City of Albuquerque

DEVELOPMENT REVIEW APPLICATION

Effective 5/17/18

Please check the appropriate box and refer to supplemental forms for submittal requirements. All fees must be paid at the time of application.

Administrative Decisions	☐ Historic Certificate of Appropriateness – Major *(Form L)*	☐ Wireless Telecommunications Facility Waiver *(Form W2)*
☐ Archaeological Certificate *(Form P3)*	☐ Historic Design Standards and Guidelines *(Form L)*	**Policy Decisions**
☐ Historic Certificate of Appropriateness – Minor *(Form L)*	☐ Master Development Plan *(Form P1)*	☐ Adoption or Amendment of Comprehensive Plan or Facility Plan *(Form Z)*
☐ Alternative Signage Plan *(Form P3)*	☐ Site Plan – EPC including any Variances – EPC (*Form P1*)	☐ Adoption or Amendment of Historic Designation *(Form L)*
☐ WTF Approval *(Form W1)*	☐ Site Plan – DRB *(Form P2)*	☐ Amendment of IDO Text *(Form Z)*
☐ Minor Amendment to Site Plan *(Form P3)*	☐ Subdivision of Land – Minor *(Form S2)*	☐ Annexation of Land *(Form Z)*
Decisions Requiring a Public Meeting or Hearing	X Subdivision of Land – Major *(Form S1)*	☐ Amendment to Zoning Map – EPC *(Form Z)*
☐ Conditional Use Approval *(Form ZHE)*	☐ Vacation of Easement or Right-of-way *(Form V)*	☐ Amendment to Zoning Map – Council *(Form Z)*
☐ Demolition Outside of HPO *(Form L)*	☐ Variance – DRB *(Form V)*	**Appeals**
☐ Expansion of Nonconforming Use or Structure *(Form ZHE)*	☐ Variance – ZHE *(Form ZHE)*	☐ Decision by EPC, LC, DRB, ZHE, or City Staff *(Form A)*

APPLICATION INFORMATION

Applicant: RED SHAMROCK 12 LLC		Phone: 505.262.2323
Address: 8220 SAN PEDRO DR NE SUITE 500		Email: josh@retailsouthwest.com
City: Albuquerque	State: NM	Zip: 87113
Professional/Agent (if any): Modulus Architects		Phone: 505-338-1499
Address: 100 Sun Ave NE Suite 600 Albuquerque, NM 87109		Email:awilliomson@modulusarchitects.com
City: Albuquerque	State: NM	Zip: 87109
Proprietary Interest in Site: Agent	List all owners:	

BRIEF DESCRIPTION OF REQUEST

Subdivide 1 existing lot into 10 smaller lots, dedicated right-of way and granting easements.

SITE INFORMATION (Accuracy of the existing legal description is crucial! Attach a separate sheet if necessary.)

Lot or Tract No.: X2A	Block:	Unit:
Subdivision/Addition: UNIVERSITY OF ABQ URBAN CENTER	MRGCD Map No.:	UPC Code:101106018038720705
Zone Atlas Page(s): G-11-Z	Existing Zoning: NR-C	Proposed Zoning: N/A
# of Existing Lots: 1	# of Proposed Lots: 1	Total Area of Site (acres): 26.5

LOCATION OF PROPERTY BY STREETS

Site Address/Street: 3801 COORS BLVD NW	Between: Coors Blvd	and: St. Josephs

CASE HISTORY (List any current or prior project and case number(s) that may be relevant to your request.)

PR-2021-005597, PS-2021-00070, 1005357, 1000032

Signature: Regina Okoye	**Date:** 2/18/2022
Printed Name: Regina Okoye	☐ Applicant or X Agent

FOR OFFICIAL USE ONLY

Case Numbers	Action	Fees
-		
-		
-		
Meeting/Hearing Date:		Fee Total:
Staff Signature:	Date:	Project #

FORM S1: SUBDIVISION OF LAND – MAJOR

Please refer to the DRB public meeting schedule for meeting dates and deadlines. Your attendance is required.

X **MAJOR SUBDIVISION PRELIMINARY PLAT APPROVAL**
☐ **MAJOR AMENDMENT TO PRELIMINARY PLAT**
☐ **BULK LAND SUBDIVISION**
☐ Interpreter Needed for Meeting?_____if yes, indicate language: _____

X A Single PDF file of the complete application including all documents being submitted must be emailed to PLNDRS@cabq.gov prior to making a submittal. Zipped files or those over 9 MB cannot be delivered via email, in which case the PDF must be provided on a CD. PDF *shall be organized* with the Development Review Application and this Form S1 at the front followed by the remaining documents *in the order provided on this form.*
X Zone Atlas map with the entire site clearly outlined and labeled
X Letter of authorization from the property owner if application is submitted by an agent
X Sign Posting Agreement
X Sites 5 acres or greater: Archeological Certificate in accordance with IDO Section 14-16-6-5(A)
X TIS Traffic Impact Study Form
X Form DRWS Drainage Report, Grading and Drainage Plan, and Water & Sewer Availability Statement submittal information
X Letter describing, explaining, and justifying the request per the criteria in IDO Section 14-16-6-6(L)
X Proof of Sketch Plat per IDO Section 14-16-6-6(L)(2)(b)
X Required notices with content per IDO Section 14-16-6-4(K)(1)
- X Office of Neighborhood Coordination notice inquiry response
- X Copy of notification letter, completed notification form(s), proof of additional information provided in accordance with IDO Section 6-4(K)(1)(b), and proof of first-class mailing to affected Neighborhood Association representatives.
- X Proof of emailed notice to affected Neighborhood Association representatives
- X Buffer map and list of property owners within 100 feet (excluding public rights-of-way) provided by Planning Department or created by applicant, copy of notifying letter, completed notification forms(s), proof of additional information provided in accordance with IDO Section 6-4(K)(1)(b), and proof of first-class mailing

X Preliminary Plat including the Grading Plan with property owner's and City Surveyor's signatures on the plat
X Sidewalk Exhibit and/or cross sections of proposed streets
N/A Site sketch with measurements showing structures, parking, building setbacks, adjacent rights-of-way and street improvements (to include sidewalk, curb & gutter with distance to property line noted) if there is any existing land use
X Sensitive Lands Site Analysis for new subdivisions of land in accordance with IDO Section 5-2(C)
N/A Landfill disclosure statement on the plat per IDO Section 14-16-6-4(S)(5)(d)(2.)(d.) if site is within a designated landfill buffer zone
X Proposed Infrastructure List

☐ **EXTENSION OF PRELIMINARY PLAT**
☐ **INFRASTRUCTURE LIST EXTENSION OR AN INFRASTRUCTURE IMPROVEMENTS AGREEMENT (IIA) EXTENSION**
For temporary sidewalk deferral extension, use Form V.

__ A Single PDF file of the complete application including all documents being submitted must be emailed to PLNDRS@cabq.gov prior to making a submittal. Zipped files or those over 9 MB cannot be delivered via email, in which case the PDF must be provided on a CD. PDF *shall be organized* with the Development Review Application and this Form S1 at the front followed by the remaining documents *in the order provided on this form.*
___ Zone Atlas map with the entire site clearly outlined and labeled
___ Letter of authorization from the property owner if application is submitted by an agent
___ Letter describing, explaining, and justifying the request per IDO Section 14-16-6-4(X)(4)
___ Preliminary Plat or site plan
___ Copy of DRB approved infrastructure list

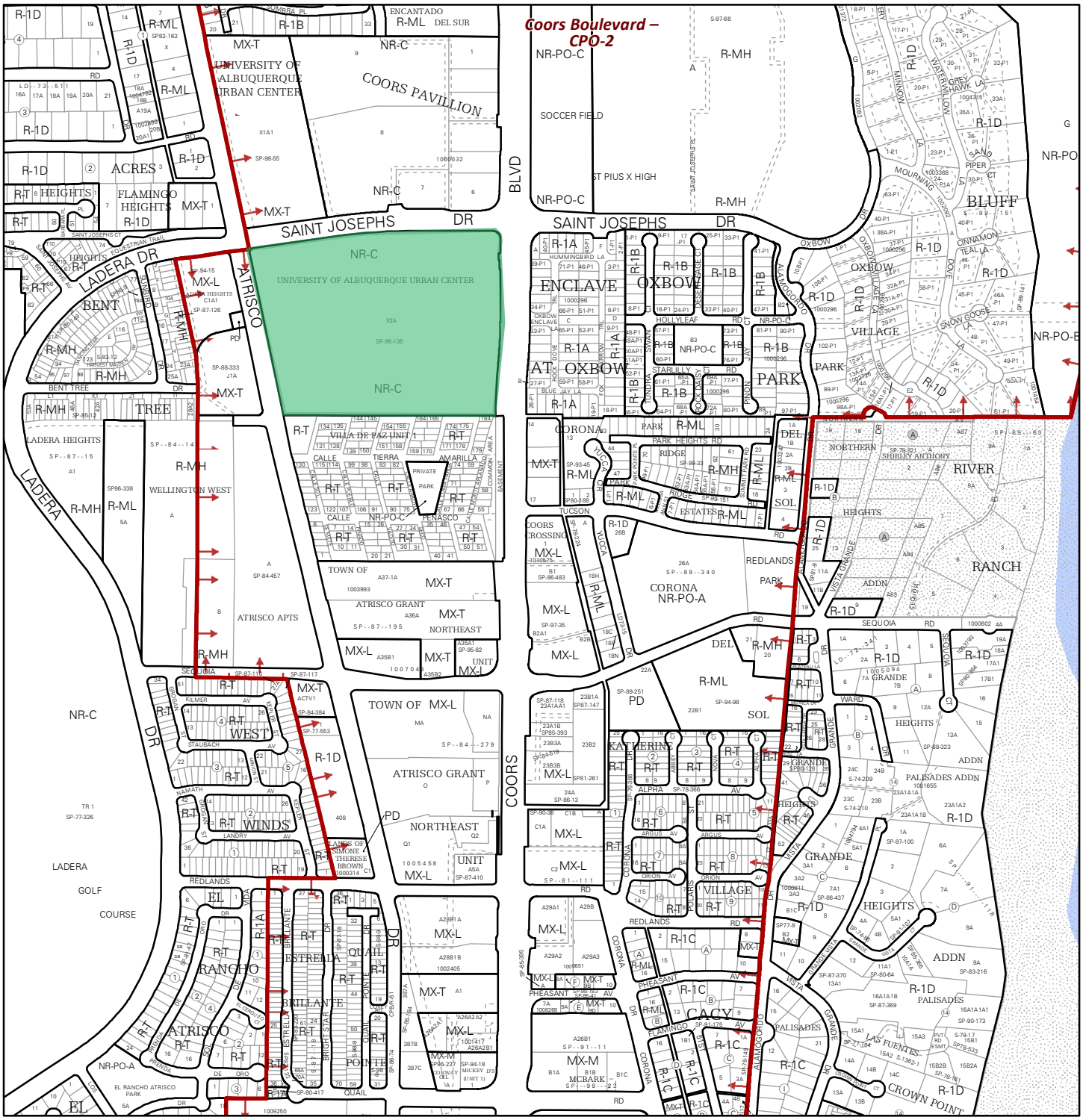
I, the applicant or agent, acknowledge that if any required information is not submitted with this application, the application will not be scheduled for a public meeting, if required, or otherwise processed until it is complete.

Signature: Regina Okoye	**Date:** 2/17/2022
Printed Name: Regina Okoye	☐ Applicant or X Agent

FOR OFFICIAL USE ONLY

Case Numbers:	Project Number:
Staff Signature:	
Date:	

*Attached to all Neighborhood Notices



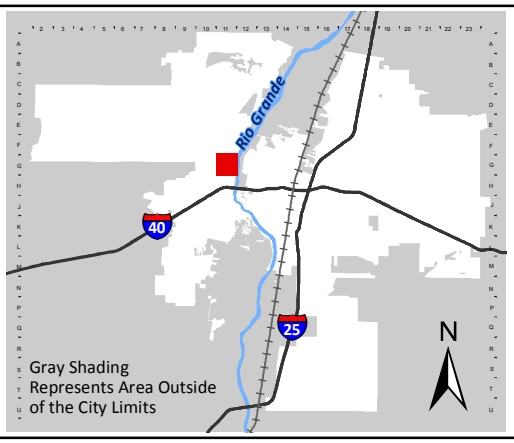
For more details about the Integrated Development Ordinance visit: http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance

IDO Zone Atlas
May 2018

Albuquerque Geographic Information System

IDO Zoning information as of May 17, 2018

The Zone Districts and Overlay Zones are established by the Integrated Development Ordinance (IDO).



Zone Atlas Page:

G-11-Z

- Easement
- Escarpment
- Petroglyph National Monument
- Areas Outside of City Limits
- Airport Protection Overlay (APO) Zone
- Character Protection Overlay (CPO) Zone
- Historic Protection Overlay (HPO) Zone
- View Protection Overlay (VPO) Zone

Feet: 0 250 500 1,000

DocuSign Envelope ID: 4F935DFE-8B8F-48A8-BCA1-A2B5C40678E1

City of Albuquerque
Development Review Board
600 2nd Street NW
Albuquerque, NM 87102

RE: AGENT AUTHORIZATION NOTICE – SW CORNER OF COORS BLVD & ST. JOSEPH DR. - 3801 COORS BLVD NW ALBUQUERQUE NM 87120

To Whom It May Concern,

Red Shamrock 12, LLC c/o Josh Skarsgard, Managing Partner, hereby authorizes Angela Williamson, CEO with Modulus Architects & Land Use Planning, Inc., to perform as the Agent of Record with the City of Albuquerque. This Agent Authorization is for the all matters regarding the project, located on the SW Corner of Coors BLVD & St. Joseph Dr. legally describe as:

TR X-2-A AMENDED PLAT OF TRS X-2-A & X-2-B THE UNIVERSITY OFALBUQUERQUE URBAN CENTER CONT 26.4990 AC M/L

This authorization is valid until further written notice from Red Shamrock 12, LLC or Angela Williamson, CEO with Modulus Architects & Land Use Planning, Inc. (Agent). Please direct all correspondence and communication to our Agent for the purpose of this request for the Developmental Review Board.

Sincerely,

DocuSigned by:

Red Shamrock 12, LLC
c/o Josh Skarsgard, Managing Partner
8220 San Pedro NE, Suite 500
Albuquerque, NM 87113
Josh@retailsouthwest.com

SIGN POSTING AGREEMENT

REQUIREMENTS

POSTING SIGNS ANNOUNCING PUBLIC HEARINGS

All persons making application to the City under the requirements and procedures established by the Integrated Development Ordinance are responsible for the posting and maintaining of one or more signs on the property which is subject to the application, as shown in Table 6-1-1. Vacations of public rights-of-way (if the way has been in use) also require signs. Waterproof signs are provided at the time of application for a $10 fee per sign. If the application is mailed, you must still stop at the Development Services Front Counter to pick up the sign(s).

The applicant is responsible for ensuring that the signs remain posted throughout the 15-day period prior to any public meeting or hearing. Failure to maintain the signs during this entire period may be cause for deferral or denial of the application. Replacement signs for those lost or damaged are available from the Development Services Front Counter.

1. LOCATION

   A. The sign shall be conspicuously located. It shall be located within twenty feet of the public sidewalk (or edge of public street). Staff may indicate a specific location.
   B. The face of the sign shall be parallel to the street, and the bottom of the sign shall be at least two feet from the ground.
   C. No barrier shall prevent a person from coming within five feet of the sign to read it.

2. NUMBER

   A. One sign shall be posted on each paved street frontage. Signs may be required on unpaved street frontages.
   B. If the land does not abut a public street, then, in addition to a sign placed on the property, a sign shall be placed on and at the edge of the public right-of-way of the nearest paved City street. Such a sign must direct readers toward the subject property by an arrow and an indication of distance.

3. PHYSICAL POSTING

   A. A heavy stake with two crossbars or a full plywood backing works best to keep the sign in place, especially during high winds.
   B. Large headed nails or staples are best for attaching signs to a post or backing; the sign tears out less easily.

4. TIME

Signs must be posted from _____To _____

5. REMOVAL

   A. The sign is not to be removed before the initial hearing on the request.
   B. The sign should be removed within five (5) days after the initial hearing.

I have read this sheet and discussed it with the Development Services Front Counter Staff. I understand (A) my obligation to keep the sign(s) posted for (15) days and (B) where the sign(s) are to be located. I am being given a copy of this sheet.

Regina Okaya _____ 2/18/2022 _____
(Applicant or Agent) (Date)

I issued _____ signs for this application, _____, _____
(Date) (Staff Member)

PROJECT NUMBER: _____

Revised 2/6/19

Tim Keller, Mayor
Sarita Nair, CAO

City of Albuquerque
P.O. Box 1293 Albuquerque, NM 87103
Planning Department
Alan Varela, Interim Director

DATE: February 8, 2022

SUBJECT: Albuquerque Archaeological Ordinance - Compliance Documentation

Case Number(s):	PR-2021-005597, SI-2022-00279
Agent:	Modulus Architects and Land Use Planning
Applicant:	Red Shamrock 12 LLC
Legal Description:	TR-X-2-A Amended Plat TRS X-2-A & -B Univ. of Albuquerque Urban Center
Zoning:	NR-C
Acreage:	26.5
Zone Atlas Page(s):	G-11-Z

CERTIFICATE OF NO EFFECT: ☑ Yes ☐ No

CERTIFICATE OF APPROVAL: ☐ Yes ☑ No

SUPPORTING DOCUMENTATION:

Historic Google Earth Images, NMCRIS Records, Historic City of Albuquerque aerials

SITE VISIT: N/A

RECOMMENDATIONS:

Parts of it bladed in the 1990s and between 2005 and 2007; otherwise disturbed by construction.

Therefore: CERTIFICATE OF NO EFFECT ISSUED-under 6-5(A) (3)(a) criterion 2 "The property has been disturbed through previous land use"

SUBMITTED BY:

Tim Boggess 2-8-2022
Douglas H. M. Boggess, MA, RPA Date
Senior Principal Investigator
Acting City Archaeologist
Lone Mountain Archaeological Services, Inc.

SUBMITTED TO:

Planning, Development Services

City of Albuquerque

Planning Department

Development Review Services Division

Traffic Scoping Form (REV 07/2020)

Project Title: Oxbow Center

Building Permit #: _____ Hydrology File #: _____

Zone Atlas Page: G-11-Z DRB#: _____ EPC#: 1005357, 1000032, PR-2021-005597 Work Order#: _____

Legal Description: TR X-2-A AMENDED PLAT OF TRS X-2-A & X-2-B THE UNIVERSITY OFALBUQUERQUE URBAN CENTER CONT 26.4990 AC M/L

Development Street Address: 3801 COORS BLVD NW ALBUQUERQUE NM 87120

Applicant: Modulus Architects Contact: Regina Okoye

Address: 100 Sun Ave Suite 600, Albuquerque NM 87109

Phone#: 505-338-1499 Fax#: _____

E-mail: rokoye@modulusarchitects.com

Development Information

Build out/Implementation Year: 2022 Current/Proposed Zoning: NR-C/NR-C

Project Type: New: (X) Change of Use: ( ) Same Use/Unchanged: ( ) Same Use/Increased Activity: ( )

Proposed Use (mark all that apply): Residential: (X) Office: ( ) Retail: ( ) Mixed-Use: ( )

Describe development and Uses:

Replatting the exiting 1 acre lot into 10 acres, granting easements, dedicating right of way. We are not proposing any uses at this time.

Days and Hours of Operation (if known): _____

Facility

Building Size (sq. ft.): _____

Number of Residential Units: _____

Number of Commercial Units: N/A

Traffic Considerations

ITE Trip Generation Land Use Code N/A

Expected Number of Daily Visitors/Patrons (if known):* _____

Expected Number of Employees (if known):* _____

Expected Number of Delivery Trucks/Buses per Day (if known):* _____

Trip Generations during PM/AM Peak Hour (if known):* _____

Driveway(s) Located on: Street Name Proposed on: Coors Blvd and Saint Josephs DR

Adjacent Roadway(s) Posted Speed: Street Name Coors Blvd Posted Speed 40 and 45 MPH

Street Name Saint Josephs DR Posted Speed not listed

** If these values are not known, assumptions will be made by City staff. Depending on the assumptions, a full TIS may be required*

Roadway Information (adjacent to site)

Comprehensive Plan Corridor Designation/Functional Classification: Coors Blvd – urban principal arterial
Saint Josephs DR- urban minor arterial
~~Atrisco DR - urban major collector~~
(arterial, collecdtor, local, main street)

Comprehensive Plan Center Designation: Ladera Activity Center
(urban center, employment center, activity center)

Jurisdiction of roadway (NMDOT, City, County): NMDOT - Coors and St Josephs/ Atrisco Dr - City

Adjacent Roadway(s) Traffic Volume: Coors Blvd - 49900
Saint Josephs DR - 8500 Volume-to-Capacity Ratio (v/c): _____
(if applicable)

Adjacent Transit Service(s): Rapid Ride 96, 155, 790 Stop Nearest Transit Stop(s): Rapid Ride 96, 155, 790 Stop

Is site within 660 feet of Premium Transit?: No

Current/Proposed Bicycle Infrastructure: Proposed Bike Coors, Current along St Josephs and Atrisco
(bike lanes, trails)

Current/Proposed Sidewalk Infrastructure: Will be proposed along coors

Relevant Web-sites for Filling out Roadway Information:

City GIS Information: http://www.cabq.gov/gis/advanced-map-viewer

Comprehensive Plan Corridor/Designation:https://abc-zone.com/document/abc-comp-plan-chapter-5-land-use (map after Page 5-5)

Road Corridor Classification: https://www.mrcog-nm.gov/DocumentCenter/View/1920/Long-Range-Roadway-System-LRRS-PDF?bidId=

Traffic Volume and V/C Ratio: https://www.mrcog-nm.gov/285/Traffic-Counts and https://public.mrcog-nm.gov/taqa/

Bikeways: http://documents.cabq.gov/planning/adopted-longrange-plans/BTFP/Final/BTFP%20FINAL_Jun25.pdf (Map Pages 75 to 81)

TIS Determination

Note: Changes made to development proposals / assumptions, from the information provided above, will result in a new TIS determination.

Traffic Impact Study (TIS) Required: Yes [ ] No [✓]

Thresholds Met? Yes [ ] No [✓]

Mitigating Reasons for Not Requiring TIS: Previously Studied: [ ]

Notes: When the site is developed the Traffic Scoping will be required to determine need for a TIS

M Pa P.E. 2/17/2022

TRAFFIC ENGINEER DATE

Submittal

The Scoping Form must be submitted as part of any building permit application, DRB application, or EPC application. See the Development Process Manual Chapter 7.4 for additional information.

Submit by email to plndrs@cabq.gov and to the City Traffic Engineer mgrush@cabq.gov. Call 924-3362 for information.

Site Plan/Traffic Scoping Checklist

Site plan, building size in sq. ft. (show new, existing, remodel), to include the following items as applicable:

1. Access -- location and width of driveways
2. Sidewalks (Check DPM and IDO for sidewalk requirements. Also, Centers have wider sidewalk requirements.)
3. Bike Lanes (check for designated bike routes, long range bikeway system) *(check MRCOG Bikeways and Trails in the 2040 MTP map)*
4. Location of nearby multi-use trails, if applicable *(check MRCOG Bikeways and Trails in the 2040 MTP map)*
5. Location of nearby transit stops, transit stop amenities (eg. bench, shelter). Note if site is within 660 feet of premium transit.
6. Adjacent roadway(s) configuration (number of lanes, lane widths, turn bays, medians, etc.)
7. Distance from access point(s) to nearest adjacent driveways/intersections.
8. Note if site is within a Center and more specifically if it is within an Urban Center.
9. Note if site is adjacent to a Main Street.
10. Identify traffic volumes on adjacent roadway per MRCOG information. If site generates more than 100 vehicles per hour, identify volume to capacity (v/c) ratio on this form.

FORM DRWS: DRAINAGE REPORT/GRADING AND DRAINAGE PLAN / WATER & SANITARY SEWER AVAILABILITY
THIS FORM IS REQUIRED WITH THE DEVELOPMENT REVIEW BOARD APPLICATION FOR SUBDIVISIONS AND SITE PLANS.

PROJECT NAME: Oxbow Center

AGIS MAP # G-11-Z

LEGAL DESCRIPTIONS: Tract "X-2-A" of the Amended Plat of Tracts X-2-A & X-2-B, THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER

_x__ **DRAINAGE REPORT/GRADING AND DRAINAGE PLAN**

A drainage report/grading and drainage plan, as per the Drainage Ordinance, was submitted to the City of Albuquerque Planning Department, Hydrology Division (2nd /Ground Floor, Plaza del Sol) on 2/17/2022 (date).

Applicant/Agent — Date: 2/17/2022

Renée C. Brasch
Hydrology Division Representative — Date: 2/18/22

NOTE: A GRADING AND DRAINAGE PLAN MUST BE APPROVED PRIOR TO DRB APPROVAL

_X_ **WATER AND SEWER AVAILABILITY STATEMENT**

A Water and Sewer Availability Statement for this project was requested to the ABCWUA (2nd/Ground floor, Plaza del Sol) on 9/15/2022 (date).

~~Applicant~~/Agent — Date: 2/17/2022

Edwin Bergeron
ABCWUA Representative — Date: 2/17/2022

Statement #210909 - Executed 9/27/2022

PROJECT # # 210909

Revised 5/18

MODULUS
ARCHITECTS

Jolene Wolfley, DRB Chair
Development Review Board
City of Albuquerque
Plaza Del Sol, 600 Second NW
Albuquerque, New Mexico 87102

February 18, 2022

RE: DRB Subdivision of Land (Preliminary Plat) – Major – 3801 COORS BLVD NW – Albuquerque, NM 87120

Ms. Wolfley and Members of the Board,

Modulus Architects, Inc., hereafter referred to as the "Agent" for the purpose of this request, represents Red Shamrock 4 LLC, hereafter referred to as the "Applicant". We, "Agent" is requesting approval of a Major Subdivision of Land. This request would create 10 new lots from one existing tract.

The parcel (the "subject site") is +/- 26.4776 acres in size, zoned NR-C and is located southwest corner of Coors Blvd and St. Josephs Dr. This site is legally described as TR X-2-A AMENDED PLAT OF TRS X-2-A & X-2-B THE UNIVERSITY OFALBUQUERQUE URBAN CENTER CONT 26.4990 AC M/L. The site is current vacant. The site is located in in Ladera Activity Center, within a Major transit Corridor, and within the Coors Blvd CPO-2 overlay zone.

This purpose of this request for a Major Platting action is to create 10 new lots from one existing tract. As well as, dedicate additional right of way as shown on the plat.

The sketch plat was heard by the DRB on 6/23/2022 (Project No: PR-2021-005597, PS-2021-00070). The comments that were provided by the DRB at the time have all been addressed in this Preliminary Plat submittal.

This request is in compliance with IDO Section 14-16-6-6(L)(1) Subdivision of Land – Major. All subsequent plans complies with all IDO and DPM regulations. This submittal includes all items of the Form S1.

A traffic impact form was provided to City of Albuquerque Transportation Department, at which time it was deemed by City staff that a Traffic Study was not warranted as the development did not meet the threshold. It was also state from the City Engineer that "When the property is developed the Traffic Scoping will need to be done to determine the traffic impact". That information is fully understood by the applicant.

Ladera Heights NA, The Enclave at Oxbox HOA, Villa De Paz HOA Inc., Westside Coalition of NA, Vista Grande NA were notified of this request. There were no comments or phone called received at the time of this letter.

We look forward to reviewing our submittal with you at the Development Review Board hearing. If you have any additional questions or concerns regarding this submittal please feel free to contact me directly at (505) 338-1499 or email me at: awilliamson@modulusarchitects.com.

Best regards,

Angela Williamson, Principal (Agent)
Modulus Architects, Inc.
100 Sun Ave NE, Suite 600
Albuquerque, New Mexico 87109
Office (505.338.1499
Email: awilliamson@modulusarchitects.com

PROOF OF SKETCH PLAT

Development Review Board

Planning Dept. - Sketch Plat Comments

Project #:PR-2021-005597 *Application #PS: -2021-2021-00070*

Meeting Date/Item Number: 12

Standard comments:

- This PR# has been assigned to this subject site. Any applications (vacations, platting, site plans, etc..) for this subject site MUST reference this PR#. It must be noted on the application with the submittal for future actions.
- Must submit any DRB signed off site plans, variances and/or NOD with submittal for building permit.
- Note that the document titles listed in the submitted PDF must not include symbols (+, &, etc.…) and title should be a short and abbreviated as possible.

Plat will require City surveyor signature, surveyor signature and property owner signature

The is site within the boundaries of the Coors Boulevard Character Protection overlay zone, the requirements of the zone and the NR-C zone apply.

Please see section 5-2, Site Design and Sensitive lands. A Sensitive Lands Analysis is required.

Please see section 5-4, Subdivision of Land for layout and other requirements.

Regina Okoye

From: Carmona, Dalaina L. <dlcarmona@cabq.gov>
Sent: Wednesday, February 2, 2022 12:20 PM
To: Regina Okoye
Subject: 3801 COORS BLVD NW Public Notice Inquiry
Attachments: G-11-Z.PDF

Dear Applicant:

Please find the neighborhood contact information listed below. Please make certain to read the information further down in this e-mail as it will help answer other questions you may have.

Association Name	First Name	Last Name	Email	Address Line 1	Address Line 2	City	State	Zip	Mobile Phone	Phone
Ladera Heights NA	Marie	Ludi	aludi2wo@yahoo.com	6216 St. Josephs Avenue NW		Albuquerque	NM	##		5E+09
Ladera Heights NA	Allan	Ludi	aludi415@gmail.com	6216 St. Josephs Avenue NW		Albuquerque	NM	##		5E+09
The Enclave at Oxbow HOA	Jill	Greene	albqdog@aol.com	3915 Fox Sparrow Trail NW		Albuquerque	NM	##		5E+09
The Enclave at Oxbow HOA	John	Holt	jholt@hoamco.com	PO Box 67590		Albuquerque	NM	##		5E+09
Villa De Paz HOA Incorporated	Fran	Pawlak	fpawlak@cgres.com	8500 Jefferson Street NE	Suite B	Albuquerque	NM	##		5E+09
Villa De Paz HOA Incorporated	Christine	Roy		54 Calle Monte Aplanado NW		Albuquerque	NM	##		5E+09
Westside Coalition of Neighborhood Associations	Elizabeth	Haley	ekhaley@comcast.net	6005 Chaparral Circle NW		Albuquerque	NM	##	5E+09	
Westside Coalition of Neighborhood Associations	Rene	Horvath	aboard111@gmail.com	5515 Palomino Drive NW		Albuquerque	NM	##		5E+09
Vista Grande NA	Richard	Schaefer	Schaefer@unm.edu	3579 Sequoia Place NW		Albuquerque	NM	##	5E+09	5E+09
Vista Grande NA	Dana	Skaar	dana@nationalheat.com	3504 Sequoia Court NW		Albuquerque	NM	##	5E+09	5E+09

PLEASE NOTE: The ONC does not have any jurisdiction over any other aspect of your application beyond this neighborhood contact information. We can't answer questions about sign postings, pre-construction meetings, permit status, site plans, buffers, or project plans, so we encourage you to contact the Planning Department at: 505-924-3857 Option #1, e-mail: devhelp@cabq.gov, or visit: https://www.cabq.gov/planning/online-planning-permitting-applications with those types of questions.

You will need to e-mail each of the listed contacts and let them know that you are applying for an approval from the Planning Department for your project. Please use this online link to find the required forms you will need to submit. https://www.cabq.gov/planning/urban-design-development/public-notice. The Checklist form you need for notifying neighborhood associations can be found here: https://documents.cabq.gov/planning/online-forms/PublicNotice/CABQ-Official_public_notice_form-2019.pdf. The Administrative Decision form you need for notifying neighborhood associations can be found here: https://documents.cabq.gov/planning/online-forms/PublicNotice/Emailed-Notice-Administrative-Print&Fill.pdf

Once you have e-mailed the listed contacts in each neighborhood, you will need to attach a copy of those e-mails AND a copy of this e-mail from the ONC to your application and submit it to the Planning Department for approval.

If your application requires you to offer a neighborhood meeting, you can click on this link to find required forms to use in your e-mail to the neighborhood association(s):
http://www.cabq.gov/planning/urban-design-development/neighborhood-meeting-requirement-in-the-integrated-development-ordinance

If your application requires a pre-application or pre-construction meeting, please plan on utilizing virtual platforms to the greatest extent possible and adhere to all current Public Health Orders and recommendations. The health and safety of the community is paramount.

If you have questions about what type of notification is required for your particular project or meetings that might be required, please click on the link below to see a table of different types of projects and what notification is required for each:

https://ido.abc-zone.com/integrated-development-ordinance-ido?document=1&outline-name=6-1%20Procedures%20Summary%20Table

Dalaina L. Carmona
Senior Administrative Assistant
Office of Neighborhood Coordination
Council Services Department
1 Civic Plaza NW, Suite 9087, 9th Floor
Albuquerque, NM 87102
505-768-3334
dlcarmona@cabq.gov or ONC@cabq.gov
Website: www.cabq.gov/neighborhoods

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message.

From: webmaster=cabq.gov@mailgun.org <webmaster=cabq.gov@mailgun.org> **On Behalf Of** webmaster@cabq.gov
Sent: Wednesday, February 2, 2022 10:04 AM
To: Office of Neighborhood Coordination <rokoye@modulusarchitects.com>
Cc: Office of Neighborhood Coordination <onc@cabq.gov>
Subject: Public Notice Inquiry Sheet Submission

[EXTERNAL] Forward to phishing@cabq.gov and delete if an email causes any concern.

Public Notice Inquiry For:
Development Review Board
If you selected "Other" in the question above, please describe what you are seeking a Public Notice Inquiry for below:
Contact Name
Regina Okoye
Telephone Number
5053381499
Email Address
rokoye@modulusarchitects.com
Company Name
Modulus Architects Inc.
Company Address
100 SUN AVE NE, Suite 600
City
Albuquerque
State
NM
ZIP
87109
Legal description of the subject site for this project:
Legal Description: TR X-2-A AMENDED PLAT OF TRS X-2-A & X-2-B THE UNIVERSITY OFALBUQUERQUE URBAN CENTER CONT 26.4990 AC M/L
Physical address of subject site:
3801 COORS BLVD NW ALBUQUERQUE NM 87120
Subject site cross streets:

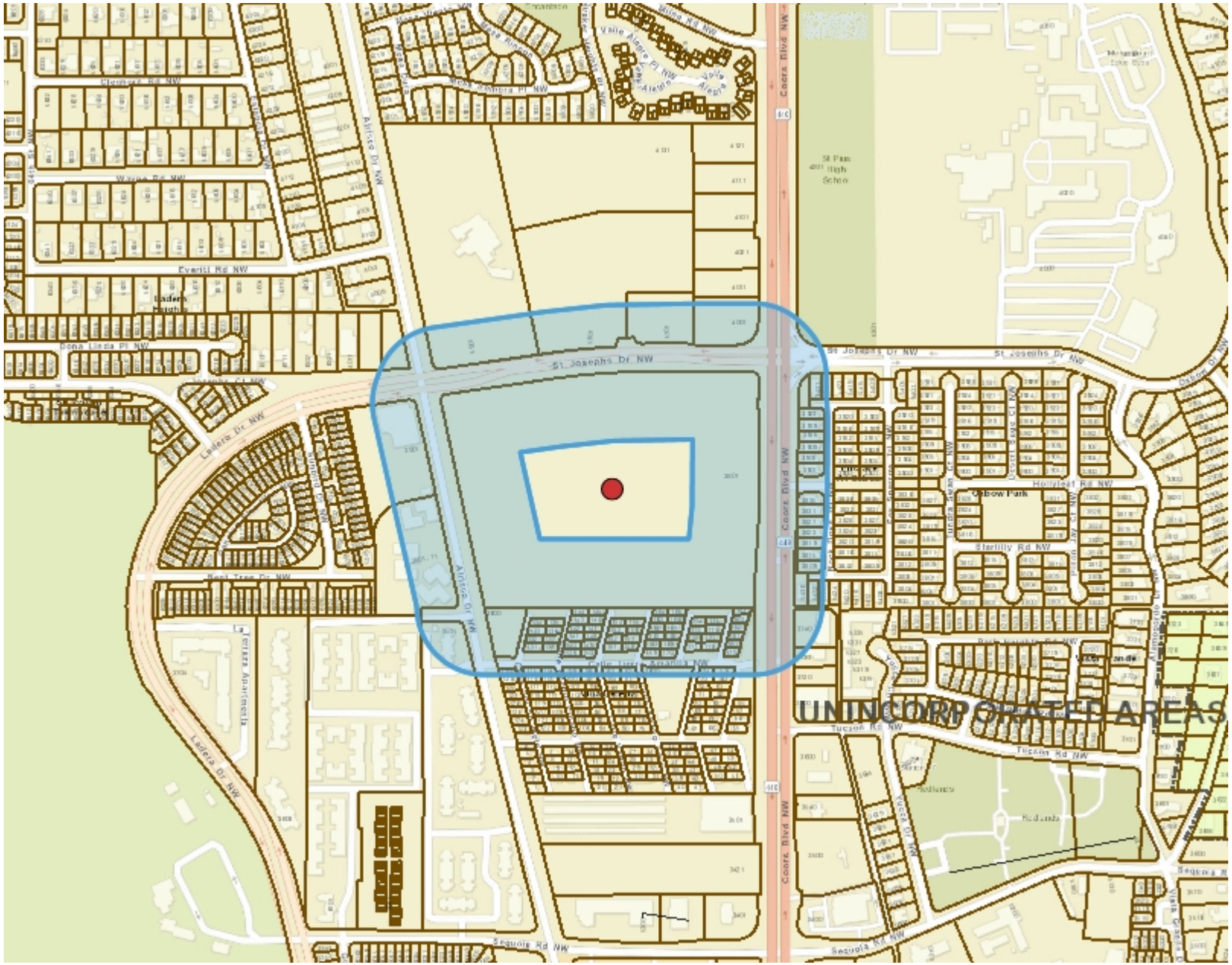
Coors Blvd. & St. Josephs

Other subject site identifiers:

This site is located on the following zone atlas page:

G-11-Z

3801 Coors Blvd NW



Legend

- Bernalillo County Parcels
- Municipal Limits
  - Corrales
  - Edgewood
  - Los Ranchos
  - Rio Rancho
  - Tijeras
  - UNINCORPORATED

Notes

Buffer: 278Ft
ROW: Coors Blvd. 178Ft

1,202 0 601 1,202 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
2/7/2022 © City of Albuquerque

1: 7,212

The City of Albuquerque ("City") provides the data on this website as a service to the public. The City makes no warranty, representation, or guaranty as to the content, accuracy, timeliness, or completeness of any of the data provided at this website. Please visit http://www.cabq.gov/abq-data/abq-data-disclaimer-1 for more information.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

MORALES ANDREA P DIAZ
153 CALLE VADITO NW
ALBUQUERQUE NM 87120-3455

GLOVER STEVEN F
800 PASEO VERDE RD NE
ALBUQUERQUE NM 87113-2850

JOSEPHSON DOLORES M & SCOTT R
158 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3469

LOPEZ CHRISTIAN D & LEANNE K
3650 NM HWY 528 NE PAD 72
RIO RANCHO NM 87144-7524

AGUIRRE YVETTE A
159 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3461

BUSHMAN JAMES
945 MONTOYA ST NW
ALBUQUERQUE NM 87104-1910

ARCHDIOCESE OF SANTA FE REAL ESTATE CORPORATION
4000 ST JOSEPHS PL NW
ALBUQUERQUE NM 87120-1714

KINNIER JAMES & ELIZABETH
6 WOODCHUCK TRL
CORAM NY 11727-2140

FERNANDEZ ARNIELLE TRUSTEE FERNANDEZ VENEGAS IRRVT
4424 BENTGRASS MEADOWS NE
RIO RANCHO NM 87144-5744

BACA CHRISTOPHER M & JANICE J
3023 SIOUX ST NW
ALBUQUERQUE NM 87107-1048

SANCHEZ DOLORES M
8312 SPRENGER DR NE
ALBUQUERQUE NM 87109-5249

PENA ANGELA LOVATO
139 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3474

MCCOY RONALD L & PAMELA J
155 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3468

WILSON NICHOLAS
6420 MONTE SERRANO NE
ALBUQUERQUE NM 87111-1253

MESA RIDGE APARTMENTS LLC C/O MONARCH INVESTMENT
2195 N STATE HWY 83 SUITE 14B
FRANKTOWN CO 80116-9664

ALCON JOHN & ESQUIBEL ISABEL
3835 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

SANCHEZ MARK S & DIANE M
PO BOX 2411
CORRALES NM 87048

HINTON ROBERT A
5800 MESA SOMBRA PL NW
ALBUQUERQUE NM 87120

CITY OF ALBUQUERQUE
PO BOX 1293
ALBUQUERQUE NM 87103-2248

STEWART CHESTER FRENCH TR OF CHESTER FRENCH & DIANA K STEWART RVT
PO BOX 94
ALBUQUERQUE NM 87103

OCONNELL WILLIAM B
5220 VALLE VISTA NW
ALBUQUERQUE NM 87120

ARAGONI LEWIS A ETUX
7556 CHASE ST
ARVADA CO 80003-2911

POOLE ROBERT D TRUSTEE POOLE RVT
6109 SWEETWATER DR NW
ALBUQUERQUE NM 87120-4492

MARES JORDAN H & BROPHY KEVIN E
181 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3471

MANGHAM JAMES A & JACQUELINE L
PO BOX 295
CUBA NM 87013

GIACINTO DOROTHY J TRUSTEE DOROTHY GIACINTO RVLT
3915 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120-5617

BARTLETT ANNELLE M
173 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3477

BLACK RONALD B & JASMINE NYLS
5431 HUMMINGBIRD LN NW
ALBUQUERQUE NM 87120-4515

GUTIERREZ HECTOR & BRIDGETTE M
3909 ROCK DOVE NW
ALBUQUERQUE NM 87120

CHAVEZ ANGELA DIANE
82 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3451

SMITH BRIAN C & SMITH IVAN W & JOAN T
176 CALLE MONTE APLANDO NW
ALBUQUERQUE NM 87120-3471

KINES DAVID T
13 MILL RD NW
ALBUQUERQUE NM 87120-1915

BOURGUET SILAS L
170 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3476

LAMBERT FREDERICK M & ROSELYN B
TRUSTEES LAMBERT FAMILY TRUST
8839 GREENLAWN ST
RIVERSIDE CA 92508-2521

BACA RAYMOND & PRISCILLA A
180 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3470

GIL VIRGILIO SERGIO SR TRUSTEE VIRJAIRAI RVLT
6506 CALLE REDONDA NW
ALBUQUERQUE NM 87120-2728

WHEELER CAROLEE A & WILLIE E
167 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3477

TIDWELL LOUETTA L
5436 BLUE JAY LN NW
ALBUQUERQUE NM 87120-4915

FOUTZ ZACHARY
168 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3477

TRAYNOR TODD & LUANN
160 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3469

MILLER JIM & MARK CORDOVA
169 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3476

PACHTA ANGELA
141 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

POLACO VICTORIA C
129 CALLE SOL SE METE NW
ALBUQUERQUE NM 87120-3472

KNOX THOMAS J
3809 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

OXBOW HOMEOWNERS ASSOCIATION
PO BOX 67590
ALBUQUERQUE NM 87193-7590

UMBER ROGER L & WANDA LEMONS
PO BOX 81391
ALBUQUERQUE NM 87198-1391

SANCHEZ DANIEL A
178 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3470

ARBELO RAMOS JOSUE A & ARBELO JUANITA
97 CALLE VADITO NW
ALBUQUERQUE NM 87120-3466

SANCHEZ LEENA M
59 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3462

DUNKLEBERGER CHERI L & JEFFREY
1331 DUSKFIRE DR NW
ALBUQUERQUE NM 87120-5553

DUNBAR LOREN D
143 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

TREVINO VICTOR A
2827 SOL DE VIDA NW
ALBUQUERQUE NM 87120-1329

DIETZ DEBRA
182 CALLE MONTE APLANDO NW
ALBUQUERQUE NM 87120-3471

PHIFER DANIEL DEE & DEBRA LYNN
164 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3453

PETERSON ELISABETH
5432 BLUE JAY LN NW
ALBUQUERQUE NM 87120-4915

HOME REJUVENATION 1 LLC
3615 YIPEE CALLE CT NW
ALBUQUERQUE NM 87120-2381

RENTERIA MELISSA
83 CALLE VADITO NW
ALBUQUERQUE NM 87120-3478

GALLEGOS ANNA M
163 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3453

GARCIA JOSEPH
3827 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120-4517

RICE ROBERT L & VERA E
150 CALLE VADITO NW
ALBUQUERQUE NM 87120-3456

VELARDE ROGER N
183 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3471

CRUICKSHANK CYNTHIA D
134 CALLE SOL SE METE NW
ALBUQUERQUE NM 87120-3473

TAYLOR MARY M
132 CALLE SOL SE MENTE NW
ALBUQUERQUE NM 87120-3472

GREENWAY MARIAN
144 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

RED SHAMROCK 12 LLC
8220 SAN PEDRO DR NE SUITE 500
ALBUQUERQUE NM 87113-2476

SANTIAGO HERMES
99 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3457

ASHLING SARAH J
3831 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120-4517

FELSTED HUGH H & CARLA M
156 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3458

VILLA DE PAZ HOMEOWNERS #185
8500 JEFFERSON ST NE SUITE B
ALBUQUERQUE NM 87113-1884

STRADFORD LEROY H & BETTY W
145 CALLE VADITO NW
ALBUQUERQUE NM 87120-3455

3D INVESTMENTS LLC
3740 COORS BLVD NW SUITE A
ALBUQUERQUE NM 87120

BOHLING DONALLY
138 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3474

VILLA DE PAZ HOMEOWNERS ASSOC #185
7770 JEFFERSON ST NE SUITE 102
ALBUQUERQUE NM 87109-4386

CODY GERALD L JR TRUSTEE CODY JR FAMILY TRUST
131 CALLE SOL SE METE NW
ALBUQUERQUE NM 87120-3472

MCCRAY PATRICIA F
136 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

CHISM THERESA L
146 CALLE VADITO NW
ALBUQUERQUE NM 87120-3455

BYRNES SONYA R
98 CALLE VADITO NW
ALBUQUERQUE NM 87120-3466

MILLIGAN INVESTMENTS LLC
909 THIRD AVE #6412
NEW YORK NY 10150-2060

NEWMAN PHYLLIS A
5427 HUMMINGBIRD LN NW
ALBUQUERQUE NM 87120-4515

PARKS PAULA S
3600 ATRISCO DR NW 148
ALBUQUERQUE NM 87120

HARLAN JASON C
172 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3476

PARSONS SHIRLEY M & PARSONS RICHARD A SR
154 CALLE VADITO NW
ALBUQUERQUE NM 87120-3455

MEDINA AMANDA SEFERINA
130 CALLE SOL SE METE NW
ALBUQUERQUE NM 87120-3472

RMV INVESTMENTS LLC
6509 JADE NW
ALBUQUERQUE NM 87120-3284

MYERS MARK D
152 CALLE VADITO NW
ALBUQUERQUE NM 87120-3456

DERRICK WILLIAM B
165 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3477

PETERSON SUSAN & LAWRENCE V
3815 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120-4517

BROADSTONE AQUISITIONS LLC
10579 W BRADFORD RD SUITE 100
LITTLETON CO 80127-4274

ARCHULETA AMADEO D & LIVA D
3823 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

HARMON DAVID & CHRISTINE
5741 N WESTSHORE DR
MORGANTOWN IN 46160-8687

SWALWELL AARON E
135 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

KIRTLAND FEDERAL CREDIT UNION
6440 GIBSON BLVD SE
ALBUQUERQUE NM 87108-4971

LEVINE INVESTMENTS LIMITED PARTNERSHIP
2801 E CAMELBACK RD SUITE 450
PHOENIX AZ 85016-0000

TAMBOR MARIA
3923 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

GARCIA MARY E
3901 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

BREESWINE STEWART L & PRESCILLA
3905 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

PRESBYTERIAN HEALTHCARE SERVICES REAL ESTATE DEPARTMENT
PO BOX 26666
ALBUQUERQUE NM 87125-6666

SCHOLZ JOHN & JODEE & ROBERTS JOAN L
115 CALLE SOL SE METE NW
ALBUQUERQUE NM 87120-3458

LADERA HEIGHTS NA
MARIE LUDI
6216 ST JOSEPHS AVE NW
ALBUQUERQUE NM 87120

LADERA HEIGHTS NA
ALLAN LUDI
6216 ST JOSEPHS AVE NW
ALBUQUERQUE NM 87120

THE ENCLAVE AT OXBOX HOA
JILL GREENE
3915 FOX SPARROW TRAIL NW
ALBUQUERQUE NM 87120

THE ENCLAVE AT OXBOX HOA
JOHN HOLT
PO BOX 67590
ALBUQUERQUE NM 87120

VILLA DE PAZ HOA INC
FRAN PAWLAK
8500 JEFFERSON ST NE SUITE B
ALBUQUERQUE NM 87113

VILLA DE PAZ HOA INC
CHRISTINE ROY
54 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120

WESTSIDE COALITION OF NA
ELIZABETH HALEY
6005 CHAPARRAL CIRCLE NW
ALBUQUERQUE NM 87114

WESTSIDE COALITION OF NA
RENE HORVATH
5515 PALOMINO DRIVE NW
ALBUQUERQUE NM 87120

VISTA GRANDE NA
RICHARD SCHAEFER
3579 SEQUOIA PLACE NW
ALBUQUERQUE NM 87120

VISTA GRANDE NA
DANA SKAAR
3504 SEQUOIA COURT NW
ALBUQUERQUE NM 87120

[Note: Items with an asterisk (*) are required.]

Public Notice of a Proposed Project in the City of Albuquerque for Decisions Requiring a Meeting or Hearing Mailed/Emailed to a Neighborhood Association

Date of Notice*: 2/14/2022

This notice of an application for a proposed project is provided as required by Integrated Development Ordinance (IDO) **Subsection 14-16-6-4(K) Public Notice** to:

Neighborhood Association (NA)*: Ladera Heights NA, The Enclave at Oxbox HOA, Villa De Paz HOA Inc., Westside Coalition of NA, Vista Grande NA

Name of NA Representative*: Marie Ludi, Allan Ludi, Jill Greene, John Holt, Fran Pawlak, Christine Roy, Elizabeth Haley, Rene Horvath, Richard Schaefer, Dana Skaar

Email Address* or Mailing Address* of NA Representative[1]: aludi2wo@yahoo.com;aludi415@gmail.com; albqdog@aol.com; jholt@hoamco.com; fpawlak@cgres.com; ekhaley@comcast.net; aboard111@gmail.com; schaefer@unm.edu; dana@nationalheat.com

Information Required by IDO Subsection 14-16-6-4(K)(1)(a)

1. Subject Property Address* 3801 Coors Blvd. NW, Albuquerque, NM 87120

   Location Description St. Josephs Dr. NW and Coors Blvd.
2. Property Owner* Red Shamrock 12 LLC
3. Agent/Applicant* *[if applicable]* Modulus Architects & Land Use Planning, Inc./Red Shamrock 12 LLC
4. Application(s) Type* per IDO Table 6-1-1 *[mark all that apply]*

   - ☐ Conditional Use Approval
   - ☐ Permit _____ (Carport or Wall/Fence – Major)
   - ☐ Site Plan
   - ☒ Subdivision Major (Minor or Major)
   - ☐ Vacation _____ (Easement/Private Way or Public Right-of-way)
   - ☐ Variance
   - ☐ Waiver
   - ☐ Other: _____

   Summary of project/request[2]*:

   Subdivide 1 existing lot into 10 smaller lots.

[1] Pursuant to IDO Subsection 14-16-6-4(K)(5)(a), email is sufficient if on file with the Office of Neighborhood Coordination. If no email address is on file for a particular NA representative, notice must be mailed to the mailing address on file for that representative.

[2] Attach additional information, as needed to explain the project/request.

[Note: Items with an asterisk (*) are required.]

5. This application will be decided at a public meeting or hearing by*:

   ☐ Zoning Hearing Examiner (ZHE) X Development Review Board (DRB)

   ☐ Landmarks Commission (LC) ☐ Environmental Planning Commission (EPC)

   Date/Time*: DRB Hearing March 16, 2022 @ 9:00am

   Location*[3]: VIA Zoom, meeting held at link provided at the webside below

   Agenda/meeting materials: http://www.cabq.gov/planning/boards-commissions

   To contact staff, email devhelp@cabq.gov or call the Planning Department at 505-924-3860.

6. Where more information about the project can be found*[4]:
   For questions, contact the Development Review Board staff at (505) 924-3880 or (505) 924-3994.

Information Required for Mail/Email Notice by IDO Subsection 6-4(K)(1)(b):

1. Zone Atlas Page(s)*[5] G-11-Z
2. Architectural drawings, elevations of the proposed building(s) or other illustrations of the proposed application, as relevant*: Attached to notice or provided via website noted above
3. The following exceptions to IDO standards have been requested for this project*:

   ☐ Deviation(s) ☐ Variance(s) ☐ Waiver(s)

   Explanation*:
   N/A

4. A Pre-submittal Neighborhood Meeting was required by Table 6-1-1: ☐ Yes X No

   Summary of the Pre-submittal Neighborhood Meeting, if one occurred:
   N/A

[3] Physical address or Zoom link
[4] Address (mailing or email), phone number, or website to be provided by the applicant
[5] Available online here: *http://data.cabq.gov/business/zoneatlas/*

[Note: Items with an asterisk (*) are required.]

5. ***For Site Plan Applications only****, attach site plan showing, at a minimum: N/A
   - ☐ a. Location of proposed buildings and landscape areas.*
   - ☐ b. Access and circulation for vehicles and pedestrians.*
   - ☐ c. Maximum height of any proposed structures, with building elevations.*
   - ☐ d. **For residential development***: Maximum number of proposed dwelling units.
   - ☐ e. **For non-residential development***:
     - ☐ Total gross floor area of proposed project.
     - ☐ Gross floor area for each proposed use.

Additional Information *[Optional]***:**

From the IDO Zoning Map[6]:

1. Area of Property *[typically in acres]* 26.5 acres
2. IDO Zone District NR-C
3. Overlay Zone(s) *[if applicable]* CPO - Character Protection Overlay Zone (3-4)
4. Center or Corridor Area *[if applicable]* Major Transit Corridor - Coors Blvd.;

Current Land Use(s) *[vacant, if none]* Vacant

NOTE: Pursuant to IDO Subsection 14-16-6-4(L), property owners within 330 feet and Neighborhood Associations within 660 feet may request a post-submittal facilitated meeting. If requested at least 15 calendar days before the public meeting/hearing date noted above, the facilitated meeting will be required. To request a facilitated meeting regarding this project, contact the Planning Department at devhelp@cabq.gov or 505-924-3955.

Useful Links

Integrated Development Ordinance (IDO):
https://ido.abc-zone.com/

IDO Interactive Map
https://tinyurl.com/IDOzoningmap

Cc: Ladera Heights NA, The Enclave at Oxbox HOA *[Other Neighborhood Associations, if any]*

Villa De Paz HOA Inc., Westside Coalition of NA

Vista Grande NA

[6] Available here: https://tinurl.com/idozoningmap

*Example of Notices Sent to all Property Owners

[Note: Items with an asterisk (*) are required.]

Public Notice of a Proposed Project in the City of Albuquerque for Decisions Requiring a Meeting or Hearing Mailed to a Property Owner

Date of Notice*: 2/14/2022

This notice of an application for a proposed project is provided as required by Integrated Development Ordinance (IDO) **Subsection 14-16-6-4(K) Public Notice** to:

Property Owner within 100 feet*: _____

Mailing Address*: _____

Project Information Required by IDO Subsection 14-16-6-4(K)(1)(a)

1. Subject Property Address* 3801 Coors Blvd. NW, Albuquerque, NM 87120
   Location Description St. Josephs Dr. NW and Coors Blvd.
2. Property Owner* Red Shamrock 12 LLC
3. Agent/Applicant* *[if applicable]* Modulus Architects & Land Use Planning Inc.,/Red Shamrock 12 LLC
4. Application(s) Type* per IDO Table 6-1-1 *[mark all that apply]*
   - ☐ Conditional Use Approval
   - ☐ Permit _____ (Carport or Wall/Fence – Major)
   - ☐ Site Plan
   - ☒ Subdivision Major (Minor or Major)
   - ☐ Vacation _____ (Easement/Private Way or Public Right-of-way)
   - ☐ Variance
   - ☐ Waiver
   - ☐ Other: _____

   Summary of project/request[1]*:
   Subdivide 1 existing lot into 10 smaller lots.
5. This application will be decided at a public meeting or hearing by*:
   - ☐ Zoning Hearing Examiner (ZHE)
   - ☒ Development Review Board (DRB)
   - ☐ Landmarks Commission (LC)
   - ☐ Environmental Planning Commission (EPC)

[1] Attach additional information, as needed to explain the project/request.

[Note: Items with an asterisk (*) are required.]

Date/Time*: DRB Hearing March 16, 2022 @ 9:00am

Location*[2]: VIA ZOOM, meeting held at link provided at the webside below

Agenda/meeting materials: http://www.cabq.gov/planning/boards-commissions

To contact staff, email devhelp@cabq.gov or call the Planning Department at 505-924-3860.

6. Where more information about the project can be found*[3]:
For questions, contact the Development Review Board staff at (505) 924-3880 or (505) 924-3994

Project Information Required for Mail/Email Notice by IDO Subsection 6-4(K)(1)(b):

1. Zone Atlas Page(s)*[4] G-11-Z
2. Architectural drawings, elevations of the proposed building(s) or other illustrations of the proposed application, as relevant*: Attached to notice or provided via website noted above
3. The following exceptions to IDO standards have been requested for this project*:

   ☐ Deviation(s) ☐ Variance(s) ☐ Waiver(s)

   Explanation*:
   N/A

4. A Pre-submittal Neighborhood Meeting was required by Table 6-1-1: ☐ Yes ☒ No

   Summary of the Pre-submittal Neighborhood Meeting, if one occurred:
   N/A

5. ***For Site Plan Applications only****, attach site plan showing, at a minimum: N/A

   ☐ a. Location of proposed buildings and landscape areas.*
   ☐ b. Access and circulation for vehicles and pedestrians.*
   ☐ c. Maximum height of any proposed structures, with building elevations.*

[2] Physical address or Zoom link
[3] Address (mailing or email), phone number, or website to be provided by the applicant
[4] Available online here: *http://data.cabq.gov/business/zoneatlas/*

- ☐ d. **For residential development***: Maximum number of proposed dwelling units.
- ☐ e. **For non-residential development***:
  - ☐ Total gross floor area of proposed project.
  - ☐ Gross floor area for each proposed use.

Additional Information:

From the IDO Zoning Map[5]:

1. Area of Property *[typically in acres]* 26.5 acres
2. IDO Zone District NR-C
3. Overlay Zone(s) *[if applicable]* CPO - Character Protection Overlay Zone (3-4)
4. Center or Corridor Area *[if applicable]* Major Transit Corridor - Coors Blvd.

Current Land Use(s) *[vacant, if none]* Vacant

NOTE: Pursuant to IDO Subsection 14-16-6-4(L), property owners within 330 feet and Neighborhood Associations within 660 feet may request a post-submittal facilitated meeting. If requested at least 15 calendar days before the public meeting/hearing date noted above, the facilitated meeting will be required. To request a facilitated meeting regarding this project, contact the Planning Department at devhelp@cabq.gov or 505-924-3955.

Useful Links

Integrated Development Ordinance (IDO):
https://ido.abc-zone.com/

IDO Interactive Map
https://tinyurl.com/IDOzoningmap

[5] Available here: https://tinurl.com/idozoningmap

***Attached to all Neighborhood Notices**

OFFICIAL PUBLIC NOTIFICATION FORM
FOR MAILED OR ELECTRONIC MAIL NOTICE
CITY OF ALBUQUERQUE PLANNING DEPARTMENT

PART I - PROCESS	
Use Table 6-1-1 in the Integrated Development Ordinance (IDO) to answer the following:	
Application Type: Subdivision of Land - Major	
Decision-making Body: Development Review Board (DRB)	
Pre-Application meeting required:	X Yes ☐ No
Neighborhood meeting required:	Yes X No
Mailed Notice required:	X Yes ☐ No
Electronic Mail required:	X Yes ☐ No
Is this a Site Plan Application:	☐ Yes X No ***Note**: if yes, see second page*
PART II – DETAILS OF REQUEST	
Address of property listed in application: 3801 COORS BLVD NW ALBUQUERQUE NM 87120	
Name of property owner: Red Shamrock 12 LLC	
Name of applicant: Modulus Architects & Land Use Planning, Inc./Red Shamrock 12 LLC	
Date, time, and place of public meeting or hearing, if applicable:	
DRB Hearing March 16, 2022 @ 9:00am, VIA Zoom	
Address, phone number, or website for additional information:	
For questions, contact the Development Review Board staff at (505) 924-3880 or (505) 924-3994.	
PART III - ATTACHMENTS REQUIRED WITH THIS NOTICE	
X Zone Atlas page indicating subject property.	
X Drawings, elevations, or other illustrations of this request.	
☐ Summary of pre-submittal neighborhood meeting, if applicable. N/A	
☐ Summary of request, including explanations of deviations, variances, or waivers. N/A	
IMPORTANT: PUBLIC NOTICE MUST BE MADE IN A TIMELY MANNER PURSUANT TO SUBSECTION 14-16-6-4(K) OF THE INTEGRATED DEVELOPMENT ORDINANCE (IDO). PROOF OF NOTICE WITH ALL REQUIRED ATTACHMENTS MUST BE PRESENTED UPON APPLICATION.	

I certify that the information I have included here and sent in the required notice was complete, true, and accurate to the extent of my knowledge.

Regina Okoye (Applicant signature) 2/16/2022 (Date)

***Note**: Providing incomplete information may require re-sending public notice. Providing false or misleading information is a violation of the IDO pursuant to IDO Subsection 14-16-6-9(B)(3) and may lead to a denial of your application.*

OFFICIAL PUBLIC NOTIFICATION FORM
FOR MAILED OR ELECTRONIC MAIL NOTICE
CITY OF ALBUQUERQUE PLANNING DEPARTMENT

PART IV – ATTACHMENTS REQUIRED FOR SITE PLAN APPLICATIONS ONLY
Provide a site plan that shows, at a minimum, the following: N/A
☐ a. Location of proposed buildings and landscape areas.
☐ b. Access and circulation for vehicles and pedestrians.
☐ c. Maximum height of any proposed structures, with building elevations.
☐ d. For residential development: Maximum number of proposed dwelling units.
☐ e. For non-residential development: ☐ Total gross floor area of proposed project. ☐ Gross floor area for each proposed use.

The Zoom link for the March 16, 2022 DRB meeting is as follows:

Join Zoom Meeting
https://cabq.zoom.us/j/84698899333

Dial by your location
+1 346 248 7799 US

Meeting ID: 846 9889 9333
Find your local number: https://cabq.zoom.us/u/k21gdhdzt

***Attached to all Neighborhood Notices**

City Address: 3801 COORS BLVD NW

County Address: 3801 COORS BLVD NW

2/9/2022

www.cabq.gov/gis

City of Albuquerque Property Report

Ownership Data from Bernalillo County Assessor
(County Assessor's data for tax year 2018)
Owner Name: RED SHAMROCK 12 LLC
Owner Address: 8220 SAN PEDRO DR NE SUITE 500, ALBUQUERQUE NM 87113-2476
UPC: 101106018038720705
Tax Year: 2018 **Tax District:** A1A
Legal Description: TR X-2-A AMENDED PLAT OF TRS X-2-A & X-2-B THE UNIVERSITY OFALBUQUERQUE URBAN CENTER CONT 26.4990 AC M/L
Property Class: V **Document Number:** 2021088224 072621 SW - EN
Acres: 26.48

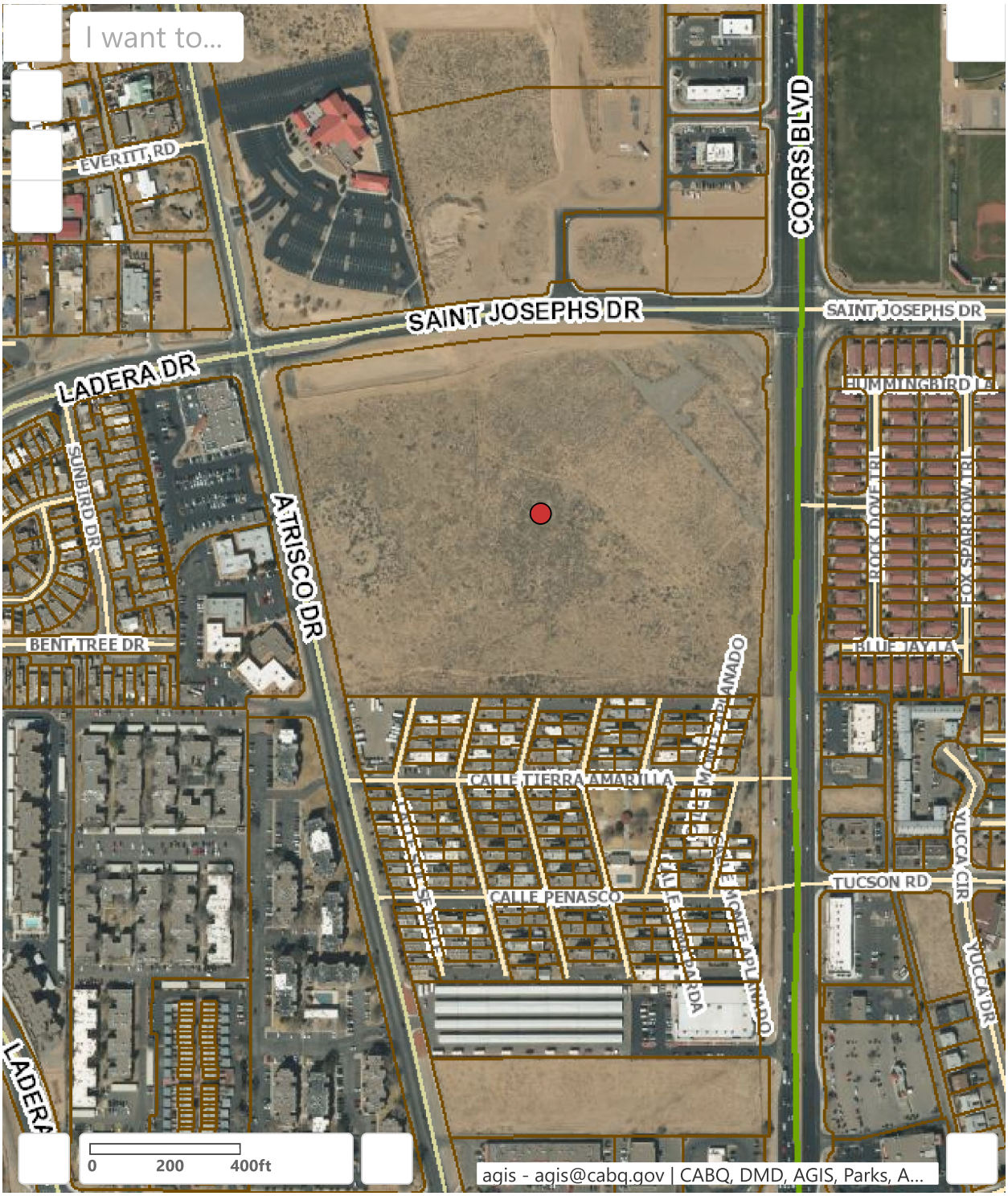
City Zoning and Services
IDO Zone District: NR-C
IDO District Definition: Commercial
Old Zoning Designation: SU-3
Old Zoning Description:
Land Use: 15 | Vacant
Lot: X2A **Block:** 0000 **Subdivision:** UNIVERSITY OF ABQ URBAN CENTER
Police Beat: 634 **Area Command:** NORTHWEST
Jurisdiction: ALBUQUERQUE
Zone Atlas Page: G11 (opens in new window)
City Neighborhood Association: Ladera Heights NA
Residential Trash Pickup:

Political Districts
City Council District: 1 - Louie Sanchez
County Commission District: 1 - Debbie O'Malley
NM House of Representatives: Antonio 'Moe' Maestas
NM Senate: Bill B. O'Neill

School Districts
Elementary: CHAPARRAL
Middle: JOHN ADAMS
High School: WEST MESA

FEMA Flood Zone: X
For questions about floodplain information, please contact the COA Floodplain Manager at 924-3986 or email ccherne@cabq.gov

Run another Search here
This report was created by the GIS group of DTI. Please send comments to GIS@cabq.gov.
Please wait while the map loads below...


I want to...
EVERITT RD
SAINT JOSEPHS DR
SAINT JOSEPHS DR
COORS BLVD
LADERA DR
HUMMINGBIRD
SUNBIRD DR
ATRISCO DR
ROCK DOVE
FOX SPARROW
BENT TREE DR
BLUE JAYLA
CALLE TIERRA AMARILLA
YUCCA CIR
TUCSON RD
CALLE PENASCO
YUCCA DR
LADERA
0
200
400ft
agis - agis@cabq.gov | CABQ, DMD, AGIS, Parks, A...

Regina Okoye

From: Regina Okoye
Sent: Wednesday, February 16, 2022 9:56 AM
To: 'aludi2wo@yahoo.com'; 'aludi415@gmail.com'; 'albqdog@aol.com'; 'jholt@hoamco.com'; 'fpawlak@cgres.com'; 'ekhaley@comcast.net'; 'aboard111@gmail.com'; 'schaefer@unm.edu'; 'dana@nationalheat.com'
Cc: Angela Williamson
Subject: Public Notice of a Proposed Project in the City of Albuquerque
Attachments: 01 - CABQ-Official_public_notice_form-2019.pdf; 02 - Address Report — City of Albuquerque.pdf; 03 - G-11-Z.PDF; 04 - plat.pdf

Tracking:

Recipient	Delivery	Read
'aludi2wo@yahoo.com'		
'aludi415@gmail.com'		
'albqdog@aol.com'		
'jholt@hoamco.com'		
'fpawlak@cgres.com'		
'ekhaley@comcast.net'		
'aboard111@gmail.com'		
'schaefer@unm.edu'		
'dana@nationalheat.com'		
Angela Williamson	Delivered: 2/16/2022 9:56 AM	Read: 2/16/2022 10:06 AM

Public Notice of a Proposed Project in the City of Albuquerque for Decisions Requiring a Meeting or Hearing Mailed/Emailed to a Neighborhood Association

Date of Notice: February 16, 2022

This notice of an application for a proposed project is provided as required by Integrated Development Ordinance (IDO) Subsection 14-16-6-4(K) Public Notice to:

Neighborhood Association (NA): Ladera Heights NA, The Enclave at Oxbow HOA, Villa De Paz HOA Inc., Westside Coalition of NA, Vista Grande NA

Name of NA Representative: Marie Ludi, Allan Ludi, Jill Greene, John Holt, Fran Pawlak, Christine Roy, Elizabeth Haley, Rene Horvath, Richard Schaefer, Dana Skaar

Email Address or Mailing Address of NA Representative: aludi2wo@yahoo.com, aludi415@gmail.com, albqdog@aol.com, jholt@hoamco.com, fpawlak@cgres.com, ekhaley@comcast.net, aboard111@gmail.com, schaefer@unm.edu, dana@nationalheat.com

Information Required by IDO Subsection 14-16-6-4(K)(1)(a)

1. Subject Property Address: 3801 Coors Blvd. NW, Albuquerque, NM 87120

   Location Description: St. Josephs Dr. NW and Coors Blvd.

2. Property Owner: Red Shamrock 12 LLC

3. Agent/Applicant [if applicable]: Modulus Architects & Land Use Planning, Inc./Red Shamrock 12 LLC

4. Application(s) Type per IDO Table 6-1-1 [mark all that apply]:

   Conditional Use Approval

Permit (Carport or Wall/Fence - Major)

Site Plan

Subdivision (Minor or Major) - Major

Vacation (Easement/Private Way or Public Right-of-way)

Variance

Waiver

Other:

Summary of project/request: Subdivide 1 existing lot into 10 smaller lots.

5. This application will be decided at a public meeting or hearing by:

Zoning Hearing Examiner (ZHE)

Landmarks Commission (LC)

Development Review Board (DRB)

Environmental Planning Commission (EPC)

Date/Time: DRB Hearing March 16, 2022 at 9:00 am

Location: VIA Zoom, meeting held at link provided at the website below:

Agenda/Meeting Materials: http://www.cabq.gov/planning/boards-commissions

To contact staff, email devhelp@cabq.gov or call the Planning Department at (505) 924-3994.

6. Where more information about the project can be found:

For questions, please contact the Development Review Board Staff at (505) 924-3880 or (505) 924-3994.

Information Required for Email Notice by IDO Subsection 6-4(K)(1)(b):

1. Zone Atlas Page(s): G-11-Z

2. Architectural drawings, elevations of the proposed building(s) or other illustrations of the proposed application, as relevant*: Attached to notice or provided via website noted above

3. The following exceptions to IDO standards will be requested for this project:

Deviation(s)

Variance(s)

Waiver(s)

Explanation: N/A

4. Pre-submittal Neighborhood Meeting: Not Required

5. For Site Plan Applications only, attach site plan showing, at a minimum: N/A

a. Location of proposed buildings and landscape areas.

b. Access and circulation for vehicles and pedestrians.

c. Maximum height of any proposed structures, with building elevations.

d. For residential development'": Maximum number of proposed dwelling units.

e. For non-residential development

Total gross floor area of proposed project

Gross floor area for each proposed use

Additional Information:

1. From the IDO Zoning Map:

a. Area of Property [typically in acres]: +/- 26.5 acres

b. IDO Zone District: NR-C

c. Overlay Zone(s): CPO – Character Protection Overlay Zone (3-4)

d. Center or Corridor Area: Montgomery Blvd. – Major Transit Corridors – Coors Blvd.

2. Current Land Use(s) [vacant, if none]: Vacant

NOTE: Pursuant to IDO Subsection 14-16-6-4(L), property owners within 330 feet and Neighborhood Associates within 660 feet may request a post-submittal facilitated meeting within 15 days of the date of this notice. To request a facilitated meeting regarding this project, contact the Planning Department at devhelp@cabq.gov or 505-924-3955

Useful Links

Integrated Development Ordinance (IDO)

https://ido.abc-zone.com/

IDO Interactive Map

https://tinyurl.com/IDOzoningmap

cc: Ladera Heights NA

The Enclave at Oxbow HOA

Villa De Paz HOA Inc.

Westside Coalition of NA

Vista Grande NA

[1] Pursuant to IDO Subsection 14-16-6-4(K)(5)(a), email is sufficient if on file with the Office of Neighborhood Coordination. If no email address is on file for a particular NA representative, notice must be mailed to the mailing address on file for that representative.
[2] Attach additional information, as needed to explain the project/request.

3 Physical address or Zoom link
4 Address (mailing or email), phone number, or website to be provided by the applicant
5 Available online here: *http://data.cabq.gov/business/zoneatlas/*

[6] Available here: https://tinurl.com/idozoningmap

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

TAYLOR MARY M
132 CALLE SOL SE MENTE NW
ALBUQUERQUE NM 87120-3472

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

PHIFER DANIEL DEE & DEBRA LYNN
164 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3453

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

CRUICKSHANK CYNTHIA D
134 CALLE SOL SE METE NW
ALBUQUERQUE NM 87120-3473

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

DERRICK WILLIAM B
165 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3477

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BOURGUET SILAS L
170 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3476

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

GUTIERREZ HECTOR & BRIDGETTE M
3909 ROCK DOVE NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

LAMBERT FREDERICK M & ROSELYN B
TRUSTEES LAMBERT FAMILY TRUST
8839 GREENLAWN ST
RIVERSIDE CA 92508-2521

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

KINES DAVID T
13 MILL RD NW
ALBUQUERQUE NM 87120-1915

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BLACK RONALD B & JASMINE NYLS
5431 HUMMINGBIRD LN NW
ALBUQUERQUE NM 87120-4515

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

GLOVER STEVEN F
800 PASEO VERDE RD NE
ALBUQUERQUE NM 87113-2850

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

AGUIRRE YVETTE A
159 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3461

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BUSHMAN JAMES
945 MONTOYA ST NW
ALBUQUERQUE NM 87104-1910

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

JOSEPHSON DOLORES M & SCOTT R
158 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3469

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BACA CHRISTOPHER M & JANICE J
3023 SIOUX ST NW
ALBUQUERQUE NM 87107-1048

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BOHLING DONALLY
138 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3474

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

KINNIER JAMES & ELIZABETH
6 WOODCHUCK TRL
CORAM NY 11727-2140

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

WILSON NICHOLAS
6420 MONTE SERRANO NE
ALBUQUERQUE NM 87111-1253

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

FERNANDEZ ARNIELLE TRUSTEE FERNANDEZ
VENEGAS IRRVT
4424 BENTGRASS MEADOWS NE
RIO RANCHO NM 87144-5744

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

SANCHEZ DOLORES M
8312 SPRENGER DR NE
ALBUQUERQUE NM 87109-5249

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

ALCON JOHN & ESQUIBEL ISABEL
3835 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

HINTON ROBERT A
5800 MESA SOMBRA PL NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

ARCHDIOCESE OF SANTA FE REAL ESTATE
CORPORATION
4000 ST JOSEPHS PL NW
ALBUQUERQUE NM 87120-1714

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MCCOY RONALD L & PAMELA J
155 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3468

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

PENA ANGELA LOVATO
139 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3474

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MORALES ANDREA P DIAZ
153 CALLE VADITO NW
ALBUQUERQUE NM 87120-3455

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

SANCHEZ MARK S & DIANE M
PO BOX 2411
CORRALES NM 87048

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MESA RIDGE APARTMENTS LLC C/O
MONARCH INVESTMENT
2195 N STATE HWY 83 SUITE 148
FRANKTOWN CO 80116-9664

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

HARLAN JASON C
172 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3476

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

TRAYNOR TODD & LUANN
160 CALLE ARROYO SECO NW
ALBUQUERQUE NM 87120-3469

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

POLACO VICTORIA C
129 CALLE SOL SE METE NW
ALBUQUERQUE NM 87120-3472

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

ARBELO RAMOS JOSUE A & ARBELO JUANITA
97 CALLE VADITO NW
ALBUQUERQUE NM 87120-3466

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

SANTIAGO HERMES
99 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3457

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

KNOX THOMAS J
3809 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

GARCIA JOSEPH
3827 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120-4517

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

DUNBAR LOREN D
143 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

DUNKLEBERGER CHERI L & JEFFREY
1331 DUSKFIRE DR NW
ALBUQUERQUE NM 87120-5553

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

HOME REJUVENATION 1 LLC
3615 YIPEE CALLE CT NW
ALBUQUERQUE NM 87120-2381

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

GIACINTO DOROTHY J TRUSTEE DOROTHY
GIACINTO RVLT
3915 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120-[illegible]

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

GARCIA MARY E
3901 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

LOPEZ CHRISTIAN D & LEANNE K
3650 NM HWY 528 NE PAD 72
RIO RANCHO NM 87144-7524

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

PETERSON ELISABETH
5432 BLUE JAY LN NW
ALBUQUERQUE NM 87120-4915

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

NEWMAN PHYLLIS A
5427 HUMMINGBIRD LN NW
ALBUQUERQUE NM 87120-4515

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

RMV INVESTMENTS LLC
6509 JADE NW
ALBUQUERQUE NM 87120-3284

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

HARMON DAVID & CHRISTINE
5741 N WESTSHORE DR
MORGANTOWN IN 46160-8687

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

TAMBOR MARIA
3923 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

FELSTED HUGH H & CARLA M
156 CALLE AMOVO SECO NW
ALBUQUERQUE NM 87120-3458

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

VILLA DE PAZ HOMEOWNERS #185
8500 JEFFERSON ST NE SUITE B
ALBUQUERQUE NM 87113-1884

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BYRNES SONIA R
98 CALLE VADITO NW
ALBUQUERQUE NM 87120-3466

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MEYERS MARK D
152 CALLE VADITO NW
ALBUQUERQUE NM 87120-3456

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

LEVINE INVESTMENTS LIMITED PARTNERSHIP
2801 E CAMELBACK RD SUITE 450
PHOENIX AZ 85016-0000

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

KIRTLAND FEDERAL CREDIT UNION
6440 GIBSON BLVD SE
ALBUQUERQUE NM 87108-4971

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BARTLETT ANNELLE M
173 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3477

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

CHAVEZ ANGELA DIANE
82 CALLE AMOVO SECO NW
ALBUQUERQUE NM 87120-3451

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

SMITH BRIAN C & SMITH IVAN W & JOAN T
176 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3471

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MANGHAM JAMES A & JACQUELINE L
PO BOX 295
CUBA NM 87013

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MARES JORDAN H & BROPHY KEVIN E
182 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3471

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

LADERA HEIGHTS NA
ALAN LUDI
6216 ST JOSEPHS AVE NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

LADERA HEIGHTS NA
MARIE LUDI
6216 ST JOSEPHS AVE NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

VISTA GRANDE NA
DANA SKAAR
3504 SEQUOIA COURT NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

POOLE ROBERT D TRUSTEE POOLE RVT
6109 SWEETWATER DR NW
ALBUQUERQUE NM 87120-4492

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

ARAGONI LEWIS A ETUX
7556 CHASE ST
ARVADA CO 80007-4274

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

PACHTA ANGELA
141 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

DIETZ DEBRA
182 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3471

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

TREVINO VICTOR A
2827 SOL DE VIDA NW
ALBUQUERQUE NM 87120-1329

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

VILLA DE PAZ HOA INC
CHRISTINE ROY
6 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

GALLEGOS ANNA M
143 CALLE AMOVO SECO NW
ALBUQUERQUE NM 87120-3453

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

STRADFORD LEROY H & BETTY W
145 CALLE VADITO NW
ALBUQUERQUE NM 87120-3455

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

3D INVESTMENTS LLC
3740 COORS BLVD NW SUITE A
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

GIL VIRGILIO SERGIO SR TRUSTEE VIRGILIO
6506 CALLE REDONDA NW
RV17
ALBUQUERQUE NM 87120-2728

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BREESWINE STEWART L & PRESCILLA
3905 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

PRESBYTERIAN HEALTHCARE SERVICES REAL ESTATE DEPARTMENT
PO BOX 26666
ALBUQUERQUE NM 87125-6666

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

SWALWELL AARON E
135 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MILLER JIM & MARK CORDOVA
169 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3476

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

OXBOW HOMEOWNERS ASSOCIATION
PO BOX 67590
ALBUQUERQUE NM 87193-7590

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

TOWELL LOUETTA L
5436 BLUE JAY LN NW
ALBUQUERQUE NM 87120-4915

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

CITY OF ALBUQUERQUE
PO BOX 1293
ALBUQUERQUE NM 87103

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

WHEELER CAMILLE A & WILLE E
167 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3477

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

FOUTZ ZACHARY
168 CALLE LOMA PARDA NW
ALBUQUERQUE NM 87120-3477

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

SANCHEZ DANIEL A
178 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3470

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BROADSTONE AGUSTONS LLC
10579 W BRADFORD RD SUITE 100
LITTLETON CO 80127-4274

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

SANCHEZ LEENA M
59 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3462

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

UNRER ROGER L & WANDA LEMONS
PO BOX 81391
ALBUQUERQUE NM 87198-1391

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

PETERSON SUSAN & LAWRENCE V
3815 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120-4517

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

THE ENCLAVE AT OSKOX HOA
JOHN HOLT
PO BOX 67590
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

VILLA DE PAZ HOA INC
CHRISTINE ROY
54 CALLE MONTE ARLANADO NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

VISTA GRANDE NA
RICHARD SCHAEFER
3539 SEQUOIA PLACE NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

BACA RAYMOND & PRISCILLA A
180 CALLE MONTE APLANADO NW
ALBUQUERQUE NM 87120-3470

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

CHISM THERESA L
146 CALLE VADITO NW
ALBUQUERQUE NM 87120-3455

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

WESTSIDE COALITION OF NA
RENE HORVATH
5515 PALOMINO DRIVE NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

VILLA DE PAZ HOA INC
IRMA PRIMIAK
8500 JEFFERSON ST NE SUITE B
ALBUQUERQUE NM 87113

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MCCRAY PATRICIA F
136 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

REYTERA MELISSA
83 CALLE VADITO NW
ALBUQUERQUE NM 87120-3478

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

COOY GERALD L JR TRUSTEE COOY JR FAMILY TRUST
131 CALLE SOL SE MERE NW
ALBUQUERQUE NM 87120-3472

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

ASHLING SARAH J
3831 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120-4517

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

THE ENCLAVE AT OSKOX HOA
JUL GREENE
3915 FOX SPARROW TRAIL NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

WESTSIDE COALITION OF NA
ELIZABETH HALEY
6005 CHAPARRAL CIRCLE NW
ALBUQUERQUE NM 87114

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

STEWART CECILIA FRENCH TR OF CECILIA FRENCH & DIANA E STEWART RVT
PO BOX 94
ALBUQUERQUE NM 87103

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

RED SHAMROCK 12 LLC
8220 SAN PEDRO DR NE SUITE 500
ALBUQUERQUE NM 87113-2476

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

GREENWAY MARIAN
144 CALLE PUEBLO PINADO NW
ALBUQUERQUE NM 87120-3475

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

VILLA DE PAZ HOMEOWNERS ASSOC #185
7770 JEFFERSON ST NE SUITE 102
ALBUQUERQUE NM 87109-4386

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

ARCHULETA AMADEO D & LIVA O
3823 ROCK DOVE TRL NW
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

PARSONS SHIRLEY M & PARSONS RICHARD J SR
154 CALLE VADITO NW
ALBUQUERQUE NM 87120-3455

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

RICE ROBERT L & VERA E
150 CALLE VADITO NW
ALBUQUERQUE NM 87120-3456

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

PARKS PAULA S
3400 ATRISCO DR NW 148
ALBUQUERQUE NM 87120

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MEDINA AMANDA SERENA
130 CALLE SOL SE MERE NW
ALBUQUERQUE NM 87120-3472

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MILLIGAN INVESTMENTS LLC
909 THIRD AVE #6412
NEW YORK NY 10150-2060

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

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100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

MODULUS ARCHITECTS INC.
100 SUN AVENUE NE, SUITE 600
ALBUQUERQUE, NM 87109

UNITED STATES POSTAL SERVICE.

ACADEMY
6255 SAN ANTONIO DR NE
ALBUQUERQUE, NM 87109-9998
(800)275-8777

02/10/2022 10:09 AM

Product	Qty	Unit Price	Price
Forever® Postage Stamp	16	$0.58	$9.28

Grand Total: $9.28

Credit Card Remitted $9.28
Card Name: VISA
Account #: XXXXXXXXXXXX1521
Approval #: 07197G
Transaction #: 735
Receipt #: 000735
AID: A0000000031010 Chip
AL: VISA CREDIT
PIN: Not Required CAPITAL ONE VISA

****
USPS is experiencing unprecedented volume increases and limited employee availability due to the impacts of COVID-19. We appreciate your patience.
****

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Go to: https://postalexperience.com/ssk
or scan this code with your mobile device,

UFN: 340128-9552
Receipt #: 840-18520494-1-5461411-1
Clerk: 00

UNITED STATES POSTAL SERVICE.

ACADEMY
6255 SAN ANTONIO DR NE
ALBUQUERQUE, NM 87109-9998
(800)275-8777

02/10/2022 10:08 AM

Product	Qty	Unit Price	Price
U.S. Flags Coil	2	$58.00	$116.00

Grand Total: $116.00

Credit Card Remitted $116.00
Card Name: VISA
Account #: XXXXXXXXXXXX1521
Approval #: 04640G
Transaction #: 529
AID: A0000000031010 Chip
AL: VISA CREDIT
PIN: Not Required CAPITAL ONE VISA

****
USPS is experiencing unprecedented volume increases and limited employee availability due to the impacts of COVID-19. We appreciate your patience.
****

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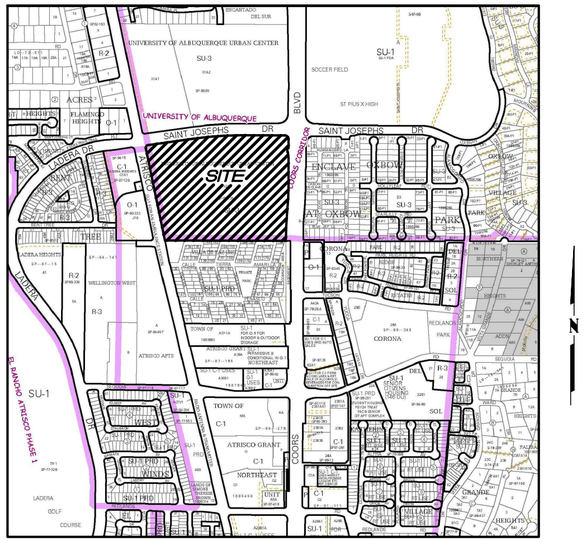
or scan this code with your mobile device,

or call 1-800-410-7420.

UFN: 340128-0109
Receipt #: 840-58700065-3-6849089-1
Clerk: 61



Zone Atlas G–11–Z

VICINITY MAP

Not To Scale

GENERAL NOTES

1. Bearings are grid and based on the New Mexico State Plane Coordinate System, Central Zone (NAD83).
2. Distances are ground U.S. Survey Feet.
3. Distances along curved lines are arc lengths.
4. Record Plat or Deed bearings and distances, where they differ from those established by this field survey, are shown in parenthesis ( ).
5. All corners found in place and held were tagged with a brass disk stamped "8911" unless otherwise indicated hereon.
6. All corners that were set are either a 5/8" rebar with cap stamped "8911" or a concrete nail with brass disk stamped "8911" unless otherwise indicated hereon.
7. City of Albuquerque Zone Atlas Page G–11–Z.

SUBDIVISION DATA

1. Total number of existing Tracts: 1
2. Total number of Lots created: 10
3. Total mileage of full width streets created: 0 miles
4. Gross Subdivision acreage: 26.4992 acres.
5. Total number of Tracts created: 0
5. Total Right–of–Way Dedicated: 0.4613

PURPOSE OF PLAT:

The purpose of this Plat is to:

1. Create 10 new Lots from One existing Tract as shown hereon.
2. Dedicate Additional Right–of–Way as shown hereon.

TREASURERS CERTIFICATION

This is to certify that taxes are current and paid on the following:

_____

_____

_____

_____

Bernalillo County Treasurer — Date

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of:

A. Public Service Company of New Mexico ("PNM"), a New Mexico corporation, (PNM Electric) for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical services.

B. New Mexico Gas Company for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas services.

C. Qwest Corporation d/b/a CenturyLinlk QC. for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services.

D. Cable TV for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, replace, modify, renew, operate and maintain facilities for purposes described above, together with free access to, from, and over said easements, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.

Easements for electric transformer/switchgears, as installed, shall extend ten (10) feet in front of transformer/switchgear doors and five (5) feet on each side.

DISCLAIMER

In approving this plat, Public Service Company of New Mexico (PNM) and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

APPROVED on the condition that all rights of the Middle Rio Grande Conservancy District in easements, rights of way, assessments and liens, are fully reserved to said District, and that if provision for irrigation source and easements are not provided for by the subdivider for the subdivision, addition, or plat, said District is absolved of all obligations to furnish irrigation waters and services to any portions thereof, other than from existing turnouts

PLAT OF

LOTS 1 THRU 10 THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER

WITHIN
THE TOWN OF ATRISCO GRANT
IN
PROJECTED SECTION 2, TOWNSHIP 10 NORTH, RANGE 2 EAST
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

NOVEMBER, 2021

PROJECT NUMBER: _____

Application Number: _____

PLAT APPROVAL

UTILITY APPROVALS:

Public Service Company of New Mexico	02/08/2022 Date
New Mexico Gas Company (Jeff Estvanko — Digitally signed by Jeff Estvanko Date: 2022.02.03 11:17:23 -07'00')	Date
Qwest Corporation d/b/a CenturyLink QC. (Abdul A Bhuiyan)	2/11/2022 Date
Comcast	2-10-22 Date

CITY APPROVALS:

City Surveyor (Loren N. Risenhoover P.S.)	6/14/2021 Date

Department of Municipal Development

Code Enforcement	Date
Traffic Engineering, Transportation Division	Date
ABCWUA	Date
Parks and Recreation Department	Date
AMAFCA	Date
City Engineer	Date
DRB Chairperson, Planning Department	Date

SURVEYORS CERTIFICATION

I, David Vigil, New Mexico Professional Surveyor Number 8911, hereby certify that this plat of survey was prepared from field notes of an actual ground survey performed by me or under my supervision; that it meets the Standards for Land Surveys in New Mexico as adopted by the New Mexico State Board of Registration for Professional Engineers and Professional Surveyors; that it meets the minimum requirements for surveys and monumentation of the Albuquerque Subdivision Ordinance; that it shows all easements of record; and that it is true and correct to the best of my knowledge and belief.

DAVID A. VIGIL — NEW MEXICO — 8911 — PROFESSIONAL SURVEYOR

David Vigil
NMPS No. 8911

SHEET 1 OF 3

SURV TEK
Consulting Surveyors
Albuquerque, New Mexico
Phone: 505–897–3366

210218

PLAT OF

LOTS 1 THRU 10
THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER

WITHIN
THE TOWN OF ATRISCO GRANT
IN
PROJECTED SECTION 2, TOWNSHIP 10 NORTH, RANGE 2 EAST
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

NOVEMBER, 2021

LEGAL DESCRIPTION

Tract "X-2-A" of the Amended Plat of Tracts X-2-A & X-2-B, THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER, Albuquerque, Bernalillo County, New Mexico, as the same is shown and designated on said amended plat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico, on July 10, 1995, in Plat Book 95C, page 250.

FREE CONSENT AND DEDICATION

SURVEYED and SUBDIVIDED and now comprising Lots 1 THRU 10, THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER, with the free consent of and in accordance with the wishes and desires of the undersigned owner(s) and proprietor(s) thereof. Said owner(s) and proprietor(s) do hereby grant the public and private easements as shown hereon. Said owner(s) and proprietor(s) do hereby warrant that they hold among them complete and indefeasible title in fee simple to the land subdivided. Said owner(s) and proprietor(s) do hereby consent to all of the foregoing and do hereby represent that they are so authorized to act.

OWNER

Red Shamrock 12, LLC, a New Mexico limited liability company

By: _____ 2-14-22
Joshua Skarsgard
Managing Member — Date

ACKNOWLEDGMENT

STATE OF NEW MEXICO
SS
COUNTY OF BERNALILLO

The foregoing instrument was acknowledged before me this 14th day of February, 2022, by Joshua Skarsgard.

_____ My commission expires 04/01/24
Notary Public

OFFICIAL SEAL
Kent Holland
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires: 04/01/24

DOCUMENTS USED IN THE PREPARATION OF THIS SURVEY

A. Plat entitled "PLAT OF TRACTS X-1-A1 AND X-1-A2, UNIVERSITY OF ALBUQUERQUE URBAN CENTER, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, FEBRUARY 1998", filed March 12, 1998, in Volume 98C, Folio 68, records of Bernalillo County, New Mexico.

B. Plat entitled "AMENDED PLAT OF TRACTS X-2-A AND X-2-B, THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, JANUARY 1995", filed July 10, 1995, in Volume 95C, Folio 250, records of Bernalillo County, New Mexico.

C. Plat entitled "REPLAT MAP FOR TRACT X A POTION OF THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER, ALBUQUERQUE, NEW MEXICO, MAY, 1987", filed November 17, 1987 in Volume C35, Folio 29, records of Bernalillo County, New Mexico.

D. Title Commitment prepared for this property by Fidelity National Title Insurance Company, Commitment for Title Insurance No. SP000104432, dated March 24, 2021.

PROHIBITION ON PRIVATE RESTRICTIONS ON THE INSTALLATION OF SOLAR COLLECTORS

"No property within the area of this plat shall at any time be subject to a deed restriction, covenant, or binding agreement prohibiting solar collectors from being installed on buildings or erected on the lots or parcels within the area of proposed plat. The foregoing requirement shall be a condition to approval of this plat."

FLOOD ZONE DETERMINATION

The subject property (as shown hereon) lies within Zone "X" (areas determined to be outside 0.2% annual chance flood plain) in accordance with the National Flood Insurance Program Rate Map No. 35001C0329 H, Effective Date: 08/16/12.

SURV TEK
Consulting Surveyors
Albuquerque, New Mexico
Phone: 505-897-3366

210218

PLAT OF

LOTS 1 THRU 10
THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER

WITHIN
THE TOWN OF ATRISCO GRANT
IN
PROJECTED SECTION 2, TOWNSHIP 10 NORTH, RANGE 2 EAST
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

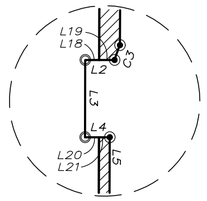
NOVEMBER, 2021

LINE TABLE		
LINE	LENGTH	BEARING
L1	71.53' (71.53')	S00°10'11"W (S00°10'11"W)
L2	8.53' (8.53')	N89°49'48"W (N89°49'48"W)
L3	36.00' (36.00')	S00°10'12"W (S00°10'12"W)
L4	6.38' (6.38')	S89°49'48"E (S89°49'48"E)
L5	32.00' (32.00')	S00°10'12"W (S00°10'12"W)
L6	60.87	S00° 10' 12"W
L7	152.37	S00° 10' 12"W
L8	103.62	S00° 10' 12"W
L9	95.51	S00° 10' 12"W
L10	42.08	S87° 59' 21"W
L11	37.92	S87° 59' 21"W
L12	80.00	S87° 59' 21"W

LINE TABLE		
LINE	LENGTH	BEARING
L13	4.50	S0° 10' 47"W
L14	21.99	N00° 00' 00"E
L15	24.01	N00° 00' 00"W
L16	63.97	N00° 10' 06"E
L17	70.68	S00° 10' 12"W
L18	5.16	N89° 49' 47"W
L19	3.37	N89° 49' 49"W
L20	5.16	S89° 47' 24"E
L21	1.22	S90° 00' 00"E
L22	50.06	N78° 15' 27"E
L23	69.15	N11° 44' 33"W
L24	601.46	N78° 15' 27"E
L25	83.05	S90° 00' 00"E
L26	217.70	N90° 00' 00"W

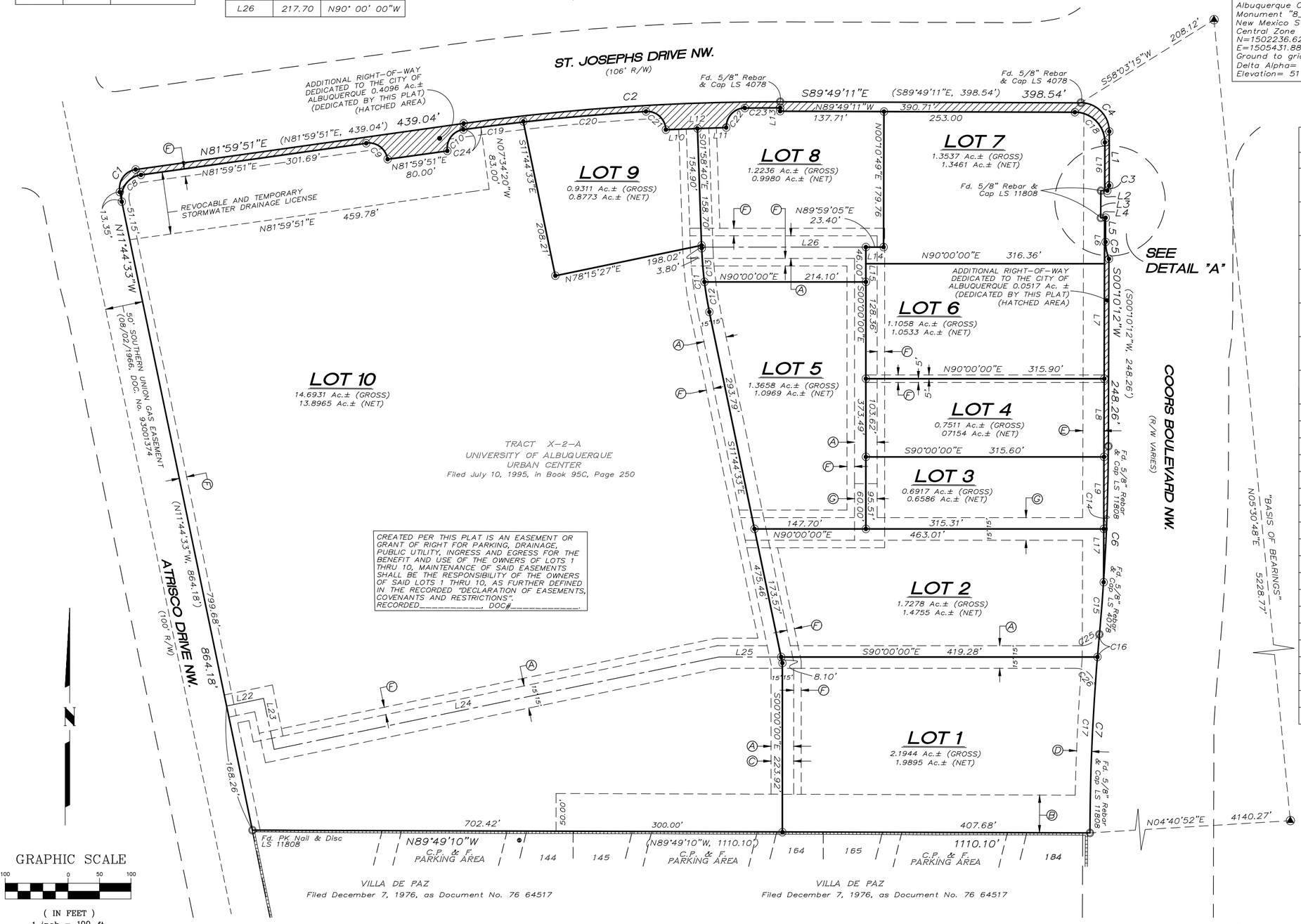
KEYED EASEMENTS:

- (A) 30' PUBLIC ACCESS, PUBLIC WATER & SANITARY SEWER EASEMENT FOR THE BENEFIT OF LOTS 1–10 TO BE MAINTAINED BY OWNERS OF SAID LOTS. (GRANTED BY THIS PLAT)
- (B) PRIVATE STORM DRAINAGE EASEMENT BENEFIT OF LOTS 1–10 TO BE MAINTAINED BY OWNERS OF SAID LOTS. (GRANTED BY THIS PLAT)
- (C) 30' PRIVATE STORM DRAINAGE EASEMENT BENEFIT OF LOTS 1–10 TO BE MAINTAINED BY OWNERS OF SAID LOTS. (GRANTED BY THIS PLAT)
- (D) 20' PRIVATE STORM DRAINAGE EASEMENT BENEFIT OF LOTS 1–10 TO BE MAINTAINED BY OWNERS OF SAID LOTS. (GRANTED BY THIS PLAT)
- (E) 28' PRIVATE STORM DRAINAGE EASEMENT BENEFIT OF LOTS 1–10 TO BE MAINTAINED BY OWNERS OF SAID LOTS. (GRANTED BY THIS PLAT)
- (F) 10' P.U.E. (GRANTED BY THIS PLAT)
- (G) 30' PRIVATE STORM DRAINAGE EASEMENT BENEFIT OF LOTS 1–10 TO BE MAINTAINED BY OWNERS OF SAID LOTS. (GRANTED BY THIS PLAT)



DETAIL "A"
N.T.S.

Albuquerque Control Survey
Monument "8_G11"
New Mexico State Plane Coordinates,
Central Zone (NAD 83) as published:
N=1502236.625 U.S. SURVEY FEET
E=1505431.887 U.S. SURVEY FEET
Ground to grid factor= 0.999680082
Delta Alpha= –00°15'35.17"
Elevation= 5116.009 U.S. SURVEY FEET (NAVD88)



Curve Table						
CURVE	LENGTH	RADIUS	TANGENT	CHORD	CHORD BEARING	DELTA
C1	40.91' (40.91')	25.00' (25.00')	26.70'	36.50' (36.50')	S35°07'10"W (S35°07'10"W)	93°45'42" (93°45'42")
C2	420.88' (420.88')	2947.00' (2947.00')	210.80'	420.52' (420.52')	S86°05'20"W (S86°05'20"W)	8°10'58" (8°10'58")
C3	7.37' (7.37')	56.63' (56.63')	3.69	7.36' (7.36')	S19°45'40"W (S19°45'40"W)	7°27'06" (7°27'06")
C4	59.69' (59.69')	38.00' (38.00')	38.00'	53.74' (53.74')	N44°49'30"W (N44°49'30"W)	89°59'59" (89°59'59")
C5	23.05' (23.05')	56.62' (56.62')	11.69'	22.89' (22.89')	S11°29'21"E (S11°29'21"E)	23°19'26" (23°19'26")
C6	249.78' (249.78')	2786.79' (2786.79')	124.98'	249.70' (249.70')	N02°44'16"E (N02°44'16"E)	5°08'08" (5°08'08")
C7	263.71' (263.71')	2942.79' (2942.79')	131.95'	263.63' (263.62')	S02°44'22"W (S02°44'17"W)	5°08'04" (5°08'04")
C8	49.08	30.00	32.03	43.79	S35° 07' 39"W	93°44'24"
C9	39.27	25.00	25.00	35.36	N53° 00' 09"W	90°00'00"
C10	39.27	25.00	25.00	35.36	S36° 59' 51"W	90°00'00"
C11	85.21	500.00	42.71	85.11	S6° 51' 36"E	9°45'53"
C12	40.40	500.00	20.21	40.39	S9° 25' 39"E	4°37'48"
C13	44.81	500.00	22.42	44.79	S4° 32' 43"E	5°08'05"
C14	180.50	2786.79	90.28	180.47	N2° 01' 32"E	3°42'40"
C15	69.29	2786.79	34.64	69.28	N4° 35' 36"E	1°25'28"
C16	30.31	2942.79	15.16	30.31	S5° 00' 42"W	0°35'25"
C17	233.40	2942.79	116.76	233.34	S2° 26' 40"W	4°32'40"
C18	62.82	40.00	39.99	56.56	N44° 49' 33"W	89°59'17"
C19	80.09	2939.00	40.05	80.09	S82° 45' 06"W	1°33'41"
C20	163.05	2939.00	81.54	163.03	S85° 07' 18"W	3°10'43"
C21	39.83	25.00	25.56	35.75	N47° 38' 59"W	91°16'41"
C22	39.83	25.00	25.56	35.75	S43° 37' 42"W	91°16'41"
C23	46.83	2939.00	23.41	46.83	S89° 43' 26"W	0°54'46"
C24	23.43	2939.00	11.71	23.43	S82° 11' 58"W	0°27'24"
C25	37.02	25.00	22.85	33.73	N47° 34' 29"E	84°51'02"
C26	40.97	25.00	26.76	36.54	N43° 02' 56"W	93°54'08"

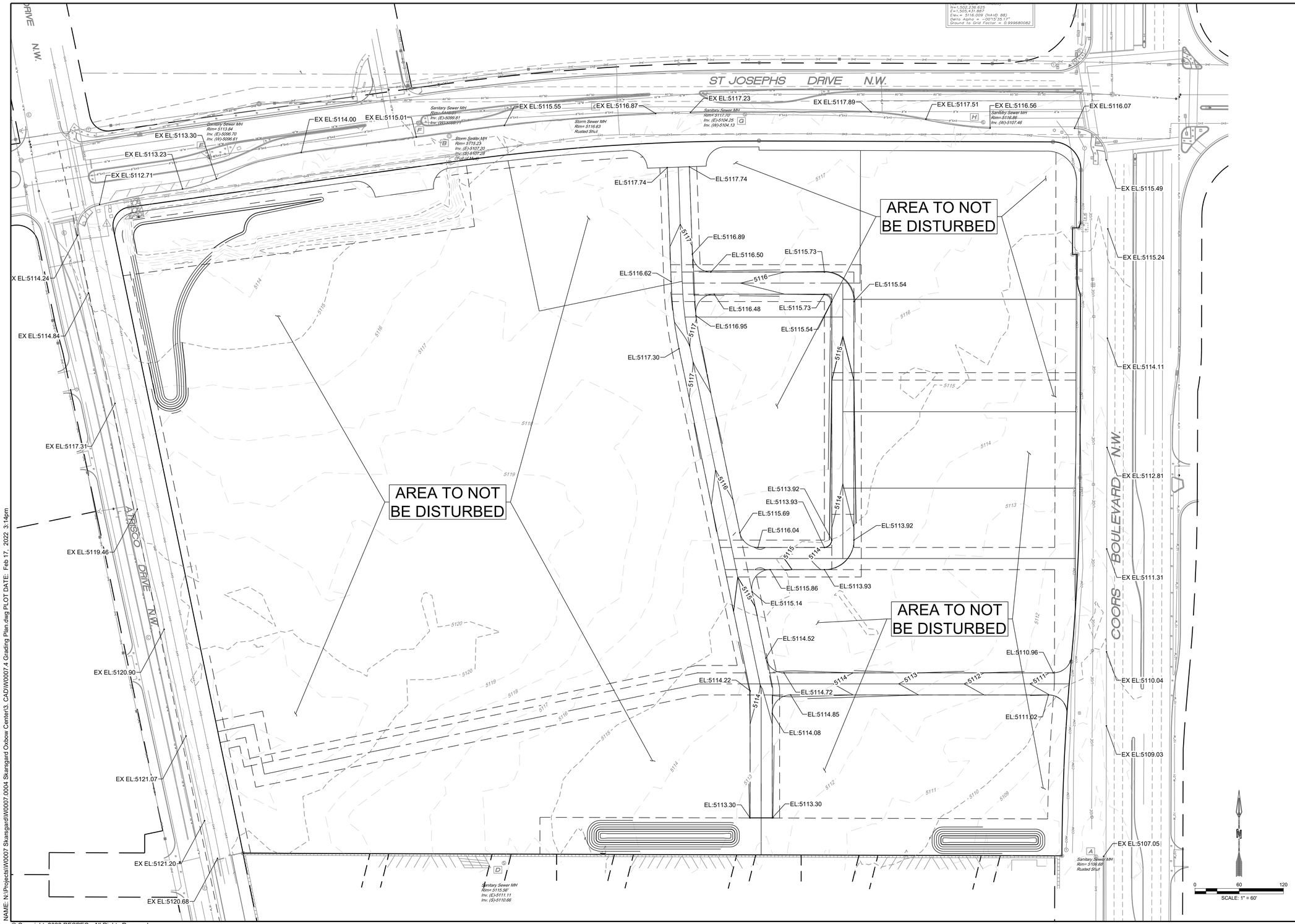
Albuquerque Control Survey
Monument "12_H11"
New Mexico State Plane Coordinates,
Central Zone (NAD 83) as published:
N=1497519.02 U.S. SURVEY FEET
E=1505414.361 U.S. SURVEY FEET
Ground to grid factor= 0.999680622
Delta Alpha= –00°15'34.84"
Elevation= 5104.854 U.S. SURVEY FEET (NAVD88)

GRAPHIC SCALE
100 0 50 100
(IN FEET)
1 inch = 100 ft.

SHEET 3 OF 3

210218

SURVTEK
Consulting Surveyors
Albuquerque, New Mexico
Phone: 505–897–3366



NAME: N:\Projects\W0007 Skarsgard\W0007.0004 Skarsgard Oxbow Center\3. CAD\W0007.4 Grading Plan.dwg PLOT DATE: Feb 17, 2022, 3:14pm

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DESIGNED	DESIGN BY
DRAWN	DRAWN BY
CHECKED	CHECKED BY
DATE	2.17.2022

REVISION

RESPEC
5971 Jefferson Street Suite 101
Albuquerque, New Mexico 87109
Water and Natural Resources
respec.com 505.253.9718

STAMP

SHELDON E. GREER
NEW MEXICO
17154
LICENSED PROFESSIONAL ENGINEER
2/17/2022

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2/2022

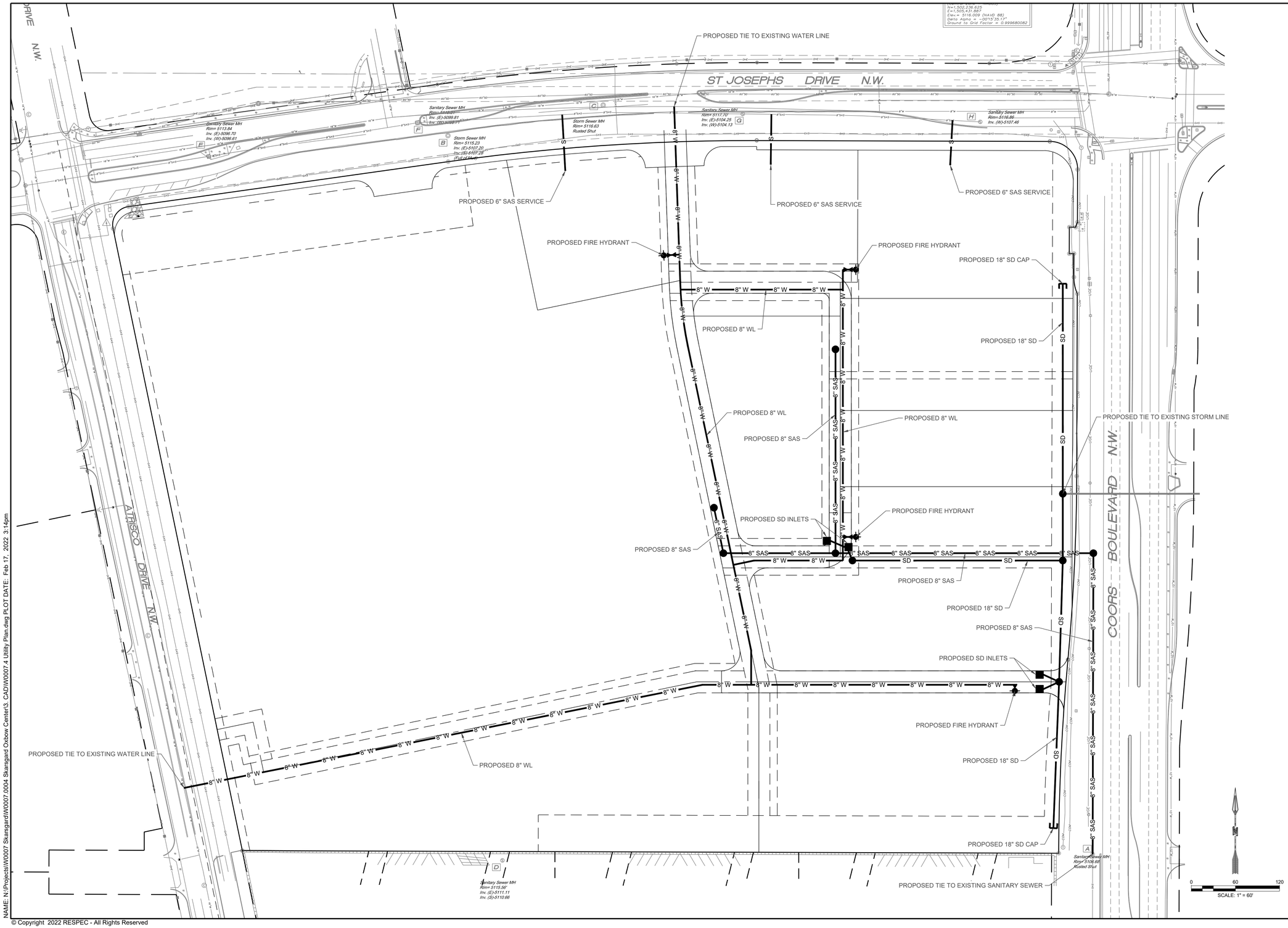
THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED

PROJECT NAME: OXBOW CENTER

SHEET TITLE: CONCEPTUAL GRADING & DRAINAGE PLAN

SUBMITTED FOR: PRELIMINARY PLAT

SHEET NUMBER: C-XX



NAME: N:\Projects\W0007 Skarsgard\W0007.0004 Skarsgard Oxbow Center\3. CAD\W0007.4 Utility Plan.dwg PLOT DATE: Feb 17, 2022 3:14pm

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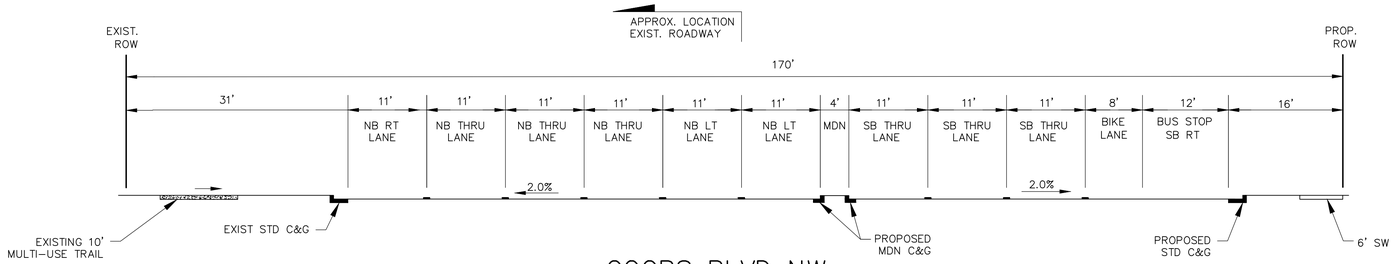
PROJECT NAME: OXBOW CENTER

SHEET TITLE: CONCEPTUAL UTILITY PLAN

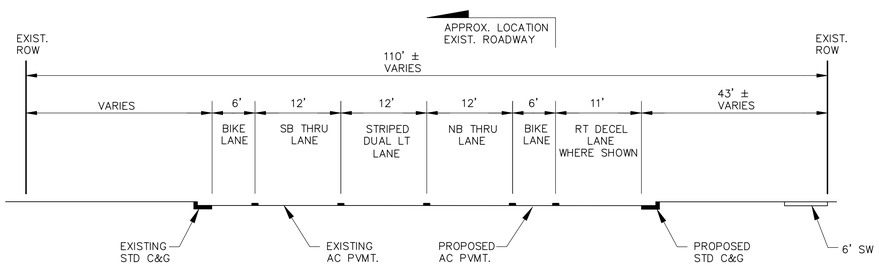
SUBMITTED FOR: PRELIMINARY PLAT

SHEET NUMBER: C-XX



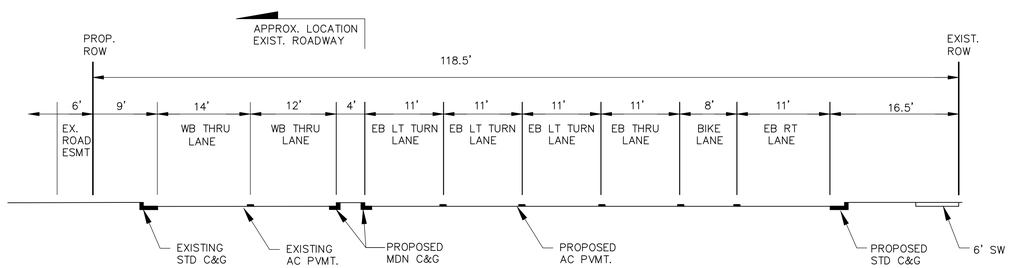
COORS BLVD NW

NTS



ATRISCO DR. NW

NTS



ST. JOSEPHS DR. NW – WEST OF COORS INTERSECTION

NTS

NAME: N:\Projects\W0007 Skarsgard\W0007.0004 Skarsgard Oxbow Center\3. CAD\W0007.4 Road Section Exhibits 021722.dwg PLOT DATE: Feb 17, 2022 3:36pm

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DRAWN DRAWN BY
CHECKED CHECKED BY
DATE 2-17-2022

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NEW MEXICO
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2/17/2022

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PROJECT NAME: OXBOW CENTER

SHEET TITLE: CONCEPTUAL ROAD CROSS SECTIONS

SUBMITTED FOR: PRELIMINARY PLAT

SHEET NUMBER: C-XX

SENSITIVE LANDS ANALYSIS

PURSUANT TO IDO SECTION 5-2, SITE DESIGN AND SENSITIVE LANDS, THE SITE WAS REVIEWED THROUGH CURRENT TOPOGRAPHIC MAPPING, AERIAL PHOTOGRAPHY, AND A THOROUGH SITE VISIT. THE FOLLOWING ANALYSIS PROVIDED GUIDANCE TO THE SITE PLAN FOR OXBOW CENTER:

5-2(C)(1)(a) FLOODPLAINS AND FLOOD HAZARD ZONES
RESPONSE: NOT APPLICABLE, SEE FEMA MAP BELOW.

5-2(C)(1)(b) STEEP SLOPES
RESPONSE: NOT APPLICABLE

5-2(C)(1)(c) UNSTABLE SOILS
RESPONSE: NOT APPLICABLE

5-2(C)(1)(d) WETLANDS
RESPONSE: NOT APPLICABLE

5-2(C)(1)(e) ARROYOS
RESPONSE: NOT APPLICABLE

5-2(C)(1)(f) IRRIGATION FACILITIES (ACEQUIAS)
RESPONSE: NOT APPLICABLE

5-2(C)(1)(g) ESCARPMENTS
RESPONSE: NOT APPLICABLE

5-2(C)(1)(h) ROCK OUTCROPPINGS
RESPONSE: NOT APPLICABLE.

5-2(C)(1)(i) LARGE STANDS OF MATURE TREES
RESPONSE: NOT APPLICABLE.

5-2(C)(1)(j) ARCHAEOLOGICAL SITES
RESPONSE: NOT APPLICABLE. A CERTIFICATE OF NO EFFECT WAS ISSUED BY THE CITY OF ALBUQUERQUE IN FEBRUARY 2022. THE PROPERTY HAS BEEN DISTURBED THROUGH PREVIOUS LAND USE, NO FURTHER INVESTIGATION REQUIRED.

FIRM PANEL 0114H

FEMA MAP NUMBER: 35001C0114H

0 80 160

SCALE: 1" = 80'

DESIGNED	DESIGN BY
DRAWN	DRAWN BY
CHECKED	CHECKED BY
DATE	2.17.2022

REVISION

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Albuquerque, New Mexico 87109
Water and Natural Resources
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PROJECT NAME: OXBOW CENTER

SHEET TITLE: SENSITIVE LANDS ANALYSIS

SUBMITTED FOR: PRELIMINARY PLAT

SHEET NUMBER: C-XX

NAME: N:\Projects\W0007 Skarsgard\W0007.0004 Skarsgard Oxbow Center\3. CAD\W0007.4 Sensitive Lands Exhibit 021722.dwg PLOT DATE: Feb 17, 2022 3:37pm

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Current DRC
Project Number:_____

FIGURE 12

Date Submitted: February 17, 2022
Date Site Plan Approved: _____
Date Preliminary Plat Approved: _____
Date Preliminary Plat Expires: _____
DRB Project No.: _____
DRB Application No.: _____

INFRASTRUCTURE LIST

(Rev. 2-16-18)

EXHIBIT "A"

TO SUBDIVISION IMPROVEMENTS AGREEMENT

DEVELOPMENT REVIEW BOARD (D.R.B.) REQUIRED INFRASTRUCTURE LIST

LOTS 1 THRU 10, THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER
PROPOSED NAME OF PLAT AND/OR SITE DEVELOPMENT PLAN

TRACT X-2-A OF THE AMENDED PLAT OF TRACTS X-2-A & X-2-B, THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER
EXISTING LEGAL DESCRIPTION PRIOR TO PLATTING ACTION

Following is a summary of PUBLIC/PRIVATE Infrastructure required to be constructed or financially guaranteed for the above development. This Listing is not necessarily a complete listing. During the SIA process and/or in the review of the construction drawings, if the DRC Chair determines that appurtenant items and/or unforeseen items have not been included in the infrastructure listing, the DRC Chair may include those items in the listing and related financial guarantee. Likewise, if the DRC Chair determines that appurtenant or non-essential items can be deleted from the listing, those items may be deleted as well as the related portions of the financial guarantees. All such revisions require approval by the DRC Chair, the User Department and agent/owner. If such approvals are obtained, these revisions to the listing will be incorporated administratively. In addition, any unforeseen items which arise during construction which are necessary to complete the project and which normally are the Subdivider's responsibility will be required as a condition of project acceptance and close out by the City.

Financially Guaranteed DRC #	Constructed Under DRC #	Size	Type of Improvement	Location	From	To	Construction Certification: Private Inspector	Private P.E.	City Cnst Engineer
		PAVING							
		12' WIDTH	ARTERIAL PAVING FOR ADDITIONAL SB LT LANE	COORS BLVD	500' NORTH OF ST. JOSEPHS BLVD	ST JOSEPHS BLVD	/	/	/
		12' WIDTH	ARTERIAL PAVING W/ C&G FOR SB RT LANE	COORS BLVD	NORTH PROPERTY BOUNDARY OF LOT 1	355' NORTH	/	/	/
		12' WIDTH	ARTERIAL PAVING FOR ADDITIONAL NB LT LANE	COORS BLVD	390' SOUTH OF ST JOSEPHS BLVD	ST JOSEPHS BLVD	/	/	/
		6' WIDTH	PCC SIDEWALK (WEST SIDE ONLY)	COORS BLVD	SOUTH PROPERTY BOUNDARY	ST JOSEPHS BLVD	/	/	/
			ARTERIAL PAVING W/ C&G FOR BUS BAY	COORS BLVD	SOUTH OF ST JOSEPHS		/	/	/
			RELOCATE STREET LIGHTS (WEST SIDE ONLY)	COORS BLVD	SOUTH PROPERTY BOUNDARY	ST JOSEPHS BLVD	/	/	/
			SIGNALIZATION IMPROVEMENTS	COORS BLVD	INTERSECTION W/ ST JOSEPHS BLVD		/	/	/
			MEDIAN MODIFICATIONS	COORS BLVD	SOUTH PROPERTY BOUNDARY	NORTH BOUNDARY OF LOT 2	/	/	/
		12' WIDTH	ARTERIAL PAVING FOR 1-EB THRU LANES	ST JOSEPHS BLVD	ATRISCO DR	EAST ENTRANCE	/	/	/

Financially Guaranteed DRC #	Constructed Under DRC #	Size	Type of Improvement	Location	From	To	Construction Certification: Private Inspector	Private P.E.	City Cnst Engineer
		12' WIDTH	ARTERIAL PAVING FOR 1-EB THRU LANE	ST JOSEPHS BLVD	EAST ENTRANCE	COORS BLVD	/	/	/
		12' WIDTH	ARTERIAL PAVING FOR 2 ADDITIONAL EB LT LANES	ST JOSEPHS BLVD	COORS BLVD	WEST PROPERTY BOUNDARY OF LOT 7	/	/	/
		12' WIDTH	ARTERIAL PAVING FOR EB RT & WB LT LANES	ST JOSEPHS BLVD	WEST ENTRANCE		/	/	/
		12' WIDTH	ARTERIAL PAVING FOR EB RT & WB LT LANES	ST JOSEPHS BLVD	EAST ENTRANCE		/	/	/
		12' WIDTH	ARTERIAL PAVING FOR EB RT LANE	ST JOSEPHS BLVD	COORS BLVD	WEST PROPERTY BOUNDARY OF LOT 7	/	/	/
		6' WIDTH	EB BIKE LANE	ST JOSEPHS BLVD	ATRISCO DR	COORS BLVD	/	/	/
		6' WIDTH	PCC SIDEWALK (SOUTH SIDE ONLY)	ST JOSEPHS BLVD	ATRISCO DR	COORS BLVD	/	/	/
		12' WIDTH	COLLECTOR PAVING FOR NB RT LANE	ATRISCO DR	SOUTH ENTRANCE	150' SOUTH	/	/	/
		6' WIDTH	PCC C&G AND SIDEWALK	ATRISCO DR	ST JOSEPHS BLVD	SOUTH PROPERTY BOUNDARY	/	/	/
			INTERNAL PRIVATE ACCESS ROADS	INTERNAL TO PROPERTY			/	/	/
		DRAINAGE							
			PUBLIC DETENTION / RETENTION POND	NORTHWEST CORNER OF PROPERTY			/	/	/
		18" DIA.	PRIVATE STORM DRAIN W/ INLETS AND CONNECTION TO EXISTING STORM DRAIN STUB	EASTERN PROPERTY BOUNDARY	SOUTH PROPERTY BOUNDARY	NORTH BOUNDARY OF LOT 6	/	/	/
		18" DIA.	PRIVATE STORM DRAIN W/ INLETS	INTERNAL TO PROPERTY	EAST PROPERTY BOUNDARY	250' WEST	/	/	/
		TYPE "C"	INLET W/ NEC. RCP SD, MH's, & LATERALS	ST JOSEPHS BLVD	EAST OF INTERSECTION W/ ATRISCO DR		/	/	/

The items listed below are on the CCIP and approved for Impact Fee credits. Signatures from the Impact Fee Administrator and the City User Department is required prior to DRB approval of this listing. The Items listed below are subject to the standard SIA requirements.

Financially Guaranteed DRC #	Constructed Under DRC #	Size	Type of Improvement	Location	From	To	Construction Certification: Private Inspector	Private P.E.	City Cnst Engineer
		SEWER							
		8" DIA.	SANITARY SEWER W/ NEC. MH's & LATERALS AS SHOWN ON THE UTILITY PLAN	INTERNAL TO PROPERTY	SOUTHERN PROPERTY BOUNDARY	400' NORTH AND 450' EAST	/	/	/
		WATER							
		8" DIA.	WATERLINE W/ NEC. FH's, MJ's, RJ's, & LATERALS AS SHOWN ON THE UTILITY PLAN	INTERNAL TO PROPERTY	ATRISCO DR	ST JOSEPHS BLVD	/	/	/

Approval of Creditable Items:

Impact Fee Admistrator Signature **Date**

Approval of Creditable Items:

City User Dept. Signature **Date**

NOTES

If the site is located in a floodplain, then the financial guarantee will not be released until the LOMR is approved by FEMA.

Street lights per City rquirements.

1

2

3

AGENT / OWNER

SHELDON GREER
NAME (print)

RESPEC
FIRM

2/17/22
SIGNATURE - date

DEVELOPMENT REVIEW BOARD MEMBER APPROVALS

DRB CHAIR - date

PARKS & RECREATION - date

TRANSPORTATION DEVELOPMENT - date

AMAFCA - date

UTILITY DEVELOPMENT - date

CODE ENFORCEMENT - date

CITY ENGINEER - date

_____ - date

DESIGN REVIEW COMMITTEE REVISIONS

REVISION	DATE	DRC CHAIR	USER DEPARTMENT	AGENT /OWNER

(Rev. 2-16-18)

Albuquerque Bernalillo County
Water Utility Authority

PO Box 568
Albuquerque, NM 87103-0568
505-289-3000
www.abcwua.org

Chair
Steven Michael Quezada
County of Bernalillo
Commissioner, District 2

Vice Chair
Klarissa J. Peña
City of Albuquerque
Councilor, District 3

Walt Benson
County of Bernalillo
Commissioner, District 4

Pat Davis
City of Albuquerque
Councilor, District 6

Trudy E. Jones
City of Albuquerque
Councilor, District 8

Timothy M. Keller
City of Albuquerque
Mayor

Charlene Pyskoty
County of Bernalillo
Commissioner, District 5

Ex-Officio Member
Pablo R. Rael
Village of Los Ranchos
Board Trustee

Executive Director
Mark S. Sanchez

Website
www.abcwua.org

September 27, 2021

Adrian Casas
ARCH + PLAN Land Use Consultants
P.O. Box 25911
Albuquerque, NM 87125

RE: Water and Sanitary Sewer Availability Statement #210909
Project Name: Lots 1 thru 10 The University of Albuquerque Urban Center
Project Address: 3801 COORS BOULEVARD NW
Legal Description: TR X-2-A AMENDED PLAT OF TRS X-2-A & X-2-B THE UNIVERSITY OF ALBUQUERQUE URBAN CENTER
UPC: 101106018038720705
Zone Atlas Map: G-11

Dear Mr. Casas:

Project Description: The subject site is located at the southwestern corner of Coors Boulevard and Saint Joseph's Drive within the City of Albuquerque. The proposed development consists of approximately 26.5 acres and the property is currently zoned NR-C for non-residential use. The property lies within the Pressure Zone 2WR in the College trunk. The request for availability indicates plans to subdivide the existing site into ten smaller commercial parcels.

Existing Conditions: Water infrastructure in the area consists of the following:

- Eight-inch PVC distribution main (project #26-6588.92-16) along St. Joseph's Drive.
- Ten-inch PVC distribution main (project #26-3720-89) along Atrisco Drive.
- Ten-inch cast iron distribution main (project #03-008-66) along Coors Boulevard.
- 16-inch concrete cylinder transmission main (project #09-012-76) along St. Joseph's Drive.
- 36-inch ductile iron San Juan-Chama transmission main (project #26-6811.03-06) along Atrisco Drive.

Sanitary sewer infrastructure in the area consists of the following:

- Eight-inch PVC collector line (project #26-6223.81-01) along Saint Joseph's Drive.
- Eight-inch VCP collector line (project #01-164-72) along Coors Boulevard.

Water Service: New metered water service to the property can be provided contingent upon a developer funded project to extend an eight-inch main such that it loops the eight-inch main along St. Joseph Drive and the ten-inch main along Atrisco Drive. Upon completion of the infrastructure construction, the development may receive service via routine connection to the proposed eight-inch distribution main interior to the site. Please note that the connection made to the infrastructure along Atrisco Drive will be in close proximity to the San Juan-Chama transmission main and observance of the Administrative Instruction Number 9 is required. The distribution main internal to the site shall remain in an alignment that is both conducive to operations and maintenance of the public infrastructure and minimizes the amount of public infrastructure on site. Connection to transmission mains are prohibited. The engineer is responsible for

determining pressure losses and sizing of the service line(s) downstream of the public water line to serve the proposed development.

Service lines that are will cross lot lines shall have dedicated private easement prior to sale of service.

Service is also contingent upon compliance with the Fire Marshal's instantaneous fire flow requirements. Water service will not be sold without adequate fire protection. Water service will only be sold in conjunction with sanitary sewer service. Each legally platted property shall have individual, independent water services. No property shall share a water service with any other property.

Existing service lines and fire lines that will not be utilized are to be removed by shutting the valve near the distribution main. For fire lines, the line shall be capped near the public valve and valve access shall be grouted and collar removed.

Non-Potable Water Service: Currently, there is no non-potable infrastructure available to serve the subject property.

Sanitary Sewer Service: New sanitary sewer service to the property can be provided contingent upon a developer funded project to extend an eight-inch main internal to the site from manhole G11-341 on the eight-inch collector along Coors Boulevard. This alignment is consistent with what was proposed in the proposed utility plan, presented as supplemental material to the request. However, the extension shall instead terminate at a manhole such that proposed lot "P2" can receive perpendicular connection.

No property shall share a private sewer service with any other property. The engineer is responsible for sizing the service line(s) upstream of the public sanitary sewer line to serve the proposed development.

All food service establishments must install a grease trap upstream of the domestic

Fire Protection: From the Fire Marshal's requirements, the instantaneous fire flow requirements for the project are 4,000 gallons-per-minute. Four fire hydrants are required. Four new hydrants are proposed with this project. All hydrants outside of public easements are to be considered private and painted safety orange. As modeled using InfoWater™ computer software, the fire flow can be met. Analysis was performed by simulating the required fire flow at the four southern-most hydrants.

Any changes to the proposed connection points shall be coordinated through Utility Development. All new required hydrants as well as their exact locations must be determined through the City of Albuquerque Fire Marshal's Office and verified through the Utility Development Office prior to sale of service.

The engineer is responsible for determining pressure losses and sizing of the fire line(s) downstream of the public water line to serve the proposed fire hydrants and/or fire suppression system.

Cross Connection Prevention: Per the Cross Connection Ordinance, all new non-residential premises must have a reduced pressure principle backflow prevention assembly approved by the Water Authority installed at each domestic service connection at a location accessible to the Water Authority. No tees, branches or possible connection fittings or openings are allowed between the reduced principle backflow prevention assembly and the service connection unless protected by a

backflow prevention assembly. These requirements also apply to all remodeled non-residential premises when the work area of the building undergoing repairs, alterations or rehabilitation, as defined in the International Existing Building Code, exceeds 50 percent of the aggregate area of the building regardless of the costs of repairs, alteration or rehabilitation.

All non-residential irrigation water systems connected to the public water system shall have a pressure vacuum breaker, spill-resistant pressure vacuum breaker or a reduced pressure principle backflow prevention assembly installed after the service connection. Such devices shall be approved by the Water Authority. No tees, branches or possible connection fittings or openings are allowed between the containment backflow prevention assembly and the service connection.

All non-residential customers connected via piping to an alternative water source or an auxiliary water supply and the public water system shall install a containment reduced pressure principle backflow prevention assembly approved by the Water Authority after the potable service connection.

All new services to private fire protection systems shall be equipped with a containment reduced pressure principal backflow prevention assembly approved by the Water Authority and Fire Marshal having jurisdiction installed after the service connection. No tees, branches or possible connection fittings or openings are allowed between the containment backflow prevention assembly and the service connection. A double check valve assembly approved by the Water Authority and Fire Marshal having jurisdiction may be installed instead of a reduced pressure backflow prevention assembly provided the private fire protection system meets or exceed ANSI/NSF Standard 60 61 throughout the entire private fire protection system, the fire sprinkler drain discharges into atmosphere, and there are no reservoirs, fire department connections nor connections from auxiliary water supplies.

The Water Authority requests that all backflow (containment) devices be located above ground just outside the easement or roadway right-of-way. Contact Cross Connection at (505) 289-3454 for more information.

Easements: Exclusive public water and sanitary sewer easements are required for all public lines that are to be constructed outside of any dedicated rights-of-way. A minimum width easement of 20 feet is required for a single utility and 25 feet for water and sewer both within the same easement. Easements for standard sized water meters need to be five feet by five feet and include the length of the water service if located on private property. For larger meters that require a meter vault, a 35 feet by 35 feet easement is required. Actual easement widths may vary depending on the depth of the lines to be installed. Acceptable easements must be documented prior to approval of service.

Pro Rata: Pro Rata has been assessed for this property in the amount of $25,265.09 for Sewer infrastructure for a total amount of $25,265.09. The project(s) that assessed the subject property pro rata is under projects #622381. These charges are assessed to the property due to its ability to benefit from and/or take service from the previously installed infrastructure. Payment will be required as a condition of approvals from the Water Authority.

It should be noted that there is an additional pro rata to be assessed to the subject property for water extension as performed in project #26-6588.92-16. This project is

still considered closed but the pro rata assessment is still pending. If the pro rata assessment is completed prior to the completion of this proposed project, then the subject site will owe additional charges.

Design and Construction: Design and construction of all required improvements will be at the developer/property owner's expense. Improvements must be coordinated through the City of Albuquerque via the Work Order process. Designs must be performed by a licensed, New Mexico registered, professional engineer. Construction must be performed by a licensed and bonded public utility contractor.

Utility Expansion Charge (UEC): In addition to installation and construction costs, any new metered water services will be subject to both water and sanitary sewer Utility Expansion Charges (UEC) payable at the time of service application. All charges and rates collected will be based on the ordinances and policies in effect at the time service is actually requested and authorized. Per the Rate Ordinance, each customer classification on the same premise requires a separate meter.

Contact Customer Service at (505) 842-9287 (option 3) for more information regarding account fees.

Water Use: All new commercial developments shall be subject to the requirements for water usage and water conservation requirements as defined by the Water Authority, particularly the Water Waste Reduction Ordinance. Where available, outdoor water usage shall utilize reclaimed water.

Closure: This availability statement provides a commitment from the Water Authority to provide services to the development, as long as identified conditions are met. It will remain in effect for a period of one year from the date of issue and applies only to the development identified herein. Its validity is, in part, contingent upon the continuing accuracy of the information supplied by the developer. Changes in the proposed development may require reevaluation of availability and should be brought to the attention of the Utility Development Section of the Water Authority as soon as possible.

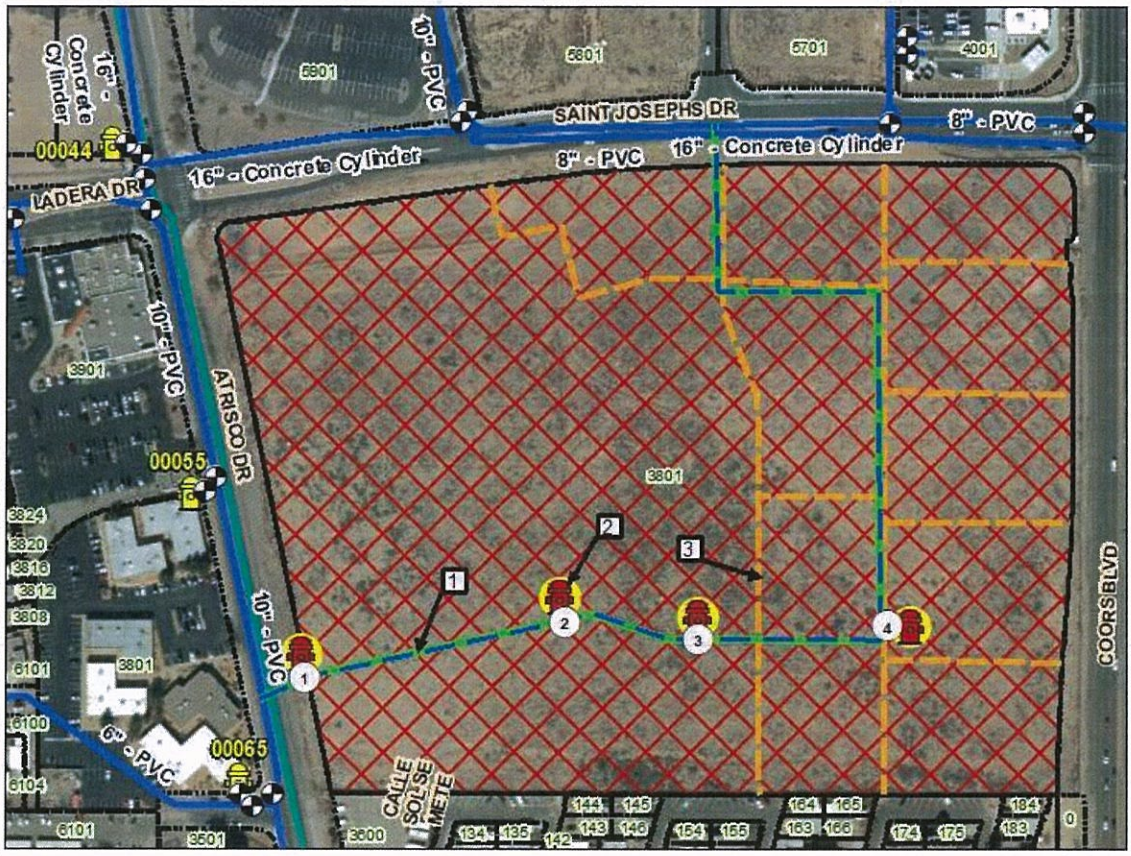
Please feel free to contact Mr. Kristopher Cadena in our Utility Development Section at (505) 289-3301 or email at kcadena@abcwua.org if you have questions regarding the information presented herein or need additional information.

Sincerely,

Mark S. Sanchez
Executive Director

Enclosures: Infrastructure Maps
f/ Availability Statement#210909

210909 - Water



Legend

- Project Location
- Valve
- Hydrant

Pipe

SUBTYPE

- Distribution Line
- Hydrant Leg

San Juan Chama Line

- San Juan Chama Line

0 445 890 Feet

N W E S

--- General Map Keyed Notes

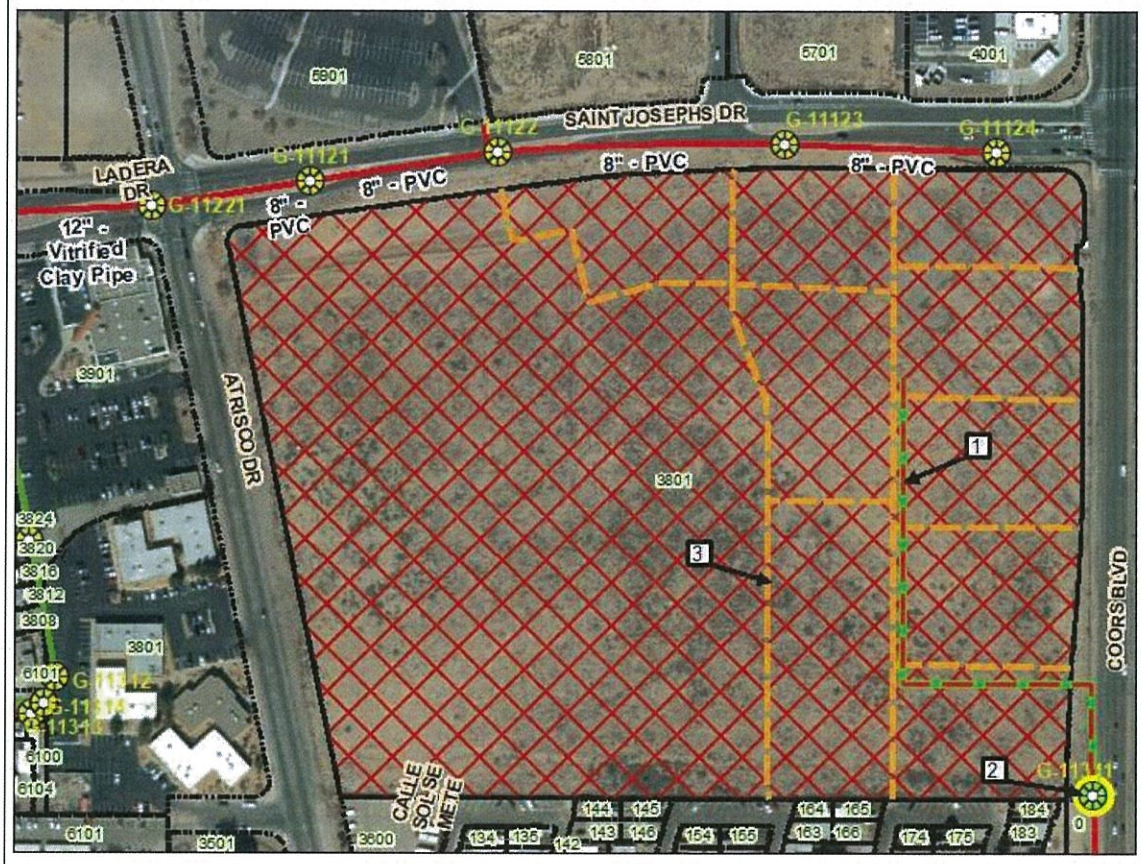
1. --- Proposed Waterline Extensions
2. --- Proposed Fire Hydrants
3. --- Proposed Lot Lines

--- Fire Flow Analysis Points

1. --- Analysis Point
2. --- Analysis Point
3. --- Analysis Point
4. --- Analysis Point

Water Utility Authority

210909 - Sanitary Sewer



Legend

- Project Location
- Sewer Manhole

Sewer Pipe

SUBTYPE

- COLLECTOR
- INTERCEPTOR

0 445 890 Feet

N W E S

--- General Map Keyed Notes

1. --- Proposed Sewer Extension
2. --- Proposed Connection At Sewer Manhole G-11341
3. --- Proposed Lot Lines

Water Utility Authority

SOUTHERN OXBOW CENTER MASTER DRAINAGE PLAN

PREPARED FOR
FNA, LLC
John Skarsgard

PREPARED BY
RESPEC, Inc.
5971 Jefferson St. NE,
Suite 101
Albuquerque, NM 87109

19 NOVEMBER 2021
Project Number W0007.0004

RESPEC

I, Hugh Floyd, do hereby certify that this report was duly prepared by me or under my direction and that I am a duly registered Professional Engineer under the laws of the State of New Mexico.

Hugh Floyd, P.E.
NMPE No. 16633

2/17/2022

Date

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A.1.2. Ladera Drive Improvements Drainage Analysis Memo

A.1.3. Master Drainage Plan for the Oxbow Center

A.1.4. Atrisco and St. Josephs As Built

A.1.5. Drainage Report for the Enclave and Oxbow

A.1.6. Enclave at Oxbow Subdivision As Built

A.2. Hydrology Calculations

A.3. Pond Routing Calculations

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B. APPENDIX B – HYDRAULICS **10**

B.1. Mannings Solver

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1.0 INTRODUCTION

1.1 BACKGROUND

The purpose of this submittal is to provide a drainage report for the vacant property located in the southeast quadrant of the St Joseph's Drive/ Atrisco Drive intersection. This vacant property is part of the Oxbow Center, in Albuquerque. The Oxbow Center is a planned 48-acre development. The northern portion is already partially developed and the southern portion, which is covered in this report, will be comprised of proposed commercial properties. There is no existing FEMA designated floodplain in the area according to FEMA FIRM 35001C0114H. See Appendix A for the FRIM.

Five documents provide background and help inform the drainage requirements for this site. For the Northwest portion of the site the relevant documents are the Ladera Drive Improvements Drainage Analysis Memo and the Atrisco and St. Josephs As-Built Documents. These are included in Appendix A. For the southwestern portion of the site, the Master Drainage Plan for the Oxbow Center, Drainage Report for the Enclave and Oxbow and the Enclave at Oxbow Subdivision As Built provide relevant information.

FIGURE 1: PROJECT LOCATION

2.0 DESIGN CRITERIA/ ASSUMPTIONS

The Ladera Drive Improvements Drainage Analysis Memo, by Parsons Brinckerhoff in 2015 was used as reference for our analysis and proposed improvements.

Design Criteria and Assumptions from the Ladera Drive Improvements Drainage Analysis Memo:

- The existing pond to the east of Atrisco has approximate 2 acre-feet of volume. Any proposed basins will only be able to contribute flow volume that will match the existing pond capacity or include an increase in volume of this pond to accommodate additional runoff.
- This detention pond captures runoff from the eastbound lanes of St Joseph's drive in the vicinity of the St Joseph's drive/ Atrisco drive intersection in addition to the 1,050-foot segment of Atrisco drive north of St Joseph's drive and the 950-foot segment of Atrisco drive south of St Joseph's drive, as well as the remainder of the right of way. This pond also captures about 40% of the vacant property located in the southeast quadrant of the St. Joseph's Drive/ Atrisco Drive intersection. See Exhibit A – Existing Conditions.
- This detention pond outfalls to the St. Josephs storm drain via a 24- inch reinforced concrete pipe which has a flap gate to prevent flows from the pond reentering the storm drain when the peak flow is occurring in that storm drain.
- The main purpose of the detention pond is to temporarily retain flows reaching the existing St Joseph's storm drain network, which conveys flow to the Coors Boulevard storm drain trunk line.

Design Criteria and Assumptions from the Master Drainage Plan for the Oxbow Center:

- Per the approved Master Drainage Plan for Oxbow Town Center by GND LLC in 2007, all runoff from the developed site will be attenuated in onsite detention ponds and conveyed to the existing 36-inch storm outfall which runs under Coors Boulevard and discharges to the Enclave at Oxbow Subdivision system to the east of Coors Boulevard. Allowable discharge from the site will not exceed 45.1 cfs.

Additional assumptions and design considerations include:

- The onsite drainage systems are designed using the 100-year 24-hour design storm.
- All proposed subbasins assume a 90% impervious surface.
- New construction shall incorporate on-site 'first flush' retention requirements per COA Development Process Manual, Chapter 22.
- Proposed conditions will continue to capture all offsite flow in inlets along both Atrisco Drive and St Joseph's Drive and Coors drive and discharge to a reconfigured "North Pond" which replaces the existing pond at the intersection of Atrisco Drive and St Josephs.
- Hydrology and Hydraulic calculations performed in accordance with the ABQ Drainage Process Manual Chapter 22.

3.0 HYDROLOGIC CONDITIONS

3.1 EXISTING CONDITIONS

Existing conditions for the vacant property include a high point running from the Northeast corner to the Southwest corner. Flows northwest of this high point flow to the existing retention/detention pond along St Joseph's Drive. Flows Southeast of this line flow toward Coors Boulevard where they are picked up by a storm drain under Coors Boulevard. This storm drain was constructed with the Enclave at Oxbow Subdivision east of Coors Boulevard. The drainage report and as built for this storm drain are included in appendix A. This site includes predominately undisturbed soils with slopes ranging from 0-2%. Therefore, Land Treatment Type A is used in our modeling. See Exhibit A: Existing Drainage Basins detail model input and outputs and background reports can be found in Appendix A.

TABLE 1:EXISTING SUBBASIN SUMMARY

SUBBASIN	AREA (AC)	Q100 (CFS)	V100 (AC-FT)	YIELD (CFS/AC)
EX 1	11.72	13.4	0.380	1.1
EX 2	16.72	19.9	0.562	1.2
OFF 1	1.8	6.9	0.322	3.9
OFF 2	1.0	3.8	0.179	3.9
OFF 3	0.9	3.1	0.114	3.3
OFF 4	0.8	2.5	0.092	3.1

3.2 PROPOSED CONDITIONS

The proposed Southern portion of the Oxbow Center will include the addition of office buildings and commercial properties.

Southeast

The proposed hydrology calculations were performed by separating the lot into individual subbasins, with roads as separate subbasins. All Southeastern subbasins discharge to the 36-inch existing storm drain under Coors Boulevard, which has a maximum allowable discharge rate of 45.1 cfs. To meet this downstream restraint each subbasin will be required to pond onsite having an allowable release rate of 1.81 cfs/acre.

Northeast

Subbasin P12, along will all offsite subbasins 1-4 discharge to the northwest pond. The Northern Pond has a capacity of 2.11 acre- ft of runoff. The proposed conditions mirrors that of existing conditions in that the northwest portion of the site goes to the North Pond which replaces the existing pond.

Table 3 summarizes each proposed basin hydrology parameters. All proposed subbasins were modeled assuming 90% impervious surfaces, land treatment D and 10% Type C. See Exhibit B: Proposed Drainage Basins.

TABLE 2: PROPOSED SUBBASIN SUMMARY

SUBBASIN	A (AC)	Q100 (CFS)	V100 (AC-FT)	YEILD (CFS/AC)
P1	2.0	16.4	0.8	8.3
P2	1.5	5.7	0.3	3.8
P3	0.7	2.5	0.1	3.7
P4	1.1	4.2	0.2	3.9
P5	1.3	4.9	0.2	3.9
P6	0.9	3.5	0.2	3.9
P7	1.2	4.7	0.2	3.9
P8	1.0	3.9	0.2	3.8
P9	0.9	3.5	0.2	4.0
P10	0.9	3.2	0.1	3.7
P11	0.5	2.0	0.1	4.1
P12	7.7	29.4	1.3	3.8
P13	6.4	24.3	1.1	3.8
P14	0.4	1.5	0.1	3.7
P15	0.3	1.0	0.0	3.7
OFF 1	1.8	6.9	0.322	3.9
OFF 2	1.0	3.8	0.179	3.9
OFF 3	1.0	3.7	0.168	3.8
OFF 4	0.8	3.2	0.146	4.0

Each subbasin, excluding subbasins P10, P14 and P15, will be required to pond on site for both detention and water quality. See below for a description of each subbasin, discharge patterns and water quality requirements:

- Subbasin P1 will discharge directly to South Pond 1, in the Southeast corner west of Coors Boulevard. South Pond 1 will connect to a proposed north south adjacent storm drain along Coors Boulevard which will outflow to the existing 36-inch storm drain crossing under Coors Boulevard.
- Subbasins P2, P3, P4, P6 and P7 will drain to the east towards Coors Boulevard. It will require detention ponding onsite to attenuate flows which include retention for water quality. These future ponds will outlet to the proposed 18-inch storm drain along Coors Boulevard. These subbasins will have an allowable discharge rate of 1.81 cfs/acre.
- Subbasins P5, P8 and P9 will be required to pond onsite and retain water quality volumes. These ponds will outfall to the Southeast where it will discharge to the proposed road (Subbasin P10). This flow will then get picked up by inlets and discharge to a proposed storm drain along Coors Boulevard. These subbasins will have an allowable discharge rate of 1.81 cfs/acre.

- Subbasin P10 will not require ponding, this runoff will flow to the East and then South where it will then get picked up by inlets and discharge to a proposed storm drain along Coors Boulevard. The required water quality ponding for this subbasins is intended to be covered by "fee in lieu". This subbasin will have an allowable discharge rate of 1.81 cfs/acre..
- Subbasin P11 will discharge to the Northeast. This subbasin will require ponding onsite as well as retaining any water quality. This pond will then discharge into Subbasin P10. This subbasin will have an allowable discharge rate of 1.81 cfs/acre.
- Subbasin P12 will require ponding. This subbasin will drain to the North where the runoff will enter the North Pond which is located inside this subbasin. The North Pond is privately owned but will be covered by a public drainage easement due to the flows coming into the pond from Atrisco Drive and St. Josephs. The North Pond is sized to temporarily retain all flows from P12 and the Offsite Subbasins 1-4 and discharge through a flap gate to the storm drain in St. Josephs which empties to the storm trunk line in Coors Boulevard.
- Subbasin P13 will discharge to the Southeast where the runoff will enter South Pond 2. South Pond 2 will be required to retain water quality volumes as well as provide attenuation of the peak flow rate. This pond will then discharge to a proposed storm drain along Coors Boulevard.
- Subbasin P14 will discharge into South Pond 2.
- Subbasin P15 will drain to the east towards Coors Boulevard. As this subbasin is along the road, it will not be required to retain any water quality volumes. The developer will pay "fee in lieu" for water quality. This subbasin runoff will get picked up by inlets along the road then discharge to a proposed storm drain along Coors Boulevard.

See section 4, Table 5 for an in depth look at water quality volume requirements.

4.0 WATER QUALITY

Water quality calculations were performed for the entire project site per requirements set out in the City of Albuquerque DPM.

4.1 ANALYSIS

The calculations performed in this drainage management plan were to determine volume (cu. ft) of detention storage needed to meet water quality requirements. The required volume calculations were based on impervious areas in that subbasin. See table 5 below for a summary of calculated retention volume for the site. Water quality calculations were proposed assuming a 90% impervious area for each lot and based off of 0.41 inches of runoff based on Albuquerque Drainage Process Manual. Detail of water quality calculations can be found in Appendix A – Hydrology.

TABLE 3: WATER QUALITY SUMMARY

SUB-BASIN	Percent Impervious (%)	Volume Required (cu. ft)
P1	90%	2,699
P2	90%	2,005
P3	90%	905
P4	90%	1,452
P5	90%	1,694
P6	90%	1,199
P7	90%	1,628
P8	90%	1,398
P9	90%	1,177
P11	90%	656
P12	90%	10,369
P13	90%	8,606

5.0 HYDRAULICS

The proposed storm drain running along Coors Boulevard was analyzed using the Manning's equation. Flow was added manually from each subbasin entering the storm drain from both the North Side as well as the South. 17.9 cfs is the maximum flow rate in the storm drain. Mannings solver shows that an 18-inch pipe will have sufficient capacity for the future property on the Northern side, but a small portion of the Southern side, after subbasin P3 is added, will need to be increased to 24-inch pipe to have enough capacity. Calculations can be found in Appendix B.

6.0 CONCLUSION

The analysis performed for this drainage report demonstrates that the capacity of the proposed drainage system will follow the allowable discharge requirements set for the 100-year storm event for the development of Oxbow Center as stated in the background reports, the Ladera Drive Improvements Drainage Analysis Memo, Master Drainage Plan for the Oxbow Center, Atrisco and St. Josephs As Built, Drainage Report for the Enclave and Oxbow as well as the as built.

A. APPENDIX A – HYDROLOGY

A.1. Background Information

A.1.1. FEMA FIRM

A.1.2. Ladera Drive Improvements Drainage Analysis Memo

A.1.3. Master Drainage Plan for the Oxbow Center

A.1.4. Atrisco and St. Josephs As Built

A.1.5. Drainage Report for the Enclave and Oxbow

A.1.6. Enclave at Oxbow Subdivision As Built

A.2. Hydrology Calculations

A.3. Pond Routing Calculations

A.4. Existing AHYMO Results

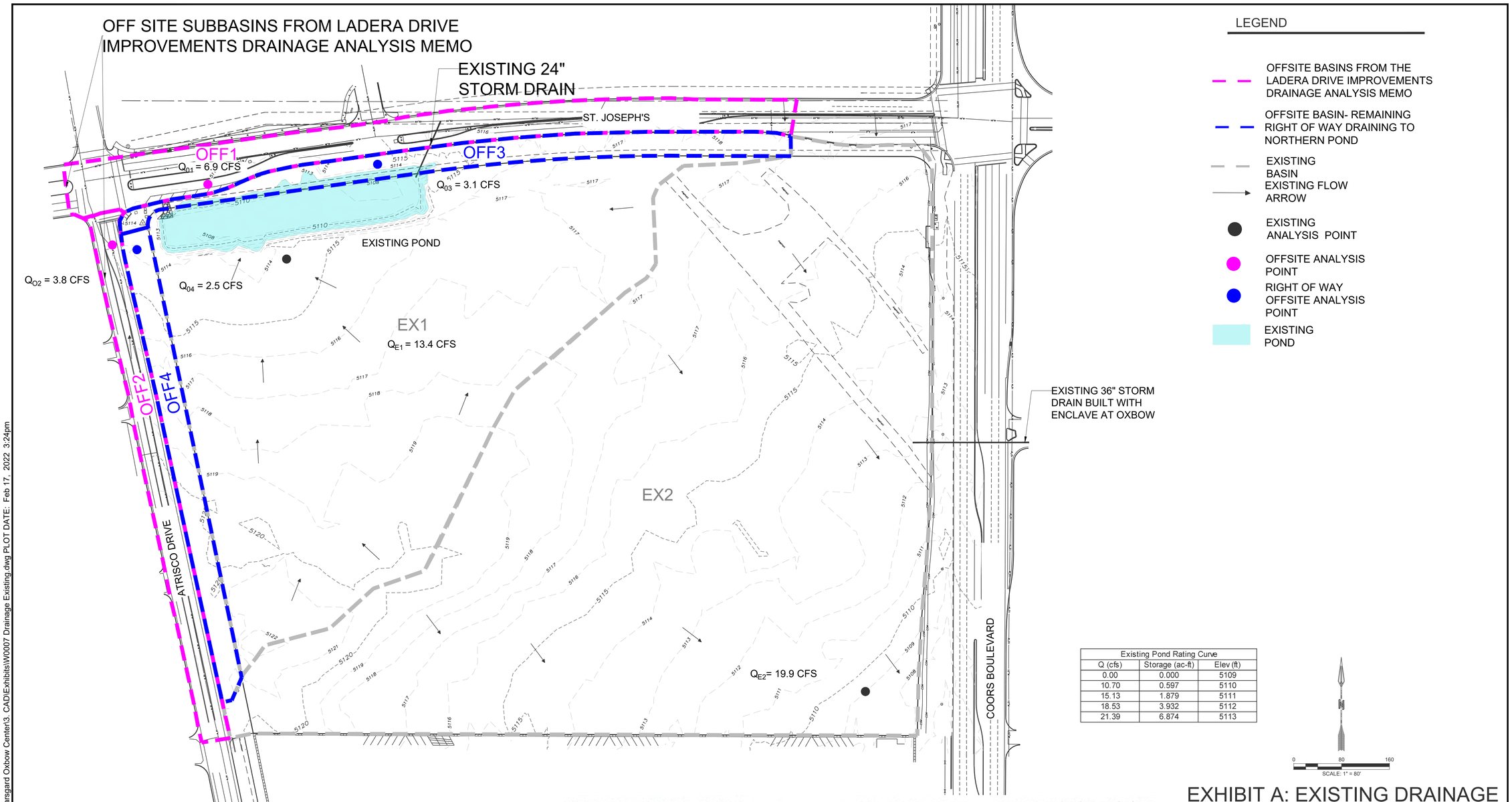
A.5. Proposed AHYMO Results

A.6. Water Quality Calculations

B. APPENDIX B – HYDRAULICS

B.1. Mannings Solver

B.2. Orifice Calculations



Existing Pond Rating Curve		
Q (cfs)	Storage (ac-ft)	Elev (ft)
0.00	0.000	5109
10.70	0.597	5110
15.13	1.879	5111
18.53	3.932	5112
21.39	6.874	5113

AHYMO INPUT: EXISTING CONDITIONS

Subbasin	Area (ac)	Treatment Type Area (ac)				Treatment Type Area (%)			
		A	B	C	D	A	B	C	D
EX1	11.7	11.7	0.0	0.0	0.0	100%	0%	0%	0%
EX2	16.7	16.0	0.0	0.7	0.0	96%	0%	4%	0%
OFF1	1.8	0.0	0.0	0.0	1.8	0%	0%	0%	100%
OFF2	1.0	0.0	0.0	0.0	1.0	0%	0%	0%	100%
OFF3	0.9	0.0	0.0	0.6	0.4	0%	0%	60%	40%
OFF4	0.8	0.0	0.0	0.5	0.3	0%	0%	60%	40%

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COMMAND        IDENTIFICATION    NO.    NO.      (SQ MI)      (CFS)       (AC-FT)    (INCHES)     (HOURS)    ACRE      NOTATION

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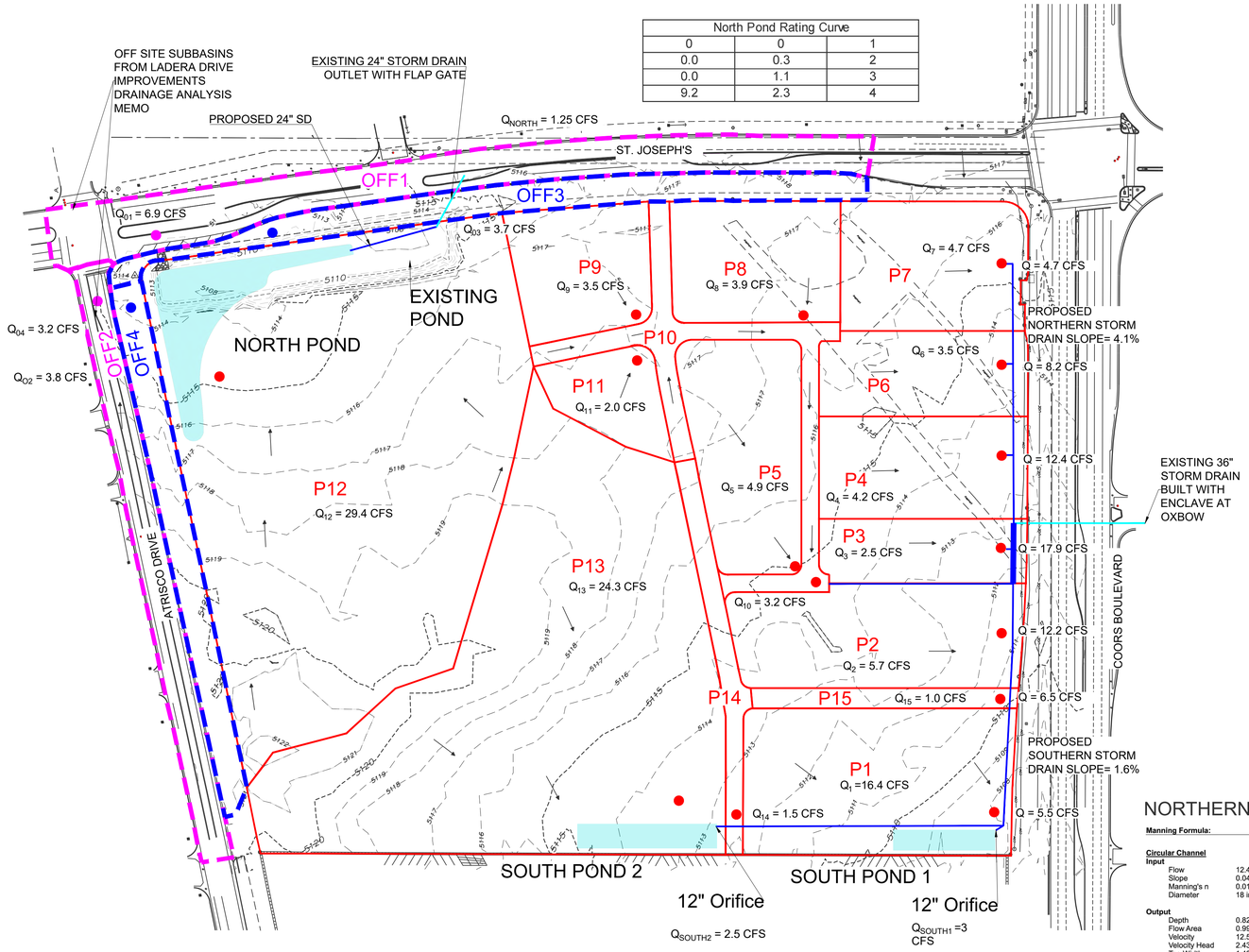
*S  COMPUTE HYD EX1
COMPUTE NM HYD        101.00    -      1       0.01830       13.36        0.380     0.38952       1.533    1.141 PER IMP=   0.00
*S  COMPUTE HYD EX2
COMPUTE NM HYD        102.00    -      2       0.02610       19.88        0.562     0.40401       1.533    1.190 PER IMP=   0.00
*S  COMPUTE HYD OFF1
COMPUTE NM HYD        103.00    -      3       0.00270        6.85        0.322     2.23824       1.500    3.963 PER IMP= 100.00
*S  COMPUTE HYD OFF2
COMPUTE NM HYD        104.00    -      4       0.00150        3.81        0.179     2.23824       1.500    3.966 PER IMP= 100.00
*S  COMPUTE HYD OFF3
COMPUTE NM HYD        105.00    -      5       0.00150        3.07        0.114     1.43027       1.500    3.193 PER IMP=  40.00
*S  COMPUTE HYD OFF4
COMPUTE NM HYD        106.00    -      6       0.00120        2.46        0.092     1.43027       1.500    3.197 PER IMP=  40.00
ADD HYD               107.00  1& 3     7       0.02100       20.19        0.702     0.62719       1.500    1.502
ROUTE RESERVOIR  NORTH.PONDS    7      8       0.02100        6.03        0.702     0.62719       1.800    0.449 AC-FT=    0.336
PTNTSH
```

EXHIBIT A: EXISTING DRAINAGE BASINS
OXBOW CENTER

FEBRUARY17, 2022

RESPEC
COMMUNITY DESIGN SOLUTIONS
5971 JEFFERSON STREET SUITE 101
ALBUQUERQUE, NEW MEXICO 87109
WWW.RESPEC.COM PHONE: (505)253-9718

NAME: N:\Projects\W0007 Skarsgard\W0007.0004 Skarsgard Oxbow Center\3. CAD\Exhibits\W0007 Drainage Existing.dwg PLOT DATE: Feb 17, 2022 3:24pm



North Pond Rating Curve		
0	0	1
0.0	0.3	2
0.0	1.1	3
9.2	2.3	4

LEGEND

- PROPOSED 24" STORM DRAIN
- PROPOSED 18" STORM DRAIN
- PROPOSED BASIN
- OFFSITE BASINS FROM THE LADERA DRIVE IMPROVEMENTS DRAINAGE ANALYSIS MEMO
- OFFSITE BASIN- REMAINING RIGHT OF WAY DRAINING TO NORTHERN POND
- OFFSITE ANALYSIS POINT
- RIGHT OF WAY OFFSITE ANALYSIS POINT
- PROPOSED ANALYSIS POINT
- PROPOSED FLOW ARROW
- PROPOSED POND

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                                                                                                                   PER
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*S  COMPUTE HYD BASIN P14
COMPUTE NH HYD          101.00   -     1     0.00060      1.49        0.047      2.10358     1.500     3.847 PER IMP=  90.00
*S  COMPUTE HYD BASIN P13
COMPUTE NH HYD          102.00   -     2     0.00990     24.27        1.111      2.10358     1.500     3.831 PER IMP=  90.00
ADD HYD                 105.00  14 2   9     0.10950     25.76        1.178      2.10353     1.500     3.833
*ROUTE POND 1
ROUTE RESERVOIR  SOUTH.POND1    3   4     0.01050      2.54        1.059      1.89166     2.200     0.370 AC-FT=    0.571
*S  COMPUTE HYD BASIN P1
COMPUTE NH HYD          105.00   -     5     0.00670     16.43        0.752      2.10353     1.500     3.832 PER IMP=  90.00
*ROUTE POND 1
ROUTE RESERVOIR  SOUTH.POND1    5   6     0.00670      2.97        0.745      2.05572     2.100     0.693 AC-FT=    0.409
*S  COMPUTE HYD BASIN P12
COMPUTE NH HYD          107.00   -     7     0.01200     29.42        1.346      2.10358     1.500     3.831 PER IMP=  90.00
*S  COMPUTE HYD OFF1
COMPUTE NH HYD          120.00   -    20     0.00270      6.85        0.322      2.23824     1.500     3.963 PER IMP= 100.00
*S  COMPUTE HYD OFF2
COMPUTE NH HYD          121.00   -    21     0.00180      3.81        0.179      2.23824     1.500     3.964 PER IMP= 100.00
*S  COMPUTE HYD OFF3
COMPUTE NH HYD          122.00   -    22     0.00150      3.69        0.168      2.10358     1.500     3.844 PER IMP=  90.00
*S  COMPUTE HYD OFF4
COMPUTE NH HYD          123.00   -    23     0.00130      3.20        0.146      2.10358     1.500     3.844 PER IMP=  90.00
ADD HYD                 124.00 7420   24     0.01470     36.27        1.665      2.12527     1.500     3.855
ADD HYD                 124.00 24421  25     0.01420     60.08        1.840      2.13543     1.500     3.865
ADD HYD                 124.00 25422  26     0.01770     63.77        2.014      2.13547     1.500     3.864
ADD HYD                 124.00 26423  27     0.01900     66.97        2.162      2.13327     1.500     3.862
ROUTE RESERVOIR  NORTH.POND    27   9     0.01900      3.66        1.225      1.20057     2.233     0.301 AC-FT=    1.524
*S  COMPUTE HYD BASIN P2
COMPUTE NH HYD          109.00   -     9     0.00230      5.65        0.258      2.10358     1.500     3.839 PER IMP=  90.00
*S  COMPUTE HYD BASIN P3
COMPUTE NH HYD          110.00   -    10     0.00100      2.47        0.112      2.10358     1.500     3.853 PER IMP=  90.00
*S  COMPUTE HYD BASIN P4
COMPUTE NH HYD          111.00   -    11     0.00170      4.18        0.191      2.10358     1.500     3.842 PER IMP=  90.00
*S  COMPUTE HYD BASIN P6
COMPUTE NH HYD          112.00   -    12     0.00200      4.92        0.224      2.10358     1.500     3.840 PER IMP=  90.00
*S  COMPUTE HYD BASIN P6
COMPUTE NH HYD          113.00   -    13     0.00140      3.45        0.157      2.10358     1.500     3.844 PER IMP=  90.00
*S  COMPUTE HYD BASIN P7
COMPUTE NH HYD          114.00   -    14     0.00190      4.67        0.213      2.10358     1.500     3.842 PER IMP=  90.00
*S  COMPUTE HYD BASIN P8
COMPUTE NH HYD          115.00   -    15     0.00160      3.94        0.180      2.10358     1.500     3.843 PER IMP=  90.00
*S  COMPUTE HYD BASIN P9
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*S  COMPUTE HYD BASIN P10
COMPUTE NH HYD          117.00   -    17     0.00130      3.20        0.146      2.10358     1.500     3.844 PER IMP=  90.00
*S  COMPUTE HYD BASIN P11
COMPUTE NH HYD          118.00   -    18     0.00080      1.98        0.090      2.10358     1.500     3.858 PER IMP=  90.00
*S  COMPUTE HYD BASIN P15
COMPUTE NH HYD          119.00   -    19     0.00040      1.00        0.045      2.10358     1.500     3.890 PER IMP=  90.00
FINISH
```

NORTHERN SD

Manning Formula:

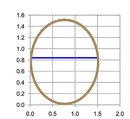
Circular Channel

Input

Flow	12.4 cfs
Slope	0.041 ft/ft
Manning's n	0.013
Diameter	18 in

Output

Depth	0.823 ft
Flow Area	0.992 sf
Velocity	12.5 fps
Velocity Head	2.43 ft
Top Width	1.49 ft
Froude Number	2.70
Critical Depth	1.330 ft
Critical Slope	0.0124 ft/ft



Northern Storm Drain.mad 3/17/2022
ManningSolver v1.019
Copyright (c) 2000 Current Applications

SOUTHERN SD

Manning Formula:

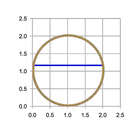
Circular Channel

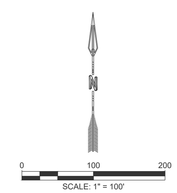
Input

Flow	17.9 cfs
Slope	0.016 ft/ft
Manning's n	0.013
Diameter	24 in

Output

Depth	1.146 ft
Flow Area	1.86 sf
Velocity	9.61 fps
Velocity Head	1.44 ft
Top Width	1.98 ft
Froude Number	1.75
Critical Depth	1.524 ft
Critical Slope	0.00726 ft/ft





AHYMO INPUT: PROPOSED CONDITIONS

Subbasin	Area (ac)	Treatment Type Area (ac)				Treatment Type Area (%)			
		A	B	C	D	A	B	C	D
P1	2.0	0.0	0.0	0.2	1.8	0%	0%	10%	90%
P2	1.5	0.0	0.0	0.2	1.3	0%	0%	10%	90%
P3	0.7	0.0	0.0	0.1	0.6	0%	0%	10%	90%
P4	1.1	0.0	0.0	0.1	1.0	0%	0%	10%	90%
P5	1.3	0.0	0.0	0.1	1.1	0%	0%	10%	90%
P6	0.9	0.0	0.0	0.1	0.8	0%	0%	10%	90%
P7	1.2	0.0	0.0	0.1	1.1	0%	0%	10%	90%
P8	1.0	0.0	0.0	0.1	0.9	0%	0%	10%	90%
P9	0.9	0.0	0.0	0.1	0.8	0%	0%	10%	90%
P10	0.9	0.0	0.0	0.1	0.8	0%	0%	10%	90%
P11	0.5	0.0	0.0	0.1	0.4	0%	0%	10%	90%
P12	7.7	0.0	0.0	0.8	6.9	0%	0%	10%	90%
P13	6.4	0.0	0.0	0.6	5.7	0%	0%	10%	90%
P14	0.4	0.0	0.0	0.04	0.4	0%	0%	10%	90%
P15	0.3	0.0	0.0	0.03	0.2	0%	0%	10%	90%
OFF1	1.8	0.0	0.0	0.0	1.8	0%	0%	0%	100%
OFF2	1.0	0.0	0.0	0.0	1.0	0%	0%	0%	100%
OFF3	1.0	0.0	0.0	0.1	0.9	0%	0%	10%	90%
OFF4	0.8	0.0	0.0	0.1	0.7	0%	0%	10%	90%

South Pond 1 Rating Curve		
Q (cfs)	Storage (ac-ft)	Depth (ft)
0.00	0.00	1
0.01	0.03	2
0.02	0.10	3
2.67	0.24	4
3.78	0.47	5

South Pond 2 Rating Curve		
Q (cfs)	Storage (ac-ft)	Depth (ft)
0.00	0.0	1
0.01	0.0	2
0.02	0.1	3
0.03	0.2	4
2.67	0.5	5

EXHIBIT B: PROPOSED DRAINAGE BASINS OXBOW CENTER

FEBRUARY, 17 2022

RESPEC
COMMUNITY DESIGN SOLUTIONS
5971 JEFFERSON STREET SUITE 101
ALBUQUERQUE, NEW MEXICO 87109
WWW.RESPEC.COM PHONE: (505)253-9718

NAME: N:\Projects\W0007 Skarsgard\W0007.0004 Skarsgard Oxbow Center\3. CAD\Exhibits\W0007 Drainage Proposed.dwg PLOT DATE: Feb 17, 2022 3:46pm

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was New Mexico State Plane, Central Zone (FIPS 3002). The **horizontal datum** was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey, SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit their website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was provided in digital format by City of Albuquerque, 2010, Bernalillo County, 2004, and 2010, Bureau of Land Management, 2003, National Geodetic Survey, 2003, and United States Geological Survey (USGS), 1999. Additional Information was photogrammetrically compiled at a scale of 1:12,000 from U.S. Department of Agriculture aerial photography dated 2009.

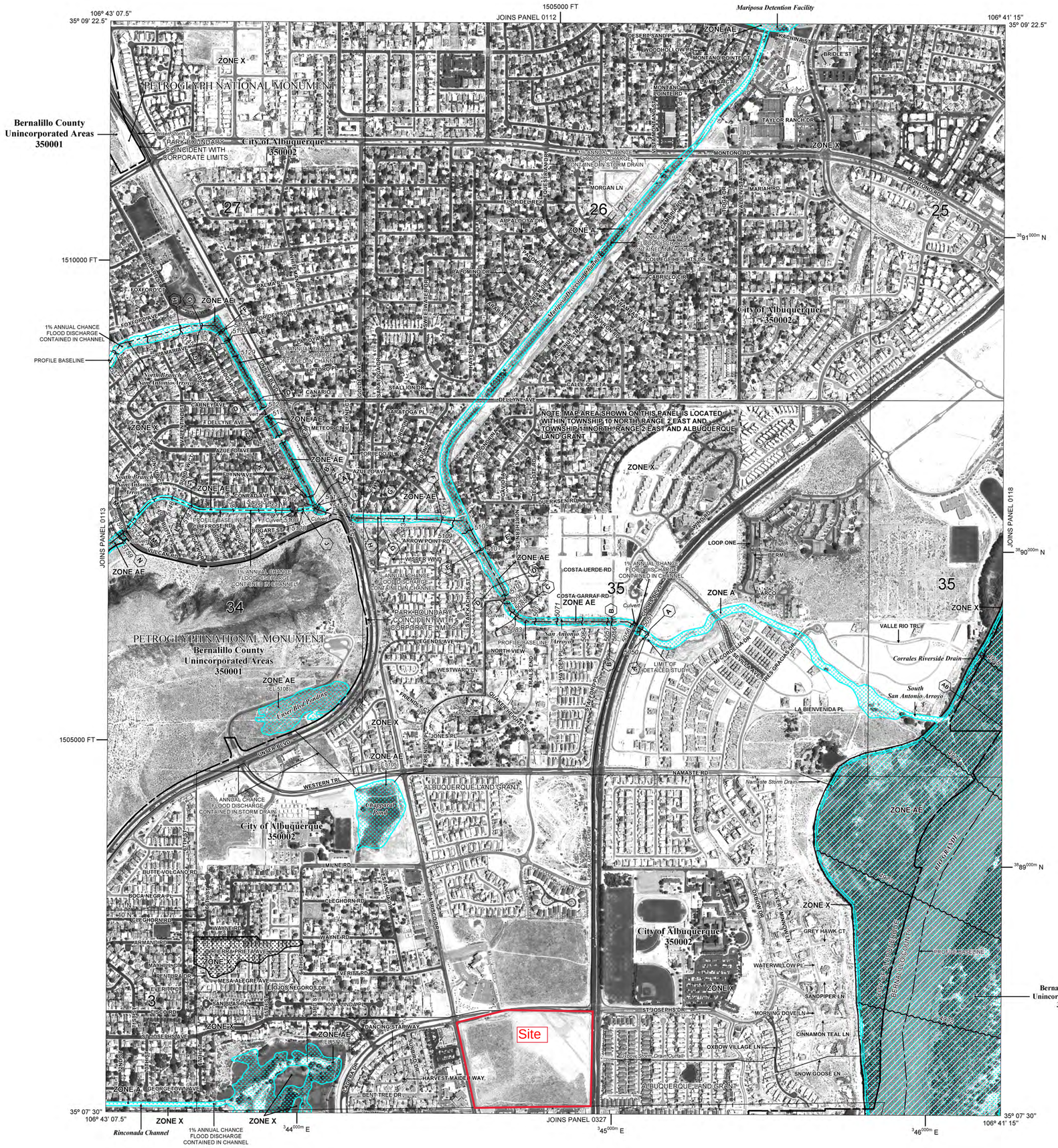
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D Boundary
CBRS and OPA Boundary
Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 - - - - 23	Transect line
97° 07' 30", 32° 22' 30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
4 76000m E	1000-meter Universal Transverse Mercator grid values, zone 13
600000 FT	5000-foot grid ticks: New Mexico State Plane coordinate system, Central zone (FIPSZONE 3002), Transverse Mercator
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
• M1.5	River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index.

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP PANEL

SEPTEMBER 20, 1996

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

April 2, 2002
November 19, 2003
September 26, 2008

August 16, 2012 - to update corporate limits, to change Base Flood Elevations, to add Special Flood Hazard Areas, to change Special Flood Hazard Areas, to add roads and road names, to incorporate previously issued Letters of Map Change.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0114H

FIRM

FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 114 OF 825

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE, CITY OF	350002	0114	H
BERNALILLO COUNTY UNINCORPORATED AREAS	350001	0114	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
35001C0114H

MAP REVISED
AUGUST 16, 2012

Federal Emergency Management Agency

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services

Richard J. Berry, Mayor

September 11, 2015

Kendra Chavez, P.E.
Parsons-Brinckerhoff
6100 Uptown Blvd NE
Albuquerque, NM 87111

RE: Ladera Drive Improvements – Gavin Rd. to Coors Blvd.
Drainage Report for Work Order
Engineer's Stamp Date (none) (J09D014)

Dear Ms. Chavez:

Based upon the information provided in your submittal received 8-27-15, the above referenced plan is approved for Work Order.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Rita Harmon, P.E.
Senior Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Orig Drainage file
c pdf Addressee via Email

J9D024_WO_Appr doc

Albuquerque - Making History 1706-2006

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Ladera Drive Improvements Project - Phase 1 Building Permit #: _____ City Drainage #: J9D024

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: _____

City Address: _____

Engineering Firm: Parsons Brinckerhoff Contact: Kendra Chavez

Address: 6100 Uptown Blvd NE Suite 700, 87111

Phone#: 505-878-6551 Fax#: _____ E-mail: chavez@pbworld.com

Owner: City of Albuquerque Contact: Kellie Shaw

Address: Old City Hall

Phone#: 505-768-3659 Fax#: _____ E-mail: kellieshaw@cabq.gov

Architect: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

X DRAINAGE REPORT
___ DRAINAGE PLAN 1st SUBMITTAL
___ DRAINAGE PLAN RESUBMITTAL
___ CONCEPTUAL G & D PLAN
___ GRADING PLAN
___ EROSION & SEDIMENT CONTROL PLAN (ESC)
___ ENGINEER'S CERT (HYDROLOGY)
___ CLOMR/LOMR
___ TRAFFIC CIRCULATION LAYOUT (TCL)
___ ENGINEER'S CERT (TCL)
___ ENGINEER'S CERT (DRB SITE PLAN)
___ ENGINEER'S CERT (ESC)
___ SO-19
___ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

___ SIA/FINANCIAL GUARANTEE RELEASE
___ PRELIMINARY PLAT APPROVAL
___ S. DEV. PLAN FOR SUB'D APPROVAL
___ S. DEV. FOR BLDG. PERMIT APPROVAL
___ SECTOR PLAN APPROVAL
___ FINAL PLAT APPROVAL
___ CERTIFICATE OF OCCUPANCY (PERM)
___ CERTIFICATE OF OCCUPANCY (TCL TEMP)
___ FOUNDATION PERMIT APPROVAL
___ BUILDING PERMIT APPROVAL
___ GRADING PERMIT APPROVAL
___ PAVING PERMIT APPROVAL
X WORK ORDER APPROVAL
___ GRADING CERTIFICATION
___ SO-19 APPROVAL
___ ESC PERMIT APPROVAL
___ ESC CERT. ACCEPTANCE
___ OTHER (SPECIFY)

RECEIVED
AUG 27 2015
LAND DEVELOPMENT SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED: ___ Yes X No ___ Copy Provided

DATE SUBMITTED: August 26 2015 By: Kendra Chavez

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the followin

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

J9D024

Ladera Drive Improvements
Gavin Road to Coors Boulevard

City of Albuquerque Project No. 6588.92

Drainage Analysis Memo

August 10, 2015

Prepared for:

Prepared by:

PARSONS BRINCKERHOFF

RECEIVED
AUG 2 7 2015
LAND DEVELOPMENT SECTION

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Introduction

Parsons Brinckerhoff (PB) was selected by the City of Albuquerque (CoA) to design improvements to Ladera Drive from Gavin Road to Coors Boulevard as part of City of Albuquerque project 6588.92. A vicinity map for the project area can been seen in Exhibit 1 which has been included as an attachment to this memo. The purpose of the project is to provide continuous on-street bicycle lanes within the project limits as well as new segments of off-street multi-use trail to improve the connectivity of the adjacent trail system.

Major design improvements that will be constructed as part of this project include:

- Roadway and intersection improvements
- Bicycle and pedestrian improvements
- Storm drainage improvements
- Intersection lighting improvements
- Traffic signal improvements
- Landscaping improvements (to be designed by others)

Based on project funding, the project is scheduled to be constructed in two phases. Phase 1 will construct the proposed improvements from Ouray Road to Coors Boulevard. Phase 2 will construct the proposed improvements from Gavin Road to Ouray Road.

The following provides a summary of the analysis of existing drainage conditions and the proposed drainage facilities for Ladera Drive within the project limits. The primary goal is to safely accommodate drainage in the corridor, while avoiding adverse impacts to water quality and the surrounding environment; the drainage design addresses cost effectiveness, maintenance, and aesthetics.

Literature Review

The following related approved drainage reports for the project area were obtained from the CoA and were used for the development of this drainage memo.

- Master Drainage Plan for Altura West and Archdiocese of Santa Fe Properties Near St. Pius High School, Bohannan Huston Inc. – October 1997
- Master Drainage Plan for the Oxbow Town Center Tracts X-1-A-2 & X-2-A, GND, LLC – October 2007

Existing Conditions

Gavin Road to Unser Boulevard

Ladera Drive between Gavin Road and Unser Boulevard consists of a normally crowned roadway typical section with drainage inlets along eastbound and westbound Ladera Drive curb lines capturing onsite runoff. An existing storm drain system within Ladera Drive, between Marapi Street and Gunnison Place, conveys flows into the Parkway Drive storm drain system which runs southeast to Unser Boulevard and then east into a series of detention ponds and storm drain until it reaches the Rio Grande. There is an

existing pond located in the southwest quadrant of the Ladera Drive/Gunnison Place intersection which was constructed as part of the Parkway - Unit 7 improvements project to detain runoff from offsite drainage basins adjacent to Ladera Drive and outfall into the Parkway Drive storm drain system. As part of the development adjacent to Ladera Drive, a drainage system was built to intercept flows and outfall directly to the Parkway Drive storm drain system. The pond is no longer required and has been abandoned in place. As-built plans for the detention pond indicate that the pond was constructed to store the required 3.4 acre-feet of water.

Unser Boulevard to Ouray Road

Ladera Drive between Unser Boulevard and Ouray Road consists of a normally crowned roadway typical section with drainage inlets along eastbound and westbound Ladera Drive curb lines capturing onsite runoff and conveying it into an existing storm drain system within Ladera Drive. The outfalls for this storm drain system are the existing detention basins located in the southwest quadrant of the Ladera Drive/Ouray Road intersection. These detention basins are part of the Ladera Diversion and Detention Facility (LDDF) which outfall to the San Antonio Arroyo just south of the Coors Boulevard/Seville Avenue intersection via the Oxbow and Coors Boulevard storm drain networks.

Ouray Road to Sequoia Road

There is currently no median curb and gutter along eastbound lanes of Ladera Drive between Ouray Road and Sequoia Road and onsite runoff drains into the median where it is captured by a series of bee-hive grate median drop inlets. Westbound Ladera Drive is crowned to drain to the west curb line where runoff is captured by drainage inlets. An existing storm drain system within Ladera Drive conveys flows west into the existing LDDF detention pond located in the northwest quadrant of the Ouray Road/Ladera Drive intersection.

Sequoia Road to Artrisco Drive

Ladera Drive between Sequoia Road and Atrisco Drive consists of a normally crowned roadway typical section with drainage inlets along eastbound and westbound Ladera Drive curb lines that capture both onsite and offsite runoff and convey it to two outfall locations. Runoff from contributing drainage basins extending from the Ladera Drive/Sequoia Road intersection to an existing roadway high point located approximately 1200' north of the intersection are conveyed into the previously discussed drainage system located between Ouray Road and Sequoia Road. Runoff from contributing drainage basins north of the roadway high point and extending to the Ladera Drive/Atrisco Road intersection are captured by a series of inlets located at a roadway low point approximately 575' west of the Ladera Drive/Atrisco Drive intersection. These drainage inlets outfall directly to the 60" Oxbow storm drain network that serves as the outfall for the LDDF. This 60" line conveys flows east into the Coors Boulevard drainage network which ultimately outfalls to the San Antonio Arroyo.

Atrisco Drive to Coors Boulevard

St. Joseph's Drive between Atrisco Drive and Coors Boulevard consists of a normally crowned temporary roadway typical section with two travel lanes (one lane in each direction). There is an existing inlet located approximately 100' east of the St. Joseph's Drive/Atrisco Drive intersection that collects runoff from the majority of the eastbound and westbound lanes of St Joseph's Drive. The inlet outfalls into a

detention pond located east of Atrisco Drive, within St. Joseph's Drive roadway right-of-way which outfalls to the Oxbow storm drain via a 24" reinforced concrete pipe. The detention pond also captures runoff from eastbound lanes of St Joseph's Drive, in the vicinity of the St. Joseph's Drive/Atrisco Drive intersection, in addition to the 1050' segment of Atrisco Drive north of St. Joseph's Drive, and the 950' segment of Atrisco Drive south of St Joseph's Drive. Additional runoff contributing to the detention pond is generated from 40% of the vacant property located in the southeast quadrant of the St. Joseph's Drive/Atrisco Drive intersection. This vacant property is part of the proposed Oxbow Town Center, a planned 48-acre development which will be comprised of office buildings and commercial properties. A conceptual grading and drainage plan for the Oxbow Town Center has been included as an attachment to this memo. The detention pond also serves as the outfall for the St. Joseph's on the Rio Grande onsite detention pond which is located just north of St. Joseph's Drive. The main purpose of the detention pond is to attenuate flows reaching the existing Oxbow storm drain network which conveys flows to the Coors Boulevard storm drain trunk line.

Offsite Drainage Facilities

Offsite drainage facilities that have been identified near the project include the Rio Grande storm sewer which was constructed as part of phase one of the Master Drainage Plan for the Oxbow Town Center. The storm sewer was designed and constructed to accept runoff from the proposed Oxbow Town Center as well as developed properties east of Coors Boulevard. The Rio Grande storm sewer begins as a 36" storm drain approximately 560' south of the St. Joseph's Drive/Coors Boulevard intersection and continues east, ultimately discharging to the Rio Grande.

Existing Drainage Issues

Maintenance personnel from the CoA who are responsible for maintaining the Ladera Drive storm drain system were contacted to discuss drainage issues within the project limits. No known drainage issues were reported.

The CoA's 311 citizen complaint database was also queried to determine if any drainage related complaints or issues had been reported within the project area. No incidents were noted.

In a meeting with personnel from AMAFCA, it was mentioned that the Coors Boulevard storm drain trunk line is at capacity.

Hydrology

Criteria and Methodology

The design flood for this assessment is the 100-year recurrence interval storm based on the *CoA's Development Process Manual* (DPM). Drop inlet spacing and allowable spread were also evaluated for the 10-year recurrence interval storm.

The Rational Method was used to perform peak flow rate calculations for offsite and onsite drainage basins based on the 6-hour storm duration per the DPM. The 24-hour duration storm was used for runoff volume computations. The 100-year rainfall data for Bernalillo County precipitation Zone 1 was

obtained from the DPM. The 100-year, 24 hour duration precipitation for Zone 1, which is defined as the area west of the Rio Grande, is 2.66 inches.

The following assumptions were also considered for this assessment:

- Drainage design elements for the section of Ladera Drive from Gavin Road to Atrisco Drive consider the existing storm drain system to be adequate for widening into the median as additional runoff generated by the construction of bike lanes is minimal (see Results Section of this report for flow rate estimates). The analysis for this area was performed based on topographic survey to determine if the existing inlet spacing meets the CoA's spread criteria.
- Pond at Northwest Corner of the Ladera Drive/Gunnison Place Intersection – It is anticipated that the widened typical section of Ladera Drive required to accommodate new segments of off-street multi-use trail will impact the existing pond and spillway. The analysis determined the function and capacity of the pond.
- Pond South of St Joseph's, approximately 400' east of Atrisco Drive – In a report entitled *Master Drainage Plan for Altura West and Archdiocese of Santa Fe Properties Near St. Pius High School,* the proposed drainage conditions for the vacant property currently contributing to the detention pond (Basin 5) are identified. The report indicates that flows from the future development of the property will be carried by the proposed internal local streets and discharged to proposed onsite detention ponds which will control the discharge to the Rio Grande storm sewer. The report also indicates that curb and gutter will be installed on Ladera Drive and Atrisco Drive so that onsite flows will be contained within the roadway right-of-way and drain to the Oxbow storm drain via inlets. Since it is likely that the construction of this project will take place before the development of Basin 5, a replacement pond will need to be constructed to continue to attenuate offsite flow discharging to the Oxbow and Coors Boulevard storm drain systems. The analysis determined the capacities of the existing and the required replacement ponds. The analysis also addressed onsite drainage on St. Joseph's Drive between Atrisco Drive and Coors Boulevard.

Peak flow rate estimates for drainage basins as well as a summary of runoff volume estimates for detention ponds can be found in the Results Section of this drainage memo.

Drainage Basin and Land Use Maps

ArcGIS, version 10.1 was used to prepare the drainage basin maps for this assessment. Resources used to define basin areas include existing drainage reports, aerial photos, and Bernalillo County's 2010 Light Detection and Ranging (LiDAR) mapping data. A field investigation was conducted to verify drainage patterns and basin boundaries. Future developed land use estimates are based on the land use designations from the CoA GIS Data website. Drainage basin maps and a Land Use Map have been included as an attachment to this memo.

Results

Gavin Road to Atrisco Drive

Peak flow rate estimates for eastbound and westbound Ladera Drive are shown in Tables 1 and 2. Detailed peak flow rate calculations have been included as an attachment to this memo.

Table 1: Estimated Discharge Rates –Eastbound Ladera Drive

Basin ID	Basin Area (acres)	Existing Peak Discharge 10-yr (cfs)	Existing Peak Discharge 100-yr (cfs)	Additional Flow Generated By Improvements 10-yr (cfs)	Additional Flow Generated By Improvements 100-yr (cfs)	Total Flow 10-yr (cfs)	Total Flow 100-yr (cfs)
100	2.93	7.25	11.51	0.39	0.39	7.65	11.90
101	0.88	2.07	3.34	0.12	0.12	2.19	3.45
102.1	0.38	0.88	1.43	0.05	0.05	0.93	1.48
102.2	0.58	1.41	2.25	0.08	0.08	1.49	2.33
103	1.39	3.34	5.35	0.14	0.14	3.48	5.49
104	5.50	13.16	21.10	0.64	0.64	13.81	21.75
105.1	4.21	10.77	16.90	0.23	0.23	11.00	17.13
105.2	0.12	0.32	0.50	0.02	0.02	0.34	0.52
106	0.97	2.65	4.08	0.35	0.51	3.00	4.58
107	0.29	0.81	1.23	0.09	0.13	0.89	1.36
108	0.45	1.24	1.91	0.16	0.24	1.40	2.14
109	0.14	0.38	0.59	0.05	0.08	0.43	0.67
110	0.40	1.10	1.69	0.14	0.21	1.25	1.90
111	0.42	1.13	1.74	0.15	0.22	1.28	1.96
112	0.27	0.72	1.11	0.08	0.12	0.80	1.23
113	0.18	0.45	0.71	0.07	0.10	0.52	0.81
114	0.33	0.88	1.36	0.10	0.15	0.98	1.51
115.1	0.34	0.85	1.34	0.11	0.16	0.96	1.50
115.2	0.28	0.78	1.20	0.06	0.08	0.84	1.28
116	0.43	1.02	1.64	0.06	0.06	1.07	1.69
117	3.00	7.41	11.75	0.11	0.11	7.52	11.87
118.1	13.97	30.12	50.07	0.22	0.22	30.34	50.29
118.2	9.40	23.25	36.88	0.08	0.08	23.33	36.96

Table 2: Estimated Discharge Rates –Westbound Ladera Drive

Basin ID	Basin Area (acres)	Existing Peak Discharge 10-yr (cfs)	Existing Peak Discharge 100-yr (cfs)	Additional Flow Generated By Improvements 10-yr (cfs)	Additional Flow Generated By Improvements 100-yr (cfs)	Total Flow 10-yr (cfs)	Total Flow 100-yr (cfs)
200	6.28	12.36	21.25	0.28	0.28	12.64	21.53
201	2.27	4.56	7.78	0.10	0.10	4.66	7.88
202.1	3.02	6.28	10.57	0.16	0.16	6.45	10.74
202.2	3.31	5.52	10.13	0.08	0.08	5.60	10.21
203	3.49	6.28	11.17	0.15	0.15	6.43	11.33
204	8.15	15.67	27.18	0.22	0.22	15.89	27.40
205	1.60	3.89	6.20	0.08	0.08	3.97	6.28
206	0.69	1.82	2.83	0.06	0.06	1.89	2.89
207	0.43	1.12	1.75	0.06	0.06	1.18	1.81
208	0.47	1.08	1.75	0.05	0.05	1.13	1.80
209	0.55	1.22	2.01	0.06	0.06	1.28	2.07
210	2.89	6.77	10.94	0.05	0.05	6.83	10.99
211	0.23	0.63	0.97	0.03	0.03	0.66	1.00
212.1	2.77	5.63	9.55	0.21	0.21	5.83	9.76
212.2	0.18	0.37	0.63	0.01	0.01	0.39	0.64
213	0.62	1.52	2.41	0.12	0.18	1.64	2.59
214	1.13	2.52	4.13	0.25	0.36	2.77	4.49
215.1	0.41	0.85	1.43	0.08	0.11	0.93	1.55
215.2	0.57	1.34	2.16	0.09	0.13	1.43	2.29
216	1.11	2.53	4.13	0.23	0.34	2.77	4.47
217.1	0.28	0.63	1.03	0.06	0.09	0.69	1.12
217.2	1.16	2.75	4.42	0.25	0.36	3.00	4.79
218	0.34	0.77	1.26	0.03	0.03	0.80	1.29
219	1.84	3.84	6.45	0.14	0.14	3.98	6.59
220.1	3.12	6.93	11.40	0.24	0.24	7.17	11.64
220.2	3.75	7.14	12.43	0.08	0.08	7.23	12.52

Pond West of Gunnison Place

An analysis of the existing pond topography was conducted and it was determined that the abandoned pond has a capacity of 3.4 acre-ft with an emergency freeboard depth of 0.80 feet.

Pond East of Atrisco Drive

A summary of the runoff volume estimates for drainage basins currently contributing to the detention pond east of Atrisco Drive are shown in Table 3. Detailed runoff volume calculations have been included as an attachment to this memo.

Table 3: Estimated Existing Runoff Volumes for Pond East of Atrisco Drive

Basin ID	Basin Area (acres)	Peak Discharge (100-yr)	Vol 100-yr, 24-hr (acre-ft)
5	12.19	35.43	1.04
1.1	0.76	3.32	0.15
1.2	1.61	6.71	0.30
1.3	1.49	6.29	0.28
8.1	0.49	1.61	0.06
8.2	1.47	4.65	0.16
		Total	1.99

It can be seen from the table that the total volume of water currently contributing to the detention pond is approximately 2 acre-ft. Based on the existing pond topography, the existing pond capacity was found to be approximately 1 acre-ft.

Because the existing detention pond is located adjacent to St. Joseph's Drive, within existing roadway right-of-way, the detention pond will need to be removed and relocated to accommodate the construction of the full build out typical section of St. Joseph's Drive. A hydrologic analysis was completed to determine the estimated required detention pond volume after the construction of roadway improvements on St. Joseph's Drive. The results of the analysis are shown in Table 4.

Table 4: Estimated Post Construction Runoff Volumes for Pond East of Atrisco Drive

Basin ID	Peak Discharge (100-yr)	Vol 100-yr, 24-hr (acre-ft)
*5	32.12	0.92
1.1	3.32	0.15
**1.2A-EB St Josephs East of Low Point	4.95	0.22
**1.2B-EB St Josephs West of Low Point	1.17	0.05
**1.2C-WB St Josephs East of Low Point	4.93	0.22
**1.2D-WB St Josephs West of Low Poin	0.99	0.04
1.3	6.29	0.28
8.1	1.61	0.06
8.2	4.65	0.16
	Total	2.11

*Adjusted Basin 5 to account for the widening of St. Joseph's Drive
**Adjusted Basin 1.2 to include roadway improvements

It can be seen from the table that the required replacement pond volume is 2.11 acre-ft.

Hydraulics

Gavin Road to Atrisco Drive

A spreadsheet was developed to verify whether the spacing of the existing inlets meet the CoA's 10-year storm spread criterion with the proposed bicycle lane improvements. Inlet spacing analysis results can be found in an attachment to this memo. In general, the existing inlet spacing on Ladera Drive meets the CoA 10-year storm spread criterion with the proposed bicycle lane improvements. Specific areas where the criterion was not met are discussed below.

- The roadway low point just east of the Ladera Drive/Gunnison Place intersection.
- The roadway low point on eastbound and westbound Ladera Drive, near the Ladera Drive/Ouray Road intersection. Flows reaching the eastbound inlet total 18.5 cfs and flows reaching the westbound inlet total 5.9 cfs.
- The roadway low point at the intersection of Ladera Drive and Los Tretos Street.
- The existing median inlet located at the roadway low point on eastbound Ladera Drive, near the Sequoia Road intersection, fails to meet the spread criterion. Flows reaching the inlet total 3.6 cfs which is only slightly higher than the allowable flow rate for this inlet.
- The existing inlets located on eastbound and westbound Ladera Drive, at the roadway low point just west of the Ladera Drive/Sunbird Drive intersection, fail to meet the spread criterion. Flows reaching the eastbound inlets total 53.7 cfs. The majority of flow reaching these inlets is generated from offsite drainage basins 118.1 and 118.2 which outfall into Ladera Drive and ultimately to these inlets. Flows reaching the westbound inlets total 14.4 cfs.

Pond East of Atrisco Drive

A hydraulic analysis (using StormCAD) was conducted on the existing detention pond located east of Atrisco Drive, within existing St. Joseph's Drive roadway right-of-way, to determine the existing pond outflow rate into the Oxbow storm drain system. It was determined that the Oxbow and Coors Boulevard storm drains are currently functioning at capacity and the existing pond is acting as a surge pond during large storm events.

Recommendations

Gavin Road to Atrisco Drive

Based on the results of the hydraulic analysis, the following recommendations for improvement to the existing roadway drainage infrastructure have been identified:

- **Gavin Road to Unser Boulevard** – Additional inlets should be constructed along westbound Ladera Drive, south of the Ladera Drive/Gunnison Place intersection to reduce flows reaching the inlets at the roadway low point. No drainage improvements are required for eastbound Ladera Drive as existing inlets meet CoA spread criterion. Existing inlets on eastbound and westbound Ladera Drive are currently located along the outer curb lines and will not be affected by the construction of the proposed bicycle lane improvements.
- **Unser Boulevard to Ouray Road** – Additional inlets should be constructed along eastbound and westbound Ladera Drive to decrease the existing inlet spacing and to reduce flows reaching the

inlets at the roadway low point. Existing inlets on eastbound and westbound Ladera Drive are currently located along the outer curb lines and will not be affected by the construction of the proposed bicycle lane improvements.

- **Ouray Road to Sequoia Road** – Curb cuts should be constructed along proposed median curb lines and spaced to meet CoA spread criterion. Water harvesting swales should be constructed within the existing median at proposed curb cuts. Existing beehive and median drop inlets should be cleaned and, if needed, grate elevations adjusted to facilitate positive drainage in medians. Curb inlets should be constructed along westbound Ladera Drive to reduce flow reaching the inlet at the roadway low point.
- **Sequoia Road to Atrisco Drive** - Additional inlets should be added along eastbound and westbound Ladera Drive to reduce flows reaching the existing inlets at the Ladera Drive roadway low point, just west of the Ladera Drive/Sunbird Drive intersection. Existing inlets on eastbound and westbound Ladera Drive are currently located along the outer curb lines and will not be affected by the construction of the proposed bicycle lane improvements.

Pond West of Gunnison Place

Considering the existing pond serves no function since the construction of the upstream drainage network, the outfall pipe in the pond should be capped and the existing pond filled to accommodate the new sections of multi-use trail that are proposed to be constructed as part of this project.

St. Joseph's Drive/Pond East of Atrisco Drive

As St. Joseph's Drive will be built out to its ultimate roadway section with the construction of this project, curb drainage inlets should be constructed along eastbound and westbound St Joseph's Drive to capture onsite drainage and accommodate the CoA spread criterion. Considering that the Oxbow and Coors Boulevard drainage networks are currently at capacity, new inlets on St. Joseph's drive should not be connected directly to the Oxbow storm drain. Onsite runoff should be conveyed into an offsite detention facility, similar to the existing condition, to attenuate flow to the Oxbow storm drain system. Several alternatives were considered to control the estimated 0.96 acre-feet volume of water that is generated from onsite drainage basins 1.1, 1.2, and 1.3. The alternatives have been summarized in Table 5 below.

Table 5: Onsite Runoff Storage Alternatives

	Alternative	Issues/Concerns
1	Store the estimated 100-year runoff volumes from St. Joseph's Drive and Atrisco Drive in underground storage facilities.	▪ Possible right-of-way acquisition ▪ Possible utility conflicts ▪ Maintenance issues
2	Construct a replacement detention pond, south of St. Joseph's Drive, sized to store the estimated 100-year runoff volumes from St. Joseph's Drive and Atrisco Drive as well as offsite flows from Basin 5.	▪ An agreement to construct a detention pond outside of City right-of-way would have to be coordinated with the developer of Oxbow Town Center, which could delay the project.

3	Increase the storage capacity of the existing detention pond located in the northeast quadrant of the Ladera Drive/Atrisco Drive intersection (on the St. Joseph's on the Rio Grande Church property) to handle the 100-year runoff volumes from St. Joseph's Drive and Atrisco Drive.	▪ An agreement to store the additional volume of runoff would have to be coordinated with the church, which could delay the project.

Initial property owner meetings were conducted on July 31, 2015 with St. Joseph's on the Rio Grande Church staff as well as Thomas Keleher, a member of the board that presides over the lands of Oxbow Town Center, to determine the feasibility of Alternatives 2 and 3. It was determined during the meetings that the church is planning to extend its existing parking lot to the south. This will not allow for the expansion of the existing pond required to store the full volume of runoff from St. Joseph's Drive and Atrisco Drive. Based on the initial property owner meetings and a review of the proposed alternatives, Alternative 2 (construct a replacement pond) is recommended. The pond should be sized to accommodate the volume of runoff generated from onsite basin 1.1, 1.2, and 1.3 (approximately 0.96 acre-feet) and offsite flows from basin's 5, 8.1, and 8.2 (approximately 1.14 acre-feet). The proposed pond should outfall to the existing Oxbow storm drain network as it does today and maintain the existing hydraulic conditions. Final design of the replacement pond should continue to be coordinated with the board that presides over the lands of Oxbow Town Center.

Conclusion

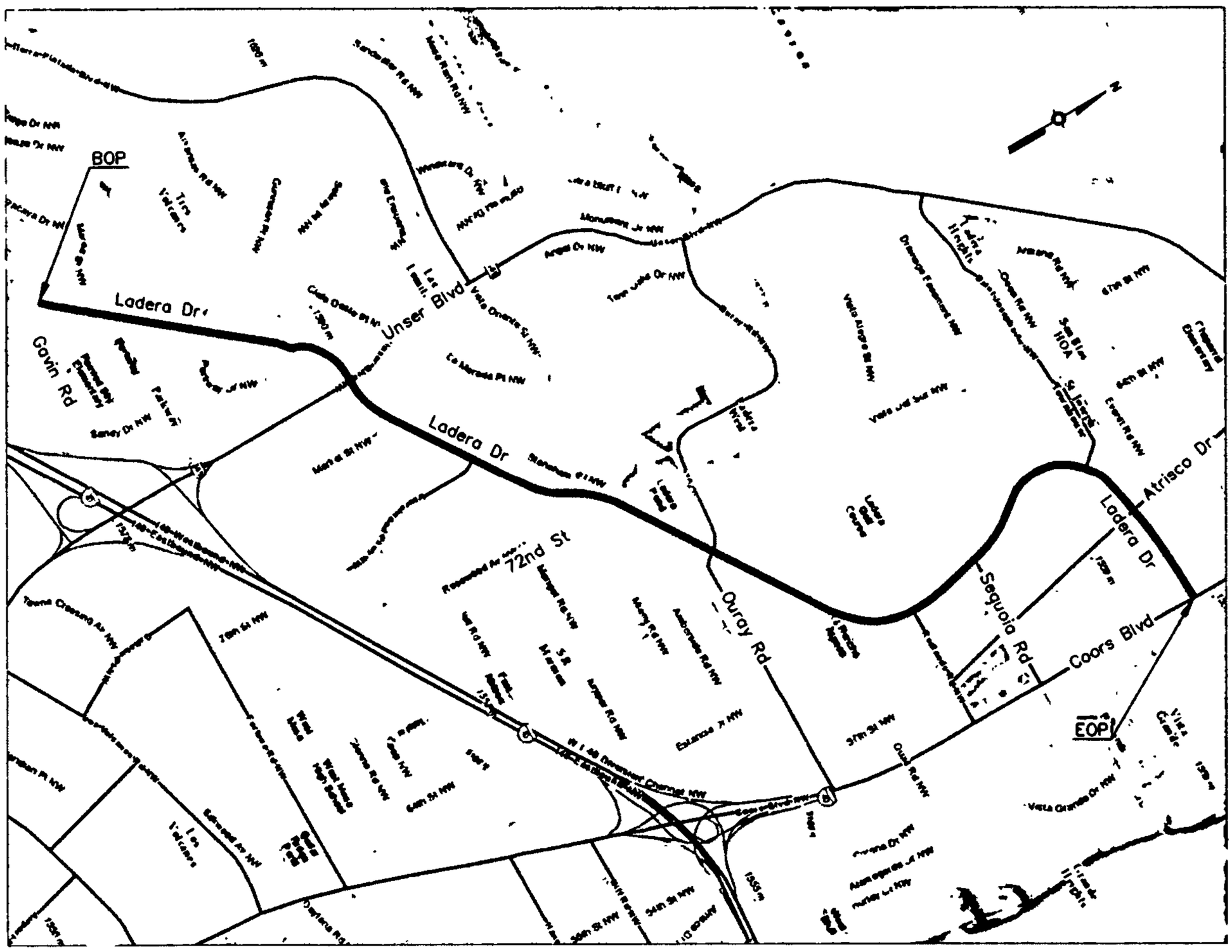
This drainage memo summarizes the analysis of the existing drainage conditions and the proposed preliminary drainage recommendation for Ladera Drive between Gavin Road and Coors Boulevard. The proposed preliminary drainage recommendations meet the CoA drainage design criteria. Recommendations were proposed to construct additional inlets along Ladera Drive. Recommendations were made to fill the abandoned detention pond located in the southwest quadrant of the Ladera Drive/Gunnison Place intersection to allow for construction of a proposed multi-use trail in that area. Finally, recommendations were made to construct a replacement detention pond south of St. Joseph's Drive to maintain the existing hydraulic conditions of the St. Joseph's Drive drainage system. Final design plans for the replacement pond should be coordinated with property owners of lands adjacent to the project site.

Attachments

Attachment 1:	Vicinity Map
Attachment 2:	Drainage Basin Maps
Attachment 3:	Existing Land Use Map
Attachment 4:	Runoff Calculations
Attachment 5:	Existing and Proposed Pond Volume Calculations
Attachment 6:	Inlet Spacing Analysis
Attachment 7:	Hand Calculations
Attachment 8:	Oxbow Town Center Conceptual Grading and Drainage Plan

Attachment 1: Vicinity Map

Exhibit 1: Vicinity Map



Attachment 2: Drainage Basin Maps

Legend

- Flow Direction
- Existing Manhole
- Existing Inlet
- Existing Storm Drain
- Basin Boundary
- Arroyo
- 2' Contour
- XXX Basin ID

N
W E
S

Exhibit 2
Drainage Basin Map
(Gavin Rd. to Unser Blvd.)
Ladera Drive
Improvements

500 250 0 500 Feet

Legend

- Flow Direction
- Existing Manhole
- Existing Inlet
- Existing Storm Drain
- Basin Boundary
- Arroyo
- 2' Contour
- XXX Basin ID

N
W E
S

Exhibit 4
Drainage Basin Map
(72nd St. to Sequoia Rd.)
Ladera Drive
Improvements

500 250 0 500 Feet

Legend

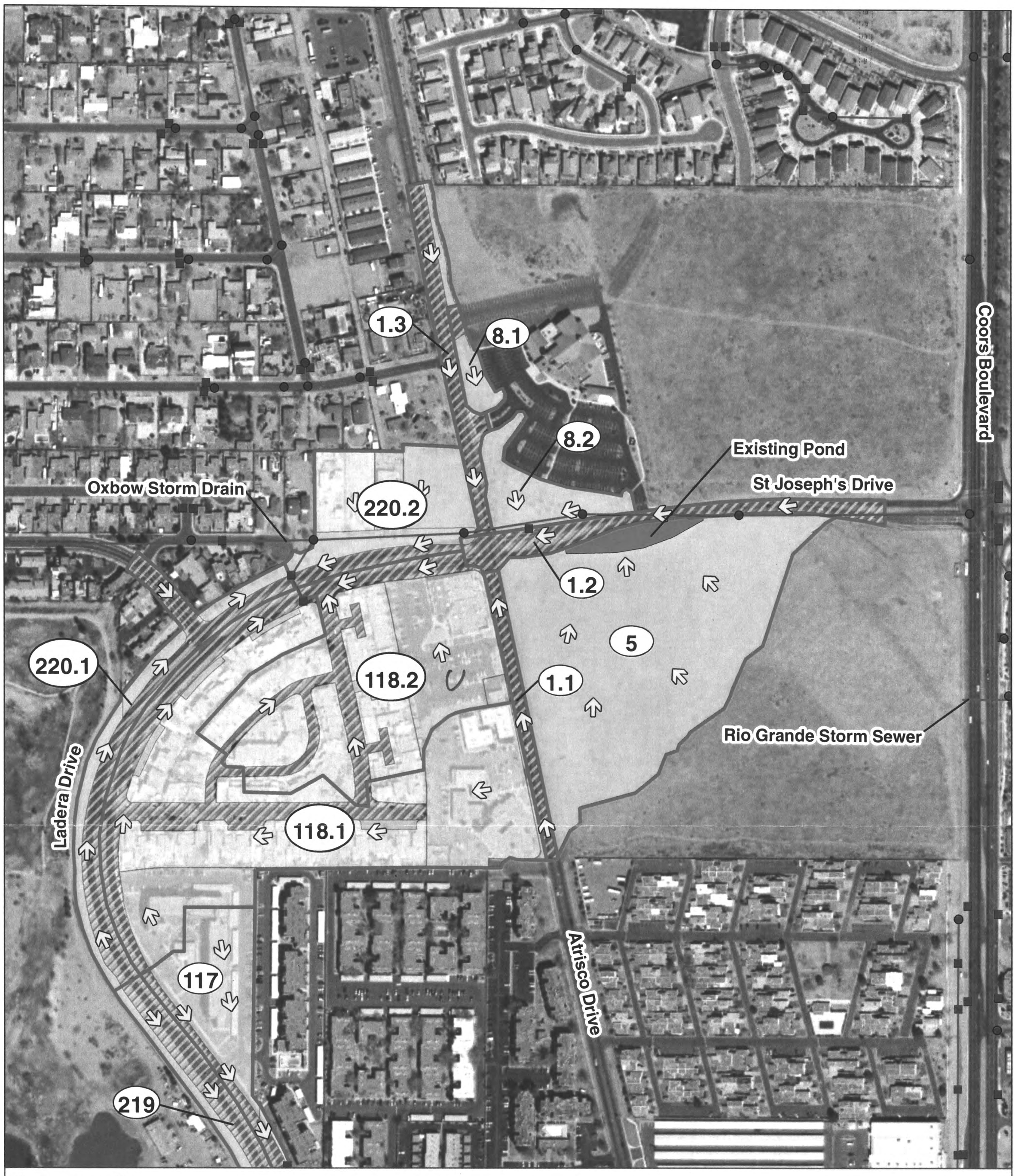
- Flow Direction
- Existing Manhole
- Existing Inlet
- Existing Storm Drain
- Existing Pond
- Basin Boundary
- Arroyo
- 2' Contours
- XXX Basin ID

N W E S

400 200 0 400 Feet

Exhibit 5
Drainage Basin Map
(Sequoia Rd. to Coors Blvd.)
Ladera Drive
Improvements

Attachment 3: Existing Land Use Map



Legend

- Flow Direction
- Existing Manhole
- Existing Inlet
- Existing Storm Drain
- Basin Boundary
- Existing Pond

Land Use

- ARTERIAL
- COMMERCIAL RETAIL
- C COMMERCIAL SERVICE
- D DRAINAGE / FLOOD CONTROL
- M MULTI FAMILY
- P PARKS / RECREATION
- PI PUBLIC / INSTITUTIONAL
- S SINGLE FAMILY
- T TRANSPORTATION / UTILITIES
- V VACANT / OTHER
- Arroyo
- XXX Basin ID

N W E S

Exhibit 6
Existing Land Use Map
Ladera Drive
Improvements

400 200 0 400 Feet

Attachment 4: Runoff Calculations

	cfs/100', 10-yr	cfs/100', 100-yr
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.	0.016	0.016
Additional flow generated from 5' of median not contributing before(land treatment "Type D").	0.033	0.048

Land Use	Basin ID	Roadway Length	Basin Area (acres)	A (%)	B (%)	C (%)	D (%)	Peak Discharge, 10-yr A (cfs/acre)	Peak Discharge, 10-yr B (cfs/acre)	Peak Discharge, 10-yr C (cfs/acre)	Peak Discharge, 10-yr D (cfs/acre)	Existing Peak Discharge 10-yr (cfs)	Peak Discharge, 100-yr A (cfs/acre)	Peak Discharge, 100-yr B (cfs/acre)	Peak Discharge, 100-yr C (cfs/acre)	Peak Discharge, 100-yr D (cfs/acre)	Existing Peak Discharge 100-yr (cfs)	Additional Flow Generated By Improvements 10-yr (cfs)	Additional Flow Generated By Improvements 100-yr (cfs)	Total Flow 10-yr (cfs)	Total Flow 100-yr (cfs)
Eastbound																					
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.																					
Mixed	100	2460	2.93	0	0	0.30	0.70	0.24	0.76	1.49	2.89	7.25	1.29	2.03	2.87	4.37	11.51	0.39	0.39	7.65	11.90
Arterial			2.06																		
Median/Landscaped Area			0.88																		
Mixed	101	732	0.88	0	0	0.38	0.62	0.24	0.76	1.49	2.89	2.07	1.29	2.03	2.87	4.37	3.34	0.12	0.12	2.19	3.45
Arterial			0.54																		
Median/Landscaped Area			0.34																		
Mixed	102.1	312	0.38	0	0	0.39	0.61	0.24	0.76	1.49	2.89	0.88	1.29	2.03	2.87	4.37	1.43	0.05	0.05	0.93	1.48
Arterial			0.23																		
Median/Landscaped Area			0.15																		
Mixed	102.2	480	0.58	0	0	0.33	0.67	0.24	0.76	1.49	2.89	1.41	1.29	2.03	2.87	4.37	2.25	0.08	0.08	1.49	2.33
Arterial			0.39																		
Median/Landscaped Area			0.19																		
Mixed	103	895	1.39	0	0	0.35	0.65	0.24	0.76	1.49	2.89	3.34	1.29	2.03	2.87	4.37	5.35	0.14	0.14	3.48	5.49
Arterial			0.90																		
Median/Landscaped Area			0.49																		
Mixed	104	4030	5.50	0	0	0.35	0.65	0.24	0.76	1.49	2.89	13.16	1.29	2.03	2.87	4.37	21.10	0.64	0.64	13.81	21.75
Arterial			3.55																		
Median/Landscaped Area			1.95																		
Mixed	105.1	1450	4.21	0	0	0.24	0.76	0.24	0.76	1.49	2.89	10.77	1.29	2.03	2.87	4.37	16.90	0.23	0.23	11.00	17.13
Arterial			1.75																		
Median/Landscaped Area			0.60																		
Residential 9			1.86																		
Mixed	105.2	96	0.12	0	0	0.22	0.78	0.24	0.76	1.49	2.89	0.32	1.29	2.03	2.87	4.37	0.50	0.02	0.02	0.34	0.52
Arterial			0.10																		
Median/Landscaped Area			0.03																		
Additional flow generated from 5' of type D land treatment.																					
Mixed	106	1054	0.97	0	0	0.11	0.89	0.24	0.76	1.49	2.89	2.65	1.29	2.03	2.87	4.37	4.08	0.35	0.51	3.00	4.58
Arterial			0.86																		
Median/Landscaped Area			0.11																		
Mixed	107	265	0.29	0	0	0.08	0.92	0.24	0.76	1.49	2.89	0.81	1.29	2.03	2.87	4.37	1.23	0.09	0.13	0.89	1.36
Arterial			0.27																		
Median/Landscaped Area			0.02																		
Mixed	108	492	0.45	0	0	0.12	0.88	0.24	0.76	1.49	2.89	1.24	1.29	2.03	2.87	4.37	1.91	0.16	0.24	1.40	2.14
Arterial			0.40																		
Median/Landscaped Area			0.05																		
Mixed	109	158	0.14	0	0	0.16	0.84	0.24	0.76	1.49	2.89	0.38	1.29	2.03	2.87	4.37	0.59	0.05	0.08	0.43	0.67
Arterial			0.12																		
Median/Landscaped Area			0.02																		
Mixed	110	439	0.40	0	0	0.11	0.89	0.24	0.76	1.49	2.89	1.10	1.29	2.03	2.87	4.37	1.69	0.14	0.21	1.25	1.90
Arterial			0.36																		
Median/Landscaped Area			0.05																		
Mixed	111	465	0.42	0	0	0.13	0.87	0.24	0.76	1.49	2.89	1.13	1.29	2.03	2.87	4.37	1.74	0.15	0.22	1.28	1.96
Arterial			0.36																		
Median/Landscaped Area			0.05																		
Mixed	112	242	0.27	0	0	0.15	0.85	0.24	0.76	1.49	2.89	0.72	1.29	2.03	2.87	4.37	1.11	0.08	0.12	0.80	1.23
Arterial			0.23																		
Median/Landscaped Area			0.04																		

	cfs/100', 10-yr	cfs/100', 100-yr
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.	0.016	0.016
Additional flow generated from 5' of median not contributing before(land treatment "Type D").	0.033	0.048

Land Use	Basin ID	Roadway Length	Basin Area (acres)	A (%)	B (%)	C (%)	D (%)	Peak Discharge, 10-yr A (cfs/acre)	B (cfs/acre)	C (cfs/acre)	D (cfs/acre)	Existing Peak Discharge 10-yr (cfs)	Peak Discharge, 100-yr A (cfs/acre)	B (cfs/acre)	C (cfs/acre)	D (cfs/acre)	Existing Peak Discharge 100-yr (cfs)	Additional Flow Generated By Improvements 10-yr (cfs)	Additional Flow Generated By Improvements 100-yr (cfs)	Total Flow 10-yr (cfs)	Total Flow 100-yr (cfs)
Eastbound																					
Additional flow generated from 5' of "Type D" land treatment.																					
Mixed	113	205	0.18	0	0	0.30	0.70	0.24	0.76	1.49	2.89	0.45	1.29	2.03	2.87	4.37	0.71	0.07	0.10	0.52	0.81
Arterial			0.13																		
Median/Landscaped Area			0.05																		
Mixed	114	306	0.33	0	0	0.16	0.84	0.24	0.76	1.49	2.89	0.88	1.29	2.03	2.87	4.37	1.36	0.10	0.15	0.98	1.51
Arterial			0.28																		
Median/Landscaped Area			0.05																		
Mixed	115.1	327	0.34	0	0	0.26	0.74	0.24	0.76	1.49	2.89	0.85	1.29	2.03	2.87	4.37	1.34	0.11	0.16	0.96	1.50
Arterial			0.25																		
Median/Landscaped Area			0.09																		
Mixed	115.2	168	0.28	0	0	0.08	0.92	0.24	0.76	1.49	2.89	0.78	1.29	2.03	2.87	4.37	1.20	0.06	0.08	0.84	1.28
Arterial			0.26																		
Median/Landscaped Area			0.02																		
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.																					
Mixed	116	353	0.43	0	0	0.37	0.63	0.24	0.76	1.49	2.89	1.02	1.29	2.03	2.87	4.37	1.64	0.06	0.06	1.07	1.69
Arterial			0.27																		
Median/Landscaped Area			0.16																		
Mixed	117	709	3.00	0	0	0.30	0.70	0.24	0.76	1.49	2.89	7.41	1.29	2.03	2.87	4.37	11.75	0.11	0.11	7.52	11.87
Arterial			0.56																		
Median/Landscaped Area			0.23																		
Multiple Unit Residential Attached			2.21																		
Mixed	118.1	1376	13.97	0	0	0.52	0.48	0.24	0.76	1.49	2.89	30.12	1.29	2.03	2.87	4.37	50.07	0.22	0.22	30.34	50.29
Arterial			0.93																		
Median/Landscaped Area			3.75																		
Multiple Unit Residential Attached			1.46																		
Multiple Unit Residential Detached			7.83																		
Mixed	118.2	504	9.40	0	0	0.30	0.70	0.24	0.76	1.49	2.89	23.25	1.29	2.03	2.87	4.37	36.88	0.08	0.08	23.33	36.96
Arterial			0.34																		
Median/Landscaped Area			0.14																		
Multiple Unit Residential Detached			5.89																		
Commercial			3.03																		

	cfs/100', 10-yr	cfs/100', 100-yr
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.	0.016	0.016
Additional flow generated from 5' of median not contributing before(land treatment "Type D").	0.033	0.048

Land Use	Basin ID	Roadway Length	Basin Area (acres)	A (%)	B (%)	C (%)	D (%)	Peak Discharge, 10-yr A (cfs/acre)	Peak Discharge, 10-yr B (cfs/acre)	Peak Discharge, 10-yr C (cfs/acre)	Peak Discharge, 10-yr D (cfs/acre)	Existing Peak Discharge 10-yr (cfs)	Peak Discharge, 100-yr A (cfs/acre)	Peak Discharge, 100-yr B (cfs/acre)	Peak Discharge, 100-yr C (cfs/acre)	Peak Discharge, 100-yr D (cfs/acre)	Existing Peak Discharge 100-yr (cfs)	Additional Flow Generated By Improvements 10-yr (cfs)	Additional Flow Generated By Improvements 100-yr (cfs)	Total Flow 10-yr (cfs)	Total Flow 100-yr (cfs)
Westbound																					
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.																					
Mixed	200	1732	6.28	0	0	0.66	0.34	0.24	0.76	1.49	2.89	12.36	1.29	2.03	2.87	4.37	21.25	0.28	0.28	12.64	21.53
Arterial			2.14																		
Median/Landscaped Area			4.14																		
Mixed	201	648	2.27	0	0	0.63	0.37	0.24	0.76	1.49	2.89	4.56	1.29	2.03	2.87	4.37	7.78	0.10	0.10	4.66	7.88
Arterial			0.84																		
Median/Landscaped Area			1.43																		
Mixed	202.1	1029	3.02	0	0	0.58	0.42	0.24	0.76	1.49	2.89	6.28	1.29	2.03	2.87	4.37	10.57	0.16	0.16	6.45	10.74
Arterial			1.28																		
Median/Landscaped Area			1.74																		
Mixed	202.2	483	3.31	0	0	0.87	0.13	0.24	0.76	1.49	2.89	5.52	1.29	2.03	2.87	4.37	10.13	0.08	0.08	5.60	10.21
Arterial			0.42																		
Median/Landscaped Area			2.89																		
Mixed	203	943	3.49	0	0	0.78	0.22	0.24	0.76	1.49	2.89	6.28	1.29	2.03	2.87	4.37	11.17	0.15	0.15	6.43	11.33
Arterial			0.77																		
Median/Landscaped Area			2.71																		
Mixed	204	1375	8.15	0	0	0.69	0.31	0.24	0.76	1.49	2.89	15.67	1.29	2.03	2.87	4.37	27.18	0.22	0.22	15.89	27.40
Arterial			1.34																		
Median/Landscaped Area			5.13																		
Multiple Unit Residential Attached			1.68																		
Mixed	205	477	1.60	0	0	0.33	0.67	0.24	0.76	1.49	2.89	3.89	1.29	2.03	2.87	4.37	6.20	0.08	0.08	3.97	6.28
Arterial			0.41																		
Median/Landscaped Area			0.24																		
Multiple Unit Residential Attached			0.95																		
Mixed	206	402	0.69	0	0	0.17	0.83	0.24	0.76	1.49	2.89	1.82	1.29	2.03	2.87	4.37	2.83	0.06	0.06	1.89	2.89
Arterial			0.57																		
Median/Landscaped Area			0.12																		
Mixed	207	369	0.43	0	0	0.18	0.82	0.24	0.76	1.49	2.89	1.12	1.29	2.03	2.87	4.37	1.75	0.06	0.06	1.18	1.81
Arterial			0.35																		
Median/Landscaped Area			0.08																		
Mixed	208	320	0.47	0	0	0.42	0.58	0.24	0.76	1.49	2.89	1.08	1.29	2.03	2.87	4.37	1.75	0.05	0.05	1.13	1.80
Arterial			0.27																		
Median/Landscaped Area			0.19																		
Mixed	209	386	0.55	0	0	0.48	0.52	0.24	0.76	1.49	2.89	1.22	1.29	2.03	2.87	4.37	2.01	0.06	0.06	1.28	2.07
Arterial			0.29																		
Median/Landscaped Area			0.26																		
Mixed	210	340	2.89	0	0	0.39	0.61	0.24	0.76	1.49	2.89	6.77	1.29	2.03	2.87	4.37	10.94	0.05	0.05	6.83	10.99
Arterial			0.59																		
Median/Landscaped Area			0.81																		
Residential 9			1.49																		
Mixed	211	185	0.23	0	0	0.16	0.84	0.24	0.76	1.49	2.89	0.63	1.29	2.03	2.87	4.37	0.97	0.03	0.03	0.66	1.00
Arterial			0.20																		
Median/Landscaped Area			0.04																		

	cfs/100', 10-yr	cfs/100', 100-yr
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.	0.016	0.016
Additional flow generated from 5' of median not contributing before(land treatment "Type D").	0.033	0.048

Land Use	Basin ID	Roadway Length	Basin Area (acres)	A (%)	B (%)	C (%)	D (%)	Peak Discharge, 10-yr A (cfs/acre)	Peak Discharge, 10-yr B (cfs/acre)	Peak Discharge, 10-yr C (cfs/acre)	Peak Discharge, 10-yr D (cfs/acre)	Existing Peak Discharge 10-yr (cfs)	Peak Discharge, 100-yr A (cfs/acre)	Peak Discharge, 100-yr B (cfs/acre)	Peak Discharge, 100-yr C (cfs/acre)	Peak Discharge, 100-yr D (cfs/acre)	Existing Peak Discharge 100-yr (cfs)	Additional Flow Generated By Improvements 10-yr (cfs)	Additional Flow Generated By Improvements 100-yr (cfs)	Total Flow 10-yr (cfs)	Total Flow 100-yr (cfs)
Westbound																					
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.																					
Mixed	212.1	1286	2.77	0	0	0.61	0.39	0.24	0.76	1.49	2.89	5.63	1.29	2.03	2.87	4.37	9.55	0.21	0.21	5.83	9.76
Arterial			1.07																		
Median/Landscaped Area			1.70																		
Mixed	212.2	93	0.18	0	0	0.59	0.41	0.24	0.76	1.49	2.89	0.37	1.29	2.03	2.87	4.37	0.63	0.01	0.01	0.39	0.64
Arterial			0.07																		
Median/Landscaped Area			0.11																		
Additional flow generated from 5' of "Type D" land treatment.																					
Mixed	213	374	0.62	0	0	0.30	0.70	0.24	0.76	1.49	2.89	1.52	1.29	2.03	2.87	4.37	2.41	0.12	0.18	1.64	2.59
Arterial			0.43																		
Median/Landscaped Area			0.19																		
Mixed	214	753	1.13	0	0	0.47	0.53	0.24	0.76	1.49	2.89	2.52	1.29	2.03	2.87	4.37	4.13	0.25	0.36	2.77	4.49
Arterial			0.60																		
Median/Landscaped Area			0.52																		
Mixed	215.1	239	0.41	0	0	0.59	0.41	0.24	0.76	1.49	2.89	0.85	1.29	2.03	2.87	4.37	1.43	0.08	0.11	0.93	1.55
Arterial			0.17																		
Median/Landscaped Area			0.24																		
Mixed	215.2	262	0.57	0	0	0.39	0.61	0.24	0.76	1.49	2.89	1.34	1.29	2.03	2.87	4.37	2.16	0.09	0.13	1.43	2.29
Arterial			0.35																		
Median/Landscaped Area			0.22																		
Mixed	216	711	1.11	0	0	0.44	0.56	0.24	0.76	1.49	2.89	2.53	1.29	2.03	2.87	4.37	4.13	0.23	0.34	2.77	4.47
Arterial			0.62																		
Median/Landscaped Area			0.49																		
Mixed	217.1	195	0.28	0	0	0.43	0.57	0.24	0.76	1.49	2.89	0.63	1.29	2.03	2.87	4.37	1.03	0.06	0.09	0.69	1.12
Arterial			0.16																		
Median/Landscaped Area			0.12																		
Mixed	217.2	760	1.16	0	0	0.37	0.63	0.24	0.76	1.49	2.89	2.75	1.29	2.03	2.87	4.37	4.42	0.25	0.36	3.00	4.79
Arterial			0.73																		
Median/Landscaped Area			0.43																		
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.																					
Mixed	218	177	0.34	0	0	0.44	0.56	0.24	0.76	1.49	2.89	0.77	1.29	2.03	2.87	4.37	1.26	0.03	0.03	0.80	1.29
Arterial			0.19																		
Median/Landscaped Area			0.15																		
Mixed	219	879	1.84	0	0	0.57	0.43	0.24	0.76	1.49	2.89	3.84	1.29	2.03	2.87	4.37	6.45	0.14	0.14	3.98	6.59
Arterial			0.79																		
Median/Landscaped Area			1.05																		
Mixed	220.1	1476	3.12	0	0	0.48	0.52	0.24	0.76	1.49	2.89	6.93	1.29	2.03	2.87	4.37	11.40	0.24	0.24	7.17	11.64
Arterial			1.63																		
Median/Landscaped Area			1.49																		
Mixed	220.2	521	3.75	0	0	0.70	0.30	0.24	0.76	1.49	2.89	7.14	1.29	2.03	2.87	4.37	12.43	0.08	0.08	7.23	12.52
Arterial			0.39																		
Median/Landscaped Area			0.52																		
Residential 1			0.99																		
Commercial			0.61																		
Vacant Land			1.24																		

Attachment 5: Existing and Proposed Pond Volume Calculations

Existing Pond Volume Calculations

								Peak Discharge						Excess Precipitation					
Land Use	Basin ID	Basin Area (acres)	Area ($mile^2$)	A (%)	B (%)	C (%)	D (%)	A (cfs/acre)	B (cfs/acre)	C (cfs/acre)	D (cfs/acre)	Peak Discharge (100-yr)	Calc cfs/acre)	A (inches)	B (inches)	C (inches)	D (inches)	Vol 100yr-6hr (acre-ft)	Vol 100-yr, 24-hr (acre-ft)
Mixed	5	12.19	0.01905	0	0	0.98	0.02	1.29	2.03	2.87	4.37	35.43	2.91	0.44	0.67	0.99	1.97	1.03	1.04
Vacant Land		11.89	0.01859																
Pond		0.30	0.00046																
Mixed	1.1	0.76	0.00119	0	0	0.00	1.00	1.29	2.03	2.87	4.37	3.32	4.37	0.44	0.67	0.99	1.97	0.12	0.15
Vacant Land		0.00	0.00000																
Arterial		0.76	0.00119																
Mixed	1.2	1.61	0.00252	0	0	0.14	0.86	1.29	2.03	2.87	4.37	6.71	4.17	0.44	0.67	0.99	1.97	0.25	0.30
Vacant Land		0.22	0.00034																
Arterial		1.39	0.00217																
Mixed	1.3	1.49	0.00233	0	0	0.10	0.90	1.29	2.03	2.87	4.37	6.29	4.22	0.44	0.67	0.99	1.97	0.23	0.28
Vacant Land		0.15	0.00024																
Arterial		1.34	0.00209																
Mixed	8.1	0.49	0.00076	0	0	0.72	0.28	1.29	2.03	2.87	4.37	1.61	3.29	0.44	0.67	0.99	1.97	0.05	0.06
Vacant Land		0.35	0.00055																
Arterial		0.14	0.00022																
Mixed	8.2	1.47	0.00229	0	0	0.80	0.20	1.29	2.03	2.87	4.37	4.65	3.17	0.44	0.67	0.99	1.97	0.14	0.16
Vacant Land		1.18	0.00184																
Arterial		0.20	0.00032																
Pond		0.09	0.00014																
																		Total	1.99

Proposed Pond Volume Calculations

Land Use	Basin ID	Basin Area (acres)	Area (mile^2)	A (%)	B (%)	C (%)	D (%)	Peak Discharge A (cfs/acre)	Peak Discharge B (cfs/acre)	Peak Discharge C (cfs/acre)	Peak Discharge D (cfs/acre)	Peak Discharge (10-yr)	Peak Discharge A (cfs/acre)	Peak Discharge B (cfs/acre)	Peak Discharge C (cfs/acre)	Peak Discharge D (cfs/acre)	Peak Discharge (100-yr)	Calc cfs/acre)	Excess Precipitation A (inches)	Excess Precipitation B (inches)	Excess Precipitation C (inches)	Excess Precipitation D (inches)	Vol 100yr-6hr (acre-ft)	Vol 100-yr, 24-hr (acre-ft)
Mixed	*5	11.19	0.01748	0	0	1.00	0.00	0.24	0.76	1.49	2.89	16.67	1.29	2.03	2.87	4.37	32.12	2.87	0.44	0.67	0.99	1.97	0.92	0.92
Vacant Land		11.19	0.01748																					
Mixed	1.1	0.76	0.00119	0	0	0.00	1.00	0.24	0.76	1.49	2.89	2.20	1.29	2.03	2.87	4.37	3.32	4.37	0.44	0.67	0.99	1.97	0.12	0.15
Vacant Land		0.00	0.00000																					
Arterial		0.76	0.00119																					
Mixed	**1.2A-EB St Josephs East of Low Point	1.20	0.00187	0	0	0.15	0.85	0.24	0.76	1.49	2.89	3.20	1.29	2.03	2.87	4.37	4.95	4.14	0.44	0.67	0.99	1.97	0.18	0.22
Arterial		1.01	0.00158																					
Median/Landscaped Area		0.18	0.00029																					
Mixed	**1 2B-EB St Josephs West of Low Point	0.27	0.00043	0	0	0.06	0.94	0.24	0.76	1.49	2.89	0.77	1.29	2.03	2.87	4.37	1.17	4.28	0.44	0.67	0.99	1.97	0.04	0.05
Arterial		0.26	0.00040																					
Median/Landscaped Area		0.02	0.00003																					
Mixed	**1.2C-WB St Josephs East of Low Point	1.20	0.00187	0	0	0.16	0.84	0.24	0.76	1.49	2.89	3.18	1.29	2.03	2.87	4.37	4.93	4.12	0.44	0.67	0.99	1.97	0.18	0.22
Arterial		1 00	0.00156																					
Median/Landscaped Area		0.20	0.00031																					
Mixed	**1.2D-WB St Josephs West of Low Point	0.24	0.00037	0	0	0.11	0.89	0.24	0.76	1.49	2.89	0.65	1.29	2.03	2.87	4.37	0.99	4.21	0.44	0.67	0.99	1.97	0.04	0.04
Arterial		0.21	0.00033																					
Median/Landscaped Area		0.03	0.00004																					
Mixed	1.3	1.49	0.00233	0	0	0.10	0.90	0.24	0.76	1.49	2.89	4.10	1.29	2.03	2.87	4.37	6.29	4.22	0.44	0.67	0.99	1.97	0.23	0.28
Vacant Land		0.15	0.00024																					
Arterial		1.34	0.00209																					
Mixed	8.1	0.49	0.00076	0	0	0.72	0.28	0.24	0.76	1.49	2.89	0.92	1.29	2.03	2.87	4.37	1.61	3.29	0.44	0.67	0.99	1.97	0.05	0.06
Vacant Land		0.35	0.00055																					
Arterial		0.14	0.00022																					
Mixed	8.2	1.47	0.00229	0	0	0.80	0.20	0.24	0.76	1.49	2.89	2.59	1.29	2.03	2.87	4.37	4.65	3.17	0.44	0.67	0.99	1.97	0.14	0.16
Vacant Land		1.18	0 00184																					
Arterial		0.20	0.00032																					
Pond		0.09	0.00014																					
																							Total	2.11

Attachment 6: Inlet Spacing Analysis

PARSONS BRINCKERHOFF COMPUTATION SHEET

Subject: Ladera Drive Runoff Calculations

Page 1 of 1 | 4588.92

Made by: KVC

Date: 2/15

Checked by: EHO

Date: 2/15

$Q_{10/100'}$ for 5' Type "C" $= \frac{5'(100)}{43560} = 0.011 \frac{acres}{100'}\left(\frac{1.49 cfs}{acre}\right) = 0.016 cfs/100'$

$Q_{10/100'}$ for 5' Type "D" $= 0.011 \frac{acres}{100'}\left(\frac{2.89 cfs}{acre}\right) = 0.032 cfs/100'$

$\Delta Q_{10/100} = 0.032 - 0.016 = \underline{\underline{0.016 cfs/100'}}$

$Q_{100/100}$ for 5' Type "C" $= \frac{5'(100)}{43560} = \frac{0.011 acres}{100'}\left(\frac{2.87 cfs}{acre}\right) = 0.032 cfs/10$

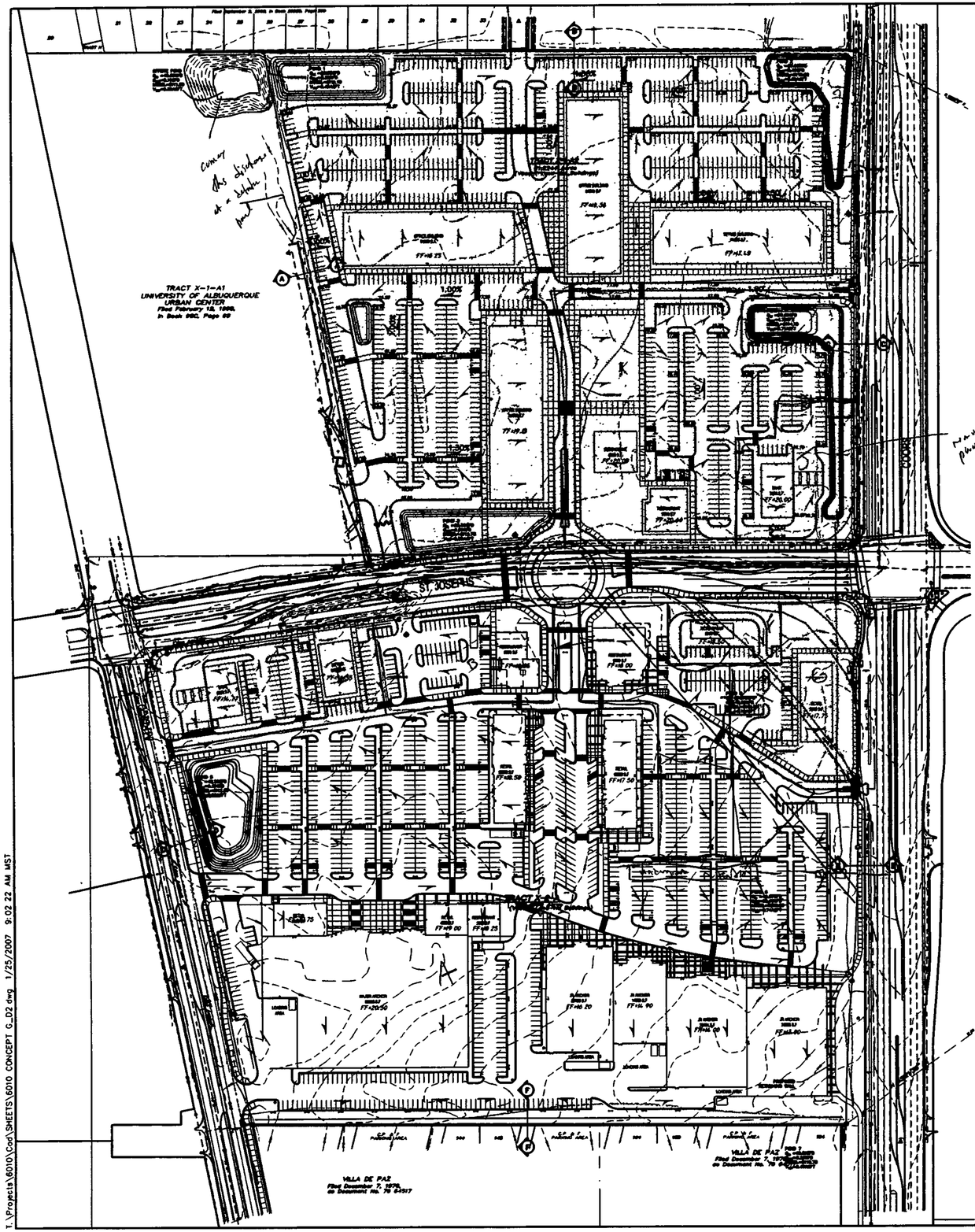
$Q_{100/100'}$ for 5' Type "D" $= \frac{0.011 acres}{100'}\left(\frac{4.37 cfs}{acre}\right) = \frac{0.048 cfs}{100'}$

$\Delta Q_{100/100} = 0.048 - 0.032 = \underline{\underline{0.016 cfs/100'}}$

Attachment 7: Hand Calculations

	cfs/100', 10-yr	cfs/100', 100-yr
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.	0.016	0.016
Additional flow generated from 5' of median not contributing before(land treatment "Type D").	0.033	0.048

Land Use	Basin ID	Roadway Length	Basin Area (acres)	A (%)	B (%)	C (%)	D (%)	Peak Discharge, 10-yr A (cfs/acre)	B (cfs/acre)	C (cfs/acre)	D (cfs/acre)	Existing Peak Discharge 10-yr (cfs)	Peak Discharge, 100-yr A (cfs/acre)	B (cfs/acre)	C (cfs/acre)	D (cfs/acre)	Existing Peak Discharge 100-yr (cfs)	Additional Flow Generated By Improvements 10-yr (cfs)	Additional Flow Generated By Improvements 100-yr (cfs)	Total Flow 10-yr (cfs)	Total Flow 100-yr (cfs)
Eastbound																					
Additional flow generated from 5' of "Type D" land treatment.																					
Mixed	113	205	0.18	0	0	0.30	0.70	0.24	0.76	1.49	2.89	0.45	1.29	2.03	2.87	4.37	0.71	0.07	0.10	0.52	0.81
Arterial			0.13																		
Median/Landscaped Area			0.05																		
Mixed	114	306	0.33	0	0	0.16	0.84	0.24	0.76	1.49	2.89	0.88	1.29	2.03	2.87	4.37	1.36	0.10	0.15	0.98	1.51
Arterial			0.28																		
Median/Landscaped Area			0.05																		
Mixed	115.1	327	0.34	0	0	0.26	0.74	0.24	0.76	1.49	2.89	0.85	1.29	2.03	2.87	4.37	1.34	0.11	0.16	0.96	1.50
Arterial			0.25																		
Median/Landscaped Area			0.09																		
Mixed	115.2	168	0.28	0	0	0.08	0.92	0.24	0.76	1.49	2.89	0.78	1.29	2.03	2.87	4.37	1.20	0.06	0.08	0.84	1.28
Arterial			0.26																		
Median/Landscaped Area			0.02																		
Additional flow generated from going from 5' of "Type C" to 5' of "Type D" land treatment.																					
Mixed	116	353	0.43	0	0	0.37	0.63	0.24	0.76	1.49	2.89	1.02	1.29	2.03	2.87	4.37	1.64	0.06	0.06	1.07	1.69
Arterial			0.27																		
Median/Landscaped Area			0.16																		
Mixed	117	709	3.00	0	0	0.30	0.70	0.24	0.76	1.49	2.89	7.41	1.29	2.03	2.87	4.37	11.75	0.11	0.11	7.52	11.87
Arterial			0.56																		
Median/Landscaped Area			0.23																		
Multiple Unit Residential Attached			2.21																		
Mixed	118.1	1376	13.97	0	0	0.52	0.48	0.24	0.76	1.49	2.89	30.12	1.29	2.03	2.87	4.37	50.07	0.22	0.22	30.34	50.29
Arterial			0.93																		
Median/Landscaped Area			3.75																		
Multiple Unit Residential Attached			1.46																		
Multiple Unit Residential Detached			7.83																		
Mixed	118.2	504	9.40	0	0	0.30	0.70	0.24	0.76	1.49	2.89	23.25	1.29	2.03	2.87	4.37	36.88	0.08	0.08	23.33	36.96
Arterial			0.34																		
Median/Landscaped Area			0.14																		
Multiple Unit Residential Detached			5.89																		
Commercial			3.03																		



EROSION CONTROL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITES IS THE RESPONSIBILITY OF THE CONTRACTOR.

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROASIN PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.

EXISTING CONDITIONS

THE EXISTING SITE IS PREDOMINATELY UNDISTURBED SILTY SAND AND CLAYEY SAND TYP SOILS MODERATELY VEGITATED WITH VARIOUS GRASSSES AND SHRUBS. ONSITE SLOPES ARE VERY MILD AND DRAIN IN VARIOUS DIRECTIONS. THE PORTION OF THE PROJECT NORTH OF ST. JOSEPHS DRIVE PREDOMINATELY DRAINS TO THE NW CORNER OF THE TRACT AND INTO AN EXISTING RETENTION POND OFFSITE. THE REMAINDER OF THE NORTHERN PORTION DRAINS TO A DEPRESSION ADJACENT TO COORS BLVD. THE PORTION OF THE PROJECT SOUTH OF ST. JOSEPHS DRAINS IN TWO DIRECTIONS. APPROXIMATELY 60% DRAINS INTO COORS BLVD AND THE EXISTING STORM DRAIN. THE REMAINING 40% DRAINS TO AN EXISTING DETENTION POND WITHIN THE ST. JOSEPHS RIGHT OF WAY. THIS POND THEN DISCHARGES INTO THE EXISTING 60" LADERA STORM DRAIN SYSTEM.-

PROPOSED CONDITIONS

THE PROPOSED SITE IMPROVEMENTS WILL INCLUDE THE CONSTRUCTION OF MULTIPLE RETAIL AND OFFICE DEVELOPMENTS WITH ASSOCIATED INFRASTRUCTURE. ONSITE DRAINAGE WILL BE ROUTED THROUGH A SERIES OF BOTH ABOVE-GROUND AND UNDERGROUND DETENTION PONDS INTENDED TO DISCHARGE TO THE EXISTING OUTFALL WITHIN COORS BLVD. THE EXISTING OUTFALL DIRECTS RUNOFF THROUGH THE ENCLAVE AT OXBOW AND ULTIMATELY TO THE RIO GRANDE RIVER.

NOTES

1. SEE SHEET 15 OF 15 FOR GRADING TYPICAL SECTIONS
2. SEE SHEET 15 OF 15 FOR RETAINING WALL DETAILS
3. SEE SHEETS 6-9 OF 15 FOR STORM DRAIN PLANS

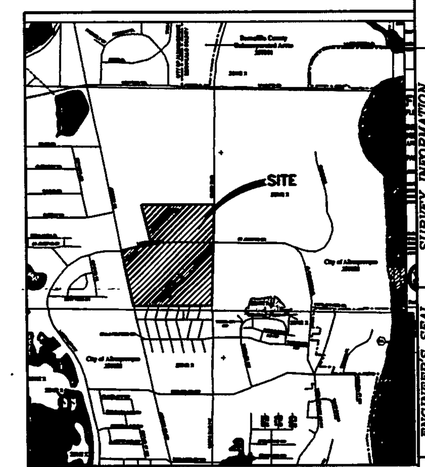
LEGEND

DIRECTION OF FLOW

HIGH POINT

FUTURE PHASE

VICINITY MAP G-11-Z



FIRM MAP 35001C0114E 35001C0327E

LEGAL DESCRIPTION Tracts X-1-A2 and X-2-A University of Albuquerque Urban Center Pojected Sec. 2, T10N, R2E

GRAPHIC SCALE

100 0 50 100 200

SCALE 1"=100'

GND, LLC
CONSULTING ENGINEERS
3443 Menaul Blvd. NW
Albuquerque, NM 87110
Phone: (505) 884-4183
Fax: (505) 884-4184

AS BUILT INFORMATION

CONTRACTOR	DATE
FIELD TEST BY	
ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS MARKED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
No.	

BENCH MARKS

NGS/Albuquerque Control Survey Monument

"JOSEPH 1989"

NM State Plane Coordinates (Central Zone -NAD27)

X=356,686.52 Y=1,502,246.75

Delta Alpha=-0°15'24"

Ground to Grid Factor=0.99967551

Elevation=5116.61 (NAVD88)

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY: JRW		DATE: MAR 2007
DRAWN BY: JRW PMT		DATE: MAR 2007
CHECKED BY: SEG		DATE: MAR 2007

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

OXBOW TOWN CENTER

CONCEPTUAL GRADING & DRAINAGE PLAN

LATEST DESIGN UPDATE

MONTH/DAY/YEAR	USER DEPARTMENT

CITY PROJECT No.	ZONE MAP No.	SHEET
6010	G-11	1 OF 15

PLATE 3

T:\Projects\6010\Cad\SHEETS\6010 CONCEPT G_02.dwg 1/25/2007 9:02:22 AM MST

Attachment 8: Oxbow Town Center Conceptual Grading and Drainage Plan

Legend

- Flow Direction
- Existing Manhole
- Existing Inlet
- Existing Storm Drain
- Basin Boundary
- Arroyo
- 2' Contour
- XXX Basin ID

N
W E
S

1,000 500 0 1,000 Feet

Exhibit 3
Drainage Basin Map
(Unser Blvd. to 72nd St.)
Ladera Drive
Improvements

Pavement Drainage
Ladera Drive Eastbound 10yr

JOB: Ladera Drive Improvements																					
Inlet Number:	0	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	Low Point	Low Point	On Grade	On Grade	On Grade	On Grade	Low Point	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade
Temporary Inlet Number:	(Input Data)																				
Return Period:		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Allowable Spread:		18	18	18	18	18	18	18	18	18	18	18	18	18	12	12	12	12	12	12	12
RATIONAL METHOD HYDROLOGY COMPUTATION:		⇒	⇒	⇒	⇒	⇒	⇒	⇓	⇓	⇐	⇒	⇒	⇒	⇓	⇒	⇒	⇒	⇒	⇒	⇒	⇐
Basin ID		100	100	100	101	101	102.1	102.1	102.2	102.2	104	104	105	105	106	106	107	107	108	108	109
Location:		NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB
Location Description.		Curb Opng	grate	grate	Curb Opng	grate	Curb Opng	grate	grate	Curb Opng	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	grate
Pavement Area (ac).																					
Sideslope Area (ac).																					
Contributing watershed area (acres):		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Previous by-pass flow (cfs).			6.4	3.2	1.2	2.5	0.8	0.5	0.4		0 0	11 9	7.5	13 7	0.0	1.6	0.6	0.6	0.1	0.6	0 0
Discharge added by operator		7.7	0.0	0.0	2.2		0.9			1.5	13 8	0 0	11 0	0.3	3.0	0.0	0.9	0.0	1.4	0.0	0 0
Total discharge Q (cfs):		7.7	6.4	3.2	3.4	2.5	1.8	0.5	0.4	1.5	13.8	11.9	18.5	14.1	3.0	1.6	1.5	0.6	1.5	0.6	0.0
CA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SHOULDER AND GUTTER CONFIGURATION:																					
Manning's n.		0.017	0.017	0 017	0.017	0 017	0.017	0 017	0.017	0.017	0 017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0 017
Longitudinal slope S (ft/ft)		0.0316	0.0316	0 0316	0 0252	0.0252	0.0010	0.0010	0.0010	0.0010	0 0212	0.0212	0 0010	0 0010	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0 0030
Inlet type (1=grate, 2=curb opening, 3=slotted)		2	1	1	2	1	2	1	1	2	2	1	2	1	2	1	2	1	2	1	1
Longitudinal profile (1=on-grade, 2=sag)		1	1	1	1	1	1	2	2	1	1	1	1	2	1	1	1	1	1	1	1
Gutter Configuration (NMDOT curb, 1=Type A, 2=Type B vertical).		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Capture Ratio Used.		100%	50%	50%	100%	50%	100%	50%	50%	100%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	50%
Inlet Std		Single A	Single A	Single C	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A
Grate width.		0	2	2	0	2	0	2	2	0	0	2	0	2	0	2	0	2	0	2	2
Grate length.		0.0	3.3	3.3	0.0	3 3	0.0	3.3	3.3	0.0	0.0	3.3	0 0	3.3	0.0	3.3	0.0	3.3	0.0	3.3	3 3
Pavement cross-slope (Sx).		0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0 020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0 020
Width of gutter from flowline (ft)		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2 00	2.00	2 00	2.00	2 00	2.00	2.00	2.00	2.00	2.00	2 00	2 00
Gutter depression from horizontal (ft):		0.12	0.12	0.12	0.12	0.12	0.12	0 12	0.12	0.12	0.12	0 12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0 12
Gutter cross-slope Sw. (S'w=Sw-Sx)		0.060	0 060	0.060	0 060	0.060	0.060	0.060	0.060	0.060	0 060	0 060	0 060	0 060	0 060	0.060	0.060	0.060	0.060	0.060	0 060
Flooded Width from flowline (ft): before inlet		12.2	11.3	8.4	9.1	7.9	13.6	NA	NA	12.7	16.7	15.8	33.7	NA	13.5	10.5	10.2	6.7	10.2	6.6	1.1
Depth at flowline (ft). before inlet		0.32	0.31	0.25	0.26	0.24	0 35	0.00	0.00	0.33	0 41	0 40	0.75	0 00	0.35	0 29	0 28	0.21	0.28	0.21	0.07
Water cross-area (sq.ft). before inlet		1.57	1.36	0.79	0.90	0.71	1.92	0.00	0 00	1.68	2 88	2.57	11.46	0 00	1.89	1.18	1.12	0.53	1.11	0 52	0.04
Velocity V for total discharge (fps) before inlet		4 88	4.68	4.06	3.75	3.52	0.92	0.00	0.00	0.89	4.79	4 63	1.62	0 00	1.59	1.39	1.37	1.14	1.37	1.14	0.60
Ratio of gutter depression flow to total Q (Eod).		44.8%	48 0%	61 4%	58.0%	64.7%	40.6%	100.0%	100.0%	43.3%	33 1%	35.1%	16 4%	100 0%	40.9%	51.3%	52.6%	72.8%	52.7%	73.1%	100.0%
Equivalent cross-slope (Se)		0.038	0.039	0 045	0 043	0.046	0.036	0.060	0.060	0.037	0.033	0.034	0 027	0 060	0.036	0 041	0.041	0.049	0.041	0.049	0 060
GRATE INLETS ON-GRADE:																					
Ratio of grate frontal flow to total flow.		-----	48.0%	61.4%	-----	64.7%	-----	-----	-----	-----	-----	35 1%	-----	-----	-----	51.3%	-----	72 8%	-----	73.1%	100.0%
Inlet frontal flow in cfs (Qw).		-----	3.05	1.98	-----	1.61	-----	-----	-----	-----	-----	4 17	-----	-----	-----	0.84	-----	0.44	-----	0.43	0.02
Vo for effective length (P-1-7/8, Chart 7 HEC 12).		-----	7.23	7.23	-----	7.20	-----	-----	-----	-----	-----	7.23	-----	-----	-----	7.23	-----	7.23	-----	7.23	7 23
Fraction of frontal flow intercepted (Rf).		-----	100.0%	100.0%	-----	100 0%	-----	-----	-----	-----	-----	100.0%	-----	-----	-----	100.0%	-----	100.0%	-----	100.0%	100 0%
Side flow in cfs (Qs)		-----	3.31	1.24	-----	0 88	-----	-----	-----	-----	-----	7.73	-----	-----	-----	0.80	-----	0.16	-----	0.16	0 00
Effective grate length w/clogging		-----	1.67	1.67	-----	1 65	-----	-----	-----	-----	-----	1.67	-----	-----	-----	1.67	-----	1.67	-----	1.67	1 67
Fraction of side flow interception (Rs)		-----	2.6%	3.3%	-----	4 2%	-----	-----	-----	-----	-----	2.7%	-----	-----	-----	19.3%	-----	25.4%	-----	25.5%	0 0%
Grate Efficiency (E)		-----	49.4%	62.7%	-----	66 1%	-----	-----	-----	-----	-----	36.8%	-----	-----	-----	60.7%	-----	79.7%	-----	80.0%	100 0%
Total flow intercepted (cfs):		-----	3.14	2.02	-----	1 64	-----	-----	-----	-----	-----	4.38	-----	-----	-----	1 00	-----	0 48	-----	0.47	0 02
Grate flow-by (cfs):		-----	3.22	1.20	-----	0.84	-----	-----	-----	-----	-----	7.52	-----	-----	-----	0.64	-----	0.12	-----	0.12	0.00
SLOTTED DRAINS AND CURB OPENING INLETS ON-GRADE:																					
Length required for total interception (ft). w/clogging		41.1	-----	-----	25.2	-----	8.1	-----	-----	7 4	50.5	-----	26.2	-----	14.0	-----	9.8	-----	9.8	-----	-----
Length of inlet provided L (ft)		4	4	4	4	4	4	0	0	4	4	4	4	0	4	4	4	4	4	4	4
Interception for length L (cfs)		1.29	-----	-----	0.91	-----	1.25	-----	-----	1.12	1.90	-----	4.78	-----	1.36	-----	0 93	-----	0 93	-----	-----
Efficiency for length L		0.17	-----	-----	0.27	-----	0.71	-----	-----	0.75	0 14	-----	0.26	-----	0.45	-----	0 61	-----	0 61	-----	-----
Slotted drain or curb opening flow-by (cfs):		6.36	-----	-----	2.48	-----	0.52	-----	-----	0.37	11.91	-----	13.74	-----	1.64	-----	0.60	-----	0.59	-----	-----
INTERCEPTION CAPACITY OF INLETS IN SAG LOCATION:																					
Head available for weir flow at sag (ft).		0	0	0	0	0	0	0.42	0.42	0	0	0	0	0 42	0	0	0	0	0	0	0
Capacity of grate in a sag (3-sided weir):		-----	Head Available?	Head Available?	-----	Head Available?	-----	2.98	2 98	-----	-----	Head Available?	-----	2.99	-----	Head Available?	-----	Head Available?	-----	Head Available?	Head Available?
Capacity of grate in a sag (4-sided weir):		-----	Head Available?	Head Available?	-----	Head Available?	-----	4.3	4 3	-----	-----	Head Available?	-----	4.4	-----	Head Available?	-----	Head Available?	-----	Head Available?	Head Available?
Length provided of curb-opening or slotted drain at sag		0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	0 0	0.0	0.0	0.0	0.0	0 0
Capacity of curb-opening or slotted drain in a sag (weir)		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Length of the vertical curve (ft x 100)																					
approach grade #1 (%).																					
approach grade #2 (%).																					
ABS (algebraic diff. in approach grades) (%):		-----	-----	-----	-----	-----	-----	0.00	0.00	-----	-----	-----	-----	0.00	-----	-----	-----	-----	-----	-----	-----
K = Min(Lc/A,167) (Table 5, HEC-12).		-----	-----	-----	-----	-----	-----	#DIV/0!	#DIV/0!	-----	-----	-----	-----	#DIV/0!	-----	-----	-----	-----	-----	-----	-----
Flanking inlets maximum distance (ft).		-----	-----	-----	-----	-----	-----	#DIV/0!	#DIV/0!	-----	-----	-----	-----	#DIV/0!	-----	-----	-----	-----	-----	-----	-----
TRIANGULAR MEDIAN HYDRAULICS:																					
Manning's n for median finish.																					
Cross-slope of median sides.																					
Depth of flow at center of median (ft).		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Flooded width in the median (ft):		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Water velocity in the median (fps).		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Design by: BPB

Pavement Drainage
Ladera Drive Eastbound 10yr

JOB: Ladera Drive Improvements																	
Inlet Number:	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	Low Point	On Grade	On Grade	On Grade	On Grade	Low Point
Temporary Inlet Number:																	
Return Period:	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Allowable Spread:	12	12	12	12	12	12	12	12	12	12	12	12	18	18	18	18	18
RATIONAL METHOD HYDROLOGY COMPUTATION:	⇐	⇐	⇐	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇓	⇐	⇐	⇐	⇐	⇓
Basin ID	109	110	110	111	111	112	112	113	113	114	114	115	116	116	117	117	118
Location:	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB	NB
Location Description.	Curb Opng	grate	Curb Opng	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	grate	grate	Curb Opng	grate	Curb Opng	grate
Pavement Area (ac).																	
Sideslope Area (ac).																	
Contributing watershed area (acres):	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Previous by-pass flow (cfs)		0.4			0.4	0.1	0.2	0.0	0.1	0.0	0.3	1.2	2.5	3.1	5.3		-----
Discharge added by operator	0.4	0.0	1.3	1.3	0.0	0.8	0.0	0.5	0.0	1.0	0.0	2.4		1.1		7.5	53.7
Total discharge Q (cfs):	0.4	0.4	1.3	1.3	0.4	0.9	0.2	0.5	0.1	1.0	0.3	3.6	2.5	4.2	5.3	7.5	53.7
CA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SHOULDER AND GUTTER CONFIGURATION:																	
Manning's n.	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
Longitudinal slope S (ft/ft)	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0010	0.0030	0.0030	0.0030	0.0030	0.0010
Inlet type (1=grate, 2=curb opening, 3=slotted)	2	1	2	2	1	2	1	2	1	2	1	1	1	2	1	2	1
Longitudinal profile (1=on-grade, 2=sag)	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2
Gutter Configuration (NMDOT curb, 1=Type A, 2=Type B vertical)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Capture Ratio Used.	100%	50%	100%	100%	50%	100%	50%	100%	50%	100%	50%	50%	50%	100%	50%	100%	50%
Inlet Std.	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Double C
Grate width.	0	2	0	0	2	0	2	0	2	0	2	2	2	0	2	0	2
Grate length.	0.0	3.3	0.0	0.0	3.3	0.0	3.3	0.0	3.3	0.0	3.3	3.3	3.3	0.0	3.3	0.0	6.6
Pavement cross-slope (Sx)	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Width of gutter from flowline (ft)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Gutter depression from horizontal (ft).	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Gutter cross-slope Sw. (S'w=Sw-Sx)	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060
Flooded Width from flowline (ft): before inlet	5.6	5.6	9.3	9.4	5.7	7.9	3.6	6.3	1.5	8.4	4.3	NA	12.6	15.3	16.9	19.3	NA
Depth at flowline (ft). before inlet	0.19	0.19	0.27	0.27	0.19	0.24	0.15	0.21	0.09	0.25	0.17	0.00	0.33	0.39	0.42	0.47	0.00
Water cross-area (sq.ft). before inlet	0.40	0.39	0.95	0.97	0.41	0.71	0.21	0.47	0.07	0.78	0.26	0.00	1.66	2.43	2.92	3.82	0.00
Velocity V for total discharge (fps) before inlet	1.08	1.08	1.31	1.32	1.08	1.22	0.98	1.11	0.74	1.25	1.01	0.00	1.53	1.71	1.81	1.97	0.00
Ratio of gutter depression flow to total Q (Eod)	80.6%	81.0%	56.7%	56.2%	80.0%	64.5%	95.6%	75.9%	100.0%	61.8%	91.0%	100.0%	43.6%	36.1%	32.9%	28.7%	100.0%
Equivalent cross-slope (Se).	0.052	0.052	0.043	0.042	0.052	0.046	0.058	0.050	0.060	0.045	0.056	0.060	0.037	0.034	0.033	0.031	0.060
GRATE INLETS ON-GRADE:																	
Ratio of grate frontal flow to total flow.	-----	81.0%	-----	-----	80.0%	-----	95.6%	-----	100.0%	-----	91.0%	-----	43.6%	-----	32.9%	-----	-----
Inlet frontal flow in cfs (Qw).	-----	0.34	-----	-----	0.35	-----	0.19	-----	0.05	-----	0.24	-----	1.11	-----	1.74	-----	-----
Vo for effective length (P-1-7/8, Chart 7 HEC 12)	-----	7.23	-----	-----	7.23	-----	7.23	-----	7.23	-----	7.23	-----	7.23	-----	7.23	-----	-----
Fraction of frontal flow intercepted (Rf)	-----	100.0%	-----	-----	100.0%	-----	100.0%	-----	100.0%	-----	100.0%	-----	100.0%	-----	100.0%	-----	-----
Side flow in cfs (Qs)	-----	0.08	-----	-----	0.09	-----	0.01	-----	0.00	-----	0.02	-----	1.43	-----	3.55	-----	-----
Effective grate length w/clogging	-----	1.67	-----	-----	1.67	-----	1.67	-----	1.67	-----	1.67	-----	1.67	-----	1.67	-----	-----
Fraction of side flow interception (Rs).	-----	27.4%	-----	-----	27.2%	-----	31.0%	-----	0.0%	-----	29.8%	-----	16.7%	-----	12.9%	-----	-----
Grate Efficiency (E)	-----	86.2%	-----	-----	85.5%	-----	97.0%	-----	100.0%	-----	93.7%	-----	53.0%	-----	41.6%	-----	-----
Total flow intercepted (cfs).	-----	0.36	-----	-----	0.38	-----	0.20	-----	0.05	-----	0.25	-----	1.34	-----	2.20	-----	-----
Grate flow-by (cfs):	——	0.06	——	——	0.06	——	0.01	——	0.00	——	0.02	——	1.19	——	3.09	——	——
SLOTTED DRAINS AND CURB OPENING INLETS ON-GRADE:																	
Length required for total interception (ft) w/clogging	5.0	-----	8.8	8.9	-----	7.2	-----	5.6	-----	7.7	-----	-----	-----	16.6	-----	22.5	-----
Length of inlet provided L (ft)	4	4	4	4	4	4	4	4	4	4	4	0	4	4	4	4	4
Interception for length L (cfs)	0.41	-----	0.83	0.84	-----	0.66	-----	0.47	-----	0.71	-----	-----	-----	1.62	-----	2.23	-----
Efficiency for length L	0.95	-----	0.66	0.66	-----	0.76	-----	0.90	-----	0.73	-----	-----	-----	0.39	-----	0.30	-----
Slotted drain or curb opening flow-by (cfs):	0.02	-----	0.42	0.44	-----	0.20	-----	0.05	-----	0.27	-----	-----	-----	2.53	-----	5.29	-----
INTERCEPTION CAPACITY OF INLETS IN SAG LOCATION:																	
Head available for weir flow at sag (ft)	0	0	0	0	0	0	0	0	0	0	0	0.42	0	0	0	0	0.42
Capacity of grate in a sag (3-sided weir)	-----	Head Available?	-----	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----	Head Available?	2.98	Head Available?	-----	Head Available?	-----	4.33
Capacity of grate in a sag (4-sided weir)	-----	Head Available?	-----	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----	Head Available?	4.3	Head Available?	-----	Head Available?	-----	7.0
Length provided of curb-opening or slotted drain at sag	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capacity of curb-opening or slotted drain in a sag (weir).	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Length of the vertical curve (ft x 100).																	
approach grade #1 (%).																	
approach grade #2 (%).																	
ABS (algebraic diff. in approach grades) (%)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.00	-----	-----	-----	-----	0.00
K = Min(Lc/A,167) (Table 5, HEC-12).	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	#DIV/0!	-----	-----	-----	-----	#DIV/0!
Flanking inlets maximum distance (ft)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	#DIV/0!	-----	-----	-----	-----	#DIV/0!
TRIANGULAR MEDIAN HYDRAULICS:																	
Manning's n for median finish:																	
Cross-slope of median sides																	
Depth of flow at center of median (ft).	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Flooded width in the median (ft):	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Water velocity in the median (fps).	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Design by: BPB

Existing HEC 12 10yr Work KVC xls (Ladera Drive EB)

Pavement Drainage
Ladera Drive Westbound-10yr

JOB: Ladera Drive Improvements

Inlet Number:	##	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	Low Point	Low Point	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade
Temporary Inlet Number:	(Input Data)																					
Return Period:		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Allowable Spread:		18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
RATIONAL METHOD HYDROLOGY COMPUTATION:		⇒	⇒	⇒	⇒	⇒	⇒	⇓	⇓	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒
Basin ID		200	200	201	201	201	202.1	202.1	202.2	204	204	205	205	206	206	207	207	208	208	209	209	210
Location:		SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB
Location Description		Curb Opng	grate	Curb Opng	grate	grate	Curb Opng	grate	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng
Pavement Area (ac)																						
Sideslope Area (ac)																						
Contributing watershed area (acres):		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Previous by-pass flow (cfs)			10.9	6.6	9.7	5.7	2.8	4.6			13.5	8.0	10.1	6.3	6.6	3.7	3.7	1.7	2.0	0.6	1.0	0.2
Discharge added by operator		12.6	0.0	4.7	0.0	0.0	4.7		5.6	15.9	0.0	4.0	0.0	1.9	0.0	1.2	0.0	1.1	0.0	1.3	0.0	6.8
Total discharge Q (cfs):		12.6	10.9	11.3	9.7	5.7	7.5	4.6	5.6	15.9	13.5	12.0	10.1	8.2	6.6	4.9	3.7	2.8	2.0	1.9	1.0	7.1
CA		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SHOULDER AND GUTTER CONFIGURATION:																						
Manning's n		0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
Longitudinal slope S (ft/ft)		0.0273	0.0273	0.0273	0.0273	0.0273	0.0010	0.0010	0.0010	0.0123	0.0123	0.0171	0.0171	0.0171	0.0171	0.0171	0.0171	0.0221	0.0221	0.0073	0.0073	0.0198
Inlet type (1=grate, 2=curb opening, 3=slotted)		2	1	2	1	1	2	1	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Longitudinal profile (1=on-grade, 2=sag)		1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Gutter Configuration (NMDOT curb, 1=Type A, 2=Type B vertical)		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Capture Ratio Used		100%	50%	100%	50%	50%	100%	50%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%
Inlet Std		Single A	Single A	Single A	Single A	Single C	Single A	Single A	Double C	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A
Grate width		0	2	0	2	2	0	2	2	0	2	0	2	0	2	0	2	0	2	0	2	0
Grate length		0.0	3.3	0.0	3.3	3.3	0.0	3.3	6.6	0.0	6.6	0.0	3.3	0.0	3.3	0.0	3.3	0.0	3.3	0.0	3.3	0.0
Pavement cross-slope (Sx)		0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Width of gutter from flowline (ft)		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Gutter depression from horizontal (ft).		0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Gutter cross-slope Sw: (S'w=Sw-Sx)		0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060
Flooded Width from flowline (ft): before inlet		15.4	14.5	14.7	13.8	11.1	23.9	NA	NA	19.7	18.5	16.5	15.5	14.2	13.0	11.5	10.2	8.6	7.3	9.2	6.9	13.0
Depth at flowline (ft). before inlet		0.39	0.37	0.37	0.36	0.30	0.56	0.00	0.00	0.47	0.45	0.41	0.39	0.36	0.34	0.31	0.28	0.25	0.23	0.26	0.22	0.34
Water cross-area (sq ft) before inlet		2.45	2.19	2.24	1.99	1.31	5.77	0.00	0.00	3.95	3.50	2.81	2.47	2.09	1.78	1.40	1.13	0.82	0.61	0.92	0.55	1.77
Velocity V for total discharge (fps). before inlet		5.17	5.00	5.03	4.86	4.31	1.29	0.00	0.00	4.02	3.87	4.27	4.10	3.90	3.72	3.48	3.27	3.42	3.19	2.03	1.80	4.00
Ratio of gutter depression flow to total Q (Eod)		36.0%	38.0%	37.6%	39.9%	48.8%	23.3%	100.0%	100.0%	28.2%	30.0%	33.6%	35.8%	38.9%	42.1%	47.3%	52.4%	60.6%	68.6%	57.6%	71.4%	42.2%
Equivalent cross-slope (Se).		0.034	0.035	0.035	0.036	0.040	0.029	0.060	0.060	0.031	0.032	0.033	0.034	0.036	0.037	0.039	0.041	0.044	0.047	0.043	0.049	0.037
GRATE INLETS ON-GRADE:																						
Ratio of grate frontal flow to total flow.		-----	38.0%	-----	39.9%	48.8%	-----	-----	-----	-----	30.0%	-----	35.8%	-----	42.1%	-----	52.4%	-----	68.6%	-----	71.4%	-----
Inlet frontal flow in cfs (Qw).		-----	4.16	-----	3.85	2.76	-----	-----	-----	-----	4.07	-----	3.63	-----	2.79	-----	1.93	-----	1.34	-----	0.71	-----
Vo for effective length (P-1-7/8, Chart 7 HEC 12)		-----	7.23	-----	7.23	7.23	-----	-----	-----	-----	10.45	-----	7.20	-----	7.20	-----	7.20	-----	7.20	-----	7.20	-----
Fraction of frontal flow intercepted (Rf)		-----	100.0%	-----	100.0%	100.0%	-----	-----	-----	-----	100.0%	-----	100.0%	-----	100.0%	-----	100.0%	-----	100.0%	-----	100.0%	-----
Side flow in cfs (Qs)		-----	6.77	-----	5.80	2.90	-----	-----	-----	-----	9.48	-----	6.50	-----	3.84	-----	1.76	-----	0.61	-----	0.28	-----
Effective grate length w/clogging.		-----	1.67	-----	1.67	1.67	-----	-----	-----	-----	3.30	-----	1.65	-----	1.65	-----	1.65	-----	1.65	-----	1.65	-----
Fraction of side flow interception (Rs)		-----	2.3%	-----	2.4%	3.0%	-----	-----	-----	-----	15.4%	-----	3.2%	-----	3.8%	-----	4.8%	-----	5.0%	-----	12.8%	-----
Grate Efficiency (E)		-----	39.5%	-----	41.4%	50.3%	-----	-----	-----	-----	40.8%	-----	37.9%	-----	44.3%	-----	54.7%	-----	70.1%	-----	75.1%	-----
Total flow intercepted (cfs)		-----	4.31	-----	3.99	2.85	-----	-----	-----	-----	5.53	-----	3.83	-----	2.94	-----	2.02	-----	1.37	-----	0.75	-----
Grate flow-by (cfs):		-----	6.61	-----	5.66	2.81	-----	-----	-----	-----	8.02	-----	6.29	-----	3.70	-----	1.67	-----	0.58	-----	0.25	-----
SLOTTED DRAINS AND CURB OPENING INLETS ON-GRADE:																						
Length required for total interception (ft). w/clogging		51.5	-----	48.5	-----	-----	16.8	-----	-----	47.2	-----	44.5	-----	36.5	-----	27.9	-----	22.1	-----	13.6	-----	35.1
Length of inlet provided L (ft)		4	4	4	4	4	4	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4
Interception for length L (cfs)		1.71	-----	1.62	-----	-----	2.89	-----	-----	2.34	-----	1.87	-----	1.54	-----	1.19	-----	0.85	-----	0.87	-----	1.38
Efficiency for length L		0.14	-----	0.14	-----	-----	0.39	-----	-----	0.15	-----	0.16	-----	0.19	-----	0.24	-----	0.30	-----	0.47	-----	0.20
Slotted drain or curb opening flow-by (cfs):		10.93	-----	9.66	-----	-----	4.59	-----	-----	13.55	-----	10.12	-----	6.64	-----	3.69	-----	1.95	-----	0.99	-----	5.69
INTERCEPTION CAPACITY OF INLETS IN SAG LOCATION:																						
Head available for weir flow at sag (ft)		0	0	0	0	0	0	0.42	0.42	0	0	0	0	0	0	0	0	0	0	0	0	0
Capacity of grate in a sag (3-sided weir).		-----	Head Available?	-----	Head Available?	Head Available?	-----	2.98	4.33	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----
Capacity of grate in a sag (4-sided weir)		-----	Head Available?	-----	Head Available?	Head Available?	-----	4.3	7.0	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----	Head Available?	-----
Length provided of curb-opening or slotted drain at sag		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capacity of curb-opening or slotted drain in a sag (weir)		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Length of the vertical curve (ft x 100)																						
approach grade #1 (%):																						
approach grade #2 (%).																						
ABS (algebraic diff. in approach grades) (%).		-----	-----	-----	-----	-----	-----	0.00	0.00	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
K = Min(Lc/A,167) (Table 5, HEC-12).		-----	-----	-----	-----	-----	-----	#DIV/0!	#DIV/0!	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Flanking inlets maximum distance (ft).		-----	-----	-----	-----	-----	-----	#DIV/0!	#DIV/0!	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
TRIANGULAR MEDIAN HYDRAULICS:																						
Manning's n for median finish.																						
Cross-slope of median sides																						
Depth of flow at center of median (ft).		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Flooded width in the median (ft).		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Water velocity in the median (fps).		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Design by: BPB

Existing HEC-12, 10yr Work KVC.xls (Ladera Drive WB)

Pavement Drainage
Ladera Drive Westbound-10yr

JOB: Ladera Drive Improvements																					
Inlet Number:	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	Low Point	On Grade	On Grade	On Grade	On Grade	On Grade	Low Point	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade	On Grade
Temporary Inlet Number:																					
Return Period:	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Allowable Spread:	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
RATIONAL METHOD HYDROLOGY COMPUTATION:	⇒	⇒	⇒	⇒	⇒	⇒	⇓	⇒	⇒	⇒	⇒	⇒	⇓	⇒	⇒	⇓	⇐	⇐	⇐	⇐	⇐
Basin ID	210	210	210	211	211	212.1	212.2	213	213	214	214	215.1	215.2	216	216	217.1	217.2	218	218	219	219
Location:	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB	SB
Location Description.	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng	grate	grate	Curb Opng	grate	Curb Opng	grate	Curb Opng
Pavement Area (ac).																					
Sideslope Area (ac).																					
Contributing watershed area (acres):	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Previous by-pass flow (cfs).	5.7	3.0	2.1	0.7	0.8	0.1	3.4		0.6	0.1	1.6	0.6	2.0		1.5	2.0	0.2	0.8	1.1	2.4	
Discharge added by operator	0.0		0.0	0.7	0.0	5.8	0.4	1.5	0.0	2.8	0.0	3.2	2.5	2.8	0.0	0.7	3.0		0.8		4.0
Total discharge Q (cfs):	5.7	3.0	2.1	1.3	0.8	5.9	3.8	1.5	0.6	2.9	1.6	3.8	4.5	2.8	1.5	2.7	3.2	0.8	1.9	2.4	4.0
CA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SHOULDER AND GUTTER CONFIGURATION:																					
Manning's n.	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
Longitudinal slope S (ft/ft)	0.0198	0.0198	0.0198	0.0336	0.0336	0.0010	0.0010	0.0030	0.0030	0.0030	0.0030	0.0010	0.0010	0.0030	0.0030	0.0010	0.0010	0.0030	0.0030	0.0030	0.0030
Inlet type (1=grate, 2=curb opening, 3=slotted)	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	1	2	1	2	1	2
Longitudinal profile (1=on-grade, 2=sag)	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	2	1	1	1	1	1
Gutter Configuration (NMDOT curb, 1=Type A, 2=Type B vertical).	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Capture Ratio Used.	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	50%	100%	50%	100%	50%	100%
Inlet Std.	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A	Single A
Grate width	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	2	0	2	0	2	0
Grate length	3.3	0.0	3.3	0.0	3.3	0.0	3.3	0.0	3.3	0.0	3.3	0.0	3.3	0.0	3.3	3.3	0.0	3.3	0.0	3.3	0.0
Pavement cross-slope (Sx).	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Width of gutter from flowline (ft)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Gutter depression from horizontal (ft).	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Gutter cross-slope Sw. (S'w=Sw-Sx)	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060
Flooded Width from flowline (ft): before inlet	11.9	9.0	7.7	5.4	4.0	21.8	NA	10.2	6.7	13.3	10.3	18.4	NA	13.0	10.0	NA	17.2	7.9	11.2	12.3	15.1
Depth at flowline (ft). before inlet	0.32	0.26	0.23	0.19	0.16	0.52	0.00	0.28	0.21	0.35	0.29	0.45	0.00	0.34	0.28	0.00	0.42	0.24	0.30	0.33	0.38
Water cross-area (sq.ft). before inlet	1.50	0.90	0.67	0.37	0.24	4.82	0.00	1.12	0.53	1.84	1.14	3.45	0.00	1.78	1.08	0.00	3.05	0.70	1.33	1.59	2.35
Velocity V for total discharge (fps) before inlet	3.81	3.31	3.09	3.56	3.33	1.22	0.00	1.37	1.14	1.57	1.37	1.10	0.00	1.56	1.36	0.00	1.06	1.21	1.43	1.51	1.69
Ratio of gutter depression flow to total Q (Eod)	45.8%	58.2%	66.0%	82.3%	92.8%	25.5%	100.0%	52.5%	72.7%	41.5%	52.3%	30.2%	100.0%	42.2%	53.4%	100.0%	32.2%	65.0%	48.5%	44.6%	36.7%
Equivalent cross-slope (Se)	0.038	0.043	0.046	0.053	0.057	0.030	0.060	0.041	0.049	0.037	0.041	0.032	0.060	0.037	0.041	0.060	0.033	0.046	0.039	0.038	0.035
GRATE INLETS ON-GRADE:																					
Ratio of grate frontal flow to total flow.	45.8%	-----	66.0%	-----	92.8%	-----	-----	-----	72.7%	-----	52.3%	-----	-----	-----	53.4%	-----	-----	65.0%	-----	44.6%	-----
Inlet frontal flow in cfs (Qw).	2.61	-----	1.37	-----	0.75	-----	-----	-----	0.44	-----	0.82	-----	-----	-----	0.78	-----	-----	0.55	-----	1.07	-----
Vo for effective length (P-1-7/8, Chart 7 HEC 12)	7.20	-----	7.20	-----	7.20	-----	-----	-----	7.20	-----	7.20	-----	-----	-----	7.20	-----	-----	7.20	-----	7.20	-----
Fraction of frontal flow intercepted (Rf)	100.0%	-----	100.0%	-----	100.0%	-----	-----	-----	100.0%	-----	100.0%	-----	-----	-----	100.0%	-----	-----	100.0%	-----	100.0%	-----
Side flow in cfs (Qs)	3.08	-----	0.71	-----	0.06	-----	-----	-----	0.17	-----	0.74	-----	-----	-----	0.68	-----	-----	0.30	-----	1.33	-----
Effective grate length w/clogging	1.65	-----	1.65	-----	1.65	-----	-----	-----	1.65	-----	1.65	-----	-----	-----	1.65	-----	-----	1.65	-----	1.65	-----
Fraction of side flow interception (Rs)	3.7%	-----	5.2%	-----	4.6%	-----	-----	-----	25.0%	-----	19.2%	-----	-----	-----	19.6%	-----	-----	22.9%	-----	16.8%	-----
Grate Efficiency (E)	47.8%	-----	67.8%	-----	93.1%	-----	-----	-----	79.5%	-----	61.4%	-----	-----	-----	62.6%	-----	-----	73.0%	-----	53.8%	-----
Total flow intercepted (cfs)	2.72	-----	1.41	-----	0.75	-----	-----	-----	0.48	-----	0.96	-----	-----	-----	0.92	-----	-----	0.62	-----	1.29	-----
Grate flow-by (cfs):	2.97	-----	0.67	-----	0.06	-----	-----	-----	0.12	-----	0.60	-----	-----	-----	0.55	-----	-----	0.23	-----	1.10	-----
SLOTTED DRAINS AND CURB OPENING INLETS ON-GRADE:																					
Length required for total interception (ft) w/clogging	-----	22.2	-----	16.4	-----	15.0	-----	9.9	-----	13.8	-----	12.0	-----	13.5	-----	-----	11.1	-----	11.0	-----	16.3
Length of inlet provided L (ft)	4	4	4	4	4	4	0	4	4	4	4	4	0	4	4	4	4	4	4	4	4
Interception for length L (cfs):	-----	0.89	-----	0.52	-----	2.52	-----	0.94	-----	1.33	-----	1.97	-----	1.30	-----	-----	1.79	-----	1.06	-----	1.59
Efficiency for length L	-----	0.30	-----	0.39	-----	0.43	-----	0.61	-----	0.46	-----	0.52	-----	0.47	-----	-----	0.55	-----	0.55	-----	0.40
Slotted drain or curb opening flow-by (cfs):	-----	2.08	-----	0.80	-----	3.36	-----	0.60	-----	1.56	-----	1.83	-----	1.47	-----	-----	1.44	-----	0.85	-----	2.39
INTERCEPTION CAPACITY OF INLETS IN SAG LOCATION:																					
Head available for weir flow at sag (ft):	0	0	0	0	0	0	0.42	0	0	0	0	0	0.42	0	0	0	0	0	0	0	0
Capacity of grate in a sag (3-sided weir)	Head Available?	-----	Head Available?	-----	Head Available?	-----	2.98	-----	Head Available?	-----	Head Available?	-----	2.98	-----	Head Available?	Head Available?	-----	Head Available?	-----	Head Available?	-----
Capacity of grate in a sag (4-sided weir)	Head Available?	-----	Head Available?	-----	Head Available?	-----	4.3	-----	Head Available?	-----	Head Available?	-----	4.3	-----	Head Available?	Head Available?	-----	Head Available?	-----	Head Available?	-----
Length provided of curb-opening or slotted drain at sag.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capacity of curb-opening or slotted drain in a sag (weir).	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Length of the vertical curve (ft x 100).																					
approach grade #1 (%).																					
approach grade #2 (%).																					
ABS (algebraic diff. in approach grades) (%)	-----	-----	-----	-----	-----	-----	0.00	-----	-----	-----	-----	-----	0.00	-----	-----	-----	-----	-----	-----	-----	-----
K = Min(Lc/A,167) (Table 5, HEC-12)	-----	-----	-----	-----	-----	-----	#DIV/0!	-----	-----	-----	-----	-----	#DIV/0!	-----	-----	-----	-----	-----	-----	-----	-----
Flanking inlets maximum distance (ft):	-----	-----	-----	-----	-----	-----	#DIV/0!	-----	-----	-----	-----	-----	#DIV/0!	-----	-----	-----	-----	-----	-----	-----	-----
TRIANGULAR MEDIAN HYDRAULICS:																					
Manning's n for median finish.																					
Cross-slope of median sides:																					
Depth of flow at center of median (ft)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Flooded width in the median (ft).	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Water velocity in the median (fps)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Design by: BPB

Pavement Drainage
Ladera Drive Westbound-10yr

JOB: Ladera Drive Improvements	
Inlet Number:	**Low Point**
Temporary Inlet Number:	
Return Period:	10
Allowable Spread:	18
RATIONAL METHOD HYDROLOGY COMPUTATION:	⇓
Basin ID	220
Location:	SB
Location Description	grate
Pavement Area (ac).	
Sideslope Area (ac).	
Contributing watershed area (acres):	0.000
Previous by-pass flow (cfs).	
Discharge added by operator	14.4
Total discharge Q (cfs):	14.4
CA	-
SHOULDER AND GUTTER CONFIGURATION:	
Manning's n.	0.017
Longitudinal slope S (ft/ft)	0.0010
Inlet type (1=grate, 2=curb opening, 3=slotted)	1
Longitudinal profile (1=on-grade, 2=sag)	2
Gutter Configuration (NMDOT curb, 1=Type A, 2=Type B vertical)	2
Capture Ratio Used	50%
Inlet Std	Double C
Grate width	2
Grate length	6 6
Pavement cross-slope (Sx).	0.020
Width of gutter from flowline (ft).	2 00
Gutter depression from horizontal (ft).	0.12
Gutter cross-slope Sw. (S'w=Sw-Sx)	0.060
Flooded Width from flowline (ft): before inlet	**NA**
Depth at flowline (ft). before inlet	0.00
Water cross-area (sq.ft). before inlet	0.00
Velocity V for total discharge (fps) before inlet	0.00
Ratio of gutter depression flow to total Q (Eod)	100.0%
Equivalent cross-slope (Se).	0.060
GRATE INLETS ON-GRADE:	
Ratio of grate frontal flow to total flow.	-----
Inlet frontal flow in cfs (Qw):	-----
Vo for effective length (P-1-7/8, Chart 7 HEC 12)	-----
Fraction of frontal flow intercepted (Rf)	-----
Side flow in cfs (Qs)	-----
Effective grate length w/clogging:	-----
Fraction of side flow interception (Rs).	-----
Grate Efficiency (E):	-----
Total flow intercepted (cfs)	-----
Grate flow-by (cfs):	—
SLOTTED DRAINS AND CURB OPENING INLETS ON-GRADE:	
Length required for total interception (ft): w/clogging	-----
Length of inlet provided L (ft)	4
Interception for length L (cfs)	-----
Efficiency for length L	-----
Slotted drain or curb opening flow-by (cfs):	—
INTERCEPTION CAPACITY OF INLETS IN SAG LOCATION:	
Head available for weir flow at sag (ft)	0 42
Capacity of grate in a sag (3-sided weir)	4 33
Capacity of grate in a sag (4-sided weir)	7.0
Length provided of curb-opening or slotted drain at sag.	0.0
Capacity of curb-opening or slotted drain in a sag (weir)	-----
Length of the vertical curve (ft x 100)	
approach grade #1 (%).	
approach grade #2 (%).	
ABS (algebraic diff. in approach grades) (%)	0 00
K = Min(Lc/A,167) (Table 5, HEC-12)	#DIV/0!
Flanking inlets maximum distance (ft)	#DIV/0!
TRIANGULAR MEDIAN HYDRAULICS:	
Manning's n for median finish	
Cross-slope of median sides	
Depth of flow at center of median (ft)	-----
Flooded width in the median (ft)	-----
Water velocity in the median (fps)	-----

Design by: BPB

Existing HEC-12_10yr Work KVC xls (Ladera Drive WB)

Figure 6: Notice of DRC Session Processing Date_____

Project#: 658892 **Zone Atlas:** G10, G11, H10, H11 **DRB#:**_____

Project Name: Ladera Drive Improvements - Phase 1

☒ Scheduled with DRC on Monday August 31, 2015 at 1:30pm
☐ No DRC Meeting Scheduled. Please return at comments by _____

Project Location: _____

TYPE OF PROJECT: ☐-AHBA ☒-CIP ☐-SAD/PID ☐-ABCWUA

PROJECT COORDINATOR: _____ Phone: _____
Company: _____

Design Engineer: Paul Steffin Phone: 505-881-6554
Company: Parsons Brinckerhoff

The Project Is Scheduled For the Following DRC Session:

☐-Pre-Design Review ☒- Final Plan Review ☐- _____
Preliminary Plan Review ☐- Signature Review ☐-Route for Signature

The Project Relates to City Infrastructure Systems:

☐ Water ☐ San. Sewer ☒ Paving ☐ Storm Drainage ☒ Traffic Signal

The Attached Package Includes:
Indicated below are the Departments/Divisions that have received project documents and/or are invited to attend. (It will be the Project Coordinator's responsibility to notify consulting engineering firms of date and time of scheduled DRC meetings).

D- Drawings **MU**- Markups **M**- Memo Only **E**- Estimate **R**- Report

			D	MU	M	E	R
DRC Chairman	~~Stephen~~ Jeanne	Design Review Section	☒	☒	☐	☐	☐
Traffic Dev.	Jeanne	Transportation Development	☒	☐	☐	☐	☐
Utility Dev.	Kristopher/Tim	Utility Development	☐	☐	☐	☐	☐
Utility Des.	(CIP)Kris/John	Utility Design	☒	☐	☐	☐	☐
Hydr. Dev.	Rita	Hydrology Development	☒	☒	☐	☐	☐
Hydr. Des.	(CIP)	Hydrology Design	☐	☐	☐	☐	☐
Const. Mgmnt		Construction Division	☐	☐	☐	☐	☐
Const. Div.	(CIP)Dave Harrison	Construction Division	☐	☐	☐	☐	☐
Jesse Valdez/Matt Yannoni/Manh Tran		Traffic Operations Division	e ☒	☐	☐	☐	☐
Brett Frauenglass		Risk Management	☒	☒	☐	☐	☐
Stephen James		City Architect	☐	☐	☐	☐	☐
Parks & Rec.		Parks & Recreation Department	☐	☐	☐	☐	☐
Project Manager			☐	☐	☐	☐	☐
Transit	Shabih Rizza		☒	☐	☐	☐	☐
			☐	☐	☐	☐	☐
			☐	☐	☐	☐	☐

Notified _____ of DRC meeting date & time on _____ at _____ via _____

CITY OF ALBUQUERQUE

March 7, 2007

Jason Woodruff, P.E.
GND, LLC
5643 Paradise Blvd NW
Albuquerque, NM 87114

Re: Oxbow Town Center (Tracts 1-A-2 and X-2-A) Master Drainage Plan Engineer's Stamp dated 3-7-07 (G11/D067)

Dear Mr. Woodruff,

Based upon the information provided in your submittal dated 1-31-07, the above referenced plan is approved for Site Development Plan for Subdivision and Site Development Plan for Building Permit action be the DRB.

Please note:

- Temporary retention ponds should be sized for the 100 yr 10 day storm.
- The required volume of Pond 7 per the AHYMO Summary is 0.496 ac-ft , while the plans show the volume as 0.47 ac-ft.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, E.I.
Engineering Associate, Planning Dept.
Development and Building Services

C: file
Brad Bingham

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

CITY OF ALBUQUERQUE

November 9, 2007

Jason Woodruff, P.E.
GND Consulting Engineers
5643 Paradise Blvd. NW
Albuquerque, NM 87114

Re: Oxbow Town Center (Tracts ~~1-A-2~~ X1-A2 and X-2-A), Master Drainage Plan Engineer's Stamp dated 10-02-07 (G11-D67)

Dear Mr. Woodruff,

Based upon the information provided in your submittal received 10-04-07, the above referenced plan is approved for Master Plan requirements. Please note that a site-specific grading and drainage plan will need to be submitted for each phase of this project. In addition, the above referenced plan is approved for Preliminary Plat, Site Development Plan for Building Permit, and Site Development Plan for Subdivision action by the DRB. Once the DRB has approved the plan, please submit a mylar copy and a copy of your DRB action sheet in order to obtain rough grading approval.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. In addition to submitting an NOI to the EPA and preparing a SWPPP, please send a copy of the SWPPP on a CD in .pdf format to the following address:

Department of Municipal Development
Storm Drainage Division
P.O. Box 1293, One Civic Plaza, Rm. 301
Attn: Kathy Verhage
Albuquerque, NM 87103

If you have any questions regarding this permit please feel free to call the DMD Storm Drainage Design section at 768-3654 (Kathy Verhage).

Sincerely,

Kristal D. Metro, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: Kathy Verhage, DMD Storm Drainage Design
Bradley Bingham, DRB
File

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(REV 12/2005)

G-11/D067

PROJECT TITLE: Oxbow Town Center (Tracts 1-A-2 and X-2-A)
ZONE MAP: G-11
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: SEE ROUGH GRADING PLAN FOR LEGAL DESCRIPTION
CITY ADDRESS: _____

ENGINEERING FIRM: GND, LLC — CONTACT: Jason Woodruff
ADDRESS: 5643 Paradise Blvd — PHONE: 899-6182
CITY, STATE: Albuquerque, NM — ZIP CODE: 87114

OWNER: Jim Rogers — CONTACT: Same as above
ADDRESS: 4407 Lomas Blvd — PHONE: 899-6182
CITY, STATE: Albuquerque, NM 87110 — ZIP CODE: 87110

ARCHITECT: George Rainhart Architect And Assoc. — CONTACT: _____
ADDRESS: 2325 San Pedro — PHONE: 884-9110
CITY, STATE: Albuquerque, NM — ZIP CODE: 87110

SURVEYOR: Surv-Tek — CONTACT: Russ Hugg
ADDRESS: 9384 Valley View Drive — PHONE: 897-3366
CITY, STATE: Albuquerque, NM — ZIP CODE: 87114

CONTRACTOR: _____ — CONTACT: _____
ADDRESS: _____ — PHONE: _____
CITY, STATE: _____ — ZIP CODE: _____

TYPE OF SUBMITTAL:
- ____ DRAINAGE REPORT
- ____ DRAINAGE PLAN 1st SUBMITTAL
- X DRAINAGE PLAN RESUBMITTAL
- X CONCEPTUAL G & D PLAN
- ____ GRADING PLAN
- ____ EROSION CONTROL PLAN
- ____ ENGINEER'S CERT (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT
- ____ ENGINEER'S CERT (TCL)
- ____ ENGINEER'S CERT (DRB SITE PLAN)
- ____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
- ____ SIA/FINANCIAL GUARANTEE RELEASE
- X PRELIMINARY PLAT APPROVAL
- X S. DEV. PLAN FOR SUB'D APPROVAL
- X S. DEV. FOR BLDG. PERMIT APPROVAL
- X SECTOR PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- ____ FOUNDATION PERMIT APPROVAL
- ____ BUILDING PERMIT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY (PERM)
- ____ CERTIFICATE OF OCCUPANCY (TEMP)
- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ OTHER – Rough Grading Permit Approval

70.00

RECEIVED
OCT 04 2007
HYDROLOGY SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED:
- ____ YES
- X NO
- ____ COPY PROVIDED

DATE SUBMITTED: Jason Woodruff — BY: 10-4-07

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

MASTER DRAINAGE PLAN
FOR THE
OXBOW TOWN CENTER
TRACTS X-1-A-2 & X-2-A

October 2, 2007

PREPARED FOR:

Sunland Development Group, LLC
4407 Lomas Blvd
Albuquerque, NM 87110

PREPARED BY:

GND, LLC
CONSULTING ENGINEERS
5643 Paradise Blvd. NW ◊ Albuquerque, New Mexico 87114
Phone: 505-899-6182 ◊ Fax: 505-899-6184

GND, LLC

CONSULTING ENGINEERS

5643 Paradise Blvd. NW ◊ Albuquerque, New Mexico 87114
Phone: 505-899-6182 ◊ Fax: 505-899-6184

October 4, 2007

Mr. Curtis Cherne
Development and Building Services
City of Albuquerque
600 2nd Street NW, Suite 201
Albuquerque, NM 87102

Re: Oxbow Town Center: Master Drainage Plan Resubmittal

Dear Mr. Cherne:

The purpose of this letter is to advise the City of Revisions to the Oxbow Drainage Master Plan that have resulted from our recent appearance at the EPC (#1005357). The revisions to the plan consist of minor revisions to the basin boundaries caused by revisions to the site plan that are the result of specific EPC comments. The general drainage concept remains unchanged. The over all runoff from the site still meets the allowable discharge rate of 45.1 cfs to the existing outfall passing beneath Coors Blvd. Minor revisions to the onsite ponds have been made which have no effect on the conceptual storm drain plan included in the DMP.

Please feel free to contact me if you have any questions or comments regarding this matter.

Thank you,

Jason Woodruff, PE
GND, LLC
Consulting Engineers

MASTER DRAINAGE PLAN
FOR THE
OXBOW TOWN CENTER
TRACTS X-1-A-2 & X-2-A

October 2, 2007

PREPARED FOR:
Sunland Development Group
4407 Lomas Blvd
Albuquerque, NM 87110

PREPARED BY:
GND, LLC
Consulting Engineers
5643 Paradise Blvd. NW
Albuquerque, NM 87114

I, Jason Woodruff, do hereby certify that this report was prepared by me or under my direction and that I am a duly registered Professional Engineer under the laws of the State of New Mexico.

JASON R. WOODRUFF
NEW MEXICO
17179
LICENSED PROFESSIONAL ENGINEER

Jason Woodruff, P.E.
NMPE No. 17179

10-2-07
Date

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I. INTRODUCTION

Purpose

The purpose of this drainage report is to demonstrate that the proposed system of storm drainage improvements and detention ponds will safely mitigate the peak 100-year storm runoff and convey flows to the prescribed outfall in Coors Blvd per the approved *Altura West Master Drainage Plan* (Oct 1997).

Project Location and Description

The Oxbow Town Center is a 48 acre development located within the City of Albuquerque. The project is bounded on the North by the Rancho Encantado del Sur residential development, on the East by Coors Blvd, on the West by Atrisco Blvd, and on the South by the Villa de Paz residential development (See Figure 1). The proposed development will be comprised of two distinct sectors; North and South. The Northern sector (North of St. Josephs Drive) will primarily be comprised of office buildings with the SE quadrant being reserved for commercial uses. The Southern sector (South of St. Josephs Drive) will be comprised solely of commercial buildings.

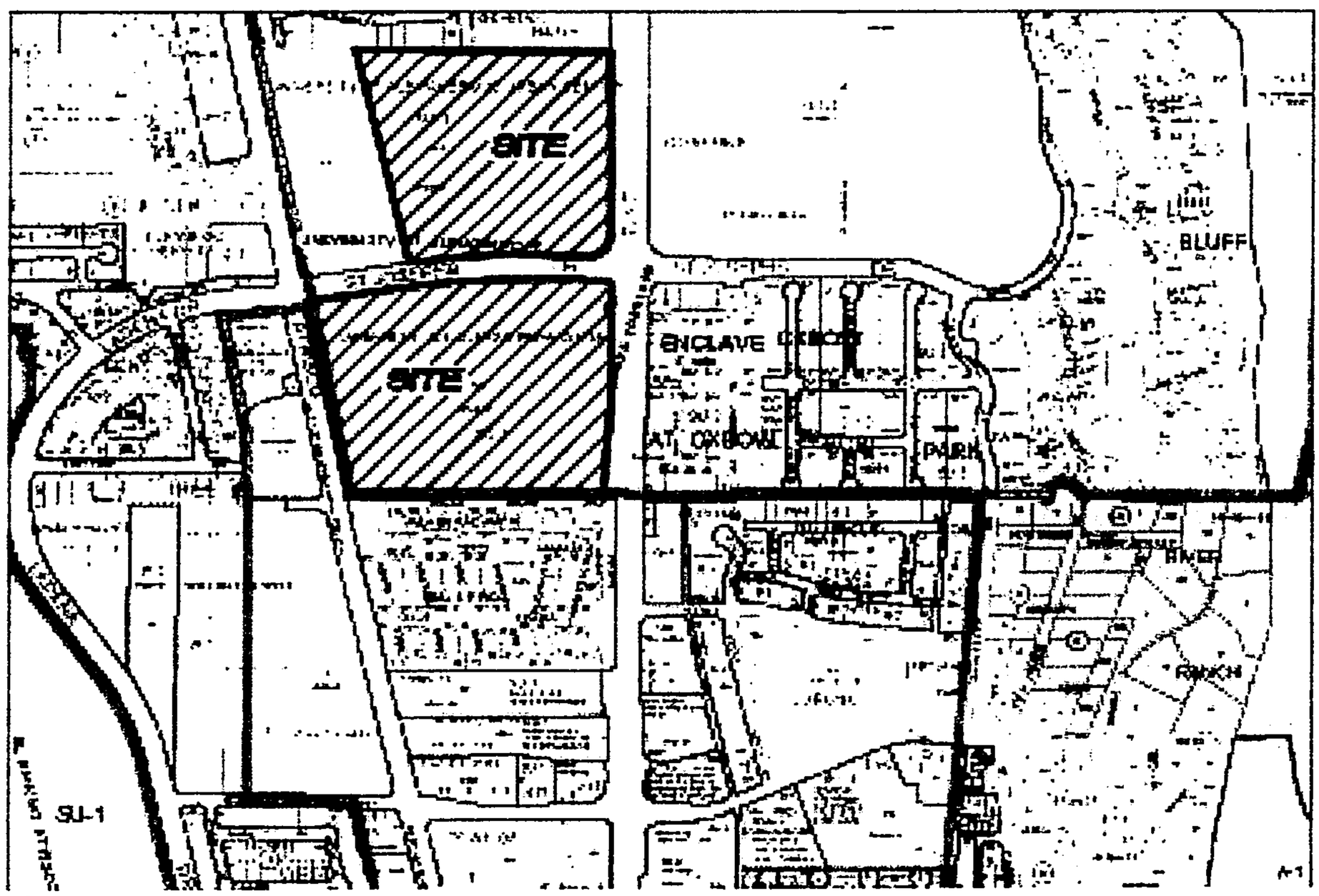

Figure 1

II. DESIGN CRITERIA/ASSUMPTIONS

The following are the design criteria/assumptions used in the design of the proposed development:

- Onsite storm drain systems will be designed using the 100-yr, 6-hr design storm.
- Onsite detention ponds will be designed using the 100-yr, 6-hr design storm.
- Per the approved Altura West Master Drainage Plan, all runoff from the developed site will be mitigated in onsite detention ponds and conveyed to the existing 36" storm drain outfall within Coors Blvd. Allowable discharge from the site will not exceed 45.1 cfs.
- Runoff from Atrisco Blvd, St. Josephs Drive, and Ladera Drive will be conveyed into the existing 60" storm drain within St. Josephs Drive.
- Runoff from the western half of Coors Blvd, north of St. Josephs Drive will be mitigated by onsite ponding and conveyed to the existing outfall within Coors Blvd.

III. HYDROLOGY

Hydrologic analyses to determine peak flow rates for street capacities and storm drain systems conforms to Section 22.2 – Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, New Mexico, January 1993 (COA DPM). Hydrologic Modeling was performed using the Arid Lands Hydrologic Model, Version 1997.02.

Existing Conditions (Plate 1- Appendix D)
Existing conditions on the project site include predominately undisturbed sandy soils with slopes not exceeding 4%. Undisturbed areas are moderately vegetated with various shrubs, weeds, and grasses. A small portion of the Oxbow site, south of St. Josephs Drive, is currently functioning as a "Park and Ride" facility with minor grading and primitive road improvements. As it was stated earlier, the project has two distinct sectors. The following paragraphs describe the existing drainage patterns for each sector of the project.

The *Northern Sector* (Tract X-1-A2) of the project primarily drains to the NW corner of the property and into an existing retention pond located on the adjacent church tract. A smaller percentage of the Northern portion of the project drains to a depression adjacent to Coors Blvd in the NE corner of the site. The 100 year, 6 hour design storm currently generates approximately 29 cfs of runoff in this sector.

The *Southern Sector* (Tract X-2-A) of the project also drains in two separate directions. Approximately 60% of the project drains into Coors Blvd near the SE corner of the project. An existing storm drain west of Coors Blvd currently captures runoff exiting the site at this location. The other 40% of the Southern portion drains in a NW direction to an existing detention pond within the St. Josephs Drive right-of-way. This existing pond

also receives offsite runoff from Atrisco Blvd, St. Josephs Drive, and Ladera Drive. The existing pond then discharges to the existing 60" storm drain within St. Josephs. The 100 year, 6 hour design storm currently generates approximately 38 cfs of runoff in this sector.

The adjacent church tract located on the NE corner of St. Josephs and Atrisco currently drains in a Northerly direction to an existing retention pond. Per the approved master plan, this church tract will be allowed to discharge runoff to the outfall within Coors Blvd. This allowable discharge rate has been determined to be 9.5 cfs.

Offsite street flows within Atrisco Blvd and St. Josephs currently drain to the existing detention pond within the St. Josephs Right-of-Way. This pond then discharges to the existing 60" storm drain within St. Josephs. Basins X4 drains north along Coors Blvd and away from the project site. Per the approved Master Drainage plan, runoff from this basin will be intercepted, ponded on site, and finally discharged to the existing outfall in Coors. Basin X7 currently drains to the roadside swale west of Coors Blvd and is captured by the existing storm drain system paralleling Coors.

Hydrology input and output summary files can be found in *Appendices A and B* of this report.

Proposed Conditions (Plate 2 – Appendix D)
The proposed drainage improvements include the construction of multiple detention ponds located throughout the site as well as the associated storm drain systems. The proposed drainage improvements will capture, mitigate, and convey runoff from both onsite and offsite basins to the proposed outfall within Coors Blvd. Discharge to the existing outfall will not exceed the allowable discharge rate set by the approved master drainage plan.

Per the approved *Altura West Master Drainage Plan*, the allowable discharge rate at the existing storm drain outfall in Coors Blvd is limited 45.1 CFS. This allowable discharge rate is intended to accommodate the following parcels:

- Tract X-1-A-1 (Exist Church) 10.01 acres
- Oxbow Town Center (Tract X-1-A-2) 21.22 acres
- Oxbow Town Center (Tract X-2-A) 26.40 acres
- Portion of Coors draining to outfall 1.99 acres

The parcels located north of St. Josephs that are accommodated by the existing outfall have an allowable discharge rate set at 31.5 cfs (A portion of the overall discharge rate of 45.1 cfs). Total lands north of St. Josephs amounts to 33.22 acres. This equates to an allowable discharge rate of 0.95 cfs/acres. The following are the allowable discharge rates associated with each parcel north of St Josephs:

- Tract X-1-A-1 (Existing Church Site) 9.50 cfs
- Oxbow Town Center (Tracts X-1-A-2 plus street flows) 22.01 cfs

Tract X-2-A, south of St. Josephs, has an allowable discharge rate of 13.6 cfs per the approved master drainage plan. By combining the allowable discharge rates for all of the proposed Oxbow Town Center as well as the adjacent street flows in Coors (35.61 cfs for the approximate 49.61 Acres), an overall allowable discharge rate of 0.718 cfs/acre has been established for future developments within Oxbow. To ensure that this discharge rate is not exceeded, a series of detention ponds and storm drain will be constructed.

The proposed detention ponds will come in two forms; above ground ponding and underground ponding. Due to site constraints, certain detention ponds will be routed through other ponds on their way to the project outfall in Coors Blvd. Storm drain and ponding configurations can be seen on *Plates 4 & 5 of Appendix D.*

Phasing

The drainage improvements for the proposed development will be constructed in phases. The first phase will focus on the Southern Sector (Tract X-2-A) of the Oxbow Town Center. Currently, it is expected that all buildings and supporting infrastructure for those buildings will be constructed as part of phase one with the exception of four pad sites. These remaining pad sites should be graded as necessary and temporary detention/retention ponds provided to mitigate their flows. Refer to *Plate 3 of Appendix D (Conceptual Grading Plan)* for the phasing boundary.

Since the Northern Sector (Tract X-1-A-2) will eventually discharge its runoff through the southern sector, all drainage improvements necessary to allow this will be constructed in conjunction with phase one.

Future phases may include the development of pad sites in both the Northern and Southern Sectors. All future phases will be addressed on a case by case basis, but will generally adhere to the overall grading and drainage concept outlined in this report.

The current conceptual grading and drainage plan for the Northern Sector includes a series of four surface ponds located at the four corners of the tract. The four ponds will discharge runoff into a future storm drain that will convey flows across St. Josephs Drive at two crossing locations to be constructed as part of phase one. Refer to *Plates 4 & 5 of Appendix D for the Conceptual Storm Drain Design and Pond Info.*

IV. HYDRAULICS

Storm Inlets and Storm Sewer (See Appendix C)
Storm inlet interception rates and storm sewer capacities were determined using Hydraflow by Intelisolve. Inlet and storm drain design calculations are included in Appendix C.

Detention Ponds

The detention ponds were designed using the 100-yr 6-hr storm event. Each pond, whether it is above ground or underground, will have its release rate controlled by any orifice plate at its outlet. See Appendix B for all orifice calculations.

V. CONCLUSIONS

The analysis performed for this report demonstrates that the proposed drainage improvements will safely convey and detain the fully developed 100-yr storm runoff from the basins associated with the Oxbow Town Center.

APPENDIX A

AHYMO Existing Input/Output

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*  Project Number 6010 (OXBOW TOWN CENTER) 011207
*  EXISTING Conditions
*  100 YEAR 24 HOUR RAINFALL TABLE
*RAINFALL                TYPE=1  RAIN QUARTER=0
*                        RAIN ONE=1.87 IN  RAIN SIX=2.20 IN
*                        RAIN DAY=2.66 IN  DT=0.03333 HRS
*  10 YEAR RAINFALL TABLE
RAINFALL                TYPE=1  RAIN QUARTER=0.0
                        RAIN ONE=1.25 IN  RAIN SIX=1.47 IN
                        RAIN DAY=1.77 IN  DT=0.03333 HRS
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**********************************************************
**********************************************************
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COMPUTE NM HYD          ID=1  HYDNO=100  AREA=0.01175SQ MI
                        PER A=0 PER B=0 PER C=20 PER D=80
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**********************************************************
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COMPUTE NM HYD          ID=2  HYDNO=200  AREA=0.02419SQ MI
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COMPUTE NM HYD          ID=3  HYDNO=300  AREA=0.00904SQ MI
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**********************************************************
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COMPUTE NM HYD          ID=4  HYDNO=301  AREA=0.00332SQ MI
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**********************************************************
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COMPUTE NM HYD          ID=7  HYDNO=501  AREA=0.00374SQ MI
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COMPUTE NM HYD          ID=8  HYDNO=502  AREA=0.01562SQ MI
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**********************************************************
**********************************************************
```

```
*S ADD X3 AND X4
ADD HYD                 ID=10 HYDNO=600
                        ID=3 ID=4
PRINT HYD               ID=10 CODE=5
*************************************************************
*S ADD X6 AND X7
ADD HYD                 ID=11 HYDNO=700
                        ID=6 ID=7
*PRINT HYD              ID=11 CODE=5
*************************************************************
*************************************************************
*************************************************************
FINISH
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          AHYMO PROGRAM (AHYMO_97) -                          - Version:  1997.02c
               RUN DATE (MON/DAY/YR) = 01/28/2007
               START TIME (HR:MIN:SEC) = 22:03:51     USER NO.=
AHYMO-C-9803c01UNMLIB-AH
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     *  Project Number 6010 (OXBOW TOWN CENTER) 011207

     *  EXISTING Conditions

     *  100 YEAR 24 HOUR RAINFALL TABLE

     *RAINFALL                TYPE=1  RAIN QUARTER=0

     *                        RAIN ONE=1.87 IN  RAIN SIX=2.20 IN

     *                        RAIN DAY=2.66 IN  DT=0.03333 HRS

     *  10 YEAR RAINFALL TABLE

     RAINFALL                TYPE=1  RAIN QUARTER=0.0

                             RAIN ONE=1.25 IN  RAIN SIX=1.47 IN

                             RAIN DAY=1.77 IN  DT=0.03333 HRS

                    COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 -
PEAK AT 1.40 HR.
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                       .0081   .0094   .0106   .0120   .0133   .0147   .0162
                       .0177   .0192   .0208   .0224   .0241   .0258   .0276
                       .0294   .0314   .0334   .0355   .0377   .0400   .0424
                       .0449   .0476   .0504   .0538   .0575   .0615   .0700
                       .0889   .1181   .1600   .2173   .2925   .3884   .5078
                       .6535   .7888   .8453   .8930   .9354   .9740  1.0095
                      1.0425  1.0733  1.1022  1.1294  1.1551  1.1793  1.2022
                      1.2240  1.2446  1.2641  1.2827  1.3003  1.3044  1.3083
                      1.3119  1.3154  1.3187  1.3219  1.3249  1.3279  1.3307
                      1.3335  1.3361  1.3387  1.3411  1.3436  1.3459  1.3482
                      1.3504  1.3526  1.3547  1.3568  1.3588  1.3608  1.3627
                      1.3646  1.3665  1.3683  1.3701  1.3719  1.3736  1.3753
                      1.3769  1.3786  1.3802  1.3818  1.3833  1.3849  1.3864
                      1.3879  1.3893  1.3908  1.3922  1.3936  1.3950  1.3964
                      1.3977  1.3991  1.4004  1.4017  1.4030  1.4042  1.4055
                      1.4067  1.4080  1.4092  1.4104  1.4116  1.4128  1.4139
                      1.4151  1.4162  1.4173  1.4185  1.4196  1.4207  1.4217
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                      1.4301  1.4311  1.4321  1.4330  1.4340  1.4350  1.4359
                      1.4369  1.4378  1.4388  1.4397  1.4406  1.4415  1.4425
                      1.4434  1.4443  1.4451  1.4460  1.4469  1.4478  1.4486
                      1.4495  1.4503  1.4512  1.4520  1.4529  1.4537  1.4545
                      1.4553  1.4562  1.4570  1.4578  1.4586  1.4594  1.4601
                      1.4609  1.4617  1.4625  1.4633  1.4640  1.4648  1.4655
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     ************************************************************************
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EX10

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CONSTANT, N =  7.106420
          UNIT PEAK =   37.103    CFS   UNIT VOLUME =    .9991       B =   526.28
  P60 = 1.2500
          AREA =      .009400 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
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.033330

          K =   .108040HR    TP =   .133330HR    K/TP RATIO =   .810320     SHAPE
CONSTANT, N =  4.414309
          UNIT PEAK =   6.7313    CFS   UNIT VOLUME =    .9984       B =   381.91
  P60 = 1.2500
          AREA =      .002350 SQ MI    IA =    .35000 INCHES    INF =    .83000
INCHES PER HOUR
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.033330

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PARTIAL HYDROGRAPH 100.00

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	.000	.0		1.500	19.7	3.000	.1
4.500	.1	5.999	.1				
	.167	.0		1.667	9.8	3.166	.1
4.666	.1	6.166	.0				
	.333	.0		1.833	6.1	3.333	.1
4.833	.1	6.333	.0				
	.500	.0		2.000	4.4	3.500	.1
4.999	.1	6.499	.0				
	.667	.0		2.166	2.0	3.666	.0
5.166	.1	6.666	.0				
	.833	.0		2.333	.9	3.833	.0
5.333	.1	6.833	.0				
	1.000	.0		2.500	.5	4.000	.0
5.499	.1						
	1.167	.0		2.666	.3	4.166	.0
5.666	.1						
	1.333	4.6		2.833	.2	4.333	.0
5.833	.1						

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          PEAK DISCHARGE RATE =      19.65 CFS  AT   1.500 HOURS   BASIN AREA =
.0118 SQ. MI.
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CONSTANT, N =  2.724954
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  P60 = 1.2500
          AREA =       .024190 SQ MI     IA =     .63500 INCHES     INF =    1.62800
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

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                                                PARTIAL HYDROGRAPH   200.00

          TIME       FLOW            TIME       FLOW            TIME       FLOW
TIME      FLOW            TIME       FLOW
           HRS       CFS              HRS       CFS              HRS       CFS
 HRS       CFS             HRS       CFS
           .000        .0            1.167        .0            2.333        .2
3.500        .0          4.666         .0
           .167        .0            1.333        .0            2.500        .2
3.666        .0          4.833         .0
           .333        .0            1.500       4.2            2.666        .1
3.833        .0          4.999         .0
           .500        .0            1.667       2.6            2.833        .1
4.000        .0          5.166         .0
           .667        .0            1.833       1.0            3.000        .1
4.166        .0
           .833        .0            2.000        .4            3.166        .0
4.333        .0
          1.000        .0            2.166        .3            3.333        .0
4.500        .0

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         PEAK DISCHARGE RATE =        4.42 CFS  AT    1.533 HOURS    BASIN AREA =
.0242 SQ. MI.


**************************************************************

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```

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          UNIT PEAK =   17.532    CFS   UNIT VOLUME =    .9985       B =   258.57
  P60 = 1.2500
          AREA =      .009040 SQ MI    IA =    .63500 INCHES    INF =   1.62800
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

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                                                HYDROGRAPH FROM AREA   300.00

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TIME      FLOW            TIME       FLOW
           HRS       CFS              HRS       CFS              HRS       CFS
 HRS      CFS              HRS       CFS
          .000        .0            1.000        .0            2.000        .2
3.000       .0          4.000         .0
          .167        .0            1.167        .0            2.166        .1
3.166       .0          4.166         .0
          .333        .0            1.333        .0            2.333        .1
3.333       .0          4.333         .0
          .500        .0            1.500       1.6            2.500        .1
3.500       .0          4.500         .0
          .667        .0            1.667       1.0            2.666        .0
3.666       .0
          .833        .0            1.833        .4            2.833        .0
3.833       .0

         RUNOFF VOLUME =      .09489 INCHES     =        .0457 ACRE-FEET
         PEAK DISCHARGE RATE =       1.65 CFS  AT   1.533 HOURS   BASIN AREA =
.0090 SQ. MI.


     ************************************************************

     *S  COMPUTE HYD BASIN X4

     COMPUTE NM HYD         ID=4  HYDNO=301  AREA=0.00332SQ MI

                            PER A=0 PER B=0 PER C=20 PER D=80

                            TP=.13333 HR MASS RAIN=-1


          K =   .072665HR    TP =   .133330HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   10.484    CFS   UNIT VOLUME =    .9982       B =   526.28
  P60 = 1.2500
          AREA =      .002656 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330


          K =   .108040HR    TP =   .133330HR    K/TP RATIO =   .810320     SHAPE
CONSTANT, N =  4.414309
          UNIT PEAK =   1.9020    CFS   UNIT VOLUME =    .9935       B =   381.91
  P60 = 1.2500
          AREA =      .000664 SQ MI    IA =    .35000 INCHES    INF =    .83000
INCHES PER HOUR
```

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=4 CODE=5

HYDROGRAPH FROM AREA 301.00

TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0		1.333	1.3	2.666	.1
4.000	.0		5.333	.0			
	.167	.0		1.500	5.6	2.833	.1
4.166	.0		5.499	.0			
	.333	.0		1.667	2.8	3.000	.0
4.333	.0		5.666	.0			
	.500	.0		1.833	1.7	3.166	.0
4.500	.0		5.833	.0			
	.667	.0		2.000	1.3	3.333	.0
4.666	.0		5.999	.0			
	.833	.0		2.166	.6	3.500	.0
4.833	.0		6.166	.0			
	1.000	.0		2.333	.3	3.666	.0
4.999	.0		6.333	.0			
	1.167	.0		2.500	.1	3.833	.0
5.166	.0		6.499	.0			

RUNOFF VOLUME = 1.07765 INCHES = .1908 ACRE-FEET
PEAK DISCHARGE RATE = 5.56 CFS AT 1.500 HOURS BASIN AREA = .0033 SQ. MI.

****

*S COMPUTE HYD BASIN X5

COMPUTE NM HYD ID=5 HYDNO=400 AREA=0.01581SQ MI

PER A=90 PER B=10 PER C=0 PER D=0

TP=.13333 HR MASS RAIN=-1

K = .175612HR TP = .133330HR K/TP RATIO = 1.317123 SHAPE CONSTANT, N = 2.724954
UNIT PEAK = 30.661 CFS UNIT VOLUME = .9988 B = 258.57 P60 = 1.2500
AREA = .015810 SQ MI IA = .63500 INCHES INF = 1.62800 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=5 CODE=5

HYDROGRAPH FROM AREA 400.00

TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	FLOW CFS

HRS	CFS	HRS	CFS			
	.000	.0	1.000	.0	2.000	.3
3.000	.0	4.000	.0			
	.167	.0	1.167	.0	2.166	.2
3.166	.0	4.166	.0			
	.333	.0	1.333	.0	2.333	.1
3.333	.0	4.333	.0			
	.500	.0	1.500	2.7	2.500	.1
3.500	.0	4.500	.0			
	.667	.0	1.667	1.7	2.666	.1
3.666	.0	4.666	.0			
	.833	.0	1.833	.7	2.833	.1
3.833	.0	4.833	.0			

RUNOFF VOLUME = .09489 INCHES = .0800 ACRE-FEET
PEAK DISCHARGE RATE = 2.89 CFS AT 1.533 HOURS BASIN AREA = .0158 SQ. MI.

****

*S COMPUTE HYD BASIN X6

COMPUTE NM HYD ID=6 HYDNO=500 AREA=0.02559SQ MI

PER A=80 PER B=10 PER C=10 PER D=0

TP=.13333 HR MASS RAIN=-1

K = .168481HR TP = .133330HR K/TP RATIO = 1.263636 SHAPE CONSTANT, N = 2.826119
UNIT PEAK = 51.308 CFS UNIT VOLUME = .9991 B = 267.32 P60 = 1.2500
AREA = .025590 SQ MI IA = .60500 INCHES INF = 1.54400 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=6 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 500.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0	1.167	.0	2.333	.3	
3.500	.0	4.666	.0				
	.167	.0	1.333	.0	2.500	.2	
3.666	.0	4.833	.0				
	.333	.0	1.500	5.8	2.666	.1	
3.833	.0	4.999	.0				
	.500	.0	1.667	3.4	2.833	.1	
4.000	.0						
	.667	.0	1.833	1.3	3.000	.1	
4.166	.0						
	.833	.0	2.000	.6	3.166	.1	
4.333	.0						
	1.000	.0	2.166	.4	3.333	.0	
4.500	.0						

```
        RUNOFF VOLUME =       .12025 INCHES     =        .1641 ACRE-FEET
        PEAK DISCHARGE RATE =       6.08 CFS  AT   1.533 HOURS   BASIN AREA =
.0256 SQ. MI.


    ***********************************************************************

    *S  COMPUTE HYD BASIN X7

    COMPUTE NM HYD          ID=7  HYDNO=501  AREA=0.00374SQ MI

                            PER A=0 PER B=0 PER C=20 PER D=80

                            TP=.13333 HR MASS RAIN=-1

        K =   .072665HR    TP =   .133330HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
        UNIT PEAK =   11.810    CFS   UNIT VOLUME =    .9984       B =   526.28
  P60 = 1.2500
        AREA =      .002992 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330


        K =   .108040HR    TP =   .133330HR    K/TP RATIO =   .810320     SHAPE
CONSTANT, N =  4.414309
        UNIT PEAK =   2.1426    CFS   UNIT VOLUME =    .9942       B =   381.91
  P60 = 1.2500
        AREA =      .000748 SQ MI    IA =    .35000 INCHES    INF =    .83000
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

    PRINT HYD               ID=7   CODE=5


                                     OUTFLOW HYDROGRAPH RESERVOIR   501.00

        TIME      FLOW            TIME      FLOW            TIME      FLOW
TIME    FLOW            TIME      FLOW
         HRS       CFS              HRS       CFS              HRS       CFS
 HRS      CFS              HRS      CFS
            .000          .0            1.333       1.5            2.666       .1
4.000       .0            5.333          .0
            .167          .0            1.500       6.3            2.833       .1
4.166       .0            5.499          .0
            .333          .0            1.667       3.1            3.000       .0
4.333       .0            5.666          .0
            .500          .0            1.833       2.0            3.166       .0
4.500       .0            5.833          .0
            .667          .0            2.000       1.4            3.333       .0
4.666       .0            5.999          .0
            .833          .0            2.166        .6            3.500       .0
4.833       .0            6.166          .0
           1.000          .0            2.333        .3            3.666       .0
4.999       .0            6.333          .0
           1.167          .0            2.500        .2            3.833       .0
5.166       .0            6.499          .0
```

RUNOFF VOLUME = 1.07765 INCHES = .2150 ACRE-FEET
PEAK DISCHARGE RATE = 6.26 CFS AT 1.500 HOURS BASIN AREA = .0037 SQ. MI.

****

*S COMPUTE HYD BASIN X8

COMPUTE NM HYD ID=8 HYDNO=502 AREA=0.01562SQ MI

PER A=0 PER B=10 PER C=20 PER D=70

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 43.158 CFS UNIT VOLUME = .9991 B = 526.28 P60 = 1.2500
AREA = .010934 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .119338HR TP = .133330HR K/TP RATIO = .895055 SHAPE CONSTANT, N = 3.961006
UNIT PEAK = 12.391 CFS UNIT VOLUME = .9994 B = 352.56 P60 = 1.2500
AREA = .004686 SQ MI IA = .40000 INCHES INF = .97000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=8 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 502.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000		.0		.1		.2
4.500	.1	5.999	.0	1.500	23.9	3.000	.1
	.167		.0		.1		.1
4.666	.1	6.166	.0	1.667	12.0	3.166	.1
	.333		.0		.1		.1
4.833	.1	6.333	.0	1.833	7.3	3.333	.1
	.500		.0		.0		.1
4.999	.1	6.499	.0	2.000	5.2	3.500	.1
	.667		.0		.0		.1
5.166	.1	6.666	.0	2.166	2.4	3.666	.1
	.833		.0		.0		.1
5.333	.1	6.833	.0	2.333	1.1	3.833	.1
	1.000		.0		.0		.1
5.499	.1		.0	2.500	.6	4.000	.1
	1.167						
5.666	.1		5.4	2.666	.4	4.166	.1
	1.333						
5.833	.1			2.833	.2	4.333	.1

```
        RUNOFF VOLUME =       .97290 INCHES      =         .8105 ACRE-FEET
        PEAK DISCHARGE RATE =       23.89 CFS  AT    1.500 HOURS   BASIN AREA =
.0156 SQ. MI.


     ***********************************************************************

     ***********************************************************************

     ***********************************************************************

     *S ADD X3 AND X4

     ADD HYD                    ID=10 HYDNO=600

                                ID=3 ID=4

       PRINT HYD                ID=10 CODE=5

                                                    HYDROGRAPH FROM AREA   600.00

                TIME      FLOW              TIME      FLOW              TIME      FLOW
TIME            FLOW           TIME         FLOW
                 HRS       CFS                HRS       CFS                HRS       CFS
 HRS            CFS                HRS       CFS
                .000        .0              1.333       1.3              2.666        .1
4.000             .0          5.333            .0
                .167        .0              1.500       7.1              2.833        .1
4.166             .0          5.499            .0
                .333        .0              1.667       3.8              3.000        .1
4.333             .0          5.666            .0
                .500        .0              1.833       2.1              3.166        .0
4.500             .0          5.833            .0
                .667        .0              2.000       1.4              3.333        .0
4.666             .0          5.999            .0
                .833        .0              2.166        .7              3.500        .0
4.833             .0          6.166            .0
               1.000        .0              2.333        .3              3.666        .0
4.999             .0          6.333            .0
               1.167        .0              2.500        .2              3.833        .0
5.166             .0          6.499            .0

        RUNOFF VOLUME =       .35883 INCHES      =         .2365 ACRE-FEET
        PEAK DISCHARGE RATE =        7.13 CFS  AT    1.500 HOURS   BASIN AREA =
.0124 SQ. MI.


     ***********************************************************************

     *S ADD X6 AND X7

     ADD HYD                    ID=11 HYDNO=700

                                ID=6 ID=7

     *PRINT HYD                 ID=11 CODE=5

     ***********************************************************************
```

EX10

****

****

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 22:03:51

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02c RUN DATE (MON/DAY/YR) =01/28/2007
INPUT FILE = EX10.HMI USER NO.=
AHYMO-C-9803c01UNMLIB-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)
RAINFALL TYPE= 1								
RAIN6= 1.470								
*S COMPUTE HYD BASIN X1								
COMPUTE NM HYD	100.00	-	1	.01175	19.65	.675	1.07765	1.500
*S COMPUTE HYD BASIN X2								
COMPUTE NM HYD	200.00	-	2	.02419	4.42	.122	.09489	1.533
*S COMPUTE HYD BASIN X3								
COMPUTE NM HYD	300.00	-	3	.00904	1.65	.046	.09489	1.533
*S COMPUTE HYD BASIN X4								
COMPUTE NM HYD	301.00	-	4	.00332	5.56	.191	1.07765	1.500
*S COMPUTE HYD BASIN X5								
COMPUTE NM HYD	400.00	-	5	.01581	2.89	.080	.09489	1.533
*S COMPUTE HYD BASIN X6								
COMPUTE NM HYD	500.00	-	6	.02559	6.08	.164	.12025	1.533
*S COMPUTE HYD BASIN X7								
COMPUTE NM HYD	501.00	-	7	.00374	6.26	.215	1.07765	1.500
*S COMPUTE HYD BASIN X8								
COMPUTE NM HYD	502.00	-	8	.01562	23.89	.810	.97290	1.500
*S ADD X3 AND X4								
ADD HYD	600.00	3& 4	10	.01236	7.13	.237	.35883	1.500
*S ADD X6 AND X7								
ADD HYD	700.00	6& 7	11	.02933	12.07	.379	.24232	1.500
FINISH								

CFS PAGE = 1
PER IMP= 80.00
PER IMP= .00
PER IMP= .00
PER IMP= 80.00
PER IMP= .00
PER IMP= .00
PER IMP= 80.00
PER IMP= 70.00
.901
.643
ACRE NOTATION

```
*  Project Number 6010 (OXBOW TOWN CENTER) 011207
*  EXISTING Conditions
*  100 YEAR 24 HOUR RAINFALL TABLE
RAINFALL                TYPE=1  RAIN QUARTER=0
                        RAIN ONE=1.87 IN  RAIN SIX=2.20 IN
                        RAIN DAY=2.66 IN  DT=0.03333 HRS
*  10 YEAR RAINFALL TABLE
*RAINFALL               TYPE=1  RAIN QUARTER=0.0
*                       RAIN ONE=1.25 IN  RAIN SIX=1.47 IN
*                       RAIN DAY=1.77 IN  DT=0.03333 HRS
**********************************************************
**********************************************************
**********************************************************
*S  COMPUTE HYD BASIN X1
COMPUTE NM HYD          ID=1  HYDNO=100  AREA=0.01175SQ MI
                        PER A=0 PER B=0 PER C=20 PER D=80
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=1   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN X2
COMPUTE NM HYD          ID=2  HYDNO=200  AREA=0.02419SQ MI
                        PER A=90 PER B=10 PER C=0 PER D=0
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=2   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN X3
COMPUTE NM HYD          ID=3  HYDNO=300  AREA=0.00904SQ MI
                        PER A=90 PER B=10 PER C=0 PER D=0
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=3   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN X4
COMPUTE NM HYD          ID=4  HYDNO=301  AREA=0.00332SQ MI
                        PER A=0 PER B=0 PER C=20 PER D=80
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=4   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN X5
COMPUTE NM HYD          ID=5  HYDNO=400  AREA=0.01581SQ MI
                        PER A=90 PER B=10 PER C=0 PER D=0
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=5   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN X6
COMPUTE NM HYD          ID=6  HYDNO=500  AREA=0.02559SQ MI
                        PER A=80 PER B=10 PER C=10 PER D=0
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=6   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN X7
COMPUTE NM HYD          ID=7  HYDNO=501  AREA=0.00374SQ MI
                        PER A=0 PER B=0 PER C=20 PER D=80
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=7   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN X8
COMPUTE NM HYD          ID=8  HYDNO=502  AREA=0.01562SQ MI
                        PER A=0 PER B=10 PER C=20 PER D=70
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=8   CODE=5
**********************************************************
**********************************************************
**********************************************************
```

```
*S ADD X3 AND X4
ADD HYD                 ID=10 HYDNO=600
                        ID=3 ID=4
PRINT HYD               ID=10 CODE=5
*************************************************************
*S ADD X6 AND X7
ADD HYD                 ID=11 HYDNO=700
                        ID=6 ID=7
*PRINT HYD              ID=11 CODE=5
*************************************************************
*************************************************************
*************************************************************
FINISH
```

```
AHYMO PROGRAM (AHYMO_97) -                                  - Version:  1997.02c
     RUN DATE (MON/DAY/YR) = 01/28/2007
     START TIME (HR:MIN:SEC) = 20:35:44     USER NO.=
AHYMO-C-9803c01UNMLIB-AH
     INPUT FILE = EX100.HMI

*  Project Number 6010 (OXBOW TOWN CENTER) 011207

*  EXISTING Conditions

*  100 YEAR 24 HOUR RAINFALL TABLE

RAINFALL                TYPE=1  RAIN QUARTER=0

                        RAIN ONE=1.87 IN  RAIN SIX=2.20 IN

                        RAIN DAY=2.66 IN  DT=0.03333 HRS

                  COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 -
PEAK AT 1.40 HR.
                  DT =     .033330 HOURS       END TIME =     5.999400 HOURS
                     .0000   .0016   .0033   .0050   .0067   .0085   .0103
                     .0122   .0141   .0160   .0180   .0201   .0222   .0243
                     .0266   .0289   .0312   .0337   .0362   .0388   .0415
                     .0443   .0472   .0502   .0534   .0567   .0601   .0637
                     .0675   .0715   .0758   .0809   .0865   .0924   .1050
                     .1334   .1771   .2398   .3254   .4379   .5814   .7600
                     .9780  1.1804  1.2649  1.3363  1.3997  1.4575  1.5106
                    1.5600  1.6061  1.6493  1.6900  1.7284  1.7646  1.7989
                    1.8314  1.8623  1.8915  1.9193  1.9456  1.9518  1.9576
                    1.9630  1.9682  1.9732  1.9780  1.9825  1.9869  1.9912
                    1.9953  1.9993  2.0031  2.0068  2.0104  2.0140  2.0174
                    2.0207  2.0240  2.0272  2.0303  2.0333  2.0363  2.0392
                    2.0420  2.0448  2.0475  2.0502  2.0528  2.0554  2.0580
                    2.0605  2.0629  2.0653  2.0677  2.0700  2.0723  2.0746
                    2.0768  2.0790  2.0812  2.0833  2.0855  2.0875  2.0896
                    2.0916  2.0936  2.0956  2.0976  2.0995  2.1014  2.1033
                    2.1051  2.1070  2.1088  2.1106  2.1124  2.1141  2.1159
                    2.1176  2.1193  2.1210  2.1227  2.1244  2.1260  2.1276
                    2.1292  2.1308  2.1324  2.1340  2.1355  2.1371  2.1386
                    2.1401  2.1416  2.1431  2.1446  2.1460  2.1475  2.1489
                    2.1504  2.1518  2.1532  2.1546  2.1560  2.1573  2.1587
                    2.1600  2.1614  2.1627  2.1640  2.1654  2.1667  2.1680
                    2.1692  2.1705  2.1718  2.1731  2.1743  2.1756  2.1768
                    2.1780  2.1792  2.1804  2.1817  2.1829  2.1840  2.1852
                    2.1864  2.1876  2.1887  2.1899  2.1910  2.1922  2.1933
                    2.1944  2.1956  2.1967  2.1978  2.1989  2.2000

*  10 YEAR RAINFALL TABLE

*RAINFALL               TYPE=1  RAIN QUARTER=0.0

*                       RAIN ONE=1.25 IN  RAIN SIX=1.47 IN

*                       RAIN DAY=1.77 IN  DT=0.03333 HRS

**********************************************************************

**********************************************************************
```

EX100

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**********************************************************************

*S  COMPUTE HYD BASIN X1

COMPUTE NM HYD          ID=1  HYDNO=100  AREA=0.01175SQ MI

                        PER A=0 PER B=0 PER C=20 PER D=80

                        TP=.13333 HR MASS RAIN=-1


          K =   .072665HR    TP =   .133330HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   37.103    CFS   UNIT VOLUME =    .9991       B =   526.28
  P60 = 1.8700
          AREA =      .009400 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330


          K =   .105891HR    TP =   .133330HR    K/TP RATIO =   .794199     SHAPE
CONSTANT, N =  4.514851
          UNIT PEAK =   6.8412    CFS   UNIT VOLUME =    .9986       B =   388.14
  P60 = 1.8700
          AREA =      .002350 SQ MI    IA =    .35000 INCHES    INF =    .83000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

     PRINT HYD              ID=1   CODE=5
```

PARTIAL HYDROGRAPH 100.00

TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0		1.500	30.6	3.000	.3
4.500	.1		5.999	.2			
	.167	.0		1.667	15.5	3.166	.2
4.666	.1		6.166	.1			
	.333	.0		1.833	9.9	3.333	.2
4.833	.2		6.333	.0			
	.500	.0		2.000	7.1	3.500	.2
4.999	.2		6.499	.0			
	.667	.0		2.166	3.2	3.666	.2
5.166	.2		6.666	.0			
	.833	.0		2.333	1.5	3.833	.2
5.333	.2		6.833	.0			
	1.000	.0		2.500	.9	4.000	.2
5.499	.2						
	1.167	.1		2.666	.6	4.166	.2
5.666	.2						
	1.333	8.4		2.833	.4	4.333	.1
5.833	.2						

```
          RUNOFF VOLUME =     1.77127 INCHES     =       1.1100 ACRE-FEET
          PEAK DISCHARGE RATE =      30.62 CFS  AT   1.500 HOURS   BASIN AREA =
.0118 SQ. MI.
```

```
*************************************************************
*S  COMPUTE HYD BASIN X2
COMPUTE NM HYD          ID=2  HYDNO=200  AREA=0.02419SQ MI
                        PER A=90 PER B=10 PER C=0 PER D=0
                        TP=.13333 HR MASS RAIN=-1

          K =   .160451HR    TP =   .133330HR    K/TP RATIO =  1.203411     SHAPE
CONSTANT, N =  2.953513
          UNIT PEAK =   50.439    CFS   UNIT VOLUME =    .9995       B =   278.01
  P60 = 1.8700
          AREA =      .024190 SQ MI    IA =    .63500 INCHES    INF =   1.62800
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

     PRINT HYD              ID=2   CODE=5
```

PARTIAL HYDROGRAPH 200.00

TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0		1.000	.0	2.000	2.0
3.000	.2		4.000	.0			
	.167	.0		1.167	.0	2.166	1.4
3.166	.2		4.166	.0			
	.333	.0		1.333	.0	2.333	1.0
3.333	.1		4.333	.0			
	.500	.0		1.500	20.7	2.500	.7
3.500	.1		4.500	.0			
	.667	.0		1.667	12.0	2.666	.5
3.666	.1		4.666	.0			
	.833	.0		1.833	4.3	2.833	.3
3.833	.0		4.833	.0			

```
          RUNOFF VOLUME =      .45896 INCHES     =        .5921 ACRE-FEET
          PEAK DISCHARGE RATE =      21.11 CFS  AT   1.533 HOURS   BASIN AREA =
.0242 SQ. MI.

*************************************************************
*S  COMPUTE HYD BASIN X3
COMPUTE NM HYD          ID=3  HYDNO=300  AREA=0.00904SQ MI
                        PER A=90 PER B=10 PER C=0 PER D=0
                        TP=.13333 HR MASS RAIN=-1

          K =   .160451HR    TP =   .133330HR    K/TP RATIO =  1.203411     SHAPE
CONSTANT, N =  2.953513
          UNIT PEAK =   18.850    CFS   UNIT VOLUME =    .9990       B =   278.01
```

P60 = 1.8700
AREA = .009040 SQ MI IA = .63500 INCHES INF = 1.62800
INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

PRINT HYD ID=3 CODE=5

HYDROGRAPH FROM AREA 300.00

TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0		1.000	.0	2.000	.7
3.000	.1		4.000	.0			
	.167	.0		1.167	.0	2.166	.5
3.166	.1		4.166	.0			
	.333	.0		1.333	.0	2.333	.4
3.333	.0		4.333	.0			
	.500	.0		1.500	7.7	2.500	.3
3.500	.0						
	.667	.0		1.667	4.5	2.666	.2
3.666	.0						
	.833	.0		1.833	1.6	2.833	.1
3.833	.0						

RUNOFF VOLUME = .45896 INCHES = .2213 ACRE-FEET
PEAK DISCHARGE RATE = 7.89 CFS AT 1.533 HOURS BASIN AREA =
.0090 SQ. MI.

****

*S COMPUTE HYD BASIN X4

COMPUTE NM HYD ID=4 HYDNO=301 AREA=0.00332SQ MI

PER A=0 PER B=0 PER C=20 PER D=80

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000 SHAPE
CONSTANT, N = 7.106420
UNIT PEAK = 10.484 CFS UNIT VOLUME = .9982 B = 526.28
P60 = 1.8700
AREA = .002656 SQ MI IA = .10000 INCHES INF = .04000
INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

K = .105891HR TP = .133330HR K/TP RATIO = .794199 SHAPE
CONSTANT, N = 4.514851
UNIT PEAK = 1.9330 CFS UNIT VOLUME = .9941 B = 388.14
P60 = 1.8700
AREA = .000664 SQ MI IA = .35000 INCHES INF = .83000
INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

PRINT HYD ID=4 CODE=5

HYDROGRAPH FROM AREA 301.00

TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0		1.500	8.7	3.000	.1
4.500	.0		5.999	.1			
	.167	.0		1.667	4.4	3.166	.1
4.666	.0		6.166	.0			
	.333	.0		1.833	2.8	3.333	.1
4.833	.0		6.333	.0			
	.500	.0		2.000	2.0	3.500	.1
4.999	.0		6.499	.0			
	.667	.0		2.166	.9	3.666	.0
5.166	.0		6.666	.0			
	.833	.0		2.333	.4	3.833	.0
5.333	.0						
	1.000	.0		2.500	.3	4.000	.0
5.499	.0						
	1.167	.0		2.666	.2	4.166	.0
5.666	.1						
	1.333	2.4		2.833	.1	4.333	.0
5.833	.1						

RUNOFF VOLUME = 1.77127 INCHES = .3136 ACRE-FEET
PEAK DISCHARGE RATE = 8.66 CFS AT 1.500 HOURS BASIN AREA =
.0033 SQ. MI.

****

*S COMPUTE HYD BASIN X5

COMPUTE NM HYD ID=5 HYDNO=400 AREA=0.01581SQ MI

PER A=90 PER B=10 PER C=0 PER D=0

TP=.13333 HR MASS RAIN=-1

K = .160451HR TP = .133330HR K/TP RATIO = 1.203411 SHAPE
CONSTANT, N = 2.953513
UNIT PEAK = 32.966 CFS UNIT VOLUME = .9993 B = 278.01
P60 = 1.8700
AREA = .015810 SQ MI IA = .63500 INCHES INF = 1.62800
INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

PRINT HYD ID=5 CODE=5

HYDROGRAPH FROM AREA 400.00

TIME	TIME FLOW HRS	FLOW CFS	TIME	TIME FLOW HRS	FLOW CFS	TIME HRS	FLOW CFS

EX100

HRS	CFS	HRS	CFS			
	.000	.0	1.000	.0	2.000	1.3
3.000	.2	4.000	.0			
	.167	.0	1.167	.0	2.166	.9
3.166	.1	4.166	.0			
	.333	.0	1.333	.0	2.333	.6
3.333	.1	4.333	.0			
	.500	.0	1.500	13.5	2.500	.4
3.500	.1	4.500	.0			
	.667	.0	1.667	7.8	2.666	.3
3.666	.0	4.666	.0			
	.833	.0	1.833	2.8	2.833	.2
3.833	.0					

RUNOFF VOLUME = .45896 INCHES = .3870 ACRE-FEET
PEAK DISCHARGE RATE = 13.80 CFS AT 1.533 HOURS BASIN AREA =
.0158 SQ. MI.

****

*S COMPUTE HYD BASIN X6

COMPUTE NM HYD ID=6 HYDNO=500 AREA=0.02559SQ MI

PER A=80 PER B=10 PER C=10 PER D=0

TP=.13333 HR MASS RAIN=-1

K = .154668HR TP = .133330HR K/TP RATIO = 1.160037 SHAPE
CONSTANT, N = 3.055544
UNIT PEAK = 54.953 CFS UNIT VOLUME = .9995 B = 286.32
P60 = 1.8700
AREA = .025590 SQ MI IA = .60500 INCHES INF = 1.54400
INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.033330

PRINT HYD ID=6 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 500.00

TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0		1.000	.0	2.000	2.3
3.000	.3		4.000	.0			
	.167	.0		1.167	.0	2.166	1.6
3.166	.2		4.166	.0			
	.333	.0		1.333	.0	2.333	1.1
3.333	.1		4.333	.0			
	.500	.0		1.500	24.1	2.500	.8
3.500	.1		4.500	.0			
	.667	.0		1.667	13.9	2.666	.5
3.666	.1		4.666	.0			
	.833	.0		1.833	4.8	2.833	.4
3.833	.0		4.833	.0			

RUNOFF VOLUME = .50071 INCHES = .6834 ACRE-FEET

PEAK DISCHARGE RATE = 24.55 CFS AT 1.533 HOURS BASIN AREA = .0256 SQ. MI.

****

*S COMPUTE HYD BASIN X7

COMPUTE NM HYD ID=7 HYDNO=501 AREA=0.00374SQ MI

PER A=0 PER B=0 PER C=20 PER D=80

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 11.810 CFS UNIT VOLUME = .9984 B = 526.28 P60 = 1.8700
AREA = .002992 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .105891HR TP = .133330HR K/TP RATIO = .794199 SHAPE CONSTANT, N = 4.514851
UNIT PEAK = 2.1775 CFS UNIT VOLUME = .9947 B = 388.14 P60 = 1.8700
AREA = .000748 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=7 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 501.00

TIME HRS	FLOW HRS CFS	TIME HRS	FLOW HRS CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0		1.500	9.8	3.000	.1
4.500	.0		5.999	.1			
	.167	.0		1.667	5.0	3.166	.1
4.666	.0		6.166	.0			
	.333	.0		1.833	3.2	3.333	.1
4.833	.0		6.333	.0			
	.500	.0		2.000	2.3	3.500	.1
4.999	.0		6.499	.0			
	.667	.0		2.166	1.0	3.666	.1
5.166	.1		6.666	.0			
	.833	.0		2.333	.5	3.833	.1
5.333	.1						
	1.000	.0		2.500	.3	4.000	.0
5.499	.1						
	1.167	.0		2.666	.2	4.166	.0
5.666	.1						
	1.333	2.7		2.833	.1	4.333	.0
5.833	.1						

RUNOFF VOLUME = 1.77127 INCHES = .3533 ACRE-FEET
PEAK DISCHARGE RATE = 9.76 CFS AT 1.500 HOURS BASIN AREA = .0037 SQ. MI.

****

*S COMPUTE HYD BASIN X8

COMPUTE NM HYD ID=8 HYDNO=502 AREA=0.01562SQ MI

PER A=0 PER B=10 PER C=20 PER D=70

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 43.158 CFS UNIT VOLUME = .9991 B = 526.28 P60 = 1.8700
AREA = .010934 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .114268HR TP = .133330HR K/TP RATIO = .857028 SHAPE CONSTANT, N = 4.150447
UNIT PEAK = 12.831 CFS UNIT VOLUME = .9993 B = 365.08 P60 = 1.8700
AREA = .004686 SQ MI IA = .40000 INCHES INF = .97000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=8 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 502.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0		1.500	38.3	3.000	.4
4.500	.2	5.999	.2				
	.167	.0		1.667	19.6	3.166	.3
4.666	.2	6.166	.1				
	.333	.0		1.833	12.0	3.333	.3
4.833	.2	6.333	.0				
	.500	.0		2.000	8.4	3.500	.2
4.999	.2	6.499	.0				
	.667	.0		2.166	3.9	3.666	.2
5.166	.2	6.666	.0				
	.833	.0		2.333	1.8	3.833	.2
5.333	.2	6.833	.0				
	1.000	.0		2.500	1.1	4.000	.2
5.499	.2	6.999	.0				
	1.167	.1		2.666	.8	4.166	.2
5.666	.2						
	1.333	9.8		2.833	.5	4.333	.2
5.833	.2						

RUNOFF VOLUME = 1.63711 INCHES = 1.3638 ACRE-FEET
PEAK DISCHARGE RATE = 38.31 CFS AT 1.500 HOURS BASIN AREA =
.0156 SQ. MI.

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****

****

*S ADD X3 AND X4

ADD HYD ID=10 HYDNO=600

ID=3 ID=4

PRINT HYD ID=10 CODE=5

HYDROGRAPH FROM AREA 600.00

TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	TIME FLOW HRS CFS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0		1.500	16.4	3.000	.2
4.500	.0		5.999	.1			
	.167	.0		1.667	8.9	3.166	.1
4.666	.0		6.166	.0			
	.333	.0		1.833	4.4	3.333	.1
4.833	.0		6.333	.0			
	.500	.0		2.000	2.7	3.500	.1
4.999	.0		6.499	.0			
	.667	.0		2.166	1.4	3.666	.1
5.166	.0		6.666	.0			
	.833	.0		2.333	.8	3.833	.1
5.333	.0						
	1.000	.0		2.500	.5	4.000	.1
5.499	.0						
	1.167	.0		2.666	.4	4.166	.1
5.666	.1						
	1.333	2.4		2.833	.2	4.333	.0
5.833	.1						

RUNOFF VOLUME = .81143 INCHES = .5349 ACRE-FEET
PEAK DISCHARGE RATE = 16.39 CFS AT 1.500 HOURS BASIN AREA =
.0124 SQ. MI.

****

*S ADD X6 AND X7

ADD HYD ID=11 HYDNO=700

ID=6 ID=7

*PRINT HYD ID=11 CODE=5

EX100

****

****

****

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 20:35:45

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02c RUN DATE (MON/DAY/YR) =01/28/2007
INPUT FILE = EX100.HMI USER NO.= AHYMO-C-9803c01UNMLIB-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
RAINFALL TYPE= 1										
RAIN6= 2.200										
*S COMPUTE HYD BASIN X1										
COMPUTE NM HYD	100.00	-	1	.01175	30.62	1.110	1.77127	1.500	4.072	PER IMP= 80.00
*S COMPUTE HYD BASIN X2										
COMPUTE NM HYD	200.00	-	2	.02419	21.11	.592	.45896	1.533	1.364	PER IMP= .00
*S COMPUTE HYD BASIN X3										
COMPUTE NM HYD	300.00	-	3	.00904	7.89	.221	.45896	1.533	1.364	PER IMP= .00
*S COMPUTE HYD BASIN X4										
COMPUTE NM HYD	301.00	-	4	.00332	8.66	.314	1.77127	1.500	4.078	PER IMP= 80.00
*S COMPUTE HYD BASIN X5										
COMPUTE NM HYD	400.00	-	5	.01581	13.80	.387	.45896	1.533	1.364	PER IMP= .00
*S COMPUTE HYD BASIN X6										
COMPUTE NM HYD	500.00	-	6	.02559	24.55	.683	.50071	1.533	1.499	PER IMP= .00
*S COMPUTE HYD BASIN X7										
COMPUTE NM HYD	501.00	-	7	.00374	9.76	.353	1.77127	1.500	4.077	PER IMP= 80.00
*S COMPUTE HYD BASIN X8										
COMPUTE NM HYD	502.00	-	8	.01562	38.31	1.364	1.63711	1.500	3.833	PER IMP= 70.00
*S ADD X3 AND X4										
ADD HYD	600.00	3& 4	10	.01236	16.39	.535	.81143	1.500	2.072	
*S ADD X6 AND X7										
ADD HYD	700.00	6& 7	11	.02933	33.87	1.037	.66271	1.533	1.804	
FINISH										

APPENDIX B
AHYMO Developed Input/Output

```
                                        DEV10
*  Project Number 6010 (OXBOW TOWN CENTER) 100207
*  PROPOSED Conditions
*  100 YEAR 24 HOUR RAINFALL TABLE
*RAINFALL                TYPE=1  RAIN QUARTER=0
*                        RAIN ONE=1.87 IN  RAIN SIX=2.20 IN
*                        RAIN DAY=2.66 IN  DT=0.03333 HRS
*  10 YEAR RAINFALL TABLE
RAINFALL                TYPE=1  RAIN QUARTER=0.0
                        RAIN ONE=1.25 IN  RAIN SIX=1.47 IN
                        RAIN DAY=1.77 IN  DT=0.03333 HRS
*************************************************************
*************************************************************
*************************************************************
*S  COMPUTE HYD BASIN A1
COMPUTE NM HYD          ID=1  HYDNO=101  AREA=0.00780SQ MI
                        PER A=0 PER B=10 PER C=0 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=1   CODE=5
*************************************************************
*S  COMPUTE HYD BASIN A2
COMPUTE NM HYD          ID=2  HYDNO=102  AREA=0.00623SQ MI
                        PER A=0 PER B=15 PER C=0 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=2   CODE=5
*************************************************************
*S  COMPUTE HYD BASIN A3
COMPUTE NM HYD          ID=3  HYDNO=103  AREA=0.00833SQ MI
                        PER A=0 PER B=12 PER C=0 PER D=88
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=3   CODE=5
*************************************************************
*S  COMPUTE HYD BASIN A4
COMPUTE NM HYD          ID=4  HYDNO=104  AREA=0.0104SQ MI
                        PER A=0 PER B=15 PER C=0 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=4   CODE=5
*************************************************************
*S  COMPUTE HYD BASIN B1
COMPUTE NM HYD          ID=11  HYDNO=201  AREA=0.00161SQ MI
                        PER A=0 PER B=10 PER C=0 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=11   CODE=5
*************************************************************
*S  COMPUTE HYD BASIN B2
COMPUTE NM HYD          ID=12  HYDNO=202  AREA=0.00097SQ MI
                        PER A=0 PER B=0 PER C=10 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=12   CODE=5
*************************************************************
*S  COMPUTE HYD BASIN B3
COMPUTE NM HYD          ID=13  HYDNO=203  AREA=0.00190SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=13   CODE=5
*************************************************************
*S  COMPUTE HYD BASIN B4
COMPUTE NM HYD          ID=14  HYDNO=204  AREA=0.00459SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=14   CODE=5
*************************************************************
*S  COMPUTE HYD BASIN B5
COMPUTE NM HYD          ID=15  HYDNO=205  AREA=0.00657SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=15   CODE=5
```

```
**********************************************************
*S  COMPUTE HYD BASIN B6
COMPUTE NM HYD          ID=16  HYDNO=206  AREA=0.00575SQ MI
                        PER A=0 PER B=0 PER C=10 PER D=90
                        TP=.16667 HR MASS RAIN=-1
PRINT HYD               ID=16   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B7
COMPUTE NM HYD          ID=17  HYDNO=207  AREA=0.00176SQ MI
                        PER A=0 PER B=0 PER C=10 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=17   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B8
COMPUTE NM HYD          ID=18  HYDNO=208  AREA=0.00249SQ MI
                        PER A=0 PER B=0 PER C=10 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=18   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B9
COMPUTE NM HYD          ID=19  HYDNO=209  AREA=0.00725SQ MI
                        PER A=0 PER B=5 PER C=5 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=19   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B10
COMPUTE NM HYD          ID=20  HYDNO=210  AREA=0.00748SQ MI
                        PER A=0 PER B=10 PER C=0 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=20   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN O1
COMPUTE NM HYD          ID=21  HYDNO=211  AREA=0.00796SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.1667 HR MASS RAIN=-1
PRINT HYD               ID=21   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN O2
COMPUTE NM HYD          ID=22  HYDNO=212  AREA=0.00767SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.1667 HR MASS RAIN=-1
PRINT HYD               ID=22   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN OS1
COMPUTE NM HYD          ID=23  HYDNO=213  AREA=0.01104SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=23   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN OS2
COMPUTE NM HYD          ID=24  HYDNO=214  AREA=0.0008SQ MI
                        PER A=0 PER B=5 PER C=5 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=24   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN OS3
COMPUTE NM HYD          ID=25  HYDNO=215  AREA=0.00311SQ MI
                        PER A=0 PER B=5 PER C=5 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=25   CODE=5
**********************************************************
**********************************************************
**********************************************************
*S ADD O1 AND O2
ADD HYD                 ID=28 HYDNO=300
                        ID=21 ID=22
```

```
PRINT HYD                ID=28 CODE=5
*****************************************************************
*OFFSITE POND ON CHURCH TRACT
*****************************************************************
ROUTE RESERVOIR          ID=29 HYD=301 INFLOW ID=28 CODE=5
                         OUTFLOW            STORAGE        ELEV
                          (CFS)             (AC-FT)        (FT)
                           0.01             0.0            5108
                           5.43             0.40           5110
                           7.05             0.65           5111
                           8.37             0.95           5112
                           9.50             1.25           5113
PRINT HYD                ID=29 CODE=5
*****************************************************************
*POND 1
*****************************************************************
ROUTE RESERVOIR          ID=30 HYD=302 INFLOW ID=1 CODE=5
                         OUTFLOW            STORAGE        ELEV
                          (CFS)             (AC-FT)        (FT)
                           0.01             0.0            5110
                           2.82             0.21           5111
                           3.31             0.47           5112
                           3.73             0.77           5113
                           4.11             1.12           5114
PRINT HYD                ID=30 CODE=5
*****************************************************************
*S ADD OFFSITE POND AND POND 1
ADD HYD                  ID=31 HYDNO=303
                         ID=29 ID=30
PRINT HYD                ID=31 CODE=5
*****************************************************************
*POND 3
*****************************************************************
ROUTE RESERVOIR          ID=32 HYD=304 INFLOW ID=3 CODE=5
                         OUTFLOW            STORAGE        ELEV
                          (CFS)             (AC-FT)        (FT)
                           2.29             0.0            5111
                           2.89             0.28           5112
                           3.39             0.62           5113
                           3.83             1.01           5114
                           4.22             1.20           5115
PRINT HYD                ID=32 CODE=5
*****************************************************************
*S ADD HYD 303 AND POND 3
ADD HYD                  ID=34 HYDNO=306
                         ID=31 ID=32
PRINT HYD                ID=34 CODE=5
*****************************************************************
*S ADD B1 AND B2
ADD HYD                  ID=36 HYDNO=308
                         ID=11 ID=12
PRINT HYD                ID=36 CODE=5
*****************************************************************
*S ADD HYD 308 AND B3
ADD HYD                  ID=37 HYDNO=309
                         ID=36 ID=13
PRINT HYD                ID=37 CODE=5
*****************************************************************
*S ADD B5 AND B6
ADD HYD                  ID=38 HYDNO=310
                         ID=15 ID=16
PRINT HYD                ID=38 CODE=5
*****************************************************************
*S ADD HYD 309 AND HYD 310
ADD HYD                  ID=39 HYDNO=311
                         ID=37 ID=38
```

```
PRINT HYD                ID=39 CODE=5
*************************************************************
*POND 5
*************************************************************
ROUTE RESERVOIR          ID=40 HYD=312 INFLOW ID=39 CODE=5
                         OUTFLOW            STORAGE        ELEV
                          (CFS)             (AC-FT)        (FT)
                           0.00             0.00           5108
                           5.44             0.13           5109
                           6.66             0.29           5110
                           7.69             0.48           5111
                           8.60             0.70           5112
                           9.42             0.96           5113
                           9.80             1.10           5113.5
PRINT HYD                ID=40 CODE=5
*************************************************************
*S ADD HYD 306 AND POND 5
ADD HYD                  ID=42 HYDNO=320
                         ID=34 ID=40
PRINT HYD                ID=42 CODE=5
*************************************************************
*S ADD HYD 320 AND B7
ADD HYD                  ID=43 HYDNO=321
                         ID=42 ID=17
PRINT HYD                ID=43 CODE=5
*************************************************************
*S ADD HYD 321 AND B8
ADD HYD                  ID=44 HYDNO=322
                         ID=43 ID=18
PRINT HYD                ID=44 CODE=5
*************************************************************
*S ADD HYD 322 AND B9
ADD HYD                  ID=45 HYDNO=323
                         ID=44 ID=19
PRINT HYD                ID=45 CODE=5
*************************************************************
*POND 6 (UNDERGROUND)
*************************************************************
ROUTE RESERVOIR          ID=46 HYD=324 INFLOW ID=45 CODE=5
                         OUTFLOW            STORAGE        ELEV
                          (CFS)             (AC-FT)        (FT)
                           0.01             0.0            5101
                           12.23            0.16           5103
                           20.70            0.40           5105
                           26.59            0.63           5107
                           29.10            0.72           5108
                           31.40            0.74           5108.5
PRINT HYD                ID=46 CODE=5
*************************************************************
*POND 7 (UNDERGROUND)
*************************************************************
ROUTE RESERVOIR          ID=48 HYD=325 INFLOW ID=20 CODE=5
                         OUTFLOW            STORAGE        ELEV
                          (CFS)             (AC-FT)        (FT)
                           0.00             0.00           5104.5
                           1.47             0.11           5106.5
                           2.16             0.29           5108.5
                           2.67             0.46           5110.5
                           3.00             0.53           5112.0
PRINT HYD                ID=48 CODE=5
*************************************************************
*S ADD A2 AND OS3
ADD HYD                  ID=49 HYDNO=326
                         ID=2 ID=25
PRINT HYD                ID=49 CODE=5
*************************************************************
```

```
*POND 2
*************************************************************
ROUTE RESERVOIR        ID=50 HYD=400 INFLOW ID=49 CODE=5
                       OUTFLOW            STORAGE        ELEV
                        (CFS)             (AC-FT)        (FT)
                         1.94             0.0            5111
                         2.44             0.26           5112
                         2.86             0.57           5113
                         3.22             0.93           5114
PRINT HYD              ID=50 CODE=5
*************************************************************
*S ADD A4 AND OS2
ADD HYD                ID=51 HYDNO=327
                       ID=4 ID=24
PRINT HYD              ID=51 CODE=5
*************************************************************
*POND 4
*************************************************************
ROUTE RESERVOIR        ID=52 HYD=401 INFLOW ID=51 CODE=5
                       OUTFLOW            STORAGE        ELEV
                        (CFS)             (AC-FT)        (FT)
                         2.76             0.0            5111
                         3.50             0.11           5112
                         4.12             0.32           5113
                         4.65             0.65           5114
                         5.13             1.05           5115
PRINT HYD              ID=52 CODE=5
*************************************************************
*POND 8 (UNDERGROUND)
*************************************************************
ROUTE RESERVOIR        ID=53 HYD=402 INFLOW ID=14 CODE=5
                       OUTFLOW            STORAGE        ELEV
                        (CFS)             (AC-FT)        (FT)
                         0.00             0.0            5105
                         2.27             0.05           5107
                         3.38             0.14           5109
                         4.20             0.22           5111
                         4.72             0.25           5112.5
PRINT HYD              ID=53 CODE=5
*************************************************************
*S ADD POND 2 AND POND 4
ADD HYD                ID=55 HYDNO=500
                       ID=50 ID=52
PRINT HYD              ID=55 CODE=5
*************************************************************
*S ADD HYD 500 AND POND 8
ADD HYD                ID=56 HYDNO=501
                       ID=55 ID=53
PRINT HYD              ID=56 CODE=5
*************************************************************
*S ADD HYD 501 AND POND 7
ADD HYD                ID=57 HYDNO=502
                       ID=56 ID=48
PRINT HYD              ID=57 CODE=5
*************************************************************
*S ADD HYD 502 AND POND 6
ADD HYD                ID=58 HYDNO=503
                       ID=57 ID=46
PRINT HYD              ID=58 CODE=5
*************************************************************
FINISH
```

```
        AHYMO PROGRAM (AHYMO_97) -                                  - Version:
1997.02c
              RUN DATE (MON/DAY/YR) = 10/02/2007
              START TIME (HR:MIN:SEC) = 15:48:35     USER NO.=
AHYMO-C-9803c01UNMLIB-AH
              INPUT FILE = DEV10.HMI

     *  Project Number 6010 (OXBOW TOWN CENTER) 100207

     *  PROPOSED Conditions

     *  100 YEAR 24 HOUR RAINFALL TABLE

     *RAINFALL                TYPE=1  RAIN QUARTER=0

     *                        RAIN ONE=1.87 IN  RAIN SIX=2.20 IN

     *                        RAIN DAY=2.66 IN  DT=0.03333 HRS

     *  10 YEAR RAINFALL TABLE

     RAINFALL                 TYPE=1  RAIN QUARTER=0.0

                              RAIN ONE=1.25 IN  RAIN SIX=1.47 IN

                              RAIN DAY=1.77 IN  DT=0.03333 HRS

                    COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS
2 - PEAK AT 1.40 HR.
                    DT =     .033330 HOURS        END TIME =     5.999400 HOURS
                       .0000   .0011   .0022   .0033   .0045   .0056   .0069
                       .0081   .0094   .0106   .0120   .0133   .0147   .0162
                       .0177   .0192   .0208   .0224   .0241   .0258   .0276
                       .0294   .0314   .0334   .0355   .0377   .0400   .0424
                       .0449   .0476   .0504   .0538   .0575   .0615   .0700
                       .0889   .1181   .1600   .2173   .2925   .3884   .5078
                       .6535   .7888   .8453   .8930   .9354   .9740  1.0095
                      1.0425  1.0733  1.1022  1.1294  1.1551  1.1793  1.2022
                      1.2240  1.2446  1.2641  1.2827  1.3003  1.3044  1.3083
                      1.3119  1.3154  1.3187  1.3219  1.3249  1.3279  1.3307
                      1.3335  1.3361  1.3387  1.3411  1.3436  1.3459  1.3482
                      1.3504  1.3526  1.3547  1.3568  1.3588  1.3608  1.3627
                      1.3646  1.3665  1.3683  1.3701  1.3719  1.3736  1.3753
                      1.3769  1.3786  1.3802  1.3818  1.3833  1.3849  1.3864
                      1.3879  1.3893  1.3908  1.3922  1.3936  1.3950  1.3964
                      1.3977  1.3991  1.4004  1.4017  1.4030  1.4042  1.4055
                      1.4067  1.4080  1.4092  1.4104  1.4116  1.4128  1.4139
                      1.4151  1.4162  1.4173  1.4185  1.4196  1.4207  1.4217
                      1.4228  1.4239  1.4249  1.4260  1.4270  1.4280  1.4291
                      1.4301  1.4311  1.4321  1.4330  1.4340  1.4350  1.4359
                      1.4369  1.4378  1.4388  1.4397  1.4406  1.4415  1.4425
                      1.4434  1.4443  1.4451  1.4460  1.4469  1.4478  1.4486
                      1.4495  1.4503  1.4512  1.4520  1.4529  1.4537  1.4545
                      1.4553  1.4562  1.4570  1.4578  1.4586  1.4594  1.4601
                      1.4609  1.4617  1.4625  1.4633  1.4640  1.4648  1.4655
                      1.4663  1.4670  1.4678  1.4685  1.4693  1.4700

**************************************************************************

**************************************************************************

**************************************************************************
```

```
*S  COMPUTE HYD BASIN A1

COMPUTE NM HYD          ID=1  HYDNO=101  AREA=0.00780SQ MI

                        PER A=0 PER B=10 PER C=0 PER D=90

                        TP=.13333 HR MASS RAIN=-1


          K =   .072665HR    TP =   .133330HR    K/TP RATIO =   .545000
SHAPE CONSTANT, N =  7.106420
          UNIT PEAK =   27.709    CFS   UNIT VOLUME =    .9990       B =
526.28      P60 = 1.2500
          AREA =      .007020 SQ MI    IA =    .10000 INCHES    INF =
.04000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330


          K =   .141933HR    TP =   .133330HR    K/TP RATIO =  1.064525
SHAPE CONSTANT, N =  3.317383
          UNIT PEAK =   1.7945    CFS   UNIT VOLUME =    .9923       B =
306.75      P60 = 1.2500
          AREA =      .000780 SQ MI    IA =    .50000 INCHES    INF =
1.25000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330

     PRINT HYD              ID=1   CODE=5


                                        PARTIAL HYDROGRAPH   101.00

          TIME      FLOW            TIME      FLOW            TIME      FLOW
     TIME      FLOW            TIME      FLOW
          HRS       CFS             HRS       CFS             HRS       CFS
      HRS       CFS             HRS       CFS
          .000        .0            1.500      13.4           3.000        .1
     4.500        .0            5.999        .1
          .167        .0            1.667       6.7           3.166        .1
     4.666        .0            6.166        .0
          .333        .0            1.833       4.4           3.333        .0
     4.833        .0            6.333        .0
          .500        .0            2.000       3.2           3.500        .0
     4.999        .1            6.499        .0
          .667        .0            2.166       1.4           3.666        .0
     5.166        .1            6.666        .0
          .833        .0            2.333        .6           3.833        .0
     5.333        .1            6.833        .0
         1.000        .0            2.500        .4           4.000        .0
     5.499        .1
         1.167        .0            2.666        .2           4.166        .0
     5.666        .1
         1.333       3.4            2.833        .1           4.333        .0
     5.833        .1

        RUNOFF VOLUME =      1.13650 INCHES      =        .4728 ACRE-FEET
        PEAK DISCHARGE RATE =      13.37 CFS  AT   1.500 HOURS   BASIN AREA =
.0078 SQ. MI.


**********************************************************************

*S  COMPUTE HYD BASIN A2
```

DEV10

COMPUTE NM HYD ID=2 HYDNO=102 AREA=0.00623SQ MI

PER A=0 PER B=15 PER C=0 PER D=85

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 20.902 CFS UNIT VOLUME = .9988 B = 526.28 P60 = 1.2500
AREA = .005296 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .141933HR TP = .133330HR K/TP RATIO = 1.064525
SHAPE CONSTANT, N = 3.317383
UNIT PEAK = 2.1500 CFS UNIT VOLUME = .9934 B = 306.75 P60 = 1.2500
AREA = .000935 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=2 CODE=5

PARTIAL HYDROGRAPH 102.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	10.3	3.000	.1
.167	.0	1.667	5.2	3.166	.0
.333	.0	1.833	3.3	3.333	.0
.500	.0	2.000	2.4	3.500	.0
.667	.0	2.166	1.1	3.666	.0
.833	.0	2.333	.5	3.833	.0
1.000	.0	2.500	.3	4.000	.0
1.167	.0	2.666	.2	4.166	.0
1.333	2.6	2.833	.1	4.333	.0

RUNOFF VOLUME = 1.08583 INCHES = .3608 ACRE-FEET
PEAK DISCHARGE RATE = 10.25 CFS AT 1.500 HOURS BASIN AREA = .0062 SQ. MI.

****

*S COMPUTE HYD BASIN A3

COMPUTE NM HYD ID=3 HYDNO=103 AREA=0.00833SQ MI

DEV10
PER A=0 PER B=12 PER C=0 PER D=88

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 28.934 CFS UNIT VOLUME = .9990 B =
526.28 P60 = 1.2500
AREA = .007330 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .141933HR TP = .133330HR K/TP RATIO = 1.064525
SHAPE CONSTANT, N = 3.317383
UNIT PEAK = 2.2998 CFS UNIT VOLUME = .9939 B =
306.75 P60 = 1.2500
AREA = .001000 SQ MI IA = .50000 INCHES INF =
1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=3 CODE=5

PARTIAL HYDROGRAPH 103.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	14.1	3.000	.1
.167	.0	1.667	7.1	3.166	.1
.333	.0	1.833	4.6	3.333	.0
.500	.0	2.000	3.4	3.500	.0
.667	.0	2.166	1.5	3.666	.0
.833	.0	2.333	.7	3.833	.0
1.000	.0	2.500	.4	4.000	.0
1.167	.0	2.666	.2	4.166	.0
1.333	3.6	2.833	.2	4.333	.0

RUNOFF VOLUME = 1.11623 INCHES = .4959 ACRE-FEET
PEAK DISCHARGE RATE = 14.05 CFS AT 1.500 HOURS BASIN AREA =
.0083 SQ. MI.

****

*S COMPUTE HYD BASIN A4

COMPUTE NM HYD ID=4 HYDNO=104 AREA=0.0104SQ MI

PER A=0 PER B=15 PER C=0 PER D=85

DEV10
TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 34.893 CFS UNIT VOLUME = .9990 B =
526.28 P60 = 1.2500
AREA = .008840 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .141933HR TP = .133330HR K/TP RATIO = 1.064525
SHAPE CONSTANT, N = 3.317383
UNIT PEAK = 3.5891 CFS UNIT VOLUME = .9962 B =
306.75 P60 = 1.2500
AREA = .001560 SQ MI IA = .50000 INCHES INF =
1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=4 CODE=5

PARTIAL HYDROGRAPH 104.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	17.1	3.000	.1
.167	.0	1.667	8.6	3.166	.1
.333	.0	1.833	5.6	3.333	.1
.500	.0	2.000	4.1	3.500	.0
.667	.0	2.166	1.8	3.666	.0
.833	.0	2.333	.8	3.833	.0
1.000	.0	2.500	.5	4.000	.0
1.167	.0	2.666	.3	4.166	.0
1.333	4.3	2.833	.2	4.333	.0

RUNOFF VOLUME = 1.08583 INCHES = .6023 ACRE-FEET
PEAK DISCHARGE RATE = 17.11 CFS AT 1.500 HOURS BASIN AREA =
.0104 SQ. MI.

****

*S COMPUTE HYD BASIN B1

COMPUTE NM HYD ID=11 HYDNO=201 AREA=0.00161SQ MI

PER A=0 PER B=10 PER C=0 PER D=90

TP=.13333 HR MASS RAIN=-1

```
          K =    .072665HR     TP =    .133330HR     K/TP RATIO =    .545000
SHAPE CONSTANT, N =  7.106420
          UNIT PEAK =    5.7194     CFS    UNIT VOLUME =     .9973        B =
526.28       P60 = 1.2500
          AREA =       .001449 SQ MI     IA =     .10000 INCHES     INF =
.04000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =    .033330


          K =    .141933HR     TP =    .133330HR     K/TP RATIO =  1.064525
SHAPE CONSTANT, N =  3.317383
          UNIT PEAK =    .37041     CFS    UNIT VOLUME =     .9630        B =
306.75       P60 = 1.2500
          AREA =       .000161 SQ MI     IA =     .50000 INCHES     INF =
1.25000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =    .033330

     PRINT HYD                ID=11   CODE=5
```

PARTIAL HYDROGRAPH 201.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	.7	2.666	.0
.167	.0	1.500	2.8	2.833	.0
.333	.0	1.667	1.4	3.000	.0
.500	.0	1.833	.9	3.166	.0
.667	.0	2.000	.7	3.333	.0
.833	.0	2.166	.3	3.500	.0
1.000	.0	2.333	.1	3.666	.0
1.167	.0	2.500	.1	3.833	.0

```
          RUNOFF VOLUME =     1.13650 INCHES     =        .0976 ACRE-FEET
          PEAK DISCHARGE RATE =       2.77 CFS  AT   1.500 HOURS   BASIN AREA =
.0016 SQ. MI.


     ***********************************************************************

     *S  COMPUTE HYD BASIN B2

     COMPUTE NM HYD           ID=12  HYDNO=202  AREA=0.00097SQ MI

                              PER A=0 PER B=0 PER C=10 PER D=90

                              TP=.13333 HR MASS RAIN=-1


          K =    .072665HR     TP =    .133330HR     K/TP RATIO =    .545000
SHAPE CONSTANT, N =  7.106420
          UNIT PEAK =    3.4459     CFS    UNIT VOLUME =     .9960        B =
```

526.28 P60 = 1.2500
AREA = .000873 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .108040HR TP = .133330HR K/TP RATIO = .810320
SHAPE CONSTANT, N = 4.414309
UNIT PEAK = .27785 CFS UNIT VOLUME = .9517 B =
381.91 P60 = 1.2500
AREA = .000097 SQ MI IA = .35000 INCHES INF =
.83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=12 CODE=5

PARTIAL HYDROGRAPH 202.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	.4	2.666	.0
.167	.0	1.500	1.7	2.833	.0
.333	.0	1.667	.9	3.000	.0
.500	.0	1.833	.6	3.166	.0
.667	.0	2.000	.4	3.333	.0
.833	.0	2.166	.2	3.500	.0
1.000	.0	2.333	.1	3.666	.0
1.167	.0	2.500	.0	3.833	.0

RUNOFF VOLUME = 1.15775 INCHES = .0599 ACRE-FEET
PEAK DISCHARGE RATE = 1.72 CFS AT 1.500 HOURS BASIN AREA =
.0010 SQ. MI.

****

*S COMPUTE HYD BASIN B3

COMPUTE NM HYD ID=13 HYDNO=203 AREA=0.00190SQ MI

PER A=0 PER B=10 PER C=5 PER D=85

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 6.3747 CFS UNIT VOLUME = .9976 B =
526.28 P60 = 1.2500
AREA = .001615 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -

DT = .033330

K = .130635HR TP = .133330HR K/TP RATIO = .979790
SHAPE CONSTANT, N = 3.604282
UNIT PEAK = .70082 CFS UNIT VOLUME = .9807 B = 327.86 P60 = 1.2500
AREA = .000285 SQ MI IA = .45000 INCHES INF = 1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=13 CODE=5

PARTIAL HYDROGRAPH 203.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	.8	2.666	.0
.167	.0	1.500	3.2	2.833	.0
.333	.0	1.667	1.6	3.000	.0
.500	.0	1.833	1.0	3.166	.0
.667	.0	2.000	.8	3.333	.0
.833	.0	2.166	.3	3.500	.0
1.000	.0	2.333	.1	3.666	.0
1.167	.0	2.500	.1	3.833	.0
4.000	.0	5.333	.0		
4.166	.0	5.499	.0		
4.333	.0	5.666	.0		
4.500	.0	5.833	.0		
4.666	.0	5.999	.0		
4.833	.0	6.166	.0		
4.999	.0	6.333	.0		
5.166	.0	6.499	.0		

RUNOFF VOLUME = 1.09479 INCHES = .1109 ACRE-FEET
PEAK DISCHARGE RATE = 3.17 CFS AT 1.500 HOURS BASIN AREA = .0019 SQ. MI.

****

*S COMPUTE HYD BASIN B4

COMPUTE NM HYD ID=14 HYDNO=204 AREA=0.00459SQ MI

PER A=0 PER B=10 PER C=5 PER D=85

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 15.400 CFS UNIT VOLUME = .9987 B = 526.28 P60 = 1.2500
AREA = .003902 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .130635HR TP = .133330HR K/TP RATIO = .979790

DEV10

SHAPE CONSTANT, N = 3.604282
UNIT PEAK = 1.6930 CFS UNIT VOLUME = .9919 B = 327.86 P60 = 1.2500
AREA = .000689 SQ MI IA = .45000 INCHES INF = 1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=14 CODE=5

PARTIAL HYDROGRAPH 204.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	7.7	3.000	.0
4.500	.0	5.999	.1		
.167	.0	1.667	3.8	3.166	.0
4.666	.0	6.166	.0		
.333	.0	1.833	2.5	3.333	.0
4.833	.0	6.333	.0		
.500	.0	2.000	1.8	3.500	.0
4.999	.0	6.499	.0		
.667	.0	2.166	.8	3.666	.0
5.166	.0	6.666	.0		
.833	.0	2.333	.4	3.833	.0
5.333	.0				
1.000	.0	2.500	.2	4.000	.0
5.499	.0				
1.167	.0	2.666	.1	4.166	.0
5.666	.0				
1.333	1.9	2.833	.1	4.333	.0
5.833	.0				

RUNOFF VOLUME = 1.09479 INCHES = .2680 ACRE-FEET
PEAK DISCHARGE RATE = 7.65 CFS AT 1.500 HOURS BASIN AREA = .0046 SQ. MI.

****

*S COMPUTE HYD BASIN B5

COMPUTE NM HYD ID=15 HYDNO=205 AREA=0.00657SQ MI

PER A=0 PER B=10 PER C=5 PER D=85

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 22.043 CFS UNIT VOLUME = .9988 B = 526.28 P60 = 1.2500
AREA = .005585 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .130635HR TP = .133330HR K/TP RATIO = .979790
SHAPE CONSTANT, N = 3.604282
UNIT PEAK = 2.4234 CFS UNIT VOLUME = .9948 B =

DEV10

327.86 P60 = 1.2500
AREA = .000986 SQ MI IA = .45000 INCHES INF =
1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=15 CODE=5

PARTIAL HYDROGRAPH 205.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	11.0	3.000	.1
4.500	.0	5.999	.1		
.167	.0	1.667	5.5	3.166	.0
4.666	.0	6.166	.0		
.333	.0	1.833	3.5	3.333	.0
4.833	.0	6.333	.0		
.500	.0	2.000	2.6	3.500	.0
4.999	.0	6.499	.0		
.667	.0	2.166	1.2	3.666	.0
5.166	.0	6.666	.0		
.833	.0	2.333	.5	3.833	.0
5.333	.1				
1.000	.0	2.500	.3	4.000	.0
5.499	.1				
1.167	.0	2.666	.2	4.166	.0
5.666	.1				
1.333	2.7	2.833	.1	4.333	.0
5.833	.1				

RUNOFF VOLUME = 1.09479 INCHES = .3836 ACRE-FEET
PEAK DISCHARGE RATE = 10.95 CFS AT 1.500 HOURS BASIN AREA =
.0066 SQ. MI.

****

*S COMPUTE HYD BASIN B6

COMPUTE NM HYD ID=16 HYDNO=206 AREA=0.00575SQ MI

PER A=0 PER B=0 PER C=10 PER D=90

TP=.16667 HR MASS RAIN=-1

K = .090835HR TP = .166670HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 16.341 CFS UNIT VOLUME = .9996 B =
526.28 P60 = 1.2500
AREA = .005175 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .135056HR TP = .166670HR K/TP RATIO = .810320
SHAPE CONSTANT, N = 4.414309
UNIT PEAK = 1.3176 CFS UNIT VOLUME = .9901 B =
381.91 P60 = 1.2500
AREA = .000575 SQ MI IA = .35000 INCHES INF =

DEV10

.83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=16 CODE=5

PARTIAL HYDROGRAPH 206.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	8.6	3.000	.1
.167	.0	1.667	5.9	3.166	.1
.333	.0	1.833	3.5	3.333	.0
.500	.0	2.000	2.6	3.500	.0
.667	.0	2.166	1.5	3.666	.0
.833	.0	2.333	.6	3.833	.0
1.000	.0	2.500	.4	4.000	.0
1.167	.0	2.666	.2	4.166	.0
1.333	1.5	2.833	.2	4.333	.0
4.500	.0	5.999	.1		
4.666	.0	6.166	.0		
4.833	.0	6.333	.0		
4.999	.0	6.499	.0		
5.166	.0	6.666	.0		
5.333	.0	6.833	.0		
5.499	.1				
5.666	.1				
5.833	.1				

RUNOFF VOLUME = 1.15775 INCHES = .3550 ACRE-FEET
PEAK DISCHARGE RATE = 9.15 CFS AT 1.533 HOURS BASIN AREA =
.0058 SQ. MI.

****

*S COMPUTE HYD BASIN B7

COMPUTE NM HYD ID=17 HYDNO=207 AREA=0.00176SQ MI

PER A=0 PER B=0 PER C=10 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 6.2523 CFS UNIT VOLUME = .9976 B =
526.28 P60 = 1.2500
AREA = .001584 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .108040HR TP = .133330HR K/TP RATIO = .810320
SHAPE CONSTANT, N = 4.414309
UNIT PEAK = .50413 CFS UNIT VOLUME = .9741 B =
381.91 P60 = 1.2500
AREA = .000176 SQ MI IA = .35000 INCHES INF =
.83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -

DEV10

DT = .033330

PRINT HYD ID=17 CODE=5

PARTIAL HYDROGRAPH 207.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	.8	2.666	.0	4.000	.0
.167	.0	1.500	3.1	2.833	.0	4.166	.0
.333	.0	1.667	1.6	3.000	.0	4.333	.0
.500	.0	1.833	1.0	3.166	.0	4.500	.0
.667	.0	2.000	.7	3.333	.0	4.666	.0
.833	.0	2.166	.3	3.500	.0	4.833	.0
1.000	.0	2.333	.1	3.666	.0	4.999	.0
1.167	.0	2.500	.1	3.833	.0	5.166	.0
5.333	.0	5.499	.0	5.666	.0	5.833	.0
5.999	.0	6.166	.0	6.333	.0	6.499	.0

RUNOFF VOLUME = 1.15775 INCHES = .1087 ACRE-FEET
PEAK DISCHARGE RATE = 3.11 CFS AT 1.500 HOURS BASIN AREA = .0018 SQ. MI.

****

*S COMPUTE HYD BASIN B8

COMPUTE NM HYD ID=18 HYDNO=208 AREA=0.00249SQ MI

PER A=0 PER B=0 PER C=10 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 8.8456 CFS UNIT VOLUME = .9980 B = 526.28 P60 = 1.2500
AREA = .002241 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .108040HR TP = .133330HR K/TP RATIO = .810320
SHAPE CONSTANT, N = 4.414309
UNIT PEAK = .71323 CFS UNIT VOLUME = .9830 B = 381.91 P60 = 1.2500
AREA = .000249 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=18 CODE=5

DEV10

PARTIAL HYDROGRAPH 208.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	1.1	2.666	.1
.167	.0	1.500	4.4	2.833	.0
.333	.0	1.667	2.2	3.000	.0
.500	.0	1.833	1.4	3.166	.0
.667	.0	2.000	1.0	3.333	.0
.833	.0	2.166	.5	3.500	.0
1.000	.0	2.333	.2	3.666	.0
1.167	.0	2.500	.1	3.833	.0
4.000	.0	5.333	.0		
4.166	.0	5.499	.0		
4.333	.0	5.666	.0		
4.500	.0	5.833	.0		
4.666	.0	5.999	.0		
4.833	.0	6.166	.0		
4.999	.0	6.333	.0		
5.166	.0	6.499	.0		

RUNOFF VOLUME = 1.15775 INCHES = .1537 ACRE-FEET
PEAK DISCHARGE RATE = 4.40 CFS AT 1.500 HOURS BASIN AREA = .0025 SQ. MI.

****

*S COMPUTE HYD BASIN B9

COMPUTE NM HYD ID=19 HYDNO=209 AREA=0.00725SQ MI

PER A=0 PER B=5 PER C=5 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 25.755 CFS UNIT VOLUME = .9989 B = 526.28 P60 = 1.2500
AREA = .006525 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .124987HR TP = .133330HR K/TP RATIO = .937423
SHAPE CONSTANT, N = 3.772497
UNIT PEAK = 1.8472 CFS UNIT VOLUME = .9932 B = 339.71 P60 = 1.2500
AREA = .000725 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=19 CODE=5

PARTIAL HYDROGRAPH 209.00

TIME	FLOW	TIME	FLOW	TIME	FLOW

DEV10

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	HRS	CFS
.000	.0	1.500	12.6	3.000	.1
.167	.0	1.667	6.3	3.166	.1
.333	.0	1.833	4.1	3.333	.0
.500	.0	2.000	3.0	3.500	.0
.667	.0	2.166	1.3	3.666	.0
.833	.0	2.333	.6	3.833	.0
1.000	.0	2.500	.3	4.000	.0
1.167	.0	2.666	.2	4.166	.0
1.333	3.2	2.833	.1	4.333	.0

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
4.500	.0	5.999	.1
4.666	.0	6.166	.0
4.833	.0	6.333	.0
4.999	.1	6.499	.0
5.166	.1	6.666	.0
5.333	.1		
5.499	.1		
5.666	.1		
5.833	.1		

RUNOFF VOLUME = 1.14585 INCHES = .4431 ACRE-FEET
PEAK DISCHARGE RATE = 12.59 CFS AT 1.500 HOURS BASIN AREA = .0073 SQ. MI.

****

*S COMPUTE HYD BASIN B10

COMPUTE NM HYD ID=20 HYDNO=210 AREA=0.00748SQ MI

PER A=0 PER B=10 PER C=0 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 26.572 CFS UNIT VOLUME = .9989 B = 526.28 P60 = 1.2500
AREA = .006732 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .141933HR TP = .133330HR K/TP RATIO = 1.064525
SHAPE CONSTANT, N = 3.317383
UNIT PEAK = 1.7209 CFS UNIT VOLUME = .9917 B = 306.75 P60 = 1.2500
AREA = .000748 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=20 CODE=5

PARTIAL HYDROGRAPH 210.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS

DEV10

HRS	CFS	HRS	CFS		
.000	.0	1.500	12.8	3.000	.1
4.500	.0	5.999	.1		
.167	.0	1.667	6.4	3.166	.1
4.666	.0	6.166	.0		
.333	.0	1.833	4.2	3.333	.0
4.833	.0	6.333	.0		
.500	.0	2.000	3.1	3.500	.0
4.999	.1	6.499	.0		
.667	.0	2.166	1.4	3.666	.0
5.166	.1	6.666	.0		
.833	.0	2.333	.6	3.833	.0
5.333	.1				
1.000	.0	2.500	.4	4.000	.0
5.499	.1				
1.167	.0	2.666	.2	4.166	.0
5.666	.1				
1.333	3.3	2.833	.1	4.333	.0
5.833	.1				

RUNOFF VOLUME = 1.13650 INCHES = .4534 ACRE-FEET
PEAK DISCHARGE RATE = 12.83 CFS AT 1.500 HOURS BASIN AREA =
.0075 SQ. MI.

****

*S COMPUTE HYD BASIN 01

COMPUTE NM HYD ID=21 HYDNO=211 AREA=0.00796SQ MI

PER A=0 PER B=10 PER C=5 PER D=85

TP=.1667 HR MASS RAIN=-1

K = .090852HR TP = .166700HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 21.360 CFS UNIT VOLUME = .9997 B =
526.28 P60 = 1.2500
AREA = .006766 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .163331HR TP = .166700HR K/TP RATIO = .979790
SHAPE CONSTANT, N = 3.604281
UNIT PEAK = 2.3483 CFS UNIT VOLUME = .9942 B =
327.86 P60 = 1.2500
AREA = .001194 SQ MI IA = .45000 INCHES INF =
1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=21 CODE=5

PARTIAL HYDROGRAPH 211.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	11.2	3.000	.1

```
4.666          .0          6.166          .1
     .333          .0          1.833       4.5          3.333          .1
4.833          .0          6.333          .0
     .500          .0          2.000       3.3          3.500          .0
4.999          .0          6.499          .0
     .667          .0          2.166       1.9          3.666          .0
5.166          .1          6.666          .0
     .833          .0          2.333        .8          3.833          .0
5.333          .1          6.833          .0
    1.000          .0          2.500        .5          4.000          .0
5.499          .1          6.999          .0
    1.167          .0          2.666        .3          4.166          .0
5.666          .1
    1.333         1.9          2.833        .2          4.333          .0
5.833          .1

   RUNOFF VOLUME =     1.09479 INCHES     =        .4478 ACRE-FEET
   PEAK DISCHARGE RATE =      11.52 CFS  AT   1.533 HOURS   BASIN AREA =
 .0077 SQ. MI.


   ***********************************************************

   *S  COMPUTE HYD BASIN OS1

   COMPUTE NM HYD          ID=23  HYDNO=213  AREA=0.01104SQ MI

                           PER A=0 PER B=10 PER C=5 PER D=85

                           TP=.13333 HR MASS RAIN=-1


          K =   .072665HR    TP =   .133330HR    K/TP RATIO =   .545000
SHAPE CONSTANT, N =  7.106420
          UNIT PEAK =   37.040    CFS   UNIT VOLUME =    .9991       B =
526.28      P60 = 1.2500
          AREA =      .009384 SQ MI    IA =    .10000 INCHES    INF =
.04000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330


          K =   .130635HR    TP =   .133330HR    K/TP RATIO =   .979790
SHAPE CONSTANT, N =  3.604282
          UNIT PEAK =   4.0722    CFS   UNIT VOLUME =    .9970       B =
327.86      P60 = 1.2500
          AREA =      .001656 SQ MI    IA =    .45000 INCHES    INF =
1.11000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330

   PRINT HYD               ID=23   CODE=5


                                        PARTIAL HYDROGRAPH   213.00

      TIME       FLOW            TIME       FLOW            TIME       FLOW
TIME       FLOW            TIME       FLOW
      HRS        CFS             HRS        CFS             HRS        CFS
 HRS        CFS             HRS        CFS
     .000          .0          1.500       18.4          3.000          .1
4.500          .1          5.999          .1
     .167          .0          1.667        9.2          3.166          .1
4.666          .1          6.166          .0
     .333          .0          1.833        5.9          3.333          .1
```

DEV10

4.833	.1		6.333	.0			
.500		.0	2.000		4.4	3.500	.1
4.999	.1		6.499	.0			
.667		.0	2.166		1.9	3.666	.0
5.166	.1		6.666	.0			
.833		.0	2.333		.9	3.833	.0
5.333	.1		6.833	.0			
1.000		.0	2.500		.5	4.000	.0
5.499	.1						
1.167		.0	2.666		.3	4.166	.0
5.666	.1						
1.333		4.6	2.833		.2	4.333	.0
5.833	.1						

RUNOFF VOLUME = 1.09479 INCHES = .6446 ACRE-FEET
PEAK DISCHARGE RATE = 18.39 CFS AT 1.500 HOURS BASIN AREA =
.0110 SQ. MI.

****

*S COMPUTE HYD BASIN OS2

COMPUTE NM HYD ID=24 HYDNO=214 AREA=0.0008SQ MI

PER A=0 PER B=5 PER C=5 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 2.8420 CFS UNIT VOLUME = .9955 B =
526.28 P60 = 1.2500
AREA = .000720 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .124987HR TP = .133330HR K/TP RATIO = .937423
SHAPE CONSTANT, N = 3.772497
UNIT PEAK = .20383 CFS UNIT VOLUME = .9352 B =
339.71 P60 = 1.2500
AREA = .000080 SQ MI IA = .42500 INCHES INF =
1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=24 CODE=5

PARTIAL HYDROGRAPH 214.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	.4	2.666	.0
4.000	.0	5.333	.0		
.167	.0	1.500	1.4	2.833	.0
4.166	.0	5.499	.0		
.333	.0	1.667	.7	3.000	.0
4.333	.0	5.666	.0		
.500	.0	1.833	.5	3.166	.0

DEV10

4.500	.0	5.833	.0				
.667	.0	2.000	.3	3.333	.0		
4.666	.0	5.999	.0				
.833	.0	2.166	.1	3.500	.0		
4.833	.0	6.166	.0				
1.000	.0	2.333	.1	3.666	.0		
4.999	.0	6.333	.0				
1.167	.0	2.500	.0	3.833	.0		
5.166	.0						

RUNOFF VOLUME = 1.14585 INCHES = .0489 ACRE-FEET
PEAK DISCHARGE RATE = 1.40 CFS AT 1.500 HOURS BASIN AREA =
.0008 SQ. MI.

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*S COMPUTE HYD BASIN OS3

COMPUTE NM HYD ID=25 HYDNO=215 AREA=0.00311SQ MI

PER A=0 PER B=5 PER C=5 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 11.048 CFS UNIT VOLUME = .9984 B =
526.28 P60 = 1.2500
AREA = .002799 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .124987HR TP = .133330HR K/TP RATIO = .937423
SHAPE CONSTANT, N = 3.772497
UNIT PEAK = .79238 CFS UNIT VOLUME = .9831 B =
339.71 P60 = 1.2500
AREA = .000311 SQ MI IA = .42500 INCHES INF =
1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=25 CODE=5

PARTIAL HYDROGRAPH 215.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	1.4	2.666	.1
4.000	.0	5.333	.0		
.167	.0	1.500	5.4	2.833	.1
4.166	.0	5.499	.0		
.333	.0	1.667	2.7	3.000	.0
4.333	.0	5.666	.0		
.500	.0	1.833	1.8	3.166	.0
4.500	.0	5.833	.0		
.667	.0	2.000	1.3	3.333	.0
4.666	.0	5.999	.0		
.833	.0	2.166	.6	3.500	.0

DEV10

4.833	.0	6.166	.0				
1.000	.0	2.333	.3	3.666	.0		
4.999	.0	6.333	.0				
1.167	.0	2.500	.1	3.833	.0		
5.166	.0	6.499	.0				

RUNOFF VOLUME = 1.14585 INCHES = .1901 ACRE-FEET
PEAK DISCHARGE RATE = 5.41 CFS AT 1.500 HOURS BASIN AREA = .0031 SQ. MI.

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*S ADD O1 AND O2

ADD HYD ID=28 HYDNO=300

ID=21 ID=22

PRINT HYD ID=28 CODE=5

HYDROGRAPH FROM AREA 300.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	22.0	3.000	.3
4.500	.1	5.999	.2		
.167	.0	1.667	15.3	3.166	.2
4.666	.1	6.166	.1		
.333	.0	1.833	9.1	3.333	.1
4.833	.1	6.333	.0		
.500	.0	2.000	6.7	3.500	.1
4.999	.1	6.499	.0		
.667	.0	2.166	3.8	3.666	.1
5.166	.1	6.666	.0		
.833	.0	2.333	1.6	3.833	.1
5.333	.1	6.833	.0		
1.000	.0	2.500	1.0	4.000	.1
5.499	.1	6.999	.0		
1.167	.0	2.666	.6	4.166	.1
5.666	.1				
1.333	3.9	2.833	.4	4.333	.1
5.833	.2				

RUNOFF VOLUME = 1.09474 INCHES = .9126 ACRE-FEET
PEAK DISCHARGE RATE = 23.47 CFS AT 1.533 HOURS BASIN AREA = .0156 SQ. MI.

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*OFFSITE POND ON CHURCH TRACT

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ROUTE RESERVOIR ID=29 HYD=301 INFLOW ID=28 CODE=5

DEV10

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.01	0.0	5108
5.43	0.40	5110
7.05	0.65	5111
8.37	0.95	5112
9.50	1.25	5113

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5108.00	-.001	.00
.17	.00	5108.00	.000	.01
.33	.00	5108.00	.000	.01
.50	.00	5108.00	.000	.01
.67	.00	5108.00	.000	.01
.83	.00	5108.00	.000	.01
1.00	.00	5108.00	.000	.01
1.17	.00	5108.00	.000	.01
1.33	3.87	5108.06	.012	.17
1.50	21.95	5108.84	.169	2.30
1.67	15.27	5109.98	.397	5.38
1.83	9.10	5110.31	.477	5.93
2.00	6.69	5110.41	.502	6.09
2.17	3.79	5110.37	.493	6.03
2.33	1.64	5110.19	.446	5.73
2.50	1.00	5109.94	.388	5.26
2.67	.63	5109.66	.332	4.50
2.83	.41	5109.41	.281	3.82
3.00	.27	5109.19	.237	3.23
3.17	.18	5109.00	.200	2.72
3.33	.12	5108.84	.167	2.28
3.50	.09	5108.70	.140	1.91
3.67	.07	5108.58	.117	1.60
3.83	.06	5108.49	.098	1.34
4.00	.06	5108.41	.082	1.12
4.17	.07	5108.34	.069	.94
4.33	.07	5108.29	.058	.79
4.50	.08	5108.24	.049	.67
4.67	.08	5108.21	.041	.57
4.83	.09	5108.18	.035	.49
5.00	.10	5108.15	.030	.42
5.17	.11	5108.13	.026	.37
5.33	.12	5108.12	.023	.32
5.50	.13	5108.10	.021	.29
5.67	.14	5108.09	.019	.26
5.83	.16	5108.09	.017	.24
6.00	.17	5108.08	.016	.23
6.17	.10	5108.08	.015	.22
6.33	.03	5108.07	.013	.19
6.50	.01	5108.06	.011	.16
6.67	.01	5108.05	.009	.14
6.83	.00	5108.04	.008	.11
7.00	.00	5108.03	.006	.09
7.17	.00	5108.03	.005	.08
7.33	.00	5108.02	.004	.07
7.50	.00	5108.02	.003	.05

7.67	.00	5108.01	.003	.04
7.83	.00	5108.01	.002	.04
8.00	.00	5108.01	.002	.03
8.17	.00	5108.01	.001	.03
8.33	.00	5108.00	.001	.02
8.50	.00	5108.00	.001	.02
8.67	.00	5108.00	.000	.01
8.83	.00	5108.00	.000	.01
9.00	.00	5108.00	.000	.01
9.17	.00	5108.00	.000	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5108.00	.000	.01
9.50	.00	5108.00	.000	.01
9.67	.00	5108.00	.000	.01
9.83	.00	5108.00	.000	.01
10.00	.00	5108.00	.000	.01
10.17	.00	5108.00	.000	.01
10.33	.00	5108.00	.000	.01
10.50	.00	5108.00	.000	.01
10.67	.00	5108.00	.000	.01
10.83	.00	5108.00	.000	.01
11.00	.00	5108.00	.000	.01
11.17	.00	5108.00	.000	.01
11.33	.00	5108.00	.000	.01
11.50	.00	5108.00	.000	.01
11.67	.00	5108.00	.000	.01
11.83	.00	5108.00	.000	.01
12.00	.00	5108.00	.000	.01
12.17	.00	5108.00	.000	.01
12.33	.00	5108.00	.000	.01
12.50	.00	5108.00	.000	.01
12.67	.00	5108.00	.000	.01
12.83	.00	5108.00	.000	.01
13.00	.00	5108.00	.000	.01
13.17	.00	5108.00	.000	.01
13.33	.00	5108.00	.000	.01
13.50	.00	5108.00	.000	.01
13.67	.00	5108.00	.000	.01
13.83	.00	5108.00	.000	.01
14.00	.00	5108.00	.000	.01
14.17	.00	5108.00	.000	.01
14.33	.00	5108.00	.000	.01
14.50	.00	5108.00	.000	.01
14.67	.00	5108.00	.000	.01
14.83	.00	5108.00	.000	.01
15.00	.00	5108.00	.000	.01
15.17	.00	5108.00	.000	.01
15.33	.00	5108.00	.000	.01
15.50	.00	5108.00	.000	.01
15.67	.00	5108.00	.000	.01
15.83	.00	5108.00	.000	.01
16.00	.00	5108.00	.000	.01
16.17	.00	5108.00	.000	.01
16.33	.00	5108.00	.000	.01
16.50	.00	5108.00	.000	.01
16.67	.00	5108.00	.000	.01
16.83	.00	5108.00	.000	.01
17.00	.00	5108.00	.000	.01
17.16	.00	5108.00	.000	.01
17.33	.00	5108.00	.000	.01
17.50	.00	5108.00	.000	.01
17.66	.00	5108.00	.000	.01
17.83	.00	5108.00	.000	.01

DEV10

18.00	.00	5108.00	.000	.01
18.16	.00	5108.00	.000	.01
18.33	.00	5108.00	.000	.01
18.50	.00	5108.00	.000	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	.00	5108.00	.000	.01
18.83	.00	5108.00	.000	.01
19.00	.00	5108.00	.000	.01
19.16	.00	5108.00	.000	.01
19.33	.00	5108.00	.000	.01
19.50	.00	5108.00	.000	.01
19.66	.00	5108.00	.000	.01
19.83	.00	5108.00	.000	.01

PEAK DISCHARGE = 6.096 CFS - PEAK OCCURS AT HOUR 2.07
MAXIMUM WATER SURFACE ELEVATION = 5110.411
MAXIMUM STORAGE = .5028 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=29 CODE=5

HYDROGRAPH FROM AREA 301.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	1.1	7.999	.0
.167	.0	4.166	.9	8.166	.0
.333	.0	4.333	.8	8.332	.0
.500	.0	4.500	.7	8.499	.0
.667	.0	4.666	.6	8.666	.0
.833	.0	4.833	.5	8.832	.0
1.000	.0	4.999	.4	8.999	.0
1.167	.0	5.166	.4	9.166	.0
1.333	.2	5.333	.3	9.332	.0
1.500	2.3	5.499	.3	9.499	.0
1.667	5.4	5.666	.3	9.666	.0
1.833	5.9	5.833	.2	9.832	.0
2.000	6.1	5.999	.2	9.999	.0
2.166	6.0	6.166	.2	10.166	.0
2.333	5.7	6.333	.2	10.332	.0
2.500	5.3	6.499	.2	10.499	.0
2.666	4.5	6.666	.1	10.666	.0
2.833	3.8	6.833	.1	10.832	.0

DEV10

3.000	3.2	6.999	.1	10.999	.0
14.998	.0	18.998	.0		
3.166	2.7	7.166	.1	11.166	.0
15.165	.0	19.165	.0		
3.333	2.3	7.333	.1	11.332	.0
15.332	.0	19.331	.0		
3.500	1.9	7.499	.1	11.499	.0
15.498	.0	19.498	.0		
3.666	1.6	7.666	.0	11.665	.0
15.665	.0	19.665	.0		
3.833	1.3	7.833	.0	11.832	.0
15.832	.0	19.831	.0		

RUNOFF VOLUME = 1.10678 INCHES = .9226 ACRE-FEET
PEAK DISCHARGE RATE = 6.10 CFS AT 2.066 HOURS BASIN AREA = .0156 SQ. MI.

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*POND 1

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ROUTE RESERVOIR ID=30 HYD=302 INFLOW ID=1 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.01	0.0	5110
2.82	0.21	5111
3.31	0.47	5112
3.73	0.77	5113
4.11	1.12	5114

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5110.00	-.001	.00
.17	.00	5110.00	.000	.01
.33	.00	5110.00	.000	.01
.50	.00	5110.00	.000	.01
.67	.00	5110.00	.000	.01
.83	.00	5110.00	.000	.01
1.00	.00	5110.00	.000	.01
1.17	.00	5110.00	.000	.01
1.33	3.45	5110.06	.012	.17
1.50	13.37	5110.57	.120	1.62
1.67	6.72	5111.06	.227	2.85
1.83	4.40	5111.19	.260	2.91
2.00	3.23	5111.24	.272	2.94
2.17	1.43	5111.21	.265	2.92
2.33	.63	5111.11	.238	2.87
2.50	.37	5110.98	.206	2.77
2.67	.23	5110.83	.175	2.35
2.83	.15	5110.70	.148	1.98
3.00	.09	5110.59	.124	1.67

3.17	.06	5110.50	.104	1.40
3.33	.05	5110.41	.087	1.17
3.50	.04	5110.35	.073	.98
3.67	.03	5110.29	.061	.82
3.83	.03	5110.24	.051	.69
4.00	.03	5110.20	.043	.58
4.17	.04	5110.17	.036	.49
4.33	.04	5110.14	.030	.41
4.50	.04	5110.12	.025	.35
4.67	.04	5110.10	.021	.30
4.83	.05	5110.09	.018	.26
5.00	.05	5110.08	.016	.22
5.17	.06	5110.07	.014	.19
5.33	.07	5110.06	.012	.17
5.50	.07	5110.05	.011	.15
5.67	.08	5110.05	.010	.14
5.83	.08	5110.04	.009	.13
6.00	.09	5110.04	.008	.12
6.17	.04	5110.04	.008	.12
6.33	.01	5110.03	.007	.10
6.50	.00	5110.03	.005	.08
6.67	.00	5110.02	.004	.07
6.83	.00	5110.02	.004	.06
7.00	.00	5110.01	.003	.05
7.17	.00	5110.01	.002	.04
7.33	.00	5110.01	.002	.03
7.50	.00	5110.01	.001	.03
7.67	.00	5110.00	.001	.02
7.83	.00	5110.00	.001	.02
8.00	.00	5110.00	.000	.02
8.17	.00	5110.00	.000	.01
8.33	.00	5110.00	.000	.01
8.50	.00	5110.00	.000	.01
8.67	.00	5110.00	.000	.01
8.83	.00	5110.00	.000	.01
9.00	.00	5110.00	.000	.01
9.17	.00	5110.00	.000	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5110.00	.000	.01
9.50	.00	5110.00	.000	.01
9.67	.00	5110.00	.000	.01
9.83	.00	5110.00	.000	.01
10.00	.00	5110.00	.000	.01
10.17	.00	5110.00	.000	.01
10.33	.00	5110.00	.000	.01
10.50	.00	5110.00	.000	.01
10.67	.00	5110.00	.000	.01
10.83	.00	5110.00	.000	.01
11.00	.00	5110.00	.000	.01
11.17	.00	5110.00	.000	.01
11.33	.00	5110.00	.000	.01
11.50	.00	5110.00	.000	.01
11.67	.00	5110.00	.000	.01
11.83	.00	5110.00	.000	.01
12.00	.00	5110.00	.000	.01
12.17	.00	5110.00	.000	.01
12.33	.00	5110.00	.000	.01
12.50	.00	5110.00	.000	.01
12.67	.00	5110.00	.000	.01
12.83	.00	5110.00	.000	.01
13.00	.00	5110.00	.000	.01
13.17	.00	5110.00	.000	.01
13.33	.00	5110.00	.000	.01

DEV10

13.50	.00	5110.00	.000	.01
13.67	.00	5110.00	.000	.01
13.83	.00	5110.00	.000	.01
14.00	.00	5110.00	.000	.01
14.17	.00	5110.00	.000	.01
14.33	.00	5110.00	.000	.01
14.50	.00	5110.00	.000	.01
14.67	.00	5110.00	.000	.01
14.83	.00	5110.00	.000	.01
15.00	.00	5110.00	.000	.01
15.17	.00	5110.00	.000	.01
15.33	.00	5110.00	.000	.01
15.50	.00	5110.00	.000	.01
15.67	.00	5110.00	.000	.01
15.83	.00	5110.00	.000	.01
16.00	.00	5110.00	.000	.01
16.17	.00	5110.00	.000	.01
16.33	.00	5110.00	.000	.01
16.50	.00	5110.00	.000	.01
16.67	.00	5110.00	.000	.01
16.83	.00	5110.00	.000	.01
17.00	.00	5110.00	.000	.01
17.16	.00	5110.00	.000	.01
17.33	.00	5110.00	.000	.01
17.50	.00	5110.00	.000	.01
17.66	.00	5110.00	.000	.01
17.83	.00	5110.00	.000	.01
18.00	.00	5110.00	.000	.01
18.16	.00	5110.00	.000	.01
18.33	.00	5110.00	.000	.01
18.50	.00	5110.00	.000	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	.00	5110.00	.000	.01
18.83	.00	5110.00	.000	.01
19.00	.00	5110.00	.000	.01
19.16	.00	5110.00	.000	.01
19.33	.00	5110.00	.000	.01
19.50	.00	5110.00	.000	.01
19.66	.00	5110.00	.000	.01
19.83	.00	5110.00	.000	.01

PEAK DISCHARGE = 2.938 CFS - PEAK OCCURS AT HOUR 2.03
MAXIMUM WATER SURFACE ELEVATION = 5111.241
MAXIMUM STORAGE = .2725 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=30 CODE=5

HYDROGRAPH FROM AREA 302.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	.6	7.999	.0
11.999	.0	15.998	.0		
.167	.0	4.166	.5	8.166	.0
12.165	.0	16.165	.0		
.333	.0	4.333	.4	8.332	.0
12.332	.0	16.332	.0		
.500	.0	4.500	.3	8.499	.0
12.499	.0	16.498	.0		
.667	.0	4.666	.3	8.666	.0

DEV10

12.665	.0		16.665	.0			
.833	.0		4.833	.3		8.832	.0
12.832	.0		16.832	.0			
1.000	.0		4.999	.2		8.999	.0
12.999	.0		16.998	.0			
1.167	.0		5.166	.2		9.166	.0
13.165	.0		17.165	.0			
1.333	.2		5.333	.2		9.332	.0
13.332	.0		17.332	.0			
1.500	1.6		5.499	.2		9.499	.0
13.499	.0		17.498	.0			
1.667	2.9		5.666	.1		9.666	.0
13.665	.0		17.665	.0			
1.833	2.9		5.833	.1		9.832	.0
13.832	.0		17.832	.0			
2.000	2.9		5.999	.1		9.999	.0
13.999	.0		17.998	.0			
2.166	2.9		6.166	.1		10.166	.0
14.165	.0		18.165	.0			
2.333	2.9		6.333	.1		10.332	.0
14.332	.0		18.331	.0			
2.500	2.8		6.499	.1		10.499	.0
14.499	.0		18.498	.0			
2.666	2.3		6.666	.1		10.666	.0
14.665	.0		18.665	.0			
2.833	2.0		6.833	.1		10.832	.0
14.832	.0		18.831	.0			
3.000	1.7		6.999	.0		10.999	.0
14.998	.0		18.998	.0			
3.166	1.4		7.166	.0		11.166	.0
15.165	.0		19.165	.0			
3.333	1.2		7.333	.0		11.332	.0
15.332	.0		19.331	.0			
3.500	1.0		7.499	.0		11.499	.0
15.498	.0		19.498	.0			
3.666	.8		7.666	.0		11.665	.0
15.665	.0		19.665	.0			
3.833	.7		7.833	.0		11.832	.0
15.832	.0		19.831	.0			

RUNOFF VOLUME = 1.16169 INCHES = .4833 ACRE-FEET
PEAK DISCHARGE RATE = 2.94 CFS AT 2.033 HOURS BASIN AREA =
.0078 SQ. MI.

****

*S ADD OFFSITE POND AND POND 1

ADD HYD ID=31 HYDNO=303

ID=29 ID=30

PRINT HYD ID=31 CODE=5

HYDROGRAPH FROM AREA 303.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	1.7	7.999	.0
11.999	.0	15.998	.0		
.167	.0	4.166	1.4	8.166	.0

DEV10

12.165	.0		16.165	.0			
.333	.0		4.333	1.2		8.332	.0
12.332	.0		16.332	.0			
.500	.0		4.500	1.0		8.499	.0
12.499	.0		16.498	.0			
.667	.0		4.666	.9		8.666	.0
12.665	.0		16.665	.0			
.833	.0		4.833	.7		8.832	.0
12.832	.0		16.832	.0			
1.000	.0		4.999	.6		8.999	.0
12.999	.0		16.998	.0			
1.167	.0		5.166	.6		9.166	.0
13.165	.0		17.165	.0			
1.333	.3		5.333	.5		9.332	.0
13.332	.0		17.332	.0			
1.500	3.9		5.499	.4		9.499	.0
13.499	.0		17.498	.0			
1.667	8.2		5.666	.4		9.666	.0
13.665	.0		17.665	.0			
1.833	8.8		5.833	.4		9.832	.0
13.832	.0		17.832	.0			
2.000	9.0		5.999	.4		9.999	.0
13.999	.0		17.998	.0			
2.166	9.0		6.166	.3		10.166	.0
14.165	.0		18.165	.0			
2.333	8.6		6.333	.3		10.332	.0
14.332	.0		18.331	.0			
2.500	8.0		6.499	.2		10.499	.0
14.499	.0		18.498	.0			
2.666	6.9		6.666	.2		10.666	.0
14.665	.0		18.665	.0			
2.833	5.8		6.833	.2		10.832	.0
14.832	.0		18.831	.0			
3.000	4.9		6.999	.1		10.999	.0
14.998	.0		18.998	.0			
3.166	4.1		7.166	.1		11.166	.0
15.165	.0		19.165	.0			
3.333	3.5		7.333	.1		11.332	.0
15.332	.0		19.331	.0			
3.500	2.9		7.499	.1		11.499	.0
15.498	.0		19.498	.0			
3.666	2.4		7.666	.1		11.665	.0
15.665	.0		19.665	.0			
3.833	2.0		7.833	.1		11.832	.0
15.832	.0		19.831	.0			

RUNOFF VOLUME = 1.12505 INCHES = 1.4059 ACRE-FEET
PEAK DISCHARGE RATE = 9.03 CFS AT 2.066 HOURS BASIN AREA = .0234 SQ. MI.

****

*POND 3

****

ROUTE RESERVOIR ID=32 HYD=304 INFLOW ID=3 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
2.29	0.0	5111

DEV10

2.89	0.28	5112
3.39	0.62	5113
3.83	1.01	5114
4.22	1.20	5115

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5107.18	-1.069	.00
.17	.00	5111.00	.000	2.29
.33	.00	5111.00	.000	2.29
.50	.00	5111.00	.000	2.29
.67	.00	5111.00	.000	2.29
.83	.00	5111.00	.000	2.29
1.00	.00	5111.00	.000	2.29
1.17	.00	5111.00	.000	2.29
1.33	3.60	5111.00	.000	2.29
1.50	14.05	5111.32	.090	2.48
1.67	7.06	5111.72	.201	2.72
1.83	4.61	5111.86	.240	2.80
2.00	3.38	5111.91	.256	2.84
2.17	1.50	5111.90	.252	2.83
2.33	.67	5111.81	.227	2.78
2.50	.39	5111.70	.196	2.71
2.67	.24	5111.58	.163	2.64
2.83	.15	5111.46	.130	2.57
3.00	.10	5111.35	.097	2.50
3.17	.07	5111.23	.064	2.43
3.33	.05	5111.11	.032	2.36
3.50	.04	5111.00	.001	2.29
3.67	.04	5111.00	.000	2.29
3.83	.03	5111.00	.000	2.29
4.00	.03	5111.00	.000	2.29
4.17	.04	5111.00	.000	2.29
4.33	.04	5111.00	.000	2.29
4.50	.04	5111.00	.000	2.29
4.67	.05	5111.00	.000	2.29
4.83	.05	5111.00	.000	2.29
5.00	.06	5111.00	.000	2.29
5.17	.06	5111.00	.000	2.29
5.33	.07	5111.00	.000	2.29
5.50	.08	5111.00	.000	2.29
5.67	.08	5111.00	.000	2.29
5.83	.09	5111.00	.000	2.29
6.00	.10	5111.00	.000	2.29
6.17	.04	5111.00	.000	2.29
6.33	.01	5111.00	.000	2.29
6.50	.00	5111.00	.000	2.29
6.67	.00	5111.00	.000	2.29
6.83	.00	5111.00	.000	2.29
7.00	.00	5111.00	.000	2.29
7.17	.00	5111.00	.000	2.29
7.33	.00	5111.00	.000	2.29
7.50	.00	5111.00	.000	2.29
7.67	.00	5111.00	.000	2.29
7.83	.00	5111.00	.000	2.29
8.00	.00	5111.00	.000	2.29
8.17	.00	5111.00	.000	2.29
8.33	.00	5111.00	.000	2.29
8.50	.00	5111.00	.000	2.29

8.67	.00	5111.00	.000	2.29
8.83	.00	5111.00	.000	2.29
9.00	.00	5111.00	.000	2.29
9.17	.00	5111.00	.000	2.29

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5111.00	.000	2.29
9.50	.00	5111.00	.000	2.29
9.67	.00	5111.00	.000	2.29
9.83	.00	5111.00	.000	2.29
10.00	.00	5111.00	.000	2.29
10.17	.00	5111.00	.000	2.29
10.33	.00	5111.00	.000	2.29
10.50	.00	5111.00	.000	2.29
10.67	.00	5111.00	.000	2.29
10.83	.00	5111.00	.000	2.29
11.00	.00	5111.00	.000	2.29
11.17	.00	5111.00	.000	2.29
11.33	.00	5111.00	.000	2.29
11.50	.00	5111.00	.000	2.29
11.67	.00	5111.00	.000	2.29
11.83	.00	5111.00	.000	2.29
12.00	.00	5111.00	.000	2.29
12.17	.00	5111.00	.000	2.29
12.33	.00	5111.00	.000	2.29
12.50	.00	5111.00	.000	2.29
12.67	.00	5111.00	.000	2.29
12.83	.00	5111.00	.000	2.29
13.00	.00	5111.00	.000	2.29
13.17	.00	5111.00	.000	2.29
13.33	.00	5111.00	.000	2.29
13.50	.00	5111.00	.000	2.29
13.67	.00	5111.00	.000	2.29
13.83	.00	5111.00	.000	2.29
14.00	.00	5111.00	.000	2.29
14.17	.00	5111.00	.000	2.29
14.33	.00	5111.00	.000	2.29
14.50	.00	5111.00	.000	2.29
14.67	.00	5111.00	.000	2.29
14.83	.00	5111.00	.000	2.29
15.00	.00	5111.00	.000	2.29
15.17	.00	5111.00	.000	2.29
15.33	.00	5111.00	.000	2.29
15.50	.00	5111.00	.000	2.29
15.67	.00	5111.00	.000	2.29
15.83	.00	5111.00	.000	2.29
16.00	.00	5111.00	.000	2.29
16.17	.00	5111.00	.000	2.29
16.33	.00	5111.00	.000	2.29
16.50	.00	5111.00	.000	2.29
16.67	.00	5111.00	.000	2.29
16.83	.00	5111.00	.000	2.29
17.00	.00	5111.00	.000	2.29
17.16	.00	5111.00	.000	2.29
17.33	.00	5111.00	.000	2.29
17.50	.00	5111.00	.000	2.29
17.66	.00	5111.00	.000	2.29
17.83	.00	5111.00	.000	2.29
18.00	.00	5111.00	.000	2.29
18.16	.00	5111.00	.000	2.29
18.33	.00	5111.00	.000	2.29
18.50	.00	5111.00	.000	2.29

TIME INFLOW ELEV VOLUME OUTFLOW

DEV10

(HRS)	(CFS)	(FEET)	(AC-FT)	(CFS)
18.66	.00	5111.00	.000	2.29
18.83	.00	5111.00	.000	2.29
19.00	.00	5111.00	.000	2.29
19.16	.00	5111.00	.000	2.29
19.33	.00	5111.00	.000	2.29
19.50	.00	5111.00	.000	2.29
19.66	.00	5111.00	.000	2.29
19.83	.00	5111.00	.000	2.29

PEAK DISCHARGE = 2.841 CFS - PEAK OCCURS AT HOUR 2.07
MAXIMUM WATER SURFACE ELEVATION = 5111.919
MAXIMUM STORAGE = .2573 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=32 CODE=5

HYDROGRAPH FROM AREA 304.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	2.3	7.999	2.3
.167	2.3	4.166	2.3	8.166	2.3
.333	2.3	4.333	2.3	8.332	2.3
.500	2.3	4.500	2.3	8.499	2.3
.667	2.3	4.666	2.3	8.666	2.3
.833	2.3	4.833	2.3	8.832	2.3
1.000	2.3	4.999	2.3	8.999	2.3
1.167	2.3	5.166	2.3	9.166	2.3
1.333	2.3	5.333	2.3	9.332	2.3
1.500	2.5	5.499	2.3	9.499	2.3
1.667	2.7	5.666	2.3	9.666	2.3
1.833	2.8	5.833	2.3	9.832	2.3
2.000	2.8	5.999	2.3	9.999	2.3
2.166	2.8	6.166	2.3	10.166	2.3
2.333	2.8	6.333	2.3	10.332	2.3
2.500	2.7	6.499	2.3	10.499	2.3
2.666	2.6	6.666	2.3	10.666	2.3
2.833	2.6	6.833	2.3	10.832	2.3
3.000	2.5	6.999	2.3	10.999	2.3
3.166	2.4	7.166	2.3	11.166	2.3
3.333	2.4	7.333	2.3	11.332	2.3

DEV10

3.500	2.3	7.499	2.3	11.499	2.3
15.498	2.3	19.498	2.3		
3.666	2.3	7.666	2.3	11.665	2.3
15.665	2.3	19.665	2.3		
3.833	2.3	7.833	2.3	11.832	2.3
15.832	2.3	19.831	2.3		

RUNOFF VOLUME = 8.63458 INCHES = 3.8360 ACRE-FEET
PEAK DISCHARGE RATE = 2.84 CFS AT 2.066 HOURS BASIN AREA =
.0083 SQ. MI.

****

*S ADD HYD 303 AND POND 3

ADD HYD ID=34 HYDNO=306
ID=31 ID=32

PRINT HYD ID=34 CODE=5

HYDROGRAPH FROM AREA 306.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.0	7.999	2.3
11.999	2.3	15.998	2.3		
.167	2.3	4.166	3.7	8.166	2.3
12.165	2.3	16.165	2.3		
.333	2.3	4.333	3.5	8.332	2.3
12.332	2.3	16.332	2.3		
.500	2.3	4.500	3.3	8.499	2.3
12.499	2.3	16.498	2.3		
.667	2.3	4.666	3.2	8.666	2.3
12.665	2.3	16.665	2.3		
.833	2.3	4.833	3.0	8.832	2.3
12.832	2.3	16.832	2.3		
1.000	2.3	4.999	2.9	8.999	2.3
12.999	2.3	16.998	2.3		
1.167	2.3	5.166	2.8	9.166	2.3
13.165	2.3	17.165	2.3		
1.333	2.6	5.333	2.8	9.332	2.3
13.332	2.3	17.332	2.3		
1.500	6.4	5.499	2.7	9.499	2.3
13.499	2.3	17.498	2.3		
1.667	11.0	5.666	2.7	9.666	2.3
13.665	2.3	17.665	2.3		
1.833	11.6	5.833	2.7	9.832	2.3
13.832	2.3	17.832	2.3		
2.000	11.9	5.999	2.6	9.999	2.3
13.999	2.3	17.998	2.3		
2.166	11.8	6.166	2.6	10.166	2.3
14.165	2.3	18.165	2.3		
2.333	11.4	6.333	2.6	10.332	2.3
14.332	2.3	18.331	2.3		
2.500	10.7	6.499	2.5	10.499	2.3
14.499	2.3	18.498	2.3		
2.666	9.5	6.666	2.5	10.666	2.3
14.665	2.3	18.665	2.3		
2.833	8.4	6.833	2.5	10.832	2.3
14.832	2.3	18.831	2.3		

DEV10

3.000	7.4	6.999	2.4	10.999	2.3		
14.998	2.3	18.998	2.3				
3.166	6.5	7.166	2.4	11.166	2.3		
15.165	2.3	19.165	2.3				
3.333	5.8	7.333	2.4	11.332	2.3		
15.332	2.3	19.331	2.3				
3.500	5.2	7.499	2.4	11.499	2.3		
15.498	2.3	19.498	2.3				
3.666	4.7	7.666	2.4	11.665	2.3		
15.665	2.3	19.665	2.3				
3.833	4.3	7.833	2.3	11.832	2.3		
15.832	2.3	19.831	2.3				

RUNOFF VOLUME = 3.09468 INCHES = 5.2419 ACRE-FEET
PEAK DISCHARGE RATE = 11.88 CFS AT 2.066 HOURS BASIN AREA =
.0318 SQ. MI.

****

*S ADD B1 AND B2

ADD HYD ID=36 HYDNO=308

ID=11 ID=12

PRINT HYD ID=36 CODE=5

HYDROGRAPH FROM AREA 308.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	1.1	2.666	.1
4.000	.0	5.333	.0		
.167	.0	1.500	4.5	2.833	.0
4.166	.0	5.499	.0		
.333	.0	1.667	2.3	3.000	.0
4.333	.0	5.666	.0		
.500	.0	1.833	1.5	3.166	.0
4.500	.0	5.833	.0		
.667	.0	2.000	1.1	3.333	.0
4.666	.0	5.999	.0		
.833	.0	2.166	.5	3.500	.0
4.833	.0	6.166	.0		
1.000	.0	2.333	.2	3.666	.0
4.999	.0	6.333	.0		
1.167	.0	2.500	.1	3.833	.0
5.166	.0				

RUNOFF VOLUME = 1.14426 INCHES = .1574 ACRE-FEET
PEAK DISCHARGE RATE = 4.49 CFS AT 1.500 HOURS BASIN AREA =
.0026 SQ. MI.

****

*S ADD HYD 308 AND B3

ADD HYD ID=37 HYDNO=309

ID=36 ID=13

DEV10

PRINT HYD ID=37 CODE=5

HYDROGRAPH FROM AREA 309.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
4.000	.0	5.333	1.9	2.666	.1
4.166	.0	5.499	7.7	2.833	.1
4.333	.0	5.666	3.8	3.000	.0
4.500	.0	5.833	2.5	3.166	.0
4.666	.0	5.999	1.8	3.333	.0
4.833	.0	6.166	.8	3.500	.0
4.999	.0	6.333	.4	3.666	.0
5.166	.0	6.499	.2	3.833	.0

RUNOFF VOLUME = 1.12321 INCHES = .2684 ACRE-FEET
PEAK DISCHARGE RATE = 7.66 CFS AT 1.500 HOURS BASIN AREA = .0045 SQ. MI.

****

*S ADD B5 AND B6

ADD HYD ID=38 HYDNO=310

ID=15 ID=16

PRINT HYD ID=38 CODE=5

HYDROGRAPH FROM AREA 310.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
4.500	.0	5.999	19.5	3.000	.2
4.666	.0	6.166	11.4	3.166	.1
4.833	.0	6.333	7.1	3.333	.1
4.999	.0	6.499	5.2	3.500	.1
5.166	.0	6.666	2.6	3.666	.1
5.333	.0	6.833	1.2	3.833	.1
5.499	.0	2.500	.7	4.000	.1
5.666	.0	2.666	.4	4.166	.1

DEV10

1.333	4.3	2.833	.3	4.333	.1	5.833	.1

RUNOFF VOLUME = 1.12412 INCHES = .7386 ACRE-FEET
PEAK DISCHARGE RATE = 19.60 CFS AT 1.533 HOURS BASIN AREA = .0123 SQ. MI.

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*S ADD HYD 309 AND HYD 310

ADD HYD ID=39 HYDNO=311

ID=37 ID=38

PRINT HYD ID=39 CODE=5

HYDROGRAPH FROM AREA 311.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	27.2	3.000	.2
.167	.0	1.667	15.3	3.166	.1
.333	.0	1.833	9.6	3.333	.1
.500	.0	2.000	7.0	3.500	.1
.667	.0	2.166	3.4	3.666	.1
.833	.0	2.333	1.5	3.833	.1
1.000	.0	2.500	.9	4.000	.1
1.167	.0	2.666	.5	4.166	.1
1.333	6.2	2.833	.3	4.333	.1
4.500	.1	5.999	.2	5.833	.2
4.666	.1	6.166	.1		
4.833	.1	6.333	.0		
4.999	.1	6.499	.0		
5.166	.1	6.666	.0		
5.333	.1	6.833	.0		
5.499	.2				
5.666	.2				

RUNOFF VOLUME = 1.12388 INCHES = 1.0070 ACRE-FEET
PEAK DISCHARGE RATE = 27.17 CFS AT 1.500 HOURS BASIN AREA = .0168 SQ. MI.

****

*POND 5

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ROUTE RESERVOIR ID=40 HYD=312 INFLOW ID=39 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.00	0.00	5108
5.44	0.13	5109

6.66	0.29	5110
7.69	0.48	5111
8.60	0.70	5112
9.42	0.96	5113
9.80	1.10	5113.5

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5108.00	.000	.00
.17	.00	5108.00	.000	.00
.33	.00	5108.00	.000	.00
.50	.00	5108.00	.000	.00
.67	.00	5108.00	.000	.00
.83	.00	5108.00	.000	.00
1.00	.00	5108.00	.000	.00
1.17	.00	5108.00	.000	.00
1.33	6.19	5108.15	.020	.82
1.50	27.17	5109.45	.202	5.99
1.67	15.28	5110.65	.413	7.33
1.83	9.56	5110.96	.473	7.65
2.00	7.02	5111.00	.480	7.69
2.17	3.43	5110.84	.450	7.53
2.33	1.51	5110.47	.380	7.15
2.50	.89	5110.06	.301	6.72
2.67	.54	5109.57	.222	6.14
2.83	.34	5109.11	.147	5.57
3.00	.22	5108.66	.086	3.60
3.17	.14	5108.39	.050	2.10
3.33	.10	5108.23	.029	1.23
3.50	.08	5108.13	.017	.73
3.67	.07	5108.08	.011	.45
3.83	.07	5108.05	.007	.28
4.00	.07	5108.03	.005	.19
4.17	.07	5108.03	.003	.14
4.33	.08	5108.02	.003	.11
4.50	.09	5108.02	.002	.10
4.67	.09	5108.02	.002	.09
4.83	.10	5108.02	.002	.09
5.00	.11	5108.02	.002	.10
5.17	.12	5108.02	.003	.11
5.33	.14	5108.02	.003	.12
5.50	.15	5108.02	.003	.13
5.67	.16	5108.03	.003	.14
5.83	.18	5108.03	.004	.15
6.00	.19	5108.03	.004	.17
6.17	.09	5108.03	.004	.16
6.33	.02	5108.02	.003	.11
6.50	.01	5108.01	.002	.07
6.67	.00	5108.01	.001	.04
6.83	.00	5108.00	.001	.02
7.00	.00	5108.00	.000	.01
7.17	.00	5108.00	.000	.01
7.33	.00	5108.00	.000	.00

PEAK DISCHARGE = 7.696 CFS - PEAK OCCURS AT HOUR 1.93
MAXIMUM WATER SURFACE ELEVATION = 5111.006
MAXIMUM STORAGE = .4814 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=40 CODE=5

HYDROGRAPH FROM AREA 312.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.667	7.3	3.333	1.2
.167	.0	1.833	7.7	3.500	.7
.333	.0	2.000	7.7	3.666	.4
.500	.0	2.166	7.5	3.833	.3
.667	.0	2.333	7.1	4.000	.2
.833	.0	2.500	6.7	4.166	.1
1.000	.0	2.666	6.1	4.333	.1
1.167	.0	2.833	5.6	4.500	.1
1.333	.8	3.000	3.6	4.666	.1
1.500	6.0	3.166	2.1	4.833	.1

RUNOFF VOLUME = 1.12388 INCHES = 1.0070 ACRE-FEET
PEAK DISCHARGE RATE = 7.70 CFS AT 1.933 HOURS BASIN AREA = .0168 SQ. MI.

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*S ADD HYD 306 AND POND 5

ADD HYD ID=42 HYDNO=320

ID=34 ID=40

PRINT HYD ID=42 CODE=5

HYDROGRAPH FROM AREA 320.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.2	7.999	2.3
.167	2.3	4.166	3.9	8.166	2.3
.333	2.3	4.333	3.6	8.332	2.3
.500	2.3	4.500	3.4	8.499	2.3
.667	2.3	4.666	3.2	8.666	2.3
.833	2.3	4.833	3.1	8.832	2.3

DEV10

1.000	2.3	4.999	3.0	8.999	2.3	12.999	2.3
16.998	2.3						
1.167	2.3	5.166	3.0	9.166	2.3	13.165	2.3
17.165	2.3						
1.333	3.4	5.333	2.9	9.332	2.3	13.332	2.3
17.332	2.3						
1.500	12.4	5.499	2.9	9.499	2.3	13.499	2.3
17.498	2.3						
1.667	18.3	5.666	2.8	9.666	2.3	13.665	2.3
17.665	2.3						
1.833	19.3	5.833	2.8	9.832	2.3	13.832	2.3
17.832	2.3						
2.000	19.6	5.999	2.8	9.999	2.3	13.999	2.3
17.998	2.3						
2.166	19.3	6.166	2.8	10.166	2.3	14.165	2.3
18.165	2.3						
2.333	18.5	6.333	2.7	10.332	2.3	14.332	2.3
18.331	2.3						
2.500	17.5	6.499	2.6	10.499	2.3	14.499	2.3
18.498	2.3						
2.666	15.6	6.666	2.5	10.666	2.3	14.665	2.3
18.665	2.3						
2.833	13.9	6.833	2.5	10.832	2.3	14.832	2.3
18.831	2.3						
3.000	11.0	6.999	2.4	10.999	2.3	14.998	2.3
18.998	2.3						
3.166	8.6	7.166	2.4	11.166	2.3	15.165	2.3
19.165	2.3						
3.333	7.0	7.333	2.4	11.332	2.3	15.332	2.3
19.331	2.3						
3.500	5.9	7.499	2.4	11.499	2.3	15.498	2.3
19.498	2.3						
3.666	5.2	7.666	2.4	11.665	2.3	15.665	2.3
19.665	2.3						
3.833	4.6	7.833	2.3	11.832	2.3	15.832	2.3
19.831	2.3						

RUNOFF VOLUME = 2.41285 INCHES = 6.2489 ACRE-FEET
PEAK DISCHARGE RATE = 19.55 CFS AT 2.000 HOURS BASIN AREA = .0486 SQ. MI.

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*S ADD HYD 320 AND B7

ADD HYD ID=43 HYDNO=321

ID=42 ID=17

PRINT HYD ID=43 CODE=5

HYDROGRAPH FROM AREA 321.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.2	7.999	2.3
11.999	2.3	15.998	2.3		
.167	2.3	4.166	3.9	8.166	2.3
12.165	2.3	16.165	2.3		
.333	2.3	4.333	3.6	8.332	2.3
12.332	2.3	16.332	2.3		

DEV10

.500	2.3	4.500	3.4	8.499	2.3	12.499	2.3
.667	2.3	4.666	3.3	8.666	2.3	12.665	2.3
.833	2.3	4.833	3.1	8.832	2.3	12.832	2.3
1.000	2.3	4.999	3.0	8.999	2.3	12.999	2.3
1.167	2.3	5.166	3.0	9.166	2.3	13.165	2.3
1.333	4.2	5.333	2.9	9.332	2.3	13.332	2.3
1.500	15.5	5.499	2.9	9.499	2.3	13.499	2.3
1.667	19.8	5.666	2.9	9.666	2.3	13.665	2.3
1.833	20.3	5.833	2.8	9.832	2.3	13.832	2.3
2.000	20.3	5.999	2.8	9.999	2.3	13.999	2.3
2.166	19.6	6.166	2.8	10.166	2.3	14.165	2.3
2.333	18.7	6.333	2.7	10.332	2.3	14.332	2.3
2.500	17.5	6.499	2.6	10.499	2.3	14.499	2.3
2.666	15.7	6.666	2.5	10.666	2.3	14.665	2.3
2.833	14.0	6.833	2.5	10.832	2.3	14.832	2.3
3.000	11.0	6.999	2.4	10.999	2.3	14.998	2.3
3.166	8.7	7.166	2.4	11.166	2.3	15.165	2.3
3.333	7.1	7.333	2.4	11.332	2.3	15.332	2.3
3.500	5.9	7.499	2.4	11.499	2.3	15.498	2.3
3.666	5.2	7.666	2.4	11.665	2.3	15.665	2.3
3.833	4.6	7.833	2.3	11.832	2.3	15.832	2.3

RUNOFF VOLUME = 2.36894 INCHES = 6.3576 ACRE-FEET
PEAK DISCHARGE RATE = 20.34 CFS AT 1.900 HOURS BASIN AREA = .0503 SQ. MI.

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*S ADD HYD 321 AND B8

ADD HYD ID=44 HYDNO=322

ID=43 ID=18

PRINT HYD ID=44 CODE=5

HYDROGRAPH FROM AREA 322.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS

DEV10

.000	.0	4.000	4.2	7.999	2.3	11.999	2.3
.167	2.3	4.166	3.9	8.166	2.3	12.165	2.3
.333	2.3	4.333	3.6	8.332	2.3	12.332	2.3
.500	2.3	4.500	3.4	8.499	2.3	12.499	2.3
.667	2.3	4.666	3.3	8.666	2.3	12.665	2.3
.833	2.3	4.833	3.2	8.832	2.3	12.832	2.3
1.000	2.3	4.999	3.1	8.999	2.3	12.999	2.3
1.167	2.3	5.166	3.0	9.166	2.3	13.165	2.3
1.333	5.3	5.333	2.9	9.332	2.3	13.332	2.3
1.500	19.9	5.499	2.9	9.499	2.3	13.499	2.3
1.667	22.0	5.666	2.9	9.666	2.3	13.665	2.3
1.833	21.7	5.833	2.9	9.832	2.3	13.832	2.3
2.000	21.3	5.999	2.9	9.999	2.3	13.999	2.3
2.166	20.1	6.166	2.8	10.166	2.3	14.165	2.3
2.333	18.9	6.333	2.7	10.332	2.3	14.332	2.3
2.500	17.7	6.499	2.6	10.499	2.3	14.499	2.3
2.666	15.7	6.666	2.5	10.666	2.3	14.665	2.3
2.833	14.0	6.833	2.5	10.832	2.3	14.832	2.3
3.000	11.0	6.999	2.4	10.999	2.3	14.998	2.3
3.166	8.7	7.166	2.4	11.166	2.3	15.165	2.3
3.333	7.1	7.333	2.4	11.332	2.3	15.332	2.3
3.500	5.9	7.499	2.4	11.499	2.3	15.498	2.3
3.666	5.2	7.666	2.4	11.665	2.3	15.665	2.3
3.833	4.6	7.833	2.3	11.832	2.3	15.832	2.3

RUNOFF VOLUME = 2.31183 INCHES = 6.5113 ACRE-FEET
PEAK DISCHARGE RATE = 22.05 CFS AT 1.667 HOURS BASIN AREA = .0528 SQ. MI.

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*S ADD HYD 322 AND B9

ADD HYD ID=45 HYDNO=323

ID=44 ID=19

PRINT HYD ID=45 CODE=5

DEV10

HYDROGRAPH FROM AREA 323.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.2	7.999	2.3
.167	2.3	4.166	3.9	8.166	2.3
.333	2.3	4.333	3.7	8.332	2.3
.500	2.3	4.500	3.5	8.499	2.3
.667	2.3	4.666	3.3	8.666	2.3
.833	2.3	4.833	3.2	8.832	2.3
1.000	2.3	4.999	3.1	8.999	2.3
1.167	2.3	5.166	3.0	9.166	2.3
1.333	8.5	5.333	3.0	9.332	2.3
1.500	32.5	5.499	3.0	9.499	2.3
1.667	28.4	5.666	2.9	9.666	2.3
1.833	25.8	5.833	2.9	9.832	2.3
2.000	24.3	5.999	2.9	9.999	2.3
2.166	21.4	6.166	2.8	10.166	2.3
2.333	19.5	6.333	2.7	10.332	2.3
2.500	18.0	6.499	2.6	10.499	2.3
2.666	16.0	6.666	2.5	10.666	2.3
2.833	14.2	6.833	2.5	10.832	2.3
3.000	11.1	6.999	2.4	10.999	2.3
3.166	8.7	7.166	2.4	11.166	2.3
3.333	7.1	7.333	2.4	11.332	2.3
3.500	6.0	7.499	2.4	11.499	2.3
3.666	5.2	7.666	2.4	11.665	2.3
3.833	4.6	7.833	2.3	11.832	2.3

RUNOFF VOLUME = 2.17108 INCHES = 6.9543 ACRE-FEET
PEAK DISCHARGE RATE = 33.21 CFS AT 1.533 HOURS BASIN AREA = .0601 SQ. MI.

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*POND 6 (UNDERGROUND)

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DEV10

ROUTE RESERVOIR ID=46 HYD=324 INFLOW ID=45 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.01	0.0	5101
12.23	0.16	5103
20.70	0.40	5105
26.59	0.63	5107
29.10	0.72	5108
31.40	0.74	5108.5

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5101.00	.000	.00
.17	2.31	5101.23	.018	1.42
.33	2.31	5101.33	.026	2.00
.50	2.31	5101.36	.029	2.20
.67	2.31	5101.37	.030	2.27
.83	2.31	5101.37	.030	2.30
1.00	2.31	5101.38	.030	2.31
1.17	2.31	5101.38	.030	2.31
1.33	8.54	5101.60	.048	3.67
1.50	32.48	5103.44	.213	14.11
1.67	28.37	5104.97	.397	20.58
1.83	25.83	5105.60	.469	22.46
2.00	24.34	5105.86	.498	23.22
2.17	21.44	5105.84	.496	23.17
2.33	19.47	5105.55	.463	22.31
2.50	18.00	5105.18	.421	21.24
2.67	15.96	5104.77	.372	19.71
2.83	14.15	5104.33	.320	17.88
3.00	11.13	5103.86	.263	15.85
3.17	8.73	5103.30	.196	13.51
3.33	7.11	5102.71	.137	10.46
3.50	5.97	5102.28	.102	7.82
3.67	5.21	5102.03	.082	6.31
3.83	4.65	5101.88	.070	5.37
4.00	4.23	5101.77	.062	4.73
4.17	3.91	5101.70	.056	4.28
4.33	3.66	5101.64	.051	3.94
4.50	3.47	5101.60	.048	3.68
4.67	3.31	5101.57	.045	3.48
4.83	3.20	5101.54	.043	3.33
5.00	3.11	5101.52	.042	3.21
5.17	3.04	5101.51	.041	3.12
5.33	3.00	5101.50	.040	3.05
5.50	2.97	5101.49	.039	3.00
5.67	2.95	5101.48	.039	2.97
5.83	2.94	5101.48	.039	2.96
6.00	2.95	5101.48	.038	2.95
6.17	2.84	5101.48	.038	2.92
6.33	2.70	5101.46	.037	2.81
6.50	2.61	5101.44	.035	2.71
6.67	2.54	5101.43	.034	2.61

DEV10

6.83	2.49	5101.42	.033	2.54
7.00	2.45	5101.41	.032	2.49
7.17	2.42	5101.40	.032	2.45
7.33	2.39	5101.39	.032	2.42
7.50	2.37	5101.39	.031	2.39
7.67	2.36	5101.39	.031	2.38
7.83	2.35	5101.38	.031	2.36
8.00	2.34	5101.38	.031	2.35
8.17	2.33	5101.38	.030	2.34
8.33	2.32	5101.38	.030	2.33
8.50	2.32	5101.38	.030	2.32
8.67	2.31	5101.38	.030	2.32
8.83	2.31	5101.38	.030	2.31
9.00	2.31	5101.38	.030	2.31
9.17	2.31	5101.38	.030	2.31

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	2.31	5101.38	.030	2.31
9.50	2.31	5101.38	.030	2.31
9.67	2.31	5101.38	.030	2.31
9.83	2.31	5101.38	.030	2.31
10.00	2.31	5101.38	.030	2.31
10.17	2.31	5101.38	.030	2.31
10.33	2.31	5101.38	.030	2.31
10.50	2.31	5101.38	.030	2.31
10.67	2.31	5101.38	.030	2.31
10.83	2.31	5101.38	.030	2.31
11.00	2.31	5101.38	.030	2.31
11.17	2.31	5101.38	.030	2.31
11.33	2.31	5101.38	.030	2.31
11.50	2.31	5101.38	.030	2.31
11.67	2.31	5101.38	.030	2.31
11.83	2.31	5101.38	.030	2.31
12.00	2.31	5101.38	.030	2.31
12.17	2.31	5101.38	.030	2.31
12.33	2.31	5101.38	.030	2.31
12.50	2.31	5101.38	.030	2.31
12.67	2.31	5101.38	.030	2.31
12.83	2.31	5101.38	.030	2.31
13.00	2.31	5101.38	.030	2.31
13.17	2.31	5101.38	.030	2.31
13.33	2.31	5101.38	.030	2.31
13.50	2.31	5101.38	.030	2.31
13.67	2.31	5101.38	.030	2.31
13.83	2.31	5101.38	.030	2.31
14.00	2.31	5101.38	.030	2.31
14.17	2.31	5101.38	.030	2.31
14.33	2.31	5101.38	.030	2.31
14.50	2.31	5101.38	.030	2.31
14.67	2.31	5101.38	.030	2.31
14.83	2.31	5101.38	.030	2.31
15.00	2.31	5101.38	.030	2.31
15.17	2.31	5101.38	.030	2.31
15.33	2.31	5101.38	.030	2.31
15.50	2.31	5101.38	.030	2.31
15.67	2.31	5101.38	.030	2.31
15.83	2.31	5101.38	.030	2.31
16.00	2.31	5101.38	.030	2.31
16.17	2.31	5101.38	.030	2.31
16.33	2.31	5101.38	.030	2.31
16.50	2.31	5101.38	.030	2.31
16.67	2.31	5101.38	.030	2.31
16.83	2.31	5101.38	.030	2.31
17.00	2.31	5101.38	.030	2.31

DEV10

17.16	2.31	5101.38	.030	2.31
17.33	2.31	5101.38	.030	2.31
17.50	2.31	5101.38	.030	2.31
17.66	2.31	5101.38	.030	2.31
17.83	2.31	5101.38	.030	2.31
18.00	2.31	5101.38	.030	2.31
18.16	2.31	5101.38	.030	2.31
18.33	2.31	5101.38	.030	2.31
18.50	2.31	5101.38	.030	2.31

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	2.31	5101.38	.030	2.31
18.83	2.31	5101.38	.030	2.31
19.00	2.31	5101.38	.030	2.31
19.16	2.31	5101.38	.030	2.31
19.33	2.31	5101.38	.030	2.31
19.50	2.31	5101.38	.030	2.31
19.66	2.31	5101.38	.030	2.31
19.83	2.31	5101.38	.030	2.31

PEAK DISCHARGE = 23.323 CFS - PEAK OCCURS AT HOUR 2.07
MAXIMUM WATER SURFACE ELEVATION = 5105.891
MAXIMUM STORAGE = .5024 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=46 CODE=5

HYDROGRAPH FROM AREA 324.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.7	7.999	2.3
11.999	2.3	15.998	2.3		
.167	1.4	4.166	4.3	8.166	2.3
12.165	2.3	16.165	2.3		
.333	2.0	4.333	3.9	8.332	2.3
12.332	2.3	16.332	2.3		
.500	2.2	4.500	3.7	8.499	2.3
12.499	2.3	16.498	2.3		
.667	2.3	4.666	3.5	8.666	2.3
12.665	2.3	16.665	2.3		
.833	2.3	4.833	3.3	8.832	2.3
12.832	2.3	16.832	2.3		
1.000	2.3	4.999	3.2	8.999	2.3
12.999	2.3	16.998	2.3		
1.167	2.3	5.166	3.1	9.166	2.3
13.165	2.3	17.165	2.3		
1.333	3.7	5.333	3.1	9.332	2.3
13.332	2.3	17.332	2.3		
1.500	14.1	5.499	3.0	9.499	2.3
13.499	2.3	17.498	2.3		
1.667	20.6	5.666	3.0	9.666	2.3
13.665	2.3	17.665	2.3		
1.833	22.5	5.833	3.0	9.832	2.3
13.832	2.3	17.832	2.3		
2.000	23.2	5.999	2.9	9.999	2.3
13.999	2.3	17.998	2.3		
2.166	23.2	6.166	2.9	10.166	2.3
14.165	2.3	18.165	2.3		
2.333	22.3	6.333	2.8	10.332	2.3
14.332	2.3	18.331	2.3		
2.500	21.2	6.499	2.7	10.499	2.3

DEV10

14.499	2.3	18.498	2.3				
2.666	19.7	6.666	2.6	10.666	2.3		
14.665	2.3	18.665	2.3				
2.833	17.9	6.833	2.5	10.832	2.3		
14.832	2.3	18.831	2.3				
3.000	15.9	6.999	2.5	10.999	2.3		
14.998	2.3	18.998	2.3				
3.166	13.5	7.166	2.5	11.166	2.3		
15.165	2.3	19.165	2.3				
3.333	10.5	7.333	2.4	11.332	2.3		
15.332	2.3	19.331	2.3				
3.500	7.8	7.499	2.4	11.499	2.3		
15.498	2.3	19.498	2.3				
3.666	6.3	7.666	2.4	11.665	2.3		
15.665	2.3	19.665	2.3				
3.833	5.4	7.833	2.4	11.832	2.3		
15.832	2.3	19.831	2.3				

RUNOFF VOLUME = 2.16167 INCHES = 6.9242 ACRE-FEET
PEAK DISCHARGE RATE = 23.32 CFS AT 2.066 HOURS BASIN AREA = .0601 SQ. MI.

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*POND 7 (UNDERGROUND)

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ROUTE RESERVOIR ID=48 HYD=325 INFLOW ID=20 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.00	0.00	5104.5
1.47	0.11	5106.5
2.16	0.29	5108.5
2.67	0.46	5110.5
3.00	0.53	5112.0

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5104.50	.000	.00
.17	.00	5104.50	.000	.00
.33	.00	5104.50	.000	.00
.50	.00	5104.50	.000	.00
.67	.00	5104.50	.000	.00
.83	.00	5104.50	.000	.00
1.00	.00	5104.50	.000	.00
1.17	.00	5104.50	.000	.00
1.33	3.31	5104.71	.012	.15
1.50	12.83	5106.56	.116	1.49
1.67	6.44	5107.79	.226	1.91
1.83	4.22	5108.26	.269	2.08
2.00	3.10	5108.49	.289	2.16
2.17	1.37	5108.52	.292	2.17

DEV10

2.33	.61	5108.33	.275	2.10
2.50	.36	5108.09	.253	2.02
2.67	.22	5107.83	.230	1.93
2.83	.14	5107.57	.206	1.84
3.00	.09	5107.31	.183	1.75
3.17	.06	5107.06	.160	1.66
3.33	.04	5106.82	.139	1.58
3.50	.04	5106.59	.118	1.50
3.67	.03	5106.30	.099	1.32
3.83	.03	5106.00	.083	1.10
4.00	.03	5105.76	.069	.92
4.17	.03	5105.55	.058	.77
4.33	.04	5105.38	.049	.65
4.50	.04	5105.24	.041	.55
4.67	.04	5105.13	.035	.46
4.83	.05	5105.03	.029	.39
5.00	.05	5104.95	.025	.33
5.17	.06	5104.89	.021	.29
5.33	.06	5104.84	.019	.25
5.50	.07	5104.80	.016	.22
5.67	.07	5104.76	.014	.19
5.83	.08	5104.74	.013	.17
6.00	.09	5104.72	.012	.16
6.17	.04	5104.70	.011	.14
6.33	.01	5104.67	.009	.12
6.50	.00	5104.64	.008	.10
6.67	.00	5104.62	.006	.09
6.83	.00	5104.60	.005	.07
7.00	.00	5104.58	.004	.06
7.17	.00	5104.57	.004	.05
7.33	.00	5104.56	.003	.04
7.50	.00	5104.55	.003	.03
7.67	.00	5104.54	.002	.03
7.83	.00	5104.53	.002	.02
8.00	.00	5104.53	.001	.02
8.17	.00	5104.52	.001	.02
8.33	.00	5104.52	.001	.01
8.50	.00	5104.52	.001	.01
8.67	.00	5104.51	.001	.01
8.83	.00	5104.51	.001	.01
9.00	.00	5104.51	.000	.01
9.17	.00	5104.51	.000	.01
9.33	.00	5104.51	.000	.00

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)

PEAK DISCHARGE = 2.172 CFS - PEAK OCCURS AT HOUR 2.10
MAXIMUM WATER SURFACE ELEVATION = 5108.548
MAXIMUM STORAGE = .2941 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=48 CODE=5

HYDROGRAPH FROM AREA 325.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	2.166	2.2	4.333	.6
.167	.0	2.333	2.1	4.500	.5
.333	.0	2.500	2.0	4.666	.5
6.499	.1	8.666	.0		
6.666	.1	8.832	.0		

DEV10

6.833	.1	.500	.0	8.999	.0	2.666	1.9
6.999	.1	.667	.0	9.166	.0	2.833	1.8
7.166	.1	.833	.0	9.332	.0	3.000	1.7
7.333	.0	1.000	.0	9.499	.0	3.166	1.7
7.499	.0	1.167	.0	9.666	.0	3.333	1.6
7.666	.0	1.333	.2	9.832	.0	3.500	1.5
7.833	.0	1.500	1.5	9.999	.0	3.666	1.3
7.999	.0	1.667	1.9	10.166	.0	3.833	1.1
8.166	.0	1.833	2.1	10.332	.0	4.000	.9
8.332	.0	2.000	2.2	10.499	.0	4.166	.8
8.499	.0			10.666	.0		

4.833	.4		
4.999	.3		
5.166	.3		
5.333	.2		
5.499	.2		
5.666	.2		
5.833	.2		
5.999	.2		
6.166	.1		
6.333	.1		

RUNOFF VOLUME = 1.13646 INCHES = .4534 ACRE-FEET
PEAK DISCHARGE RATE = 2.17 CFS AT 2.100 HOURS BASIN AREA = .0075 SQ. MI.

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*S ADD A2 AND OS3

ADD HYD ID=49 HYDNO=326

ID=2 ID=25

PRINT HYD ID=49 CODE=5

HYDROGRAPH FROM AREA 326.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	15.7	3.000	.1
.167	.0	1.667	7.9	3.166	.1
.333	.0	1.833	5.1	3.333	.1
.500	.0	2.000	3.7	3.500	.0
.667	.0	2.166	1.7	3.666	.0
.833	.0	2.333	.7	3.833	.0
1.000	.0	2.500	.4	4.000	.0
1.167	.0	2.666	.3	4.166	.0
1.333	4.0	2.833	.2	4.333	.0

TIME HRS	FLOW CFS
4.500	.0
4.666	.1
4.833	.1
4.999	.1
5.166	.1
5.333	.1
5.499	.1
5.666	.1
5.833	.1
5.999	.1

RUNOFF VOLUME = 1.10576 INCHES = .5508 ACRE-FEET
PEAK DISCHARGE RATE = 15.66 CFS AT 1.500 HOURS BASIN AREA =

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*POND 2

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ROUTE RESERVOIR ID=50 HYD=400 INFLOW ID=49 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
1.94	0.0	5111
2.44	0.26	5112
2.86	0.57	5113
3.22	0.93	5114

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5107.12	-1.009	.00
.17	.00	5111.00	.000	1.94
.33	.00	5111.00	.000	1.94
.50	.00	5111.00	.000	1.94
.67	.00	5111.00	.000	1.94
.83	.00	5111.00	.000	1.94
1.00	.00	5111.00	.000	1.94
1.17	.00	5111.00	.000	1.94
1.33	3.98	5111.00	.000	1.94
1.50	15.66	5111.43	.111	2.15
1.67	7.87	5111.94	.243	2.41
1.83	5.11	5112.11	.295	2.49
2.00	3.74	5112.20	.321	2.52
2.17	1.66	5112.21	.325	2.53
2.33	.74	5112.15	.305	2.50
2.50	.43	5112.06	.279	2.47
2.67	.26	5111.96	.250	2.42
2.83	.16	5111.85	.220	2.36
3.00	.11	5111.73	.190	2.30
3.17	.07	5111.61	.160	2.25
3.33	.05	5111.50	.130	2.19
3.50	.04	5111.39	.101	2.13
3.67	.04	5111.28	.072	2.08
3.83	.04	5111.17	.045	2.03
4.00	.04	5111.07	.018	1.97
4.17	.04	5111.00	.000	1.94
4.33	.04	5111.00	.000	1.94
4.50	.05	5111.00	.000	1.94
4.67	.05	5111.00	.000	1.94
4.83	.06	5111.00	.000	1.94
5.00	.06	5111.00	.000	1.94
5.17	.07	5111.00	.000	1.94
5.33	.08	5111.00	.000	1.94
5.50	.08	5111.00	.000	1.94
5.67	.09	5111.00	.000	1.94
5.83	.10	5111.00	.000	1.94

6.00	.11	5111.00	.000	1.94
6.17	.04	5111.00	.000	1.94
6.33	.01	5111.00	.000	1.94
6.50	.01	5111.00	.000	1.94
6.67	.00	5111.00	.000	1.94
6.83	.00	5111.00	.000	1.94
7.00	.00	5111.00	.000	1.94
7.17	.00	5111.00	.000	1.94
7.33	.00	5111.00	.000	1.94
7.50	.00	5111.00	.000	1.94
7.67	.00	5111.00	.000	1.94
7.83	.00	5111.00	.000	1.94
8.00	.00	5111.00	.000	1.94
8.17	.00	5111.00	.000	1.94
8.33	.00	5111.00	.000	1.94
8.50	.00	5111.00	.000	1.94
8.67	.00	5111.00	.000	1.94
8.83	.00	5111.00	.000	1.94
9.00	.00	5111.00	.000	1.94
9.17	.00	5111.00	.000	1.94

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5111.00	.000	1.94
9.50	.00	5111.00	.000	1.94
9.67	.00	5111.00	.000	1.94
9.83	.00	5111.00	.000	1.94
10.00	.00	5111.00	.000	1.94
10.17	.00	5111.00	.000	1.94
10.33	.00	5111.00	.000	1.94
10.50	.00	5111.00	.000	1.94
10.67	.00	5111.00	.000	1.94
10.83	.00	5111.00	.000	1.94
11.00	.00	5111.00	.000	1.94
11.17	.00	5111.00	.000	1.94
11.33	.00	5111.00	.000	1.94
11.50	.00	5111.00	.000	1.94
11.67	.00	5111.00	.000	1.94
11.83	.00	5111.00	.000	1.94
12.00	.00	5111.00	.000	1.94
12.17	.00	5111.00	.000	1.94
12.33	.00	5111.00	.000	1.94
12.50	.00	5111.00	.000	1.94
12.67	.00	5111.00	.000	1.94
12.83	.00	5111.00	.000	1.94
13.00	.00	5111.00	.000	1.94
13.17	.00	5111.00	.000	1.94
13.33	.00	5111.00	.000	1.94
13.50	.00	5111.00	.000	1.94
13.67	.00	5111.00	.000	1.94
13.83	.00	5111.00	.000	1.94
14.00	.00	5111.00	.000	1.94
14.17	.00	5111.00	.000	1.94
14.33	.00	5111.00	.000	1.94
14.50	.00	5111.00	.000	1.94
14.67	.00	5111.00	.000	1.94
14.83	.00	5111.00	.000	1.94
15.00	.00	5111.00	.000	1.94
15.17	.00	5111.00	.000	1.94
15.33	.00	5111.00	.000	1.94
15.50	.00	5111.00	.000	1.94
15.67	.00	5111.00	.000	1.94
15.83	.00	5111.00	.000	1.94
16.00	.00	5111.00	.000	1.94
16.17	.00	5111.00	.000	1.94

DEV10

16.33	.00	5111.00	.000	1.94
16.50	.00	5111.00	.000	1.94
16.67	.00	5111.00	.000	1.94
16.83	.00	5111.00	.000	1.94
17.00	.00	5111.00	.000	1.94
17.16	.00	5111.00	.000	1.94
17.33	.00	5111.00	.000	1.94
17.50	.00	5111.00	.000	1.94
17.66	.00	5111.00	.000	1.94
17.83	.00	5111.00	.000	1.94
18.00	.00	5111.00	.000	1.94
18.16	.00	5111.00	.000	1.94
18.33	.00	5111.00	.000	1.94
18.50	.00	5111.00	.000	1.94
TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	.00	5111.00	.000	1.94
18.83	.00	5111.00	.000	1.94
19.00	.00	5111.00	.000	1.94
19.16	.00	5111.00	.000	1.94
19.33	.00	5111.00	.000	1.94
19.50	.00	5111.00	.000	1.94
19.66	.00	5111.00	.000	1.94
19.83	.00	5111.00	.000	1.94

PEAK DISCHARGE = 2.531 CFS - PEAK OCCURS AT HOUR 2.10
MAXIMUM WATER SURFACE ELEVATION = 5112.217
MAXIMUM STORAGE = .3273 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=50 CODE=5

HYDROGRAPH FROM AREA 400.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	2.0	7.999	1.9
11.999	1.9	15.998	1.9		
.167	1.9	4.166	1.9	8.166	1.9
12.165	1.9	16.165	1.9		
.333	1.9	4.333	1.9	8.332	1.9
12.332	1.9	16.332	1.9		
.500	1.9	4.500	1.9	8.499	1.9
12.499	1.9	16.498	1.9		
.667	1.9	4.666	1.9	8.666	1.9
12.665	1.9	16.665	1.9		
.833	1.9	4.833	1.9	8.832	1.9
12.832	1.9	16.832	1.9		
1.000	1.9	4.999	1.9	8.999	1.9
12.999	1.9	16.998	1.9		
1.167	1.9	5.166	1.9	9.166	1.9
13.165	1.9	17.165	1.9		
1.333	1.9	5.333	1.9	9.332	1.9
13.332	1.9	17.332	1.9		
1.500	2.2	5.499	1.9	9.499	1.9
13.499	1.9	17.498	1.9		
1.667	2.4	5.666	1.9	9.666	1.9
13.665	1.9	17.665	1.9		
1.833	2.5	5.833	1.9	9.832	1.9
13.832	1.9	17.832	1.9		
2.000	2.5	5.999	1.9	9.999	1.9
13.999	1.9	17.998	1.9		

DEV10

2.166	2.5	6.166	1.9	10.166	1.9	14.165	1.9
18.165	1.9						
2.333	2.5	6.333	1.9	10.332	1.9	14.332	1.9
18.331	1.9						
2.500	2.5	6.499	1.9	10.499	1.9	14.499	1.9
18.498	1.9						
2.666	2.4	6.666	1.9	10.666	1.9	14.665	1.9
18.665	1.9						
2.833	2.4	6.833	1.9	10.832	1.9	14.832	1.9
18.831	1.9						
3.000	2.3	6.999	1.9	10.999	1.9	14.998	1.9
18.998	1.9						
3.166	2.2	7.166	1.9	11.166	1.9	15.165	1.9
19.165	1.9						
3.333	2.2	7.333	1.9	11.332	1.9	15.332	1.9
19.331	1.9						
3.500	2.1	7.499	1.9	11.499	1.9	15.498	1.9
19.498	1.9						
3.666	2.1	7.666	1.9	11.665	1.9	15.665	1.9
19.665	1.9						
3.833	2.0	7.833	1.9	11.832	1.9	15.832	1.9
19.831	1.9						

RUNOFF VOLUME = 6.58535 INCHES = 3.2804 ACRE-FEET
PEAK DISCHARGE RATE = 2.53 CFS AT 2.100 HOURS BASIN AREA = .0093 SQ. MI.

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*S ADD A4 AND OS2

ADD HYD ID=51 HYDNO=327

ID=4 ID=24

PRINT HYD ID=51 CODE=5

HYDROGRAPH FROM AREA 327.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	18.5	3.000	.1	4.500	.1
5.999	.1						
.167	.0	1.667	9.3	3.166	.1	4.666	.1
6.166	.1						
.333	.0	1.833	6.0	3.333	.1	4.833	.1
6.333	.0						
.500	.0	2.000	4.4	3.500	.1	4.999	.1
6.499	.0						
.667	.0	2.166	2.0	3.666	.0	5.166	.1
6.666	.0						
.833	.0	2.333	.9	3.833	.0	5.333	.1
6.833	.0						
1.000	.0	2.500	.5	4.000	.0	5.499	.1
1.167	.0	2.666	.3	4.166	.0	5.666	.1
1.333	4.7	2.833	.2	4.333	.1	5.833	.1

RUNOFF VOLUME = 1.09006 INCHES = .6511 ACRE-FEET

DEV10
PEAK DISCHARGE RATE = 18.51 CFS AT 1.500 HOURS BASIN AREA = .0112 SQ. MI.

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*POND 4

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ROUTE RESERVOIR ID=52 HYD=401 INFLOW ID=51 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
2.76	0.0	5111
3.50	0.11	5112
4.12	0.32	5113
4.65	0.65	5114
5.13	1.05	5115

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5107.27	-.410	.00
.17	.00	5111.00	.000	2.76
.33	.00	5111.00	.000	2.76
.50	.00	5111.00	.000	2.76
.67	.00	5111.00	.000	2.76
.83	.00	5111.00	.000	2.76
1.00	.00	5111.00	.000	2.76
1.17	.00	5111.00	.000	2.76
1.33	4.70	5111.00	.000	2.76
1.50	18.51	5112.05	.120	3.53
1.67	9.30	5112.72	.262	3.95
1.83	6.04	5112.94	.308	4.08
2.00	4.42	5113.01	.322	4.12
2.17	1.96	5112.96	.312	4.10
2.33	.87	5112.78	.274	3.98
2.50	.51	5112.57	.229	3.85
2.67	.31	5112.35	.183	3.71
2.83	.20	5112.12	.136	3.58
3.00	.13	5111.82	.090	3.37
3.17	.09	5111.43	.047	3.08
3.33	.07	5111.07	.008	2.81
3.50	.05	5111.00	.000	2.76
3.67	.05	5111.00	.000	2.76
3.83	.05	5111.00	.000	2.76
4.00	.05	5111.00	.000	2.76
4.17	.05	5111.00	.000	2.76
4.33	.05	5111.00	.000	2.76
4.50	.06	5111.00	.000	2.76
4.67	.06	5111.00	.000	2.76
4.83	.07	5111.00	.000	2.76
5.00	.07	5111.00	.000	2.76
5.17	.08	5111.00	.000	2.76
5.33	.09	5111.00	.000	2.76

5.50	.10	5111.00	.000	2.76
5.67	.10	5111.00	.000	2.76
5.83	.12	5111.00	.000	2.76
6.00	.13	5111.00	.000	2.76
6.17	.05	5111.00	.000	2.76
6.33	.01	5111.00	.000	2.76
6.50	.01	5111.00	.000	2.76
6.67	.00	5111.00	.000	2.76
6.83	.00	5111.00	.000	2.76
7.00	.00	5111.00	.000	2.76
7.17	.00	5111.00	.000	2.76
7.33	.00	5111.00	.000	2.76
7.50	.00	5111.00	.000	2.76
7.67	.00	5111.00	.000	2.76
7.83	.00	5111.00	.000	2.76
8.00	.00	5111.00	.000	2.76
8.17	.00	5111.00	.000	2.76
8.33	.00	5111.00	.000	2.76
8.50	.00	5111.00	.000	2.76
8.67	.00	5111.00	.000	2.76
8.83	.00	5111.00	.000	2.76
9.00	.00	5111.00	.000	2.76
9.17	.00	5111.00	.000	2.76

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5111.00	.000	2.76
9.50	.00	5111.00	.000	2.76
9.67	.00	5111.00	.000	2.76
9.83	.00	5111.00	.000	2.76
10.00	.00	5111.00	.000	2.76
10.17	.00	5111.00	.000	2.76
10.33	.00	5111.00	.000	2.76
10.50	.00	5111.00	.000	2.76
10.67	.00	5111.00	.000	2.76
10.83	.00	5111.00	.000	2.76
11.00	.00	5111.00	.000	2.76
11.17	.00	5111.00	.000	2.76
11.33	.00	5111.00	.000	2.76
11.50	.00	5111.00	.000	2.76
11.67	.00	5111.00	.000	2.76
11.83	.00	5111.00	.000	2.76
12.00	.00	5111.00	.000	2.76
12.17	.00	5111.00	.000	2.76
12.33	.00	5111.00	.000	2.76
12.50	.00	5111.00	.000	2.76
12.67	.00	5111.00	.000	2.76
12.83	.00	5111.00	.000	2.76
13.00	.00	5111.00	.000	2.76
13.17	.00	5111.00	.000	2.76
13.33	.00	5111.00	.000	2.76
13.50	.00	5111.00	.000	2.76
13.67	.00	5111.00	.000	2.76
13.83	.00	5111.00	.000	2.76
14.00	.00	5111.00	.000	2.76
14.17	.00	5111.00	.000	2.76
14.33	.00	5111.00	.000	2.76
14.50	.00	5111.00	.000	2.76
14.67	.00	5111.00	.000	2.76
14.83	.00	5111.00	.000	2.76
15.00	.00	5111.00	.000	2.76
15.17	.00	5111.00	.000	2.76
15.33	.00	5111.00	.000	2.76
15.50	.00	5111.00	.000	2.76
15.67	.00	5111.00	.000	2.76

DEV10

15.83	.00	5111.00	.000	2.76
16.00	.00	5111.00	.000	2.76
16.17	.00	5111.00	.000	2.76
16.33	.00	5111.00	.000	2.76
16.50	.00	5111.00	.000	2.76
16.67	.00	5111.00	.000	2.76
16.83	.00	5111.00	.000	2.76
17.00	.00	5111.00	.000	2.76
17.16	.00	5111.00	.000	2.76
17.33	.00	5111.00	.000	2.76
17.50	.00	5111.00	.000	2.76
17.66	.00	5111.00	.000	2.76
17.83	.00	5111.00	.000	2.76
18.00	.00	5111.00	.000	2.76
18.16	.00	5111.00	.000	2.76
18.33	.00	5111.00	.000	2.76
18.50	.00	5111.00	.000	2.76

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	.00	5111.00	.000	2.76
18.83	.00	5111.00	.000	2.76
19.00	.00	5111.00	.000	2.76
19.16	.00	5111.00	.000	2.76
19.33	.00	5111.00	.000	2.76
19.50	.00	5111.00	.000	2.76
19.66	.00	5111.00	.000	2.76
19.83	.00	5111.00	.000	2.76

PEAK DISCHARGE = 4.124 CFS - PEAK OCCURS AT HOUR 2.03
MAXIMUM WATER SURFACE ELEVATION = 5113.008
MAXIMUM STORAGE = .3227 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=52 CODE=5

HYDROGRAPH FROM AREA 401.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	2.8	7.999	2.8
.167	2.8	4.166	2.8	8.166	2.8
.333	2.8	4.333	2.8	8.332	2.8
.500	2.8	4.500	2.8	8.499	2.8
.667	2.8	4.666	2.8	8.666	2.8
.833	2.8	4.833	2.8	8.832	2.8
1.000	2.8	4.999	2.8	8.999	2.8
1.167	2.8	5.166	2.8	9.166	2.8
1.333	2.8	5.333	2.8	9.332	2.8
1.500	3.5	5.499	2.8	9.499	2.8
1.667	3.9	5.666	2.8	9.666	2.8
1.833	4.1	5.833	2.8	9.832	2.8

DEV10

13.832	2.8		17.832	2.8			
2.000		4.1	5.999		2.8	9.999	2.8
13.999	2.8		17.998	2.8			
2.166		4.1	6.166		2.8	10.166	2.8
14.165	2.8		18.165	2.8			
2.333		4.0	6.333		2.8	10.332	2.8
14.332	2.8		18.331	2.8			
2.500		3.9	6.499		2.8	10.499	2.8
14.499	2.8		18.498	2.8			
2.666		3.7	6.666		2.8	10.666	2.8
14.665	2.8		18.665	2.8			
2.833		3.6	6.833		2.8	10.832	2.8
14.832	2.8		18.831	2.8			
3.000		3.4	6.999		2.8	10.999	2.8
14.998	2.8		18.998	2.8			
3.166		3.1	7.166		2.8	11.166	2.8
15.165	2.8		19.165	2.8			
3.333		2.8	7.333		2.8	11.332	2.8
15.332	2.8		19.331	2.8			
3.500		2.8	7.499		2.8	11.499	2.8
15.498	2.8		19.498	2.8			
3.666		2.8	7.666		2.8	11.665	2.8
15.665	2.8		19.665	2.8			
3.833		2.8	7.833		2.8	11.832	2.8
15.832	2.8		19.831	2.8			

RUNOFF VOLUME = 7.87751 INCHES = 4.7055 ACRE-FEET
PEAK DISCHARGE RATE = 4.12 CFS AT 2.033 HOURS BASIN AREA =
.0112 SQ. MI.

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*POND 8 (UNDERGROUND)

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ROUTE RESERVOIR ID=53 HYD=402 INFLOW ID=14 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.00	0.0	5105
2.27	0.05	5107
3.38	0.14	5109
4.20	0.22	5111
4.72	0.25	5112.5

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5105.00	.000	.00
.17	.00	5105.00	.000	.00
.33	.00	5105.00	.000	.00
.50	.00	5105.00	.000	.00
.67	.00	5105.00	.000	.00
.83	.00	5105.00	.000	.00

DEV10

1.00	.00	5105.00	.000	.00
1.17	.00	5105.00	.000	.00
1.33	1.92	5105.25	.006	.28
1.50	7.65	5107.15	.057	2.35
1.67	3.84	5108.11	.100	2.89
1.83	2.47	5108.15	.102	2.91
2.00	1.81	5107.92	.091	2.78
2.17	.81	5107.52	.074	2.56
2.33	.36	5106.91	.048	2.17
2.50	.21	5106.13	.028	1.29
2.67	.13	5105.67	.017	.76
2.83	.08	5105.40	.010	.45
3.00	.05	5105.24	.006	.27
3.17	.03	5105.14	.004	.16
3.33	.03	5105.09	.002	.10
3.50	.02	5105.06	.001	.06
3.67	.02	5105.04	.001	.04
3.83	.02	5105.03	.001	.03
4.00	.02	5105.02	.001	.03
4.17	.02	5105.02	.000	.02
4.33	.02	5105.02	.000	.02
4.50	.02	5105.02	.000	.02
4.67	.02	5105.02	.000	.02
4.83	.03	5105.02	.001	.02
5.00	.03	5105.02	.001	.03
5.17	.03	5105.03	.001	.03
5.33	.04	5105.03	.001	.03
5.50	.04	5105.03	.001	.03
5.67	.04	5105.03	.001	.04
5.83	.05	5105.04	.001	.04
6.00	.05	5105.04	.001	.05
6.17	.02	5105.04	.001	.04
6.33	.01	5105.02	.001	.03
6.50	.00	5105.01	.000	.02
6.67	.00	5105.01	.000	.01
6.83	.00	5105.00	.000	.01
7.00	.00	5105.00	.000	.00

PEAK DISCHARGE = 2.924 CFS - PEAK OCCURS AT HOUR 1.77
MAXIMUM WATER SURFACE ELEVATION = 5108.178
MAXIMUM STORAGE = .1030 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=53 CODE=5

HYDROGRAPH FROM AREA 402.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	2.4	3.000	.3
.167	.0	1.667	2.9	3.166	.2
.333	.0	1.833	2.9	3.333	.1
.500	.0	2.000	2.8	3.500	.1
.667	.0	2.166	2.6	3.666	.0
.833	.0	2.333	2.2	3.833	.0
1.000	.0	2.500	1.3	4.000	.0
1.167	.0	2.666	.8	4.166	.0
4.500	.0	5.999	.0		
4.666	.0	6.166	.0		
4.833	.0	6.333	.0		
4.999	.0	6.499	.0		
5.166	.0	6.666	.0		
5.333	.0	6.833	.0		
5.499	.0	6.999	.0		

DEV10

5.666 .0 7.166 .0
1.333 .3 2.833 .5 4.333 .0
5.833 .0

RUNOFF VOLUME = 1.09473 INCHES = .2680 ACRE-FEET
PEAK DISCHARGE RATE = 2.92 CFS AT 1.766 HOURS BASIN AREA =
.0046 SQ. MI.

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*S ADD POND 2 AND POND 4

ADD HYD ID=55 HYDNO=500

ID=50 ID=52

PRINT HYD ID=55 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 500.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.7	7.999	4.7
.167	4.7	4.166	4.7	8.166	4.7
.333	4.7	4.333	4.7	8.332	4.7
.500	4.7	4.500	4.7	8.499	4.7
.667	4.7	4.666	4.7	8.666	4.7
.833	4.7	4.833	4.7	8.832	4.7
1.000	4.7	4.999	4.7	8.999	4.7
1.167	4.7	5.166	4.7	9.166	4.7
1.333	4.7	5.333	4.7	9.332	4.7
1.500	5.7	5.499	4.7	9.499	4.7
1.667	6.4	5.666	4.7	9.666	4.7
1.833	6.6	5.833	4.7	9.832	4.7
2.000	6.6	5.999	4.7	9.999	4.7
2.166	6.6	6.166	4.7	10.166	4.7
2.333	6.5	6.333	4.7	10.332	4.7
2.500	6.3	6.499	4.7	10.499	4.7
2.666	6.1	6.666	4.7	10.666	4.7
2.833	5.9	6.833	4.7	10.832	4.7
3.000	5.7	6.999	4.7	10.999	4.7
3.166	5.3	7.166	4.7	11.166	4.7

DEV10

15.165	4.7	19.165	4.7				
3.333	5.0	7.333	4.7	11.332	4.7		
15.332	4.7	19.331	4.7				
3.500	4.9	7.499	4.7	11.499	4.7		
15.498	4.7	19.498	4.7				
3.666	4.8	7.666	4.7	11.665	4.7		
15.665	4.7	19.665	4.7				
3.833	4.8	7.833	4.7	11.832	4.7		
15.832	4.7	19.831	4.7				

RUNOFF VOLUME = 7.28989 INCHES = 7.9858 ACRE-FEET
PEAK DISCHARGE RATE = 6.65 CFS AT 2.066 HOURS BASIN AREA = .0205 SQ. MI.

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*S ADD HYD 500 AND POND 8

ADD HYD ID=56 HYDNO=501

ID=55 ID=53

PRINT HYD ID=56 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 501.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.8	7.999	4.7
11.999	4.7	15.998	4.7		
.167	4.7	4.166	4.7	8.166	4.7
12.165	4.7	16.165	4.7		
.333	4.7	4.333	4.7	8.332	4.7
12.332	4.7	16.332	4.7		
.500	4.7	4.500	4.7	8.499	4.7
12.499	4.7	16.498	4.7		
.667	4.7	4.666	4.7	8.666	4.7
12.665	4.7	16.665	4.7		
.833	4.7	4.833	4.7	8.832	4.7
12.832	4.7	16.832	4.7		
1.000	4.7	4.999	4.7	8.999	4.7
12.999	4.7	16.998	4.7		
1.167	4.7	5.166	4.7	9.166	4.7
13.165	4.7	17.165	4.7		
1.333	5.0	5.333	4.7	9.332	4.7
13.332	4.7	17.332	4.7		
1.500	8.0	5.499	4.7	9.499	4.7
13.499	4.7	17.498	4.7		
1.667	9.2	5.666	4.7	9.666	4.7
13.665	4.7	17.665	4.7		
1.833	9.5	5.833	4.7	9.832	4.7
13.832	4.7	17.832	4.7		
2.000	9.4	5.999	4.7	9.999	4.7
13.999	4.7	17.998	4.7		
2.166	9.2	6.166	4.7	10.166	4.7
14.165	4.7	18.165	4.7		
2.333	8.7	6.333	4.7	10.332	4.7
14.332	4.7	18.331	4.7		
2.500	7.6	6.499	4.7	10.499	4.7
14.499	4.7	18.498	4.7		
2.666	6.9	6.666	4.7	10.666	4.7

DEV10

14.665	4.7	18.665	4.7				
2.833	6.4	6.833	4.7	10.832	4.7		
14.832	4.7	18.831	4.7				
3.000	5.9	6.999	4.7	10.999	4.7		
14.998	4.7	18.998	4.7				
3.166	5.5	7.166	4.7	11.166	4.7		
15.165	4.7	19.165	4.7				
3.333	5.1	7.333	4.7	11.332	4.7		
15.332	4.7	19.331	4.7				
3.500	5.0	7.499	4.7	11.499	4.7		
15.498	4.7	19.498	4.7				
3.666	4.9	7.666	4.7	11.665	4.7		
15.665	4.7	19.665	4.7				
3.833	4.8	7.833	4.7	11.832	4.7		
15.832	4.7	19.831	4.7				

RUNOFF VOLUME = 6.15832 INCHES = 8.2537 ACRE-FEET
PEAK DISCHARGE RATE = 9.48 CFS AT 1.866 HOURS BASIN AREA =
.0251 SQ. MI.

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*S ADD HYD 501 AND POND 7

ADD HYD ID=57 HYDNO=502

ID=56 ID=48

PRINT HYD ID=57 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 502.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	5.7	7.999	4.7	11.999	4.7
.167	4.7	4.166	5.5	8.166	4.7	12.165	4.7
.333	4.7	4.333	5.4	8.332	4.7	12.332	4.7
.500	4.7	4.500	5.3	8.499	4.7	12.499	4.7
.667	4.7	4.666	5.2	8.666	4.7	12.665	4.7
.833	4.7	4.833	5.1	8.832	4.7	12.832	4.7
1.000	4.7	4.999	5.1	8.999	4.7	12.999	4.7
1.167	4.7	5.166	5.0	9.166	4.7	13.165	4.7
1.333	5.1	5.333	5.0	9.332	4.7	13.332	4.7
1.500	9.5	5.499	5.0	9.499	4.7	13.499	4.7
1.667	11.2	5.666	4.9	9.666	4.7	13.665	4.7
1.833	11.6	5.833	4.9	9.832	4.7	13.832	4.7
2.000	11.6	5.999	4.9	9.999	4.7	13.999	4.7
2.166	11.4	6.166	4.9	10.166	4.7		

DEV10

14.165	4.7	18.165	4.7				
2.333	10.8	6.333	4.9	10.332	4.7		
14.332	4.7	18.331	4.7				
2.500	9.6	6.499	4.8	10.499	4.7		
14.499	4.7	18.498	4.7				
2.666	8.8	6.666	4.8	10.666	4.7		
14.665	4.7	18.665	4.7				
2.833	8.2	6.833	4.8	10.832	4.7		
14.832	4.7	18.831	4.7				
3.000	7.7	6.999	4.8	10.999	4.7		
14.998	4.7	18.998	4.7				
3.166	7.2	7.166	4.8	11.166	4.7		
15.165	4.7	19.165	4.7				
3.333	6.7	7.333	4.7	11.332	4.7		
15.332	4.7	19.331	4.7				
3.500	6.5	7.499	4.7	11.499	4.7		
15.498	4.7	19.498	4.7				
3.666	6.2	7.666	4.7	11.665	4.7		
15.665	4.7	19.665	4.7				
3.833	5.9	7.833	4.7	11.832	4.7		
15.832	4.7	19.831	4.7				

RUNOFF VOLUME = 5.00639 INCHES = 8.7071 ACRE-FEET
PEAK DISCHARGE RATE = 11.60 CFS AT 1.933 HOURS BASIN AREA = .0326 SQ. MI.

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*S ADD HYD 502 AND POND 6

ADD HYD ID=58 HYDNO=503

ID=57 ID=46

PRINT HYD ID=58 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 503.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	10.4	7.999	7.1	11.999	7.0
.167	6.1	4.166	9.8	8.166	7.1	12.165	7.0
.333	6.7	4.333	9.3	8.332	7.0	12.332	7.0
.500	6.9	4.500	8.9	8.499	7.0	12.499	7.0
.667	7.0	4.666	8.7	8.666	7.0	12.665	7.0
.833	7.0	4.833	8.4	8.832	7.0	12.832	7.0
1.000	7.0	4.999	8.3	8.999	7.0	12.999	7.0
1.167	7.0	5.166	8.1	9.166	7.0	13.165	7.0
1.333	8.8	5.333	8.0	9.332	7.0	13.332	7.0
1.500	23.6	5.499	8.0	9.499	7.0	13.499	7.0
1.667	31.7	5.666	7.9	9.666	7.0		

DEV10

13.665	7.0	17.665	7.0				
1.833	34.0	5.833	7.9	9.832	7.0		
13.832	7.0	17.832	7.0				
2.000	34.8	5.999	7.9	9.999	7.0		
13.999	7.0	17.998	7.0				
2.166	34.5	6.166	7.8	10.166	7.0		
14.165	7.0	18.165	7.0				
2.333	33.1	6.333	7.7	10.332	7.0		
14.332	7.0	18.331	7.0				
2.500	30.9	6.499	7.5	10.499	7.0		
14.499	7.0	18.498	7.0				
2.666	28.5	6.666	7.4	10.666	7.0		
14.665	7.0	18.665	7.0				
2.833	26.1	6.833	7.3	10.832	7.0		
14.832	7.0	18.831	7.0				
3.000	23.5	6.999	7.3	10.999	7.0		
14.998	7.0	18.998	7.0				
3.166	20.7	7.166	7.2	11.166	7.0		
15.165	7.0	19.165	7.0				
3.333	17.1	7.333	7.2	11.332	7.0		
15.332	7.0	19.331	7.0				
3.500	14.3	7.499	7.1	11.499	7.0		
15.498	7.0	19.498	7.0				
3.666	12.5	7.666	7.1	11.665	7.0		
15.665	7.0	19.665	7.0				
3.833	11.3	7.833	7.1	11.832	7.0		
15.832	7.0	19.831	7.0				

RUNOFF VOLUME = 3.16268 INCHES = 15.6311 ACRE-FEET
PEAK DISCHARGE RATE = 34.86 CFS AT 2.066 HOURS BASIN AREA =
.0927 SQ. MI.

****

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 15:48:35

DEV10

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02c RUN DATE (MON/DAY/YR) =10/02/2007
INPUT FILE = DEV10.HMI USER NO.=
AHYMO-C-9803c01UNMLIB-AH

PAGE = 1

COMMAND NOTATION	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE
RAINFALL TYPE= 1									
RAIN6= 1.470									
*S COMPUTE HYD BASIN A1									
COMPUTE NM HYD	101.00	-	1	.00780	13.37	.473	1.13650	1.500	2.679
PER IMP= 90.00									
*S COMPUTE HYD BASIN A2									
COMPUTE NM HYD	102.00	-	2	.00623	10.25	.361	1.08583	1.500	2.572
PER IMP= 85.00									
*S COMPUTE HYD BASIN A3									
COMPUTE NM HYD	103.00	-	3	.00833	14.05	.496	1.11623	1.500	2.636
PER IMP= 88.00									
*S COMPUTE HYD BASIN A4									
COMPUTE NM HYD	104.00	-	4	.01040	17.11	.602	1.08583	1.500	2.571
PER IMP= 85.00									
*S COMPUTE HYD BASIN B1									
COMPUTE NM HYD	201.00	-	11	.00161	2.77	.098	1.13650	1.500	2.686
PER IMP= 90.00									
*S COMPUTE HYD BASIN B2									
COMPUTE NM HYD	202.00	-	12	.00097	1.72	.060	1.15775	1.500	2.769
PER IMP= 90.00									
*S COMPUTE HYD BASIN B3									
COMPUTE NM HYD	203.00	-	13	.00190	3.17	.111	1.09479	1.500	2.609
PER IMP= 85.00									
*S COMPUTE HYD BASIN B4									
COMPUTE NM HYD	204.00	-	14	.00459	7.65	.268	1.09479	1.500	2.605
PER IMP= 85.00									
*S COMPUTE HYD BASIN B5									
COMPUTE NM HYD	205.00	-	15	.00657	10.95	.384	1.09479	1.500	2.604
PER IMP= 85.00									
*S COMPUTE HYD BASIN B6									
COMPUTE NM HYD	206.00	-	16	.00575	9.15	.355	1.15775	1.533	2.485
PER IMP= 90.00									
*S COMPUTE HYD BASIN B7									

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    COMPUTE NM HYD          207.00   -    17        .00176        3.11        .109      1.15775    1.500    2.761
PER IMP=  90.00
    *S  COMPUTE HYD BASIN B8
    COMPUTE NM HYD          208.00   -    18        .00249        4.40        .154      1.15775    1.500    2.759
PER IMP=  90.00
    *S  COMPUTE HYD BASIN B9
    COMPUTE NM HYD          209.00   -    19        .00725       12.59        .443      1.14585    1.500    2.713
PER IMP=  90.00
    *S  COMPUTE HYD BASIN B10
    COMPUTE NM HYD          210.00   -    20        .00748       12.83        .453      1.13650    1.500    2.679
PER IMP=  90.00
    *S  COMPUTE HYD BASIN O1
    COMPUTE NM HYD          211.00   -    21        .00796       11.95        .465      1.09479    1.533    2.346
PER IMP=  85.00
    *S  COMPUTE HYD BASIN O2
    COMPUTE NM HYD          212.00   -    22        .00767       11.52        .448      1.09479    1.533    2.346
PER IMP=  85.00
    *S  COMPUTE HYD BASIN OS1
    COMPUTE NM HYD          213.00   -    23        .01104       18.39        .645      1.09479    1.500    2.603
PER IMP=  85.00
    *S  COMPUTE HYD BASIN OS2
    COMPUTE NM HYD          214.00   -    24        .00080        1.40        .049      1.14585    1.500    2.729
PER IMP=  90.00
    *S  COMPUTE HYD BASIN OS3
    COMPUTE NM HYD          215.00   -    25        .00311        5.41        .190      1.14585    1.500    2.716
PER IMP=  90.00
    *S ADD O1 AND O2
    ADD HYD                 300.00 21&22  28        .01563       23.47        .913      1.09474    1.533    2.346
    ROUTE RESERVOIR         301.00   28   29        .01563        6.10        .923      1.10678    2.066     .609
AC-FT=      .503
    ROUTE RESERVOIR         302.00    1   30        .00780        2.94        .483      1.16169    2.033     .589
AC-FT=      .273
    *S ADD OFFSITE POND AND POND 1
    ADD HYD                 303.00 29&30  31        .02343        9.03       1.406      1.12505    2.066     .602
    ROUTE RESERVOIR         304.00    3   32        .00833        2.84       3.836      8.63458    2.066     .533
AC-FT=      .257
    *S ADD HYD 303 AND POND 3
    ADD HYD                 306.00 31&32  34        .03176       11.88       5.242      3.09468    2.066     .584
    *S ADD B1 AND B2
```


COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE

NOTATION

```
    ADD HYD                 308.00 11&12  36        .00258        4.49        .157      1.14426    1.500    2.717
    *S ADD HYD 308 AND B3
    ADD HYD                 309.00 36&13  37        .00448        7.66        .268      1.12321    1.500    2.671
    *S ADD B5 AND B6
    ADD HYD                 310.00 15&16  38        .01232       19.60        .739      1.12412    1.533    2.486
    *S ADD HYD 309 AND HYD 310
    ADD HYD                 311.00 37&38  39        .01680       27.17       1.007      1.12388    1.500    2.527
    ROUTE RESERVOIR         312.00   39   40        .01680        7.70       1.007      1.12388    1.933     .716
AC-FT=      .481
    *S ADD HYD 306 AND POND 5
    ADD HYD                 320.00 34&40  42        .04856       19.55       6.249      2.41285    2.000     .629
    *S ADD HYD 320 AND B7
    ADD HYD                 321.00 42&17  43        .05032       20.34       6.358      2.36894    1.900     .632
    *S ADD HYD 321 AND B8
    ADD HYD                 322.00 43&18  44        .05281       22.05       6.511      2.31183    1.667     .652
    *S ADD HYD 322 AND B9
    ADD HYD                 323.00 44&19  45        .06006       33.21       6.954      2.17108    1.533     .864
    ROUTE RESERVOIR         324.00   45   46        .06006       23.32       6.924      2.16167    2.066     .607
AC-FT=      .502
    ROUTE RESERVOIR         325.00   20   48        .00748        2.17        .453      1.13646    2.100     .454
AC-FT=      .294
    *S ADD A2 AND OS3
    ADD HYD                 326.00  2&25  49        .00934       15.66        .551      1.10576    1.500    2.620
    ROUTE RESERVOIR         400.00   49   50        .00934        2.53       3.280      6.58535    2.100     .423
AC-FT=      .327
    *S ADD A4 AND OS2
    ADD HYD                 327.00  4&24  51        .01120       18.51        .651      1.09006    1.500    2.582
    ROUTE RESERVOIR         401.00   51   52        .01120        4.12       4.705      7.87751    2.033     .575
AC-FT=      .323
    ROUTE RESERVOIR         402.00   14   53        .00459        2.92        .268      1.09473    1.766     .995
AC-FT=      .103
    *S ADD POND 2 AND POND 4
    ADD HYD                 500.00 50&52  55        .02054        6.65       7.986      7.28989    2.066     .506
    *S ADD HYD 500 AND POND 8
    ADD HYD                 501.00 55&53  56        .02513        9.48       8.254      6.15832    1.866     .590
    *S ADD HYD 501 AND POND 7
    ADD HYD                 502.00 56&48  57        .03261       11.60       8.707      5.00639    1.933     .556
    *S ADD HYD 502 AND POND 6
    ADD HYD                 503.00 57&46  58        .09267       34.86      15.631      3.16268    2.066     .588
    FINISH
```

```
                                        DEV100
*  Project Number 6010 (OXBOW TOWN CENTER) 100207
*  PROPOSED Conditions
*  100 YEAR 24 HOUR RAINFALL TABLE
RAINFALL                TYPE=1  RAIN QUARTER=0
                        RAIN ONE=1.87 IN  RAIN SIX=2.20 IN
                        RAIN DAY=2.66 IN  DT=0.03333 HRS
*  10 YEAR RAINFALL TABLE
*RAINFALL               TYPE=1  RAIN QUARTER=0.0
*                       RAIN ONE=1.25 IN  RAIN SIX=1.47 IN
*                       RAIN DAY=1.77 IN  DT=0.03333 HRS
**********************************************************
**********************************************************
**********************************************************
*S  COMPUTE HYD BASIN A1
COMPUTE NM HYD          ID=1  HYDNO=101  AREA=0.00780SQ MI
                        PER A=0 PER B=10 PER C=0 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=1   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN A2
COMPUTE NM HYD          ID=2  HYDNO=102  AREA=0.00623SQ MI
                        PER A=0 PER B=15 PER C=0 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=2   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN A3
COMPUTE NM HYD          ID=3  HYDNO=103  AREA=0.00833SQ MI
                        PER A=0 PER B=12 PER C=0 PER D=88
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=3   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN A4
COMPUTE NM HYD          ID=4  HYDNO=104  AREA=0.0104SQ MI
                        PER A=0 PER B=15 PER C=0 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=4   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B1
COMPUTE NM HYD          ID=11  HYDNO=201  AREA=0.00161SQ MI
                        PER A=0 PER B=10 PER C=0 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=11   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B2
COMPUTE NM HYD          ID=12  HYDNO=202  AREA=0.00097SQ MI
                        PER A=0 PER B=0 PER C=10 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=12   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B3
COMPUTE NM HYD          ID=13  HYDNO=203  AREA=0.00190SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=13   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B4
COMPUTE NM HYD          ID=14  HYDNO=204  AREA=0.00459SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=14   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B5
COMPUTE NM HYD          ID=15  HYDNO=205  AREA=0.00657SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=15   CODE=5
```

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**********************************************************
*S  COMPUTE HYD BASIN B6
COMPUTE NM HYD          ID=16  HYDNO=206  AREA=0.00575SQ MI
                        PER A=0 PER B=0 PER C=10 PER D=90
                        TP=.16667 HR MASS RAIN=-1
PRINT HYD               ID=16   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B7
COMPUTE NM HYD          ID=17  HYDNO=207  AREA=0.00176SQ MI
                        PER A=0 PER B=0 PER C=10 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=17   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B8
COMPUTE NM HYD          ID=18  HYDNO=208  AREA=0.00249SQ MI
                        PER A=0 PER B=0 PER C=10 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=18   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B9
COMPUTE NM HYD          ID=19  HYDNO=209  AREA=0.00725SQ MI
                        PER A=0 PER B=5 PER C=5 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=19   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN B10
COMPUTE NM HYD          ID=20  HYDNO=210  AREA=0.00748SQ MI
                        PER A=0 PER B=10 PER C=0 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=20   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN O1
COMPUTE NM HYD          ID=21  HYDNO=211  AREA=0.00796SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.1667 HR MASS RAIN=-1
PRINT HYD               ID=21   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN O2
COMPUTE NM HYD          ID=22  HYDNO=212  AREA=0.00767SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.1667 HR MASS RAIN=-1
PRINT HYD               ID=22   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN OS1
COMPUTE NM HYD          ID=23  HYDNO=213  AREA=0.01104SQ MI
                        PER A=0 PER B=10 PER C=5 PER D=85
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=23   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN OS2
COMPUTE NM HYD          ID=24  HYDNO=214  AREA=0.0008SQ MI
                        PER A=0 PER B=5 PER C=5 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=24   CODE=5
**********************************************************
*S  COMPUTE HYD BASIN OS3
COMPUTE NM HYD          ID=25  HYDNO=215  AREA=0.00311SQ MI
                        PER A=0 PER B=5 PER C=5 PER D=90
                        TP=.13333 HR MASS RAIN=-1
PRINT HYD               ID=25   CODE=5
**********************************************************
**********************************************************
**********************************************************
*S ADD O1 AND O2
ADD HYD                 ID=28 HYDNO=300
                        ID=21 ID=22
```

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PRINT HYD                ID=28 CODE=5
*************************************************************
*OFFSITE POND ON CHURCH TRACT
*************************************************************
ROUTE RESERVOIR          ID=29 HYD=301 INFLOW ID=28 CODE=5
                         OUTFLOW          STORAGE        ELEV
                          (CFS)           (AC-FT)        (FT)
                           0.01           0.0            5108
                           5.43           0.40           5110
                           7.05           0.65           5111
                           8.37           0.95           5112
                           9.50           1.25           5113
PRINT HYD                ID=29 CODE=5
*************************************************************
*POND 1
*************************************************************
ROUTE RESERVOIR          ID=30 HYD=302 INFLOW ID=1 CODE=5
                         OUTFLOW          STORAGE        ELEV
                          (CFS)           (AC-FT)        (FT)
                           0.01           0.0            5110
                           2.82           0.21           5111
                           3.31           0.47           5112
                           3.73           0.77           5113
                           4.11           1.12           5114
PRINT HYD                ID=30 CODE=5
*************************************************************
*S ADD OFFSITE POND AND POND 1
ADD HYD                  ID=31 HYDNO=303
                         ID=29 ID=30
PRINT HYD                ID=31 CODE=5
*************************************************************
*POND 3
*************************************************************
ROUTE RESERVOIR          ID=32 HYD=304 INFLOW ID=3 CODE=5
                         OUTFLOW          STORAGE        ELEV
                          (CFS)           (AC-FT)        (FT)
                           2.29           0.0            5111
                           2.89           0.28           5112
                           3.39           0.62           5113
                           3.83           1.01           5114
                           4.22           1.20           5115
PRINT HYD                ID=32 CODE=5
*************************************************************
*S ADD HYD 303 AND POND 3
ADD HYD                  ID=34 HYDNO=306
                         ID=31 ID=32
PRINT HYD                ID=34 CODE=5
*************************************************************
*S ADD B1 AND B2
ADD HYD                  ID=36 HYDNO=308
                         ID=11 ID=12
PRINT HYD                ID=36 CODE=5
*************************************************************
*S ADD HYD 308 AND B3
ADD HYD                  ID=37 HYDNO=309
                         ID=36 ID=13
PRINT HYD                ID=37 CODE=5
*************************************************************
*S ADD B5 AND B6
ADD HYD                  ID=38 HYDNO=310
                         ID=15 ID=16
PRINT HYD                ID=38 CODE=5
*************************************************************
*S ADD HYD 309 AND HYD 310
ADD HYD                  ID=39 HYDNO=311
                         ID=37 ID=38
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PRINT HYD                ID=39 CODE=5
**********************************************************
*POND 5
**********************************************************
ROUTE RESERVOIR          ID=40 HYD=312 INFLOW ID=39 CODE=5
                         OUTFLOW            STORAGE        ELEV
                          (CFS)             (AC-FT)        (FT)
                           0.00             0.00           5108
                           5.44             0.13           5109
                           6.66             0.29           5110
                           7.69             0.48           5111
                           8.60             0.70           5112
                           9.42             0.96           5113
                           9.80             1.10           5113.5
PRINT HYD                ID=40 CODE=5
**********************************************************
*S ADD HYD 306 AND POND 5
ADD HYD                  ID=42 HYDNO=320
                         ID=34 ID=40
PRINT HYD                ID=42 CODE=5
**********************************************************
*S ADD HYD 320 AND B7
ADD HYD                  ID=43 HYDNO=321
                         ID=42 ID=17
PRINT HYD                ID=43 CODE=5
**********************************************************
*S ADD HYD 321 AND B8
ADD HYD                  ID=44 HYDNO=322
                         ID=43 ID=18
PRINT HYD                ID=44 CODE=5
**********************************************************
*S ADD HYD 322 AND B9
ADD HYD                  ID=45 HYDNO=323
                         ID=44 ID=19
PRINT HYD                ID=45 CODE=5
**********************************************************
*POND 6 (UNDERGROUND)
**********************************************************
ROUTE RESERVOIR          ID=46 HYD=324 INFLOW ID=45 CODE=5
                         OUTFLOW            STORAGE        ELEV
                          (CFS)             (AC-FT)        (FT)
                           0.01             0.0            5101
                           12.23            0.16           5103
                           20.70            0.40           5105
                           26.59            0.63           5107
                           29.10            0.72           5108
                           31.40            0.74           5108.5
PRINT HYD                ID=46 CODE=5
**********************************************************
*POND 7 (UNDERGROUND)
**********************************************************
ROUTE RESERVOIR          ID=48 HYD=325 INFLOW ID=20 CODE=5
                         OUTFLOW            STORAGE        ELEV
                          (CFS)             (AC-FT)        (FT)
                           0.00             0.00           5104.5
                           1.47             0.11           5106.5
                           2.16             0.29           5108.5
                           2.67             0.46           5110.5
                           3.00             0.53           5112.0
PRINT HYD                ID=48 CODE=5
**********************************************************
*S ADD A2 AND OS3
ADD HYD                  ID=49 HYDNO=326
                         ID=2 ID=25
PRINT HYD                ID=49 CODE=5
**********************************************************
```

```
*POND 2
**********************************************************
ROUTE RESERVOIR        ID=50 HYD=400 INFLOW ID=49 CODE=5
                       OUTFLOW            STORAGE        ELEV
                        (CFS)             (AC-FT)        (FT)
                         1.94             0.0            5111
                         2.44             0.26           5112
                         2.86             0.57           5113
                         3.22             0.93           5114
PRINT HYD              ID=50 CODE=5
**********************************************************
*S ADD A4 AND OS2
ADD HYD                ID=51 HYDNO=327
                       ID=4 ID=24
PRINT HYD              ID=51 CODE=5
**********************************************************
*POND 4
**********************************************************
ROUTE RESERVOIR        ID=52 HYD=401 INFLOW ID=51 CODE=5
                       OUTFLOW            STORAGE        ELEV
                        (CFS)             (AC-FT)        (FT)
                         2.76             0.0            5111
                         3.50             0.11           5112
                         4.12             0.32           5113
                         4.65             0.65           5114
                         5.13             1.05           5115
PRINT HYD              ID=52 CODE=5
**********************************************************
*POND 8 (UNDERGROUND)
**********************************************************
ROUTE RESERVOIR        ID=53 HYD=402 INFLOW ID=14 CODE=5
                       OUTFLOW            STORAGE        ELEV
                        (CFS)             (AC-FT)        (FT)
                         0.00             0.0            5105
                         2.27             0.05           5107
                         3.38             0.14           5109
                         4.20             0.22           5111
                         4.72             0.25           5112.5
PRINT HYD              ID=53 CODE=5
**********************************************************
*S ADD POND 2 AND POND 4
ADD HYD                ID=55 HYDNO=500
                       ID=50 ID=52
PRINT HYD              ID=55 CODE=5
**********************************************************
*S ADD HYD 500 AND POND 8
ADD HYD                ID=56 HYDNO=501
                       ID=55 ID=53
PRINT HYD              ID=56 CODE=5
**********************************************************
*S ADD HYD 501 AND POND 7
ADD HYD                ID=57 HYDNO=502
                       ID=56 ID=48
PRINT HYD              ID=57 CODE=5
**********************************************************
*S ADD HYD 502 AND POND 6
ADD HYD                ID=58 HYDNO=503
                       ID=57 ID=46
PRINT HYD              ID=58 CODE=5
**********************************************************
FINISH
```

```
        AHYMO PROGRAM (AHYMO_97) -                                  - Version:
1997.02c
              RUN DATE (MON/DAY/YR) = 10/02/2007
              START TIME (HR:MIN:SEC) = 15:48:17      USER NO.=
AHYMO-C-9803c01UNMLIB-AH
              INPUT FILE = DEV100.HMI

     *  Project Number 6010 (OXBOW TOWN CENTER) 100207

     *  PROPOSED Conditions

     *  100 YEAR 24 HOUR RAINFALL TABLE

     RAINFALL                TYPE=1  RAIN QUARTER=0

                             RAIN ONE=1.87 IN  RAIN SIX=2.20 IN

                             RAIN DAY=2.66 IN  DT=0.03333 HRS

                        COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS
2 - PEAK AT 1.40 HR.
                        DT =     .033330 HOURS       END TIME =     5.999400 HOURS
                           .0000   .0016   .0033   .0050   .0067   .0085   .0103
                           .0122   .0141   .0160   .0180   .0201   .0222   .0243
                           .0266   .0289   .0312   .0337   .0362   .0388   .0415
                           .0443   .0472   .0502   .0534   .0567   .0601   .0637
                           .0675   .0715   .0758   .0809   .0865   .0924   .1050
                           .1334   .1771   .2398   .3254   .4379   .5814   .7600
                           .9780  1.1804  1.2649  1.3363  1.3997  1.4575  1.5106
                          1.5600  1.6061  1.6493  1.6900  1.7284  1.7646  1.7989
                          1.8314  1.8623  1.8915  1.9193  1.9456  1.9518  1.9576
                          1.9630  1.9682  1.9732  1.9780  1.9825  1.9869  1.9912
                          1.9953  1.9993  2.0031  2.0068  2.0104  2.0140  2.0174
                          2.0207  2.0240  2.0272  2.0303  2.0333  2.0363  2.0392
                          2.0420  2.0448  2.0475  2.0502  2.0528  2.0554  2.0580
                          2.0605  2.0629  2.0653  2.0677  2.0700  2.0723  2.0746
                          2.0768  2.0790  2.0812  2.0833  2.0855  2.0875  2.0896
                          2.0916  2.0936  2.0956  2.0976  2.0995  2.1014  2.1033
                          2.1051  2.1070  2.1088  2.1106  2.1124  2.1141  2.1159
                          2.1176  2.1193  2.1210  2.1227  2.1244  2.1260  2.1276
                          2.1292  2.1308  2.1324  2.1340  2.1355  2.1371  2.1386
                          2.1401  2.1416  2.1431  2.1446  2.1460  2.1475  2.1489
                          2.1504  2.1518  2.1532  2.1546  2.1560  2.1573  2.1587
                          2.1600  2.1614  2.1627  2.1640  2.1654  2.1667  2.1680
                          2.1692  2.1705  2.1718  2.1731  2.1743  2.1756  2.1768
                          2.1780  2.1792  2.1804  2.1817  2.1829  2.1840  2.1852
                          2.1864  2.1876  2.1887  2.1899  2.1910  2.1922  2.1933
                          2.1944  2.1956  2.1967  2.1978  2.1989  2.2000

     *  10 YEAR RAINFALL TABLE

     *RAINFALL               TYPE=1  RAIN QUARTER=0.0

     *                       RAIN ONE=1.25 IN  RAIN SIX=1.47 IN

     *                       RAIN DAY=1.77 IN  DT=0.03333 HRS

     ************************************************************

     ************************************************************

     ************************************************************
```

```
*S  COMPUTE HYD BASIN A1

COMPUTE NM HYD          ID=1  HYDNO=101  AREA=0.00780SQ MI

                        PER A=0 PER B=10 PER C=0 PER D=90

                        TP=.13333 HR MASS RAIN=-1


          K =   .072665HR    TP =   .133330HR    K/TP RATIO =   .545000
SHAPE CONSTANT, N =  7.106420
          UNIT PEAK =   27.709    CFS   UNIT VOLUME =    .9990       B =
526.28      P60 = 1.8700
          AREA =      .007020 SQ MI    IA =    .10000 INCHES    INF =
.04000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330


          K =   .131021HR    TP =   .133330HR    K/TP RATIO =   .982685
SHAPE CONSTANT, N =  3.593448
          UNIT PEAK =   1.9135    CFS   UNIT VOLUME =    .9932       B =
327.09      P60 = 1.8700
          AREA =      .000780 SQ MI    IA =    .50000 INCHES    INF =
1.25000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330

     PRINT HYD              ID=1   CODE=5


                                        PARTIAL HYDROGRAPH   101.00

          TIME      FLOW           TIME      FLOW           TIME      FLOW
     TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
      HRS       CFS            HRS       CFS
          .000        .0           1.500      20.7           3.000        .2
     4.500        .1           5.999        .1
          .167        .0           1.667      10.5           3.166        .2
     4.666        .1           6.166        .1
          .333        .0           1.833       6.8           3.333        .2
     4.833        .1           6.333        .0
          .500        .0           2.000       5.0           3.500        .1
     4.999        .1           6.499        .0
          .667        .0           2.166       2.3           3.666        .1
     5.166        .1           6.666        .0
          .833        .0           2.333       1.1           3.833        .1
     5.333        .1           6.833        .0
         1.000        .0           2.500        .7           4.000        .1
     5.499        .1
         1.167        .1           2.666        .4           4.166        .1
     5.666        .1
         1.333       6.1           2.833        .3           4.333        .1
     5.833        .1

        RUNOFF VOLUME =     1.83567 INCHES     =        .7636 ACRE-FEET
        PEAK DISCHARGE RATE =      20.65 CFS  AT   1.500 HOURS   BASIN AREA =
.0078 SQ. MI.


**********************************************************************

*S  COMPUTE HYD BASIN A2
```

```
                                        DEV100
     COMPUTE NM HYD          ID=2  HYDNO=102  AREA=0.00623SQ MI

                             PER A=0 PER B=15 PER C=0 PER D=85

                             TP=.13333 HR MASS RAIN=-1

          K =    .072665HR    TP =    .133330HR    K/TP RATIO =    .545000
SHAPE CONSTANT, N =  7.106420
          UNIT PEAK =   20.902    CFS   UNIT VOLUME =    .9988       B =
526.28      P60 = 1.8700
          AREA =       .005296 SQ MI    IA =    .10000 INCHES    INF =
.04000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330

          K =    .131021HR    TP =    .133330HR    K/TP RATIO =    .982685
SHAPE CONSTANT, N =  3.593448
          UNIT PEAK =   2.2925    CFS   UNIT VOLUME =    .9943       B =
327.09      P60 = 1.8700
          AREA =       .000935 SQ MI    IA =    .50000 INCHES    INF =
1.25000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330

     PRINT HYD               ID=2   CODE=5

                                          PARTIAL HYDROGRAPH   102.00

          TIME       FLOW            TIME       FLOW            TIME       FLOW
TIME       FLOW            TIME       FLOW
     HRS        CFS              HRS        CFS              HRS        CFS
 HRS        CFS              HRS        CFS
     .000          .0            1.500       16.0            3.000         .2
4.500         .1            5.999         .1
     .167          .0            1.667        8.2            3.166         .1
4.666         .1            6.166         .0
     .333          .0            1.833        5.2            3.333         .1
4.833         .1            6.333         .0
     .500          .0            2.000        3.8            3.500         .1
4.999         .1            6.499         .0
     .667          .0            2.166        1.7            3.666         .1
5.166         .1            6.666         .0
     .833          .0            2.333         .8            3.833         .1
5.333         .1            6.833         .0
    1.000          .0            2.500         .5            4.000         .1
5.499         .1
    1.167          .0            2.666         .3            4.166         .1
5.666         .1
    1.333         4.6            2.833         .2            4.333         .1
5.833         .1

       RUNOFF VOLUME =      1.77077 INCHES      =        .5884 ACRE-FEET
       PEAK DISCHARGE RATE =       16.03 CFS  AT   1.500 HOURS   BASIN AREA =
.0062 SQ. MI.


     ***********************************************************************

     *S  COMPUTE HYD BASIN A3

     COMPUTE NM HYD          ID=3  HYDNO=103  AREA=0.00833SQ MI
```

DEV100
PER A=0 PER B=12 PER C=0 PER D=88

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 28.934 CFS UNIT VOLUME = .9990 B =
526.28 P60 = 1.8700
AREA = .007330 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .131021HR TP = .133330HR K/TP RATIO = .982685
SHAPE CONSTANT, N = 3.593448
UNIT PEAK = 2.4522 CFS UNIT VOLUME = .9948 B =
327.09 P60 = 1.8700
AREA = .001000 SQ MI IA = .50000 INCHES INF =
1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=3 CODE=5

PARTIAL HYDROGRAPH 103.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	21.8	3.000	.2
.167	.0	1.667	11.1	3.166	.2
.333	.0	1.833	7.1	3.333	.2
.500	.0	2.000	5.2	3.500	.1
.667	.0	2.166	2.4	3.666	.1
.833	.0	2.333	1.1	3.833	.1
1.000	.0	2.500	.7	4.000	.1
1.167	.1	2.666	.5	4.166	.1
1.333	6.3	2.833	.3	4.333	.1

RUNOFF VOLUME = 1.80971 INCHES = .8040 ACRE-FEET
PEAK DISCHARGE RATE = 21.80 CFS AT 1.500 HOURS BASIN AREA =
.0083 SQ. MI.

****

*S COMPUTE HYD BASIN A4

COMPUTE NM HYD ID=4 HYDNO=104 AREA=0.0104SQ MI

PER A=0 PER B=15 PER C=0 PER D=85

DEV100
TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 34.893 CFS UNIT VOLUME = .9990 B =
526.28 P60 = 1.8700
AREA = .008840 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .131021HR TP = .133330HR K/TP RATIO = .982685
SHAPE CONSTANT, N = 3.593448
UNIT PEAK = 3.8270 CFS UNIT VOLUME = .9967 B =
327.09 P60 = 1.8700
AREA = .001560 SQ MI IA = .50000 INCHES INF =
1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=4 CODE=5

PARTIAL HYDROGRAPH 104.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	26.7	3.000	.3
.167	.0	1.667	13.6	3.166	.2
.333	.0	1.833	8.7	3.333	.2
.500	.0	2.000	6.3	3.500	.2
.667	.0	2.166	2.9	3.666	.2
.833	.0	2.333	1.4	3.833	.2
1.000	.0	2.500	.8	4.000	.1
1.167	.1	2.666	.6	4.166	.1
1.333	7.7	2.833	.4	4.333	.1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
4.500	.1	5.999	.2		
4.666	.1	6.166	.1		
4.833	.1	6.333	.0		
4.999	.1	6.499	.0		
5.166	.2	6.666	.0		
5.333	.2	6.833	.0		
5.499	.2				
5.666	.2				
5.833	.2				

RUNOFF VOLUME = 1.77077 INCHES = .9822 ACRE-FEET
PEAK DISCHARGE RATE = 26.75 CFS AT 1.500 HOURS BASIN AREA =
.0104 SQ. MI.

****

*S COMPUTE HYD BASIN B1

COMPUTE NM HYD ID=11 HYDNO=201 AREA=0.00161SQ MI

PER A=0 PER B=10 PER C=0 PER D=90

TP=.13333 HR MASS RAIN=-1

```
          K =    .072665HR     TP =    .133330HR     K/TP RATIO =    .545000
SHAPE CONSTANT, N =  7.106420
          UNIT PEAK =    5.7194     CFS    UNIT VOLUME =     .9973        B =
526.28       P60 = 1.8700
          AREA =       .001449 SQ MI     IA =     .10000 INCHES     INF =
.04000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =    .033330

          K =    .131021HR     TP =    .133330HR     K/TP RATIO =    .982685
SHAPE CONSTANT, N =  3.593448
          UNIT PEAK =    .39497     CFS    UNIT VOLUME =     .9644        B =
327.09       P60 = 1.8700
          AREA =       .000161 SQ MI     IA =     .50000 INCHES     INF =
1.25000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =    .033330

     PRINT HYD                ID=11   CODE=5
```

PARTIAL HYDROGRAPH 201.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	1.3	2.666	.1
.167	.0	1.500	4.3	2.833	.1
.333	.0	1.667	2.2	3.000	.0
.500	.0	1.833	1.4	3.166	.0
.667	.0	2.000	1.0	3.333	.0
.833	.0	2.166	.5	3.500	.0
1.000	.0	2.333	.2	3.666	.0
1.167	.0	2.500	.1	3.833	.0
4.000	.0	5.333	.0		
4.166	.0	5.499	.0		
4.333	.0	5.666	.0		
4.500	.0	5.833	.0		
4.666	.0	5.999	.0		
4.833	.0	6.166	.0		
4.999	.0	6.333	.0		
5.166	.0	6.499	.0		

```
          RUNOFF VOLUME =      1.83567 INCHES      =         .1576 ACRE-FEET
          PEAK DISCHARGE RATE =        4.28 CFS   AT    1.500 HOURS    BASIN AREA =
.0016 SQ. MI.

     ***********************************************************************

     *S  COMPUTE HYD BASIN B2

     COMPUTE NM HYD           ID=12  HYDNO=202  AREA=0.00097SQ MI

                              PER A=0 PER B=0 PER C=10 PER D=90

                              TP=.13333 HR MASS RAIN=-1

          K =    .072665HR     TP =    .133330HR     K/TP RATIO =    .545000
SHAPE CONSTANT, N =  7.106420
          UNIT PEAK =    3.4459     CFS    UNIT VOLUME =     .9960        B =
```

```
526.28      P60 = 1.8700
          AREA =      .000873 SQ MI    IA =    .10000 INCHES    INF =
.04000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330


          K =   .105891HR    TP =   .133330HR    K/TP RATIO =   .794199
SHAPE CONSTANT, N =  4.514851
          UNIT PEAK =   .28238    CFS   UNIT VOLUME =    .9537       B =
388.14      P60 = 1.8700
          AREA =      .000097 SQ MI    IA =    .35000 INCHES    INF =
.83000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT =   .033330

     PRINT HYD              ID=12   CODE=5
```

PARTIAL HYDROGRAPH 202.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	.8	2.666	.0
4.000	.0	5.333	.0		
.167	.0	1.500	2.6	2.833	.0
4.166	.0	5.499	.0		
.333	.0	1.667	1.3	3.000	.0
4.333	.0	5.666	.0		
.500	.0	1.833	.9	3.166	.0
4.500	.0	5.833	.0		
.667	.0	2.000	.6	3.333	.0
4.666	.0	5.999	.0		
.833	.0	2.166	.3	3.500	.0
4.833	.0	6.166	.0		
1.000	.0	2.333	.1	3.666	.0
4.999	.0	6.333	.0		
1.167	.0	2.500	.1	3.833	.0
5.166	.0				

```
        RUNOFF VOLUME =     1.86838 INCHES     =        .0967 ACRE-FEET
        PEAK DISCHARGE RATE =       2.64 CFS  AT   1.500 HOURS   BASIN AREA =
.0010 SQ. MI.


     ***********************************************************************

     *S  COMPUTE HYD BASIN B3

     COMPUTE NM HYD          ID=13  HYDNO=203  AREA=0.00190SQ MI

                             PER A=0 PER B=10 PER C=5 PER D=85

                             TP=.13333 HR MASS RAIN=-1


          K =   .072665HR    TP =   .133330HR    K/TP RATIO =   .545000
SHAPE CONSTANT, N =  7.106420
          UNIT PEAK =   6.3747    CFS   UNIT VOLUME =    .9976       B =
526.28      P60 = 1.8700
          AREA =      .001615 SQ MI    IA =    .10000 INCHES    INF =
.04000 INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
```

DEV100

DT = .033330

K = .122644HR TP = .133330HR K/TP RATIO = .919857
SHAPE CONSTANT, N = 3.848008
UNIT PEAK = .73725 CFS UNIT VOLUME = .9827 B = 344.91 P60 = 1.8700
AREA = .000285 SQ MI IA = .45000 INCHES INF = 1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=13 CODE=5

PARTIAL HYDROGRAPH 203.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	1.4	2.666	.1
.167	.0	1.500	5.0	2.833	.1
.333	.0	1.667	2.5	3.000	.0
.500	.0	1.833	1.6	3.166	.0
.667	.0	2.000	1.2	3.333	.0
.833	.0	2.166	.5	3.500	.0
1.000	.0	2.333	.3	3.666	.0
1.167	.0	2.500	.2	3.833	.0
4.000	.0	5.333	.0		
4.166	.0	5.499	.0		
4.333	.0	5.666	.0		
4.500	.0	5.833	.0		
4.666	.0	5.999	.0		
4.833	.0	6.166	.0		
4.999	.0	6.333	.0		
5.166	.0	6.499	.0		

RUNOFF VOLUME = 1.78520 INCHES = .1809 ACRE-FEET
PEAK DISCHARGE RATE = 4.95 CFS AT 1.500 HOURS BASIN AREA = .0019 SQ. MI.

****

*S COMPUTE HYD BASIN B4

COMPUTE NM HYD ID=14 HYDNO=204 AREA=0.00459SQ MI

PER A=0 PER B=10 PER C=5 PER D=85

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 15.400 CFS UNIT VOLUME = .9987 B = 526.28 P60 = 1.8700
AREA = .003902 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .122644HR TP = .133330HR K/TP RATIO = .919857

DEV100

SHAPE CONSTANT, N = 3.848008
UNIT PEAK = 1.7810 CFS UNIT VOLUME = .9926 B = 344.91 P60 = 1.8700
AREA = .000689 SQ MI IA = .45000 INCHES INF = 1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=14 CODE=5

PARTIAL HYDROGRAPH 204.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	11.9	3.000	.1
4.500	.1	5.999	.1		
.167	.0	1.667	6.1	3.166	.1
4.666	.1	6.166	.0		
.333	.0	1.833	3.9	3.333	.1
4.833	.1	6.333	.0		
.500	.0	2.000	2.8	3.500	.1
4.999	.1	6.499	.0		
.667	.0	2.166	1.3	3.666	.1
5.166	.1	6.666	.0		
.833	.0	2.333	.6	3.833	.1
5.333	.1				
1.000	.0	2.500	.4	4.000	.1
5.499	.1				
1.167	.0	2.666	.2	4.166	.1
5.666	.1				
1.333	3.4	2.833	.2	4.333	.1
5.833	.1				

RUNOFF VOLUME = 1.78520 INCHES = .4370 ACRE-FEET
PEAK DISCHARGE RATE = 11.94 CFS AT 1.500 HOURS BASIN AREA = .0046 SQ. MI.

****

*S COMPUTE HYD BASIN B5

COMPUTE NM HYD ID=15 HYDNO=205 AREA=0.00657SQ MI

PER A=0 PER B=10 PER C=5 PER D=85

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 22.043 CFS UNIT VOLUME = .9988 B = 526.28 P60 = 1.8700
AREA = .005585 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .122644HR TP = .133330HR K/TP RATIO = .919857
SHAPE CONSTANT, N = 3.848008
UNIT PEAK = 2.5493 CFS UNIT VOLUME = .9949 B =

DEV100

344.91 P60 = 1.8700
AREA = .000986 SQ MI IA = .45000 INCHES INF =
1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=15 CODE=5

PARTIAL HYDROGRAPH 205.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	17.1	3.000	.2
.167	.0	1.667	8.7	3.166	.1
.333	.0	1.833	5.5	3.333	.1
.500	.0	2.000	4.0	3.500	.1
.667	.0	2.166	1.8	3.666	.1
.833	.0	2.333	.9	3.833	.1
1.000	.0	2.500	.5	4.000	.1
1.167	.0	2.666	.4	4.166	.1
1.333	4.9	2.833	.3	4.333	.1

RUNOFF VOLUME = 1.78520 INCHES = .6255 ACRE-FEET
PEAK DISCHARGE RATE = 17.08 CFS AT 1.500 HOURS BASIN AREA =
.0066 SQ. MI.

****

*S COMPUTE HYD BASIN B6

COMPUTE NM HYD ID=16 HYDNO=206 AREA=0.00575SQ MI

PER A=0 PER B=0 PER C=10 PER D=90

TP=.16667 HR MASS RAIN=-1

K = .090835HR TP = .166670HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 16.341 CFS UNIT VOLUME = .9996 B =
526.28 P60 = 1.8700
AREA = .005175 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .132369HR TP = .166670HR K/TP RATIO = .794199
SHAPE CONSTANT, N = 4.514851
UNIT PEAK = 1.3391 CFS UNIT VOLUME = .9901 B =
388.14 P60 = 1.8700
AREA = .000575 SQ MI IA = .35000 INCHES INF =

DEV100

.83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=16 CODE=5

PARTIAL HYDROGRAPH 206.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	13.2	3.000	.2
.167	.0	1.667	9.2	3.166	.2
.333	.0	1.833	5.5	3.333	.1
.500	.0	2.000	4.1	3.500	.1
.667	.0	2.166	2.3	3.666	.1
.833	.0	2.333	1.0	3.833	.1
1.000	.0	2.500	.7	4.000	.1
1.167	.0	2.666	.4	4.166	.1
1.333	3.0	2.833	.3	4.333	.1
4.500	.1	5.999	.1		
4.666	.1	6.166	.1		
4.833	.1	6.333	.0		
4.999	.1	6.499	.0		
5.166	.1	6.666	.0		
5.333	.1	6.833	.0		
5.499	.1	6.999	.0		
5.666	.1				
5.833	.1				

RUNOFF VOLUME = 1.86838 INCHES = .5730 ACRE-FEET
PEAK DISCHARGE RATE = 14.05 CFS AT 1.533 HOURS BASIN AREA =
.0058 SQ. MI.

****

*S COMPUTE HYD BASIN B7

COMPUTE NM HYD ID=17 HYDNO=207 AREA=0.00176SQ MI

PER A=0 PER B=0 PER C=10 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 6.2523 CFS UNIT VOLUME = .9976 B =
526.28 P60 = 1.8700
AREA = .001584 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .105891HR TP = .133330HR K/TP RATIO = .794199
SHAPE CONSTANT, N = 4.514851
UNIT PEAK = .51236 CFS UNIT VOLUME = .9755 B =
388.14 P60 = 1.8700
AREA = .000176 SQ MI IA = .35000 INCHES INF =
.83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -

DEV100

DT = .033330

PRINT HYD ID=17 CODE=5

PARTIAL HYDROGRAPH 207.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	1.4	2.666	.1
.167	.0	1.500	4.8	2.833	.1
.333	.0	1.667	2.4	3.000	.0
.500	.0	1.833	1.6	3.166	.0
.667	.0	2.000	1.1	3.333	.0
.833	.0	2.166	.5	3.500	.0
1.000	.0	2.333	.2	3.666	.0
1.167	.0	2.500	.1	3.833	.0
4.000	.0	5.333	.0		
4.166	.0	5.499	.0		
4.333	.0	5.666	.0		
4.500	.0	5.833	.0		
4.666	.0	5.999	.0		
4.833	.0	6.166	.0		
4.999	.0	6.333	.0		
5.166	.0	6.499	.0		

RUNOFF VOLUME = 1.86838 INCHES = .1754 ACRE-FEET
PEAK DISCHARGE RATE = 4.77 CFS AT 1.500 HOURS BASIN AREA = .0018 SQ. MI.

****

*S COMPUTE HYD BASIN B8

COMPUTE NM HYD ID=18 HYDNO=208 AREA=0.00249SQ MI

PER A=0 PER B=0 PER C=10 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 8.8456 CFS UNIT VOLUME = .9980 B = 526.28 P60 = 1.8700
AREA = .002241 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .105891HR TP = .133330HR K/TP RATIO = .794199
SHAPE CONSTANT, N = 4.514851
UNIT PEAK = .72487 CFS UNIT VOLUME = .9823 B = 388.14 P60 = 1.8700
AREA = .000249 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=18 CODE=5

DEV100

PARTIAL HYDROGRAPH 208.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	6.7	3.000	.1
.167	.0	1.667	3.4	3.166	.1
.333	.0	1.833	2.2	3.333	.0
.500	.0	2.000	1.6	3.500	.0
.667	.0	2.166	.7	3.666	.0
.833	.0	2.333	.3	3.833	.0
1.000	.0	2.500	.2	4.000	.0
1.167	.0	2.666	.1	4.166	.0
1.333	2.0	2.833	.1	4.333	.0

4.500 .0 4.666 .0 4.833 .0 4.999 .0 5.166 .0 5.333 .0 5.499 .0 5.666 .0 5.833 .0

RUNOFF VOLUME = 1.86838 INCHES = .2481 ACRE-FEET
PEAK DISCHARGE RATE = 6.74 CFS AT 1.500 HOURS BASIN AREA =
.0025 SQ. MI.

****

*S COMPUTE HYD BASIN B9

COMPUTE NM HYD ID=19 HYDNO=209 AREA=0.00725SQ MI

PER A=0 PER B=5 PER C=5 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 25.755 CFS UNIT VOLUME = .9989 B =
526.28 P60 = 1.8700
AREA = .006525 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .118456HR TP = .133330HR K/TP RATIO = .888442
SHAPE CONSTANT, N = 3.992480
UNIT PEAK = 1.9286 CFS UNIT VOLUME = .9937 B =
354.67 P60 = 1.8700
AREA = .000725 SQ MI IA = .42500 INCHES INF =
1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=19 CODE=5

PARTIAL HYDROGRAPH 209.00

DEV100

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	19.4	3.000	.2
4.500	.1	1.667	9.8	3.166	.2
.167	.0	1.833	6.4	3.333	.1
4.666	.1	2.000	4.6	3.500	.1
.333	.0	2.166	2.1	3.666	.1
4.833	.1	2.333	1.0	3.833	.1
.500	.0	2.500	.6	4.000	.1
4.999	.1	2.666	.4	4.166	.1
.667	.0	2.833	.3	4.333	.1
5.166	.1				
.833	.0				
5.333	.1				
1.000	.0				
5.499	.1				
1.167	.0				
5.666	.1				
1.333	5.7				
5.833	.1				

RUNOFF VOLUME = 1.85050 INCHES = .7155 ACRE-FEET
PEAK DISCHARGE RATE = 19.39 CFS AT 1.500 HOURS BASIN AREA =
.0073 SQ. MI.

****

*S COMPUTE HYD BASIN B10

COMPUTE NM HYD ID=20 HYDNO=210 AREA=0.00748SQ MI

PER A=0 PER B=10 PER C=0 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 26.572 CFS UNIT VOLUME = .9989 B =
526.28 P60 = 1.8700
AREA = .006732 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .131021HR TP = .133330HR K/TP RATIO = .982685
SHAPE CONSTANT, N = 3.593448
UNIT PEAK = 1.8350 CFS UNIT VOLUME = .9932 B =
327.09 P60 = 1.8700
AREA = .000748 SQ MI IA = .50000 INCHES INF =
1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=20 CODE=5

PARTIAL HYDROGRAPH 210.00

TIME	FLOW	TIME	FLOW	TIME	FLOW

DEV100

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	HRS	CFS
.000	.0	1.500	19.8	3.000	.2
4.500	.1	1.667	10.0	3.166	.2
.167	.0	1.833	6.5	3.333	.1
4.666	.1	2.000	4.8	3.500	.1
.333	.0	2.166	2.2	3.666	.1
4.833	.1	2.333	1.0	3.833	.1
.500	.0	2.500	.6	4.000	.1
4.999	.1	2.666	.4	4.166	.1
.667	.0	2.833	.3	4.333	.1
5.166	.1				
.833	.0				
5.333	.1				
1.000	.0				
5.499	.1				
1.167	.1				
5.666	.1				
1.333	5.8				
5.833	.1				

RUNOFF VOLUME = 1.83567 INCHES = .7323 ACRE-FEET
PEAK DISCHARGE RATE = 19.81 CFS AT 1.500 HOURS BASIN AREA =
.0075 SQ. MI.

****

*S COMPUTE HYD BASIN 01

COMPUTE NM HYD ID=21 HYDNO=211 AREA=0.00796SQ MI

PER A=0 PER B=10 PER C=5 PER D=85

TP=.1667 HR MASS RAIN=-1

K = .090852HR TP = .166700HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 21.360 CFS UNIT VOLUME = .9997 B =
526.28 P60 = 1.8700
AREA = .006766 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .153340HR TP = .166700HR K/TP RATIO = .919856
SHAPE CONSTANT, N = 3.848002
UNIT PEAK = 2.4704 CFS UNIT VOLUME = .9945 B =
344.91 P60 = 1.8700
AREA = .001194 SQ MI IA = .45000 INCHES INF =
1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=21 CODE=5

PARTIAL HYDROGRAPH 211.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS

DEV100

HRS	CFS	HRS	CFS			
.000	.0	1.500	17.5	3.000	.3	
4.500	.1	5.999	.1			
.167	.0	1.667	12.2	3.166	.2	
4.666	.1	6.166	.1			
.333	.0	1.833	7.3	3.333	.2	
4.833	.1	6.333	.0			
.500	.0	2.000	5.3	3.500	.1	
4.999	.1	6.499	.0			
.667	.0	2.166	3.0	3.666	.1	
5.166	.1	6.666	.0			
.833	.0	2.333	1.4	3.833	.1	
5.333	.1	6.833	.0			
1.000	.0	2.500	.9	4.000	.1	
5.499	.1	6.999	.0			
1.167	.0	2.666	.6	4.166	.1	
5.666	.1					
1.333	3.9	2.833	.4	4.333	.1	
5.833	.1					

RUNOFF VOLUME = 1.78520 INCHES = .7579 ACRE-FEET
PEAK DISCHARGE RATE = 18.66 CFS AT 1.533 HOURS BASIN AREA =
.0080 SQ. MI.

****

*S COMPUTE HYD BASIN O2

COMPUTE NM HYD ID=22 HYDNO=212 AREA=0.00767SQ MI

PER A=0 PER B=10 PER C=5 PER D=85

TP=.1667 HR MASS RAIN=-1

K = .090852HR TP = .166700HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 20.582 CFS UNIT VOLUME = .9997 B =
526.28 P60 = 1.8700
AREA = .006520 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .153340HR TP = .166700HR K/TP RATIO = .919856
SHAPE CONSTANT, N = 3.848002
UNIT PEAK = 2.3804 CFS UNIT VOLUME = .9945 B =
344.91 P60 = 1.8700
AREA = .001151 SQ MI IA = .45000 INCHES INF =
1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=22 CODE=5

PARTIAL HYDROGRAPH 212.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	16.9	3.000	.3

4.500	.1		5.999	.1			
.167		.0	1.667		11.8	3.166	.2
4.666	.1		6.166	.1			
.333		.0	1.833		7.0	3.333	.2
4.833	.1		6.333	.0			
.500		.0	2.000		5.1	3.500	.1
4.999	.1		6.499	.0			
.667		.0	2.166		2.9	3.666	.1
5.166	.1		6.666	.0			
.833		.0	2.333		1.3	3.833	.1
5.333	.1		6.833	.0			
1.000		.0	2.500		.8	4.000	.1
5.499	.1		6.999	.0			
1.167		.0	2.666		.6	4.166	.1
5.666	.1						
1.333		3.8	2.833		.4	4.333	.1
5.833	.1						

RUNOFF VOLUME = 1.78520 INCHES = .7303 ACRE-FEET
PEAK DISCHARGE RATE = 17.98 CFS AT 1.533 HOURS BASIN AREA =
.0077 SQ. MI.

****

*S COMPUTE HYD BASIN OS1

COMPUTE NM HYD ID=23 HYDNO=213 AREA=0.01104SQ MI

PER A=0 PER B=10 PER C=5 PER D=85

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 37.040 CFS UNIT VOLUME = .9991 B =
526.28 P60 = 1.8700
AREA = .009384 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .122644HR TP = .133330HR K/TP RATIO = .919857
SHAPE CONSTANT, N = 3.848008
UNIT PEAK = 4.2838 CFS UNIT VOLUME = .9972 B =
344.91 P60 = 1.8700
AREA = .001656 SQ MI IA = .45000 INCHES INF =
1.11000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=23 CODE=5

PARTIAL HYDROGRAPH 213.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	28.7	3.000	.3
4.500	.1	5.999	.2	3.166	.2
.167	.0	1.667	14.6		

DEV100

4.666	.1		6.166	.1		3.333	.2
.333		.0	1.833		9.3		
4.833	.2		6.333	.0		3.500	.2
.500		.0	2.000		6.8		
4.999	.2		6.499	.0		3.666	.2
.667		.0	2.166		3.1		
5.166	.2		6.666	.0		3.833	.2
.833		.0	2.333		1.4		
5.333	.2		6.833	.0		4.000	.2
1.000		.0	2.500		.9		
5.499	.2					4.166	.2
1.167		.1	2.666		.6		
5.666	.2					4.333	.1
1.333		8.2	2.833		.4		
5.833	.2						

RUNOFF VOLUME = 1.78520 INCHES = 1.0511 ACRE-FEET
PEAK DISCHARGE RATE = 28.69 CFS AT 1.500 HOURS BASIN AREA =
.0110 SQ. MI.

****

*S COMPUTE HYD BASIN OS2

COMPUTE NM HYD ID=24 HYDNO=214 AREA=0.0008SQ MI

PER A=0 PER B=5 PER C=5 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 2.8420 CFS UNIT VOLUME = .9955 B =
526.28 P60 = 1.8700
AREA = .000720 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .118456HR TP = .133330HR K/TP RATIO = .888442
SHAPE CONSTANT, N = 3.992480
UNIT PEAK = .21281 CFS UNIT VOLUME = .9359 B =
354.67 P60 = 1.8700
AREA = .000080 SQ MI IA = .42500 INCHES INF =
1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=24 CODE=5

PARTIAL HYDROGRAPH 214.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	.6	2.666	.0
4.000	.0	5.333	.0	2.833	.0
.167	.0	1.500	2.2	3.000	.0
4.166	.0	5.499	.0		
.333	.0	1.667	1.1		

DEV100

4.333	.0		5.666	.0			
.500		.0	1.833		.7	3.166	.0
4.500	.0		5.833	.0			
.667		.0	2.000		.5	3.333	.0
4.666	.0		5.999	.0			
.833		.0	2.166		.2	3.500	.0
4.833	.0		6.166	.0			
1.000		.0	2.333		.1	3.666	.0
4.999	.0		6.333	.0			
1.167		.0	2.500		.1	3.833	.0
5.166	.0						

RUNOFF VOLUME = 1.85050 INCHES = .0790 ACRE-FEET
PEAK DISCHARGE RATE = 2.15 CFS AT 1.500 HOURS BASIN AREA =
.0008 SQ. MI.

****

*S COMPUTE HYD BASIN OS3

COMPUTE NM HYD ID=25 HYDNO=215 AREA=0.00311SQ MI

PER A=0 PER B=5 PER C=5 PER D=90

TP=.13333 HR MASS RAIN=-1

K = .072665HR TP = .133330HR K/TP RATIO = .545000
SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 11.048 CFS UNIT VOLUME = .9984 B =
526.28 P60 = 1.8700
AREA = .002799 SQ MI IA = .10000 INCHES INF =
.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

K = .118456HR TP = .133330HR K/TP RATIO = .888442
SHAPE CONSTANT, N = 3.992480
UNIT PEAK = .82728 CFS UNIT VOLUME = .9847 B =
354.67 P60 = 1.8700
AREA = .000311 SQ MI IA = .42500 INCHES INF =
1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD -
DT = .033330

PRINT HYD ID=25 CODE=5

PARTIAL HYDROGRAPH 215.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	8.3	3.000	.1
.167	.0	1.667	4.2	3.166	.1
.333	.0	1.833	2.7	3.333	.1
.500	.0	2.000	2.0	3.500	.1
.667	.0	2.166	.9	3.666	.1
4.500	.0	5.999	.1		
4.666	.0	6.166	.0		
4.833	.0	6.333	.0		
4.999	.0	6.499	.0		

DEV100

5.166	.0		6.666	.0			
.833		.0	2.333		.4	3.833	.0
5.333	.0						
1.000		.0	2.500		.3	4.000	.0
5.499	.1						
1.167		.0	2.666		.2	4.166	.0
5.666	.1						
1.333		2.4	2.833		.1	4.333	.0
5.833	.1						

RUNOFF VOLUME = 1.85050 INCHES = .3069 ACRE-FEET
PEAK DISCHARGE RATE = 8.33 CFS AT 1.500 HOURS BASIN AREA =
.0031 SQ. MI.

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****

*S ADD O1 AND O2

ADD HYD ID=28 HYDNO=300

ID=21 ID=22

PRINT HYD ID=28 CODE=5

HYDROGRAPH FROM AREA 300.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	34.4	3.000	.6
4.500	.2	5.999	.3		
.167	.0	1.667	24.0	3.166	.4
4.666	.2	6.166	.2		
.333	.0	1.833	14.3	3.333	.3
4.833	.2	6.333	.0		
.500	.0	2.000	10.4	3.500	.3
4.999	.2	6.499	.0		
.667	.0	2.166	6.0	3.666	.3
5.166	.2	6.666	.0		
.833	.0	2.333	2.7	3.833	.2
5.333	.2	6.833	.0		
1.000	.0	2.500	1.7	4.000	.2
5.499	.2	6.999	.0		
1.167	.0	2.666	1.2	4.166	.2
5.666	.2				
1.333	7.7	2.833	.8	4.333	.2
5.833	.3				

RUNOFF VOLUME = 1.78515 INCHES = 1.4881 ACRE-FEET
PEAK DISCHARGE RATE = 36.65 CFS AT 1.533 HOURS BASIN AREA =
.0156 SQ. MI.

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*OFFSITE POND ON CHURCH TRACT

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ROUTE RESERVOIR ID=29 HYD=301 INFLOW ID=28 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.01	0.0	5108
5.43	0.40	5110
7.05	0.65	5111
8.37	0.95	5112
9.50	1.25	5113

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5108.00	-.001	.00
.17	.00	5108.00	.000	.01
.33	.00	5108.00	.000	.01
.50	.00	5108.00	.000	.01
.67	.00	5108.00	.000	.01
.83	.00	5108.00	.000	.01
1.00	.00	5108.00	.000	.01
1.17	.04	5108.00	.000	.01
1.33	7.72	5108.16	.032	.45
1.50	34.43	5109.43	.286	3.88
1.67	24.02	5110.99	.648	7.04
1.83	14.31	5111.49	.797	7.70
2.00	10.41	5111.69	.857	7.96
2.17	5.96	5111.71	.864	7.99
2.33	2.71	5111.53	.810	7.76
2.50	1.71	5111.28	.735	7.43
2.67	1.15	5111.02	.655	7.07
2.83	.81	5110.70	.574	6.56
3.00	.59	5110.39	.497	6.06
3.17	.44	5110.10	.424	5.58
3.33	.35	5109.78	.357	4.84
3.50	.29	5109.50	.300	4.07
3.67	.25	5109.26	.252	3.42
3.83	.23	5109.06	.212	2.88
4.00	.22	5108.89	.179	2.43
4.17	.22	5108.75	.151	2.05
4.33	.21	5108.64	.128	1.74
4.50	.21	5108.54	.108	1.48
4.67	.21	5108.46	.093	1.26
4.83	.22	5108.40	.079	1.09
5.00	.22	5108.34	.068	.94
5.17	.23	5108.30	.059	.82
5.33	.23	5108.26	.052	.72
5.50	.24	5108.23	.046	.63
5.67	.25	5108.21	.041	.57
5.83	.26	5108.19	.037	.51
6.00	.27	5108.17	.034	.47
6.17	.16	5108.16	.031	.43
6.33	.04	5108.13	.027	.37
6.50	.02	5108.11	.022	.31
6.67	.01	5108.09	.019	.26
6.83	.01	5108.08	.016	.22

7.00	.00	5108.06	.013	.18
7.17	.00	5108.05	.011	.15
7.33	.00	5108.04	.009	.13
7.50	.00	5108.04	.007	.11
7.67	.00	5108.03	.006	.09
7.83	.00	5108.02	.005	.07
8.00	.00	5108.02	.004	.06
8.17	.00	5108.01	.003	.05
8.33	.00	5108.01	.002	.04
8.50	.00	5108.01	.002	.03
8.67	.00	5108.01	.001	.03
8.83	.00	5108.00	.001	.02
9.00	.00	5108.00	.001	.02
9.17	.00	5108.00	.000	.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5108.00	.000	.01
9.50	.00	5108.00	.000	.01
9.67	.00	5108.00	.000	.01
9.83	.00	5108.00	.000	.01
10.00	.00	5108.00	.000	.01
10.17	.00	5108.00	.000	.01
10.33	.00	5108.00	.000	.01
10.50	.00	5108.00	.000	.01
10.67	.00	5108.00	.000	.01
10.83	.00	5108.00	.000	.01
11.00	.00	5108.00	.000	.01
11.17	.00	5108.00	.000	.01
11.33	.00	5108.00	.000	.01
11.50	.00	5108.00	.000	.01
11.67	.00	5108.00	.000	.01
11.83	.00	5108.00	.000	.01
12.00	.00	5108.00	.000	.01
12.17	.00	5108.00	.000	.01
12.33	.00	5108.00	.000	.01
12.50	.00	5108.00	.000	.01
12.67	.00	5108.00	.000	.01
12.83	.00	5108.00	.000	.01
13.00	.00	5108.00	.000	.01
13.17	.00	5108.00	.000	.01
13.33	.00	5108.00	.000	.01
13.50	.00	5108.00	.000	.01
13.67	.00	5108.00	.000	.01
13.83	.00	5108.00	.000	.01
14.00	.00	5108.00	.000	.01
14.17	.00	5108.00	.000	.01
14.33	.00	5108.00	.000	.01
14.50	.00	5108.00	.000	.01
14.67	.00	5108.00	.000	.01
14.83	.00	5108.00	.000	.01
15.00	.00	5108.00	.000	.01
15.17	.00	5108.00	.000	.01
15.33	.00	5108.00	.000	.01
15.50	.00	5108.00	.000	.01
15.67	.00	5108.00	.000	.01
15.83	.00	5108.00	.000	.01
16.00	.00	5108.00	.000	.01
16.17	.00	5108.00	.000	.01
16.33	.00	5108.00	.000	.01
16.50	.00	5108.00	.000	.01
16.67	.00	5108.00	.000	.01
16.83	.00	5108.00	.000	.01
17.00	.00	5108.00	.000	.01
17.16	.00	5108.00	.000	.01

17.33	.00	5108.00	.000	.01
17.50	.00	5108.00	.000	.01
17.66	.00	5108.00	.000	.01
17.83	.00	5108.00	.000	.01
18.00	.00	5108.00	.000	.01
18.16	.00	5108.00	.000	.01
18.33	.00	5108.00	.000	.01
18.50	.00	5108.00	.000	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	.00	5108.00	.000	.01
18.83	.00	5108.00	.000	.01
19.00	.00	5108.00	.000	.01
19.16	.00	5108.00	.000	.01
19.33	.00	5108.00	.000	.01
19.50	.00	5108.00	.000	.01
19.66	.00	5108.00	.000	.01
19.83	.00	5108.00	.000	.01

PEAK DISCHARGE = 8.013 CFS - PEAK OCCURS AT HOUR 2.10
MAXIMUM WATER SURFACE ELEVATION = 5111.729
MAXIMUM STORAGE = .8689 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=29 CODE=5

HYDROGRAPH FROM AREA 301.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	2.4	7.999	.1	11.999	.0
.167	.0	4.166	2.1	8.166	.0	12.165	.0
.333	.0	4.333	1.7	8.332	.0	12.332	.0
.500	.0	4.500	1.5	8.499	.0	12.499	.0
.667	.0	4.666	1.3	8.666	.0	12.665	.0
.833	.0	4.833	1.1	8.832	.0	12.832	.0
1.000	.0	4.999	.9	8.999	.0	12.999	.0
1.167	.0	5.166	.8	9.166	.0	13.165	.0
1.333	.4	5.333	.7	9.332	.0	13.332	.0
1.500	3.9	5.499	.6	9.499	.0	13.499	.0
1.667	7.0	5.666	.6	9.666	.0	13.665	.0
1.833	7.7	5.833	.5	9.832	.0	13.832	.0
2.000	8.0	5.999	.5	9.999	.0	13.999	.0
2.166	8.0	6.166	.4	10.166	.0	14.165	.0
2.333	7.8	6.333	.4	10.332	.0	14.332	.0
2.500	7.4	6.499	.3	10.499	.0	14.499	.0
						15.998	.0
						16.165	.0
						16.332	.0
						16.498	.0
						16.665	.0
						16.832	.0
						16.998	.0
						17.165	.0
						17.332	.0
						17.498	.0
						17.665	.0
						17.832	.0
						17.998	.0
						18.165	.0
						18.331	.0
						18.498	.0

DEV100

2.666	7.1	6.666	.3	10.666	.0	14.665	.0
2.833	6.6	6.833	.2	10.832	.0	14.832	.0
3.000	6.1	6.999	.2	10.999	.0	14.998	.0
3.166	5.6	7.166	.2	11.166	.0	15.165	.0
3.333	4.8	7.333	.1	11.332	.0	15.332	.0
3.500	4.1	7.499	.1	11.499	.0	15.498	.0
3.666	3.4	7.666	.1	11.665	.0	15.665	.0
3.833	2.9	7.833	.1	11.832	.0	15.832	.0

RUNOFF VOLUME = 1.79654 INCHES = 1.4976 ACRE-FEET
PEAK DISCHARGE RATE = 8.01 CFS AT 2.100 HOURS BASIN AREA = .0156 SQ. MI.

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*POND 1

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ROUTE RESERVOIR ID=30 HYD=302 INFLOW ID=1 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.01	0.0	5110
2.82	0.21	5111
3.31	0.47	5112
3.73	0.77	5113
4.11	1.12	5114

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5110.00	-.001	.00
.17	.00	5110.00	.000	.01
.33	.00	5110.00	.000	.01
.50	.00	5110.00	.000	.01
.67	.00	5110.00	.000	.01
.83	.00	5110.00	.000	.01
1.00	.00	5110.00	.000	.01
1.17	.05	5110.00	.000	.01
1.33	6.08	5110.14	.028	.39
1.50	20.65	5110.94	.197	2.65
1.67	10.47	5111.63	.373	3.13
1.83	6.79	5111.90	.443	3.26
2.00	4.97	5112.03	.478	3.32
2.17	2.26	5112.05	.485	3.33
2.33	1.06	5111.96	.460	3.29

2.50	.66	5111.83	.426	3.23
2.67	.44	5111.69	.390	3.16
2.83	.31	5111.55	.352	3.09
3.00	.23	5111.40	.314	3.02
3.17	.18	5111.25	.275	2.94
3.33	.15	5111.11	.238	2.87
3.50	.14	5110.96	.201	2.70
3.67	.13	5110.80	.168	2.26
3.83	.12	5110.67	.142	1.90
4.00	.11	5110.57	.119	1.60
4.17	.11	5110.48	.100	1.35
4.33	.11	5110.40	.085	1.14
4.50	.11	5110.34	.072	.97
4.67	.11	5110.29	.061	.83
4.83	.11	5110.25	.052	.71
5.00	.12	5110.21	.045	.61
5.17	.12	5110.18	.038	.52
5.33	.12	5110.16	.033	.46
5.50	.13	5110.14	.029	.40
5.67	.13	5110.12	.026	.35
5.83	.14	5110.11	.023	.32
6.00	.14	5110.10	.021	.29
6.17	.06	5110.09	.019	.26
6.33	.02	5110.07	.016	.22
6.50	.01	5110.06	.013	.18
6.67	.00	5110.05	.011	.15
6.83	.00	5110.04	.009	.13
7.00	.00	5110.03	.007	.11
7.17	.00	5110.03	.006	.09
7.33	.00	5110.02	.005	.07
7.50	.00	5110.02	.004	.06
7.67	.00	5110.01	.003	.05
7.83	.00	5110.01	.002	.04
8.00	.00	5110.01	.002	.04
8.17	.00	5110.01	.001	.03
8.33	.00	5110.01	.001	.02
8.50	.00	5110.00	.001	.02
8.67	.00	5110.00	.001	.02
8.83	.00	5110.00	.000	.01
9.00	.00	5110.00	.000	.01
9.17	.00	5110.00	.000	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5110.00	.000	.01
9.50	.00	5110.00	.000	.01
9.67	.00	5110.00	.000	.01
9.83	.00	5110.00	.000	.01
10.00	.00	5110.00	.000	.01
10.17	.00	5110.00	.000	.01
10.33	.00	5110.00	.000	.01
10.50	.00	5110.00	.000	.01
10.67	.00	5110.00	.000	.01
10.83	.00	5110.00	.000	.01
11.00	.00	5110.00	.000	.01
11.17	.00	5110.00	.000	.01
11.33	.00	5110.00	.000	.01
11.50	.00	5110.00	.000	.01
11.67	.00	5110.00	.000	.01
11.83	.00	5110.00	.000	.01
12.00	.00	5110.00	.000	.01
12.17	.00	5110.00	.000	.01
12.33	.00	5110.00	.000	.01
12.50	.00	5110.00	.000	.01
12.67	.00	5110.00	.000	.01

DEV100

12.83	.00	5110.00	.000	.01
13.00	.00	5110.00	.000	.01
13.17	.00	5110.00	.000	.01
13.33	.00	5110.00	.000	.01
13.50	.00	5110.00	.000	.01
13.67	.00	5110.00	.000	.01
13.83	.00	5110.00	.000	.01
14.00	.00	5110.00	.000	.01
14.17	.00	5110.00	.000	.01
14.33	.00	5110.00	.000	.01
14.50	.00	5110.00	.000	.01
14.67	.00	5110.00	.000	.01
14.83	.00	5110.00	.000	.01
15.00	.00	5110.00	.000	.01
15.17	.00	5110.00	.000	.01
15.33	.00	5110.00	.000	.01
15.50	.00	5110.00	.000	.01
15.67	.00	5110.00	.000	.01
15.83	.00	5110.00	.000	.01
16.00	.00	5110.00	.000	.01
16.17	.00	5110.00	.000	.01
16.33	.00	5110.00	.000	.01
16.50	.00	5110.00	.000	.01
16.67	.00	5110.00	.000	.01
16.83	.00	5110.00	.000	.01
17.00	.00	5110.00	.000	.01
17.16	.00	5110.00	.000	.01
17.33	.00	5110.00	.000	.01
17.50	.00	5110.00	.000	.01
17.66	.00	5110.00	.000	.01
17.83	.00	5110.00	.000	.01
18.00	.00	5110.00	.000	.01
18.16	.00	5110.00	.000	.01
18.33	.00	5110.00	.000	.01
18.50	.00	5110.00	.000	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	.00	5110.00	.000	.01
18.83	.00	5110.00	.000	.01
19.00	.00	5110.00	.000	.01
19.16	.00	5110.00	.000	.01
19.33	.00	5110.00	.000	.01
19.50	.00	5110.00	.000	.01
19.66	.00	5110.00	.000	.01
19.83	.00	5110.00	.000	.01

PEAK DISCHARGE = 3.334 CFS - PEAK OCCURS AT HOUR 2.10
MAXIMUM WATER SURFACE ELEVATION = 5112.057
MAXIMUM STORAGE = .4869 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=30 CODE=5

HYDROGRAPH FROM AREA 302.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	11.999	.0	4.000	1.6	15.998	.0
.167	.0	12.165	.0	4.166	1.4	16.165	.0
.333	.0			4.333	1.1		
7.999	.0	8.166	.0	8.332	.0		

DEV10

12.665	.0	.833	.0	16.665	.0	4.833	.3
12.832	.0	1.000	.0	16.832	.0	4.999	.2
12.999	.0	1.167	.0	16.998	.0	5.166	.2
13.165	.0	1.333	.2	17.165	.0	5.333	.2
13.332	.0	1.500	1.6	17.332	.0	5.499	.2
13.499	.0	1.667	2.9	17.498	.0	5.666	.1
13.665	.0	1.833	2.9	17.665	.0	5.833	.1
13.832	.0	2.000	2.9	17.832	.0	5.999	.1
13.999	.0	2.166	2.9	17.998	.0	6.166	.1
14.165	.0	2.333	2.9	18.165	.0	6.333	.1
14.332	.0	2.500	2.8	18.331	.0	6.499	.1
14.499	.0	2.666	2.3	18.498	.0	6.666	.1
14.665	.0	2.833	2.0	18.665	.0	6.833	.1
14.832	.0	3.000	1.7	18.831	.0	6.999	.0
14.998	.0	3.166	1.4	18.998	.0	7.166	.0
15.165	.0	3.333	1.2	19.165	.0	7.333	.0
15.332	.0	3.500	1.0	19.331	.0	7.499	.0
15.498	.0	3.666	.8	19.498	.0	7.666	.0
15.665	.0	3.833	.7	19.665	.0	7.833	.0
15.832	.0			19.831	.0		

8.832	.0	11.832	.0				
8.999	.0	11.999	.0				
9.166	.0						
9.332	.0						
9.499	.0						
9.666	.0						
9.832	.0						
9.999	.0						
10.166	.0						
10.332	.0						
10.499	.0						
10.666	.0						
10.832	.0						
10.999	.0						
11.166	.0						
11.332	.0						
11.499	.0						
11.665	.0						
11.832	.0						

RUNOFF VOLUME = 1.16169 INCHES = .4833 ACRE-FEET
PEAK DISCHARGE RATE = 2.94 CFS AT 2.033 HOURS BASIN AREA = .0078 SQ. MI.

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*S ADD OFFSITE POND AND POND 1

ADD HYD ID=31 HYDNO=303

ID=29 ID=30

PRINT HYD ID=31 CODE=5

HYDROGRAPH FROM AREA 303.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	1.7	7.999	.0
.167	.0	4.166	1.4	8.166	.0

DEV10

12.165	.0		16.165	.0			
.333	.0		4.333	1.2		8.332	.0
12.332	.0		16.332	.0			
.500	.0		4.500	1.0		8.499	.0
12.499	.0		16.498	.0			
.667	.0		4.666	.9		8.666	.0
12.665	.0		16.665	.0			
.833	.0		4.833	.7		8.832	.0
12.832	.0		16.832	.0			
1.000	.0		4.999	.6		8.999	.0
12.999	.0		16.998	.0			
1.167	.0		5.166	.6		9.166	.0
13.165	.0		17.165	.0			
1.333	.3		5.333	.5		9.332	.0
13.332	.0		17.332	.0			
1.500	3.9		5.499	.4		9.499	.0
13.499	.0		17.498	.0			
1.667	8.2		5.666	.4		9.666	.0
13.665	.0		17.665	.0			
1.833	8.8		5.833	.4		9.832	.0
13.832	.0		17.832	.0			
2.000	9.0		5.999	.4		9.999	.0
13.999	.0		17.998	.0			
2.166	9.0		6.166	.3		10.166	.0
14.165	.0		18.165	.0			
2.333	8.6		6.333	.3		10.332	.0
14.332	.0		18.331	.0			
2.500	8.0		6.499	.2		10.499	.0
14.499	.0		18.498	.0			
2.666	6.9		6.666	.2		10.666	.0
14.665	.0		18.665	.0			
2.833	5.8		6.833	.2		10.832	.0
14.832	.0		18.831	.0			
3.000	4.9		6.999	.1		10.999	.0
14.998	.0		18.998	.0			
3.166	4.1		7.166	.1		11.166	.0
15.165	.0		19.165	.0			
3.333	3.5		7.333	.1		11.332	.0
15.332	.0		19.331	.0			
3.500	2.9		7.499	.1		11.499	.0
15.498	.0		19.498	.0			
3.666	2.4		7.666	.1		11.665	.0
15.665	.0		19.665	.0			
3.833	2.0		7.833	.1		11.832	.0
15.832	.0		19.831	.0			

RUNOFF VOLUME = 1.12505 INCHES = 1.4059 ACRE-FEET
PEAK DISCHARGE RATE = 9.03 CFS AT 2.066 HOURS BASIN AREA = .0234 SQ. MI.

****

*POND 3

****

ROUTE RESERVOIR ID=32 HYD=304 INFLOW ID=3 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
2.29	0.0	5111

2.89	0.28	5112
3.39	0.62	5113
3.83	1.01	5114
4.22	1.20	5115

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5107.18	-1.069	.00
.17	.00	5111.00	.000	2.29
.33	.00	5111.00	.000	2.29
.50	.00	5111.00	.000	2.29
.67	.00	5111.00	.000	2.29
.83	.00	5111.00	.000	2.29
1.00	.00	5111.00	.000	2.29
1.17	.00	5111.00	.000	2.29
1.33	3.60	5111.00	.000	2.29
1.50	14.05	5111.32	.090	2.48
1.67	7.06	5111.72	.201	2.72
1.83	4.61	5111.86	.240	2.80
2.00	3.38	5111.91	.256	2.84
2.17	1.50	5111.90	.252	2.83
2.33	.67	5111.81	.227	2.78
2.50	.39	5111.70	.196	2.71
2.67	.24	5111.58	.163	2.64
2.83	.15	5111.46	.130	2.57
3.00	.10	5111.35	.097	2.50
3.17	.07	5111.23	.064	2.43
3.33	.05	5111.11	.032	2.36
3.50	.04	5111.00	.001	2.29
3.67	.04	5111.00	.000	2.29
3.83	.03	5111.00	.000	2.29
4.00	.03	5111.00	.000	2.29
4.17	.04	5111.00	.000	2.29
4.33	.04	5111.00	.000	2.29
4.50	.04	5111.00	.000	2.29
4.67	.05	5111.00	.000	2.29
4.83	.05	5111.00	.000	2.29
5.00	.06	5111.00	.000	2.29
5.17	.06	5111.00	.000	2.29
5.33	.07	5111.00	.000	2.29
5.50	.08	5111.00	.000	2.29
5.67	.08	5111.00	.000	2.29
5.83	.09	5111.00	.000	2.29
6.00	.10	5111.00	.000	2.29
6.17	.04	5111.00	.000	2.29
6.33	.01	5111.00	.000	2.29
6.50	.00	5111.00	.000	2.29
6.67	.00	5111.00	.000	2.29
6.83	.00	5111.00	.000	2.29
7.00	.00	5111.00	.000	2.29
7.17	.00	5111.00	.000	2.29
7.33	.00	5111.00	.000	2.29
7.50	.00	5111.00	.000	2.29
7.67	.00	5111.00	.000	2.29
7.83	.00	5111.00	.000	2.29
8.00	.00	5111.00	.000	2.29
8.17	.00	5111.00	.000	2.29
8.33	.00	5111.00	.000	2.29
8.50	.00	5111.00	.000	2.29

8.67	.00	5111.00	.000	2.29
8.83	.00	5111.00	.000	2.29
9.00	.00	5111.00	.000	2.29
9.17	.00	5111.00	.000	2.29

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5111.00	.000	2.29
9.50	.00	5111.00	.000	2.29
9.67	.00	5111.00	.000	2.29
9.83	.00	5111.00	.000	2.29
10.00	.00	5111.00	.000	2.29
10.17	.00	5111.00	.000	2.29
10.33	.00	5111.00	.000	2.29
10.50	.00	5111.00	.000	2.29
10.67	.00	5111.00	.000	2.29
10.83	.00	5111.00	.000	2.29
11.00	.00	5111.00	.000	2.29
11.17	.00	5111.00	.000	2.29
11.33	.00	5111.00	.000	2.29
11.50	.00	5111.00	.000	2.29
11.67	.00	5111.00	.000	2.29
11.83	.00	5111.00	.000	2.29
12.00	.00	5111.00	.000	2.29
12.17	.00	5111.00	.000	2.29
12.33	.00	5111.00	.000	2.29
12.50	.00	5111.00	.000	2.29
12.67	.00	5111.00	.000	2.29
12.83	.00	5111.00	.000	2.29
13.00	.00	5111.00	.000	2.29
13.17	.00	5111.00	.000	2.29
13.33	.00	5111.00	.000	2.29
13.50	.00	5111.00	.000	2.29
13.67	.00	5111.00	.000	2.29
13.83	.00	5111.00	.000	2.29
14.00	.00	5111.00	.000	2.29
14.17	.00	5111.00	.000	2.29
14.33	.00	5111.00	.000	2.29
14.50	.00	5111.00	.000	2.29
14.67	.00	5111.00	.000	2.29
14.83	.00	5111.00	.000	2.29
15.00	.00	5111.00	.000	2.29
15.17	.00	5111.00	.000	2.29
15.33	.00	5111.00	.000	2.29
15.50	.00	5111.00	.000	2.29
15.67	.00	5111.00	.000	2.29
15.83	.00	5111.00	.000	2.29
16.00	.00	5111.00	.000	2.29
16.17	.00	5111.00	.000	2.29
16.33	.00	5111.00	.000	2.29
16.50	.00	5111.00	.000	2.29
16.67	.00	5111.00	.000	2.29
16.83	.00	5111.00	.000	2.29
17.00	.00	5111.00	.000	2.29
17.16	.00	5111.00	.000	2.29
17.33	.00	5111.00	.000	2.29
17.50	.00	5111.00	.000	2.29
17.66	.00	5111.00	.000	2.29
17.83	.00	5111.00	.000	2.29
18.00	.00	5111.00	.000	2.29
18.16	.00	5111.00	.000	2.29
18.33	.00	5111.00	.000	2.29
18.50	.00	5111.00	.000	2.29

TIME INFLOW ELEV VOLUME OUTFLOW

DEV10

(HRS)	(CFS)	(FEET)	(AC-FT)	(CFS)
18.66	.00	5111.00	.000	2.29
18.83	.00	5111.00	.000	2.29
19.00	.00	5111.00	.000	2.29
19.16	.00	5111.00	.000	2.29
19.33	.00	5111.00	.000	2.29
19.50	.00	5111.00	.000	2.29
19.66	.00	5111.00	.000	2.29
19.83	.00	5111.00	.000	2.29

PEAK DISCHARGE = 2.841 CFS - PEAK OCCURS AT HOUR 2.07
MAXIMUM WATER SURFACE ELEVATION = 5111.919
MAXIMUM STORAGE = .2573 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=32 CODE=5

HYDROGRAPH FROM AREA 304.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	2.3	7.999	2.3
.167	2.3	4.166	2.3	8.166	2.3
.333	2.3	4.333	2.3	8.332	2.3
.500	2.3	4.500	2.3	8.499	2.3
.667	2.3	4.666	2.3	8.666	2.3
.833	2.3	4.833	2.3	8.832	2.3
1.000	2.3	4.999	2.3	8.999	2.3
1.167	2.3	5.166	2.3	9.166	2.3
1.333	2.3	5.333	2.3	9.332	2.3
1.500	2.5	5.499	2.3	9.499	2.3
1.667	2.7	5.666	2.3	9.666	2.3
1.833	2.8	5.833	2.3	9.832	2.3
2.000	2.8	5.999	2.3	9.999	2.3
2.166	2.8	6.166	2.3	10.166	2.3
2.333	2.8	6.333	2.3	10.332	2.3
2.500	2.7	6.499	2.3	10.499	2.3
2.666	2.6	6.666	2.3	10.666	2.3
2.833	2.6	6.833	2.3	10.832	2.3
3.000	2.5	6.999	2.3	10.999	2.3
3.166	2.4	7.166	2.3	11.166	2.3
3.333	2.4	7.333	2.3	11.332	2.3

DEV10

3.500	2.3	7.499	2.3	11.499	2.3	15.498	2.3
19.498	2.3						
3.666	2.3	7.666	2.3	11.665	2.3	15.665	2.3
19.665	2.3						
3.833	2.3	7.833	2.3	11.832	2.3	15.832	2.3
19.831	2.3						

RUNOFF VOLUME = 8.63458 INCHES = 3.8360 ACRE-FEET
PEAK DISCHARGE RATE = 2.84 CFS AT 2.066 HOURS BASIN AREA = .0083 SQ. MI.

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*S ADD HYD 303 AND POND 3

ADD HYD ID=34 HYDNO=306

ID=31 ID=32

PRINT HYD ID=34 CODE=5

HYDROGRAPH FROM AREA 306.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.0	7.999	2.3	11.999	2.3
15.998	2.3						
.167	2.3	4.166	3.7	8.166	2.3	12.165	2.3
16.165	2.3						
.333	2.3	4.333	3.5	8.332	2.3	12.332	2.3
16.332	2.3						
.500	2.3	4.500	3.3	8.499	2.3	12.499	2.3
16.498	2.3						
.667	2.3	4.666	3.2	8.666	2.3	12.665	2.3
16.665	2.3						
.833	2.3	4.833	3.0	8.832	2.3	12.832	2.3
16.832	2.3						
1.000	2.3	4.999	2.9	8.999	2.3	12.999	2.3
16.998	2.3						
1.167	2.3	5.166	2.8	9.166	2.3	13.165	2.3
17.165	2.3						
1.333	2.6	5.333	2.8	9.332	2.3	13.332	2.3
17.332	2.3						
1.500	6.4	5.499	2.7	9.499	2.3	13.499	2.3
17.498	2.3						
1.667	11.0	5.666	2.7	9.666	2.3	13.665	2.3
17.665	2.3						
1.833	11.6	5.833	2.7	9.832	2.3	13.832	2.3
17.832	2.3						
2.000	11.9	5.999	2.6	9.999	2.3	13.999	2.3
17.998	2.3						
2.166	11.8	6.166	2.6	10.166	2.3	14.165	2.3
18.165	2.3						
2.333	11.4	6.333	2.6	10.332	2.3	14.332	2.3
18.331	2.3						
2.500	10.7	6.499	2.5	10.499	2.3	14.499	2.3
18.498	2.3						
2.666	9.5	6.666	2.5	10.666	2.3	14.665	2.3
18.665	2.3						
2.833	8.4	6.833	2.5	10.832	2.3	14.832	2.3
18.831	2.3						

DEV10

3.000	7.4	6.999	2.4	10.999	2.3
14.998	2.3	18.998	2.3		
3.166	6.5	7.166	2.4	11.166	2.3
15.165	2.3	19.165	2.3		
3.333	5.8	7.333	2.4	11.332	2.3
15.332	2.3	19.331	2.3		
3.500	5.2	7.499	2.4	11.499	2.3
15.498	2.3	19.498	2.3		
3.666	4.7	7.666	2.4	11.665	2.3
15.665	2.3	19.665	2.3		
3.833	4.3	7.833	2.3	11.832	2.3
15.832	2.3	19.831	2.3		

RUNOFF VOLUME = 3.09468 INCHES = 5.2419 ACRE-FEET
PEAK DISCHARGE RATE = 11.88 CFS AT 2.066 HOURS BASIN AREA = .0318 SQ. MI.

****

*S ADD B1 AND B2

ADD HYD ID=36 HYDNO=308

ID=11 ID=12

PRINT HYD ID=36 CODE=5

HYDROGRAPH FROM AREA 308.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	1.1	2.666	.1
4.000	.0	5.333	.0		
.167	.0	1.500	4.5	2.833	.0
4.166	.0	5.499	.0		
.333	.0	1.667	2.3	3.000	.0
4.333	.0	5.666	.0		
.500	.0	1.833	1.5	3.166	.0
4.500	.0	5.833	.0		
.667	.0	2.000	1.1	3.333	.0
4.666	.0	5.999	.0		
.833	.0	2.166	.5	3.500	.0
4.833	.0	6.166	.0		
1.000	.0	2.333	.2	3.666	.0
4.999	.0	6.333	.0		
1.167	.0	2.500	.1	3.833	.0
5.166	.0				

RUNOFF VOLUME = 1.14426 INCHES = .1574 ACRE-FEET
PEAK DISCHARGE RATE = 4.49 CFS AT 1.500 HOURS BASIN AREA = .0026 SQ. MI.

****

*S ADD HYD 308 AND B3

ADD HYD ID=37 HYDNO=309

ID=36 ID=13

PRINT HYD ID=37 CODE=5

HYDROGRAPH FROM AREA 309.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.333	1.9	2.666	.1
.167	.0	1.500	7.7	2.833	.1
.333	.0	1.667	3.8	3.000	.0
.500	.0	1.833	2.5	3.166	.0
.667	.0	2.000	1.8	3.333	.0
.833	.0	2.166	.8	3.500	.0
1.000	.0	2.333	.4	3.666	.0
1.167	.0	2.500	.2	3.833	.0

RUNOFF VOLUME = 1.12321 INCHES = .2684 ACRE-FEET
PEAK DISCHARGE RATE = 7.66 CFS AT 1.500 HOURS BASIN AREA = .0045 SQ. MI.

****

*S ADD B5 AND B6

ADD HYD ID=38 HYDNO=310

ID=15 ID=16

PRINT HYD ID=38 CODE=5

HYDROGRAPH FROM AREA 310.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	19.5	3.000	.2
.167	.0	1.667	11.4	3.166	.1
.333	.0	1.833	7.1	3.333	.1
.500	.0	2.000	5.2	3.500	.1
.667	.0	2.166	2.6	3.666	.1
.833	.0	2.333	1.2	3.833	.1
1.000	.0	2.500	.7	4.000	.1
1.167	.0	2.666	.4	4.166	.1

DEV10

1.333	4.3	2.833	.3	4.333	.1	5.833	.1		

RUNOFF VOLUME = 1.12412 INCHES = .7386 ACRE-FEET
PEAK DISCHARGE RATE = 19.60 CFS AT 1.533 HOURS BASIN AREA = .0123 SQ. MI.

****

*S ADD HYD 309 AND HYD 310

ADD HYD ID=39 HYDNO=311

ID=37 ID=38

PRINT HYD ID=39 CODE=5

HYDROGRAPH FROM AREA 311.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	27.2	3.000	.2	4.500	.1
.167	.0	1.667	15.3	3.166	.1	4.666	.1
.333	.0	1.833	9.6	3.333	.1	4.833	.1
.500	.0	2.000	7.0	3.500	.1	4.999	.1
.667	.0	2.166	3.4	3.666	.1	5.166	.1
.833	.0	2.333	1.5	3.833	.1	5.333	.1
1.000	.0	2.500	.9	4.000	.1	5.499	.2
1.167	.0	2.666	.5	4.166	.1	5.666	.2
1.333	6.2	2.833	.3	4.333	.1	5.833	.2

RUNOFF VOLUME = 1.12388 INCHES = 1.0070 ACRE-FEET
PEAK DISCHARGE RATE = 27.17 CFS AT 1.500 HOURS BASIN AREA = .0168 SQ. MI.

****

*POND 5

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ROUTE RESERVOIR ID=40 HYD=312 INFLOW ID=39 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.00	0.00	5108
5.44	0.13	5109

6.66	0.29	5110
7.69	0.48	5111
8.60	0.70	5112
9.42	0.96	5113
9.80	1.10	5113.5

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5108.00	.000	.00
.17	.00	5108.00	.000	.00
.33	.00	5108.00	.000	.00
.50	.00	5108.00	.000	.00
.67	.00	5108.00	.000	.00
.83	.00	5108.00	.000	.00
1.00	.00	5108.00	.000	.00
1.17	.00	5108.00	.000	.00
1.33	6.19	5108.15	.020	.82
1.50	27.17	5109.45	.202	5.99
1.67	15.28	5110.65	.413	7.33
1.83	9.56	5110.96	.473	7.65
2.00	7.02	5111.00	.480	7.69
2.17	3.43	5110.84	.450	7.53
2.33	1.51	5110.47	.380	7.15
2.50	.89	5110.06	.301	6.72
2.67	.54	5109.57	.222	6.14
2.83	.34	5109.11	.147	5.57
3.00	.22	5108.66	.086	3.60
3.17	.14	5108.39	.050	2.10
3.33	.10	5108.23	.029	1.23
3.50	.08	5108.13	.017	.73
3.67	.07	5108.08	.011	.45
3.83	.07	5108.05	.007	.28
4.00	.07	5108.03	.005	.19
4.17	.07	5108.03	.003	.14
4.33	.08	5108.02	.003	.11
4.50	.09	5108.02	.002	.10
4.67	.09	5108.02	.002	.09
4.83	.10	5108.02	.002	.09
5.00	.11	5108.02	.002	.10
5.17	.12	5108.02	.003	.11
5.33	.14	5108.02	.003	.12
5.50	.15	5108.02	.003	.13
5.67	.16	5108.03	.003	.14
5.83	.18	5108.03	.004	.15
6.00	.19	5108.03	.004	.17
6.17	.09	5108.03	.004	.16
6.33	.02	5108.02	.003	.11
6.50	.01	5108.01	.002	.07
6.67	.00	5108.01	.001	.04
6.83	.00	5108.00	.001	.02
7.00	.00	5108.00	.000	.01
7.17	.00	5108.00	.000	.01
7.33	.00	5108.00	.000	.00

PEAK DISCHARGE = 7.696 CFS - PEAK OCCURS AT HOUR 1.93
MAXIMUM WATER SURFACE ELEVATION = 5111.006
MAXIMUM STORAGE = .4814 AC-FT INCREMENTAL TIME= .033330HRS

DEV10

PRINT HYD ID=40 CODE=5

HYDROGRAPH FROM AREA 312.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.667	7.3	3.333	1.2
.167	.0	1.833	7.7	3.500	.7
.333	.0	2.000	7.7	3.666	.4
.500	.0	2.166	7.5	3.833	.3
.667	.0	2.333	7.1	4.000	.2
.833	.0	2.500	6.7	4.166	.1
1.000	.0	2.666	6.1	4.333	.1
1.167	.0	2.833	5.6	4.500	.1
1.333	.8	3.000	3.6	4.666	.1
1.500	6.0	3.166	2.1	4.833	.1

RUNOFF VOLUME = 1.12388 INCHES = 1.0070 ACRE-FEET
PEAK DISCHARGE RATE = 7.70 CFS AT 1.933 HOURS BASIN AREA = .0168 SQ. MI.

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*S ADD HYD 306 AND POND 5

ADD HYD ID=42 HYDNO=320

ID=34 ID=40

PRINT HYD ID=42 CODE=5

HYDROGRAPH FROM AREA 320.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.2	7.999	2.3
.167	2.3	4.166	3.9	8.166	2.3
.333	2.3	4.333	3.6	8.332	2.3
.500	2.3	4.500	3.4	8.499	2.3
.667	2.3	4.666	3.2	8.666	2.3
.833	2.3	4.833	3.1	8.832	2.3

1.000	2.3	4.999	3.0	8.999	2.3
12.999	2.3	16.998	2.3		
1.167	2.3	5.166	3.0	9.166	2.3
13.165	2.3	17.165	2.3		
1.333	3.4	5.333	2.9	9.332	2.3
13.332	2.3	17.332	2.3		
1.500	12.4	5.499	2.9	9.499	2.3
13.499	2.3	17.498	2.3		
1.667	18.3	5.666	2.8	9.666	2.3
13.665	2.3	17.665	2.3		
1.833	19.3	5.833	2.8	9.832	2.3
13.832	2.3	17.832	2.3		
2.000	19.6	5.999	2.8	9.999	2.3
13.999	2.3	17.998	2.3		
2.166	19.3	6.166	2.8	10.166	2.3
14.165	2.3	18.165	2.3		
2.333	18.5	6.333	2.7	10.332	2.3
14.332	2.3	18.331	2.3		
2.500	17.5	6.499	2.6	10.499	2.3
14.499	2.3	18.498	2.3		
2.666	15.6	6.666	2.5	10.666	2.3
14.665	2.3	18.665	2.3		
2.833	13.9	6.833	2.5	10.832	2.3
14.832	2.3	18.831	2.3		
3.000	11.0	6.999	2.4	10.999	2.3
14.998	2.3	18.998	2.3		
3.166	8.6	7.166	2.4	11.166	2.3
15.165	2.3	19.165	2.3		
3.333	7.0	7.333	2.4	11.332	2.3
15.332	2.3	19.331	2.3		
3.500	5.9	7.499	2.4	11.499	2.3
15.498	2.3	19.498	2.3		
3.666	5.2	7.666	2.4	11.665	2.3
15.665	2.3	19.665	2.3		
3.833	4.6	7.833	2.3	11.832	2.3
15.832	2.3	19.831	2.3		

RUNOFF VOLUME = 2.41285 INCHES = 6.2489 ACRE-FEET
PEAK DISCHARGE RATE = 19.55 CFS AT 2.000 HOURS BASIN AREA = .0486 SQ. MI.

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*S ADD HYD 320 AND B7

ADD HYD ID=43 HYDNO=321

ID=42 ID=17

PRINT HYD ID=43 CODE=5

HYDROGRAPH FROM AREA 321.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.2	7.999	2.3
11.999	2.3	15.998	2.3		
.167	2.3	4.166	3.9	8.166	2.3
12.165	2.3	16.165	2.3		
.333	2.3	4.333	3.6	8.332	2.3
12.332	2.3	16.332	2.3		

.500	2.3	4.500	3.4	8.499	2.3	12.499	2.3
16.498	2.3	.667	2.3	4.666	3.3	8.666	2.3
12.665	2.3	16.665	2.3	.833	2.3	4.833	3.1
8.832	2.3	12.832	2.3	16.832	2.3	1.000	2.3
4.999	3.0	8.999	2.3	12.999	2.3	16.998	2.3
1.167	2.3	5.166	3.0	9.166	2.3	13.165	2.3
17.165	2.3	1.333	4.2	5.333	2.9	9.332	2.3
13.332	2.3	17.332	2.3	1.500	15.5	5.499	2.9
9.499	2.3	13.499	2.3	17.498	2.3	1.667	19.8
5.666	2.9	9.666	2.3	13.665	2.3	17.665	2.3
1.833	20.3	5.833	2.8	9.832	2.3	13.832	2.3
17.832	2.3	2.000	20.3	5.999	2.8	9.999	2.3
13.999	2.3	17.998	2.3	2.166	19.6	6.166	2.8
10.166	2.3	14.165	2.3	18.165	2.3	2.333	18.7
6.333	2.7	10.332	2.3	14.332	2.3	18.331	2.3
2.500	17.5	6.499	2.6	10.499	2.3	14.499	2.3
18.498	2.3	2.666	15.7	6.666	2.5	10.666	2.3
14.665	2.3	18.665	2.3	2.833	14.0	6.833	2.5
10.832	2.3	14.832	2.3	18.831	2.3	3.000	11.0
6.999	2.4	10.999	2.3	14.998	2.3	18.998	2.3
3.166	8.7	7.166	2.4	11.166	2.3	15.165	2.3
19.165	2.3	3.333	7.1	7.333	2.4	11.332	2.3
15.332	2.3	19.331	2.3	3.500	5.9	7.499	2.4
11.499	2.3	15.498	2.3	19.498	2.3	3.666	5.2
7.666	2.4	11.665	2.3	15.665	2.3	19.665	2.3
3.833	4.6	7.833	2.3	11.832	2.3	15.832	2.3
19.831	2.3						

RUNOFF VOLUME = 2.36894 INCHES = 6.3576 ACRE-FEET
PEAK DISCHARGE RATE = 20.34 CFS AT 1.900 HOURS BASIN AREA = .0503 SQ. MI.

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*S ADD HYD 321 AND B8

ADD HYD ID=44 HYDNO=322

ID=43 ID=18

PRINT HYD ID=44 CODE=5

HYDROGRAPH FROM AREA 322.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS

.000	.0	4.000	4.2	7.999	2.3	11.999	2.3
15.998	2.3	.167	2.3	4.166	3.9	8.166	2.3
12.165	2.3	16.165	2.3	.333	2.3	4.333	3.6
8.332	2.3	12.332	2.3	16.332	2.3	.500	2.3
4.500	3.4	8.499	2.3	12.499	2.3	16.498	2.3
.667	2.3	4.666	3.3	8.666	2.3	12.665	2.3
16.665	2.3	.833	2.3	4.833	3.2	8.832	2.3
12.832	2.3	16.832	2.3	1.000	2.3	4.999	3.1
8.999	2.3	12.999	2.3	16.998	2.3	1.167	2.3
5.166	3.0	9.166	2.3	13.165	2.3	17.165	2.3
1.333	5.3	5.333	2.9	9.332	2.3	13.332	2.3
17.332	2.3	1.500	19.9	5.499	2.9	9.499	2.3
13.499	2.3	17.498	2.3	1.667	22.0	5.666	2.9
9.666	2.3	13.665	2.3	17.665	2.3	1.833	21.7
5.833	2.9	9.832	2.3	13.832	2.3	17.832	2.3
2.000	21.3	5.999	2.9	9.999	2.3	13.999	2.3
17.998	2.3	2.166	20.1	6.166	2.8	10.166	2.3
14.165	2.3	18.165	2.3	2.333	18.9	6.333	2.7
10.332	2.3	14.332	2.3	18.331	2.3	2.500	17.7
6.499	2.6	10.499	2.3	14.499	2.3	18.498	2.3
2.666	15.7	6.666	2.5	10.666	2.3	14.665	2.3
18.665	2.3	2.833	14.0	6.833	2.5	10.832	2.3
14.832	2.3	18.831	2.3	3.000	11.0	6.999	2.4
10.999	2.3	14.998	2.3	18.998	2.3	3.166	8.7
7.166	2.4	11.166	2.3	15.165	2.3	19.165	2.3
3.333	7.1	7.333	2.4	11.332	2.3	15.332	2.3
19.331	2.3	3.500	5.9	7.499	2.4	11.499	2.3
15.498	2.3	19.498	2.3	3.666	5.2	7.666	2.4
11.665	2.3	15.665	2.3	19.665	2.3	3.833	4.6
7.833	2.3	11.832	2.3	15.832	2.3	19.831	2.3

RUNOFF VOLUME = 2.31183 INCHES = 6.5113 ACRE-FEET
PEAK DISCHARGE RATE = 22.05 CFS AT 1.667 HOURS BASIN AREA = .0528 SQ. MI.

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*S ADD HYD 322 AND B9

ADD HYD ID=45 HYDNO=323

ID=44 ID=19

PRINT HYD ID=45 CODE=5

DEV10

HYDROGRAPH FROM AREA 323.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.2	7.999	2.3
11.999	2.3	15.998	2.3		
.167	2.3	4.166	3.9	8.166	2.3
12.165	2.3	16.165	2.3		
.333	2.3	4.333	3.7	8.332	2.3
12.332	2.3	16.332	2.3		
.500	2.3	4.500	3.5	8.499	2.3
12.499	2.3	16.498	2.3		
.667	2.3	4.666	3.3	8.666	2.3
12.665	2.3	16.665	2.3		
.833	2.3	4.833	3.2	8.832	2.3
12.832	2.3	16.832	2.3		
1.000	2.3	4.999	3.1	8.999	2.3
12.999	2.3	16.998	2.3		
1.167	2.3	5.166	3.0	9.166	2.3
13.165	2.3	17.165	2.3		
1.333	8.5	5.333	3.0	9.332	2.3
13.332	2.3	17.332	2.3		
1.500	32.5	5.499	3.0	9.499	2.3
13.499	2.3	17.498	2.3		
1.667	28.4	5.666	2.9	9.666	2.3
13.665	2.3	17.665	2.3		
1.833	25.8	5.833	2.9	9.832	2.3
13.832	2.3	17.832	2.3		
2.000	24.3	5.999	2.9	9.999	2.3
13.999	2.3	17.998	2.3		
2.166	21.4	6.166	2.8	10.166	2.3
14.165	2.3	18.165	2.3		
2.333	19.5	6.333	2.7	10.332	2.3
14.332	2.3	18.331	2.3		
2.500	18.0	6.499	2.6	10.499	2.3
14.499	2.3	18.498	2.3		
2.666	16.0	6.666	2.5	10.666	2.3
14.665	2.3	18.665	2.3		
2.833	14.2	6.833	2.5	10.832	2.3
14.832	2.3	18.831	2.3		
3.000	11.1	6.999	2.4	10.999	2.3
14.998	2.3	18.998	2.3		
3.166	8.7	7.166	2.4	11.166	2.3
15.165	2.3	19.165	2.3		
3.333	7.1	7.333	2.4	11.332	2.3
15.332	2.3	19.331	2.3		
3.500	6.0	7.499	2.4	11.499	2.3
15.498	2.3	19.498	2.3		
3.666	5.2	7.666	2.4	11.665	2.3
15.665	2.3	19.665	2.3		
3.833	4.6	7.833	2.3	11.832	2.3
15.832	2.3	19.831	2.3		

RUNOFF VOLUME = 2.17108 INCHES = 6.9543 ACRE-FEET
PEAK DISCHARGE RATE = 33.21 CFS AT 1.533 HOURS BASIN AREA = .0601 SQ. MI.

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*POND 6 (UNDERGROUND)

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ROUTE RESERVOIR ID=46 HYD=324 INFLOW ID=45 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.01	0.0	5101
12.23	0.16	5103
20.70	0.40	5105
26.59	0.63	5107
29.10	0.72	5108
31.40	0.74	5108.5

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5101.00	.000	.00
.17	2.31	5101.23	.018	1.42
.33	2.31	5101.33	.026	2.00
.50	2.31	5101.36	.029	2.20
.67	2.31	5101.37	.030	2.27
.83	2.31	5101.37	.030	2.30
1.00	2.31	5101.38	.030	2.31
1.17	2.31	5101.38	.030	2.31
1.33	8.54	5101.60	.048	3.67
1.50	32.48	5103.44	.213	14.11
1.67	28.37	5104.97	.397	20.58
1.83	25.83	5105.60	.469	22.46
2.00	24.34	5105.86	.498	23.22
2.17	21.44	5105.84	.496	23.17
2.33	19.47	5105.55	.463	22.31
2.50	18.00	5105.18	.421	21.24
2.67	15.96	5104.77	.372	19.71
2.83	14.15	5104.33	.320	17.88
3.00	11.13	5103.86	.263	15.85
3.17	8.73	5103.30	.196	13.51
3.33	7.11	5102.71	.137	10.46
3.50	5.97	5102.28	.102	7.82
3.67	5.21	5102.03	.082	6.31
3.83	4.65	5101.88	.070	5.37
4.00	4.23	5101.77	.062	4.73
4.17	3.91	5101.70	.056	4.28
4.33	3.66	5101.64	.051	3.94
4.50	3.47	5101.60	.048	3.68
4.67	3.31	5101.57	.045	3.48
4.83	3.20	5101.54	.043	3.33
5.00	3.11	5101.52	.042	3.21
5.17	3.04	5101.51	.041	3.12
5.33	3.00	5101.50	.040	3.05
5.50	2.97	5101.49	.039	3.00
5.67	2.95	5101.48	.039	2.97
5.83	2.94	5101.48	.039	2.96
6.00	2.95	5101.48	.038	2.95
6.17	2.84	5101.48	.038	2.92
6.33	2.70	5101.46	.037	2.81
6.50	2.61	5101.44	.035	2.71
6.67	2.54	5101.43	.034	2.61

6.83	2.49	5101.42	.033	2.54
7.00	2.45	5101.41	.032	2.49
7.17	2.42	5101.40	.032	2.45
7.33	2.39	5101.39	.032	2.42
7.50	2.37	5101.39	.031	2.39
7.67	2.36	5101.39	.031	2.38
7.83	2.35	5101.38	.031	2.36
8.00	2.34	5101.38	.031	2.35
8.17	2.33	5101.38	.030	2.34
8.33	2.32	5101.38	.030	2.33
8.50	2.32	5101.38	.030	2.32
8.67	2.31	5101.38	.030	2.32
8.83	2.31	5101.38	.030	2.31
9.00	2.31	5101.38	.030	2.31
9.17	2.31	5101.38	.030	2.31

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	2.31	5101.38	.030	2.31
9.50	2.31	5101.38	.030	2.31
9.67	2.31	5101.38	.030	2.31
9.83	2.31	5101.38	.030	2.31
10.00	2.31	5101.38	.030	2.31
10.17	2.31	5101.38	.030	2.31
10.33	2.31	5101.38	.030	2.31
10.50	2.31	5101.38	.030	2.31
10.67	2.31	5101.38	.030	2.31
10.83	2.31	5101.38	.030	2.31
11.00	2.31	5101.38	.030	2.31
11.17	2.31	5101.38	.030	2.31
11.33	2.31	5101.38	.030	2.31
11.50	2.31	5101.38	.030	2.31
11.67	2.31	5101.38	.030	2.31
11.83	2.31	5101.38	.030	2.31
12.00	2.31	5101.38	.030	2.31
12.17	2.31	5101.38	.030	2.31
12.33	2.31	5101.38	.030	2.31
12.50	2.31	5101.38	.030	2.31
12.67	2.31	5101.38	.030	2.31
12.83	2.31	5101.38	.030	2.31
13.00	2.31	5101.38	.030	2.31
13.17	2.31	5101.38	.030	2.31
13.33	2.31	5101.38	.030	2.31
13.50	2.31	5101.38	.030	2.31
13.67	2.31	5101.38	.030	2.31
13.83	2.31	5101.38	.030	2.31
14.00	2.31	5101.38	.030	2.31
14.17	2.31	5101.38	.030	2.31
14.33	2.31	5101.38	.030	2.31
14.50	2.31	5101.38	.030	2.31
14.67	2.31	5101.38	.030	2.31
14.83	2.31	5101.38	.030	2.31
15.00	2.31	5101.38	.030	2.31
15.17	2.31	5101.38	.030	2.31
15.33	2.31	5101.38	.030	2.31
15.50	2.31	5101.38	.030	2.31
15.67	2.31	5101.38	.030	2.31
15.83	2.31	5101.38	.030	2.31
16.00	2.31	5101.38	.030	2.31
16.17	2.31	5101.38	.030	2.31
16.33	2.31	5101.38	.030	2.31
16.50	2.31	5101.38	.030	2.31
16.67	2.31	5101.38	.030	2.31
16.83	2.31	5101.38	.030	2.31
17.00	2.31	5101.38	.030	2.31

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17.16	2.31	5101.38	.030	2.31
17.33	2.31	5101.38	.030	2.31
17.50	2.31	5101.38	.030	2.31
17.66	2.31	5101.38	.030	2.31
17.83	2.31	5101.38	.030	2.31
18.00	2.31	5101.38	.030	2.31
18.16	2.31	5101.38	.030	2.31
18.33	2.31	5101.38	.030	2.31
18.50	2.31	5101.38	.030	2.31

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	2.31	5101.38	.030	2.31
18.83	2.31	5101.38	.030	2.31
19.00	2.31	5101.38	.030	2.31
19.16	2.31	5101.38	.030	2.31
19.33	2.31	5101.38	.030	2.31
19.50	2.31	5101.38	.030	2.31
19.66	2.31	5101.38	.030	2.31
19.83	2.31	5101.38	.030	2.31

PEAK DISCHARGE = 23.323 CFS - PEAK OCCURS AT HOUR 2.07
MAXIMUM WATER SURFACE ELEVATION = 5105.891
MAXIMUM STORAGE = .5024 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=46 CODE=5

HYDROGRAPH FROM AREA 324.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.7	7.999	2.3	11.999	2.3
.167	1.4	4.166	4.3	8.166	2.3	12.165	2.3
.333	2.0	4.333	3.9	8.332	2.3	12.332	2.3
.500	2.2	4.500	3.7	8.499	2.3	12.499	2.3
.667	2.3	4.666	3.5	8.666	2.3	12.665	2.3
.833	2.3	4.833	3.3	8.832	2.3	12.832	2.3
1.000	2.3	4.999	3.2	8.999	2.3	12.999	2.3
1.167	2.3	5.166	3.1	9.166	2.3	13.165	2.3
1.333	3.7	5.333	3.1	9.332	2.3	13.332	2.3
1.500	14.1	5.499	3.0	9.499	2.3	13.499	2.3
1.667	20.6	5.666	3.0	9.666	2.3	13.665	2.3
1.833	22.5	5.833	3.0	9.832	2.3	13.832	2.3
2.000	23.2	5.999	2.9	9.999	2.3	13.999	2.3
2.166	23.2	6.166	2.9	10.166	2.3	14.165	2.3
2.333	22.3	6.333	2.8	10.332	2.3	14.332	2.3
2.500	21.2	6.499	2.7	10.499	2.3		

14.499	2.3	18.498	2.3				
2.666	19.7	6.666	2.6	10.666	2.3		
14.665	2.3	18.665	2.3				
2.833	17.9	6.833	2.5	10.832	2.3		
14.832	2.3	18.831	2.3				
3.000	15.9	6.999	2.5	10.999	2.3		
14.998	2.3	18.998	2.3				
3.166	13.5	7.166	2.5	11.166	2.3		
15.165	2.3	19.165	2.3				
3.333	10.5	7.333	2.4	11.332	2.3		
15.332	2.3	19.331	2.3				
3.500	7.8	7.499	2.4	11.499	2.3		
15.498	2.3	19.498	2.3				
3.666	6.3	7.666	2.4	11.665	2.3		
15.665	2.3	19.665	2.3				
3.833	5.4	7.833	2.4	11.832	2.3		
15.832	2.3	19.831	2.3				

RUNOFF VOLUME = 2.16167 INCHES = 6.9242 ACRE-FEET
PEAK DISCHARGE RATE = 23.32 CFS AT 2.066 HOURS BASIN AREA = .0601 SQ. MI.

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*POND 7 (UNDERGROUND)

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ROUTE RESERVOIR ID=48 HYD=325 INFLOW ID=20 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.00	0.00	5104.5
1.47	0.11	5106.5
2.16	0.29	5108.5
2.67	0.46	5110.5
3.00	0.53	5112.0

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5104.50	.000	.00
.17	.00	5104.50	.000	.00
.33	.00	5104.50	.000	.00
.50	.00	5104.50	.000	.00
.67	.00	5104.50	.000	.00
.83	.00	5104.50	.000	.00
1.00	.00	5104.50	.000	.00
1.17	.00	5104.50	.000	.00
1.33	3.31	5104.71	.012	.15
1.50	12.83	5106.56	.116	1.49
1.67	6.44	5107.79	.226	1.91
1.83	4.22	5108.26	.269	2.08
2.00	3.10	5108.49	.289	2.16
2.17	1.37	5108.52	.292	2.17

DEV10

2.33	.61	5108.33	.275	2.10
2.50	.36	5108.09	.253	2.02
2.67	.22	5107.83	.230	1.93
2.83	.14	5107.57	.206	1.84
3.00	.09	5107.31	.183	1.75
3.17	.06	5107.06	.160	1.66
3.33	.04	5106.82	.139	1.58
3.50	.04	5106.59	.118	1.50
3.67	.03	5106.30	.099	1.32
3.83	.03	5106.00	.083	1.10
4.00	.03	5105.76	.069	.92
4.17	.03	5105.55	.058	.77
4.33	.04	5105.38	.049	.65
4.50	.04	5105.24	.041	.55
4.67	.04	5105.13	.035	.46
4.83	.05	5105.03	.029	.39
5.00	.05	5104.95	.025	.33
5.17	.06	5104.89	.021	.29
5.33	.06	5104.84	.019	.25
5.50	.07	5104.80	.016	.22
5.67	.07	5104.76	.014	.19
5.83	.08	5104.74	.013	.17
6.00	.09	5104.72	.012	.16
6.17	.04	5104.70	.011	.14
6.33	.01	5104.67	.009	.12
6.50	.00	5104.64	.008	.10
6.67	.00	5104.62	.006	.09
6.83	.00	5104.60	.005	.07
7.00	.00	5104.58	.004	.06
7.17	.00	5104.57	.004	.05
7.33	.00	5104.56	.003	.04
7.50	.00	5104.55	.003	.03
7.67	.00	5104.54	.002	.03
7.83	.00	5104.53	.002	.02
8.00	.00	5104.53	.001	.02
8.17	.00	5104.52	.001	.02
8.33	.00	5104.52	.001	.01
8.50	.00	5104.52	.001	.01
8.67	.00	5104.51	.001	.01
8.83	.00	5104.51	.001	.01
9.00	.00	5104.51	.000	.01
9.17	.00	5104.51	.000	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5104.51	.000	.00

PEAK DISCHARGE = 2.172 CFS - PEAK OCCURS AT HOUR 2.10
MAXIMUM WATER SURFACE ELEVATION = 5108.548
MAXIMUM STORAGE = .2941 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=48 CODE=5

HYDROGRAPH FROM AREA 325.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	2.166	2.2	4.333	.6	6.499	.1
.167	.0	2.333	2.1	4.500	.5	6.666	.1
.333	.0	2.500	2.0	4.666	.5	8.666	.0
						8.832	.0

6.833	.1	8.999	.0				
.500	.0	2.666	1.9	4.833	.4		
6.999	.1	9.166	.0				
.667	.0	2.833	1.8	4.999	.3		
7.166	.1	9.332	.0				
.833	.0	3.000	1.7	5.166	.3		
7.333	.0	9.499	.0				
1.000	.0	3.166	1.7	5.333	.2		
7.499	.0	9.666	.0				
1.167	.0	3.333	1.6	5.499	.2		
7.666	.0	9.832	.0				
1.333	.2	3.500	1.5	5.666	.2		
7.833	.0	9.999	.0				
1.500	1.5	3.666	1.3	5.833	.2		
7.999	.0	10.166	.0				
1.667	1.9	3.833	1.1	5.999	.2		
8.166	.0	10.332	.0				
1.833	2.1	4.000	.9	6.166	.1		
8.332	.0	10.499	.0				
2.000	2.2	4.166	.8	6.333	.1		
8.499	.0	10.666	.0				

RUNOFF VOLUME = 1.13646 INCHES = .4534 ACRE-FEET
PEAK DISCHARGE RATE = 2.17 CFS AT 2.100 HOURS BASIN AREA =
.0075 SQ. MI.

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*S ADD A2 AND OS3

ADD HYD ID=49 HYDNO=326

ID=2 ID=25

PRINT HYD ID=49 CODE=5

HYDROGRAPH FROM AREA 326.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	15.7	3.000	.1	4.500	.0
.167	.0	1.667	7.9	3.166	.1	4.666	.1
.333	.0	1.833	5.1	3.333	.1	4.833	.1
.500	.0	2.000	3.7	3.500	.0	4.999	.1
.667	.0	2.166	1.7	3.666	.0	5.166	.1
.833	.0	2.333	.7	3.833	.0	5.333	.1
1.000	.0	2.500	.4	4.000	.0	5.499	.1
1.167	.0	2.666	.3	4.166	.0	5.666	.1
1.333	4.0	2.833	.2	4.333	.0	5.833	.1

RUNOFF VOLUME = 1.10576 INCHES = .5508 ACRE-FEET
PEAK DISCHARGE RATE = 15.66 CFS AT 1.500 HOURS BASIN AREA =

.0093 SQ. MI.

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*POND 2

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ROUTE RESERVOIR ID=50 HYD=400 INFLOW ID=49 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
1.94	0.0	5111
2.44	0.26	5112
2.86	0.57	5113
3.22	0.93	5114

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5107.12	-1.009	.00
.17	.00	5111.00	.000	1.94
.33	.00	5111.00	.000	1.94
.50	.00	5111.00	.000	1.94
.67	.00	5111.00	.000	1.94
.83	.00	5111.00	.000	1.94
1.00	.00	5111.00	.000	1.94
1.17	.00	5111.00	.000	1.94
1.33	3.98	5111.00	.000	1.94
1.50	15.66	5111.43	.111	2.15
1.67	7.87	5111.94	.243	2.41
1.83	5.11	5112.11	.295	2.49
2.00	3.74	5112.20	.321	2.52
2.17	1.66	5112.21	.325	2.53
2.33	.74	5112.15	.305	2.50
2.50	.43	5112.06	.279	2.47
2.67	.26	5111.96	.250	2.42
2.83	.16	5111.85	.220	2.36
3.00	.11	5111.73	.190	2.30
3.17	.07	5111.61	.160	2.25
3.33	.05	5111.50	.130	2.19
3.50	.04	5111.39	.101	2.13
3.67	.04	5111.28	.072	2.08
3.83	.04	5111.17	.045	2.03
4.00	.04	5111.07	.018	1.97
4.17	.04	5111.00	.000	1.94
4.33	.04	5111.00	.000	1.94
4.50	.05	5111.00	.000	1.94
4.67	.05	5111.00	.000	1.94
4.83	.06	5111.00	.000	1.94
5.00	.06	5111.00	.000	1.94
5.17	.07	5111.00	.000	1.94
5.33	.08	5111.00	.000	1.94
5.50	.08	5111.00	.000	1.94
5.67	.09	5111.00	.000	1.94
5.83	.10	5111.00	.000	1.94

6.00	.11	5111.00	.000	1.94
6.17	.04	5111.00	.000	1.94
6.33	.01	5111.00	.000	1.94
6.50	.01	5111.00	.000	1.94
6.67	.00	5111.00	.000	1.94
6.83	.00	5111.00	.000	1.94
7.00	.00	5111.00	.000	1.94
7.17	.00	5111.00	.000	1.94
7.33	.00	5111.00	.000	1.94
7.50	.00	5111.00	.000	1.94
7.67	.00	5111.00	.000	1.94
7.83	.00	5111.00	.000	1.94
8.00	.00	5111.00	.000	1.94
8.17	.00	5111.00	.000	1.94
8.33	.00	5111.00	.000	1.94
8.50	.00	5111.00	.000	1.94
8.67	.00	5111.00	.000	1.94
8.83	.00	5111.00	.000	1.94
9.00	.00	5111.00	.000	1.94
9.17	.00	5111.00	.000	1.94

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5111.00	.000	1.94
9.50	.00	5111.00	.000	1.94
9.67	.00	5111.00	.000	1.94
9.83	.00	5111.00	.000	1.94
10.00	.00	5111.00	.000	1.94
10.17	.00	5111.00	.000	1.94
10.33	.00	5111.00	.000	1.94
10.50	.00	5111.00	.000	1.94
10.67	.00	5111.00	.000	1.94
10.83	.00	5111.00	.000	1.94
11.00	.00	5111.00	.000	1.94
11.17	.00	5111.00	.000	1.94
11.33	.00	5111.00	.000	1.94
11.50	.00	5111.00	.000	1.94
11.67	.00	5111.00	.000	1.94
11.83	.00	5111.00	.000	1.94
12.00	.00	5111.00	.000	1.94
12.17	.00	5111.00	.000	1.94
12.33	.00	5111.00	.000	1.94
12.50	.00	5111.00	.000	1.94
12.67	.00	5111.00	.000	1.94
12.83	.00	5111.00	.000	1.94
13.00	.00	5111.00	.000	1.94
13.17	.00	5111.00	.000	1.94
13.33	.00	5111.00	.000	1.94
13.50	.00	5111.00	.000	1.94
13.67	.00	5111.00	.000	1.94
13.83	.00	5111.00	.000	1.94
14.00	.00	5111.00	.000	1.94
14.17	.00	5111.00	.000	1.94
14.33	.00	5111.00	.000	1.94
14.50	.00	5111.00	.000	1.94
14.67	.00	5111.00	.000	1.94
14.83	.00	5111.00	.000	1.94
15.00	.00	5111.00	.000	1.94
15.17	.00	5111.00	.000	1.94
15.33	.00	5111.00	.000	1.94
15.50	.00	5111.00	.000	1.94
15.67	.00	5111.00	.000	1.94
15.83	.00	5111.00	.000	1.94
16.00	.00	5111.00	.000	1.94
16.17	.00	5111.00	.000	1.94

DEV10

16.33	.00	5111.00	.000	1.94
16.50	.00	5111.00	.000	1.94
16.67	.00	5111.00	.000	1.94
16.83	.00	5111.00	.000	1.94
17.00	.00	5111.00	.000	1.94
17.16	.00	5111.00	.000	1.94
17.33	.00	5111.00	.000	1.94
17.50	.00	5111.00	.000	1.94
17.66	.00	5111.00	.000	1.94
17.83	.00	5111.00	.000	1.94
18.00	.00	5111.00	.000	1.94
18.16	.00	5111.00	.000	1.94
18.33	.00	5111.00	.000	1.94
18.50	.00	5111.00	.000	1.94

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	.00	5111.00	.000	1.94
18.83	.00	5111.00	.000	1.94
19.00	.00	5111.00	.000	1.94
19.16	.00	5111.00	.000	1.94
19.33	.00	5111.00	.000	1.94
19.50	.00	5111.00	.000	1.94
19.66	.00	5111.00	.000	1.94
19.83	.00	5111.00	.000	1.94

PEAK DISCHARGE = 2.531 CFS - PEAK OCCURS AT HOUR 2.10
MAXIMUM WATER SURFACE ELEVATION = 5112.217
MAXIMUM STORAGE = .3273 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=50 CODE=5

HYDROGRAPH FROM AREA 400.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	2.0	7.999	1.9	11.999	1.9
.167	1.9	4.166	1.9	8.166	1.9	12.165	1.9
.333	1.9	4.333	1.9	8.332	1.9	12.332	1.9
.500	1.9	4.500	1.9	8.499	1.9	12.499	1.9
.667	1.9	4.666	1.9	8.666	1.9	12.665	1.9
.833	1.9	4.833	1.9	8.832	1.9	12.832	1.9
1.000	1.9	4.999	1.9	8.999	1.9	12.999	1.9
1.167	1.9	5.166	1.9	9.166	1.9	13.165	1.9
1.333	1.9	5.333	1.9	9.332	1.9	13.332	1.9
1.500	2.2	5.499	1.9	9.499	1.9	13.499	1.9
1.667	2.4	5.666	1.9	9.666	1.9	13.665	1.9
1.833	2.5	5.833	1.9	9.832	1.9	13.832	1.9
2.000	2.5	5.999	1.9	9.999	1.9	13.999	1.9

2.166	2.5	6.166	1.9	10.166	1.9
14.165	1.9	18.165	1.9		
2.333	2.5	6.333	1.9	10.332	1.9
14.332	1.9	18.331	1.9		
2.500	2.5	6.499	1.9	10.499	1.9
14.499	1.9	18.498	1.9		
2.666	2.4	6.666	1.9	10.666	1.9
14.665	1.9	18.665	1.9		
2.833	2.4	6.833	1.9	10.832	1.9
14.832	1.9	18.831	1.9		
3.000	2.3	6.999	1.9	10.999	1.9
14.998	1.9	18.998	1.9		
3.166	2.2	7.166	1.9	11.166	1.9
15.165	1.9	19.165	1.9		
3.333	2.2	7.333	1.9	11.332	1.9
15.332	1.9	19.331	1.9		
3.500	2.1	7.499	1.9	11.499	1.9
15.498	1.9	19.498	1.9		
3.666	2.1	7.666	1.9	11.665	1.9
15.665	1.9	19.665	1.9		
3.833	2.0	7.833	1.9	11.832	1.9
15.832	1.9	19.831	1.9		

RUNOFF VOLUME = 6.58535 INCHES = 3.2804 ACRE-FEET
PEAK DISCHARGE RATE = 2.53 CFS AT 2.100 HOURS BASIN AREA = .0093 SQ. MI.

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*S ADD A4 AND OS2

ADD HYD ID=51 HYDNO=327

ID=4 ID=24

PRINT HYD ID=51 CODE=5

HYDROGRAPH FROM AREA 327.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	18.5	3.000	.1
4.500	.1	5.999	.1		
.167	.0	1.667	9.3	3.166	.1
4.666	.1	6.166	.1		
.333	.0	1.833	6.0	3.333	.1
4.833	.1	6.333	.0		
.500	.0	2.000	4.4	3.500	.1
4.999	.1	6.499	.0		
.667	.0	2.166	2.0	3.666	.0
5.166	.1	6.666	.0		
.833	.0	2.333	.9	3.833	.0
5.333	.1	6.833	.0		
1.000	.0	2.500	.5	4.000	.0
5.499	.1				
1.167	.0	2.666	.3	4.166	.0
5.666	.1				
1.333	4.7	2.833	.2	4.333	.1
5.833	.1				

RUNOFF VOLUME = 1.09006 INCHES = .6511 ACRE-FEET

DEV10
PEAK DISCHARGE RATE = 18.51 CFS AT 1.500 HOURS BASIN AREA = .0112 SQ. MI.

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*POND 4

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ROUTE RESERVOIR ID=52 HYD=401 INFLOW ID=51 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
2.76	0.0	5111
3.50	0.11	5112
4.12	0.32	5113
4.65	0.65	5114
5.13	1.05	5115

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5107.27	-.410	.00
.17	.00	5111.00	.000	2.76
.33	.00	5111.00	.000	2.76
.50	.00	5111.00	.000	2.76
.67	.00	5111.00	.000	2.76
.83	.00	5111.00	.000	2.76
1.00	.00	5111.00	.000	2.76
1.17	.00	5111.00	.000	2.76
1.33	4.70	5111.00	.000	2.76
1.50	18.51	5112.05	.120	3.53
1.67	9.30	5112.72	.262	3.95
1.83	6.04	5112.94	.308	4.08
2.00	4.42	5113.01	.322	4.12
2.17	1.96	5112.96	.312	4.10
2.33	.87	5112.78	.274	3.98
2.50	.51	5112.57	.229	3.85
2.67	.31	5112.35	.183	3.71
2.83	.20	5112.12	.136	3.58
3.00	.13	5111.82	.090	3.37
3.17	.09	5111.43	.047	3.08
3.33	.07	5111.07	.008	2.81
3.50	.05	5111.00	.000	2.76
3.67	.05	5111.00	.000	2.76
3.83	.05	5111.00	.000	2.76
4.00	.05	5111.00	.000	2.76
4.17	.05	5111.00	.000	2.76
4.33	.05	5111.00	.000	2.76
4.50	.06	5111.00	.000	2.76
4.67	.06	5111.00	.000	2.76
4.83	.07	5111.00	.000	2.76
5.00	.07	5111.00	.000	2.76
5.17	.08	5111.00	.000	2.76
5.33	.09	5111.00	.000	2.76

5.50	.10	5111.00	.000	2.76
5.67	.10	5111.00	.000	2.76
5.83	.12	5111.00	.000	2.76
6.00	.13	5111.00	.000	2.76
6.17	.05	5111.00	.000	2.76
6.33	.01	5111.00	.000	2.76
6.50	.01	5111.00	.000	2.76
6.67	.00	5111.00	.000	2.76
6.83	.00	5111.00	.000	2.76
7.00	.00	5111.00	.000	2.76
7.17	.00	5111.00	.000	2.76
7.33	.00	5111.00	.000	2.76
7.50	.00	5111.00	.000	2.76
7.67	.00	5111.00	.000	2.76
7.83	.00	5111.00	.000	2.76
8.00	.00	5111.00	.000	2.76
8.17	.00	5111.00	.000	2.76
8.33	.00	5111.00	.000	2.76
8.50	.00	5111.00	.000	2.76
8.67	.00	5111.00	.000	2.76
8.83	.00	5111.00	.000	2.76
9.00	.00	5111.00	.000	2.76
9.17	.00	5111.00	.000	2.76

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	.00	5111.00	.000	2.76
9.50	.00	5111.00	.000	2.76
9.67	.00	5111.00	.000	2.76
9.83	.00	5111.00	.000	2.76
10.00	.00	5111.00	.000	2.76
10.17	.00	5111.00	.000	2.76
10.33	.00	5111.00	.000	2.76
10.50	.00	5111.00	.000	2.76
10.67	.00	5111.00	.000	2.76
10.83	.00	5111.00	.000	2.76
11.00	.00	5111.00	.000	2.76
11.17	.00	5111.00	.000	2.76
11.33	.00	5111.00	.000	2.76
11.50	.00	5111.00	.000	2.76
11.67	.00	5111.00	.000	2.76
11.83	.00	5111.00	.000	2.76
12.00	.00	5111.00	.000	2.76
12.17	.00	5111.00	.000	2.76
12.33	.00	5111.00	.000	2.76
12.50	.00	5111.00	.000	2.76
12.67	.00	5111.00	.000	2.76
12.83	.00	5111.00	.000	2.76
13.00	.00	5111.00	.000	2.76
13.17	.00	5111.00	.000	2.76
13.33	.00	5111.00	.000	2.76
13.50	.00	5111.00	.000	2.76
13.67	.00	5111.00	.000	2.76
13.83	.00	5111.00	.000	2.76
14.00	.00	5111.00	.000	2.76
14.17	.00	5111.00	.000	2.76
14.33	.00	5111.00	.000	2.76
14.50	.00	5111.00	.000	2.76
14.67	.00	5111.00	.000	2.76
14.83	.00	5111.00	.000	2.76
15.00	.00	5111.00	.000	2.76
15.17	.00	5111.00	.000	2.76
15.33	.00	5111.00	.000	2.76
15.50	.00	5111.00	.000	2.76
15.67	.00	5111.00	.000	2.76

DEV10

15.83	.00	5111.00	.000	2.76
16.00	.00	5111.00	.000	2.76
16.17	.00	5111.00	.000	2.76
16.33	.00	5111.00	.000	2.76
16.50	.00	5111.00	.000	2.76
16.67	.00	5111.00	.000	2.76
16.83	.00	5111.00	.000	2.76
17.00	.00	5111.00	.000	2.76
17.16	.00	5111.00	.000	2.76
17.33	.00	5111.00	.000	2.76
17.50	.00	5111.00	.000	2.76
17.66	.00	5111.00	.000	2.76
17.83	.00	5111.00	.000	2.76
18.00	.00	5111.00	.000	2.76
18.16	.00	5111.00	.000	2.76
18.33	.00	5111.00	.000	2.76
18.50	.00	5111.00	.000	2.76
TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	.00	5111.00	.000	2.76
18.83	.00	5111.00	.000	2.76
19.00	.00	5111.00	.000	2.76
19.16	.00	5111.00	.000	2.76
19.33	.00	5111.00	.000	2.76
19.50	.00	5111.00	.000	2.76
19.66	.00	5111.00	.000	2.76
19.83	.00	5111.00	.000	2.76

PEAK DISCHARGE = 4.124 CFS - PEAK OCCURS AT HOUR 2.03
MAXIMUM WATER SURFACE ELEVATION = 5113.008
MAXIMUM STORAGE = .3227 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=52 CODE=5

HYDROGRAPH FROM AREA 401.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	2.8	7.999	2.8
11.999	2.8	15.998	2.8		
.167	2.8	4.166	2.8	8.166	2.8
12.165	2.8	16.165	2.8		
.333	2.8	4.333	2.8	8.332	2.8
12.332	2.8	16.332	2.8		
.500	2.8	4.500	2.8	8.499	2.8
12.499	2.8	16.498	2.8		
.667	2.8	4.666	2.8	8.666	2.8
12.665	2.8	16.665	2.8		
.833	2.8	4.833	2.8	8.832	2.8
12.832	2.8	16.832	2.8		
1.000	2.8	4.999	2.8	8.999	2.8
12.999	2.8	16.998	2.8		
1.167	2.8	5.166	2.8	9.166	2.8
13.165	2.8	17.165	2.8		
1.333	2.8	5.333	2.8	9.332	2.8
13.332	2.8	17.332	2.8		
1.500	3.5	5.499	2.8	9.499	2.8
13.499	2.8	17.498	2.8		
1.667	3.9	5.666	2.8	9.666	2.8
13.665	2.8	17.665	2.8		
1.833	4.1	5.833	2.8	9.832	2.8

13.832	2.8	17.832	2.8				
2.000	4.1	5.999	2.8	9.999	2.8		
13.999	2.8	17.998	2.8				
2.166	4.1	6.166	2.8	10.166	2.8		
14.165	2.8	18.165	2.8				
2.333	4.0	6.333	2.8	10.332	2.8		
14.332	2.8	18.331	2.8				
2.500	3.9	6.499	2.8	10.499	2.8		
14.499	2.8	18.498	2.8				
2.666	3.7	6.666	2.8	10.666	2.8		
14.665	2.8	18.665	2.8				
2.833	3.6	6.833	2.8	10.832	2.8		
14.832	2.8	18.831	2.8				
3.000	3.4	6.999	2.8	10.999	2.8		
14.998	2.8	18.998	2.8				
3.166	3.1	7.166	2.8	11.166	2.8		
15.165	2.8	19.165	2.8				
3.333	2.8	7.333	2.8	11.332	2.8		
15.332	2.8	19.331	2.8				
3.500	2.8	7.499	2.8	11.499	2.8		
15.498	2.8	19.498	2.8				
3.666	2.8	7.666	2.8	11.665	2.8		
15.665	2.8	19.665	2.8				
3.833	2.8	7.833	2.8	11.832	2.8		
15.832	2.8	19.831	2.8				

RUNOFF VOLUME = 7.87751 INCHES = 4.7055 ACRE-FEET
PEAK DISCHARGE RATE = 4.12 CFS AT 2.033 HOURS BASIN AREA =
.0112 SQ. MI.

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*POND 8 (UNDERGROUND)

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ROUTE RESERVOIR ID=53 HYD=402 INFLOW ID=14 CODE=5

OUTFLOW (CFS)	STORAGE (AC-FT)	ELEV (FT)
0.00	0.0	5105
2.27	0.05	5107
3.38	0.14	5109
4.20	0.22	5111
4.72	0.25	5112.5

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5105.00	.000	.00
.17	.00	5105.00	.000	.00
.33	.00	5105.00	.000	.00
.50	.00	5105.00	.000	.00
.67	.00	5105.00	.000	.00
.83	.00	5105.00	.000	.00

DEV10

1.00	.00	5105.00	.000	.00
1.17	.00	5105.00	.000	.00
1.33	1.92	5105.25	.006	.28
1.50	7.65	5107.15	.057	2.35
1.67	3.84	5108.11	.100	2.89
1.83	2.47	5108.15	.102	2.91
2.00	1.81	5107.92	.091	2.78
2.17	.81	5107.52	.074	2.56
2.33	.36	5106.91	.048	2.17
2.50	.21	5106.13	.028	1.29
2.67	.13	5105.67	.017	.76
2.83	.08	5105.40	.010	.45
3.00	.05	5105.24	.006	.27
3.17	.03	5105.14	.004	.16
3.33	.03	5105.09	.002	.10
3.50	.02	5105.06	.001	.06
3.67	.02	5105.04	.001	.04
3.83	.02	5105.03	.001	.03
4.00	.02	5105.02	.001	.03
4.17	.02	5105.02	.000	.02
4.33	.02	5105.02	.000	.02
4.50	.02	5105.02	.000	.02
4.67	.02	5105.02	.000	.02
4.83	.03	5105.02	.001	.02
5.00	.03	5105.02	.001	.03
5.17	.03	5105.03	.001	.03
5.33	.04	5105.03	.001	.03
5.50	.04	5105.03	.001	.03
5.67	.04	5105.03	.001	.04
5.83	.05	5105.04	.001	.04
6.00	.05	5105.04	.001	.05
6.17	.02	5105.04	.001	.04
6.33	.01	5105.02	.001	.03
6.50	.00	5105.01	.000	.02
6.67	.00	5105.01	.000	.01
6.83	.00	5105.00	.000	.01
7.00	.00	5105.00	.000	.00

PEAK DISCHARGE = 2.924 CFS - PEAK OCCURS AT HOUR 1.77
MAXIMUM WATER SURFACE ELEVATION = 5108.178
MAXIMUM STORAGE = .1030 AC-FT INCREMENTAL TIME= .033330HRS

PRINT HYD ID=53 CODE=5

HYDROGRAPH FROM AREA 402.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.500	2.4	3.000	.3
4.500	.0	5.999	.0		
.167	.0	1.667	2.9	3.166	.2
4.666	.0	6.166	.0		
.333	.0	1.833	2.9	3.333	.1
4.833	.0	6.333	.0		
.500	.0	2.000	2.8	3.500	.1
4.999	.0	6.499	.0		
.667	.0	2.166	2.6	3.666	.0
5.166	.0	6.666	.0		
.833	.0	2.333	2.2	3.833	.0
5.333	.0	6.833	.0		
1.000	.0	2.500	1.3	4.000	.0
5.499	.0	6.999	.0		
1.167	.0	2.666	.8	4.166	.0

DEV10

5.666 .0 7.166 .0
1.333 .3 2.833 .5 4.333 .0
5.833 .0

RUNOFF VOLUME = 1.09473 INCHES = .2680 ACRE-FEET
PEAK DISCHARGE RATE = 2.92 CFS AT 1.766 HOURS BASIN AREA =
.0046 SQ. MI.

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*S ADD POND 2 AND POND 4

ADD HYD ID=55 HYDNO=500

ID=50 ID=52

PRINT HYD ID=55 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 500.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.7	7.999	4.7
.167	4.7	4.166	4.7	8.166	4.7
.333	4.7	4.333	4.7	8.332	4.7
.500	4.7	4.500	4.7	8.499	4.7
.667	4.7	4.666	4.7	8.666	4.7
.833	4.7	4.833	4.7	8.832	4.7
1.000	4.7	4.999	4.7	8.999	4.7
1.167	4.7	5.166	4.7	9.166	4.7
1.333	4.7	5.333	4.7	9.332	4.7
1.500	5.7	5.499	4.7	9.499	4.7
1.667	6.4	5.666	4.7	9.666	4.7
1.833	6.6	5.833	4.7	9.832	4.7
2.000	6.6	5.999	4.7	9.999	4.7
2.166	6.6	6.166	4.7	10.166	4.7
2.333	6.5	6.333	4.7	10.332	4.7
2.500	6.3	6.499	4.7	10.499	4.7
2.666	6.1	6.666	4.7	10.666	4.7
2.833	5.9	6.833	4.7	10.832	4.7
3.000	5.7	6.999	4.7	10.999	4.7
3.166	5.3	7.166	4.7	11.166	4.7

DEV10

15.165	4.7	19.165	4.7				
3.333	5.0	7.333	4.7	11.332	4.7		
15.332	4.7	19.331	4.7				
3.500	4.9	7.499	4.7	11.499	4.7		
15.498	4.7	19.498	4.7				
3.666	4.8	7.666	4.7	11.665	4.7		
15.665	4.7	19.665	4.7				
3.833	4.8	7.833	4.7	11.832	4.7		
15.832	4.7	19.831	4.7				

RUNOFF VOLUME = 7.28989 INCHES = 7.9858 ACRE-FEET
PEAK DISCHARGE RATE = 6.65 CFS AT 2.066 HOURS BASIN AREA =
.0205 SQ. MI.

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*S ADD HYD 500 AND POND 8

ADD HYD ID=56 HYDNO=501

ID=55 ID=53

PRINT HYD ID=56 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 501.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	4.8	7.999	4.7
11.999	4.7	15.998	4.7		
.167	4.7	4.166	4.7	8.166	4.7
12.165	4.7	16.165	4.7		
.333	4.7	4.333	4.7	8.332	4.7
12.332	4.7	16.332	4.7		
.500	4.7	4.500	4.7	8.499	4.7
12.499	4.7	16.498	4.7		
.667	4.7	4.666	4.7	8.666	4.7
12.665	4.7	16.665	4.7		
.833	4.7	4.833	4.7	8.832	4.7
12.832	4.7	16.832	4.7		
1.000	4.7	4.999	4.7	8.999	4.7
12.999	4.7	16.998	4.7		
1.167	4.7	5.166	4.7	9.166	4.7
13.165	4.7	17.165	4.7		
1.333	5.0	5.333	4.7	9.332	4.7
13.332	4.7	17.332	4.7		
1.500	8.0	5.499	4.7	9.499	4.7
13.499	4.7	17.498	4.7		
1.667	9.2	5.666	4.7	9.666	4.7
13.665	4.7	17.665	4.7		
1.833	9.5	5.833	4.7	9.832	4.7
13.832	4.7	17.832	4.7		
2.000	9.4	5.999	4.7	9.999	4.7
13.999	4.7	17.998	4.7		
2.166	9.2	6.166	4.7	10.166	4.7
14.165	4.7	18.165	4.7		
2.333	8.7	6.333	4.7	10.332	4.7
14.332	4.7	18.331	4.7		
2.500	7.6	6.499	4.7	10.499	4.7
14.499	4.7	18.498	4.7		
2.666	6.9	6.666	4.7	10.666	4.7

DEV10

14.665	4.7	18.665	4.7				
2.833	6.4	6.833	4.7	10.832	4.7		
14.832	4.7	18.831	4.7				
3.000	5.9	6.999	4.7	10.999	4.7		
14.998	4.7	18.998	4.7				
3.166	5.5	7.166	4.7	11.166	4.7		
15.165	4.7	19.165	4.7				
3.333	5.1	7.333	4.7	11.332	4.7		
15.332	4.7	19.331	4.7				
3.500	5.0	7.499	4.7	11.499	4.7		
15.498	4.7	19.498	4.7				
3.666	4.9	7.666	4.7	11.665	4.7		
15.665	4.7	19.665	4.7				
3.833	4.8	7.833	4.7	11.832	4.7		
15.832	4.7	19.831	4.7				

RUNOFF VOLUME = 6.15832 INCHES = 8.2537 ACRE-FEET
PEAK DISCHARGE RATE = 9.48 CFS AT 1.866 HOURS BASIN AREA = .0251 SQ. MI.

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*S ADD HYD 501 AND POND 7

ADD HYD ID=57 HYDNO=502

ID=56 ID=48

PRINT HYD ID=57 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 502.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	5.7	7.999	4.7
11.999	4.7	15.998	4.7		
.167	4.7	4.166	5.5	8.166	4.7
12.165	4.7	16.165	4.7		
.333	4.7	4.333	5.4	8.332	4.7
12.332	4.7	16.332	4.7		
.500	4.7	4.500	5.3	8.499	4.7
12.499	4.7	16.498	4.7		
.667	4.7	4.666	5.2	8.666	4.7
12.665	4.7	16.665	4.7		
.833	4.7	4.833	5.1	8.832	4.7
12.832	4.7	16.832	4.7		
1.000	4.7	4.999	5.1	8.999	4.7
12.999	4.7	16.998	4.7		
1.167	4.7	5.166	5.0	9.166	4.7
13.165	4.7	17.165	4.7		
1.333	5.1	5.333	5.0	9.332	4.7
13.332	4.7	17.332	4.7		
1.500	9.5	5.499	5.0	9.499	4.7
13.499	4.7	17.498	4.7		
1.667	11.2	5.666	4.9	9.666	4.7
13.665	4.7	17.665	4.7		
1.833	11.6	5.833	4.9	9.832	4.7
13.832	4.7	17.832	4.7		
2.000	11.6	5.999	4.9	9.999	4.7
13.999	4.7	17.998	4.7		
2.166	11.4	6.166	4.9	10.166	4.7

DEV10

14.165	4.7	18.165	4.7		
2.333	10.8	6.333	4.9	10.332	4.7
14.332	4.7	18.331	4.7		
2.500	9.6	6.499	4.8	10.499	4.7
14.499	4.7	18.498	4.7		
2.666	8.8	6.666	4.8	10.666	4.7
14.665	4.7	18.665	4.7		
2.833	8.2	6.833	4.8	10.832	4.7
14.832	4.7	18.831	4.7		
3.000	7.7	6.999	4.8	10.999	4.7
14.998	4.7	18.998	4.7		
3.166	7.2	7.166	4.8	11.166	4.7
15.165	4.7	19.165	4.7		
3.333	6.7	7.333	4.7	11.332	4.7
15.332	4.7	19.331	4.7		
3.500	6.5	7.499	4.7	11.499	4.7
15.498	4.7	19.498	4.7		
3.666	6.2	7.666	4.7	11.665	4.7
15.665	4.7	19.665	4.7		
3.833	5.9	7.833	4.7	11.832	4.7
15.832	4.7	19.831	4.7		

RUNOFF VOLUME = 5.00639 INCHES = 8.7071 ACRE-FEET
PEAK DISCHARGE RATE = 11.60 CFS AT 1.933 HOURS BASIN AREA =
.0326 SQ. MI.

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*S ADD HYD 502 AND POND 6

ADD HYD ID=58 HYDNO=503

ID=57 ID=46

PRINT HYD ID=58 CODE=5

OUTFLOW HYDROGRAPH RESERVOIR 503.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	10.4	7.999	7.1
11.999	7.0	15.998	7.0		
.167	6.1	4.166	9.8	8.166	7.1
12.165	7.0	16.165	7.0		
.333	6.7	4.333	9.3	8.332	7.0
12.332	7.0	16.332	7.0		
.500	6.9	4.500	8.9	8.499	7.0
12.499	7.0	16.498	7.0		
.667	7.0	4.666	8.7	8.666	7.0
12.665	7.0	16.665	7.0		
.833	7.0	4.833	8.4	8.832	7.0
12.832	7.0	16.832	7.0		
1.000	7.0	4.999	8.3	8.999	7.0
12.999	7.0	16.998	7.0		
1.167	7.0	5.166	8.1	9.166	7.0
13.165	7.0	17.165	7.0		
1.333	8.8	5.333	8.0	9.332	7.0
13.332	7.0	17.332	7.0		
1.500	23.6	5.499	8.0	9.499	7.0
13.499	7.0	17.498	7.0		
1.667	31.7	5.666	7.9	9.666	7.0

DEV10

13.665	7.0	17.665	7.0				
1.833	34.0	5.833	7.9	9.832	7.0		
13.832	7.0	17.832	7.0				
2.000	34.8	5.999	7.9	9.999	7.0		
13.999	7.0	17.998	7.0				
2.166	34.5	6.166	7.8	10.166	7.0		
14.165	7.0	18.165	7.0				
2.333	33.1	6.333	7.7	10.332	7.0		
14.332	7.0	18.331	7.0				
2.500	30.9	6.499	7.5	10.499	7.0		
14.499	7.0	18.498	7.0				
2.666	28.5	6.666	7.4	10.666	7.0		
14.665	7.0	18.665	7.0				
2.833	26.1	6.833	7.3	10.832	7.0		
14.832	7.0	18.831	7.0				
3.000	23.5	6.999	7.3	10.999	7.0		
14.998	7.0	18.998	7.0				
3.166	20.7	7.166	7.2	11.166	7.0		
15.165	7.0	19.165	7.0				
3.333	17.1	7.333	7.2	11.332	7.0		
15.332	7.0	19.331	7.0				
3.500	14.3	7.499	7.1	11.499	7.0		
15.498	7.0	19.498	7.0				
3.666	12.5	7.666	7.1	11.665	7.0		
15.665	7.0	19.665	7.0				
3.833	11.3	7.833	7.1	11.832	7.0		
15.832	7.0	19.831	7.0				

RUNOFF VOLUME = 3.16268 INCHES = 15.6311 ACRE-FEET
PEAK DISCHARGE RATE = 34.86 CFS AT 2.066 HOURS BASIN AREA =
.0927 SQ. MI.

****

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 15:48:35

DEV10

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02c RUN DATE (MON/DAY/YR) =10/02/2007

INPUT FILE = DEV10.HMI USER NO.=

AHYMO-C-9803c01UNMLIB-AH

PAGE = 1

COMMAND NOTATION	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE
RAINFALL TYPE= 1									
RAIN6= 1.470									
*S COMPUTE HYD BASIN A1									
COMPUTE NM HYD	101.00	-	1	.00780	13.37	.473	1.13650	1.500	2.679
PER IMP= 90.00									
*S COMPUTE HYD BASIN A2									
COMPUTE NM HYD	102.00	-	2	.00623	10.25	.361	1.08583	1.500	2.572
PER IMP= 85.00									
*S COMPUTE HYD BASIN A3									
COMPUTE NM HYD	103.00	-	3	.00833	14.05	.496	1.11623	1.500	2.636
PER IMP= 88.00									
*S COMPUTE HYD BASIN A4									
COMPUTE NM HYD	104.00	-	4	.01040	17.11	.602	1.08583	1.500	2.571
PER IMP= 85.00									
*S COMPUTE HYD BASIN B1									
COMPUTE NM HYD	201.00	-	11	.00161	2.77	.098	1.13650	1.500	2.686
PER IMP= 90.00									
*S COMPUTE HYD BASIN B2									
COMPUTE NM HYD	202.00	-	12	.00097	1.72	.060	1.15775	1.500	2.769
PER IMP= 90.00									
*S COMPUTE HYD BASIN B3									
COMPUTE NM HYD	203.00	-	13	.00190	3.17	.111	1.09479	1.500	2.609
PER IMP= 85.00									
*S COMPUTE HYD BASIN B4									
COMPUTE NM HYD	204.00	-	14	.00459	7.65	.268	1.09479	1.500	2.605
PER IMP= 85.00									
*S COMPUTE HYD BASIN B5									
COMPUTE NM HYD	205.00	-	15	.00657	10.95	.384	1.09479	1.500	2.604
PER IMP= 85.00									
*S COMPUTE HYD BASIN B6									
COMPUTE NM HYD	206.00	-	16	.00575	9.15	.355	1.15775	1.533	2.485
PER IMP= 90.00									
*S COMPUTE HYD BASIN B7									

```
                                                                  DEV10
    COMPUTE NM HYD          207.00   -    17        .00176        3.11        .109      1.15775    1.500    2.761
PER IMP=  90.00
    *S  COMPUTE HYD BASIN B8
    COMPUTE NM HYD          208.00   -    18        .00249        4.40        .154      1.15775    1.500    2.759
PER IMP=  90.00
    *S  COMPUTE HYD BASIN B9
    COMPUTE NM HYD          209.00   -    19        .00725       12.59        .443      1.14585    1.500    2.713
PER IMP=  90.00
    *S  COMPUTE HYD BASIN B10
    COMPUTE NM HYD          210.00   -    20        .00748       12.83        .453      1.13650    1.500    2.679
PER IMP=  90.00
    *S  COMPUTE HYD BASIN O1
    COMPUTE NM HYD          211.00   -    21        .00796       11.95        .465      1.09479    1.533    2.346
PER IMP=  85.00
    *S  COMPUTE HYD BASIN O2
    COMPUTE NM HYD          212.00   -    22        .00767       11.52        .448      1.09479    1.533    2.346
PER IMP=  85.00
    *S  COMPUTE HYD BASIN OS1
    COMPUTE NM HYD          213.00   -    23        .01104       18.39        .645      1.09479    1.500    2.603
PER IMP=  85.00
    *S  COMPUTE HYD BASIN OS2
    COMPUTE NM HYD          214.00   -    24        .00080        1.40        .049      1.14585    1.500    2.729
PER IMP=  90.00
    *S  COMPUTE HYD BASIN OS3
    COMPUTE NM HYD          215.00   -    25        .00311        5.41        .190      1.14585    1.500    2.716
PER IMP=  90.00
    *S ADD O1 AND O2
    ADD HYD                 300.00 21&22  28        .01563       23.47        .913      1.09474    1.533    2.346
    ROUTE RESERVOIR         301.00   28   29        .01563        6.10        .923      1.10678    2.066     .609
AC-FT=     .503
    ROUTE RESERVOIR         302.00    1   30        .00780        2.94        .483      1.16169    2.033     .589
AC-FT=     .273
    *S ADD OFFSITE POND AND POND 1
    ADD HYD                 303.00 29&30  31        .02343        9.03       1.406      1.12505    2.066     .602
    ROUTE RESERVOIR         304.00    3   32        .00833        2.84       3.836      8.63458    2.066     .533
AC-FT=     .257
    *S ADD HYD 303 AND POND 3
    ADD HYD                 306.00 31&32  34        .03176       11.88       5.242      3.09468    2.066     .584
    *S ADD B1 AND B2
```

PAGE = 2

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE

NOTATION

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    ADD HYD                 308.00 11&12  36        .00258        4.49        .157      1.14426    1.500    2.717
    *S ADD HYD 308 AND B3
    ADD HYD                 309.00 36&13  37        .00448        7.66        .268      1.12321    1.500    2.671
    *S ADD B5 AND B6
    ADD HYD                 310.00 15&16  38        .01232       19.60        .739      1.12412    1.533    2.486
    *S ADD HYD 309 AND HYD 310
    ADD HYD                 311.00 37&38  39        .01680       27.17       1.007      1.12388    1.500    2.527
    ROUTE RESERVOIR         312.00   39   40        .01680        7.70       1.007      1.12388    1.933     .716
AC-FT=     .481
    *S ADD HYD 306 AND POND 5
    ADD HYD                 320.00 34&40  42        .04856       19.55       6.249      2.41285    2.000     .629
    *S ADD HYD 320 AND B7
    ADD HYD                 321.00 42&17  43        .05032       20.34       6.358      2.36894    1.900     .632
    *S ADD HYD 321 AND B8
    ADD HYD                 322.00 43&18  44        .05281       22.05       6.511      2.31183    1.667     .652
    *S ADD HYD 322 AND B9
    ADD HYD                 323.00 44&19  45        .06006       33.21       6.954      2.17108    1.533     .864
    ROUTE RESERVOIR         324.00   45   46        .06006       23.32       6.924      2.16167    2.066     .607
AC-FT=     .502
    ROUTE RESERVOIR         325.00   20   48        .00748        2.17        .453      1.13646    2.100     .454
AC-FT=     .294
    *S ADD A2 AND OS3
    ADD HYD                 326.00  2&25  49        .00934       15.66        .551      1.10576    1.500    2.620
    ROUTE RESERVOIR         400.00   49   50        .00934        2.53       3.280      6.58535    2.100     .423
AC-FT=     .327
    *S ADD A4 AND OS2
    ADD HYD                 327.00  4&24  51        .01120       18.51        .651      1.09006    1.500    2.582
    ROUTE RESERVOIR         401.00   51   52        .01120        4.12       4.705      7.87751    2.033     .575
AC-FT=     .323
    ROUTE RESERVOIR         402.00   14   53        .00459        2.92        .268      1.09473    1.766     .995
AC-FT=     .103
    *S ADD POND 2 AND POND 4
    ADD HYD                 500.00 50&52  55        .02054        6.65       7.986      7.28989    2.066     .506
    *S ADD HYD 500 AND POND 8
    ADD HYD                 501.00 55&53  56        .02513        9.48       8.254      6.15832    1.866     .590
    *S ADD HYD 501 AND POND 7
    ADD HYD                 502.00 56&48  57        .03261       11.60       8.707      5.00639    1.933     .556
    *S ADD HYD 502 AND POND 6
    ADD HYD                 503.00 57&46  58        .09267       34.86      15.631      3.16268    2.066     .588
    FINISH
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.673                                                    DEV100
    *S ADD HYD 502 AND POND 6
    ADD HYD                 503.00 57&46  58        .09267        45.14       18.366       3.71597    2.000
.761
    FINISH
```

APPENDIX C

Hydraflow Inlet and Storm Drain Analysis
and
Orifice Calculations

Oxbow Town Center
6010
Orifice Plate Design
10/2/2007

Pond 1

$Q_{Allowable}$	3.58	cfs
Coef. Of Discharge	0.61	
Orifice Diameter	0.70	ft
Orifice Area	0.38	ft^2
Orifice Invert Elevation	5108.00	ft
Pond Bottom	5109.00	ft
MWSEL	5112.00	ft

WSEL	Q_{OUT}
5109.0	0.00
5110.0	2.41
5111.0	3.05
5112.0	3.58

$Q_{Discharged}$	3.58	Check	0.00

Pond 2

$Q_{Allowable}$	2.86	cfs
Coef. Of Discharge	0.61	
Orifice Diameter	0.62	ft
Orifice Area	0.30	ft^2
Orifice Invert Elevation	5109.00	ft
Pond Bottom	5111.00	ft
MWSEL	5113.00	ft

WSEL	Q_{OUT}
5111.0	0.00
5112.0	2.44
5113.0	2.86
5114.0	3.22
5115.0	3.55

$Q_{Discharged}$	2.86	Check	0.00

Pond 3

$Q_{Allowable}$	3.83	cfs
Coef. Of Discharge	0.61	
Orifice Diameter	0.68	ft
Orifice Area	0.36	ft^2
Orifice Invert Elevation	5109.00	ft
Pond Bottom	5111.00	ft
MWSEL	5114.00	ft

WSEL	Q_{OUT}
5111.0	0.00
5112.0	2.89
5113.0	3.39
5114.0	3.83
5115.0	4.22

$Q_{Discharged}$	3.83	Check	0.00

Oxbow Town Center
6010
Orifice Plate Design
10/2/2007

Pond 4

			WSEL	Q_{OUT}
$Q_{Allowable}$	5.13	cfs	5111.0	0.00
Coef. Of Discharge	0.61		5112.0	3.50
Orifice Diameter	0.75	ft	5113.0	4.12
Orifice Area	0.44	ft^2	5114.0	4.65
Orifice Invert Elevation	5109.00	ft	5115.0	5.13
Pond Bottom	5111.00	ft	5115.5	5.35
MWSEL	5115.00	ft		
$Q_{Discharged}$	5.13		Check	0.00

Pond 5

			WSEL	Q_{OUT}
$Q_{Allowable}$	9.80	cfs	5108.0	0.00
Coef. Of Discharge	0.61		5109.0	5.44
Orifice Diameter	1.00	ft	5110.0	6.66
Orifice Area	0.79	ft^2	5111.0	7.69
Orifice Invert Elevation	5106.50	ft	5112.0	8.60
Pond Bottom	5108.00	ft	5113.0	9.42
MWSEL	5113.50	ft	5114.0	10.17
$Q_{Discharged}$	9.80		Check	0.00

Pond 6 (90" CMP Underground Storage)

			WSEL	Q_{OUT}
$Q_{Allowable}$	31.40	cfs	5103.0	12.61
Coef. Of Discharge	0.61		5105.0	21.44
Orifice Diameter	1.79	ft	5107.0	27.58
Orifice Area	2.50	ft^2	5108.0	30.18
Orifice Invert Elevation	5101.05	ft	5109.0	32.58
Pond Bottom	5101.05	ft		
MWSEL	5108.50	ft		
$Q_{Discharged}$	31.40		Check	0.00

Oxbow Town Center
6010
Orifice Plate Design
10/2/2007

Pond 7 (90" CMP Underground Storage)

$Q_{Allowable}$	3.00	cfs
Coef. Of Discharge	0.61	
Orifice Diameter	0.54	ft
Orifice Area	0.23	ft^2
Orifice Invert Elevation	5104.50	ft
Pond Bottom	5104.50	ft
MWSEL	5112.00	ft

WSEL	Q_{OUT}
5106.5	1.47
5108.5	2.16
5110.5	2.67
5112.0	3.00

$Q_{Discharged}$	3.00	Check	0.00

Pond 8 (90" CMP Underground Storage)

$Q_{Allowable}$	4.72	cfs
Coef. Of Discharge	0.61	
Orifice Diameter	0.68	ft
Orifice Area	0.36	ft^2
Orifice Invert Elevation	5105.00	ft
Pond Bottom	5105.00	ft
MWSEL	5112.50	ft

WSEL	Q_{OUT}
5107.0	2.27
5109.0	3.38
5111.0	4.20
5112.5	4.72

$Q_{Discharged}$	4.72	Check	0.00

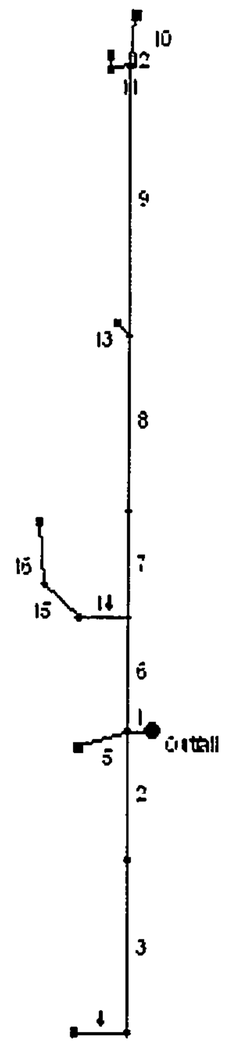
Offsite Detention Pond on Church Tract

$Q_{Allowable}$	9.50	cfs
Coef. Of Discharge	0.61	
Orifice Diameter	1.08	ft
Orifice Area	0.92	ft^2
Orifice Invert Elevation	5108.00	ft
Pond Bottom	5108.00	ft
MWSEL	5113.00	ft

WSEL	Q_{OUT}
5110.0	5.43
5111.0	7.05
5112.0	8.37
5113.0	9.50

$Q_{Discharged}$	9.50	Check	0.00

Hydraflow Plan View



Project file: SD012607-1.stm	IDF file: sampleFHA.IDF	No. Lines: 16	10-02-2007

Hydraflow Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	Dns line No.
1		48.44	36 c	44.0	5099.00	5100.20	2.728	5102.00	5102.42	0.81	End
2		2.84	18 c	204.0	5100.20	5101.97	0.868	5103.23	5103.37	0.00	1
3		2.84	18 c	267.0	5101.97	5103.84	0.700	5103.47	5104.48	0.06	2
4		2.84	18 c	91.0	5104.00	5104.64	0.703	5105.50	5105.54	0.01	3
5		30.26	24 c	87.0	5100.20	5101.05	0.977	5103.23*	5104.79*	0.07	1
6		15.34	24 c	178.0	5100.20	5101.70	0.843	5103.23*	5104.05*	0.02	1
7		11.51	18 c	167.0	5101.70	5103.12	0.850	5104.07*	5106.08*	0.03	6
8		11.51	18 c	270.0	5103.12	5105.42	0.852	5106.11*	5109.35*	0.16	7
9		6.89	18 c	424.0	5105.42	5108.00	0.609	5109.52*	5111.35*	0.17	8
10		2.89	18 c	80.0	5108.00	5110.00	2.500	5111.51*	5111.57*	0.00	9
11		4.00	18 c	32.0	5108.00	5110.50	7.813	5111.51	5111.49	0.06	9
12		2.00	18 c	24.0	5110.50	5111.50	4.167	5112.00	5112.04	0.00	11
13		4.62	18 c	30.0	5111.40	5112.00	2.000	5112.90	5112.82	0.02	8
14		3.83	18 c	84.0	5101.70	5102.77	1.274	5104.07	5104.17	0.00	6
15		3.83	18 c	81.0	5102.77	5103.79	1.259	5104.27	5104.54	0.01	14
16		3.83	18 c	95.0	5103.79	5105.00	1.274	5105.29	5105.75	0.00	15

Project File: SD012607-1.stm	IDF File: sampleFHA.IDF	Total No. Lines: 16	Run Date: 10-02-2007

NOTES: c = circular; e = elliptical; b = box; Return period = 2 Yrs.; * Indicates surcharge condition.

Hydraflow Hydraulic Grade Line Computations

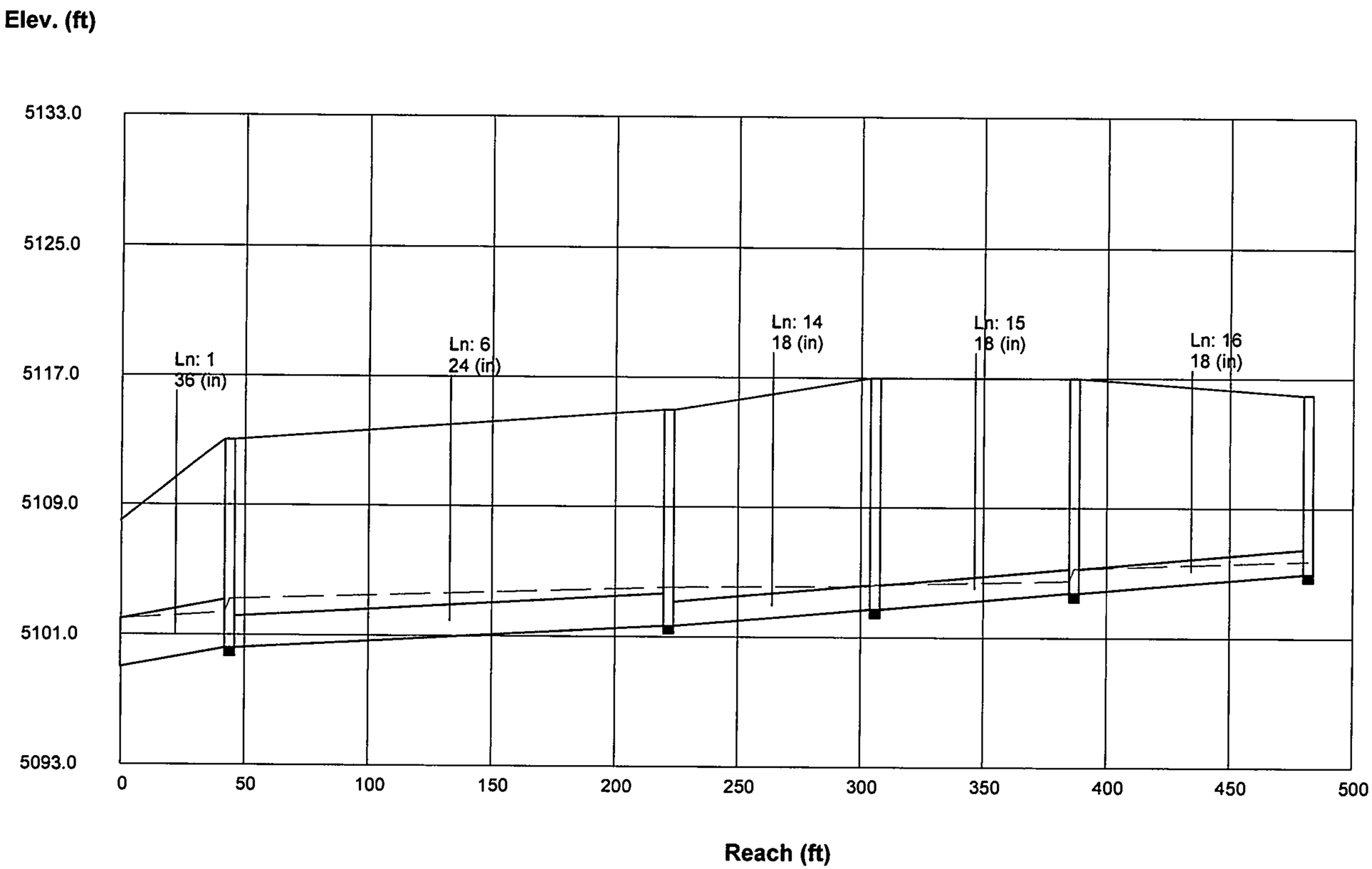
Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
	(in)	(cfs)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	(ft)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)	(K)	(ft)
1	36	48.44	5099.00	5102.00	3.00	7.07	6.85	0.73	5102.73	0.528	44.0	5100.20	5102.42	2.22**	5.60	8.64	1.16	5103.58	0.656	0.592	N/A	0.70	0.81
2	18	2.84	5100.20	5103.23	1.50	1.77	1.61	0.04	5103.27	0.073	204	5101.97	5103.37	1.40	1.71	1.66	0.04	5103.41	0.063	0.068	0.139	0.05	0.00
3	18	2.84	5101.97	5103.47	1.50*	1.77	1.61	0.04	5103.51	0.073	267	5103.84	5104.48	0.64**	0.72	3.92	0.24	5104.72	0.501	0.287	N/A	0.25	0.06
4	18	2.84	5104.00	5105.50	1.50*	1.77	1.61	0.04	5105.54	0.073	91.0	5104.64	5105.54	0.90	1.11	2.55	0.10	5105.65	0.160	0.116	0.106	0.05	0.01
5	24	30.26	5100.20	5103.23	2.00	3.14	9.63	1.44	5104.67	1.791	87.0	5101.05	5104.79	2.00	3.14	9.63	1.44	5106.23	1.790	1.790	1.558	0.05	0.07
6	24	15.34	5100.20	5103.23	2.00	3.14	4.88	0.37	5103.60	0.460	178	5101.70	5104.05	2.00	3.14	4.88	0.37	5104.42	0.460	0.460	0.819	0.05	0.02
7	18	11.51	5101.70	5104.07	1.50	1.77	6.51	0.66	5104.73	1.202	167	5103.12	5106.08	1.50	1.77	6.51	0.66	5106.74	1.201	1.202	2.007	0.05	0.03
8	18	11.51	5103.12	5106.11	1.50	1.77	6.51	0.66	5106.77	1.202	270	5105.42	5109.35	1.50	1.77	6.51	0.66	5110.01	1.201	1.202	3.244	0.25	0.16
9	18	6.89	5105.42	5109.52	1.50	1.77	3.90	0.24	5109.76	0.431	424	5108.00	5111.35	1.50	1.77	3.90	0.24	5111.58	0.431	0.431	1.826	0.70	0.17
10	18	2.89	5108.00	5111.51	1.50	1.77	1.64	0.04	5111.55	0.076	80.0	5110.00	5111.57	1.50	1.77	1.64	0.04	5111.61	0.076	0.076	0.061	0.00	0.00
11	18	4.00	5108.00	5111.51	1.50	1.77	2.26	0.08	5111.59	0.145	32.0	5110.50	5111.49	0.99	1.23	3.24	0.16	5111.65	0.244	0.195	0.062	0.35	0.06
12	18	2.00	5110.50	5112.00	1.50*	1.77	1.13	0.02	5112.02	0.036	24.0	5111.50	5112.04	0.54**	0.57	3.49	0.19	5112.23	0.473	0.255	N/A	0.00	0.00
13	18	4.62	5111.40	5112.90	1.50*	1.77	2.61	0.11	5113.01	0.194	30.0	5112.00	5112.82	0.82	0.99	4.65	0.34	5113.16	0.566	0.380	0.114	0.05	0.02
14	18	3.83	5101.70	5104.07	1.50	1.77	2.17	0.07	5104.14	0.133	84.0	5102.77	5104.17	1.40	1.72	2.23	0.08	5104.25	0.115	0.124	0.104	0.05	0.00
15	18	3.83	5102.77	5104.27	1.50*	1.77	2.17	0.07	5104.34	0.133	81.0	5103.79	5104.54	0.75**	0.88	4.36	0.30	5104.83	0.539	0.336	N/A	0.05	0.01
16	18	3.83	5103.79	5105.29	1.50*	1.77	2.17	0.07	5105.36	0.133	95.0	5105.00	5105.75	0.75**	0.88	4.36	0.30	5106.04	0.539	0.336	N/A	0.00	0.00

Project File: SD012607-1.stm	IDF File: sampleFHA.IDF	Total number of lines: 16	Run Date: 10-02-2007

NOTES: Initial tailwater elevation = 5102 (ft) , * Crown depth assumed., ** Critical depth assumed., i Under inlet control.

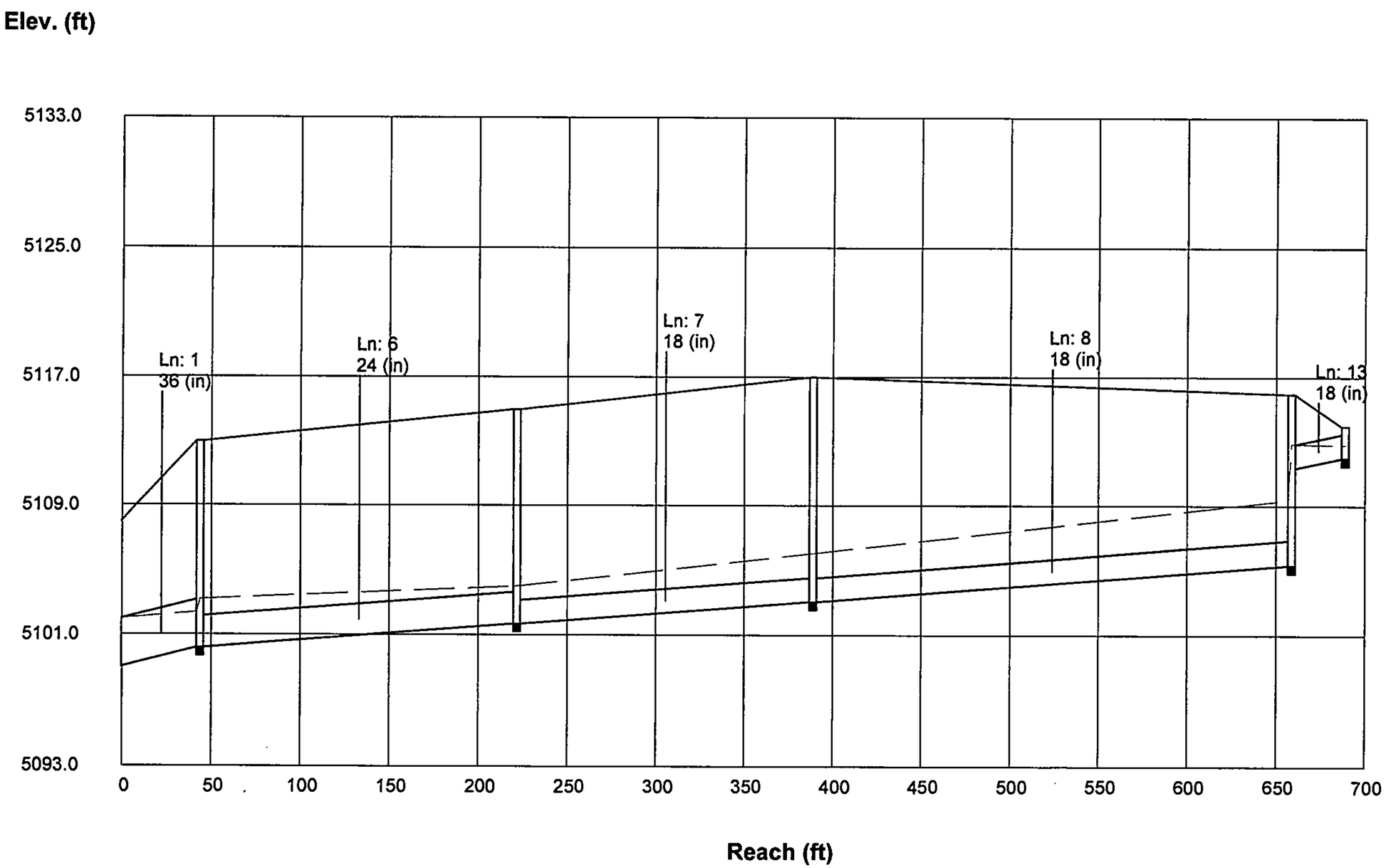
Storm Sewer Profile

Proj. file: SD012607-1.stm



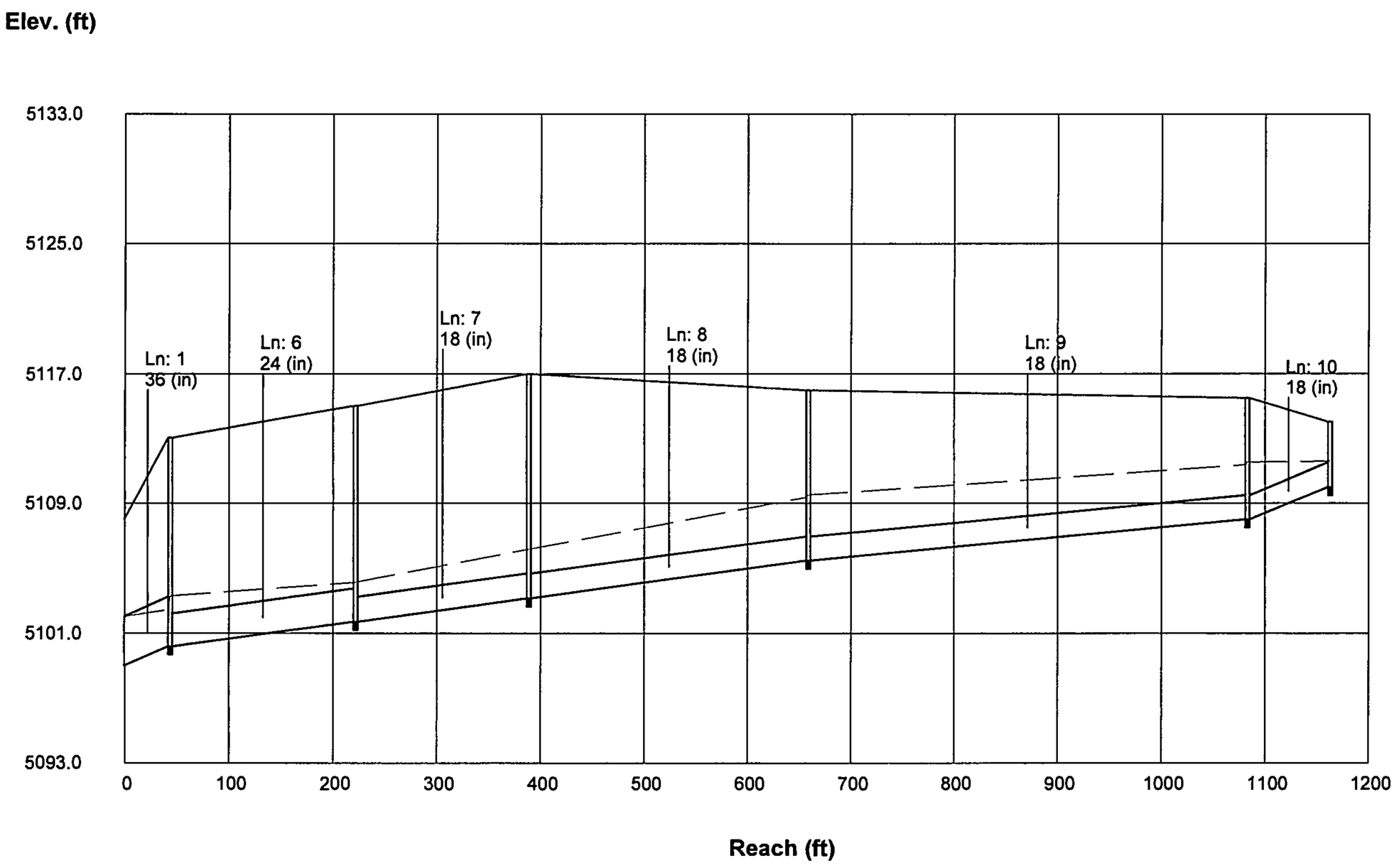
Storm Sewer Profile

Proj. file: SD012607-1.stm



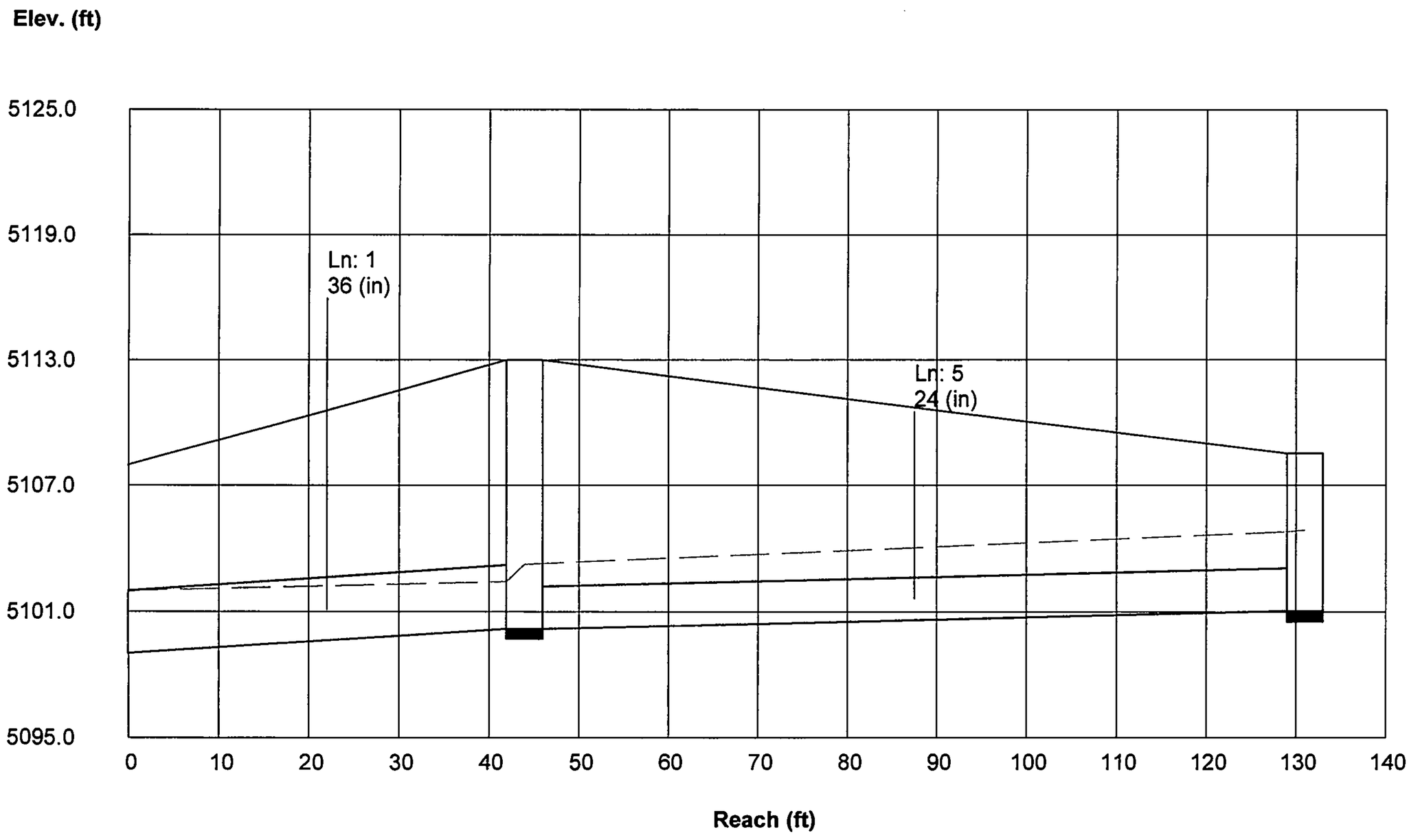
Storm Sewer Profile

Proj. file: SD012607-1.stm



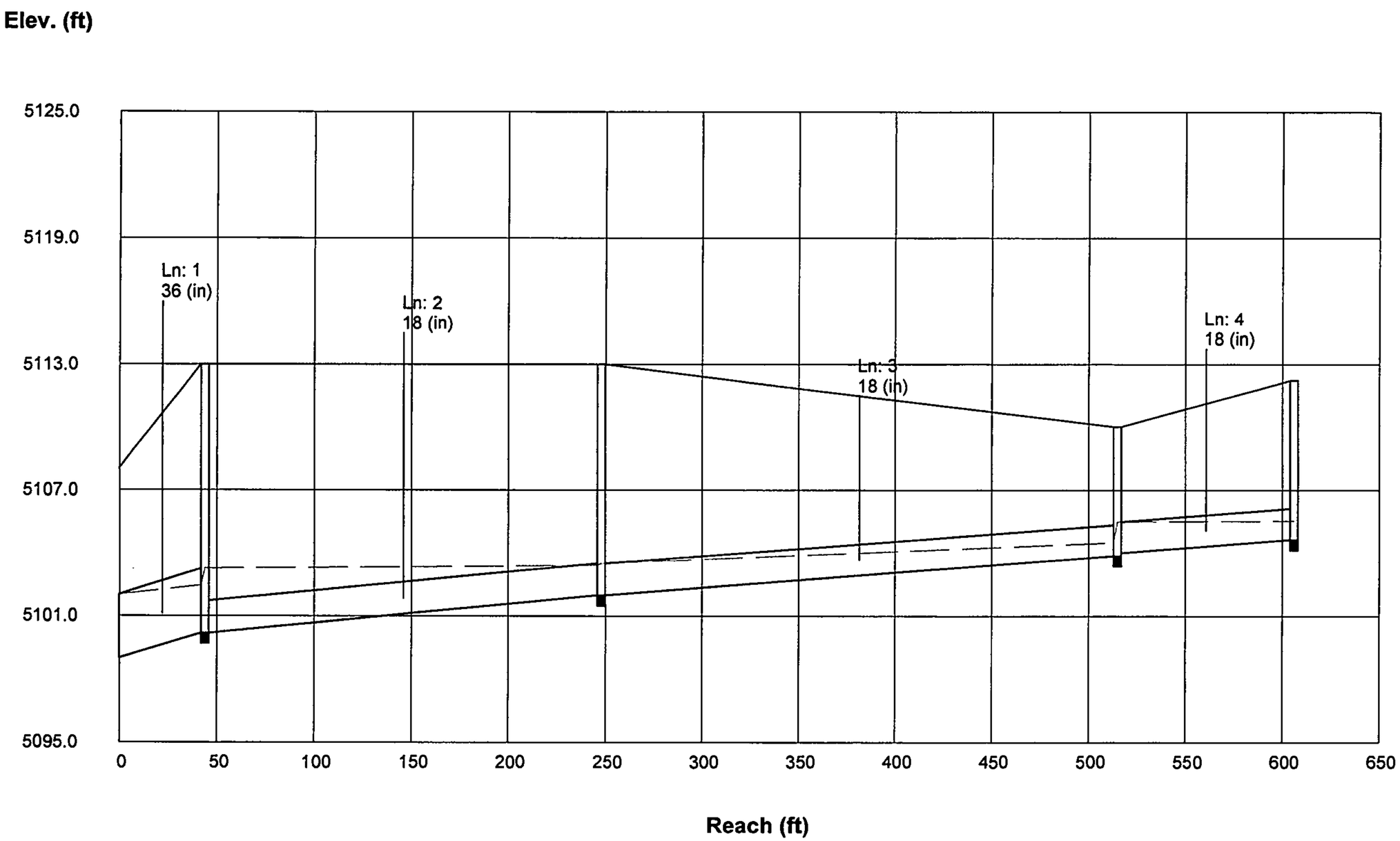
Storm Sewer Profile

Proj. file: SD012607-1.stm

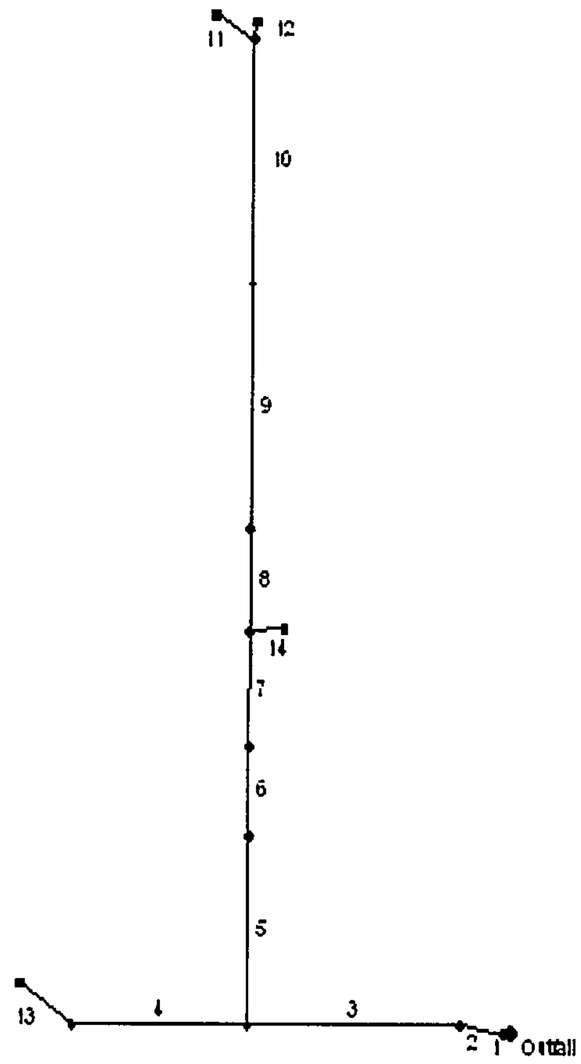


Storm Sewer Profile

Proj. file: SD012607-1.stm



Hydraflow Plan View



Project file: SD012607-2.stm	IDF file: sampleFHA.IDF	No. Lines: 14	10-02-2007

Hydraflow Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	Dns line No.
1		21.82	30 c	10.0	5100.95	5101.05	0.996	5103.45	5103.47	0.00	End
2		21.82	30 c	70.0	5101.05	5101.40	0.500	5103.55	5103.71	0.03	1
3		21.82	30 c	340.0	5101.40	5103.10	0.500	5103.90	5104.83	0.28	2
4		7.92	18 c	280.0	5103.10	5105.97	1.025	5105.11	5107.04	0.08	3
5		13.90	24 c	267.0	5103.10	5103.90	0.300	5105.11*	5106.12*	0.02	3
6		13.90	24 c	131.0	5103.90	5104.33	0.328	5106.14*	5106.63*	0.02	5
7		13.90	24 c	165.0	5104.33	5104.87	0.327	5106.65*	5107.27*	0.08	6
8		11.34	24 c	150.0	5104.87	5105.36	0.326	5107.35*	5107.73*	0.01	7
9		11.34	24 c	350.0	5105.36	5106.52	0.331	5107.74*	5108.62*	0.01	8
10		11.34	24 c	350.0	5106.52	5107.77	0.357	5108.63	5109.44	0.01	9
11		8.01	18 c	70.0	5107.77	5108.00	0.329	5109.45*	5109.86*	0.00	10
12		3.33	18 c	25.0	5107.77	5108.00	0.920	5109.45	5109.48	0.00	10
13		7.92	18 c	100.0	5105.97	5107.00	1.030	5107.47	5108.07	0.00	4
14		2.56	18 c	55.0	5106.70	5110.00	6.000	5108.20	5110.61	0.00	7

Project File: SD012607-2.stm	IDF File: sampleFHA.IDF	Total No. Lines: 14	Run Date: 10-02-2007

NOTES: c = circular; e = elliptical; b = box; Return period = 2 Yrs.; * Indicates surcharge condition.

Hydraflow Hydraulic Grade Line Computations

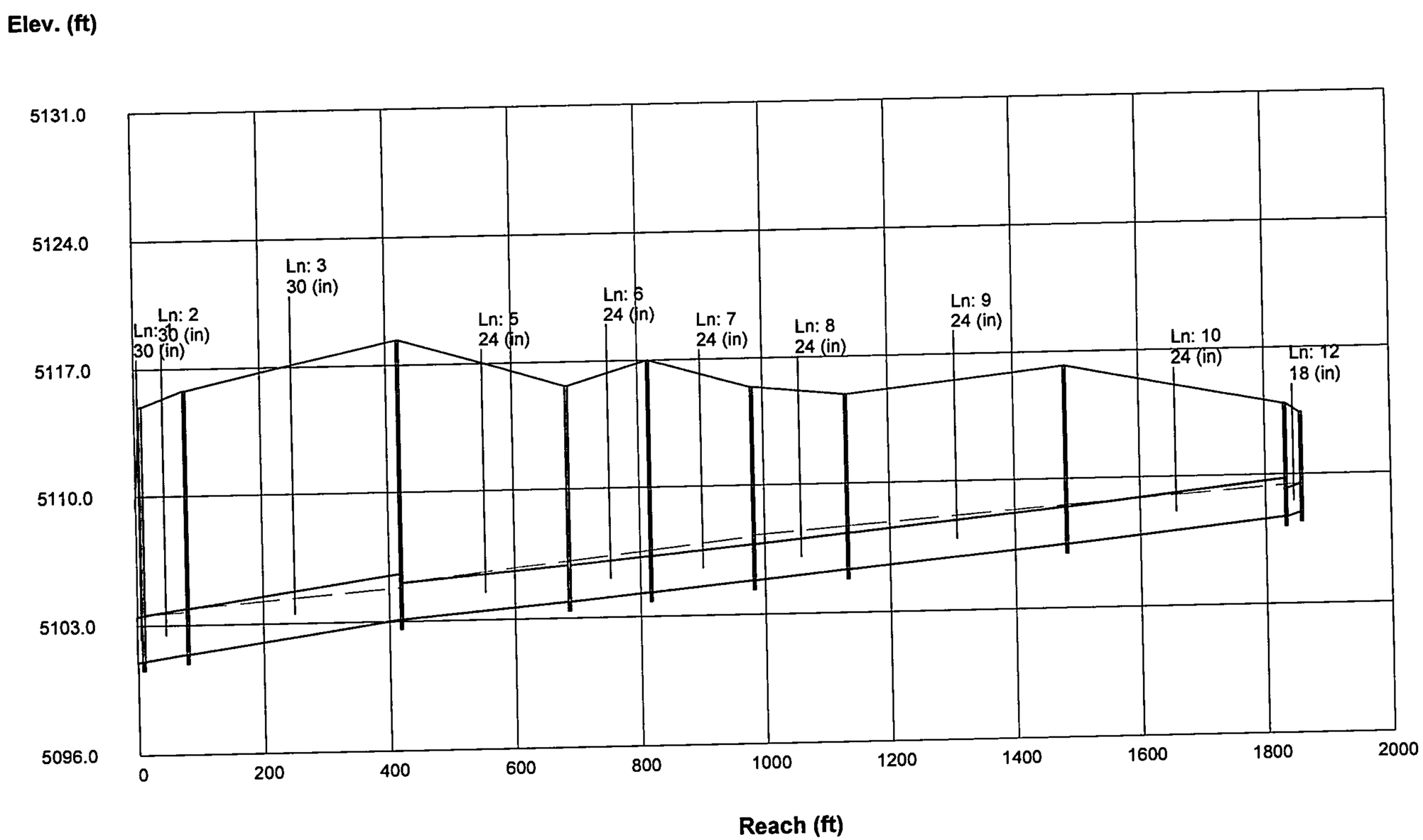
Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
	(in)	(cfs)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	(ft)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)	(K)	(ft)
1	30	21.82	5100.95	5103.45	2.50	4.91	4.45	0.31	5103.76	0.283	10.0	5101.05	5103.47	2.42	4.86	4.49	0.31	5103.78	0.249	0.266	0.027	0.00	0.00
2	30	21.82	5101.05	5103.55	2.50*	4.91	4.45	0.31	5103.86	0.283	70.0	5101.40	5103.71	2.31	4.74	4.60	0.33	5104.04	0.245	0.264	0.185	0.10	0.03
3	30	21.82	5101.40	5103.90	2.50*	4.91	4.45	0.31	5104.21	0.283	340	5103.10	5104.83	1.73	3.63	6.01	0.56	5105.40	0.414	0.349	1.186	0.50	0.28
4	18	7.92	5103.10	5105.11	1.50	1.77	4.48	0.31	5105.43	0.569	280	5105.97	5107.04	1.07**	1.35	5.85	0.53	5107.58	0.765	0.667	N/A	0.15	0.08
5	24	13.90	5103.10	5105.11	2.00	3.14	4.43	0.30	5105.42	0.378	267	5103.90	5106.12	2.00	3.14	4.42	0.30	5106.43	0.378	0.378	1.009	0.05	0.02
6	24	13.90	5103.90	5106.14	2.00	3.14	4.43	0.30	5106.44	0.378	131	5104.33	5106.63	2.00	3.14	4.42	0.30	5106.94	0.378	0.378	0.495	0.05	0.02
7	24	13.90	5104.33	5106.65	2.00	3.14	4.43	0.30	5106.95	0.378	165	5104.87	5107.27	2.00	3.14	4.42	0.30	5107.58	0.378	0.378	0.623	0.25	0.08
8	24	11.34	5104.87	5107.35	2.00	3.14	3.61	0.20	5107.55	0.251	150	5105.36	5107.73	2.00	3.14	3.61	0.20	5107.93	0.251	0.251	0.377	0.05	0.01
9	24	11.34	5105.36	5107.74	2.00	3.14	3.61	0.20	5107.94	0.251	350	5106.52	5108.62	2.00	3.14	3.61	0.20	5108.82	0.251	0.251	0.880	0.05	0.01
10	24	11.34	5106.52	5108.63	2.00	3.14	3.61	0.20	5108.83	0.251	350	5107.77	5109.44	1.67	2.80	4.05	0.25	5109.70	0.243	0.247	0.866	0.05	0.01
11	18	8.01	5107.77	5109.45	1.50	1.77	4.53	0.32	5109.77	0.582	70.0	5108.00	5109.86	1.50	1.77	4.53	0.32	5110.18	0.582	0.582	0.407	0.00	0.00
12	18	3.33	5107.77	5109.45	1.50	1.77	1.88	0.06	5109.51	0.101	25.0	5108.00	5109.48	1.48	1.76	1.89	0.06	5109.53	0.091	0.096	0.024	0.00	0.00
13	18	7.92	5105.97	5107.47	1.50*	1.77	4.48	0.31	5107.78	0.569	100	5107.00	5108.07	1.07**	1.35	5.85	0.53	5108.61	0.765	0.667	N/A	0.00	0.00
14	18	2.56	5106.70	5108.20	1.50*	1.77	1.45	0.03	5108.23	0.059	55.0	5110.00	5110.61	0.61**	0.68	3.79	0.22	5110.83	0.491	0.275	N/A	0.00	0.00

Project File: SD012607-2.stm	IDF File: sampleFHA.IDF	Total number of lines: 14	Run Date: 10-02-2007

NOTES: Initial tailwater elevation = 5103.45 (ft) , * Crown depth assumed., ** Critical depth assumed., i Under inlet control.

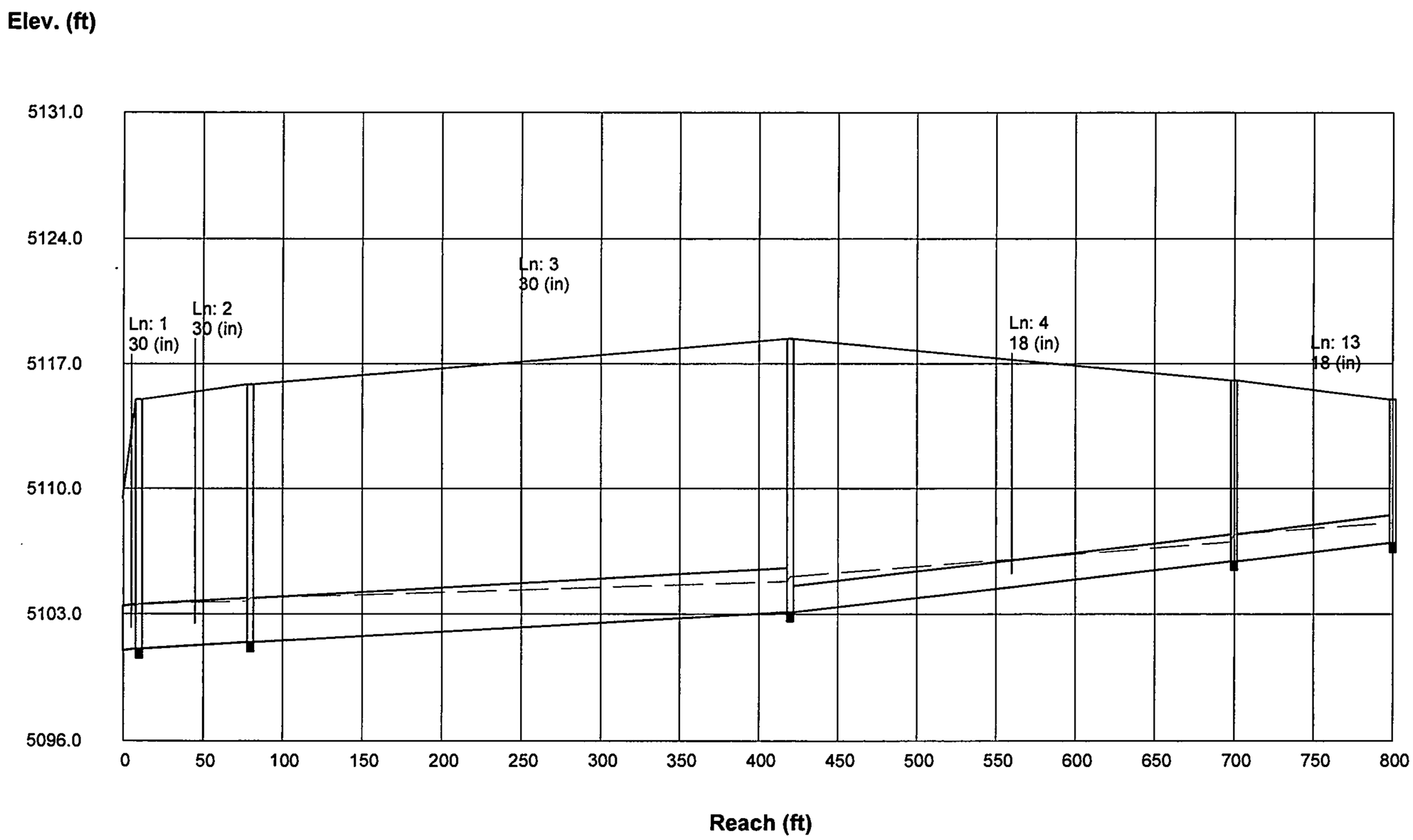
Storm Sewer Profile

Proj. file: SD012607-2.stm



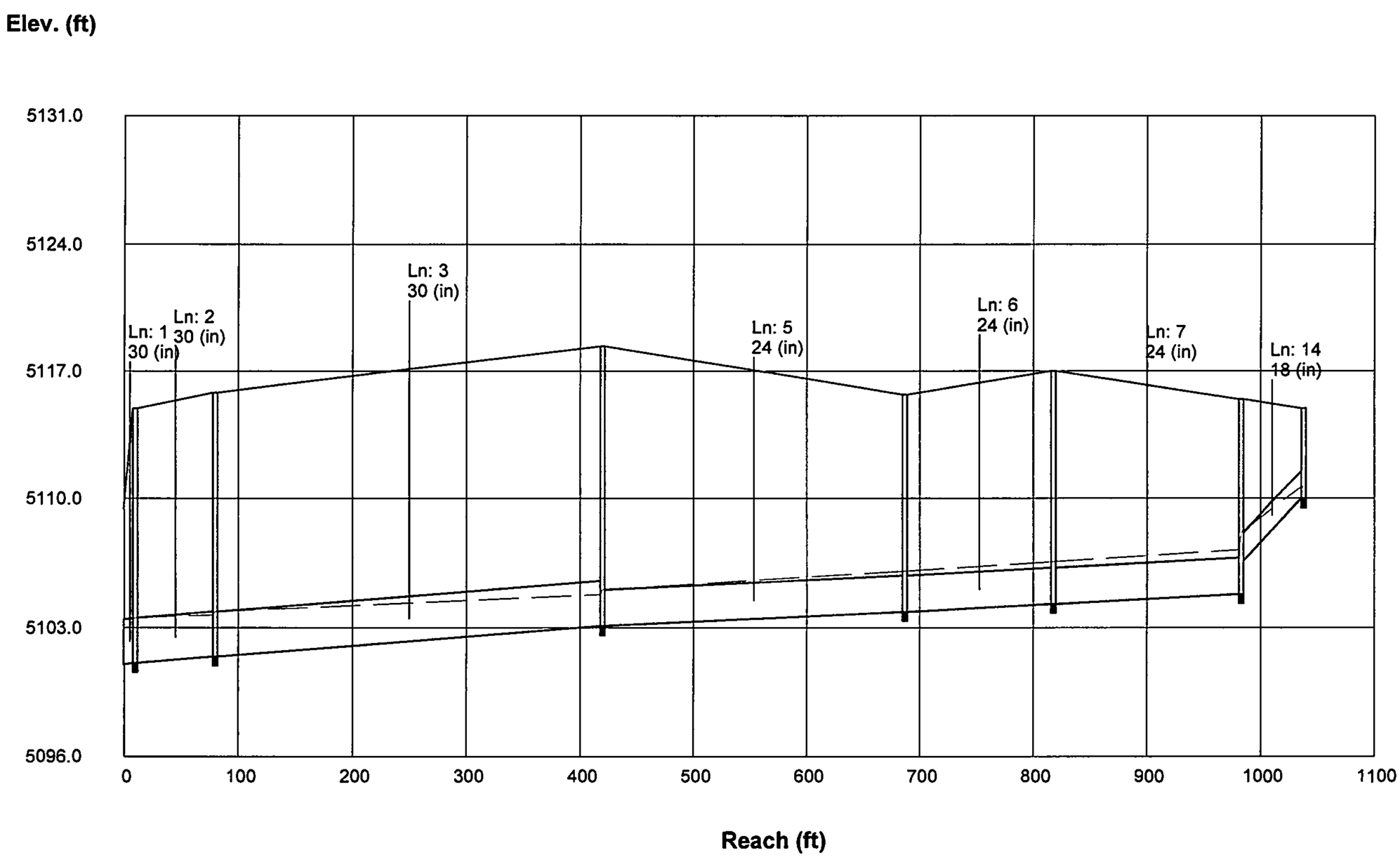
Storm Sewer Profile

Proj. file: SD012607-2.stm

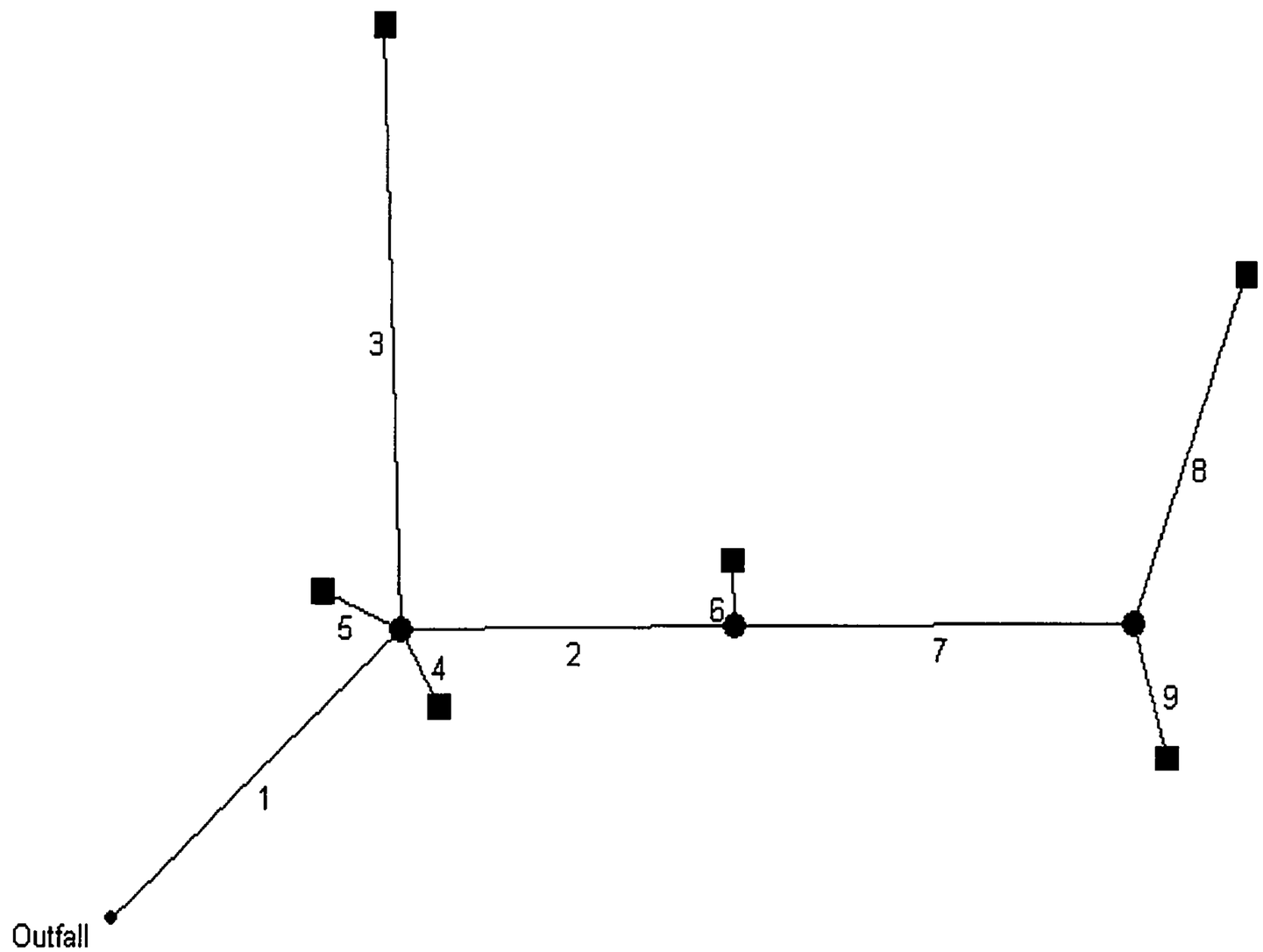


Storm Sewer Profile

Proj. file: SD012607-2.stm



Hydraflow Plan View



Project file: SD012607-3.stm	IDF file: sampleFHA.IDF	No. Lines: 9	02-02-2007

Hydraflow Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	Dns line No.
1		21.30	30 c	114.0	5108.00	5108.67	0.588	5112.76*	5113.07*	0.13	End
2		9.32	24 c	98.0	5108.67	5109.36	0.704	5113.20*	5113.37*	0.03	1
3		2.80	24 c	160.0	5108.67	5110.50	1.144	5113.20*	5113.22*	0.00	1
4		8.68	18 c	23.0	5108.67	5110.33	7.218	5113.20*	5113.36*	0.00	1
5		0.50	18 c	25.0	5108.67	5110.25	6.320	5113.20*	5113.20*	0.00	1
6		0.94	18 c	17.0	5109.36	5110.20	4.943	5113.40*	5113.40*	0.00	2
7		8.38	24 c	117.0	5109.36	5110.18	0.701	5113.40*	5113.56*	0.03	2
8		5.31	18 c	98.0	5110.18	5110.76	0.591	5113.59*	5113.84*	0.00	7
9		3.07	18 c	37.0	5110.18	5111.98	4.864	5113.59*	5113.62*	0.00	7

Project File: SD012607-3.stm	IDF File: sampleFHA.IDF	Total No. Lines: 9	Run Date: 02-02-2007

NOTES: c = circular; e = elliptical; b = box; Return period = 2 Yrs.; * Indicates surcharge condition.

Hydraflow Hydraulic Grade Line Computations

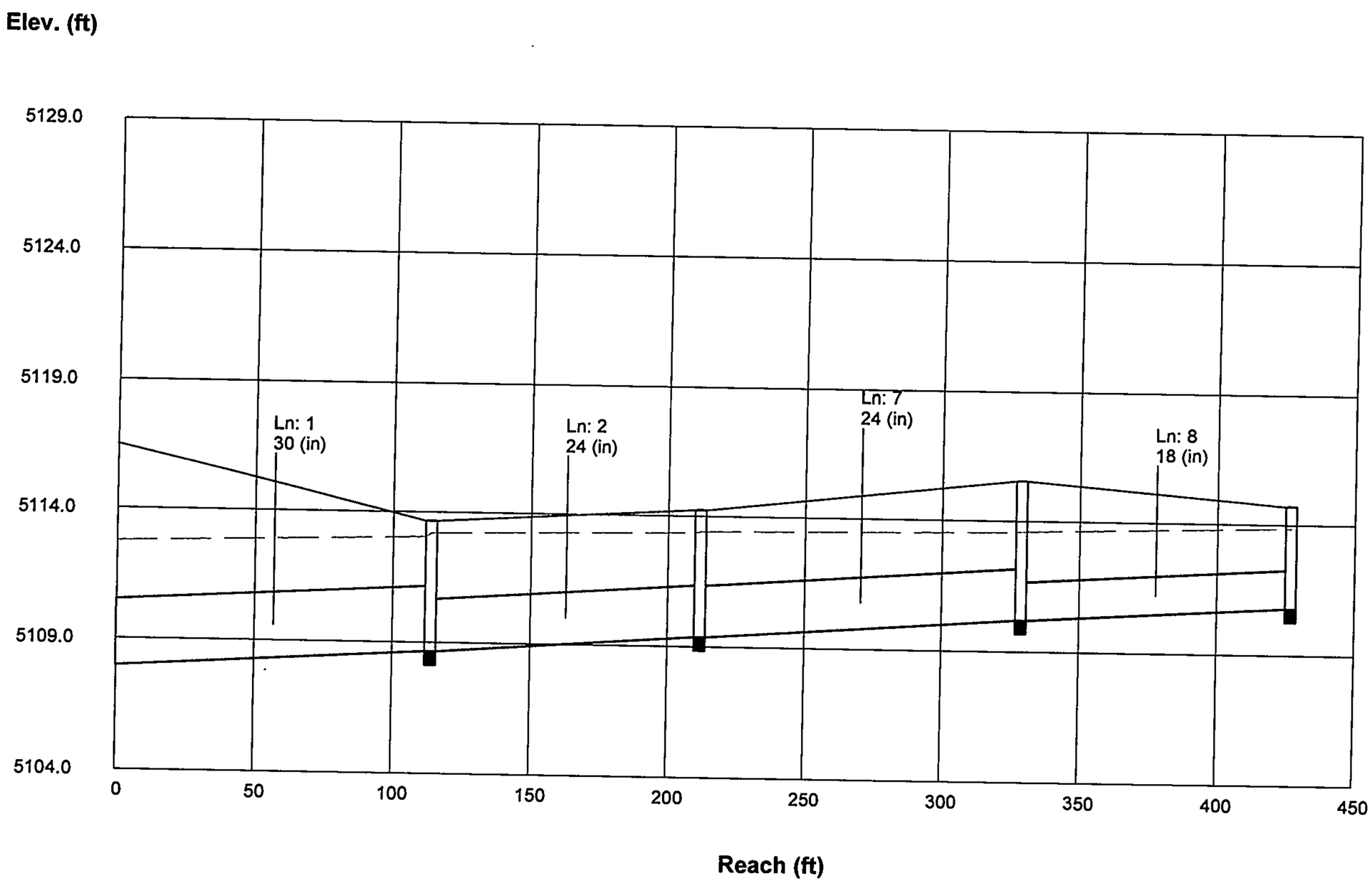
Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
	(in)	(cfs)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	(ft)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)	(K)	(ft)
1	30	21.30	5108.00	5112.76	2.50	4.91	4.34	0.29	5113.05	0.270	114	5108.67	5113.07	2.50	4.91	4.34	0.29	5113.36	0.270	0.270	0.308	0.45	0.13
2	24	9.32	5108.67	5113.20	2.00	3.14	2.97	0.14	5113.34	0.170	98.0	5109.36	5113.37	2.00	3.14	2.97	0.14	5113.50	0.170	0.170	0.166	0.25	0.03
3	24	2.80	5108.67	5113.20	2.00	3.14	0.89	0.01	5113.21	0.015	160	5110.50	5113.22	2.00	3.14	0.89	0.01	5113.24	0.015	0.015	0.025	0.00	0.00
4	18	8.68	5108.67	5113.20	1.50	1.77	4.91	0.38	5113.57	0.684	23.0	5110.33	5113.36	1.50	1.77	4.91	0.38	5113.73	0.683	0.683	0.157	0.00	0.00
5	18	0.50	5108.67	5113.20	1.50	1.77	0.28	0.00	5113.20	0.002	25.0	5110.25	5113.20	1.50	1.77	0.28	0.00	5113.20	0.002	0.002	0.001	0.00	0.00
6	18	0.94	5109.36	5113.40	1.50	1.77	0.53	0.00	5113.40	0.008	17.0	5110.20	5113.40	1.50	1.77	0.53	0.00	5113.41	0.008	0.008	0.001	0.00	0.00
7	24	8.38	5109.36	5113.40	2.00	3.14	2.67	0.11	5113.51	0.137	117	5110.18	5113.56	2.00	3.14	2.67	0.11	5113.67	0.137	0.137	0.161	0.25	0.03
8	18	5.31	5110.18	5113.59	1.50	1.77	3.01	0.14	5113.73	0.256	98.0	5110.76	5113.84	1.50	1.77	3.00	0.14	5113.98	0.256	0.256	0.251	0.00	0.00
9	18	3.07	5110.18	5113.59	1.50	1.77	1.74	0.05	5113.64	0.086	37.0	5111.98	5113.62	1.50	1.77	1.74	0.05	5113.67	0.085	0.085	0.032	0.00	0.00

Project File: SD012607-3.stm | IDF File: sampleFHA.IDF | Total number of lines: 9 | Run Date: 02-02-2007

NOTES: Initial tailwater elevation = 5112.76 (ft) , * Crown depth assumed., ** Critical depth assumed., i Under inlet control.

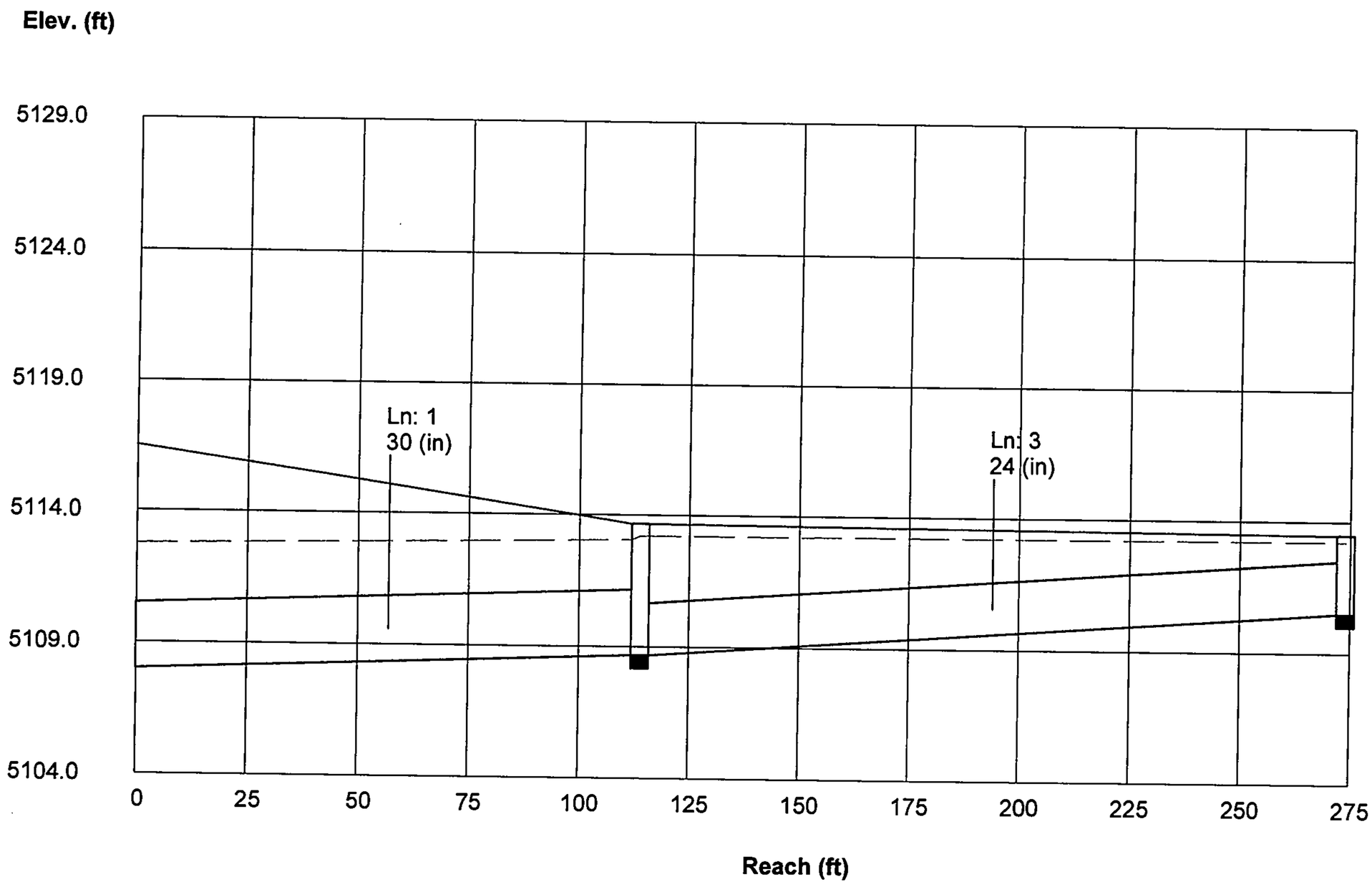
Storm Sewer Profile

Proj. file: SD012607-3.stm



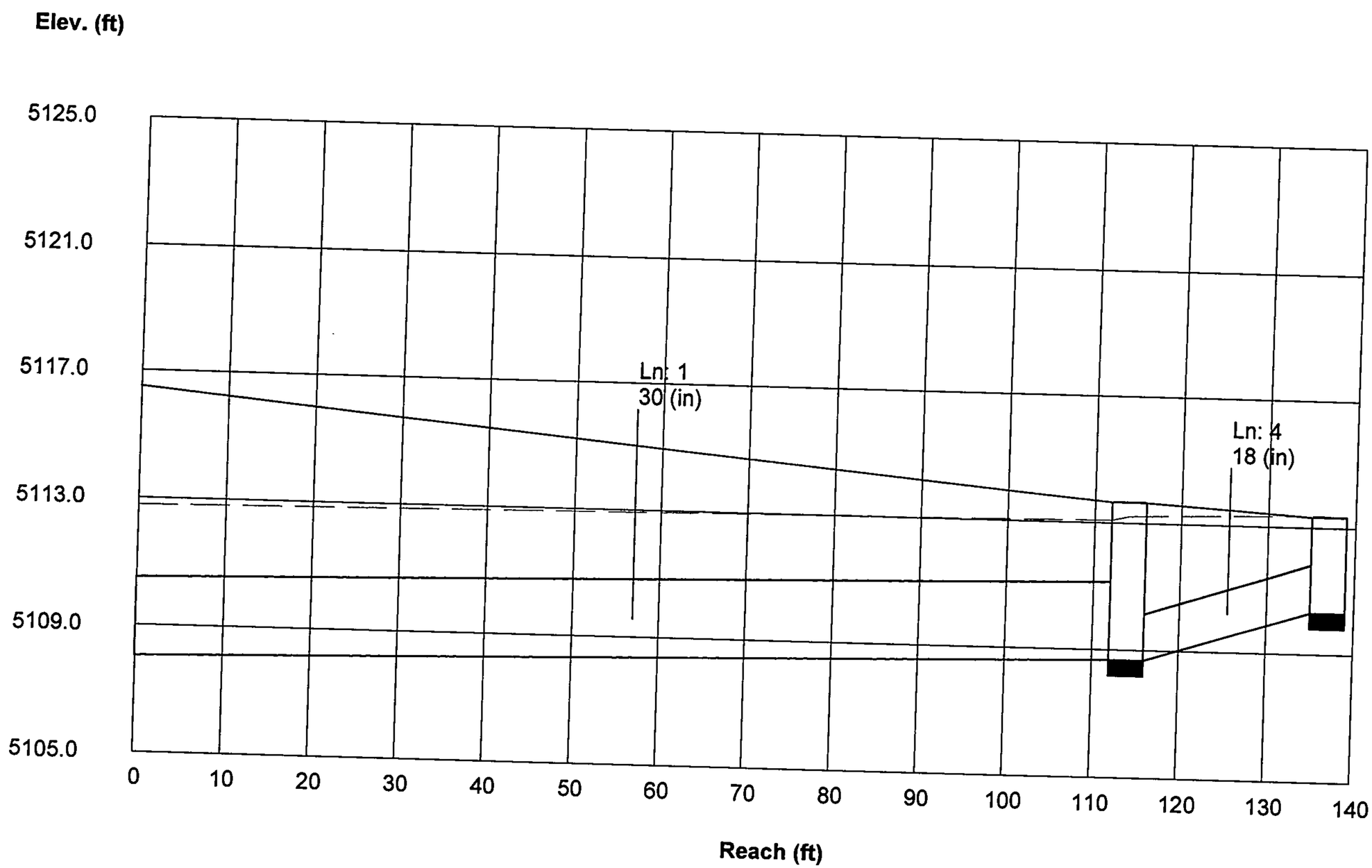
Storm Sewer Profile

Proj. file: SD012607-3.stm

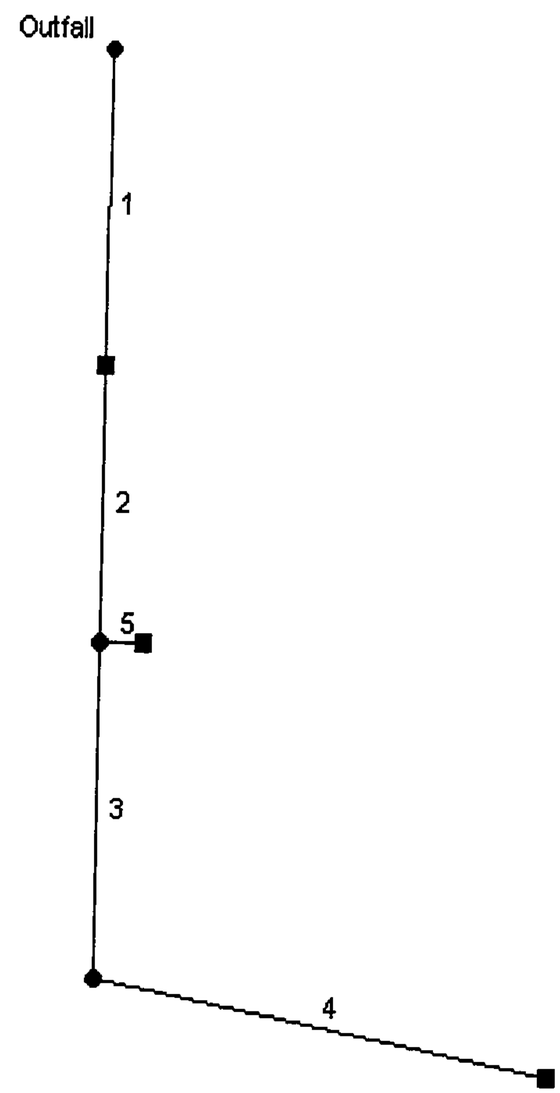


Storm Sewer Profile

Proj. file: SD012607-3.stm



Hydraflow Plan View



Project file: SD012607-4.stm	IDF file: sampleFHA.IDF	No. Lines: 5	02-02-2007

Hydraflow Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	Dns line No.
1		15.50	24 c	160.0	5108.00	5109.12	0.700	5112.76*	5113.51*	0.00	End
2		13.00	24 c	140.0	5109.12	5110.10	0.700	5113.51*	5113.98*	0.01	1
3		12.00	24 c	170.0	5110.10	5111.29	0.700	5113.99*	5114.47*	0.06	2
4		12.00	24 c	260.0	5111.29	5113.11	0.700	5114.52*	5115.26*	0.06	3
5		1.00	12 c	25.0	5110.10	5112.75	10.600	5113.99*	5114.01*	0.00	2

Project File: SD012607-4.stm	IDF File: sampleFHA.IDF	Total No. Lines: 5	Run Date: 02-02-2007

NOTES: c = circular; e = elliptical; b = box; Return period = 2 Yrs.; * Indicates surcharge condition.

Hydraflow Hydraulic Grade Line Computations

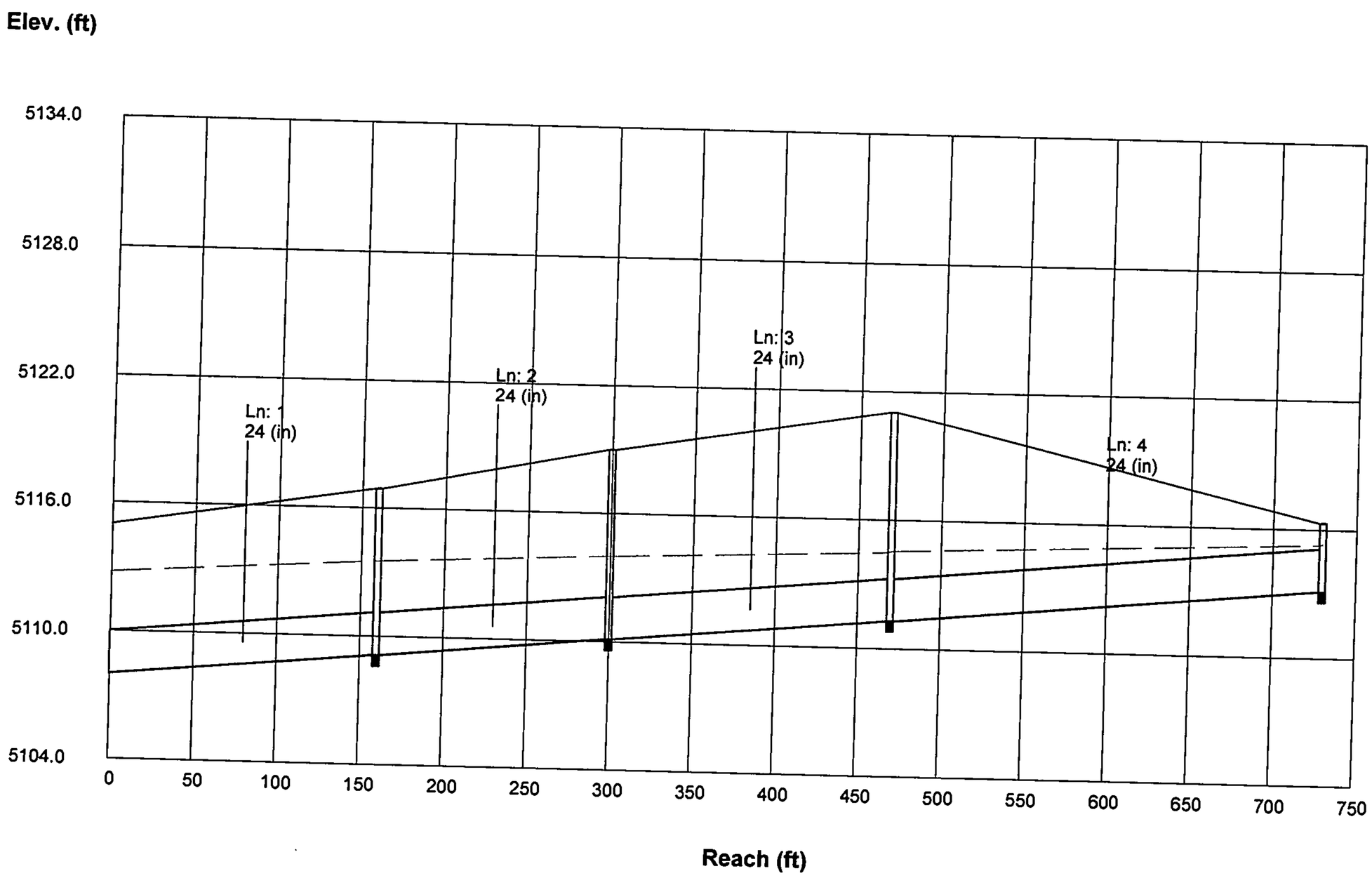
Line	Size (in)	Q (cfs)	Downstream Invert elev (ft)	Downstream HGL elev (ft)	Downstream Depth (ft)	Downstream Area (sqft)	Downstream Vel (ft/s)	Downstream Vel head (ft)	Downstream EGL elev (ft)	Downstream Sf (%)	Len (ft)	Upstream Invert elev (ft)	Upstream HGL elev (ft)	Upstream Depth (ft)	Upstream Area (sqft)	Upstream Vel (ft/s)	Upstream Vel head (ft)	Upstream EGL elev (ft)	Upstream Sf (%)	Check Ave Sf (%)	Check Enrgy loss (ft)	JL coeff (K)	Minor loss (ft)
1	24	15.50	5108.00	5112.76	2.00	3.14	4.93	0.38	5113.14	0.470	160	5109.12	5113.51	2.00	3.14	4.93	0.38	5113.89	0.470	0.470	0.752	0.00	0.00
2	24	13.00	5109.12	5113.51	2.00	3.14	4.14	0.27	5113.78	0.331	140	5110.10	5113.98	2.00	3.14	4.14	0.27	5114.24	0.330	0.330	0.463	0.05	0.01
3	24	12.00	5110.10	5113.99	2.00	3.14	3.82	0.23	5114.22	0.282	170	5111.29	5114.47	2.00	3.14	3.82	0.23	5114.69	0.282	0.282	0.479	0.25	0.06
4	24	12.00	5111.29	5114.52	2.00	3.14	3.82	0.23	5114.75	0.282	260	5113.11	5115.26	2.00	3.14	3.82	0.23	5115.48	0.282	0.282	0.732	0.25	0.06
5	12	1.00	5110.10	5113.99	1.00	0.79	1.27	0.03	5114.01	0.079	25.0	5112.75	5114.01	1.00	0.79	1.27	0.03	5114.03	0.079	0.079	0.020	0.00	0.00

Project File: SD012607-4.stm | IDF File: sampleFHA.IDF | Total number of lines: 5 | Run Date: 02-02-2007

NOTES: Initial tailwater elevation = 5112.76 (ft) , * Crown depth assumed., ** Critical depth assumed., i Under inlet control.

Storm Sewer Profile

Proj. file: SD012607-4.stm



APPENDIX D

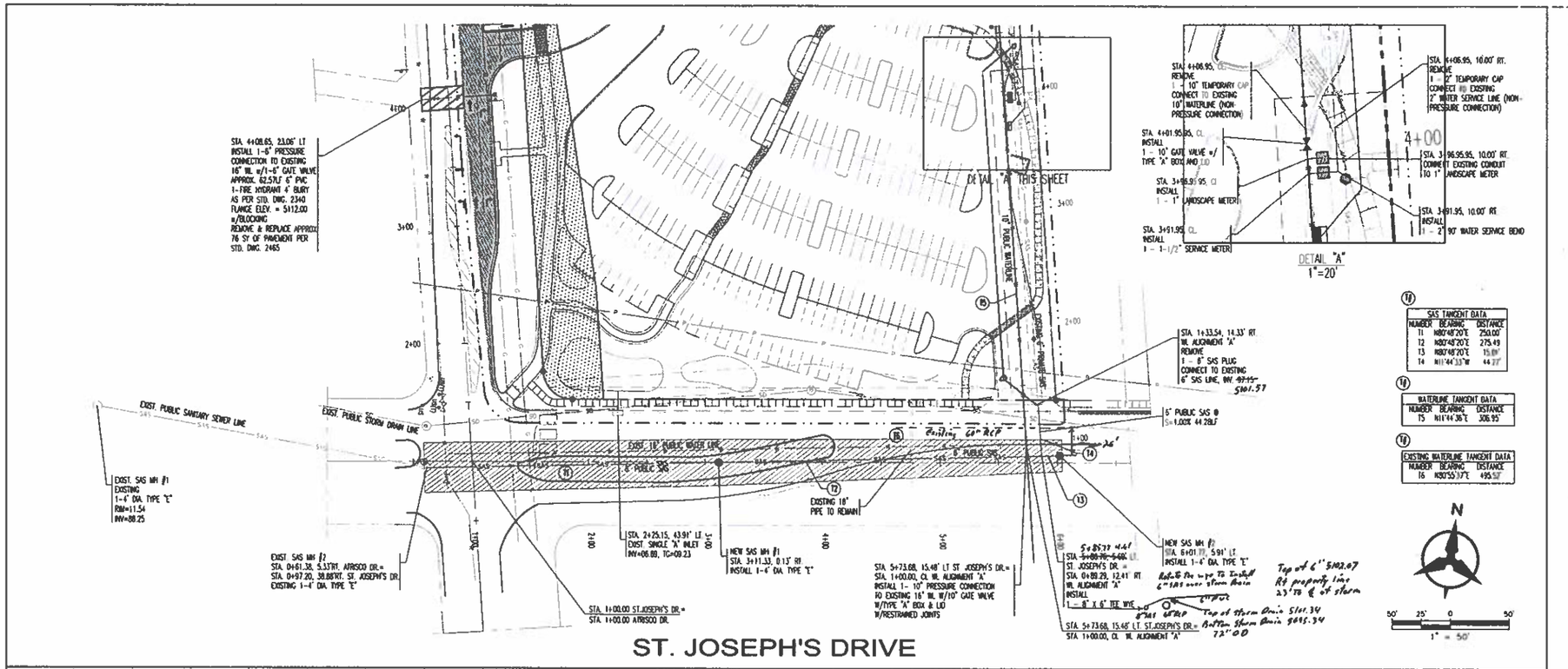
Project Basin Maps
And Exhibits

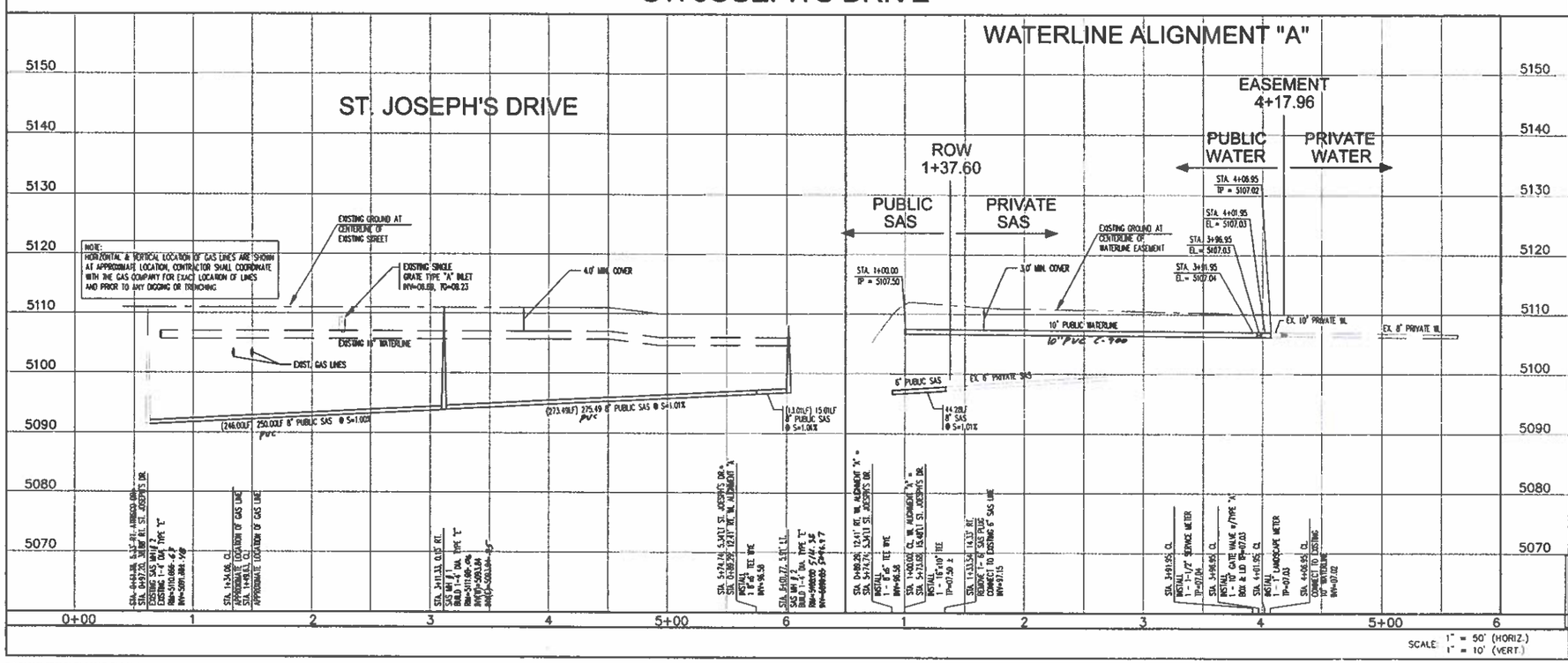
EVERITT
ATRISCO
ST JOSEPHS
LADERA
BENT TREE
COORS
CALLE SOL SEMETE
CALLE TIERRA AMARILLA
CALLE LOMA PARDA
CALLE ARROYO SECO
CALLE VADITO
HUMMINGBIRD
ROCK DOVE
FOX SPARROW
TUNDRA SWAN
DESERT SAGE
HOLLYLE
STARLIN
PARK HEIGHTS
PARK POINTE
PARK RIDGE
TUCSON
26-1727-86 PVC 6"
26-6223.81-01 PVC 18"
26-6223.82-17 PVC 8"
09-012-76 Concrete Cylinder 16"
26-6588.92-16 PVC 8"
03-009-66 Cast Iron 10"
23-006-74 Cast Iron 8"
03-021-67 Cast Iron 6"
26-3720-89 PVC 10"
26-1884-86 Cast Iron 6"
26-2493-85 PVC 10"
26-1885-86 Cast Iron 6"
26-2493-85 PVC 6"
26-2181-85 PVC 10"
03-008-66 Cast Iron 10"
26-6912.81-03 PVC 6"
26-6288.81-00 PVC 6"
26-6288.81-00 PVC 4"
26-6288.81-00 PVC 6"
26-2340-85 PVC 8"
3801
3600
3630

EVERITT
ESTARCIA
EVERITT
26-68 10.03-07 Ductile Iron Pipe 36"
ATRISCO
ST JOSEPHS
COORS
ST JOSEPHS
ST JOSEPHS
ST JOSEPHS
ST JOSEPHS
LADERA
LADERA
ST JOSEPHS
ATRISCO
26-68 10.03-07 Ductile Iron Pipe 36"
3801
HUMMINGBIRD
ROCK DOVE
FOX SPARROW
TUNDRA SWAN
DESERT SAGE
HOLLYLEAF
HOLLYLEAF
STARLILLY
STARLILLY
ROCK DAISY
BENT TREE
CALLE SOL SEMETE
CALLE TIERRA AMARILLA
CALLE LOMA PARDA
CALLE ARROYO SECO
CALLE VABITO
CALLE PENASCO
PARK HEIGHTS
PARK POINTE
PARK RIDGE
YUCCA
TUCSON
TUCSON
TUCSON
3600
3720
3700
3630

EVERITT
ATRISCO
8" PVC 26-1727-86
8" PVC 26-1727-86
8" PVC 26-6223.82-17
12" Vitrified Clay Pipe 25-011-78
8" PVC 26-6588.92-16
8" PVC 26-6223.81-01
LADERA
ST JOSEPHS
COORS
48" Reinforced Concrete Pipe 07-040-65
8" PVC 26-1885-86
CALLE SOL SEMETE
CALLE VABITO
CALLE ARROYO SECO
CALLE LOMA PARDA
8" Vitrified Clay Pipe 01-164-72
ROCKDOVE
FOX SPARROW
TUNDRA SWAN
HOLLYLEAF
DESERT SAGE
ROCK DAISY
8" PVC 26-6288.81-00
8" PVC 26-6029.81-99
8" PVC 26-2532-89
PARK RIDGE
TUCSON
3801
3720
3600

EVERITT
26-4486.90-95
ATRISCO
LADERA
25-011-78
ST JOSEPHS
BENT TREE
622-81
08-006-77 ST JOSEPHS
CALLE SOL SE METE
CALLE VABITO
CALLE ARROYO SECO
CALLE LOMA PARDA
26-2532-89
Reinforced Concrete Pipe
800709
COORS
26-6912.81-04
HUMMINGBIRD
ROCK DOVE
FOX SPARROW
TUNDRA SWAN
DESERT SAGE
HOLLYLEAF
26-6288.81-00
STARLILLY
ROCK DAISY
26-3241-88
PARK HEIGHTS
PARK POINTE
YUCCA
26-6029.81-99
PARK RIDGE
TUCSON
3801
3720
3600





NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 30' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE FOR TOP OF STANDARD CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND END AT THE END OF EACH SANITARY SEWER SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER

MATERIALS:

SAS LINE: SDR-35 PVC
WATER LINE: C900-PVC

RESTRAINED JOINT TABLE

MECHANICAL JOINTS	LENGTH OF RESTRAINED JOINTS (6")	(8")	(10")
11.25° H. BEND	2'	3'	3'
22.50° H. BEND	4'	5'	6'
45° H. BEND	8'	11'	13'
90° H. BEND	20'	26'	31'
GATE VALVE/CAP	55'	72'	86'

NOTE

1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
2. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS, UNLESS SPECIFIED DIFFERENTLY IN THE PLANS. ALL PIPE JOINTS WITHIN 20 LF OF A WV SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ABOVE. (SEE NOTE 5 ABOVE)
4. THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE OR THE MAIN TO THE FIRE HYDRANT FLANGE.

Bohannan ▲ Huston
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

AS-BUILT INFORMATION
CONTRACTOR: Carlos Gallegos DATE 3/01
WORK STAKED BY: C.G.R. DATE 4/00
AS-BUILTS MARKED BY: Ray Baca DATE 3/01
FIELD VERIFIED BY: Ray Baca DATE 4/00
DWG. CORRECTED BY: C.G.R. DATE 3/01
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
CENTRAL ZONE X=366,686.82
Y=1,502,246.75
GROUND TO GRID FACTOR
0.9967551
DELTA ALPHA = 00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
KEVIN G PATTON NEW MEXICO REGISTERED PROFESSIONAL ENGINEER
4-28-00

No.	Date	REMARKS	By
		REVISIONS	
		DESIGN	

Designed By: KGP\YP DATE: 9/99
Drawn By: BS DATE: 9/99
Checked By: KGP DATE: 9/99

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

St. Joseph on the Rio Grande Parish
UTILITY PLAN & PROFILE
ST. JOSEPH'S DRIVE

Design Review Committee — MAY 1 1 2000 — REVISED COPY HERE
City Engineer Approval — AUG - 8 2000 — CITY ENGINEER
Last Design Update — Mo./Day/Yr. — Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	Of
622381	G-11	8	16

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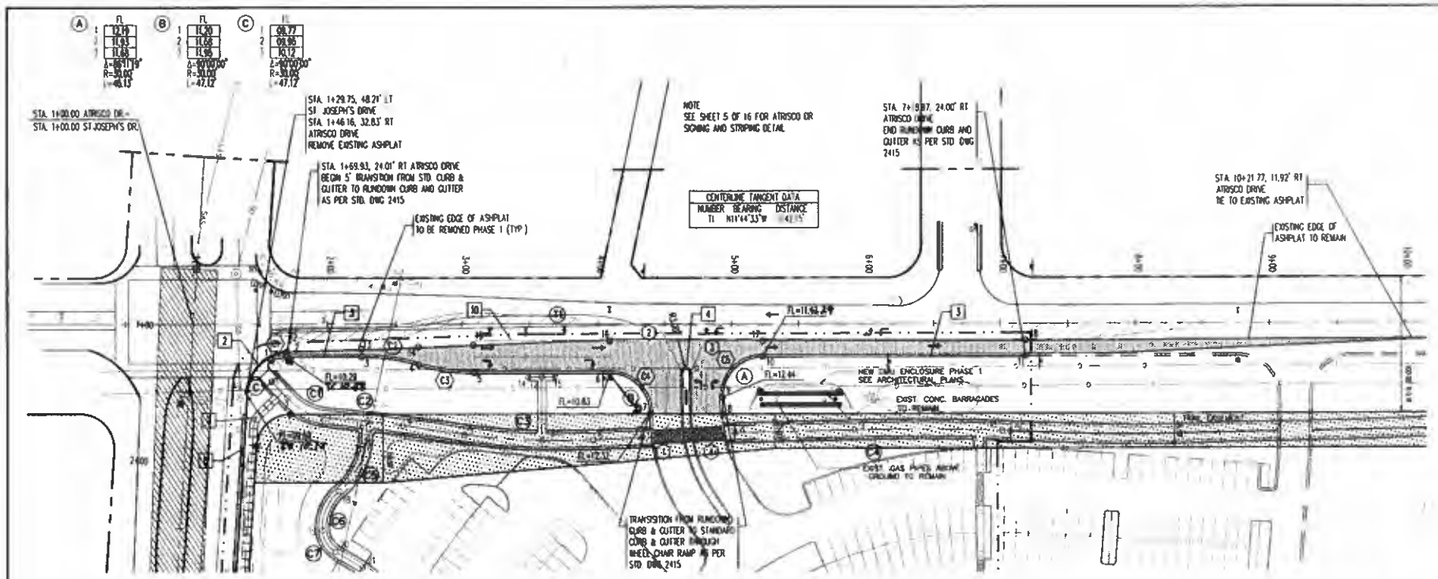
BHI JOB NO. 00213 A01 2400

Copyright Bohannan Huston 1998
Date: SEPTEMBER 8,1999



CURB COORDINATE DATA			
PT #	DESC.	X	Y	FL ELEVATION
1	PC	363785.88,	1502562.69	10.05
2	PT	363785.21,	1502573.63	10.29
3	PC	363770.00,	1502627.56	10.74
4	PRC	363767.33,	1502688.90	11.11
5	PT	363764.65,	1502717.24	11.46
6	RETURN	363744.30,	1502810.13	10.83
7	RETURN	363767.57,	1502845.62	12.32
8	PT	363756.57,	1502898.48	13.29
9	RETURN	363744.82,	1502896.01	12.44
10	RETURN	363709.35,	1502919.32	11.42
11	END OF CURB	363669.47,	1503111.18	11.82

EDGE OF ASPHALT COORDINATE DATA			
PT #	X	Y	FL ELEVATION
12	363777.70,	1502572.77	10.35
13	363764.61	1502626.24	10.90
14	363754.69,	1502668.37	11.35
15	363744.76,	1502707.37	11.55
16	363732.55,	1502805.39	11.59
17	363698.20	1502916.98	11.39
18	363658.05,	1503108.79	11.89

CURB CURVE DATA				
CURVE #	RADIUS	ARC LENGTH	TANGENT	DELTA
C1	37.38'	11.94'	6.03'	18°18'03"
C2	190.14'	42.57'	21.43'	16°14'04"
C3	146.63'	42.58'	21.44'	16°38'11"
C4	30.00'	47.12'	30.00'	89°59'59"
C5	29.78'	47.21'	30.21'	90°47'40"

TRAIL CENTERLINE COORDINATE DATA					
PT #	X	Y	PT #	X	Y
1	363801.14,	1502566.31	12	363802.65,	1502771.39
2	363810.06,	1502580.03	13	363757.16,	1502761.74
3	363818.76,	1502612.45	14	363758.20,	1502751.95
4	363818.33,	1502647.30	15	363755.13,	1502727.53
5	363818.02,	1502713.94	16	363815.44,	1502641.01
6	363794.30,	1502808.31	17	363830.16,	1502647.55
7	363785.76,	1502843.03	18	363869.75,	1502631.20
8	363788.18,	1502910.33	19	363900.56,	1502625.63
9	363748.18,	1502997.11	20	363914.33,	1502637.67
10	363726.51,	1503105.03	21	363921.73,	1502659.22
11	363725.44,	1503111.23			

TRAIL CENTERLINE CURVE DATA				
CURVE #	RADIUS	ARC LENGTH	TANGENT	DELTA
C1	45.74'	34.18'	17.93'	42°48'51"
C2	858.45'	55.03'	27.53'	03°40'28"
C3	523.88'	95.80'	48.03'	10°28'38"
C4	2000.00'	110.09'	55.06'	03°09'14"
C5	55.00'	42.22'	22.31'	43°58'43"
C6	35.00'	32.96'	17.58'	53°57'00"
C7	20.00'	18.27'	10.46'	52°17'58"

NOTES

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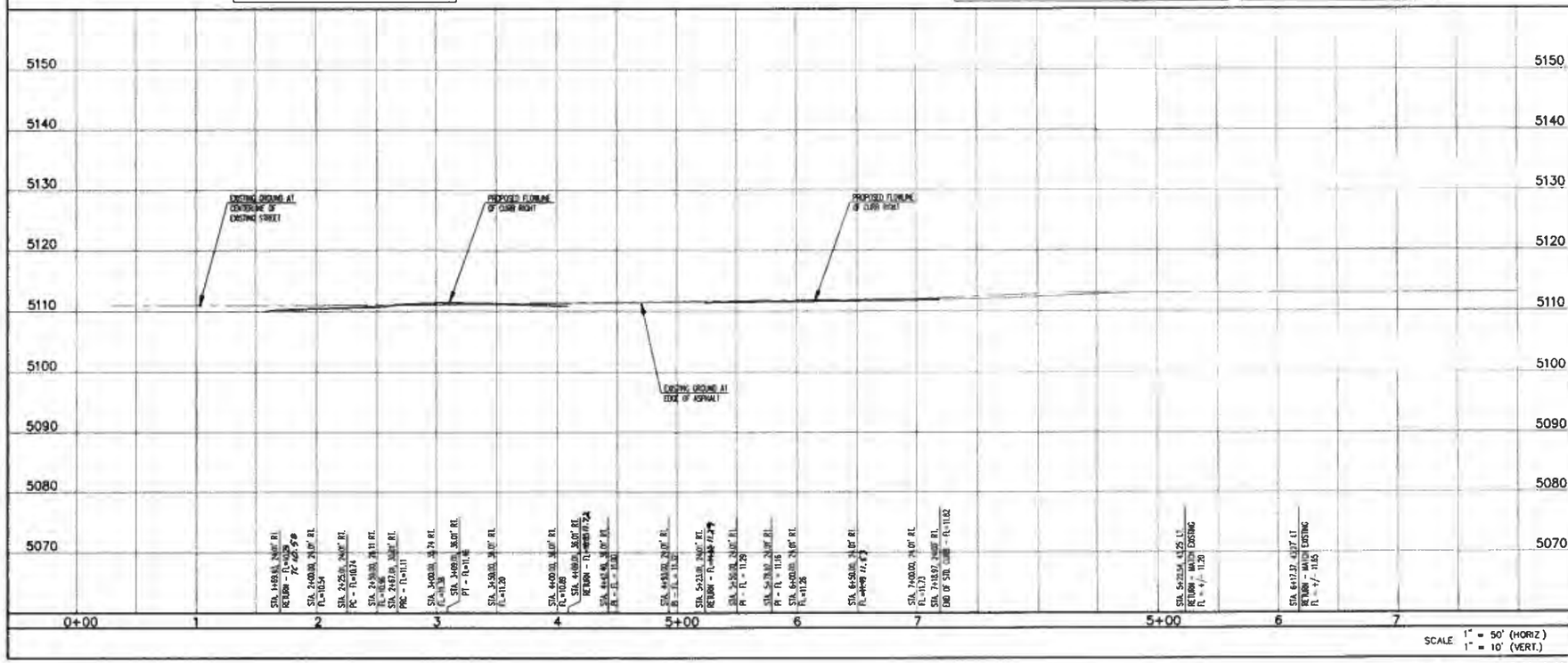
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER

POINTS DATA MEDIAN CURB

PT#	X	Y	FL ELEVATION
1	363762.68	1502869.11	12.50
2	363733.31	1502863.01	49
3	363732.08	1502868.88	11.65
4	366761.46	1502874.99	12.51

KEYED NOTES

1. INSTALL CONCRETE VALLEY CUTTER AS PER STD. DWG. 2420
2. INSTALL WHEELCHAIR RAMP AS PER DETAIL SHEET 7 OF 16
3. RUNDOWN CURB & GUTTER AS PER STD. DWG. 2415
4. MEDIAN CURB & GUTTER AS PER STD. DWG. 2415
5. EXISTING CURB AND GUTTER TO REMAIN
6. FUTURE 6' SIDEWALK
7. BUILD 6' SIDEWALK
8. EXISTING CURB AND GUTTER TO BE REMOVED (PHASE 1)
9. EXISTING ASPHALT CURB
10. 4" REFLECTIVE WHITE PLASTIC STRIPE



SCALE 1" = 50' (HORIZ.) 1" = 10' (VERT.)

Bohannan Huston
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

AS-BUILT INFORMATION
CONTRACTOR DATE
WORK STAKED BY DATE
FIELD VERIFIED BY DATE
DRAWINGS CORRECTED BY DATE
WATER LINE VERIFIED BY DATE
SEWER LINE VERIFIED BY DATE
MICRO-FILM INFORMATION
FILMED BY DATE
RECORDED BY DATE

BENCH MARKS
ACS BRASS TABLE" STAMPED JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
CENTRAL ZONE X= 368,686.82
Y=1,502,246.75
GROUND TO GRID FACTOR
= 0.9987551
DELTA ALPHA = 0015'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
KEVIN G. PATTON NEW MEXICO REGISTERED PROFESSIONAL ENGINEER
4-28-00

No.	Date	REMARKS	BY
		REVISIONS	
		DESIGN	

Designed By: KGP DATE: 9.99
Drawn By: BS DATE: 9.99
Checked By: KGP DATE: 9.99

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

St. Joseph on the Rio Grande Parish
PAVING PLAN & PROFILE
ATRISCO DRIVE

Design Review Committee: DESIGN PROFESSIONAL ENGINEER
City Engineer Approval: CITY ENGINEER
Last Design Update: Mo./Day/Yr. Mo./Day/Yr.

City Project No. 622381 | Zone Map No. G-11 | Sheet 6 Of 16

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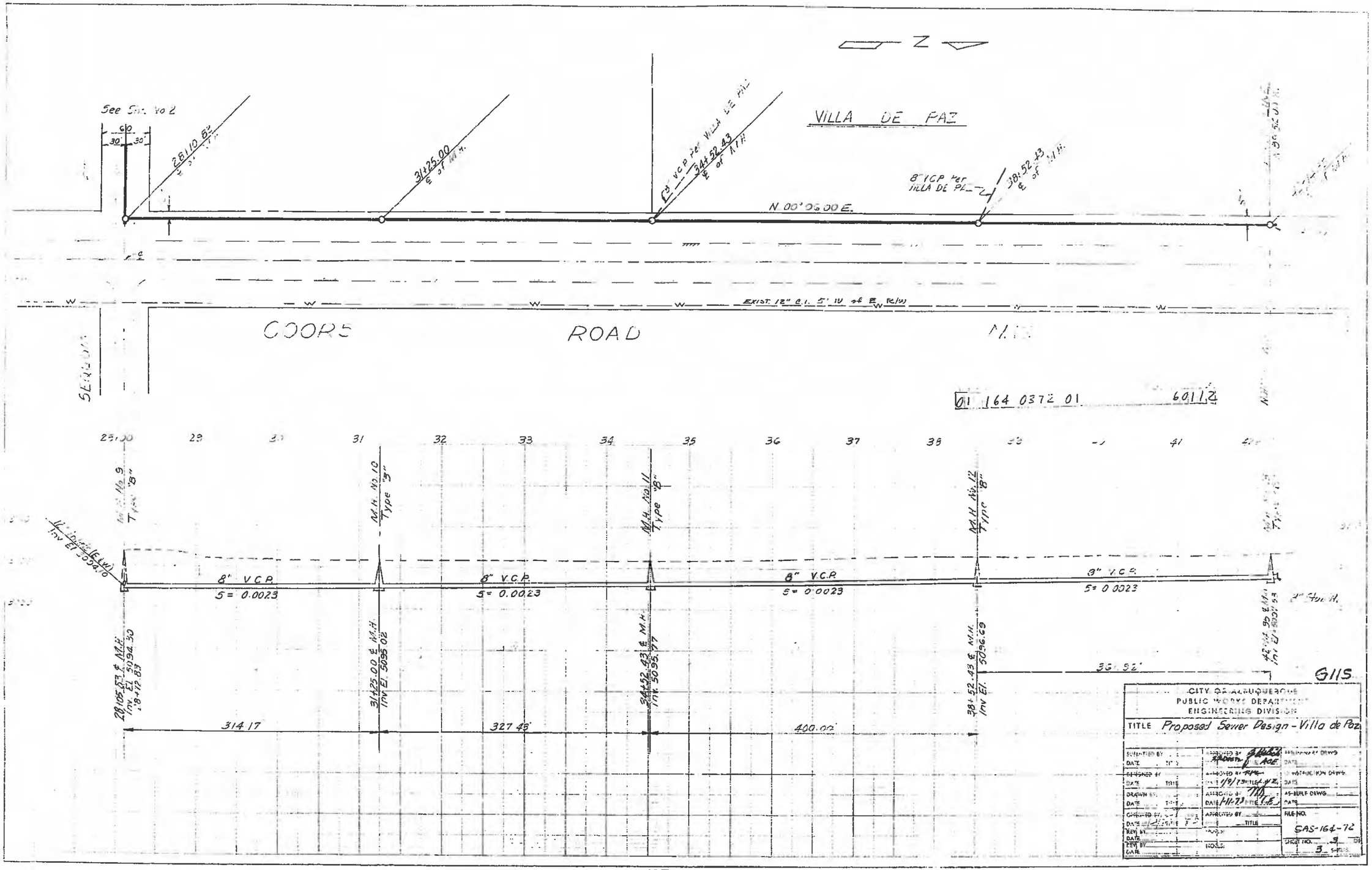
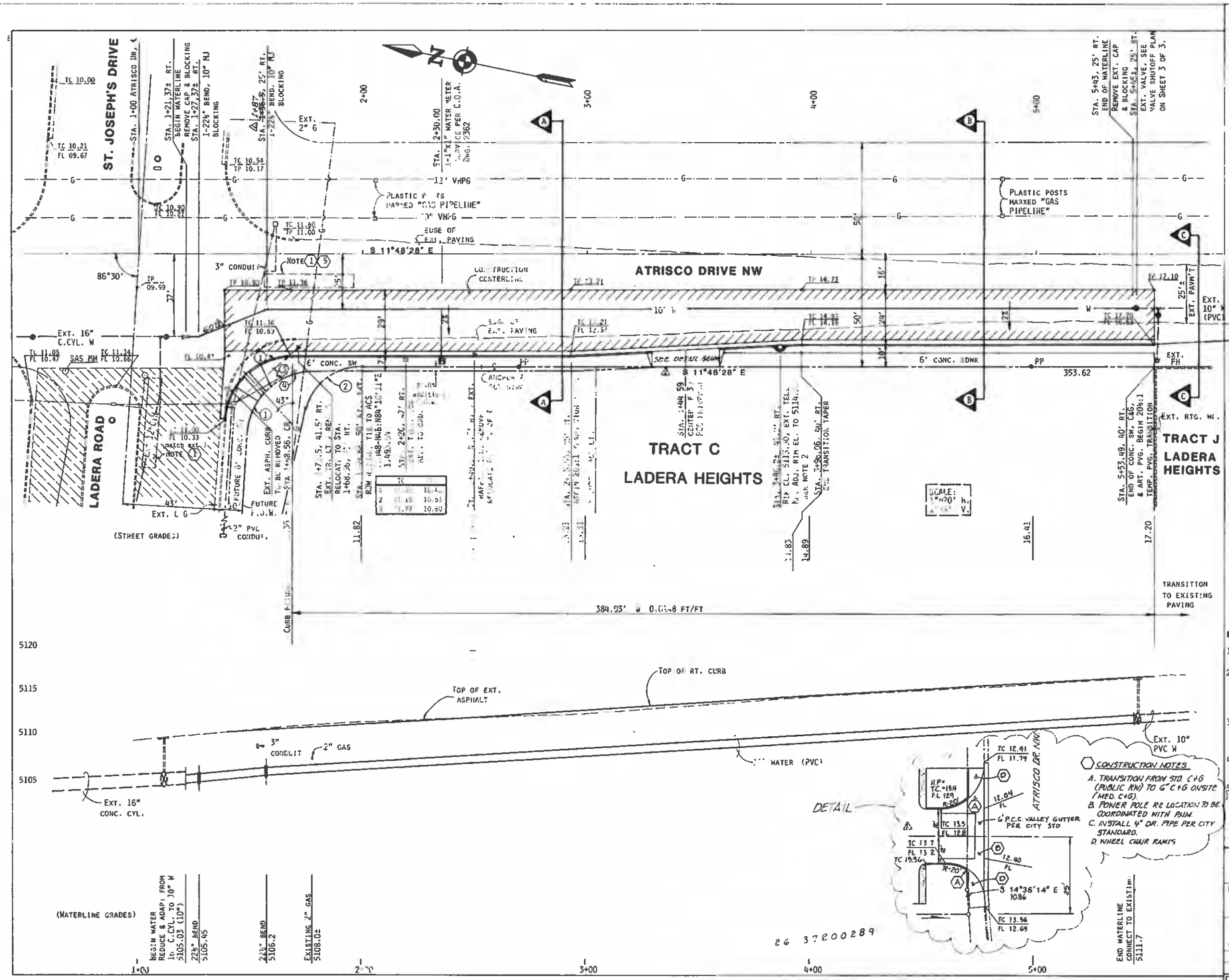
BHI JOB NO. 00213 A01 2400

Copyright Bohannan Huston 1998
Date: SEPTEMBER 8,1999



PROFILE

K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.



CURVE DATA

① Δ = 93°30'00"
R = 30.00
L = 45.29

② Δ = 78°07'18"
R = 25.00
L = 34.09

20±:1 ASPHALT TRANSITION TO EXISTING ASPHALT

LEGEND

- EXT. ARTERIAL PAVING
- EXT. STD. C&G
- EXT. ASPHALT CURB
- EXT. GAS MAIN
- EXT. WATER LINE
- EXT. CONTOUR LINE
- EXT. 3" CONDUIT W/BOX
- EXT. STREET LIGHT
- TP — TOP OF PVM'T GRADE
- TC — TOP OF CURB ELEV
- FL — FLOWLINE ELEVATION
- ARTERIAL ASPH. PVG.
- PROPOSED STD. C&G
- NEW 2"PVC CONDUIT

NOTES

1. 6'X60' QUADRAPOLE LOOP TRAFFIC SIGNAL TRIP.
2. COORDINATE WITH TELEPHONE CO. CONSTRUCTION DIVISION TO RE-CONSTRUCT CONE PORTION OF MANHOLE TO RELOCATE RIM TO THE WEST, BEHIND BACK OF CURB.
3. REMOVE AND RELOCATE 2" PVC CONDUIT. COST IS INCIDENTAL TO NEW MAST ARM FOUNDATION.
4. NEW MAST ARM FOUNDATION, TYPE 2 PER C.O.A. DWG. 2526
5. CONTRACTOR SHALL REPLACE QUAD. LOOP TRAFFIC SIGNAL TRIP IF DAMAGED, NO ADDED COST.

Isaacson & Arfman, P.A.
CONSULTING ENGINEERING ASSOCIATES
Albuquerque, New Mexico

NO	DATE	REMARKS	BY
1	9/13/89	Revised from as-built information	FW

DESIGN	DATE
F. ARFMAN	12/88
R. ALLEN	DATE

SURVEY INFORMATION		
FIELD NOTES		
NO	BY	DATE
1	W. PETTIT	11/88

BENCH MARKS
ACS NM 448-N48, BRASS CAP @ COORS & ST. JOSEPH'S DRIVE. ELEVATION: 5113.60
TBM: CHISELED SCRIBE ON SOUTH CURB OF LADERA ROAD AL ___ THE PROJECTION OF THE WEST PROP. LINE OF ___ SET C, LADERA HEIGHTS. ELEVATI 5109.47

AS BUILT INFORMATION
SUNDAVICE
MICRO-FILM INFORMATION

ENGINEER'S SEAL
FRED E. ARFMAN 7352 NEW MEXICO PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE
ATRISCO DRIVE NW SOUTH OF LADERA ROAD PAVING & WATER PLAN

2/4/89
2/4/89

DRAWING NO	MAP NO	SHEET	OF
3720	G-11	2	3

CONTINUATION OF

PARTIAL PLANS ON COMBINATION SEWER & WATER CONTRACT

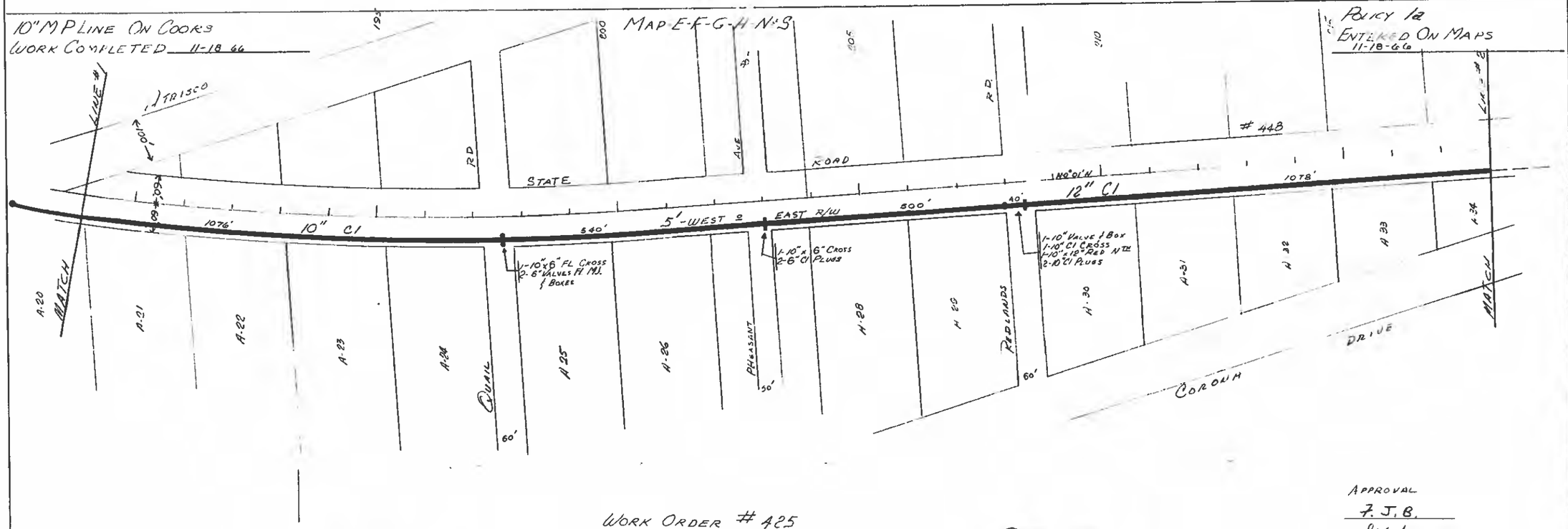
SCALE - 1" = 100' OR AS INDICATED

(1)

10" MP LINE ON COORS
WORK COMPLETED 11-18-66

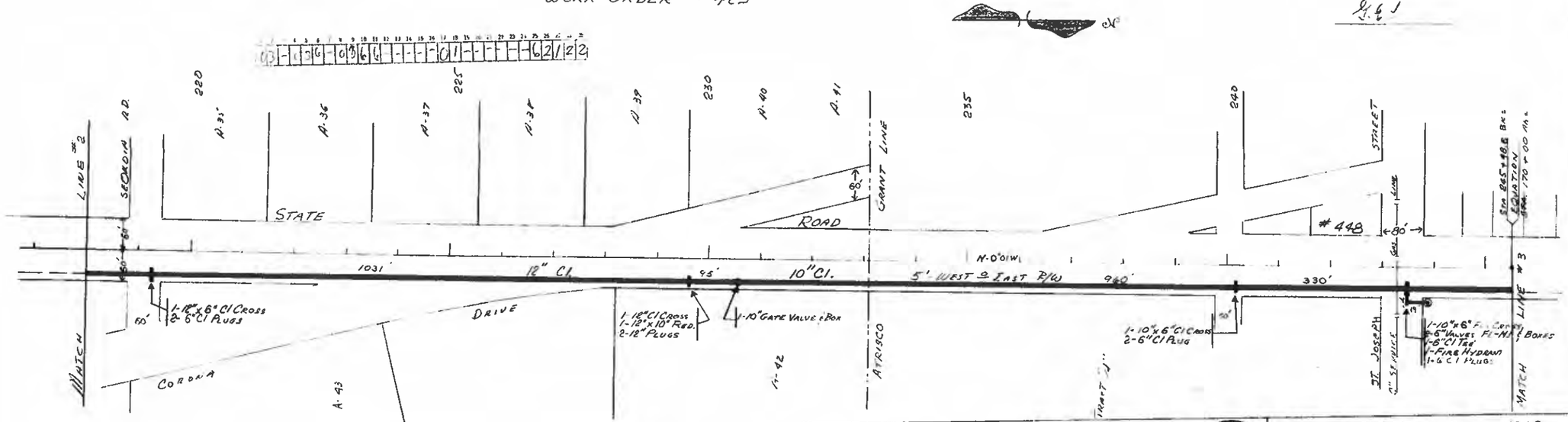
MAP E-F-G-H N.S

POLICY 12
ENTERED ON MAPS
11-18-66



WORK ORDER # 425

APPROVAL
F. J. B.
9-6-1



TOWN OF ATRISCO GRANT

CAUTION!
BURIED CABLES
BEFORE EXCAVATING
CALL TEL. CO. EXT. 000

NOTICE
SANITARY FACILITIES MUST BE PROVIDED ON EACH CONSTRUCTION JOB.
CITY ORDINANCE SEC. 2-11.1.

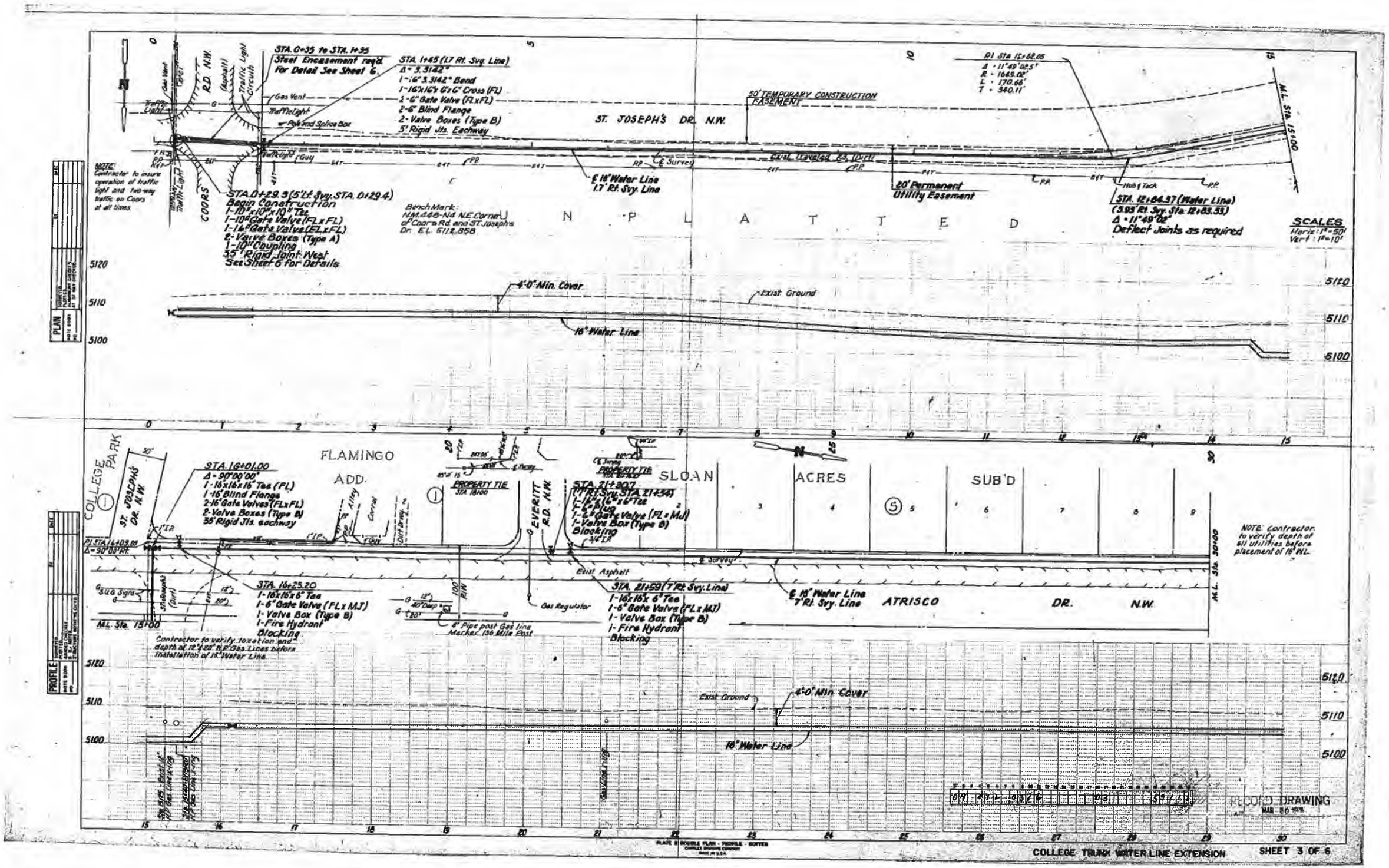
NOTE: - CONTRACTOR MUST NOTIFY THE SUPERINTENDENT OF BUILDING AND INSPECTION DIVISION OF THE STARTING DATE AND NUMBER OF WEATHER WORKING DAYS FOR COMPLETION

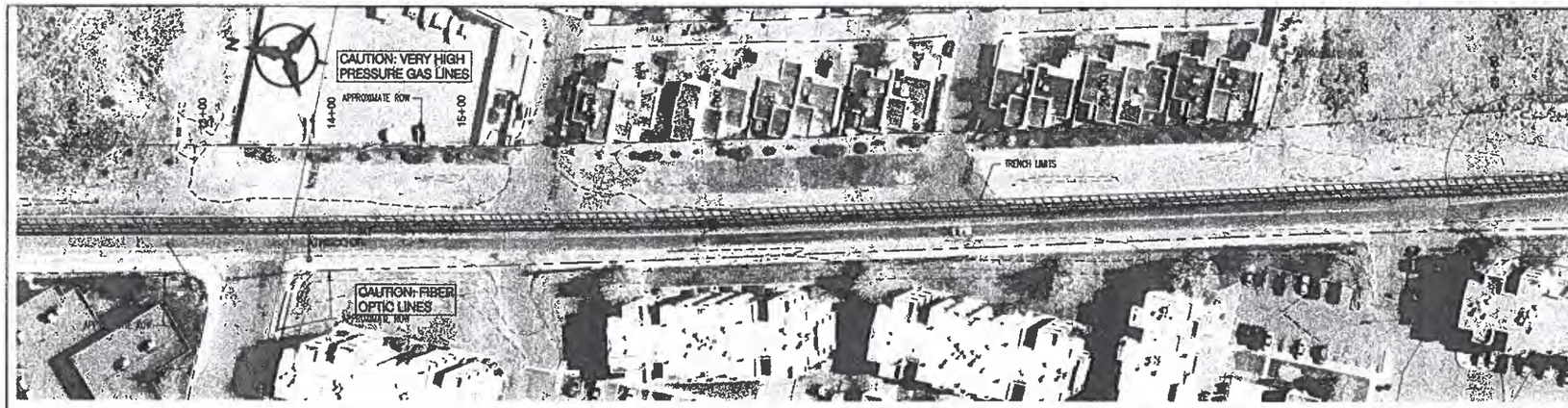
REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NO. 1029 NEW MEXICO CONRAD GORBELES

SHEET NO. 5 1965

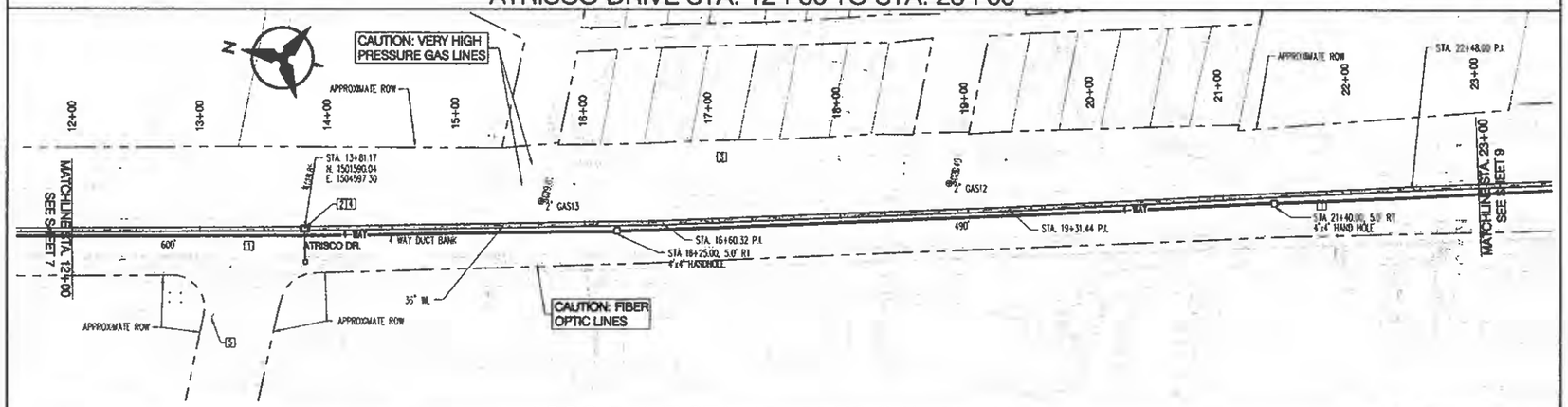
CHECKED	APPROVED	
	WATER SUPERINTENDENT	ASST. WATER ENGINEER

8-19-65


STA. 0+35 to STA. 1+35
Steel Encasement reqd.
For Detail See Sheet 6.
STA. 1+45 (17 Rt. Svg. Line)
Δ = 5.3142°
1-16" 5.3142° Bend
1-16"x16"x6"x6" Cross (FL)
2-6" Gate Valve (FL x FL)
2-6" Blind Flange
2-Valve Boxes (Type B)
5' Rigid Jts. Eachway
PI STA 12+62.05
Δ = 11°49'02.5"
R = 1645.02'
L = 170.66'
T = 340.11'
50' TEMPORARY CONSTRUCTION EASEMENT
ST. JOSEPH'S DR. N.W.
M.L. Sta. 15+00
NOTE: Contractor to insure operation of traffic light and two-way traffic on Coors at all times.
COORS RD. N.W.
STA. 0+29.5 (5' Lt. Svg. STA. 0+29.4)
Begin Construction
1-10"x10"x10" Tee
1-10" Gate Valve (FL x FL)
1-16" Gate Valve (FL x FL)
2-Valve Boxes (Type A)
1-10" Coupling
35' Rigid Joint West
See Sheet 6 for Details
Bench Mark:
NM 448-N4 N.E. Corner of Coors Rd. and ST. Josephs Dr. EL. 5112.858
℄ 16" Water Line
17' Rt. Svg. Line
20' Permanent Utility Easement
STA. 12+84.37 (Water Line)
(5.93' Rt. Svg. Sta. 12+83.53)
Δ = 11°49'02"
Deflect Joints as required
N · P L A T T E D
SCALES
Horiz: 1" = 50'
Vert: 1" = 10'
4'-0" Min. Cover
Exist. Ground
16" Water Line
PLAN
PROFILE
COLLEGE PARK
ST. JOSEPH'S DR. N.W.
FLAMINGO ADD.
SLOAN ACRES SUB'D
STA. 16+01.00
Δ = 90°00'00"
1-16"x16"x16" Tee (FL)
1-16" Blind Flange
2-16" Gate Valves (FL x FL)
2-Valve Boxes (Type B)
35' Rigid Jts. eachway
PROPERTY TIE
STA. 18+00
EVERITT RD. N.W.
STA. 21+80.7
(7' Rt. Svg. STA. 21+54)
1-16"x16"x6" Tee
1-16" Plug
1-6" Gate Valve (FL x MJ)
1-Valve Box (Type B)
Blocking
Exist. Asphalt
STA. 16+25.20
1-16"x16"x6" Tee
1-6" Gate Valve (FL x MJ)
1-Valve Box (Type B)
1-Fire Hydrant
Blocking
Contractor to verify location and depth of 12"x22" N.P. Gas Lines before installation of 16" Water Line.
6" Pipe post Gas line Marker. 136 Mile East
Gas Regulator
STA. 21+59 (7' Rt. Svg. Line)
1-16"x16"x6" Tee
1-6" Gate Valve (FL x MJ)
1-Valve Box (Type B)
1-Fire Hydrant
Blocking
℄ 16" Water Line
7' Rt. Svg. Line
ATRISCO DR. N.W.
M.L. Sta. 30+00
NOTE: Contractor to verify depth of all utilities before placement of 16" W.L.
Exist. Ground
4'-0" Min. Cover
16" Water Line
RECORD DRAWING
COLLEGE TRUNK WATER LINE EXTENSION
SHEET 3 OF 6

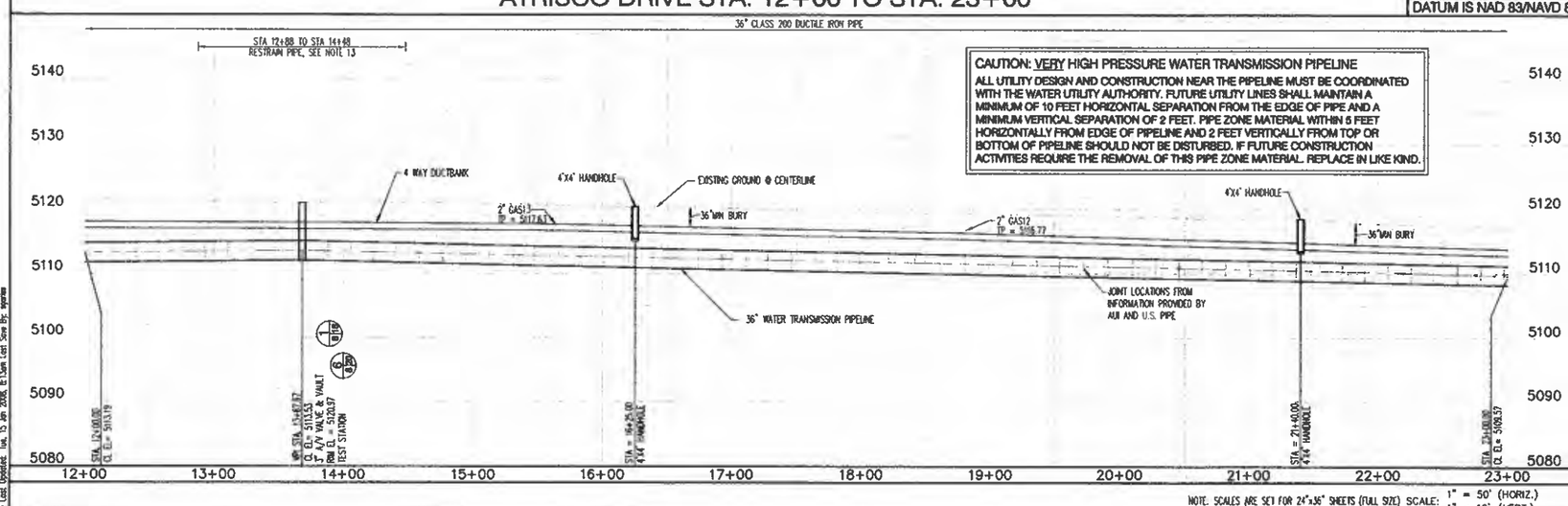


ATRISCO DRIVE STA. 12+00 TO STA. 23+00



ATRISCO DRIVE STA. 12+00 TO STA. 23+00

DATUM IS NAD 83/NAVD 88



NOTE. SCALES ARE SET FOR 24"x36" SHEETS (FULL SIZE) SCALE: 1" = 50' (HORIZ.) 1" = 10' (VERT.)

NOTES

1. FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. REPAIR OR REPLACE ALL UTILITY CONDUITS AND EXISTING LINES DAMAGED OR REMOVED DURING CONSTRUCTION.
3. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
4. PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
5. PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
6. ANY DAMAGE TO THE EXISTING FACILITIES BEYOND TRENCH LIMITS DEFINED BY (5/817) (CURB & GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES (ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
7. REMOVAL OF THE EXISTING CURB & GUTTER SHALL BE AS PER COA STD. DWG. 2415A (SAWCUT ONLY).
8. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PER COA STD. DWG. 2441 CASE 2 PRIOR TO ACCEPTANCE OF CURB & GUTTER.
9. MAINTAIN ACCESS TO PRIVATE PROPERTY AT ALL TIMES DURING CONSTRUCTION.
10. DIAMETER OF WATER TRANSMISSION PIPE IS NOMINAL AFTER MORTAR LINING IS INSTALLED.
11. STATIONS AND ELEVATIONS SHOWN ARE ALONG CENTERLINE OF PIPE. THE 1988/1983 DATUM IS USED.
12. MATCH THE EXISTING PAVEMENT WHERE THE EXISTING PAVEMENT IS THICKER THAN THE COA STD. REPLACEMENT PAVEMENT.
13. RESTRAIN STEEL AND CCP BY DOUBLE WELDING JOINTS. (4/816) OR (11/819) RESTRAIN DUCTILE IRON BY MEGALUG OR EQUAL.

TRAFFIC NOTES

1. MAINTAIN 2-WAY TRAFFIC AT ALL TIMES.
2. REFER TO SUPPLEMENTAL SPECIAL PROVISION SECTION 10 IN THE SPECIFICATIONS FOR WORK HOURS.
3. SEE SHEET 21 FOR TEMPORARY PAVEMENT AND TRENCH LIMITS.

KEYED NOTES

1. SEE SHEET 24 FOR ASPHALT REMOVAL AND REPLACEMENT LIMITS AND NOTE 5 ON SHEET 3.
2. INSTALL 3" AIR/VACUUM VALVE VAULT (1/816)
3. DO NOT DISTURB LANDSCAPING FOR TEMPORARY PAVEMENT CONSTRUCTION AS SHOWN ON SHEET 21
4. INSTALL CORROSION TEST STATION.
5. FIRE HYDRANT LOCATION FOR FILLING WATERLINE.

RECORD DRAWING

ALL Elevations are in INTERIM NAVD 88 DATUM. To convert from INTERIM NAVD 88 to NGVD 29 subtract 2.70 feet ± 0.02 feet.

Bohannan Huston

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

ENGINEERING · SPATIAL DATA · ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

SJC DWP TRANSMISSION PIPELINE #3 WEST SIDE
ATRISCO DRIVE
STA. 12+00 TO STA. 23+00

Design Review Committee	City Engineer Approval	Cost Design Update	Mo./Day/Yr	Mo./Day/Yr

City Project No.	Zone Map No.	Sheet	Of
681003	G-11	8R	25

BHI JOB NO. 030080.002.04.CWH

Date: 10.14.04

AS-BUILT INFORMATION

CONTRACTOR: RB	DATE: 10/5/07
NOTES COMPILED BY: RB	DATE: 10/5/07
ACCEPTANCE BY: BOHANNAN HUSTON, INC.	DATE: 10/5/07
FIELD VERIFICATION BY: RB	DATE: 10/5/07
AS-BUILTS BY: BOHANNAN HUSTON, INC.	DATE: 10/5/07

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

STATION IS STAMPED "ACS, BM 448-H4A, 1984"
GEOGRAPHIC POSITION (NAD 27), IN FEET
NM STATE PLANE COORDINATES (CENTRAL ZONE)
X=-355,125.21, Y=1,489,735.31
GROUND TO GRID FACTOR = 0.9996767 n.o. - 00° 15' 34"
ELEVATION=5081.917 NGVD29, IN FEET
CONVERSION TO NAD 83/NAVD 88 BY DATUM TRANSFORMATION
(X=1,560,288.542, Y=1,560,862.784 NAD83)
(ELEVATION = 5107.196 NAVD88 IN FEET)

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

No.	Date	REMARKS	BY
1	04.04.05	VAULT DEPTH REVISION (W.O.)	T.A.B.
2	05.01.06	AS-BUILT & CERTIFY	DKD

REVISIONS

DESIGN

Designed By: E.E.S./A.O.C. DATE: 10.14.04
Drawn By: B.H.I. DATE: 10.14.04
Checked By: E.E.S./D.K.D. DATE: 10.14.04

P:\030080\Hydro\Design\Plans\West\As-built\030080Sprint03-ab.dwg
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Thu, 15 Jun 2006, 8:13am Last Save By: sparnes
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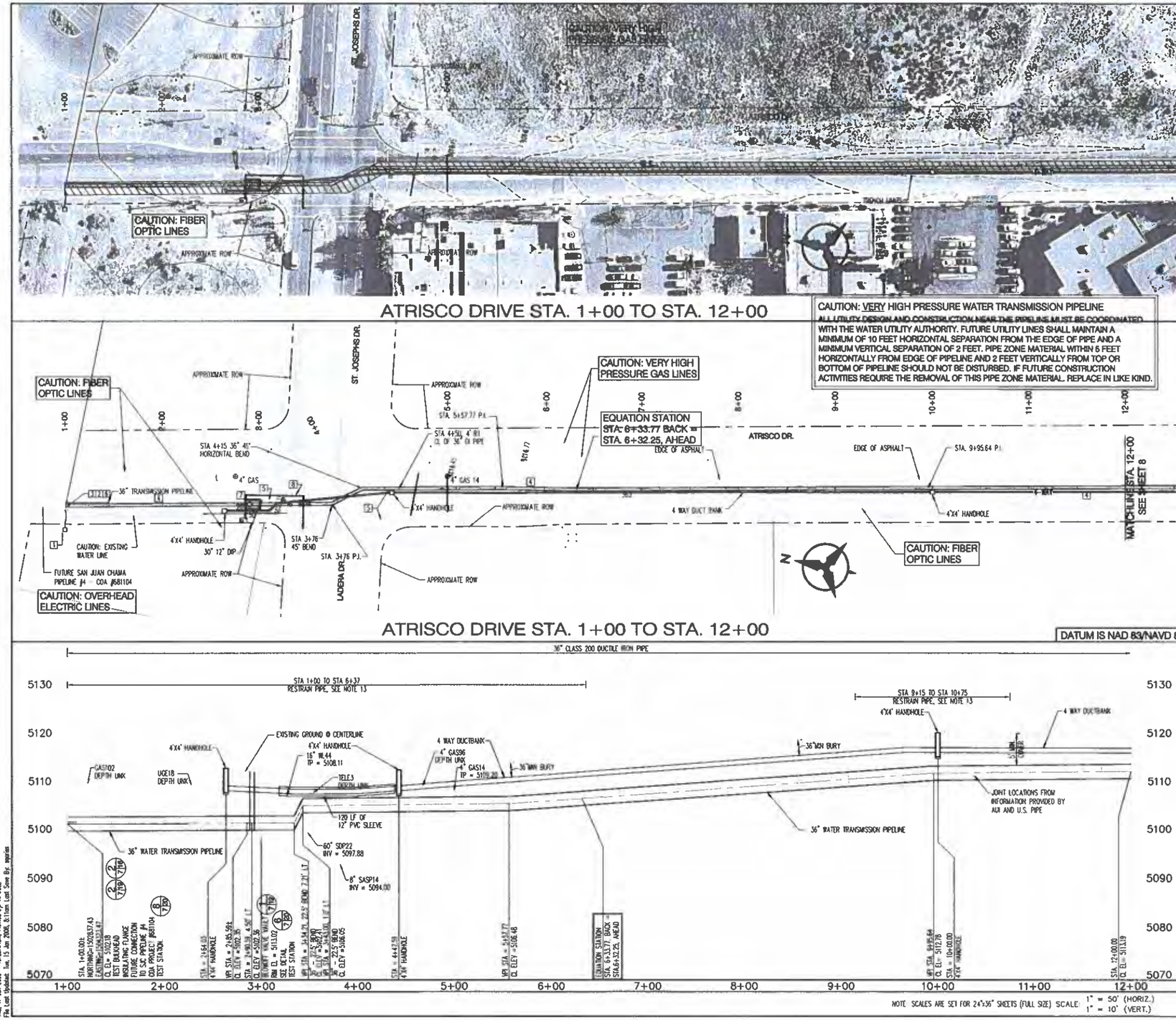

ATRISCO DRIVE STA. 1+00 TO STA. 12+00

DATUM IS NAD 83/NAVD 88

NOTE: SCALES ARE SET FOR 24"x36" SHEETS (FULL SIZE) SCALE: 1" = 50' (HORIZ.) 1" = 10' (VERT.)

NOTES

1. FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. REPAIR OR REPLACE ALL UTILITY CONDUITS AND EXISTING LINES DAMAGED OR REMOVED DURING CONSTRUCTION.
3. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
4. PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
5. PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
6. ANY DAMAGE TO THE EXISTING FACILITIES BEYOND TRENCH LIMITS DEFINED BY (5/7.17) (CURB & GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
7. REMOVAL OF THE EXISTING CURB & GUTTER SHALL BE AS PER COA STD DWG. 2415A (SAWCUT ONLY).
8. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PER COA STD. DWG. 2441 CASE 2 PRIOR TO ACCEPTANCE OF CURB & GUTTER.
9. MAINTAIN ACCESS TO PRIVATE PROPERTY AT ALL TIMES DURING CONSTRUCTION.
10. DIAMETER OF WATER TRANSMISSION PIPE IS NOMINAL AFTER MORTAR LINING IS INSTALLED.
11. STATIONS AND ELEVATIONS SHOWN ARE ALONG CENTERLINE OF PIPE. THE 1988/1983 DATUM IS USED.
12. MATCH THE EXISTING PAVEMENT WHERE THE EXISTING PAVEMENT IS THICKER THAN THE COA STD. REPLACEMENT PAVEMENT.
13. RESTRAIN STEEL AND DCP BY DOUBLE WELDING JOINTS. RESTRAIN DUCTILE IRON BY MEGALUG OR EQUAL. (4/7.19) OR (11/7.19)

TRAFFIC NOTES

1. MAINTAIN 2-WAY TRAFFIC AT ALL TIMES.
2. REFER TO SUPPLEMENTAL SPECIAL PROVISION SECTION 10 IN THE SPECIFICATIONS FOR WORK HOURS.
3. SEE SHEET 21 FOR TEMPORARY PAVEMENT AND TRENCH LIMITS.

KEYED NOTES

1. INSTALL CORROSION TEST STATION
2. INSTALL INSULATING FLANGE
3. INSTALL TEST BULKHEAD
4. SEE SHEET 24 FOR ASPHALT REMOVAL AND REPLACEMENT LIMITS AND NOTE 5 ON SHEET 3.
5. CAUTION, TRAFFIC SIGNAL CONDUIT AND CABLE
6. CONNECT TO EXISTING 36" PIPELINE #4. REMOVE EXISTING PIPE TEMPORARY CLOSURE END PIECE (TEST BULKHEAD) AS PART OF THE CONNECTION PRICE. IF CONNECTING PIPE IS NOT INSTALLED, INSTALL TEMPORARY CLOSURE END PIECE (TEST BULKHEAD) IN LIEU OF MAKING CONNECTION AT NO ADDITIONAL COST TO OWNER.
7. INSTALL BLOW OFF VAULT SEE (1/7.19)
8. INSTALL BLOW OFF VAULT DRAINLINE SEE (2/7.19)

RECORD DRAWING

ALL Elevations are in INTERIM NAVD 88 DATUM. To convert from INTERIM NAVD 88 to NGVD 29 subtract 2.70 feet ± 0.02 feet.

Bohannan Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING SPATIAL DATA ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

SJC DWP TRANSMISSION PIPELINE #3 WEST SIDE
ATRISCO DRIVE
STA. 1+00 TO STA. 12+00

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	Of
681003	G-11	7R	25

BHI JOB NO 030080.002.04.CWH Date: 10.14.04

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

BENCH MARKS
STATION IS STAMPED "14CS, NM, 449-H44, 1984"
GEOGRAPHIC POSITION (NAD 27), IN FEET
NM STATE PLANE COORDINATES (CENTRAL ZONE)
X=365,125.21, Y=1,499,135.31
GROUND TO GRID FACTOR = 0.9996767 +0.- 00' 15" 34"
ELEVATION=5081.917 MOVED, IN FEET
CONVERSION TO NAD 83/NAVD 88 BY DATUM TRANSFORMATION
(X=1,500,288.542, Y=1,500,862.784 NAD83)
(ELEVATION = 5107.188 NAVD88 IN FEET)

AS-BUILT INFORMATION
CON TRACTOR AS-BUILTED BY: B.H.I. DATE: 10.14.04
PLANS PREPARED BY: BOHANNAN HUSTON INC. DATE: 10.14.04
AS-BUILT REVIEWED BY: BOHANNAN HUSTON INC. DATE: 10.14.04
FIELD VERIFICATION BY: BOHANNAN HUSTON INC. DATE: 10.14.04
DRAWINGS PREPARED BY: BOHANNAN HUSTON INC. DATE: 10.14.04
MICRO-FILM INFORMATION
RECORDED BY: DATE:
MICRO-FILM NO.:

ENGINEER'S SEAL
TODD A. BURT
NEW MEXICO
16864
PROFESSIONAL ENGINEER

No.	Date	REMARKS	By
1	04.04.05	VAULT DEPTH REVISION (DW 2)	T.A.B.
0	10.01.06	AS-BUILT & CERTIFY	DKD

REVISIONS
DESIGN
Designed By: E.E.S./A.O.C. DATE: 10.14.04
Drawn By: B.H.I. DATE: 10.14.04
Checked By: E.E.S./D.K.D. DATE: 10.14.04

P:\030080\Hydro\Design\Plans\Plan\As-builts\030080MSpmp01R-db.dwg
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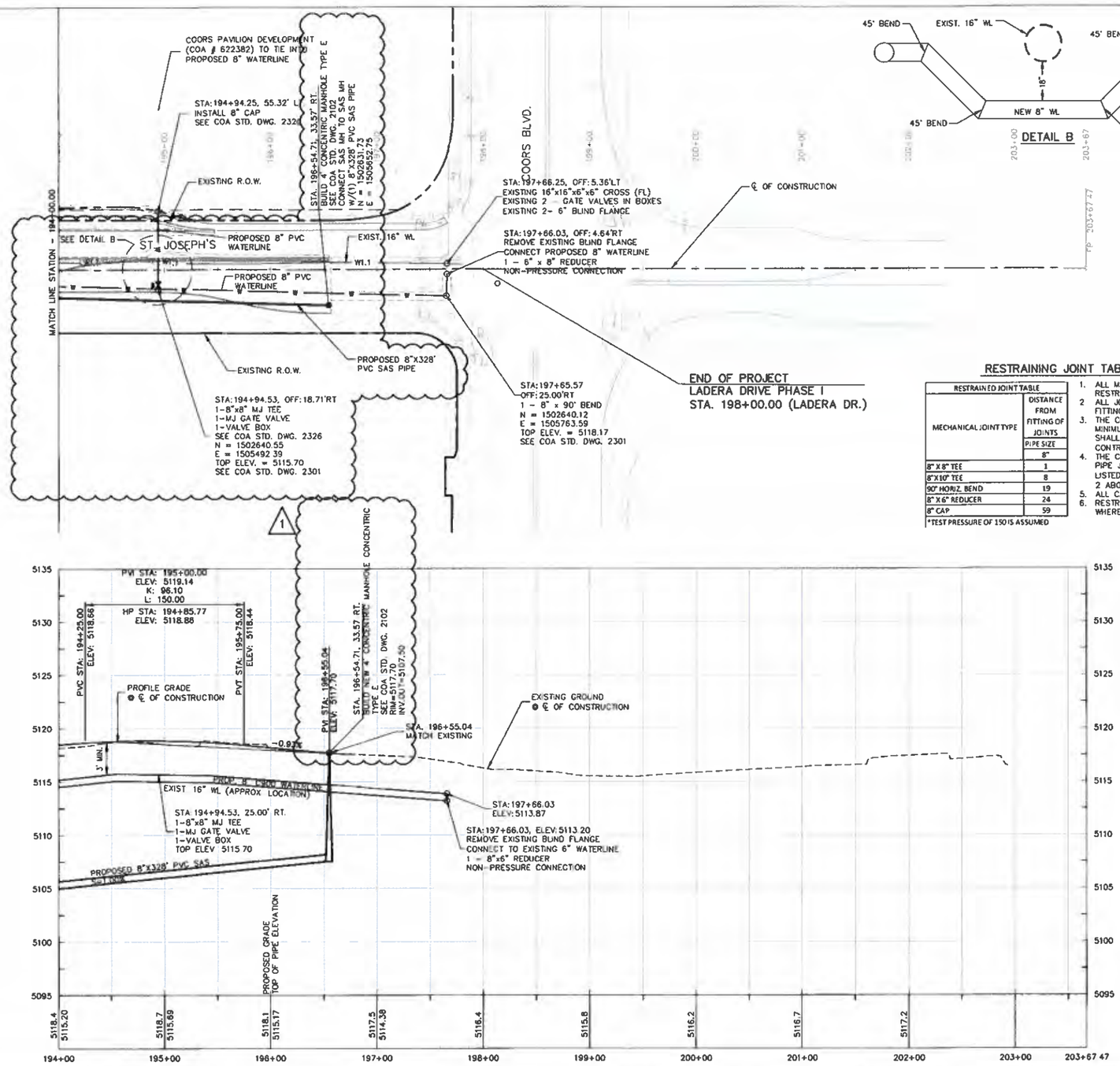
Plot Last Updated: Mon, 13 Jan 2008, 8:11am Last Save By: mpries



GENERAL NOTES:

1. STATION AND OFFSET FOR WATERLINE ARE GIVEN TO CENTER OF PIPE.
2. STATION AND OFFSET PROVIDED REFERENCE CL OF CONSTRUCTION ON LADERA DR.
3. *ALL ELEVATIONS AND SLOPES ARE DERIVED FROM AERIAL PHOTOGRAMMETRY AND ARE FOR INFORMATION ONLY. CONTRACTOR SHALL VERIFY AND MATCH EXISTING CROSS-SLOPES IN THE FIELD, AND MATCH EXISTING ELEVATIONS.
4. EXISTING MANHOLE AND VALVE COLLARS TO BE ADJUSTED TO GRADE.
5. TRACER WIRE IS TO BE INSTALLED ON ALL WATER AND SEWER INFRASTRUCTURE.
6. CONTRACTOR SHALL INSTALL WATERLINE WITH A MINIMUM OF 3 FOOT OF COVER.
7. WATERLINE CONNECTION DETAILS SEE COA STANDARD DWG. 2301. THRUST CONTROL SHALL BE BY CONSTRAINED JOINTS.
8. 10 FOOT MINIMUM SEPARATION SHALL BE MAINTAINED BETWEEN THE WATERLINE AND THE SANITARY SEWER.
9. THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF WELL COLLECTORS, TRANSMISSION LINES, OR FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST MADE ONLINE AT: http//www.abcwua.org/Water Shut off and Turn on Procedures.aspx

RESTRAINING JOINT TABLE/NOTES

RESTRAINED JOINT TABLE	
MECHANICAL JOINT TYPE	DISTANCE FROM FITTING OF JOINTS
	PIPE SIZE
	8"
8" X 8" TEE	1
8"X10" TEE	8
90° HORIZ. BEND	19
8" X 6" REDUCER	24
8" CAP	59

*TEST PRESSURE OF 150 IS ASSUMED

1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED
2. ALL JOINTS WITHIN DISTANCE FROM FITTING SHALL BE RESTRAINED
3. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF OF MJ SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE
4. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE AT LEFT (SEE NOTE 2 ABOVE)
5. ALL CAPS SHALL UTILIZE PCC BLOCKING.
6. RESTRAINED LENGTH IS ON LARGE SIDE WHERE REDUCERS ARE USED.

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

PARSONS BRINCKERHOFF

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
LADERA DRIVE IMPROVEMENTS
LADERA DRIVE PHASE I
SAS & WATERLINE PLAN & PROFILE

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet
6588.92	G10,G11,H9-H11,J9	56C of 119

AS BUILT INFORMATION

CONTRACTOR WORK STAKED BY / PLOTTED BY / FIELD VERIFICATION BY / DRAWINGS BY / DATE

BENCH MARKS

COA @ GEODETIC CONTROL STATION "3-H10".
BRASS DISC SET FLUSH IN CONCRETE AT THE INTERSECTION OF ON THE NORTHEAST OF THE UNSER BLVD. AND LADERA DR. INTERSECTION.
NM STATE PLANE COORDS. (NAD 83)
N=1495985.681
E=1497135.488
NAVD 88 ELEV. = 5196.151

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

PAUL F. STEFFIN NEW MEXICO 15352 REGISTERED PROFESSIONAL ENGINEER

SAS & WL LOCATION REVISION

NO.	DATE	REMARKS	BY
1	5/17		DGS

DESIGN

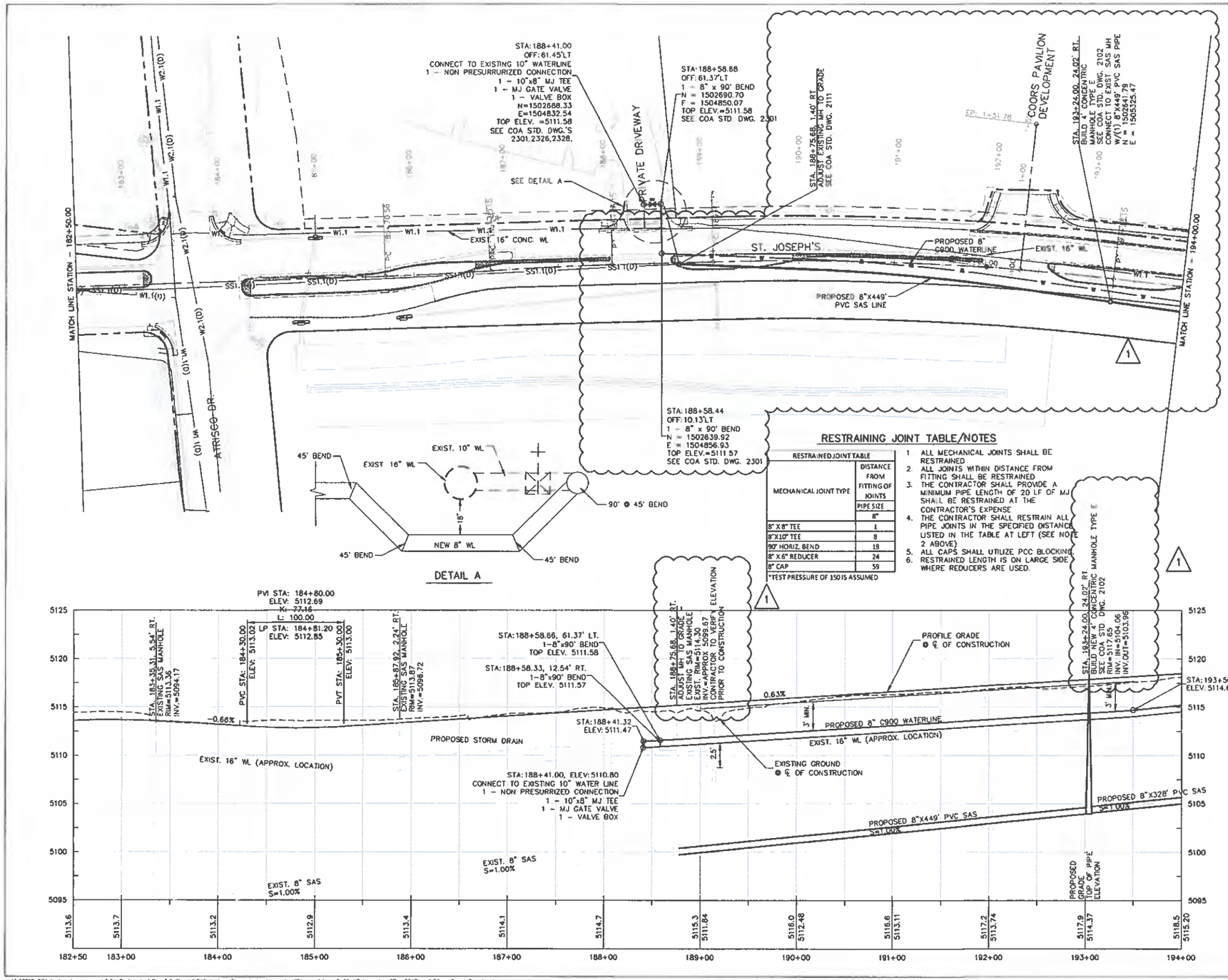
		DATE
DESIGNED BY:	DGS	02/23/17
DRAWN BY:	DGS	02/23/17
CHECKED BY:	PFS	02/23/17

MICRO-FILM INFORMATION
RECORDED BY / DATE
NO.

RECORD DRAWING

RECORD DRAWING

A:\33712 COA Ladera Improvements\04 Engineering\Plans\3_Sheets\PMP-Ladera Phase I-development utilities revisions 6_08_17.dwg Jun 07, 2017 - 9:53am Saved By: aimade



RESTRAINING JOINT TABLE/NOTES

RESTRAINED JOINT TABLE	
MECHANICAL JOINT TYPE	DISTANCE FROM FITTING OF JOINTS
	PIPE SIZE
	8"
8" X 8" TEE	1
8"X10" TEE	8
90° HORIZ. BEND	19
8" X 6" REDUCER	24
8" CAP	59

*TEST PRESSURE OF 150 IS ASSUMED

1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED
2. ALL JOINTS WITHIN DISTANCE FROM FITTING SHALL BE RESTRAINED
3. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF OF MJ SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE
4. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE AT LEFT (SEE NOTE 2 ABOVE)
5. ALL CAPS SHALL UTILIZE PCC BLOCKING
6. RESTRAINED LENGTH IS ON LARGE SIDE WHERE REDUCERS ARE USED.

GENERAL NOTES:

1. STATION AND OFFSET FOR WATERLINE ARE GIVEN TO CENTER OF PIPE.
2. STATION AND OFFSET PROVIDED REFERENCE CL OF CONSTRUCTION ON LADERA DR.
3. *ALL ELEVATIONS AND SLOPES ARE DERIVED FROM AERIAL PHOTOGRAMMETRY AND ARE FOR INFORMATION ONLY. CONTRACTOR SHALL VERIFY AND MATCH EXISTING CROSS-SLOPES IN THE FIELD, AND MATCH EXISTING ELEVATIONS.
4. EXISTING MANHOLE AND VALVE COLLARS TO BE ADJUSTED TO GRADE.
5. TRACER WIRE IS TO BE INSTALLED ON ALL WATER AND SEWER INFRASTRUCTURE.
6. CONTRACTOR SHALL INSTALL WATERLINE WITH A MINIMUM OF 3 FOOT OF COVER.
7. WATERLINE CONNECTION DETAILS SEE COA STANDARD DWG. 2301. THRUST CONTROL SHALL BE BY CONSTRAINED JOINTS.
8. 10 FOOT MINIMUM SEPARATION SHALL BE MAINTAINED BETWEEN THE WATERLINE AND THE SANITARY SEWER.
9. THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF WELL COLLECTORS, TRANSMISSION LINES, OR FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST MADE ONLINE AT: http//www.abcwua.org/Water Shut off and Turn on Procedures.aspx

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

AS BUILT INFORMATION
CONTRACTOR
SURVEYED BY | DATE
INSPECTOR | DATE
FIELD ENGINEER | DATE
CONTRACTOR | DATE
MICRO-FILM INFORMATION
RECORDED BY | DATE
NO.

BENCH MARKS
COA GEODETIC CONTROL STATION "J-H10"
BRASS DISC SET FLUSH IN CONCRETE AT THE INTERSECTION OF ON THE NORTHEAST OF THE UNSER BLVD. AND LADERA DR. INTERSECTION
NM STATE PLANE COORDS. (NAD 83)
N=1493985.681
E=1497135.488
NAVD 88 ELEV. = 5196.151

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
PAUL F. STEFFIN
NEW MEXICO
15352
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
1	6/17	SAS & WL LOCATION REVISION	DGS

DESIGN

		DATE
DESIGNED BY:	DGS	02/23/17
DRAWN BY:	DGS	02/23/17
CHECKED BY:	PFS	02/23/17

PARSONS BRINCKERHOFF

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
LADERA DRIVE IMPROVEMENTS
LADERA DRIVE PHASE I
SAS & WATERLINE PLAN & PROFILE

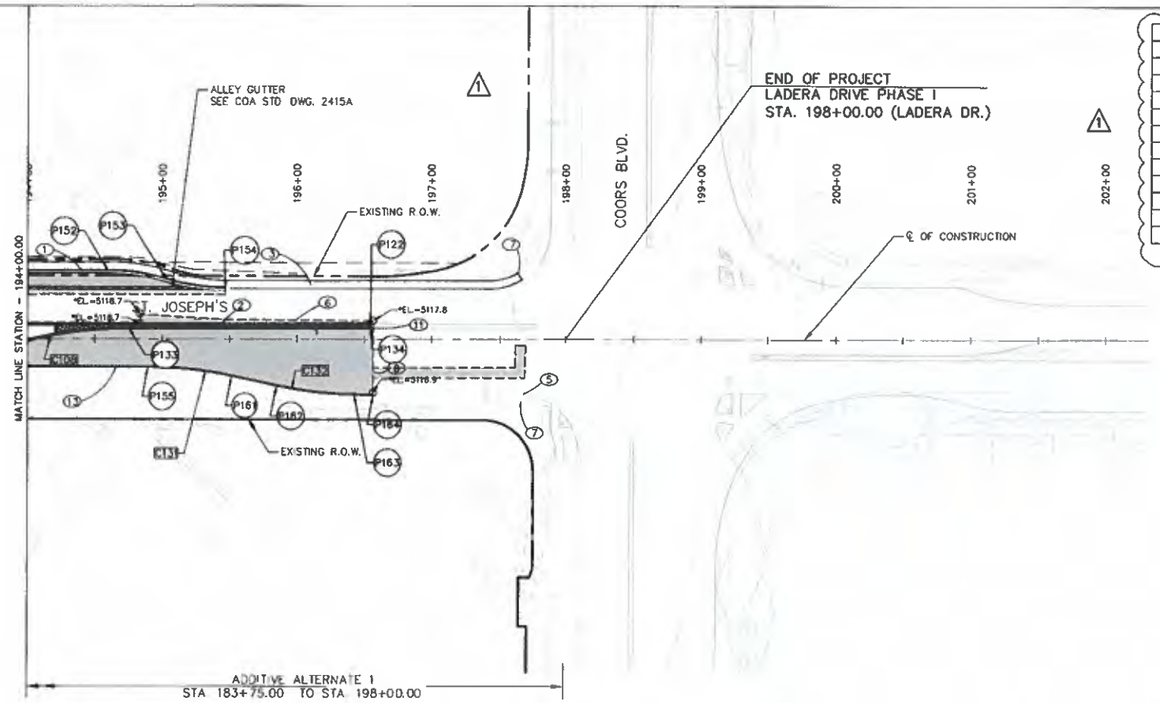
DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL | MO./DAY/YR. | MO./DAY/YR.

City Project No. 8568.92 | Zone Map No. G10,G11,H9-H11,J9 | Sheet 56B of 119

RECORD DRAWING

RECORD DRAWING

z:\33712 COA Ladera Improvements\04 Engineering\Plans\3_Sheets\PMP-Ladera Phase I-development utilities revisions 8_08_17.dwg Jun 07, 2017 - 9:53am Saved By: simada



POINT DATA			
POINT	STATION	OFFSET	DESCRIPTION
P122	196+54.72	10.73' LT	BEGIN FL CURB
P133	194+74.84	8.36' LT.	PT FL CURB
P134	196+54.72	8.39' LT.	BEGIN FL CURB
P152	194+59.60	50.56' LT.	PC FL CURB
P153	195+03.28	44.06' LT.	PRC FL CURB
P154	195+46.96	37.56' LT.	PT FL CURB
P155	194+89.41	21.00' RT.	PC FL CURB
P161	195+51.74	27.57' RT.	PT FL CURB
P162	195+84.69	35.19' RT.	PC FL CURB
P163	196+42.48	41.32' RT.	PT FL CURB
P164	196+56.64	41.59' RT.	END FL CURB

CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C108	79.11'	300.00'	15°06'33"	39.79'
C131	62.79'	298.30'	12°03'40"	31.51'
C132	57.46'	301.00'	10°56'16"	28.82'

GENERAL NOTES:

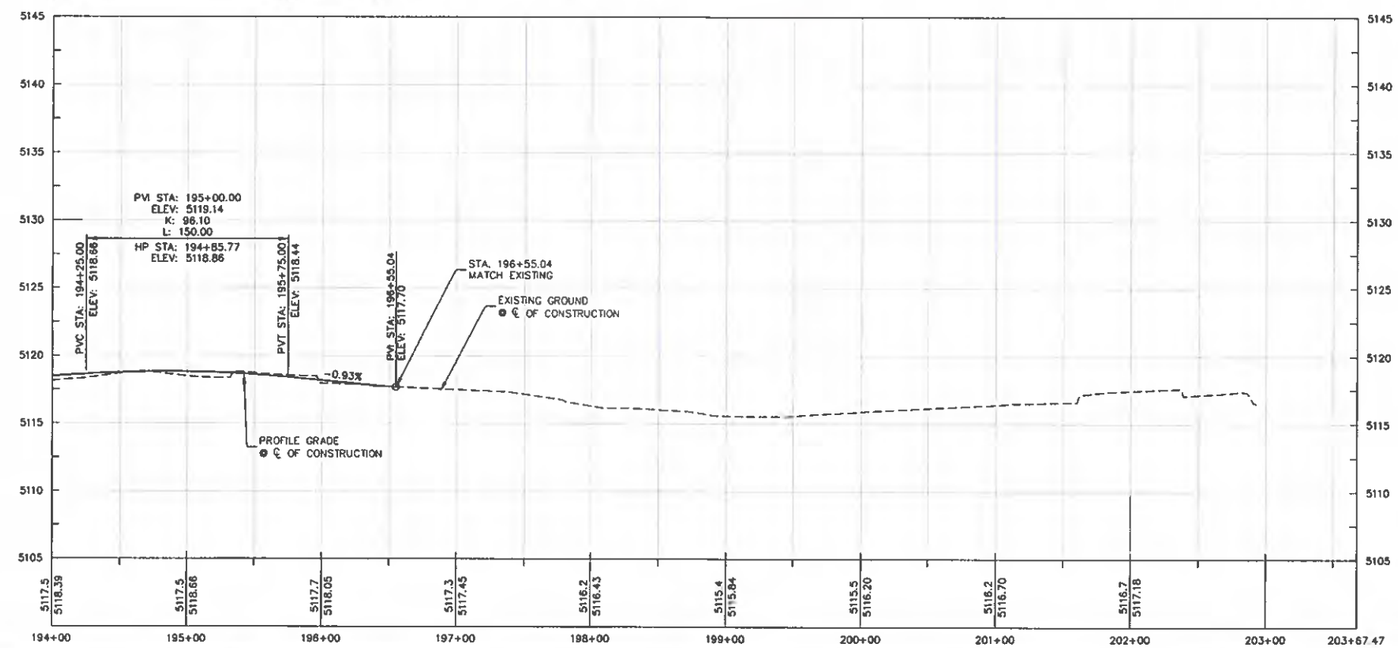
1. STATION AND OFFSET FOR CURB AND GUTTER GIVEN TO FLOWLINE UNLESS OTHERWISE NOTED.
2. ALL TIE POINTS SHALL TIE TO EXISTING CURB & GUTTER OR SIDEWALK.
3. STATION AND OFFSET PROVIDED REFERENCE CL OF CONSTRUCTION ON LADERA DR
4. *ALL ELEVATIONS AND SLOPES ARE DERIVED FROM AERIAL PHOTOGRAMMETRY AND ARE FOR INFORMATION ONLY. CONTRACTOR SHALL VERIFY AND MATCH EXISTING CROSS-SLOPES IN THE FIELD, AND MATCH EXISTING ELEVATIONS.

KEYED NOTES:

1. BUILD STANDARD CURB & GUTTER. SEE COA STD. DWG. 2415A.
2. BUILD MEDIAN CURB & GUTTER, SEE COA STD. DWG. 2415B. SEE DRAINAGE PLANS, SEE SHT 16 & SHTS 57 THRU 65 FOR CURB CUT LOCATIONS.
3. BUILD CONCRETE SIDEWALK. SEE COA STD. DWG. 2430
4. BUILD CURB RAMP, SEE CURB RAMP DETAIL SHEETS 36 THRU 47, SEE NMDOT STANDARD DRAWINGS 608-001 (1 THRU 12).
5. NEAT CUT LINE. MATCH EXISTING CURB.
6. NEAT CUT LINE. MATCH EXISTING ASPHALT.
7. NEAT CUT LINE. MATCH EXISTING SIDEWALK.
8. BUILD VALLEY GUTTER, SEE DETAIL SHT. 17 & COA STD. DWG. 2420.
9. BUILD CONCRETE DRIVEPAD. SEE NMDOT STANDARD DRAWINGS 608-001 (8 & 9).
10. CUT-OFF WALL. SEE COA STD. DWG 2415B & SHEET 16 OF PLANS
11. BUILD 4" TEXTURED/COLORED MEDIAN CONCRETE SEE SHT. 17 FOR DETAIL
12. BUILD ASPHALT MULTI-USE TRAIL.
13. BUILD TEMPORARY ASPHALT CURB TYPE C. SEE COA STD. DWG. 2415B. BUILD 1' WIDE CURB CUTS EVERY 20'.

LEGEND:

- NEW ASPHALT - PAVEMENT SECTION 1
- NEW 4" TEXTURED/COLORED MEDIAN CONCRETE



GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

PARSONS BRINCKERHOFF

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
LADERA DRIVE IMPROVEMENTS
LADERA DRIVE PHASE I
PLAN & PROFILE - STA. 194+00.00 TO E.O.P.

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet
6588.92	G10,G11,H9-H11,J9	56 of 119

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY DATE
BUILDER'S ACCEPTANCE BY DATE
FIELD VERIFIED BY DATE
DRAWINGS MARKED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
COA GEODETIC CONTROL STATION "3-H10"
BRASS DISC SET FLUSH IN CONCRETE AT THE INTERSECTION OF ON THE NORTHEAST OF THE UNSER BLVD AND LADERA DR INTERSECTION.
NM STATE PLANE COORDS. (NAD 83)
N=1493985.681
E=1497135.488
NAVD 88 ELEV = 5196.151

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
PAUL F. STEFFIN
NEW MEXICO
15352
REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S SEAL
1 3/17 RT. LT TURN ADDITION, & REVISIONS
NO DATE REMARKS BY

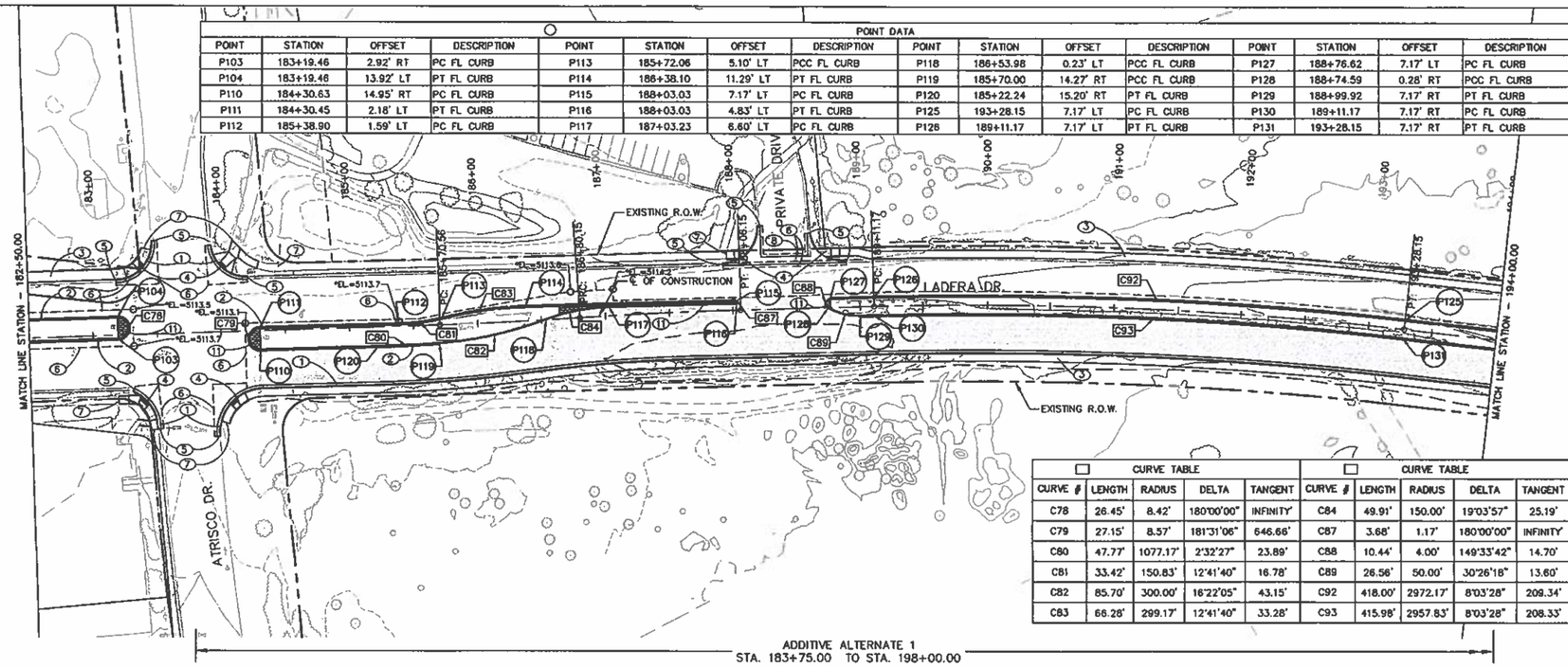
DESIGN
DESIGNED BY: DGS DATE 02/23/17
DRAWN BY: DGS DATE 02/23/17
CHECKED BY: PFS DATE 02/23/17

RECORD DRAWING

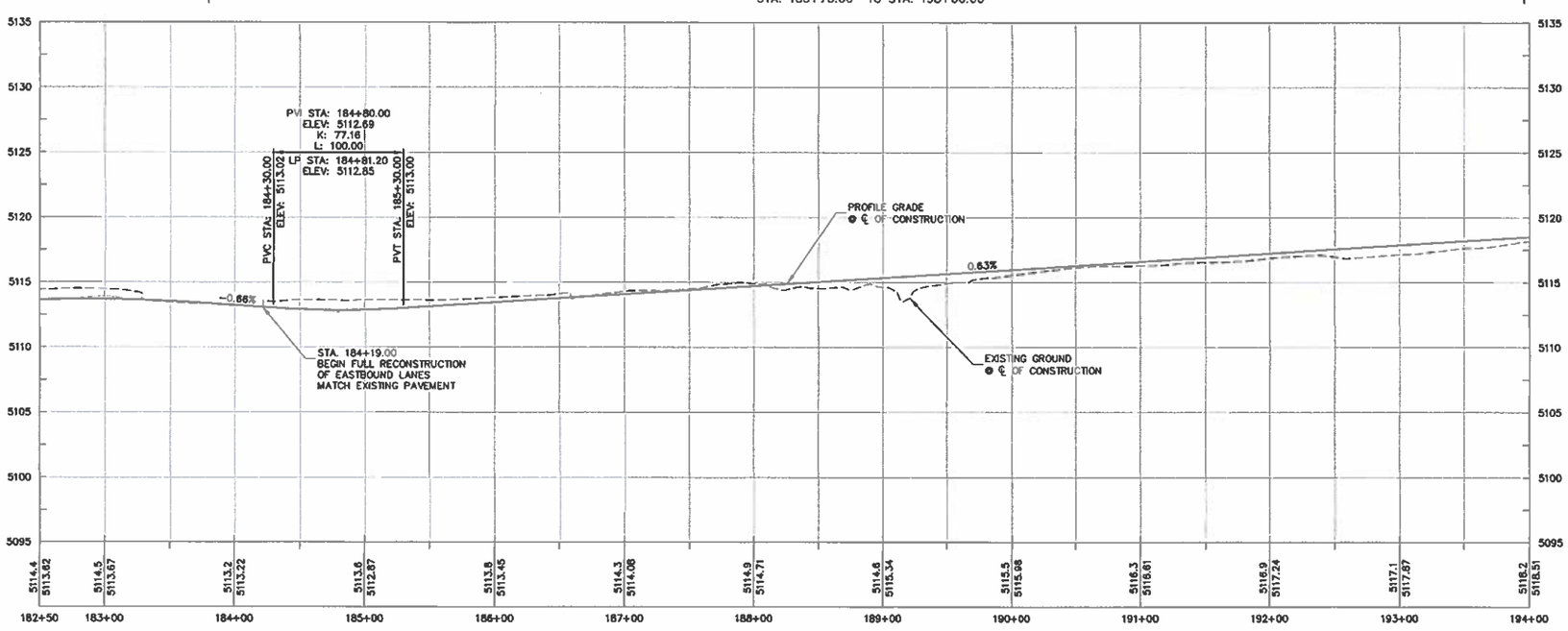
RECORD DRAWING

C:\Users\simada\appdata\local\temp\AcPublish_9480\PNP-Ladera Phase I-development-revised.dwg Apr 14, 2017 - 9:15am Saved By: simada

POINT DATA															
POINT	STATION	OFFSET	DESCRIPTION	POINT	STATION	OFFSET	DESCRIPTION	POINT	STATION	OFFSET	DESCRIPTION	POINT	STATION	OFFSET	DESCRIPTION
P103	183+19.46	2.92' RT	PC FL CURB	P113	185+72.06	5.10' LT	PCC FL CURB	P118	186+53.98	0.23' LT	PCC FL CURB	P127	188+76.62	7.17' LT	PC FL CURB
P104	183+19.46	13.92' LT	PT FL CURB	P114	186+38.10	11.29' LT	PT FL CURB	P119	185+70.00	14.27' RT	PCC FL CURB	P128	188+74.59	0.28' RT	PCC FL CURB
P110	184+30.63	14.95' RT	PC FL CURB	P115	188+03.03	7.17' LT	PC FL CURB	P120	185+22.24	15.20' RT	PT FL CURB	P129	188+99.92	7.17' RT	PT FL CURB
P111	184+30.45	2.18' LT	PT FL CURB	P116	188+03.03	4.83' LT	PT FL CURB	P125	193+28.15	7.17' LT	PC FL CURB	P130	189+11.17	7.17' RT	PC FL CURB
P112	185+38.90	1.59' LT	PC FL CURB	P117	187+03.23	6.60' LT	PC FL CURB	P126	189+11.17	7.17' LT	PT FL CURB	P131	193+28.15	7.17' RT	PT FL CURB



CURVE TABLE					CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT	CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C78	26.45'	8.42'	180°00'00"	INFINITY'	C84	49.91'	150.00'	19°03'57"	25.19'
C79	27.15'	8.57'	181°31'06"	646.66'	C87	3.68'	1.17'	180°00'00"	INFINITY'
C80	47.77'	1077.17'	2°32'27"	23.89'	C88	10.44'	4.00'	149°33'42"	14.70'
C81	33.42'	150.83'	12°41'40"	16.78'	C89	26.56'	50.00'	30°26'18"	13.60'
C82	85.70'	300.00'	16°22'05"	43.15'	C92	418.00'	2972.17'	8°03'28"	209.34'
C83	66.28'	299.17'	12°41'40"	33.28'	C93	415.98'	2957.83'	8°03'28"	208.33'



GENERAL NOTES:

1. STATION AND OFFSET FOR CURB AND GUTTER GIVEN TO FLOWLINE UNLESS OTHERWISE NOTED.
2. ALL TIE POINTS SHALL TIE TO EXISTING CURB & GUTTER OR SIDEWALK.
3. STATION AND OFFSET PROVIDED REFERENCE CL OF CONSTRUCTION ON LADERA DR.
4. *ALL ELEVATIONS AND SLOPES ARE DERIVED FROM AERIAL PHOTOGRAMMETRY AND ARE FOR INFORMATION ONLY. CONTRACTOR SHALL VERIFY AND MATCH EXISTING CROSS-SLOPES IN THE FIELD, AND MATCH EXISTING ELEVATIONS.

KEYED NOTES:

1. BUILD STANDARD CURB & GUTTER. SEE COA STD. DWG. 2415A.
2. BUILD MEDIAN CURB & GUTTER, SEE COA STD. DWG. 2415B. SEE DRAINAGE PLANS, SEE SHT 16 & SHTS 57 THRU 65 FOR CURB CUT LOCATIONS.
3. BUILD CONCRETE SIDEWALK. SEE COA STD. DWG. 2430
4. BUILD CURB RAMP, SEE CURB RAMP DETAIL SHEETS 36 THRU 47. SEE NMDOT STANDARD DRAWINGS 608-001 (1 THRU 12).
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11. BUILD 4" TEXTURED/COLORED MEDIAN CONCRETE. SEE SHT. 17 FOR DETAIL
12. BUILD ASPHALT MULTI-USE TRAIL.

LEGEND:

NEW ASPHALT - PAVEMENT SECTION 1

NEW 4" TEXTURED/COLORED MEDIAN CONCRETE

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY
AS-BUILTS CHECKED BY
FIELD VERIFICATION BY
DRAWINGS PREPARED BY
MICRO-FILM INFORMATION
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BENCH MARKS
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BRASS DISC SET FLUSH IN CONCRETE AT THE INTERSECTION OF ON THE NORTHEAST OF THE UNSER BLVD. AND LADERA DR. INTERSECTION.
NM STATE PLANE COORDS. (NAD 83)
N=1493985.681
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NAVD 88 ELEV. = 5196.151

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL
PAUL F. STEFFEN
NEW MEXICO
13952
4/7/2016
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY

DESIGN
DESIGNED BY: DGS, KVC DATE 03/28/16
DRAWN BY: DGS, KVC DATE 03/28/16
CHECKED BY: PFS DATE 03/28/16

PARSONS BRINCKERHOFF

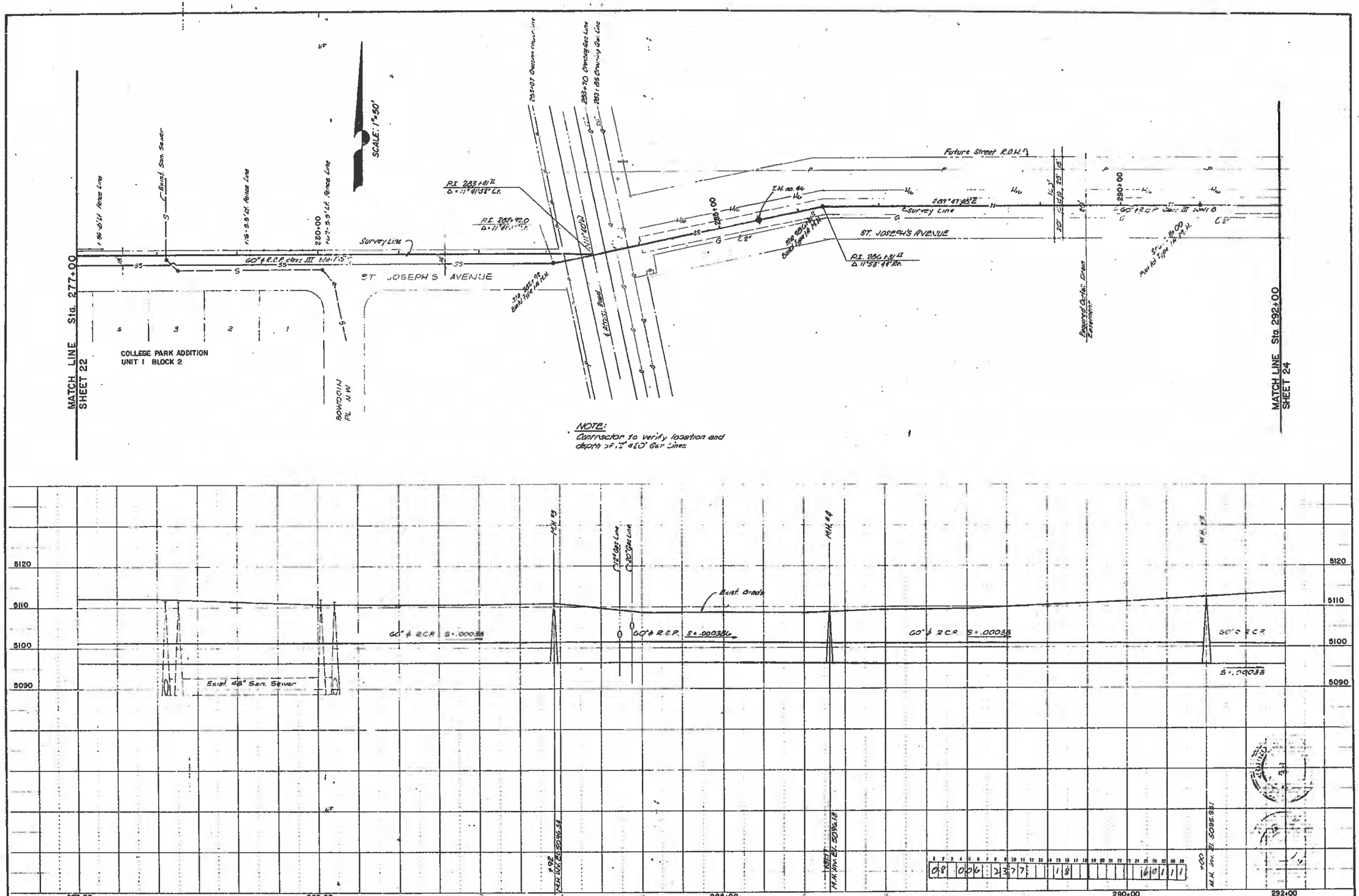
CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION
LADERA DRIVE IMPROVEMENTS
LADERA DRIVE PHASE I
PLAN & PROFILE - STA. 182+50.00 TO STA 194+00.00

DESIGN REVIEW COMMITTEE: APPROVED APR 21 2016 DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL: APPROVED APR 21 2016 CITY ENGINEER
MO./DAY/YR. | MO./DAY/YR.

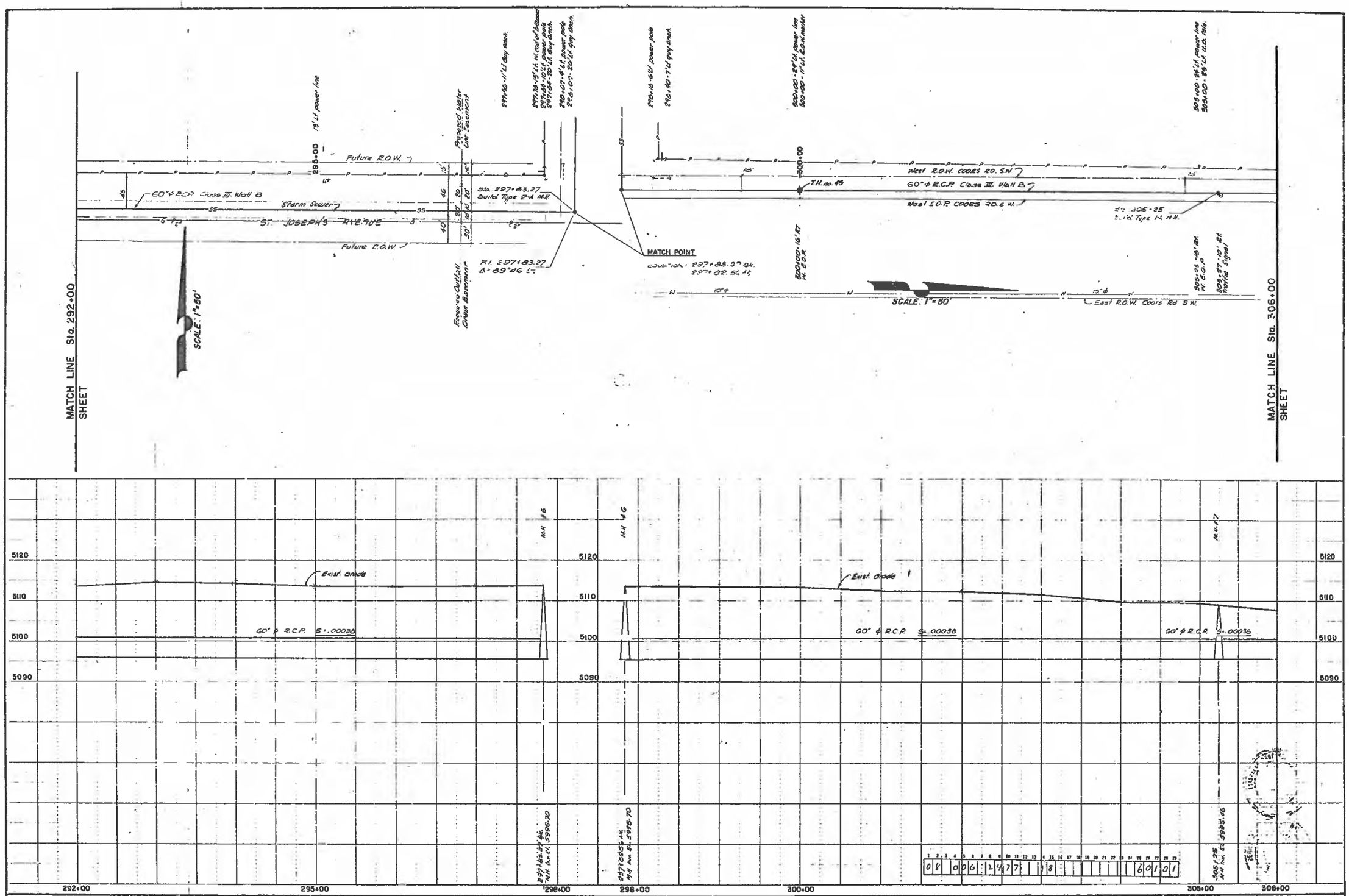
City Project No. 6588.92 | Zone Map No. G10,G11,H9-H11,J9 | Sheet 55 of 119

RECORD DRAWING

RECORD DRAWING



	LEVERTON/DENNEY & MacCORNACK/BURNS A JOINT VENTURE OF ENGINEERS ALBUQUERQUE, NEW MEXICO	DESIGNED DATE DRAWN DATE CHECKED DATE APPROVED DATE	ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY	LADERA STORM DRAINAGE DIVERSION AND DETENTION FACILITY	DRAWING NUMBER SHEET 23 OF 47



LEVERTON/DENNEY & MacCORNACK/BURNS A JOINT VENTURE OF ENGINEERS ALBUQUERQUE NEW MEXICO	DESIGNED DATE DRAWN DATE CHECKED DATE APPROVED DATE	ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY	LADERA STORM DRAINAGE DIVERSION AND DETENTION FACILITY	OUTFALL STORM DRAIN Sta. 292+00 to Sta. 306+00	DRAWING NUMBER SHEET 24 OF 47

DRAINAGE REPORT FOR THE ENCLAVE AT OXBOW

(TRACT B-1 OF OXBOW PARK SUBDIVISION)

MAY 2, 2002

PREPARED FOR:

ALTURA WEST LTD
P.O. DRAWER AA
ALBUQUERQUE, NEW MEXICO 87107

DRAINAGE REPORT
FOR
THE ENCLAVE AT OXBOW SUBDIVISION
(TRACT B-1 OF OXBOW PARK)

MAY 2, 2002

PREPARED BY:

BOHANNAN HUSTON, INC.
COURTYARD I, 7500 JEFFERSON STREET NE
ALBUQUERQUE, NM 87109

PREPARED FOR:

ALTURA WEST LTD
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ELIZABETH EDDY SMITH
NEW MEXICO
15391
LICENSED PROFESSIONAL ENGINEER

PREPARED BY:

Elizabeth E. Smith 5-2-02

Elizabeth Smith, P.E. **Date**

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I. PURPOSE 1
II. METHODOLOGIES 1
III. SITE LOCATION AND CHARACTERISTICS 2
IV. EXISTING HYDRAULIC AND HYDROLOGIC CONDITIONS 2
V. PROPOSED HYDRAULIC AND HYDROLOGIC CONDITIONS 3
A. Off-Site Basins 4
B. On-Site Basins 4
VI. CONCLUSION 6

APPENDICES

APPENDIX A: AHYMO INPUT AND SUMMARY
APPENDIX B: STREET HYDRAULICS AND INLET ANALYSIS
APPENDIX C: STORM DRAIN HYDRAULIC ANALYSIS

EXHIBITS

EXHIBIT 1: FEMA FLOODPLAIN EXHIBIT
EXHIBIT 2: BULK LAND PLAT
EXHIBIT 3: PRELIMINARY PLAT
EXHIBIT 4: EXISTING CONDITIONS BASIN MAP
EXHIBIT 5: PROPOSED CONDITIONS BASIN MAP
EXHIBIT 6: GRADING AND DRAINAGE PLAN

I. PURPOSE

The purpose of this report is to present historic and proposed drainage conditions for the area pertaining to this site, and to obtain work order, site plan approval, and preliminary and final plat approvals.

II. METHODOLOGIES

Site conditions will be analyzed for a 10-year and 100-year, 6-hour storm event in accordance with the City of Albuquerque Drainage Ordinance and the Development Process Manual (DPM) Volume 2, Design Criteria, Section 22.2, Hydrology, for the City of Albuquerque, January 1993.

This report will reference the *Master Drainage Plan for Altura West and Archdiocese of Santa Fe Properties* dated October, 1997 (hereafter referred to as the Master Plan), which was prepared for Altura West LTD. and Archdiocese of Santa Fe and approved by the City of Albuquerque. That report was prepared to support future drainage plans submitted for the development of individual land parcels within Altura West Development, and to provide design guidance for the installation of major drainage infrastructure to be constructed in advance of, or simultaneously with individual parcel development. In addition, it provides fully developed flow rates for basins within the Altura West and Archdiocese of Santa Fe Properties.

This report also references the *Drainage Report for Oxbow Park Subdivision (Tract B)* dated October 1, 1999, which was prepared for Altura West LTD and approved by the City of Albuquerque. This report establishes the downstream conditions and storm drain outfall for the Enclave at Oxbow.

collected by inlets at the intersection of Oxbow Drive and Mourning Dove Place. The flow west of the high point flows west on St. Joseph's Drive and is collected by an inlet at the intersection of Coors Boulevard. This inlet temporarily outlets the St. Joseph runoff into a ditch on the east side of Coors Boulevard. The runoff travels south at the western boundary of the Enclave at Oxbow adjacent to Coors Boulevard.

For additional information regarding the existing drainage conditions, please refer to the approved Master Plan (October 1997) or the Drainage Report for Oxbow Park Subdivision (October 1, 1999).

IV. PROPOSED HYDRAULIC AND HYDROLOGIC CONDITIONS

Runoff generated by the Enclave at Oxbow will flow through internal streets to the center of the site where it will be collected into a storm drain system. An existing storm drain located at the center of the site at the east boundary discharges through the Oxbow Park Subdivision. This storm drain will be extended west across Coors Boulevard to serve future development. The existing storm drain was designed with the Oxbow Park Subdivision to accommodate 74.41 cfs. In order to limit the discharge, a portion of the flow generated by the Enclave at Oxbow will be collected in a private detention pond and released at a controlled rate.

The flow discharging into Rock Dove Street will be collected by an inlet at the low-point of the road adjacent to a private detention pond. An 18" pipe will connect the inlet to a manhole at the center of the pond. During large storms the storm water will back up through the manhole fitted with a beehive grate into the pond. As the storm recedes, the water discharges through a 12" orifice into the 48" storm drain. In addition to the flow in Rock Dove Street, the runoff from several lots will enter the detention pond. The lots in the interior of the subdivision will drain to a sidewalk and alley gutter located in an easement in the back yards. This alley gutter will convey the flow to the pond. The detention pond will be 2.5 feet deep and have side slopes of 3:1 maximum. The pond will store 0.4 Acre-feet of water and discharge 6.1 cfs. The detention pond covers a 0.29-acre area, which will also serve as a private park for the Enclave at Oxbow. For Additional

assistance throughout this section, please refer to the Grading and Drainage Plan (Exhibit 6) or the Proposed Conditions Basin Map (Exhibit 5) enclosed in the Exhibit section of this report.

The flow discharged into Fox Sparrow Street will be collected by an inlet at the low-point adjacent to the private pond and park. This inlet will be attached directly to the 48" storm drain and the flow will bypass the pond.

A. Off-Site Basins

The Master Plan identifies two upstream developments that will contribute to the existing storm drain. They are called Basin A and Basin B in the Master Plan. Basin A will contribute 13.6 cfs and Basin B will contribute 31.5 cfs. The storm drain was designed to accommodate 74.4 cfs. The remaining capacity of 29.31 cfs is available for runoff from the Enclave at Oxbow. The analysis of this storm drain can be found in the appendix of this report, see Appendix C.

In addition to the two offsite developments that contribute flow, there are two street basins that also contribute flow to the Enclave at Oxbow. These two basins are called Coors and StJoe. Flow on St. Joseph's Drive flows west and is collected in an inlet at Coors Boulevard. The Enclave at Oxbow will extend a storm drain to tie this inlet to the 48" storm drain on site. The flow in Coors Boulevard travels south and is collected in inlets just north of the entrance to the Enclave at Oxbow. There is a high-point in Coors Boulevard just north of St. Joseph's Drive that defines the extents of the flow contribution.

B. On-Site Basins

The proposed site is broken into eleven basins. Basins 1, 9, 10, and 11 flow to the low-point of Fox Sparrow and are collected by an inlet into the proposed 48" storm drain. These four basins bypass the detention pond. Basins 2 through 8 are conveyed into the private detention pond and discharge into the 48" storm drain through a 12" orifice. The following paragraphs describe the locations of the proposed basins and their flow patterns.

Basin 1 (1.56ac, Q_{100}=5.6cfs) is located in the far northeast corner of the Enclave at Oxbow. Basin 1 consists of eight lots, lots 1 through 8. Runoff from Basin 1 will flow south in Fox Sparrow to the low-point at the center of the site where it will be collected by an inlet and discharged into a proposed 48" storm drain.

Basin 2 (1.15ac, Q_{100}=4.1cfs) is located at the north end of the Enclave at Oxbow. Basin 2 consists of six lots, lots 40 through 45, and Tract 'A'. Runoff from Basin 2 will flow to the low point of Hummingbird and south on Rock Dove into the detention pond, where it will be detained and discharged into a 48" storm drain. The detention pond will collect and detain runoff from Basins 2 through 8.

Basin 3 (1.1ac, Q_{100}=3.9cfs) is adjacent and south of Basin 2. Basin 3 consists of six lots numbered 34 to 39. Runoff from Basin 3 will combine with flow from Basin 2 in Rock Dove and will be conveyed to the detention pond on Tract 'C' through an inlet.

Basin 4 (0.86ac, Q_{100}=3.1cfs) is adjacent and east of Basin 3. Basin 4 consists of six lots numbered 66 to 71. Runoff from lots within Basin 4 will flow to the back yard and will be conveyed by an alley gutter adjacent to a sidewalk to the detention pond. This gutter will also convey flow in the same way from Basin 5 (0.81ac, Q_{100}=2.9cfs). Basin 5 is located directly east of Basin 4 and consists of lots 52 to 57.

Basin 6 (1.0ac, Q_{100}=3.9cfs) is adjacent and south of Basin 3. Basin 6 consists of seven lots numbered 27 to 33. The runoff generated by Basin 6 will combine with flow from Basins 7 and 8 and will flow north to the low-point of Rock Dove where it will be collected by an inlet.

Basin 7 (0.82ac, Q_{100}=2.9cfs) is located in the far northwestern corner of the Enclave at Oxbow. Basin 7 consists of five lots numbered 22 through 26. Runoff will flow from Blue Jay into Rock Dove, where it will flow south and be collected by an inlet at the lowpoint.

Basin 8 (0.95ac, Q_{100}=3.6cfs) is adjacent and east of Basin 6. Basin 8 consists of seven lots numbered 59 to 65. The runoff generated will flow to the back yard and will be conveyed north in an alley gutter adjacent to a sidewalk. This flow will discharge into the pond and will be detained and released at a controlled rate.

Basin 9 (0.68ac, Q_{100}=2.4cfs) is located directly east of Basin 8 and consists of lots 52 to 58. The runoff from Basin 9 will combine with flow from Basins 10 and 11. This runoff will flow north to the low point of Fox Sparrow where it will be collected in an inlet and discharged directly into the proposed 48" storm drain.

Basin 10 (0.52ac, Q_{100}=1.9cfs) is located on the south end of the Enclave at Oxbow adjacent to Basin 7. Basin 10 consists of three lots numbered 19 to 21. Runoff will flow north to the low point of Fox Sparrow and will be collected in one type 'A' inlet.

Basin 11 (1.53ac, Q_{100}=5.5cfs) is located to the east of Basins 9 and 10. Basin 11 consists of ten lots numbered 9 to 18. Runoff from Basin 11 will flow north to the low point of Fox Sparrow and will be collected in one type 'A' inlet.

V. CONCLUSION

This drainage plan conforms to the approved drainage patterns for the area as presented in the *Master Drainage Plan for Altura West and Archdiocese of Santa Fe Properties* dated October, 1997 and the *Drainage Report for Oxbow Park Subdivision (Tract B)* dated October 1, 1999. As instructed by these plans, the Enclave at Oxbow will extend a storm drain from the existing 48" in Oxbow Park to Coors Boulevard to accommodate future development. In addition, the Enclave at Oxbow will install a detention pond to decrease the peak discharge from the site. These concepts provide a plan that manages the developed runoff from the site in a responsible manner, provide for upstream development, and protect existing downstream development from harm.

APPENDICES

APPENDIX A: AHYMO INPUT AND SUMMARY

APPENDIX B: STREET HYDRAULICS AND INLET ANALYSIS

APPENDIX C: STORM DRAIN HYDRAULIC ANALYSIS

THE ENCLAVE AT OXBOW

BASIN I.D.	AREA (AC)	% LAND TREATMENT A	B	C	D	RUNOFF (AC-FT) 10 YR	100 YR	DISCHARGE (CFS) 10 YR	100YR
HYDROLOGICAL VOLUMETRIC & DISCHARGE DATA (EXISTING)[1]									
Tract B-1	11.20	90.0%	10.0%	0.0%	0.0%				15.2
HYDROLOGICAL VOLUMETRIC & DISCHARGE DATA (DEVELOPED)									
1	1.56	0.0%	20.0%	20.0%	60.0%	0.11	5.6	3.4	5.62
2	1.16	0.0%	20.0%	20.0%	60.0%	0.08	4.1	2.5	4.14
3	1.10	0.0%	20.0%	20.0%	60.0%	0.08	3.9	2.4	3.96
4	0.86	0.0%	20.0%	20.0%	60.0%	0.06	3.1	1.9	3.10
5	0.81	0.0%	20.0%	20.0%	60.0%	0.06	2.9	1.8	2.92
6	1.00	0.0%	20.0%	20.0%	60.0%	0.07	3.6	2.2	3.60
7	0.81	0.0%	20.0%	20.0%	60.0%	0.05	2.9	1.8	2.92
8	0.95	0.0%	20.0%	20.0%	60.0%	0.06	3.4	2.1	3.42
9	0.68	0.0%	20.0%	20.0%	60.0%	0.05	2.4	1.5	2.45
10	0.52	0.0%	20.0%	20.0%	60.0%	0.03	1.9	1.1	1.87
11	1.55	0.0%	20.0%	20.0%	60.0%	0.10	5.5	3.4	5.58
St. Joe's	1.65	100.0%	0.0%	0.0%	0.0%	0.11	6.5	0.4	6.60
Coors	0.90	100.0%	0.0%	0.0%	0.0%	0.06	7.5	0.2	3.70
Offsite A	27.21	0.0%	7.5%	7.5%	85.0%	1.82	4.1	71.4	109.4
Offsite B	31.45	0.0%	7.5%	7.5%	85.0%	2.10	4.7	82.5	126.1
TOTAL[1]	72.20								285.4

NOTES: 1) Total runoff is mitigated by detention ponds.

```
*
*S ENCLAVE AT OXBOW
*s BHI JOB #020199
*S 2-26-02
*S EXISTING CONDITIONS
*
START                 RAINFALL BEGINS AT 0.00 HOURS
*                       100 YEAR RETURN PERIOD
*S INPUT FILE=020199/CDP/HYDRO/OXBOW.TXT
*******************************************************************************
*
*      :::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
*      ::                        MISC. DATA                                                        ::
*      ::          RAINFALL RETURN PERIOD______________  100-YEAR                        ::
*      ::          RAINFALL DURATION___________________  6-HOUR                          ::
*      ::        ZONE 1                                                                  ::
*      ::          RAINFALL DEPTHS: 1 HOUR (P60)___  1.87 INCHES                                   ::
*      ::          (UNADJUSTED)      6 HOUR (P360)__  2.20 INCHES                        ::
*      ::                           24 HOUR (P1440)_  2.66 INCHES                        ::
*      ::                                                                                         ::
*      ::                                                                                         ::
*      ::                  HYDROGRAPH METHODOLOGY                                                  ::
*      ::                                                                                         ::
*      ::          CITY OF ALBQ. DPM VOL. 2, SECTION 22.2 July, 1997                              ::
*      ::          INITIAL ABSTRACTION - INFILTRATION METHOD                                      ::
*      ::          Tc CALCULATIONS PER C.O.A. DPM 22.2-B.4                               ::
*      ::          AMAFCA AHYMO VERSION MARCH 20,1992                                             ::
*      ::                                                                                         ::
*      :::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
*                             BEGIN  ANALYSIS
*******************************************************************************
*
RAINFALL                 TYPE=1 RAIN QUARTER=0.0 RAIN ONE=1.87
                         RAIN SIX=2.20 RAIN DAY=2.66 DT=0.05
************************************
**** COMPUTE AND PRINT NM HYD DATA FOR BASIN K *********
COMPUTE NM HYD           ID=1 HYD=K AREA=0.0177 PER A=90.0 PER B=10.0
                         PER C=0.0 PER D=0.0  TP=.133  RAINFALL=-1
PRINT HYD               ID=1   CODE=1
FINISH
```

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994 RUN DATE (MON/DAY/YR) =02/27/2002
INPUT FILE = EXIST.TXT USER NO.= BOHN_HNM.STE

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
*S ENCLAVE AT OXBOW										
*s BHI JOB #020199										
*S 2-26-02										
*S EXISTING CONDITIONS										
START										TIME= .00
*S INPUT FILE=020199/CDP/HYDRO/OXBOW.TXT										
RAINFALL TYPE= 1										RAIN6= 2.200
COMPUTE NM HYD	K	-	1	.01770	15.30	.432	.45757	1.500	1.351	PER IMP= .00
FINISH										

A.3

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994 RUN DATE (MON/DAY/YR) =02/27/2002
INPUT FILE = EXIST.TXT USER NO.= BOHN_HNM.STE

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION
*S ENCLAVE AT OXBOW										
*s BHI JOB #020199										
*S 2-26-02										
*S EXISTING CONDITIONS										
START										TIME= .00
*S INPUT FILE=020199/CDP/HYDRO/OXBOW.TXT										
RAINFALL TYPE= 1										RAIN6= 2.200
COMPUTE NM HYD	K	-	1	.01770	15.30	.432	.45757	1.500	1.351	PER IMP= .00
FINISH										

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994 RUN DATE (MON/DAY/YR) =04/30/2002
INPUT FILE = USER NO.= BOHN_HNM.STE

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION	PAGE = 1
*S ENCLAVE AT OXBOW											
*S AMENDED AHYMO TO INCLUDE OFFSITE BASINS											
*s BHI JOB #020199											
*S 4-2-02											
START										TIME=	.00
*S INPUT FILE=020199/CDP/HYDRO/OXBOW.TXT											
RAINFALL TYPE= 1										RAIN6=	2.200
COMPUTE NM HYD	1.00	-	1	.00244	5.37	.196	1.50672	1.500	3.565	PER IMP=	60.00
COMPUTE NM HYD	2.00	-	2	.00180	4.11	.145	1.50672	1.500	3.568	PER IMP=	60.00
COMPUTE NM HYD	3.00	-	3	.00170	3.88	.137	1.50672	1.500	3.568	PER IMP=	60.00
COMPUTE NM HYD	4.00	-	4	.00134	3.06	.108	1.50672	1.500	3.572	PER IMP=	60.00
COMPUTE NM HYD	5.00	-	5	.00127	2.90	.102	1.50672	1.500	3.573	PER IMP=	60.00
COMPUTE NM HYD	6.00	-	6	.00156	3.56	.125	1.50672	1.500	3.570	PER IMP=	60.00
COMPUTE NM HYD	7.00	-	7	.00127	2.90	.102	1.50672	1.500	3.573	PER IMP=	60.00
COMPUTE NM HYD	8.00	-	8	.00148	3.38	.119	1.50672	1.500	3.570	PER IMP=	60.00
COMPUTE NM HYD	9.00	-	9	.00106	2.41	.085	1.50672	1.500	3.576	PER IMP=	60.00
COMPUTE NM HYD	10.00	-	10	.00081	1.86	.065	1.50672	1.500	3.583	PER IMP=	60.00
COMPUTE NM HYD	11.00	-	11	.00240	5.48	.193	1.50672	1.500	3.565	PER IMP=	60.00
COMPUTE NM HYD	STJOE	-	15	.00258	7.11	.271	1.96760	1.500	4.304	PER IMP=	100.00
COMPUTE NM HYD	COORS	-	16	.00134	3.69	.141	1.96760	1.500	4.308	PER IMP=	100.00
ADD HYD	OFFROADS	15&16	17	.00392	10.80	.411	1.96747	1.500	4.306		
COMPUTE NM HYD	OFFA	-	40	.04250	109.37	4.068	1.79477	1.500	4.021	PER IMP=	85.00
*S ROUTE SURGE POND FOR BASIN A											
ROUTE RESERVOIR	PONDA	40	41	.04250	13.64	4.068	1.79477	2.150	.501	AC-FT=	2.846
COMPUTE NM HYD	OFFB	-	42	.04900	126.10	4.690	1.79477	1.500	4.021	PER IMP=	85.00
*S ROUTE POND B											
ROUTE RESERVOIR	PONDB	42	43	.04900	31.58	4.690	1.79477	1.950	1.007	AC-FT=	2.408
*S ROUTE FLOW THROUGH 36" IN COORS BLVD											
ROUTE	B	43	44	.04900	31.54	4.690	1.79478	2.000	1.006		
ADD HYD	OFFSITE	44&41	45	.09150	45.08	8.758	1.79476	2.050	.770		
*S COMBINE HYDROGRAPHS FOR BASINS 2+3 and 6+7 and 8+4+5											
*S THESE BASINS WILL BE DETAINED IN POND											
ADD HYD	23.00	2& 3	20	.00350	7.99	.281	1.50658	1.500	3.568		
ADD HYD	67.00	6& 7	21	.00283	6.47	.227	1.50651	1.500	3.572		
ADD HYD	2367.00	20&21	22	.00633	14.46	.509	1.50655	1.500	3.569		
ADD HYD	45.00	4& 5	23	.00261	5.97	.210	1.50651	1.500	3.572		
ADD HYD	458.00	8&23	24	.00409	9.35	.329	1.50652	1.500	3.572		
ADD HYD	PNDIN	22&24	25	.01042	23.81	.837	1.50654	1.500	3.570		
*S ROUTE ON-SITE SURGE POND											
ROUTE RESERVOIR	POND	25	50	.01042	16.53	.837	1.50654	1.600	2.479	AC-FT=	.129
*S COMBINE HYDROGRAPHS FOR BASINS 10+11+9 and 1											
*S THESE BASINS WILL BE CAPTURED BY NEW STORM DRAIN											
ADD HYD	1011.00	10&11	31	.00321	7.33	.258	1.50654	1.500	3.569		
ADD HYD	91011	31& 9	33	.00427	9.76	.343	1.50651	1.500	3.571		
ADD HYD	FOX	1&33	35	.00671	15.33	.539	1.50654	1.500	3.569		

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION
*S ADD OFFSITE BASINS TO COORS BLVD FLOW										
ADD HYD	OFFALL	17&45	60	.09542	47.78	9.170	1.80186	1.950	.782	
*S ADD OFFSITE FLOWS TO OUTFLOW FROM ONSITE POND										
ADD HYD	OFFPND	60&50	61	.10584	61.46	10.007	1.77278	1.650	.907	
ADD HYD	ALL	61&35	62	.11255	71.62	10.546	1.75691	1.550	.994	
FINISH										

```
*
*S ENCLAVE AT OXBOW
*S AMENDED AHYMO TO INCLUDE OFFSITE BASINS
*s BHI JOB #020199
*S 4-2-02
START                 RAINFALL BEGINS AT 0.00 HOURS
*                       100 YEAR RETURN PERIOD
*S INPUT FILE=020199/CDP/HYDRO/OXBOW.TXT
*********************************************************************************
*
*      :::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
*      ::                        MISC. DATA                                              ::
*      ::        RAINFALL RETURN PERIOD______________  100-YEAR                  ::
*      ::        RAINFALL DURATION___________________  6-HOUR                    ::
*      ::       ZONE 1                                                           ::
*      ::        RAINFALL DEPTHS: 1 HOUR (P60)___  1.87 INCHES                           ::
*      ::        (UNADJUSTED)     6 HOUR (P360)__  2.20 INCHES                   ::
*      ::                        24 HOUR (P1440)_  2.66 INCHES                   ::
*      ::                                                                              ::
*      ::                                                                              ::
*      ::                HYDROGRAPH METHODOLOGY                                         ::
*      ::                                                                              ::
*      ::        CITY OF ALBQ. DPM VOL. 2, SECTION 22.2 July, 1997                      ::
*      ::        INITIAL ABSTRACTION - INFILTRATION METHOD                              ::
*      ::        Tc CALCULATIONS PER C.O.A. DPM 22.2-B.4                         ::
*      ::        AMAFCA AHYMO VERSION MARCH 20,1992                                     ::
*      ::                                                                              ::
*      :::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
*                          BEGIN  ANALYSIS
*********************************************************************************
*
RAINFALL                  TYPE=1 RAIN QUARTER=0.0 RAIN ONE=1.87
                          RAIN SIX=2.20 RAIN DAY=2.66 DT=0.05
************************************
**** COMPUTE AND PRINT NM HYD DATA FOR BASIN 1 *********
COMPUTE NM HYD            ID=1 HYD=1 AREA=0.00244 PER A=0.0 PER B=20.0
                         PER C=20.0 PER D=60.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=1   CODE=1
**** COMPUTE AND PRINT NM HYD DATA FOR BASIN 2 *********
COMPUTE NM HYD            ID=2 HYD=2  AREA=0.0018 PER A=0.0 PER B=20.0
                         PER C=20.0 PER D=60.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=2   CODE=1
**** COMPUTE AND PRINT NM HYD DATA FOR BASIN 3 *********
COMPUTE NM HYD            ID=3 HYD=3  AREA=0.0017 PER A=0.0 PER B=20.0
                         PER C=20.0 PER D=60.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=3   CODE=1
**** COMPUTE AND PRINT NM HYD DATA FOR BASIN 4 *********
COMPUTE NM HYD          _ ID=4 HYD=4  AREA=0.00134 PER A=0.0 PER B=20.0
```

```
PRINT HYD                ID=8   CODE=1
**** COMPUTE AND PRINT NM HYD DATA FOR BASIN 9 *********
COMPUTE NM HYD            ID=9 HYD=9  AREA=0.00106 PER A=0.0 PER B=20.0
                         PER C=20.0 PER D=60.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=9   CODE=1
**** COMPUTE AND PRINT NM HYD DATA FOR BASIN 10 *********
COMPUTE NM HYD            ID=10 HYD=10  AREA=0.00081 PER A=0.0 PER B=20.0
                         PER C=20.0 PER D=60.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=10   CODE=1
**** COMPUTE AND PRINT NM HYD DATA FOR BASIN 11 *********
COMPUTE NM HYD            ID=11 HYD=11  AREA=0.0024 PER A=0.0 PER B=20.0
                         PER C=20.0 PER D=60.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=11   CODE=1
*****************************************************************
* OFFSITE COORS CONTRIBUTION
COMPUTE NM HYD            ID=15 HYD=STJOE  AREA=0.00258 PER A=0.0 PER B=0.0
                         PER C=0.0 PER D=100.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=15   CODE=1
**** COMPUTE AND PRINT NM HYD DATA FOR COORS *********
COMPUTE NM HYD            ID=16 HYD=COORS  AREA=0.00134 PER A=0.0 PER B=0.0
                         PER C=0.0 PER D=100.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=16   CODE=1
*
ADD HYD                   ID=17 HYD=OFFROADS ID I=15 ID II=16
PRINT HYD                ID=17  CODE=1
*
*****************************************************************
* OFFSITE BASIN A CONTRIBUTION
COMPUTE NM HYD            ID=40 HYD=OFFA  AREA=0.0425 PER A=0.0 PER B=7.5
                         PER C=7.5 PER D=85.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=40   CODE=1
*S ROUTE SURGE POND FOR BASIN A
ROUTE RESERVOIR         ID=41 HYD=PONDA INFLOW ID=40  CODE=10
                        OUTFLOW (CFS) STORAGE (AC FT) ELEV (FT)
                         0.00    0.000   1.9
                         2.34    0.037   2
                         7.77    0.815   3
                         10.74   1.654   4
                         13.05   2.556   5
                         15.01   3.523   6
*
PRINT HYD                  ID=41       CODE=1
*****************************************************************
**** COMPUTE AND PRINT NM HYD DATA FOR OFFSITE BASIN B *********
COMPUTE NM HYD            ID=42 HYD=OFFB  AREA=0.049 PER A=0.0 PER B=7.5
                         PER C=7.5 PER D=85.0  TP=.133  RAINFALL=-1
PRINT HYD                ID=42   CODE=1
*
```

```
PRINT HYD              ID=44  CODE=1
*****************************************************************
ADD HYD                  ID=45 HYD=OFFSITE ID I=44 ID II=41
PRINT HYD              ID=45  CODE=1
*
*****************************************************************
*S COMBINE HYDROGRAPHS FOR BASINS 2+3 and 6+7 and 8+4+5
*S THESE BASINS WILL BE DETAINED IN POND
*
ADD HYD                  ID=20 HYD=23 ID I=2 ID II=3
PRINT HYD              ID=20  CODE=1
*
ADD HYD                  ID=21 HYD=67 ID I=6 ID II=7
PRINT HYD              ID=21  CODE=1
*
ADD HYD                  ID=22 HYD=2367 ID I=20 ID II=21
PRINT HYD              ID=22  CODE=1
*
ADD HYD                  ID=23 HYD=45 ID I=4 ID II=5
PRINT HYD              ID=23  CODE=1
*
ADD HYD                  ID=24 HYD=458 ID I=8 ID II=23
PRINT HYD              ID=24  CODE=1
*
ADD HYD                  ID=25 HYD=PNDIN ID I=22 ID II=24
PRINT HYD              ID=25  CODE=1
*
*****************************************************************
*S ROUTE ON-SITE SURGE POND
ROUTE RESERVOIR        ID=50 HYD=POND INFLOW ID=25  CODE=10
                       OUTFLOW (CFS) STORAGE (AC FT) ELEV (FT)
                       0.00    0.000   0.5
                       10.70   0.026   1
                       18.53   0.164   2
                       23.92   0.370   3
*
PRINT HYD                ID=50       CODE=1
*
*****************************************************************
*
*S COMBINE HYDROGRAPHS FOR BASINS 10+11+9 and 1
*S THESE BASINS WILL BE CAPTURED BY NEW STORM DRAIN
*
ADD HYD                  ID=31 HYD=1011 ID I=10 ID II=11
PRINT HYD              ID=31  CODE=1
*
ADD HYD                  ID=33 HYD=91011 ID I=31 ID II=9
PRINT HYD              ID=33  CODE=1
```

27-Feb-02
Enclave at Oxbow
Job #020199

POND FOR BASIN B

Elevation	Area ft^2	Avg Area ft^2	increment Vol ft^3	Cum Vol ft^3	Cum Vol ac-ft	H ft	Q cfs	d (ft)=	2.21
4.9	0		0	0	0	0	0		
5	32544	16272	1627.2	1627.2	0.037355	0.1	5.84		
6	35190	33867	33867	35494.2	0.814832	1.1	19.37		
7	37908	36549	36549	72043.2	1.653878	2.1	26.77		
8	40698	39303	39303	111346.2	2.556147	3.1	32.52		
9	43560	42129	42129	153475.2	3.523292	4.1	37.40		

POND FOR BASIN A

Elevation	Area ft^2	Avg Area ft^2	increment Vol ft^3	Cum Vol ft^3	Cum Vol ac-ft	H ft	Q cfs	d (ft)=	1.4
1.9	0		0	0	0	0	0		
2	32544	16272	1627.2	1627.2	0.037355	0.1	2.34		
3	35190	33867	33867	35494.2	0.814832	1.1	7.77		
4	37908	36549	36549	72043.2	1.653878	2.1	10.74		
5	40698	39303	39303	111346.2	2.556147	3.1	13.05		
6	43560	42129	42129	153475.2	3.523292	4.1	15.01		

27-Feb-02
Enclave at Oxbow
Job #020199

POND 1

Elevation	Area	Avg Area	Increment Vol	Cum Vol	Cum Vol	H	Q	d (ft)=	2
	ft^2	ft^2	ft^3	ft^3	ac-ft	ft	cfs		
0.5	0	0	0	0	0	0	0		
1	4600	2300	1150	1150	0.0264	0.5	10.70		
2	7400	6000	6000	7150	0.164141	1.5	18.53		
3	10500	8950	8950	16100	0.369604	2.5	23.92		

```
*S ROUTE SURGE POND FOR BASIN A
ROUTE RESERVOIR        ID=41 HYD=PONDA INFLOW ID=40  CODE=10
                       OUTFLOW (CFS) STORAGE (AC FT) ELEV (FT)
                                 0.00    0.000   1.9
                                 2.34    0.037   2
                                 7.77    0.815   3
                                 10.74   1.654   4
                                 13.05   2.556   5
                                 15.01   3.523   6

 * * * * * * * * * * * * * * * * *

   TIME      INFLOW    ELEV      VOLUME    OUTFLOW
   (HRS)     (CFS)     (FEET)    (AC-FT)   (CFS)

    .00        .00      1.90       .000       .00
    .50        .00      1.90       .000       .00
   1.00        .00      1.90       .000       .00
   1.50     109.37      3.37      1.124      8.86
   2.00      25.67      5.22      2.767     13.48
   2.50       3.39      5.08      2.638     13.22
   3.00       1.22      4.60      2.197     12.13
   3.50        .74      4.12      1.758     11.01
   4.00        .61      3.65      1.357      9.69
   4.50        .59      3.23      1.007      8.45
   5.00        .62      2.86       .708      7.02
   5.50        .68      2.57       .479      5.43
   6.00        .76      2.35       .310      4.25
   6.50        .04      2.17       .166      3.24
   7.00        .00      2.02       .050      2.43
   7.50        .00      1.91       .004       .24
   8.00        .00      1.90       .000       .02
   8.50        .00      1.90       .000       .00
 PEAK DISCHARGE =        13.638 CFS - PEAK OCCURS AT HOUR    1.15
 MAXIMUM WATER SURFACE ELEVATION =          5.300
 MAXIMUM STORAGE =         2.8463 AC-FT       INCREMENTAL TIME=      .050000HRS

*****************************************************************
*S ROUTE POND B
ROUTE RESERVOIR        ID=43 HYD=PONDB INFLOW ID=42  CODE=10
                       OUTFLOW (CFS) STORAGE (AC FT) ELEV (FT)
                                 0.00    0.000   4.9
                                 5.84    0.037   5
                                 19.37   0.815   6
                                 26.77   1.654   7
                                 32.52   2.556   8
                                 37.40   3.523   9

 * * * * * * * * * * * * * * * * *

   TIME      INFLOW    ELEV      VOLUME    OUTFLOW
   (HRS)     (CFS)     (FEET)    (AC-FT)   (CFS)

    .00        .00      4.90       .000       .00
    .50        .00      4.90       .000       .00
   1.00        .00      4.90       .000       .00
   1.50     126.10      6.41      1.157     22.38
   2.00      29.59      7.83      2.406     31.56
   2.50       3.91      7.02      1.674     26.90
   3.00       1.41      6.01       .819     19.41
   3.50        .85      5.31       .277     10.01
   4.00        .71      4.94       .016      2.46
   4.50        .68      4.91       .004       .68
   5.00        .72      4.91       .004       .71
   5.50        .79      4.91       .005       .77
   6.00        .88      4.91       .005       .86
   6.50        .04      4.90       .000       .07
   7.00        .00      4.90       .000       .01
 PEAK DISCHARGE =        31.575 CFS - PEAK OCCURS AT HOUR    1.95
 MAXIMUM WATER SURFACE ELEVATION =          7.836
 MAXIMUM STORAGE =         2.4078 AC-FT       INCREMENTAL TIME=      .050000HRS
```

```
*S ROUTE ON-SITE SURGE POND
ROUTE RESERVOIR        ID=50 HYD=POND INFLOW ID=25  CODE=10
                       OUTFLOW (CFS) STORAGE (AC FT) ELEV (FT)
                                0.00    0.000   0.5
                                10.70   0.026   1
                                18.53   0.164   2
                                23.92   0.370   3

 *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

   TIME       INFLOW     ELEV       VOLUME     OUTFLOW
   (HRS)      (CFS)      (FEET)     (AC-FT)    (CFS)

     .00        .00        .50        .000       .00
     .50        .00        .50        .000       .00
    1.00        .00        .50        .000       .00
    1.50      23.81       1.45        .088     14.21
    2.00       4.90        .75        .013      5.25
    2.50        .66        .53        .002       .72
    3.00        .19        .51        .000       .20
    3.50        .12        .51        .000       .13
    4.00        .11        .50        .000       .11
    4.50        .10        .50        .000       .10
    5.00        .11        .50        .000       .11
    5.50        .12        .51        .000       .12
    6.00        .13        .51        .000       .13
    6.50        .00        .50        .000       .00
PEAK DISCHARGE =        16.530 CFS - PEAK OCCURS AT HOUR    1.60
MAXIMUM WATER SURFACE ELEVATION =        1.745
MAXIMUM STORAGE =         .1288 AC-FT      INCREMENTAL TIME=     .050000HRS
```

APPENDIX B

STREET HYDRAULICS AND INLET ANALYSIS

SUMMARY OF THE ROADWAY CAPACITY ANALYSIS FOR THE ENCLAVE AT OXBOW

Hummingbird - Drainage Basin 2

Roadway Grade (%)	Q(100 YR) in roadway (cfs)	Depth of water in roadway (ft)	Velocity of storm water in roadway (ft/s)	$V^2/2*g$ (ft)	EGL (ft)	ROW Elevation (ft)	COMMENTS
1.73	4.11	0.20	2.34	0.09	0.29	0.51	OK

Rock Dove - Drainage Basins 2 and 3

Roadway Grade (%)	Q(100 YR) in roadway (cfs)	Depth of water in roadway (ft)	Velocity of storm water in roadway (ft/s)	$V^2/2*g$ (ft)	EGL (ft)	ROW Elevation (ft)	COMMENTS
0.60	8.00	0.30	1.92	0.06	0.36	0.51	OK
1.00	8.00	0.28	2.26	0.08	0.36	0.51	OK

Blue Jay - Drainage Basin 7

Roadway Grade (%)	Q(100 YR) in roadway (cfs)	Depth of water in roadway (ft)	Velocity of storm water in roadway (ft/s)	$V^2/2*g$ (ft)	EGL (ft)	ROW Elevation (ft)	COMMENTS
0.70	2.90	0.21	1.54	0.04	0.25	0.51	OK

SUMMARY OF THE ROADWAY CAPACITY ANALYSIS FOR THE ENCLAVE AT OXBOW

Rock Dove (south) - Drainage Basins 6 and 7

Roadway Grade (%)	Q(100 YR) in roadway (cfs)	Depth of water in roadway (ft)	Velocity of storm water in roadway (ft/s)	$V^2/2*g$ (ft)	EGL (ft)	ROW Elevation (ft)	COMMENTS
0.60	6.50	0.29	1.75	0.05	0.34	0.51	OK

Fox Sparrow- Drainage Basin 1

Roadway Grade (%)	Q(100 YR) in roadway (cfs)	Depth of water in roadway (ft)	Velocity of storm water in roadway (ft/s)	$V^2/2*g$ (ft)	EGL (ft)	ROW Elevation (ft)	COMMENTS
2.30	5.60	0.21	2.80	0.12	0.33	0.51	OK
1.27	5.60	0.24	2.22	0.08	0.32	0.51	OK
0.50	9.80	0.33	1.97	0.06	0.39	0.51	OK

Coors Blvd - Drainage Basins Coors and St.Joe's

Roadway Grade (%)	Q(100 YR) in roadway (cfs)	Depth of water in roadway (ft)	Velocity of storm water in roadway (ft/s)	$V^2/2*g$ (ft)	EGL (ft)	ROW Elevation (ft)	COMMENTS
0.80	10.80	0.48	2.64	0.11	0.59	1.00	OK

B-2

EES
1

The Enclave at Oxbow
Street Capacities
4-10-02

BOHANNAN-HUSTON, INC.
Courtyard One
7500 JEFFERSON NE
Albuquerque
NM 87109-4335
voice 505.823.1000
fax 505.821.0892

North End of the Site

See AHYMO summary file for flow rates

Basin 2 / Hummingbird

Q= 4.11 cfs

d= 0.2' < 0.33 roll curb

S= 1.73%

E = 0.29' < 0.51' right of way.

no inlets required.

Rock Dove

Basin 2: 4.1 cfs

Basin 3: 3.9 cfs

Q= 8 cfs

S= 0.6%

d= 0.3' < 0.33' roll curb

E= 0.36' < 0.51' right of way

Rock Dove

changed slope

S= 1%

d= 0.28' < 0.33' roll curb

E= 0.36' < 0.51' right of way

install inlet at low point. one type 'A'

depth over depressed grate=

0.54' < 0.68' right of way over grate

if larger storm occurs, water can overflow into private park/pond

40 YEARS

B-3

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ANYMO SUMMARY TABLE (ANYMO194) - AMAFCA Hydrologic Model - January, 1994          RUN DATE (MON/DAY/YR) =04/10/2002
INPUT FILE =    oxbow.txt                                                                  USER NO.= BOHN_HNM.STE

                                FROM  TO                    PEAK        RUNOFF                TIME TO   CFS      PAGE =    1
                   HYDROGRAPH    ID   ID        AREA     DISCHARGE     VOLUME      RUNOFF      PEAK    PER
COMMAND          IDENTIFICATION  NO.  NO.     (SQ MI)     (CFS)      (AC-FT)    (INCHES)   (HOURS)  ACRE      NOTATION

*S ENCLAVE AT OXBOW
*s BHI JOB #020199
*S 2-26-02
START                                                                                                          TIME=        .00
*S INPUT FILE=020199/CDP/HYDRO/OXBOW.TXT
RAINFALL  TYPE= 1                                                                                              RAIN6=     2.200
COMPUTE NM HYD          1.00   -    1       .00344       5.57       .196     1.50672    1.500    3.565 PER IMP=   60.00
COMPUTE NM HYD          2.00   -    2       .00180       4.11       .145     1.50672    1.500    3.568 PER IMP=   60.00
COMPUTE NM HYD          3.00   -    3       .00170       3.88       .137     1.50672    1.500    3.568 PER IMP=   60.00
COMPUTE NM HYD          4.00   -    4       .00134       3.06       .108     1.50672    1.500    3.572 PER IMP=   60.00
COMPUTE NM HYD          5.00   -    5       .00127       2.90       .102     1.50672    1.500    3.573 PER IMP=   60.00
COMPUTE NM HYD          6.00   -    6       .00156       3.56       .125     1.50672    1.500    3.570 PER IMP=   60.00
COMPUTE NM HYD          7.00   -    7       .00127       2.90       .102     1.50672    1.500    3.573 PER IMP=   60.00
COMPUTE NM HYD          8.00   -    8       .00148       3.38       .119     1.50672    1.500    3.570 PER IMP=   60.00
COMPUTE NM HYD          9.00   -    9       .00106       2.43       .085     1.50672    1.500    3.576 PER IMP=   60.00
COMPUTE NM HYD         10.00   -   10       .00081       1.86       .065     1.50672    1.500    3.583 PER IMP=   60.00
COMPUTE NM HYD         11.00   -   11       .00240       5.48       .193     1.50672    1.500    3.565 PER IMP=   60.00
COMPUTE NM HYD         STJOE   -   15       .00238       5.54       .249     1.96760    1.500    4.305 PER IMP=  100.00
COMPUTE NM HYD         COORS   -   16       .00134       3.69       .141     1.96760    1.500    4.308 PER IMP=  100.00
ADD HYD               OFFSITE 15&16  17      .00372      10.24       .390     1.96745    1.500    4.306
*S COMBINE HYDROGRAPHS FOR BASINS 2+3 and 6+7 and 8+4+5
*S THESE BASINS WILL BE DETAINED IN POND
ADD HYD                23.00  2& 3  20       .00350       7.99       .281     1.50658    1.500    3.568
ADD HYD                67.00  6& 7  21       .00283       6.47       .227     1.50651    1.500    3.572
ADD HYD              2367.00 20&21  22       .00633      14.46       .509     1.50655    1.500    3.569
ADD HYD                45.00  4& 5  23       .00261       5.97       .210     1.50651    1.500    3.572
ADD HYD               458.00  8&23  24       .00409       9.35       .329     1.50652    1.500    3.572
ADD HYD                PND1N 22&24  25       .01042      23.81       .837     1.50654    1.500    3.570
*S ROUTE SURGE POND
ROUTE RESERVOIR         POND   25   50       .01042       6.14       .837     1.50654    1.900     .921 AC-FT=      .418
*S COMBINE HYDROGRAPHS FOR BASINS 10+11+9 and 1
*S THESE BASINS WILL BE CAPTURED BY NEW STORM DRAIN
ADD HYD              1011.00 10&11  31       .00321       7.33       .258     1.50654    1.500    3.569
ADD HYD                10119 31& 9  33       .00427       9.76       .343     1.50651    1.500    3.571
ADD HYD                  FOX  1&33  35       .00671      15.33       .539     1.50654    1.500    3.569
*S ADD EASTERN BASINS TO OUTFLOW FROM SURGE POND
ADD HYD               OFFPND 17&50  60       .01414      14.83      1.227     1.62767    1.500    1.639
ADD HYD                  ALL 60&35  62       .02084      30.15      1.766     1.58868    1.500    2.260
FINISH
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B-4

***** PC PROGRAM STREAM SEPTEMBER 1994 *****

Hummingbird

MANNING'S N= .017 SLOPE= .0173

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	0.42	5	18.00	0.28	9	36.00	0.42
2	4.37	0.33	6	29.00	0.06	10	0.00	0.00
3	5.00	0.00	7	31.00	0.00	11	0.00	0.00
4	7.00	0.06	8	31.63	0.33	12	0.00	0.00

WSEL (FT)	DEPTH INC (FT)	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID (FT)	VEL HEAD (FT)	ENERGY HEAD (FT)
0.01	0.01	0.00	0.0	0.71	0.33	0.70	0.00	0.01
0.02	0.02	0.01	0.0	1.42	0.53	1.41	0.00	0.02
0.03	0.03	0.03	0.0	2.13	0.70	2.11	0.01	0.04
0.04	0.04	0.06	0.0	2.84	0.84	2.82	0.01	0.05
0.05	0.05	0.09	0.1	3.55	0.98	3.52	0.01	0.06
0.06	0.06	0.13	0.1	4.26	1.10	4.23	0.02	0.08
0.07	0.07	0.17	0.2	5.30	1.18	5.27	0.02	0.09
0.08	0.08	0.23	0.3	6.35	1.27	6.31	0.02	0.10
0.09	0.09	0.30	0.4	7.39	1.36	7.34	0.03	0.12
0.10	0.10	0.38	0.6	8.43	1.45	8.38	0.03	0.13
0.11	0.11	0.47	0.7	9.48	1.55	9.42	0.04	0.15
0.12	0.12	0.57	0.9	10.52	1.64	10.46	0.04	0.16
0.13	0.13	0.68	1.2	11.56	1.73	11.50	0.05	0.18
0.14	0.14	0.80	1.5	12.61	1.83	12.53	0.05	0.19
0.15	0.15	0.93	1.8	13.65	1.92	13.57	0.06	0.21
0.16	0.16	1.07	2.1	14.69	2.00	14.61	0.06	0.22
0.17	0.17	1.22	2.6	15.74	2.09	15.65	0.07	0.24
0.18	0.18	1.38	3.0	16.78	2.18	16.69	0.07	0.25
0.19	0.19	1.55	3.5	17.82	2.26	17.73	0.08	0.27
0.20	0.20	1.74	4.1	18.87	2.34	18.76	0.09	0.29
0.21	0.21	1.93	4.7	19.91	2.43	19.80	0.09	0.30
0.22	0.22	2.13	5.3	20.95	2.51	20.84	0.10	0.32
0.23	0.23	2.35	6.1	22.00	2.59	21.88	0.10	0.33
0.24	0.24	2.57	6.8	23.04	2.66	22.92	0.11	0.35
0.25	0.25	2.80	7.7	24.08	2.74	23.95	0.12	0.37
0.26	0.26	3.05	8.6	25.13	2.82	24.99	0.12	0.38
0.27	0.27	3.30	9.6	26.17	2.89	26.03	0.13	0.40
0.28	0.28	3.57	10.6	27.21	2.97	27.07	0.14	0.42
0.29	0.29	3.84	12.0	27.26	3.11	27.11	0.15	0.44
0.30	0.30	4.11	13.4	27.30	3.25	27.15	0.16	0.46
0.31	0.31	4.38	14.9	27.34	3.39	27.18	0.18	0.49
0.32	0.32	4.66	16.4	27.39	3.53	27.22	0.19	0.51
0.33	0.33	4.93	18.0	27.43	3.66	27.26	0.21	0.54
0.34	0.34	5.21	19.3	28.40	3.71	28.23	0.21	0.55
0.35	0.35	5.49	20.7	29.37	3.76	29.20	0.22	0.57
0.36	0.36	5.79	22.1	30.34	3.81	30.17	0.23	0.59
0.37	0.37	6.10	23.5	31.31	3.86	31.14	0.23	0.60
0.38	0.38	6.41	25.1	32.29	3.91	32.12	0.24	0.62
0.39	0.39	6.74	26.7	33.26	3.97	33.09	0.24	0.63
0.40	0.40	7.07	28.4	34.23	4.02	34.06	0.25	0.65
0.41	0.41	7.42	30.2	35.20	4.07	35.03	0.26	0.67
0.42	0.42	7.77	32.1	36.17	4.13	36.00	0.26	0.68

d = 0.2' < 0.33' rock curb

E = 0.29' < 0.51 right of way

***** PC PROGRAM STREAM SEPTEMBER 1994 *****

Rock Dove

MANNING'S N= .017 SLOPE= .006

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	0.42	5	18.00	0.28	9	36.00	0.42
2	4.37	0.33	6	29.00	0.06	10	0.00	0.00
3	5.00	0.00	7	31.00	0.00	11	0.00	0.00
4	7.00	0.06	8	31.63	0.33	12	0.00	0.00

WSEL (FT)	DEPTH INC (FT)	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID (FT)	VEL HEAD (FT)	ENERGY HEAD (FT)
0.01	0.01	0.00	0.0	0.71	0.20	0.70	0.00	0.01
0.02	0.02	0.01	0.0	1.42	0.31	1.41	0.00	0.02
0.03	0.03	0.03	0.0	2.13	0.41	2.11	0.00	0.03
0.04	0.04	0.06	0.0	2.84	0.50	2.82	0.00	0.04
0.05	0.05	0.09	0.1	3.55	0.58	3.52	0.01	0.06
0.06	0.06	0.13	0.1	4.26	0.65	4.23	0.01	0.07
0.07	0.07	0.17	0.1	5.30	0.69	5.27	0.01	0.08
0.08	0.08	0.23	0.2	6.35	0.75	6.31	0.01	0.09
0.09	0.09	0.30	0.2	7.39	0.80	7.34	0.01	0.10
0.10	0.10	0.38	0.3	8.43	0.86	8.38	0.01	0.11
0.11	0.11	0.47	0.4	9.48	0.91	9.42	0.01	0.12
0.12	0.12	0.57	0.5	10.52	0.97	10.46	0.01	0.13
0.13	0.13	0.68	0.7	11.56	1.02	11.50	0.02	0.15
0.14	0.14	0.80	0.9	12.61	1.07	12.53	0.02	0.16
0.15	0.15	0.93	1.0	13.65	1.13	13.57	0.02	0.17
0.16	0.16	1.07	1.3	14.69	1.18	14.61	0.02	0.18
0.17	0.17	1.22	1.5	15.74	1.23	15.65	0.02	0.19
0.18	0.18	1.38	1.8	16.78	1.28	16.69	0.03	0.21
0.19	0.19	1.55	2.1	17.82	1.33	17.73	0.03	0.22
0.20	0.20	1.74	2.4	18.87	1.38	18.76	0.03	0.23
0.21	0.21	1.93	2.8	19.91	1.43	19.80	0.03	0.24
0.22	0.22	2.13	3.1	20.95	1.48	20.84	0.03	0.25
0.23	0.23	2.35	3.6	22.00	1.52	21.88	0.04	0.27
0.24	0.24	2.57	4.0	23.04	1.57	22.92	0.04	0.28
0.25	0.25	2.80	4.5	24.08	1.61	23.95	0.04	0.29
0.26	0.26	3.05	5.1	25.13	1.66	24.99	0.04	0.30
0.27	0.27	3.30	5.6	26.17	1.70	26.03	0.05	0.32
0.28	0.28	3.57	6.2	27.21	1.75	27.07	0.05	0.33
0.29	0.29	3.84	7.0	27.26	1.83	27.11	0.05	0.34
0.30	0.30	4.11	7.9	27.30	1.92	27.15	0.06	0.36
0.31	0.31	4.38	8.8	27.34	2.00	27.18	0.06	0.37
0.32	0.32	4.66	9.7	27.39	2.08	27.22	0.07	0.39
0.33	0.33	4.93	10.6	27.43	2.16	27.26	0.07	0.40
0.34	0.34	5.21	11.4	28.40	2.18	28.23	0.07	0.41
0.35	0.35	5.49	12.2	29.37	2.21	29.20	0.08	0.43
0.36	0.36	5.79	13.0	30.34	2.24	30.17	0.08	0.44
0.37	0.37	6.10	13.9	31.31	2.27	31.14	0.08	0.45
0.38	0.38	6.41	14.8	32.29	2.30	32.12	0.08	0.46
0.39	0.39	6.74	15.7	33.26	2.34	33.09	0.08	0.47
0.40	0.40	7.07	16.7	34.23	2.37	34.06	0.09	0.49
0.41	0.41	7.42	17.8	35.20	2.40	35.03	0.09	0.50
0.42	0.42	7.77	18.9	36.17	2.43	36.00	0.09	0.51

Q= 8 cfs

d = 0.3' < 0.33' roll curb

E = 0.36 < 0.51 right of way

***** PC PROGRAM STREAM SEPTEMBER 1994 *****

Rock Dove

MANNING'S N= .017 SLOPE= .01

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	0.42	5	18.00	0.28	9	36.00	0.42
2	4.37	0.33	6	29.00	0.06	10	0.00	0.00
3	5.00	0.00	7	31.00	0.00	11	0.00	0.00
4	7.00	0.06	8	31.63	0.33	12	0.00	0.00

WSEL (FT)	DEPTH INC (FT)	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID (FT)	VEL HEAD (FT)	ENERGY HEAD (FT)
0.01	0.01	0.00	0.0	0.71	0.25	0.70	0.00	0.01
0.02	0.02	0.01	0.0	1.42	0.40	1.41	0.00	0.02
0.03	0.03	0.03	0.0	2.13	0.53	2.11	0.00	0.03
0.04	0.04	0.06	0.0	2.84	0.64	2.82	0.01	0.05
0.05	0.05	0.09	0.1	3.55	0.74	3.52	0.01	0.06
0.06	0.06	0.13	0.1	4.26	0.84	4.23	0.01	0.07
0.07	0.07	0.17	0.2	5.30	0.90	5.27	0.01	0.08
0.08	0.08	0.23	0.2	6.35	0.96	6.31	0.01	0.09
0.09	0.09	0.30	0.3	7.39	1.03	7.34	0.02	0.11
0.10	0.10	0.38	0.4	8.43	1.11	8.38	0.02	0.12
0.11	0.11	0.47	0.6	9.48	1.18	9.42	0.02	0.13
0.12	0.12	0.57	0.7	10.52	1.25	10.46	0.02	0.14
0.13	0.13	0.68	0.9	11.56	1.32	11.50	0.03	0.16
0.14	0.14	0.80	1.1	12.61	1.39	12.53	0.03	0.17
0.15	0.15	0.93	1.4	13.65	1.46	13.57	0.03	0.18
0.16	0.16	1.07	1.6	14.69	1.52	14.61	0.04	0.20
0.17	0.17	1.22	1.9	15.74	1.59	15.65	0.04	0.21
0.18	0.18	1.38	2.3	16.78	1.65	16.69	0.04	0.22
0.19	0.19	1.55	2.7	17.82	1.72	17.73	0.05	0.24
0.20	0.20	1.74	3.1	18.87	1.78	18.76	0.05	0.25
0.21	0.21	1.93	3.6	19.91	1.84	19.80	0.05	0.26
0.22	0.22	2.13	4.1	20.95	1.91	20.84	0.06	0.28
0.23	0.23	2.35	4.6	22.00	1.97	21.88	0.06	0.29
0.24	0.24	2.57	5.2	23.04	2.03	22.92	0.06	0.30
0.25	0.25	2.80	5.8	24.08	2.08	23.95	0.07	0.32
0.26	0.26	3.05	6.5	25.13	2.14	24.99	0.07	0.33
0.27	0.27	3.30	7.3	26.17	2.20	26.03	0.08	0.35
0.28	0.28	3.57	8.1	27.21	2.26	27.07	0.08	0.36
0.29	0.29	3.84	9.1	27.26	2.37	27.11	0.09	0.38
0.30	0.30	4.11	10.2	27.30	2.47	27.15	0.10	0.40
0.31	0.31	4.38	11.3	27.34	2.58	27.18	0.10	0.41
0.32	0.32	4.66	12.5	27.39	2.68	27.22	0.11	0.43
0.33	0.33	4.93	13.7	27.43	2.78	27.26	0.12	0.45
0.34	0.34	5.21	14.7	28.40	2.82	28.23	0.12	0.46
0.35	0.35	5.49	15.7	29.37	2.86	29.20	0.13	0.48
0.36	0.36	5.79	16.8	30.34	2.90	30.17	0.13	0.49
0.37	0.37	6.10	17.9	31.31	2.94	31.14	0.13	0.50
0.38	0.38	6.41	19.1	32.29	2.98	32.12	0.14	0.52
0.39	0.39	6.74	20.3	33.26	3.02	33.09	0.14	0.53
0.40	0.40	7.07	21.6	34.23	3.06	34.06	0.14	0.54
0.41	0.41	7.42	23.0	35.20	3.10	35.03	0.15	0.56
0.42	0.42	7.77	24.4	36.17	3.14	36.00	0.15	0.57

Q=8cfs

d= 0.28' < 0.33' roll curb

E= 0.36' < 0.51 right of way

B-7

South west end of site

Blue Jay
Basin 7
Q= 2.9 cfs.
S= 0.7%
d= 0.21' < 0.33' roll curb
E= 0.25' < 0.51' right of way
no inlets required.

BOHANNAN-HUSTON, INC.
Courtyard One
7500 JEFFERSON NE
Albuquerque
NM 87109-4335
voice 505.823.1000
fax 505.821.0892

Rock dove South

Q= 2.9 Basin 7
+ 3.6 Basin 6
6.5 cfs

S= 0.6%
d= 0.29' < 0.33' roll curb
E= 0.33' < 0.51' right of way

Total flow at low point of Rock Dove
Q= 8 cfs Basins 2+3
+ 6.5 cfs Basins 6+7
14.5 total

install one type 'A' inlet at low point
depth over depressed grate =
0.54' < 0.68' right of way over grate
if a large storm occurs, water can overflow into the private pond/park.

***** PC PROGRAM STREAM SEPTEMBER 1994 *****

Blue Jay

MANNING'S N= .017 SLOPE= .007

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	0.42	5	18.00	0.28	9	36.00	0.42
2	4.37	0.33	6	29.00	0.06	10	0.00	0.00
3	5.00	0.00	7	31.00	0.00	11	0.00	0.00
4	7.00	0.06	8	31.63	0.33	12	0.00	0.00

WSEL (FT)	DEPTH INC (FT)	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID (FT)	VEL HEAD (FT)	ENERGY HEAD (FT)
0.01	0.01	0.00	0.0	0.71	0.21	0.70	0.00	0.01
0.02	0.02	0.01	0.0	1.42	0.34	1.41	0.00	0.02
0.03	0.03	0.03	0.0	2.13	0.44	2.11	0.00	0.03
0.04	0.04	0.06	0.0	2.84	0.54	2.82	0.00	0.04
0.05	0.05	0.09	0.1	3.55	0.62	3.52	0.01	0.06
0.06	0.06	0.13	0.1	4.26	0.70	4.23	0.01	0.07
0.07	0.07	0.17	0.1	5.30	0.75	5.27	0.01	0.08
0.08	0.08	0.23	0.2	6.35	0.81	6.31	0.01	0.09
0.09	0.09	0.30	0.3	7.39	0.86	7.34	0.01	0.10
0.10	0.10	0.38	0.4	8.43	0.92	8.38	0.01	0.11
0.11	0.11	0.47	0.5	9.48	0.98	9.42	0.02	0.13
0.12	0.12	0.57	0.6	10.52	1.04	10.46	0.02	0.14
0.13	0.13	0.68	0.7	11.56	1.10	11.50	0.02	0.15
0.14	0.14	0.80	0.9	12.61	1.16	12.53	0.02	0.16
0.15	0.15	0.93	1.1	13.65	1.22	13.57	0.02	0.17
0.16	0.16	1.07	1.4	14.69	1.27	14.61	0.03	0.19
0.17	0.17	1.22	1.6	15.74	1.33	15.65	0.03	0.20
0.18	0.18	1.38	1.9	16.78	1.38	16.69	0.03	0.21
0.19	0.19	1.55	2.2	17.82	1.44	17.73	0.03	0.22
0.20	0.20	1.74	2.6	18.87	1.49	18.76	0.03	0.23
0.21	0.21	1.93	3.0	19.91	1.54	19.80	0.04	0.25
0.22	0.22	2.13	3.4	20.95	1.59	20.84	0.04	0.26
0.23	0.23	2.35	3.9	22.00	1.64	21.88	0.04	0.27
0.24	0.24	2.57	4.4	23.04	1.69	22.92	0.04	0.28
0.25	0.25	2.80	4.9	24.08	1.74	23.95	0.05	0.30
0.26	0.26	3.05	5.5	25.13	1.79	24.99	0.05	0.31
0.27	0.27	3.30	6.1	26.17	1.84	26.03	0.05	0.32
0.28	0.28	3.57	6.7	27.21	1.89	27.07	0.06	0.34
0.29	0.29	3.84	7.6	27.26	1.98	27.11	0.06	0.35
0.30	0.30	4.11	8.5	27.30	2.07	27.15	0.07	0.37
0.31	0.31	4.38	9.5	27.34	2.16	27.18	0.07	0.38
0.32	0.32	4.66	10.4	27.39	2.24	27.22	0.08	0.40
0.33	0.33	4.93	11.5	27.43	2.33	27.26	0.08	0.41
0.34	0.34	5.21	12.3	28.40	2.36	28.23	0.09	0.43
0.35	0.35	5.49	13.1	29.37	2.39	29.20	0.09	0.44
0.36	0.36	5.79	14.0	30.34	2.42	30.17	0.09	0.45
0.37	0.37	6.10	15.0	31.31	2.46	31.14	0.09	0.46
0.38	0.38	6.41	16.0	32.29	2.49	32.12	0.10	0.48
0.39	0.39	6.74	17.0	33.26	2.52	33.09	0.10	0.49
0.40	0.40	7.07	18.1	34.23	2.56	34.06	0.10	0.50
0.41	0.41	7.42	19.2	35.20	2.59	35.03	0.10	0.51
0.42	0.42	7.77	20.4	36.17	2.62	36.00	0.11	0.53

Q= 29 cfs

d= 0.21'

E= 0.25'

***** PC PROGRAM STREAM SEPTEMBER 1994 *****

Rock Dove

MANNING'S N= .017 SLOPE= .006

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	0.42	5	18.00	0.28	9	36.00	0.42
2	4.37	0.33	6	29.00	0.06	10	0.00	0.00
3	5.00	0.00	7	31.00	0.00	11	0.00	0.00
4	7.00	0.06	8	31.63	0.33	12	0.00	0.00

WSEL (FT)	DEPTH INC (FT)	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID (FT)	VEL HEAD (FT)	ENERGY HEAD (FT)
0.01	0.01	0.00	0.0	0.71	0.20	0.70	0.00	0.01
0.02	0.02	0.01	0.0	1.42	0.31	1.41	0.00	0.02
0.03	0.03	0.03	0.0	2.13	0.41	2.11	0.00	0.03
0.04	0.04	0.06	0.0	2.84	0.50	2.82	0.00	0.04
0.05	0.05	0.09	0.1	3.55	0.58	3.52	0.01	0.06
0.06	0.06	0.13	0.1	4.26	0.65	4.23	0.01	0.07
0.07	0.07	0.17	0.1	5.30	0.69	5.27	0.01	0.08
0.08	0.08	0.23	0.2	6.35	0.75	6.31	0.01	0.09
0.09	0.09	0.30	0.2	7.39	0.80	7.34	0.01	0.10
0.10	0.10	0.38	0.3	8.43	0.86	8.38	0.01	0.11
0.11	0.11	0.47	0.4	9.48	0.91	9.42	0.01	0.12
0.12	0.12	0.57	0.5	10.52	0.97	10.46	0.01	0.13
0.13	0.13	0.68	0.7	11.56	1.02	11.50	0.02	0.15
0.14	0.14	0.80	0.9	12.61	1.07	12.53	0.02	0.16
0.15	0.15	0.93	1.0	13.65	1.13	13.57	0.02	0.17
0.16	0.16	1.07	1.3	14.69	1.18	14.61	0.02	0.18
0.17	0.17	1.22	1.5	15.74	1.23	15.65	0.02	0.19
0.18	0.18	1.38	1.8	16.78	1.28	16.69	0.03	0.21
0.19	0.19	1.55	2.1	17.82	1.33	17.73	0.03	0.22
0.20	0.20	1.74	2.4	18.87	1.38	18.76	0.03	0.23
0.21	0.21	1.93	2.8	19.91	1.43	19.80	0.03	0.24
0.22	0.22	2.13	3.1	20.95	1.48	20.84	0.03	0.25
0.23	0.23	2.35	3.6	22.00	1.52	21.88	0.04	0.27
0.24	0.24	2.57	4.0	23.04	1.57	22.92	0.04	0.28
0.25	0.25	2.80	4.5	24.08	1.61	23.95	0.04	0.29
0.26	0.26	3.05	5.1	25.13	1.66	24.99	0.04	0.30
0.27	0.27	3.30	5.6	26.17	1.70	26.03	0.05	0.32
0.28	0.28	3.57	6.2	27.21	1.75	27.07	0.05	0.33
0.29	0.29	3.84	7.0	27.26	1.83	27.11	0.05	0.34
0.30	0.30	4.11	7.9	27.30	1.92	27.15	0.06	0.36
0.31	0.31	4.38	8.8	27.34	2.00	27.18	0.06	0.37
0.32	0.32	4.66	9.7	27.39	2.08	27.22	0.07	0.39
0.33	0.33	4.93	10.6	27.43	2.16	27.26	0.07	0.40
0.34	0.34	5.21	11.4	28.40	2.18	28.23	0.07	0.41
0.35	0.35	5.49	12.2	29.37	2.21	29.20	0.08	0.43
0.36	0.36	5.79	13.0	30.34	2.24	30.17	0.08	0.44
0.37	0.37	6.10	13.9	31.31	2.27	31.14	0.08	0.45
0.38	0.38	6.41	14.8	32.29	2.30	32.12	0.08	0.46
0.39	0.39	6.74	15.7	33.26	2.34	33.09	0.08	0.47
0.40	0.40	7.07	16.7	34.23	2.37	34.06	0.09	0.49
0.41	0.41	7.42	17.8	35.20	2.40	35.03	0.09	0.50
0.42	0.42	7.77	18.9	36.17	2.43	36.00	0.09	0.51

Q= 6.5cfs

d= 0.29' < 0.33' roll curb

E= 0.33' < 0.51' right of way

GRATE OPEN AREA

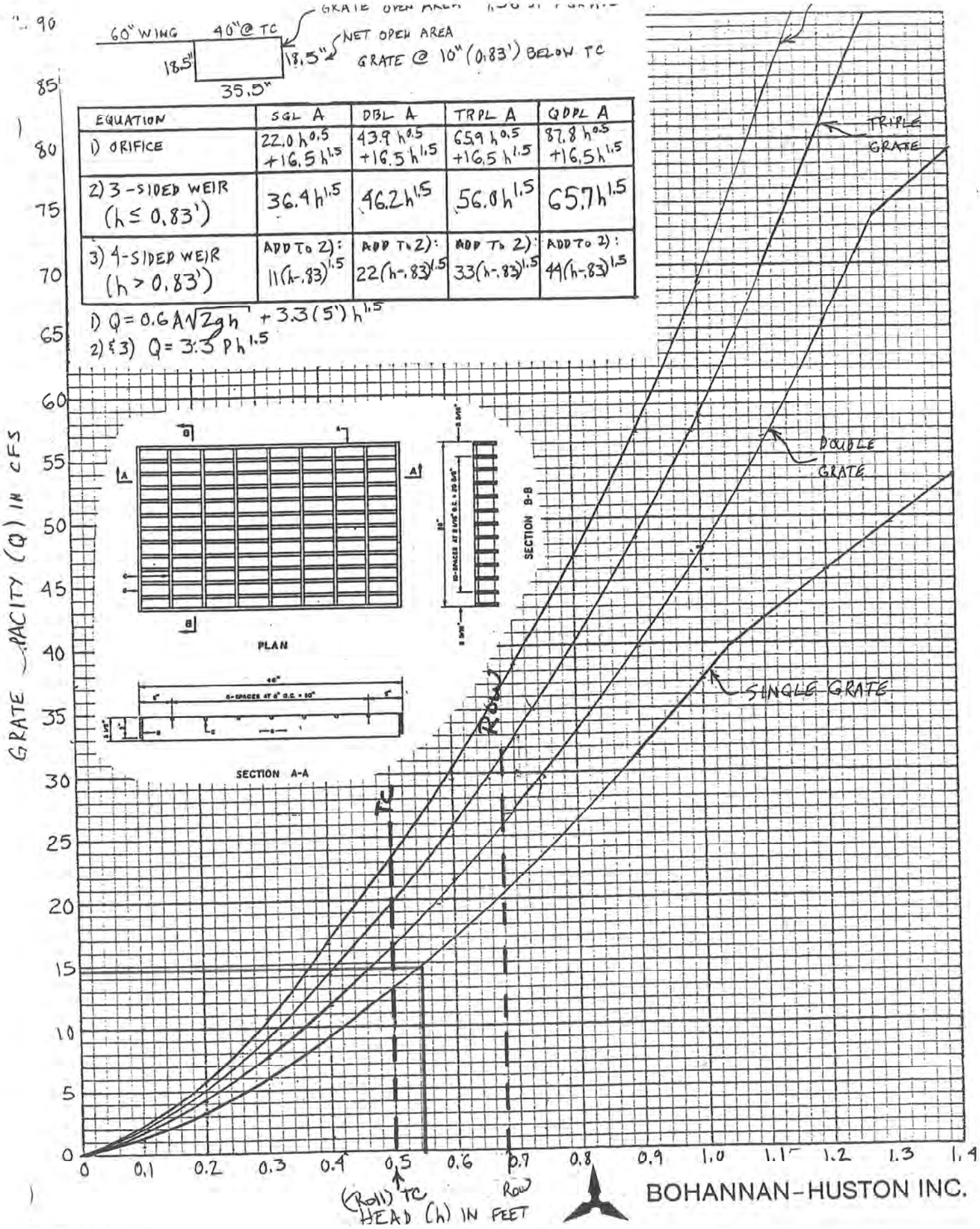
NET OPEN AREA

GRATE @ 10" (0.83') BELOW TC

EQUATION	SGL A	DBL A	TRPL A	QDPL A
1) ORIFICE	$22.0h^{0.5} + 16.5h^{1.5}$	$43.9h^{0.5} + 16.5h^{1.5}$	$65.9h^{0.5} + 16.5h^{1.5}$	$87.8h^{0.5} + 16.5h^{1.5}$
2) 3-SIDED WEIR ($h \le 0.83'$)	$36.4h^{1.5}$	$46.2h^{1.5}$	$56.0h^{1.5}$	$65.7h^{1.5}$
3) 4-SIDED WEIR ($h > 0.83'$)	ADD TO 2): $11(h-.83)^{1.5}$	ADD TO 2): $22(h-.83)^{1.5}$	ADD TO 2): $33(h-.83)^{1.5}$	ADD TO 2): $44(h-.83)^{1.5}$

1) $Q = 0.6A\sqrt{2gh} + 3.3(5')h^{1.5}$

2) & 3) $Q = 3.3Ph^{1.5}$



Lowpoint at Park
1- 0.54'

PROJECT NAME ENCLAVE @ Oxbow SHEET ____ OF ____

PROJECT NO. 020199 BY JPK DATE 4/9/92

SUBJECT RATING CURVE FOR TYPE A INLETS CH'D ____ DATE ____

BOHANNAN-HUSTON, INC.
Courtyard One
7500 JEFFERSON NE
Albuquerque
NM 87109-4335
voice 505.823.1000
fax 505.821.0892

North east corner of site

FOX SPARROW

Basin 1

Q = 5.6 cfs

S = 2.3%

d = 0.21' < 0.33' roll curb

E = 0.33' < 0.51' right of way

change in slope

S = .0127 1.27%

d = 0.24' < 0.33' roll curb

E = 0.32' < 0.51' right of way

inlet will be installed at low point

roll curb is sufficient

South east corner

Basin 10 = 1.9 cfs Basin 9 = 2.4 cfs

Basin 11 = 5.5 cfs

7.4 cfs + 2.4 = 9.8 cfs

S = 0.5%

d = 0.33 ≤ 0.33' roll curb

E = 0.39' < 0.51' right of way

install inlet

Total flow at low point:

9.8 cfs Basins 10+11 +9

5.6 cfs Basin 1

15.4 cfs

depth over depressed grate =

0.56' < 0.68' right of way

overflow can enter pond directly if a larger storm occurs

***** PC PROGRAM STREAM SEPTEMBER 1994 *****

Fox Sparrow

MANNING'S N= .017 SLOPE= .023

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	0.42	5	18.00	0.28	9	36.00	0.42
2	4.37	0.33	6	29.00	0.06	10	0.00	0.00
3	5.00	0.00	7	31.00	0.00	11	0.00	0.00
4	7.00	0.06	8	31.63	0.33	12	0.00	0.00

WSEL (FT)	DEPTH INC (FT)	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID (FT)	VEL HEAD (FT)	ENERGY HEAD (FT)
0.01	0.01	0.00	0.0	0.71	0.39	0.70	0.00	0.01
0.02	0.02	0.01	0.0	1.42	0.61	1.41	0.01	0.03
0.03	0.03	0.03	0.0	2.13	0.80	2.11	0.01	0.04
0.04	0.04	0.06	0.1	2.84	0.97	2.82	0.01	0.05
0.05	0.05	0.09	0.1	3.55	1.13	3.52	0.02	0.07
0.06	0.06	0.13	0.2	4.26	1.27	4.23	0.03	0.09
0.07	0.07	0.17	0.2	5.30	1.36	5.27	0.03	0.10
0.08	0.08	0.23	0.3	6.35	1.46	6.31	0.03	0.11
0.09	0.09	0.30	0.5	7.39	1.57	7.34	0.04	0.13
0.10	0.10	0.38	0.6	8.43	1.68	8.38	0.04	0.14
0.11	0.11	0.47	0.8	9.48	1.78	9.42	0.05	0.16
0.12	0.12	0.57	1.1	10.52	1.89	10.46	0.06	0.18
0.13	0.13	0.68	1.4	11.56	2.00	11.50	0.06	0.19
0.14	0.14	0.80	1.7	12.61	2.10	12.53	0.07	0.21
0.15	0.15	0.93	2.0	13.65	2.21	13.57	0.08	0.23
0.16	0.16	1.07	2.5	14.69	2.31	14.61	0.08	0.24
0.17	0.17	1.22	2.9	15.74	2.41	15.65	0.09	0.26
0.18	0.18	1.38	3.5	16.78	2.51	16.69	0.10	0.28
0.19	0.19	1.55	4.1	17.82	2.61	17.73	0.11	0.30
0.20	0.20	1.74	4.7	18.87	2.70	18.76	0.11	0.31
0.21	0.21	1.93	5.4	19.91	2.80	19.80	0.12	0.33
0.22	0.22	2.13	6.2	20.95	2.89	20.84	0.13	0.35
0.23	0.23	2.35	7.0	22.00	2.98	21.88	0.14	0.37
0.24	0.24	2.57	7.9	23.04	3.07	22.92	0.15	0.39
0.25	0.25	2.80	8.9	24.08	3.16	23.95	0.16	0.41
0.26	0.26	3.05	9.9	25.13	3.25	24.99	0.16	0.42
0.27	0.27	3.30	11.0	26.17	3.34	26.03	0.17	0.44
0.28	0.28	3.57	12.2	27.21	3.42	27.07	0.18	0.46
0.29	0.29	3.84	13.8	27.26	3.59	27.11	0.20	0.49
0.30	0.30	4.11	15.4	27.30	3.75	27.15	0.22	0.52
0.31	0.31	4.38	17.1	27.34	3.91	27.18	0.24	0.55
0.32	0.32	4.66	18.9	27.39	4.07	27.22	0.26	0.58
0.33	0.33	4.93	20.8	27.43	4.22	27.26	0.28	0.61
0.34	0.34	5.21	22.3	28.40	4.28	28.23	0.28	0.62
0.35	0.35	5.49	23.8	29.37	4.34	29.20	0.29	0.64
0.36	0.36	5.79	25.4	30.34	4.39	30.17	0.30	0.66
0.37	0.37	6.10	27.1	31.31	4.45	31.14	0.31	0.68
0.38	0.38	6.41	28.9	32.29	4.51	32.12	0.32	0.70
0.39	0.39	6.74	30.8	33.26	4.57	33.09	0.32	0.71
0.40	0.40	7.07	32.8	34.23	4.63	34.06	0.33	0.73
0.41	0.41	7.42	34.8	35.20	4.70	35.03	0.34	0.75
0.42	0.42	7.77	37.0	36.17	4.76	36.00	0.35	0.77

Q=5.4cfs
d= 0.21 < 0.33' roll curb
E= 0.33 < 0.51' right of way

***** PC PROGRAM STREAM SEPTEMBER 1994 *****

Fox Sparrow

MANNING'S N= .017 SLOPE= .0127

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	0.42	5	18.00	0.28	9	36.00	0.42
2	4.37	0.33	6	29.00	0.06	10	0.00	0.00
3	5.00	0.00	7	31.00	0.00	11	0.00	0.00
4	7.00	0.06	8	31.63	0.33	12	0.00	0.00

WSEL (FT)	DEPTH INC (FT)	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID (FT)	VEL HEAD (FT)	ENERGY HEAD (FT)
0.01	0.01	0.00	0.0	0.71	0.29	0.70	0.00	0.01
0.02	0.02	0.01	0.0	1.42	0.45	1.41	0.00	0.02
0.03	0.03	0.03	0.0	2.13	0.60	2.11	0.01	0.04
0.04	0.04	0.06	0.0	2.84	0.72	2.82	0.01	0.05
0.05	0.05	0.09	0.1	3.55	0.84	3.52	0.01	0.06
0.06	0.06	0.13	0.1	4.26	0.95	4.23	0.01	0.07
0.07	0.07	0.17	0.2	5.30	1.01	5.27	0.02	0.09
0.08	0.08	0.23	0.3	6.35	1.09	6.31	0.02	0.10
0.09	0.09	0.30	0.3	7.39	1.16	7.34	0.02	0.11
0.10	0.10	0.38	0.5	8.43	1.25	8.38	0.02	0.12
0.11	0.11	0.47	0.6	9.48	1.33	9.42	0.03	0.14
0.12	0.12	0.57	0.8	10.52	1.41	10.46	0.03	0.15
0.13	0.13	0.68	1.0	11.56	1.49	11.50	0.03	0.16
0.14	0.14	0.80	1.2	12.61	1.56	12.53	0.04	0.18
0.15	0.15	0.93	1.5	13.65	1.64	13.57	0.04	0.19
0.16	0.16	1.07	1.8	14.69	1.72	14.61	0.05	0.21
0.17	0.17	1.22	2.2	15.74	1.79	15.65	0.05	0.22
0.18	0.18	1.38	2.6	16.78	1.86	16.69	0.05	0.23
0.19	0.19	1.55	3.0	17.82	1.94	17.73	0.06	0.25
0.20	0.20	1.74	3.5	18.87	2.01	18.76	0.06	0.26
0.21	0.21	1.93	4.0	19.91	2.08	19.80	0.07	0.28
0.22	0.22	2.13	4.6	20.95	2.15	20.84	0.07	0.29
0.23	0.23	2.35	5.2	22.00	2.22	21.88	0.08	0.31
0.24	0.24	2.57	5.9	23.04	2.28	22.92	0.08	0.32
0.25	0.25	2.80	6.6	24.08	2.35	23.95	0.09	0.34
0.26	0.26	3.05	7.4	25.13	2.41	24.99	0.09	0.35
0.27	0.27	3.30	8.2	26.17	2.48	26.03	0.10	0.37
0.28	0.28	3.57	9.1	27.21	2.54	27.07	0.10	0.38
0.29	0.29	3.84	10.2	27.26	2.67	27.11	0.11	0.40
0.30	0.30	4.11	11.5	27.30	2.79	27.15	0.12	0.42
0.31	0.31	4.38	12.7	27.34	2.91	27.18	0.13	0.44
0.32	0.32	4.66	14.1	27.39	3.02	27.22	0.14	0.46
0.33	0.33	4.93	15.5	27.43	3.14	27.26	0.15	0.48
0.34	0.34	5.21	16.5	28.40	3.18	28.23	0.16	0.50
0.35	0.35	5.49	17.7	29.37	3.22	29.20	0.16	0.51
0.36	0.36	5.79	18.9	30.34	3.26	30.17	0.17	0.53
0.37	0.37	6.10	20.2	31.31	3.31	31.14	0.17	0.54
0.38	0.38	6.41	21.5	32.29	3.35	32.12	0.17	0.55
0.39	0.39	6.74	22.9	33.26	3.40	33.09	0.18	0.57
0.40	0.40	7.07	24.4	34.23	3.44	34.06	0.18	0.58
0.41	0.41	7.42	25.9	35.20	3.49	35.03	0.19	0.60
0.42	0.42	7.77	27.5	36.17	3.53	36.00	0.19	0.61

Q=5.6cfs

***** PC PROGRAM STREAM SEPTEMBER 1994 *****

Fox Sparrow

MANNING'S N= .017 SLOPE= .005

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	0.42	5	18.00	0.28	9	36.00	0.42
2	4.37	0.33	6	29.00	0.06	10	0.00	0.00
3	5.00	0.00	7	31.00	0.00	11	0.00	0.00
4	7.00	0.06	8	31.63	0.33	12	0.00	0.00

WSEL (FT)	DEPTH INC (FT)	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID (FT)	VEL HEAD (FT)	ENERGY HEAD (FT)
0.01	0.01	0.00	0.0	0.71	0.18	0.70	0.00	0.01
0.02	0.02	0.01	0.0	1.42	0.29	1.41	0.00	0.02
0.03	0.03	0.03	0.0	2.13	0.37	2.11	0.00	0.03
0.04	0.04	0.06	0.0	2.84	0.45	2.82	0.00	0.04
0.05	0.05	0.09	0.0	3.55	0.53	3.52	0.00	0.05
0.06	0.06	0.13	0.1	4.26	0.59	4.23	0.01	0.07
0.07	0.07	0.17	0.1	5.30	0.63	5.27	0.01	0.08
0.08	0.08	0.23	0.2	6.35	0.68	6.31	0.01	0.09
0.09	0.09	0.30	0.2	7.39	0.73	7.34	0.01	0.10
0.10	0.10	0.38	0.3	8.43	0.78	8.38	0.01	0.11
0.11	0.11	0.47	0.4	9.48	0.83	9.42	0.01	0.12
0.12	0.12	0.57	0.5	10.52	0.88	10.46	0.01	0.13
0.13	0.13	0.68	0.6	11.56	0.93	11.50	0.01	0.14
0.14	0.14	0.80	0.8	12.61	0.98	12.53	0.01	0.15
0.15	0.15	0.93	1.0	13.65	1.03	13.57	0.02	0.17
0.16	0.16	1.07	1.2	14.69	1.08	14.61	0.02	0.18
0.17	0.17	1.22	1.4	15.74	1.12	15.65	0.02	0.19
0.18	0.18	1.38	1.6	16.78	1.17	16.69	0.02	0.20
0.19	0.19	1.55	1.9	17.82	1.22	17.73	0.02	0.21
0.20	0.20	1.74	2.2	18.87	1.26	18.76	0.02	0.22
0.21	0.21	1.93	2.5	19.91	1.30	19.80	0.03	0.24
0.22	0.22	2.13	2.9	20.95	1.35	20.84	0.03	0.25
0.23	0.23	2.35	3.3	22.00	1.39	21.88	0.03	0.26
0.24	0.24	2.57	3.7	23.04	1.43	22.92	0.03	0.27
0.25	0.25	2.80	4.1	24.08	1.47	23.95	0.03	0.28
0.26	0.26	3.05	4.6	25.13	1.51	24.99	0.04	0.30
0.27	0.27	3.30	5.1	26.17	1.56	26.03	0.04	0.31
0.28	0.28	3.57	5.7	27.21	1.60	27.07	0.04	0.32
0.29	0.29	3.84	6.4	27.26	1.67	27.11	0.04	0.33
0.30	0.30	4.11	7.2	27.30	1.75	27.15	0.05	0.35
0.31	0.31	4.38	8.0	27.34	1.82	27.18	0.05	0.36
0.32	0.32	4.66	8.8	27.39	1.90	27.22	0.06	0.38
0.33	0.33	4.93	9.7	27.43	1.97	27.26	0.06	0.39
0.34	0.34	5.21	10.4	28.40	1.99	28.23	0.06	0.40
0.35	0.35	5.49	11.1	29.37	2.02	29.20	0.06	0.41
0.36	0.36	5.79	11.9	30.34	2.05	30.17	0.07	0.43
0.37	0.37	6.10	12.7	31.31	2.08	31.14	0.07	0.44
0.38	0.38	6.41	13.5	32.29	2.10	32.12	0.07	0.45
0.39	0.39	6.74	14.4	33.26	2.13	33.09	0.07	0.46
0.40	0.40	7.07	15.3	34.23	2.16	34.06	0.07	0.47
0.41	0.41	7.42	16.2	35.20	2.19	35.03	0.07	0.48
0.42	0.42	7.77	17.2	36.17	2.22	36.00	0.08	0.50

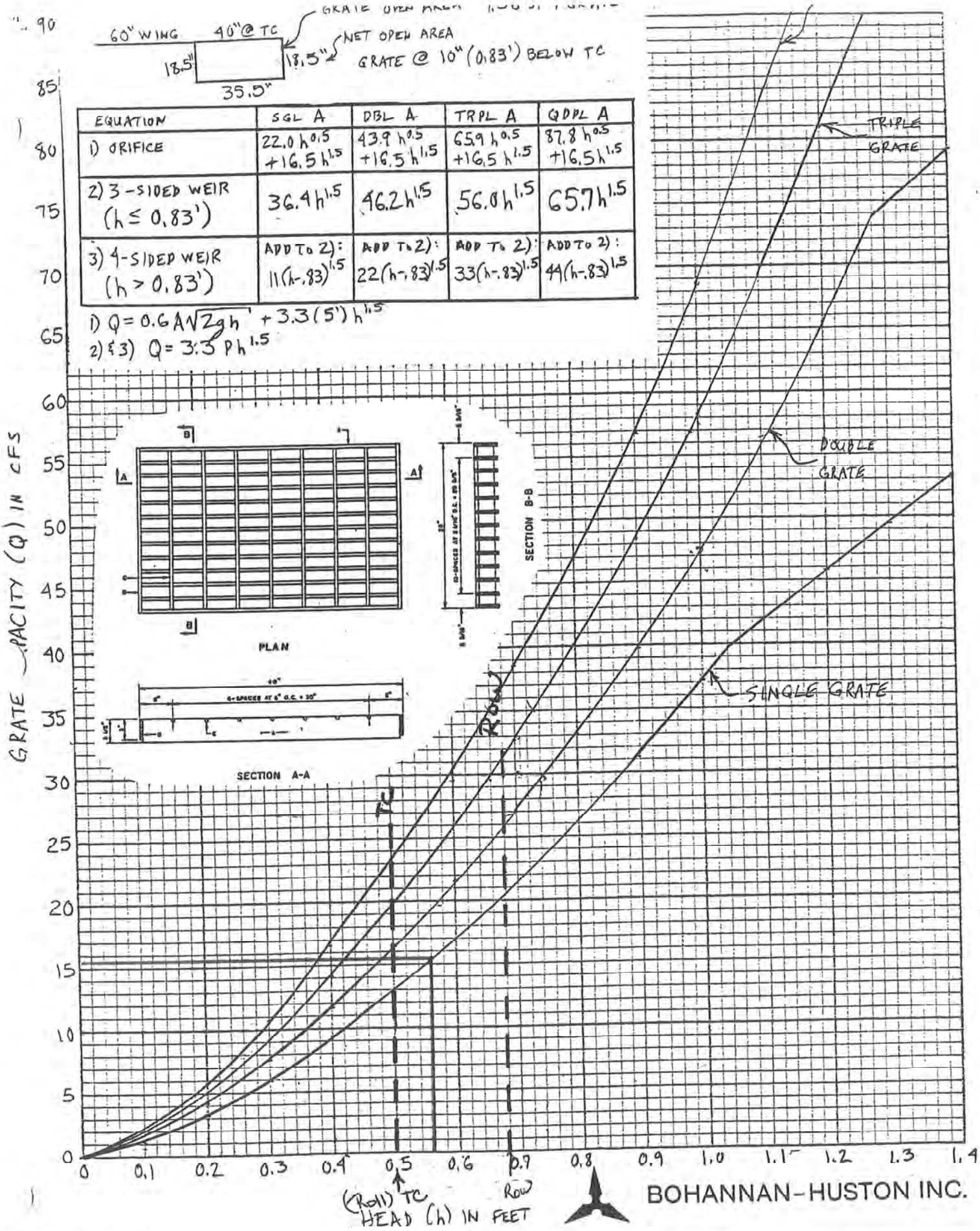
Q=9.8 cfs.

GRATE @ 10" (0.83') BELOW TC

EQUATION	SGL A	DBL A	TRPL A	QDPL A
1) ORIFICE	$22.0h^{0.5} + 16.5h^{1.5}$	$43.9h^{0.5} + 16.5h^{1.5}$	$65.9h^{0.5} + 16.5h^{1.5}$	$87.8h^{0.5} + 16.5h^{1.5}$
2) 3-SIDED WEIR ($h \le 0.83'$)	$36.4h^{1.5}$	$46.2h^{1.5}$	$56.0h^{1.5}$	$65.7h^{1.5}$
3) 4-SIDED WEIR ($h > 0.83'$)	ADD TO 2): $11(h-.83)^{1.5}$	ADD TO 2): $22(h-.83)^{1.5}$	ADD TO 2): $33(h-.83)^{1.5}$	ADD TO 2): $44(h-.83)^{1.5}$

1) $Q = 0.6A\sqrt{2gh} + 3.3(5')h^{1.5}$

2) & 3) $Q = 3.3Ph^{1.5}$



Lowpoint at Park

d = 0.56'

PROJECT NAME ENCLAVE @ Oxbow SHEET ____ OF ____

PROJECT NO. 020199 BY JPK DATE 4/9/92

SUBJECT RATING CURVE FOR TYPE A INLETS CH'D ____ DATE B-16

COORS BLVD

INLETS NORTH OF ENCLAVE ENTRANCE

Q= 6.54 from St. Josephs Drive
+ 0.57 added landscaped area
+ 3.69 Coors

10.8 cfs

S= 0.8%
d= 0.48 < 0.67' Std curb
E= 0.59 < 0.83' right of way.

install inlets - 2 type 'A' inlets
5.4 cfs/grate

BOHANNAN-HUSTON, INC.
Courtyard One
7500 JEFFERSON NE
Albuquerque
NM 87109-4335
voice 505.823.1000
fax 505.821.0892

COORS HALF STREET FLOW

***** PC PROGRAM STREAM SEPTEMBER 1994 *****

MANNING'S N= .017 SLOPE= .008

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1	0.00	1.13	3	52.00	0.00	5	62.00	0.87
2	50.00	0.13	4	52.20	0.67	6	0.00	0.00

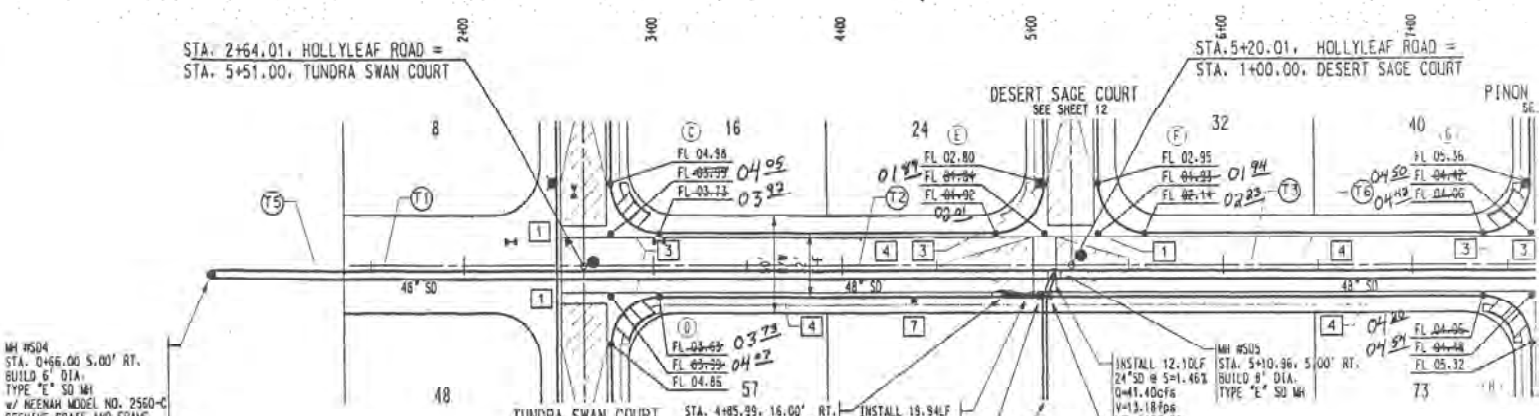
WSEL (FT)	DEPTH INC (FT)	FLOW AREA SQ.FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID (FT)	VEL HEAD (FT)	ENERGY HEAD (FT)
0.01	0.01	0.00	0.0	0.16	0.22	0.16	0.00	0.01
0.02	0.02	0.00	0.0	0.33	0.35	0.31	0.00	0.02
0.03	0.03	0.01	0.0	0.49	0.46	0.47	0.00	0.03
0.04	0.04	0.01	0.0	0.66	0.56	0.63	0.00	0.04
0.05	0.05	0.02	0.0	0.82	0.65	0.78	0.01	0.06
0.06	0.06	0.03	0.0	0.99	0.73	0.94	0.01	0.07
0.07	0.07	0.04	0.0	1.15	0.81	1.10	0.01	0.08
0.08	0.08	0.05	0.0	1.32	0.89	1.25	0.01	0.09
0.09	0.09	0.06	0.1	1.48	0.96	1.41	0.01	0.10
0.10	0.10	0.08	0.1	1.65	1.03	1.57	0.02	0.12
0.11	0.11	0.09	0.1	1.81	1.09	1.73	0.02	0.13
0.12	0.12	0.11	0.1	1.98	1.16	1.88	0.02	0.14
0.13	0.13	0.13	0.2	2.14	1.22	2.04	0.02	0.15
0.14	0.14	0.16	0.2	2.65	1.18	2.54	0.02	0.16
0.15	0.15	0.18	0.2	3.16	1.17	3.04	0.02	0.17
0.16	0.16	0.22	0.3	3.67	1.18	3.55	0.02	0.18
0.17	0.17	0.25	0.3	4.18	1.21	4.05	0.02	0.19
0.18	0.18	0.30	0.4	4.69	1.24	4.55	0.02	0.20
0.19	0.19	0.35	0.4	5.20	1.28	5.06	0.03	0.22
0.20	0.20	0.40	0.5	5.71	1.32	5.56	0.03	0.23
0.21	0.21	0.46	0.6	6.22	1.37	6.06	0.03	0.24
0.22	0.22	0.52	0.7	6.73	1.42	6.57	0.03	0.25
0.23	0.23	0.59	0.9	7.25	1.47	7.07	0.03	0.26
0.24	0.24	0.66	1.0	7.76	1.51	7.57	0.04	0.28
0.25	0.25	0.74	1.2	8.27	1.56	8.07	0.04	0.29
0.26	0.26	0.82	1.3	8.78	1.61	8.58	0.04	0.30
0.27	0.27	0.91	1.5	9.29	1.66	9.08	0.04	0.31
0.28	0.28	1.00	1.7	9.80	1.71	9.58	0.05	0.33
0.29	0.29	1.10	1.9	10.31	1.76	10.09	0.05	0.34
0.30	0.30	1.21	2.2	10.82	1.81	10.59	0.05	0.35
0.31	0.31	1.31	2.4	11.33	1.86	11.09	0.05	0.36
0.32	0.32	1.43	2.7	11.84	1.91	11.60	0.06	0.38
0.33	0.33	1.55	3.0	12.35	1.96	12.10	0.06	0.39
0.34	0.34	1.67	3.3	12.86	2.00	12.60	0.06	0.40
0.35	0.35	1.80	3.7	13.37	2.05	13.10	0.07	0.42
0.36	0.36	1.93	4.1	13.88	2.10	13.61	0.07	0.43
0.37	0.37	2.07	4.4	14.39	2.15	14.11	0.07	0.44
0.38	0.38	2.21	4.9	14.90	2.19	14.61	0.07	0.45
0.39	0.39	2.36	5.3	15.41	2.24	15.12	0.08	0.47
0.40	0.40	2.52	5.8	15.92	2.29	15.62	0.08	0.48
0.41	0.41	2.68	6.2	16.43	2.33	16.12	0.08	0.49
0.42	0.42	2.84	6.7	16.95	2.38	16.63	0.09	0.51
0.43	0.43	3.01	7.3	17.46	2.42	17.13	0.09	0.52
0.44	0.44	3.18	7.8	17.97	2.47	17.63	0.09	0.53
0.45	0.45	3.36	8.4	18.48	2.51	18.13	0.10	0.55
0.47	0.47	3.73	9.7	19.50	2.60	19.14	0.10	0.57
0.48	0.48	3.93	10.4	20.01	2.64	19.64	0.11	0.59
0.49	0.49	4.13	11.1	20.52	2.68	20.15	0.11	0.60
0.50	0.50	4.33	11.8	21.03	2.73	20.65	0.12	0.62
0.51	0.51	4.54	12.6	21.54	2.77	21.15	0.12	0.63
0.52	0.52	4.75	13.4	22.05	2.81	21.66	0.12	0.64
0.53	0.53	4.97	14.2	22.56	2.85	22.16	0.13	0.66

APPENDIX C

STORM DRAIN HYDRAULIC ANALYSIS

NUMBER	BEARING	LENGTH
T5	N89°48'50"W	444.96'
T6	N89°48'50"W	448.05'

NUMBER	BEARING	DISTANCE
T1	N89°48'50"W	128.01'
T2	N89°48'50"W	256.00'
T3	N89°48'50"W	256.00'
T4	N89°48'50"W	192.71'



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

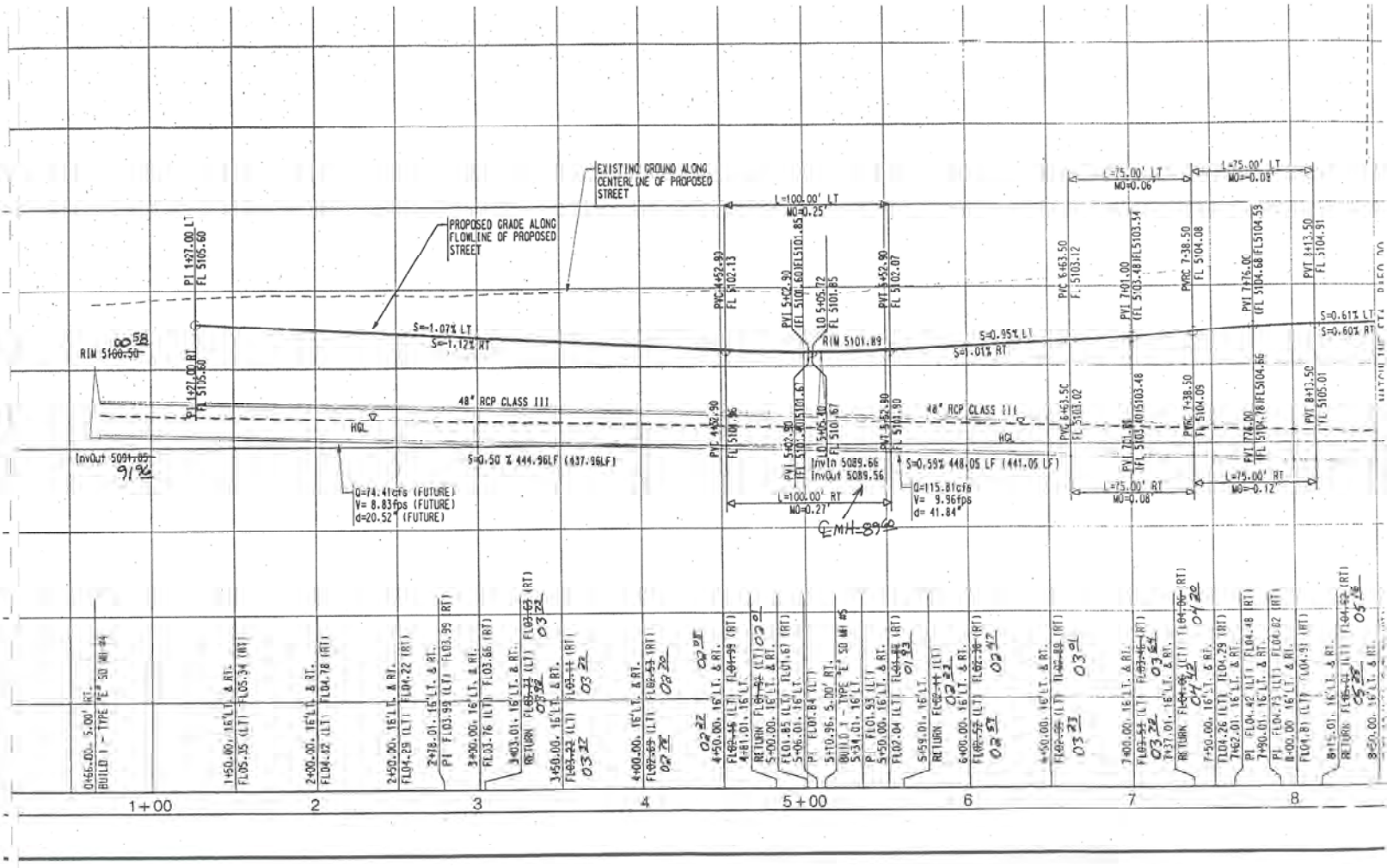
OXBOW PARK SUBDIVISION
PAVING AND STORM DRAIN PLAN & PROFILE
HOLLYLEAF ROAD

DESIGN REVIEW COMMITTEE: APPROVED JAN 27 2000
CITY ENGINEER APPROVAL: APPROVED FEB 14 2000 CITY ENGINEER

LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ONE MAP NO.	SHEET	OF
628881	G-11	8	25

C-1


EXISTING GROUND ALONG CENTERLINE OF PROPOSED STREET
PROPOSED GRADE ALONG FLOWLINE OF PROPOSED STREET
PI 1+27.00 LT FL 5105.60
PI 1+27.00 RT FL 5105.60
RIM 5100.50
S=-1.07% LT
S=-1.12% RT
48" RCP CLASS III
HGL
InvOut 5091.85
S=0.50 % 444.96LF (437.96LF)
Q=74.41cfs (FUTURE)
V= 8.83fps (FUTURE)
d=20.52" (FUTURE)
L=100.00' LT
MO=0.25'
L=100.00' RT
MO=0.27'
PVC 4+52.90 FL 5102.13
PVI 5+62.90 FL 5101.60
LO 5+05.72 FL 5101.85
RIM 5101.89
PVT 5+52.90 FL 5102.07
InvIn 5089.66
InvOut 5089.56
S=0.59% 448.05 LF (441.05 LF)
Q=115.81cfs
V= 9.96fps
d= 41.84"
L=75.00' LT
MO=0.06'
L=75.00' RT
MO=0.08'
PVC 5+63.50 FL 5103.12
PVI 7+01.00 FL 5103.48
PVRC 7+38.50 FL 5104.08
PVI 7+76.00 FL 5104.68
PVT 8+13.50 FL 5104.91
L=75.00' LT
MO=-0.02'
L=75.00' RT
MO=-0.12'
S=0.61% LT
S=0.60% RT
S=0.95% LT
S=1.01% RT
1+00
2
3
4
5+00
6
7
8

Shaded cells require user input. Non-shaded cells cannot be edited.*

ENCLAVE AT OXBOW MAIN LINE

***** HYDRAULIC GRADE LINE CALCULATIONS *****

Manning's n = for pipe: 0.013

Station	Structure	Diam. (in.)	Q (cfs)	Area	Vel.	K	Sf	Length (ft.)	MH Dia. (ft.)	JNCT Angle	Hf	Hb	Hj	Hmh	Ht	Total Losses	HGL(dn)	HGL(up)	Low Point	HV	EGL(dn)	EGL(up)	JUNCTION LOSSES Dia. 3 (in.)	Juncl. Angle	<delta>y	Ht(inc.)	Ht(dec.)	Actual Slope	Elev.	Depth
	OUTFALL								0.00	0.00		0.00	0.00	0.00	0.00	0.00		5094.50	5100.58	0.50	5095.00	5095.00	0	V	0.0000	0.0504	0.0000		5091.96	8.62
		48	71.8	12.57	5.70	1436	0.0025	50.00			0.14					0.14												0.0100	0.55	
	MH #1								4.00	0.00		0.00	0.67	0.00	0.03	0.70	5094.64	5094.86	5105.00	1.18	5095.14	5095.84	36	45	0.5093	0.0000	0.0280		5092.51	12.49
		30	61.5	7.07	8.70	667	0.0085	45.00			0.38					0.38												0.0100	0.45	
	POND OUT								4.00	0.00		0.00	0.57	0.00	0.00	0.57	5095.05	5095.16	5104.00	0.63	5096.22	5096.79	24	90	1.1128	0.00	0.00		5092.96	11.04
		36	45.1	7.07	6.38	667	0.0046	40.00			1.63					1.63												0.0100	0.40	
	MH#2								4.00	90.00		0.13	0.00	0.03	0.00	0.16	5097.99	5098.15	5109.00	0.63	5098.62	5098.78	0	0	0.0000	0.00	0.00		5096.96	12.04
		36	45.1	7.07	6.38	667	0.0046	150.00			0.69					0.69												0.0080	1.20	
	GOORS								4.00	0.00		0.00	1.07	0.00	0.01	1.08	5098.63	5100.20	5109.00	0.29	5099.46	5100.53	36	90	1.4087	0.00	0.01		5098.16	10.84
		24	13.6	3.14	4.33	226	0.0036	448.00			1.62					1.62												0.00080	3.58	
	POND A								4.00	0.00		0.00	0.00	0.00	0.00	0.00	5101.87	5101.95	5105.00	0.21	5102.16	5102.17	24	90	-0.4406	0.00	0.00		5101.74	3.26

EXHIBITS

EXHIBIT 1:	FEMA FLOODPLAIN EXHIBIT
EXHIBIT 2:	BULK LAND PLAT
EXHIBIT 3:	PRELIMINARY PLAT
EXHIBIT 4:	EXISTING CONDITIONS BASIN MAP
EXHIBIT 5:	PROPOSED CONDITIONS BASIN MAP
EXHIBIT 6:	GRADING AND DRAINAGE PLAN

EXHIBIT 1

FEMA FLOODPLAIN EXHIBIT

THE ENCLAVE AT OXBOW

FEMA FLOODPLAIN MAP

SCALE: 1"=500'

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 10 NORTH, RANGE 2 EAST, AND TOWNSHIP 11 NORTH, RANGE 2 EAST.

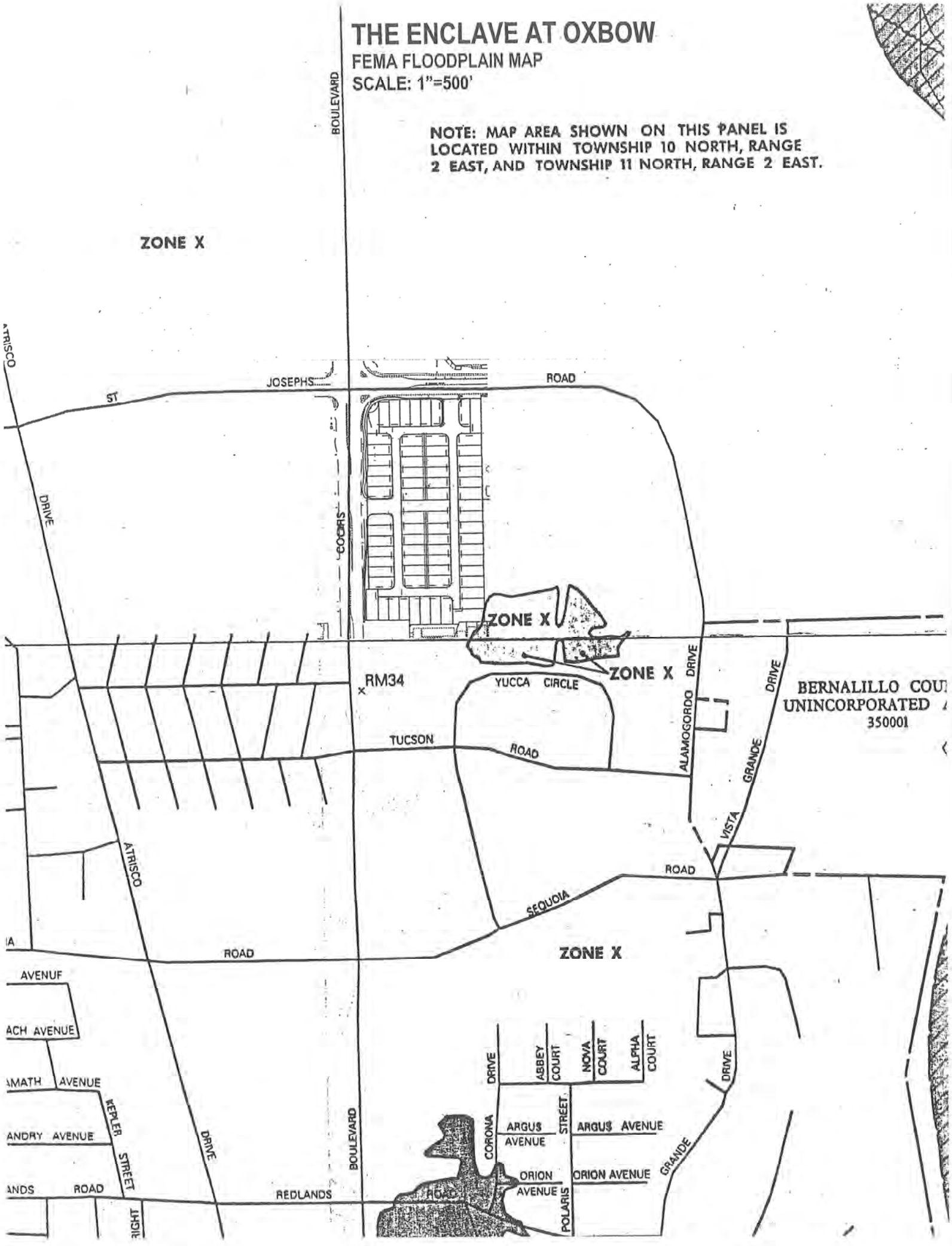
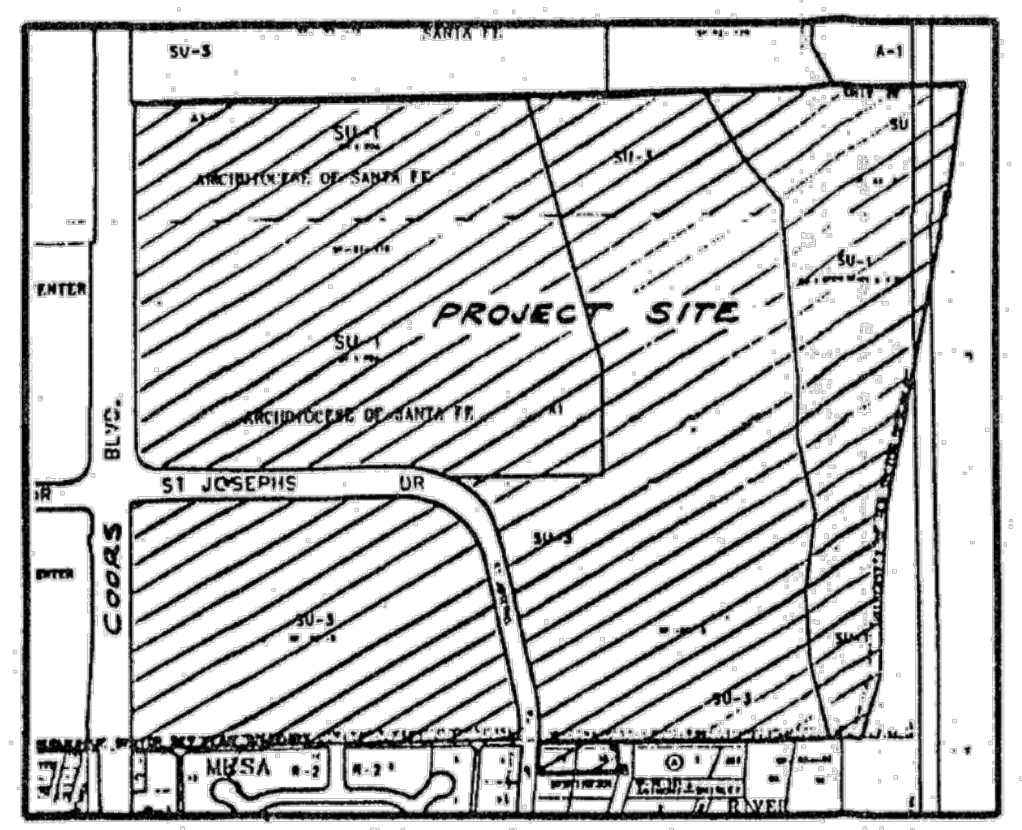


EXHIBIT 2

BULK LAND PLAT



LOCATION MAP

ZONE ATLAS INDEX MAP No. F-11-Z & G-11-Z
NOT TO SCALE

SUBDIVISION DATA

1. DRB No. 97-237
2. Gross Subdivision Area: 171.5662 Acres.
3. Total number of tracts created: Five (5) Tracts.
4. Total mileage of full width streets created: 0.396 Mile.
5. Total mileage of partial width streets created: 0.183 Mile.
6. Date of Survey: September 24, 1997.
7. Plat is located within the City of Albuquerque, Bernalillo County, New Mexico within Section 2 and projected Section 2, T10N, R2E, N.M.P.M. and Section 35, T11N, R2E, N.M.P.M.

DISCLOSURE STATEMENT

The purpose of this Plat is to eliminate tract lines, dedicate right-of-way, grant easements and create Tracts A,B,E,F & G.

NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone).
2. Distances are ground distances.
3. All easements of record are shown.
4. Centerline (in lieu of R/W monumentation) to be installed at all centerline PC's, PT's, angle points and street intersections prior to acceptance of subdivision street improvements and will consist of a standard four-inch (4") aluminum alloy cap stamped "CITY OF ALBUQUERQUE", "CENTERLINE MONUMENTATION", "SURVEY MARKER", "DO NOT DISTURB", "PLS #6544".
5. Record bearings and distances are shown in parenthesis ( ).
6. See Sheet 3 for Notice of Subdivision Plat Conditions.
7. Maintenance of Temporary Private Access Easement shall be the responsibility of Tract F.

DESCRIPTION

A certain tract of land situate within Section 2 and projected Section 2, T10N, R2E and Section 35, T11N, R2E, N.M.P.M., within the City of Albuquerque, Bernalillo County, New Mexico, said tract being and comprising all of an 83.7148 acre tract, ANNEXATION PLAT OF LAND IN SECTION 2, T10N, R2E, N.M.P.M., as the same is shown and designated on the Plat filed in the Office of the County Clerk of Bernalillo County, New Mexico on January 20, 1982 in Volume C19, Folio 67 together with all of Tract A-1, PLAT OF ARCHDIOCESE OF SANTA FE, as the same is shown and designated on the Plat filed in the Office of the County Clerk of Bernalillo County, New Mexico on June 19, 1987 in Volume C33, Folio 196 and being more particularly described by New Mexico State Plane Grid bearings (Central Zone) and ground distances as follows:

BEGINNING at the southwest corner of the tract herein described, also being the north northeast point of return of Coors Boulevard and St. Joseph's Place, whence the Albuquerque City Survey (ACS) Monument "448-N4B", an aluminum tablet having New Mexico State Plane Coordinates, Central Zone (NAD 1927) of X=365,122.05 and Y=1,502,080.28 bears S25°11'31"W, 192.37 feet and from said point of beginning running thence along the westerly boundary line of the Tract herein described and also along the easterly right-of-way line of Coors Boulevard,
N00°10'49"E, 1111.91 feet to a point; thence,
N03°02'43"E, 100.04 feet to a point; thence,
N00°10'49"E, 150.00 feet to the northwest corner of the tract herein described, also being the northwest corner of said Tract A-1, thence leaving said right-of-way line of Coors Boulevard and running thence along the northerly boundary line of said Tract A-1 and said 83.7148 acre tract,
S89°48'50"E, 3317.00 feet to the northeast corner of said 83.7148 acre tract, also being a point on the west bank of the Rio Grande River; thence continuing along said west bank and also along the westerly boundary of the tract herein described,
S18°44'51"W, 362.18 feet to a point; thence,
S15°44'32"W, 801.26 feet to a point; thence,
S09°40'33"W, 410.77 feet to a point; thence,
S05°39'42"W, 302.60 feet to a point; thence,
S00°33'54"W, 403.28 feet to a point; thence,
S12°44'21"W, 302.55 feet to the southeast corner of said 83.7148 acre tract, also being a point on the northerly boundary line of the Town of Atrisco Grant; thence leaving the said west bank of the Rio Grande River and running thence along the said northerly boundary line of the Town of Atrisco Grant and the southerly boundary line of said 83.7148 acre tract,
N89°49'36"W, 1310.20 feet to the southwest corner of said 83.7148 acre Tract and a point on the easterly right-of-way line of St. Joseph's Place; thence leaving said northerly boundary line of Town of Atrisco Grant and running thence along the westerly boundary line of said 83.7148 acre Tract and said easterly right-of-way line of St. Joseph's Place,
N04°52'25"E, 6.89 feet to a point of curvature; thence,
221.21 feet along the arc of a curve to the left having a radius of 756.19 feet and a chord bearing N03°30'25"W, 220.43 feet to a point of tangency; thence,
N11°53'15"W, 520.28 feet to a point of curvature; thence,
559.06 feet along the arc of a curve to the left having a radius of 411.05 feet and a chord bearing N50°51'02"W, 516.95 feet to a point of tangency; thence,
N89°48'50"W, 642.07 feet to a point; thence,
N86°05'39"W, 200.39 feet to a point; thence,
N89°48'50"W, 65.02 feet to a point of curvature at the east northeast point of return of Coors Boulevard and St. Joseph's Place; thence running along said return,
133.51 feet along the arc of a curve to the right having a radius of 85.00 feet and a chord bearing N44°49'01"W, 120.20 feet to the point and place of beginning.

DESCRIPTION

A certain tract of land situate within Section 2, T10N, R2E, N.M.P.M., within the City of Albuquerque, Bernalillo County, New Mexico, said tract being and comprising all of a 31.6815 acre tract of ANNEXATION PLAT OF LAND IN SECTION 2, T10N, R2E, N.M.P.M., filed in the Office of the County Clerk of Bernalillo County, New Mexico on January 20, 1982 in Volume C19, Folio 67 less a 0.5232 acre parcel of Public Street Right-of-Way dedicated to the City of Albuquerque by Special Warranty Deed filed in the Office of the County Clerk of Bernalillo County, New Mexico on March 17, 1995 as Document No.95027107 in Book 95-7, Pages 195-201 and being more particularly described by New Mexico State Plane Grid bearings (Central Zone) and ground distances as follows:

BEGINNING at the northwest corner of the tract herein described, also being a point on the easterly right-of-way line of Coors Boulevard and the southerly right-of-way line of St. Joseph's Place, whence the Albuquerque City Survey (ACS) Monument "448-N4B", an aluminum tablet having New Mexico State Plane Coordinates, Central Zone (NAD 1927) of X=365,122.05 and Y=1,502,080.28 bears S80°11'30"W, 209.45 feet and from said point of beginning running thence along the northerly boundary line of the Tract herein described and also along said southerly right-of-way line of St. Joseph's Place,
S89°48'50"E, 867.10 feet to a point; thence,
S00°11'10"W, 40.00 feet to a point of curvature; thence along the easterly boundary line of the tract herein described and also along the westerly boundary line of said St. Joseph's Place,
450.25 feet along the arc of a curve to the right having a radius of 331.05 feet and a chord bearing S50°51'03"E, 416.34 feet to a point of tangency; thence,
S11°53'15"E, 520.28 feet to a point of curvature; thence,
197.81 feet along the arc of a curve to the right having a radius of 676.19 feet and a chord bearing S03°30'25"E, 197.11 feet to a point of tangency; thence,
S04°52'25"W, 13.47 feet to the southeast corner of the tract herein described, also being a point on the northerly boundary line of the Town of Atrisco Grant; thence leaving said westerly right-of-way line of St. Joseph's Place and continuing along the southerly boundary line of the tract herein described and said northerly boundary line of the Town of Atrisco Grant,
N89°49'36"W, 908.71 feet to the 1/2 mile corner marked by a City of Albuquerque Brass Cap; thence,
N89°49'10"W, 545.37 feet to the southwest corner of the tract herein described, a point on the easterly right-of-way line of Coors Boulevard; thence leaving said northerly boundary line of the Town of Atrisco Grant and continuing along said easterly right-of-way line of Coors Boulevard,
N00°10'49"E, 162.96 feet to a point of curvature; thence, 86.70 feet along the arc of a curve to the right having a radius of 2786.79 feet and a chord bearing N04°24'51"E, 86.69 feet to a point of reverse curvature; thence,
263.77 feet along the arc of a curve to the left having a radius of 2942.79 feet and a chord bearing N02°44'15"E, 263.68 feet to a point of tangency; thence,
N00°10'11"E, 134.93 feet to a point of curvature; thence,
55.48 feet along the arc of a curve to the left having a radius of 307.00 feet and a chord bearing N05°20'51"E, 55.41 feet to a point of tangency; thence,
N00°10'12"E, 182.98 feet to a point of curvature; thence,
128.83 feet along the arc of a curve to the right having a radius of 82.00 feet and a chord bearing N45°10'41"E, 115.98 feet to a point on the southerly right-of-way of said St. Joseph's Place; thence along said right-of-way,
S89°48'50"E, 37.83 feet to a point; thence,
N00°11'10"E, 53.00 feet to the point and place of beginning.

Tract contains 31.1587 acres, more or less.

FREE CONSENT AND DEDICATION

The foregoing plat of that certain tract of land situated within Section 2 and projected Section 2, T10N, R2E and Section 35, T11N, R2E, New Mexico Principal Meridian, City of Albuquerque, Bernalillo County, New Mexico, said tract being and comprising all of Tract A-1 of PLAT OF ARCHDIOCESE OF SANTA FE, as the same is shown and designated on the Plat thereof, recorded in the Office of the County Clerk of Bernalillo County, New Mexico on June 19, 1987 in Volume C33, Folio 196 as Document No.8765168 together with all of the 31.6815 acre tract and the 83.7148 acre tract of ANNEXATION PLAT, as the same is shown and designated on the Plat thereof, recorded in the office of the County Clerk of Bernalillo County, New Mexico on January 20, 1982 in Volume C19, Folio 67 as document 823120 now comprising Tracts A, B, E, F and G, OXBOW SUBDIVISION, Albuquerque, New Mexico is with free consent and in accordance with the desires of the undersigned owner(s) and/or proprietor(s) thereof and said owner(s) and/or proprietor(s) do hereby dedicate all streets and public right-of-ways shown hereon to the City of Albuquerque in Fee Simple with Warranty Covenants, do hereby grant all easements shown hereon including the right to construct, operate, inspect, and maintain facilities therein; and all public utility easements shown hereon for the common and joint use of gas, electrical power and communication services for buried and/or overhead distribution lines, conduits, and pipes for underground and/or overhead utilities where shown or indicated, and including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees and shrubs. The City has the right to enter upon the Grantees Property at any time and perform whatever inspection, installation, maintenance, repair, modification or removal ("Work") it deems appropriate without liability to the City. If Work affects any Improvements or Encroachments made by the Grantee, the City will not be financially or otherwise responsible for rebuilding or repairing of Improvements or Encroachments. If in the opinion of the City, the Work to be performed by the City could endanger the structural integrity or otherwise damage the Improvements or Encroachments, the Grantee shall, at its own expense take whatever protective measures are required to safeguard the Improvements or Encroachments. Said owner(s) and/or proprietor(s) do hereby consent to all of the foregoing and do hereby certify that this subdivision is their free act and deed.

Altura West LTD. Co. (Owner of Tracts B, E, F, and G)

[signature]
Thomas Kelsher, President

State of New Mexico)
ss
County of Bernalillo)

This instrument was acknowledged before me on the 10 day of October, 1997, by Thomas Kelsher, President of Altura West LTD., a New Mexico LTD., Liability Company.

My Commission Expires: 4-13-00 [signature] Notary

Archdiocese of Santa Fe (Owner of Tract A)

+ [signature]
Michael J. Sheehan
Archbishop of the Archdiocese of Santa Fe

State of New Mexico)
ss
County of Bernalillo)

This instrument was acknowledged before me on the 10th day of October, 1997 by Michael J. Sheehan, Archbishop of the Archdiocese of Santa Fe.

OFFICIAL SEAL
JOHN A. HUCHMALA
NOTARY PUBLIC - STATE OF NEW MEXICO
My commission expires:

My Commission Expires: 9/16/99 [signature] Notary

PLAT OF
OXBOW SUBDIVISION
ALBUQUERQUE, NEW MEXICO
OCTOBER, 1997

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Page: 1 of 3
02/18/1998 11:28A
Judy D. Woodward Bern. Co. PLAT R 0.00 Bk-98C Pg-44

APPROVALS

PLAT NUMBER 9-97-66

[signature]	2/17/98
PLANNING DIRECTOR	DATE
[signature]	11-25-97
CITY ENGINEER	DATE
[signature]	11-25-97
A.M.A.F.C.A.	DATE
[signature]	2-12-98
TRAFFIC ENGINEER	DATE
[signature]	101797
CITY SURVEYOR	DATE
[signature]	2-12-98
PROPERTY MANAGEMENT	DATE
[signature]	11-25-97
UTILITY DEVELOPMENT DEPARTMENT	DATE
[signature]	11-25-97
~~PARKS & RECREATION DEPARTMENT~~ CIP	DATE
[signature]	11-3-97
PNM ELECTRIC SERVICES	DATE
Norma G Carrillo	10-29-97
U.S. WEST COMMUNICATIONS	DATE
[signature]	11-3-97
PNM GAS SERVICES	DATE

THIS IS TO CERTIFY THAT TAXES ARE CURRENT AND PAID ON
UPC# 1 011 060 335500 10716
1 011 060 327377 10816
PROPERTY OWNER OF RECORD: 1 011 060 464391 10538
Archdiocese of Santa Fe
McMahon John T & Mildred
[signature] 2/18/98
BERNALILLO COUNTY TREASURER'S OFFICE DATE

PNM STAMP

IN APPROVING THIS PLAT, PNM ELECTRIC SERVICES AND GAS SERVICES (PNM) DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM DOES NOT WAIVE NOR RELEASE ANY EASEMENT OR EASEMENT RIGHTS TO WHICH IT MAY BE ENTITLED.

SURVEYOR'S CERTIFICATION

I, A. Dwain Weaver, a registered Professional New Mexico Surveyor, certify that I am responsible for this survey and that this plat was prepared by me or under my supervision, shows all easements of record, and conforms to the Minimum Requirements of the Board of Registration for Professional Engineers and Professional Surveyors in February, 1994 and meets the minimum requirements for monumentation and surveys contained in the Albuquerque Subdivision Ordinance, and is true and accurate to the best of my knowledge and belief.

A. Dwain Weaver
A. Dwain Weaver
New Mexico Professional Surveyor 6544
Date: OCT. 9, 1997

Bohannan Huston
Courtyard I
7500 Jefferson Street, N.E.
Albuquerque, NM 87109

Bohannan Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS LANDSCAPE ARCHITECTS

SHEET 1 OF 3 SHEETS

JOB NO. 97142A.10

2331 (1)

OXBOW SUBDIVISION

ALBUQUERQUE, NEW MEXICO

OCTOBER, 1997

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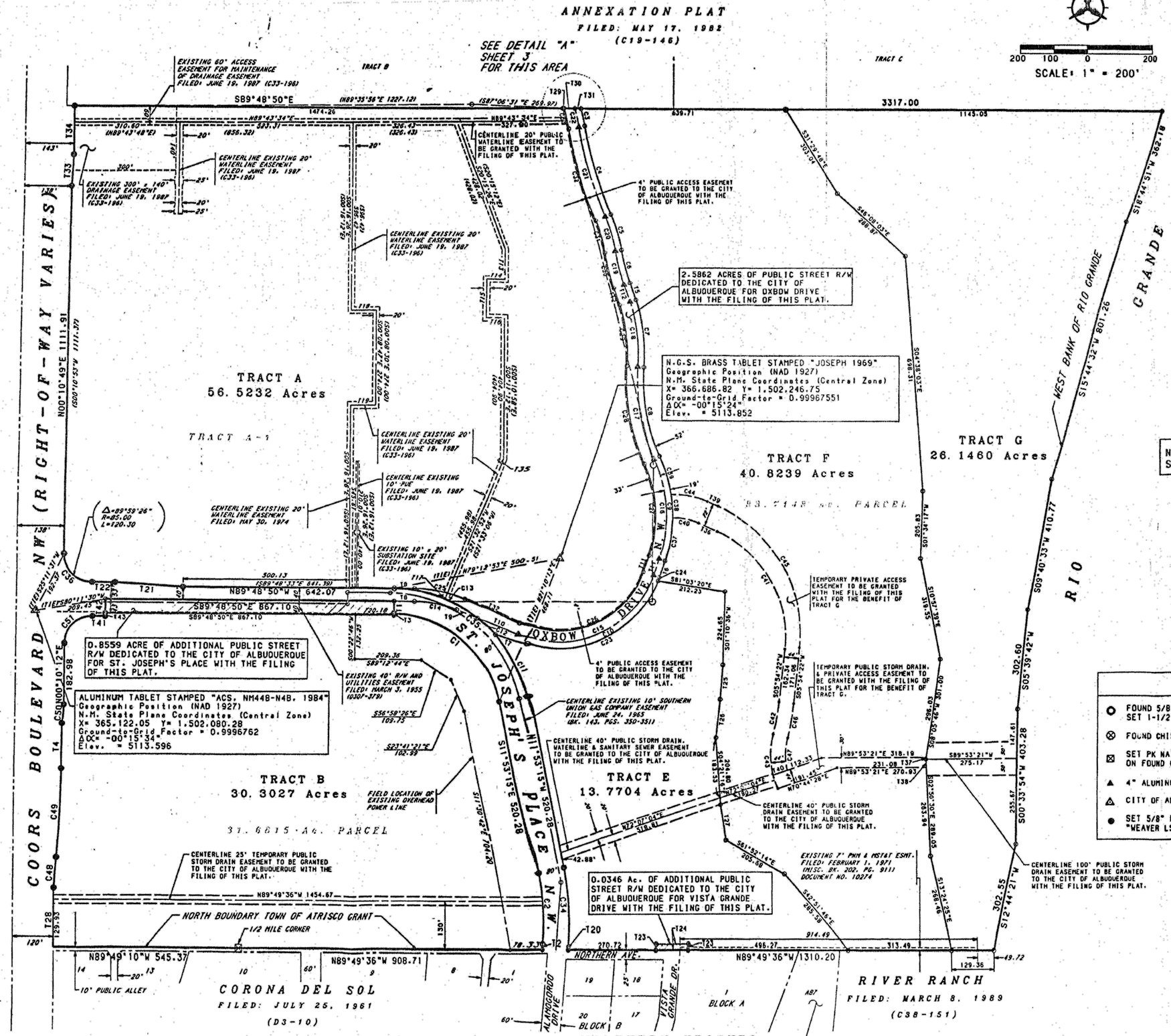
Judy D. Woodward Bern. Co. PLAT R 8.00



NOTE:
SEE SHEET 3 FOR CURVE & TANGENT DATA

LEGEND

- ○ FOUND 5/8" REBAR WITH 1-1/4" PLASTIC SURVEY CAP STAMPED "LS 4078" SET 1-1/2" SURVEY WASHER STAMPED "WEAVER RLS 6544"
- ⊗ FOUND CHISELED "X" IN CONCRETE
- ⊠ SET PK NAIL WITH 1-1/2" SURVEY WASHER STAMPED "WEAVER RLS 6544" ON FOUND CITY OF ALBUQUERQUE CONCRETE MONUMENT
- ▲ 4" ALUMINUM ALLOY CAP - SEE NOTE 4, SHEET 1
- △ CITY OF ALBUQUERQUE SURVEY CONTROL MONUMENT
- ● SET 5/8" REBAR WITH 1-1/4" PLASTIC SURVEY CAP STAMPED "WEAVER LS 6544"

NOTE: SEE SHEET 3 FOR NOTICE OF SUBDIVISION PLAT CONDITIONS

Bohannan Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS
SURVEYORS LANDSCAPE ARCHITECTS

PLAT OF
OXBOW SUBDIVISION
ALBUQUERQUE, NEW MEXICO
OCTOBER, 1997

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Judy D. Woodward Bern. Co. PLAT R 8.00

NOTICE OF SUBDIVISION PLAT CONDITIONS

PURSUANT TO SECTION 7 OF THE CITY OF ALBUQUERQUE, NEW MEXICO SUBDIVISION ORDINANCE, A VARIANCE OR WAIVER FROM CERTAIN SUBDIVISION REQUIREMENTS HAS BEEN GRANTED BY THE CITY AND THE ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY IN CONNECTION WITH THIS PLAT.

FUTURE SUBDIVISION OF LANDS WITHIN THIS PLAT, ZONING SITE DEVELOPMENT PLAN APPROVALS, AND DEVELOPMENT PERMITS MAY BE CONDITIONED UPON DEDICATION OF RIGHTS- OF-WAY AND EASEMENTS, AND/OR UPON INFRASTRUCTURE IMPROVEMENTS BY THE OWNER FOR WATER, SANITARY SEWER, STREETS, DRAINAGE, GRADING AND PARKS IN ACCORDANCE WITH CURRENT RESOLUTIONS, ORDINANCES AND POLICIES IN EFFECT AT THE TIME FOR ANY SPECIFIC PROPOSAL.

THE CITY (AND AMAFCA WITH REFERENCE TO DRAINAGE) MAY REQUIRE AND/OR PERMIT EASEMENTS TO BE ADDED, MODIFIED, OR REMOVED WHEN FUTURE PLATS AND/OR SITE DEVELOPMENT PLANS ARE APPROVED.

BY ITS APPROVAL OF THIS SUBDIVISION THE CITY MAKES NO REPRESENTATION OR WARRANTIES AS TO AVAILIBILITY OF UTILITIES, OR FINAL APPROVAL OF ALL REQUIREMENTS INCLUDING (BUT NOT LIMITED TO) THE FOLLOWING ITEMS:

WATER AND SANITARY SEWER AVAILABILITY,
FUTURE STREET DEDICATIONS AND/OR IMPROVEMENTS,
PARK AND OPEN SPACE REQUIREMENTS,
DRAINAGE REQUIREMENTS AND/OR IMPROVEMENTS,
EXCAVATION, FILLING OR GRADING REQUIREMENTS.

ANY PERSON INTENDING DEVELOPMENT OF LANDS WITHIN SUBJECT SUBDIVISION IS CAUTIONED TO INVESTIGATE THE STATUS OF THESE ITEMS.

AT SUCH TIME AS ALL SUCH CONDITIONS HAVE BEEN SATISFACTORILY MET, THE CITY ENGINEER SHALL APPROVE A RECORDABLE DOCUMENT, REMOVING SUCH CONDITIONS FROM ALL OR FROM A PORTION OF THE AREA WITHIN THE SUBJECT SUBDIVISION.

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are for the common joint use of:

A. The Public Service Company of New Mexico for the installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment, fixtures, structures and related facilities reasonably necessary to provide electrical service.

B. The Gas Company of New Mexico for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.

C. U S West for the installation, maintenance and service of all buried and aerial communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and closures.

D. Jones Intercable for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable TV service.

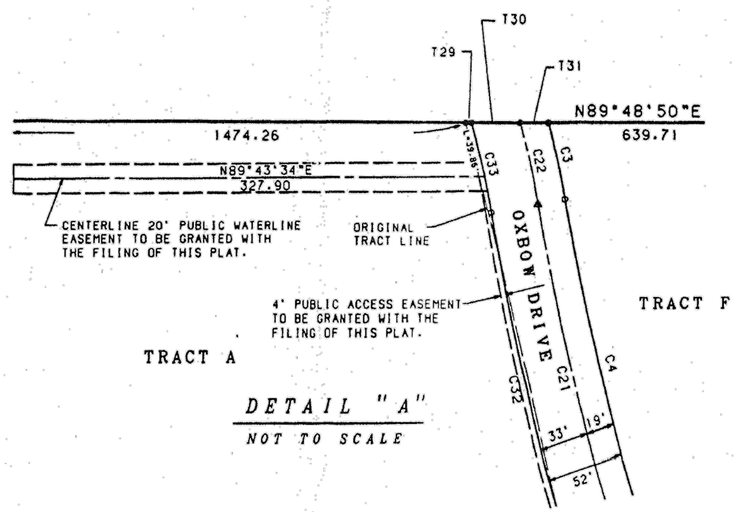
Included is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, modify, renew, operate, and maintain facilities for the purposes described above, together with free access to, from, and over said easements, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (above ground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electric Safety Code caused by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.

CURVE DATA

NUMBER	ARC	RADIUS	DELTA	CHORD	CHORD BEARING	TANGENT
C1	450.25	331.05	77°55'35"	416.34	S50°51'02"E	267.73
C2	197.81	676.19	16°45'40"	197.11	S03°30'25"E	99.62
C3	55.33	647.00	4°53'59"	55.31	S12°26'02"E	27.68
C4	287.58	1253.00	13°09'01"	286.95	S16°33'33"E	144.43
C5	119.35	497.00	13°45'32"	119.06	S16°15'18"E	59.96
C6	109.23	665.50	9°24'16"	109.11	S14°04'39"E	54.74
C7	199.70	501.50	22°48'54"	198.38	S07°22'20"E	101.19
C8	262.49	498.50	30°10'10"	259.47	S11°02'58"E	134.36
C9	325.50	413.00	45°09'23"	317.14	S03°33'22"E	171.73
C10	496.65	323.00	88°05'56"	449.15	S63°04'17"W	312.46
C11	208.49	411.05	29°03'40"	206.26	N26°25'05"W	106.54
C12	71.21	411.05	9°55'33"	71.12	N45°54'42"W	35.69
C13	279.36	411.05	38°56'21"	274.01	N70°20'39"W	145.32
C14	133.91	345.00	22°14'23"	133.07	S78°41'39"E	67.81
C15	495.58	304.00	93°24'14"	442.50	N65°43'26"E	322.62
C16	310.52	394.00	45°09'23"	302.55	N03°33'22"W	163.83
C17	272.49	517.50	30°10'10"	269.36	N11°02'58"W	139.48
C18	192.13	482.50	22°48'54"	190.86	N07°22'20"W	97.35
C19	112.35	684.50	9°24'16"	112.23	N14°04'39"W	56.30
C20	114.79	478.00	13°45'32"	114.51	N16°15'18"W	57.67
C21	291.94	1272.00	13°09'01"	291.30	N16°33'33"W	146.62
C22	58.83	628.00	5°22'01"	58.80	N12°40'03"W	29.43
C23	484.85	323.00	86°00'23"	440.60	N64°07'04"E	301.24
C24	11.80	323.00	2°05'33"	11.80	N20°04'05"E	5.90
C25	159.82	385.00	23°47'05"	158.68	S77°55'17"E	81.08
C26	452.02	271.00	95°34'03"	401.41	N66°48'21"E	298.70
C27	284.51	361.00	45°09'23"	277.21	N03°33'22"W	150.11
C28	289.87	550.50	30°10'10"	286.53	N11°02'58"W	148.38
C29	178.99	449.50	22°48'54"	177.81	N07°22'20"W	90.70
C30	117.77	717.50	9°24'16"	117.64	N14°04'39"W	59.02
C31	106.86	445.00	13°45'32"	106.60	N16°15'18"W	53.69
C32	299.52	1305.00	13°09'01"	298.86	N16°33'33"W	150.42
C33	64.93	595.00	6°15'09"	64.90	N13°06'37"W	32.50
C34	221.21	756.19	16°45'40"	220.43	N03°30'25"W	111.40
C35	559.06	411.05	77°55'35"	516.95	N50°51'02"W	332.42
C36	133.51	85.00	89°59'39"	120.20	N44°49'01"W	84.99
C37	133.36	413.00	18°30'03"	132.78	N09°46'17"E	67.26
C38	72.13	413.00	10°00'24"	72.04	N04°28'56"W	36.16
C39	120.01	413.00	16°38'55"	119.59	N17°48'36"W	60.43
C40	83.96	189.00	25°27'10"	83.27	S79°32'26"E	42.68
C41	449.22	354.00	72°42'27"	419.68	S30°26'51"E	260.55
C42	96.36	678.00	8°08'35"	96.28	S09°58'39"W	48.26
C43	167.40	247.00	38°49'49"	164.21	S05°21'58"E	87.06
C44	118.73	261.00	26°03'51"	117.71	S79°50'48"E	60.41
C45	538.01	426.00	72°21'41"	502.96	S30°16'29"E	311.56
C46	102.61	722.00	8°08'35"	102.52	S09°58'40"W	51.39
C47	97.75	203.00	27°35'19"	96.81	S00°15'17"W	49.84
C48	86.70	2786.79	1°46'57"	86.69	N04°24'51"E	43.35
C49	263.77	2942.79	5°08'08"	263.68	N02°44'15"E	131.97
C50	55.48	307.00	10°21'18"	55.41	N05°20'51"E	27.82
C51	128.83	82.00	90°00'52"	115.98	N45°10'41"E	82.02

TANGENT DATA

NUMBER	BEARING	DISTANCE	(RECORD)
T1	S00°11'10"W	40.00	
T2	S04°52'25"W	13.47	
T3	N00°11'10"E	3.00	
T4	N00°10'11"E	134.93	
T5	S18°46'47"E	57.74	
T6	S19°01'19"W	55.00	
T7	N72°52'45"W	93.43	
T8	S89°48'50"E	65.00	
T9	S67°34'28"E	67.81	
T10	S67°34'28"E	129.26	
T11	N19°01'19"E	55.00	
T12	N18°46'47"W	57.74	
T13	S00°11'12"E	95.76	(S00°10'58"E 95.76)
T14	N89°47'19"W	55.33	(N89°47'05"W 55.33)
T15	S00°12'41"W	122.94	(S00°12'55"W 122.94)
T16	S89°47'19"E	56.15	(S89°47'05"E 56.15)
T17	N89°48'47"W	4.68	
T18	N89°51'16"E	80.23	(N89°51'30"E 80.23)
T19	N89°51'16"E	79.62	(N89°51'30"E 79.62)
T20	N04°52'25"E	6.89	
T21	N86°05'39"W	200.39	(N86°05'25"W 200.42)
T22	N89°48'50"W	65.02	(N89°48'33"W 65.01)
T23	N05°04'24"E	15.06	
T24	N89°49'36"W	100.37	
T25	S04°20'49"W	104.11	
T26	S06°31'16"W	113.73	
T27	S09°55'25"E	104.83	
T28	N00°10'49"E	162.96	
T29	S89°48'50"E	3.95	
T30	S89°48'50"E	34.33	
T31	S89°48'50"E	19.70	
T32	S65°24'39"E	176.59	
T33	N03°02'43"E	100.04	(N03°02'44"E 100.32)
T34	N00°10'49"E	150.00	(N00°10'53"E 150.00)
T35	S46°21'26"W	15.55	(S46°21'40"W 15.55)
T36	S66°48'05"E	64.12	
T37	S08°05'46"W	4.97	
T38	S02°50'30"E	25.11	
T39	S66°48'05"E	37.39	
T40	N70°44'28"E	44.18	
T41	S89°48'50"E	37.83	
T42	N00°11'10"E	53.00	
T43	N00°11'10"E	10.00	



DETAIL "A"
NOT TO SCALE

Bohannan ▲ Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS
SURVEYORS LANDSCAPE ARCHITECTS

SHEET 3 OF 3 SHEETS

JOB NO. 97142A.10

2331(3)

SURV\ICS97142A09\SHEET3.GRF

EXHIBIT 3

PRELIMINARY PLAT

GENERAL NOTES

1. EXISTING ZONING: SU-3
   PROPOSED ZONING: SU-3

2. TOTAL ACREAGE: 11.2316 ACRES
   NET ACREAGE: 11.1024 ACRES
   TRACT A 0.1445 ACRE
   TRACT B 0.0708 ACRE
   TRACT C 0.2410 ACRE
   TRACT D 0.1206 ACRE
   TRACT E 0.0011 ACRE
   TRACT F (PRIVATE STREETS) 2.1546 ACRES

3. TOTAL NUMBER OF LOTS/TRACTS: 71 LOTS, 6 TRACTS
   PROPOSED DENSITY: 6.30 D.U./AC.

4. THIS PRELIMINARY PLAT CONFORMS TO THE EPC APPROVED SITE PLAN FOR SUBDIVISION CASE #Z-97-103 AND THE REQUIRED CONDITIONS.

5. ALL LOTS ARE TO BE P-1 AND SHALL CONFORM TO INTERMITTENT PARKING DESIGN CRITERIA.

6. TRACT F (2.1546 Acres) IS SUBJECT TO A PUBLIC SANITARY SEWER, WATER, SUBSURFACE STORM DRAIN EASEMENT TO THE CITY OF ALBUQUERQUE WITH THE FILING OF THIS PLAT.

7. TRACT F IS ALSO SUBJECT TO A PRIVATE ACCESS AND SURFACE DRAINAGE EASEMENT TO SERVE LOTS 1 THRU 71 IN THE ENCLAVE AT OXBOW SUBDIVISION. TRACT F (2.1546 Acres) IS TO BE RESERVED FOR AND GRANTED TO THE ENCLAVE AT OXBOW HOMEOWNERS ASSOCIATION AND ITS ASSIGNS BY SEPARATE DOCUMENT.

8. ALL INTERIOR STREETS (TRACT F) ARE PRIVATE AND TO BE MAINTAINED BY THE ENCLAVE AT OXBOW HOMEOWNERS ASSOCIATION.

9. THIS SUBDIVISION LIES WITHIN THE CITY OF ALBUQUERQUE. WATER AND SANITARY SEWER CAPABILITIES ARE BASED ON THE CITY OF ALBUQUERQUE'S FACILITIES. WATER AND SANITARY SEWER INFRASTRUCTURE IMPROVEMENTS MUST BE APPROVED BY THE CITY OF ALBUQUERQUE.

10. TRACTS A, C & D ARE TO BE RESERVED FOR AND GRANTED TO THE OXBOW HOMEOWNERS ASSOCIATION AND ITS ASSIGNS BY SEPARATE DOCUMENT.

11. TRACT C IS SUBJECT TO A BLANKET PUBLIC STORM DRAIN AND SANITARY SEWER EASEMENT.

12. TRACT D IS SUBJECT TO A BLANKET PUBLIC WATER, SANITARY SEWER, AND STORM DRAIN EASEMENT.

13. TRACT B IS TO BE DEDICATED TO THE CITY OF ALBUQUERQUE AS NON-VEHICULAR RIGHT-OF-WAY.

14. IT IS ANTICIPATED THAT TRACT E WILL BE QUITCLAIMED BY SEPARATE DEED TO THE ADJACENT PROPERTY OWNER TO THE SOUTH.

OWNER:

TOM KELEHER, PRESIDENT, ALTURA WEST LTD. CO. DATE

SURVEY NOTES:

1. UNLESS OTHERWISE NOTED, ALL BOUNDARY CORNERS SHOWN THUS (●) SHALL BE MARKED BY A #5 REBAR STAMPED "WEAVER LS 6544".

2. ALL STREET CENTERLINE MONUMENTATION SHALL BE INSTALLED AT ALL CENTERLINE PC'S, PT'S, ANGLE POINTS AND STREET INTERSECTIONS AND SHOWN THUS (▲) WILL BE MARKED BY A FOUR (4") ALUMINUM CAP STAMPED "CITY OF ALBUQUERQUE CENTERLINE MONUMENTATION MARKED, DO NOT DISTURB, P.L.S. 6544".

3. THE SUBDIVISION BOUNDARY WILL BE TIED TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM AS SHOWN.

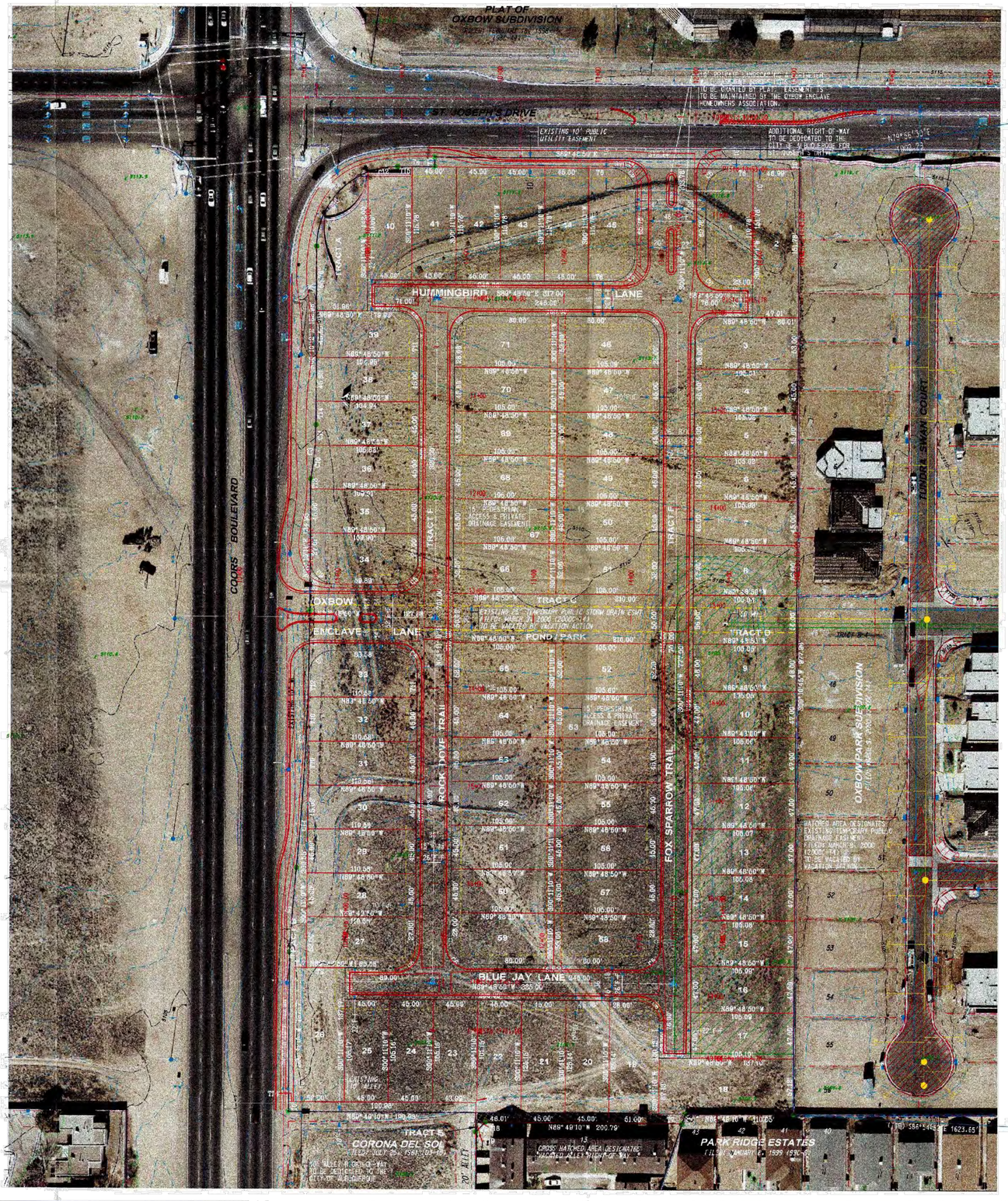
4. BASIS OF BEARINGS WILL BE NEW MEXICO STATE PLANE GRID BEARINGS.

5. DISTANCES SHALL BE GROUND DISTANCES.

6. MANHOLES WILL BE OFFSET AT ALL POINTS OF CURVATURE POINTS OF TANGENCY, STREET INTERSECTIONS AND ALL OTHER ANGLE POINTS TO ALLOW THE USE OF CENTERLINE MONUMENTATION.

APPROVED FOR MONUMENTATION AND STREET NAMES

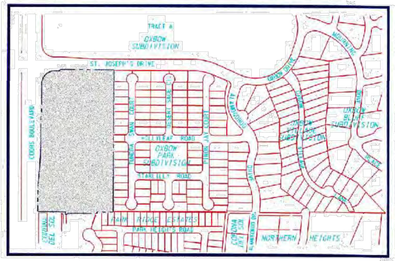
CITY SURVEYOR DATE



NGS BRASS TABLET STAMPED "JOSEPH 1969"
GEOGRAPHIC POSITION (NAD 1927)
NM STATE PLANE COORDINATES (CENTRAL ZONE)
X = 366,686.62 Y = 1,502,246.75
GROUND TO GRID FACTOR = 0.9996751
DELTA ALPHA = -00°15'24"
ELEVATION = 5113.852

N

SCALE: 1" = 60' (HORIZ.)



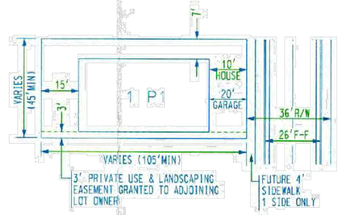
LOCATION MAP
ZONE ATLAS MAP NO. C-11
NOT TO SCALE

CURVE DATA

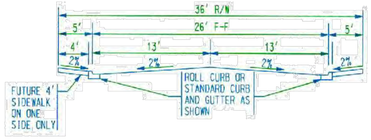
ID	DELTA	TANGENT	ARC	RADIUS	CHORD	CHORD BRG
C1	01°46'57"	43.35'	86.70'	2786.79'	86.69'	N04°24'50"E
C2	05°08'08"	131.97'	263.77'	2942.79'	263.68'	N02°44'15"E
C3	10°21'18"	27.82'	55.48'	307.03'	55.41'	N05°20'51"E
C4	50°03'52"	62.02'	128.63'	82.03'	115.98'	N45°10'41"E
C5	90°00'00"	25.00'	39.27'	25.03'	35.36'	N45°11'10"E
C6	90°00'00"	25.00'	39.27'	25.03'	35.36'	N44°48'50"W
C7	88°44'54"	24.46'	38.72'	25.03'	34.97'	S45°48'43"W
C8	01°16'05"	32.96'	65.13'	2942.79'	65.12'	N00°48'13"E
C9	89°59'01"	24.99'	39.26'	25.03'	35.35'	S44°49'19"E
C10	06°28'26"	17.36'	34.69'	307.03'	34.67'	N07°17'17"E
C11	03°52'52"	10.40'	20.80'	307.03'	20.79'	N02°06'38"E
C12	21°28'22"	15.55'	30.13'	82.03'	30.55'	N79°26'56"E
C13	68°37'30"	55.88'	98.09'	82.03'	92.35'	S34°26'30"W
C14	03°52'03"	99.36'	198.64'	2942.79'	198.61'	N03°22'17"E

TANGENT DATA

ID	BEARING	DISTANCE
T1	S18°19'25"W	10.52'
T2	S45°10'50"W	14.14'
T3	N00°10'50"E	20.00'
T4	S89°48'50"E	37.83'
T5	N00°11'10"E	10.00'
T6	N89°48'50"W	23.00'
T7	N89°49'10"W	23.78'
T8	S14°19'47"W	4.13'
T9	N89°48'50"W	52.00'
T10	S00°11'10"W	45.00'
T11	S00°11'10"W	23.00'
T12	S00°11'10"W	23.35'
T13	S00°10'11"W	10.60'
T14	S00°10'10"W	24.22'
T15	N89°48'50"W	14.98'
T16	N89°49'10"W	4.99'
T17	N89°48'50"W	12.42'
T18	N89°49'10"W	10.00'
T19	S00°10'50"W	10.00'



TYPICAL LOT DETAIL
NOT TO SCALE



TYPICAL PRIVATE STREET SECTION
NOT TO SCALE

PRELIMINARY PLAT

THE ENCLAVE AT OXBOW

(REPLAT OF TRACT B-1 OXBOW PARK SUBDIVISION)

ALBUQUERQUE, NEW MEXICO
APRIL, 2002

BRASS TABLET STAMPED "VABM 5108 NOSE RG 1950"
GEOGRAPHIC POSITION (NAD 1927)
NM STATE PLANE COORDINATES (CENTRAL ZONE)
X = 367,317.96 Y = 1,501,006.81
GROUND TO GRID FACTOR = 0.9996757
DELTA ALPHA = -00°15'19"
SLD 1929 ELEVATION = 5111.597

BHI JOB NO. 020199 007

Bohannan Huston
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

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08-MAY-2002
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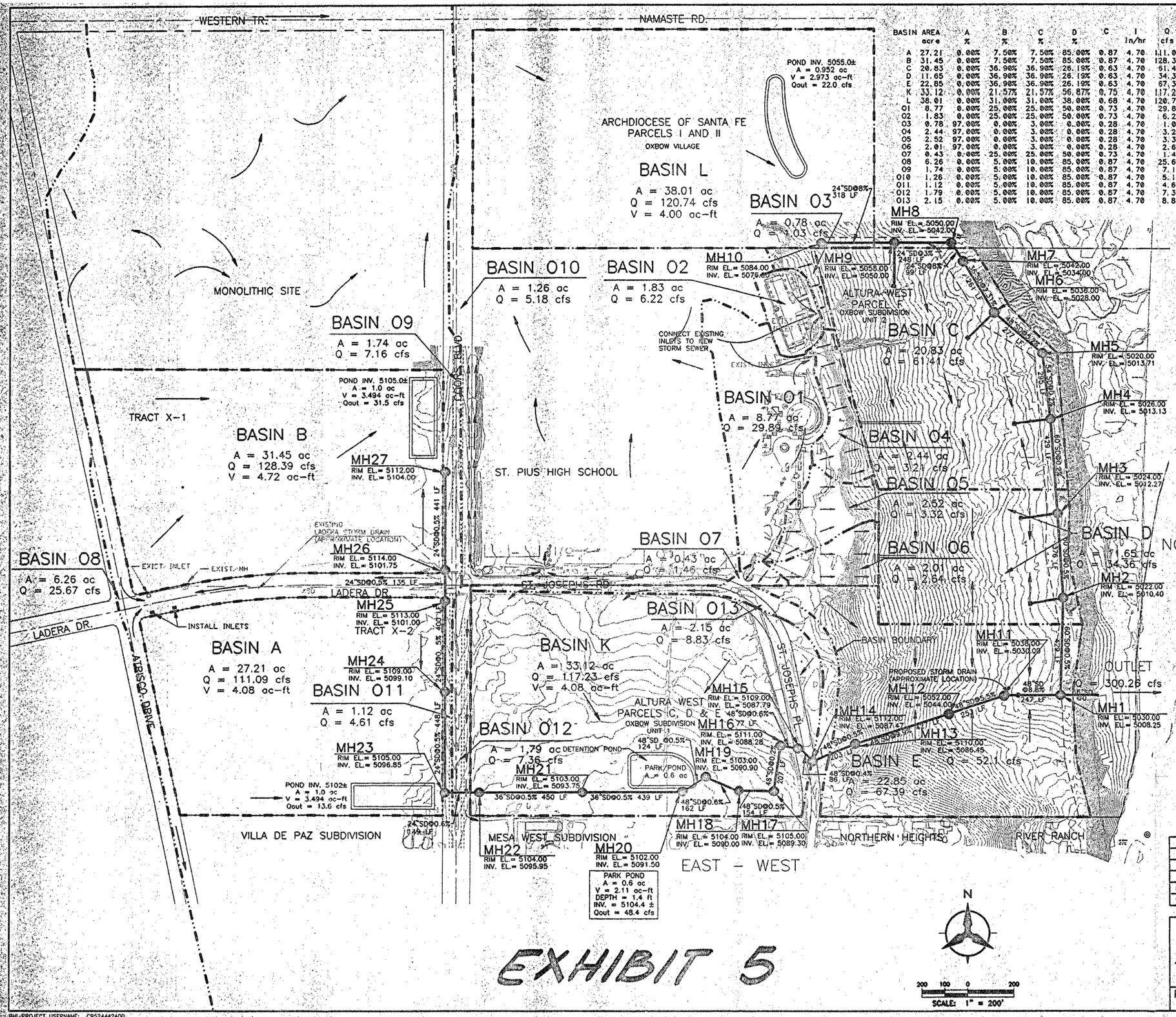
BUSERNAME

EXHIBIT 4

EXISTING CONDITIONS BASIN MAP



BASIN	AREA acre	A %	B %	C %	D %	C	I in/hr	Q cfs
A	27.21	0.00%	7.50%	7.50%	85.00%	0.87	4.70	111.09
B	31.45	0.00%	7.50%	7.50%	85.00%	0.87	4.70	128.39
C	20.83	0.00%	36.90%	36.90%	26.19%	0.63	4.70	61.41
D	11.65	0.00%	36.90%	36.90%	26.19%	0.63	4.70	34.36
E	22.85	0.00%	36.90%	36.90%	26.19%	0.63	4.70	67.39
K	33.12	0.00%	21.57%	21.57%	56.87%	0.75	4.70	117.23
L	38.01	0.00%	31.00%	31.00%	38.00%	0.68	4.70	120.74
01	8.77	0.00%	25.00%	25.00%	50.00%	0.73	4.70	29.89
02	1.83	0.00%	25.00%	25.00%	50.00%	0.73	4.70	6.22
03	0.78	97.00%	0.00%	3.00%	0.00%	0.28	4.70	1.03
04	2.44	97.00%	0.00%	3.00%	0.00%	0.28	4.70	3.21
05	2.52	97.00%	0.00%	3.00%	0.00%	0.28	4.70	3.32
06	2.01	97.00%	0.00%	3.00%	0.00%	0.28	4.70	2.64
07	0.43	0.00%	25.00%	25.00%	50.00%	0.73	4.70	1.46
08	6.26	0.00%	5.00%	10.00%	85.00%	0.87	4.70	25.67
09	1.74	0.00%	5.00%	10.00%	85.00%	0.87	4.70	7.16
010	1.26	0.00%	5.00%	10.00%	85.00%	0.87	4.70	5.18
011	1.12	0.00%	5.00%	10.00%	85.00%	0.87	4.70	4.61
012	1.79	0.00%	5.00%	10.00%	85.00%	0.87	4.70	7.36
013	2.15	0.00%	5.00%	10.00%	85.00%	0.87	4.70	8.83

NOTES

1. ALL STORM FLOWS AND VOLUMES REPRESENT THE 100-YEAR, 6-HOUR EVENT, UNLESS OTHERWISE NOTED.

2. ALL STORM FLOWS AND VOLUMES WERE CALCULATED USING AHYMO IN ACCORDANCE WITH REVISED SECTION 22.2, HYDROLOGY, OF THE DEVELOPMENT PROCESS MANUAL FOR THE CITY OF ALBUQUERQUE.

3. THE EXISTING CONTOURS WERE GENERATED FROM DATA COMPILED BY DIGITAL STEREOPHOTOGRAMMETRIC METHODS USING VERTICAL AERIAL PHOTOGRAPHY EXPOSED ON 8/29/95. THE DATA WAS COMPILED FOR USE AT A SCALE OF 1"=50' WITH A CONTOUR INTERVAL OF 1' FOR THE PURPOSE OF PLANNING AND SITE DEVELOPMENT. BOHANNAN-HUSTON INC. ASSUMES NO RESPONSIBILITY FOR THE QUALITY, ACCURACY OR COMPLETENESS OF THIS DATA WHEN USED FOR OTHER THAN THE INTENDED PURPOSE OR WHEN USED AT OTHER THAN THE COMPILED SCALE.

4. ALL EXISTING AND PROPOSED MANHOLES, INLETS, PONDS AND UTILITY LINES ARE SHOWN AT THEIR APPROXIMATE LOCATION.

5. PHASE 1 CONSTRUCTION INCLUDES CONSTRUCTION OF THE OUTFALL TO THE RIO GRANDE RIVER AND THE STORM DRAIN WITHIN PARCEL F.

6. PHASE 2 CONSTRUCTION INCLUDES STORM SEWER CONSTRUCTION IN ALTURA WEST PARCELS OR A TEMPORARY RETENTION POND.

7. PHASE 3 CONSTRUCTION INCLUDES CONSTRUCTION OF STORM SEWER IN COORS BLVD AND DETENTION PONDS. THIS PHASE SHALL BE SCHEDULED FOR CONSTRUCTION AFTER OR DURING PHASE 2 CONSTRUCTION.

LEGEND

- DIRECTION OF FLOW
- MH# — PROPOSED MANHOLE
- PROPERTY LINE
- BASIN BOUNDARY
- CENTERLINE
- RIGHT OF WAY LINE
- XSS — EXISTING STORM SEWER
- SS — NEW STORM SEWER
- EXISTING DRAINAGE SWALE
- BASIN O# — OFFSITE BASINS
- Q = 18.0 cfs — DISCHARGE (100-YR, 6-HR STORM EVENT)
- SHEET FLOW

EXHIBIT 5

7/25/97
ENGINEER'S SEAL

REV	DESCRIPTION	USER DEPARTMENT	DATE

APPROVAL OF REVISIONS

BOHANNAN-HUSTON INC.
ENGINEERS • PLANNERS • PHOTOGRAMMETRISTS • SURVEYORS • LANDSCAPE ARCHITECTS
ALBUQUERQUE LAS CRUCES SANTA FE

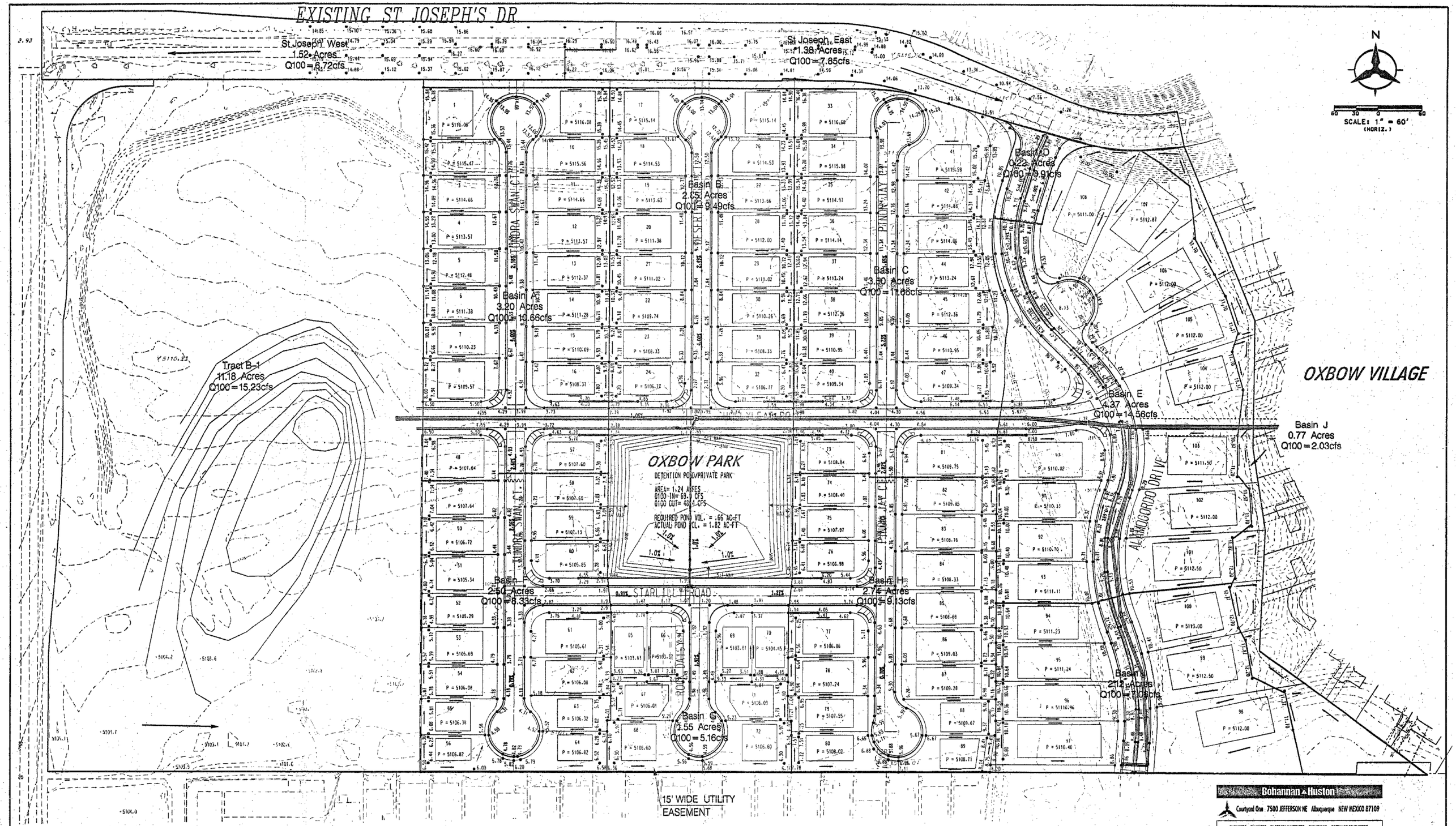
ALTURA WEST
ARCHDIOCESE
OF SANTA FE
PROP. DRAINAGE
CONDITIONS

PROJECT NUMBER: 1-950244C.2482

SHEET 1 OF 1

BHI-PROJECT, USERNAME: C95244A2400
FILENAME: ALTEPO2.DWG
XREFS: ALTPAVT.DWG, ALTMAIN.DWG
SHT2

Copyright Bohannan-Huston, Inc. 1996
DATE: 7/24/97



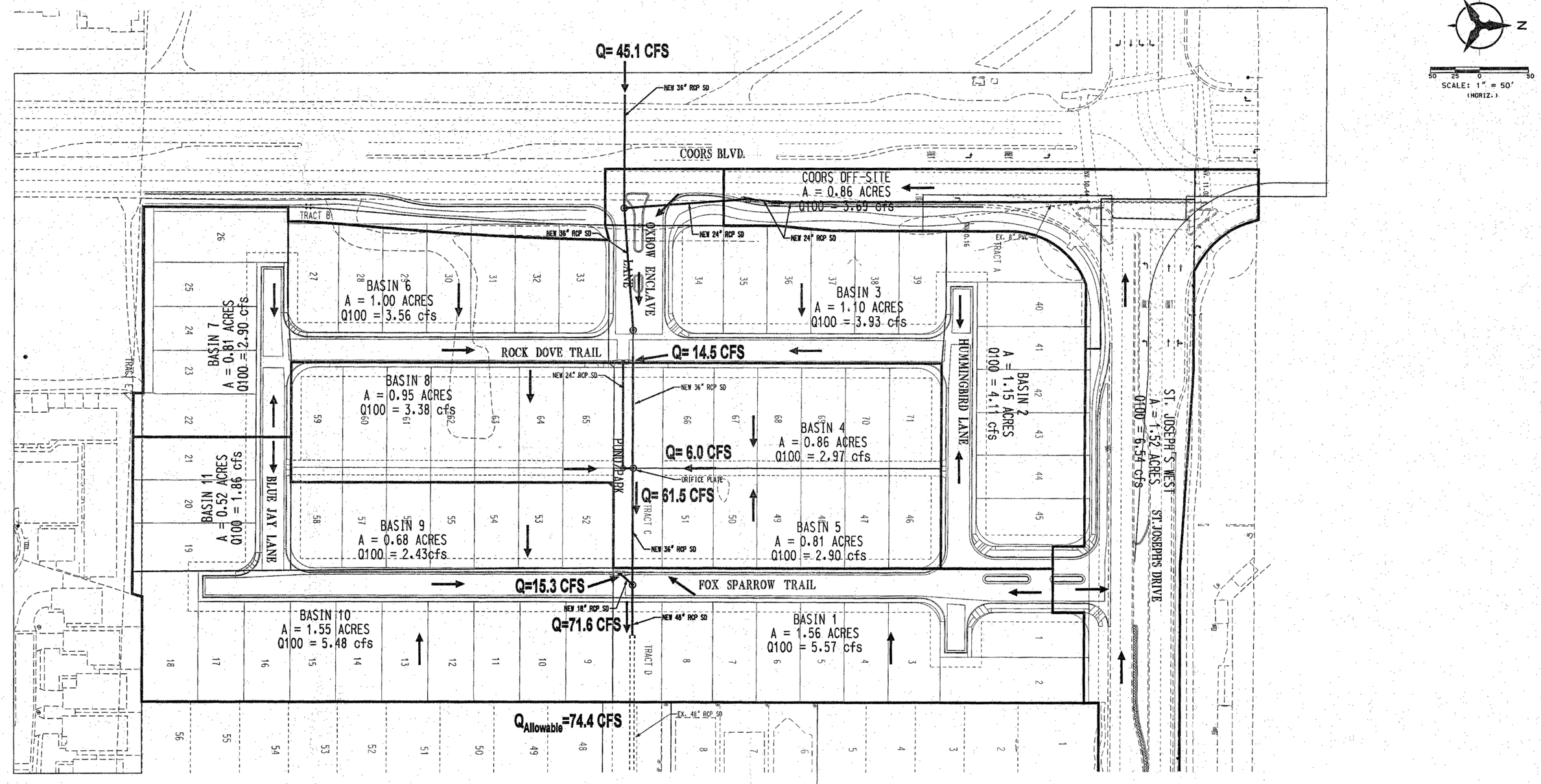
PARK RIDGE SUBDIVISION

OXBOW PARK SUBDIVISION BASIN MAP

COPYRIGHT BOHANNAN-HUSTON, INC 1999
DATE: JUNE, 1999.

EXHIBIT 5

PROPOSED CONDITIONS BASIN MAP



OXBOW PARK
SUBDIVISION

NOTE: THE PEAK FLOW RATE IS MITIGATED BY THE SURGE POND ON-SITE AND THE DELAYED PEAK FROM OFF-SITE BASINS.

Bohannan ▲ Huston
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

EXHIBIT 5
THE ENCLAVE AT OXBOW
PROPOSED CONDITIONS
BASIN MAP

06-MAY-2002
P:\#020199\cdp\exhfb11e\#020199BASIN01.dgn
06-MAY-2002
14:36
FIdpkay

BHI JOB NO. 020199 007

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EXHIBIT 6

GRADING AND DRAINAGE PLAN

CONSTRUCTION PLANS
FOR
ENCLAVE AT OXBOW SUBDIVISION
ALBUQUERQUE, NEW MEXICO

INDEX

SHEET NUMBER	DESCRIPTION
1	TITLE SHEET
2	PLAT
4	GRADING PLAN
5	GRADING PLAN DETAILS
6	OVERALL PAVING PLAN
7	COORS BOULEVARD PAVING PLAN
8	ST. JOSEPH'S DRIVE PAVING PLAN
	PAVING PLAN AND PROFILE SHEETS
	OXBOW ENCLAVE LANE
10	ROCK DOVE TRAIL
11-12	FOX SPARROW TRAIL
13	HUMMINGBIRD LANE / BLUE JAY LANE
14	OVERALL UTILITY PLAN
	UTILITY PLAN AND PROFILE SHEETS
15	OXBOW ENCLAVE LANE / TRACTS C & D
16	ROCK DOVE TRAIL
17	FOX SPARROW TRAIL
18	HUMMINGBIRD LANE / BLUE JAY LANE
19	SAS LINE "A" TO TUNDRA SWAN CT.
	STORM DRAIN PLAN AND PROFILE SHEETS
20	OXBOW ENCLAVE LANE / TRACTS C & D
21	COORS BOULEVARD
22	FOX SPARROW TRAIL / BLUE JAY LANE
23	STRIPING & SIGNING PLAN – COORS BOULEVARD / ST. JOSEPH'S DRIVE
24	SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS
25	TYPICAL TRAFFIC CONTROL AND SIGNING EXAMPLES (REF. M.U.T.C.D.)

RECORD DRAWING

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, William L. Vreeke, P.E. of the firm of Bohannan Huston, Inc., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project (City Project No. 691281) has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by Charles G. Cala, Jr., NMPS 11184.

APPROVED AS RECORD DRAWINGS
DESIGN REVIEW SECTION
CITY CONSTRUCTION ENGINEER
DATE 8/13/03

Engineers Seal & Signature
WILLIAM L. VREEKE
NEW MEXICO
8131
REGISTERED PROFESSIONAL ENGINEER

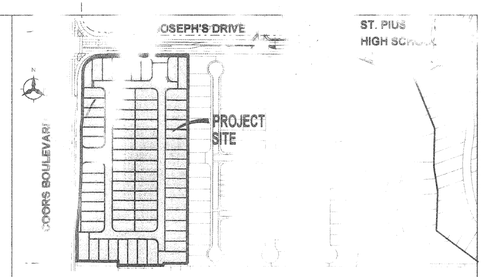
SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

2-10-03
Charles G. Cala, Jr., NMPS 11184 — Date

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

J.M.A.# 2002.048.1



VICINITY MAP: NOT TO SCALE — ZONE ATLAS NO. G-11

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE No. 6.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM CONST. COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY CONSTRUCTION COORDINATION ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
6. ALL WORK EFFECTING ARTERIAL ROADWAYS REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
7. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED W/ PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO THE SAME LOCATION AS EXISTING, OR AS INDICATED BY THIS PLAN SET.
8. CONTRACTOR SHALL NOTIFY THE ENGINEER OF LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
9. CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWING. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED
10. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
11. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE WATER SYSTEMS DIVISION (857-8200) SEVEN WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES. EXISTING VALVES TO BE OPERATED BY CITY PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION SEVEN (7) WORKING DAYS PRIOR TO NEEDING VALVES TURNED ON OR OFF

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- [X] ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- [X] BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- [ ] TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE ENGINEER.
- [X] SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- [ ] IF CURB IS DEPRESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
- [X] ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- [X] THE REQUESTOR OR DEVELOPER SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL CURB AND GUTTER OR SIDEWALK DAMAGED AFTER APPROVAL BY THE CITY ENGINEER OF WORK COMPLETED BY THE CONTRACTOR.

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
2	7-13, 16-22		2-06-03				
1	6, 9, 11		11-25-02				

ENGINEERS STAMP & SIGNATURE	APPROVALS	ENGINEER	DATE	* * * * * * * * * * * * * * *
KENNETH E. PATTON NEW MEXICO 8-13-02 REGISTERED PROFESSIONAL ENGINEER	DRC Chairman		8-15-02	APPROVED FOR CONSTRUCTION
	Transportation		8/13/02	
	Water/Wastewater		8/13/02	
	Hydrology		8/13/02	
	CIP			
	Const. Mngmt.			City Engineer — Date 8/13/02
	Const. Coord.		8-15-02	

DRB Case Number	City Project No.	Sheet	Of
1000296	691281	1	25

BHI JOB NO. 020199

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 | 69 | 12.81 | | 03

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

02-AUG-2002
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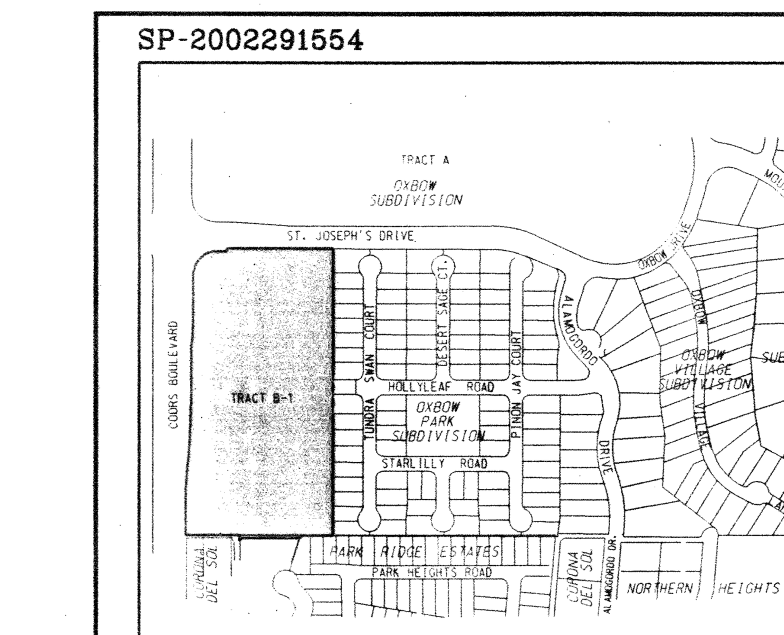
SCANNED BY MESA REPRO

SCANNED BY
MESA REPRO

SP-2002291554



LOCATION MAP

ZONE ATLAS INDEX MAP No. G-11-Z

NOT TO SCALE

SUBDIVISION DATA

1. DRB No. ______
2. Zone Atlas Index No. G-11-Z.
3. Gross Subdivision Acreage: 11.2316 Acres.
4. Total Number of Lots/Tracts created: Seventy-One (71) Lots and Six (6) Tracts.
5. Total Mileage of full width Private Street created: 0.4204 mile.
6. Total Mileage of partial width Public R-O-W (St. Joseph's Drive): 0.0705 mile.
7. Total Mileage of partial width Public R-O-W (Alley) created: 0.0362 mile.
7. Date of Survey: March, 2002
8. Plat is located within the Town of Atrisco Grant and within Section 2, T10N, R2E, NMPM.

DISCLOSURE STATEMENT

The purpose of this Plat is to Subdivide all of Tract B-1 of the PLAT OF OXBOW PARK SUBDIVISION, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, recorded in the office of the County Clerk of Bernalillo County, New Mexico on March 9, 2000 in Book 2000C, Page 74 as Document No. 2000023435, together with an easterly portion of an existing public alley of the plat of CORONA DEL SOL, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, recorded in the office of the County Clerk of Bernalillo County, New Mexico on July 25, 1961 in Book D3, Folio 10, into Seventy-One (71) Lots and Six (6) Tracts, to dedicate additional public right-of-way to the City of Albuquerque, to vacate an easterly portion of Existing Public R-O-W (Alley), to vacate easements, and to grant Easements.

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are for the common joint use of:

A. PNM Electric Services for the installation, maintenance and service of underground & overhead electrical lines, transformers, and other equipment, fixtures, structures, and related facilities reasonably necessary to provide electrical service.

B. PNM Gas services for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.

C. QWEST for the installation, maintenance, and service of all buried communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and closures.

D. Comcast Cable for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable TV service.

Included is the right to build, rebuild, construct, reconstruct, Locate, relocate, change, remove, modify, renew, operate, and maintain facilities for the purposes described above, together with free access to, from, and over said easements, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool, (above ground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electric Safety Code caused by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.

Easements for electric transformers/switchgears, as installed shall extend ten feet(10') in front of transformers/switchgear door and five feet (5') on each side.

DESCRIPTION

A certain tract of land situate within the Town of Atrisco Grant and within Section 2, Township 10 North, Range 2 East, New Mexico Principal Meridian, Bernalillo County, Albuquerque, New Mexico, being and comprising all of Tract B-1 of the PLAT OF OXBOW PARK SUBDIVISION, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, recorded in the office of the County Clerk of Bernalillo County, New Mexico on March 9, 2000 in Book 2000C, Page 74 as Document No. 2000023435, together with an easterly portion of an existing public alley of the plat of CORONA DEL SOL, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, recorded in the office of the County Clerk of Bernalillo County, New Mexico on July 25, 1961 in Volume D3, Folio 10 and being more particularly described by New Mexico State Plane Grid Bearings (Central Zone NAD 1927) and ground distances as follows:

BEGINNING at the northeast corner of said Tract B-1, a point on the southerly right-of-way line of St. Joseph's Drive NW, whence the Albuquerque City Survey (ACS) Monument "JOSEPH 1969" a USC&GS Brass Tablet set in top of a concrete post, having New Mexico State Plane Coordinates Central Zone (NAD 1927) of X=366,686.82 and Y=1,502,246.75 bears N79°56'30"E, a distance of 1002.29 feet and from said point of beginning leaving said right-of-way line and running thence along the easterly boundary line of said Tract B-1,
S00°10'45"W, a distance of 977.90 feet to the southeast corner of said Tract B-1, a point on the northerly boundary line of the Town of Atrisco Grant, thence running along the southerly boundary line of said Tract B-1 and also along said Grant line,
N89°49'10"W, a distance of 110.05 feet to a point, thence leaving said southerly boundary line and said Grant line and running thence along the easterly right-of-way line of said public alley,
S18°19'25"W, a distance of 10.52 feet to a point on the southerly right-of-way line of said public alley, thence running along said right-of-way line,
N89°49'10"W, a distance of 200.79 feet to a point; thence,
S45°10'50"W, a distance of 14.14 feet to a point; thence,
N00°10'50"E, a distance of 20.00 feet to a point on the southerly boundary line of said Tract B-1 and also being a point on the northerly boundary line of the Town of Atrisco Grant, thence running along the southerly boundary line of said Tract B-1 and also along said Grant line,
N88°49'10"W, a distance of 190.98 feet to the southwest corner of said Tract B-1, a point on the easterly right-of-way line of Coors Boulevard NW, thence running along the easterly boundary line of said Tract B-1 and also along said right-of-way line,
N00°10'49"E, a distance of 162.96 feet to a point of curvature (non-tangent); thence,
86.70 feet along the arc of a curve to the right having a radius of 2786.79 feet and a chord which bears N04°24'51"E, a distance of 86.69 feet to a point of reverse curvature; thence,
263.77 feet along the arc of a curve to the left having a radius of 2942.79 feet and a chord which bears N02°44'15"E, a distance of 263.68 feet to a point of tangency; thence,
N00°10'11"E, a distance of 134.93 feet to a point of curvature (non-tangent); thence,
55.48 feet along the arc of a curve to the left having a radius of 307.00 feet and a chord which bears N05°20'51"E, a distance of 55.40 feet to a point of tangency; thence,
N00°10'12"E, a distance of 182.98 feet to a point of curvature (non-tangent); thence,
128.83 feet along the arc of a curve to the right having a radius of 82.00 feet and a chord which bears N45°10'41"E, a distance of 115.98 feet to a point of non-tangency on the northerly boundary line of said Tract B-1 and also being a point on the southerly right-of-way line of St. Joseph's Drive NW, thence running along the northerly boundary line of said Tract B-1 and also along said right-of-way line,
S89°48'50"E, a distance of 37.83 feet to a point; thence,
N00°11'10"E, a distance of 10.00 feet to a point; thence,
S89°48'50"E, a distance of 372.14 feet to the point and place of beginning.

Tract contains 11.2316 acres, more or less.

NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone NAD 1927) and are the same as shown on the PLAT OF OXBOW PARK SUBDIVISION, Albuquerque, New Mexico, recorded in the office of the County Clerk of Bernalillo County, New Mexico on March 9, 2000 in Book 2000C, Page 74 as Document No. 2000023435
2. Distances are ground distances.
3. All easements of record are shown.
4. All lots are to be P-1 and shall conform to Intermittent Parking Design Criteria.
5. Centerline (in lieu of R/W monumentation) to be installed at all centerline PC's, PT's, angle points and street intersections prior to acceptance of subdivision street improvements and will consist of a standard four-inch (4") aluminum alloy cap stamped "CITY OF ALBUQUERQUE", "CENTERLINE MONUMENTATION", "SURVEY MARKER", "DO NOT DISTURB", "PLS #6544".
6. Tracts A, C, & D, are to be reserved for and granted to the Enclave at Oxbow Homeowners Association and its assigns by separate Document.
7. Tract B is to be dedicated to the City of Albuquerque as non-vehicular right-of-way.
8. It is anticipated that Tract E will be quitclaimed by separate deed to the adjacent property owner to the south.
9. Tract F is subject to a Public Sanitary Sewer, Water, and Subsurface Storm Drain Easement to be granted with the filing of this plat. Tract F is also subject to a Private Access and Surface Drainage Easement to serve Lots 1 through 71 in the Enclave at Oxbow Subdivision. Tract F is to be reserved for and granted to the Enclave at Oxbow Homeowners Association and its assigns by separate document.
10. All interior streets (Tract F) are private and to be maintained by the Enclave at Oxbow Homeowners Association.
11. Tract C is subject to a blanket public storm drain and sanitary sewer easement to be granted with the filing of this plat.
12. Tract D is subject to a blanket public water, sanitary sewer, and storm drain easement to be granted with the filing of this plat.
13. Fireplaces and/or stoves shall be limited to Gas Logs and Environmental Protection Agency approved Wood-Burning Devices. No ordinary Wood-Burning Fireplaces shall be installed in any Residential Dwelling Unit.
14. This subdivision lies within the City of Albuquerque, water and sanitary sewer capabilities are based on the City of Albuquerque's facilities. Water and sanitary sewer infrastructure improvements must be approved by the City of Albuquerque.
15. Shaded areas on lots 3 & 46 designate a clear sight easement to be granted with the filing of this Plat. No obstructions over 3' high measured from the gutter is allowed in this area.

FREE CONSENT AND DEDICATION

The foregoing plat of that certain tract of land situate within the Town of Atrisco Grant and within Section 2, Township 10 North, Range 2 East, New Mexico Principal Meridian, Bernalillo County, Albuquerque, New Mexico, being and comprising all of Tract B-1 of the PLAT OF OXBOW PARK SUBDIVISION, Albuquerque, New Mexico, as the same is shown and designated on the plat thereof, recorded in the office of the County Clerk of Bernalillo County, New Mexico on March 9, 2000 in Book 2000C, Page 74 as Document No. 2000023435, together with an easterly portion of an existing public alley of the plat of CORONA DEL SOL, Albuquerque, New Mexico, as the same is shown and designated on the plat thereof, recorded in the office of the County Clerk of Bernalillo County, New Mexico on July 25, 1961 in Volume D3, Folio 10, now Comprising Lots 1 through 71 inclusive and Tracts A, B, C, D, E and F, PLAT OF THE ENCLAVE AT OXBOW, Albuquerque, New Mexico is with the free consent and in accordance with the desires of the undersigned owner(s) and/or proprietor(s) thereof and said owner(s) and/or proprietor(s) do hereby dedicate the 0.0438 acre of Public Alley and 0.1953 acre for St. Joseph's Drive as public right-of-way to the City of Albuquerque in Fee Simple with warranty covenants and do hereby grant all access, utility, and Drainage Easements hereon including the right to construct, operate, inspect, and maintain facilities therein; and all Public Utility easements shown hereon for the common and joint use of Gas, Electrical Power and Communication Services for buried and overhead distribution lines, conduits, pipes for underground and/or overhead Utilities where shown or indicated, and including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees and shrubs. The City has the right to enter upon the Grantees Property at any time and perform whatever inspection, installation, maintenance, repair, modification or removal ("Work") it deems appropriate without liability to the City. If Work affects any Improvements or Encroachments made by the Grantee, the City will not be financially or otherwise responsible for rebuilding or repairing of Improvements or Encroachments. If in the opinion of the City, the Work to be performed by the City could endanger the structural integrity or otherwise damage the Improvements or Encroachments, the Grantee shall, at its own expense take whatever protective measures are required to safeguard the Improvements or Encroachments. Said owner(s) and/or proprietor(s) do hereby consent to all of the foregoing and do hereby certify that this subdivision is with its free act and deed.

ALTURA WEST LTD. CO.

By: ______________________ ______________________
Thomas F. Keleher, President James W. Rogers, Vice President

State of New Mexico)
SS
County of Bernalillo)

This instrument was acknowledged before me on ______ day of ______________ 2002, by Thomas F. Keleher, President of Altura West LTD. Co., a New Mexico LTD. Liability Company.

This instrument was acknowledged before me on ______ day of ______________ 2002, by James W. Rogers, Vice President of Altura West LTD. Co., a New Mexico LTD. Liability Company.

My Commission Expires: ______________ ______________
Notary Public

SURVEYOR'S CERTIFICATION

I, A. Dwain Weaver, a registered Professional New Mexico Surveyor, certify that I am responsible for this survey and that this plat was prepared by me or under my supervision, shows all easements of record, and conforms to the Minimum Requirements of the Board of Registration for Professional Engineers and Professional Surveyors in October, 2000 and meets the minimum requirements for monumentation and surveys contained in the Albuquerque Subdivision Ordinance, and is true and accurate to the best of my knowledge and belief.

A. DWAIN WEAVER — NEW MEXICO — 6544 — REGISTERED PROFESSIONAL SURVEYOR

____
A. Dwain Weaver
New Mexico Professional Surveyor 6544

Date:

PLAT OF THE ENCLAVE AT OXBOW

(A REPLAT OF TRACT B-1 OXBOW PARK SUBDIVISION)

ALBUQUERQUE, NEW MEXICO
JULY, 2002

APPROVALS

PLAT NUMBER ______________

PLANNING DIRECTOR	DATE
CITY ENGINEER	DATE
A.M.A.F.C.A.	DATE
TRAFFIC ENGINEER	DATE
CITY SURVEYOR	DATE
PROPERTY MANAGEMENT	DATE
UTILITY DEVELOPMENT DEPARTMENT	DATE
PARKS & RECREATION	DATE
QWEST	DATE
COMCAST CABLE	DATE
PNM ELECTRIC SERVICES	DATE
PNM GAS SERVICES	DATE

TAX CERTIFICATION

PROPERTY OWNER OF RECORD ______________

BERNALILLO COUNTY TREASURER'S OFFICE ______________ DATE

PNM STAMP

In approving this plat, PNM Electric Services and Gas Services (PNM) did not conduct a Title Search of the properties shown hereon. Consequently, PNM does not waive nor release any easement or easement rights to which it may be entitled.

Bohannan ▲ Huston
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

SHEET 1 OF 2

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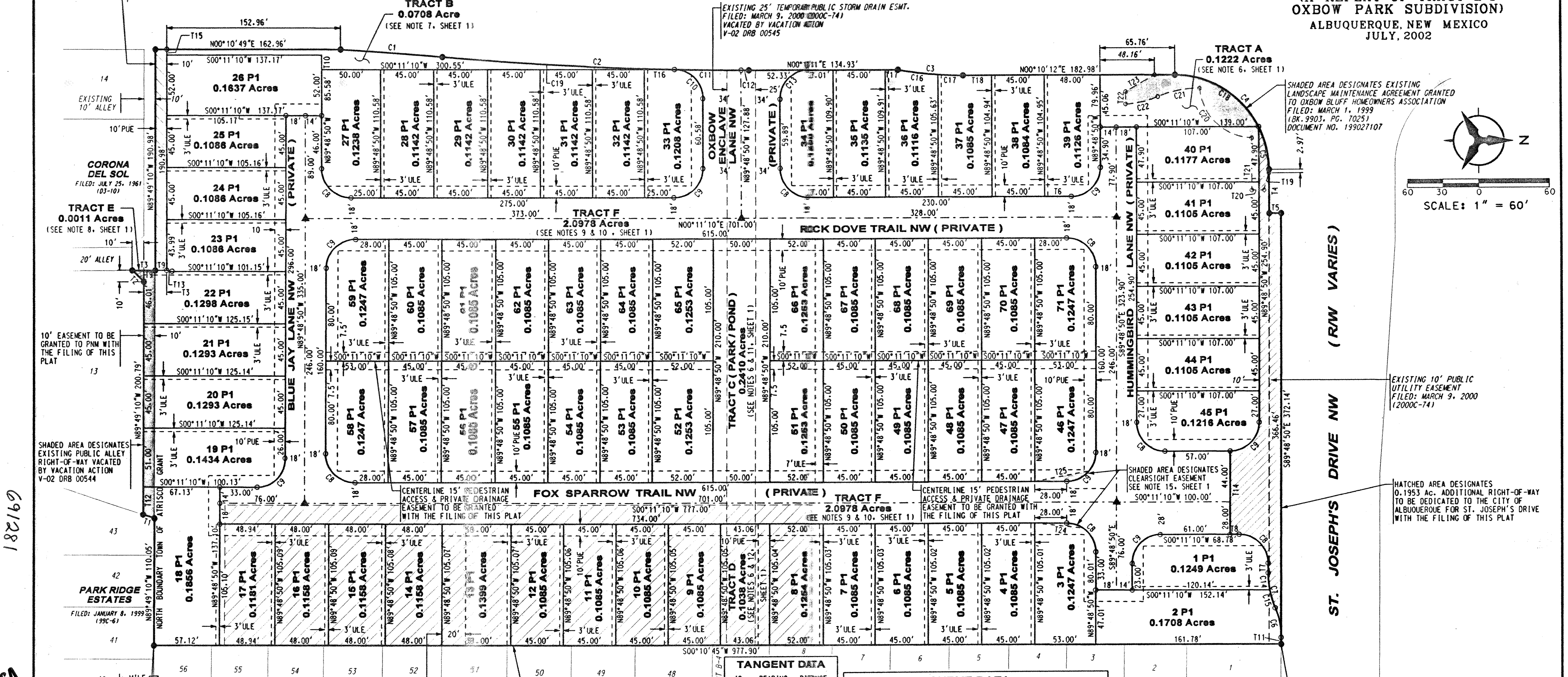
PLAT OF THE ENCLAVE AT OXBOW

(A REPLAT OF TRACT B-1 OXBOW PARK SUBDIVISION)

ALBUQUERQUE, NEW MEXICO
JULY, 2002



TANGENT DATA		
ID	BEARING	DISTANCE
T1	S18°19'25"W	[illegible].52'
T2	S45°10'50"W	[illegible].14'
T3	N00°10'50"E	[illegible].00'
T4	S89°48'50"E	[illegible].83'
T5	N00°11'10"E	[illegible].00'
T6	S00°11'10"W	[illegible].00'
T7	N89°48'50"W	[illegible].32'
T8	S00°11'10"W	[illegible].78'
T9	S00°10'50"W	[illegible].00'
T10	N89°48'50"W	[illegible].42'
T11	N89°48'50"W	5.68'
T12	N89°49'10"W	[illegible].78'
T13	S14°19'47"W	4.13'
T14	N89°48'50"W	[illegible].00'
T15	N89°49'10"W	4.99'
T16	S00°11'10"W	25.55'
T17	S00°10'11"W	[illegible].60'
T18	S00°10'12"W	24.22'
T19	S73°35'17"E	15.50'
T20	S00°00'00"W	[illegible].67'
T21	N89°49'18"W	[illegible].01'
T22	S90°00'00"W	[illegible].67'
T23	N29°12'06"W	[illegible].63'
T24	N06°15'25"E	[illegible].55'
T25	N10°37'57"W	[illegible].09'

CURVE DATA						
ID	DELTA	TANGENT	ARC	RADIUS	CHORD	CHORD BRG
C1	01°46'57"	43.35'	86.70'	2786.79'	86.69'	N04°24'51"E
C2	05°08'08"	131.97'	263.77'	2942.79'	263.68'	N02°44'15"E
C3	10°21'18"	27.82'	55.48'	307.00'	55.40'	N05°20'51"E
C4	90°00'52"	82.02'	128.83'	82.00'	115.98'	N45°10'41"E
C5	26°45'28"	19.50'	38.30'	82.00'	37.95'	N76°48'23"E
C6	22°13'46"	13.36'	26.38'	68.00'	26.22'	S79°04'17"W
C7	22°13'46"	15.72'	31.04'	80.00'	30.84'	S79°04'17"W
C8	90°00'00"	25.00'	39.27'	25.00'	35.36'	S45°11'10"W
C9	90°00'00"	25.00'	39.27'	25.00'	35.36'	N44°48'50"W
C10	88°44'54"	24.46'	38.72'	25.00'	34.97'	S45°48'43"W
C11	01°08'17"	29.23'	58.46'	2942.79'	58.46'	N00°52'07"E
C12	00°07'47"	3.33'	6.67'	2942.79'	6.67'	N00°14'05"E
C13	89°59'01"	24.99'	39.26'	25.00'	35.35'	S44°49'19"E
C14	10°34'37"	7.41'	14.77'	80.00'	14.75'	N84°53'51"E
C15	11°39'09"	8.16'	16.27'	80.00'	16.24'	N73°46'58"E
C16	06°28'26"	17.36'	34.69'	307.00'	34.67'	N07°17'17"E
C17	03°52'52"	10.40'	20.80'	307.00'	20.79'	N02°06'38"E
C18	63°15'23"	50.50'	90.53'	82.00'	86.00'	N31°47'57"E
C19	03°52'03"	99.36'	198.64'	2942.79'	198.61'	N03°22'17"E
C20	83°09'51"	41.70'	68.22'	47.00'	62.39'	S43°49'28"W
C21	23°11'05"	18.94'	37.37'	92.35'	37.12'	S10°41'54"E
C22	24°41'07"	15.10'	29.73'	69.00'	29.50'	S12°18'43"E

LEGEND

———	SUBDIVISION BOUNDARY LINE
———	NEW LOT LINE
— · — · —	CENTERLINE
— — — —	PROPOSED EASEMENT LINE
- - - - -	EXISTING EASEMENT LINE
———	ADJOINING PROPERTY LINE
ULE	3' OR 7' PRIVATE USE AND LANDSCAPING EASEMENT TO BE GRANTED TO THE ADJOINING LOT OWNER WITH THE FILING OF THIS PLAT
10' PUE	10' PUBLIC UTILITY EASEMENT TO BE GRANTED WITH THE FILING OF THIS PLAT
△	CITY OF ALBUQUERQUE CONTROL MONUMENT
▲	CENTERLINE MONUMENT TO BE INSTALLED
●	5/8" REBAR WITH 1 1/4" YELLOW PLASTIC SURVEY CAP STAMPED "WEAVER LS 6544"

USGS BRASS TABLET STAMPED "VABM 5108 NOSE RG 1950"
GEOGRAPHIC POSITION (NAD 1927)
NM STATE PLANE COORDINATES (CENTRAL ZONE)
X = 367,317.96 Y = 1,501,006.81
GROUND TO GRID FACTOR = 0.9996757
DELTA ALPHA = -00°15'19"
SLD 1929 ELEVATION = 5111.597

USC & GS BRASS TABLET STAMPED "JOSEPH 1969"
GEOGRAPHIC POSITION (NAD 1927)
NM STATE PLANE COORDINATES (CENTRAL ZONE)
X = 366,686.82 Y = 1,502,246.75
GROUND TO GRID FACTOR = 0.99967551
DELTA ALPHA = -00°15'24"
SLD 1929 ELEVATION = 5113.852

Bohannan ▲ Huston
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

SHEET 2 OF 2

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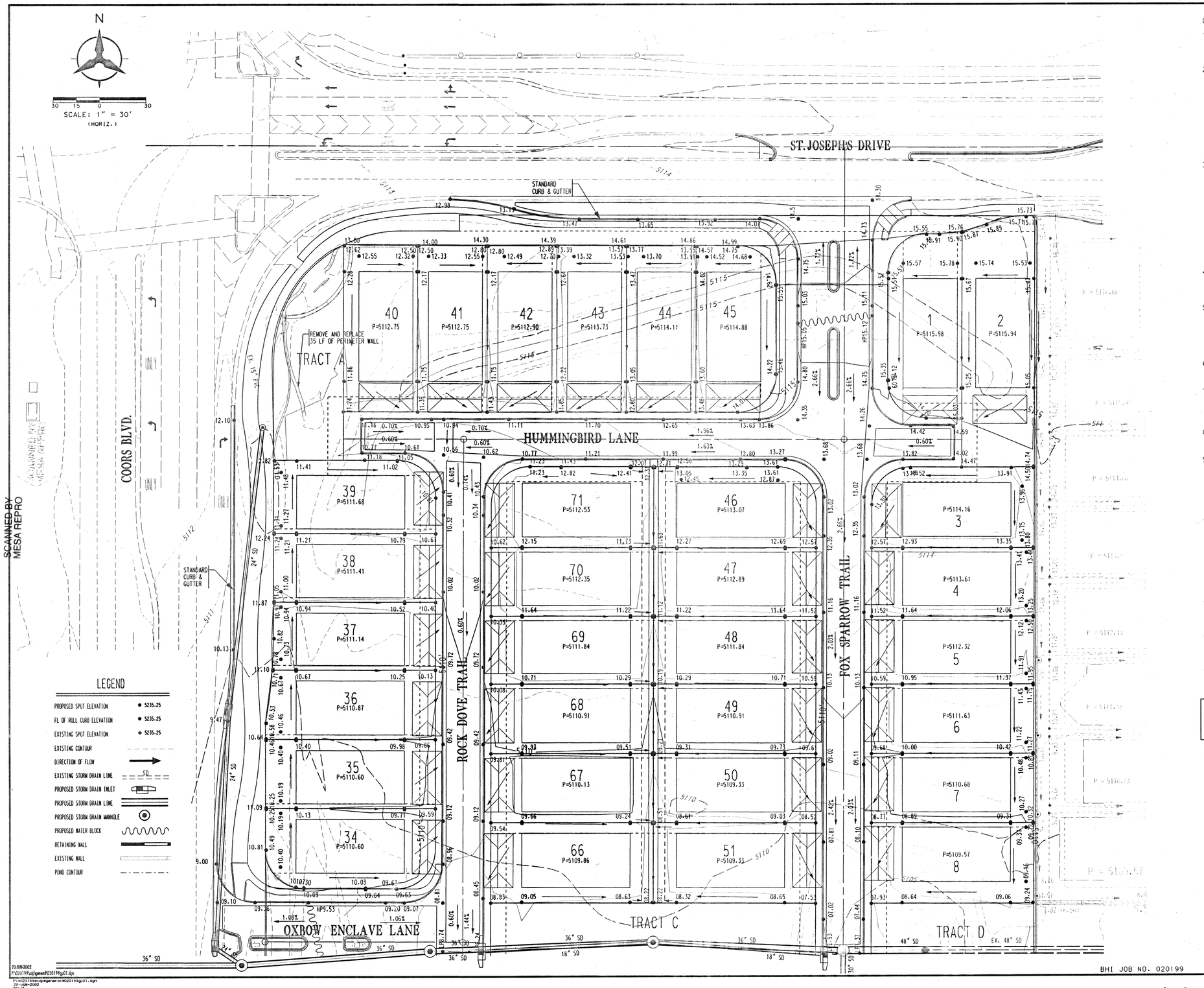
SHEET 2 OF 25



GENERAL NOTES:

1. EXCEPT AS PROVIDED HERIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.

2. CONTRACTOR SHALL OBTAIN AND ABIDE BY A TOPSOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH DIVISION, PRIOR TO CONSTRUCTION. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.

3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SOILS REPORT PREPARED BY GEO-TEST INC., DATED OCTOBER, 1997. ALL OTHER WORK, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS (FIRST PRIORITY), AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).

4. TWO WORKING DAYS PRIOR TO EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE (765-1264) FOR LOCATION OF EXISTING UTILITIES.

5. PRIOR TO GRADING, ALL VEGETATION DEBRIS, AND NEAR SURFACE ORGANICALLY CONTAMINATED SOIL SHALL BE STRIPPED FROM ALL AREAS TO BE GRADED. VEGETATION AND DEBRIS SHALL BE DISPOSED OF OFF-SITE OR STOCK-PILED FOR USE IN PLANTERS AND NON-STRUCTURAL FILLS.

6. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.

7. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.

8. CONTRACTOR SHALL RESEED ALL DISTURBED AREAS PER COA STANDARD SPECIFICATION 1012.

9. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTUCTING TEMPORARY BERMS AT THE PROPERTY LINES PER DETAIL THIS SHEET 2 OF 2 AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.

10. A DISPOSAL SITE FOR ALL EXCESS EXCAVATION AND UNSUITABLE MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIROMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT, AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

11. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATIONS.

12. ALL SPOT ELEVATIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED. VALLEY GUTTER ELEVATIONS ARE SHOWN AT FLOWLINE ELEVATION.

13. ALL INTERIOR CURBS ARE ROLL CURB AND GUTTER UNLESS OTHERWISE NOTED.

Brad S. Bishop 6/26/02
APPROVED FOR ROUGH GRADING DATE

Bohannan ▲ Huston
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

AS-BUILT INFORMATION

CONTRACTOR WORK STAKED BY	
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE
RECORDED BY	DATE
NO.	

MICRO-FILM INFORMATION

BENCH MARKS

ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366.686.82
Y=1.502.246.75
GROUND-TO-GRID FACTOR = 0.9996751
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

FIELD SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
KEVIN G. PATTON
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
6-26-02

RECORD DRAWING

NO.	DATE	REMARKS	BY
1		REVISIONS	
		DESIGN	

DESIGNED BY	RKL-YP	DATE 05/2002
DRAWN BY	BJG	DATE 05/2002
CHECKED BY	KP	DATE 05/2002

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
GRADING PLAN

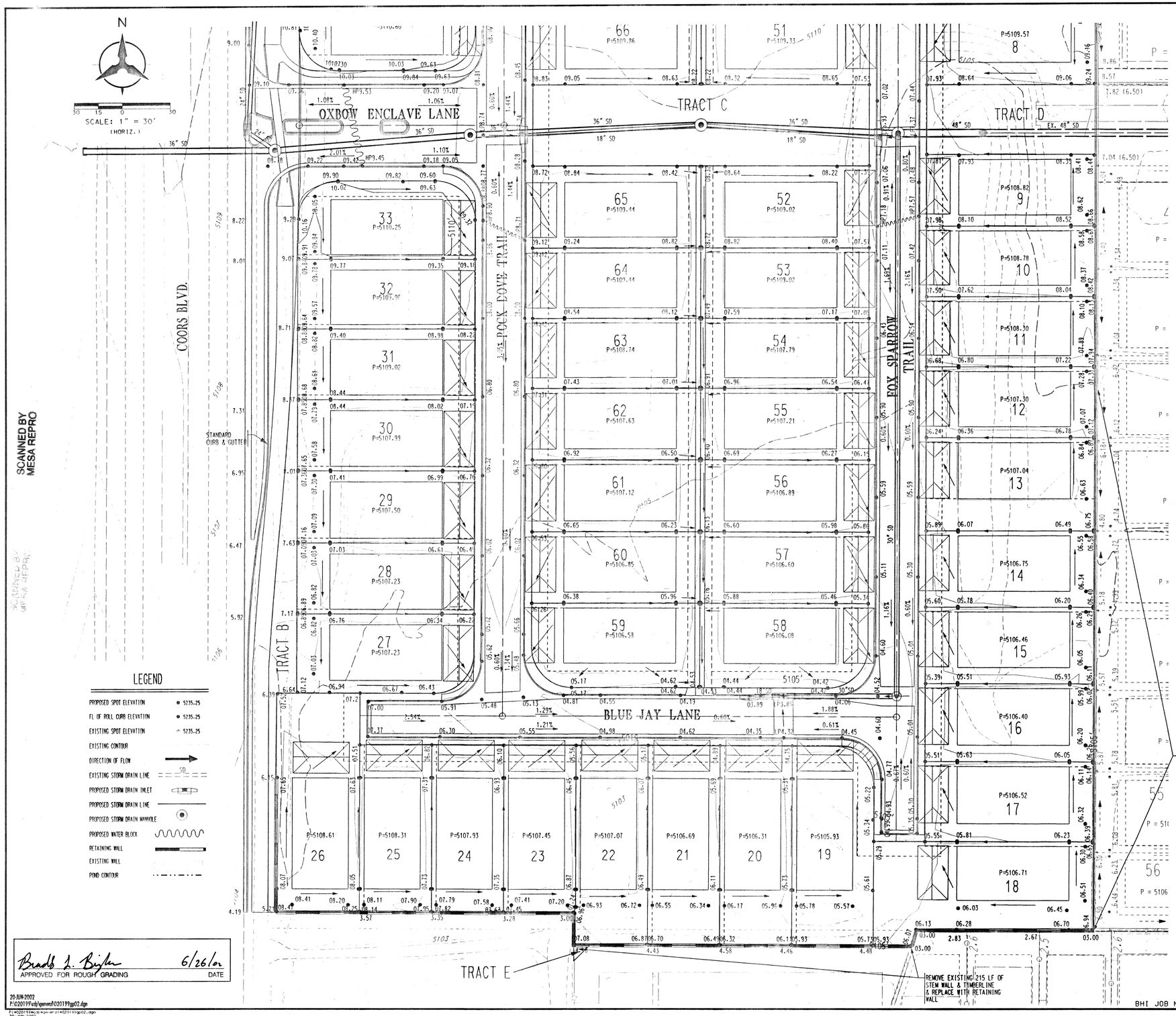
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
X	X			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	1	3

BHI JOB NO. 020199

RECORD DRAWING

SCANNED BY MESA REPRO



SCANNED BY MESA REPRO

LEGEND

PROPOSED SPOT ELEVATION	• 5235.25
FL OF ROLL CURB ELEVATION	• 5235.25
EXISTING SPOT ELEVATION	^ 5235.25
EXISTING CONTOUR	
DIRECTION OF FLOW	
EXISTING STORM DRAIN LINE	SD
PROPOSED STORM DRAIN INLET	INLET
PROPOSED STORM DRAIN LINE	
PROPOSED STORM DRAIN MANHOLE	
PROPOSED WATER BLOCK	
RETAINING WALL	
EXISTING WALL	
POND CONTOUR	

Brad S. Bigler 6/26/02
APPROVED FOR ROUGH GRADING DATE

20-JUN-2002
P:\020199\cdp\gnenm\020199gg02.dgn

GENERAL NOTES:

1. EXCEPT AS PROVIDED HERIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. CONTRACTOR SHALL OBTAIN AND ABIDE BY A TOPSOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH DIVISION, PRIOR TO CONSTRUCTION. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SOILS REPORT PREPARED BY GEO-TEST INC., DATED OCTOBER, 1997. ALL OTHER WORK, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS (FIRST PRIORITY), AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
4. TWO WORKING DAYS PRIOR TO EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE (765-1264) FOR LOCATION OF EXISTING UTILITIES.
5. PRIOR TO GRADING, ALL VEGETATION DEBRIS, AND NEAR SURFACE ORGANICALLY CONTAMINATED SOIL SHALL BE STRIPPED FROM ALL AREAS TO BE GRADED. VEGETATION AND DEBRIS SHALL BE DISPOSED OF OFF-SITE OR STOCK-PILED FOR USE IN PLANTERS AND NON-STRUCTURAL FILLS.
6. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
7. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
8. CONTRACTOR SHALL RESEED ALL DISTURBED AREAS PER COA STANDARD SPECIFICATION 1012.
9. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTUCTING TEMPORARY BERMS AT THE PROPERTY LINES PER DETAIL THIS SHEET 2 OF 2 AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
10. A DISPOSAL SITE FOR ALL EXCESS EXCAVATION AND UNSUITABLE MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIROMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT, AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
11. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATIONS.
12. ALL SPOT ELEVATIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED. VALLEY GUTTER ELEVATIONS ARE SHOWN AT FLOWLINE ELEVATION.
13. ALL INTERIOR CURBS ARE ROLL CURB AND GUTTER UNLESS OTHERWISE NOTED.

Bohannan ▲ Huston
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

AS-BUILT INFORMATION

BENCH MARKS	
ACS BRASS TABLET STAMPED "JOSEPH"	
GEOGRAPHIC POSITION (NAD 1927)	
N.M. STATE PLANE COORDINATES	
(CENTRAL ZONE) Y=366,686.82	
Y=1,502,246.75	
GROUND-TO-GRID FACTOR = 0.99967551	
DELTA ALPHA-00°15'24"	
NGVD 1929 ELEVATION = 5113.852'	

SURVEY INFORMATION FIELD NOTES		
NO.	BY	DATE

ENGINEER'S SEAL
KEVIN L. PATTON, REGISTERED PROFESSIONAL ENGINEER, 6-25-02

RECORDED BY RRL.YP DATE 05/2002
DRAWN BY BJG DATE 05/2002
CHECKED BY KP DATE 05/2002

REVISIONS			
NO.	DATE	REMARKS	BY

RECORDED DRAWING

CONTRACTOR
STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
VERIFICATION BY — DATE
DRAWINGS CHECKED BY — DATE

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

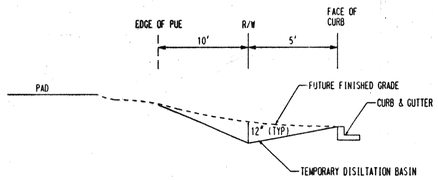
ENCLAVE AT OXBOW SUBDIVISION
GRADING PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
X	X			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	2	3

BHI JOB NO. 020199

RECORD DRAWING



SECTION A-A
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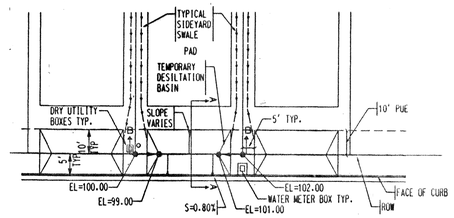
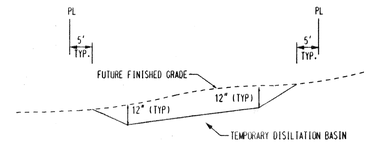
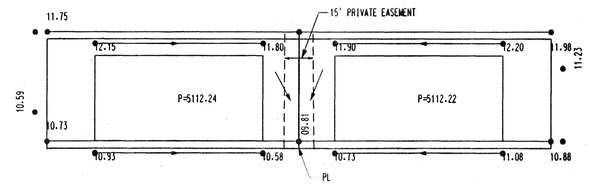


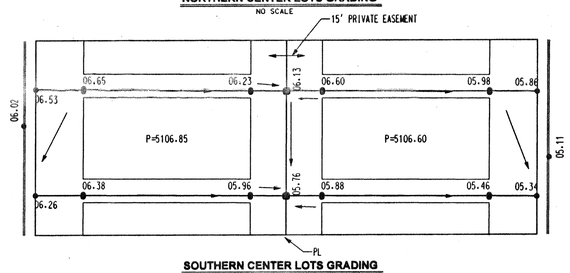
ROUGH GRADING DETAIL
NOT TO SCALE



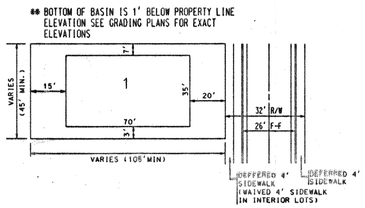
SECTION B-B
NOT TO SCALE



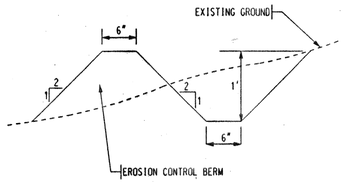
NORTHERN CENTER LOTS GRADING
NO SCALE



SOUTHERN CENTER LOTS GRADING
NO SCALE

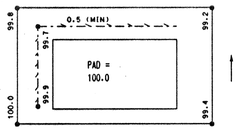


TYPICAL LOT DETAIL (LOTS 1 - 71)
NO SCALE

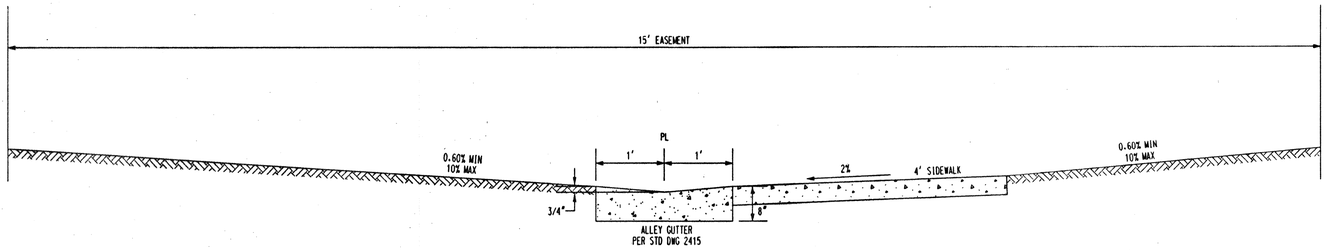


EROSION CONTROL PLAN
NOT TO SCALE

A BERM WITH THE DIMENSIONS SHOWN SHALL BE MAINTAINED DURING CONSTRUCTION UNTIL COMPLETION OF INDIVIDUAL HOMES WITHIN THE PROJECT



TYPICAL LOT GRADING
NO SCALE



LEGEND

PROPOSED SPOT	●
EXISTING SPOT	
TEMP. DESILTATION BASIN (SEE DETAIL THIS SHEET)	
LIMITS OF GRADING	———
EXISTING CONTOUR	- - - -
FLOW DIRECTION ARROW	←
PAD	
TURNED BLOCK	TB
RETAINING WALL	▬

BHI JOB NO. 020199

Bohannan ▲ Huston
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
GRADING PLAN DETAILS

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
X	X			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	3	3

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	RKL	DATE 05/2002
DRAWN BY	DH	DATE 05/2002
CHECKED BY	ES	DATE 05/2002

AS-BUILT INFORMATION

CONTRACTOR
REPRESENTATIVE BY
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE) X=366.686.82 Y=1.502.246.75
GROUND-TO-GRID FACTOR = 0.999967551
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
KEVIN R. PATTON
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER

RECORD DRAWING

RECORD DRAWING

SCANNED BY MESA REPRO

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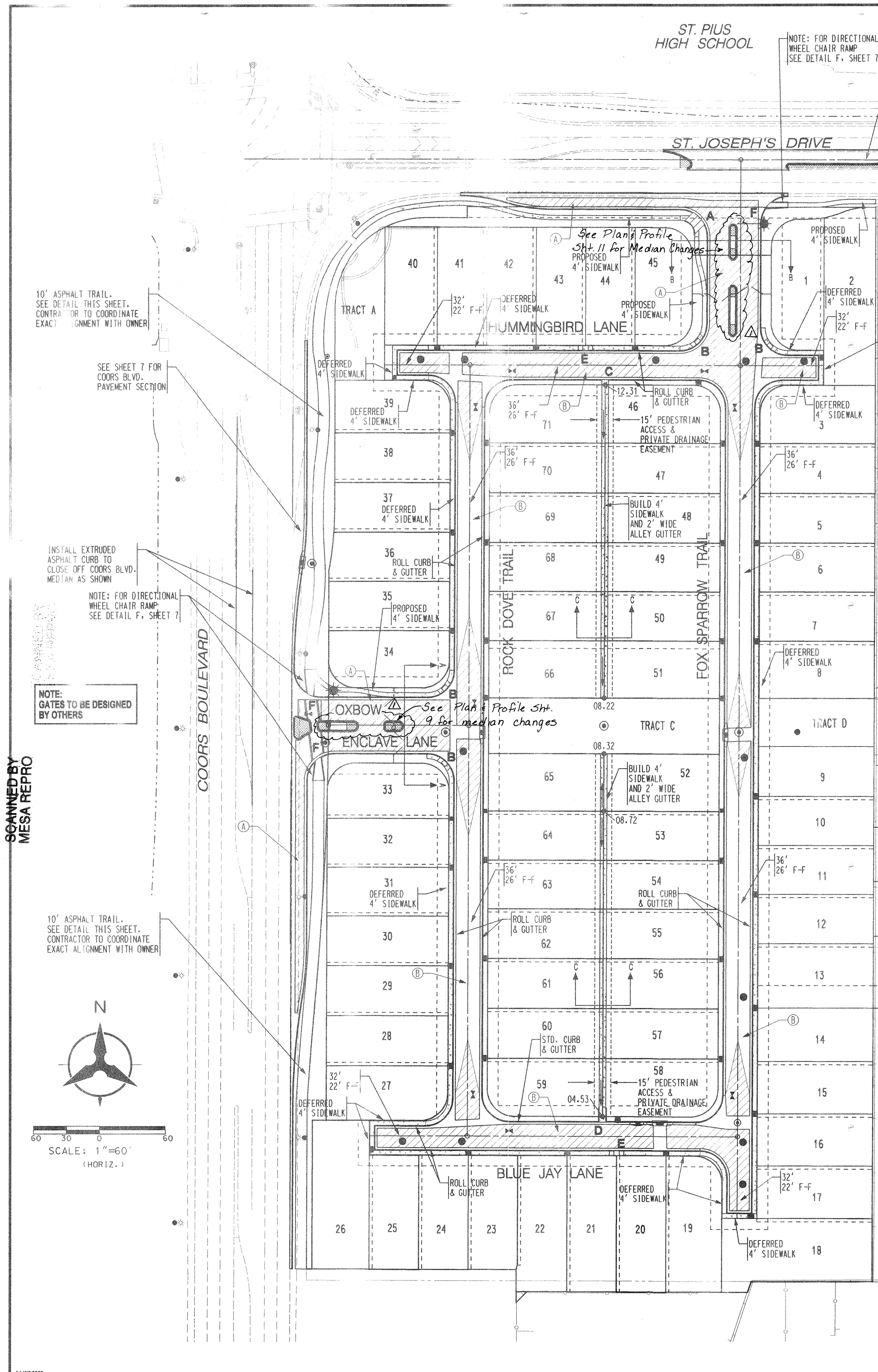
P:\020199\cdp\general\020199GP.dgn
20-JUN-2002
09:22

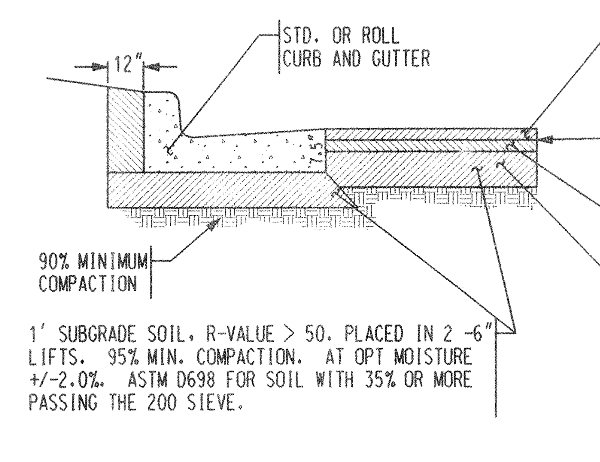


SCANNED BY MESA REPRO

14-AUG-2002
p:\020199\cdp\general\020199opave.dgn

NOTE:
"SOIL NOT HAVING THE MINIMUM R-VALUE OF 50, SHALL BE REMOVED TO A DEPTH OF 2 FEET AND REPLACED, BY THE CONTRACTOR, WITH SUITABLE MATERIAL OR PAVEMENT SECTION SHALL BE DESIGNED, BY THE CONSULTANT ACCOMMODATING THE EXISTING R-VALUE PER COA STANDARD SPECIFICATIONS."

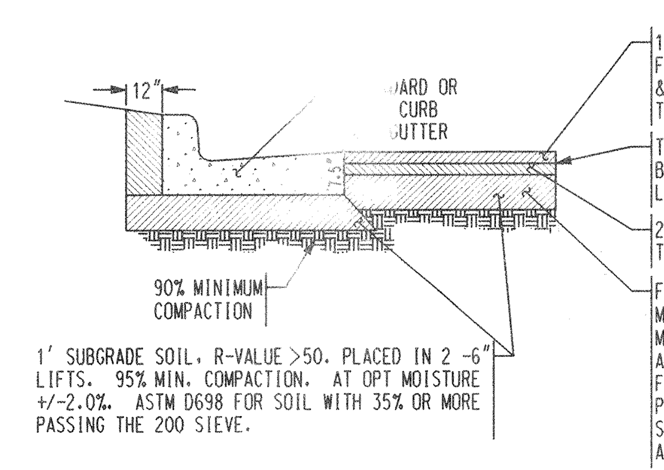
LIMITS OF PAVEMENT SECTION AT VALLEY GUTTER



TYPICAL SUBDIVISION PAVEMENT SECTION (B)

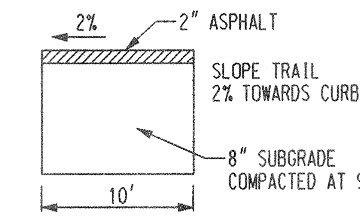
(REFER TO COA STD. DWG. 2405)
(EXCEPT TYPE "B" GRADATION SHALL BE USED)
(AS ACCEPTED ON COA PROJECT #628881)
NOT TO SCALE

NOTE:
"SOIL NOT HAVING THE MINIMUM R-VALUE OF 50, SHALL BE REMOVED TO A DEPTH OF 2 FEET AND REPLACED, BY THE CONTRACTOR, WITH SUITABLE MATERIAL OR PAVEMENT SECTION SHALL BE DESIGNED, BY THE CONSULTANT ACCOMMODATING THE EXISTING R-VALUE PER COA STANDARD SPECIFICATIONS."

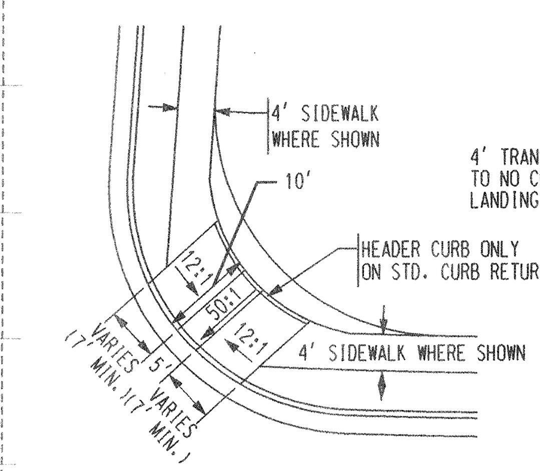


ENTRANCE TO SUBDIVISION (OFF COORS BLVD. / ST. JOSEPH'S DR.) PAVEMENT SECTION (A)

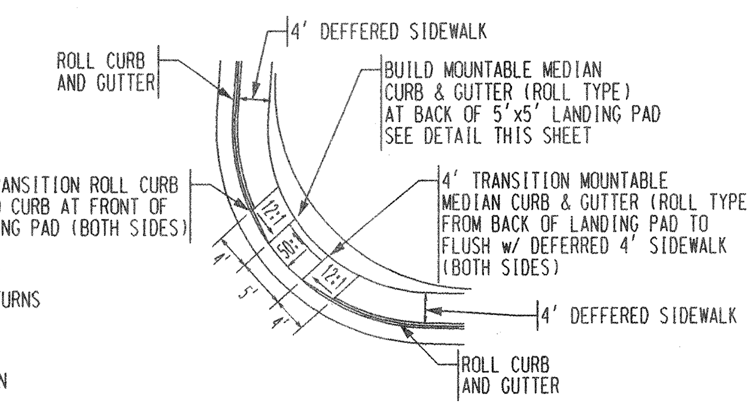
(AS ACCEPTED ON COA PROJECT #628881)
NOT TO SCALE



ASPHALT TRAIL
NOT TO SCALE

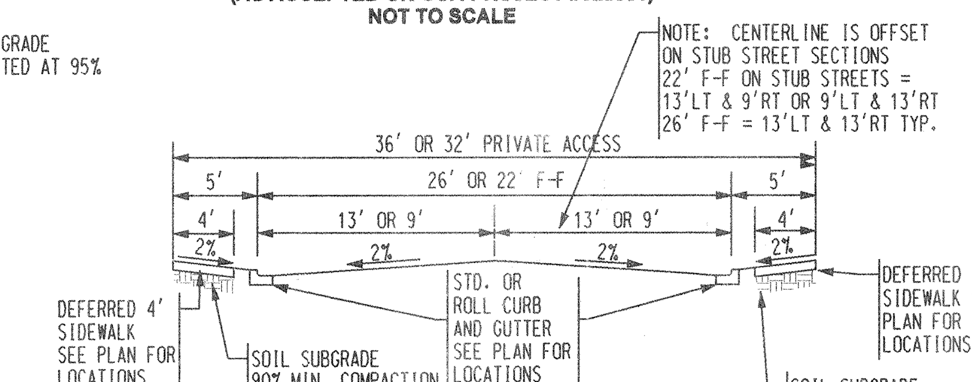


WHEEL CHAIR RAMP DETAIL A
SEE MODIFIED STD. DWG. 2441 CASE II
NOT TO SCALE

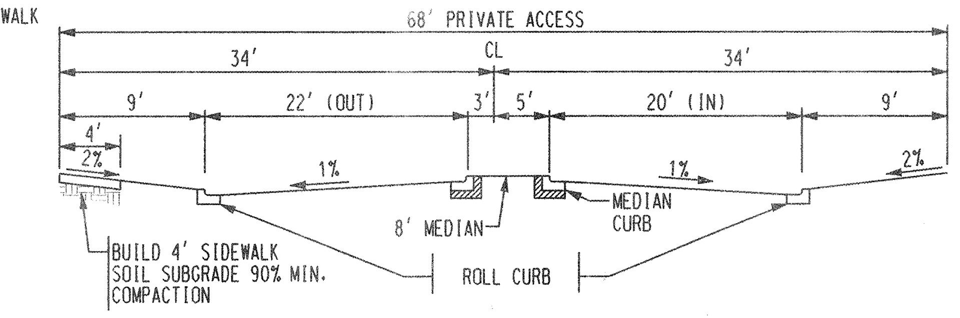


ROLL CURB WHEEL CHAIR RAMP DETAIL B
NOT TO SCALE

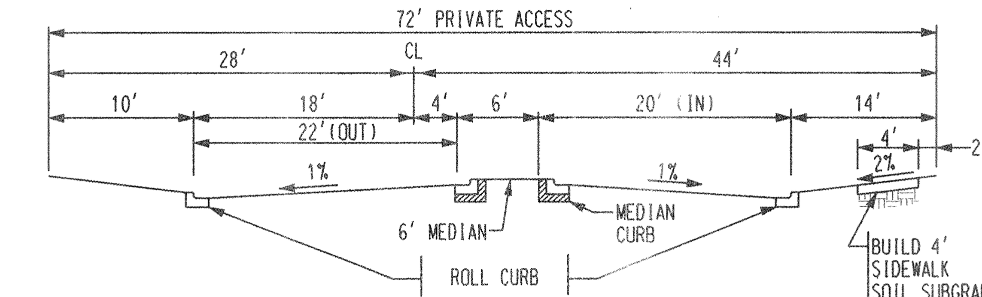
CONTRACTOR SHALL COORDINATE WITH ALL WET AND DRY UTILITY COMPANIES FOR EXACT LOCATIONS OF UTILITIES PRIOR TO ANY WORK WITHIN COORS BLVD. OR ST. JOSEPH'S DRIVE. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCIES.



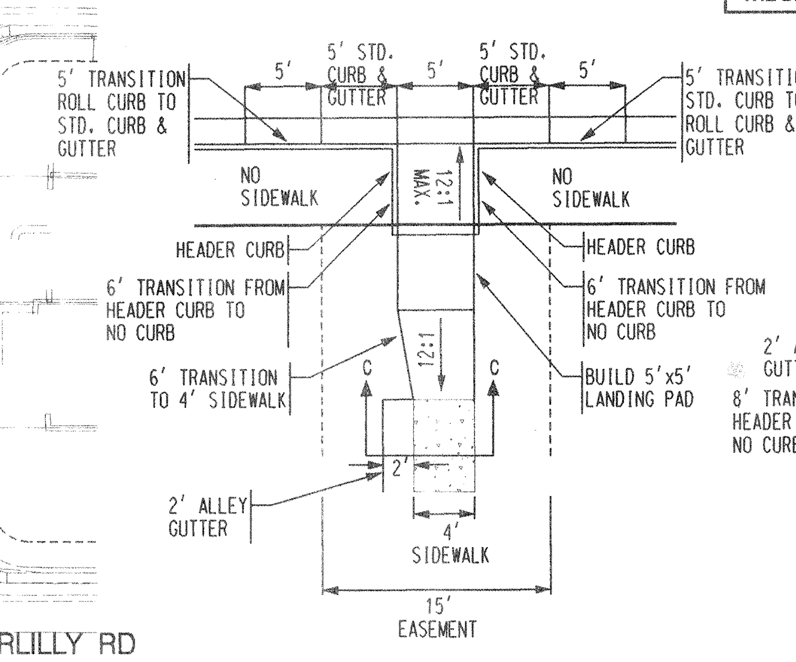
TYPICAL STREET SECTION LOCAL RESIDENTIAL
NOT TO SCALE



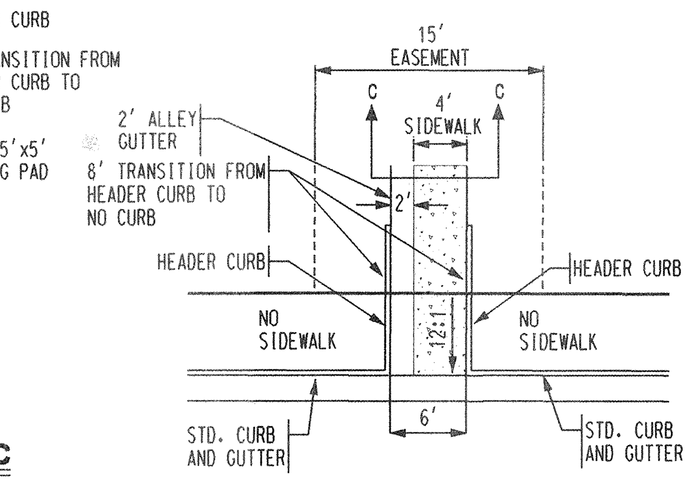
ENTRANCE TO SUBDIVISION STREET SECTION A-A
NOT TO SCALE



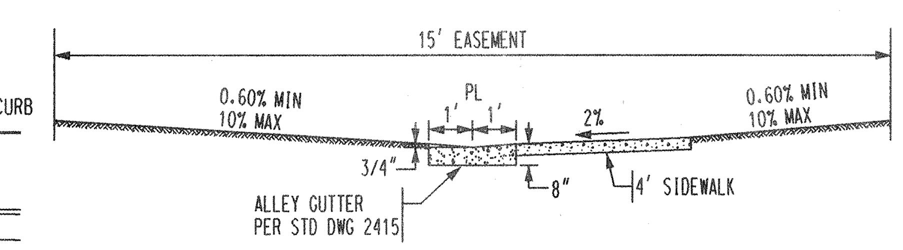
ENTRANCE TO SUBDIVISION STREET SECTION B-B
NOT TO SCALE



WHEEL CHAIR RAMP DETAIL C
NOT TO SCALE
(AS USED AT NORTH END OF 15' ACCESS TRAIL EASEMENT)



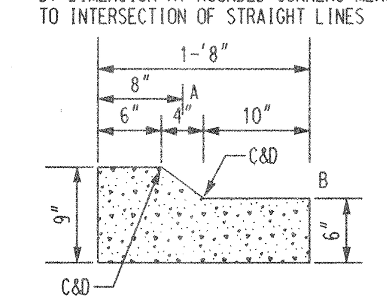
WHEEL CHAIR RAMP DETAIL D
NOT TO SCALE
(AS USED AT SOUTH END OF 15' ACCESS TRAIL EASEMENT)



ALLEY GUTTER / SIDEWALK SECTION C-C
NOT TO SCALE

CURB CONSTRUCTION NOTES

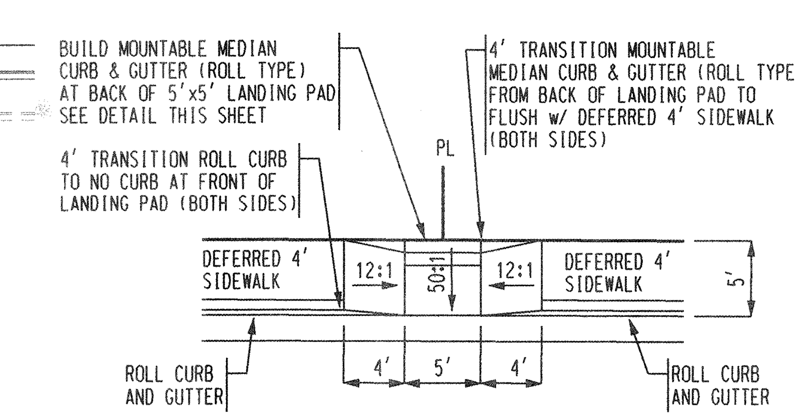
A. THEORETICAL FACE OF CURB
B. TRAFFIC SIDE
C. 2" RADIUS
D. DIMENSION AT ROUNDED CORNERS MEASURED TO INTERSECTION OF STRAIGHT LINES



MOUNTABLE MEDIAN CURB & GUTTER ROLL TYPE
NOT TO SCALE

LEGEND

PROPOSED CURB AND GUTTER	
EXISTING CURB AND GUTTER	
PROPOSED STORM DRAIN INLET	
PROPOSED STORM MANHOLE	◉
EXISTING STORM DRAIN MANHOLE	
PROPOSED SANITARY SEWER MANHOLE	●
EXISTING SANITARY SEWER MANHOLE	
PROPOSED FIRE HYDRANT	
PROPOSED GATE VALVE	⧓
EXISTING FIRE HYDRANT	
PROPOSED STREET LIGHT	
SIDEWALK	
CROWN FLATTENING	
PROPOSED WATER METER	■



WHEEL CHAIR RAMP DETAIL E
NOT TO SCALE
(AS USED AT BOTH ENDS ACROSS FROM 15' ACCESS TRAIL EASEMENT)

BHI JOB NO. 020199

Bohannan ▲ Huston Inc.
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

AS-BUILT INFORMATION

CONTRACTOR	
WORK STAKED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366,686.82
Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA-00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
KEVIN G. PATTON NEW MEXICO 13685 REGISTERED PROFESSIONAL ENGINEER
8.13.02

NO.	DATE	REMARKS	BY
2		RECORD DRAWING.	
1	11-25-02	Median Changes	KGP

REVISIONS
DESIGN

DESIGNED BY	TSG, RKL	DATE 05/2002
DRAWN BY	BS	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

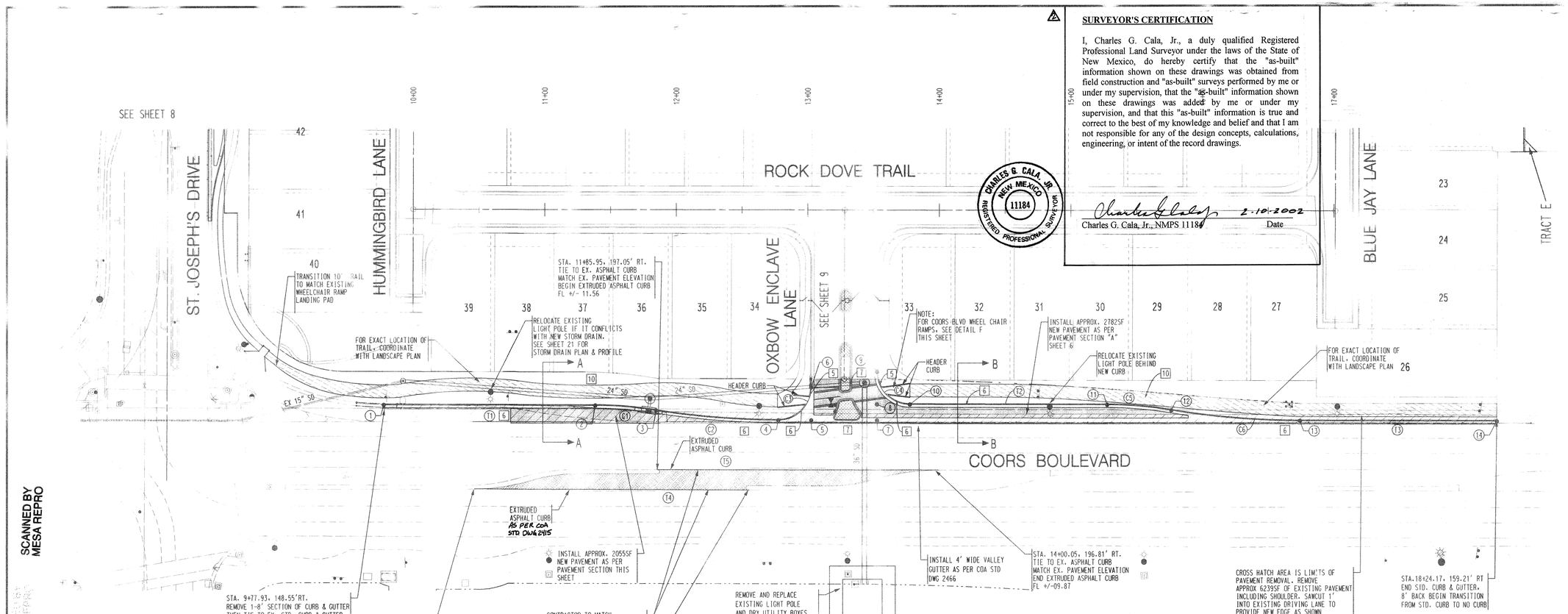
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
OVERALL PAVING PLAN

DESIGN REVIEW COMMITTEE: APPROVED AUG 15 2002 DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL: APPROVED AUG 19 2002 CITY ENGINEER
LAST DESIGN UPDATE
MO./DAY/YR. MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	6	25

2 **RECORD DRAWING**



SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

Charles G. Cala, Jr., NMPS 11184 — Date 2-10-2002

SCANNED BY MESA REPRO

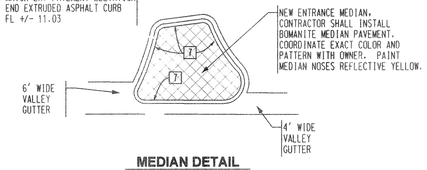
NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE ALONG FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

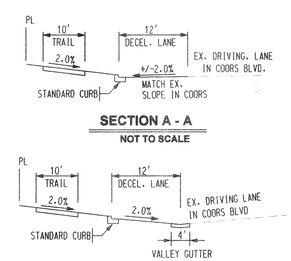
CONTRACTOR SHALL COORDINATE WITH ALL WET AND DRY UTILITY COMPANIES FOR EXACT LOCATIONS OF UTILITIES PRIOR TO ANY WORK WITHIN COORS BLVD. OR ST. JOSEPH'S DRIVE. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCIES.

KEYED GENERAL NOTES

- 1 INSTALL 6' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2420
- 2 INSTALL SPECIAL 12' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2422
- 3A–3B INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 4C–4E INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 5 ROLL CURB & GUTTER AS PER STD. DWG. 2415
- 6 STD CURB & GUTTER AS PER STD. DWG. 2415
- 7 MEDIAN CURB & GUTTER AS PER STD. DWG. 2415
- 8 BUILD 4' SIDEWALK AS PER STD. DWG. 2430
- 9 BUILD 6' SIDEWALK AS PER STD. DWG. 2430
- 10 BUILD 10' TRAIL (SEE LANDSCAPE PLAN FOR EXACT LOCATION & SECTION)
- 11 DEFERRED 4' SIDEWALK

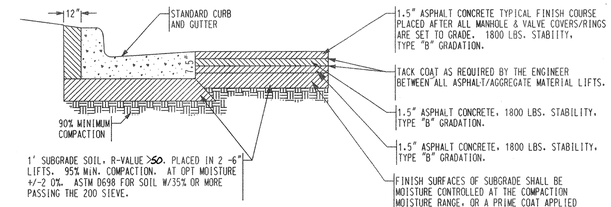


MEDIAN DETAIL
NOT TO SCALE



SECTION A - A
NOT TO SCALE

SECTION B-B
NOT TO SCALE



COORS BOULEVARD
(REFER TO COA STD. DWG. 2405)
(EXCEPT TYPE "B" GRADATION SHALL BE USED)
NOT TO SCALE
R>65 PER PAVEMENT SECTION
COA W.O. # 584081

Point Table				
		STATION	OFFSET	ELEVATION
	1	9+77.93	148.55' RT.	5111.87
PC	2	11+38.83	148.61' RT.	5110.23
PRC	3	11+85.06	152.22' RT.	5109.41 10.00
PCC	4	12+78.01	159.42' RT.	5109.28 ✓
	5	13+03.00	159.41' RT.	5109.05 8.93
PT	6	13+03.00	134.42' RT.	5109.36 ✓
	7	13+53.00	159.39' RT.	5108.54 8.37
	8	13+53.00	147.39' RT.	5108.24 8.08
PC	9	13+53.00	122.39' RT.	5109.27 8.34
PT	10	13+78.01	147.38' RT.	5107.27 8.58
PC	11	15+28.01	147.33' RT.	5107.14 ✓
PRC	12	15+76.84	151.31' RT.	5106.37 8.47
PT	13	16+74.49	159.27' RT.	5105.33 8.41
	14	18+24.17	159.21' RT.	5104.07 ✓

* NOTE- ALL ELEVATIONS ARE FL UNLESS OTHERWISE NOTED

Tangent Table		
ID	BEARING	LENGTH
T1	S00°12'33"W	160.90'
T2	S00°09'51"W	150.00'
T3	S00°09'51"W	149.68'
T4	S00°16'38"W	209.03'
T5	S00°07'20"W	214.10'

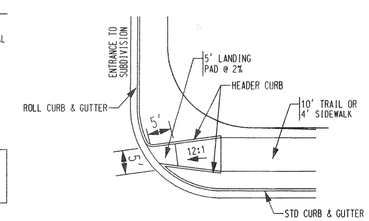
Curve Table				
ID	ARC	RADIUS	DELTA	TANGENT
C1	46.42'	300.00'	08°51'58"	23.26'
C2	93.32'	600.00'	08°54'41"	46.75'
C3	39.26'	25.00'	89°58'40"	24.99'
C4	39.28'	25.00'	90°01'20"	25.01'
C5	49.04'	300.00'	09°22'00"	24.58'
C6	98.09'	600.00'	09°22'00"	49.15'

PAVEMENT LEGEND

- PAVEMENT REMOVAL
- NEW PAVEMENT
- MEDIAN FILL
- ASPHALT TRAIL

FOR SIGNING AND STRIPING ALONG COORS BLVD. SEE SHEET 23

NOTE:
COORS PAVING ALIGNMENT BASED OFF OF ROCK DOVE TRAIL STATIONING



WHEEL CHAIR RAMP DETAIL F
NOT TO SCALE
(AS SHOWN ON COORS BLVD. AND ST. JOSEPH'S DRIVE ENTRANCES)

N

40 20 0 40
SCALE: 1"=40'
(HORIZ.)

BHI JOB NO. 020199

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
COORS BOULEVARD PAVING PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
APPROVED AUG 15 2002 DESIGN REVIEW COMMITTEE	APPROVED AUG 19 2002 CITY ENGINEER			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	7	25

AS-BUILT INFORMATION

CONTRACTOR Universal Constructors
WORK STAKED BY J.M.A.
INSPECTOR'S ACCEPTANCE BY BHI Jim Pritchard DATE
FIELD VERIFICATION BY J.M.A. DATE 2-03
DRAWINGS CORRECTED BY J.M.A. DATE 2-03
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH" (NAD 1927)
GEOGRAPHIC POSITION
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366,686.82
Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.9996751
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

SEAL

ENGINEER'S SEAL
KEVIN G. PATTON NEW MEXICO 9889 REGISTERED PROFESSIONAL ENGINEER
8-13-02

CGC

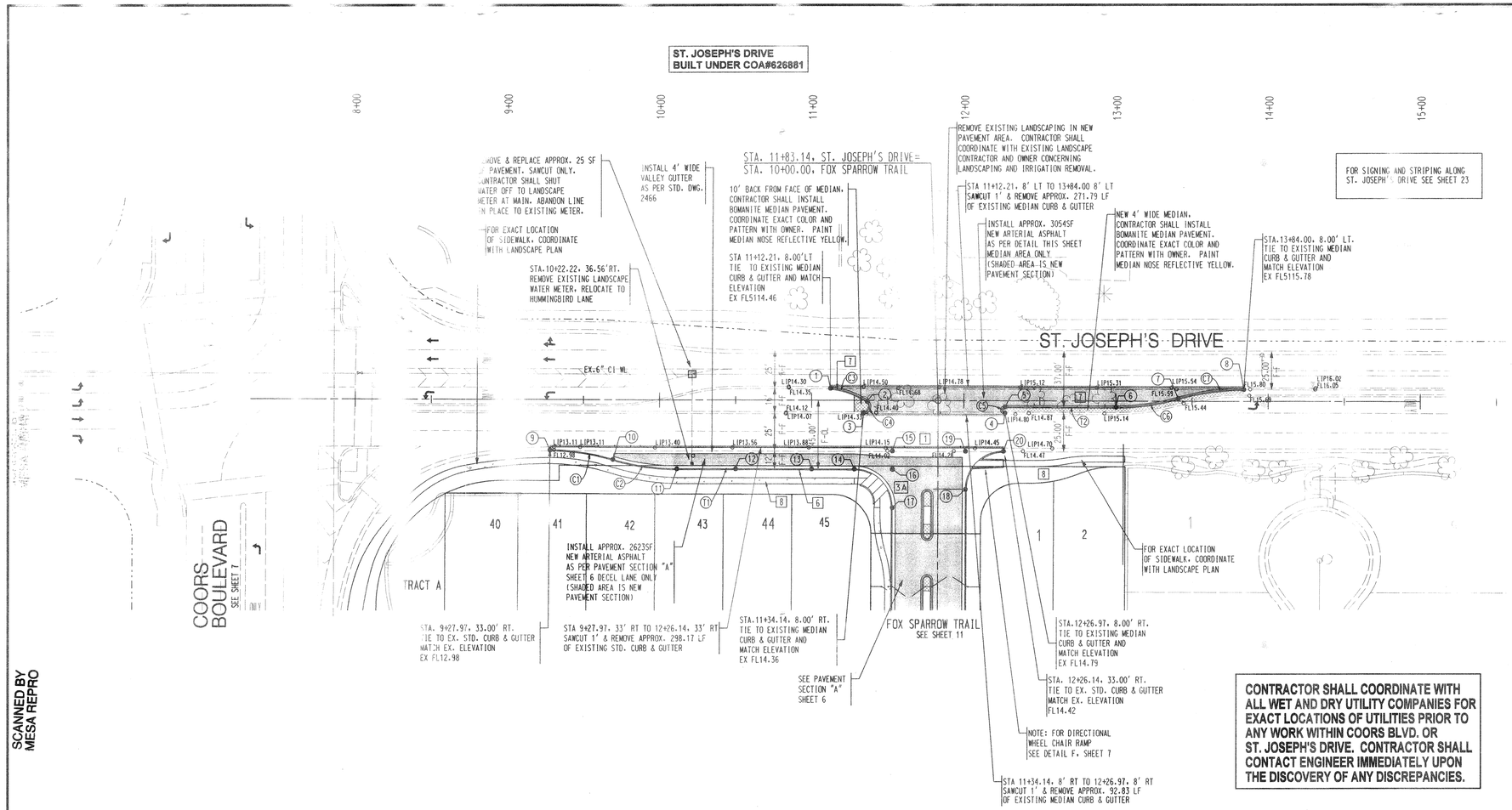
NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG.RKL	DATE 05/2002
DRAWN BY	DLM.BJS	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

AS-BUILT CERTIFY

RECORD DRAWING

13-AUG-2002
p:\020199\cdp\general\020199S01.dgn



CONTRACTOR SHALL COORDINATE WITH ALL WET AND DRY UTILITY COMPANIES FOR EXACT LOCATIONS OF UTILITIES PRIOR TO ANY WORK WITHIN COORS BLVD. OR ST. JOSEPH'S DRIVE. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCIES.

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25 UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE ALONG FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

KEYED GENERAL NOTES

1. INSTALL 6' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2420
2. INSTALL SPECIAL 12' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2422
3A-3B INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
4C-4E INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
5. ROLL CURB & GUTTER AS PER STD. DWG. 2415
6. STD CURB & GUTTER AS PER STD. DWG. 2415
7. MEDIAN CURB & GUTTER AS PER STD. DWG. 2415
8. BUILD 4' SIDEWALK AS PER ST. DWG. 2430
9. BUILD 6' SIDEWALK AS PER STD. DWG. 2430
10. BUILD 10' TRAIL (SEE LANDSCAPE PLAN FOR EXACT LOCATION & SECTION)
11. DEFERRED 4' SIDEWALK

CURB Tangent Table

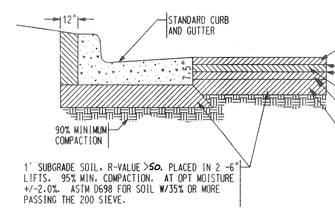
ID	BEARING	LENGTH
T1	S89°48'55"E	116.14'
T2	N89°48'50"W	73.03'

CURB Curve Table

ID	ARC	RADIUS	DELTA	TANGENT
C1	42.00'	150.00'	16°02'31"	21.14'
C2	42.57'	150.00'	16°15'37"	21.43'
C3	26.01'	50.00'	29°48'29"	13.31'
C4	10.14'	4.00'	145°18'01"	12.80'
C5	6.28'	2.00'	180°00'00"	--
C6	41.44'	146.00'	16°15'39"	20.86'
C7	43.70'	154.00'	16°15'37"	22.00'

Point Table

	ID	STATION	OFFSET	ELEVATION	
PC	1	11+12.21	8.00' LT.	5114.86	.40
PCC	2	11+36.41	0.71' RT.	5114.39	.58
PT	3	11+34.14	8.00' RT.	5114.36	✓
PC	4	12+26.97	8.00' RT.	5114.25	.74
PT	5	12+26.97	4.00' RT.	5116.00	4.00
PC	6	13+00.00	4.00' RT.	5115.24	.31
PRC	7	13+40.88	1.84' LT.	5115.48	.41
PT	8	13+84.00	8.00' LT.	5115.78	✓
PC	9	9+27.97	33.00' RT.	5112.88	.90
PRC	10	9+69.40	39.00' RT.	5113.19	✓
PT	11	10+11.40	45.00' RT.	5113.47	✓
	12	10+50.00	45.00' RT.	5113.52	.50
	13	11+00.00	45.00' RT.	5113.92	.83
PC	14	11+28.14	45.00' RT.	5114.07	✓
	15	11+53.14	33.00' RT.	5114.04	✓
	16	11+53.14	45.00' RT.	5114.26	.36
PT	17	11+53.14	70.00' RT.	5114.75	✓
PC	18	12+01.14	58.00' RT.	5114.73	✓
	19	12+01.14	33.00' RT.	5114.20	.20
PT	20	12+26.14	33.00' RT.	5114.42	✓



ST. JOSEPH'S DRIVE

(MEDIAN AREA ONLY)
(REFER TO COA STD. DWG. 2405)
(EXCEPT TYPE "B" GRADATION SHALL BE USED)
NOT TO SCALE

R>65 PER PAVEMENT SECTION
COA W.O. # 584081

SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

2-10-03
Charles G. Cala, Jr., NMPS 11184 — Date

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

RECORD DRAWING

N

SCALE: 1"=40' (HORIZ.)

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
ST. JOSEPH'S DRIVE PAVING PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
APPROVED AUG 15 2002 DESIGN REVIEW COMMITTEE	APPROVED AUG 19 2002 CITY ENGINEER			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	8	25

BHI JOB NO. 020199

AS-BUILT INFORMATION

CONTRACTOR Universal Constructors
WORK STAKED BY J.M.A.
INSPECTOR'S ACCEPTANCE BY B.H.I. Jon Rathbun DATE
FIELD LOCATION BY J.M.A. DATE 2/26/03
DRAWINGS CORRECTED BY J.M.A. DATE 2/26/03
WICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366,686.82
Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

SEAL

ENGINEER'S SEAL
C.G.C.
KEVIN G. CARTON NEW MEXICO 9695 PROFESSIONAL ENGINEER
8-13-02

AS-BUILT & CERTIFY.

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG.RKL	DATE 05/2002
DRAWN BY	DLM.BJS	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

SCANNED BY MESA REPRO

13-AUG-2002
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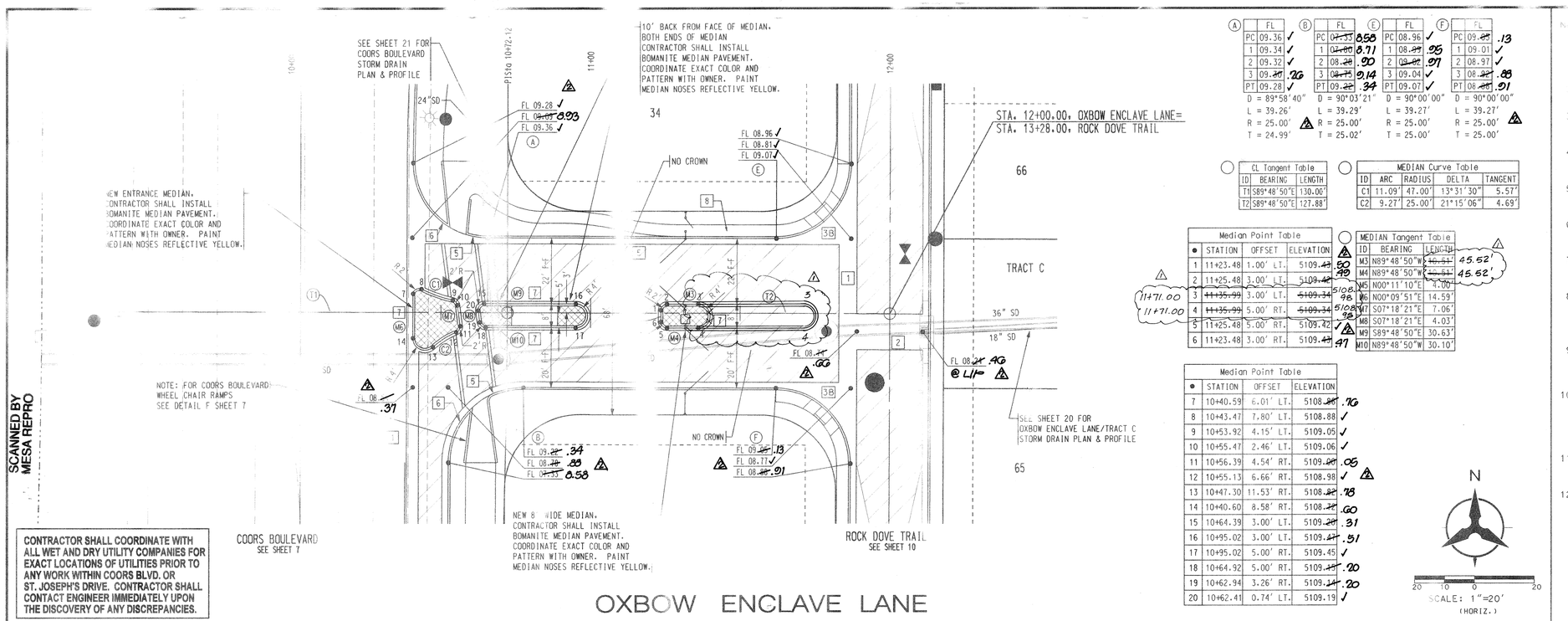

(A)	FL
PC	09.36 ✓
1	09.34 ✓
2	09.32 ✓
3	09.~~30~~ .26
PT	09.28 ✓

D = 89°58'40"
L = 39.26'
R = 25.00'
T = 24.99'

(B)	FL
PC	~~07.33~~ 0.58
1	~~07.00~~ 0.71
2	08.~~20~~ .90
3	~~08.75~~ 0.14
PT	09.~~22~~ .34

D = 90°03'21"
L = 39.29'
R = 25.00'
T = 25.02'

(E)	FL
PC	08.96 ✓
1	08.~~99~~ .95
2	~~09.09~~ .07
3	09.04 ✓
PT	09.07 ✓

D = 90°00'00"
L = 39.27'
R = 25.00'
T = 25.00'

(F)	FL
PC	09.~~89~~ .13
1	09.01 ✓
2	08.97 ✓
3	08.~~92~~ .88
PT	08.~~88~~ .91

D = 90°00'00"
L = 39.27'
R = 25.00'

CL Tangent Table		
ID	BEARING	LENGTH
T1	S89°48'50"E	130.06'
T2	S89°48'50"E	127.88'

MEDIAN Curve Table				
ID	ARC	RADIUS	DELTA	TANGENT
C1	11.09'	47.00'	13°31'30"	5.57'
C2	9.27'	25.00'	21°15'06"	4.69'

Median Point Table			
●	STATION	OFFSET	ELEVATION
1	11+23.48	1.00' LT.	5109.~~43~~ .50
2	11+25.48	3.00' LT.	5109.~~42~~ .49
3	~~11+35.99~~ 11+71.00	3.00' LT.	~~5109.34~~ 5108.98
4	~~11+35.99~~ 11+71.00	5.00' RT.	~~5109.34~~ 5108.98
5	11+25.48	5.00' RT.	5109.42 ✓
6	11+23.48	3.00' RT.	5109.~~43~~ .47

MEDIAN Tangent Table		
ID	BEARING	LENGTH
M3	N89°48'50"W	~~40.51~~ 45.52'
M4	N89°48'50"W	~~40.51~~ 45.52'
M5	N00°11'10"E	4.00'
M6	N00°09'51"E	14.59'
M7	S07°18'21"E	7.06'
M8	S07°18'21"E	4.03'
M9	S89°48'50"E	30.63'
M10	N89°48'50"W	30.10'

Median Point Table			
●	STATION	OFFSET	ELEVATION
7	10+40.59	6.01' LT.	5108.~~88~~ .76
8	10+43.47	7.80' LT.	5108.88 ✓
9	10+53.92	4.15' LT.	5109.05 ✓
10	10+55.47	2.46' LT.	5109.06 ✓
11	10+56.39	4.54' RT.	5109.~~00~~ .05
12	10+55.13	6.66' RT.	5108.98 ✓
13	10+47.30	11.53' RT.	5108.~~82~~ .78
14	10+40.60	8.58' RT.	5108.~~72~~ .60
15	10+64.39	3.00' LT.	5109.~~20~~ .31
16	10+95.02	3.00' LT.	5109.~~47~~ .51
17	10+95.02	5.00' RT.	5109.45 ✓
18	10+64.92	5.00' RT.	5109.~~17~~ .20
19	10+62.94	3.26' RT.	5109.~~17~~ .20
20	10+62.41	0.74' LT.	5109.19 ✓

SCALE: 1"=20' (HORIZ.)

THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.

ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.

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2. INSTALL SPECIAL 12' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2422
3A-3B. INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
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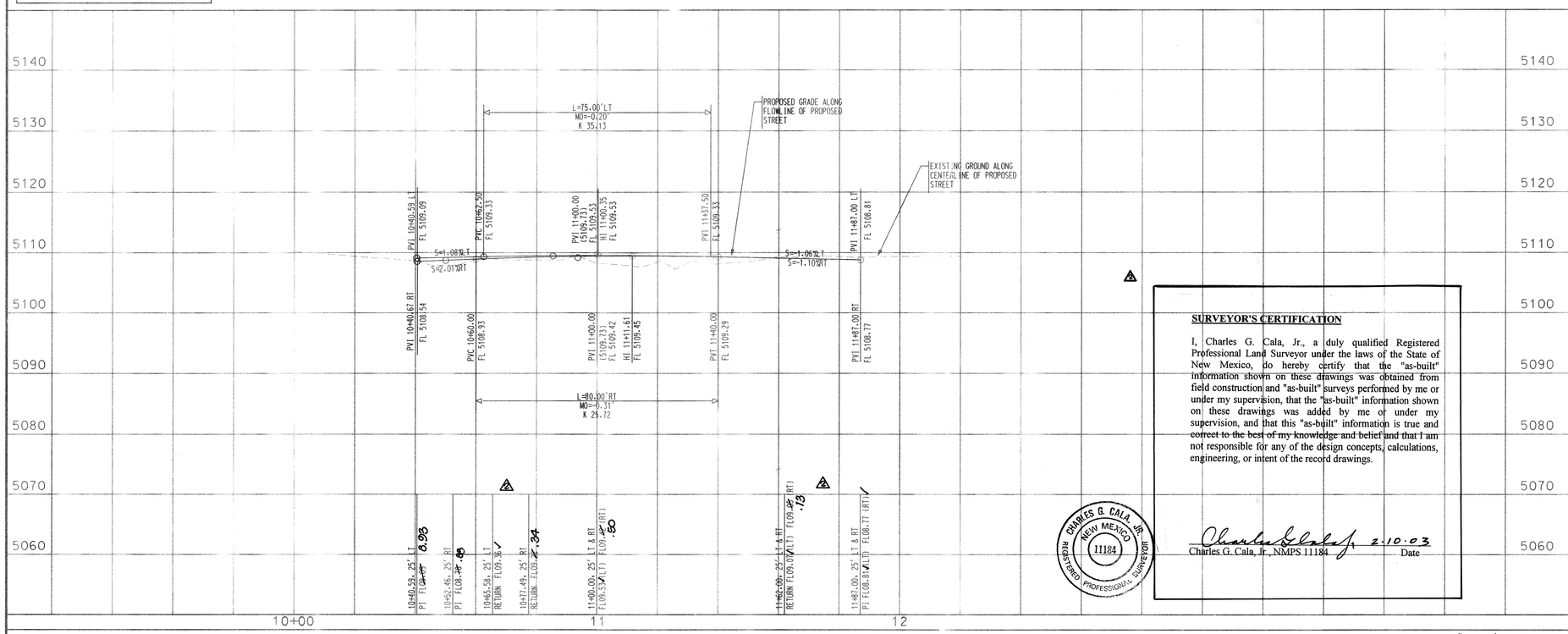
10. BUILD 10' TRAIL (SEE LANDSCAPE PLAN FOR EXACT LOCATION & SECTION)
11. DEFERRED 4' SIDEWALK



SCALE: 1" = 20' (HORIZ.)
1" = 10' (VERT.)

SURVEYOR'S CERTIFICATION

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Charles G. Cala, Jr., NMPS 11184 — Date 2-10-03

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
PAVING PLAN & PROFILE
OXBOW ENCLAVE LANE

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
AUG 15 2002 DESIGN REVIEW COMMITTEE	AUG 19 2002 CITY			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	9	25

BHI JOB NO. 020199

COPYRIGHT BOHANNAN HUSTON 1999

RECORD DRAWING

AS-BUILT INFORMATION
CONTRACTOR Universal Constructors
WORK STAKED BY J.M.A.
INSPECTOR'S ACCEPTANCE BY R.H.I. DATE 2-20-03
FIELD VERIFICATION BY J.M.A. DATE 2-20-03
DRAWINGS CORRECTED BY J.M.A. DATE 2-20-03
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORD. (CENTRAL ZONE)
X=366,686.82 Y=1,502,246.75
GROUND TO GRID FACTOR = 0.99967551
DELTA ALPHA = -00° 15' 24"
NGVD 1929 ELEVATION = 5113.852

AS-BUILT & CERTIFY. 11/26/02 CGC
Median changes KGP
REMARKS
REVISIONS
DESIGN

NO.	DATE	BY

			DATE
DESIGNED BY	TSG.RKL	CGC	05/2002
DRAWN BY	DLM.BJG	KGP	05/2002
CHECKED BY	KGP		05/2002

ENGINEER'S SEAL
KEVIN G. PATTON NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 8-13-02

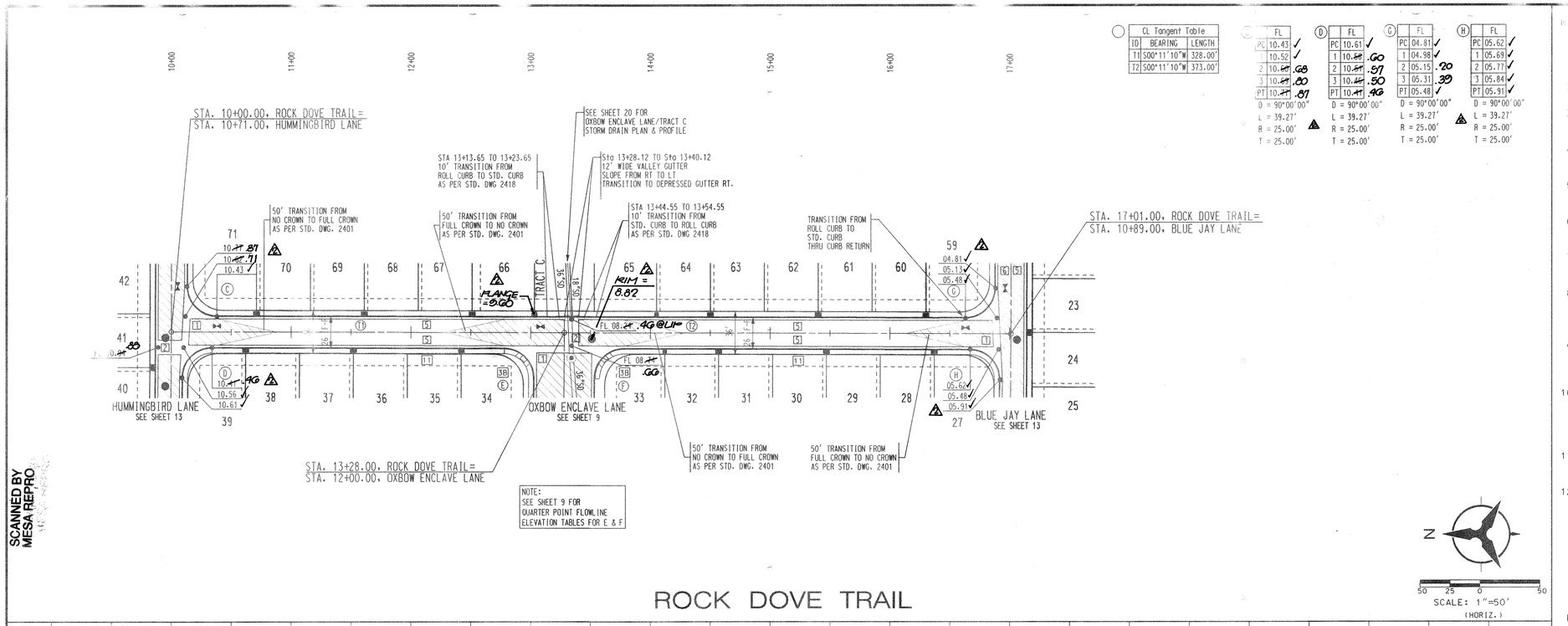
SURVEY INFORMATION
FIELD NOTES

NO.	DATE	BY

SCANNED BY MESA REPRO

CONTRACTOR SHALL COORDINATE WITH ALL WET AND DRY UTILITY COMPANIES FOR EXACT LOCATIONS OF UTILITIES PRIOR TO ANY WORK WITHIN COORS BLVD. OR ST. JOSEPH'S DRIVE. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCIES.

13-AUG-2002
p:\020199\cdp\pnp\020199PNP01.dgn



CL Tangent Table		
ID	BEARING	LENGTH
T1	S00°11'10"W	328.00'
T2	S00°11'10"W	373.00'

C	FL
PC	10.43 ✓
1	10.52 ✓
2	10.~~41~~ .68
3	10.~~41~~ .80
PT	10.~~41~~ .87

D = 90°00'00"
L = 39.27'
R = 25.00'
T = 25.00'

D	FL
PC	10.61 ✓
1	10.~~41~~ .60
2	10.~~41~~ .57
3	10.~~41~~ .50
PT	10.~~41~~ .46

D = 90°00'00"
L = 39.27'
R = 25.00'
T = 25.00'

G	FL
PC	04.81 ✓
1	04.98 ✓
2	05.15 .20
3	05.31 .39
PT	05.48 ✓

D = 90°00'00"
L = 39.27'
R = 25.00'
T = 25.00'

H	FL
PC	05.62 ✓
1	05.69 ✓
2	05.77 ✓
3	05.84 ✓
PT	05.91 ✓

D = 90°00'00"
L = 39.27'
R = 25.00'
T = 25.00'

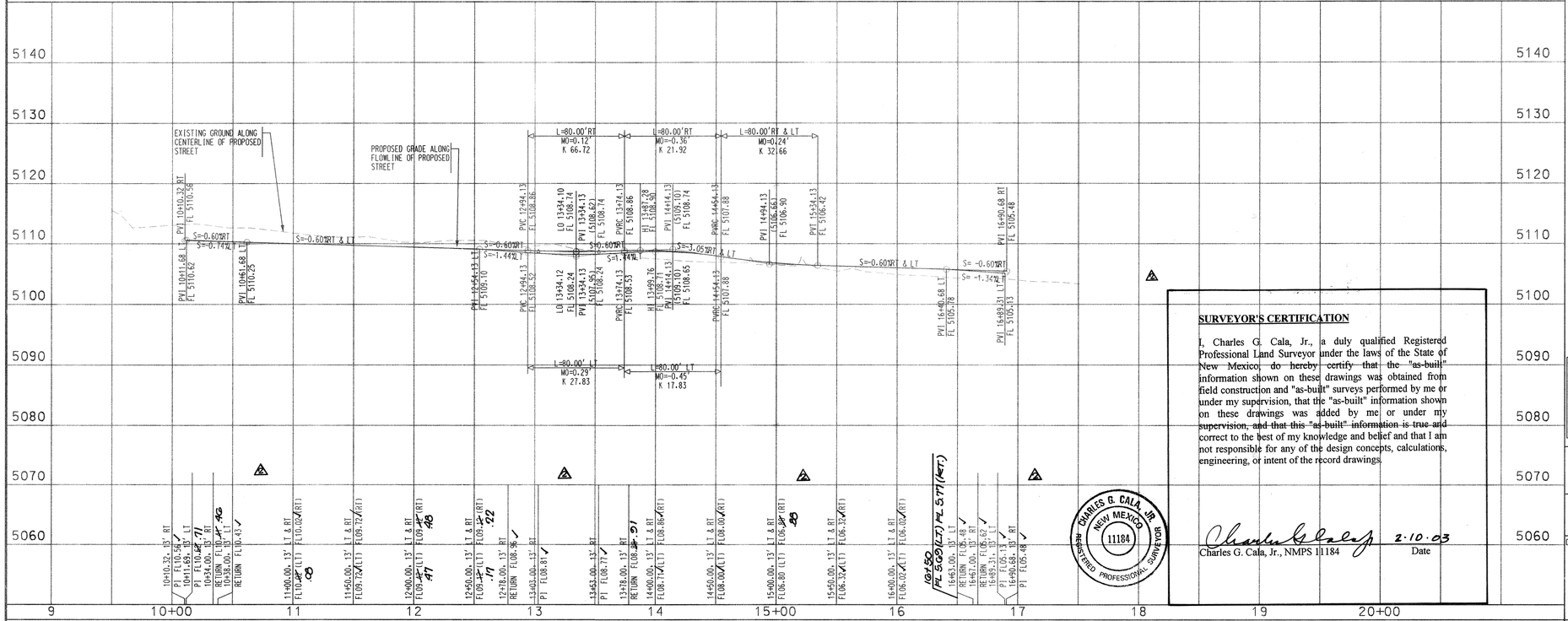
NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE ALONG FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC. DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

KEYED GENERAL NOTES

- 1 INSTALL 6' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2420
- 2 INSTALL SPECIAL 12' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2422
- 3A-3B INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 4C-4E INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 5 ROLL CURB & GUTTER AS PER STD. DWG. 2415
- 6 STD CURB & GUTTER AS PER STD. DWG. 2415
- 7 MEDIAN CURB & GUTTER AS PER STD. DWG. 2415
- 8 BUILD 4' SIDEWALK AS PER STD. DWG. 2430
- 9 BUILD 6' SIDEWALK AS PER STD. DWG. 2430
- 10 BUILD 10' TRAIL (SEE LANDSCAPE PLAN FOR EXACT LOCATION & SECTION)
- 11 DEFERRED 4' SIDEWALK

ROCK DOVE TRAIL



SCALE: 1" = 50' (HORIZ.)
1" = 10' (VERT.)

SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

Charles G. Cala, Jr., NMPS 11184 — Date: 2-10-03

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

AS-BUILT INFORMATION

CONTRACTOR Universal Constructors
WORK STAKED BY J.M.A.
INSPECTOR'S ACCEPTANCE BY B.H.T. for Pattye DATE 2-20-03
FIELD VERIFICATION BY J.M.A. DATE 2-20-03
DRAWINGS MARKED BY J.M.A. DATE 2-20-03
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE) X=366,686.82 Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

AS-BUILT & CERTIFY. — CGC ENGINEER'S SEAL — KEVIN G. PATTON NEW MEXICO 10393 PROFESSIONAL ENGINEER 8-13-02

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

		DATE
DESIGNED BY	TSG.RKL	05/2002
DRAWN BY	DLM.BJG	05/2002
CHECKED BY	KGP	05/2002

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
PAVING PLAN & PROFILE
ROCK DOVE TRAIL

DESIGN REVIEW COMMITTEE — AUG 15 2002 — DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL — AUG 19 2002 — CITY ENGINEER
LAST DESIGN UPDATE — MO./DAY/YR. — MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	10	25

BHI JOB NO. 020199

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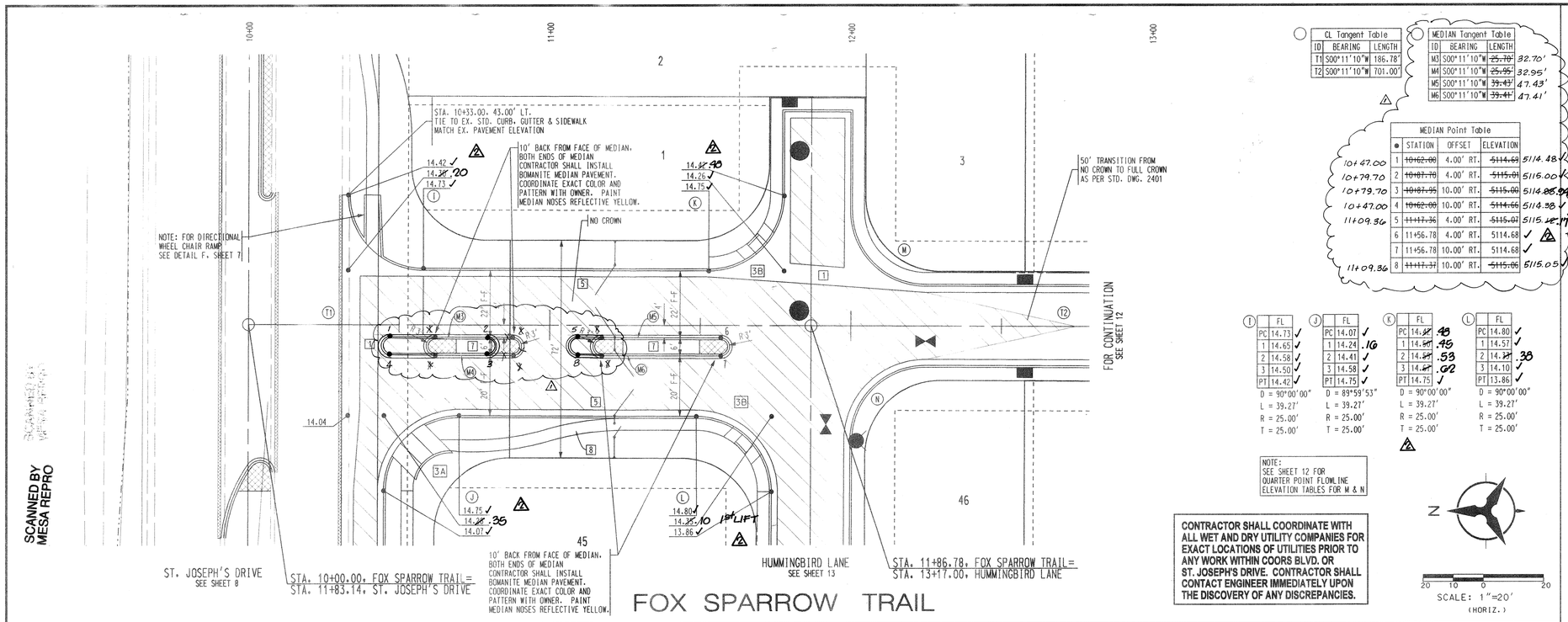
RECORD DRAWING

SCANNED BY MESA REPRO



CL Tangent Table		
ID	BEARING	LENGTH
T1	S00°11'10"W	186.78'
T2	S00°11'10"W	701.00'

MEDIAN Tangent Table			
ID	BEARING	LENGTH	
M3	S00°11'10"W	~~25.70'~~	32.70'
M4	S00°11'10"W	~~25.95'~~	32.95'
M5	S00°11'10"W	~~39.43'~~	47.43'
M6	S00°11'10"W	~~39.41'~~	47.41'

MEDIAN Point Table				
	●	STATION	OFFSET	ELEVATION	
10+47.00	1	~~10+62.00~~	4.00' RT.	~~5114.69~~	5114.48
10+79.70	2	~~10+87.70~~	4.00' RT.	~~5115.01~~	5115.00
10+79.70	3	~~10+87.95~~	10.00' RT.	~~5115.00~~	5114.88
10+47.00	4	~~10+62.00~~	10.00' RT.	~~5114.66~~	5114.38
11+09.36	5	~~11+17.36~~	4.00' RT.	~~5115.07~~	5115.17
	6	11+56.78	4.00' RT.	5114.68	
	7	11+56.78	10.00' RT.	5114.68	
11+09.36	8	~~11+17.37~~	10.00' RT.	~~5115.06~~	5115.05

I	FL
PC	14.73
1	14.65
2	14.58
3	14.50
PT	14.42

D = 90°00'00"
L = 39.27'
R = 25.00'
T = 25.00'

J	FL
PC	14.07
1	14.24 .16
2	14.41
3	14.58
PT	14.75

D = 89°59'53"
L = 39.27'
R = 25.00'
T = 25.00'

K	FL
PC	~~14.47~~ .48
1	~~14.47~~ .45
2	~~14.47~~ .53
3	~~14.47~~ .62
PT	14.75

D = 90°00'00"
L = 39.27'
R = 25.00'
T = 25.00'

L	FL
PC	14.80
1	14.57
2	~~14.27~~ .38
3	14.10
PT	13.86

D = 90°00'00"
L = 39.27'
R = 25.00'
T = 25.00'

NOTE:
SEE SHEET 12 FOR QUARTER POINT FLOWLINE ELEVATION TABLES FOR M & N

CONTRACTOR SHALL COORDINATE WITH ALL WET AND DRY UTILITY COMPANIES FOR EXACT LOCATIONS OF UTILITIES PRIOR TO ANY WORK WITHIN COORS BLVD. OR ST. JOSEPH'S DRIVE. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCIES.

SCALE: 1"=20'
(HORIZ.)

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE ALONG FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.
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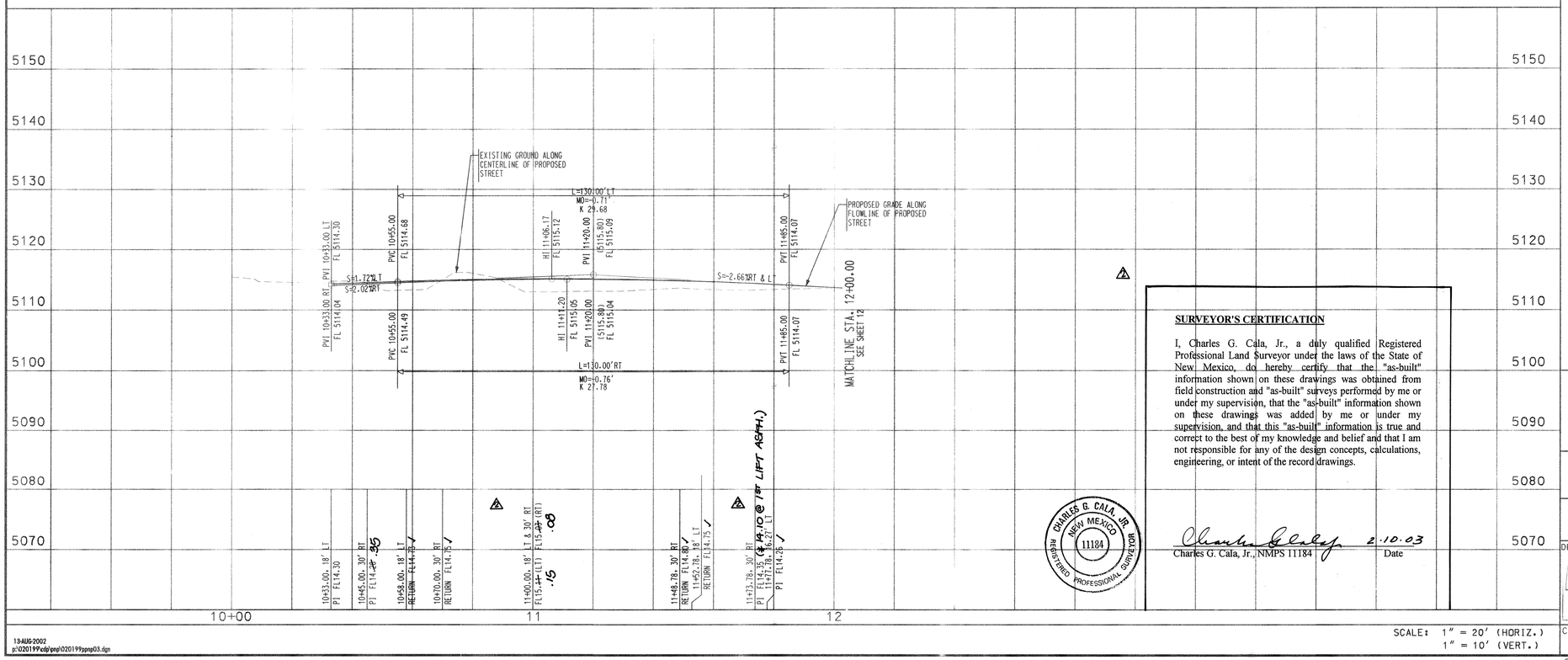
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

KEYED GENERAL NOTES

- 1 INSTALL 6' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2420
- 2 INSTALL SPECIAL 12' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2422
- 3A–3B INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 4C–4E INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 5 ROLL CURB & GUTTER AS PER STD. DWG. 2415
- 6 STD CURB & GUTTER AS PER STD. DWG. 2415
- 7 MEDIAN CURB & GUTTER AS PER STD. DWG. 2415
- 8 BUILD 4' SIDEWALK AS PER STD. DWG. 2430
- 9 BUILD 6' SIDEWALK AS PER STD. DWG. 2430
- 10 BUILD 10' TRAIL (SEE LANDSCAPE PLAN FOR EXACT LOCATION & SECTION)
- 11 DEFERRED 4' SIDEWALK



SCALE: 1" = 20' (HORIZ.)
1" = 10' (VERT.)

SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

Charles G. Cala, Jr., NMPS 11184 — Date 2.10.03

AS-BUILT INFORMATION

CONTRACTOR Universal Contractors
WORK STAKED BY J.M.A.
INSPECTOR'S ACCEPTANCE BY B.H.I. DATE 2-2003
VERIFICATION BY J.M.A. DATE 2-2003
DRAWINGS CORRECTED BY J.M.A. DATE 2-2003
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORD. (CENTRAL ZONE)
X=366,686.82 Y=1,502,246.75
GROUND TO GRID FACTOR = 0.99967551
DELTA ALPHA = -00° 15' 24"
NGVD 1929 ELEVATION = 5113.852

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
KEVIN G. PATTON NEW MEXICO 10201 REGISTERED PROFESSIONAL ENGINEER
8-15-02

NO.	DATE	REMARKS	BY
1	11/25/02	As-built & certify. Median changes	CGC

REVISIONS

DESIGN		DATE
DESIGNED BY	TSG.RKL	05/2002
DRAWN BY	DLM.BJG	05/2002
CHECKED BY	KGP	05/2002

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
PAVING PLAN & PROFILE
FOX SPARROW TRAIL

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
AUG 15 2002 DESIGN REVIEW COMMITTEE	AUG 19 2002 CITY ENGINEER			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	11	25

BHI JOB NO. 020199

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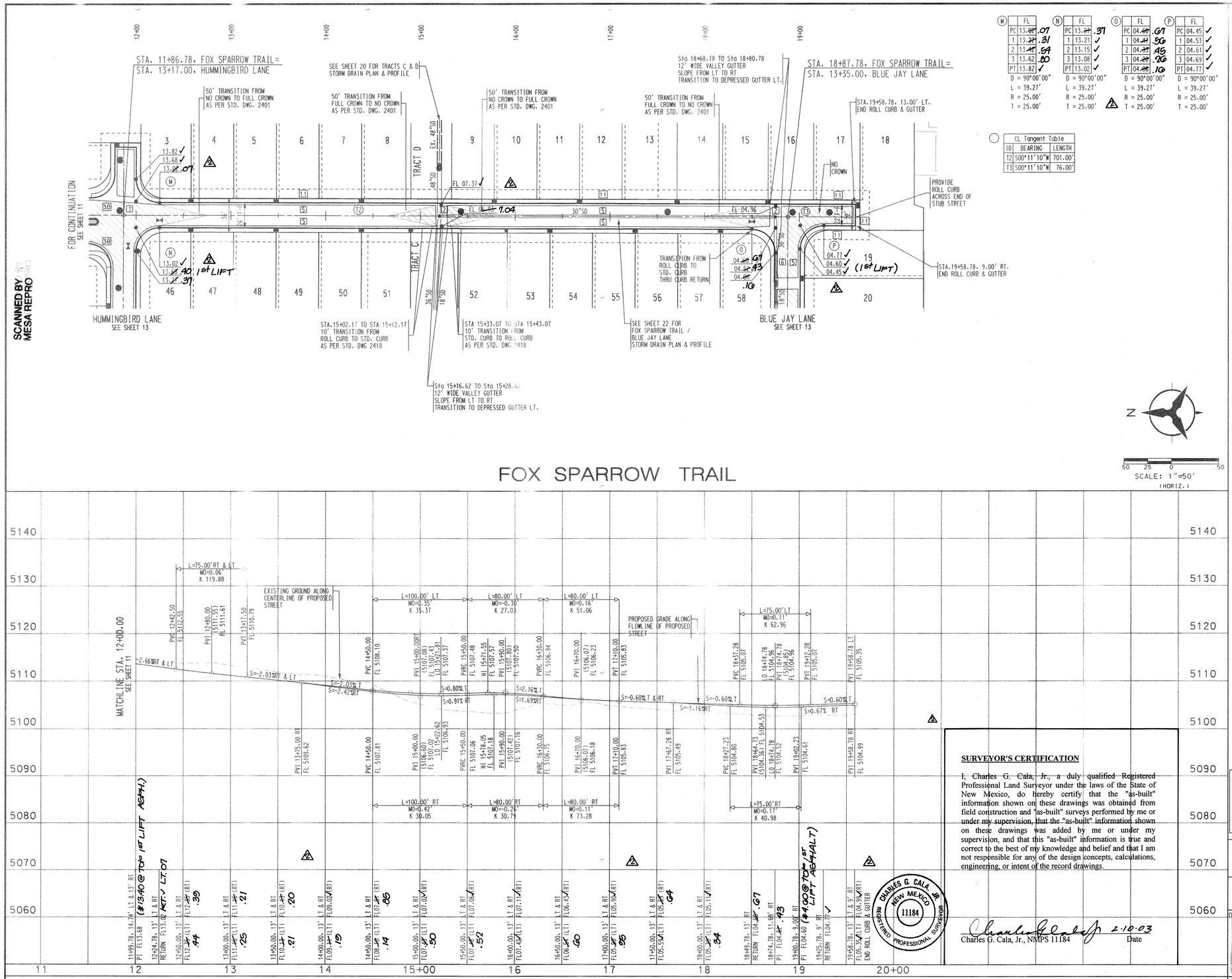
RECORD DRAWING

SCANNED BY MESA REPRO

19-AUG-2002
p:\020199\cdp\pnp\020199pnp03.dgn



M	FL
PC	13.82
1	13.82
2	13.82
3	13.62
PT	13.82
D = 90°00'00"	
L = 39.27'	
R = 25.00'	
T = 25.00'	

N	FL
PC	13.21
1	13.21
2	13.15
3	13.08
PT	13.02
D = 90°00'00"	
L = 39.27'	
R = 25.00'	
T = 25.00'	

O	FL
PC	04.60
1	04.47
2	04.45
3	04.40
PT	04.40
D = 90°00'00"	
L = 39.27'	
R = 25.00'	
T = 25.00'	

P	FL
PC	04.45
1	04.53
2	04.61
3	04.69
PT	04.77
D = 90°00'00"	
L = 39.27'	
R = 25.00'	
T = 25.00'	

CL Tangent Table		
ID	BEARING	LENGTH
T2	S00°11'10"W	701.00'
T3	S00°11'10"W	76.00'

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
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11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

KEYED GENERAL NOTES

- 1 INSTALL 6' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2420
- 2 INSTALL SPECIAL 12' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2422
- 3A-3B INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 4C-4E INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 5 ROLL CURB & GUTTER AS PER STD. DWG. 2415
- 6 STD CURB & GUTTER AS PER STD. DWG. 2415
- 7 MEDIAN CURB & GUTTER AS PER STD. DWG. 2415
- 8 BUILD 4' SIDEWALK AS PER STD. DWG. 2430
- 9 BUILD 6' SIDEWALK AS PER STD. DWG. 2430
- 10 BUILD 10' TRAIL (SEE LANDSCAPE PLAN FOR EXACT LOCATION & SECTION)
- 11 DEFERRED 4' SIDEWALK

SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

Charles G. Cala, Jr., NMPS 11184 — Date 2-10-03

CHARLES G. CALA JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

AS-BUILT INFORMATION

CONTRACTOR Universal Contractors
STAKED BY J.M.A. DATE
INSPECTOR'S ACCEPTANCE BY B.H.I. DATE 2-20-03
FIELD VERIFICATION BY J.M.A. DATE 2-20-03
DRAWINGS CORRECTED BY J.M.A. DATE 2-20-03

BENCH MARKS

ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE) X=366,686.82 Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

AS-BUILT INFORMATION
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

AS SEAL SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
CGC
KEVIN G. PATTON NEW MEXICO 13615 REGISTERED PROFESSIONAL ENGINEER 8-13-02

AS-BUILT & CERTIFY.

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG/RKL	DATE 05/2002
DRAWN BY	DLM/BJG	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
PAVING PLAN & PROFILE
FOX SPARROW TRAIL

DESIGN REVIEW COMMITTEE — APPROVED AUG 15 2002 — DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL — APPROVED AUG 19 2002 — CITY ENGINEER
LAST DESIGN UPDATE — MO./DAY/YR. — MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	12	25

02-AUG-2002
P:\020199\dgn\pro020199pro04.dgn

BHI JOB NO. 020199

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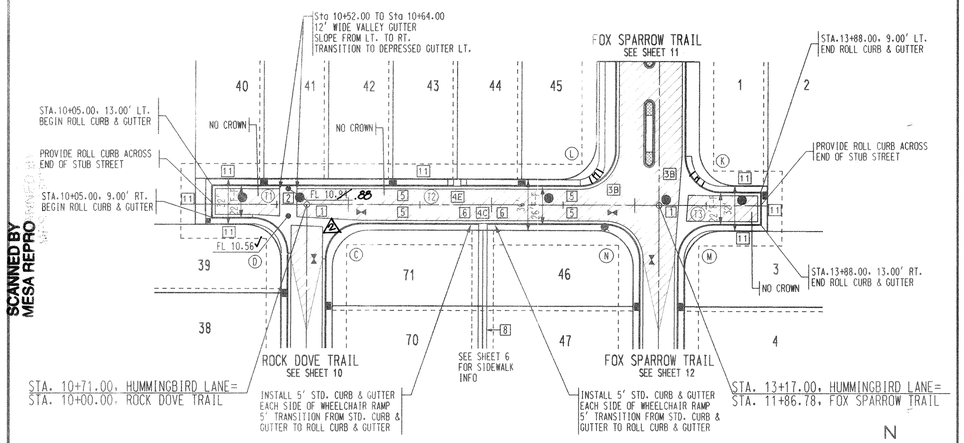
RECORD DRAWING

SCANNED BY MESA REPRO

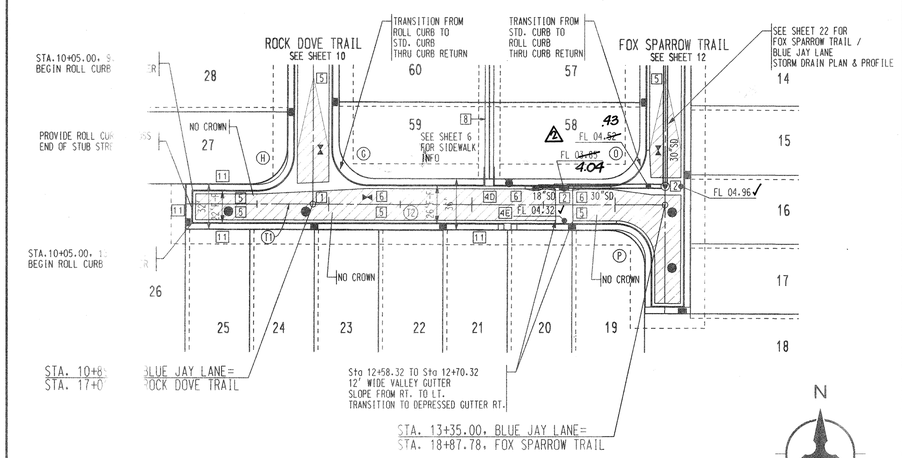
CL Tangent Table		
ID	BEARING	LENGTH
T1	S89°48'50"E	71.00'
T2	S89°48'50"E	246.00'
T3	S89°48'50"E	76.00'



NOTE:
SEE SHEET 10 FOR QUARTER POINT FLOWLINE ELEVATION TABLES FOR C & D , SHEET 11 FOR K & L, AND SHEET 12 FOR M & N

HUMMINGBIRD LANE

CL Tangent Table		
ID	BEARING	LENGTH
T1	S89°48'50"E	89.00'
T2	S89°48'50"E	246.00'



NOTE:
SEE SHEET 10 FOR QUARTER POINT FLOWLINE ELEVATION TABLES FOR G & H AND SHEET 10 & P

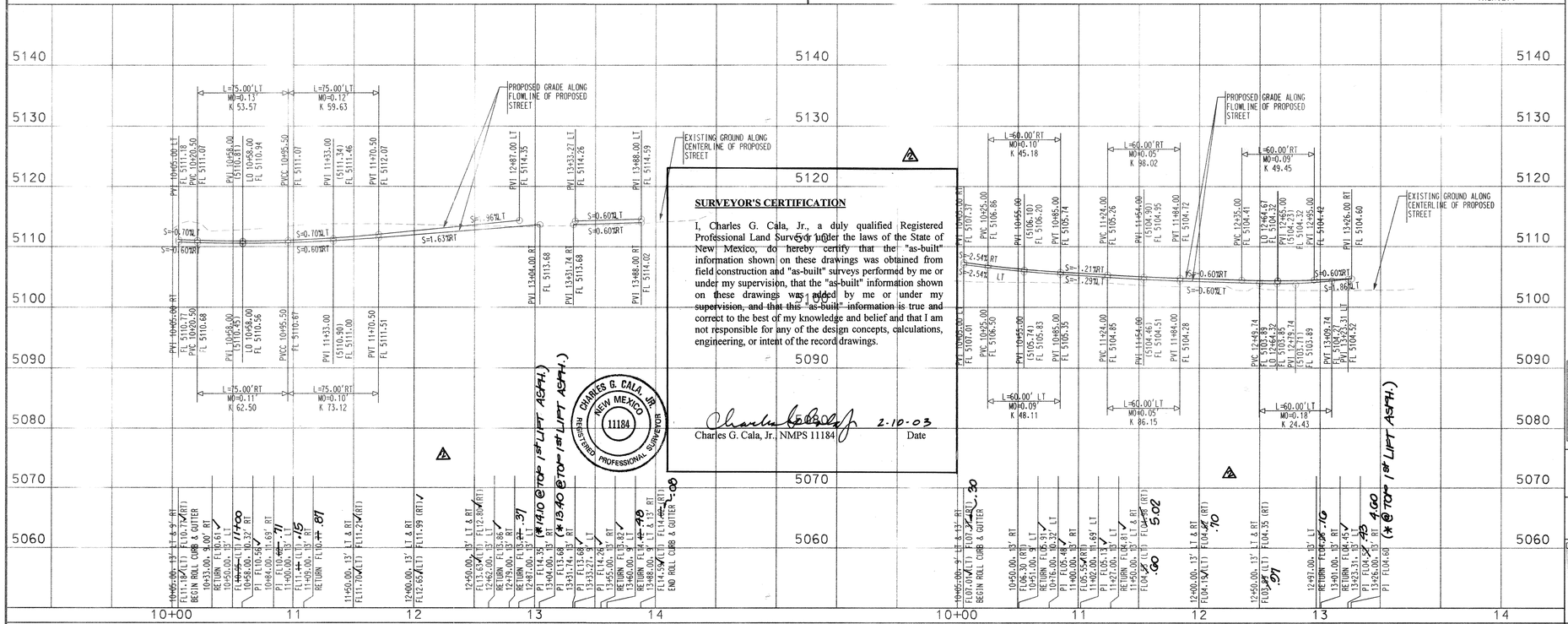
BLUE JAY LANE

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE ALONG FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

KEYED GENERAL NOTES

- 1 INSTALL 6' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2420
- 2 INSTALL SPECIAL 12' WIDE CONCRETE VALLEY GUTTER AS PER STD. DWG. 2422
- 3A-3B INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 4C-4E INSTALL WHEELCHAIR RAMP AS PER DETAIL ON SHEET 6
- 5 ROLL CURB & GUTTER AS PER STD. DWG. 2415
- 6 STD CURB & GUTTER AS PER STD. DWG. 2415
- 7 MEDIAN CURB & GUTTER AS PER STD. DWG. 2415
- 8 BUILD 4' SIDEWALK AS PER STD. DWG. 2430
- 9 BUILD 6' SIDEWALK AS PER STD. DWG. 2430
- 10 BUILD 10' TRAIL (SEE LANDSCAPE PLAN FOR EXACT LOCATION & SECTION)
- 11 DEFERRED 4' SIDEWALK



SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

Charles G. Cala, Jr., NMPS 11184 — Date 2-10-03

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

SCALE: 1" = 50' (HORIZ.)
1" = 10' (VERT.)

BHI JOB NO. 020199

03-AUG-2002
©:\020199\cdd\gen\020199gen05.dgn

AS-BUILT INFORMATION

CONTRACTOR Universal Contractors
STAKED BY J.M.A. DATE
INSPECTOR'S ACCEPTANCE BY O.H.I. DATE 2-10-03
FIELD VERIFICATION BY J.M.A. DATE 2-10-03
DRAWINGS CORRECTED BY J.M.A. DATE 2-10-03

BENCH MARKS

ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366,688.82
Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

RECORDED BY DATE
NO.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

KEVIN G. PATTON — REGISTERED PROFESSIONAL ENGINEER

CGC AS-BUILT & CERTIFY

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG/RKL	DATE 05/2002
DRAWN BY	DLM/BJG	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
PAVING PLAN & PROFILE
HUMMINGBIRD LANE /BLUE JAY LANE

DESIGN REVIEW COMMITTEE APPROVAL — APPROVED AUG 15 2002 REVIEW COMMITTEE
CITY ENGINEER APPROVAL — APPROVED AUG 19 2002 CITY ENGINEER
MO./DAY/YR. MO./DAY/YR.
LAST DESIGN UPDATE

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	13	25

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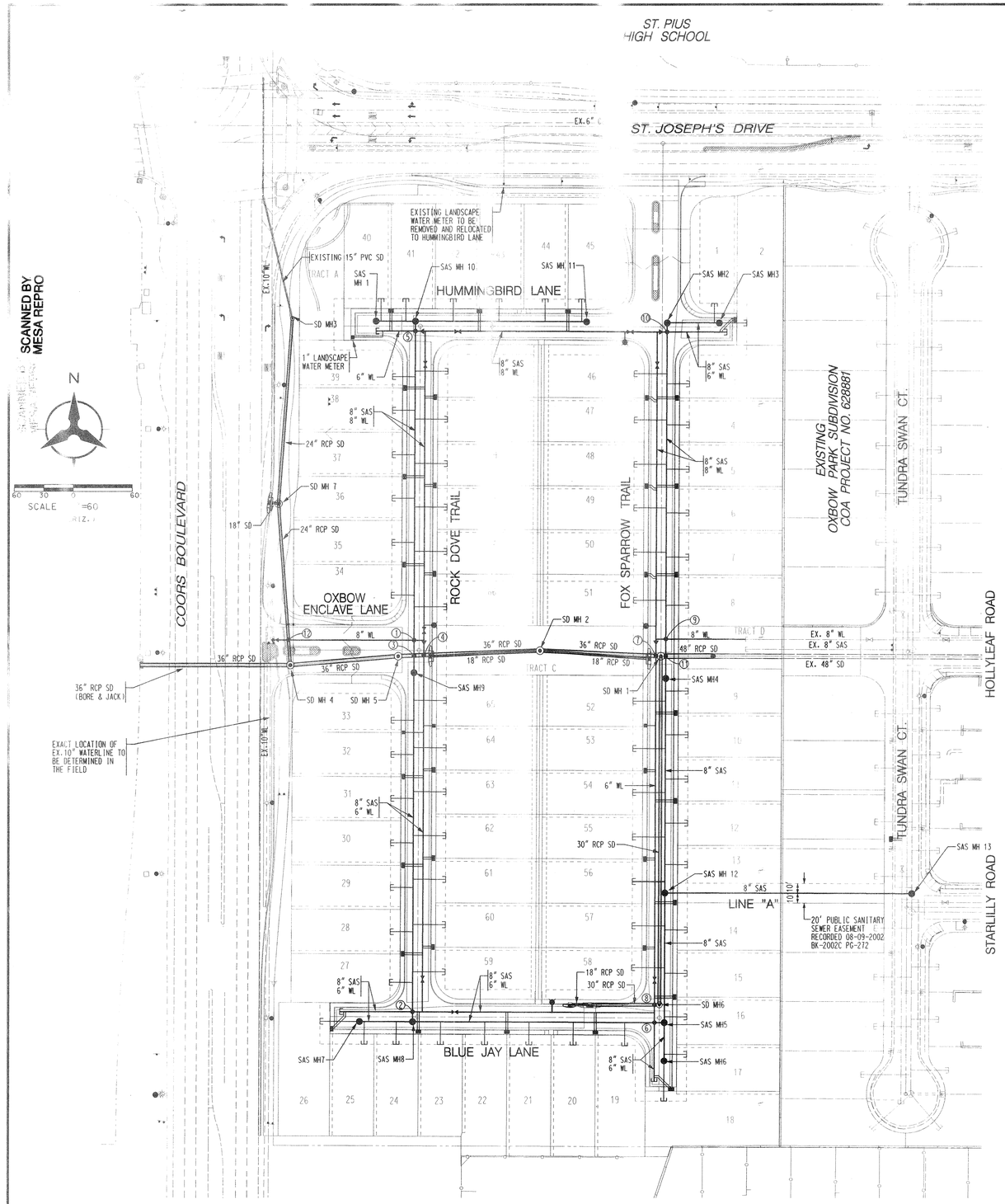
RECORD DRAWING

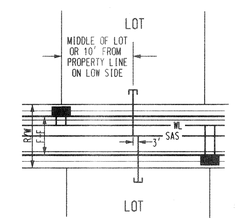
SCANNED BY MESA REPRO



SCANNED BY MESA REPRO

Utility Crossings Table OD				
DES	SAS	SD	WL	Clearance
1	8" TP 03.17	- - - - - -	8" TP 05.16	**1.27
	8" INV 02.46	- - - - - -	8" INV 04.44	
2	8" TP 01.20	- - - - - -	6" TP 02.35	**0.61
	8" INV 00.49	- - - - - -	6" INV 01.81	
3	8" TP 03.09	36" TP 98.20	- - - - - -	4.19
	8" INV 02.38	36" INV 94.41	- - - - - -	
4	- - - - - -	36" TP 98.10	6" TP 04.90	6.26
	- - - - - -	36" INV 94.31	6" INV 04.35	
5	8" TP 04.73	- - - - - -	6" TP 07.32	2.04
	8" INV 04.03	- - - - - -	6" INV 06.78	
6	8" TP 99.79	- - - - - -	6" TP 01.55	**1.22
	8" INV 99.08	- - - - - -	6" INV 01.01	
7	- - - - - -	36" TP 95.72	6" TP 03.61	7.35
	- - - - - -	36" INV 91.92	6" INV 03.07	
8	- - - - - -	30" TP 00.83	6" TP 01.67	**0.30
	- - - - - -	30" INV 97.74	6" INV 01.13	
9	8" TP 01.09	- - - - - -	8" TP 03.82	2.01
	8" INV 00.38	- - - - - -	8" INV 03.10	
10	8" TP 08.13	- - - - - -	6" TP 08.21	**0.47
	8" INV 07.43	- - - - - -	6" INV 07.66	
11	8" TP 00.70	48" TP 96.69	- - - - - -	3.31
	8" INV 99.99	48" INV 91.73	- - - - - -	
12	- - - - - -	24" TP 00.22	8" TP 04.85	3.91
	- - - - - -	24" INV 97.72	8" INV 04.13	

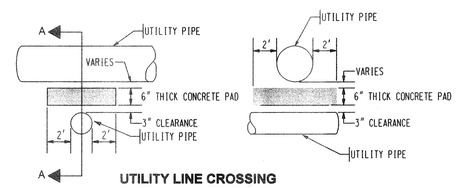
** USE CONCRETE PAD BETWEEN PIPES AS PER DETAIL THIS SHEET



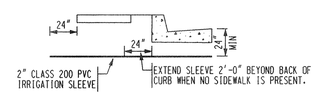
TYPICAL UTILITY SERVICE LOCATION
NO SCALE

As-Built
All waterlines were constructed of C-900 pipe.
All sanitary sewer mains were constructed of SDR-35.
All sanitary sewer services were constructed of SDR-26.

NOTE: SEE SHEET 16 FOR WATER VALVE SHUT-OFF PLAN AND REQUIREMENTS

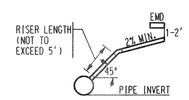


UTILITY LINE CROSSING SECTION A-A UTILITY PIPE
FOR LESS THAN 1.5' CLEARANCE BETWEEN PIPES (NOT TO SCALE)



IRRIGATION SLEEVES UNDER PAVING AND SIDEWALKS
NOT TO SCALE

AFD PLANS CHECKING OFFICE
324-3611
APPROVED
8/14/02



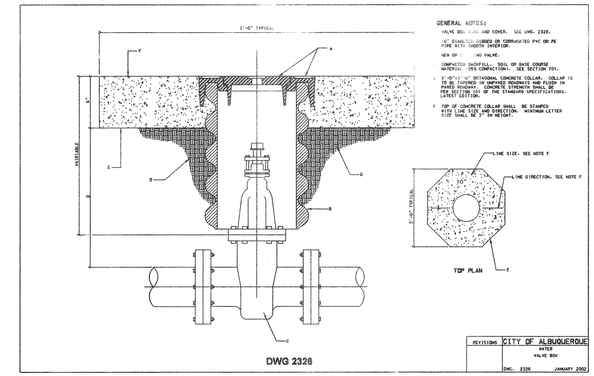
SERVICE RISER DETAIL
(SERVICE CONNECTION & INSTALLATION TO CONFORM TO COA STD. DWG. 2134 USE CI SOIL PIPE ONLY)

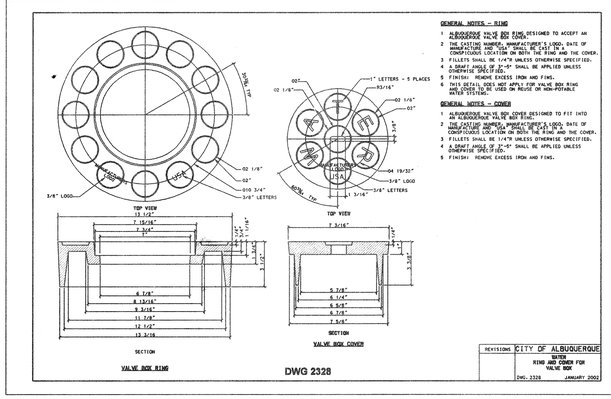
CONTRACTOR SHALL COORDINATE WITH ALL WET AND DRY UTILITY COMPANIES FOR EXACT LOCATIONS OF UTILITIES PRIOR TO ANY WORK WITHIN COORS BLVD. OR ST. JOSEPH'S DRIVE. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCIES.

LEGEND

PROPOSED SANITARY SEWER MANHOLE	
EXISTING SANITARY SEWER MANHOLE	
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED GATE VALVE	
EXISTING GATE VALVE	
PROPOSED SANITARY SEWER LINE	SAS
EXISTING SANITARY SEWER LINE	SAS
PROPOSED WATER LINE	W
EXISTING WATER LINE	W
PROPOSED SANITARY SEWER SERVICE	
PROPOSED WATER METER SERVICE	

BHI JOB NO. 020199





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Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
OVERALL UTILITY PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
APPROVED AUG 15 2002 REVIEW COMMITTEE	APPROVED AUG 19 2002 CITY ENGINEER	LAST DESIGN UPDATE	

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	14	25

AS-BUILT INFORMATION

CONTRACTOR
WORK STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366,686.82
Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA-00°15'24"
NGVD 1929 ELEVATION = 5113.852'

ENGINEER'S SEAL SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

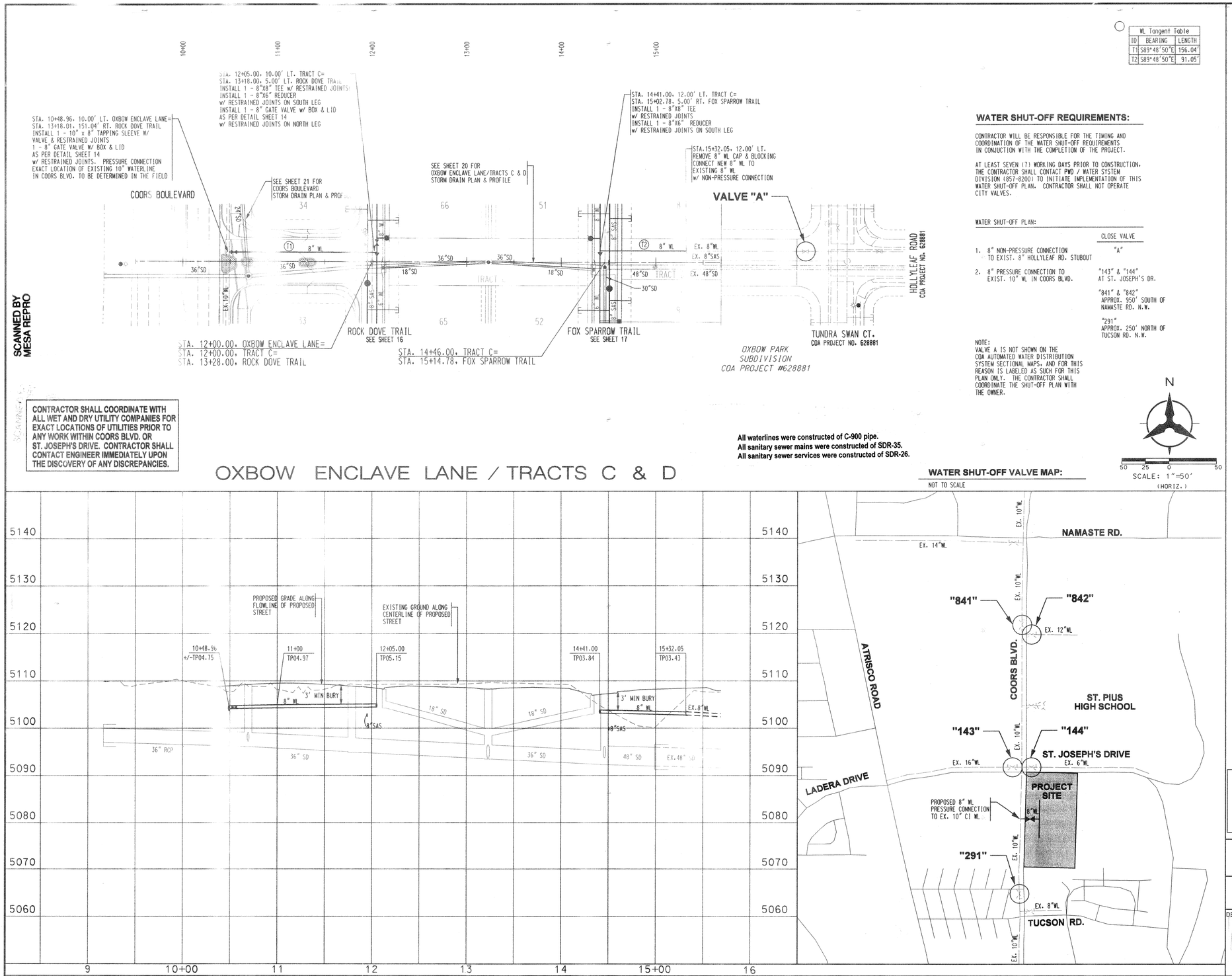
KEVIN G. PATTON NEW MEXICO 12641 REGISTERED PROFESSIONAL ENGINEER 8-15-02

RECORD DRAWING

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG-RKL	DATE 05/2002
DRAWN BY	BJG-DLM	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

RECORD DRAWING



SCANNED BY
MESA REPRO

CONTRACTOR SHALL COORDINATE WITH ALL WET AND DRY UTILITY COMPANIES FOR EXACT LOCATIONS OF UTILITIES PRIOR TO ANY WORK WITHIN COORS BLVD. OR ST. JOSEPH'S DRIVE. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCIES.

OXBOW ENCLAVE LANE / TRACTS C & D

All waterlines were constructed of C-900 pipe.
All sanitary sewer mains were constructed of SDR-35.
All sanitary sewer services were constructed of SDR-26.

WATER SHUT-OFF VALVE MAP:
NOT TO SCALE

WL Tangent Table		
ID	BEARING	LENGTH
T1	S89°48'50"E	156.04'
T2	S89°48'50"E	91.05'

WATER SHUT-OFF REQUIREMENTS:

CONTRACTOR WILL BE RESPONSIBLE FOR THE TIMING AND COORDINATION OF THE WATER SHUT-OFF REQUIREMENTS IN CONJUCTION WITH THE COMPLETION OF THE PROJECT.

AT LEAST SEVEN (7) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT PWD / WATER SYSTEM DIVISION (857-8200) TO INITIATE IMPLEMENTATION OF THIS WATER SHUT-OFF PLAN. CONTRACTOR SHALL NOT OPERATE CITY VALVES.

WATER SHUT-OFF PLAN:

	CLOSE VALVE
1. 8" NON-PRESSURE CONNECTION TO EXIST. 8" HOLLYLEAF RD. STUBOUT	"A"
2. 8" PRESSURE CONNECTION TO EXIST. 10" WL IN COORS BLVD.	"143" & "144" AT ST. JOSEPH'S DR. "841" & "842" APPROX. 950' SOUTH OF NAMASTE RD. N.W. "291" APPROX. 250' NORTH OF TUCSON RD. N.W.

NOTE:
VALVE A IS NOT SHOWN ON THE COA AUTOMATED WATER DISTRIBUTION SYSTEM SECTIONAL MAPS, AND FOR THIS REASON IS LABELED AS SUCH FOR THIS PLAN ONLY. THE CONTRACTOR SHALL COORDINATE THE SHUT-OFF PLAN WITH THE OWNER.

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE ALONG FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
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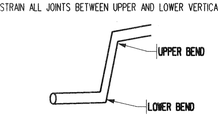
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

RESTRAINING JOINT TABLE

MECHANICAL JOINTS	LENGTH OF RESTRAINED JOINTS 6"	8"	
6" X 6" TEE	1	-	
8" X 6" TEE	1	1	
8" X 8" CROSS	-	1	
8" X 6" REDUCER	-	30	
90° HORIZ. BEND	20	26	
45° HORIZ. BEND	8	11	
22.5° HORIZ. BEND	4	5	
11.25° HORIZ. BEND	2	3	
GATE VALVE/CAP	55	72	
22.5° VERT. BEND			
UPPER	-	14	
LOWER	-	2	

NOTE:

1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
2. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE POINTS WITHIN 20 LF OF MJ SHALL BE RESTRANED AT THE CONTRACTORS EXPENSE.
3. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ABOVE. (SEE NOTE 2 ABOVE).
4. THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANTS JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.
5. ALL CAPS SHALL UTILIZE PCC BLOCKING, UNLESS OTHERWISE NOTED.
6. RESTRAINED LENGTH IN ON LARGE SIDE ON ALL REDUCERS
7. RESTRAIN ALL JOINTS BETWEEN UPPER AND LOWER VERTICAL BENDS.



Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

AS-BUILT INFORMATION
CONTRACTOR
WORK STAKED BY
INSPECTOR'S ACCEPTANCE BY DATE
VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366,686.82
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GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

ENGINEER'S SEAL
KEVIN G. ATTON
NEW MEXICO
PROFESSIONAL ENGINEER
8-15-02

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

RECORD DRAWING

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG.RKL	DATE 05/2002
DRAWN BY	DLM.BJG	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
UTILITY PLAN & PROFILE
OXBOW ENCLAVE LANE / TRACTS C & D

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
APPROVED AUG 15 2002 DESIGN REVIEW COMMITTEE	APPROVED AUG 19 2002 CITY ENGINEER			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	15	25

BHI JOB NO. 020199

SCALE: 1" = 50' (HORIZ.)
1" = 10' (VERT.)

14-AUG-2002
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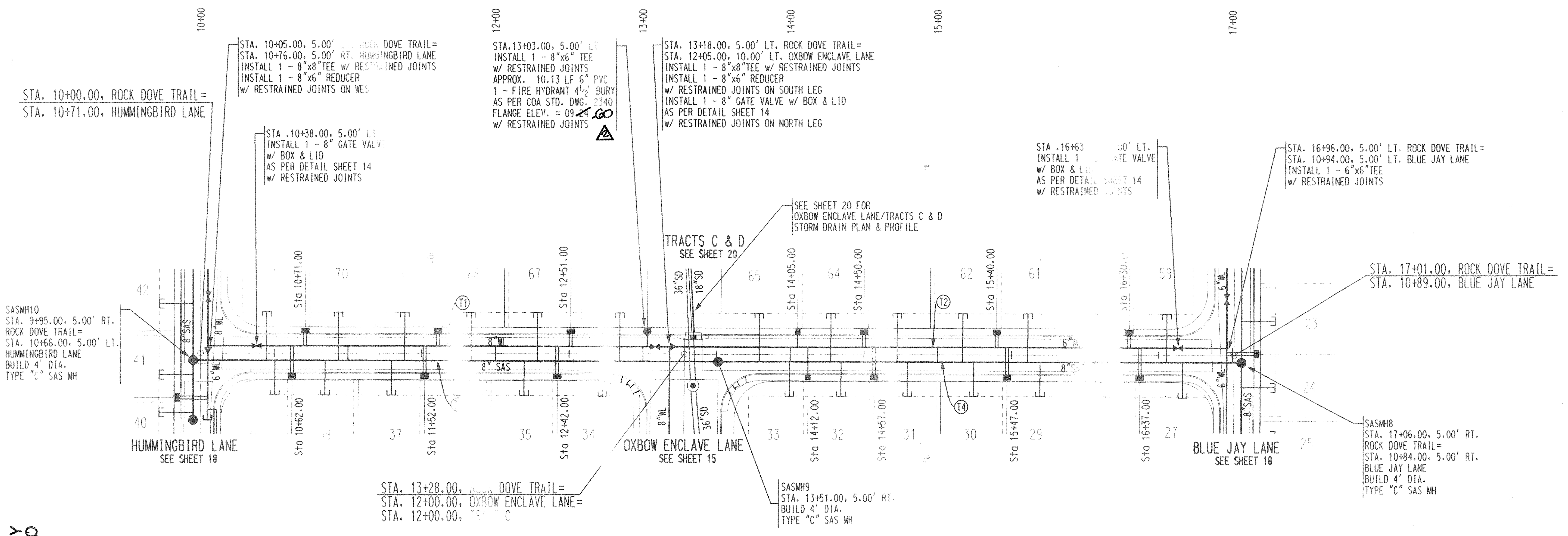
RECORD DRAWING



WL Tangent Table		
ID	BEARING	LENGTH
T1	S00°11'10"W	313.00'
T2	S00°11'10"W	378.00'

SAS Tangent Table		
ID	BEARING	LENGTH
T3	S00°11'10"W	356.00'
T4	S00°11'10"W	355.00'

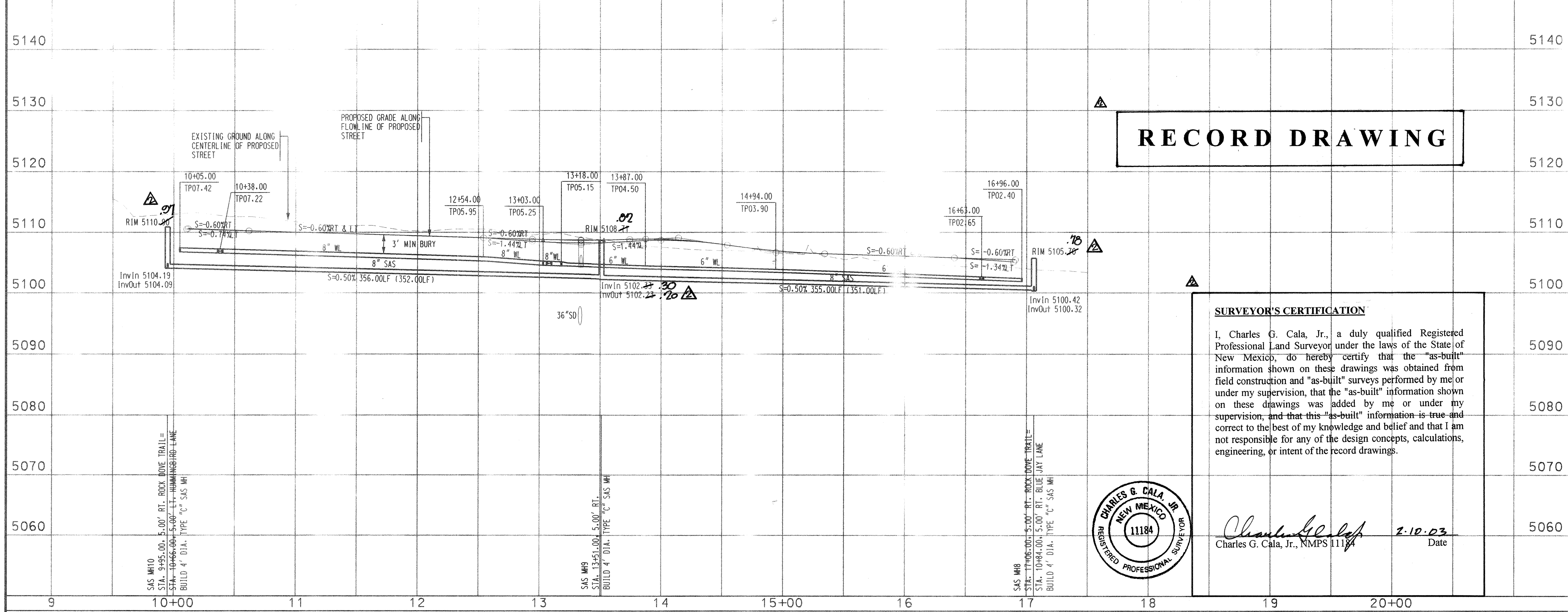
SANITARY SEWER SERVICES				
LOT ID	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG (W/RISER)	
27	16+66.22, 5.00'RT.	23.00'	5102.47 (-)	.16
28	16+14.50, 5.00'RT.	23.00'	5102.72 (-)	.77
29	15+69.50, 5.00'RT.	23.00'	5102.95 (-)	.63
30	15+24.50, 5.00'RT.	23.00'	5103.17 (-)	.78
31	14+79.50, 5.00'RT.	23.00'	5103.40 (-)	.02
32	14+34.50, 5.00'RT.	23.00'	5103.62 (-)	.30
33	13+99.50, 5.00'RT.	23.00'	5103.80 (-)	.64
34	12+72.64, 5.00'RT.	23.00'	5104.52 (-)	.43
35	12+19.50, 5.00'RT.	23.00'	5104.78 (-)	.85
36	11+74.50, 5.00'RT.	23.00'	5105.00 (-)	.10
37	11+29.50, 5.00'RT.	23.00'	5105.23 (-)	.24
38	10+84.50, 5.00'RT.	23.00'	5105.45 (-)	.78
39	10+50.50, 5.00'RT.	23.00'	5105.62 (-)	.22
59	16+55.41, 5.00'RT.	33.00'	5102.67 (-)	.43
60	16+07.22, 5.00'RT.	33.00'	5102.91 (-)	.50
61	15+61.20, 5.00'RT.	33.00'	5103.14 (-)	.42
62	15+17.04, 5.00'RT.	33.00'	5103.36 (-)	2.99
63	14+72.50, 5.00'RT.	33.00'	5103.63 (-)	.27
64	14+27.50, 5.00'RT.	33.00'	5103.86 (-)	.56
65	13+79.00, 5.00'RT.	33.00'	5104.10 (-)	3.69
66	12+84.33, 5.00'RT.	33.00'	5104.65 (-)	.54
67	12+28.50, 5.00'RT.	33.00'	5104.93 (-)	.83
68	11+83.50, 5.00'RT.	33.00'	5105.16 (-)	.32
69	11+38.50, 5.00'RT.	33.00'	5105.38 (-)	.12
70	10+93.50, 5.00'RT.	33.00'	5105.61 (-)	4.96
71	10+44.82, 5.00'RT.	33.00'	5105.86 (-)	.92

NOTE: WATER METER LOCATIONS ARE DESIGNATED BY STATIONING AT PROPERTY CORNERS.

All waterlines were constructed of C-900 pipe.
All sanitary sewer mains were constructed of SDR-35.
All sanitary sewer services were constructed of SDR-26.

SCALE: 1"=50' (HORIZ.)

ROCK DOVE TRAIL



RECORD DRAWING

SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

Charles G. Cala, Jr., NMPS 11184 — Date 2.10.03

SCALE: 1" = 50' (HORIZ.) 1" = 10' (VERT.)

BHI JOB NO. 020199

02-AUG-2002
P:\020199\cdp\pnp\020199upnp02.dgn

NOTES

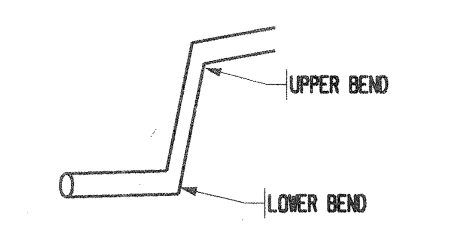
1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE ALONG FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND END AT THE END OF EACH SANITARY SEWER SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

RESTRAINING JOINT TABLE

MECHANICAL JOINTS	LENGTH OF RESTRAINED JOINTS	
	6"	8"
6" X 6" TEE	1	-
8" X 6" TEE	1	1
8" X 8" CROSS	-	1
8" X 6" REDUCER	-	30
90° HORIZ. BEND	20	26
45° HORIZ. BEND	8	11
22.5° HORIZ. BEND	4	5
11.25° HORIZ. BEND	2	3
GATE VALVE/CAP	55	72
22.5° VERT. BEND		
UPPER	-	14
LOWER	-	2

NOTE:

1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
2. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE POINTS WITHIN 20 LF OF MJ SHALL BE RESTRAINED AT THE CONTRACTORS EXPENSE.
3. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ABOVE. (SEE NOTE 2 ABOVE).
4. THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANTS JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.
5. ALL CAPS SHALL UTILIZE PCC BLOCKING, UNLESS OTHERWISE NOTED.
6. RESTRAINED LENGTH IN ON LARGE SIDE ON ALL REDUCERS
7. RESTRAIN ALL JOINTS BETWEEN UPPER AND LOWER VERTICAL BENDS.



AS-BUILT INFORMATION
CONTRACTOR Universal Constructors
WORK STAKED BY J.M.A.
INSPECTOR'S ACCEPTANCE BY B.H.I. DATE -
FIELD VERIFICATION BY J.M.A. DATE 2-2003
DRAWINGS CORRECTED BY J.M.A. DATE 2-2003

MICRO-FILM INFORMATION
RECORDED BY / DATE / NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366,686.82
Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA=-00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION — FIELD NOTES
NO. / BY / DATE

ENGINEER'S SEAL — KEVIN G. PATTON, NEW MEXICO, REGISTERED PROFESSIONAL ENGINEER, 8-13-02

C.G.C. AS-BUILT & CERTIFY.

NO.	DATE	BY	REMARKS
			REVISIONS
			DESIGN

DESIGNED BY TSG, RKL DATE 05/2002
DRAWN BY DLM, BJG DATE 05/2002
CHECKED BY KGP DATE 05/2002

Bohannan ▲ Huston Inc.
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
UTILITY PLAN & PROFILE
ROCK DOVE TRAIL

DESIGN REVIEW COMMITTEE: APPROVED AUG 15 2002 DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL: APPROVED AUG 19 2002 CITY ENGINEER
LAST DESIGN UPDATE — MO./DAY/YR. — MO./DAY/YR.

CITY PROJECT NO. 691281 | ZONE MAP NO. G-11 | SHEET 16 OF 25

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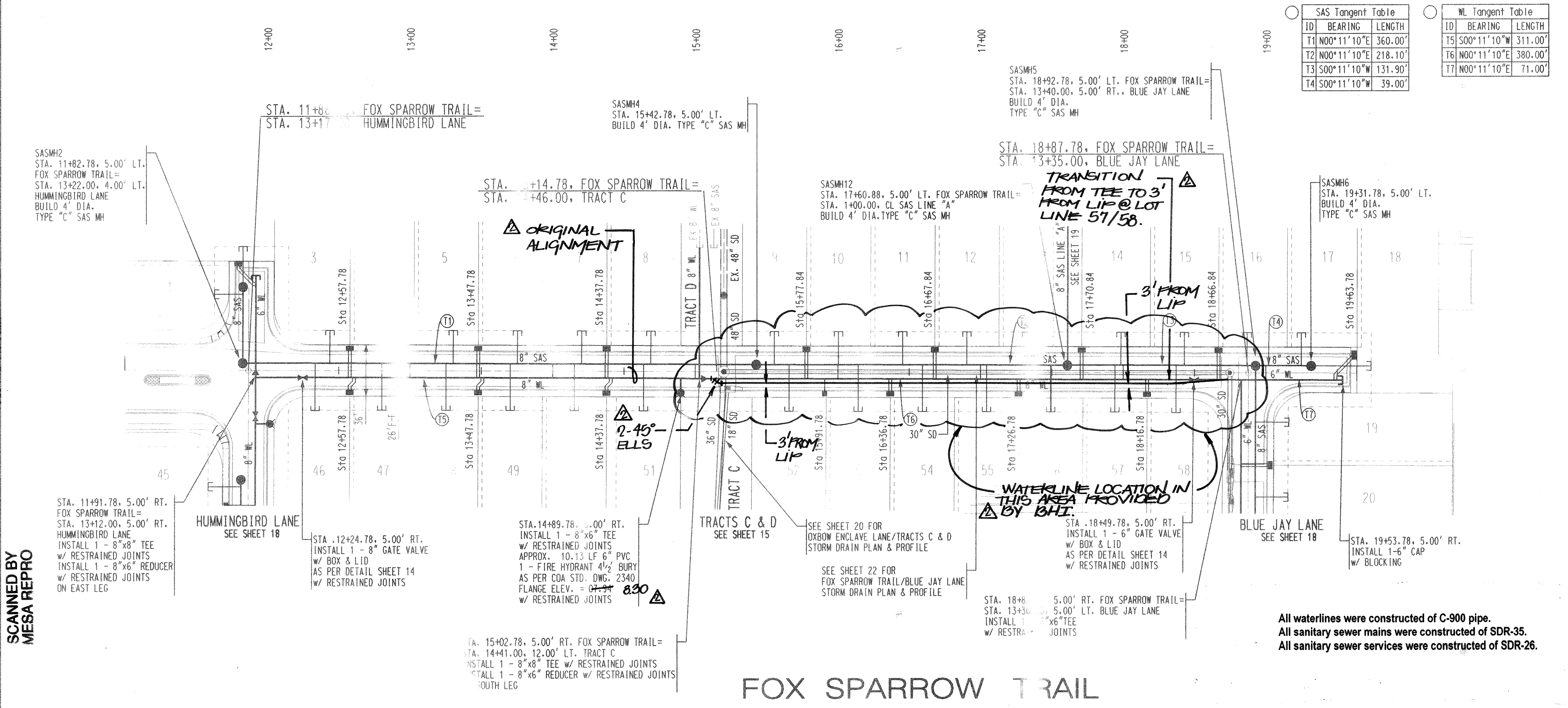
SCANNED BY MESA REPRO



SCANNED BY MESA REPRO

SAS Tangent Table		
ID	BEARING	LENGTH
T1	N00°11'10"E	360.00'
T2	N00°11'10"E	218.10'
T3	S00°11'10"W	131.90'
T4	S00°11'10"W	39.00'

WL Tangent Table		
ID	BEARING	LENGTH
T5	S00°11'10"W	311.00'
T6	N00°11'10"E	380.00'
T7	N00°11'10"E	71.00'

SANITARY SEWER SERVICES

LOT ID	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG (W/RISER)	(as-built)
3	12+43.78, 5.00'LT.	23.00'	5108.~~07~~ (-)	.01
4	12+85.28, 5.00'LT.	23.00'	510~~7.13~~ (-)	6.87
5	13+30.28, 5.00'LT.	23.00'	5106.~~11~~ (-)	.24
6	13+75.28, 5.00'LT.	23.00'	5105.~~09~~ (-)	.11
7	14+20.28, 5.00'LT.	23.00'	5104.~~07~~ (-)	.31
8	14+68.78, 5.00'LT.	23.00'	5102.~~98~~ (-)	.96
9	15+55.34, 5.00'LT.	23.00'	5101.~~19~~ (-)	.18
10	16+00.34, 5.00'LT.	23.00'	5100.~~97~~ (-)	.84
11	16+45.34, 5.00'LT.	23.00'	5100.~~74~~ (-)	.77
12	16+90.34, 5.00'LT.	23.00'	5100.~~52~~ (-)	.22
13	17+32.15, 5.00'LT.	23.00'	5~~100.31~~ (-)	99.99
14	17+98.39, 5.00'LT.	23.00'	5~~100.31~~ (-)	99.84
15	18+42.84, 5.00'LT.	23.00'	5100.~~53~~ (-)	.14
16	18+86.79, 5.00'LT.	23.00'	5100.~~75~~ (-)	.34
17	19+24.84, 5.00'LT.	23.00'	5100.~~96~~ (-)	.83
18	19+31.78, 5.00'LT.	42.00'	5101.~~37~~ (-)	.35
46	12+33.50, 5.00'LT.	33.00'	5108.~~51~~ (-)	.06
47	12+80.28, 5.00'LT.	33.00'	5107.~~45~~ (-)	.48
48	13+25.28, 5.00'LT.	33.00'	5106.~~43~~ (-)	.28
49	13+70.28, 5.00'LT.	33.00'	5105.~~41~~ (-)	.35
50	14+15.28, 5.00'LT.	33.00'	5104.~~39~~ (-)	.47
51	14+63.78, 5.00'LT.	33.00'	5103.~~29~~ (-)	.06
52	15+65.78, 5.00'LT.	33.00'	5101.~~34~~ (-)	.87
53	16+14.28, 5.00'LT.	33.00'	5101.~~10~~ (-)	.38
54	16+59.28, 5.00'LT.	33.00'	5100.~~87~~ (-)	1.28
55	17+04.28, 5.00'LT.	33.00'	5100.~~65~~ (-)	.86
56	17+49.28, 5.00'LT.	33.00'	5100.~~80~~ (1')	1.01
57	17+94.28, 5.00'LT.	33.00'	5100.~~87~~ (1')	.66
58	18+37.09, 5.00'LT.	33.00'	5100.~~71~~ (-)	.25

NOTE: WATER METER LOCATIONS ARE DESIGNATED BY STATIONING AT PROPERTY CORNERS.

All waterlines were constructed of C-900 pipe.
All sanitary sewer mains were constructed of SDR-35.
All sanitary sewer services were constructed of SDR-26.

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES.
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RESTRAINING JOINT TABLE

MECHANICAL JOINTS	LENGTH OF RESTRAINED JOINTS 6"	8"
6" X 6" TEE	1	-
8" X 6" TEE	1	1
8" X 8" CROSS	-	1
8" X 6" REDUCER	-	30
90° HORIZ. BEND	20	26
45° HORIZ. BEND	8	11
22.5° HORIZ. BEND	4	5
11.25° HORIZ. BEND	2	3
GATE VALVE/CAP	55	72
22.5° VERT. BEND		
UPPER	-	14
LOWER	-	2

NOTE:

1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
2. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE POINTS WITHIN 20 LF OF MJ SHALL BE RESTRAINED AT THE CONTRACTORS EXPENSE.
3. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ABOVE. (SEE NOTE 2 ABOVE).
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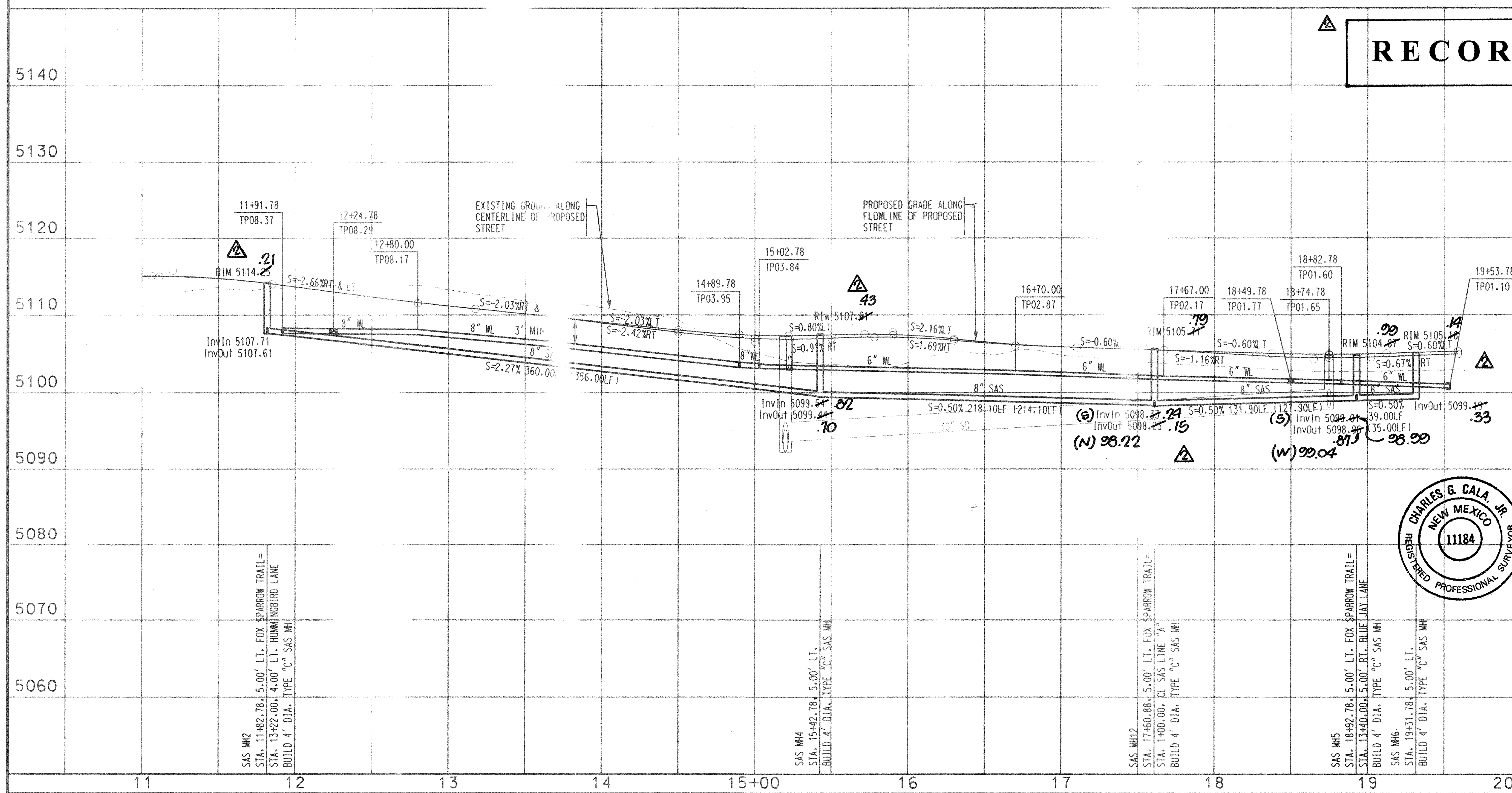
5. ALL CAPS SHALL UTILIZE PCC BLOCKING, UNLESS OTHERWISE NOTED.
6. RESTRAINED LENGTH IN ON LARGE SIDE ON ALL REDUCERS
7. RESTRAIN ALL JOINTS BETWEEN UPPER AND LOWER VERTICAL BENDS.

UPPER BEND
LOWER BEND

RECORD DRAWING



SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

2.10.03
Charles G. Cala, Jr., NMPS 11184 — Date

AS-BUILT INFORMATION
CONTRACTOR Universal Constructors
WORK STAKED BY J.M.A. DATE -
INSPECTOR'S ACCEPTANCE BY B.H.I. DATE 2-2003
FIELD VERIFICATION BY J.M.A. DATE 2-2003
DRAWINGS CORRECTED BY J.M.A. DATE 2-2003

MICRO-FILM INFORMATION
RECORDED BY / DATE / NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366,686.82
Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA-00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES
NO. / BY / DATE

ENGINEER'S SEAL
KEVIN G. PATTON NEW MEXICO 13665 REGISTERED PROFESSIONAL ENGINEER
8.13.02

NO.	DATE	REMARKS	BY
2		AS-BUILT & CERTIFY.	C.G.C.
		REVISIONS	
		DESIGN	

DESIGNED BY TSG,RKL DATE 05/2002
DRAWN BY DLM,BJG DATE 05/2002
CHECKED BY KGP DATE 05/2002

Bohannan ▲ Huston Inc.
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
UTILITY PLAN & PROFILE
FOX SPARROW TRAIL

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL		MO./DAY/YR.	MO./DAY/YR.
APPROVED AUG 15 2002 DESIGN REVIEW COMMITTEE	APPROVED AUG 19 20__	LAST DESIGN UPDATE		

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	17	25

SCALE: 1" = 50' (HORIZ.) 1" = 10' (VERT.)

BHI JOB NO. 020199

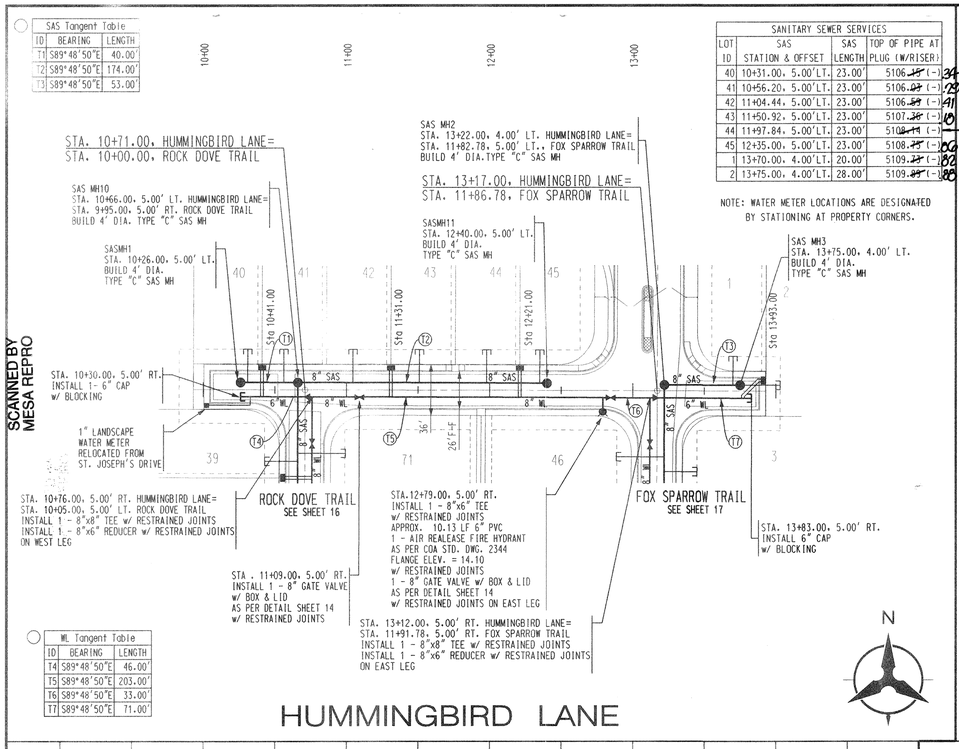
02-AUG-2002
P:\020199\cdp\pnp\020199upnp04.dgn

COPYRIGHT BOHANNAN HUSTON 1999

SAS Tangent Table		
ID	BEARING	LENGTH
T1	S89°48'50"E	40.00'
T2	S89°48'50"E	174.00'
T3	S89°48'50"E	53.00'

SANITARY SEWER SERVICES				
LOT ID	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG (W/RISER)	
40	10+31.00, 5.00'LT.	23.00'	5106.~~25~~ (-)	.34
41	10+56.20, 5.00'LT.	23.00'	5106.~~03~~ (-)	.10
42	11+04.44, 5.00'LT.	23.00'	5106.~~59~~ (-)	.41
43	11+50.92, 5.00'LT.	23.00'	5107.~~36~~ (-)	.10
44	11+97.84, 5.00'LT.	23.00'	5108.~~73~~ (-)	1.96
45	12+35.00, 5.00'LT.	23.00'	5108.~~75~~ (-)	.02
1	13+70.00, 4.00'LT.	20.00'	5109.~~22~~ (-)	.82
2	13+75.00, 4.00'LT.	28.00'	5109.~~88~~ (-)	.80

NOTE: WATER METER LOCATIONS ARE DESIGNATED BY STATIONING AT PROPERTY CORNERS.



WL Tangent Table		
ID	BEARING	LENGTH
T4	S89°48'50"E	46.00'
T5	S89°48'50"E	203.00'
T6	S89°48'50"E	33.00'
T7	S89°48'50"E	71.00'

HUMMINGBIRD LANE

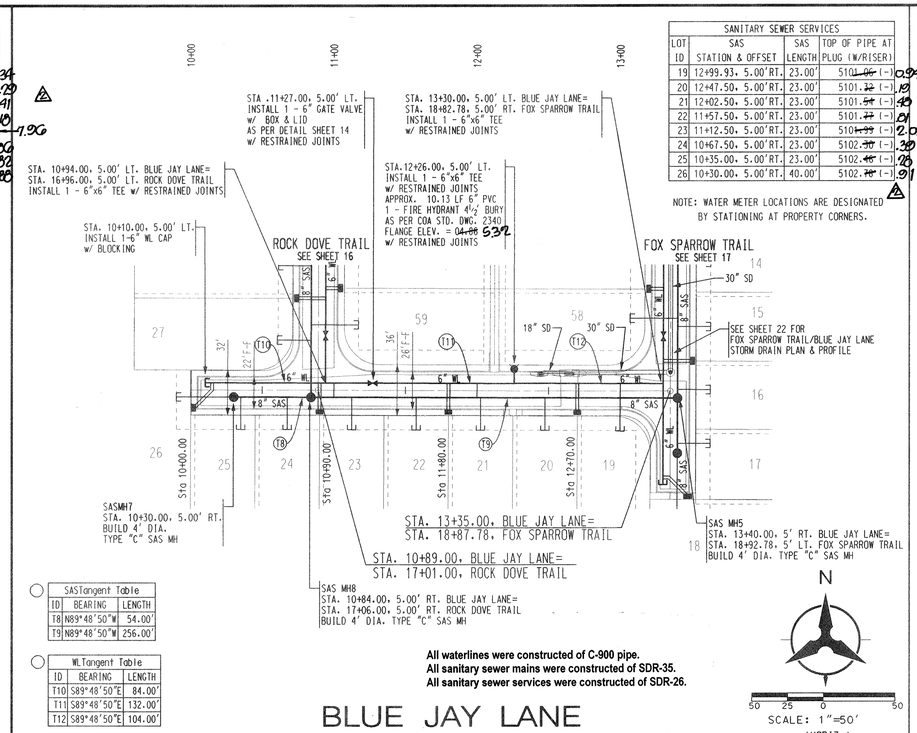
SAS Tangent Table		
ID	BEARING	LENGTH
T8	N89°48'50"W	54.00'
T9	N89°48'50"W	256.00'

WL Tangent Table		
ID	BEARING	LENGTH
T10	S89°48'50"E	84.00'
T11	S89°48'50"E	132.00'
T12	S89°48'50"E	104.00'

All waterlines were constructed of C-900 pipe.
All sanitary sewer mains were constructed of SDR-35.
All sanitary sewer services were constructed of SDR-26.

SANITARY SEWER SERVICES				
LOT ID	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG (W/RISER)	
19	12+99.93, 5.00'RT.	23.00'	5101.~~06~~ (-)	.94
20	12+47.50, 5.00'RT.	23.00'	5101.~~32~~ (-)	.10
21	12+02.50, 5.00'RT.	23.00'	5101.~~54~~ (-)	.49
22	11+57.50, 5.00'RT.	23.00'	5101.~~77~~ (-)	.01
23	11+12.50, 5.00'RT.	23.00'	5101.~~93~~ (-)	2.02
24	10+67.50, 5.00'RT.	23.00'	5102.~~30~~ (-)	.30
25	10+35.00, 5.00'RT.	23.00'	5102.~~45~~ (-)	.28
26	10+30.00, 5.00'RT.	40.00'	5102.~~70~~ (-)	.91

NOTE: WATER METER LOCATIONS ARE DESIGNATED BY STATIONING AT PROPERTY CORNERS.



BLUE JAY LANE

SCALE: 1"=50'
(HORIZ.)

NOTES

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RESTRAINING JOINT TABLE

MECHANICAL JOINTS	LENGTH OF RESTRAINED JOINTS 6"	8"	
6" X 6" TEE	1	-	
8" X 6" TEE	1	1	
8" X 8" CROSS	-	1	
8" X 6" REDUCER	-	30	
90° HORIZ. BEND	20	26	
45° HORIZ. BEND	8	11	
22.5° HORIZ. BEND	4	5	
11.25° HORIZ. BEND	2	3	
GATE VALVE/CAP	55	72	
22.5° VERT. BEND			
UPPER	-	14	
LOWER	-	2	

NOTE:

1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
2. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE POINTS WITHIN 20 LF OF MJ SHALL BE RESTRAINED AT THE CONTRACTORS EXPENSE.
3. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ABOVE. (SEE NOTE 2 ABOVE).
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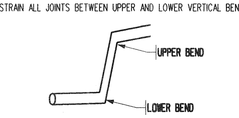
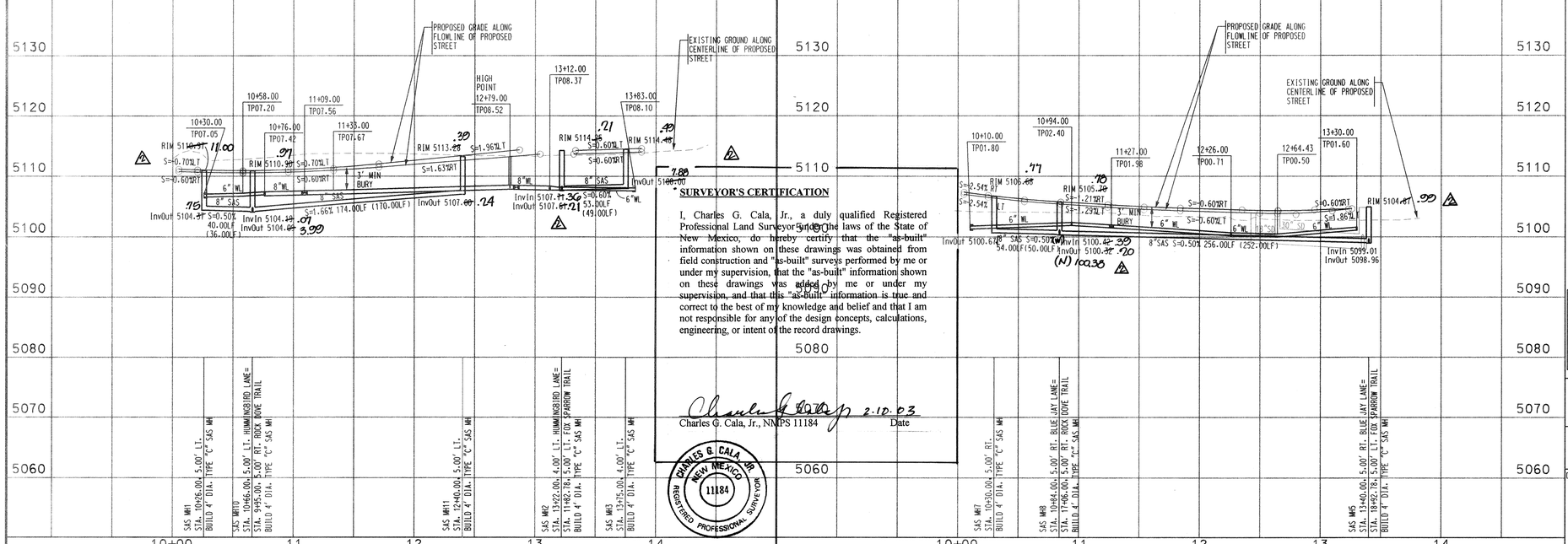
6. RESTRAINED LENGTH IN ON LARGE SIDE ON ALL REDUCERS
7. RESTRAIN ALL JOINTS BETWEEN UPPER AND LOWER VERTICAL BENDS.





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2.10.03

Charles G. Cala, Jr., NMPS 11184 — Date

CHARLES G. CALA JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

14-AUG-2002
p:\020199\cdp\pnp\020199pnp05.dgn

BHI JOB NO. 020199

SCALE: 1" = 50' (HORIZ.)
1" = 10' (VERT.)

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

AS-BUILT INFORMATION
CONTRACTOR Universal Constructors
WORK STAKED BY J.M.A.
INSPECTOR'S ACCEPTANCE BY B.H.I. DATE —
AS-BUILT VERIFICATION BY J.M.A. DATE 8-2-03
DRAWINGS REVIEWED BY J.M.A. DATE 8-2-03
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE) X=366,686.82 Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA-00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
KEVIN G. PATTON NEW MEXICO 13685 REGISTERED PROFESSIONAL ENGINEER 8.13.02

AS-BUILT & CERTIFY.

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG.RKL	DATE 05/2002
DRAWN BY	DLM.BJG	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
UTILITY PLAN & PROFILE
HUMMINGBIRD LANE /BLUE JAY LANE

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
APPROVED AUG 15 2002 DESIGN REVIEW COMMITTEE	APPROVED AUG 19 CITY ENGINEER			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	18	25

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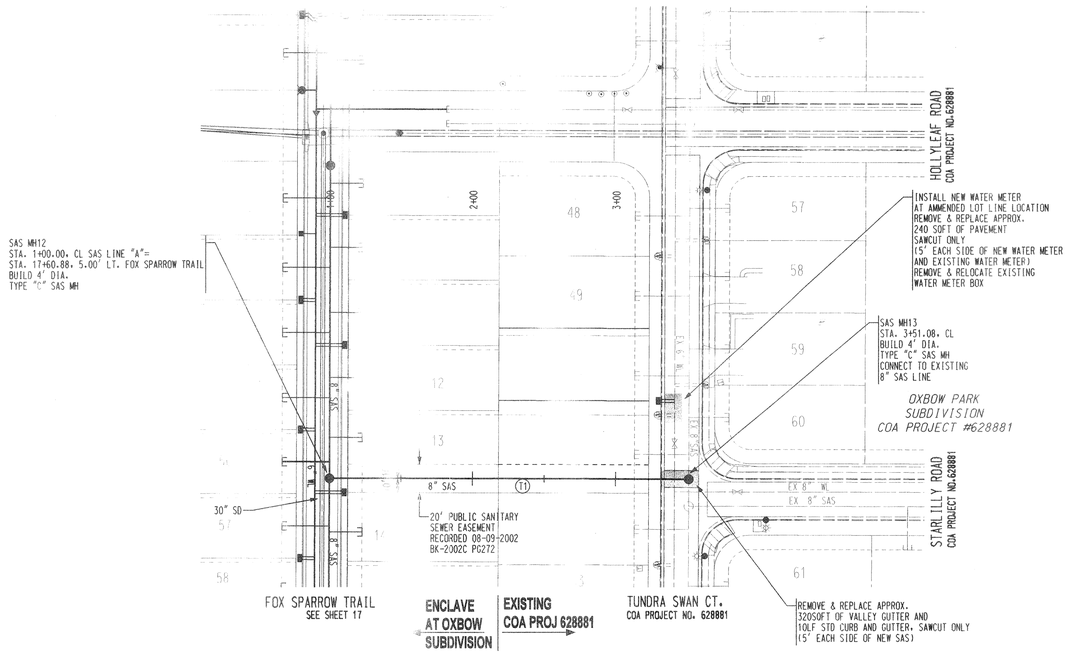
RECORD DRAWING

SCANNED BY MESA REPRO

SCANNED BY
MESA REPRO



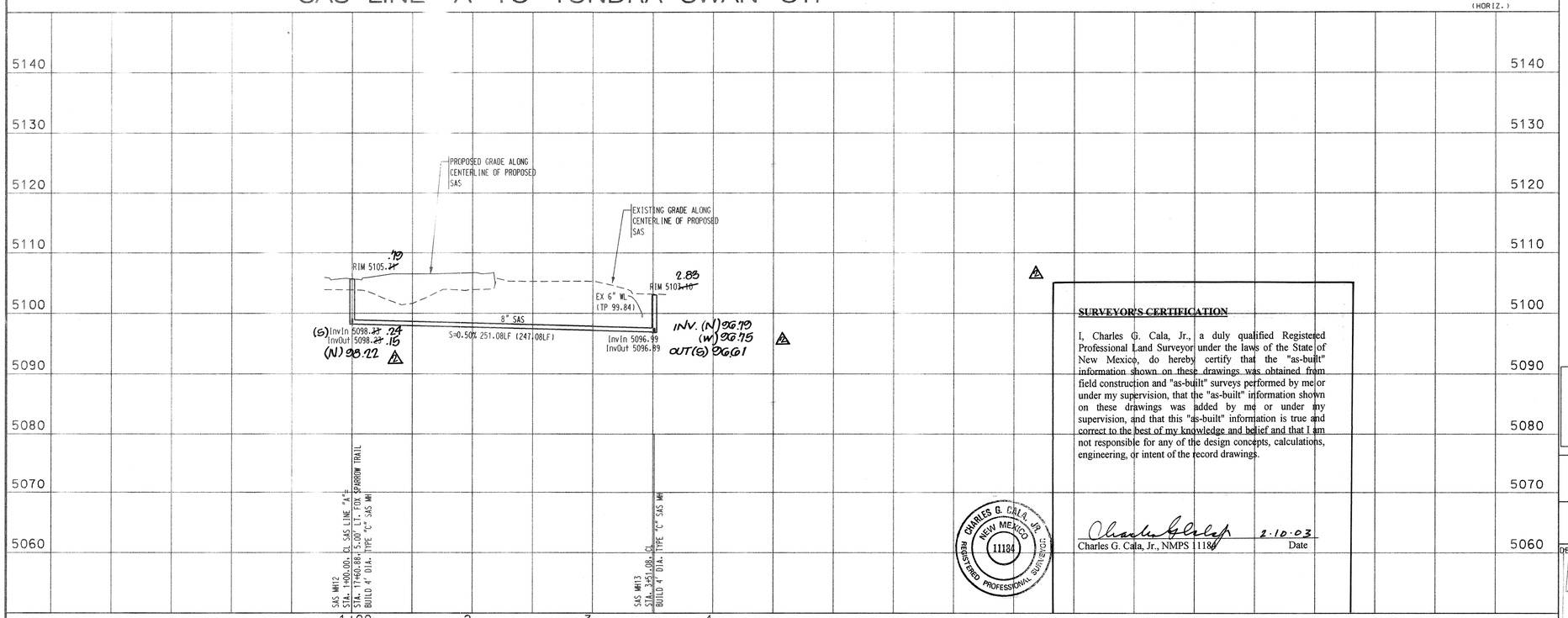
SAS Tangent Table		
ID	BEARING	LENGTH
T1	S89°49'26"E	251.08'

All waterlines were constructed of C-900 pipe.
All sanitary sewer mains were constructed of SDR-35.
All sanitary sewer services were constructed of SDR-26.

N

SCALE: 1"=50' (HORIZ.)

SAS LINE "A" TO TUNDRA SWAN CT.



SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

Charles G. Cala, Jr., NMPS 11184 — 2-10-03 Date

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF OF ANY DISCREPANCIES
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE ALONG FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
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11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

AS-BUILT INFORMATION

CONTRACTOR	Universal Constructors	
WORK STAKED BY	J.M.A.	
INSPECTOR'S ACCEPTANCE BY	K.H.I.	DATE 1-2003
FIELD VERIFICATION BY	J.M.A.	DATE 2-2003
DRAWINGS CORRECTED BY	J.M.A.	DATE 2-2003

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

ACS BRASS TABLET STAMPED "JOSEPH"

NO.	BY	DATE
	GEOGRAPHIC POSITION (NAD 1927)	
	N.M. STATE PLANE COORDINATES	
	(CENTRAL ZONE) X=366,686.82	
	Y=1,502,246.75	
	GROUND-TO-GRID FACTOR = 0.99967551	
	DELTA ALPHA=00°15'24"	
	NGVD 1929 ELEVATION = 5113.852'	

FIELD NOTES

ENGINEER'S SEAL

KEVIN G. PATTON NEW MEXICO 13009 REGISTERED PROFESSIONAL ENGINEER
8.13.02

AS-BUILT I CERTIFY. CGC

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG.RKL	DATE 05/2002
DRAWN BY	DLM.BJG	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
UTILITY PLAN & PROFILE
SAS LINE "A" TO TUNDRA SWAN CT.

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
APPROVED AUG 15 2002 DESIGN REVIEW COMMITTEE	APPROVED AUG 19 2002 CITY ENGINEER			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	19	25

SCALE: 1" = 50' (HORIZ.)
1" = 10' (VERT.)

BHI JOB NO. 020199

14-400-2002
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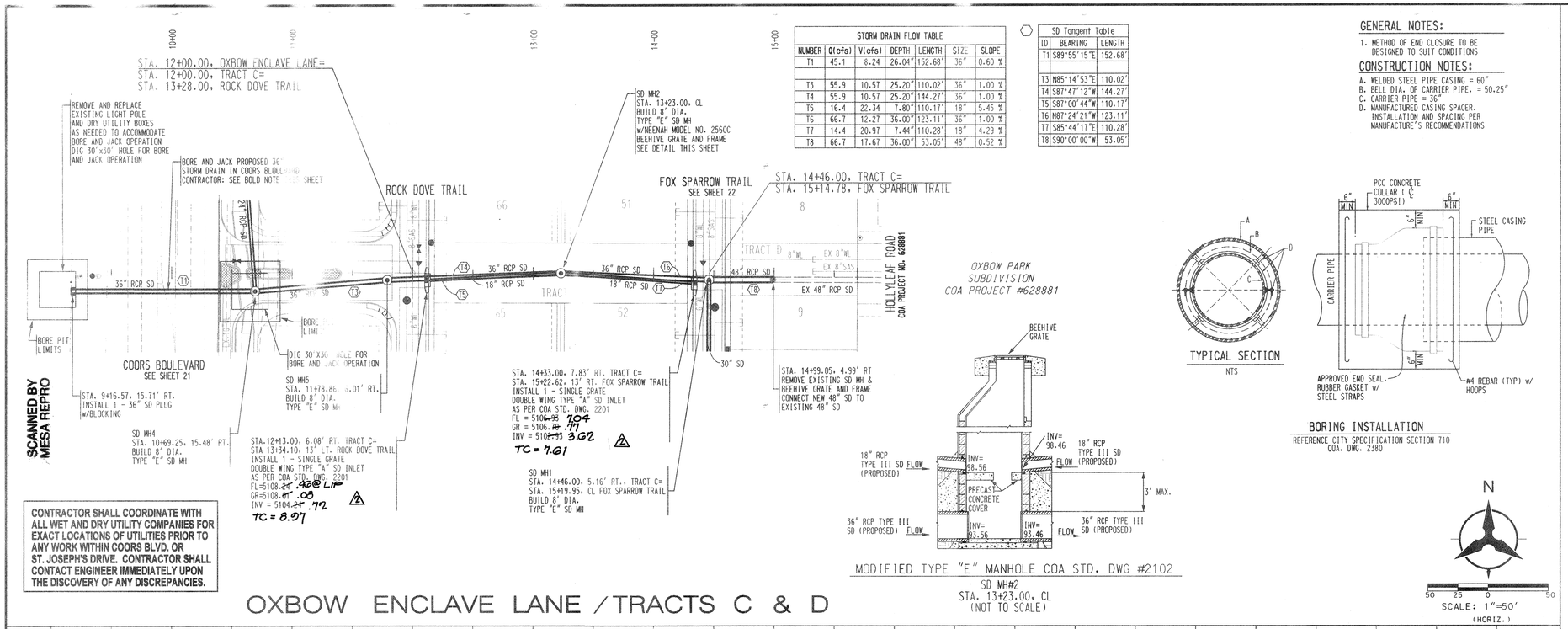
RECORD DRAWING



STORM DRAIN FLOW TABLE							
NUMBER	Q(cfs)	V(cfs)	DEPTH	LENGTH	SIZE	SLOPE
T1	45.1	8.24	26.04"	152.68'	36"	0.60 %
T3	55.9	10.57	25.20"	110.02'	36"	1.00 %
T4	55.9	10.57	25.20"	144.27'	36"	1.00 %
T5	16.4	22.34	7.80"	110.17'	18"	5.45 %
T6	66.7	12.27	36.00"	123.11'	36"	1.00 %
T7	14.4	20.97	7.44"	110.28'	18"	4.29 %
T8	66.7	17.67	36.00"	53.05'	48"	0.52 %

SD Tangent Table		
ID	BEARING	LENGTH
T1	S89°55'15"E	152.68'
T3	N85°14'53"E	110.02'
T4	S87°47'12"W	144.27'
T5	S87°00'44"W	110.17'
T6	N87°24'21"W	123.11'
T7	S85°44'17"E	110.28'
T8	S90°00'00"W	53.05'

GENERAL NOTES:

1. METHOD OF END CLOSURE TO BE DESIGNED TO SUIT CONDITIONS

CONSTRUCTION NOTES:

A. WELDED STEEL PIPE CASING = 60"
B. BELL DIA. OF CARRIER PIPE. = 50.25"
C. CARRIER PIPE = 36"
D. MANUFACTURED CASING SPACER. INSTALLATION AND SPACING PER MANUFACTURE'S RECOMMENDATIONS

NOTES

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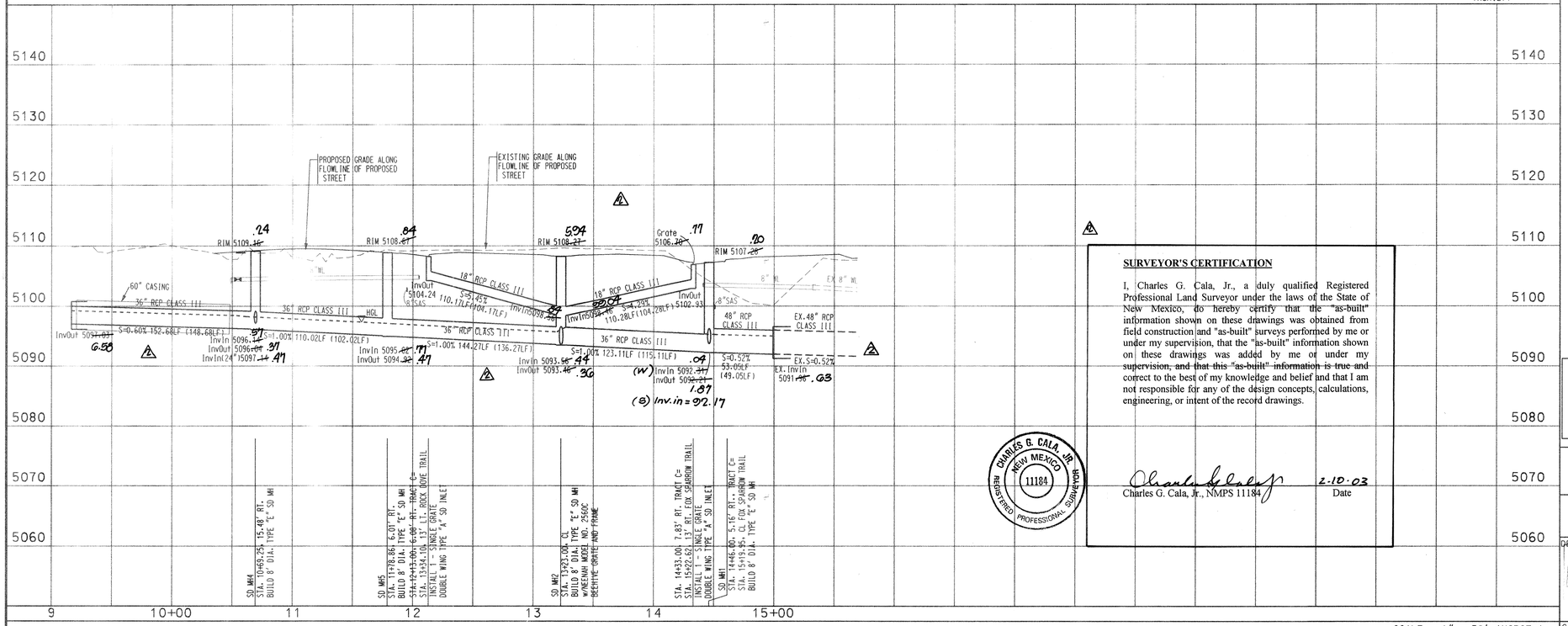
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.

CONTRACTOR SHALL COORDINATE WITH ALL WET AND DRY UTILITY COMPANIES FOR EXACT LOCATIONS OF UTILITIES PRIOR TO ANY WORK WITHIN COORS BLVD. OR ST. JOSEPH'S DRIVE. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCIES.

SCANNED BY MESA REPRO

OXBOW ENCLAVE LANE / TRACTS C & D



SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, ~~and that this "as-built" information is true and~~ correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

2-10-03
Charles G. Cala, Jr., NMPS 11184 — Date

SCALE: 1" = 50' (HORIZ.)
1" = 10' (VERT.)

BHI JOB NO. 020199

02-AUG-2002
P:\020199\cdd\dgn\020199edgn01.dgn

AS-BUILT INFORMATION

CONTRACTOR	Universal Contractors
STAKED BY	J.M.A.
INSPECTOR'S ACCEPTANCE BY	DATE —
FIELD VERIFICATION BY	J.M.A. DATE 2/6/03
DRAWINGS CORRECTED BY	J.M.A. DATE 2/6/03
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

BENCH MARKS

ACS BRASS TABLET STAMPED "JOSEPH"	
GEOGRAPHIC POSITION (NAD 1927)	
N.M. STATE PLANE COORDINATES (CENTRAL ZONE) X=366,686.82 Y=1,502,246.75	
GROUND-TO-GRID FACTOR = 0.99967551	
DELTA ALPHA=00°15'24"	
NGVD 1929 ELEVATION = 5113.852'	

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

KEVIN G. SATTON NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 8-5-02

AS-BUILT C CERTIFY. CGC

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG.RKL	DATE 05/2002
DRAWN BY	BJG	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
STORM DRAIN PLAN & PROFILE
OXBOW ENCLAVE LANE / TRACTS C & D

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL		MO./DAY/YR.	MO./DAY/YR.
APPROVED AUG 15 2002 REVIEW COMMITTEE	APPROVED AUG 19 2002 CITY ENGINEER	LAST DESIGN UPDATE		

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	20	25

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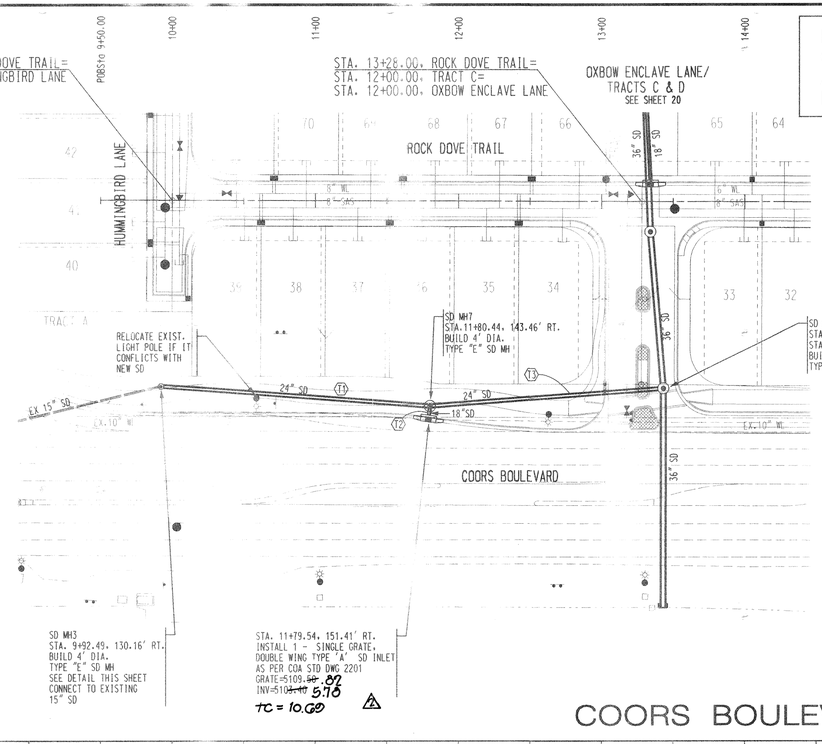
RECORD DRAWING



NOTE:
COORS STORM DRAIN ALIGNMENT BASED OFF OF ROCK DOVE TRAIL STATIONING

SD Tangent Table		
ID	BEARING	LENGTH
T1	N04°13'54"E	188.42'
T2	N83°20'06"W	8.00'
T3	N04°16'12"W	163.56'

STORM DRAIN FLOW TABLE							
NUMBER	Q(cfs)	V(cfs)	DEPTH	LENGTH	SIZE	SLOPE
T1	5.40	4.93	10.68"	188.42'	24"	2.02 %
T2	10.80	21.59	5.88"	8.00'	18"	3.00 %
T3	10.80	21.59	5.88"	163.56'	24"	3.83 %

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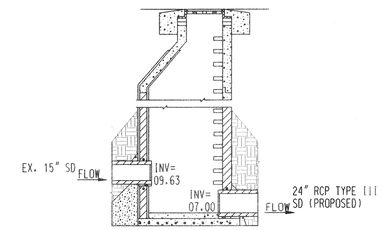
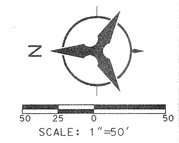
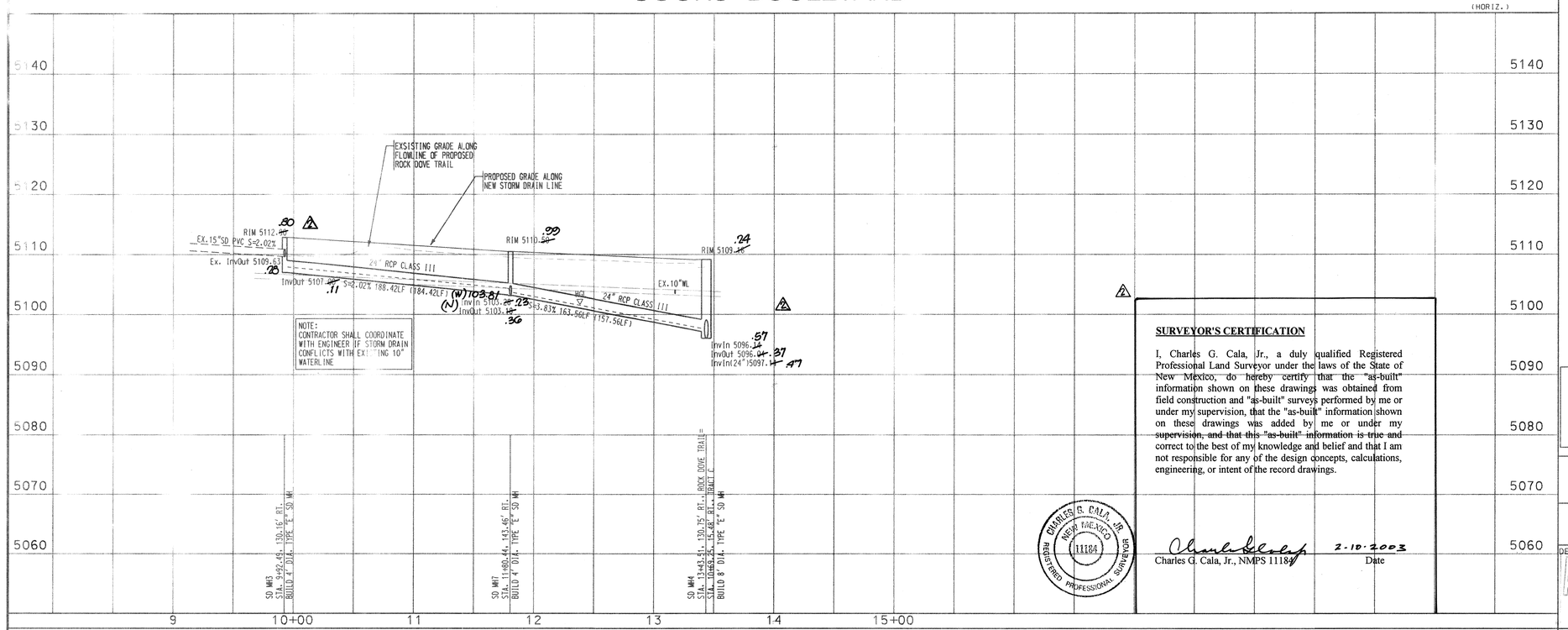


MODIFIED TYPE "E" MANHOLE COA STD. DWG. #2102
SD MH#3
STA. 9+92.49, 130.16' RT
(NOT TO SCALE)



COORS BOULEVARD



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CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

Charles G. Cala, Jr., NMPS 11184 — 2-10-2003 Date

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AS-BUILT INFORMATION

CONTRACTOR Universal Constructors
WORK STAKED BY J.M.A.
INSPECTOR'S ACCEPTANCE BY B.H.I. DATE —
FIELD VERIFICATION BY J.M.A. DATE 2/2/03
DRAWINGS CORRECTED BY J.M.A. DATE 2/2/03
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES
(CENTRAL ZONE) X=366,686.82
Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

AS BUILT SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
CGC
KEVIN G. PATTON NEW MEXICO 10295 REGISTERED PROFESSIONAL ENGINEER 2-10-03

AS-BUILT & CERTIFY.

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG.RKL	DATE 05/2002
DRAWN BY	BJG	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
STORM DRAIN PLAN & PROFILE
COORS BOULEVARD

DESIGN REVIEW COMMITTEE: APPROVED AUG 15 2002 — DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL: APPROVED AUG 19 2002 — CITY ENGINEER
LAST DESIGN UPDATE | MO./DAY/YR. | MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	21	25

SCALE: 1" = 50' (HORIZ.)
1" = 10' (VERT.)

BHI JOB NO. 020199

14-AUG-2002
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SCANNED BY MESA REPRO

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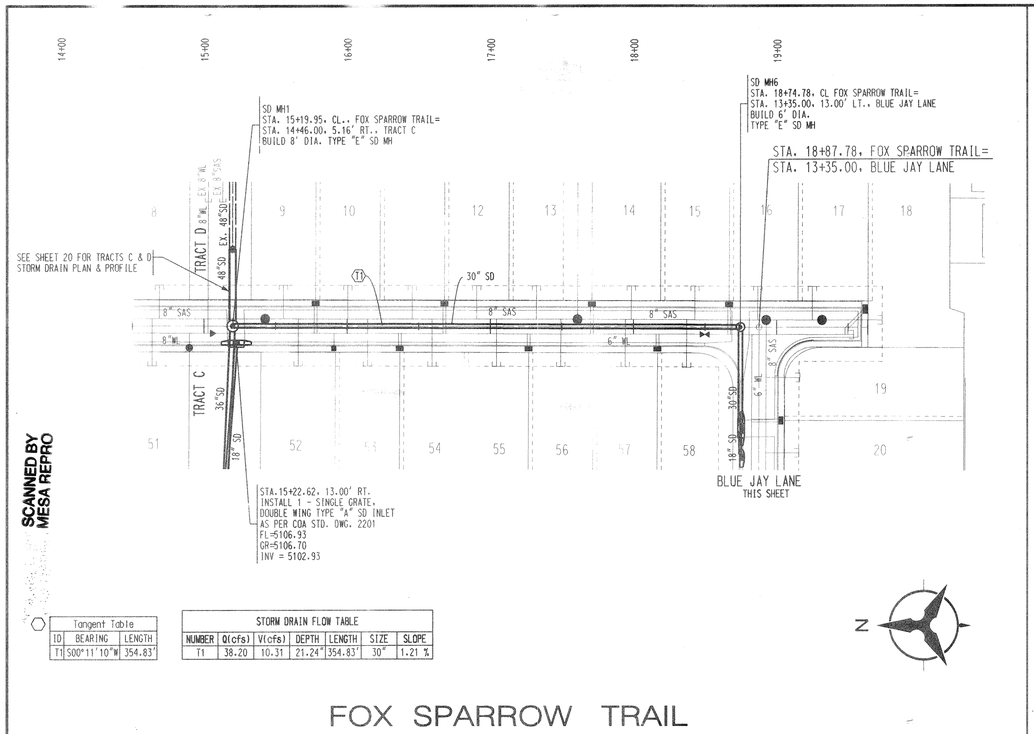
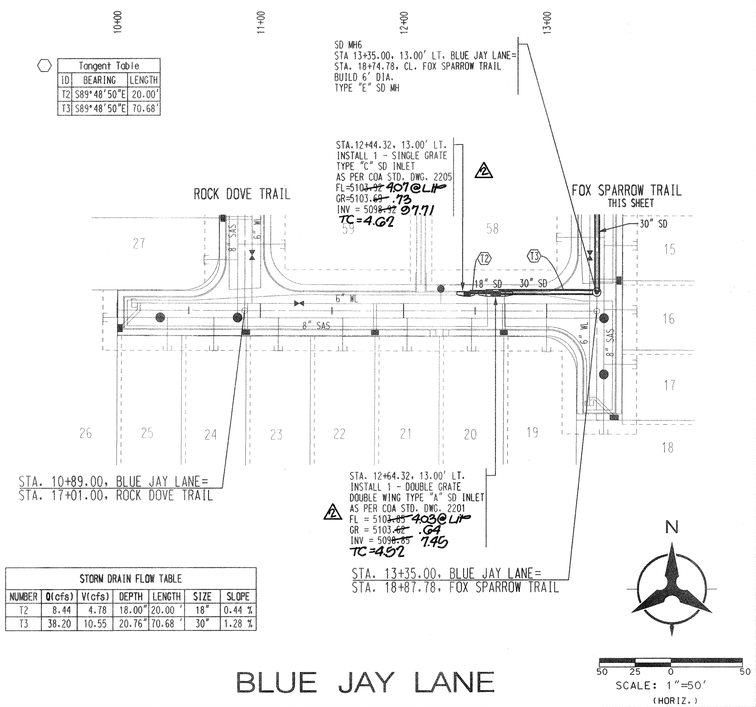
RECORD DRAWING



Tangent Table		
ID	BEARING	LENGTH
T1	S00°11'10"W	354.83'

STORM DRAIN FLOW TABLE						
NUMBER	Q(cfs)	V(cfs)	DEPTH	LENGTH	SIZE	SLOPE
T1	38.20	10.31	21.24"	354.83'	30"	1.21 %

FOX SPARROW TRAIL



Tangent Table		
ID	BEARING	LENGTH
T2	S89°48'50"E	20.00'
T3	S89°48'50"E	70.68'

STORM DRAIN FLOW TABLE						
NUMBER	Q(cfs)	V(cfs)	DEPTH	LENGTH	SIZE	SLOPE
T2	8.44	4.78	18.00"	20.00 '	18"	0.44 %
T3	38.20	10.55	20.76"	70.68 '	30"	1.28 %

BLUE JAY LANE

SCALE: 1"=50'
(HORIZ.)

NOTES

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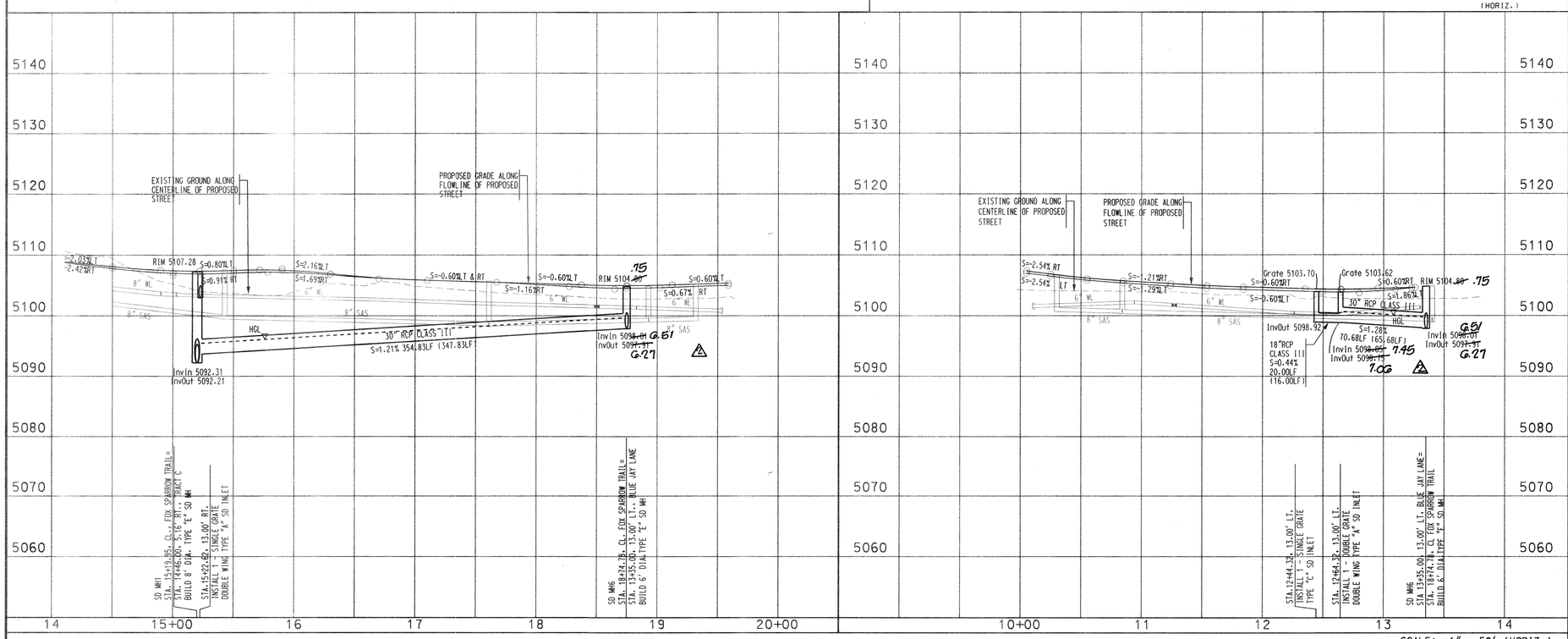

SCALE: 1" = 50' (HORIZ.)
1" = 10' (VERT.)

BHI JOB NO. 020199

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

SURVEYOR'S CERTIFICATION

I, Charles G. Cala, Jr., a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the "as-built" information shown on these drawings was obtained from field construction and "as-built" surveys performed by me or under my supervision, that the "as-built" information shown on these drawings was added by me or under my supervision, and that this "as-built" information is true and correct to the best of my knowledge and belief and that I am not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

2-10-03
Charles G. Cala, Jr., NMPS 11184 Date

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

AS-BUILT INFORMATION
CONTRACTOR Universal Contractors
STAKED BY J.M.A. DATE -
INSPECTOR'S ACCEPTANCE BY D.H.I. DATE 2/2/03
FIELD VERIFICATION BY J.M.A. DATE 2/2/03
DRAWINGS CORRECTED BY J.M.A. DATE 2/2/03
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE) X=366,686.82 Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL & CERTIFICATE
CGC
KEVIN G. PATTON NEW MEXICO 12808 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

		DATE
DESIGNED BY	TSG.RKL	05/2002
DRAWN BY	DLM.BJG	05/2002
CHECKED BY	KGP	05/2002

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
STORM DRAIN PLAN & PROFILE
FOX SPARROW TRAIL /BLUE JAY LANE

DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL
APPROVED AUG 15 2002 DESIGN REVIEW COMMITTEE
APPROVED AUG 19 2002 CITY ENGINEER
LAST DESIGN UPDATE MO./DAY/YR. MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	22	25

RECORD DRAWING

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SCANNED BY MESA REPRO

02-AUG-2002
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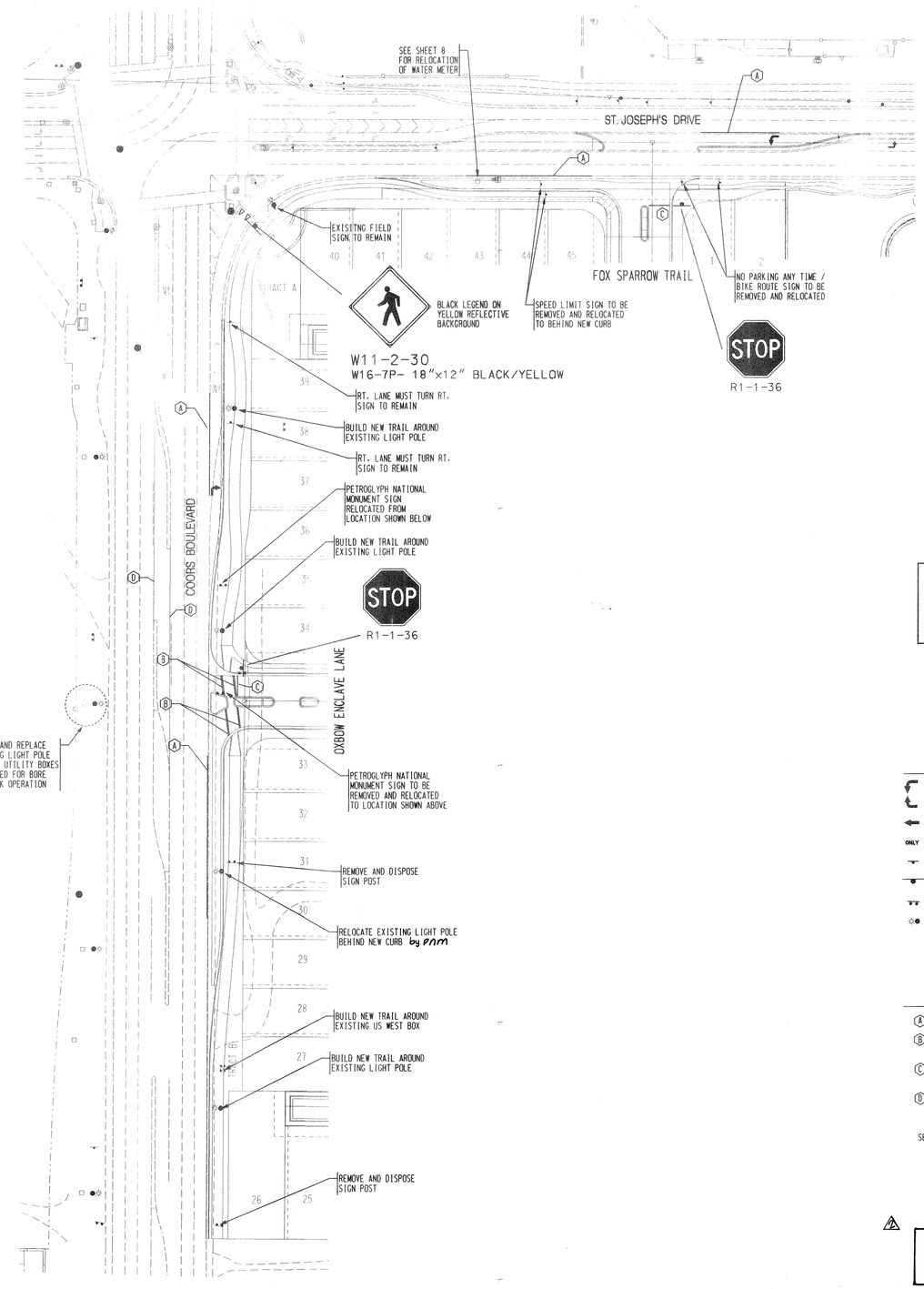
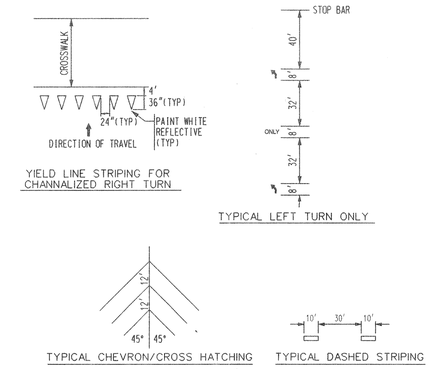
N

SCALE: 1" = 60'
(HORIZ.)





TYPICAL STRIPING DETAILS

NTS

CONTRACTOR SHALL COORDINATE WITH ALL WET AND DRY UTILITY COMPANIES FOR EXACT LOCATIONS OF UTILITIES PRIOR TO ANY WORK WITHIN COORS BLVD. OR ST. JOSEPH'S DRIVE. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCIES.

GENERAL STRIPING & SIGNING LEGEND

- REFLECTORIZED LEFT TURN ARROW (PREFORMED PLASTIC)
- REFLECTORIZED RIGHT TURN ARROW (PREFORMED PLASTIC)
- REFLECTORIZED STRAIGHT ARROW (PREFORMED PLASTIC)
- ONLY REFLECTORIZED "ONLY"
- EXISTING SIGN
- PROPOSED SIGN
- EXISTING TYPE III BARRICADE
- EXISTING STREET LIGHT

STRIPING LEGEND

- (A) 4" SOLID WHITE REFLECTIVE STRIPE
- (B) 12" SOLID WHITE REFLECTIVE CROSSWALK STRIPE EACH SIDE OF 10' CROSSWALK
- (C) 24" SOLID WHITE REFLECTIVE STOP BAR STRIPE
- (D) 4" SOLID YELLOW REFLECTIVE STRIPE ALONG EDGE OF NEW EXTRUDED ASPHALT CURB AS INSTALLED FOR COORS BLVD. MEDIAN CLOSURE

SEE STRIPING & SIGNING GENERAL NOTES THIS SHEET

STRIPING & SIGNING GENERAL NOTES:

1. ALL STRIPES ARE TO BE 4" UNLESS OTHERWISE SPECIFIED.
2. ALL MEDIAN NOSES SHALL BE PAINTED REFLECTIVE YELLOW.
3. EACH SIGN FACE SHOWN ON THE PLANS SHALL MEET THE SPECIFICATIONS IN THE STANDARED HIGHWAY SIGNS MANUAL (1979 EDITION) FOR PROPER ARRANGEMENT, SPACING OF LETTERS, LETTER HEIGHT, LETTER SERIES, SYMBOLS, AND BORDERS FOR THE SPECIFIED SIZE AND MESSAGE AS SHOWN ON PLANS.
4. ALL SIGNS SHALL BE ALUMINUM.
5. POST LENGTHS AND SECTIONS ARE BASED ON 7'-0" CLEARANCE HEIGHT FROM THE TOP OF SIDEWALK TO THE BOTTOM OF THE SIGN. FINAL POST LENGTHS AND SECTIONS ARE TO BE DETERMINED IN THE FIELD.
6. PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SUPPLEMENTAL TECHNICAL SPECIFICATION SECTION 440 FOR THE REFLECTORIZED PLASTIC PAVEMENT SYMBOLS, LEGENDS, STRIPES, AND MARKINGS.
7. FOR EXACT LOCATION OF SIGNING, CONTACT ED TOLEDO AT 857-8004.

RECORD DRAWING

BHI JOB NO. 020199

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

AS-BUILT INFORMATION
CONTRACTOR
STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
MAPS CORRECTED BY — DATE
MICRO-FILM INFORMATION
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ACS BRASS TABLET STAMPED "JOSEPH"
GEOGRAPHIC POSITION (NAD 1927)
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Y=1,502,246.75
GROUND-TO-GRID FACTOR = 0.99967551
DELTA ALPHA=00°15'24"
NGVD 1929 ELEVATION = 5113.852'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
KEVIN G. PATTON — NEW MEXICO — REGISTERED PROFESSIONAL ENGINEER
8-13-02

RECORD DRAWING.

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	TSG-RKL	DATE 05/2002
DRAWN BY	DLM	DATE 05/2002
CHECKED BY	KGP	DATE 05/2002

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ENCLAVE AT OXBOW SUBDIVISION
STRIPING & SIGNING PLAN – COORS BLVD./ST. JOSEPH'S DRIVE

DESIGN REVIEW COMMITTEE — APPROVED AUG 15 2002 — DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL — APPROVED AUG 19 2002 — CITY ENGINEER
LAST DESIGN UPDATE — MO./DAY/YR. — MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
691281	G-11	23	25

02408-2002
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SCANNED BY MESA REPRO

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.

2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPERATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.

3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.

11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.

12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH

18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

19. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
    1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
    2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
    3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.

23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION, WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.

25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.

27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPTMENT, BOTH PERMANENT AND TEMPORARY.

SPECIAL PROJECT TRAFFIC CONTROL NOTES

1. CONTRACTOR SHALL PERFORM AS MUCH WORK AS POSSIBLE BEHIND THE EXISTING ROADWAY ON BOTH COORS BLVD. AND ST. JOSEPH'S DRIVE PRIOR TO AFFECTING TRAFFIC.

2. LANE CLOSURES ON COORS BLVD. WILL NOT BE ALLOWED FROM 6:00 A.M. TO 9:00 A.M., AND FROM 3:00 P.M. TO 7:00 P.M. WORK INVOLVING LANE CLOSURES EXPECTED TO LAST LONGER THAN THESE HOURS SHALL BE PERFORMED AT NIGHT STARTING AFTER 7:00 P.M. WITH WORK PROCEEDING 24-HOURS PER DAY UNTIL ALL LANES ARE OPENED TO TRAFFIC.

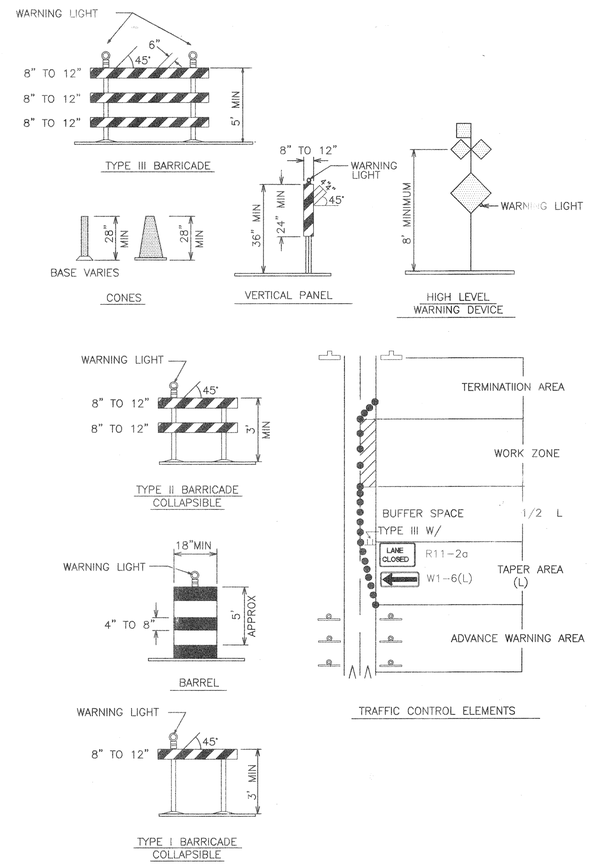
3. ONLY SINGLE LANE CLOSURES ON COORS BLVD. WILL BE ALLOWED.

4. ARTERIAL/COLLECTOR ROAD USAGE FEES FOR $0.01 PER SQUARE FOOT OF BARRICADED AREA PER DAY WILL BE ASSESSED FOR ALL LANE CLOSURES ON EITHER COORS BLVD. OR ST. JOSEPH'S DRIVE.

5. A CONCRETE, JERSEY-TYPE BARRIER IS REQUIRED TO PROTECT TRAFFIC ON COORS BLVD. FROM ENTERING BORE PITS FROM EITHER SIDE OF COORS BLVD.

6. CONTRACTOR MUST MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION ON ST. JOSEPH'S DRIVE AT ALL TIMES. NO TRAFFIC SPLITS WILL BE ALLOWED.

7. NO LANE CLOSURES WILL BE ALLOWED ON EASTBOUND OR WESTBOUND ST. JOSEPH'S DRIVE BEFORE 9:00 A.M., MONDAY THROUGH FRIDAY, WHEN ST. PIUS HIGH SCHOOL IS IN SESSION.



LEGEND

- WORK AREA
- BARRICADE – TYPE I, TYPE II, OR BARREL
- BARRICADE – TYPE III
- VERTICAL PANEL
- WARNING SIGN
- D — DISTANCE BETWEEN SIGNS – A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- S — SPACING BETWEEN BARRICADES – A DISTANCE MEASURED IN FEET EQUAL TO THE STREET LIMIT OF THE STREET
- L — TAPER LENGTH – SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH(L) (FEET) 10' LANE	11' LANE	12' LANE	MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TAPER CRITERIA

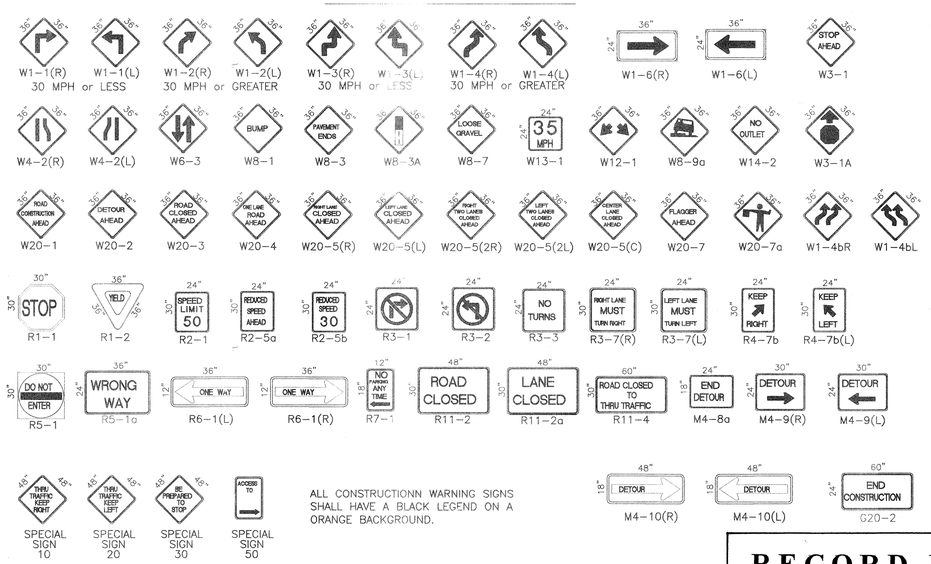
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
40 MPH OR GREATER	$L = W \times S$

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

SIGN FACE DETAILS



ALL CONSTRUCTIONN WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

RECORD DRAWING

AS-BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

COA STD

No.	Date	REMARKS	By
		REVISIONS	
		DESIGN	

Designed By: COA DATE: 09/01
Drawn By: COA DATE: 09/01
Checked By: COA DATE: 09/01

Bohannan ▲ Huston
425 S. Telshor Blvd., Suite C-100 Las Cruces, NM 88011 (505) 522-8237
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

ENCLAVE AT OXBOW SUBDIVISION
SIGNING & CONSTRUCTION
TRAFFIC CONTROL STANDARDS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	Of
691281	G-11	24	25

BHI JOB NO. 020199 Date: JUNE 2002

SCANNED BY MESA REPRO

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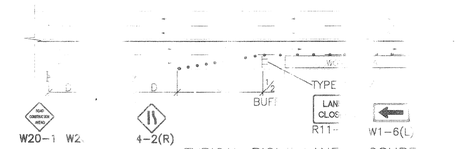
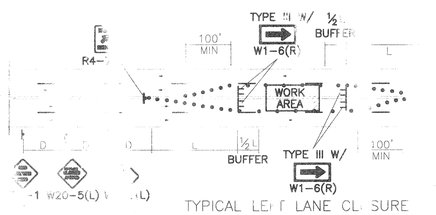
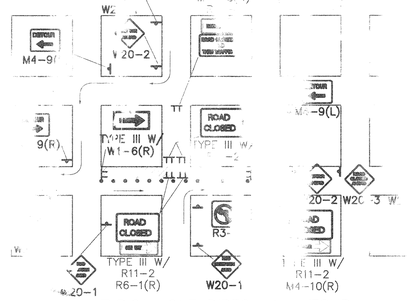
Aug 02, 2002 - 10:27am



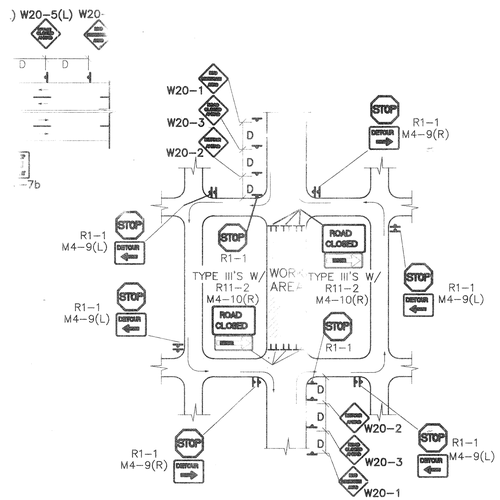
TYPICAL RIGHT LANE CLOSURE



TYPICAL LEFT LANE CLOSURE



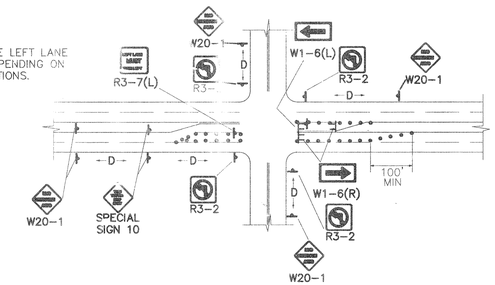
TYPICAL ONE DIRECTION DETOUR



TYPICAL STREET CLOSURE

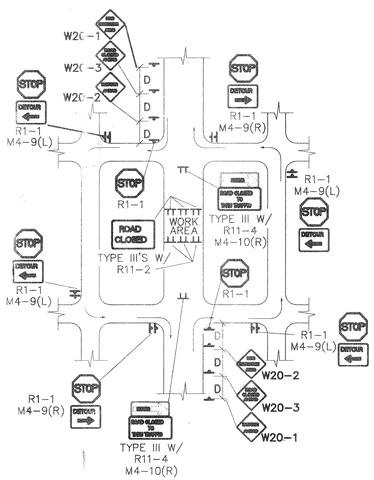
NOTE: (R1-1) BASED ON FIELD CONDITIONS.

NOTE:
MAY REQUIRE LEFT LANE CLOSURE DEPENDING ON FIELD CONDITIONS.



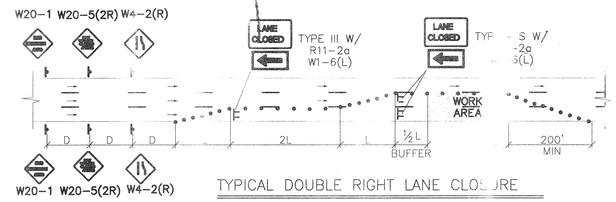
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE: DEPENDING ON WORK ZONE LOCATION.

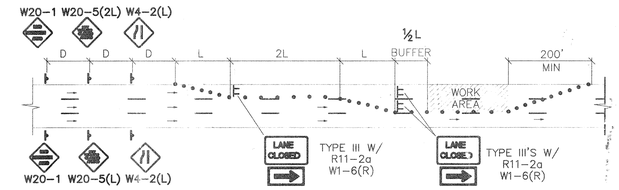


TYPICAL MID-BLOCK CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

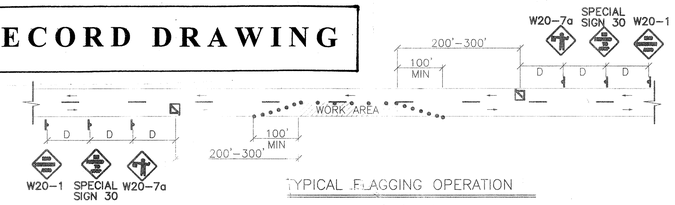


TYPICAL DOUBLE RIGHT LANE CLOSURE

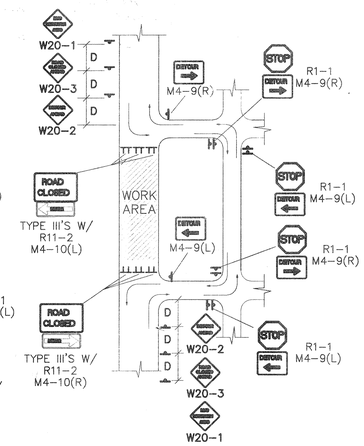


TYPICAL DOUBLE LEFT LANE CLOSURE

RECORD DRAWING

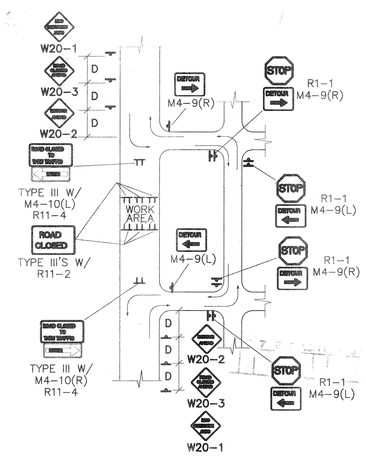


TYPICAL FLAGGING OPERATION



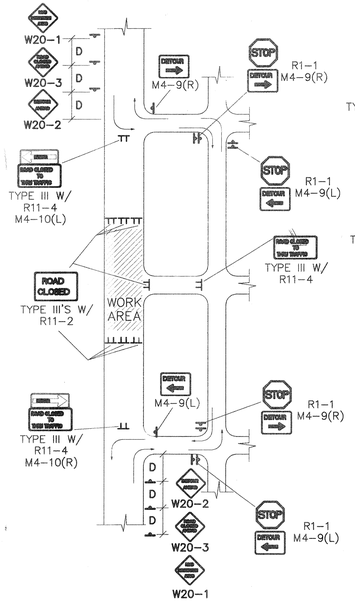
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



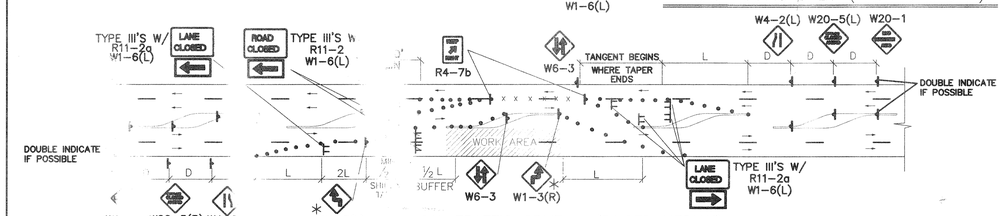
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

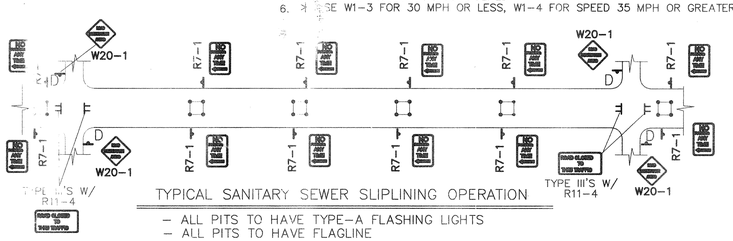


TYPICAL TRAFFIC SPLIT-(PAINTED MEDIAN)

TYPICAL TRAFFIC SPLIT – (RAISED MEDIAN)

TRAFFIC SPLIT NOTES:

1. OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
2. 1/2 L IS THE MINIMUM DISTANCE FOR SHIFTING TAPERS.
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
4. MEDIAN REMOVAL SHALL BE REQUIRED IF 1/2 L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS.
5. REDUCED SPEED MAY BE CONSIDERED.
6. USE W1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER.



TYPICAL SANITARY SEWER SLIPLINING OPERATION

- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS
- ALL PITS TO HAVE FLAGLINE

GENERAL NOTE:

ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF 36" THIRTY SIX INCHES BY 36" THIRTY SIX INCHES IN SIZE AND SHALL HAVE ONE WARNING LIGHT.

SCANNED BY MESA REPRO

AS-BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

COA STD

No.	Date	REMARKS	By
		REVISIONS	
		DESIGN	

Designed By: COA DATE: 06/02
Drawn By: COA DATE: 06/02
Checked By: COA DATE: 03/02

Bohannan ▲ Huston
425 S. Telshor Blvd., Suite C-108 Las Cruces, NM 88011 (505) 522-8217
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

ENCLAVE AT OXBOW SUBDIVISION
TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF MUTCD)

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	Of
691281	G-11	25	25

BH JOB NO. 020199

Date: JUNE 2002

Project Name: Oxbow Center
Project No: W0007.0004
Sheet Title: Hydrology Calculations
Creation Date: 02/15/2022
Comments:

HYDROLOGY CALCULATIONS

AHYMO INPUT: EXISTING CONDITIONS

Subbasin	Area (ac)	Treatment Type Area (ac)				Treatment Type Area (%)			
		A	B	C	D	A	B	C	D
EX1	11.7	11.7	0.0	0.0	0.0	100%	0%	0%	0%
EX2	16.7	16.0	0.0	0.7	0.0	96%	0%	4%	0%
OFF1	1.8	0.0	0.0	0.0	1.8	0%	0%	0%	100%
OFF2	1.0	0.0	0.0	0.0	1.0	0%	0%	0%	100%
OFF3	0.9	0.0	0.0	0.6	0.4	0%	0%	60%	40%
OFF4	0.8	0.0	0.0	0.5	0.3	0%	0%	60%	40%

AHYMO INPUT: PROPOSED CONDITIONS

Subbasin	Area (ac)	Treatment Type Area (ac)				Treatment Type Area (%)			
		A	B	C	D	A	B	C	D
P1	2.0	0.0	0.0	0.2	1.8	0%	0%	10%	90%
P2	1.5	0.0	0.0	0.2	1.3	0%	0%	10%	90%
P3	0.7	0.0	0.0	0.1	0.6	0%	0%	10%	90%
P4	1.1	0.0	0.0	0.1	1.0	0%	0%	10%	90%
P5	1.3	0.0	0.0	0.1	1.1	0%	0%	10%	90%
P6	0.9	0.0	0.0	0.1	0.8	0%	0%	10%	90%
P7	1.2	0.0	0.0	0.1	1.1	0%	0%	10%	90%
P8	1.0	0.0	0.0	0.1	0.9	0%	0%	10%	90%
P9	0.9	0.0	0.0	0.1	0.8	0%	0%	10%	90%
P10	0.9	0.0	0.0	0.1	0.8	0%	0%	10%	90%
P11	0.5	0.0	0.0	0.1	0.4	0%	0%	10%	90%
P12	7.7	0.0	0.0	0.8	6.9	0%	0%	10%	90%
P13	6.4	0.0	0.0	0.6	5.7	0%	0%	10%	90%
P14	0.4	0.0	0.0	0.04	0.4	0%	0%	10%	90%
P15	0.3	0.0	0.0	0.03	0.2	0%	0%	10%	90%
OFF1	1.8	0.0	0.0	0.0	1.8	0%	0%	0%	100%
OFF2	1.0	0.0	0.0	0.0	1.0	0%	0%	0%	100%
OFF3	1.0	0.0	0.0	0.1	0.9	0%	0%	10%	90%
OFF4	0.8	0.0	0.0	0.1	0.7	0%	0%	10%	90%

Precipitation From Table 6.2.8 from City of Albuquerque DPM 100-year

15-minute	1- Hour	6-Hour	24-Hour
1.02	1.69	2.17	2.49

AHYMO OUTPUT: EXISTING CONDITIONS

Subbasin	A (ac)	Q (cfs)	V (acft)	Q/A (cfs/ac)
EX1	11.7	13.4	0.380	1.1
EX2	16.7	19.9	0.562	1.2
OFF1	1.8	6.9	0.322	3.9
OFF2	1.0	3.8	0.179	3.9
OFF3	0.9	3.1	0.114	3.3
OFF4	0.8	2.5	0.092	3.1

AHYMO OUTPUT: PROPOSED CONDITIONS

Subbasin	A (ac)	Q (cfs)	V (acft)	Q/A (cfs/ac)
P1	2.0	16.4	0.8	8.3
P2	1.5	5.7	0.3	3.8
P3	0.7	2.5	0.1	3.7
P4	1.1	4.2	0.2	3.9
P5	1.3	4.9	0.2	3.9
P6	0.9	3.5	0.2	3.9
P7	1.2	4.7	0.2	3.9
P8	1.0	3.9	0.2	3.8
P9	0.9	3.5	0.2	4.0
P10	0.9	3.2	0.1	3.7
P11	0.5	2.0	0.1	4.1
P12	7.7	29.4	1.3	3.8
P13	6.4	24.3	1.1	3.8
P14	0.4	1.5	0.1	3.7
P15	0.3	1.0	0.05	3.7
OFF1	1.8	6.9	0.322	3.9
OFF2	1.0	3.8	0.179	3.9
OFF3	1.0	3.7	0.168	3.8
OFF4	0.8	3.2	0.146	4.0

AHYMO OUTPUT: PROPOSED POND CONDITIONS

Pond	Q (cfs)	V (acft)
South Pond 1	3.0	0.7
South Pond 2	2.5	1.0
North Pond	1.3	0.7
Existing Pond	6.0	0.7

Project Name: Oxbow Center
Project No: W0007.0004
Sheet Title: Pond Routing Calculations
Creation Date: 02/15/2022
Comments:

North Pond Pond Size							AHYMO Input Parameters			
Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)	Incremental. (Ac. Ft.)	Cum. (Ac. Ft.)	Q (cfs) - 24" Pipe	Storage (ac-ft)	Elev (ft)	Depth (ft)	Comment
1.0	13668.3	0	0	0.000	0	0.0	0.000	1.0	0.0	Pond Bottom
2.0	16472.2	15070	15070	0.346	0.346	0.0	0.346	2.0	1.0	Invert of Pond
3.0	19354.6	17913	32984	0.757	1.103	0.0	1.103	3.0	2.0	
4.0	22297.3	20826	53810	1.235	2.338	9.2	2.338	4.0	3.0	Top of Pond

South Pond 1 Size							AHYMO Input Parameters			
Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)	Cum. (Ac. Ft.)	Cum. (Ac. Ft.)	Q (cfs)	Storage (ac-ft)	Elev (ft)	Depth (ft)	Comment
1.0	755.32	0	0.00	0.000	0	0.00	0.000	1.0	0.0	Pond Bottom
2.0	1582.69	1169	1169.01	0.027	0.027	0.01	0.027	2.0	1.0	
3.0	2482.06	2032	3201.38	0.073	0.100	0.02	0.100	3.0	2.0	Invert of Pond
4.0	3453.42	2968	6169.12	0.142	0.242	2.67	0.242	4.0	3.0	
5.0	4496.79	3975	10144.23	0.233	0.475	3.78	0.475	5.0	4.0	Top of Pond

South Pond 2 Size							AHYMO Input Parameters			
Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)	Cum. (Ac. Ft.)	Cum. (Ac. Ft.)	Q (cfs)	Storage (ac-ft)	Elev (ft)	Depth (ft)	Comment
1.0	1056.71	0	0	0.000	0	0.00	0.000	1.0	0.0	Pond Bottom
2.0	2185.49	1621	1621.10	0.037	0.037	0.01	0.037	2.0	1.0	
3.0	3386.27	2786	4406.98	0.101	0.138	0.02	0.138	3.0	2.0	
4.0	4659.05	4023	8429.64	0.194	0.332	0.03	0.332	4.0	3.0	Invert of Pond
5.0	6003.83	5331	13761.08	0.316	0.648	2.67	0.648	5.0	4.0	Top of Pond
6.0	7420.61	6712	20473.30	0.470	1.118	3.78	1.118	6.0	5.0	

Existing Pond Size							AHYMO Input Parameters			
Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)	Cum. (Ac. Ft.)	Cum. (Ac. Ft.)	Q (cfs) - 24" Pipe	Storage (ac-ft)	Elev (ft)	Depth (ft)	Comment
5109.0	24060.34	0	0	0.000	0	0.00	0.000	5109.0	5104.0	Pond Bottom
5110.0	27936.22	25998	25998	0.597	0.597	10.70	0.597	5110.0	5105.0	
5111.0	31736.18	29836	55834	1.282	1.879	15.13	1.879	5111.0	5106.0	
5112.0	35492.36	33614	89449	2.053	3.932	18.53	3.932	5112.0	5107.0	
5113.0	41903.07	38698	128146	2.942	6.874	21.39	6.874	5113.0	5108.0	Top of Pond

```
        AHYMO PROGRAM (AHYMO-S4)                    - Version: S4.02a - Rel: 02a
             RUN DATE (MON/DAY/YR) = 02/17/2022
             START TIME (HR:MIN:SEC) = 14:00:44     USER NO.=
AHYMO-S4TempUser05901704
             INPUT FILE = N:\CDS Library\Engineering Tools\AHYMO-S4\Oxbow
Existing.txt

    *  Project Number W0007.0004
    *  Exisiting Conditions
    *  Edited by Cassy 02152022
    *  North Pond along St. Josephs
    *  100 YEAR RAINFALL TABLE
    RAINFALL              TYPE=13  RAIN QUARTER=1.02
                          RAIN ONE=1.69 IN  RAIN SIX=2.17 IN
                          RAIN DAY=2.49 IN  DT=0.03333 HRS

                    COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 -
PEAK AT 1.40 HR.
                    DT =   0.033330 HOURS       END TIME =    23.997601 HOURS
                      0.0000  0.0037  0.0075  0.0114  0.0153  0.0193  0.0234
                      0.0276  0.0319  0.0363  0.0408  0.0455  0.0502  0.0551
                      0.0601  0.0652  0.0705  0.0759  0.0815  0.0873  0.0933
                      0.0995  0.1060  0.1126  0.1196  0.1268  0.1344  0.1423
                      0.1505  0.1593  0.1685  0.1731  0.1781  0.1835  0.1949
                      0.2206  0.2600  0.3167  0.3941  0.4958  0.6254  0.7868
                      0.9839  1.1668  1.2432  1.3076  1.3650  1.4172  1.4652
                      1.5098  1.5515  1.5905  1.6273  1.6620  1.6947  1.7258
                      1.7551  1.7830  1.8094  1.8345  1.8583  1.8646  1.8705
                      1.8761  1.8815  1.8867  1.8918  1.8967  1.9014  1.9060
                      1.9105  1.9149  1.9191  1.9233  1.9273  1.9313  1.9352
                      1.9390  1.9427  1.9464  1.9500  1.9535  1.9569  1.9603
                      1.9637  1.9670  1.9702  1.9734  1.9766  1.9797  1.9827
                      1.9857  1.9887  1.9916  1.9945  1.9974  2.0002  2.0030
                      2.0058  2.0085  2.0112  2.0139  2.0165  2.0191  2.0217
                      2.0242  2.0268  2.0293  2.0317  2.0342  2.0366  2.0390
                      2.0414  2.0438  2.0461  2.0485  2.0508  2.0530  2.0553
                      2.0575  2.0598  2.0620  2.0642  2.0664  2.0685  2.0707
                      2.0728  2.0749  2.0770  2.0791  2.0811  2.0832  2.0852
                      2.0872  2.0892  2.0912  2.0932  2.0952  2.0971  2.0991
                      2.1010  2.1029  2.1048  2.1067  2.1086  2.1105  2.1123
                      2.1142  2.1160  2.1178  2.1197  2.1215  2.1233  2.1251
                      2.1268  2.1286  2.1304  2.1321  2.1338  2.1356  2.1373
                      2.1390  2.1407  2.1424  2.1441  2.1458  2.1474  2.1491
                      2.1507  2.1524  2.1540  2.1556  2.1573  2.1589  2.1605
                      2.1621  2.1637  2.1653  2.1668  2.1684  2.1700  2.1709
                      2.1718  2.1728  2.1737  2.1746  2.1755  2.1764  2.1773
                      2.1782  2.1791  2.1800  2.1809  2.1818  2.1827  2.1836
                      2.1845  2.1854  2.1863  2.1872  2.1881  2.1889  2.1898
                      2.1907  2.1916  2.1925  2.1933  2.1942  2.1951  2.1959
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2.1968	2.1977	2.1985	2.1994	2.2002	2.2011	2.2019
2.2028	2.2036	2.2045	2.2053	2.2062	2.2070	2.2078
2.2087	2.2095	2.2103	2.2112	2.2120	2.2128	2.2136
2.2145	2.2153	2.2161	2.2169	2.2177	2.2186	2.2194
2.2202	2.2210	2.2218	2.2226	2.2234	2.2242	2.2250
2.2258	2.2266	2.2274	2.2282	2.2290	2.2298	2.2306
2.2314	2.2321	2.2329	2.2337	2.2345	2.2353	2.2360
2.2368	2.2376	2.2384	2.2391	2.2399	2.2407	2.2414
2.2422	2.2430	2.2437	2.2445	2.2453	2.2460	2.2468
2.2475	2.2483	2.2490	2.2498	2.2505	2.2513	2.2520
2.2528	2.2535	2.2542	2.2550	2.2557	2.2565	2.2572
2.2579	2.2587	2.2594	2.2601	2.2608	2.2616	2.2623
2.2630	2.2637	2.2645	2.2652	2.2659	2.2666	2.2673
2.2680	2.2688	2.2695	2.2702	2.2709	2.2716	2.2723
2.2730	2.2737	2.2744	2.2751	2.2758	2.2765	2.2772
2.2779	2.2786	2.2793	2.2800	2.2807	2.2814	2.2821
2.2827	2.2834	2.2841	2.2848	2.2855	2.2862	2.2868
2.2875	2.2882	2.2889	2.2896	2.2902	2.2909	2.2916
2.2922	2.2929	2.2936	2.2942	2.2949	2.2956	2.2962
2.2969	2.2976	2.2982	2.2989	2.2995	2.3002	2.3009
2.3015	2.3022	2.3028	2.3035	2.3041	2.3048	2.3054
2.3061	2.3067	2.3074	2.3080	2.3086	2.3093	2.3099
2.3106	2.3112	2.3118	2.3125	2.3131	2.3137	2.3144
2.3150	2.3156	2.3163	2.3169	2.3175	2.3182	2.3188
2.3194	2.3200	2.3206	2.3213	2.3219	2.3225	2.3231
2.3237	2.3244	2.3250	2.3256	2.3262	2.3268	2.3274
2.3280	2.3287	2.3293	2.3299	2.3305	2.3311	2.3317
2.3323	2.3329	2.3335	2.3341	2.3347	2.3353	2.3359
2.3365	2.3371	2.3377	2.3383	2.3389	2.3395	2.3401
2.3407	2.3413	2.3418	2.3424	2.3430	2.3436	2.3442
2.3448	2.3454	2.3459	2.3465	2.3471	2.3477	2.3483
2.3489	2.3494	2.3500	2.3506	2.3512	2.3517	2.3523
2.3529	2.3535	2.3540	2.3546	2.3552	2.3557	2.3563
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2.3608	2.3614	2.3619	2.3625	2.3631	2.3636	2.3642
2.3647	2.3653	2.3658	2.3664	2.3669	2.3675	2.3681
2.3686	2.3692	2.3697	2.3702	2.3708	2.3713	2.3719
2.3724	2.3730	2.3735	2.3741	2.3746	2.3752	2.3757
2.3762	2.3768	2.3773	2.3778	2.3784	2.3789	2.3795
2.3800	2.3805	2.3811	2.3816	2.3821	2.3827	2.3832
2.3837	2.3842	2.3848	2.3853	2.3858	2.3864	2.3869
2.3874	2.3879	2.3885	2.3890	2.3895	2.3900	2.3905
2.3911	2.3916	2.3921	2.3926	2.3931	2.3937	2.3942
2.3947	2.3952	2.3957	2.3962	2.3967	2.3972	2.3978
2.3983	2.3988	2.3993	2.3998	2.4003	2.4008	2.4013
2.4018	2.4023	2.4028	2.4033	2.4038	2.4043	2.4049
2.4054	2.4059	2.4064	2.4069	2.4074	2.4079	2.4083
2.4088	2.4093	2.4098	2.4103	2.4108	2.4113	2.4118
2.4123	2.4128	2.4133	2.4138	2.4143	2.4148	2.4153
2.4157	2.4162	2.4167	2.4172	2.4177	2.4182	2.4187

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                    2.4225  2.4230  2.4235  2.4240  2.4244  2.4249  2.4254
                    2.4259  2.4263  2.4268  2.4273  2.4278  2.4282  2.4287
                    2.4292  2.4297  2.4301  2.4306  2.4311  2.4315  2.4320
                    2.4325  2.4329  2.4334  2.4339  2.4343  2.4348  2.4353
                    2.4357  2.4362  2.4367  2.4371  2.4376  2.4381  2.4385
                    2.4390  2.4394  2.4399  2.4404  2.4408  2.4413  2.4417
                    2.4422  2.4427  2.4431  2.4436  2.4440  2.4445  2.4449
                    2.4454  2.4458  2.4463  2.4467  2.4472  2.4476  2.4481
                    2.4485  2.4490  2.4494  2.4499  2.4503  2.4508  2.4512
                    2.4517  2.4521  2.4526  2.4530  2.4535  2.4539  2.4543
                    2.4548  2.4552  2.4557  2.4561  2.4566  2.4570  2.4574
                    2.4579  2.4583  2.4588  2.4592  2.4596  2.4601  2.4605
                    2.4609  2.4614  2.4618  2.4623  2.4627  2.4631  2.4636
                    2.4640  2.4644  2.4649  2.4653  2.4657  2.4661  2.4666
                    2.4670  2.4674  2.4679  2.4683  2.4687  2.4691  2.4696
                    2.4700  2.4704  2.4709  2.4713  2.4717  2.4721  2.4726
                    2.4730  2.4734  2.4738  2.4742  2.4747  2.4751  2.4755
                    2.4759  2.4763  2.4768  2.4772  2.4776  2.4780  2.4784
                    2.4789  2.4793  2.4797  2.4801  2.4805  2.4809  2.4814
                    2.4818  2.4822  2.4826  2.4830  2.4834  2.4838  2.4842
                    2.4847  2.4851  2.4855  2.4859  2.4863  2.4867  2.4871
                    2.4875  2.4879  2.4883  2.4888  2.4892  2.4896  2.4900

    ************************************************************
    ************************************************************
    ************************************************************
    *S  COMPUTE HYD EX1
    COMPUTE NM HYD        ID=1  HYDNO=101  AREA=0.0183 SQ MI
                          PER A=100 PER B=0 PER C=0 PER D=0
                          TP=.13333 HR MASS RAIN=-1

         K =  0.168259HR    TP =  0.133330HR    K/TP RATIO =  1.261977     SHAPE
CONSTANT, N =  2.829292
         UNIT PEAK =   36.729    CFS   UNIT VOLUME =   0.9990       B =   267.60
 P60 = 1.6900
         AREA =     0.018300 SQ MI    IA =   0.65000 INCHES    INF =   1.67000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=1   CODE=5

                                        PARTIAL HYDROGRAPH   101.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          1.000       0.0          2.000       1.2
```

```
3.000       0.2          4.000       0.0
         0.167       0.0          1.167       0.0          2.166       0.9
3.166       0.1          4.166       0.0
         0.333       0.0          1.333       0.0          2.333       0.6
3.333       0.1          4.333       0.0
         0.500       0.0          1.500      13.3          2.500       0.5
3.500       0.1          4.500       0.0
         0.667       0.0          1.667       7.3          2.666       0.3
3.666       0.0          4.666       0.0
         0.833       0.0          1.833       2.7          2.833       0.2
3.833       0.0          4.833       0.0

        RUNOFF VOLUME =     0.38952 INCHES     =       0.3802 ACRE-FEET
        PEAK DISCHARGE RATE =      13.36 CFS  AT   1.533 HOURS   BASIN AREA =
0.0183 SQ. MI.



    ************************************************************
    *S  COMPUTE HYD EX2
    COMPUTE NM HYD        ID=2  HYDNO=102  AREA=0.0261 SQ MI
                          PER A=96 PER B=0 PER C=4 PER D=0
                          TP=.13333 HR MASS RAIN=-1

         K =  0.165683HR    TP =  0.133330HR    K/TP RATIO =  1.242657     SHAPE
CONSTANT, N =  2.868624
         UNIT PEAK =   53.037    CFS   UNIT VOLUME =   0.9993       B =   270.94
 P60 = 1.6900
         AREA =     0.026100 SQ MI    IA =   0.63800 INCHES    INF =   1.63640
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=2   CODE=5

                                       PARTIAL HYDROGRAPH   102.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          1.167       0.0          2.333       0.9
3.500       0.1          4.666       0.0
         0.167       0.0          1.333       0.0          2.500       0.7
3.666       0.1          4.833       0.0
         0.333       0.0          1.500      19.9          2.666       0.5
3.833       0.0          4.999       0.0
         0.500       0.0          1.667      10.8          2.833       0.3
4.000       0.0
         0.667       0.0          1.833       4.0          3.000       0.2
```

```
4.166       0.0
         0.833       0.0          2.000       1.8          3.166       0.2
4.333       0.0
         1.000       0.0          2.166       1.3          3.333       0.1
4.500       0.0

        RUNOFF VOLUME =     0.40401 INCHES     =       0.5624 ACRE-FEET
        PEAK DISCHARGE RATE =      19.88 CFS  AT   1.533 HOURS   BASIN AREA =
0.0261 SQ. MI.



    ************************************************************
    *S  COMPUTE HYD OFF1
    COMPUTE NM HYD        ID=3  HYDNO=103  AREA=0.0027 SQ MI
                          PER A=0 PER B=0 PER C=0 PER D=100
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   10.657    CFS   UNIT VOLUME =   0.9982       B =   526.28
 P60 = 1.6900
         AREA =     0.002700 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=3   CODE=5

                                        PARTIAL HYDROGRAPH   103.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.1          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.1         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.1         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.1         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.1         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.1         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.3          5.999       0.1         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.3          6.166       0.1         11.166       0.0
```

16.165 0.0 21.165 0.0
1.333 2.2 6.333 0.1 11.332 0.0
16.332 0.0 21.331 0.0
1.500 6.8 6.499 0.0 11.499 0.0
16.498 0.0 21.498 0.0
1.667 3.4 6.666 0.0 11.665 0.0
16.665 0.0 21.665 0.0
1.833 2.3 6.833 0.0 11.832 0.0
16.832 0.0 21.831 0.0
2.000 1.7 6.999 0.0 11.999 0.0
16.998 0.0 21.998 0.0
2.166 0.8 7.166 0.0 12.165 0.0
17.165 0.0 22.164 0.0
2.333 0.4 7.333 0.0 12.332 0.0
17.332 0.0 22.331 0.0
2.500 0.3 7.499 0.0 12.499 0.0
17.498 0.0 22.498 0.0
2.666 0.2 7.666 0.0 12.665 0.0
17.665 0.0 22.664 0.0
2.833 0.1 7.833 0.0 12.832 0.0
17.832 0.0 22.831 0.0
3.000 0.1 7.999 0.0 12.999 0.0
17.998 0.0 22.998 0.0
3.166 0.1 8.166 0.0 13.165 0.0
18.165 0.0 23.164 0.0
3.333 0.1 8.332 0.0 13.332 0.0
18.331 0.0 23.331 0.0
3.500 0.1 8.499 0.0 13.499 0.0
18.498 0.0 23.498 0.0
3.666 0.1 8.666 0.0 13.665 0.0
18.665 0.0 23.664 0.0
3.833 0.1 8.832 0.0 13.832 0.0
18.831 0.0 23.831 0.0
4.000 0.1 8.999 0.0 13.999 0.0
18.998 0.0 23.998 0.0
4.166 0.1 9.166 0.0 14.165 0.0
19.165 0.0 24.164 0.0
4.333 0.1 9.332 0.0 14.332 0.0
19.331 0.0 24.331 0.0
4.500 0.1 9.499 0.0 14.499 0.0
19.498 0.0 24.498 0.0
4.666 0.1 9.666 0.0 14.665 0.0
19.665 0.0
4.833 0.1 9.832 0.0 14.832 0.0
19.831 0.0

RUNOFF VOLUME = 2.23824 INCHES = 0.3223 ACRE-FEET
PEAK DISCHARGE RATE = 6.85 CFS AT 1.500 HOURS BASIN AREA =
0.0027 SQ. MI.

```
    ************************************************************
    *S  COMPUTE HYD OFF2
    COMPUTE NM HYD        ID=4  HYDNO=104  AREA=0.0015 SQ MI
                          PER A=0 PER B=0 PER C=0 PER D=100
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   5.9207    CFS   UNIT VOLUME =   0.9976       B =   526.28
 P60 = 1.6900
         AREA =     0.001500 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=4   CODE=5

                                        PARTIAL HYDROGRAPH   104.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.0         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.0         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.0         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.0         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.0         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.2          5.999       0.0         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.1          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       1.2          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       3.8          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       1.9          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
         1.833       1.3          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       0.9          6.999       0.0         11.999       0.0
```

```
16.998       0.0         21.998       0.0
         2.166       0.4          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.2          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.1          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.1          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.23824 INCHES     =       0.1791 ACRE-FEET
        PEAK DISCHARGE RATE =       3.81 CFS  AT   1.500 HOURS   BASIN AREA =
0.0015 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD OFF3
    COMPUTE NM HYD        ID=5  HYDNO=105  AREA=0.0015 SQ MI
                          PER A=0 PER B=0 PER C=60 PER D=40
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
```

```
         UNIT PEAK =   2.3683    CFS   UNIT VOLUME =   0.9949       B =   526.28
 P60 = 1.6900
         AREA =     0.000600 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =   2.6611    CFS   UNIT VOLUME =   0.9956       B =   394.23
 P60 = 1.6900
         AREA =     0.000900 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=3   CODE=5

                                       PARTIAL HYDROGRAPH   103.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.1          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.1         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.1         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.1         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.1         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.1         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.3          5.999       0.1         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.3          6.166       0.1         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       2.2          6.333       0.1         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       6.8          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       3.4          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
         1.833       2.3          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       1.7          6.999       0.0         11.999       0.0
```

```
16.998       0.0         21.998       0.0
         2.166       0.8          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.4          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.3          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.2          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.1          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.1          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.1          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.1          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.1          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.1          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.1          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.1          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.1          9.499       0.0         14.499       0.0
19.498       0.0         24.498       0.0
         4.666       0.1          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.1          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.23824 INCHES     =       0.3223 ACRE-FEET
        PEAK DISCHARGE RATE =       6.85 CFS  AT   1.500 HOURS   BASIN AREA =
0.0027 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD OFF4
    COMPUTE NM HYD        ID=6  HYDNO=106  AREA=0.0012 SQ MI
                          PER A=0 PER B=0 PER C=60 PER D=40
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
```

```
         UNIT PEAK =   1.8946    CFS   UNIT VOLUME =   0.9932       B =   526.28
 P60 = 1.6900
         AREA =     0.000480 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =   2.1289    CFS   UNIT VOLUME =   0.9945       B =   394.23
 P60 = 1.6900
         AREA =     0.000720 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=4   CODE=5

                                       PARTIAL HYDROGRAPH   104.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.0         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.0         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.0         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.0         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.0         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.2          5.999       0.0         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.1          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       1.2          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       3.8          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       1.9          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
         1.833       1.3          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       0.9          6.999       0.0         11.999       0.0
```

```
16.998       0.0         21.998       0.0
         2.166       0.4          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.2          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.1          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.1          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.23824 INCHES     =       0.1791 ACRE-FEET
        PEAK DISCHARGE RATE =       3.81 CFS  AT   1.500 HOURS   BASIN AREA =
0.0015 SQ. MI.


    ************************************************************
    ADD HYD                           ID=7 HYD=107 ID I=1 ID II=3 III=4 IV=5 V=6

    PRINT HYD             ID=7   CODE=5

                                        PARTIAL HYDROGRAPH   107.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
```

TIME HRS	FLOW HRS CFS		TIME HRS	FLOW HRS CFS				
	0.000	0.0		4.999	0.1		9.999	0.0
14.998	0.0		19.998	0.0				
	0.167	0.0		5.166	0.1		10.166	0.0
15.165	0.0		20.165	0.0				
	0.333	0.0		5.333	0.1		10.332	0.0
15.332	0.0		20.331	0.0				
	0.500	0.0		5.499	0.1		10.499	0.0
15.498	0.0		20.498	0.0				
	0.667	0.0		5.666	0.1		10.666	0.0
15.665	0.0		20.665	0.0				
	0.833	0.1		5.833	0.1		10.832	0.0
15.832	0.0		20.831	0.0				
	1.000	0.3		5.999	0.1		10.999	0.0
15.998	0.0		20.998	0.0				
	1.167	0.3		6.166	0.1		11.166	0.0
16.165	0.0		21.165	0.0				
	1.333	2.2		6.333	0.1		11.332	0.0
16.332	0.0		21.331	0.0				
	1.500	20.2		6.499	0.0		11.499	0.0
16.498	0.0		21.498	0.0				
	1.667	10.8		6.666	0.0		11.665	0.0
16.665	0.0		21.665	0.0				
	1.833	5.0		6.833	0.0		11.832	0.0
16.832	0.0		21.831	0.0				
	2.000	2.9		6.999	0.0		11.999	0.0
16.998	0.0		21.998	0.0				
	2.166	1.7		7.166	0.0		12.165	0.0
17.165	0.0		22.164	0.0				
	2.333	1.0		7.333	0.0		12.332	0.0
17.332	0.0		22.331	0.0				
	2.500	0.7		7.499	0.0		12.499	0.0
17.498	0.0		22.498	0.0				
	2.666	0.5		7.666	0.0		12.665	0.0
17.665	0.0		22.664	0.0				
	2.833	0.4		7.833	0.0		12.832	0.0
17.832	0.0		22.831	0.0				
	3.000	0.3		7.999	0.0		12.999	0.0
17.998	0.0		22.998	0.0				
	3.166	0.2		8.166	0.0		13.165	0.0
18.165	0.0		23.164	0.0				
	3.333	0.2		8.332	0.0		13.332	0.0
18.331	0.0		23.331	0.0				
	3.500	0.1		8.499	0.0		13.499	0.0
18.498	0.0		23.498	0.0				
	3.666	0.1		8.666	0.0		13.665	0.0
18.665	0.0		23.664	0.0				
	3.833	0.1		8.832	0.0		13.832	0.0

```
18.831       0.0         23.831       0.0
         4.000       0.1          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.1          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.1          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.1          9.499       0.0         14.499       0.0
19.498       0.0         24.498       0.0
         4.666       0.1          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.1          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     0.62719 INCHES     =       0.7025 ACRE-FEET
        PEAK DISCHARGE RATE =      20.19 CFS  AT   1.500 HOURS   BASIN AREA =
0.0210 SQ. MI.


    ************************************************************
    *NORTH PONDS
    ************************************************************
    ROUTE RESERVOIR       ID=8 HYD=NORTH.PONDS INFLOW ID=7 CODE=5
                          OUTFLOW           STORAGE        ELEV
                           (CFS)            (AC-FT)        (FT)
                       0.00            0.000           5109.0

                                       10.70           0.597           5110.0

                                       15.13           1.879           5111.0

                                       18.53           3.932           5112.0

                                       21.39           6.874           5113.0


      *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

        TIME      INFLOW    ELEV      VOLUME    OUTFLOW
        (HRS)     (CFS)     (FEET)    (AC-FT)   (CFS)

         0.00       0.00   5109.00      0.000      0.00
         0.17       0.00   5109.00      0.000      0.00
         0.33       0.00   5109.00      0.000      0.00
         0.50       0.00   5109.00      0.000      0.00
         0.67       0.00   5109.00      0.000      0.00
         0.83       0.12   5109.00      0.000      0.01
         1.00       0.29   5109.00      0.003      0.05
```

1.17	0.26	5109.01	0.006	0.11
1.33	2.17	5109.03	0.016	0.29
1.50	20.19	5109.25	0.151	2.70
1.67	10.78	5109.53	0.314	5.62
1.83	5.02	5109.56	0.335	6.00
2.00	2.94	5109.51	0.307	5.50
2.17	1.67	5109.45	0.268	4.81
2.33	1.02	5109.38	0.225	4.04
2.50	0.71	5109.31	0.186	3.34
2.67	0.51	5109.26	0.153	2.74
2.83	0.37	5109.21	0.125	2.23
3.00	0.28	5109.17	0.101	1.82
3.17	0.22	5109.14	0.082	1.47
3.33	0.17	5109.11	0.067	1.19
3.50	0.14	5109.09	0.054	0.97
3.67	0.12	5109.07	0.044	0.78
3.83	0.11	5109.06	0.036	0.64
4.00	0.09	5109.05	0.029	0.52
4.17	0.09	5109.04	0.024	0.43
4.33	0.08	5109.03	0.020	0.35
4.50	0.08	5109.03	0.016	0.29
4.67	0.08	5109.02	0.014	0.24
4.83	0.07	5109.02	0.012	0.21
5.00	0.07	5109.02	0.010	0.18
5.17	0.07	5109.01	0.009	0.15
5.33	0.07	5109.01	0.008	0.14
5.50	0.07	5109.01	0.007	0.12
5.67	0.08	5109.01	0.006	0.11
5.83	0.08	5109.01	0.006	0.10
6.00	0.08	5109.01	0.006	0.10
6.17	0.06	5109.01	0.005	0.09
6.33	0.05	5109.01	0.005	0.08
6.50	0.05	5109.01	0.004	0.08
6.67	0.05	5109.01	0.004	0.07
6.83	0.05	5109.01	0.004	0.07
7.00	0.05	5109.01	0.003	0.06
7.17	0.05	5109.01	0.003	0.06
7.33	0.04	5109.01	0.003	0.06
7.50	0.04	5109.00	0.003	0.05
7.67	0.04	5109.00	0.003	0.05
7.83	0.04	5109.00	0.003	0.05
8.00	0.04	5109.00	0.003	0.05
8.17	0.04	5109.00	0.003	0.05
8.33	0.04	5109.00	0.003	0.05
8.50	0.04	5109.00	0.002	0.04
8.67	0.04	5109.00	0.002	0.04
8.83	0.04	5109.00	0.002	0.04
9.00	0.04	5109.00	0.002	0.04
9.17	0.04	5109.00	0.002	0.04

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	0.04	5109.00	0.002	0.04
9.50	0.04	5109.00	0.002	0.04
9.67	0.04	5109.00	0.002	0.04
9.83	0.04	5109.00	0.002	0.04
10.00	0.04	5109.00	0.002	0.04
10.17	0.04	5109.00	0.002	0.04
10.33	0.04	5109.00	0.002	0.04
10.50	0.04	5109.00	0.002	0.04
10.67	0.04	5109.00	0.002	0.04
10.83	0.04	5109.00	0.002	0.04
11.00	0.04	5109.00	0.002	0.04
11.17	0.04	5109.00	0.002	0.04
11.33	0.03	5109.00	0.002	0.04
11.50	0.03	5109.00	0.002	0.04
11.67	0.03	5109.00	0.002	0.04
11.83	0.03	5109.00	0.002	0.04
12.00	0.03	5109.00	0.002	0.04
12.17	0.03	5109.00	0.002	0.03
12.33	0.03	5109.00	0.002	0.03
12.50	0.03	5109.00	0.002	0.03
12.67	0.03	5109.00	0.002	0.03
12.83	0.03	5109.00	0.002	0.03
13.00	0.03	5109.00	0.002	0.03
13.17	0.03	5109.00	0.002	0.03
13.33	0.03	5109.00	0.002	0.03
13.50	0.03	5109.00	0.002	0.03
13.67	0.03	5109.00	0.002	0.03
13.83	0.03	5109.00	0.002	0.03
14.00	0.03	5109.00	0.002	0.03
14.17	0.03	5109.00	0.002	0.03
14.33	0.03	5109.00	0.002	0.03
14.50	0.03	5109.00	0.002	0.03
14.67	0.03	5109.00	0.002	0.03
14.83	0.03	5109.00	0.002	0.03
15.00	0.03	5109.00	0.002	0.03
15.17	0.03	5109.00	0.002	0.03
15.33	0.03	5109.00	0.002	0.03
15.50	0.03	5109.00	0.002	0.03
15.67	0.03	5109.00	0.002	0.03
15.83	0.03	5109.00	0.002	0.03
16.00	0.03	5109.00	0.002	0.03
16.17	0.03	5109.00	0.002	0.03
16.33	0.03	5109.00	0.002	0.03
16.50	0.03	5109.00	0.002	0.03
16.67	0.03	5109.00	0.002	0.03
16.83	0.03	5109.00	0.002	0.03
17.00	0.03	5109.00	0.002	0.03

17.16	0.03	5109.00	0.002	0.03
17.33	0.03	5109.00	0.002	0.03
17.50	0.03	5109.00	0.002	0.03
17.66	0.03	5109.00	0.002	0.03
17.83	0.03	5109.00	0.002	0.03
18.00	0.03	5109.00	0.001	0.03
18.16	0.03	5109.00	0.001	0.03
18.33	0.03	5109.00	0.001	0.03
18.50	0.03	5109.00	0.001	0.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	0.03	5109.00	0.001	0.03
18.83	0.03	5109.00	0.001	0.03
19.00	0.03	5109.00	0.001	0.03
19.16	0.03	5109.00	0.001	0.03
19.33	0.02	5109.00	0.001	0.03
19.50	0.02	5109.00	0.001	0.03
19.66	0.02	5109.00	0.001	0.03
19.83	0.02	5109.00	0.001	0.02
20.00	0.02	5109.00	0.001	0.02
20.16	0.02	5109.00	0.001	0.02
20.33	0.02	5109.00	0.001	0.02
20.50	0.02	5109.00	0.001	0.02
20.66	0.02	5109.00	0.001	0.02
20.83	0.02	5109.00	0.001	0.02
21.00	0.02	5109.00	0.001	0.02
21.16	0.02	5109.00	0.001	0.02
21.33	0.02	5109.00	0.001	0.02
21.50	0.02	5109.00	0.001	0.02
21.66	0.02	5109.00	0.001	0.02
21.83	0.02	5109.00	0.001	0.02
22.00	0.02	5109.00	0.001	0.02
22.16	0.02	5109.00	0.001	0.02
22.33	0.02	5109.00	0.001	0.02
22.50	0.02	5109.00	0.001	0.02
22.66	0.02	5109.00	0.001	0.02
22.83	0.02	5109.00	0.001	0.02
23.00	0.02	5109.00	0.001	0.02
23.16	0.02	5109.00	0.001	0.02
23.33	0.02	5109.00	0.001	0.02
23.50	0.02	5109.00	0.001	0.02
23.66	0.02	5109.00	0.001	0.02
23.83	0.02	5109.00	0.001	0.02
24.00	0.02	5109.00	0.001	0.02
24.16	0.01	5109.00	0.001	0.02
24.33	0.00	5109.00	0.001	0.02
24.50	0.00	5109.00	0.001	0.01
24.66	0.00	5109.00	0.001	0.01

```
        24.83       0.00   5109.00      0.000      0.01
        25.00       0.00   5109.00      0.000      0.01
        25.16       0.00   5109.00      0.000      0.01
        25.33       0.00   5109.00      0.000      0.00
     PEAK DISCHARGE =        6.028 CFS - PEAK OCCURS AT HOUR    1.80
     MAXIMUM WATER SURFACE ELEVATION =     5109.563
     MAXIMUM STORAGE =        0.3364 AC-FT      INCREMENTAL TIME=    0.033330HRS

    PRINT HYD             ID=8 CODE=5

                                                HYDROGRAPH FROM AREA NORTH.PONDS


         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
         HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          5.333       0.1         10.666       0.0
15.998       0.0         21.331       0.0
         0.167       0.0          5.499       0.1         10.832       0.0
16.165       0.0         21.498       0.0
         0.333       0.0          5.666       0.1         10.999       0.0
16.332       0.0         21.665       0.0
         0.500       0.0          5.833       0.1         11.166       0.0
16.498       0.0         21.831       0.0
         0.667       0.0          5.999       0.1         11.332       0.0
16.665       0.0         21.998       0.0
         0.833       0.0          6.166       0.1         11.499       0.0
16.832       0.0         22.164       0.0
         1.000       0.1          6.333       0.1         11.665       0.0
16.998       0.0         22.331       0.0
         1.167       0.1          6.499       0.1         11.832       0.0
17.165       0.0         22.498       0.0
         1.333       0.3          6.666       0.1         11.999       0.0
17.332       0.0         22.664       0.0
         1.500       2.7          6.833       0.1         12.165       0.0
17.498       0.0         22.831       0.0
         1.667       5.6          6.999       0.1         12.332       0.0
17.665       0.0         22.998       0.0
         1.833       6.0          7.166       0.1         12.499       0.0
17.832       0.0         23.164       0.0
         2.000       5.5          7.333       0.1         12.665       0.0
17.998       0.0         23.331       0.0
         2.166       4.8          7.499       0.1         12.832       0.0
18.165       0.0         23.498       0.0
         2.333       4.0          7.666       0.1         12.999       0.0
18.331       0.0         23.664       0.0
         2.500       3.3          7.833       0.0         13.165       0.0
18.498       0.0         23.831       0.0
         2.666       2.7          7.999       0.0         13.332       0.0
```

```
18.665       0.0         23.998       0.0
         2.833       2.2          8.166       0.0         13.499       0.0
18.831       0.0         24.164       0.0
         3.000       1.8          8.332       0.0         13.665       0.0
18.998       0.0         24.331       0.0
         3.166       1.5          8.499       0.0         13.832       0.0
19.165       0.0         24.498       0.0
         3.333       1.2          8.666       0.0         13.999       0.0
19.331       0.0         24.664       0.0
         3.500       1.0          8.832       0.0         14.165       0.0
19.498       0.0         24.831       0.0
         3.666       0.8          8.999       0.0         14.332       0.0
19.665       0.0         24.998       0.0
         3.833       0.6          9.166       0.0         14.499       0.0
19.831       0.0         25.164       0.0
         4.000       0.5          9.332       0.0         14.665       0.0
19.998       0.0         25.331       0.0
         4.166       0.4          9.499       0.0         14.832       0.0
20.165       0.0         25.497       0.0
         4.333       0.4          9.666       0.0         14.998       0.0
20.331       0.0         25.664       0.0
         4.500       0.3          9.832       0.0         15.165       0.0
20.498       0.0         25.831       0.0
         4.666       0.2          9.999       0.0         15.332       0.0
20.665       0.0         25.997       0.0
         4.833       0.2         10.166       0.0         15.498       0.0
20.831       0.0         26.164       0.0
         4.999       0.2         10.332       0.0         15.665       0.0
20.998       0.0
         5.166       0.2         10.499       0.0         15.832       0.0
21.165       0.0

        RUNOFF VOLUME =     0.62719 INCHES     =       0.7025 ACRE-FEET
        PEAK DISCHARGE RATE =       6.03 CFS  AT   1.800 HOURS   BASIN AREA =
0.0210 SQ. MI.


    ************************************************************
    FINISH

        NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 14:00:44
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```
    AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4)                        - Ver. S4.02a,
Rel: 02a      RUN DATE (MON/DAY/YR) =02/17/2022
    INPUT FILE = N:\CDS Library\Engineering Tools\AHYMO-S4\Oxbow Existing.txt
         USER NO.= AHYMO-S4TempUser05901704

                                  FROM  TO                    PEAK         RUNOFF
           TIME TO    CFS      PAGE =   1
                      HYDROGRAPH   ID   ID         AREA     DISCHARGE      VOLUME
  RUNOFF     PEAK     PER
    COMMAND       IDENTIFICATION   NO.  NO.      (SQ MI)      (CFS)        (AC-FT)
 (INCHES)  (HOURS)    ACRE     NOTATION

    RAINFALL  TYPE=13
                            RAIN24=   2.490
    *S  COMPUTE HYD EX1
    COMPUTE NM HYD        101.00   -     1       0.01830        13.36       0.380
  0.38952    1.533    1.141 PER IMP=   0.00
    *S  COMPUTE HYD EX2
    COMPUTE NM HYD        102.00   -     2       0.02610        19.88       0.562
  0.40401    1.533    1.190 PER IMP=   0.00
    *S  COMPUTE HYD OFF1
    COMPUTE NM HYD        103.00   -     3       0.00270         6.85       0.322
  2.23824    1.500    3.963 PER IMP= 100.00
    *S  COMPUTE HYD OFF2
    COMPUTE NM HYD        104.00   -     4       0.00150         3.81       0.179
  2.23824    1.500    3.966 PER IMP= 100.00
    *S  COMPUTE HYD OFF3
    COMPUTE NM HYD        105.00   -     5       0.00150         3.07       0.114
  1.43027    1.500    3.193 PER IMP=  40.00
    *S  COMPUTE HYD OFF4
    COMPUTE NM HYD        106.00   -     6       0.00120         2.46       0.092
  1.43027    1.500    3.197 PER IMP=  40.00
    ADD HYD               107.00  1& 3   7       0.02100        20.19       0.702
  0.62719    1.500    1.502
    ROUTE RESERVOIR  NORTH.PONDS    7    8       0.02100         6.03       0.702
  0.62719    1.800    0.449 AC-FT=    0.336
    FINISH
```

```
        AHYMO PROGRAM (AHYMO-S4)                    - Version: S4.02a - Rel: 02a
             RUN DATE (MON/DAY/YR) = 02/17/2022
             START TIME (HR:MIN:SEC) = 14:26:20     USER NO.=
AHYMO-S4TempUser05901704
             INPUT FILE = N:\CDS Library\Engineering Tools\AHYMO-S4\Oxbow
Proposed.txt

    *  Project Number W0007.0004
    *  Proposed Conditions
    *  Edited by Cassy 01212022
    *  Proposed Conditions
    *  100 YEAR RAINFALL TABLE
    RAINFALL              TYPE=13  RAIN QUARTER=1.02
                          RAIN ONE=1.69 IN  RAIN SIX=2.17 IN
                          RAIN DAY=2.49 IN  DT=0.03333 HRS

                    COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 -
PEAK AT 1.40 HR.
                    DT =   0.033330 HOURS       END TIME =    23.997601 HOURS
                      0.0000  0.0037  0.0075  0.0114  0.0153  0.0193  0.0234
                      0.0276  0.0319  0.0363  0.0408  0.0455  0.0502  0.0551
                      0.0601  0.0652  0.0705  0.0759  0.0815  0.0873  0.0933
                      0.0995  0.1060  0.1126  0.1196  0.1268  0.1344  0.1423
                      0.1505  0.1593  0.1685  0.1731  0.1781  0.1835  0.1949
                      0.2206  0.2600  0.3167  0.3941  0.4958  0.6254  0.7868
                      0.9839  1.1668  1.2432  1.3076  1.3650  1.4172  1.4652
                      1.5098  1.5515  1.5905  1.6273  1.6620  1.6947  1.7258
                      1.7551  1.7830  1.8094  1.8345  1.8583  1.8646  1.8705
                      1.8761  1.8815  1.8867  1.8918  1.8967  1.9014  1.9060
                      1.9105  1.9149  1.9191  1.9233  1.9273  1.9313  1.9352
                      1.9390  1.9427  1.9464  1.9500  1.9535  1.9569  1.9603
                      1.9637  1.9670  1.9702  1.9734  1.9766  1.9797  1.9827
                      1.9857  1.9887  1.9916  1.9945  1.9974  2.0002  2.0030
                      2.0058  2.0085  2.0112  2.0139  2.0165  2.0191  2.0217
                      2.0242  2.0268  2.0293  2.0317  2.0342  2.0366  2.0390
                      2.0414  2.0438  2.0461  2.0485  2.0508  2.0530  2.0553
                      2.0575  2.0598  2.0620  2.0642  2.0664  2.0685  2.0707
                      2.0728  2.0749  2.0770  2.0791  2.0811  2.0832  2.0852
                      2.0872  2.0892  2.0912  2.0932  2.0952  2.0971  2.0991
                      2.1010  2.1029  2.1048  2.1067  2.1086  2.1105  2.1123
                      2.1142  2.1160  2.1178  2.1197  2.1215  2.1233  2.1251
                      2.1268  2.1286  2.1304  2.1321  2.1338  2.1356  2.1373
                      2.1390  2.1407  2.1424  2.1441  2.1458  2.1474  2.1491
                      2.1507  2.1524  2.1540  2.1556  2.1573  2.1589  2.1605
                      2.1621  2.1637  2.1653  2.1668  2.1684  2.1700  2.1709
                      2.1718  2.1728  2.1737  2.1746  2.1755  2.1764  2.1773
                      2.1782  2.1791  2.1800  2.1809  2.1818  2.1827  2.1836
                      2.1845  2.1854  2.1863  2.1872  2.1881  2.1889  2.1898
                      2.1907  2.1916  2.1925  2.1933  2.1942  2.1951  2.1959
```

2.1968	2.1977	2.1985	2.1994	2.2002	2.2011	2.2019
2.2028	2.2036	2.2045	2.2053	2.2062	2.2070	2.2078
2.2087	2.2095	2.2103	2.2112	2.2120	2.2128	2.2136
2.2145	2.2153	2.2161	2.2169	2.2177	2.2186	2.2194
2.2202	2.2210	2.2218	2.2226	2.2234	2.2242	2.2250
2.2258	2.2266	2.2274	2.2282	2.2290	2.2298	2.2306
2.2314	2.2321	2.2329	2.2337	2.2345	2.2353	2.2360
2.2368	2.2376	2.2384	2.2391	2.2399	2.2407	2.2414
2.2422	2.2430	2.2437	2.2445	2.2453	2.2460	2.2468
2.2475	2.2483	2.2490	2.2498	2.2505	2.2513	2.2520
2.2528	2.2535	2.2542	2.2550	2.2557	2.2565	2.2572
2.2579	2.2587	2.2594	2.2601	2.2608	2.2616	2.2623
2.2630	2.2637	2.2645	2.2652	2.2659	2.2666	2.2673
2.2680	2.2688	2.2695	2.2702	2.2709	2.2716	2.2723
2.2730	2.2737	2.2744	2.2751	2.2758	2.2765	2.2772
2.2779	2.2786	2.2793	2.2800	2.2807	2.2814	2.2821
2.2827	2.2834	2.2841	2.2848	2.2855	2.2862	2.2868
2.2875	2.2882	2.2889	2.2896	2.2902	2.2909	2.2916
2.2922	2.2929	2.2936	2.2942	2.2949	2.2956	2.2962
2.2969	2.2976	2.2982	2.2989	2.2995	2.3002	2.3009
2.3015	2.3022	2.3028	2.3035	2.3041	2.3048	2.3054
2.3061	2.3067	2.3074	2.3080	2.3086	2.3093	2.3099
2.3106	2.3112	2.3118	2.3125	2.3131	2.3137	2.3144
2.3150	2.3156	2.3163	2.3169	2.3175	2.3182	2.3188
2.3194	2.3200	2.3206	2.3213	2.3219	2.3225	2.3231
2.3237	2.3244	2.3250	2.3256	2.3262	2.3268	2.3274
2.3280	2.3287	2.3293	2.3299	2.3305	2.3311	2.3317
2.3323	2.3329	2.3335	2.3341	2.3347	2.3353	2.3359
2.3365	2.3371	2.3377	2.3383	2.3389	2.3395	2.3401
2.3407	2.3413	2.3418	2.3424	2.3430	2.3436	2.3442
2.3448	2.3454	2.3459	2.3465	2.3471	2.3477	2.3483
2.3489	2.3494	2.3500	2.3506	2.3512	2.3517	2.3523
2.3529	2.3535	2.3540	2.3546	2.3552	2.3557	2.3563
2.3569	2.3574	2.3580	2.3586	2.3591	2.3597	2.3603
2.3608	2.3614	2.3619	2.3625	2.3631	2.3636	2.3642
2.3647	2.3653	2.3658	2.3664	2.3669	2.3675	2.3681
2.3686	2.3692	2.3697	2.3702	2.3708	2.3713	2.3719
2.3724	2.3730	2.3735	2.3741	2.3746	2.3752	2.3757
2.3762	2.3768	2.3773	2.3778	2.3784	2.3789	2.3795
2.3800	2.3805	2.3811	2.3816	2.3821	2.3827	2.3832
2.3837	2.3842	2.3848	2.3853	2.3858	2.3864	2.3869
2.3874	2.3879	2.3885	2.3890	2.3895	2.3900	2.3905
2.3911	2.3916	2.3921	2.3926	2.3931	2.3937	2.3942
2.3947	2.3952	2.3957	2.3962	2.3967	2.3972	2.3978
2.3983	2.3988	2.3993	2.3998	2.4003	2.4008	2.4013
2.4018	2.4023	2.4028	2.4033	2.4038	2.4043	2.4049
2.4054	2.4059	2.4064	2.4069	2.4074	2.4079	2.4083
2.4088	2.4093	2.4098	2.4103	2.4108	2.4113	2.4118
2.4123	2.4128	2.4133	2.4138	2.4143	2.4148	2.4153
2.4157	2.4162	2.4167	2.4172	2.4177	2.4182	2.4187

2.4191	2.4196	2.4201	2.4206	2.4211	2.4216	2.4220
2.4225	2.4230	2.4235	2.4240	2.4244	2.4249	2.4254
2.4259	2.4263	2.4268	2.4273	2.4278	2.4282	2.4287
2.4292	2.4297	2.4301	2.4306	2.4311	2.4315	2.4320
2.4325	2.4329	2.4334	2.4339	2.4343	2.4348	2.4353
2.4357	2.4362	2.4367	2.4371	2.4376	2.4381	2.4385
2.4390	2.4394	2.4399	2.4404	2.4408	2.4413	2.4417
2.4422	2.4427	2.4431	2.4436	2.4440	2.4445	2.4449
2.4454	2.4458	2.4463	2.4467	2.4472	2.4476	2.4481
2.4485	2.4490	2.4494	2.4499	2.4503	2.4508	2.4512
2.4517	2.4521	2.4526	2.4530	2.4535	2.4539	2.4543
2.4548	2.4552	2.4557	2.4561	2.4566	2.4570	2.4574
2.4579	2.4583	2.4588	2.4592	2.4596	2.4601	2.4605
2.4609	2.4614	2.4618	2.4623	2.4627	2.4631	2.4636
2.4640	2.4644	2.4649	2.4653	2.4657	2.4661	2.4666
2.4670	2.4674	2.4679	2.4683	2.4687	2.4691	2.4696
2.4700	2.4704	2.4709	2.4713	2.4717	2.4721	2.4726
2.4730	2.4734	2.4738	2.4742	2.4747	2.4751	2.4755
2.4759	2.4763	2.4768	2.4772	2.4776	2.4780	2.4784
2.4789	2.4793	2.4797	2.4801	2.4805	2.4809	2.4814
2.4818	2.4822	2.4826	2.4830	2.4834	2.4838	2.4842
2.4847	2.4851	2.4855	2.4859	2.4863	2.4867	2.4871
2.4875	2.4879	2.4883	2.4888	2.4892	2.4896	2.4900

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**************************************************************
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*S  COMPUTE HYD BASIN P14
COMPUTE NM HYD        ID=1  HYDNO=101  AREA=0.0006 SQ MI
                      PER A=0 PER B=0 PER C=10 PER D=90
                      TP=.13333 HR MASS RAIN=-1

        K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
        UNIT PEAK =   2.1315    CFS   UNIT VOLUME =   0.9941       B =   526.28
 P60 = 1.6900
        AREA =     0.000540 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


        K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
        UNIT PEAK =  0.17741    CFS   UNIT VOLUME =   0.9316       B =   394.23
 P60 = 1.6900
        AREA =     0.000060 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330
```

PRINT HYD ID=1 CODE=5

PARTIAL HYDROGRAPH 101.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.0	9.999	0.0	14.998	0.0
19.998	0.0						
0.167	0.0	5.166	0.0	10.166	0.0	15.165	0.0
20.165	0.0						
0.333	0.0	5.333	0.0	10.332	0.0	15.332	0.0
20.331	0.0						
0.500	0.0	5.499	0.0	10.499	0.0	15.498	0.0
20.498	0.0						
0.667	0.0	5.666	0.0	10.666	0.0	15.665	0.0
20.665	0.0						
0.833	0.0	5.833	0.0	10.832	0.0	15.832	0.0
20.831	0.0						
1.000	0.1	5.999	0.0	10.999	0.0	15.998	0.0
20.998	0.0						
1.167	0.1	6.166	0.0	11.166	0.0	16.165	0.0
21.165	0.0						
1.333	0.4	6.333	0.0	11.332	0.0	16.332	0.0
21.331	0.0						
1.500	1.5	6.499	0.0	11.499	0.0	16.498	0.0
21.498	0.0						
1.667	0.7	6.666	0.0	11.665	0.0	16.665	0.0
21.665	0.0						
1.833	0.5	6.833	0.0	11.832	0.0	16.832	0.0
21.831	0.0						
2.000	0.3	6.999	0.0	11.999	0.0	16.998	0.0
21.998	0.0						
2.166	0.2	7.166	0.0	12.165	0.0	17.165	0.0
22.164	0.0						
2.333	0.1	7.333	0.0	12.332	0.0	17.332	0.0
22.331	0.0						
2.500	0.0	7.499	0.0	12.499	0.0	17.498	0.0
22.498	0.0						
2.666	0.0	7.666	0.0	12.665	0.0	17.665	0.0
22.664	0.0						
2.833	0.0	7.833	0.0	12.832	0.0	17.832	0.0
22.831	0.0						
3.000	0.0	7.999	0.0	12.999	0.0	17.998	0.0
22.998	0.0						
3.166	0.0	8.166	0.0	13.165	0.0	18.165	0.0
23.164	0.0						
3.333	0.0	8.332	0.0	13.332	0.0		

```
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.0673 ACRE-FEET
        PEAK DISCHARGE RATE =       1.49 CFS  AT   1.500 HOURS   BASIN AREA =
0.0006 SQ. MI.



    ************************************************************
    *S  COMPUTE HYD BASIN P13
    COMPUTE NM HYD        ID=2  HYDNO=102  AREA=0.0099 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   35.169    CFS   UNIT VOLUME =   0.9990       B =   526.28
 P60 = 1.6900
         AREA =     0.008910 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =   2.9273    CFS   UNIT VOLUME =   0.9961       B =   394.23
 P60 = 1.6900
         AREA =     0.000990 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330
```

PRINT HYD ID=2 CODE=5

PARTIAL HYDROGRAPH 102.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.2	9.999	0.1	14.998	0.1
19.998	0.1						
0.167	0.0	5.166	0.2	10.166	0.1	15.165	0.1
20.165	0.1						
0.333	0.0	5.333	0.2	10.332	0.1	15.332	0.1
20.331	0.1						
0.500	0.0	5.499	0.2	10.499	0.1	15.498	0.1
20.498	0.1						
0.667	0.0	5.666	0.3	10.666	0.1	15.665	0.1
20.665	0.1						
0.833	0.4	5.833	0.3	10.832	0.1	15.832	0.1
20.831	0.1						
1.000	1.0	5.999	0.3	10.999	0.1	15.998	0.1
20.998	0.1						
1.167	0.9	6.166	0.2	11.166	0.1	16.165	0.1
21.165	0.1						
1.333	7.4	6.333	0.2	11.332	0.1	16.332	0.1
21.331	0.1						
1.500	24.3	6.499	0.2	11.499	0.1	16.498	0.1
21.498	0.1						
1.667	12.2	6.666	0.2	11.665	0.1	16.665	0.1
21.665	0.1						
1.833	7.9	6.833	0.2	11.832	0.1	16.832	0.1
21.831	0.1						
2.000	5.8	6.999	0.2	11.999	0.1	16.998	0.1
21.998	0.1						
2.166	2.7	7.166	0.1	12.165	0.1	17.165	0.1
22.164	0.1						
2.333	1.3	7.333	0.1	12.332	0.1	17.332	0.1
22.331	0.1						
2.500	0.9	7.499	0.1	12.499	0.1	17.498	0.1
22.498	0.1						
2.666	0.6	7.666	0.1	12.665	0.1	17.665	0.1
22.664	0.1						
2.833	0.5	7.833	0.1	12.832	0.1	17.832	0.1
22.831	0.1						
3.000	0.4	7.999	0.1	12.999	0.1	17.998	0.1
22.998	0.1						
3.166	0.3	8.166	0.1	13.165	0.1	18.165	0.1
23.164	0.1						
3.333	0.3	8.332	0.1	13.332	0.1		

```
18.331       0.1         23.331       0.1
         3.500       0.3          8.499       0.1         13.499       0.1
18.498       0.1         23.498       0.1
         3.666       0.3          8.666       0.1         13.665       0.1
18.665       0.1         23.664       0.1
         3.833       0.2          8.832       0.1         13.832       0.1
18.831       0.1         23.831       0.1
         4.000       0.2          8.999       0.1         13.999       0.1
18.998       0.1         23.998       0.1
         4.166       0.2          9.166       0.1         14.165       0.1
19.165       0.1         24.164       0.0
         4.333       0.2          9.332       0.1         14.332       0.1
19.331       0.1         24.331       0.0
         4.500       0.2          9.499       0.1         14.499       0.1
19.498       0.1         24.498       0.0
         4.666       0.2          9.666       0.1         14.665       0.1
19.665       0.1         24.664       0.0
         4.833       0.2          9.832       0.1         14.832       0.1
19.831       0.1

        RUNOFF VOLUME =     2.10358 INCHES     =       1.1107 ACRE-FEET
        PEAK DISCHARGE RATE =      24.27 CFS  AT   1.500 HOURS   BASIN AREA =
0.0099 SQ. MI.


    ************************************************************
    ADD HYD                            ID=3 HYD=103 ID I=1 ID II=2

    PRINT HYD             ID=3   CODE=5

                                         PARTIAL HYDROGRAPH   103.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.2          9.999       0.1
14.998       0.1         19.998       0.1
         0.167       0.0          5.166       0.3         10.166       0.1
15.165       0.1         20.165       0.1
         0.333       0.0          5.333       0.3         10.332       0.1
15.332       0.1         20.331       0.1
         0.500       0.0          5.499       0.3         10.499       0.1
15.498       0.1         20.498       0.1
         0.667       0.0          5.666       0.3         10.666       0.1
15.665       0.1         20.665       0.1
         0.833       0.4          5.833       0.3         10.832       0.1
15.832       0.1         20.831       0.1
         1.000       1.0          5.999       0.3         10.999       0.1
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15.998       0.1         20.998       0.1
         1.167       0.9          6.166       0.2         11.166       0.1
16.165       0.1         21.165       0.1
         1.333       7.8          6.333       0.2         11.332       0.1
16.332       0.1         21.331       0.1
         1.500      25.8          6.499       0.2         11.499       0.1
16.498       0.1         21.498       0.1
         1.667      13.0          6.666       0.2         11.665       0.1
16.665       0.1         21.665       0.1
         1.833       8.4          6.833       0.2         11.832       0.1
16.832       0.1         21.831       0.1
         2.000       6.1          6.999       0.2         11.999       0.1
16.998       0.1         21.998       0.1
         2.166       2.8          7.166       0.2         12.165       0.1
17.165       0.1         22.164       0.1
         2.333       1.4          7.333       0.2         12.332       0.1
17.332       0.1         22.331       0.1
         2.500       0.9          7.499       0.2         12.499       0.1
17.498       0.1         22.498       0.1
         2.666       0.6          7.666       0.2         12.665       0.1
17.665       0.1         22.664       0.1
         2.833       0.5          7.833       0.2         12.832       0.1
17.832       0.1         22.831       0.1
         3.000       0.4          7.999       0.2         12.999       0.1
17.998       0.1         22.998       0.1
         3.166       0.3          8.166       0.1         13.165       0.1
18.165       0.1         23.164       0.1
         3.333       0.3          8.332       0.1         13.332       0.1
18.331       0.1         23.331       0.1
         3.500       0.3          8.499       0.1         13.499       0.1
18.498       0.1         23.498       0.1
         3.666       0.3          8.666       0.1         13.665       0.1
18.665       0.1         23.664       0.1
         3.833       0.3          8.832       0.1         13.832       0.1
18.831       0.1         23.831       0.1
         4.000       0.2          8.999       0.1         13.999       0.1
18.998       0.1         23.998       0.1
         4.166       0.2          9.166       0.1         14.165       0.1
19.165       0.1         24.164       0.0
         4.333       0.2          9.332       0.1         14.332       0.1
19.331       0.1         24.331       0.0
         4.500       0.2          9.499       0.1         14.499       0.1
19.498       0.1         24.498       0.0
         4.666       0.2          9.666       0.1         14.665       0.1
19.665       0.1         24.664       0.0
         4.833       0.2          9.832       0.1         14.832       0.1
19.831       0.1

        RUNOFF VOLUME =     2.10353 INCHES     =       1.1780 ACRE-FEET
        PEAK DISCHARGE RATE =      25.76 CFS  AT   1.500 HOURS   BASIN AREA =
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0.0105 SQ. MI.

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**************************************************************
*SOUTH POND 2
ROUTE RESERVOIR       ID=4 HYD=SOUTH.POND2 INFLOW ID=3 CODE=5
                      OUTFLOW CFS   STORAGE ACFT    ELEV FT

                            0.00    0.000   1.0

                                    0.01    0.037   2.0

                                    0.02    0.138   3.0

                                    0.03    0.332   4.0

                                    2.29    0.648   5.0

                                    3.24    1.118   6.0
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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	1.00	0.000	0.00
0.17	0.00	1.00	0.000	0.00
0.33	0.00	1.00	0.000	0.00
0.50	0.00	1.00	0.000	0.00
0.67	0.00	1.00	0.000	0.00
0.83	0.40	1.04	0.001	0.00
1.00	1.01	1.32	0.012	0.00
1.17	0.93	1.70	0.026	0.01
1.33	7.82	2.33	0.071	0.01
1.50	25.76	3.87	0.306	0.03
1.67	12.96	4.73	0.562	1.68
1.83	8.42	5.06	0.675	2.34
2.00	6.10	5.20	0.741	2.48
2.17	2.83	5.26	0.771	2.54
2.33	1.39	5.24	0.762	2.52
2.50	0.91	5.20	0.743	2.48
2.67	0.65	5.15	0.720	2.44
2.83	0.49	5.10	0.694	2.38
3.00	0.39	5.04	0.668	2.33
3.17	0.33	4.98	0.641	2.24
3.33	0.30	4.90	0.616	2.06
3.50	0.28	4.83	0.593	1.89
3.67	0.27	4.76	0.571	1.74

3.83	0.26	4.70	0.552	1.60
4.00	0.25	4.64	0.534	1.48
4.17	0.25	4.59	0.518	1.36
4.33	0.24	4.54	0.504	1.26
4.50	0.24	4.50	0.490	1.16
4.67	0.24	4.46	0.478	1.08
4.83	0.24	4.43	0.467	1.00
5.00	0.25	4.40	0.457	0.93
5.17	0.25	4.37	0.449	0.86
5.33	0.25	4.34	0.441	0.81
5.50	0.26	4.32	0.433	0.75
5.67	0.27	4.30	0.427	0.71
5.83	0.27	4.28	0.421	0.67
6.00	0.28	4.27	0.416	0.63
6.17	0.21	4.25	0.411	0.60
6.33	0.18	4.23	0.406	0.56
6.50	0.17	4.22	0.401	0.52
6.67	0.17	4.20	0.396	0.49
6.83	0.16	4.19	0.392	0.46
7.00	0.16	4.18	0.388	0.43
7.17	0.16	4.17	0.384	0.40
7.33	0.16	4.16	0.381	0.38
7.50	0.15	4.15	0.378	0.36
7.67	0.15	4.14	0.375	0.34
7.83	0.15	4.13	0.373	0.32
8.00	0.15	4.12	0.371	0.31
8.17	0.15	4.12	0.369	0.29
8.33	0.15	4.11	0.367	0.28
8.50	0.14	4.10	0.365	0.27
8.67	0.14	4.10	0.363	0.25
8.83	0.14	4.09	0.362	0.24
9.00	0.14	4.09	0.361	0.23
9.17	0.14	4.09	0.359	0.23

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	0.14	4.08	0.358	0.22
9.50	0.14	4.08	0.357	0.21
9.67	0.14	4.08	0.356	0.20
9.83	0.13	4.07	0.355	0.20
10.00	0.13	4.07	0.354	0.19
10.17	0.13	4.07	0.354	0.18
10.33	0.13	4.07	0.353	0.18
10.50	0.13	4.06	0.352	0.17
10.67	0.13	4.06	0.352	0.17
10.83	0.12	4.06	0.351	0.17
11.00	0.12	4.06	0.351	0.16
11.17	0.12	4.06	0.350	0.16
11.33	0.12	4.06	0.350	0.16

11.50	0.12	4.05	0.349	0.15
11.67	0.12	4.05	0.349	0.15
11.83	0.12	4.05	0.348	0.15
12.00	0.12	4.05	0.348	0.14
12.17	0.12	4.05	0.348	0.14
12.33	0.12	4.05	0.347	0.14
12.50	0.12	4.05	0.347	0.14
12.67	0.11	4.05	0.347	0.14
12.83	0.11	4.05	0.346	0.13
13.00	0.11	4.04	0.346	0.13
13.17	0.11	4.04	0.346	0.13
13.33	0.11	4.04	0.346	0.13
13.50	0.11	4.04	0.345	0.13
13.67	0.11	4.04	0.345	0.12
13.83	0.11	4.04	0.345	0.12
14.00	0.11	4.04	0.345	0.12
14.17	0.11	4.04	0.345	0.12
14.33	0.11	4.04	0.344	0.12
14.50	0.10	4.04	0.344	0.12
14.67	0.10	4.04	0.344	0.12
14.83	0.10	4.04	0.344	0.12
15.00	0.10	4.04	0.344	0.11
15.17	0.10	4.04	0.344	0.11
15.33	0.10	4.04	0.343	0.11
15.50	0.10	4.04	0.343	0.11
15.67	0.10	4.04	0.343	0.11
15.83	0.10	4.04	0.343	0.11
16.00	0.10	4.03	0.343	0.11
16.17	0.10	4.03	0.343	0.11
16.33	0.10	4.03	0.343	0.11
16.50	0.10	4.03	0.343	0.11
16.67	0.10	4.03	0.342	0.10
16.83	0.09	4.03	0.342	0.10
17.00	0.09	4.03	0.342	0.10
17.16	0.09	4.03	0.342	0.10
17.33	0.10	4.03	0.342	0.10
17.50	0.09	4.03	0.342	0.10
17.66	0.09	4.03	0.342	0.10
17.83	0.09	4.03	0.342	0.10
18.00	0.09	4.03	0.342	0.10
18.16	0.09	4.03	0.341	0.10
18.33	0.09	4.03	0.341	0.10
18.50	0.09	4.03	0.341	0.10

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	0.09	4.03	0.341	0.10
18.83	0.09	4.03	0.341	0.10
19.00	0.09	4.03	0.341	0.09

19.16	0.09	4.03	0.341	0.09
19.33	0.09	4.03	0.341	0.09
19.50	0.09	4.03	0.341	0.09
19.66	0.09	4.03	0.341	0.09
19.83	0.09	4.03	0.341	0.09
20.00	0.09	4.03	0.340	0.09
20.16	0.08	4.03	0.340	0.09
20.33	0.08	4.03	0.340	0.09
20.50	0.08	4.03	0.340	0.09
20.66	0.08	4.03	0.340	0.09
20.83	0.08	4.03	0.340	0.09
21.00	0.08	4.03	0.340	0.09
21.16	0.08	4.03	0.340	0.09
21.33	0.08	4.02	0.340	0.09
21.50	0.08	4.02	0.340	0.09
21.66	0.08	4.02	0.340	0.09
21.83	0.08	4.02	0.340	0.08
22.00	0.08	4.02	0.340	0.08
22.16	0.08	4.02	0.340	0.08
22.33	0.08	4.02	0.339	0.08
22.50	0.08	4.02	0.339	0.08
22.66	0.08	4.02	0.339	0.08
22.83	0.08	4.02	0.339	0.08
23.00	0.08	4.02	0.339	0.08
23.16	0.08	4.02	0.339	0.08
23.33	0.08	4.02	0.339	0.08
23.50	0.07	4.02	0.339	0.08
23.66	0.08	4.02	0.339	0.08
23.83	0.07	4.02	0.339	0.08
24.00	0.08	4.02	0.339	0.08
24.16	0.03	4.02	0.339	0.08
24.33	0.01	4.02	0.338	0.07
24.50	0.00	4.02	0.337	0.07
24.66	0.00	4.01	0.336	0.06
24.83	0.00	4.01	0.335	0.05
25.00	0.00	4.01	0.335	0.05
25.16	0.00	4.01	0.334	0.04
25.33	0.00	4.00	0.333	0.04
25.50	0.00	4.00	0.333	0.04
25.66	0.00	4.00	0.332	0.03
25.83	0.00	4.00	0.332	0.03
26.00	0.00	4.00	0.332	0.03
26.16	0.00	4.00	0.331	0.03
26.33	0.00	3.99	0.331	0.03
26.50	0.00	3.99	0.330	0.03
26.66	0.00	3.99	0.330	0.03
26.83	0.00	3.99	0.329	0.03
27.00	0.00	3.98	0.329	0.03
27.16	0.00	3.98	0.329	0.03
27.33	0.00	3.98	0.328	0.03

27.50	0.00	3.98	0.328	0.03
27.66	0.00	3.98	0.327	0.03
27.83	0.00	3.97	0.327	0.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
28.00	0.00	3.97	0.327	0.03
28.16	0.00	3.97	0.326	0.03
28.33	0.00	3.97	0.326	0.03
28.50	0.00	3.97	0.325	0.03
28.66	0.00	3.96	0.325	0.03
28.83	0.00	3.96	0.325	0.03
29.00	0.00	3.96	0.324	0.03
29.16	0.00	3.96	0.324	0.03
29.33	0.00	3.96	0.323	0.03
29.50	0.00	3.95	0.323	0.03
29.66	0.00	3.95	0.323	0.03
29.83	0.00	3.95	0.322	0.03
30.00	0.00	3.95	0.322	0.03
30.16	0.00	3.94	0.321	0.03
30.33	0.00	3.94	0.321	0.03
30.50	0.00	3.94	0.321	0.03
30.66	0.00	3.94	0.320	0.03
30.83	0.00	3.94	0.320	0.03
31.00	0.00	3.93	0.319	0.03
31.16	0.00	3.93	0.319	0.03
31.33	0.00	3.93	0.318	0.03
31.50	0.00	3.93	0.318	0.03
31.66	0.00	3.93	0.318	0.03
31.83	0.00	3.92	0.317	0.03
32.00	0.00	3.92	0.317	0.03
32.16	0.00	3.92	0.316	0.03
32.33	0.00	3.92	0.316	0.03
32.50	0.00	3.92	0.316	0.03
32.66	0.00	3.91	0.315	0.03
32.83	0.00	3.91	0.315	0.03
33.00	0.00	3.91	0.314	0.03
33.16	0.00	3.91	0.314	0.03
33.33	0.00	3.91	0.314	0.03
33.50	0.00	3.90	0.313	0.03
33.66	0.00	3.90	0.313	0.03
33.83	0.00	3.90	0.312	0.03
34.00	0.00	3.90	0.312	0.03
34.16	0.00	3.90	0.312	0.03
34.33	0.00	3.89	0.311	0.03
34.50	0.00	3.89	0.311	0.03
34.66	0.00	3.89	0.310	0.03
34.83	0.00	3.89	0.310	0.03
35.00	0.00	3.88	0.310	0.03

35.16	0.00	3.88	0.309	0.03
35.33	0.00	3.88	0.309	0.03
35.50	0.00	3.88	0.308	0.03
35.66	0.00	3.88	0.308	0.03
35.83	0.00	3.87	0.308	0.03
36.00	0.00	3.87	0.307	0.03
36.16	0.00	3.87	0.307	0.03
36.33	0.00	3.87	0.307	0.03
36.50	0.00	3.87	0.306	0.03
36.66	0.00	3.86	0.306	0.03
36.83	0.00	3.86	0.305	0.03
37.00	0.00	3.86	0.305	0.03
37.16	0.00	3.86	0.305	0.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
37.33	0.00	3.86	0.304	0.03
37.50	0.00	3.85	0.304	0.03
37.66	0.00	3.85	0.303	0.03
37.83	0.00	3.85	0.303	0.03
38.00	0.00	3.85	0.303	0.03
38.16	0.00	3.85	0.302	0.03
38.33	0.00	3.84	0.302	0.03
38.50	0.00	3.84	0.301	0.03
38.66	0.00	3.84	0.301	0.03
38.83	0.00	3.84	0.301	0.03
39.00	0.00	3.84	0.300	0.03
39.16	0.00	3.83	0.300	0.03
39.33	0.00	3.83	0.299	0.03
39.50	0.00	3.83	0.299	0.03
39.66	0.00	3.83	0.299	0.03
39.83	0.00	3.83	0.298	0.03
40.00	0.00	3.82	0.298	0.03
40.16	0.00	3.82	0.297	0.03
40.33	0.00	3.82	0.297	0.03
40.50	0.00	3.82	0.297	0.03
40.66	0.00	3.82	0.296	0.03
40.83	0.00	3.81	0.296	0.03
41.00	0.00	3.81	0.296	0.03
41.16	0.00	3.81	0.295	0.03
41.33	0.00	3.81	0.295	0.03
41.50	0.00	3.81	0.294	0.03
41.66	0.00	3.80	0.294	0.03
41.83	0.00	3.80	0.294	0.03
42.00	0.00	3.80	0.293	0.03
42.16	0.00	3.80	0.293	0.03
42.33	0.00	3.80	0.292	0.03
42.50	0.00	3.79	0.292	0.03
42.66	0.00	3.79	0.292	0.03

42.83	0.00	3.79	0.291	0.03
43.00	0.00	3.79	0.291	0.03
43.16	0.00	3.79	0.291	0.03
43.33	0.00	3.78	0.290	0.03
43.50	0.00	3.78	0.290	0.03
43.66	0.00	3.78	0.289	0.03
43.83	0.00	3.78	0.289	0.03
44.00	0.00	3.78	0.289	0.03
44.16	0.00	3.77	0.288	0.03
44.33	0.00	3.77	0.288	0.03
44.50	0.00	3.77	0.287	0.03
44.66	0.00	3.77	0.287	0.03
44.83	0.00	3.77	0.287	0.03
45.00	0.00	3.76	0.286	0.03
45.16	0.00	3.76	0.286	0.03
45.33	0.00	3.76	0.286	0.03
45.50	0.00	3.76	0.285	0.03
45.66	0.00	3.76	0.285	0.03
45.83	0.00	3.75	0.284	0.03
46.00	0.00	3.75	0.284	0.03
46.16	0.00	3.75	0.284	0.03
46.33	0.00	3.75	0.283	0.03
46.50	0.00	3.75	0.283	0.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
46.66	0.00	3.75	0.283	0.03
46.83	0.00	3.74	0.282	0.03
47.00	0.00	3.74	0.282	0.03
47.16	0.00	3.74	0.281	0.03
47.33	0.00	3.74	0.281	0.03
47.50	0.00	3.74	0.281	0.03
47.66	0.00	3.73	0.280	0.03
47.83	0.00	3.73	0.280	0.03
48.00	0.00	3.73	0.280	0.03
48.16	0.00	3.73	0.279	0.03
48.33	0.00	3.73	0.279	0.03
48.50	0.00	3.72	0.278	0.03
48.66	0.00	3.72	0.278	0.03
48.83	0.00	3.72	0.278	0.03
49.00	0.00	3.72	0.277	0.03
49.16	0.00	3.72	0.277	0.03
49.33	0.00	3.71	0.277	0.03
49.50	0.00	3.71	0.276	0.03
49.66	0.00	3.71	0.276	0.03
49.83	0.00	3.71	0.275	0.03
50.00	0.00	3.71	0.275	0.03
50.16	0.00	3.70	0.275	0.03
50.33	0.00	3.70	0.274	0.03

50.49	0.00	3.70	0.274	0.03
50.66	0.00	3.70	0.274	0.03
50.83	0.00	3.70	0.273	0.03
50.99	0.00	3.69	0.273	0.03
51.16	0.00	3.69	0.272	0.03
51.33	0.00	3.69	0.272	0.03
51.49	0.00	3.69	0.272	0.03
51.66	0.00	3.69	0.271	0.03
51.83	0.00	3.69	0.271	0.03
51.99	0.00	3.68	0.271	0.03
52.16	0.00	3.68	0.270	0.03
52.33	0.00	3.68	0.270	0.03
52.49	0.00	3.68	0.269	0.03
52.66	0.00	3.68	0.269	0.03
52.83	0.00	3.67	0.269	0.03
52.99	0.00	3.67	0.268	0.03
53.16	0.00	3.67	0.268	0.03
53.33	0.00	3.67	0.268	0.03
53.49	0.00	3.67	0.267	0.03
53.66	0.00	3.66	0.267	0.03
53.83	0.00	3.66	0.267	0.03
53.99	0.00	3.66	0.266	0.03
54.16	0.00	3.66	0.266	0.03
54.33	0.00	3.66	0.265	0.03
54.49	0.00	3.65	0.265	0.03
54.66	0.00	3.65	0.265	0.03
54.83	0.00	3.65	0.264	0.03
54.99	0.00	3.65	0.264	0.03
55.16	0.00	3.65	0.264	0.03
55.33	0.00	3.65	0.263	0.03
55.49	0.00	3.64	0.263	0.03
55.66	0.00	3.64	0.263	0.03
55.83	0.00	3.64	0.262	0.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
55.99	0.00	3.64	0.262	0.03
56.16	0.00	3.64	0.261	0.03
56.33	0.00	3.63	0.261	0.03
56.49	0.00	3.63	0.261	0.03
56.66	0.00	3.63	0.260	0.03
56.83	0.00	3.63	0.260	0.03
56.99	0.00	3.63	0.260	0.03
57.16	0.00	3.63	0.259	0.03
57.33	0.00	3.62	0.259	0.03
57.49	0.00	3.62	0.259	0.03
57.66	0.00	3.62	0.258	0.03
57.83	0.00	3.62	0.258	0.03
57.99	0.00	3.62	0.257	0.03

58.16	0.00	3.61	0.257	0.03
58.33	0.00	3.61	0.257	0.03
58.49	0.00	3.61	0.256	0.03
58.66	0.00	3.61	0.256	0.03
58.83	0.00	3.61	0.256	0.03
58.99	0.00	3.60	0.255	0.03
59.16	0.00	3.60	0.255	0.03
59.33	0.00	3.60	0.255	0.03
59.49	0.00	3.60	0.254	0.03
59.66	0.00	3.60	0.254	0.03
59.83	0.00	3.60	0.253	0.03
59.99	0.00	3.59	0.253	0.03
60.16	0.00	3.59	0.253	0.03
60.33	0.00	3.59	0.252	0.03
60.49	0.00	3.59	0.252	0.03
60.66	0.00	3.59	0.252	0.03
60.83	0.00	3.58	0.251	0.03
60.99	0.00	3.58	0.251	0.03
61.16	0.00	3.58	0.251	0.03
61.33	0.00	3.58	0.250	0.03
61.49	0.00	3.58	0.250	0.03
61.66	0.00	3.58	0.250	0.03
61.83	0.00	3.57	0.249	0.03
61.99	0.00	3.57	0.249	0.03
62.16	0.00	3.57	0.249	0.03
62.33	0.00	3.57	0.248	0.03
62.49	0.00	3.57	0.248	0.03
62.66	0.00	3.56	0.247	0.03
62.83	0.00	3.56	0.247	0.03
62.99	0.00	3.56	0.247	0.03
63.16	0.00	3.56	0.246	0.03
63.33	0.00	3.56	0.246	0.03
63.49	0.00	3.56	0.246	0.03
63.66	0.00	3.55	0.245	0.03
63.83	0.00	3.55	0.245	0.03
63.99	0.00	3.55	0.245	0.03
64.16	0.00	3.55	0.244	0.03
64.33	0.00	3.55	0.244	0.03
64.49	0.00	3.54	0.244	0.03
64.66	0.00	3.54	0.243	0.03
64.83	0.00	3.54	0.243	0.03
64.99	0.00	3.54	0.243	0.03
65.16	0.00	3.54	0.242	0.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
65.33	0.00	3.54	0.242	0.03
65.49	0.00	3.53	0.241	0.03
65.66	0.00	3.53	0.241	0.03

65.83	0.00	3.53	0.241	0.03
65.99	0.00	3.53	0.240	0.03
66.16	0.00	3.53	0.240	0.03
66.33	0.00	3.52	0.240	0.03
66.49	0.00	3.52	0.239	0.03
66.66	0.00	3.52	0.239	0.03
66.83	0.00	3.52	0.239	0.03
66.99	0.00	3.52	0.238	0.03
67.16	0.00	3.52	0.238	0.03
67.33	0.00	3.51	0.238	0.03
67.49	0.00	3.51	0.237	0.03
67.66	0.00	3.51	0.237	0.03
67.83	0.00	3.51	0.237	0.03
67.99	0.00	3.51	0.236	0.03
68.16	0.00	3.50	0.236	0.03
68.33	0.00	3.50	0.236	0.03
68.49	0.00	3.50	0.235	0.03
68.66	0.00	3.50	0.235	0.02
68.83	0.00	3.50	0.235	0.02
68.99	0.00	3.50	0.234	0.02
69.16	0.00	3.49	0.234	0.02
69.33	0.00	3.49	0.234	0.02
69.49	0.00	3.49	0.233	0.02
69.66	0.00	3.49	0.233	0.02
69.83	0.00	3.49	0.233	0.02
69.99	0.00	3.49	0.232	0.02
70.16	0.00	3.48	0.232	0.02
70.33	0.00	3.48	0.231	0.02
70.49	0.00	3.48	0.231	0.02
70.66	0.00	3.48	0.231	0.02
70.83	0.00	3.48	0.230	0.02
70.99	0.00	3.47	0.230	0.02
71.16	0.00	3.47	0.230	0.02
71.33	0.00	3.47	0.229	0.02
71.49	0.00	3.47	0.229	0.02
71.66	0.00	3.47	0.229	0.02
71.83	0.00	3.47	0.228	0.02
71.99	0.00	3.46	0.228	0.02
72.16	0.00	3.46	0.228	0.02
72.33	0.00	3.46	0.227	0.02
72.49	0.00	3.46	0.227	0.02
72.66	0.00	3.46	0.227	0.02
72.83	0.00	3.46	0.226	0.02
72.99	0.00	3.45	0.226	0.02
73.16	0.00	3.45	0.226	0.02
73.33	0.00	3.45	0.225	0.02
73.49	0.00	3.45	0.225	0.02
73.66	0.00	3.45	0.225	0.02
73.83	0.00	3.45	0.224	0.02
73.99	0.00	3.44	0.224	0.02

74.16	0.00	3.44	0.224	0.02
74.33	0.00	3.44	0.223	0.02
74.49	0.00	3.44	0.223	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
74.66	0.00	3.44	0.223	0.02
74.83	0.00	3.43	0.222	0.02
74.99	0.00	3.43	0.222	0.02
75.16	0.00	3.43	0.222	0.02
75.33	0.00	3.43	0.221	0.02
75.49	0.00	3.43	0.221	0.02
75.66	0.00	3.43	0.221	0.02
75.83	0.00	3.42	0.220	0.02
75.99	0.00	3.42	0.220	0.02
76.16	0.00	3.42	0.220	0.02
76.33	0.00	3.42	0.219	0.02
76.49	0.00	3.42	0.219	0.02
76.66	0.00	3.42	0.219	0.02
76.83	0.00	3.41	0.218	0.02
76.99	0.00	3.41	0.218	0.02
77.16	0.00	3.41	0.218	0.02
77.33	0.00	3.41	0.217	0.02
77.49	0.00	3.41	0.217	0.02
77.66	0.00	3.41	0.217	0.02
77.83	0.00	3.40	0.216	0.02
77.99	0.00	3.40	0.216	0.02
78.16	0.00	3.40	0.216	0.02
78.33	0.00	3.40	0.215	0.02
78.49	0.00	3.40	0.215	0.02
78.66	0.00	3.40	0.215	0.02
78.83	0.00	3.39	0.214	0.02
78.99	0.00	3.39	0.214	0.02
79.16	0.00	3.39	0.214	0.02
79.33	0.00	3.39	0.213	0.02
79.49	0.00	3.39	0.213	0.02
79.66	0.00	3.39	0.213	0.02
79.83	0.00	3.38	0.212	0.02
79.99	0.00	3.38	0.212	0.02
80.16	0.00	3.38	0.212	0.02
80.33	0.00	3.38	0.211	0.02
80.49	0.00	3.38	0.211	0.02
80.66	0.00	3.37	0.211	0.02
80.83	0.00	3.37	0.210	0.02
80.99	0.00	3.37	0.210	0.02
81.16	0.00	3.37	0.210	0.02
81.33	0.00	3.37	0.209	0.02
81.49	0.00	3.37	0.209	0.02
81.66	0.00	3.36	0.209	0.02

81.83	0.00	3.36	0.208	0.02
81.99	0.00	3.36	0.208	0.02
82.16	0.00	3.36	0.208	0.02
82.33	0.00	3.36	0.207	0.02
82.49	0.00	3.36	0.207	0.02
82.66	0.00	3.35	0.207	0.02
82.83	0.00	3.35	0.207	0.02
82.99	0.00	3.35	0.206	0.02
83.16	0.00	3.35	0.206	0.02
83.33	0.00	3.35	0.206	0.02
83.49	0.00	3.35	0.205	0.02
83.66	0.00	3.34	0.205	0.02
83.82	0.00	3.34	0.205	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
83.99	0.00	3.34	0.204	0.02
84.16	0.00	3.34	0.204	0.02
84.32	0.00	3.34	0.204	0.02
84.49	0.00	3.34	0.203	0.02
84.66	0.00	3.33	0.203	0.02
84.82	0.00	3.33	0.203	0.02
84.99	0.00	3.33	0.202	0.02
85.16	0.00	3.33	0.202	0.02
85.32	0.00	3.33	0.202	0.02
85.49	0.00	3.33	0.201	0.02
85.66	0.00	3.32	0.201	0.02
85.82	0.00	3.32	0.201	0.02
85.99	0.00	3.32	0.200	0.02
86.16	0.00	3.32	0.200	0.02
86.32	0.00	3.32	0.200	0.02
86.49	0.00	3.32	0.199	0.02
86.66	0.00	3.32	0.199	0.02
86.82	0.00	3.31	0.199	0.02
86.99	0.00	3.31	0.198	0.02
87.16	0.00	3.31	0.198	0.02
87.32	0.00	3.31	0.198	0.02
87.49	0.00	3.31	0.198	0.02
87.66	0.00	3.31	0.197	0.02
87.82	0.00	3.30	0.197	0.02
87.99	0.00	3.30	0.197	0.02
88.16	0.00	3.30	0.196	0.02
88.32	0.00	3.30	0.196	0.02
88.49	0.00	3.30	0.196	0.02
88.66	0.00	3.30	0.195	0.02
88.82	0.00	3.29	0.195	0.02
88.99	0.00	3.29	0.195	0.02
89.16	0.00	3.29	0.194	0.02
89.32	0.00	3.29	0.194	0.02

89.49	0.00	3.29	0.194	0.02
89.66	0.00	3.29	0.193	0.02
89.82	0.00	3.28	0.193	0.02
89.99	0.00	3.28	0.193	0.02
90.16	0.00	3.28	0.192	0.02
90.32	0.00	3.28	0.192	0.02
90.49	0.00	3.28	0.192	0.02
90.66	0.00	3.28	0.192	0.02
90.82	0.00	3.27	0.191	0.02
90.99	0.00	3.27	0.191	0.02
91.16	0.00	3.27	0.191	0.02
91.32	0.00	3.27	0.190	0.02
91.49	0.00	3.27	0.190	0.02
91.66	0.00	3.27	0.190	0.02
91.82	0.00	3.26	0.189	0.02
91.99	0.00	3.26	0.189	0.02
92.16	0.00	3.26	0.189	0.02
92.32	0.00	3.26	0.188	0.02
92.49	0.00	3.26	0.188	0.02
92.66	0.00	3.26	0.188	0.02
92.82	0.00	3.26	0.187	0.02
92.99	0.00	3.25	0.187	0.02
93.16	0.00	3.25	0.187	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
93.32	0.00	3.25	0.187	0.02
93.49	0.00	3.25	0.186	0.02
93.66	0.00	3.25	0.186	0.02
93.82	0.00	3.25	0.186	0.02
93.99	0.00	3.24	0.185	0.02
94.16	0.00	3.24	0.185	0.02
94.32	0.00	3.24	0.185	0.02
94.49	0.00	3.24	0.184	0.02
94.66	0.00	3.24	0.184	0.02
94.82	0.00	3.24	0.184	0.02
94.99	0.00	3.23	0.183	0.02
95.16	0.00	3.23	0.183	0.02
95.32	0.00	3.23	0.183	0.02
95.49	0.00	3.23	0.183	0.02
95.66	0.00	3.23	0.182	0.02
95.82	0.00	3.23	0.182	0.02
95.99	0.00	3.22	0.182	0.02
96.16	0.00	3.22	0.181	0.02
96.32	0.00	3.22	0.181	0.02
96.49	0.00	3.22	0.181	0.02
96.66	0.00	3.22	0.180	0.02
96.82	0.00	3.22	0.180	0.02
96.99	0.00	3.22	0.180	0.02

97.16	0.00	3.21	0.179	0.02
97.32	0.00	3.21	0.179	0.02
97.49	0.00	3.21	0.179	0.02
97.66	0.00	3.21	0.179	0.02
97.82	0.00	3.21	0.178	0.02
97.99	0.00	3.21	0.178	0.02
98.16	0.00	3.20	0.178	0.02
98.32	0.00	3.20	0.177	0.02
98.49	0.00	3.20	0.177	0.02
98.66	0.00	3.20	0.177	0.02
98.82	0.00	3.20	0.176	0.02
98.99	0.00	3.20	0.176	0.02
99.16	0.00	3.19	0.176	0.02
99.32	0.00	3.19	0.176	0.02
99.49	0.00	3.19	0.175	0.02
99.66	0.00	3.19	0.175	0.02
99.82	0.00	3.19	0.175	0.02
99.99	0.00	3.19	0.174	0.02
100.16	0.00	3.19	0.174	0.02
100.32	0.00	3.18	0.174	0.02
100.49	0.00	3.18	0.173	0.02
100.66	0.00	3.18	0.173	0.02
100.82	0.00	3.18	0.173	0.02
100.99	0.00	3.18	0.173	0.02
101.16	0.00	3.18	0.172	0.02
101.32	0.00	3.17	0.172	0.02
101.49	0.00	3.17	0.172	0.02
101.66	0.00	3.17	0.171	0.02
101.82	0.00	3.17	0.171	0.02
101.99	0.00	3.17	0.171	0.02
102.16	0.00	3.17	0.170	0.02
102.32	0.00	3.17	0.170	0.02
102.49	0.00	3.16	0.170	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
102.66	0.00	3.16	0.170	0.02
102.82	0.00	3.16	0.169	0.02
102.99	0.00	3.16	0.169	0.02
103.16	0.00	3.16	0.169	0.02
103.32	0.00	3.16	0.168	0.02
103.49	0.00	3.15	0.168	0.02
103.66	0.00	3.15	0.168	0.02
103.82	0.00	3.15	0.167	0.02
103.99	0.00	3.15	0.167	0.02
104.16	0.00	3.15	0.167	0.02
104.32	0.00	3.15	0.167	0.02
104.49	0.00	3.15	0.166	0.02
104.66	0.00	3.14	0.166	0.02

104.82	0.00	3.14	0.166	0.02
104.99	0.00	3.14	0.165	0.02
105.16	0.00	3.14	0.165	0.02
105.32	0.00	3.14	0.165	0.02
105.49	0.00	3.14	0.164	0.02
105.66	0.00	3.14	0.164	0.02
105.82	0.00	3.13	0.164	0.02
105.99	0.00	3.13	0.164	0.02
106.16	0.00	3.13	0.163	0.02
106.32	0.00	3.13	0.163	0.02
106.49	0.00	3.13	0.163	0.02
106.66	0.00	3.13	0.162	0.02
106.82	0.00	3.12	0.162	0.02
106.99	0.00	3.12	0.162	0.02
107.16	0.00	3.12	0.162	0.02
107.32	0.00	3.12	0.161	0.02
107.49	0.00	3.12	0.161	0.02
107.66	0.00	3.12	0.161	0.02
107.82	0.00	3.12	0.160	0.02
107.99	0.00	3.11	0.160	0.02
108.16	0.00	3.11	0.160	0.02
108.32	0.00	3.11	0.160	0.02
108.49	0.00	3.11	0.159	0.02
108.66	0.00	3.11	0.159	0.02
108.82	0.00	3.11	0.159	0.02
108.99	0.00	3.10	0.158	0.02
109.16	0.00	3.10	0.158	0.02
109.32	0.00	3.10	0.158	0.02
109.49	0.00	3.10	0.157	0.02
109.66	0.00	3.10	0.157	0.02
109.82	0.00	3.10	0.157	0.02
109.99	0.00	3.10	0.157	0.02
110.16	0.00	3.09	0.156	0.02
110.32	0.00	3.09	0.156	0.02
110.49	0.00	3.09	0.156	0.02
110.66	0.00	3.09	0.155	0.02
110.82	0.00	3.09	0.155	0.02
110.99	0.00	3.09	0.155	0.02
111.16	0.00	3.09	0.155	0.02
111.32	0.00	3.08	0.154	0.02
111.49	0.00	3.08	0.154	0.02
111.66	0.00	3.08	0.154	0.02
111.82	0.00	3.08	0.153	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
111.99	0.00	3.08	0.153	0.02
112.16	0.00	3.08	0.153	0.02
112.32	0.00	3.08	0.153	0.02

112.49	0.00	3.07	0.152	0.02
112.66	0.00	3.07	0.152	0.02
112.82	0.00	3.07	0.152	0.02
112.99	0.00	3.07	0.151	0.02
113.16	0.00	3.07	0.151	0.02
113.32	0.00	3.07	0.151	0.02
113.49	0.00	3.06	0.151	0.02
113.66	0.00	3.06	0.150	0.02
113.82	0.00	3.06	0.150	0.02
113.99	0.00	3.06	0.150	0.02
114.16	0.00	3.06	0.149	0.02
114.32	0.00	3.06	0.149	0.02
114.49	0.00	3.06	0.149	0.02
114.66	0.00	3.05	0.149	0.02
114.82	0.00	3.05	0.148	0.02
114.99	0.00	3.05	0.148	0.02
115.16	0.00	3.05	0.148	0.02
115.32	0.00	3.05	0.147	0.02
115.49	0.00	3.05	0.147	0.02
115.66	0.00	3.05	0.147	0.02
115.82	0.00	3.04	0.147	0.02
115.99	0.00	3.04	0.146	0.02
116.16	0.00	3.04	0.146	0.02
116.32	0.00	3.04	0.146	0.02
116.49	0.00	3.04	0.146	0.02
116.66	0.00	3.04	0.145	0.02
116.82	0.00	3.04	0.145	0.02
116.99	0.00	3.03	0.145	0.02
117.15	0.00	3.03	0.144	0.02
117.32	0.00	3.03	0.144	0.02
117.49	0.00	3.03	0.144	0.02
117.65	0.00	3.03	0.144	0.02
117.82	0.00	3.03	0.143	0.02
117.99	0.00	3.03	0.143	0.02
118.15	0.00	3.02	0.143	0.02
118.32	0.00	3.02	0.142	0.02
118.49	0.00	3.02	0.142	0.02
118.65	0.00	3.02	0.142	0.02
118.82	0.00	3.02	0.142	0.02
118.99	0.00	3.02	0.141	0.02
119.15	0.00	3.02	0.141	0.02
119.32	0.00	3.01	0.141	0.02
119.49	0.00	3.01	0.140	0.02
119.65	0.00	3.01	0.140	0.02
119.82	0.00	3.01	0.140	0.02
119.99	0.00	3.01	0.140	0.02
120.15	0.00	3.01	0.139	0.02
120.32	0.00	3.01	0.139	0.02
120.49	0.00	3.00	0.139	0.02
120.65	0.00	3.00	0.139	0.02

120.82	0.00	3.00	0.138	0.02
120.99	0.00	3.00	0.138	0.02
121.15	0.00	3.00	0.138	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
121.32	0.00	2.99	0.137	0.02
121.49	0.00	2.99	0.137	0.02
121.65	0.00	2.99	0.137	0.02
121.82	0.00	2.99	0.137	0.02
121.99	0.00	2.98	0.136	0.02
122.15	0.00	2.98	0.136	0.02
122.32	0.00	2.98	0.136	0.02
122.49	0.00	2.98	0.136	0.02
122.65	0.00	2.97	0.135	0.02
122.82	0.00	2.97	0.135	0.02
122.99	0.00	2.97	0.135	0.02
123.15	0.00	2.96	0.134	0.02
123.32	0.00	2.96	0.134	0.02
123.49	0.00	2.96	0.134	0.02
123.65	0.00	2.96	0.134	0.02
123.82	0.00	2.95	0.133	0.02
123.99	0.00	2.95	0.133	0.02
124.15	0.00	2.95	0.133	0.02
124.32	0.00	2.95	0.133	0.02
124.49	0.00	2.94	0.132	0.02
124.65	0.00	2.94	0.132	0.02
124.82	0.00	2.94	0.132	0.02
124.99	0.00	2.94	0.132	0.02
125.15	0.00	2.93	0.131	0.02
125.32	0.00	2.93	0.131	0.02
125.49	0.00	2.93	0.131	0.02
125.65	0.00	2.93	0.130	0.02
125.82	0.00	2.92	0.130	0.02
125.99	0.00	2.92	0.130	0.02
126.15	0.00	2.92	0.130	0.02
126.32	0.00	2.91	0.129	0.02
126.49	0.00	2.91	0.129	0.02
126.65	0.00	2.91	0.129	0.02
126.82	0.00	2.91	0.129	0.02
126.99	0.00	2.90	0.128	0.02
127.15	0.00	2.90	0.128	0.02
127.32	0.00	2.90	0.128	0.02
127.49	0.00	2.90	0.128	0.02
127.65	0.00	2.89	0.127	0.02
127.82	0.00	2.89	0.127	0.02
127.99	0.00	2.89	0.127	0.02
128.15	0.00	2.89	0.127	0.02
128.32	0.00	2.88	0.126	0.02

128.49	0.00	2.88	0.126	0.02
128.65	0.00	2.88	0.126	0.02
128.82	0.00	2.88	0.125	0.02
128.99	0.00	2.87	0.125	0.02
129.15	0.00	2.87	0.125	0.02
129.32	0.00	2.87	0.125	0.02
129.49	0.00	2.87	0.124	0.02
129.65	0.00	2.86	0.124	0.02
129.82	0.00	2.86	0.124	0.02
129.99	0.00	2.86	0.124	0.02
130.15	0.00	2.86	0.123	0.02
130.32	0.00	2.85	0.123	0.02
130.49	0.00	2.85	0.123	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
130.65	0.00	2.85	0.123	0.02
130.82	0.00	2.85	0.122	0.02
130.99	0.00	2.84	0.122	0.02
131.15	0.00	2.84	0.122	0.02
131.32	0.00	2.84	0.122	0.02
131.49	0.00	2.84	0.121	0.02
131.65	0.00	2.83	0.121	0.02
131.82	0.00	2.83	0.121	0.02
131.99	0.00	2.83	0.121	0.02
132.15	0.00	2.83	0.120	0.02
132.32	0.00	2.82	0.120	0.02
132.49	0.00	2.82	0.120	0.02
132.65	0.00	2.82	0.120	0.02
132.82	0.00	2.82	0.119	0.02
132.99	0.00	2.81	0.119	0.02
133.15	0.00	2.81	0.119	0.02

PEAK DISCHARGE = 2.538 CFS - PEAK OCCURS AT HOUR 2.20
MAXIMUM WATER SURFACE ELEVATION = 5.261
MAXIMUM STORAGE = 0.7706 AC-FT INCREMENTAL TIME= 0.033330HRS

PRINT HYD ID=4 CODE=5

HYDROGRAPH FROM AREA SOUTH.POND2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	26.664	0.0	53.328	0.0	79.992	0.0	106.656	0.0
0.167	0.0	26.831	0.0	53.495	0.0	80.158	0.0	106.822	0.0

	0.333	0.0	26.997	0.0	53.661	0.0	80.325	0.0
	106.989	0.0						
	0.500	0.0	27.164	0.0	53.828	0.0	80.492	0.0
	107.156	0.0						
	0.667	0.0	27.331	0.0	53.995	0.0	80.658	0.0
	107.322	0.0						
	0.833	0.0	27.497	0.0	54.161	0.0	80.825	0.0
	107.489	0.0						
	1.000	0.0	27.664	0.0	54.328	0.0	80.992	0.0
	107.655	0.0						
	1.167	0.0	27.831	0.0	54.494	0.0	81.158	0.0
	107.822	0.0						
	1.333	0.0	27.997	0.0	54.661	0.0	81.325	0.0
	107.989	0.0						
	1.500	0.0	28.164	0.0	54.828	0.0	81.492	0.0
	108.155	0.0						
	1.667	1.7	28.331	0.0	54.994	0.0	81.658	0.0
	108.322	0.0						
	1.833	2.3	28.497	0.0	55.161	0.0	81.825	0.0
	108.489	0.0						
	2.000	2.5	28.664	0.0	55.328	0.0	81.992	0.0
	108.655	0.0						
	2.166	2.5	28.830	0.0	55.494	0.0	82.158	0.0
	108.822	0.0						
	2.333	2.5	28.997	0.0	55.661	0.0	82.325	0.0
	108.989	0.0						
	2.500	2.5	29.164	0.0	55.828	0.0	82.491	0.0
	109.155	0.0						
	2.666	2.4	29.330	0.0	55.994	0.0	82.658	0.0
	109.322	0.0						
	2.833	2.4	29.497	0.0	56.161	0.0	82.825	0.0
	109.489	0.0						
	3.000	2.3	29.664	0.0	56.328	0.0	82.991	0.0
	109.655	0.0						
	3.166	2.2	29.830	0.0	56.494	0.0	83.158	0.0
	109.822	0.0						
	3.333	2.1	29.997	0.0	56.661	0.0	83.325	0.0
	109.989	0.0						
	3.500	1.9	30.164	0.0	56.828	0.0	83.491	0.0
	110.155	0.0						
	3.666	1.7	30.330	0.0	56.994	0.0	83.658	0.0
	110.322	0.0						
	3.833	1.6	30.497	0.0	57.161	0.0	83.825	0.0
	110.488	0.0						
	4.000	1.5	30.664	0.0	57.327	0.0	83.991	0.0
	110.655	0.0						
	4.166	1.4	30.830	0.0	57.494	0.0	84.158	0.0
	110.822	0.0						
	4.333	1.3	30.997	0.0	57.661	0.0	84.325	0.0
	110.988	0.0						

4.500	1.2	31.164	0.0	57.827	0.0	84.491	0.0
111.155	0.0						
4.666	1.1	31.330	0.0	57.994	0.0	84.658	0.0
111.322	0.0						
4.833	1.0	31.497	0.0	58.161	0.0	84.825	0.0
111.488	0.0						
4.999	0.9	31.664	0.0	58.327	0.0	84.991	0.0
111.655	0.0						
5.166	0.9	31.830	0.0	58.494	0.0	85.158	0.0
111.822	0.0						
5.333	0.8	31.997	0.0	58.661	0.0	85.325	0.0
111.988	0.0						
5.499	0.8	32.164	0.0	58.827	0.0	85.491	0.0
112.155	0.0						
5.666	0.7	32.330	0.0	58.994	0.0	85.658	0.0
112.322	0.0						
5.833	0.7	32.497	0.0	59.161	0.0	85.824	0.0
112.488	0.0						
5.999	0.6	32.663	0.0	59.327	0.0	85.991	0.0
112.655	0.0						
6.166	0.6	32.830	0.0	59.494	0.0	86.158	0.0
112.822	0.0						
6.333	0.6	32.997	0.0	59.661	0.0	86.324	0.0
112.988	0.0						
6.499	0.5	33.163	0.0	59.827	0.0	86.491	0.0
113.155	0.0						
6.666	0.5	33.330	0.0	59.994	0.0	86.658	0.0
113.322	0.0						
6.833	0.5	33.497	0.0	60.161	0.0	86.824	0.0
113.488	0.0						
6.999	0.4	33.663	0.0	60.327	0.0	86.991	0.0
113.655	0.0						
7.166	0.4	33.830	0.0	60.494	0.0	87.158	0.0
113.821	0.0						
7.333	0.4	33.997	0.0	60.660	0.0	87.324	0.0
113.988	0.0						
7.499	0.4	34.163	0.0	60.827	0.0	87.491	0.0
114.155	0.0						
7.666	0.3	34.330	0.0	60.994	0.0	87.658	0.0
114.321	0.0						
7.833	0.3	34.497	0.0	61.160	0.0	87.824	0.0
114.488	0.0						
7.999	0.3	34.663	0.0	61.327	0.0	87.991	0.0
114.655	0.0						
8.166	0.3	34.830	0.0	61.494	0.0	88.158	0.0
114.821	0.0						
8.332	0.3	34.997	0.0	61.660	0.0	88.324	0.0
114.988	0.0						
8.499	0.3	35.163	0.0	61.827	0.0	88.491	0.0
115.155	0.0						

8.666	0.3	35.330	0.0	61.994	0.0	88.657	0.0
115.321	0.0						
8.832	0.2	35.496	0.0	62.160	0.0	88.824	0.0
115.488	0.0						
8.999	0.2	35.663	0.0	62.327	0.0	88.991	0.0
115.655	0.0						
9.166	0.2	35.830	0.0	62.494	0.0	89.157	0.0
115.821	0.0						
9.332	0.2	35.996	0.0	62.660	0.0	89.324	0.0
115.988	0.0						
9.499	0.2	36.163	0.0	62.827	0.0	89.491	0.0
116.155	0.0						
9.666	0.2	36.330	0.0	62.994	0.0	89.657	0.0
116.321	0.0						
9.832	0.2	36.496	0.0	63.160	0.0	89.824	0.0
116.488	0.0						
9.999	0.2	36.663	0.0	63.327	0.0	89.991	0.0
116.654	0.0						
10.166	0.2	36.830	0.0	63.493	0.0	90.157	0.0
116.821	0.0						
10.332	0.2	36.996	0.0	63.660	0.0	90.324	0.0
116.988	0.0						
10.499	0.2	37.163	0.0	63.827	0.0	90.491	0.0
117.154	0.0						
10.666	0.2	37.330	0.0	63.993	0.0	90.657	0.0
117.321	0.0						
10.832	0.2	37.496	0.0	64.160	0.0	90.824	0.0
117.488	0.0						
10.999	0.2	37.663	0.0	64.327	0.0	90.991	0.0
117.654	0.0						
11.166	0.2	37.830	0.0	64.493	0.0	91.157	0.0
117.821	0.0						
11.332	0.2	37.996	0.0	64.660	0.0	91.324	0.0
117.988	0.0						
11.499	0.2	38.163	0.0	64.827	0.0	91.491	0.0
118.154	0.0						
11.665	0.1	38.330	0.0	64.993	0.0	91.657	0.0
118.321	0.0						
11.832	0.1	38.496	0.0	65.160	0.0	91.824	0.0
118.488	0.0						
11.999	0.1	38.663	0.0	65.327	0.0	91.990	0.0
118.654	0.0						
12.165	0.1	38.829	0.0	65.493	0.0	92.157	0.0
118.821	0.0						
12.332	0.1	38.996	0.0	65.660	0.0	92.324	0.0
118.988	0.0						
12.499	0.1	39.163	0.0	65.827	0.0	92.490	0.0
119.154	0.0						
12.665	0.1	39.329	0.0	65.993	0.0	92.657	0.0
119.321	0.0						

12.832	0.1	39.496	0.0	66.160	0.0	92.824	0.0
119.488	0.0						
12.999	0.1	39.663	0.0	66.327	0.0	92.990	0.0
119.654	0.0						
13.165	0.1	39.829	0.0	66.493	0.0	93.157	0.0
119.821	0.0						
13.332	0.1	39.996	0.0	66.660	0.0	93.324	0.0
119.987	0.0						
13.499	0.1	40.163	0.0	66.826	0.0	93.490	0.0
120.154	0.0						
13.665	0.1	40.329	0.0	66.993	0.0	93.657	0.0
120.321	0.0						
13.832	0.1	40.496	0.0	67.160	0.0	93.824	0.0
120.487	0.0						
13.999	0.1	40.663	0.0	67.326	0.0	93.990	0.0
120.654	0.0						
14.165	0.1	40.829	0.0	67.493	0.0	94.157	0.0
120.821	0.0						
14.332	0.1	40.996	0.0	67.660	0.0	94.324	0.0
120.987	0.0						
14.499	0.1	41.163	0.0	67.826	0.0	94.490	0.0
121.154	0.0						
14.665	0.1	41.329	0.0	67.993	0.0	94.657	0.0
121.321	0.0						
14.832	0.1	41.496	0.0	68.160	0.0	94.823	0.0
121.487	0.0						
14.998	0.1	41.662	0.0	68.326	0.0	94.990	0.0
121.654	0.0						
15.165	0.1	41.829	0.0	68.493	0.0	95.157	0.0
121.821	0.0						
15.332	0.1	41.996	0.0	68.660	0.0	95.323	0.0
121.987	0.0						
15.498	0.1	42.162	0.0	68.826	0.0	95.490	0.0
122.154	0.0						
15.665	0.1	42.329	0.0	68.993	0.0	95.657	0.0
122.321	0.0						
15.832	0.1	42.496	0.0	69.160	0.0	95.823	0.0
122.487	0.0						
15.998	0.1	42.662	0.0	69.326	0.0	95.990	0.0
122.654	0.0						
16.165	0.1	42.829	0.0	69.493	0.0	96.157	0.0
122.820	0.0						
16.332	0.1	42.996	0.0	69.660	0.0	96.323	0.0
122.987	0.0						
16.498	0.1	43.162	0.0	69.826	0.0	96.490	0.0
123.154	0.0						
16.665	0.1	43.329	0.0	69.993	0.0	96.657	0.0
123.320	0.0						
16.832	0.1	43.496	0.0	70.159	0.0	96.823	0.0
123.487	0.0						

	16.998	0.1	43.662	0.0	70.326	0.0	96.990	0.0	123.654	0.0
	17.165	0.1	43.829	0.0	70.493	0.0	97.157	0.0	123.820	0.0
	17.332	0.1	43.996	0.0	70.659	0.0	97.323	0.0	123.987	0.0
	17.498	0.1	44.162	0.0	70.826	0.0	97.490	0.0	124.154	0.0
	17.665	0.1	44.329	0.0	70.993	0.0	97.657	0.0	124.320	0.0
	17.832	0.1	44.496	0.0	71.159	0.0	97.823	0.0	124.487	0.0
	17.998	0.1	44.662	0.0	71.326	0.0	97.990	0.0	124.654	0.0
	18.165	0.1	44.829	0.0	71.493	0.0	98.156	0.0	124.820	0.0
	18.331	0.1	44.995	0.0	71.659	0.0	98.323	0.0	124.987	0.0
	18.498	0.1	45.162	0.0	71.826	0.0	98.490	0.0	125.154	0.0
	18.665	0.1	45.329	0.0	71.993	0.0	98.656	0.0	125.320	0.0
	18.831	0.1	45.495	0.0	72.159	0.0	98.823	0.0	125.487	0.0
	18.998	0.1	45.662	0.0	72.326	0.0	98.990	0.0	125.654	0.0
	19.165	0.1	45.829	0.0	72.493	0.0	99.156	0.0	125.820	0.0
	19.331	0.1	45.995	0.0	72.659	0.0	99.323	0.0	125.987	0.0
	19.498	0.1	46.162	0.0	72.826	0.0	99.490	0.0	126.153	0.0
	19.665	0.1	46.329	0.0	72.992	0.0	99.656	0.0	126.320	0.0
	19.831	0.1	46.495	0.0	73.159	0.0	99.823	0.0	126.487	0.0
	19.998	0.1	46.662	0.0	73.326	0.0	99.990	0.0	126.653	0.0
	20.165	0.1	46.829	0.0	73.492	0.0	100.156	0.0	126.820	0.0
	20.331	0.1	46.995	0.0	73.659	0.0	100.323	0.0	126.987	0.0
	20.498	0.1	47.162	0.0	73.826	0.0	100.490	0.0	127.153	0.0
	20.665	0.1	47.329	0.0	73.992	0.0	100.656	0.0	127.320	0.0
	20.831	0.1	47.495	0.0	74.159	0.0	100.823	0.0	127.487	0.0
	20.998	0.1	47.662	0.0	74.326	0.0	100.989	0.0	127.653	0.0

21.165	0.1	47.829	0.0	74.492	0.0	101.156	0.0
127.820	0.0						
21.331	0.1	47.995	0.0	74.659	0.0	101.323	0.0
127.987	0.0						
21.498	0.1	48.162	0.0	74.826	0.0	101.489	0.0
128.153	0.0						
21.665	0.1	48.328	0.0	74.992	0.0	101.656	0.0
128.320	0.0						
21.831	0.1	48.495	0.0	75.159	0.0	101.823	0.0
128.487	0.0						
21.998	0.1	48.662	0.0	75.326	0.0	101.989	0.0
128.653	0.0						
22.164	0.1	48.828	0.0	75.492	0.0	102.156	0.0
128.820	0.0						
22.331	0.1	48.995	0.0	75.659	0.0	102.323	0.0
128.987	0.0						
22.498	0.1	49.162	0.0	75.826	0.0	102.489	0.0
129.153	0.0						
22.664	0.1	49.328	0.0	75.992	0.0	102.656	0.0
129.320	0.0						
22.831	0.1	49.495	0.0	76.159	0.0	102.823	0.0
129.487	0.0						
22.998	0.1	49.662	0.0	76.325	0.0	102.989	0.0
129.653	0.0						
23.164	0.1	49.828	0.0	76.492	0.0	103.156	0.0
129.820	0.0						
23.331	0.1	49.995	0.0	76.659	0.0	103.323	0.0
129.986	0.0						
23.498	0.1	50.162	0.0	76.825	0.0	103.489	0.0
130.153	0.0						
23.664	0.1	50.328	0.0	76.992	0.0	103.656	0.0
130.320	0.0						
23.831	0.1	50.495	0.0	77.159	0.0	103.823	0.0
130.486	0.0						
23.998	0.1	50.662	0.0	77.325	0.0	103.989	0.0
130.653	0.0						
24.164	0.1	50.828	0.0	77.492	0.0	104.156	0.0
130.820	0.0						
24.331	0.1	50.995	0.0	77.659	0.0	104.322	0.0
130.986	0.0						
24.498	0.1	51.161	0.0	77.825	0.0	104.489	0.0
131.153	0.0						
24.664	0.1	51.328	0.0	77.992	0.0	104.656	0.0
131.320	0.0						
24.831	0.1	51.495	0.0	78.159	0.0	104.822	0.0
131.486	0.0						
24.998	0.0	51.661	0.0	78.325	0.0	104.989	0.0
131.653	0.0						
25.164	0.0	51.828	0.0	78.492	0.0	105.156	0.0
131.820	0.0						

```
        25.331       0.0         51.995       0.0         78.659       0.0
105.322       0.0        131.986       0.0
        25.497       0.0         52.161       0.0         78.825       0.0
105.489       0.0        132.153       0.0
        25.664       0.0         52.328       0.0         78.992       0.0
105.656       0.0        132.320       0.0
        25.831       0.0         52.495       0.0         79.158       0.0
105.822       0.0        132.486       0.0
        25.997       0.0         52.661       0.0         79.325       0.0
105.989       0.0        132.653       0.0
        26.164       0.0         52.828       0.0         79.492       0.0
106.156       0.0        132.820       0.0
        26.331       0.0         52.995       0.0         79.658       0.0
106.322       0.0        132.986       0.0
        26.497       0.0         53.161       0.0         79.825       0.0
106.489       0.0        133.153       0.0

        RUNOFF VOLUME =     1.89166 INCHES     =       1.0593 ACRE-FEET
        PEAK DISCHARGE RATE =       2.54 CFS  AT   2.200 HOURS   BASIN AREA =
0.0105 SQ. MI.



    ************************************************************
    ************************************************************
    *S  COMPUTE HYD BASIN P1
    COMPUTE NM HYD        ID=5  HYDNO=105  AREA=0.0067 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   23.801    CFS   UNIT VOLUME =   0.9989       B =   526.28
 P60 = 1.6900
         AREA =     0.006030 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =   1.9811    CFS   UNIT VOLUME =   0.9938       B =   394.23
 P60 = 1.6900
         AREA =     0.000670 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=5   CODE=5
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PARTIAL HYDROGRAPH 105.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.2	9.999	0.1	14.998	0.1
19.998	0.1						
0.167	0.0	5.166	0.2	10.166	0.1	15.165	0.1
20.165	0.1						
0.333	0.0	5.333	0.2	10.332	0.1	15.332	0.1
20.331	0.1						
0.500	0.0	5.499	0.2	10.499	0.1	15.498	0.1
20.498	0.1						
0.667	0.0	5.666	0.2	10.666	0.1	15.665	0.1
20.665	0.1						
0.833	0.3	5.833	0.2	10.832	0.1	15.832	0.1
20.831	0.1						
1.000	0.6	5.999	0.2	10.999	0.1	15.998	0.1
20.998	0.1						
1.167	0.6	6.166	0.1	11.166	0.1	16.165	0.1
21.165	0.1						
1.333	5.0	6.333	0.1	11.332	0.1	16.332	0.1
21.331	0.1						
1.500	16.4	6.499	0.1	11.499	0.1	16.498	0.1
21.498	0.1						
1.667	8.3	6.666	0.1	11.665	0.1	16.665	0.1
21.665	0.1						
1.833	5.4	6.833	0.1	11.832	0.1	16.832	0.1
21.831	0.1						
2.000	3.9	6.999	0.1	11.999	0.1	16.998	0.1
21.998	0.1						
2.166	1.8	7.166	0.1	12.165	0.1	17.165	0.1
22.164	0.0						
2.333	0.9	7.333	0.1	12.332	0.1	17.332	0.1
22.331	0.1						
2.500	0.6	7.499	0.1	12.499	0.1	17.498	0.1
22.498	0.1						
2.666	0.4	7.666	0.1	12.665	0.1	17.665	0.1
22.664	0.0						
2.833	0.3	7.833	0.1	12.832	0.1	17.832	0.1
22.831	0.0						
3.000	0.2	7.999	0.1	12.999	0.1	17.998	0.1
22.998	0.0						
3.166	0.2	8.166	0.1	13.165	0.1	18.165	0.1
23.164	0.0						
3.333	0.2	8.332	0.1	13.332	0.1	18.331	0.1
23.331	0.0						
3.500	0.2	8.499	0.1	13.499	0.1		

```
18.498       0.1         23.498       0.0
         3.666       0.2          8.666       0.1         13.665       0.1
18.665       0.1         23.664       0.0
         3.833       0.2          8.832       0.1         13.832       0.1
18.831       0.1         23.831       0.0
         4.000       0.2          8.999       0.1         13.999       0.1
18.998       0.1         23.998       0.0
         4.166       0.2          9.166       0.1         14.165       0.1
19.165       0.1         24.164       0.0
         4.333       0.2          9.332       0.1         14.332       0.1
19.331       0.1         24.331       0.0
         4.500       0.2          9.499       0.1         14.499       0.1
19.498       0.1         24.498       0.0
         4.666       0.2          9.666       0.1         14.665       0.1
19.665       0.1         24.664       0.0
         4.833       0.2          9.832       0.1         14.832       0.1
19.831       0.1

        RUNOFF VOLUME =     2.10358 INCHES     =       0.7517 ACRE-FEET
        PEAK DISCHARGE RATE =      16.43 CFS  AT   1.500 HOURS   BASIN AREA =
0.0067 SQ. MI.


    ************************************************************
    *SOUTH POND 1
    ROUTE RESERVOIR       ID=6 HYD=SOUTH.POND1 INFLOW ID=5 CODE=5
                          OUTFLOW CFS   STORAGE ACFT    ELEV FT

                                        0.00    0.000   1.0

                                        0.01    0.027   2.0

                                        0.02    0.100   3.0

                                        2.29    0.242   4.0

                                        3.24    0.475   5.0



      *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

        TIME      INFLOW    ELEV      VOLUME    OUTFLOW
        (HRS)     (CFS)     (FEET)    (AC-FT)   (CFS)

         0.00       0.00      1.00      0.000      0.00
         0.17       0.00      1.00      0.000      0.00
         0.33       0.00      1.00      0.000      0.00
```

0.50	0.00	1.00	0.000	0.00
0.67	0.00	1.00	0.000	0.00
0.83	0.26	1.03	0.001	0.00
1.00	0.64	1.28	0.007	0.00
1.17	0.59	1.61	0.016	0.01
1.33	4.99	2.25	0.045	0.01
1.50	16.43	3.64	0.190	1.46
1.67	8.27	4.38	0.330	2.65
1.83	5.37	4.60	0.382	2.86
2.00	3.89	4.70	0.405	2.95
2.17	1.81	4.70	0.405	2.96
2.33	0.89	4.60	0.382	2.86
2.50	0.58	4.48	0.353	2.74
2.67	0.41	4.35	0.323	2.62
2.83	0.31	4.22	0.293	2.50
3.00	0.25	4.09	0.263	2.38
3.17	0.21	3.95	0.235	2.17
3.33	0.19	3.78	0.210	1.78
3.50	0.18	3.64	0.191	1.47
3.67	0.17	3.52	0.175	1.21
3.83	0.16	3.43	0.162	1.00
4.00	0.16	3.36	0.151	0.84
4.17	0.16	3.30	0.143	0.70
4.33	0.16	3.25	0.136	0.60
4.50	0.15	3.22	0.131	0.51
4.67	0.16	3.18	0.126	0.44
4.83	0.16	3.16	0.123	0.38
5.00	0.16	3.14	0.120	0.34
5.17	0.16	3.12	0.118	0.30
5.33	0.16	3.11	0.116	0.27
5.50	0.17	3.10	0.115	0.25
5.67	0.17	3.10	0.114	0.24
5.83	0.17	3.09	0.113	0.22
6.00	0.18	3.09	0.112	0.21
6.17	0.14	3.08	0.112	0.20
6.33	0.11	3.07	0.110	0.19
6.50	0.11	3.07	0.110	0.17
6.67	0.11	3.06	0.109	0.16
6.83	0.10	3.06	0.108	0.15
7.00	0.10	3.05	0.108	0.14
7.17	0.10	3.05	0.107	0.13
7.33	0.10	3.05	0.107	0.13
7.50	0.10	3.04	0.106	0.12
7.67	0.10	3.04	0.106	0.12
7.83	0.10	3.04	0.106	0.11
8.00	0.10	3.04	0.106	0.11
8.17	0.09	3.04	0.105	0.11
8.33	0.09	3.04	0.105	0.10
8.50	0.09	3.04	0.105	0.10
8.67	0.09	3.04	0.105	0.10

8.83	0.09	3.03	0.105	0.10
9.00	0.09	3.03	0.105	0.10
9.17	0.09	3.03	0.105	0.09

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	0.09	3.03	0.105	0.09
9.50	0.09	3.03	0.105	0.09
9.67	0.09	3.03	0.104	0.09
9.83	0.09	3.03	0.104	0.09
10.00	0.08	3.03	0.104	0.09
10.17	0.08	3.03	0.104	0.09
10.33	0.08	3.03	0.104	0.09
10.50	0.08	3.03	0.104	0.09
10.67	0.08	3.03	0.104	0.09
10.83	0.08	3.03	0.104	0.08
11.00	0.08	3.03	0.104	0.08
11.17	0.08	3.03	0.104	0.08
11.33	0.08	3.03	0.104	0.08
11.50	0.08	3.03	0.104	0.08
11.67	0.08	3.03	0.104	0.08
11.83	0.08	3.03	0.104	0.08
12.00	0.08	3.03	0.104	0.08
12.17	0.08	3.03	0.104	0.08
12.33	0.07	3.03	0.104	0.08
12.50	0.07	3.03	0.104	0.08
12.67	0.07	3.02	0.104	0.08
12.83	0.07	3.02	0.103	0.08
13.00	0.07	3.02	0.103	0.07
13.17	0.07	3.02	0.103	0.07
13.33	0.07	3.02	0.103	0.07
13.50	0.07	3.02	0.103	0.07
13.67	0.07	3.02	0.103	0.07
13.83	0.07	3.02	0.103	0.07
14.00	0.07	3.02	0.103	0.07
14.17	0.07	3.02	0.103	0.07
14.33	0.07	3.02	0.103	0.07
14.50	0.07	3.02	0.103	0.07
14.67	0.07	3.02	0.103	0.07
14.83	0.07	3.02	0.103	0.07
15.00	0.07	3.02	0.103	0.07
15.17	0.07	3.02	0.103	0.07
15.33	0.06	3.02	0.103	0.07
15.50	0.07	3.02	0.103	0.07
15.67	0.06	3.02	0.103	0.07
15.83	0.06	3.02	0.103	0.07
16.00	0.06	3.02	0.103	0.07
16.17	0.06	3.02	0.103	0.06
16.33	0.06	3.02	0.103	0.06

16.50	0.06	3.02	0.103	0.06
16.67	0.06	3.02	0.103	0.06
16.83	0.06	3.02	0.103	0.06
17.00	0.06	3.02	0.103	0.06
17.16	0.06	3.02	0.103	0.06
17.33	0.06	3.02	0.103	0.06
17.50	0.06	3.02	0.103	0.06
17.66	0.06	3.02	0.103	0.06
17.83	0.06	3.02	0.103	0.06
18.00	0.06	3.02	0.103	0.06
18.16	0.06	3.02	0.102	0.06
18.33	0.06	3.02	0.102	0.06
18.50	0.06	3.02	0.102	0.06

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	0.06	3.02	0.102	0.06
18.83	0.06	3.02	0.102	0.06
19.00	0.06	3.02	0.102	0.06
19.16	0.06	3.02	0.102	0.06
19.33	0.06	3.02	0.102	0.06
19.50	0.06	3.02	0.102	0.06
19.66	0.05	3.02	0.102	0.06
19.83	0.05	3.02	0.102	0.06
20.00	0.05	3.02	0.102	0.06
20.16	0.05	3.02	0.102	0.06
20.33	0.05	3.02	0.102	0.06
20.50	0.05	3.02	0.102	0.05
20.66	0.05	3.02	0.102	0.05
20.83	0.05	3.01	0.102	0.05
21.00	0.05	3.01	0.102	0.05
21.16	0.05	3.01	0.102	0.05
21.33	0.05	3.01	0.102	0.05
21.50	0.05	3.01	0.102	0.05
21.66	0.05	3.01	0.102	0.05
21.83	0.05	3.01	0.102	0.05
22.00	0.05	3.01	0.102	0.05
22.16	0.05	3.01	0.102	0.05
22.33	0.05	3.01	0.102	0.05
22.50	0.05	3.01	0.102	0.05
22.66	0.05	3.01	0.102	0.05
22.83	0.05	3.01	0.102	0.05
23.00	0.05	3.01	0.102	0.05
23.16	0.05	3.01	0.102	0.05
23.33	0.05	3.01	0.102	0.05
23.50	0.05	3.01	0.102	0.05
23.66	0.05	3.01	0.102	0.05
23.83	0.05	3.01	0.102	0.05
24.00	0.05	3.01	0.102	0.05

24.16	0.02	3.01	0.102	0.05
24.33	0.01	3.01	0.101	0.04
24.50	0.00	3.01	0.101	0.03
24.66	0.00	3.00	0.100	0.03
24.83	0.00	3.00	0.100	0.02
25.00	0.00	3.00	0.100	0.02
25.16	0.00	2.99	0.100	0.02
25.33	0.00	2.99	0.099	0.02
25.50	0.00	2.99	0.099	0.02
25.66	0.00	2.98	0.099	0.02
25.83	0.00	2.98	0.098	0.02
26.00	0.00	2.97	0.098	0.02
26.16	0.00	2.97	0.098	0.02
26.33	0.00	2.97	0.098	0.02
26.50	0.00	2.96	0.097	0.02
26.66	0.00	2.96	0.097	0.02
26.83	0.00	2.96	0.097	0.02
27.00	0.00	2.95	0.097	0.02
27.16	0.00	2.95	0.096	0.02
27.33	0.00	2.95	0.096	0.02
27.50	0.00	2.94	0.096	0.02
27.66	0.00	2.94	0.095	0.02
27.83	0.00	2.93	0.095	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
28.00	0.00	2.93	0.095	0.02
28.16	0.00	2.93	0.095	0.02
28.33	0.00	2.92	0.094	0.02
28.50	0.00	2.92	0.094	0.02
28.66	0.00	2.92	0.094	0.02
28.83	0.00	2.91	0.094	0.02
29.00	0.00	2.91	0.093	0.02
29.16	0.00	2.91	0.093	0.02
29.33	0.00	2.90	0.093	0.02
29.50	0.00	2.90	0.093	0.02
29.66	0.00	2.89	0.092	0.02
29.83	0.00	2.89	0.092	0.02
30.00	0.00	2.89	0.092	0.02
30.16	0.00	2.88	0.092	0.02
30.33	0.00	2.88	0.091	0.02
30.50	0.00	2.88	0.091	0.02
30.66	0.00	2.87	0.091	0.02
30.83	0.00	2.87	0.090	0.02
31.00	0.00	2.87	0.090	0.02
31.16	0.00	2.86	0.090	0.02
31.33	0.00	2.86	0.090	0.02
31.50	0.00	2.86	0.089	0.02
31.66	0.00	2.85	0.089	0.02

31.83	0.00	2.85	0.089	0.02
32.00	0.00	2.84	0.089	0.02
32.16	0.00	2.84	0.088	0.02
32.33	0.00	2.84	0.088	0.02
32.50	0.00	2.83	0.088	0.02
32.66	0.00	2.83	0.088	0.02
32.83	0.00	2.83	0.087	0.02
33.00	0.00	2.82	0.087	0.02
33.16	0.00	2.82	0.087	0.02
33.33	0.00	2.82	0.087	0.02
33.50	0.00	2.81	0.086	0.02
33.66	0.00	2.81	0.086	0.02
33.83	0.00	2.81	0.086	0.02
34.00	0.00	2.80	0.086	0.02
34.16	0.00	2.80	0.085	0.02
34.33	0.00	2.80	0.085	0.02
34.50	0.00	2.79	0.085	0.02
34.66	0.00	2.79	0.085	0.02
34.83	0.00	2.79	0.084	0.02
35.00	0.00	2.78	0.084	0.02
35.16	0.00	2.78	0.084	0.02
35.33	0.00	2.78	0.084	0.02
35.50	0.00	2.77	0.083	0.02
35.66	0.00	2.77	0.083	0.02
35.83	0.00	2.77	0.083	0.02
36.00	0.00	2.76	0.083	0.02
36.16	0.00	2.76	0.082	0.02
36.33	0.00	2.76	0.082	0.02
36.50	0.00	2.75	0.082	0.02
36.66	0.00	2.75	0.082	0.02
36.83	0.00	2.75	0.082	0.02
37.00	0.00	2.74	0.081	0.02
37.16	0.00	2.74	0.081	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
37.33	0.00	2.74	0.081	0.02
37.50	0.00	2.73	0.081	0.02
37.66	0.00	2.73	0.080	0.02
37.83	0.00	2.73	0.080	0.02
38.00	0.00	2.72	0.080	0.02
38.16	0.00	2.72	0.080	0.02
38.33	0.00	2.72	0.079	0.02
38.50	0.00	2.71	0.079	0.02
38.66	0.00	2.71	0.079	0.02
38.83	0.00	2.71	0.079	0.02
39.00	0.00	2.70	0.078	0.02
39.16	0.00	2.70	0.078	0.02
39.33	0.00	2.70	0.078	0.02

39.50	0.00	2.69	0.078	0.02
39.66	0.00	2.69	0.077	0.02
39.83	0.00	2.69	0.077	0.02
40.00	0.00	2.69	0.077	0.02
40.16	0.00	2.68	0.077	0.02
40.33	0.00	2.68	0.077	0.02
40.50	0.00	2.68	0.076	0.02
40.66	0.00	2.67	0.076	0.02
40.83	0.00	2.67	0.076	0.02
41.00	0.00	2.67	0.076	0.02
41.16	0.00	2.66	0.075	0.02
41.33	0.00	2.66	0.075	0.02
41.50	0.00	2.66	0.075	0.02
41.66	0.00	2.65	0.075	0.02
41.83	0.00	2.65	0.074	0.02
42.00	0.00	2.65	0.074	0.02
42.16	0.00	2.64	0.074	0.02
42.33	0.00	2.64	0.074	0.02
42.50	0.00	2.64	0.074	0.02
42.66	0.00	2.64	0.073	0.02
42.83	0.00	2.63	0.073	0.02
43.00	0.00	2.63	0.073	0.02
43.16	0.00	2.63	0.073	0.02
43.33	0.00	2.62	0.072	0.02
43.50	0.00	2.62	0.072	0.02
43.66	0.00	2.62	0.072	0.02
43.83	0.00	2.61	0.072	0.02
44.00	0.00	2.61	0.072	0.02
44.16	0.00	2.61	0.071	0.02
44.33	0.00	2.60	0.071	0.02
44.50	0.00	2.60	0.071	0.02
44.66	0.00	2.60	0.071	0.02
44.83	0.00	2.60	0.070	0.02
45.00	0.00	2.59	0.070	0.02
45.16	0.00	2.59	0.070	0.02
45.33	0.00	2.59	0.070	0.02
45.50	0.00	2.58	0.070	0.02
45.66	0.00	2.58	0.069	0.02
45.83	0.00	2.58	0.069	0.02
46.00	0.00	2.57	0.069	0.02
46.16	0.00	2.57	0.069	0.02
46.33	0.00	2.57	0.069	0.02
46.50	0.00	2.57	0.068	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
46.66	0.00	2.56	0.068	0.02
46.83	0.00	2.56	0.068	0.02
47.00	0.00	2.56	0.068	0.02

47.16	0.00	2.55	0.067	0.02
47.33	0.00	2.55	0.067	0.02
47.50	0.00	2.55	0.067	0.02
47.66	0.00	2.55	0.067	0.02
47.83	0.00	2.54	0.067	0.02
48.00	0.00	2.54	0.066	0.02
48.16	0.00	2.54	0.066	0.02
48.33	0.00	2.53	0.066	0.02
48.50	0.00	2.53	0.066	0.02
48.66	0.00	2.53	0.066	0.02
48.83	0.00	2.52	0.065	0.02
49.00	0.00	2.52	0.065	0.02
49.16	0.00	2.52	0.065	0.02
49.33	0.00	2.52	0.065	0.02
49.50	0.00	2.51	0.064	0.02
49.66	0.00	2.51	0.064	0.02
49.83	0.00	2.51	0.064	0.02
50.00	0.00	2.50	0.064	0.02
50.16	0.00	2.50	0.064	0.02
50.33	0.00	2.50	0.063	0.01
50.49	0.00	2.50	0.063	0.01
50.66	0.00	2.49	0.063	0.01
50.83	0.00	2.49	0.063	0.01
50.99	0.00	2.49	0.063	0.01
51.16	0.00	2.49	0.062	0.01
51.33	0.00	2.48	0.062	0.01
51.49	0.00	2.48	0.062	0.01
51.66	0.00	2.48	0.062	0.01
51.83	0.00	2.47	0.062	0.01
51.99	0.00	2.47	0.061	0.01
52.16	0.00	2.47	0.061	0.01
52.33	0.00	2.47	0.061	0.01
52.49	0.00	2.46	0.061	0.01
52.66	0.00	2.46	0.061	0.01
52.83	0.00	2.46	0.060	0.01
52.99	0.00	2.45	0.060	0.01
53.16	0.00	2.45	0.060	0.01
53.33	0.00	2.45	0.060	0.01
53.49	0.00	2.45	0.060	0.01
53.66	0.00	2.44	0.059	0.01
53.83	0.00	2.44	0.059	0.01
53.99	0.00	2.44	0.059	0.01
54.16	0.00	2.44	0.059	0.01
54.33	0.00	2.43	0.059	0.01
54.49	0.00	2.43	0.058	0.01
54.66	0.00	2.43	0.058	0.01
54.83	0.00	2.42	0.058	0.01
54.99	0.00	2.42	0.058	0.01
55.16	0.00	2.42	0.058	0.01
55.33	0.00	2.42	0.057	0.01

55.49	0.00	2.41	0.057	0.01
55.66	0.00	2.41	0.057	0.01
55.83	0.00	2.41	0.057	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
55.99	0.00	2.41	0.057	0.01
56.16	0.00	2.40	0.056	0.01
56.33	0.00	2.40	0.056	0.01
56.49	0.00	2.40	0.056	0.01
56.66	0.00	2.40	0.056	0.01
56.83	0.00	2.39	0.056	0.01
56.99	0.00	2.39	0.055	0.01
57.16	0.00	2.39	0.055	0.01
57.33	0.00	2.38	0.055	0.01
57.49	0.00	2.38	0.055	0.01
57.66	0.00	2.38	0.055	0.01
57.83	0.00	2.38	0.055	0.01
57.99	0.00	2.37	0.054	0.01
58.16	0.00	2.37	0.054	0.01
58.33	0.00	2.37	0.054	0.01
58.49	0.00	2.37	0.054	0.01
58.66	0.00	2.36	0.054	0.01
58.83	0.00	2.36	0.053	0.01
58.99	0.00	2.36	0.053	0.01
59.16	0.00	2.36	0.053	0.01
59.33	0.00	2.35	0.053	0.01
59.49	0.00	2.35	0.053	0.01
59.66	0.00	2.35	0.052	0.01
59.83	0.00	2.35	0.052	0.01
59.99	0.00	2.34	0.052	0.01
60.16	0.00	2.34	0.052	0.01
60.33	0.00	2.34	0.052	0.01
60.49	0.00	2.34	0.052	0.01
60.66	0.00	2.33	0.051	0.01
60.83	0.00	2.33	0.051	0.01
60.99	0.00	2.33	0.051	0.01
61.16	0.00	2.33	0.051	0.01
61.33	0.00	2.32	0.051	0.01
61.49	0.00	2.32	0.050	0.01
61.66	0.00	2.32	0.050	0.01
61.83	0.00	2.32	0.050	0.01
61.99	0.00	2.31	0.050	0.01
62.16	0.00	2.31	0.050	0.01
62.33	0.00	2.31	0.050	0.01
62.49	0.00	2.31	0.049	0.01
62.66	0.00	2.30	0.049	0.01
62.83	0.00	2.30	0.049	0.01
62.99	0.00	2.30	0.049	0.01

63.16	0.00	2.30	0.049	0.01
63.33	0.00	2.29	0.048	0.01
63.49	0.00	2.29	0.048	0.01
63.66	0.00	2.29	0.048	0.01
63.83	0.00	2.29	0.048	0.01
63.99	0.00	2.28	0.048	0.01
64.16	0.00	2.28	0.048	0.01
64.33	0.00	2.28	0.047	0.01
64.49	0.00	2.28	0.047	0.01
64.66	0.00	2.27	0.047	0.01
64.83	0.00	2.27	0.047	0.01
64.99	0.00	2.27	0.047	0.01
65.16	0.00	2.27	0.047	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
65.33	0.00	2.27	0.046	0.01
65.49	0.00	2.26	0.046	0.01
65.66	0.00	2.26	0.046	0.01
65.83	0.00	2.26	0.046	0.01
65.99	0.00	2.26	0.046	0.01
66.16	0.00	2.25	0.045	0.01
66.33	0.00	2.25	0.045	0.01
66.49	0.00	2.25	0.045	0.01
66.66	0.00	2.25	0.045	0.01
66.83	0.00	2.24	0.045	0.01
66.99	0.00	2.24	0.045	0.01
67.16	0.00	2.24	0.044	0.01
67.33	0.00	2.24	0.044	0.01
67.49	0.00	2.23	0.044	0.01
67.66	0.00	2.23	0.044	0.01
67.83	0.00	2.23	0.044	0.01
67.99	0.00	2.23	0.044	0.01
68.16	0.00	2.23	0.043	0.01
68.33	0.00	2.22	0.043	0.01
68.49	0.00	2.22	0.043	0.01
68.66	0.00	2.22	0.043	0.01
68.83	0.00	2.22	0.043	0.01
68.99	0.00	2.21	0.043	0.01
69.16	0.00	2.21	0.042	0.01
69.33	0.00	2.21	0.042	0.01
69.49	0.00	2.21	0.042	0.01
69.66	0.00	2.20	0.042	0.01
69.83	0.00	2.20	0.042	0.01
69.99	0.00	2.20	0.042	0.01
70.16	0.00	2.20	0.041	0.01
70.33	0.00	2.20	0.041	0.01
70.49	0.00	2.19	0.041	0.01
70.66	0.00	2.19	0.041	0.01

70.83	0.00	2.19	0.041	0.01
70.99	0.00	2.19	0.041	0.01
71.16	0.00	2.18	0.040	0.01
71.33	0.00	2.18	0.040	0.01
71.49	0.00	2.18	0.040	0.01
71.66	0.00	2.18	0.040	0.01
71.83	0.00	2.18	0.040	0.01
71.99	0.00	2.17	0.040	0.01
72.16	0.00	2.17	0.039	0.01
72.33	0.00	2.17	0.039	0.01
72.49	0.00	2.17	0.039	0.01
72.66	0.00	2.16	0.039	0.01
72.83	0.00	2.16	0.039	0.01
72.99	0.00	2.16	0.039	0.01
73.16	0.00	2.16	0.039	0.01
73.33	0.00	2.16	0.038	0.01
73.49	0.00	2.15	0.038	0.01
73.66	0.00	2.15	0.038	0.01
73.83	0.00	2.15	0.038	0.01
73.99	0.00	2.15	0.038	0.01
74.16	0.00	2.14	0.038	0.01
74.33	0.00	2.14	0.037	0.01
74.49	0.00	2.14	0.037	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
74.66	0.00	2.14	0.037	0.01
74.83	0.00	2.14	0.037	0.01
74.99	0.00	2.13	0.037	0.01
75.16	0.00	2.13	0.037	0.01
75.33	0.00	2.13	0.036	0.01
75.49	0.00	2.13	0.036	0.01
75.66	0.00	2.13	0.036	0.01
75.83	0.00	2.12	0.036	0.01
75.99	0.00	2.12	0.036	0.01
76.16	0.00	2.12	0.036	0.01
76.33	0.00	2.12	0.036	0.01
76.49	0.00	2.11	0.035	0.01
76.66	0.00	2.11	0.035	0.01
76.83	0.00	2.11	0.035	0.01
76.99	0.00	2.11	0.035	0.01
77.16	0.00	2.11	0.035	0.01
77.33	0.00	2.10	0.035	0.01
77.49	0.00	2.10	0.034	0.01
77.66	0.00	2.10	0.034	0.01
77.83	0.00	2.10	0.034	0.01
77.99	0.00	2.10	0.034	0.01
78.16	0.00	2.09	0.034	0.01
78.33	0.00	2.09	0.034	0.01

78.49	0.00	2.09	0.034	0.01
78.66	0.00	2.09	0.033	0.01
78.83	0.00	2.09	0.033	0.01
78.99	0.00	2.08	0.033	0.01
79.16	0.00	2.08	0.033	0.01
79.33	0.00	2.08	0.033	0.01
79.49	0.00	2.08	0.033	0.01
79.66	0.00	2.08	0.033	0.01
79.83	0.00	2.07	0.032	0.01
79.99	0.00	2.07	0.032	0.01
80.16	0.00	2.07	0.032	0.01
80.33	0.00	2.07	0.032	0.01
80.49	0.00	2.07	0.032	0.01
80.66	0.00	2.06	0.032	0.01
80.83	0.00	2.06	0.031	0.01
80.99	0.00	2.06	0.031	0.01
81.16	0.00	2.06	0.031	0.01
81.33	0.00	2.06	0.031	0.01
81.49	0.00	2.05	0.031	0.01
81.66	0.00	2.05	0.031	0.01
81.83	0.00	2.05	0.031	0.01
81.99	0.00	2.05	0.030	0.01
82.16	0.00	2.05	0.030	0.01
82.33	0.00	2.04	0.030	0.01
82.49	0.00	2.04	0.030	0.01
82.66	0.00	2.04	0.030	0.01
82.83	0.00	2.04	0.030	0.01
82.99	0.00	2.04	0.030	0.01
83.16	0.00	2.03	0.029	0.01
83.33	0.00	2.03	0.029	0.01
83.49	0.00	2.03	0.029	0.01
83.66	0.00	2.03	0.029	0.01
83.82	0.00	2.03	0.029	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
83.99	0.00	2.02	0.029	0.01
84.16	0.00	2.02	0.029	0.01
84.32	0.00	2.02	0.028	0.01
84.49	0.00	2.02	0.028	0.01
84.66	0.00	2.02	0.028	0.01
84.82	0.00	2.01	0.028	0.01
84.99	0.00	2.01	0.028	0.01
85.16	0.00	2.01	0.028	0.01
85.32	0.00	2.01	0.028	0.01
85.49	0.00	2.01	0.027	0.01
85.66	0.00	2.00	0.027	0.01
85.82	0.00	2.00	0.027	0.01
85.99	0.00	2.00	0.027	0.01

86.16	0.00	2.00	0.027	0.01
86.32	0.00	1.99	0.027	0.01
86.49	0.00	1.99	0.027	0.01
86.66	0.00	1.98	0.027	0.01
86.82	0.00	1.98	0.026	0.01
86.99	0.00	1.97	0.026	0.01
87.16	0.00	1.97	0.026	0.01
87.32	0.00	1.96	0.026	0.01
87.49	0.00	1.96	0.026	0.01
87.66	0.00	1.95	0.026	0.01
87.82	0.00	1.95	0.026	0.01
87.99	0.00	1.94	0.025	0.01
88.16	0.00	1.94	0.025	0.01
88.32	0.00	1.93	0.025	0.01
88.49	0.00	1.93	0.025	0.01
88.66	0.00	1.92	0.025	0.01
88.82	0.00	1.92	0.025	0.01
88.99	0.00	1.92	0.025	0.01
89.16	0.00	1.91	0.025	0.01
89.32	0.00	1.91	0.024	0.01
89.49	0.00	1.90	0.024	0.01
89.66	0.00	1.90	0.024	0.01
89.82	0.00	1.89	0.024	0.01
89.99	0.00	1.89	0.024	0.01
90.16	0.00	1.88	0.024	0.01
90.32	0.00	1.88	0.024	0.01
90.49	0.00	1.87	0.024	0.01
90.66	0.00	1.87	0.023	0.01
90.82	0.00	1.87	0.023	0.01
90.99	0.00	1.86	0.023	0.01
91.16	0.00	1.86	0.023	0.01
91.32	0.00	1.85	0.023	0.01
91.49	0.00	1.85	0.023	0.01
91.66	0.00	1.84	0.023	0.01
91.82	0.00	1.84	0.023	0.01
91.99	0.00	1.83	0.023	0.01
92.16	0.00	1.83	0.022	0.01
92.32	0.00	1.83	0.022	0.01
92.49	0.00	1.82	0.022	0.01
92.66	0.00	1.82	0.022	0.01
92.82	0.00	1.81	0.022	0.01
92.99	0.00	1.81	0.022	0.01
93.16	0.00	1.81	0.022	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
93.32	0.00	1.80	0.022	0.01
93.49	0.00	1.80	0.022	0.01
93.66	0.00	1.79	0.021	0.01

93.82	0.00	1.79	0.021	0.01
93.99	0.00	1.79	0.021	0.01
94.16	0.00	1.78	0.021	0.01
94.32	0.00	1.78	0.021	0.01
94.49	0.00	1.77	0.021	0.01
94.66	0.00	1.77	0.021	0.01
94.82	0.00	1.77	0.021	0.01
94.99	0.00	1.76	0.021	0.01
95.16	0.00	1.76	0.020	0.01
95.32	0.00	1.75	0.020	0.01
95.49	0.00	1.75	0.020	0.01
95.66	0.00	1.75	0.020	0.01
95.82	0.00	1.74	0.020	0.01
95.99	0.00	1.74	0.020	0.01
96.16	0.00	1.73	0.020	0.01
96.32	0.00	1.73	0.020	0.01
96.49	0.00	1.73	0.020	0.01
96.66	0.00	1.72	0.020	0.01
96.82	0.00	1.72	0.019	0.01
96.99	0.00	1.72	0.019	0.01
97.16	0.00	1.71	0.019	0.01
97.32	0.00	1.71	0.019	0.01
97.49	0.00	1.71	0.019	0.01
97.66	0.00	1.70	0.019	0.01
97.82	0.00	1.70	0.019	0.01
97.99	0.00	1.69	0.019	0.01
98.16	0.00	1.69	0.019	0.01
98.32	0.00	1.69	0.019	0.01
98.49	0.00	1.68	0.018	0.01
98.66	0.00	1.68	0.018	0.01
98.82	0.00	1.68	0.018	0.01
98.99	0.00	1.67	0.018	0.01
99.16	0.00	1.67	0.018	0.01
99.32	0.00	1.67	0.018	0.01
99.49	0.00	1.66	0.018	0.01
99.66	0.00	1.66	0.018	0.01
99.82	0.00	1.66	0.018	0.01
99.99	0.00	1.65	0.018	0.01
100.16	0.00	1.65	0.018	0.01
100.32	0.00	1.65	0.017	0.01
100.49	0.00	1.64	0.017	0.01
100.66	0.00	1.64	0.017	0.01
100.82	0.00	1.64	0.017	0.01
100.99	0.00	1.63	0.017	0.01
101.16	0.00	1.63	0.017	0.01
101.32	0.00	1.63	0.017	0.01
101.49	0.00	1.62	0.017	0.01
101.66	0.00	1.62	0.017	0.01
101.82	0.00	1.62	0.017	0.01
101.99	0.00	1.61	0.017	0.01

102.16	0.00	1.61	0.017	0.01
102.32	0.00	1.61	0.016	0.01
102.49	0.00	1.61	0.016	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
102.66	0.00	1.60	0.016	0.01
102.82	0.00	1.60	0.016	0.01
102.99	0.00	1.60	0.016	0.01
103.16	0.00	1.59	0.016	0.01
103.32	0.00	1.59	0.016	0.01
103.49	0.00	1.59	0.016	0.01
103.66	0.00	1.58	0.016	0.01
103.82	0.00	1.58	0.016	0.01
103.99	0.00	1.58	0.016	0.01
104.16	0.00	1.58	0.016	0.01
104.32	0.00	1.57	0.015	0.01
104.49	0.00	1.57	0.015	0.01
104.66	0.00	1.57	0.015	0.01
104.82	0.00	1.56	0.015	0.01
104.99	0.00	1.56	0.015	0.01
105.16	0.00	1.56	0.015	0.01
105.32	0.00	1.56	0.015	0.01
105.49	0.00	1.55	0.015	0.01
105.66	0.00	1.55	0.015	0.01
105.82	0.00	1.55	0.015	0.01
105.99	0.00	1.54	0.015	0.01
106.16	0.00	1.54	0.015	0.01
106.32	0.00	1.54	0.015	0.01
106.49	0.00	1.54	0.014	0.01
106.66	0.00	1.53	0.014	0.01
106.82	0.00	1.53	0.014	0.01
106.99	0.00	1.53	0.014	0.01
107.16	0.00	1.52	0.014	0.01
107.32	0.00	1.52	0.014	0.01
107.49	0.00	1.52	0.014	0.01
107.66	0.00	1.52	0.014	0.01
107.82	0.00	1.51	0.014	0.01
107.99	0.00	1.51	0.014	0.01
108.16	0.00	1.51	0.014	0.01
108.32	0.00	1.51	0.014	0.01
108.49	0.00	1.50	0.014	0.01
108.66	0.00	1.50	0.014	0.01
108.82	0.00	1.50	0.013	0.00

PEAK DISCHARGE = 2.971 CFS - PEAK OCCURS AT HOUR 2.10
MAXIMUM WATER SURFACE ELEVATION = 4.717
MAXIMUM STORAGE = 0.4091 AC-FT INCREMENTAL TIME= 0.033330HRS

PRINT HYD ID=6 CODE=5

HYDROGRAPH FROM AREA SOUTH.POND1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	26.664	0.0	53.328	0.0	79.992	0.0
106.656	0.0						
0.167	0.0	26.831	0.0	53.495	0.0	80.158	0.0
106.822	0.0						
0.333	0.0	26.997	0.0	53.661	0.0	80.325	0.0
106.989	0.0						
0.500	0.0	27.164	0.0	53.828	0.0	80.492	0.0
107.156	0.0						
0.667	0.0	27.331	0.0	53.995	0.0	80.658	0.0
107.322	0.0						
0.833	0.0	27.497	0.0	54.161	0.0	80.825	0.0
107.489	0.0						
1.000	0.0	27.664	0.0	54.328	0.0	80.992	0.0
107.655	0.0						
1.167	0.0	27.831	0.0	54.494	0.0	81.158	0.0
107.822	0.0						
1.333	0.0	27.997	0.0	54.661	0.0	81.325	0.0
107.989	0.0						
1.500	1.5	28.164	0.0	54.828	0.0	81.492	0.0
108.155	0.0						
1.667	2.6	28.331	0.0	54.994	0.0	81.658	0.0
108.322	0.0						
1.833	2.9	28.497	0.0	55.161	0.0	81.825	0.0
108.489	0.0						
2.000	3.0	28.664	0.0	55.328	0.0	81.992	0.0
108.655	0.0						
2.166	3.0	28.830	0.0	55.494	0.0	82.158	0.0
108.822	0.0						
2.333	2.9	28.997	0.0	55.661	0.0	82.325	0.0
108.989	0.0						
2.500	2.7	29.164	0.0	55.828	0.0	82.491	0.0
109.155	0.0						
2.666	2.6	29.330	0.0	55.994	0.0	82.658	0.0
109.322	0.0						
2.833	2.5	29.497	0.0	56.161	0.0	82.825	0.0
109.489	0.0						
3.000	2.4	29.664	0.0	56.328	0.0	82.991	0.0
109.655	0.0						
3.166	2.2	29.830	0.0	56.494	0.0	83.158	0.0
109.822	0.0						
3.333	1.8	29.997	0.0	56.661	0.0	83.325	0.0
109.989	0.0						

	3.500	1.5	30.164	0.0	56.828	0.0	83.491
0.0	110.155	0.0					
	3.666	1.2	30.330	0.0	56.994	0.0	83.658
0.0	110.322	0.0					
	3.833	1.0	30.497	0.0	57.161	0.0	83.825
0.0	110.488	0.0					
	4.000	0.8	30.664	0.0	57.327	0.0	83.991
0.0	110.655	0.0					
	4.166	0.7	30.830	0.0	57.494	0.0	84.158
0.0	110.822	0.0					
	4.333	0.6	30.997	0.0	57.661	0.0	84.325
0.0	110.988	0.0					
	4.500	0.5	31.164	0.0	57.827	0.0	84.491
0.0	111.155	0.0					
	4.666	0.4	31.330	0.0	57.994	0.0	84.658
0.0	111.322	0.0					
	4.833	0.4	31.497	0.0	58.161	0.0	84.825
0.0	111.488	0.0					
	4.999	0.3	31.664	0.0	58.327	0.0	84.991
0.0	111.655	0.0					
	5.166	0.3	31.830	0.0	58.494	0.0	85.158
0.0	111.822	0.0					
	5.333	0.3	31.997	0.0	58.661	0.0	85.325
0.0	111.988	0.0					
	5.499	0.3	32.164	0.0	58.827	0.0	85.491
0.0	112.155	0.0					
	5.666	0.2	32.330	0.0	58.994	0.0	85.658
0.0	112.322	0.0					
	5.833	0.2	32.497	0.0	59.161	0.0	85.824
0.0	112.488	0.0					
	5.999	0.2	32.663	0.0	59.327	0.0	85.991
0.0	112.655	0.0					
	6.166	0.2	32.830	0.0	59.494	0.0	86.158
0.0	112.822	0.0					
	6.333	0.2	32.997	0.0	59.661	0.0	86.324
0.0	112.988	0.0					
	6.499	0.2	33.163	0.0	59.827	0.0	86.491
0.0	113.155	0.0					
	6.666	0.2	33.330	0.0	59.994	0.0	86.658
0.0	113.322	0.0					
	6.833	0.1	33.497	0.0	60.161	0.0	86.824
0.0	113.488	0.0					
	6.999	0.1	33.663	0.0	60.327	0.0	86.991
0.0	113.655	0.0					
	7.166	0.1	33.830	0.0	60.494	0.0	87.158
0.0	113.821	0.0					
	7.333	0.1	33.997	0.0	60.660	0.0	87.324
0.0	113.988	0.0					
	7.499	0.1	34.163	0.0	60.827	0.0	87.491
0.0	114.155	0.0					

	7.666	0.1	34.330	0.0	60.994	0.0	87.658	0.0	114.321	0.0
	7.833	0.1	34.497	0.0	61.160	0.0	87.824	0.0	114.488	0.0
	7.999	0.1	34.663	0.0	61.327	0.0	87.991	0.0	114.655	0.0
	8.166	0.1	34.830	0.0	61.494	0.0	88.158	0.0	114.821	0.0
	8.332	0.1	34.997	0.0	61.660	0.0	88.324	0.0	114.988	0.0
	8.499	0.1	35.163	0.0	61.827	0.0	88.491	0.0	115.155	0.0
	8.666	0.1	35.330	0.0	61.994	0.0	88.657	0.0	115.321	0.0
	8.832	0.1	35.496	0.0	62.160	0.0	88.824	0.0	115.488	0.0
	8.999	0.1	35.663	0.0	62.327	0.0	88.991	0.0	115.655	0.0
	9.166	0.1	35.830	0.0	62.494	0.0	89.157	0.0	115.821	0.0
	9.332	0.1	35.996	0.0	62.660	0.0	89.324	0.0	115.988	0.0
	9.499	0.1	36.163	0.0	62.827	0.0	89.491	0.0	116.155	0.0
	9.666	0.1	36.330	0.0	62.994	0.0	89.657	0.0	116.321	0.0
	9.832	0.1	36.496	0.0	63.160	0.0	89.824	0.0	116.488	0.0
	9.999	0.1	36.663	0.0	63.327	0.0	89.991	0.0	116.654	0.0
	10.166	0.1	36.830	0.0	63.493	0.0	90.157	0.0	116.821	0.0
	10.332	0.1	36.996	0.0	63.660	0.0	90.324	0.0	116.988	0.0
	10.499	0.1	37.163	0.0	63.827	0.0	90.491	0.0	117.154	0.0
	10.666	0.1	37.330	0.0	63.993	0.0	90.657	0.0	117.321	0.0
	10.832	0.1	37.496	0.0	64.160	0.0	90.824	0.0	117.488	0.0
	10.999	0.1	37.663	0.0	64.327	0.0	90.991	0.0	117.654	0.0
	11.166	0.1	37.830	0.0	64.493	0.0	91.157	0.0	117.821	0.0
	11.332	0.1	37.996	0.0	64.660	0.0	91.324	0.0	117.988	0.0
	11.499	0.1	38.163	0.0	64.827	0.0	91.491	0.0	118.154	0.0
	11.665	0.1	38.330	0.0	64.993	0.0	91.657	0.0	118.321	0.0

	11.832	0.1	38.496	0.0	65.160	0.0	91.824	0.0	118.488	0.0
	11.999	0.1	38.663	0.0	65.327	0.0	91.990	0.0	118.654	0.0
	12.165	0.1	38.829	0.0	65.493	0.0	92.157	0.0	118.821	0.0
	12.332	0.1	38.996	0.0	65.660	0.0	92.324	0.0	118.988	0.0
	12.499	0.1	39.163	0.0	65.827	0.0	92.490	0.0	119.154	0.0
	12.665	0.1	39.329	0.0	65.993	0.0	92.657	0.0	119.321	0.0
	12.832	0.1	39.496	0.0	66.160	0.0	92.824	0.0	119.488	0.0
	12.999	0.1	39.663	0.0	66.327	0.0	92.990	0.0	119.654	0.0
	13.165	0.1	39.829	0.0	66.493	0.0	93.157	0.0	119.821	0.0
	13.332	0.1	39.996	0.0	66.660	0.0	93.324	0.0	119.987	0.0
	13.499	0.1	40.163	0.0	66.826	0.0	93.490	0.0	120.154	0.0
	13.665	0.1	40.329	0.0	66.993	0.0	93.657	0.0	120.321	0.0
	13.832	0.1	40.496	0.0	67.160	0.0	93.824	0.0	120.487	0.0
	13.999	0.1	40.663	0.0	67.326	0.0	93.990	0.0	120.654	0.0
	14.165	0.1	40.829	0.0	67.493	0.0	94.157	0.0	120.821	0.0
	14.332	0.1	40.996	0.0	67.660	0.0	94.324	0.0	120.987	0.0
	14.499	0.1	41.163	0.0	67.826	0.0	94.490	0.0	121.154	0.0
	14.665	0.1	41.329	0.0	67.993	0.0	94.657	0.0	121.321	0.0
	14.832	0.1	41.496	0.0	68.160	0.0	94.823	0.0	121.487	0.0
	14.998	0.1	41.662	0.0	68.326	0.0	94.990	0.0	121.654	0.0
	15.165	0.1	41.829	0.0	68.493	0.0	95.157	0.0	121.821	0.0
	15.332	0.1	41.996	0.0	68.660	0.0	95.323	0.0	121.987	0.0
	15.498	0.1	42.162	0.0	68.826	0.0	95.490	0.0	122.154	0.0
	15.665	0.1	42.329	0.0	68.993	0.0	95.657	0.0	122.321	0.0
	15.832	0.1	42.496	0.0	69.160	0.0	95.823	0.0	122.487	0.0

	15.998	0.1	42.662	0.0	69.326	0.0	95.990	0.0	122.654	0.0
	16.165	0.1	42.829	0.0	69.493	0.0	96.157	0.0	122.820	0.0
	16.332	0.1	42.996	0.0	69.660	0.0	96.323	0.0	122.987	0.0
	16.498	0.1	43.162	0.0	69.826	0.0	96.490	0.0	123.154	0.0
	16.665	0.1	43.329	0.0	69.993	0.0	96.657	0.0	123.320	0.0
	16.832	0.1	43.496	0.0	70.159	0.0	96.823	0.0	123.487	0.0
	16.998	0.1	43.662	0.0	70.326	0.0	96.990	0.0	123.654	0.0
	17.165	0.1	43.829	0.0	70.493	0.0	97.157	0.0	123.820	0.0
	17.332	0.1	43.996	0.0	70.659	0.0	97.323	0.0	123.987	0.0
	17.498	0.1	44.162	0.0	70.826	0.0	97.490	0.0	124.154	0.0
	17.665	0.1	44.329	0.0	70.993	0.0	97.657	0.0	124.320	0.0
	17.832	0.1	44.496	0.0	71.159	0.0	97.823	0.0	124.487	0.0
	17.998	0.1	44.662	0.0	71.326	0.0	97.990	0.0	124.654	0.0
	18.165	0.1	44.829	0.0	71.493	0.0	98.156	0.0	124.820	0.0
	18.331	0.1	44.995	0.0	71.659	0.0	98.323	0.0	124.987	0.0
	18.498	0.1	45.162	0.0	71.826	0.0	98.490	0.0	125.154	0.0
	18.665	0.1	45.329	0.0	71.993	0.0	98.656	0.0	125.320	0.0
	18.831	0.1	45.495	0.0	72.159	0.0	98.823	0.0	125.487	0.0
	18.998	0.1	45.662	0.0	72.326	0.0	98.990	0.0	125.654	0.0
	19.165	0.1	45.829	0.0	72.493	0.0	99.156	0.0	125.820	0.0
	19.331	0.1	45.995	0.0	72.659	0.0	99.323	0.0	125.987	0.0
	19.498	0.1	46.162	0.0	72.826	0.0	99.490	0.0	126.153	0.0
	19.665	0.1	46.329	0.0	72.992	0.0	99.656	0.0	126.320	0.0
	19.831	0.1	46.495	0.0	73.159	0.0	99.823	0.0	126.487	0.0
	19.998	0.1	46.662	0.0	73.326	0.0	99.990	0.0	126.653	0.0

20.165	0.1	46.829	0.0	73.492	0.0	100.156	0.0
126.820	0.0						
20.331	0.1	46.995	0.0	73.659	0.0	100.323	0.0
126.987	0.0						
20.498	0.1	47.162	0.0	73.826	0.0	100.490	0.0
127.153	0.0						
20.665	0.1	47.329	0.0	73.992	0.0	100.656	0.0
127.320	0.0						
20.831	0.1	47.495	0.0	74.159	0.0	100.823	0.0
127.487	0.0						
20.998	0.1	47.662	0.0	74.326	0.0	100.989	0.0
127.653	0.0						
21.165	0.1	47.829	0.0	74.492	0.0	101.156	0.0
127.820	0.0						
21.331	0.1	47.995	0.0	74.659	0.0	101.323	0.0
127.987	0.0						
21.498	0.1	48.162	0.0	74.826	0.0	101.489	0.0
128.153	0.0						
21.665	0.1	48.328	0.0	74.992	0.0	101.656	0.0
128.320	0.0						
21.831	0.1	48.495	0.0	75.159	0.0	101.823	0.0
128.487	0.0						
21.998	0.1	48.662	0.0	75.326	0.0	101.989	0.0
128.653	0.0						
22.164	0.1	48.828	0.0	75.492	0.0	102.156	0.0
128.820	0.0						
22.331	0.1	48.995	0.0	75.659	0.0	102.323	0.0
128.987	0.0						
22.498	0.1	49.162	0.0	75.826	0.0	102.489	0.0
129.153	0.0						
22.664	0.1	49.328	0.0	75.992	0.0	102.656	0.0
129.320	0.0						
22.831	0.1	49.495	0.0	76.159	0.0	102.823	0.0
129.487	0.0						
22.998	0.1	49.662	0.0	76.325	0.0	102.989	0.0
129.653	0.0						
23.164	0.0	49.828	0.0	76.492	0.0	103.156	0.0
129.820	0.0						
23.331	0.0	49.995	0.0	76.659	0.0	103.323	0.0
129.986	0.0						
23.498	0.0	50.162	0.0	76.825	0.0	103.489	0.0
130.153	0.0						
23.664	0.0	50.328	0.0	76.992	0.0	103.656	0.0
130.320	0.0						
23.831	0.0	50.495	0.0	77.159	0.0	103.823	0.0
130.486	0.0						
23.998	0.0	50.662	0.0	77.325	0.0	103.989	0.0
130.653	0.0						
24.164	0.0	50.828	0.0	77.492	0.0	104.156	0.0
130.820	0.0						

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        24.331       0.0         50.995       0.0         77.659       0.0
104.322       0.0        130.986       0.0
        24.498       0.0         51.161       0.0         77.825       0.0
104.489       0.0        131.153       0.0
        24.664       0.0         51.328       0.0         77.992       0.0
104.656       0.0        131.320       0.0
        24.831       0.0         51.495       0.0         78.159       0.0
104.822       0.0        131.486       0.0
        24.998       0.0         51.661       0.0         78.325       0.0
104.989       0.0        131.653       0.0
        25.164       0.0         51.828       0.0         78.492       0.0
105.156       0.0        131.820       0.0
        25.331       0.0         51.995       0.0         78.659       0.0
105.322       0.0        131.986       0.0
        25.497       0.0         52.161       0.0         78.825       0.0
105.489       0.0        132.153       0.0
        25.664       0.0         52.328       0.0         78.992       0.0
105.656       0.0        132.320       0.0
        25.831       0.0         52.495       0.0         79.158       0.0
105.822       0.0        132.486       0.0
        25.997       0.0         52.661       0.0         79.325       0.0
105.989       0.0        132.653       0.0
        26.164       0.0         52.828       0.0         79.492       0.0
106.156       0.0        132.820       0.0
        26.331       0.0         52.995       0.0         79.658       0.0
106.322       0.0        132.986       0.0
        26.497       0.0         53.161       0.0         79.825       0.0
106.489       0.0        133.153       0.0

        RUNOFF VOLUME =     2.08572 INCHES     =       0.7453 ACRE-FEET
        PEAK DISCHARGE RATE =       2.97 CFS  AT   2.100 HOURS   BASIN AREA =
0.0067 SQ. MI.



    ************************************************************
    *S  COMPUTE HYD BASIN P12
    COMPUTE NM HYD        ID=7  HYDNO=107  AREA=0.0120 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   42.629    CFS   UNIT VOLUME =   0.9991       B =   526.28
 P60 = 1.6900
         AREA =     0.010800 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330
```

K = 0.103860HR TP = 0.133330HR K/TP RATIO = 0.778968 SHAPE CONSTANT, N = 4.614198
UNIT PEAK = 3.5482 CFS UNIT VOLUME = 0.9969 B = 394.23 P60 = 1.6900
AREA = 0.001200 SQ MI IA = 0.35000 INCHES INF = 0.83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

PRINT HYD ID=7 CODE=5

PARTIAL HYDROGRAPH 107.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.3	9.999	0.2	14.998	0.1
19.998	0.1						
0.167	0.0	5.166	0.3	10.166	0.2	15.165	0.1
20.165	0.1						
0.333	0.0	5.333	0.3	10.332	0.1	15.332	0.1
20.331	0.1						
0.500	0.0	5.499	0.3	10.499	0.1	15.498	0.1
20.498	0.1						
0.667	0.0	5.666	0.3	10.666	0.1	15.665	0.1
20.665	0.1						
0.833	0.5	5.833	0.3	10.832	0.1	15.832	0.1
20.831	0.1						
1.000	1.2	5.999	0.3	10.999	0.1	15.998	0.1
20.998	0.1						
1.167	1.1	6.166	0.2	11.166	0.1	16.165	0.1
21.165	0.1						
1.333	8.9	6.333	0.2	11.332	0.1	16.332	0.1
21.331	0.1						
1.500	29.4	6.499	0.2	11.499	0.1	16.498	0.1
21.498	0.1						
1.667	14.8	6.666	0.2	11.665	0.1	16.665	0.1
21.665	0.1						
1.833	9.6	6.833	0.2	11.832	0.1	16.832	0.1
21.831	0.1						
2.000	7.0	6.999	0.2	11.999	0.1	16.998	0.1
21.998	0.1						
2.166	3.2	7.166	0.2	12.165	0.1	17.165	0.1
22.164	0.1						
2.333	1.6	7.333	0.2	12.332	0.1	17.332	0.1
22.331	0.1						
2.500	1.0	7.499	0.2	12.499	0.1	17.498	0.1
22.498	0.1						

```
         2.666       0.7          7.666       0.2         12.665       0.1
17.665       0.1         22.664       0.1
         2.833       0.6          7.833       0.2         12.832       0.1
17.832       0.1         22.831       0.1
         3.000       0.5          7.999       0.2         12.999       0.1
17.998       0.1         22.998       0.1
         3.166       0.4          8.166       0.2         13.165       0.1
18.165       0.1         23.164       0.1
         3.333       0.3          8.332       0.2         13.332       0.1
18.331       0.1         23.331       0.1
         3.500       0.3          8.499       0.2         13.499       0.1
18.498       0.1         23.498       0.1
         3.666       0.3          8.666       0.2         13.665       0.1
18.665       0.1         23.664       0.1
         3.833       0.3          8.832       0.2         13.832       0.1
18.831       0.1         23.831       0.1
         4.000       0.3          8.999       0.2         13.999       0.1
18.998       0.1         23.998       0.1
         4.166       0.3          9.166       0.2         14.165       0.1
19.165       0.1         24.164       0.0
         4.333       0.3          9.332       0.2         14.332       0.1
19.331       0.1         24.331       0.0
         4.500       0.3          9.499       0.2         14.499       0.1
19.498       0.1         24.498       0.0
         4.666       0.3          9.666       0.2         14.665       0.1
19.665       0.1         24.664       0.0
         4.833       0.3          9.832       0.2         14.832       0.1
19.831       0.1

        RUNOFF VOLUME =     2.10358 INCHES     =       1.3463 ACRE-FEET
        PEAK DISCHARGE RATE =      29.42 CFS  AT   1.500 HOURS   BASIN AREA =
0.0120 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD OFF1
    COMPUTE NM HYD        ID=20  HYDNO=120  AREA=0.0027 SQ MI
                          PER A=0 PER B=0 PER C=0 PER D=100
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   10.657    CFS   UNIT VOLUME =   0.9982       B =   526.28
 P60 = 1.6900
         AREA =     0.002700 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330
```

PRINT HYD ID=20 CODE=5

PARTIAL HYDROGRAPH 120.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.1	9.999	0.0	14.998	0.0
19.998	0.0						
0.167	0.0	5.166	0.1	10.166	0.0	15.165	0.0
20.165	0.0						
0.333	0.0	5.333	0.1	10.332	0.0	15.332	0.0
20.331	0.0						
0.500	0.0	5.499	0.1	10.499	0.0	15.498	0.0
20.498	0.0						
0.667	0.0	5.666	0.1	10.666	0.0	15.665	0.0
20.665	0.0						
0.833	0.1	5.833	0.1	10.832	0.0	15.832	0.0
20.831	0.0						
1.000	0.3	5.999	0.1	10.999	0.0	15.998	0.0
20.998	0.0						
1.167	0.3	6.166	0.1	11.166	0.0	16.165	0.0
21.165	0.0						
1.333	2.2	6.333	0.1	11.332	0.0	16.332	0.0
21.331	0.0						
1.500	6.8	6.499	0.0	11.499	0.0	16.498	0.0
21.498	0.0						
1.667	3.4	6.666	0.0	11.665	0.0	16.665	0.0
21.665	0.0						
1.833	2.3	6.833	0.0	11.832	0.0	16.832	0.0
21.831	0.0						
2.000	1.7	6.999	0.0	11.999	0.0	16.998	0.0
21.998	0.0						
2.166	0.8	7.166	0.0	12.165	0.0	17.165	0.0
22.164	0.0						
2.333	0.4	7.333	0.0	12.332	0.0	17.332	0.0
22.331	0.0						
2.500	0.3	7.499	0.0	12.499	0.0	17.498	0.0
22.498	0.0						
2.666	0.2	7.666	0.0	12.665	0.0	17.665	0.0
22.664	0.0						
2.833	0.1	7.833	0.0	12.832	0.0	17.832	0.0
22.831	0.0						
3.000	0.1	7.999	0.0	12.999	0.0	17.998	0.0
22.998	0.0						
3.166	0.1	8.166	0.0	13.165	0.0	18.165	0.0
23.164	0.0						
3.333	0.1	8.332	0.0	13.332	0.0	18.331	0.0
23.331	0.0						

```
         3.500       0.1          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.1          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.1          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.1          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.1          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.1          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.1          9.499       0.0         14.499       0.0
19.498       0.0         24.498       0.0
         4.666       0.1          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.1          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.23824 INCHES     =       0.3223 ACRE-FEET
        PEAK DISCHARGE RATE =       6.85 CFS  AT   1.500 HOURS   BASIN AREA =
0.0027 SQ. MI.



    ************************************************************
    *S  COMPUTE HYD OFF2
    COMPUTE NM HYD        ID=21  HYDNO=121  AREA=0.0015 SQ MI
                          PER A=0 PER B=0 PER C=0 PER D=100
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   5.9207    CFS   UNIT VOLUME =   0.9976       B =   526.28
 P60 = 1.6900
         AREA =     0.001500 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=21   CODE=5

                                         PARTIAL HYDROGRAPH   121.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
```

0.167	0.0	5.166	0.0	10.166	0.0	15.165	0.0
20.165	0.0						
0.333	0.0	5.333	0.0	10.332	0.0	15.332	0.0
20.331	0.0						
0.500	0.0	5.499	0.0	10.499	0.0	15.498	0.0
20.498	0.0						
0.667	0.0	5.666	0.0	10.666	0.0	15.665	0.0
20.665	0.0						
0.833	0.1	5.833	0.0	10.832	0.0	15.832	0.0
20.831	0.0						
1.000	0.2	5.999	0.0	10.999	0.0	15.998	0.0
20.998	0.0						
1.167	0.1	6.166	0.0	11.166	0.0	16.165	0.0
21.165	0.0						
1.333	1.2	6.333	0.0	11.332	0.0	16.332	0.0
21.331	0.0						
1.500	3.8	6.499	0.0	11.499	0.0	16.498	0.0
21.498	0.0						
1.667	1.9	6.666	0.0	11.665	0.0	16.665	0.0
21.665	0.0						
1.833	1.3	6.833	0.0	11.832	0.0	16.832	0.0
21.831	0.0						
2.000	0.9	6.999	0.0	11.999	0.0	16.998	0.0
21.998	0.0						
2.166	0.4	7.166	0.0	12.165	0.0	17.165	0.0
22.164	0.0						
2.333	0.2	7.333	0.0	12.332	0.0	17.332	0.0
22.331	0.0						
2.500	0.1	7.499	0.0	12.499	0.0	17.498	0.0
22.498	0.0						
2.666	0.1	7.666	0.0	12.665	0.0	17.665	0.0
22.664	0.0						
2.833	0.1	7.833	0.0	12.832	0.0	17.832	0.0
22.831	0.0						
3.000	0.1	7.999	0.0	12.999	0.0	17.998	0.0
22.998	0.0						
3.166	0.1	8.166	0.0	13.165	0.0	18.165	0.0
23.164	0.0						
3.333	0.0	8.332	0.0	13.332	0.0	18.331	0.0
23.331	0.0						
3.500	0.0	8.499	0.0	13.499	0.0	18.498	0.0
23.498	0.0						
3.666	0.0	8.666	0.0	13.665	0.0	18.665	0.0
23.664	0.0						
3.833	0.0	8.832	0.0	13.832	0.0	18.831	0.0
23.831	0.0						
4.000	0.0	8.999	0.0	13.999	0.0	18.998	0.0
23.998	0.0						
4.166	0.0	9.166	0.0	14.165	0.0	19.165	0.0
24.164	0.0						

```
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.23824 INCHES     =       0.1791 ACRE-FEET
        PEAK DISCHARGE RATE =       3.81 CFS  AT   1.500 HOURS   BASIN AREA =
0.0015 SQ. MI.



    ************************************************************
    *S  COMPUTE HYD OFF3
    COMPUTE NM HYD        ID=22  HYDNO=122  AREA=0.0015 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   5.3287    CFS   UNIT VOLUME =   0.9973       B =   526.28
 P60 = 1.6900
         AREA =     0.001350 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.44352    CFS   UNIT VOLUME =   0.9712       B =   394.23
 P60 = 1.6900
         AREA =     0.000150 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=22   CODE=5

                                          PARTIAL HYDROGRAPH   122.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
```

	0.167	0.0		5.166	0.0		10.166	0.0	
15.165	0.0		20.165	0.0					
	0.333	0.0		5.333	0.0		10.332	0.0	
15.332	0.0		20.331	0.0					
	0.500	0.0		5.499	0.0		10.499	0.0	
15.498	0.0		20.498	0.0					
	0.667	0.0		5.666	0.0		10.666	0.0	
15.665	0.0		20.665	0.0					
	0.833	0.1		5.833	0.0		10.832	0.0	
15.832	0.0		20.831	0.0					
	1.000	0.1		5.999	0.0		10.999	0.0	
15.998	0.0		20.998	0.0					
	1.167	0.1		6.166	0.0		11.166	0.0	
16.165	0.0		21.165	0.0					
	1.333	1.1		6.333	0.0		11.332	0.0	
16.332	0.0		21.331	0.0					
	1.500	3.7		6.499	0.0		11.499	0.0	
16.498	0.0		21.498	0.0					
	1.667	1.9		6.666	0.0		11.665	0.0	
16.665	0.0		21.665	0.0					
	1.833	1.2		6.833	0.0		11.832	0.0	
16.832	0.0		21.831	0.0					
	2.000	0.9		6.999	0.0		11.999	0.0	
16.998	0.0		21.998	0.0					
	2.166	0.4		7.166	0.0		12.165	0.0	
17.165	0.0		22.164	0.0					
	2.333	0.2		7.333	0.0		12.332	0.0	
17.332	0.0		22.331	0.0					
	2.500	0.1		7.499	0.0		12.499	0.0	
17.498	0.0		22.498	0.0					
	2.666	0.1		7.666	0.0		12.665	0.0	
17.665	0.0		22.664	0.0					
	2.833	0.1		7.833	0.0		12.832	0.0	
17.832	0.0		22.831	0.0					
	3.000	0.1		7.999	0.0		12.999	0.0	
17.998	0.0		22.998	0.0					
	3.166	0.0		8.166	0.0		13.165	0.0	
18.165	0.0		23.164	0.0					
	3.333	0.0		8.332	0.0		13.332	0.0	
18.331	0.0		23.331	0.0					
	3.500	0.0		8.499	0.0		13.499	0.0	
18.498	0.0		23.498	0.0					
	3.666	0.0		8.666	0.0		13.665	0.0	
18.665	0.0		23.664	0.0					
	3.833	0.0		8.832	0.0		13.832	0.0	
18.831	0.0		23.831	0.0					
	4.000	0.0		8.999	0.0		13.999	0.0	
18.998	0.0		23.998	0.0					
	4.166	0.0		9.166	0.0		14.165	0.0	
19.165	0.0		24.164	0.0					

```
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.1683 ACRE-FEET
        PEAK DISCHARGE RATE =       3.69 CFS  AT   1.500 HOURS   BASIN AREA =
0.0015 SQ. MI.



    ************************************************************
    *S  COMPUTE HYD OFF4
    COMPUTE NM HYD        ID=23  HYDNO=123  AREA=0.0013 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1

         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   4.6182    CFS   UNIT VOLUME =   0.9969       B =   526.28
 P60 = 1.6900
         AREA =     0.001170 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.38439    CFS   UNIT VOLUME =   0.9679       B =   394.23
 P60 = 1.6900
         AREA =     0.000130 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=23   CODE=5

                                         PARTIAL HYDROGRAPH   123.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
```

0.167	0.0	5.166	0.0	10.166	0.0	15.165	0.0
20.165	0.0						
0.333	0.0	5.333	0.0	10.332	0.0	15.332	0.0
20.331	0.0						
0.500	0.0	5.499	0.0	10.499	0.0	15.498	0.0
20.498	0.0						
0.667	0.0	5.666	0.0	10.666	0.0	15.665	0.0
20.665	0.0						
0.833	0.1	5.833	0.0	10.832	0.0	15.832	0.0
20.831	0.0						
1.000	0.1	5.999	0.0	10.999	0.0	15.998	0.0
20.998	0.0						
1.167	0.1	6.166	0.0	11.166	0.0	16.165	0.0
21.165	0.0						
1.333	1.0	6.333	0.0	11.332	0.0	16.332	0.0
21.331	0.0						
1.500	3.2	6.499	0.0	11.499	0.0	16.498	0.0
21.498	0.0						
1.667	1.6	6.666	0.0	11.665	0.0	16.665	0.0
21.665	0.0						
1.833	1.0	6.833	0.0	11.832	0.0	16.832	0.0
21.831	0.0						
2.000	0.8	6.999	0.0	11.999	0.0	16.998	0.0
21.998	0.0						
2.166	0.3	7.166	0.0	12.165	0.0	17.165	0.0
22.164	0.0						
2.333	0.2	7.333	0.0	12.332	0.0	17.332	0.0
22.331	0.0						
2.500	0.1	7.499	0.0	12.499	0.0	17.498	0.0
22.498	0.0						
2.666	0.1	7.666	0.0	12.665	0.0	17.665	0.0
22.664	0.0						
2.833	0.1	7.833	0.0	12.832	0.0	17.832	0.0
22.831	0.0						
3.000	0.0	7.999	0.0	12.999	0.0	17.998	0.0
22.998	0.0						
3.166	0.0	8.166	0.0	13.165	0.0	18.165	0.0
23.164	0.0						
3.333	0.0	8.332	0.0	13.332	0.0	18.331	0.0
23.331	0.0						
3.500	0.0	8.499	0.0	13.499	0.0	18.498	0.0
23.498	0.0						
3.666	0.0	8.666	0.0	13.665	0.0	18.665	0.0
23.664	0.0						
3.833	0.0	8.832	0.0	13.832	0.0	18.831	0.0
23.831	0.0						
4.000	0.0	8.999	0.0	13.999	0.0	18.998	0.0
23.998	0.0						
4.166	0.0	9.166	0.0	14.165	0.0	19.165	0.0
24.164	0.0						

```
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.1458 ACRE-FEET
        PEAK DISCHARGE RATE =       3.20 CFS  AT   1.500 HOURS   BASIN AREA =
0.0013 SQ. MI.


    ************************************************************
    ADD HYD                            ID=24 HYD=124 ID I=7 ID II=20

    PRINT HYD             ID=24   CODE=5

                                         PARTIAL HYDROGRAPH   124.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.4          9.999       0.2
14.998       0.1         19.998       0.1
         0.167       0.0          5.166       0.4         10.166       0.2
15.165       0.1         20.165       0.1
         0.333       0.0          5.333       0.4         10.332       0.2
15.332       0.1         20.331       0.1
         0.500       0.0          5.499       0.4         10.499       0.2
15.498       0.1         20.498       0.1
         0.667       0.0          5.666       0.4         10.666       0.2
15.665       0.1         20.665       0.1
         0.833       0.6          5.833       0.4         10.832       0.2
15.832       0.1         20.831       0.1
         1.000       1.4          5.999       0.4         10.999       0.2
15.998       0.1         20.998       0.1
         1.167       1.3          6.166       0.3         11.166       0.2
16.165       0.1         21.165       0.1
         1.333      11.1          6.333       0.3         11.332       0.2
16.332       0.1         21.331       0.1
         1.500      36.3          6.499       0.2         11.499       0.2
16.498       0.1         21.498       0.1
         1.667      18.2          6.666       0.2         11.665       0.2
16.665       0.1         21.665       0.1
         1.833      11.9          6.833       0.2         11.832       0.2
16.832       0.1         21.831       0.1
```

```
         2.000       8.7          6.999       0.2         11.999       0.2
16.998       0.1         21.998       0.1
         2.166       4.0          7.166       0.2         12.165       0.2
17.165       0.1         22.164       0.1
         2.333       2.0          7.333       0.2         12.332       0.2
17.332       0.1         22.331       0.1
         2.500       1.3          7.499       0.2         12.499       0.2
17.498       0.1         22.498       0.1
         2.666       0.9          7.666       0.2         12.665       0.2
17.665       0.1         22.664       0.1
         2.833       0.7          7.833       0.2         12.832       0.2
17.832       0.1         22.831       0.1
         3.000       0.6          7.999       0.2         12.999       0.2
17.998       0.1         22.998       0.1
         3.166       0.5          8.166       0.2         13.165       0.2
18.165       0.1         23.164       0.1
         3.333       0.4          8.332       0.2         13.332       0.2
18.331       0.1         23.331       0.1
         3.500       0.4          8.499       0.2         13.499       0.2
18.498       0.1         23.498       0.1
         3.666       0.4          8.666       0.2         13.665       0.2
18.665       0.1         23.664       0.1
         3.833       0.4          8.832       0.2         13.832       0.2
18.831       0.1         23.831       0.1
         4.000       0.4          8.999       0.2         13.999       0.2
18.998       0.1         23.998       0.1
         4.166       0.4          9.166       0.2         14.165       0.2
19.165       0.1         24.164       0.0
         4.333       0.3          9.332       0.2         14.332       0.2
19.331       0.1         24.331       0.0
         4.500       0.3          9.499       0.2         14.499       0.1
19.498       0.1         24.498       0.0
         4.666       0.3          9.666       0.2         14.665       0.1
19.665       0.1         24.664       0.0
         4.833       0.3          9.832       0.2         14.832       0.1
19.831       0.1

        RUNOFF VOLUME =     2.12827 INCHES     =       1.6686 ACRE-FEET
        PEAK DISCHARGE RATE =      36.27 CFS  AT   1.500 HOURS   BASIN AREA =
0.0147 SQ. MI.


    ************************************************************
    ADD HYD                           ID=25 HYD=124 ID I=24 ID II=21

    PRINT HYD             ID=25   CODE=5

                                          PARTIAL HYDROGRAPH   124.00
```

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.4	9.999	0.2	14.998	0.2
0.167	0.0	5.166	0.4	10.166	0.2	15.165	0.2
0.333	0.0	5.333	0.4	10.332	0.2	15.332	0.2
0.500	0.0	5.499	0.4	10.499	0.2	15.498	0.2
0.667	0.0	5.666	0.4	10.666	0.2	15.665	0.2
0.833	0.6	5.833	0.4	10.832	0.2	15.832	0.2
1.000	1.6	5.999	0.4	10.999	0.2	15.998	0.2
1.167	1.5	6.166	0.3	11.166	0.2	16.165	0.2
1.333	12.3	6.333	0.3	11.332	0.2	16.332	0.2
1.500	40.1	6.499	0.3	11.499	0.2	16.498	0.2
1.667	20.2	6.666	0.3	11.665	0.2	16.665	0.2
1.833	13.2	6.833	0.3	11.832	0.2	16.832	0.2
2.000	9.6	6.999	0.3	11.999	0.2	16.998	0.1
2.166	4.5	7.166	0.3	12.165	0.2	17.165	0.1
2.333	2.2	7.333	0.2	12.332	0.2	17.332	0.2
2.500	1.4	7.499	0.2	12.499	0.2	17.498	0.1
2.666	1.0	7.666	0.2	12.665	0.2	17.665	0.1
2.833	0.8	7.833	0.2	12.832	0.2	17.832	0.2
3.000	0.6	7.999	0.2	12.999	0.2	17.998	0.1
3.166	0.5	8.166	0.2	13.165	0.2	18.165	0.1
3.333	0.5	8.332	0.2	13.332	0.2	18.331	0.1
3.500	0.4	8.499	0.2	13.499	0.2	18.498	0.1
3.666	0.4	8.666	0.2	13.665	0.2	18.665	0.1

```
         3.833       0.4          8.832       0.2         13.832       0.2
18.831       0.1         23.831       0.1
         4.000       0.4          8.999       0.2         13.999       0.2
18.998       0.1         23.998       0.1
         4.166       0.4          9.166       0.2         14.165       0.2
19.165       0.1         24.164       0.0
         4.333       0.4          9.332       0.2         14.332       0.2
19.331       0.1         24.331       0.0
         4.500       0.4          9.499       0.2         14.499       0.2
19.498       0.1         24.498       0.0
         4.666       0.4          9.666       0.2         14.665       0.2
19.665       0.1         24.664       0.0
         4.833       0.4          9.832       0.2         14.832       0.2
19.831       0.1

        RUNOFF VOLUME =     2.13843 INCHES     =       1.8476 ACRE-FEET
        PEAK DISCHARGE RATE =      40.08 CFS  AT   1.500 HOURS   BASIN AREA =
0.0162 SQ. MI.


    ************************************************************
    ADD HYD                            ID=26 HYD=124 ID I=25 ID II=22

    PRINT HYD             ID=26   CODE=5

                                         PARTIAL HYDROGRAPH   124.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
         HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.4          9.999       0.2
14.998       0.2         19.998       0.1
         0.167       0.0          5.166       0.4         10.166       0.2
15.165       0.2         20.165       0.1
         0.333       0.0          5.333       0.4         10.332       0.2
15.332       0.2         20.331       0.1
         0.500       0.0          5.499       0.5         10.499       0.2
15.498       0.2         20.498       0.1
         0.667       0.0          5.666       0.5         10.666       0.2
15.665       0.2         20.665       0.1
         0.833       0.7          5.833       0.5         10.832       0.2
15.832       0.2         20.831       0.1
         1.000       1.7          5.999       0.5         10.999       0.2
15.998       0.2         20.998       0.1
         1.167       1.6          6.166       0.4         11.166       0.2
16.165       0.2         21.165       0.1
         1.333      13.4          6.333       0.3         11.332       0.2
16.332       0.2         21.331       0.1
```

```
         1.500      43.8          6.499       0.3         11.499       0.2
16.498       0.2         21.498       0.1
         1.667      22.0          6.666       0.3         11.665       0.2
16.665       0.2         21.665       0.1
         1.833      14.4          6.833       0.3         11.832       0.2
16.832       0.2         21.831       0.1
         2.000      10.5          6.999       0.3         11.999       0.2
16.998       0.2         21.998       0.1
         2.166       4.9          7.166       0.3         12.165       0.2
17.165       0.2         22.164       0.1
         2.333       2.4          7.333       0.3         12.332       0.2
17.332       0.2         22.331       0.1
         2.500       1.6          7.499       0.3         12.499       0.2
17.498       0.2         22.498       0.1
         2.666       1.1          7.666       0.3         12.665       0.2
17.665       0.2         22.664       0.1
         2.833       0.8          7.833       0.3         12.832       0.2
17.832       0.2         22.831       0.1
         3.000       0.7          7.999       0.3         12.999       0.2
17.998       0.2         22.998       0.1
         3.166       0.6          8.166       0.3         13.165       0.2
18.165       0.2         23.164       0.1
         3.333       0.5          8.332       0.3         13.332       0.2
18.331       0.2         23.331       0.1
         3.500       0.5          8.499       0.2         13.499       0.2
18.498       0.2         23.498       0.1
         3.666       0.5          8.666       0.2         13.665       0.2
18.665       0.2         23.664       0.1
         3.833       0.4          8.832       0.2         13.832       0.2
18.831       0.2         23.831       0.1
         4.000       0.4          8.999       0.2         13.999       0.2
18.998       0.2         23.998       0.1
         4.166       0.4          9.166       0.2         14.165       0.2
19.165       0.2         24.164       0.1
         4.333       0.4          9.332       0.2         14.332       0.2
19.331       0.2         24.331       0.0
         4.500       0.4          9.499       0.2         14.499       0.2
19.498       0.1         24.498       0.0
         4.666       0.4          9.666       0.2         14.665       0.2
19.665       0.1         24.664       0.0
         4.833       0.4          9.832       0.2         14.832       0.2
19.831       0.1

        RUNOFF VOLUME =     2.13547 INCHES     =       2.0159 ACRE-FEET
        PEAK DISCHARGE RATE =      43.77 CFS  AT   1.500 HOURS   BASIN AREA =
0.0177 SQ. MI.


    ************************************************************
```

ADD HYD ID=27 HYD=124 ID I=26 ID II=23

PRINT HYD ID=27 CODE=5

PARTIAL HYDROGRAPH 124.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.5	9.999	0.2	14.998	0.2
19.998	0.2						
0.167	0.0	5.166	0.5	10.166	0.2	15.165	0.2
20.165	0.2						
0.333	0.0	5.333	0.5	10.332	0.2	15.332	0.2
20.331	0.2						
0.500	0.0	5.499	0.5	10.499	0.2	15.498	0.2
20.498	0.2						
0.667	0.0	5.666	0.5	10.666	0.2	15.665	0.2
20.665	0.2						
0.833	0.7	5.833	0.5	10.832	0.2	15.832	0.2
20.831	0.2						
1.000	1.9	5.999	0.5	10.999	0.2	15.998	0.2
20.998	0.2						
1.167	1.7	6.166	0.4	11.166	0.2	16.165	0.2
21.165	0.2						
1.333	14.4	6.333	0.3	11.332	0.2	16.332	0.2
21.331	0.1						
1.500	47.0	6.499	0.3	11.499	0.2	16.498	0.2
21.498	0.1						
1.667	23.6	6.666	0.3	11.665	0.2	16.665	0.2
21.665	0.1						
1.833	15.4	6.833	0.3	11.832	0.2	16.832	0.2
21.831	0.1						
2.000	11.2	6.999	0.3	11.999	0.2	16.998	0.2
21.998	0.1						
2.166	5.2	7.166	0.3	12.165	0.2	17.165	0.2
22.164	0.1						
2.333	2.5	7.333	0.3	12.332	0.2	17.332	0.2
22.331	0.1						
2.500	1.7	7.499	0.3	12.499	0.2	17.498	0.2
22.498	0.1						
2.666	1.2	7.666	0.3	12.665	0.2	17.665	0.2
22.664	0.1						
2.833	0.9	7.833	0.3	12.832	0.2	17.832	0.2
22.831	0.1						
3.000	0.7	7.999	0.3	12.999	0.2	17.998	0.2
22.998	0.1						
3.166	0.6	8.166	0.3	13.165	0.2	18.165	0.2
23.164	0.1						

```
        3.333       0.6          8.332       0.3         13.332       0.2
18.331       0.2         23.331       0.1
        3.500       0.5          8.499       0.3         13.499       0.2
18.498       0.2         23.498       0.1
        3.666       0.5          8.666       0.3         13.665       0.2
18.665       0.2         23.664       0.1
        3.833       0.5          8.832       0.3         13.832       0.2
18.831       0.2         23.831       0.1
        4.000       0.5          8.999       0.3         13.999       0.2
18.998       0.2         23.998       0.1
        4.166       0.5          9.166       0.3         14.165       0.2
19.165       0.2         24.164       0.1
        4.333       0.5          9.332       0.3         14.332       0.2
19.331       0.2         24.331       0.0
        4.500       0.4          9.499       0.3         14.499       0.2
19.498       0.2         24.498       0.0
        4.666       0.5          9.666       0.3         14.665       0.2
19.665       0.2         24.664       0.0
        4.833       0.5          9.832       0.2         14.832       0.2
19.831       0.2

        RUNOFF VOLUME =     2.13327 INCHES     =       2.1617 ACRE-FEET
        PEAK DISCHARGE RATE =      46.97 CFS  AT   1.500 HOURS   BASIN AREA =
0.0190 SQ. MI.


    ************************************************************
    *North Pond
    *************************************************************
    ROUTE RESERVOIR       ID=8 HYD=NORTH.POND INFLOW ID=27 CODE=5
                          OUTFLOW CFS   STORAGE ACFT    ELEV FT

                                0.0             0.000           1.0

                                        0.01            0.346           2.0

                                        0.02            1.103           3.0

                                        10.7            2.338           4.0


      *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

        TIME      INFLOW    ELEV      VOLUME    OUTFLOW
        (HRS)     (CFS)     (FEET)    (AC-FT)   (CFS)

         0.00       0.00      1.00      0.000      0.00
         0.17       0.00      1.00      0.000      0.00
         0.33       0.00      1.00      0.000      0.00
```

0.50	0.00	1.00	0.000	0.00
0.67	0.00	1.00	0.000	0.00
0.83	0.75	1.01	0.002	0.00
1.00	1.87	1.06	0.022	0.00
1.17	1.72	1.14	0.048	0.00
1.33	14.41	1.38	0.131	0.00
1.50	46.97	2.28	0.561	0.01
1.67	23.63	2.93	1.052	0.02
1.83	15.44	3.16	1.299	1.72
2.00	11.24	3.28	1.448	3.00
2.17	5.21	3.34	1.520	3.63
2.33	2.55	3.34	1.519	3.62
2.50	1.66	3.32	1.498	3.44
2.67	1.17	3.30	1.472	3.21
2.83	0.89	3.28	1.443	2.96
3.00	0.73	3.25	1.415	2.72
3.17	0.61	3.23	1.389	2.49
3.33	0.56	3.21	1.364	2.28
3.50	0.52	3.19	1.341	2.08
3.67	0.49	3.18	1.321	1.90
3.83	0.48	3.16	1.302	1.74
4.00	0.46	3.15	1.286	1.60
4.17	0.46	3.14	1.271	1.47
4.33	0.45	3.13	1.258	1.36
4.50	0.45	3.12	1.246	1.26
4.67	0.45	3.11	1.236	1.17
4.83	0.45	3.10	1.226	1.09
5.00	0.46	3.09	1.218	1.02
5.17	0.47	3.09	1.211	0.95
5.33	0.47	3.08	1.205	0.90
5.50	0.48	3.08	1.199	0.85
5.67	0.49	3.07	1.194	0.81
5.83	0.51	3.07	1.190	0.78
6.00	0.52	3.07	1.187	0.75
6.17	0.40	3.07	1.183	0.72
6.33	0.33	3.06	1.179	0.68
6.50	0.32	3.06	1.174	0.64
6.67	0.31	3.05	1.170	0.60
6.83	0.30	3.05	1.166	0.57
7.00	0.30	3.05	1.163	0.54
7.17	0.29	3.05	1.160	0.51
7.33	0.29	3.04	1.157	0.48
7.50	0.29	3.04	1.154	0.46
7.67	0.28	3.04	1.152	0.44
7.83	0.28	3.04	1.150	0.42
8.00	0.28	3.04	1.148	0.41
8.17	0.27	3.03	1.146	0.39
8.33	0.27	3.03	1.145	0.38
8.50	0.27	3.03	1.143	0.37
8.67	0.26	3.03	1.142	0.36

8.83	0.26	3.03	1.141	0.35
9.00	0.26	3.03	1.140	0.34
9.17	0.26	3.03	1.139	0.33

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.33	0.25	3.03	1.138	0.32
9.50	0.25	3.03	1.137	0.31
9.67	0.25	3.03	1.136	0.31
9.83	0.25	3.03	1.135	0.30
10.00	0.25	3.03	1.135	0.29
10.17	0.25	3.03	1.134	0.29
10.33	0.24	3.02	1.133	0.28
10.50	0.24	3.02	1.133	0.28
10.67	0.24	3.02	1.132	0.27
10.83	0.23	3.02	1.132	0.27
11.00	0.23	3.02	1.131	0.26
11.17	0.23	3.02	1.131	0.26
11.33	0.23	3.02	1.130	0.26
11.50	0.23	3.02	1.130	0.25
11.67	0.22	3.02	1.130	0.25
11.83	0.22	3.02	1.129	0.25
12.00	0.22	3.02	1.129	0.24
12.17	0.22	3.02	1.129	0.24
12.33	0.22	3.02	1.128	0.24
12.50	0.22	3.02	1.128	0.24
12.67	0.21	3.02	1.128	0.23
12.83	0.21	3.02	1.127	0.23
13.00	0.21	3.02	1.127	0.23
13.17	0.21	3.02	1.127	0.23
13.33	0.21	3.02	1.127	0.22
13.50	0.20	3.02	1.126	0.22
13.67	0.20	3.02	1.126	0.22
13.83	0.20	3.02	1.126	0.22
14.00	0.20	3.02	1.126	0.22
14.17	0.20	3.02	1.125	0.21
14.33	0.20	3.02	1.125	0.21
14.50	0.19	3.02	1.125	0.21
14.67	0.19	3.02	1.125	0.21
14.83	0.19	3.02	1.125	0.21
15.00	0.19	3.02	1.124	0.21
15.17	0.19	3.02	1.124	0.20
15.33	0.19	3.02	1.124	0.20
15.50	0.19	3.02	1.124	0.20
15.67	0.19	3.02	1.124	0.20
15.83	0.19	3.02	1.123	0.20
16.00	0.18	3.02	1.123	0.20
16.17	0.18	3.02	1.123	0.19
16.33	0.18	3.02	1.123	0.19

16.50	0.18	3.02	1.123	0.19
16.67	0.18	3.02	1.123	0.19
16.83	0.18	3.02	1.122	0.19
17.00	0.17	3.02	1.122	0.19
17.16	0.17	3.02	1.122	0.19
17.33	0.18	3.02	1.122	0.18
17.50	0.17	3.02	1.122	0.18
17.66	0.17	3.02	1.122	0.18
17.83	0.18	3.02	1.122	0.18
18.00	0.16	3.01	1.121	0.18
18.16	0.17	3.01	1.121	0.18
18.33	0.17	3.01	1.121	0.18
18.50	0.16	3.01	1.121	0.18

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
18.66	0.17	3.01	1.121	0.17
18.83	0.16	3.01	1.121	0.17
19.00	0.16	3.01	1.121	0.17
19.16	0.16	3.01	1.121	0.17
19.33	0.16	3.01	1.120	0.17
19.50	0.16	3.01	1.120	0.17
19.66	0.16	3.01	1.120	0.17
19.83	0.16	3.01	1.120	0.17
20.00	0.16	3.01	1.120	0.17
20.16	0.15	3.01	1.120	0.17
20.33	0.15	3.01	1.120	0.16
20.50	0.15	3.01	1.120	0.16
20.66	0.15	3.01	1.119	0.16
20.83	0.15	3.01	1.119	0.16
21.00	0.15	3.01	1.119	0.16
21.16	0.15	3.01	1.119	0.16
21.33	0.15	3.01	1.119	0.16
21.50	0.15	3.01	1.119	0.16
21.66	0.15	3.01	1.119	0.16
21.83	0.15	3.01	1.119	0.16
22.00	0.15	3.01	1.119	0.15
22.16	0.14	3.01	1.118	0.15
22.33	0.15	3.01	1.118	0.15
22.50	0.15	3.01	1.118	0.15
22.66	0.14	3.01	1.118	0.15
22.83	0.14	3.01	1.118	0.15
23.00	0.14	3.01	1.118	0.15
23.16	0.14	3.01	1.118	0.15
23.33	0.14	3.01	1.118	0.15
23.50	0.14	3.01	1.118	0.15
23.66	0.14	3.01	1.118	0.15
23.83	0.14	3.01	1.118	0.15
24.00	0.14	3.01	1.117	0.14

24.16	0.05	3.01	1.117	0.14
24.33	0.02	3.01	1.116	0.13
24.50	0.01	3.01	1.114	0.11
24.66	0.00	3.01	1.113	0.10
24.83	0.00	3.01	1.111	0.09
25.00	0.00	3.01	1.110	0.08
25.16	0.00	3.00	1.109	0.07
25.33	0.00	3.00	1.108	0.06
25.50	0.00	3.00	1.107	0.06
25.66	0.00	3.00	1.106	0.05
25.83	0.00	3.00	1.106	0.04
26.00	0.00	3.00	1.105	0.04
26.16	0.00	3.00	1.105	0.04
26.33	0.00	3.00	1.104	0.03
26.50	0.00	3.00	1.104	0.03
26.66	0.00	3.00	1.104	0.02
26.83	0.00	3.00	1.103	0.02
27.00	0.00	3.00	1.103	0.02
27.16	0.00	3.00	1.103	0.02
27.33	0.00	3.00	1.102	0.02
27.50	0.00	3.00	1.102	0.02
27.66	0.00	3.00	1.102	0.02
27.83	0.00	3.00	1.102	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
28.00	0.00	3.00	1.101	0.02
28.16	0.00	3.00	1.101	0.02
28.33	0.00	3.00	1.101	0.02
28.50	0.00	3.00	1.100	0.02
28.66	0.00	3.00	1.100	0.02
28.83	0.00	3.00	1.100	0.02
29.00	0.00	3.00	1.100	0.02
29.16	0.00	3.00	1.099	0.02
29.33	0.00	2.99	1.099	0.02
29.50	0.00	2.99	1.099	0.02
29.66	0.00	2.99	1.099	0.02
29.83	0.00	2.99	1.098	0.02
30.00	0.00	2.99	1.098	0.02
30.16	0.00	2.99	1.098	0.02
30.33	0.00	2.99	1.097	0.02
30.50	0.00	2.99	1.097	0.02
30.66	0.00	2.99	1.097	0.02
30.83	0.00	2.99	1.097	0.02
31.00	0.00	2.99	1.096	0.02
31.16	0.00	2.99	1.096	0.02
31.33	0.00	2.99	1.096	0.02
31.50	0.00	2.99	1.096	0.02
31.66	0.00	2.99	1.095	0.02

31.83	0.00	2.99	1.095	0.02
32.00	0.00	2.99	1.095	0.02
32.16	0.00	2.99	1.094	0.02
32.33	0.00	2.99	1.094	0.02
32.50	0.00	2.99	1.094	0.02
32.66	0.00	2.99	1.094	0.02
32.83	0.00	2.99	1.093	0.02
33.00	0.00	2.99	1.093	0.02
33.16	0.00	2.99	1.093	0.02
33.33	0.00	2.99	1.092	0.02
33.50	0.00	2.99	1.092	0.02
33.66	0.00	2.99	1.092	0.02
33.83	0.00	2.99	1.092	0.02
34.00	0.00	2.98	1.091	0.02
34.16	0.00	2.98	1.091	0.02
34.33	0.00	2.98	1.091	0.02
34.50	0.00	2.98	1.091	0.02
34.66	0.00	2.98	1.090	0.02
34.83	0.00	2.98	1.090	0.02
35.00	0.00	2.98	1.090	0.02
35.16	0.00	2.98	1.089	0.02
35.33	0.00	2.98	1.089	0.02
35.50	0.00	2.98	1.089	0.02
35.66	0.00	2.98	1.089	0.02
35.83	0.00	2.98	1.088	0.02
36.00	0.00	2.98	1.088	0.02
36.16	0.00	2.98	1.088	0.02
36.33	0.00	2.98	1.088	0.02
36.50	0.00	2.98	1.087	0.02
36.66	0.00	2.98	1.087	0.02
36.83	0.00	2.98	1.087	0.02
37.00	0.00	2.98	1.086	0.02
37.16	0.00	2.98	1.086	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
37.33	0.00	2.98	1.086	0.02
37.50	0.00	2.98	1.086	0.02
37.66	0.00	2.98	1.085	0.02
37.83	0.00	2.98	1.085	0.02
38.00	0.00	2.98	1.085	0.02
38.16	0.00	2.98	1.085	0.02
38.33	0.00	2.98	1.084	0.02
38.50	0.00	2.97	1.084	0.02
38.66	0.00	2.97	1.084	0.02
38.83	0.00	2.97	1.083	0.02
39.00	0.00	2.97	1.083	0.02
39.16	0.00	2.97	1.083	0.02
39.33	0.00	2.97	1.083	0.02

39.50	0.00	2.97	1.082	0.02
39.66	0.00	2.97	1.082	0.02
39.83	0.00	2.97	1.082	0.02
40.00	0.00	2.97	1.082	0.02
40.16	0.00	2.97	1.081	0.02
40.33	0.00	2.97	1.081	0.02
40.50	0.00	2.97	1.081	0.02
40.66	0.00	2.97	1.081	0.02
40.83	0.00	2.97	1.080	0.02
41.00	0.00	2.97	1.080	0.02
41.16	0.00	2.97	1.080	0.02
41.33	0.00	2.97	1.079	0.02
41.50	0.00	2.97	1.079	0.02
41.66	0.00	2.97	1.079	0.02
41.83	0.00	2.97	1.079	0.02
42.00	0.00	2.97	1.078	0.02
42.16	0.00	2.97	1.078	0.02
42.33	0.00	2.97	1.078	0.02
42.50	0.00	2.97	1.078	0.02
42.66	0.00	2.97	1.077	0.02
42.83	0.00	2.97	1.077	0.02
43.00	0.00	2.97	1.077	0.02
43.16	0.00	2.96	1.076	0.02
43.33	0.00	2.96	1.076	0.02
43.50	0.00	2.96	1.076	0.02
43.66	0.00	2.96	1.076	0.02
43.83	0.00	2.96	1.075	0.02
44.00	0.00	2.96	1.075	0.02
44.16	0.00	2.96	1.075	0.02
44.33	0.00	2.96	1.075	0.02
44.50	0.00	2.96	1.074	0.02
44.66	0.00	2.96	1.074	0.02
44.83	0.00	2.96	1.074	0.02
45.00	0.00	2.96	1.073	0.02
45.16	0.00	2.96	1.073	0.02
45.33	0.00	2.96	1.073	0.02
45.50	0.00	2.96	1.073	0.02
45.66	0.00	2.96	1.072	0.02
45.83	0.00	2.96	1.072	0.02
46.00	0.00	2.96	1.072	0.02
46.16	0.00	2.96	1.072	0.02
46.33	0.00	2.96	1.071	0.02
46.50	0.00	2.96	1.071	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
46.66	0.00	2.96	1.071	0.02
46.83	0.00	2.96	1.070	0.02
47.00	0.00	2.96	1.070	0.02

47.16	0.00	2.96	1.070	0.02
47.33	0.00	2.96	1.070	0.02
47.50	0.00	2.96	1.069	0.02
47.66	0.00	2.96	1.069	0.02
47.83	0.00	2.95	1.069	0.02
48.00	0.00	2.95	1.069	0.02
48.16	0.00	2.95	1.068	0.02
48.33	0.00	2.95	1.068	0.02
48.50	0.00	2.95	1.068	0.02
48.66	0.00	2.95	1.068	0.02
48.83	0.00	2.95	1.067	0.02
49.00	0.00	2.95	1.067	0.02
49.16	0.00	2.95	1.067	0.02
49.33	0.00	2.95	1.066	0.02
49.50	0.00	2.95	1.066	0.02
49.66	0.00	2.95	1.066	0.02
49.83	0.00	2.95	1.066	0.02
50.00	0.00	2.95	1.065	0.02
50.16	0.00	2.95	1.065	0.02
50.33	0.00	2.95	1.065	0.02
50.49	0.00	2.95	1.065	0.02
50.66	0.00	2.95	1.064	0.02
50.83	0.00	2.95	1.064	0.02
50.99	0.00	2.95	1.064	0.02
51.16	0.00	2.95	1.064	0.02
51.33	0.00	2.95	1.063	0.02
51.49	0.00	2.95	1.063	0.02
51.66	0.00	2.95	1.063	0.02
51.83	0.00	2.95	1.062	0.02
51.99	0.00	2.95	1.062	0.02
52.16	0.00	2.95	1.062	0.02
52.33	0.00	2.95	1.062	0.02
52.49	0.00	2.94	1.061	0.02
52.66	0.00	2.94	1.061	0.02
52.83	0.00	2.94	1.061	0.02
52.99	0.00	2.94	1.061	0.02
53.16	0.00	2.94	1.060	0.02
53.33	0.00	2.94	1.060	0.02
53.49	0.00	2.94	1.060	0.02
53.66	0.00	2.94	1.059	0.02
53.83	0.00	2.94	1.059	0.02
53.99	0.00	2.94	1.059	0.02
54.16	0.00	2.94	1.059	0.02
54.33	0.00	2.94	1.058	0.02
54.49	0.00	2.94	1.058	0.02
54.66	0.00	2.94	1.058	0.02
54.83	0.00	2.94	1.058	0.02
54.99	0.00	2.94	1.057	0.02
55.16	0.00	2.94	1.057	0.02
55.33	0.00	2.94	1.057	0.02

55.49	0.00	2.94	1.057	0.02
55.66	0.00	2.94	1.056	0.02
55.83	0.00	2.94	1.056	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
55.99	0.00	2.94	1.056	0.02
56.16	0.00	2.94	1.055	0.02
56.33	0.00	2.94	1.055	0.02
56.49	0.00	2.94	1.055	0.02
56.66	0.00	2.94	1.055	0.02
56.83	0.00	2.94	1.054	0.02
56.99	0.00	2.94	1.054	0.02
57.16	0.00	2.94	1.054	0.02
57.33	0.00	2.93	1.054	0.02
57.49	0.00	2.93	1.053	0.02
57.66	0.00	2.93	1.053	0.02
57.83	0.00	2.93	1.053	0.02
57.99	0.00	2.93	1.053	0.02
58.16	0.00	2.93	1.052	0.02
58.33	0.00	2.93	1.052	0.02
58.49	0.00	2.93	1.052	0.02
58.66	0.00	2.93	1.051	0.02
58.83	0.00	2.93	1.051	0.02
58.99	0.00	2.93	1.051	0.02
59.16	0.00	2.93	1.051	0.02
59.33	0.00	2.93	1.050	0.02
59.49	0.00	2.93	1.050	0.02
59.66	0.00	2.93	1.050	0.02
59.83	0.00	2.93	1.050	0.02
59.99	0.00	2.93	1.049	0.02
60.16	0.00	2.93	1.049	0.02
60.33	0.00	2.93	1.049	0.02
60.49	0.00	2.93	1.049	0.02
60.66	0.00	2.93	1.048	0.02
60.83	0.00	2.93	1.048	0.02
60.99	0.00	2.93	1.048	0.02
61.16	0.00	2.93	1.047	0.02
61.33	0.00	2.93	1.047	0.02
61.49	0.00	2.93	1.047	0.02
61.66	0.00	2.93	1.047	0.02
61.83	0.00	2.93	1.046	0.02
61.99	0.00	2.92	1.046	0.02
62.16	0.00	2.92	1.046	0.02
62.33	0.00	2.92	1.046	0.02
62.49	0.00	2.92	1.045	0.02
62.66	0.00	2.92	1.045	0.02
62.83	0.00	2.92	1.045	0.02
62.99	0.00	2.92	1.045	0.02

63.16	0.00	2.92	1.044	0.02
63.33	0.00	2.92	1.044	0.02
63.49	0.00	2.92	1.044	0.02
63.66	0.00	2.92	1.044	0.02
63.83	0.00	2.92	1.043	0.02
63.99	0.00	2.92	1.043	0.02
64.16	0.00	2.92	1.043	0.02
64.33	0.00	2.92	1.042	0.02
64.49	0.00	2.92	1.042	0.02
64.66	0.00	2.92	1.042	0.02
64.83	0.00	2.92	1.042	0.02
64.99	0.00	2.92	1.041	0.02
65.16	0.00	2.92	1.041	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
65.33	0.00	2.92	1.041	0.02
65.49	0.00	2.92	1.041	0.02
65.66	0.00	2.92	1.040	0.02
65.83	0.00	2.92	1.040	0.02
65.99	0.00	2.92	1.040	0.02
66.16	0.00	2.92	1.040	0.02
66.33	0.00	2.92	1.039	0.02
66.49	0.00	2.92	1.039	0.02
66.66	0.00	2.92	1.039	0.02
66.83	0.00	2.91	1.039	0.02
66.99	0.00	2.91	1.038	0.02
67.16	0.00	2.91	1.038	0.02
67.33	0.00	2.91	1.038	0.02
67.49	0.00	2.91	1.037	0.02
67.66	0.00	2.91	1.037	0.02
67.83	0.00	2.91	1.037	0.02
67.99	0.00	2.91	1.037	0.02
68.16	0.00	2.91	1.036	0.02
68.33	0.00	2.91	1.036	0.02
68.49	0.00	2.91	1.036	0.02
68.66	0.00	2.91	1.036	0.02
68.83	0.00	2.91	1.035	0.02
68.99	0.00	2.91	1.035	0.02
69.16	0.00	2.91	1.035	0.02
69.33	0.00	2.91	1.035	0.02
69.49	0.00	2.91	1.034	0.02
69.66	0.00	2.91	1.034	0.02
69.83	0.00	2.91	1.034	0.02
69.99	0.00	2.91	1.033	0.02
70.16	0.00	2.91	1.033	0.02
70.33	0.00	2.91	1.033	0.02
70.49	0.00	2.91	1.033	0.02
70.66	0.00	2.91	1.032	0.02

70.83	0.00	2.91	1.032	0.02
70.99	0.00	2.91	1.032	0.02
71.16	0.00	2.91	1.032	0.02
71.33	0.00	2.91	1.031	0.02
71.49	0.00	2.91	1.031	0.02
71.66	0.00	2.90	1.031	0.02
71.83	0.00	2.90	1.031	0.02
71.99	0.00	2.90	1.030	0.02
72.16	0.00	2.90	1.030	0.02
72.33	0.00	2.90	1.030	0.02
72.49	0.00	2.90	1.030	0.02
72.66	0.00	2.90	1.029	0.02
72.83	0.00	2.90	1.029	0.02
72.99	0.00	2.90	1.029	0.02
73.16	0.00	2.90	1.029	0.02
73.33	0.00	2.90	1.028	0.02
73.49	0.00	2.90	1.028	0.02
73.66	0.00	2.90	1.028	0.02
73.83	0.00	2.90	1.027	0.02
73.99	0.00	2.90	1.027	0.02
74.16	0.00	2.90	1.027	0.02
74.33	0.00	2.90	1.027	0.02
74.49	0.00	2.90	1.026	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
74.66	0.00	2.90	1.026	0.02
74.83	0.00	2.90	1.026	0.02
74.99	0.00	2.90	1.026	0.02
75.16	0.00	2.90	1.025	0.02
75.33	0.00	2.90	1.025	0.02
75.49	0.00	2.90	1.025	0.02
75.66	0.00	2.90	1.025	0.02
75.83	0.00	2.90	1.024	0.02
75.99	0.00	2.90	1.024	0.02
76.16	0.00	2.90	1.024	0.02
76.33	0.00	2.90	1.024	0.02
76.49	0.00	2.89	1.023	0.02
76.66	0.00	2.89	1.023	0.02
76.83	0.00	2.89	1.023	0.02
76.99	0.00	2.89	1.023	0.02
77.16	0.00	2.89	1.022	0.02
77.33	0.00	2.89	1.022	0.02
77.49	0.00	2.89	1.022	0.02
77.66	0.00	2.89	1.021	0.02
77.83	0.00	2.89	1.021	0.02
77.99	0.00	2.89	1.021	0.02
78.16	0.00	2.89	1.021	0.02
78.33	0.00	2.89	1.020	0.02

78.49	0.00	2.89	1.020	0.02
78.66	0.00	2.89	1.020	0.02
78.83	0.00	2.89	1.020	0.02
78.99	0.00	2.89	1.019	0.02
79.16	0.00	2.89	1.019	0.02
79.33	0.00	2.89	1.019	0.02
79.49	0.00	2.89	1.019	0.02
79.66	0.00	2.89	1.018	0.02
79.83	0.00	2.89	1.018	0.02
79.99	0.00	2.89	1.018	0.02
80.16	0.00	2.89	1.018	0.02
80.33	0.00	2.89	1.017	0.02
80.49	0.00	2.89	1.017	0.02
80.66	0.00	2.89	1.017	0.02
80.83	0.00	2.89	1.017	0.02
80.99	0.00	2.89	1.016	0.02
81.16	0.00	2.89	1.016	0.02
81.33	0.00	2.88	1.016	0.02
81.49	0.00	2.88	1.015	0.02
81.66	0.00	2.88	1.015	0.02
81.83	0.00	2.88	1.015	0.02
81.99	0.00	2.88	1.015	0.02
82.16	0.00	2.88	1.014	0.02
82.33	0.00	2.88	1.014	0.02
82.49	0.00	2.88	1.014	0.02
82.66	0.00	2.88	1.014	0.02
82.83	0.00	2.88	1.013	0.02
82.99	0.00	2.88	1.013	0.02
83.16	0.00	2.88	1.013	0.02
83.33	0.00	2.88	1.013	0.02
83.49	0.00	2.88	1.012	0.02
83.66	0.00	2.88	1.012	0.02
83.82	0.00	2.88	1.012	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
83.99	0.00	2.88	1.012	0.02
84.16	0.00	2.88	1.011	0.02
84.32	0.00	2.88	1.011	0.02
84.49	0.00	2.88	1.011	0.02
84.66	0.00	2.88	1.011	0.02
84.82	0.00	2.88	1.010	0.02
84.99	0.00	2.88	1.010	0.02
85.16	0.00	2.88	1.010	0.02
85.32	0.00	2.88	1.010	0.02
85.49	0.00	2.88	1.009	0.02
85.66	0.00	2.88	1.009	0.02
85.82	0.00	2.88	1.009	0.02
85.99	0.00	2.88	1.008	0.02

86.16	0.00	2.87	1.008	0.02
86.32	0.00	2.87	1.008	0.02
86.49	0.00	2.87	1.008	0.02
86.66	0.00	2.87	1.007	0.02
86.82	0.00	2.87	1.007	0.02
86.99	0.00	2.87	1.007	0.02
87.16	0.00	2.87	1.007	0.02
87.32	0.00	2.87	1.006	0.02
87.49	0.00	2.87	1.006	0.02
87.66	0.00	2.87	1.006	0.02
87.82	0.00	2.87	1.006	0.02
87.99	0.00	2.87	1.005	0.02
88.16	0.00	2.87	1.005	0.02
88.32	0.00	2.87	1.005	0.02
88.49	0.00	2.87	1.005	0.02
88.66	0.00	2.87	1.004	0.02
88.82	0.00	2.87	1.004	0.02
88.99	0.00	2.87	1.004	0.02
89.16	0.00	2.87	1.004	0.02
89.32	0.00	2.87	1.003	0.02
89.49	0.00	2.87	1.003	0.02
89.66	0.00	2.87	1.003	0.02
89.82	0.00	2.87	1.003	0.02
89.99	0.00	2.87	1.002	0.02
90.16	0.00	2.87	1.002	0.02
90.32	0.00	2.87	1.002	0.02
90.49	0.00	2.87	1.002	0.02
90.66	0.00	2.87	1.001	0.02
90.82	0.00	2.87	1.001	0.02
90.99	0.00	2.86	1.001	0.02
91.16	0.00	2.86	1.001	0.02
91.32	0.00	2.86	1.000	0.02
91.49	0.00	2.86	1.000	0.02
91.66	0.00	2.86	1.000	0.02
91.82	0.00	2.86	0.999	0.02
91.99	0.00	2.86	0.999	0.02
92.16	0.00	2.86	0.999	0.02
92.32	0.00	2.86	0.999	0.02
92.49	0.00	2.86	0.998	0.02
92.66	0.00	2.86	0.998	0.02
92.82	0.00	2.86	0.998	0.02
92.99	0.00	2.86	0.998	0.02
93.16	0.00	2.86	0.997	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
93.32	0.00	2.86	0.997	0.02
93.49	0.00	2.86	0.997	0.02
93.66	0.00	2.86	0.997	0.02

93.82	0.00	2.86	0.996	0.02
93.99	0.00	2.86	0.996	0.02
94.16	0.00	2.86	0.996	0.02
94.32	0.00	2.86	0.996	0.02
94.49	0.00	2.86	0.995	0.02
94.66	0.00	2.86	0.995	0.02
94.82	0.00	2.86	0.995	0.02
94.99	0.00	2.86	0.995	0.02
95.16	0.00	2.86	0.994	0.02
95.32	0.00	2.86	0.994	0.02
95.49	0.00	2.86	0.994	0.02
95.66	0.00	2.86	0.994	0.02
95.82	0.00	2.86	0.993	0.02
95.99	0.00	2.85	0.993	0.02
96.16	0.00	2.85	0.993	0.02
96.32	0.00	2.85	0.993	0.02
96.49	0.00	2.85	0.992	0.02
96.66	0.00	2.85	0.992	0.02
96.82	0.00	2.85	0.992	0.02
96.99	0.00	2.85	0.992	0.02
97.16	0.00	2.85	0.991	0.02
97.32	0.00	2.85	0.991	0.02
97.49	0.00	2.85	0.991	0.02
97.66	0.00	2.85	0.991	0.02
97.82	0.00	2.85	0.990	0.02
97.99	0.00	2.85	0.990	0.02
98.16	0.00	2.85	0.990	0.02
98.32	0.00	2.85	0.990	0.02
98.49	0.00	2.85	0.989	0.02
98.66	0.00	2.85	0.989	0.02
98.82	0.00	2.85	0.989	0.02
98.99	0.00	2.85	0.988	0.02
99.16	0.00	2.85	0.988	0.02
99.32	0.00	2.85	0.988	0.02
99.49	0.00	2.85	0.988	0.02
99.66	0.00	2.85	0.987	0.02
99.82	0.00	2.85	0.987	0.02
99.99	0.00	2.85	0.987	0.02
100.16	0.00	2.85	0.987	0.02
100.32	0.00	2.85	0.986	0.02
100.49	0.00	2.85	0.986	0.02
100.66	0.00	2.85	0.986	0.02
100.82	0.00	2.85	0.986	0.02
100.99	0.00	2.84	0.985	0.02
101.16	0.00	2.84	0.985	0.02
101.32	0.00	2.84	0.985	0.02
101.49	0.00	2.84	0.985	0.02
101.66	0.00	2.84	0.984	0.02
101.82	0.00	2.84	0.984	0.02
101.99	0.00	2.84	0.984	0.02

102.16	0.00	2.84	0.984	0.02
102.32	0.00	2.84	0.983	0.02
102.49	0.00	2.84	0.983	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
102.66	0.00	2.84	0.983	0.02
102.82	0.00	2.84	0.983	0.02
102.99	0.00	2.84	0.982	0.02
103.16	0.00	2.84	0.982	0.02
103.32	0.00	2.84	0.982	0.02
103.49	0.00	2.84	0.982	0.02
103.66	0.00	2.84	0.981	0.02
103.82	0.00	2.84	0.981	0.02
103.99	0.00	2.84	0.981	0.02
104.16	0.00	2.84	0.981	0.02
104.32	0.00	2.84	0.980	0.02
104.49	0.00	2.84	0.980	0.02
104.66	0.00	2.84	0.980	0.02
104.82	0.00	2.84	0.980	0.02
104.99	0.00	2.84	0.979	0.02
105.16	0.00	2.84	0.979	0.02
105.32	0.00	2.84	0.979	0.02
105.49	0.00	2.84	0.979	0.02
105.66	0.00	2.84	0.978	0.02
105.82	0.00	2.83	0.978	0.02
105.99	0.00	2.83	0.978	0.02
106.16	0.00	2.83	0.978	0.02
106.32	0.00	2.83	0.977	0.02
106.49	0.00	2.83	0.977	0.02
106.66	0.00	2.83	0.977	0.02
106.82	0.00	2.83	0.977	0.02
106.99	0.00	2.83	0.976	0.02
107.16	0.00	2.83	0.976	0.02
107.32	0.00	2.83	0.976	0.02
107.49	0.00	2.83	0.976	0.02
107.66	0.00	2.83	0.975	0.02
107.82	0.00	2.83	0.975	0.02
107.99	0.00	2.83	0.975	0.02
108.16	0.00	2.83	0.975	0.02
108.32	0.00	2.83	0.974	0.02
108.49	0.00	2.83	0.974	0.02
108.66	0.00	2.83	0.974	0.02
108.82	0.00	2.83	0.974	0.02
108.99	0.00	2.83	0.973	0.02
109.16	0.00	2.83	0.973	0.02
109.32	0.00	2.83	0.973	0.02
109.49	0.00	2.83	0.973	0.02
109.66	0.00	2.83	0.972	0.02

109.82	0.00	2.83	0.972	0.02
109.99	0.00	2.83	0.972	0.02
110.16	0.00	2.83	0.972	0.02
110.32	0.00	2.83	0.971	0.02
110.49	0.00	2.83	0.971	0.02
110.66	0.00	2.83	0.971	0.02
110.82	0.00	2.82	0.971	0.02
110.99	0.00	2.82	0.970	0.02
111.16	0.00	2.82	0.970	0.02
111.32	0.00	2.82	0.970	0.02
111.49	0.00	2.82	0.970	0.02
111.66	0.00	2.82	0.969	0.02
111.82	0.00	2.82	0.969	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
111.99	0.00	2.82	0.969	0.02
112.16	0.00	2.82	0.969	0.02
112.32	0.00	2.82	0.968	0.02
112.49	0.00	2.82	0.968	0.02
112.66	0.00	2.82	0.968	0.02
112.82	0.00	2.82	0.968	0.02
112.99	0.00	2.82	0.967	0.02
113.16	0.00	2.82	0.967	0.02
113.32	0.00	2.82	0.967	0.02
113.49	0.00	2.82	0.967	0.02
113.66	0.00	2.82	0.966	0.02
113.82	0.00	2.82	0.966	0.02
113.99	0.00	2.82	0.966	0.02
114.16	0.00	2.82	0.966	0.02
114.32	0.00	2.82	0.965	0.02
114.49	0.00	2.82	0.965	0.02
114.66	0.00	2.82	0.965	0.02
114.82	0.00	2.82	0.965	0.02
114.99	0.00	2.82	0.964	0.02
115.16	0.00	2.82	0.964	0.02
115.32	0.00	2.82	0.964	0.02
115.49	0.00	2.82	0.964	0.02
115.66	0.00	2.82	0.963	0.02
115.82	0.00	2.82	0.963	0.02
115.99	0.00	2.81	0.963	0.02
116.16	0.00	2.81	0.963	0.02
116.32	0.00	2.81	0.962	0.02
116.49	0.00	2.81	0.962	0.02
116.66	0.00	2.81	0.962	0.02
116.82	0.00	2.81	0.962	0.02
116.99	0.00	2.81	0.961	0.02
117.15	0.00	2.81	0.961	0.02
117.32	0.00	2.81	0.961	0.02

117.49	0.00	2.81	0.961	0.02
117.65	0.00	2.81	0.960	0.02
117.82	0.00	2.81	0.960	0.02
117.99	0.00	2.81	0.960	0.02
118.15	0.00	2.81	0.960	0.02
118.32	0.00	2.81	0.959	0.02
118.49	0.00	2.81	0.959	0.02
118.65	0.00	2.81	0.959	0.02
118.82	0.00	2.81	0.959	0.02
118.99	0.00	2.81	0.958	0.02
119.15	0.00	2.81	0.958	0.02
119.32	0.00	2.81	0.958	0.02
119.49	0.00	2.81	0.958	0.02
119.65	0.00	2.81	0.957	0.02
119.82	0.00	2.81	0.957	0.02
119.99	0.00	2.81	0.957	0.02
120.15	0.00	2.81	0.957	0.02
120.32	0.00	2.81	0.956	0.02
120.49	0.00	2.81	0.956	0.02
120.65	0.00	2.81	0.956	0.02
120.82	0.00	2.81	0.956	0.02
120.99	0.00	2.80	0.955	0.02
121.15	0.00	2.80	0.955	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
121.32	0.00	2.80	0.955	0.02
121.49	0.00	2.80	0.955	0.02
121.65	0.00	2.80	0.954	0.02
121.82	0.00	2.80	0.954	0.02
121.99	0.00	2.80	0.954	0.02
122.15	0.00	2.80	0.954	0.02
122.32	0.00	2.80	0.953	0.02
122.49	0.00	2.80	0.953	0.02
122.65	0.00	2.80	0.953	0.02
122.82	0.00	2.80	0.953	0.02
122.99	0.00	2.80	0.952	0.02
123.15	0.00	2.80	0.952	0.02
123.32	0.00	2.80	0.952	0.02
123.49	0.00	2.80	0.952	0.02
123.65	0.00	2.80	0.951	0.02
123.82	0.00	2.80	0.951	0.02
123.99	0.00	2.80	0.951	0.02
124.15	0.00	2.80	0.951	0.02
124.32	0.00	2.80	0.950	0.02
124.49	0.00	2.80	0.950	0.02
124.65	0.00	2.80	0.950	0.02
124.82	0.00	2.80	0.950	0.02
124.99	0.00	2.80	0.949	0.02

125.15	0.00	2.80	0.949	0.02
125.32	0.00	2.80	0.949	0.02
125.49	0.00	2.80	0.949	0.02
125.65	0.00	2.80	0.948	0.02
125.82	0.00	2.80	0.948	0.02
125.99	0.00	2.80	0.948	0.02
126.15	0.00	2.79	0.948	0.02
126.32	0.00	2.79	0.947	0.02
126.49	0.00	2.79	0.947	0.02
126.65	0.00	2.79	0.947	0.02
126.82	0.00	2.79	0.947	0.02
126.99	0.00	2.79	0.946	0.02
127.15	0.00	2.79	0.946	0.02
127.32	0.00	2.79	0.946	0.02
127.49	0.00	2.79	0.946	0.02
127.65	0.00	2.79	0.945	0.02
127.82	0.00	2.79	0.945	0.02
127.99	0.00	2.79	0.945	0.02
128.15	0.00	2.79	0.945	0.02
128.32	0.00	2.79	0.944	0.02
128.49	0.00	2.79	0.944	0.02
128.65	0.00	2.79	0.944	0.02
128.82	0.00	2.79	0.944	0.02
128.99	0.00	2.79	0.943	0.02
129.15	0.00	2.79	0.943	0.02
129.32	0.00	2.79	0.943	0.02
129.49	0.00	2.79	0.943	0.02
129.65	0.00	2.79	0.942	0.02
129.82	0.00	2.79	0.942	0.02
129.99	0.00	2.79	0.942	0.02
130.15	0.00	2.79	0.942	0.02
130.32	0.00	2.79	0.941	0.02
130.49	0.00	2.79	0.941	0.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
130.65	0.00	2.79	0.941	0.02
130.82	0.00	2.79	0.941	0.02
130.99	0.00	2.79	0.940	0.02
131.15	0.00	2.78	0.940	0.02
131.32	0.00	2.78	0.940	0.02
131.49	0.00	2.78	0.940	0.02
131.65	0.00	2.78	0.939	0.02
131.82	0.00	2.78	0.939	0.02
131.99	0.00	2.78	0.939	0.02
132.15	0.00	2.78	0.939	0.02
132.32	0.00	2.78	0.938	0.02
132.49	0.00	2.78	0.938	0.02
132.65	0.00	2.78	0.938	0.02

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      132.82       0.00      2.78      0.938      0.02
      132.99       0.00      2.78      0.937      0.02
      133.15       0.00      2.78      0.937      0.02
    PEAK DISCHARGE =        3.660 CFS - PEAK OCCURS AT HOUR    2.23
    MAXIMUM WATER SURFACE ELEVATION =        3.341
    MAXIMUM STORAGE =        1.5240 AC-FT      INCREMENTAL TIME=    0.033330HRS

   PRINT HYD             ID=8 CODE=5

                                                HYDROGRAPH FROM AREA NORTH.POND


         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
         HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0         26.664       0.0         53.328       0.0
79.992       0.0        106.656       0.0
         0.167       0.0         26.831       0.0         53.495       0.0
80.158       0.0        106.822       0.0
         0.333       0.0         26.997       0.0         53.661       0.0
80.325       0.0        106.989       0.0
         0.500       0.0         27.164       0.0         53.828       0.0
80.492       0.0        107.156       0.0
         0.667       0.0         27.331       0.0         53.995       0.0
80.658       0.0        107.322       0.0
         0.833       0.0         27.497       0.0         54.161       0.0
80.825       0.0        107.489       0.0
         1.000       0.0         27.664       0.0         54.328       0.0
80.992       0.0        107.655       0.0
         1.167       0.0         27.831       0.0         54.494       0.0
81.158       0.0        107.822       0.0
         1.333       0.0         27.997       0.0         54.661       0.0
81.325       0.0        107.989       0.0
         1.500       0.0         28.164       0.0         54.828       0.0
81.492       0.0        108.155       0.0
         1.667       0.0         28.331       0.0         54.994       0.0
81.658       0.0        108.322       0.0
         1.833       1.7         28.497       0.0         55.161       0.0
81.825       0.0        108.489       0.0
         2.000       3.0         28.664       0.0         55.328       0.0
81.992       0.0        108.655       0.0
         2.166       3.6         28.830       0.0         55.494       0.0
82.158       0.0        108.822       0.0
         2.333       3.6         28.997       0.0         55.661       0.0
82.325       0.0        108.989       0.0
         2.500       3.4         29.164       0.0         55.828       0.0
82.491       0.0        109.155       0.0
         2.666       3.2         29.330       0.0         55.994       0.0
82.658       0.0        109.322       0.0
```

2.833	3.0	29.497	0.0	56.161	0.0	82.825	0.0
109.489	0.0						
3.000	2.7	29.664	0.0	56.328	0.0	82.991	0.0
109.655	0.0						
3.166	2.5	29.830	0.0	56.494	0.0	83.158	0.0
109.822	0.0						
3.333	2.3	29.997	0.0	56.661	0.0	83.325	0.0
109.989	0.0						
3.500	2.1	30.164	0.0	56.828	0.0	83.491	0.0
110.155	0.0						
3.666	1.9	30.330	0.0	56.994	0.0	83.658	0.0
110.322	0.0						
3.833	1.7	30.497	0.0	57.161	0.0	83.825	0.0
110.488	0.0						
4.000	1.6	30.664	0.0	57.327	0.0	83.991	0.0
110.655	0.0						
4.166	1.5	30.830	0.0	57.494	0.0	84.158	0.0
110.822	0.0						
4.333	1.4	30.997	0.0	57.661	0.0	84.325	0.0
110.988	0.0						
4.500	1.3	31.164	0.0	57.827	0.0	84.491	0.0
111.155	0.0						
4.666	1.2	31.330	0.0	57.994	0.0	84.658	0.0
111.322	0.0						
4.833	1.1	31.497	0.0	58.161	0.0	84.825	0.0
111.488	0.0						
4.999	1.0	31.664	0.0	58.327	0.0	84.991	0.0
111.655	0.0						
5.166	1.0	31.830	0.0	58.494	0.0	85.158	0.0
111.822	0.0						
5.333	0.9	31.997	0.0	58.661	0.0	85.325	0.0
111.988	0.0						
5.499	0.9	32.164	0.0	58.827	0.0	85.491	0.0
112.155	0.0						
5.666	0.8	32.330	0.0	58.994	0.0	85.658	0.0
112.322	0.0						
5.833	0.8	32.497	0.0	59.161	0.0	85.824	0.0
112.488	0.0						
5.999	0.7	32.663	0.0	59.327	0.0	85.991	0.0
112.655	0.0						
6.166	0.7	32.830	0.0	59.494	0.0	86.158	0.0
112.822	0.0						
6.333	0.7	32.997	0.0	59.661	0.0	86.324	0.0
112.988	0.0						
6.499	0.6	33.163	0.0	59.827	0.0	86.491	0.0
113.155	0.0						
6.666	0.6	33.330	0.0	59.994	0.0	86.658	0.0
113.322	0.0						
6.833	0.6	33.497	0.0	60.161	0.0	86.824	0.0
113.488	0.0						

	6.999	0.5	33.663	0.0	60.327	0.0	86.991	0.0	113.655	0.0
	7.166	0.5	33.830	0.0	60.494	0.0	87.158	0.0	113.821	0.0
	7.333	0.5	33.997	0.0	60.660	0.0	87.324	0.0	113.988	0.0
	7.499	0.5	34.163	0.0	60.827	0.0	87.491	0.0	114.155	0.0
	7.666	0.4	34.330	0.0	60.994	0.0	87.658	0.0	114.321	0.0
	7.833	0.4	34.497	0.0	61.160	0.0	87.824	0.0	114.488	0.0
	7.999	0.4	34.663	0.0	61.327	0.0	87.991	0.0	114.655	0.0
	8.166	0.4	34.830	0.0	61.494	0.0	88.158	0.0	114.821	0.0
	8.332	0.4	34.997	0.0	61.660	0.0	88.324	0.0	114.988	0.0
	8.499	0.4	35.163	0.0	61.827	0.0	88.491	0.0	115.155	0.0
	8.666	0.4	35.330	0.0	61.994	0.0	88.657	0.0	115.321	0.0
	8.832	0.3	35.496	0.0	62.160	0.0	88.824	0.0	115.488	0.0
	8.999	0.3	35.663	0.0	62.327	0.0	88.991	0.0	115.655	0.0
	9.166	0.3	35.830	0.0	62.494	0.0	89.157	0.0	115.821	0.0
	9.332	0.3	35.996	0.0	62.660	0.0	89.324	0.0	115.988	0.0
	9.499	0.3	36.163	0.0	62.827	0.0	89.491	0.0	116.155	0.0
	9.666	0.3	36.330	0.0	62.994	0.0	89.657	0.0	116.321	0.0
	9.832	0.3	36.496	0.0	63.160	0.0	89.824	0.0	116.488	0.0
	9.999	0.3	36.663	0.0	63.327	0.0	89.991	0.0	116.654	0.0
	10.166	0.3	36.830	0.0	63.493	0.0	90.157	0.0	116.821	0.0
	10.332	0.3	36.996	0.0	63.660	0.0	90.324	0.0	116.988	0.0
	10.499	0.3	37.163	0.0	63.827	0.0	90.491	0.0	117.154	0.0
	10.666	0.3	37.330	0.0	63.993	0.0	90.657	0.0	117.321	0.0
	10.832	0.3	37.496	0.0	64.160	0.0	90.824	0.0	117.488	0.0
	10.999	0.3	37.663	0.0	64.327	0.0	90.991	0.0	117.654	0.0

	11.166	0.3	37.830	0.0	64.493	0.0	91.157	0.0	117.821	0.0	
	11.332	0.3	37.996	0.0	64.660	0.0	91.324	0.0	117.988	0.0	
	11.499	0.3	38.163	0.0	64.827	0.0	91.491	0.0	118.154	0.0	
	11.665	0.3	38.330	0.0	64.993	0.0	91.657	0.0	118.321	0.0	
	11.832	0.2	38.496	0.0	65.160	0.0	91.824	0.0	118.488	0.0	
	11.999	0.2	38.663	0.0	65.327	0.0	91.990	0.0	118.654	0.0	
	12.165	0.2	38.829	0.0	65.493	0.0	92.157	0.0	118.821	0.0	
	12.332	0.2	38.996	0.0	65.660	0.0	92.324	0.0	118.988	0.0	
	12.499	0.2	39.163	0.0	65.827	0.0	92.490	0.0	119.154	0.0	
	12.665	0.2	39.329	0.0	65.993	0.0	92.657	0.0	119.321	0.0	
	12.832	0.2	39.496	0.0	66.160	0.0	92.824	0.0	119.488	0.0	
	12.999	0.2	39.663	0.0	66.327	0.0	92.990	0.0	119.654	0.0	
	13.165	0.2	39.829	0.0	66.493	0.0	93.157	0.0	119.821	0.0	
	13.332	0.2	39.996	0.0	66.660	0.0	93.324	0.0	119.987	0.0	
	13.499	0.2	40.163	0.0	66.826	0.0	93.490	0.0	120.154	0.0	
	13.665	0.2	40.329	0.0	66.993	0.0	93.657	0.0	120.321	0.0	
	13.832	0.2	40.496	0.0	67.160	0.0	93.824	0.0	120.487	0.0	
	13.999	0.2	40.663	0.0	67.326	0.0	93.990	0.0	120.654	0.0	
	14.165	0.2	40.829	0.0	67.493	0.0	94.157	0.0	120.821	0.0	
	14.332	0.2	40.996	0.0	67.660	0.0	94.324	0.0	120.987	0.0	
	14.499	0.2	41.163	0.0	67.826	0.0	94.490	0.0	121.154	0.0	
	14.665	0.2	41.329	0.0	67.993	0.0	94.657	0.0	121.321	0.0	
	14.832	0.2	41.496	0.0	68.160	0.0	94.823	0.0	121.487	0.0	
	14.998	0.2	41.662	0.0	68.326	0.0	94.990	0.0	121.654	0.0	
	15.165	0.2	41.829	0.0	68.493	0.0	95.157	0.0	121.821	0.0	

15.332	0.2	41.996	0.0	68.660	0.0	95.323	0.0
121.987	0.0						
15.498	0.2	42.162	0.0	68.826	0.0	95.490	0.0
122.154	0.0						
15.665	0.2	42.329	0.0	68.993	0.0	95.657	0.0
122.321	0.0						
15.832	0.2	42.496	0.0	69.160	0.0	95.823	0.0
122.487	0.0						
15.998	0.2	42.662	0.0	69.326	0.0	95.990	0.0
122.654	0.0						
16.165	0.2	42.829	0.0	69.493	0.0	96.157	0.0
122.820	0.0						
16.332	0.2	42.996	0.0	69.660	0.0	96.323	0.0
122.987	0.0						
16.498	0.2	43.162	0.0	69.826	0.0	96.490	0.0
123.154	0.0						
16.665	0.2	43.329	0.0	69.993	0.0	96.657	0.0
123.320	0.0						
16.832	0.2	43.496	0.0	70.159	0.0	96.823	0.0
123.487	0.0						
16.998	0.2	43.662	0.0	70.326	0.0	96.990	0.0
123.654	0.0						
17.165	0.2	43.829	0.0	70.493	0.0	97.157	0.0
123.820	0.0						
17.332	0.2	43.996	0.0	70.659	0.0	97.323	0.0
123.987	0.0						
17.498	0.2	44.162	0.0	70.826	0.0	97.490	0.0
124.154	0.0						
17.665	0.2	44.329	0.0	70.993	0.0	97.657	0.0
124.320	0.0						
17.832	0.2	44.496	0.0	71.159	0.0	97.823	0.0
124.487	0.0						
17.998	0.2	44.662	0.0	71.326	0.0	97.990	0.0
124.654	0.0						
18.165	0.2	44.829	0.0	71.493	0.0	98.156	0.0
124.820	0.0						
18.331	0.2	44.995	0.0	71.659	0.0	98.323	0.0
124.987	0.0						
18.498	0.2	45.162	0.0	71.826	0.0	98.490	0.0
125.154	0.0						
18.665	0.2	45.329	0.0	71.993	0.0	98.656	0.0
125.320	0.0						
18.831	0.2	45.495	0.0	72.159	0.0	98.823	0.0
125.487	0.0						
18.998	0.2	45.662	0.0	72.326	0.0	98.990	0.0
125.654	0.0						
19.165	0.2	45.829	0.0	72.493	0.0	99.156	0.0
125.820	0.0						
19.331	0.2	45.995	0.0	72.659	0.0	99.323	0.0
125.987	0.0						

	19.498	0.2	46.162	0.0	72.826	0.0	99.490	0.0	126.153	0.0
	19.665	0.2	46.329	0.0	72.992	0.0	99.656	0.0	126.320	0.0
	19.831	0.2	46.495	0.0	73.159	0.0	99.823	0.0	126.487	0.0
	19.998	0.2	46.662	0.0	73.326	0.0	99.990	0.0	126.653	0.0
	20.165	0.2	46.829	0.0	73.492	0.0	100.156	0.0	126.820	0.0
	20.331	0.2	46.995	0.0	73.659	0.0	100.323	0.0	126.987	0.0
	20.498	0.2	47.162	0.0	73.826	0.0	100.490	0.0	127.153	0.0
	20.665	0.2	47.329	0.0	73.992	0.0	100.656	0.0	127.320	0.0
	20.831	0.2	47.495	0.0	74.159	0.0	100.823	0.0	127.487	0.0
	20.998	0.2	47.662	0.0	74.326	0.0	100.989	0.0	127.653	0.0
	21.165	0.2	47.829	0.0	74.492	0.0	101.156	0.0	127.820	0.0
	21.331	0.2	47.995	0.0	74.659	0.0	101.323	0.0	127.987	0.0
	21.498	0.2	48.162	0.0	74.826	0.0	101.489	0.0	128.153	0.0
	21.665	0.2	48.328	0.0	74.992	0.0	101.656	0.0	128.320	0.0
	21.831	0.2	48.495	0.0	75.159	0.0	101.823	0.0	128.487	0.0
	21.998	0.2	48.662	0.0	75.326	0.0	101.989	0.0	128.653	0.0
	22.164	0.2	48.828	0.0	75.492	0.0	102.156	0.0	128.820	0.0
	22.331	0.2	48.995	0.0	75.659	0.0	102.323	0.0	128.987	0.0
	22.498	0.2	49.162	0.0	75.826	0.0	102.489	0.0	129.153	0.0
	22.664	0.2	49.328	0.0	75.992	0.0	102.656	0.0	129.320	0.0
	22.831	0.2	49.495	0.0	76.159	0.0	102.823	0.0	129.487	0.0
	22.998	0.1	49.662	0.0	76.325	0.0	102.989	0.0	129.653	0.0
	23.164	0.1	49.828	0.0	76.492	0.0	103.156	0.0	129.820	0.0
	23.331	0.1	49.995	0.0	76.659	0.0	103.323	0.0	129.986	0.0
	23.498	0.1	50.162	0.0	76.825	0.0	103.489	0.0	130.153	0.0

```
        23.664       0.1         50.328       0.0         76.992       0.0
103.656       0.0        130.320       0.0
        23.831       0.1         50.495       0.0         77.159       0.0
103.823       0.0        130.486       0.0
        23.998       0.1         50.662       0.0         77.325       0.0
103.989       0.0        130.653       0.0
        24.164       0.1         50.828       0.0         77.492       0.0
104.156       0.0        130.820       0.0
        24.331       0.1         50.995       0.0         77.659       0.0
104.322       0.0        130.986       0.0
        24.498       0.1         51.161       0.0         77.825       0.0
104.489       0.0        131.153       0.0
        24.664       0.1         51.328       0.0         77.992       0.0
104.656       0.0        131.320       0.0
        24.831       0.1         51.495       0.0         78.159       0.0
104.822       0.0        131.486       0.0
        24.998       0.1         51.661       0.0         78.325       0.0
104.989       0.0        131.653       0.0
        25.164       0.1         51.828       0.0         78.492       0.0
105.156       0.0        131.820       0.0
        25.331       0.1         51.995       0.0         78.659       0.0
105.322       0.0        131.986       0.0
        25.497       0.1         52.161       0.0         78.825       0.0
105.489       0.0        132.153       0.0
        25.664       0.1         52.328       0.0         78.992       0.0
105.656       0.0        132.320       0.0
        25.831       0.0         52.495       0.0         79.158       0.0
105.822       0.0        132.486       0.0
        25.997       0.0         52.661       0.0         79.325       0.0
105.989       0.0        132.653       0.0
        26.164       0.0         52.828       0.0         79.492       0.0
106.156       0.0        132.820       0.0
        26.331       0.0         52.995       0.0         79.658       0.0
106.322       0.0        132.986       0.0
        26.497       0.0         53.161       0.0         79.825       0.0
106.489       0.0        133.153       0.0

        RUNOFF VOLUME =     1.20857 INCHES     =       1.2247 ACRE-FEET
        PEAK DISCHARGE RATE =       3.66 CFS  AT   2.233 HOURS   BASIN AREA =
0.0190 SQ. MI.


    ************************************************************
    ************************************************************
    ************************************************************
    *S  COMPUTE HYD BASIN P2
    COMPUTE NM HYD        ID=9  HYDNO=109  AREA=0.0023 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
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         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   8.1706    CFS   UNIT VOLUME =   0.9980       B =   526.28
 P60 = 1.6900
         AREA =     0.002070 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.68007    CFS   UNIT VOLUME =   0.9813       B =   394.23
 P60 = 1.6900
         AREA =     0.000230 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=9  CODE=5

                                       PARTIAL HYDROGRAPH   109.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.1          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.1         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.1         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.1         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.1         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.1         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.2          5.999       0.1         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.2          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       1.7          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       5.7          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       2.8          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
```

```
         1.833       1.8          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       1.3          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.6          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.3          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.2          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.1          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.1          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.1          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.1          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.1          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.1          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.1          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.1          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.1          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.1          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.1          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.2580 ACRE-FEET
        PEAK DISCHARGE RATE =       5.65 CFS  AT   1.500 HOURS   BASIN AREA =
0.0023 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P3
    COMPUTE NM HYD        ID=10  HYDNO=110  AREA=0.0010 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

```
         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   3.5524    CFS   UNIT VOLUME =   0.9960       B =   526.28
 P60 = 1.6900
         AREA =     0.000900 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.29568    CFS   UNIT VOLUME =   0.9556       B =   394.23
 P60 = 1.6900
         AREA =     0.000100 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=10   CODE=5

                                       PARTIAL HYDROGRAPH   110.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.0         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.0         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.0         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.0         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.0          5.833       0.0         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.1          5.999       0.0         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.1          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       0.7          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       2.5          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       1.2          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
```

```
         1.833       0.8          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       0.6          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.3          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.1          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.1          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.0          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.0          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.0          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.1122 ACRE-FEET
        PEAK DISCHARGE RATE =       2.47 CFS  AT   1.500 HOURS   BASIN AREA =
0.0010 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P4
    COMPUTE NM HYD        ID=11  HYDNO=111  AREA=0.0017 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

```
         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   6.0392    CFS   UNIT VOLUME =   0.9976       B =   526.28
 P60 = 1.6900
         AREA =     0.001530 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.50266    CFS   UNIT VOLUME =   0.9741       B =   394.23
 P60 = 1.6900
         AREA =     0.000170 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=11   CODE=5

                                        PARTIAL HYDROGRAPH   111.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.0         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.0         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.0         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.0         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.0         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.2          5.999       0.0         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.2          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       1.3          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       4.2          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       2.1          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
```

```
         1.833       1.4          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       1.0          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.5          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.2          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.1          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.1          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.1907 ACRE-FEET
        PEAK DISCHARGE RATE =       4.18 CFS  AT   1.500 HOURS   BASIN AREA =
0.0017 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P5
    COMPUTE NM HYD        ID=12  HYDNO=112  AREA=0.0020 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

```
         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   7.1049    CFS   UNIT VOLUME =   0.9978       B =   526.28
 P60 = 1.6900
         AREA =     0.001800 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.59136    CFS   UNIT VOLUME =   0.9792       B =   394.23
 P60 = 1.6900
         AREA =     0.000200 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=12   CODE=5

                                       PARTIAL HYDROGRAPH   112.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.0         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.0         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.0         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.1         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.1         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.2          5.999       0.1         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.2          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       1.5          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       4.9          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       2.5          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
```

```
         1.833       1.6          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       1.2          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.5          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.3          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.2          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.1          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.1          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.1          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.1          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.2244 ACRE-FEET
        PEAK DISCHARGE RATE =       4.92 CFS  AT   1.500 HOURS   BASIN AREA =
0.0020 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P6
    COMPUTE NM HYD        ID=13  HYDNO=113  AREA=0.0014 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

K = 0.072665HR TP = 0.133330HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 4.9734 CFS UNIT VOLUME = 0.9969 B = 526.28 P60 = 1.6900
AREA = 0.001260 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

K = 0.103860HR TP = 0.133330HR K/TP RATIO = 0.778968 SHAPE CONSTANT, N = 4.614198
UNIT PEAK = 0.41396 CFS UNIT VOLUME = 0.9679 B = 394.23 P60 = 1.6900
AREA = 0.000140 SQ MI IA = 0.35000 INCHES INF = 0.83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

PRINT HYD ID=13 CODE=5

PARTIAL HYDROGRAPH 113.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.0	9.999	0.0	14.998	0.0
19.998	0.0						
0.167	0.0	5.166	0.0	10.166	0.0	15.165	0.0
20.165	0.0						
0.333	0.0	5.333	0.0	10.332	0.0	15.332	0.0
20.331	0.0						
0.500	0.0	5.499	0.0	10.499	0.0	15.498	0.0
20.498	0.0						
0.667	0.0	5.666	0.0	10.666	0.0	15.665	0.0
20.665	0.0						
0.833	0.1	5.833	0.0	10.832	0.0	15.832	0.0
20.831	0.0						
1.000	0.1	5.999	0.0	10.999	0.0	15.998	0.0
20.998	0.0						
1.167	0.1	6.166	0.0	11.166	0.0	16.165	0.0
21.165	0.0						
1.333	1.0	6.333	0.0	11.332	0.0	16.332	0.0
21.331	0.0						
1.500	3.4	6.499	0.0	11.499	0.0	16.498	0.0
21.498	0.0						
1.667	1.7	6.666	0.0	11.665	0.0	16.665	0.0
21.665	0.0						

```
         1.833       1.1          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       0.8          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.4          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.2          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.1          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.0          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.1571 ACRE-FEET
        PEAK DISCHARGE RATE =       3.45 CFS  AT   1.500 HOURS   BASIN AREA =
0.0014 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P7
    COMPUTE NM HYD        ID=14  HYDNO=114  AREA=0.0019 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

K = 0.072665HR TP = 0.133330HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 6.7497 CFS UNIT VOLUME = 0.9976 B = 526.28 P60 = 1.6900
AREA = 0.001710 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

K = 0.103860HR TP = 0.133330HR K/TP RATIO = 0.778968 SHAPE CONSTANT, N = 4.614198
UNIT PEAK = 0.56180 CFS UNIT VOLUME = 0.9768 B = 394.23 P60 = 1.6900
AREA = 0.000190 SQ MI IA = 0.35000 INCHES INF = 0.83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

PRINT HYD ID=14 CODE=5

PARTIAL HYDROGRAPH 114.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.0	9.999	0.0	14.998	0.0	19.998	0.0
0.167	0.0	5.166	0.0	10.166	0.0	15.165	0.0	20.165	0.0
0.333	0.0	5.333	0.0	10.332	0.0	15.332	0.0	20.331	0.0
0.500	0.0	5.499	0.0	10.499	0.0	15.498	0.0	20.498	0.0
0.667	0.0	5.666	0.0	10.666	0.0	15.665	0.0	20.665	0.0
0.833	0.1	5.833	0.0	10.832	0.0	15.832	0.0	20.831	0.0
1.000	0.2	5.999	0.1	10.999	0.0	15.998	0.0	20.998	0.0
1.167	0.2	6.166	0.0	11.166	0.0	16.165	0.0	21.165	0.0
1.333	1.4	6.333	0.0	11.332	0.0	16.332	0.0	21.331	0.0
1.500	4.7	6.499	0.0	11.499	0.0	16.498	0.0	21.498	0.0
1.667	2.3	6.666	0.0	11.665	0.0	16.665	0.0	21.665	0.0

```
         1.833       1.5          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       1.1          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.5          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.2          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.2          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.1          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.1          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.1          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.2132 ACRE-FEET
        PEAK DISCHARGE RATE =       4.67 CFS  AT   1.500 HOURS   BASIN AREA =
0.0019 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P8
    COMPUTE NM HYD        ID=15  HYDNO=115  AREA=0.0016 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

```
         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   5.6839    CFS   UNIT VOLUME =   0.9973       B =   526.28
 P60 = 1.6900
         AREA =     0.001440 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.47309    CFS   UNIT VOLUME =   0.9741       B =   394.23
 P60 = 1.6900
         AREA =     0.000160 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=15   CODE=5

                                       PARTIAL HYDROGRAPH   115.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.0         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.0         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.0         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.0         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.0         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.2          5.999       0.0         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.1          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       1.2          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       3.9          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       2.0          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
```

```
        1.833       1.3          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
        2.000       0.9          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
        2.166       0.4          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
        2.333       0.2          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
        2.500       0.1          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
        2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
        2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
        3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
        3.166       0.0          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
        3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
        3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
        3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
        3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
        4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
        4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
        4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
        4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
        4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
        4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

       RUNOFF VOLUME =     2.10358 INCHES     =       0.1795 ACRE-FEET
       PEAK DISCHARGE RATE =       3.94 CFS  AT   1.500 HOURS   BASIN AREA =
0.0016 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P9
    COMPUTE NM HYD        ID=16  HYDNO=116  AREA=0.0014 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

```
         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   4.9734    CFS   UNIT VOLUME =   0.9969       B =   526.28
 P60 = 1.6900
         AREA =     0.001260 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.41396    CFS   UNIT VOLUME =   0.9679       B =   394.23
 P60 = 1.6900
         AREA =     0.000140 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=16   CODE=5

                                       PARTIAL HYDROGRAPH   116.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.0         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.0         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.0         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.0         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.0         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.1          5.999       0.0         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.1          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       1.0          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       3.4          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       1.7          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
```

```
         1.833       1.1          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       0.8          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.4          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.2          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.1          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.1          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.0          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.1571 ACRE-FEET
        PEAK DISCHARGE RATE =       3.45 CFS  AT   1.500 HOURS   BASIN AREA =
0.0014 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P14
    COMPUTE NM HYD        ID=17  HYDNO=117  AREA=0.0013 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

```
         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   4.6182    CFS   UNIT VOLUME =   0.9969       B =   526.28
 P60 = 1.6900
         AREA =     0.001170 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.38439    CFS   UNIT VOLUME =   0.9679       B =   394.23
 P60 = 1.6900
         AREA =     0.000130 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=17   CODE=5

                                       PARTIAL HYDROGRAPH   117.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.0         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.0         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.0         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.0         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.1          5.833       0.0         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.1          5.999       0.0         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.1          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       1.0          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       3.2          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       1.6          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
```

```
         1.833       1.0          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       0.8          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.3          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.2          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.1          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.1          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.1          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.0          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.0          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0         24.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.1458 ACRE-FEET
        PEAK DISCHARGE RATE =       3.20 CFS  AT   1.500 HOURS   BASIN AREA =
0.0013 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P11
    COMPUTE NM HYD        ID=18  HYDNO=118  AREA=0.0008 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

K = 0.072665HR TP = 0.133330HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 2.8420 CFS UNIT VOLUME = 0.9955 B = 526.28 P60 = 1.6900
AREA = 0.000720 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

K = 0.103860HR TP = 0.133330HR K/TP RATIO = 0.778968 SHAPE CONSTANT, N = 4.614198
UNIT PEAK = 0.23655 CFS UNIT VOLUME = 0.9449 B = 394.23 P60 = 1.6900
AREA = 0.000080 SQ MI IA = 0.35000 INCHES INF = 0.83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.033330

PRINT HYD ID=18 CODE=5

PARTIAL HYDROGRAPH 118.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.999	0.0	9.999	0.0	14.998	0.0	19.998	0.0
0.167	0.0	5.166	0.0	10.166	0.0	15.165	0.0	20.165	0.0
0.333	0.0	5.333	0.0	10.332	0.0	15.332	0.0	20.331	0.0
0.500	0.0	5.499	0.0	10.499	0.0	15.498	0.0	20.498	0.0
0.667	0.0	5.666	0.0	10.666	0.0	15.665	0.0	20.665	0.0
0.833	0.0	5.833	0.0	10.832	0.0	15.832	0.0	20.831	0.0
1.000	0.1	5.999	0.0	10.999	0.0	15.998	0.0	20.998	0.0
1.167	0.1	6.166	0.0	11.166	0.0	16.165	0.0	21.165	0.0
1.333	0.6	6.333	0.0	11.332	0.0	16.332	0.0	21.331	0.0
1.500	2.0	6.499	0.0	11.499	0.0	16.498	0.0	21.498	0.0
1.667	1.0	6.666	0.0	11.665	0.0	16.665	0.0	21.665	0.0

```
         1.833       0.6          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       0.5          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.2          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.1          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.1          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.0          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.0          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.0          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.0          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.0898 ACRE-FEET
        PEAK DISCHARGE RATE =       1.98 CFS  AT   1.500 HOURS   BASIN AREA =
0.0008 SQ. MI.


    ************************************************************
    *S  COMPUTE HYD BASIN P15
    COMPUTE NM HYD        ID=19  HYDNO=119  AREA=0.0004 SQ MI
                          PER A=0 PER B=0 PER C=10 PER D=90
                          TP=.13333 HR MASS RAIN=-1
```

```
         K =  0.072665HR    TP =  0.133330HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =   1.4210    CFS   UNIT VOLUME =   0.9910       B =   526.28
 P60 = 1.6900
         AREA =     0.000360 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330


         K =  0.103860HR    TP =  0.133330HR    K/TP RATIO =  0.778968     SHAPE
CONSTANT, N =  4.614198
         UNIT PEAK =  0.11827    CFS   UNIT VOLUME =   0.8949       B =   394.23
 P60 = 1.6900
         AREA =     0.000040 SQ MI    IA =   0.35000 INCHES    INF =   0.83000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.033330

    PRINT HYD             ID=19   CODE=5

                                       PARTIAL HYDROGRAPH   119.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS            HRS       CFS            HRS       CFS
HRS       CFS            HRS       CFS
         0.000       0.0          4.999       0.0          9.999       0.0
14.998       0.0         19.998       0.0
         0.167       0.0          5.166       0.0         10.166       0.0
15.165       0.0         20.165       0.0
         0.333       0.0          5.333       0.0         10.332       0.0
15.332       0.0         20.331       0.0
         0.500       0.0          5.499       0.0         10.499       0.0
15.498       0.0         20.498       0.0
         0.667       0.0          5.666       0.0         10.666       0.0
15.665       0.0         20.665       0.0
         0.833       0.0          5.833       0.0         10.832       0.0
15.832       0.0         20.831       0.0
         1.000       0.0          5.999       0.0         10.999       0.0
15.998       0.0         20.998       0.0
         1.167       0.0          6.166       0.0         11.166       0.0
16.165       0.0         21.165       0.0
         1.333       0.3          6.333       0.0         11.332       0.0
16.332       0.0         21.331       0.0
         1.500       1.0          6.499       0.0         11.499       0.0
16.498       0.0         21.498       0.0
         1.667       0.5          6.666       0.0         11.665       0.0
16.665       0.0         21.665       0.0
```

```
         1.833       0.3          6.833       0.0         11.832       0.0
16.832       0.0         21.831       0.0
         2.000       0.2          6.999       0.0         11.999       0.0
16.998       0.0         21.998       0.0
         2.166       0.1          7.166       0.0         12.165       0.0
17.165       0.0         22.164       0.0
         2.333       0.0          7.333       0.0         12.332       0.0
17.332       0.0         22.331       0.0
         2.500       0.0          7.499       0.0         12.499       0.0
17.498       0.0         22.498       0.0
         2.666       0.0          7.666       0.0         12.665       0.0
17.665       0.0         22.664       0.0
         2.833       0.0          7.833       0.0         12.832       0.0
17.832       0.0         22.831       0.0
         3.000       0.0          7.999       0.0         12.999       0.0
17.998       0.0         22.998       0.0
         3.166       0.0          8.166       0.0         13.165       0.0
18.165       0.0         23.164       0.0
         3.333       0.0          8.332       0.0         13.332       0.0
18.331       0.0         23.331       0.0
         3.500       0.0          8.499       0.0         13.499       0.0
18.498       0.0         23.498       0.0
         3.666       0.0          8.666       0.0         13.665       0.0
18.665       0.0         23.664       0.0
         3.833       0.0          8.832       0.0         13.832       0.0
18.831       0.0         23.831       0.0
         4.000       0.0          8.999       0.0         13.999       0.0
18.998       0.0         23.998       0.0
         4.166       0.0          9.166       0.0         14.165       0.0
19.165       0.0         24.164       0.0
         4.333       0.0          9.332       0.0         14.332       0.0
19.331       0.0
         4.500       0.0          9.499       0.0         14.499       0.0
19.498       0.0
         4.666       0.0          9.666       0.0         14.665       0.0
19.665       0.0
         4.833       0.0          9.832       0.0         14.832       0.0
19.831       0.0

        RUNOFF VOLUME =     2.10358 INCHES     =       0.0449 ACRE-FEET
        PEAK DISCHARGE RATE =       1.00 CFS  AT   1.500 HOURS   BASIN AREA =
0.0004 SQ. MI.


    ************************************************************
    FINISH

        NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 14:26:20
```

```
    AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4)                        - Ver. S4.02a,
Rel: 02a      RUN DATE (MON/DAY/YR) =02/17/2022
    INPUT FILE = N:\CDS Library\Engineering Tools\AHYMO-S4\Oxbow Proposed.txt
         USER NO.= AHYMO-S4TempUser05901704

                                  FROM  TO                    PEAK         RUNOFF
           TIME TO    CFS      PAGE =   1
                      HYDROGRAPH   ID   ID         AREA     DISCHARGE      VOLUME
  RUNOFF     PEAK     PER
    COMMAND       IDENTIFICATION   NO.  NO.      (SQ MI)      (CFS)        (AC-FT)
 (INCHES)  (HOURS)    ACRE     NOTATION

    RAINFALL  TYPE=13
                            RAIN24=   2.490
    *S  COMPUTE HYD BASIN P14
    COMPUTE NM HYD        101.00   -     1       0.00060         1.49       0.067
  2.10358    1.500    3.867 PER IMP=  90.00
    *S  COMPUTE HYD BASIN P13
    COMPUTE NM HYD        102.00   -     2       0.00990        24.27       1.111
  2.10358    1.500    3.831 PER IMP=  90.00
    ADD HYD               103.00  1& 2   3       0.01050        25.76       1.178
  2.10353    1.500    3.833
    *SOUTH POND 2
    ROUTE RESERVOIR  SOUTH.POND2    3    4       0.01050         2.54       1.059
  1.89166    2.200    0.378 AC-FT=    0.771
    *S  COMPUTE HYD BASIN P1
    COMPUTE NM HYD        105.00   -     5       0.00670        16.43       0.752
  2.10358    1.500    3.832 PER IMP=  90.00
    *SOUTH POND 1
    ROUTE RESERVOIR  SOUTH.POND1    5    6       0.00670         2.97       0.745
  2.08572    2.100    0.693 AC-FT=    0.409
    *S  COMPUTE HYD BASIN P12
    COMPUTE NM HYD        107.00   -     7       0.01200        29.42       1.346
  2.10358    1.500    3.831 PER IMP=  90.00
    *S  COMPUTE HYD OFF1
    COMPUTE NM HYD        120.00   -    20       0.00270         6.85       0.322
  2.23824    1.500    3.963 PER IMP= 100.00
    *S  COMPUTE HYD OFF2
    COMPUTE NM HYD        121.00   -    21       0.00150         3.81       0.179
  2.23824    1.500    3.966 PER IMP= 100.00
    *S  COMPUTE HYD OFF3
    COMPUTE NM HYD        122.00   -    22       0.00150         3.69       0.168
  2.10358    1.500    3.844 PER IMP=  90.00
    *S  COMPUTE HYD OFF4
    COMPUTE NM HYD        123.00   -    23       0.00130         3.20       0.146
  2.10358    1.500    3.846 PER IMP=  90.00
    ADD HYD               124.00  7&20  24       0.01470        36.27       1.669
  2.12827    1.500    3.855
    ADD HYD               124.00 24&21  25       0.01620        40.08       1.848
  2.13843    1.500    3.865
```

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  ADD HYD               124.00 25&22  26       0.01770        43.77       2.016
2.13547    1.500    3.864
  ADD HYD               124.00 26&23  27       0.01900        46.97       2.162
2.13327    1.500    3.862
  ROUTE RESERVOIR   NORTH.POND   27    8       0.01900         3.66       1.225
1.20857    2.233    0.301 AC-FT=    1.524
  *S  COMPUTE HYD BASIN P2
  COMPUTE NM HYD        109.00   -     9       0.00230         5.65       0.258
2.10358    1.500    3.839 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P3
  COMPUTE NM HYD        110.00   -    10       0.00100         2.47       0.112
2.10358    1.500    3.853 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P4
  COMPUTE NM HYD        111.00   -    11       0.00170         4.18       0.191
2.10358    1.500    3.842 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P5
  COMPUTE NM HYD        112.00   -    12       0.00200         4.92       0.224
2.10358    1.500    3.840 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P6
  COMPUTE NM HYD        113.00   -    13       0.00140         3.45       0.157
2.10358    1.500    3.846 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P7
  COMPUTE NM HYD        114.00   -    14       0.00190         4.67       0.213
2.10358    1.500    3.842 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P8
  COMPUTE NM HYD        115.00   -    15       0.00160         3.94       0.180
2.10358    1.500    3.843 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P9
  COMPUTE NM HYD        116.00   -    16       0.00140         3.45       0.157
2.10358    1.500    3.846 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P14
  COMPUTE NM HYD        117.00   -    17       0.00130         3.20       0.146
2.10358    1.500    3.846 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P11
  COMPUTE NM HYD        118.00   -    18       0.00080         1.98       0.090
2.10358    1.500    3.858 PER IMP=  90.00
  *S  COMPUTE HYD BASIN P15
  COMPUTE NM HYD        119.00   -    19       0.00040         1.00       0.045
2.10358    1.500    3.890 PER IMP=  90.00
  FINISH
```

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P1
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	86855
Impervious Assume 90%*	(sq. ft.)	78169.43
	Total Imp. Area:	**78169.43**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
86854.92	2.0	78169.428	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	2.8

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **2698.8** cu. Ft
Provided: - cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P2
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	64530
Impervious	(sq. ft.)	58077.22
Assume 90%*		
	Total Imp. Area:	**58077.22**

* Used same impervious % assumption from Commerce Center for Enchanted Hills DMP

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
64530.24	1.5	58077.216	90.0%	90.0

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	2.1

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **2005.1** cu. Ft
Provided: **-** cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P3
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	29115
Impervious Assume 90%*	(sq. ft.)	26203.87
	Total Imp. Area:	**26203.87**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
29115.41	0.7	26203.869	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	1.0

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **904.7** cu. Ft
Provided: **-** cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P4
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	46743
Impervious Assume 90%*	(sq. ft.)	42068.70
	Total Imp. Area:	**42068.70**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
46743	1.1	42068.7	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	1.5

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **1452.4** cu. Ft
Provided: - cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P5
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	54515
Impervious Assume 90%*	(sq. ft.)	49063.42
	Total Imp. Area:	**49063.42**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
54514.91	1.3	49063.419	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	1.8

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **1693.9** cu. Ft
Provided: **-** cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P6
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	38577
Impervious Assume 90%*	(sq. ft.)	34719.25
	Total Imp. Area:	**34719.25**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
38576.94	0.9	34719.246	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	1.3

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **1198.7** cu. Ft
Provided: - cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P7
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	52389
Impervious Assume 90%*	(sq. ft.)	47150.03
	Total Imp. Area:	**47150.03**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
52388.92	1.2	47150.028	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	1.7

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **1627.8** cu. Ft
Provided: **-** cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P8
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	44992
Impervious Assume 90%*	(sq. ft.)	40493.15
	Total Imp. Area:	**40493.15**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
44992.39	1.0	40493.151	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	1.5

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **1398.0** cu. Ft
Provided: - cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P9
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	37892
Impervious Assume 90%*	(sq. ft.)	34103.18
	Total Imp. Area:	**34103.18**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
37892.42	0.9	34103.178	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	1.2

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **1177.4** cu. Ft
Provided: **-** cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P10
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	37520
Impervious Assume 90%*	(sq. ft.)	33767.94
	Total Imp. Area:	**33767.94**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
37519.93	0.9	33767.937	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	1.2

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **1165.8** cu. Ft
Provided: - cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P11
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	21116
Impervious Assume 90%*	(sq. ft.)	19004.69
	Total Imp. Area:	**19004.69**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
21116.32	0.5	19004.688	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	0.7

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **656.1** cu. Ft
Provided: **-** cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P12
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	333719
Impervious Assume 90%*	(sq. ft.)	300347.37
	Total Imp. Area:	**300347.37**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
333719.3	7.7	300347.37	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	10.9

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **10369.4** cu. Ft
Provided: **-** cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P13
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	276964
Impervious Assume 90%*	(sq. ft.)	249267.65
	Total Imp. Area:	**249267.65**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
276964.06	6.4	249267.654	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	9.1

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **8605.9** cu. Ft
Provided: **-** cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P14
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	17336
Impervious Assume 90%*	(sq. ft.)	15602.56
	Total Imp. Area:	**15602.56**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
17336.18	0.4	15602.562	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	0.6

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **538.7** cu. Ft
Provided: - cu. Ft

0.41 Inches of runoff from Imp. Area

Project Name: Oxbow Centre
Project No: W0007.0004
Sheet Title: Water Quality Calculations - P15
Creation Date: 2/15/2022
Comments:

Site Area	(sq. ft.)	11824
Impervious Assume 90%*	(sq. ft.)	10641.50
	Total Imp. Area:	**10641.50**

TABLE 2. WATER QUALITY STORM EVENT RUNOFF RATE AND VOLUME AS A PERCENT OF IMPERVIOUS AREA FOR 40-ACRE AND SMALLER SITES

Percent Impervious (%D)	*Runoff Depth (inches)*	*Runoff Rate (cfs/ac)*	*Runoff Volume (cubic feet/ac)*
0	0	0	0
20	0.09	0.5	327
40	0.18	0.8	653
60	0.27	1.2	980
80	0.36	1.35	1037
100	0.46	1.5	1670

*Rio Rancho DPM Vol II (2009)

Table Interpolation:

Site Area	Site Area	Imp. Area	% Imp	Imp
(sq. ft.)	(ac.)	(Sq. ft.)		
11823.89	0.3	10641.501	90%	90

Discharge Calculations	
90% Impervious (cfs/ac)	1.43
cfs of Water Treatment	0.4

Runoff Vol.
(per ac.)

0-20	20-40	40-60	60-80	80-100	
0	0	0	0	1353.5	-

Total Water Quality Volume Required: **367.4** cu. Ft
Provided: **-** cu. Ft

0.41 Inches of runoff from Imp. Area

Manning Formula:

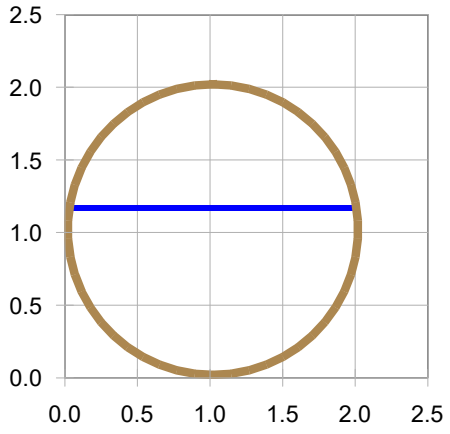
Circular Channel

Input

Flow	17.9 cfs
Slope	0.016 ft/ft
Manning's n	0.013
Diameter	24 in

Output

Depth	1.146 ft
Flow Area	1.86 sf
Velocity	9.61 fps
Velocity Head	1.44 ft
Top Width	1.98 ft
Froude Number	1.75
Critical Depth	1.524 ft
Critical Slope	0.00726 ft/ft



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Manning Formula:

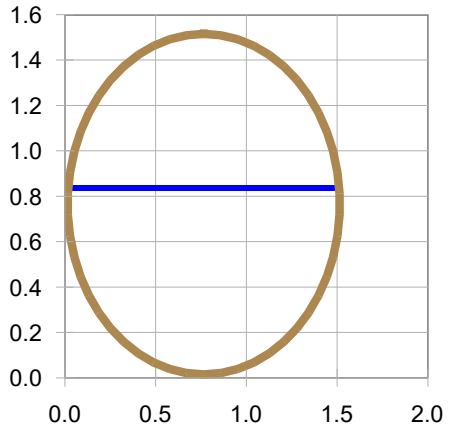
Circular Channel

Input

Flow	12.4 cfs
Slope	0.041 ft/ft
Manning's n	0.013
Diameter	18 in

Output

Depth	0.823 ft
Flow Area	0.992 sf
Velocity	12.5 fps
Velocity Head	2.43 ft
Top Width	1.49 ft
Froude Number	2.70
Critical Depth	1.330 ft
Critical Slope	0.0124 ft/ft



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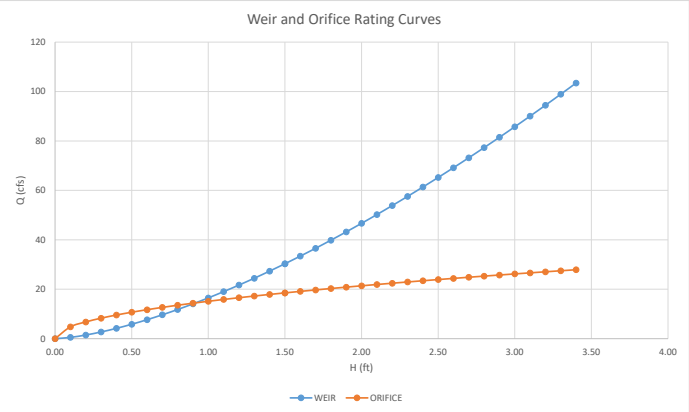
Project Name: Oxbow Center
Project No: W0007.0004
Sheet Title: Orifice 24" Calculations
Creation Date: 02/15/2022
Comments:

Orifice		H (in)	H (ft)	Q_o
$Q_o = .6A\sqrt{2gh}$		0.00	0.00	0
		1.20	0.10	4.78
Q_o = Capacity (cfs)		2.40	0.20	6.76
A = Open area of grate (sq. ft)	3.141593	3.60	0.30	8.29
g = 32.2 (ft/s2)	32.2	4.80	0.40	9.57
h = Head (ft)		6.00	0.50	10.70
Diameter (in)	24	7.20	0.60	11.72
		8.40	0.70	12.66
		9.60	0.80	13.53
		10.80	0.90	14.35
		12.00	1.00	15.13
		13.20	1.10	15.87
		14.40	1.20	16.57
		15.60	1.30	17.25
		16.80	1.40	17.90
		18.00	1.50	18.53
		18.00	1.50	18.53
		19.20	1.60	19.13
		20.40	1.70	19.72
		21.60	1.80	20.29
		22.80	1.90	20.85
		24.00	2.00	21.39
		25.20	2.10	21.92
		26.40	2.20	22.44
		27.60	2.30	22.94
		28.80	2.40	23.43
		30.00	2.50	23.92
		31.20	2.60	24.39
		32.40	2.70	24.86
		33.60	2.80	25.31
		34.80	2.90	25.76
		36.00	3.00	26.20
		37.20	3.10	26.63
		38.40	3.20	27.06
		39.60	3.30	27.48
		40.80	3.40	27.89
		42.00	3.50	28.30



Neenah: When Q is approximately the same, vortex appears over grate. This flow, due to rotation above grate, is not as efficient. Use 80% of expected flow as a good conservative estimate.

Project Name: Oxbow Center
Project No: W0007.0004
Sheet Title: Orifice 18" Calculations
Creation Date: 02/15/2022
Comments:

Orifice

$Q_o = .6A\sqrt{2gh}$

Q_o = Capacity (cfs)

A = Open area of grate (sq. ft) 1.514696

g = 32.2 (ft/s2) 32.2

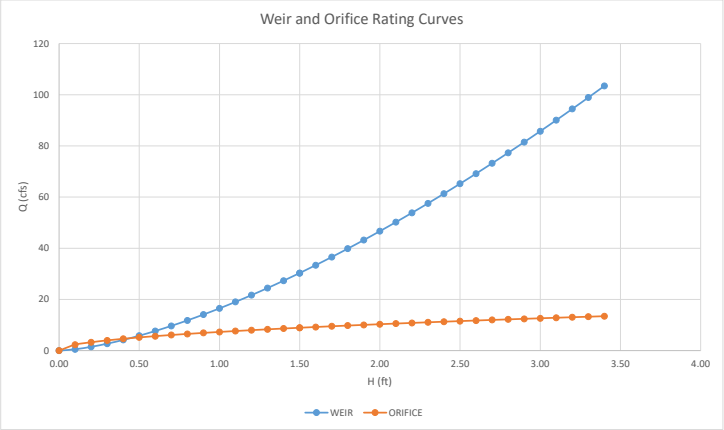
h = Head (ft)

Diameter (in) 18

ONE CITY GRATE = 4.56 SQ FT

A= Open are of grate (reduced flow)

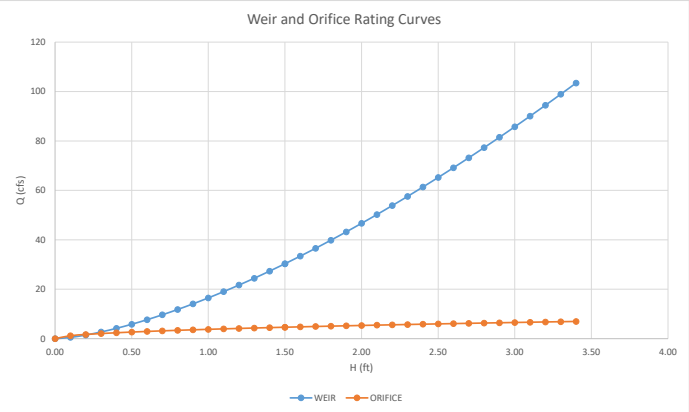
H (in)	H (ft)	Q_o
0.00	0.00	0
1.20	0.10	2.31
2.40	0.20	3.26
3.60	0.30	3.99
4.80	0.40	4.61
6.00	0.50	5.16
7.20	0.60	5.65
8.40	0.70	6.10
9.60	0.80	6.52
10.80	0.90	6.92
12.00	1.00	7.29
13.20	1.10	7.65
14.40	1.20	7.99
15.60	1.30	8.32
16.80	1.40	8.63
18.00	1.50	8.93
18.00	1.50	8.93
19.20	1.60	9.23
20.40	1.70	9.51
21.60	1.80	9.78
22.80	1.90	10.05
24.00	2.00	10.31
25.20	2.10	10.57
26.40	2.20	10.82
27.60	2.30	11.06
28.80	2.40	11.30
30.00	2.50	11.53
31.20	2.60	11.76
32.40	2.70	11.98
33.60	2.80	12.20
34.80	2.90	12.42
36.00	3.00	12.63
37.20	3.10	12.84
38.40	3.20	13.05
39.60	3.30	13.25
40.80	3.40	13.45
42.00	3.50	13.64



Neenah: When Q is approximately the same, vortex appears over grate. This flow, due to rotation above grate, is not as efficient. Use 80% of expected flow as a good conservative estimate.

Project Name: Oxbow Center
Project No: W0007.0004
Sheet Title: Orifice 12" Calculations
Creation Date: 02/15/2022
Comments:

Orifice		H (in)	H (ft)	Q_o
$Q_o = .6A\sqrt{2gh}$		0.00	0.00	0
		1.20	0.10	1.20
Q_o = Capacity (cfs)		2.40	0.20	1.69
A = Open area of grate (sq. ft)	0.785398	3.60	0.30	2.07
g = 32.2 (ft/s2)	32.2	4.80	0.40	2.39
h = Head (ft)		6.00	0.50	2.67
Diameter (in)	12	7.20	0.60	2.93
		8.40	0.70	3.16
		9.60	0.80	3.38
ONE CITY GRATE = 4.56 SQ FT		10.80	0.90	3.59
		12.00	1.00	3.78
A= Open are of grate (reduced flow)		13.20	1.10	3.97
		14.40	1.20	4.14
		15.60	1.30	4.31
		16.80	1.40	4.47
		18.00	1.50	4.63
		18.00	1.50	4.63
		19.20	1.60	4.78
		20.40	1.70	4.93
		21.60	1.80	5.07
		22.80	1.90	5.21
		24.00	2.00	5.35
		25.20	2.10	5.48
		26.40	2.20	5.61
		27.60	2.30	5.74
		28.80	2.40	5.86
		30.00	2.50	5.98
		31.20	2.60	6.10
		32.40	2.70	6.21
		33.60	2.80	6.33
		34.80	2.90	6.44
		36.00	3.00	6.55
		37.20	3.10	6.66
		38.40	3.20	6.76
		39.60	3.30	6.87
		40.80	3.40	6.97
		42.00	3.50	7.07



Neenah: When Q is approximately the same, vortex appears over grate. This flow, due to rotation above grate, is not as efficient. Use 80% of expected flow as a good conservative estimate.