

PERMANENT EASEMENT

Grant of Permanent Easement, between Woodmont Paseo, LLC ("Grantor"), whose address is 3077 East Warm Springs Road, Las Vegas, Nevada, 89120 and the City of Albuquerque, a New Mexico municipal corporation ("City"), whose address is P.O. Box 1293, Albuquerque, NM, 87103.

Subject to existing rights of record, Grantor grants to the City an exclusive, permanent easement ("Easement") in, over, upon and across the real property described on Exhibit "A" attached hereto ("Property") for the construction, installation, maintenance, repair, modification, replacement and operation of Public Drainage Easement, together with the right to remove trees, bushes, undergrowth and any other obstacles upon the Property if the City determines they interfere with the appropriate use of this Easement.

In the event Grantor constructs any improvements ("Improvements") within the Easement, the City has the right to enter upon Grantor's property at any time and perform whatever inspection, installation, maintenance, repair, modification or removal ("Work") it deems appropriate without liability to the City. If the Work effects any Improvements or encroachments made by the Grantor, the City will not be financially or otherwise responsible for rebuilding or repairing the 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 Grantor shall, at its own expense, take whatever protective measures are required to safeguard the Improvements or encroachments.

Grantor covenants and warrants that Grantor is the owner in fee simple of the Property, that Grantor has a good lawful right to convey the Property or any part thereof and that Grantor will forever warrant and defend the title to the Property against all claims from all persons or entities.

The grant and other provisions of this Easement constitute covenants running with the Property for the benefit of the City and its successors and assigns until terminated.

This Easement shall not be effective until approved by the City Engineer in the signature block below.

WITNESS my hand and seal this 31 day of March, 2016.

CITY OF ALBUQUERQUE:

By: _____
Shahab Biazar, PE
City Engineer
Date: _____

GRANTOR

Woodmont Paseo, LLC
By[signature]: _____
Name [print]: Kelly Calhoun
Title: Manager
Date: 3/31/16

INDIVIDUAL'S NOTARY

STATE OF _____)
)ss
COUNTY OF _____)

This instrument was acknowledged before me on _____ day of _____, 20____,
by _____ (name of individual).

(SEAL)

My Commission Expires: _____

Notary Public

CORPORATION'S NOTARY

STATE OF New Mexico)
)ss
COUNTY OF Bernalillo)

This instrument was acknowledged before me on 31 day of March, 2016,
by Kelly Calhoun (name), MANAGER (title)
of Woodmont Paseo, LLC (entity), a Nevada limited liability Co. (i.e. a
New Mexico) corporation, on behalf of the corporation.

(SEAL)

My Commission Expires: 1/25/20 on Expires: _____



Sara S. Hummel

NOTARY PUBLIC
STATE OF NEW MEXICO

Sara S. Hummel
Notary Public

PARTNERSHIP'S NOTARY

STATE OF _____)
)ss
COUNTY OF _____)

This instrument was acknowledged before me on _____ day of _____, 20____,
by _____ (name), partner(s), on behalf of
_____ (entity), a partnership.

(SEAL)

My Commission Expires: _____

Notary Public

(EXHIBIT "A" ATTACHED)

SEE SHEET 6

PLAT OF
DURANGO UNIT 1

(BEING A REPLAT OF TRACTS 7 AND 9, THE TRACTS UNIT 3A)

THE TOWN OF ALAMEDA GRANT

PROJECTED SECTION 16, TOWNSHIP 11 NORTH, RANGE 2 EAST
NEW MEXICO PRINCIPAL MERIDIAN

CITY OF ALBUQUERQUE

BERNILLO COUNTY, NEW MEXICO

JANUARY, 2018

EASEMENT LEGEND

1. New 10' and 5' Public Utility Easement
2. Existing 10' Public Utility Easement
3. Existing 20' Public Utility Easement
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SEE SHEET 5



TRACT H

BLANKET
DRAINAGE
EASEMENT

TRACT G

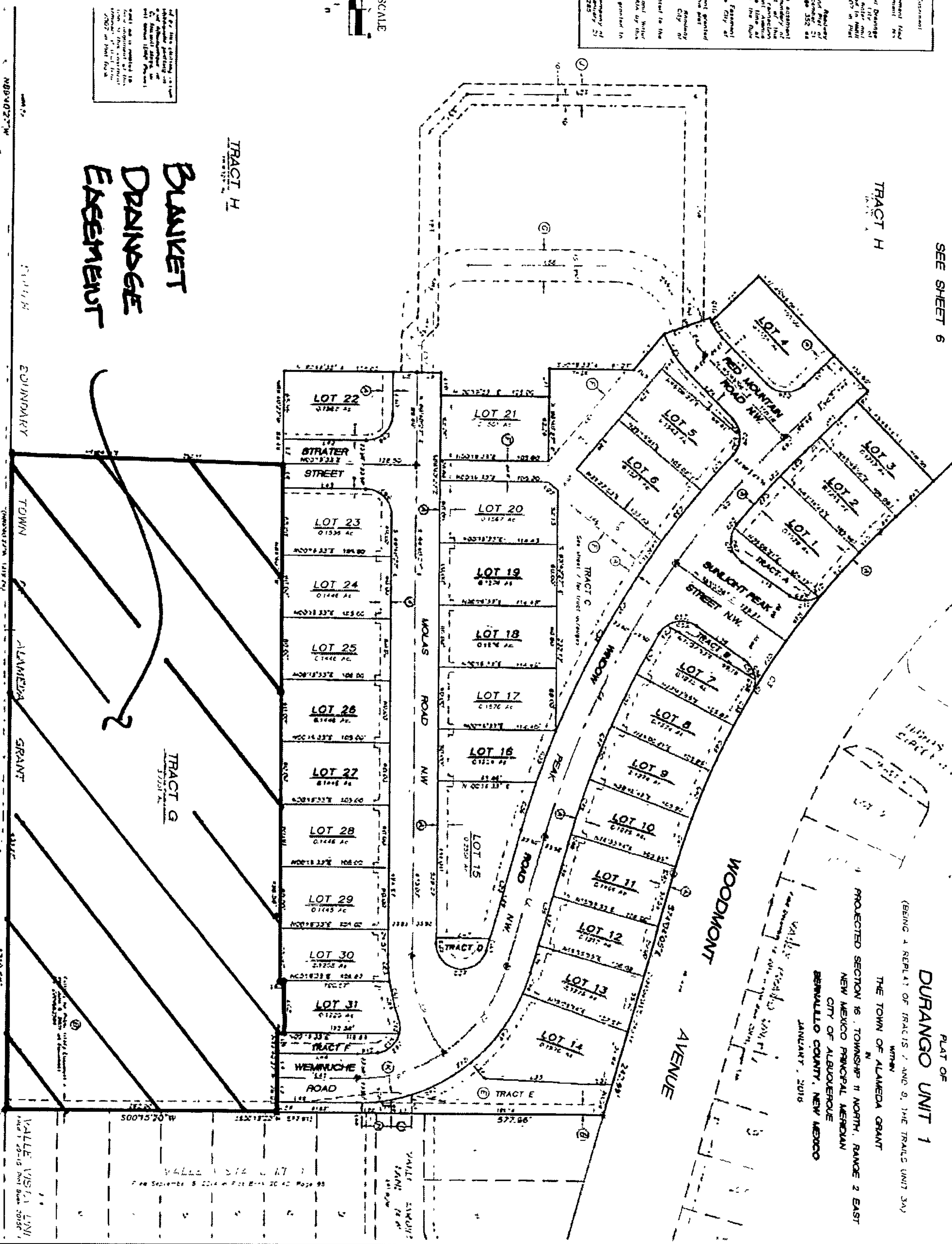


EXHIBIT A

A-2 PLAN VIEW

SURV-TEK, INC.

CONSULTING SURVEYORS
8000 Valley View Drive, NW Albuquerque, New Mexico 87114
Phone 505-887-3388
Fax 505-887-3377

EXHIBIT A

A-1 LEGAL DESCRIPTION

A blanket easement on and over Tract G, Durango Unit 1, as the same as is shown on the plat entitled "Durango Unit1 (being a replat of Tracts 7 and 8, The Trails Unit 3A) within the town of Alameda Grant in the projected Section 15, Township 11 North, Range 2 East, New Mexico Principal Meridian, City of Albuquerque, Bernalillo County, New Mexico", which was recorded in the office of the Bernalillo County Clerk on February 12, 2016, Doc. #2016013834, sheets 1 thru 7, Plat Book 2016C, Page 12, as shown on sheet A-2.

Harmon Rita T.

From: Rick Beltramo <rbeltramo@wcinm.com>
Sent: Monday, March 28, 2016 3:52 PM
To: Harmon Rita T.
Subject: RE: Durango Unit 1

Still working on it. It will be in before we turn in the close-out package. We finished the lower portion of the dual walls. Scott should be preparing and submitting the final G&D Cert. soon. I recommend that you NOT issue the approval letter until I have recorded that easement.

From: Harmon Rita T. [<mailto:rharmon@cabq.gov>]
Sent: Monday, March 28, 2016 3:42 PM
To: Rick Beltramo
Subject: Durango Unit 1

Rick,
Did you ever get Temporary Drainage easement over the Tract directly south of Durango Unit 1? Where Unit 2 will be.

Rita Harmon, P.E.
Senior Engineer, Hydrology Section
City of Albuquerque Planning Department
Development & Review Services Division
600 2nd St. NW, Suite 201
Albuquerque, NM 87102
t 505-924-3695

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



April 5, 2016

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: Durango at the Trails (File: C09D012), Unit 1
Grading and Drainage plans, Stamp Date 11-30-15 (Sheets 1 and 5)
Certification dated 3-23-2016

Dear Mr. Steffen:

Based upon the information provided in your Certification received 3-23-2016, the above referenced Certification plan is accepted for Release of Financial Guarantee for grading and drainage.

PO Box 1293

Albuquerque

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

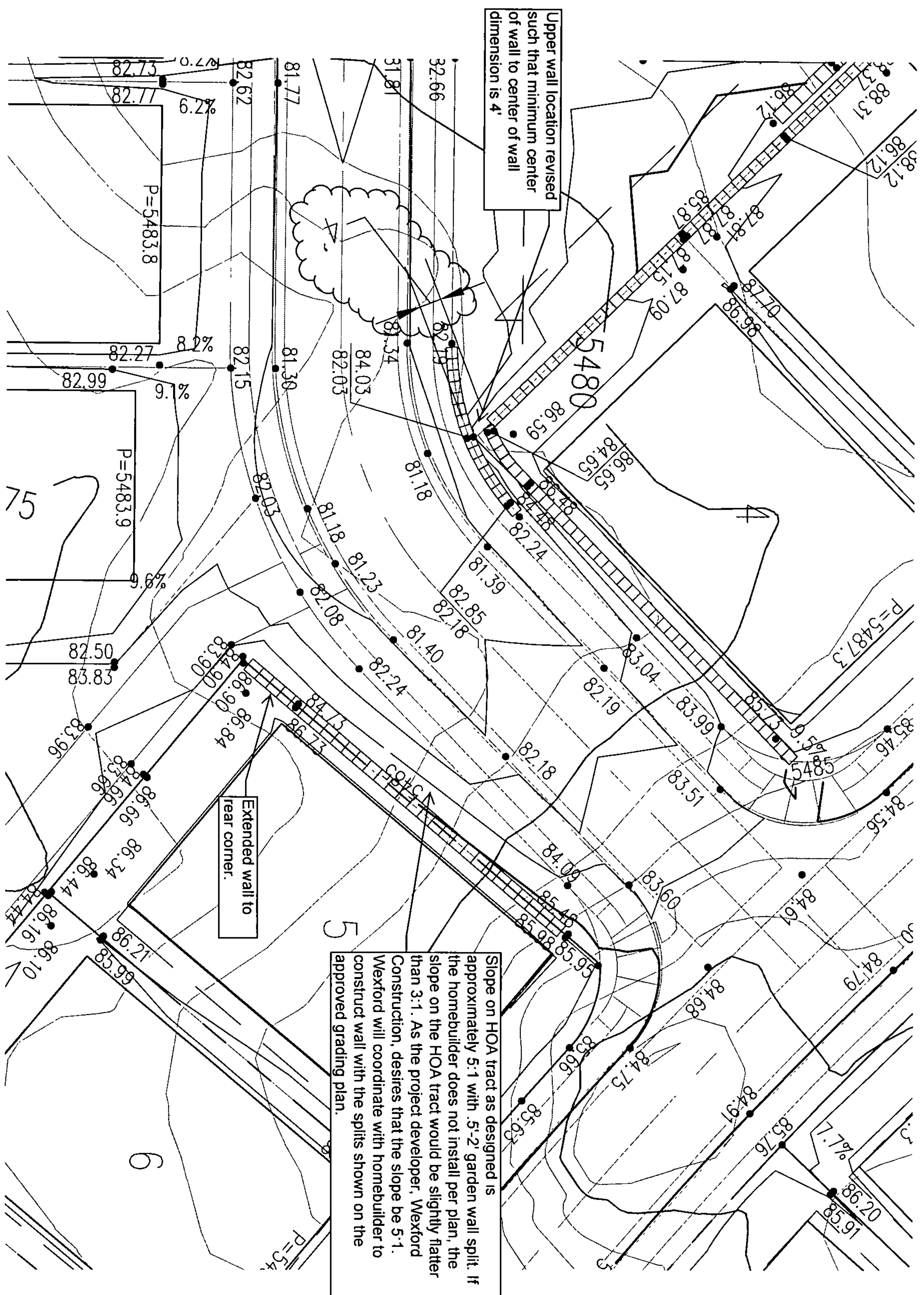
New Mexico 87103

Sincerely,

www.cabq.gov

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

Orig: Drainage file
c.pdf Addressee via Email, Charlotte LaBadie



Harmon Rita T.

From: Rick Beltramo <rbeltramo@wcinm.com>
Sent: Monday, March 28, 2016 4:01 PM
To: Harmon Rita T.
Subject: RE: Durango Unit 1 questions

Rita,

I forwarded your email to Scott. I am going to have him come up with a revised plan. See, there we go. My amend, revised, corrected.....fixed, final plan. I put him on notice that we would need to address this, both for the sake of having a workable plan, and for the benefit of the builder.

I am hoping a sketch top you and if you like it we include it with the final G&D Cert.

RLB.

From: Harmon Rita T. [<mailto:rharmon@cabq.gov>]
Sent: Monday, March 28, 2016 3:56 PM
To: Scott J. Steffen (ssteffen@bhinc.com); Rick Beltramo
Subject: Durango Unit 1 questions

Rick, Scott,

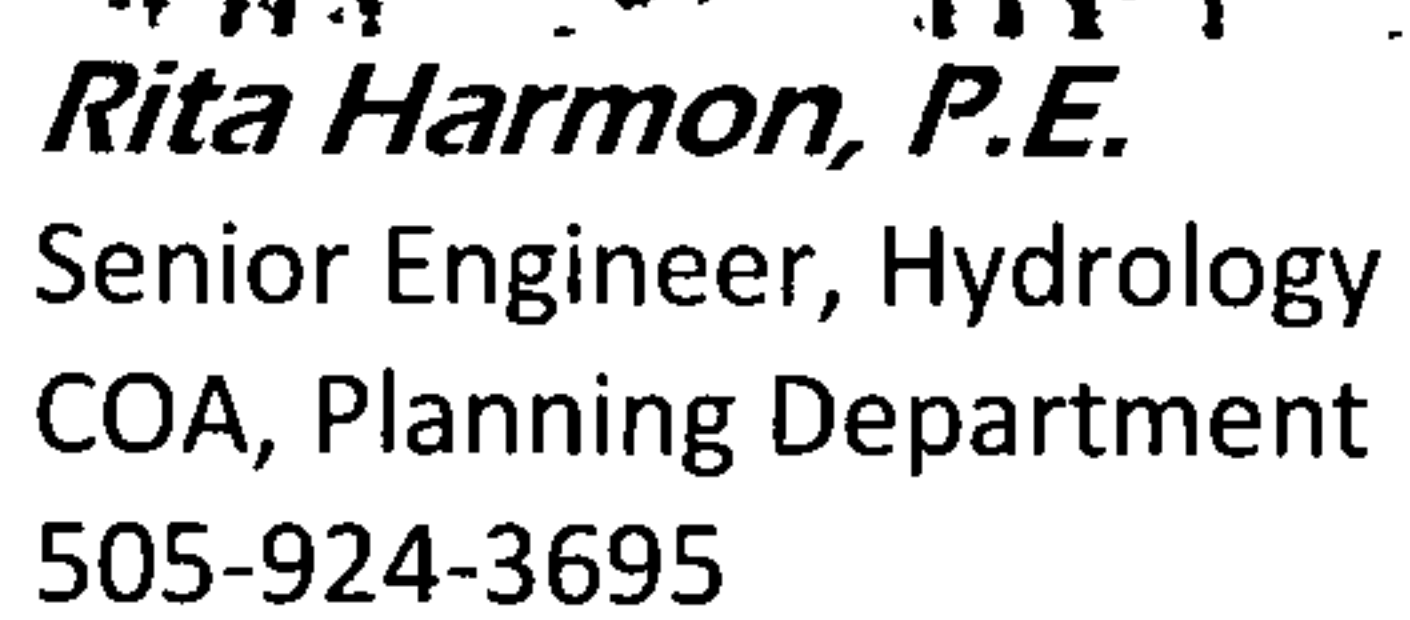
I have in my notes that Lot 4 Garden wall was to be modified as it abutted the lower wall and was not constructible as shown.

Also, it was also noted that the wall along the western edge of Lot 5 may need to be extended.

Since the Homebuilder is to build these wall, how will these changes be made?

Thanks,

Rita



March 23, 2016

voice: 505.823.1000
facsimile 505.798.7988
toll free. 800.877.5332

Ms. Rita Harmon
Hydrology Section
City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87102

Re: Final Grading and Drainage Certification, Durango Unit 1
DRB Case No. 1010401, (C09/D012)

Dear Rita:

We are submitting the final grading and drainage certification for Durango Unit 1. Enclosed for your review is the approved grading and drainage plan dated 11/30/15, with as-built elevations for Unit 1. The Unit 1 lots have been graded, and curb and gutter, pavement and storm drain improvements have been constructed.

After reviewing these as-built elevations and visiting the site on 3/17/16, it is my belief that the Durango Unit 1 subdivision has been graded in substantial compliance with the approved grading and drainage plan.

Your review and approval is requested for SIA/Financial Guaranty Release for Durango Unit 1. I appreciate your time and consideration. If you have questions or require additional information, please contact me at 823-1000.

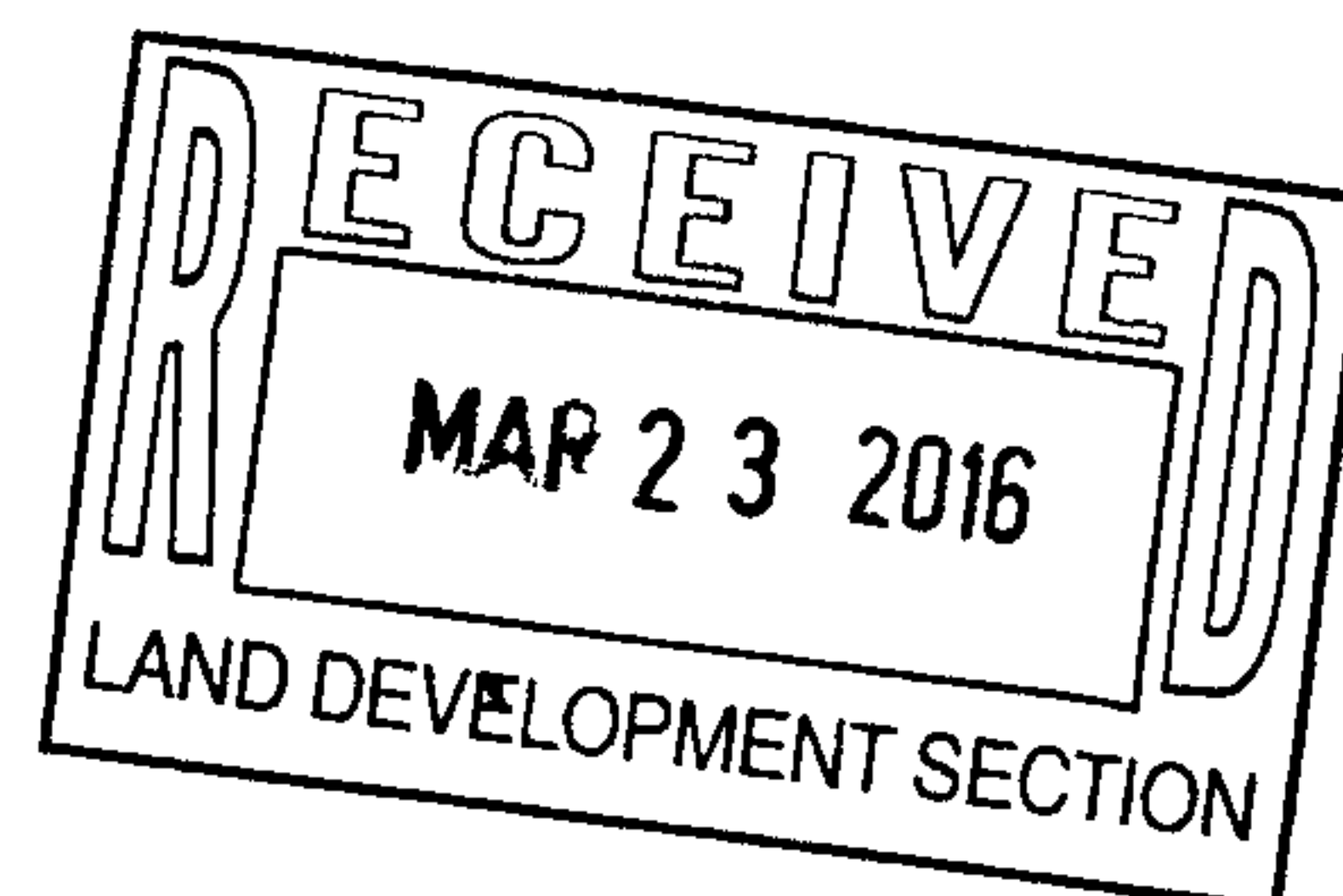
Sincerely,



Scott J. Steffen, P.E.
Vice President
Community Development & Planning

Enclosure

cc: Rick Beltramo, Wexford Construction



Engineering ▲

Spatial Data ▲

Advanced Technologies ▲

Scott Steffen

From: Scott Steffen
Sent: Wednesday, March 23, 2016 2:23 PM
To: Harmon Rita T. (rharmon@cabq.gov)
Cc: 'Rick Beltramo'; PLNDRS@cabq.gov
Subject: Durango Unit 1 RoFG certification
Attachments: Durango Unit 1 C09_D012 RoFG Cert Submittal Package.pdf

Rita,

Attached is the Durango Unit 1 RoFG grading and drainage certification.

You should receive a hard copy either this afternoon or tomorrow morning.

Let me know if you have any questions.

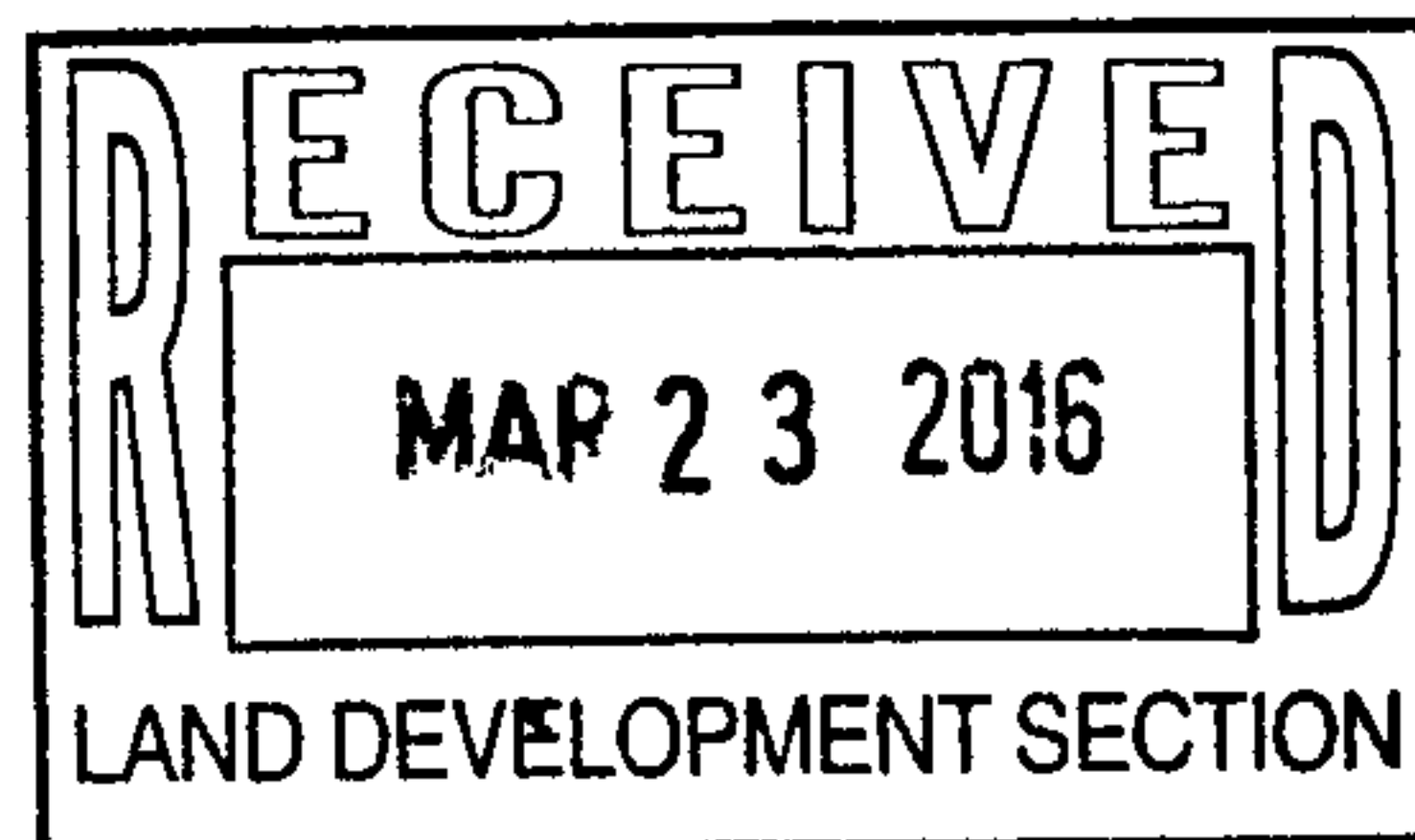
Thanks,

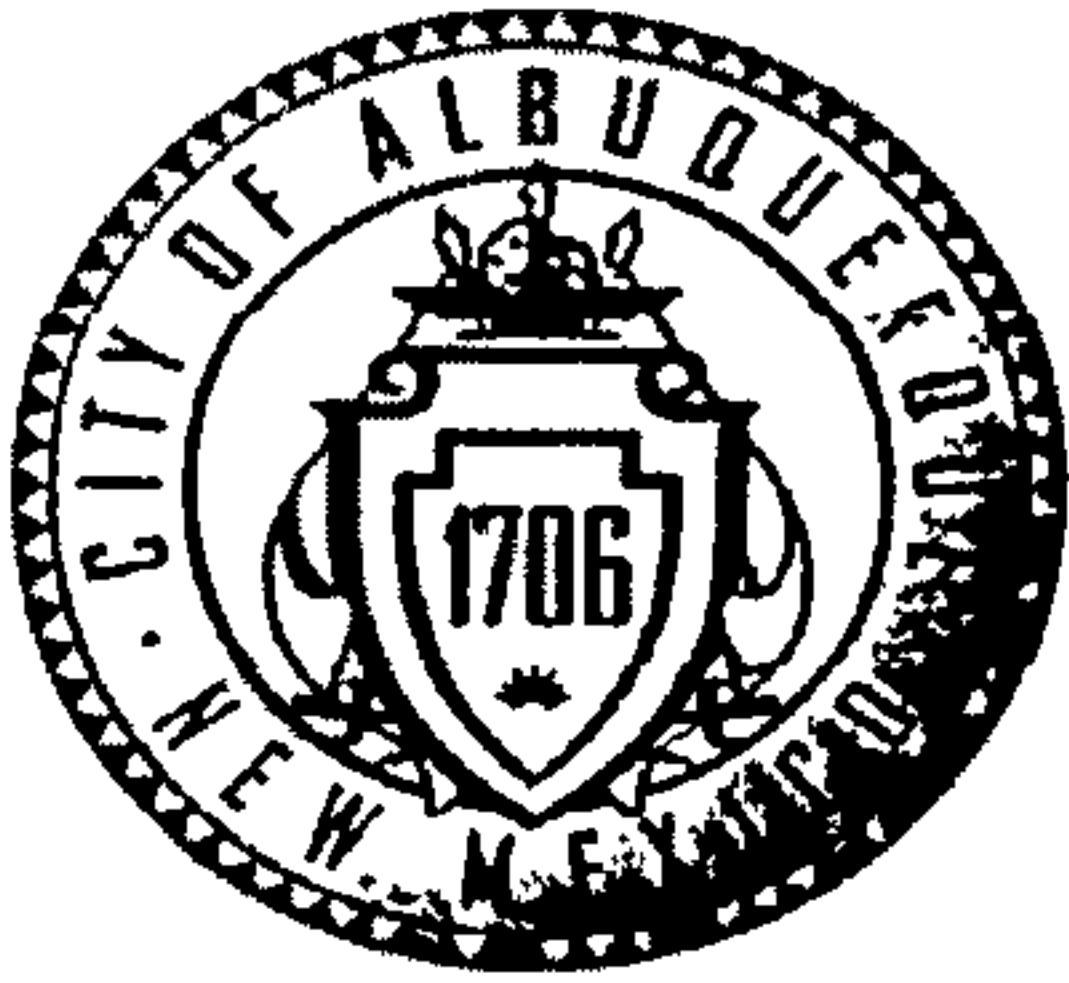
Scott J. Steffen
Vice President
Community Development and Planning

Bohannon Huston

Courtyard I
7500 Jefferson St. NE
Albuquerque, NM 87109-4335
www.bhinc.com

voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332





City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: DURANGO UNIT 1 Building Permit #: _____ City Drainage #: C09/D012
DRB#: 1010401 EPC#: _____ Work Order#: _____
Legal Description: Tracts 7 & 8, Trails Unit 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: SCOTT STEFFEN
Address: 7500 JEFFERSON ST NE COURTYARD I ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: SSTEFFEN@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: _____ Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Other Contact: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:

- ☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☒ ENGINEER/ ARCHITECT CERTIFICATION

☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)

☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY

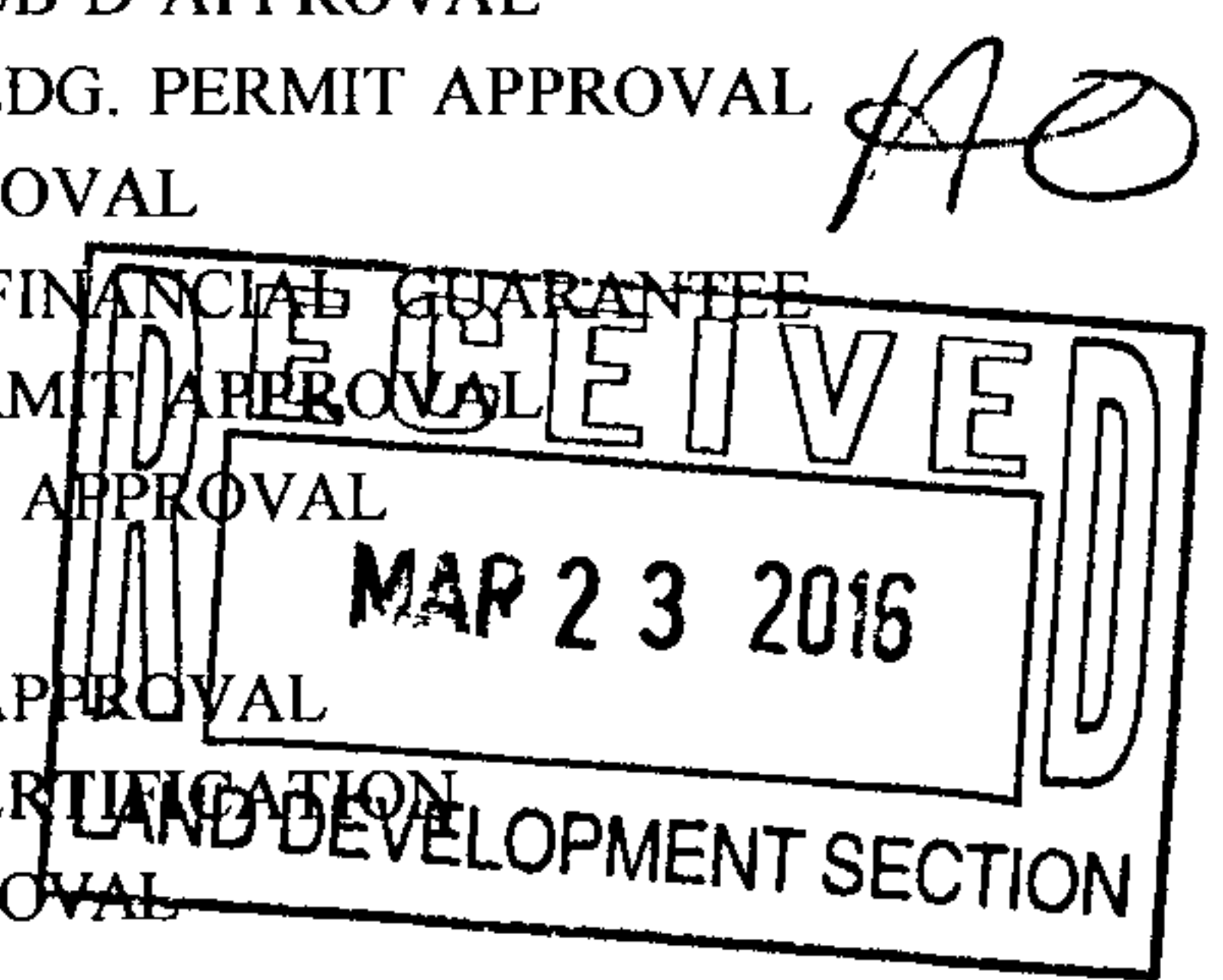
☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☒ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR

☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

DATE SUBMITTED: 3/23/16 By: SCOTT STEFFEN

COA STAFF. ELECTRONIC SUBMITTAL RECEIVED _____



Current DRC
Project No

ORIGINAL

Figure 12

INFRASTRUCTURE LIST

EXHIBIT 'A'
TO SUBDIVISION IMPROVEMENTS AGREEMENT
DEVELOPMENT REVIEW BOARD (D.R.B.) REQUIRED INFRASTRUCTURE LIST

DURANGO UNIT 2
(REPLAT OF TRACTS G AND H, DURANGO UNIT 1)

Date Submitted May 20, 2015
Date Site Plan for Bldg Permit Approval
Date Site Plan for Sub Approval

Date Preliminary Plat Approved 8-5-15
Date Preliminary Plat Expires 8-5-16

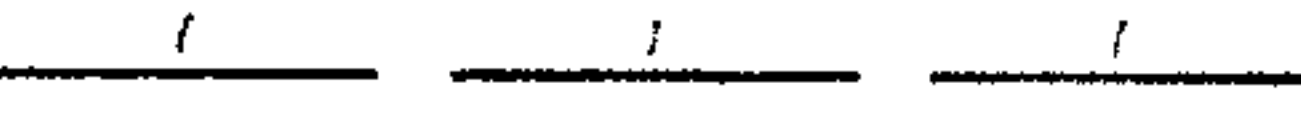
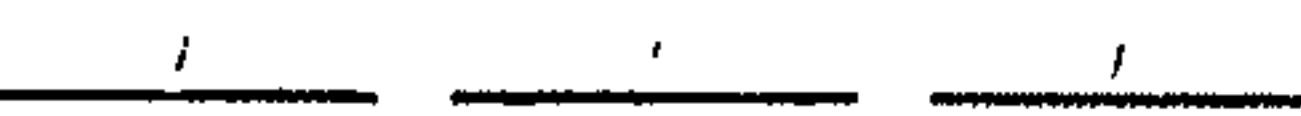
DRB Project No 1010401
15 70148

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 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.

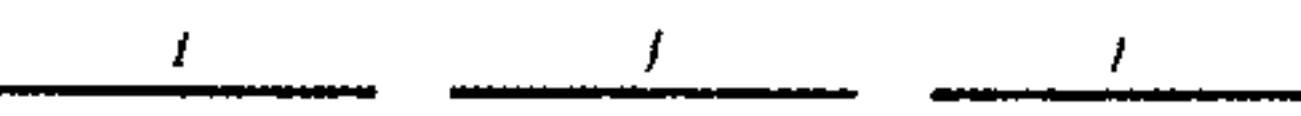
SIA Sequence #	COA DRC Project #	Size	Type of Improvement	Location	From	To	Private Inspector	City Inspector	City Cnst Engineer
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DURANGO UNIT 2 WORK ORDER WILL NOT BE ISSUED UNTIL DURANGO UNIT 1
IS OPERATIONAL AND FINAL INSPECTION WITH THE CITY OF ALBUQUERQUE HAS OCCURRED

PAVING

	28' F-F	RESIDENTIAL PAVING W/ PCC CURB & GUTTER, PCC 4" WIDE SIDEWALK ON BOTH SIDES *	WEMINUCHE ROAD	LOT 10 60' WEST OF STRATER STREET	UNIT 2 NORTH BOUNDARY NORTH END TRACT R	
	28' F-F	RESIDENTIAL PAVING W/ PCC CURB & GUTTER, PCC 4" WIDE SIDEWALK ON BOTH SIDES *	STRATER STREET	WEMINUCHE ROAD	UNIT 2 NORTH BOUNDARY NORTH END LOTS 9/10	
* SIDEWALKS TO BE BUILT/DEFERRED IN ACCORDANCE W/ APPROVED SIDEWALK EXHIBIT						

PUBLIC STORM DRAIN IMPROVEMENTS

	24" DIA	RCP W/ MH & INLETS	WEMINUCHE ROAD	STRATER STREET	50' SOUTH OF UNIT 2 NORTH BOUNDARY	
	42" DIA	RCP W/ MH & INLETS	WEMINUCHE ROAD	50' SOUTH OF UNIT 2 NORTH BOUNDARY	UNIT 2 NORTH BOUNDARY	
NOTE: CERTIFICATION OF THE GRADING AND DRAINAGE PLAN IS REQUIRED FOR RELEASE OF FINANCIAL GUARANTEES						

SIA Sequence #	COA DRC Project #	Size	Type of Improvement	Location	From	To	Private Inspector	City Inspector	City Cnstl Engineer
PUBLIC WATERLINE IMPROVEMENTS									
		8" DIA	WATERLINE W/ NEC. VALVES FHS, MJS & RJS	WEMINUCHE ROAD	STRATER STREET	UNIT 2 NORTH BOUNDARY NORTH END TRACT B	/	/	/
		12" DIA	WATERLINE W/ NEC. VALVES FHS, MJS & RJS	WEMINUCHE ROAD	LOT 10 60' WEST OF STRATER STREET	STRATER STREET	/	/	/
		12" DIA	WATERLINE W/ NEC. VALVES FHS, MJS & RJS	STRATER STREET	WEMINUCHE ROAD	UNIT 2 NORTH BOUNDARY NORTH END LOTS 9/10	/	/	/
		12" DIA	WATERLINE W/ NEC. VALVES FHS, MJS & RJS	WATERLINE EASEMENT	TRACT C SOUTH BOUNDARY/APS CONNECTION (FUTURE HILLERMAN ST)	WEST END OF WEMINUCHE ROAD	/	/	/

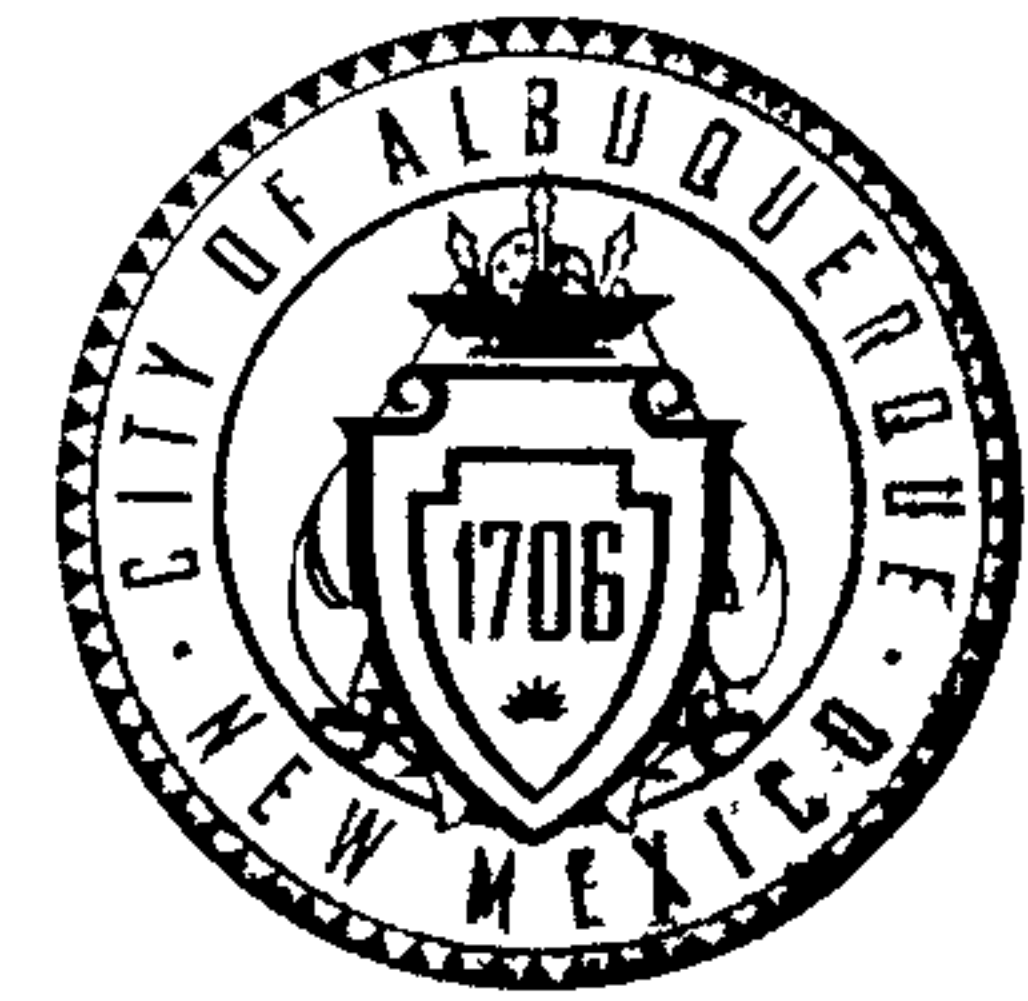
SIA Sequence #	COA DRC Project #	Size	Type of Improvement	Location	From	To	Private Inspector	City Inspector	City Cnstl Engineer
PUBLIC SANITARY SEWER IMPROVEMENTS									
		8" DIA	SANITARY SEWER W/ NEC MHS & SERVICES	WEMINUCHE ROAD	LOT 10 60' WEST OF STRATER STREET	UNIT 2 NORTH BOUNDARY NORTH END TRACT B	/	/	/
							/	/	/

AGENT/OWNER		DEVELOPMENT REVIEW BOARD MEMBER APPROVALS			
SCOTT STEFFEN	5/20/2015	<i>[Signature]</i>	8-5-15	<i>Carol S. Dymont</i>	8-5-15
PREPARED BY PRINT NAME	DATE	DRB CHAIR	DATE	PARKS & GENERAL SERVICES Recreation	DATE
BOHANNAN HUSTON, INC.		<i>[Signature]</i>	8/5/15		
FIRM		TRANSPORTATION DEVELOPMENT	DATE		
<i>[Signature]</i>	8/5/15	<i>[Signature]</i>	8/5/15	<i>[Signature]</i>	8-5-15
SIGNATURE		DATE		CITY ENGINEER	DATE
MAXIMUM TIME ALLOWED TO CONSTRUCT IMPROVEMENTS WITHOUT A DRB EXTENSION:					
DATE					

DESIGN REVIEW COMMITTEE REVISIONS				
REVISION	DATE	DRB CHAIR	USER DEPARTMENT	AGENT/OWNER

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



March 2, 2016

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: Durango at the Trails (File: C09D012), Unit 1
Grading and Drainage plans, Stamp Date 11-30-15 (Sheets 1 and 5)
Certification dated 3-2-2016

Dear Mr. Steffen:

Based upon the information provided in your Certification received 3-2-2016, the above referenced Certification is acceptable for Building Pad Certification for all lots.

PO Box 1293

Please note that a temporary paper drainage easement is needed over the interim pond, which should extend from Strater Street to Weminuche Road, as was discussed with Rick Beltramo.

Albuquerque

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

New Mexico 87103

Sincerely,

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

www.cabq.gov

Orig: Drainage file
c pdf Addressee via Email

See notes on plan for ROFG

March 2, 2016

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

Ms. Rita Harmon
Hydrology Section
City of Albuquerque
600 2nd Street NW
Albuquerque, NM 87102

Re: Partial Grading and Drainage Certification, Durango Unit 1
DRB Case No. 1010401, (C09/D012)

Dear Rita:

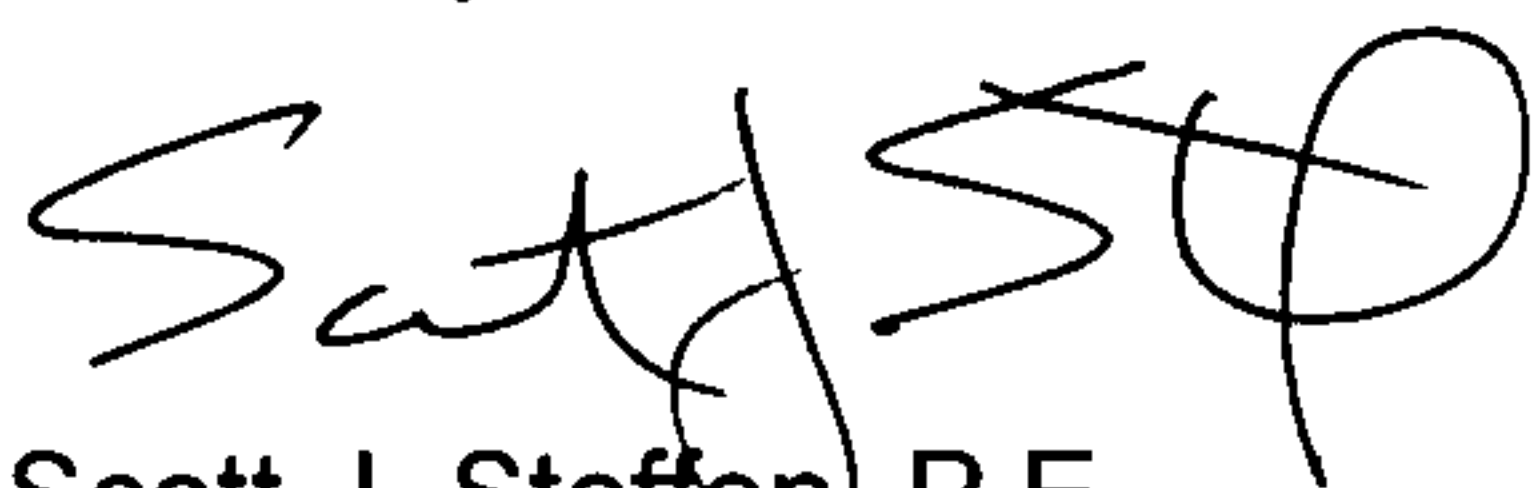
We are submitting a partial grading and drainage certification for Durango Unit 1. The partial certification only includes Durango Unit 1 ~~(Lots 1-31)~~. Enclosed for your review is the approved grading and drainage plan dated 11/30/15, with as-built elevations for Unit 1. The Unit 1 lots have been graded, and curb and gutter, pavement and storm drain improvements have been constructed.

The retaining walls and 2' garden walls are currently under construction and will be complete prior to request for release of financial guaranty.

After reviewing these as-built elevations and visiting the site on 3/01/16, it is my belief that the Durango Unit 1 subdivision has been graded in substantial compliance with the approved grading and drainage plan.

Your review and approval is requested for Pad Certification/Building Permit Approval for Durango Unit 1, Lots 1-31. I appreciate your time and consideration. If you have questions or require additional information, please contact me at 823-1000.

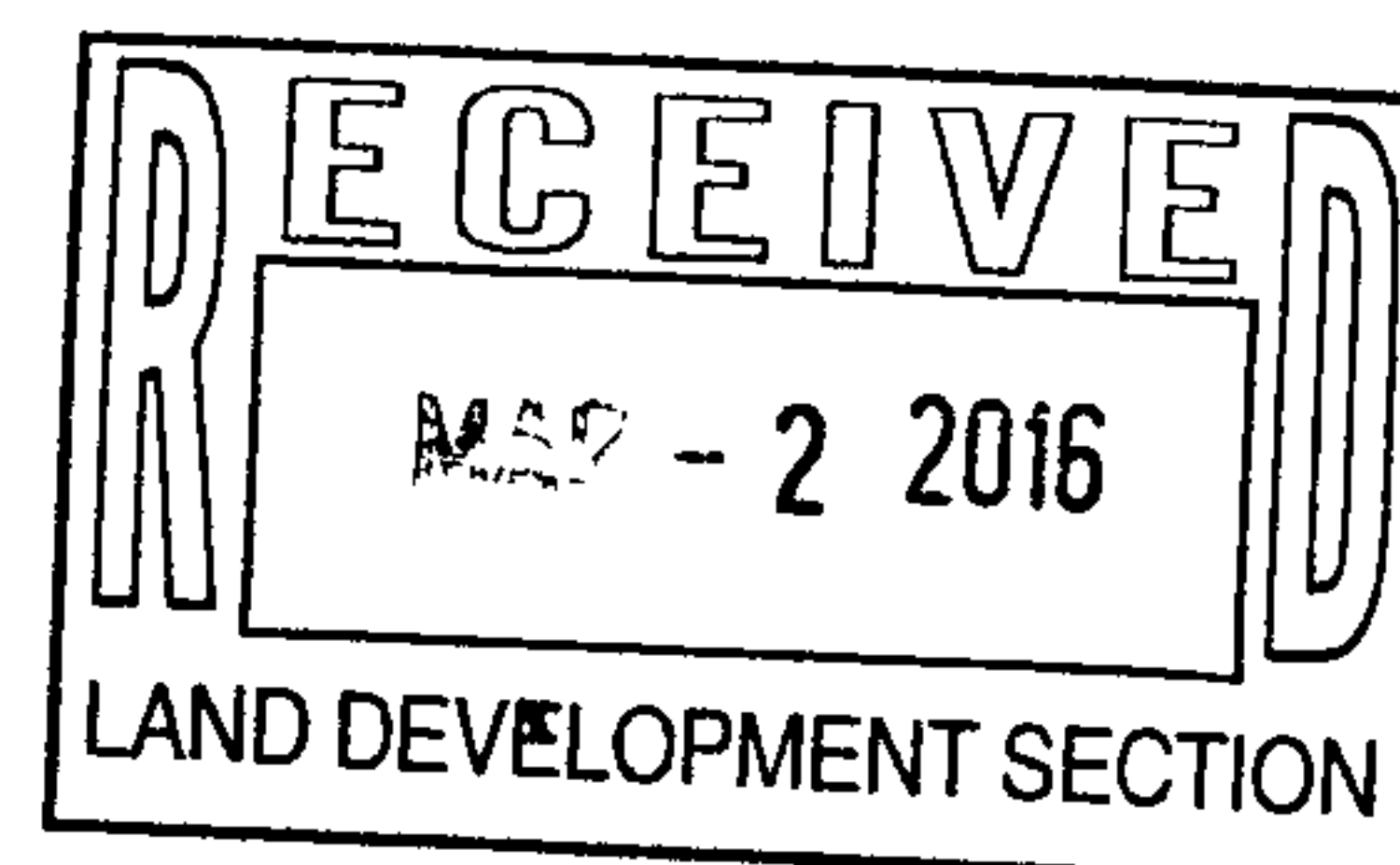
Sincerely,



Scott J. Steffen, P.E.
Vice President
Community Development & Planning

Enclosure

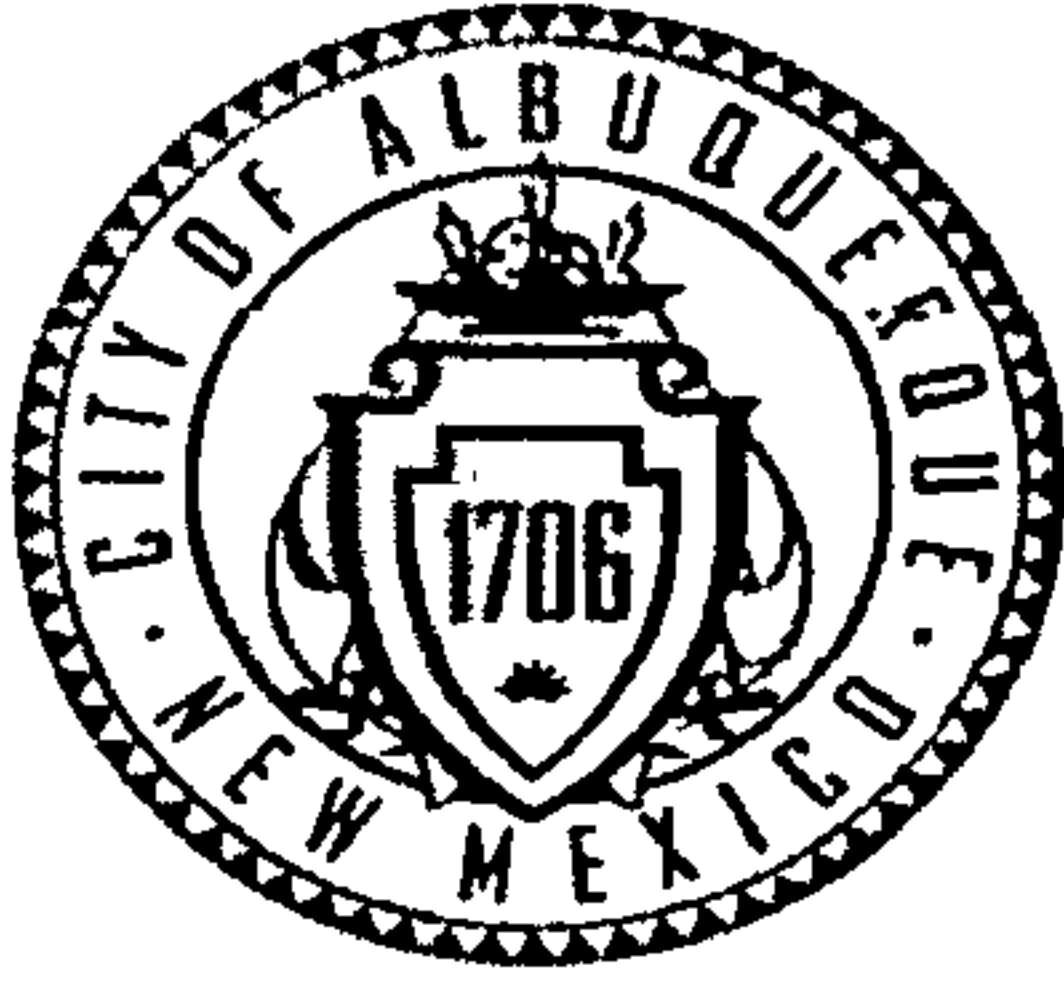
cc: Rick Beltramo, Wexford Construction



Engineering ▲

Spatial Data ▲

Advanced Technologies ▲



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: DURANGO UNIT 1 Building Permit #: _____ City Drainage #: C09/D012
DRB#: 1010401 EPC#: _____ Work Order#: _____
Legal Description: Tracts 7 & 8, Trails Unit 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: SCOTT STEFFEN
Address: 7500 JEFFERSON ST NE COURTYARD I ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: SSTEFFEN@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: _____ Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Other Contact: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

☒ ENGINEER/ ARCHITECT CERTIFICATION

☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)

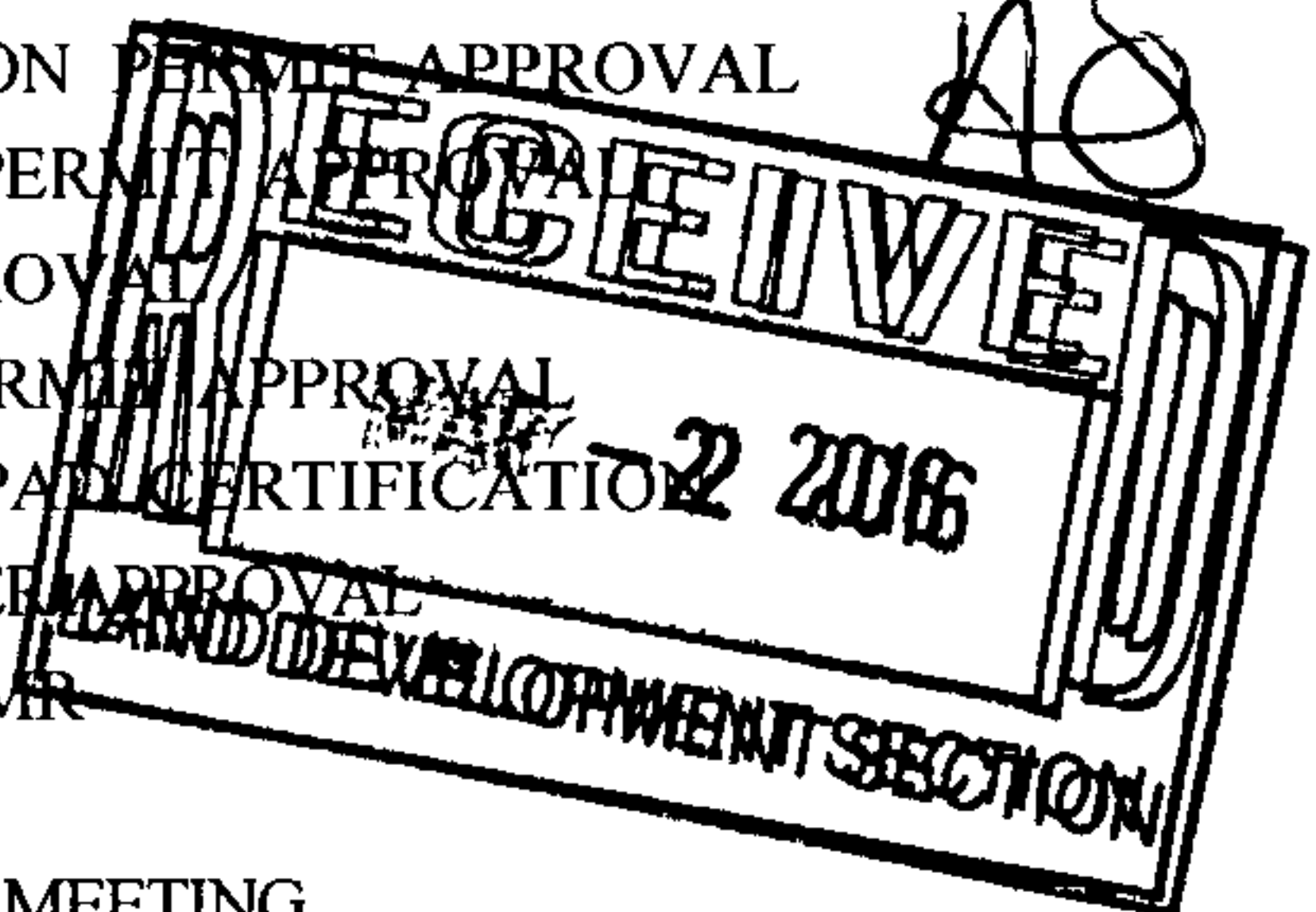
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY

☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☒ GRADING/ PLAT CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR

☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____



\$80.00

IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

DATE SUBMITTED: 3/2/16 By: SCOTT STEFFEN

COA STAFF. ELECTRONIC SUBMITTAL RECEIVED ☒

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



January 13, 2016

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: Durango at the Trails (File: C09D012), Unit 1
Grading and Drainage plans, Stamp Date 11-30-15 (Sheets 1 and 5)
Interim Grading and Drainage plans, Stamp Date 11-30-15

Dear Mr. Steffen:

Based upon the information provided in your submittal received 12-1-15, the above referenced submittal is approved for Grading Permit with the following conditions:

1. As a condition of Final Plat, the Storm drain easement width should be based on formula in DPM. It should be 25' wide south of Lot 6 and possibly 30' west of Lot 6.
2. As a condition of Work Order acceptance, provide temporary drainage easements over interim ponds.

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

Sincerely,

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

Orig: Drainage file
c pdf Addressee via Email

November 30, 2015

Rita Harmon, P. E.
Planning Department
Hydrology Review Section
City of Albuquerque
P. O. Box 1293
Albuquerque, NM 87103

Re: Durango Units 1 and 2, Grading and Drainage Plan (C09/D012)

Dear Rita:

Enclosed are the revised grading plans for Durango Units 1 and 2 that incorporate the following changes as discussed in our meeting on November 6, 2015:

Unit 1 *- need SHTS?*

1. Eliminate the side yard retaining wall between Lots 8 and 9. *- Not enough room to develop swale.*
2. Revise Lot 31 rear lot line and pad depth. *why? appears lot 1 is lengthened. why?*

Unit 2

1. Eliminate the side yard retaining wall between Lots 16 and 17.
2. Revise Lot 1 rear lot line and pad depth. *? seems*
3. Eliminate the rear yard pond on Lot 22 by adding a 6' maximum height lower retaining wall and 2' maximum height upper garden wall. *OK*

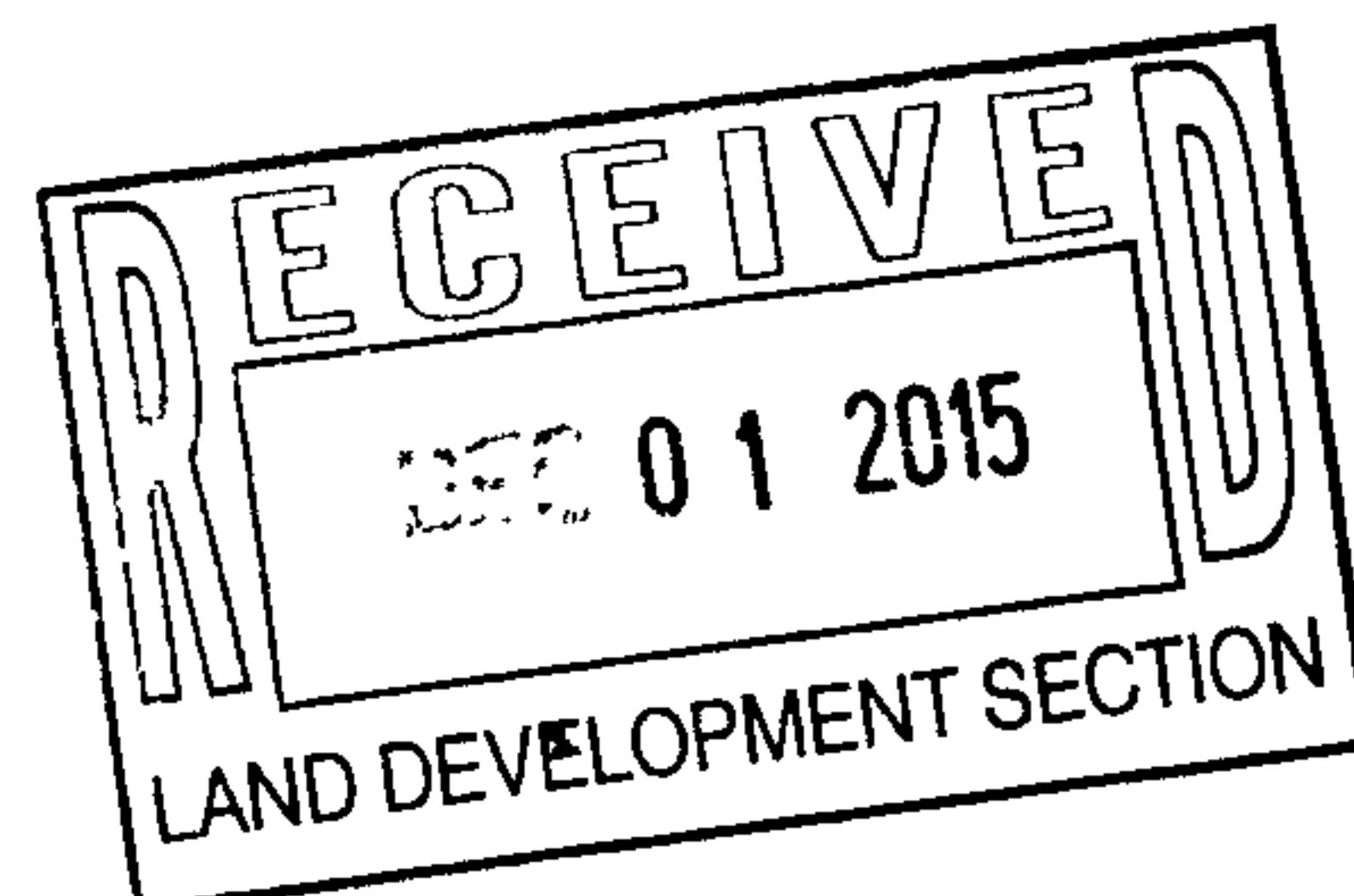
In addition, these changes have been shown on the Unit 1 and 2 Interim Grading Plans, which are also enclosed. These changes will be issued as a field revision and as-built on the approved grading plans with the grading and drainage certification as discussed at our meeting.

If you have any questions or require further information, please feel free to contact me at 823-1000.

Sincerely,



Scott J. Steffen, P.E.
Vice President
Community Development and Planning Group



Enclosures

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: DURANGO UNITS 1 AND 2 Building Permit #: _____ City Drainage #: C09/D012
DRB#: 1004404 EPC#: _____ Work Order#: _____
Legal Description: TRACTS 7 AND 8 AT THE TRAILS UNIT 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: BRIAN PATTERSON
Address: 7500 JEFFERSON ST NE COURTYARD 1 ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: BPATTERSON@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: 505-639-4798 Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

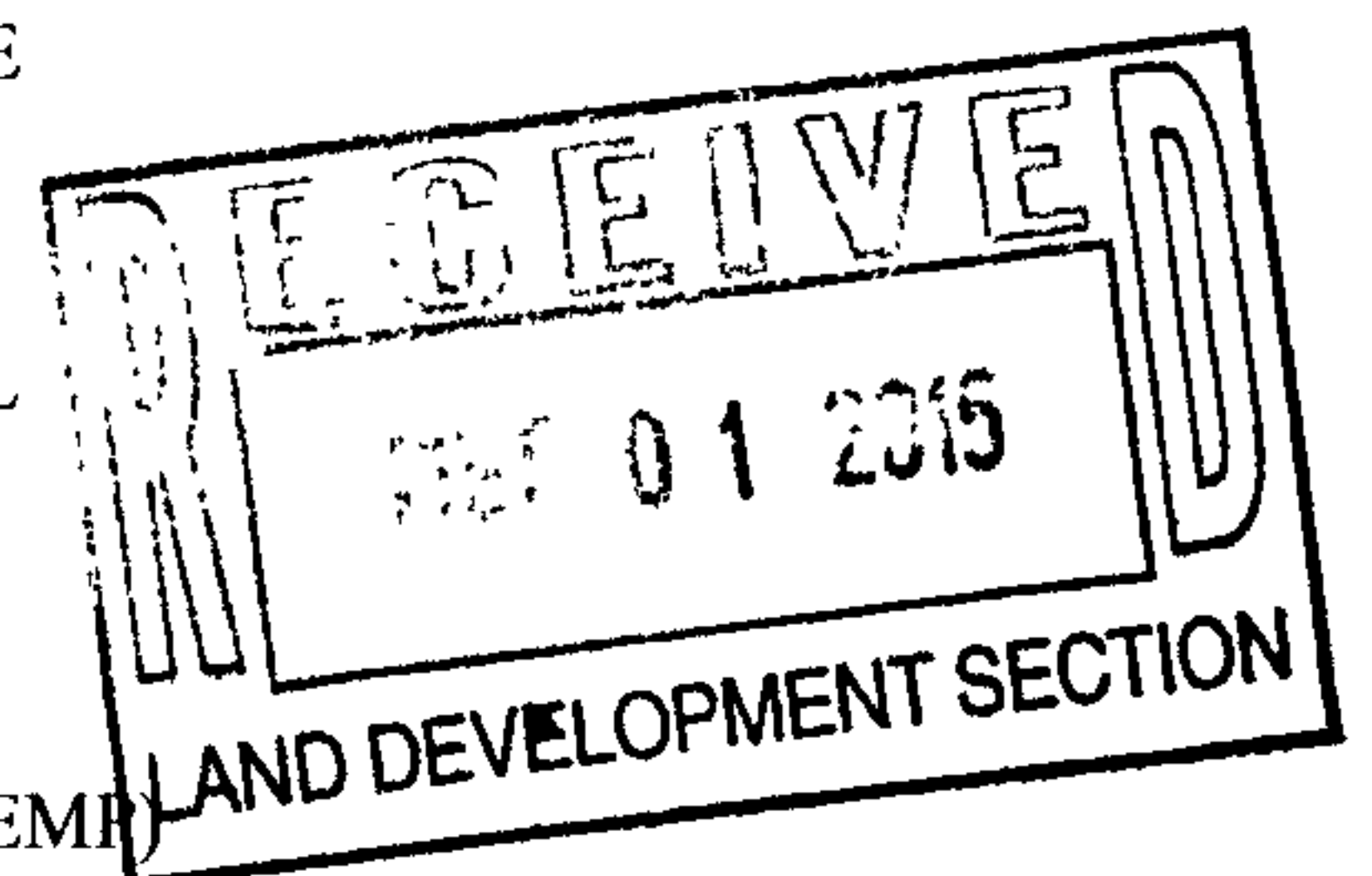
Contractor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ 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) GRADING PLAN REVISION

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
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☒ OTHER (SPECIFY) INFORMATION FOR FILE



WAS A PRE-DESIGN CONFERENCE ATTENDED: ☒ Yes ☐ No ☐ Copy Provided

DATE SUBMITTED: 11/30/2015

By: SCOTT STEFFEN

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
- 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 that are part of a larger common plan of development

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT - Development Review Services



Richard J. Berry, Mayor

March 14, 2016

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: **Durango at the Trails (File: C09D012), Unit 2**
Grading and Drainage plan, Stamp Date 3-10-16 (Sheet 2 only)

Dear Mr. Steffen:

Based upon the information provided in your submittal received 3-10-16, the above referenced submittal is approved for Grading Permit *for Unit 2* with the following conditions:

1. As a condition of Work Order acceptance, provide temporary drainage easements over interim ponds.

PO Box 1293

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

Albuquerque

Sincerely,

New Mexico 87103

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

www.cabq.gov

Orig. Drainage file
c.pdf Addressee via Email

note: previously approved "Interim Grading Plan" is still valid, ~~and~~ since changes did not affect it. see email.

Harmon Rita T.

From: Harmon Rita T.
Sent: Monday, March 14, 2016 3:12 PM
To: Scott J. Steffen (ssteffen@bhinc.com)
Cc: Rick Beltramo (rbeltramo@gcinm.com)
Subject: Durango Unit 2
Attachments: C09D012_GP_Appr_Unit2_Rev.pdf

Scott,

Please find attached a copy of the Hydrology Letter for the above referenced project. Note that the Interim Grading Plan is not included in the approval since we did not get a hard copy of it. Also, since the changes did not change the interim ponds, the approval for the latest submittal is still valid.

Sincerely,

Rita Harmon, P.E.

Senior Engineer

Planning Department

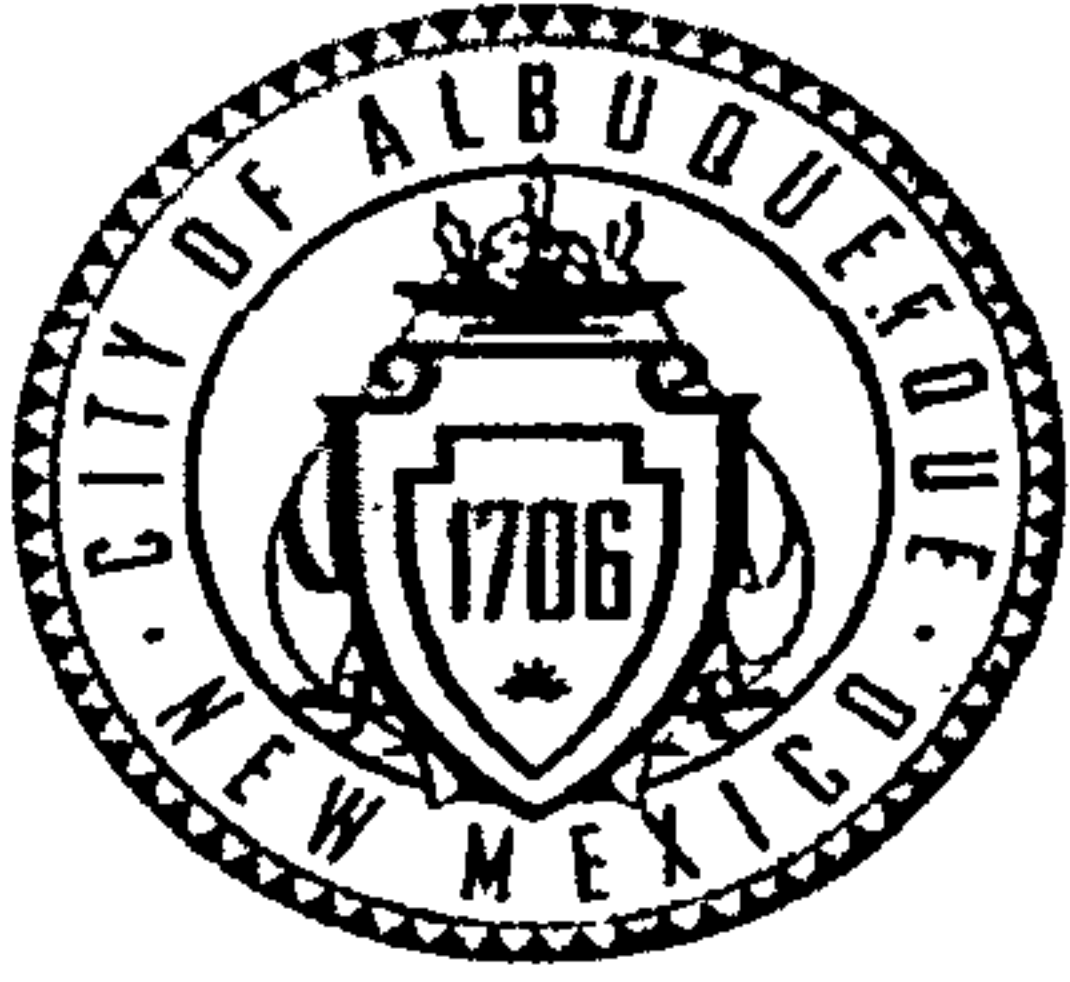
Development & Review Services Division

600 2nd St. NW, Suite 201

Albuquerque, NM 87102

t 505-924-3695

f 505-924-3864



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: DURANGO UNIT 2 Building Permit #: _____ City Drainage #: C09/D012
DRB#: 1010401 EPC#: _____ Work Order#: _____
Legal Description: Tracts 7 & 8, Trails Unit 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: SCOTT STEFFEN
Address: 7500 JEFFERSON ST NE COURTYARD I ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: SSTEFFEN@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: _____ Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Other Contact: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:
☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:
☐ ENGINEER/ ARCHITECT CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)

☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

DATE SUBMITTED: 3/10/16 By: SCOTT STEFFEN

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☒ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR

☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED _____

Scott Steffen

From: Scott Steffen
Sent: Thursday, March 10, 2016 3:26 PM
To: Harmon Rita T. (rharmon@cabq.gov); PLNDRS@cabq.gov
Cc: 'Rick Beltramo'
Subject: Durango Unit 2 Grading Plan
Attachments: Durango Unit 2 Interim Grading Plan_R2.pdf; DRS-DRAINAGE INFO SHEET_ELECTRONIC.pdf; Durango Unit 2 Grading Plan_R2.pdf

Rita,

Attached is the revised Durango Unit 2 grading plan, which reflects the Weminuche curb changes to move the storm drain manholes out from under the curb. The curb changes impacted Lot 22, with minor changes to the grading. Also attached is the revised Unit 2 interim grading plan.

You should receive a hard copy this afternoon.

Let me know if you have any questions.

Thanks,

Scott J. Steffen
Vice President
Community Development and Planning

Bohannon Huston

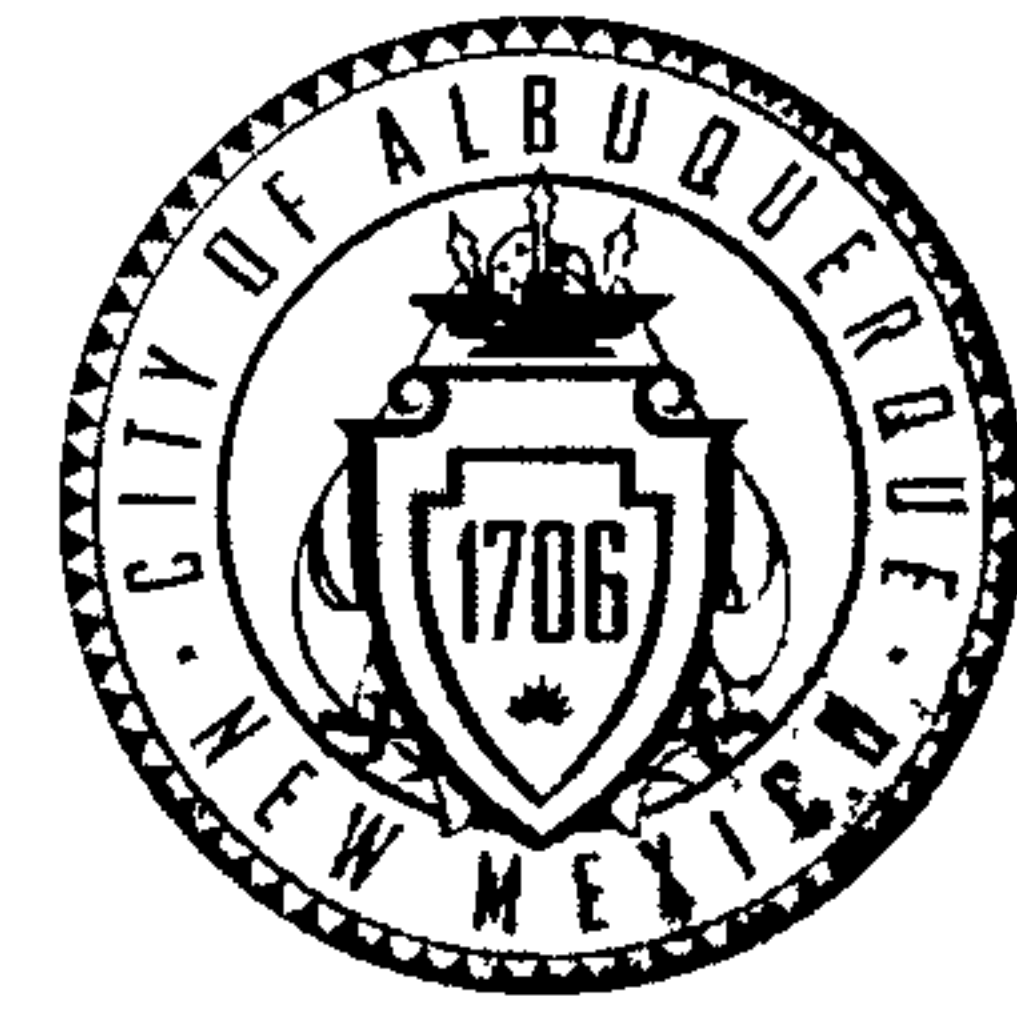
Courtyard I
7500 Jefferson St. NE
Albuquerque, NM 87109-4335
www.bhinc.com

voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332



CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



January 13, 2016

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: **Durango at the Trails (File: C09D012), Unit 2**

Grading and Drainage plan, Stamp Date 11-30-15 (Sheets 2 and 5)
Interim Grading and Drainage plan, Stamp Date 11-30-15

SHIT 2 IS
OBS.
But SHIT 5
+ Interim
plan still
valid.

Dear Mr. Steffen:

Based upon the information provided in your submittal received 7-30-15, the above referenced submittals are approved for Grading Permit *for Unit 2* with the following conditions:

1. As a condition of Work Order acceptance, provide temporary drainage easements over interim ponds.

PO Box 1293

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

Albuquerque

New Mexico 87103

www.cabq.gov

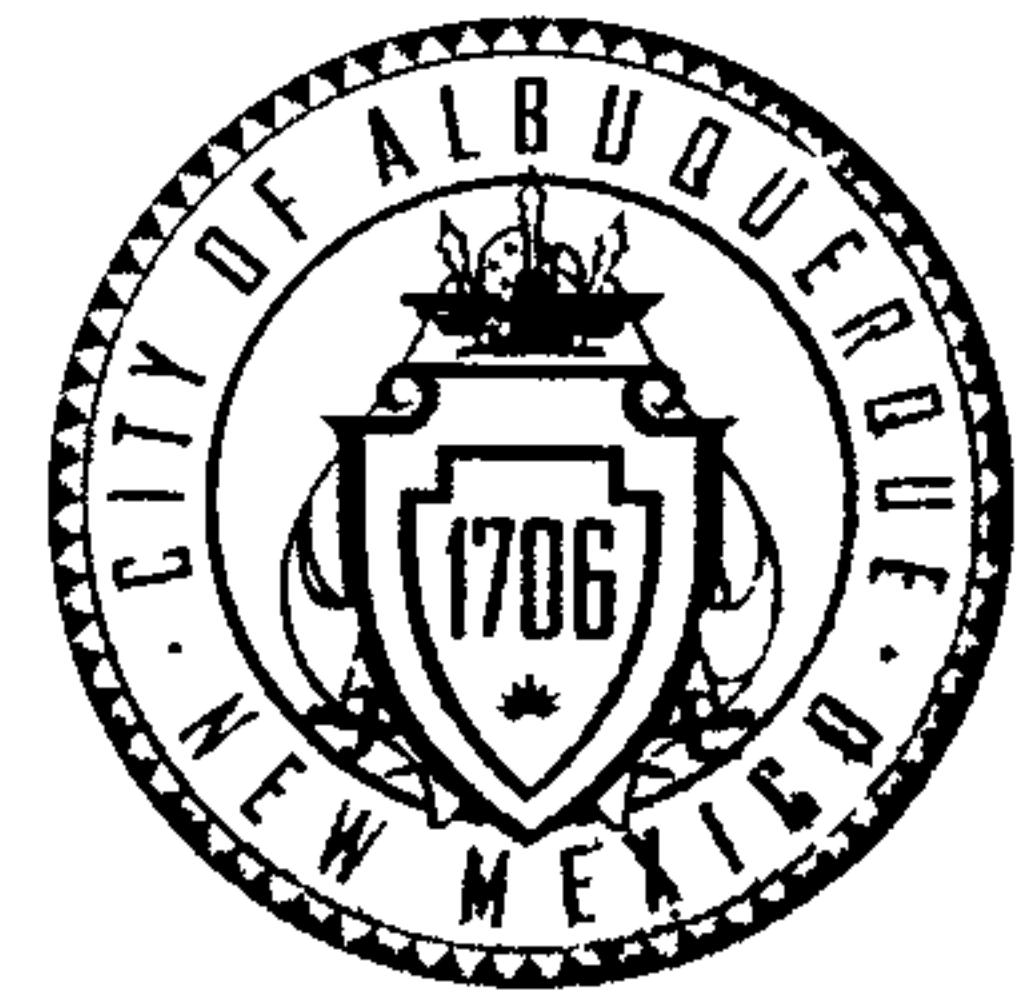
Sincerely,

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

Orig Drainage file
c.pdf Addressee via Email

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



July 28, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: **Durango at the Trails (File: C09D012), Unit 1**
Grading and Drainage plans, Stamp Date 6-4-15 (Sheets 1 and 5)

*(includes Interim)
5/20/15*

*OBsolete
superseded by
11/30/15
plans*

Dear Mr. Steffen:

Based upon the information provided in your submittal received 6-8-15, the above referenced submittal is approved for Grading Permit with the following conditions:

1. As a condition of Final Plat, the Storm drain easement width should be based on formula in DPM. It should be 25' wide south of Lot 6 and possibly 30' west of Lot 6.
2. As a condition of Work Order acceptance, provide temporary drainage easements over interim ponds.

Prior to Building Permit approval, Engineer Certification per the DPM checklist will be required.

Since the disturbed area on this site exceeds 1.0 acre, an Erosion and Sediment Control (ESC) Plan, prepared by a NM PE and approved by the City's Stormwater Engineer, will be required for this site.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge for disturbing one acre or more and a Topsoil Disturbance Permit for disturbing $\frac{3}{4}$ of an acre or more.

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

Sincerely,

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

Orig Drainage file
c.pdf Addressee via Email

C09D012_GP_Aprr_Unit1.doc

1 of 1

Albuquerque - Making History 1706-2006

June 8, 2015

Rita Harmon, P. E.
Planning Department
Hydrology Review Section
City of Albuquerque
P. O. Box 1293
Albuquerque, NM 87103

Re: Durango at the Trails, Grading and Drainage Plan (C09/D012)

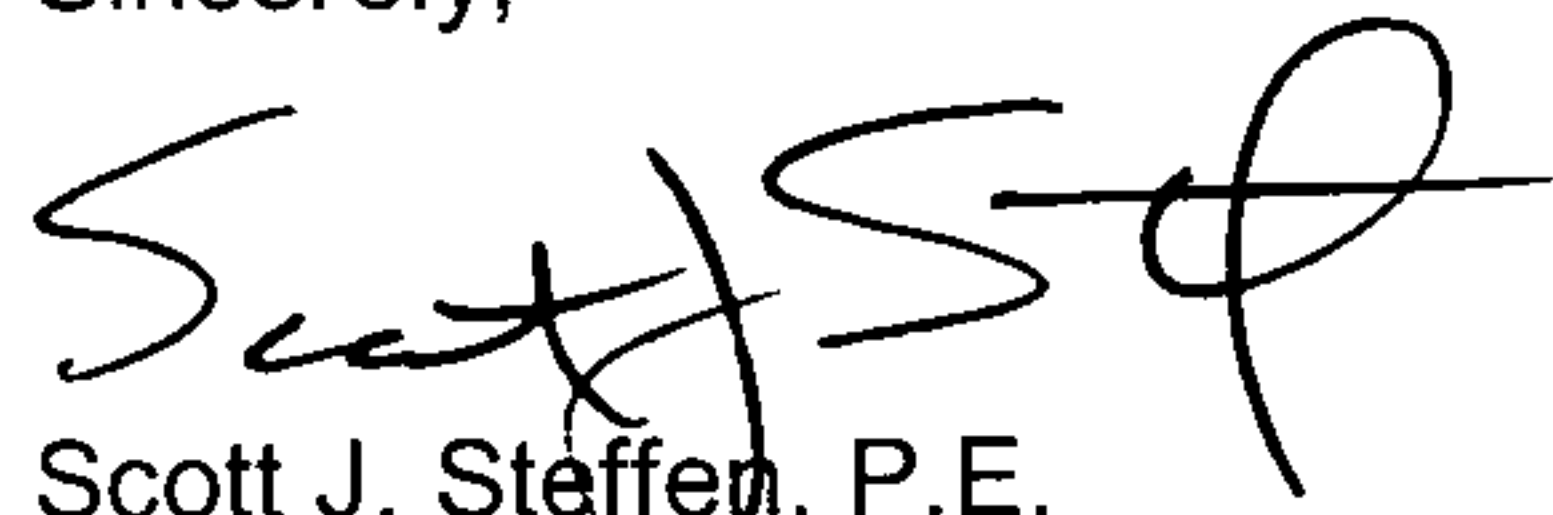
Dear Rita:

This letter provides a written response to your comments dated May 28, 2015:

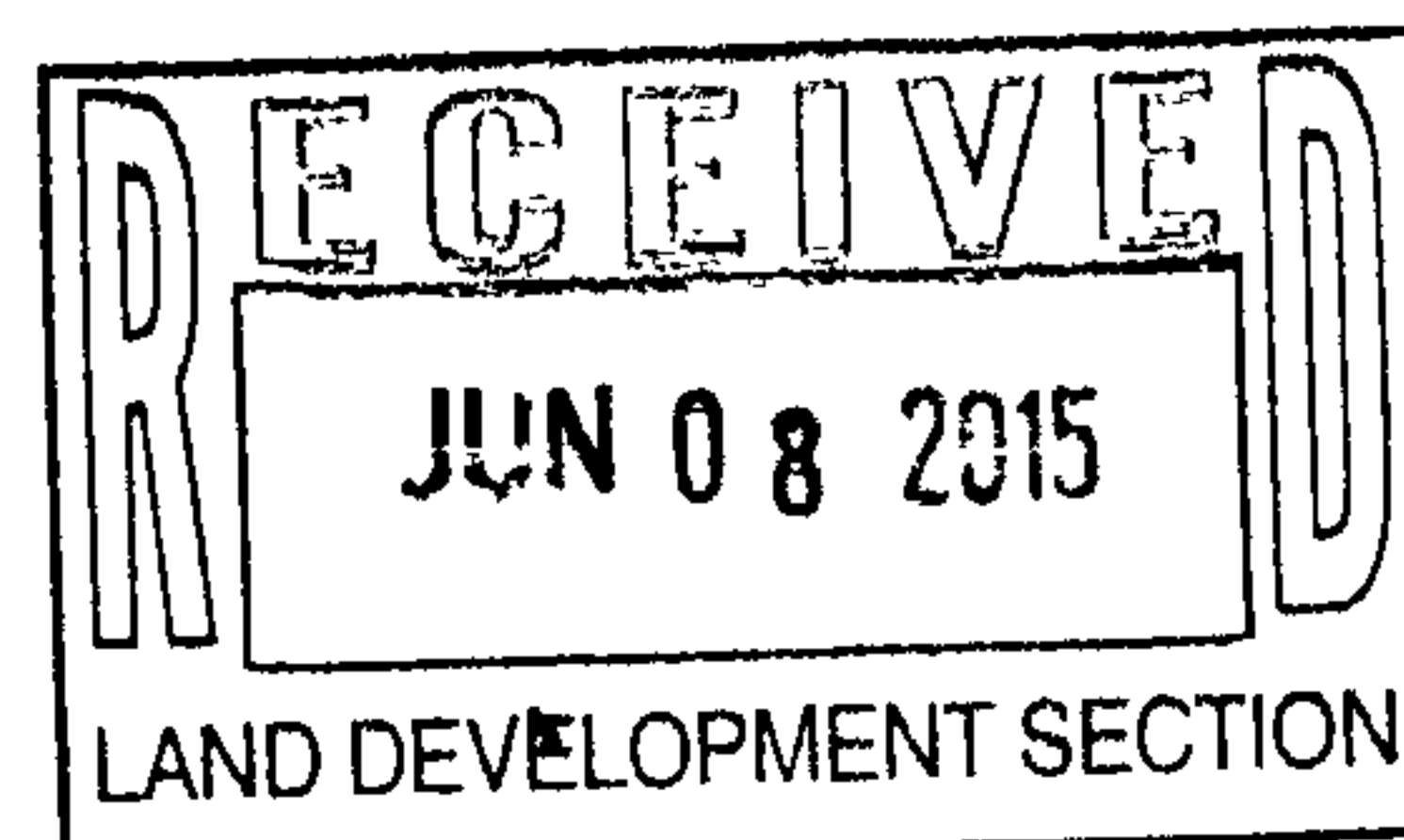
1. *Hatch pattern for the double garden walls need to be reflected on the legend. **Legend has been updated with the correct garden wall symbol.***
2. *Lot 5, Unit 1 – show a garden wall on the NW side of lot. **Garden wall symbol has been added.***
3. *Submit Sheet 5 showing a corrected cross-section of the double garden walls, labeled as “TYPICAL TIERED WALL NOMENCLATURE”. **See revised cross-section.***
4. *Revise contours at intersection of Red Mountain and Window Peak so that high point in front of Lot 1 is reflected. **Proposed contours have been revised, the flowline elevations in the area are between 5484 and 5485 so there are no contours reflected at the high point.***
5. *Provide a valley gutter in front of Lot 2 to direct flows to sump in Red Mountain. **Valley gutter has been added.***
6. *Adjust MH12 so that it ties into SD in Woodmont at 90 deg of less. **Manhole has been adjusted.***
7. *Show existing contour lines of Woodmont Avenue. **The existing Woodmont Avenue contours have been added.***

If you have any questions or require further information in order to approve the Grading and Drainage Plan for Grading Permit, please feel free to contact me at 823-1000.

Sincerely,



Scott J. Steffen, P.E.
Vice President
Community Development and Planning Group



Enclosures

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: DMP FOR DURANGO Building Permit #: _____ City Drainage #: CO9D012
DRB#: 1004404 1010461 EPC#: _____ Work Order#: _____
Legal Description: TRACTS 7 AND 8 AT THE TRAILS UNIT 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: BRIAN PATTERSON
Address: 7500 JEFFERSON ST NE COURTYARD 1 ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: BPATTERSON@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: 505-639-4798 Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

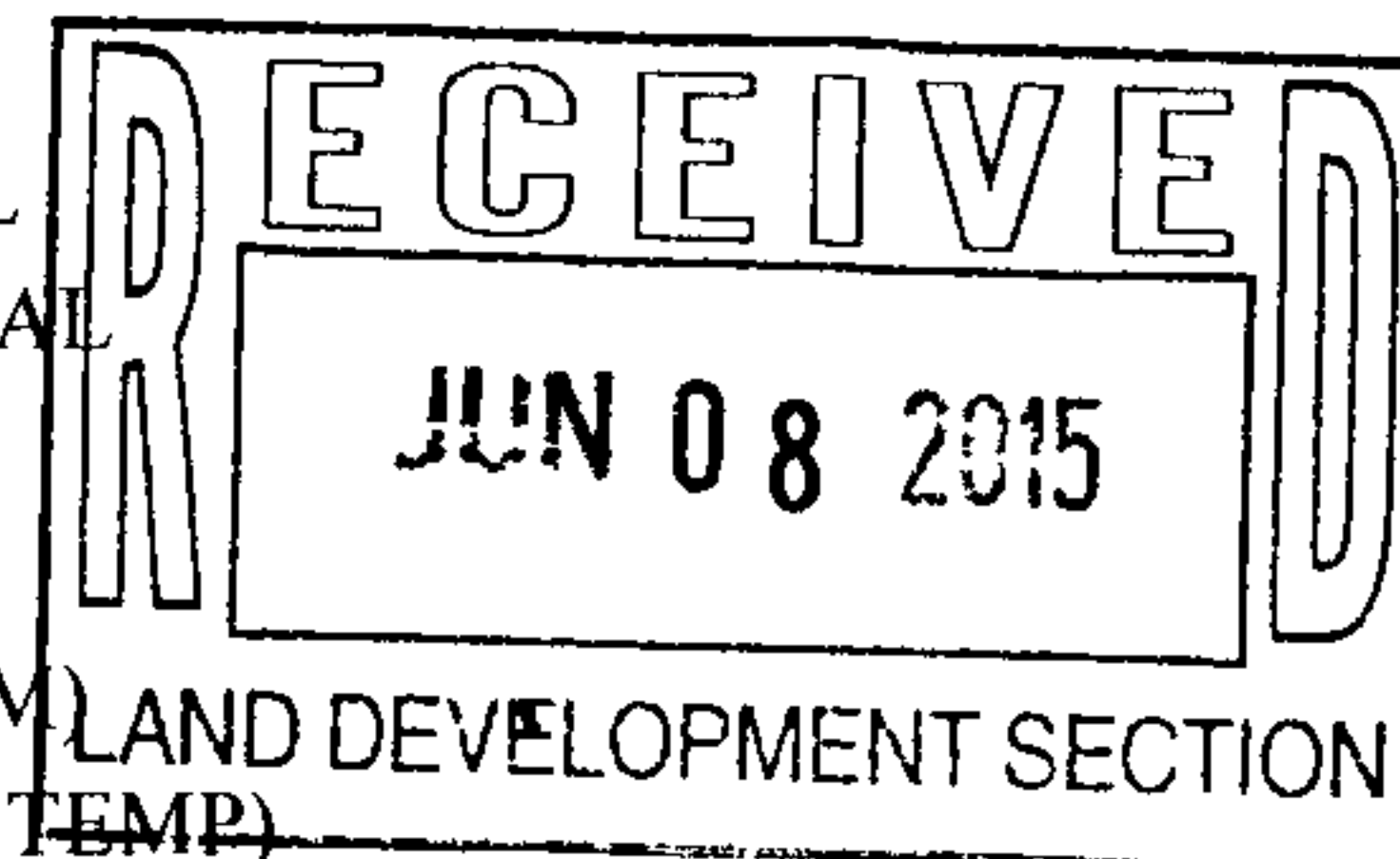
Contractor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: 2 E-mail: _____

TYPE OF SUBMITTAL:

- ☐ 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
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) _____



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

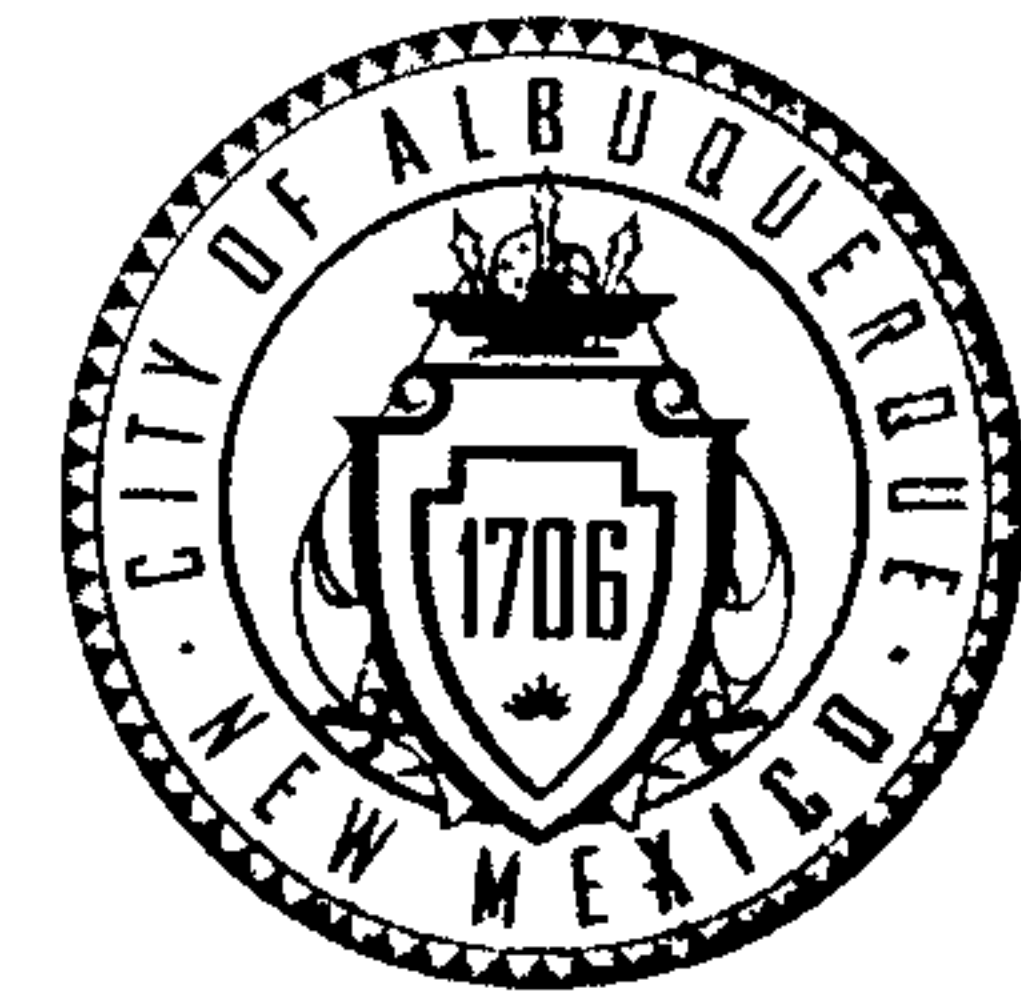
DATE SUBMITTED: 6/08/15 By: SCOTT STEFFEN

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
- 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

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



August 7, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

*OBSOLETE
Replaced
w/ 11/30/15
plans*

RE: **Durango at the Trails (File: C09D012), Unit 2**
Grading and Drainage plan, Stamp Date 7-30-15 (Sheets 2)
Interim Grading and Drainage plan, Stamp Date 7-30-15

Dear Mr. Steffen:

Based upon the information provided in your submittal received 7-30-15, the above referenced submittals are approved for Grading Permit *for Unit 2* with the following conditions:

1. As a condition of Work Order acceptance, provide temporary drainage easements over interim ponds.

PO Box 1293

Prior to Building Permit approval, Engineer Certification per the DPM checklist will be required.

Albuquerque

Since the disturbed area on this site exceeds 1.0 acre, an Erosion and Sediment Control (ESC) Plan, prepared by a NM PE and approved by the City's Stormwater Engineer, will be required for this site.

New Mexico 87103

This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge for disturbing one acre or more and a Topsoil Disturbance Permit for disturbing $\frac{3}{4}$ of an acre or more.

www.cabq.gov

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

Sincerely,

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

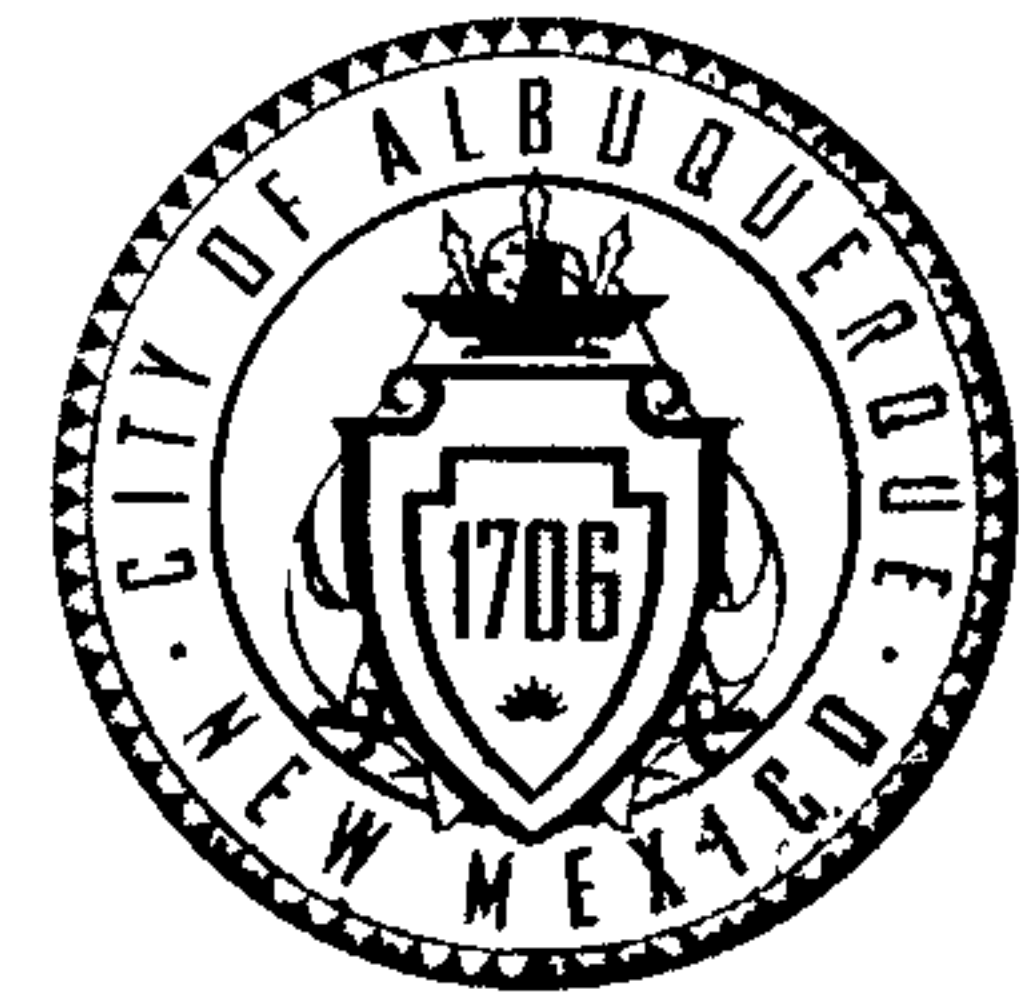
Orig Drainage file
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C09D012_ GP_Appr_Unit2.doc

1 of 1

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



August 4, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: **Durango at the Trails (File: C09D012), Unit 2**
Grading and Drainage plan, Stamp Date 7-30-15 (Sheets 2)
Interim Grading and Drainage plan, Stamp Date 7-30-15

Dear Mr. Steffen:

Based upon the information provided in your submittal received 7-30-15, the above referenced submittals are approved for DRB action on the Preliminary Plat and Site Plan for Subdivision *for Unit 2* with the following conditions:

PO Box 1293

Albuquerque

New Mexico 87103

1. As a condition of Final Plat, remove the Private Drainage easements from Lots 19,20, and 21 which were created to allow for ponding, but are no longer required. The easement will still be required for Lot 22.
2. As a condition of Work Order acceptance, provide temporary drainage easements over interim ponds.

There are no other conditions to be met for Grading Permit approval. Once the DRB approves the G&D plans, please email me requesting Grading Permit approval.

www.cabq.gov

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

Sincerely,

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

Orig Drainage file
c.pdf Addressee via Email



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: DURANGO UNIT 2 Building Permit #: _____ City Drainage #: CO9D012
DRB#: 1004404 EPC#: _____ Work Order#: _____
Legal Description: TRACTS 7 AND 8 AT THE TRAILS UNIT 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: SCOTT STEFFEN
Address: 7500 JEFFERSON ST NE COURTYARD 1 ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: SSTEFFEN@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: 505-639-4798 Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

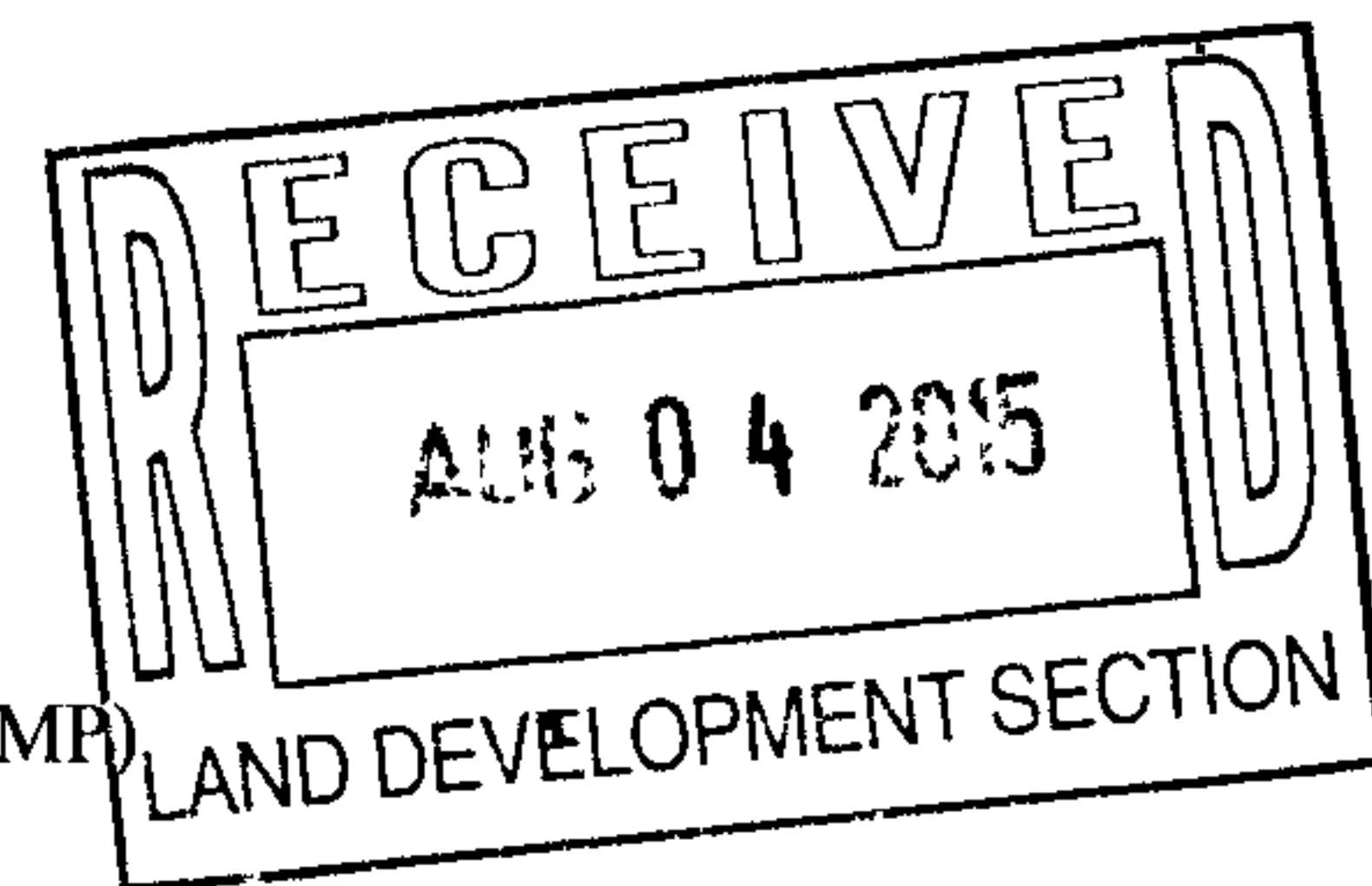
Contractor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ 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
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) _____

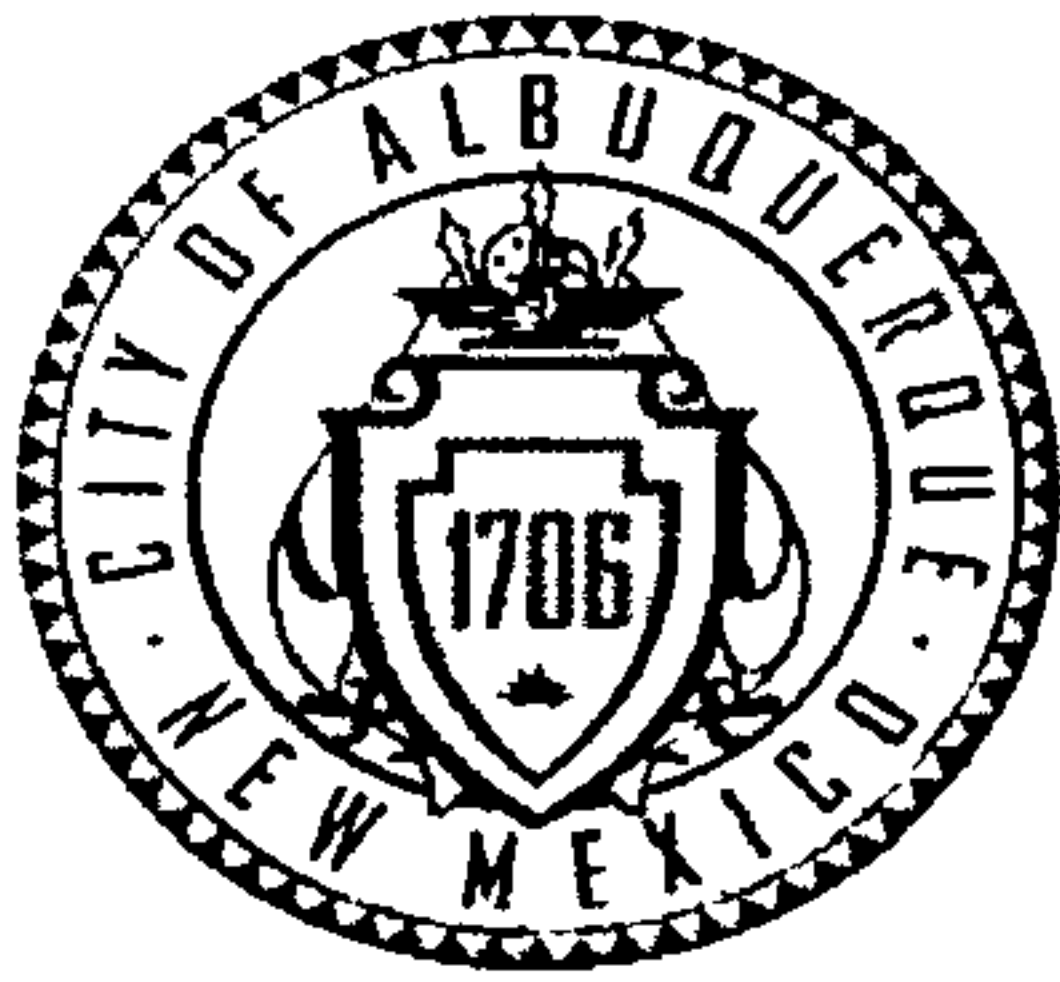


WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes _____ No _____ Copy Provided

DATE SUBMITTED: 08/04/15 By: SCOTT STEFFEN

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
- 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



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: DURANGO UNIT 2 Building Permit #: _____ City Drainage #: 109D012
DRB#: 1004404 EPC#: _____ Work Order#: _____
Legal Description: TRACTS 7 AND 8 AT THE TRAILS UNIT 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: SCOTT STEFFEN
Address: 7500 JEFFERSON ST NE COURTYARD 1 ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: SSTEFFEN@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: 505-639-4798 Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ 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 ☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL ☐ ESC PERMIT APPROVAL
☐ WORK ORDER APPROVAL ☐ ESC CERT. ACCEPTANCE
☐ GRADING CERTIFICATION ☐ OTHER (SPECIFY) _____

Received July 30th 2015

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

DATE SUBMITTED: 07/30/15 By: SCOTT STEFFEN

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:

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- 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

Scott Steffen

From: Scott Steffen
Sent: Thursday, July 30, 2015 8:07 AM
To: Harmon Rita T. (rharmon@cabq.gov); PLNDRS@cabq.gov
Cc: 'Rick Beltramo'
Subject: Durango Unit 2 grading plan DRB 1010401
Attachments: Durango Unit 2 grading plan submittal.pdf

Rita,

Attached is the revised Durango Unit 2 grading plan and interim grading plan. The revision removes the off-site grading on the APS property to the south and the Valle Vista Subdivision to the east.

You should receive hard copies this morning as part of the DRB supplemental submittal.

Please call if you have any questions. I am available to meet to go over the changes if that would be beneficial.

Thanks,

Scott J. Steffen
Vice President
Community Development and Planning

Bohannon Huston

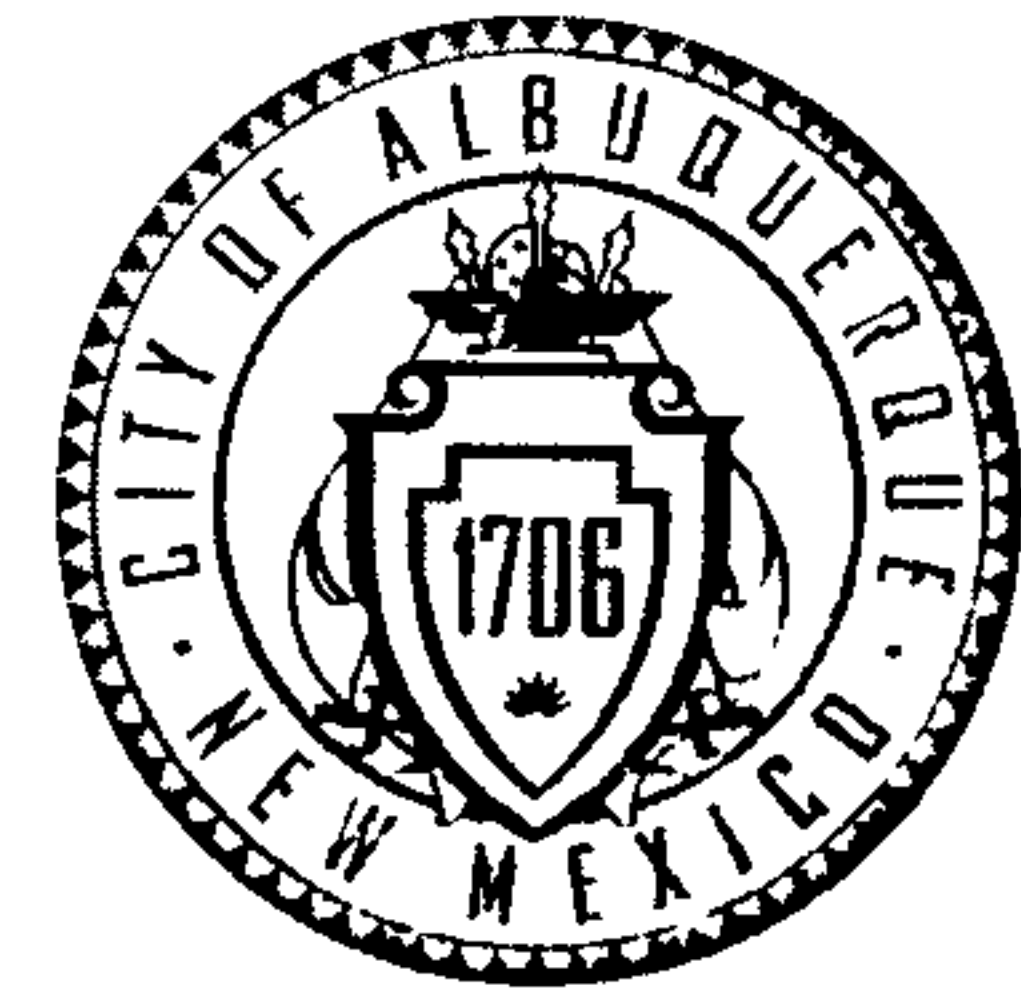
Courtyard I
7500 Jefferson St. NE
Albuquerque, NM 87109-4335
www.bhinc.com

voice: 505 823 1000 facsimile: 505.798.7988 toll free: 800.877.5332

Rec.
July 30th

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



March 14, 2016

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: Durango at the Trails (File: C09D012), Unit 4
Grading and Drainage plan, Stamp Date 3-8-16 (Sheet 3)

Dear Mr. Steffen:

Based upon the information provided in your submittal received 8-13-15, the above referenced submittal is approved for ESC Permit (Grading Permit) *for Unit 4*.

Prior to Building Permit approval, Engineer Certification per the DPM checklist will be required.

PO Box 1293

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

Albuquerque

Sincerely,

New Mexico 87103

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

www.cabq.gov

Orig: Drainage file
c.pdf Addressee via Email

ADDED WUA NOTE

Scott Steffen

From: Scott Steffen
Sent: Tuesday, March 08, 2016 4:23 PM
To: 'Harmon Rita T.'
Cc: 'Rick Beltramo'
Subject: RE: Durango Unit 4 grading plan
Attachments: Durango Unit 4 Grading Plan Revision #1.pdf

Rita,

Attached is the revised grading plan with the ABCWUA note.

The Durango Unit 4 preliminary plat is being heard next Wednesday March 16th.

You should receive a hard copy in the morning.

Thanks,

Scott J. Steffen
Vice President
Community Development and Planning

Bohannon Huston

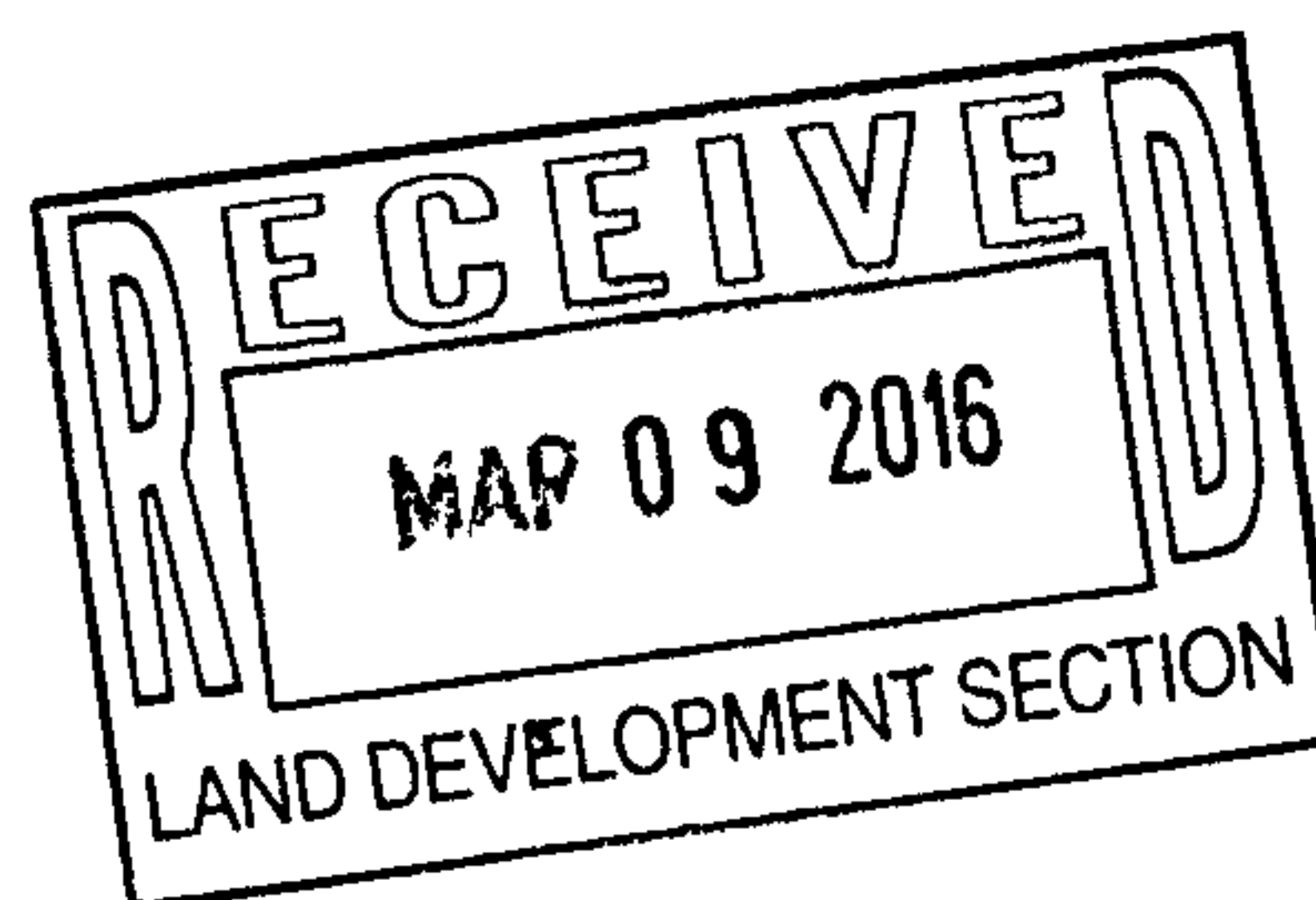
Courtyard I
7500 Jefferson St. NE
Albuquerque, NM 87109-4335
www.bhinc.com
voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332

From: Harmon Rita T. [mailto:rharm@cabq.gov]
Sent: Friday, February 26, 2016 3:00 PM
To: Scott Steffen <ssteffen@bhinc.com>
Cc: 'Rick Beltramo' <rbeltramo@wcinm.com>
Subject: RE: Durango Unit 4 grading plan

Hi Scott,

No, I do not see an issue with this.

Thanks,
Rita



From: Scott Steffen [mailto:ssteffen@bhinc.com]
Sent: Friday, February 26, 2016 8:59 AM
To: Harmon Rita T.
Cc: 'Rick Beltramo'
Subject: Durango Unit 4 grading plan

Rita,



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: DURANGO UNIT 4 **Building Permit #:** _____ **City Drainage #:** C09/D012
DRB#: 1010401 **EPC#:** _____ **Work Order#:** _____
Legal Description: Tracts 7 & 8, Trails Unit 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC **Contact:** SCOTT STEFFEN
Address: 7500 JEFFERSON ST NE COURTYARD I ALBUQUERQUE NM 87109
Phone#: 823-1000 **Fax#:** **E-mail:** SSTEFFEN@BHINC.COM

Owner: WOODMONT PASEO, LLC **Contact:** RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

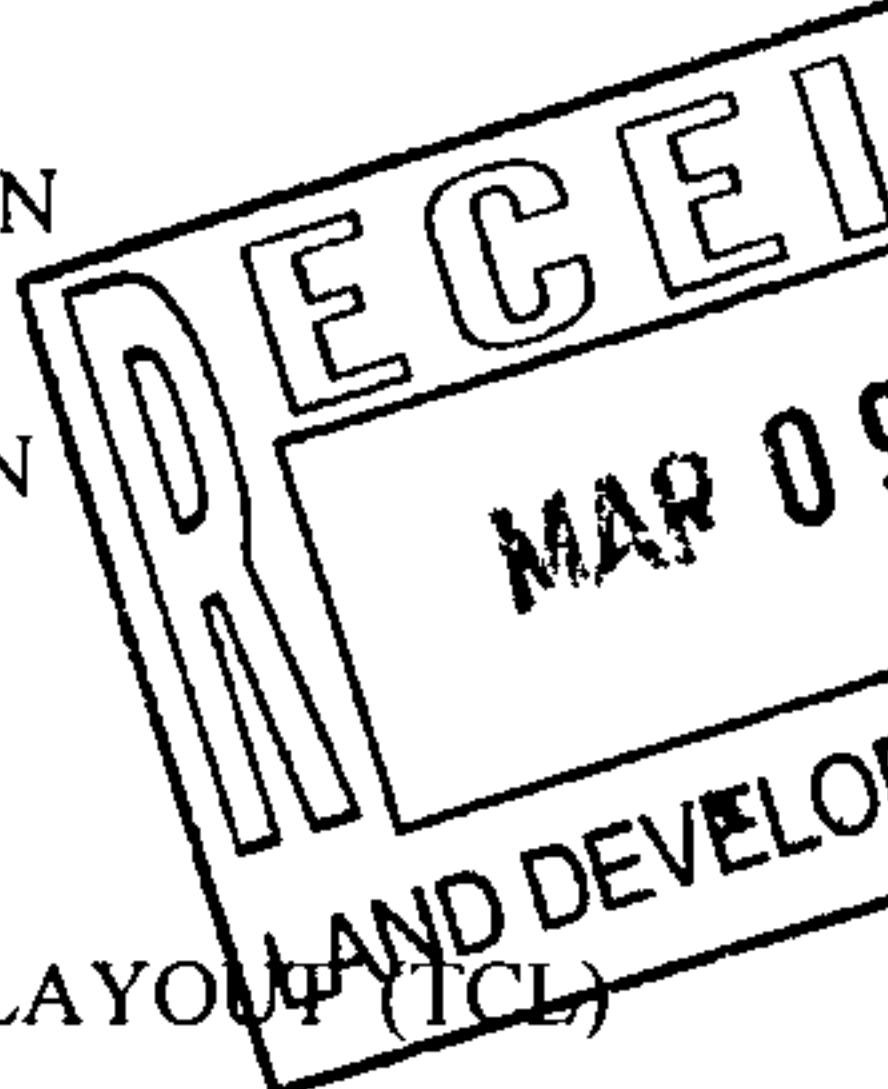
Check all that Apply:

DEPARTMENT:

<u> x </u>	HYDROLOGY/ DRAINAGE
<u> </u>	TRAFFIC/ TRANSPORTATION
<u> </u>	MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

☐ ENGINEER/ ARCHITECT CERTIFICATION
☒ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
☐ OTHER (SPECIFY) _____



CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
☒ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☒ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR

☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY)

IS THIS A RESUBMITTAL? ☒ Yes ☐ No

DATE SUBMITTED: 3/8/16 By: SCOTT STEFFEN

COA STAFF. ELECTRONIC SUBMITTAL RECEIVED.

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



August 18, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: **Durango at the Trails (File: C09D012), Unit 4**
Grading and Drainage plan, Stamp Date 8-12-15 (Sheet 3)

Dear Mr. Steffen:

Based upon the information provided in your submittal received 8-13-15, the above referenced submittal is approved for Grading Permit *for Unit 4*.

Prior to Building Permit approval, Engineer Certification per the DPM checklist will be required.

PO Box 1293

Since the disturbed area on this site exceeds 1.0 acre, an Erosion and Sediment Control (ESC) Plan, prepared by a NM PE and approved by the City's Stormwater Engineer, will be required for this site.

Albuquerque

This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge for disturbing one acre or more and a Topsoil Disturbance Permit for disturbing $\frac{3}{4}$ of an acre or more.

New Mexico 87103

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

www.cabq.gov

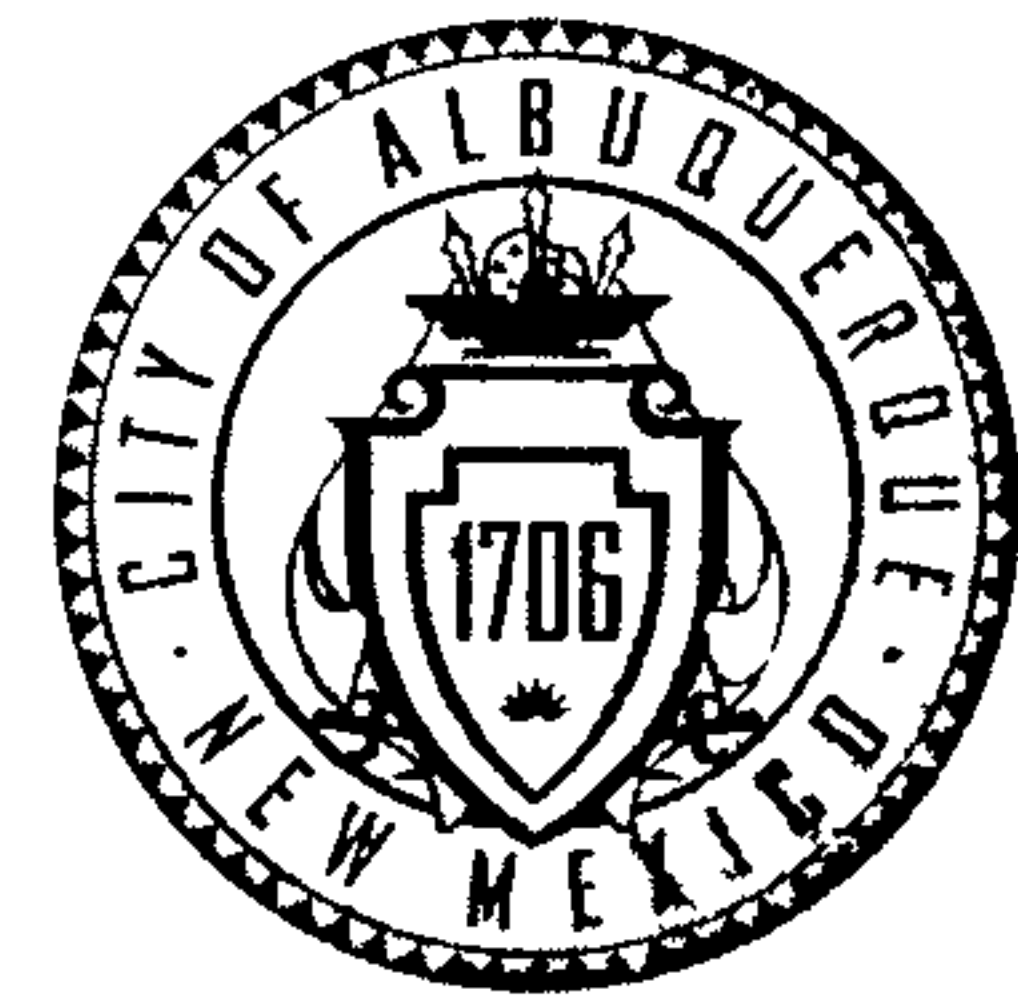
Sincerely,

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

Orig Drainage file
c.pdf Addressee via Email

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



August 18, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: **Durango at the Trails (File: C09D012), Unit 4**
Grading and Drainage plan, Stamp Date 8-12-15 (Sheet ~~2~~ 3)

Dear Mr. Steffen:

Based upon the information provided in your submittal received 8-13-15, the above referenced submittal is approved for DRB action on the Preliminary Plat and Site Plan for Subdivision *for Unit 4.*

PO Box 1293

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

Albuquerque

Sincerely,

New Mexico 87103

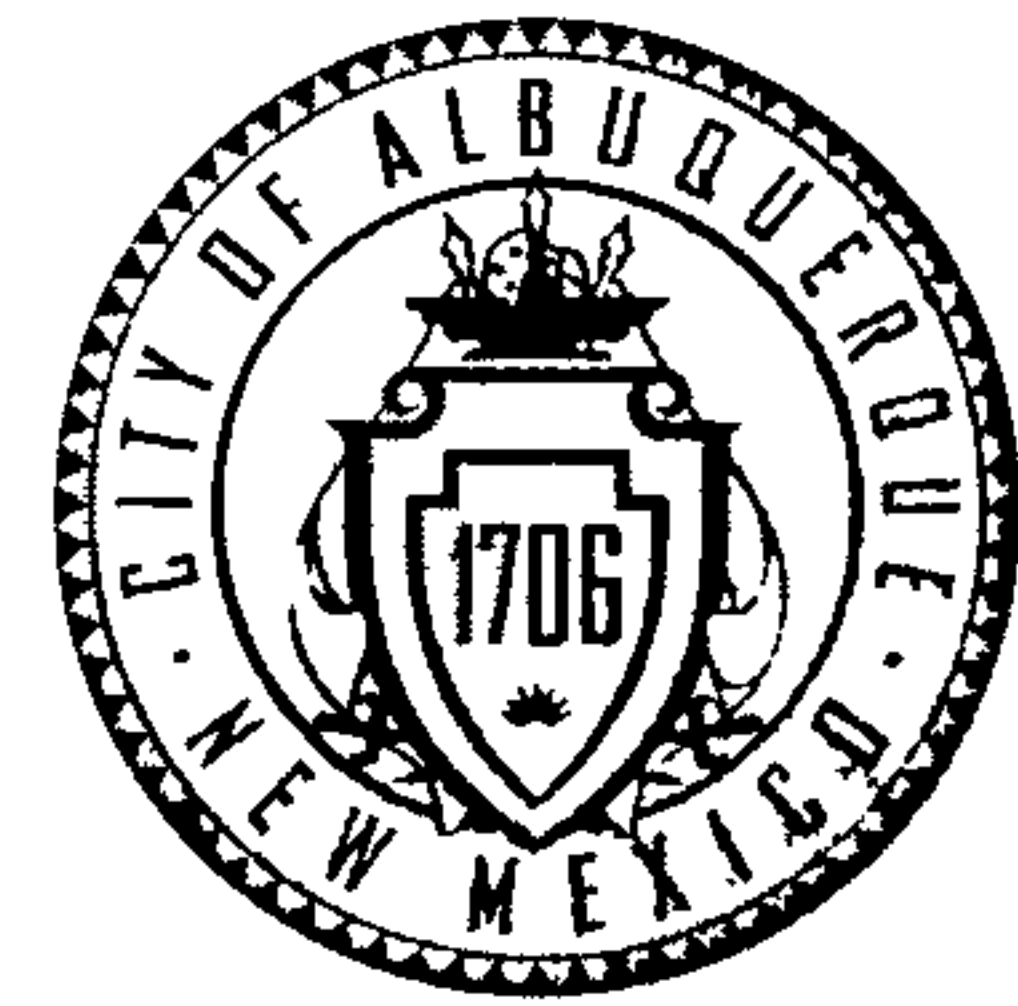
Rita Harmon, P.E.
Senior Engineer, Planning Dept.
Development Review Services

www.cabq.gov

Orig. Drainage file
c pdf Addressee via Email

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



August 18, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: Durango at the Trails (File: C09D012), Unit 3
Grading and Drainage plan, Stamp Date 8-12-15 (Sheet 4)

Dear Mr. Steffen:

Based upon the information provided in your submittal received 8-13-15, the above referenced submittal is approved for DRB action on the Preliminary Plat and Site Plan for Subdivision *for Unit 3*. Prior to approval for Grading Permit the following comment must be addressed.

1. An Interim Grading Plan is required showing a temporary pond on Coal Bank Street where Unit 4 ties in. Temporary Drainage Easements will be required before Work Order Acceptance.
2. Items that need to be addressed on the Work Order:
 - a. It appears a valley gutter is needed to direct flows from west side of Coal Bank St. down Red Mountain Road.
 - b. Offsite runoff seems to be directed by a swale to run behind the lots down to Weminuche Road. The sediment pond should pick up those flows.

PO Box 1293

Albuquerque

New Mexico 87103

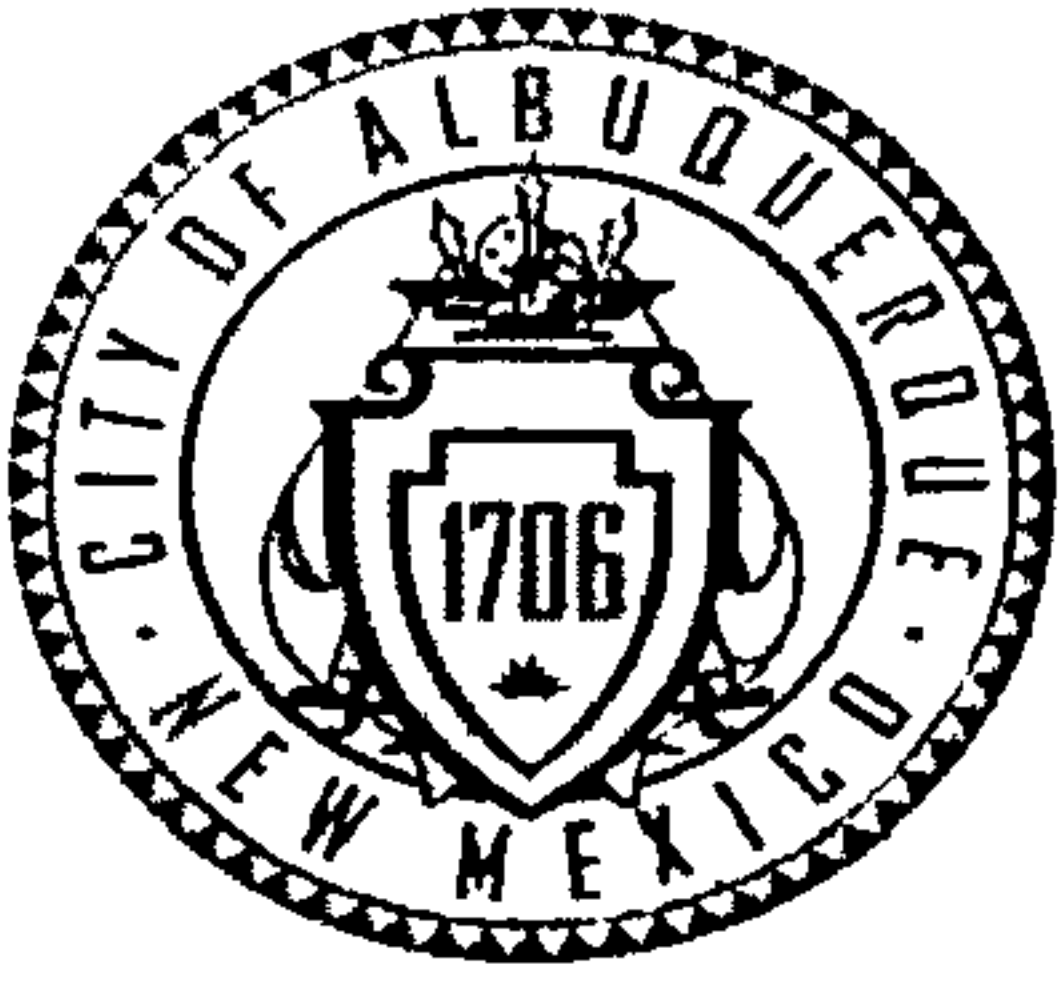
If you have any questions, you can contact me at 924-3695.

www.cabq.gov

Sincerely,

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

Orig: Drainage file
c.pdf Addressee via Email



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: DURANGO UNITS 3 AND 4 Building Permit #: _____ City Drainage #: C09D012
DRB#: 1004404 EPC#: _____ Work Order#: _____
Legal Description: TRACTS 7 AND 8 AT THE TRAILS UNIT 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: SCOTT STEFFEN
Address: 7500 JEFFERSON ST NE COURTYARD 1 ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: SSTEFFEN@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: 505-639-4798 Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

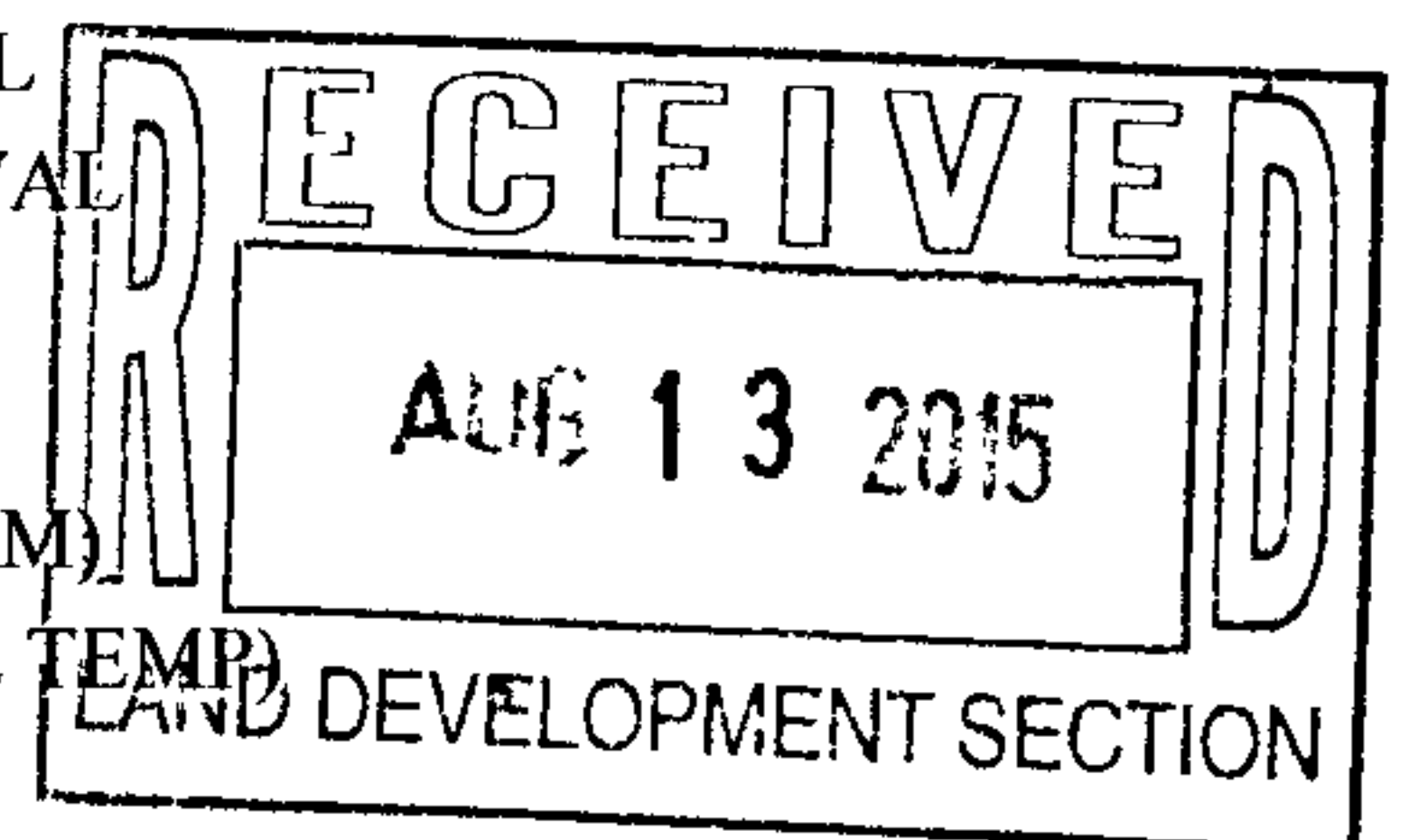
Contractor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ 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
☐ WORK ORDER APPROVAL
☐ GRADING CERTIFICATION
☐ SO-19 APPROVAL
☐ ESC PERMIT APPROVAL
☐ ESC CERT. ACCEPTANCE
☐ OTHER (SPECIFY) _____



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

DATE SUBMITTED: 08/13/15 By: SCOTT STEFFEN

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
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Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335
www.bhinc.com
voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

CLIENT/COURIER TRANSMITTAL

To: Rita Harmon
Hydrology Section
City of Albuquerque
600 2nd St NW

Requested by: Scott Steffen

Date: August 13, 2015

Time Due: ☒ This A.M.
☐ This P.M.
☐ Rush _____
☐ By Tomorrow

Phone: 924-3695

Job No.: 20140164.005.01.cdp

Job Name: Durango at the Trails

DELIVERY VIA

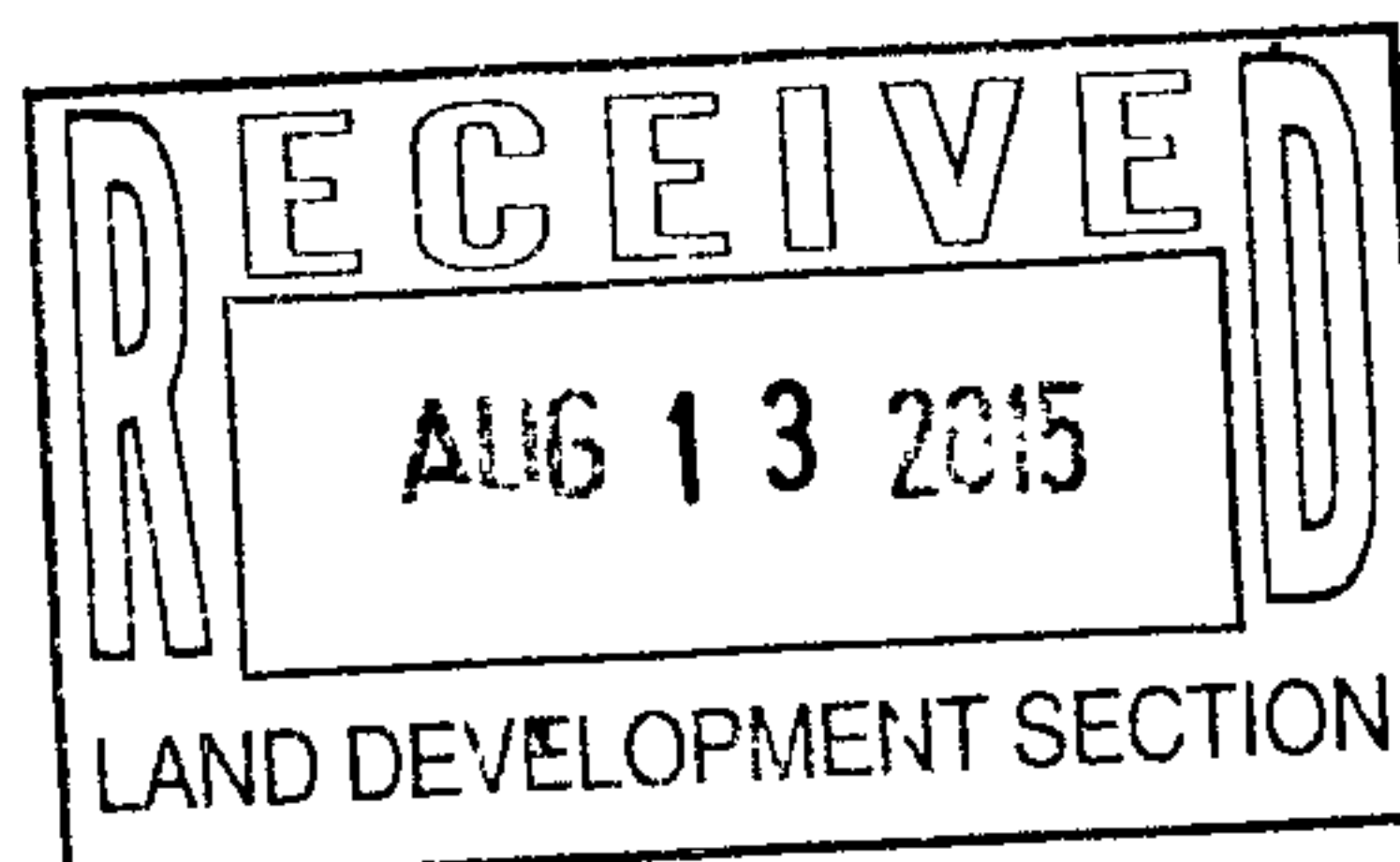
☒ Courier ☐ Federal Express
☐ Mail ☐ UPS
☐ Other

PICK UP

Item: _____

<u>ITEM NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
1	1	Units 3 and 4 grading plan

COMMENTS / INSTRUCTIONS



REC'D BY: _____ DATE: _____ TIME: _____

Scott Steffen

From: Scott Steffen
Sent: Thursday, August 13, 2015 8:55 AM
To: Harmon Rita T. (rharmon@cabq.gov); PLNDRS@cabq.gov
Cc: 'Rick Beltramo'
Subject: Durango Units 3 and 4
Attachments: Durango Unit 4 grading plan 20150812.pdf; Durango Unit 3 grading plan 20150812.pdf; DRAINAGE INFO SHEET.pdf

Rita,

Attached are the revised grading plans for Durango Units 3 and 4 reflecting the revised layouts for the 2 subdivisions. There were no outstanding comments to be addressed. It is my recollection that you have not completed your review of these grading plans as we requested that you focus on Durango Units 1 and 2 for preliminary plat approval. We are now hoping to get Unit 3 and 4 preliminary plat approval.

You should be receiving a hard copy this morning.

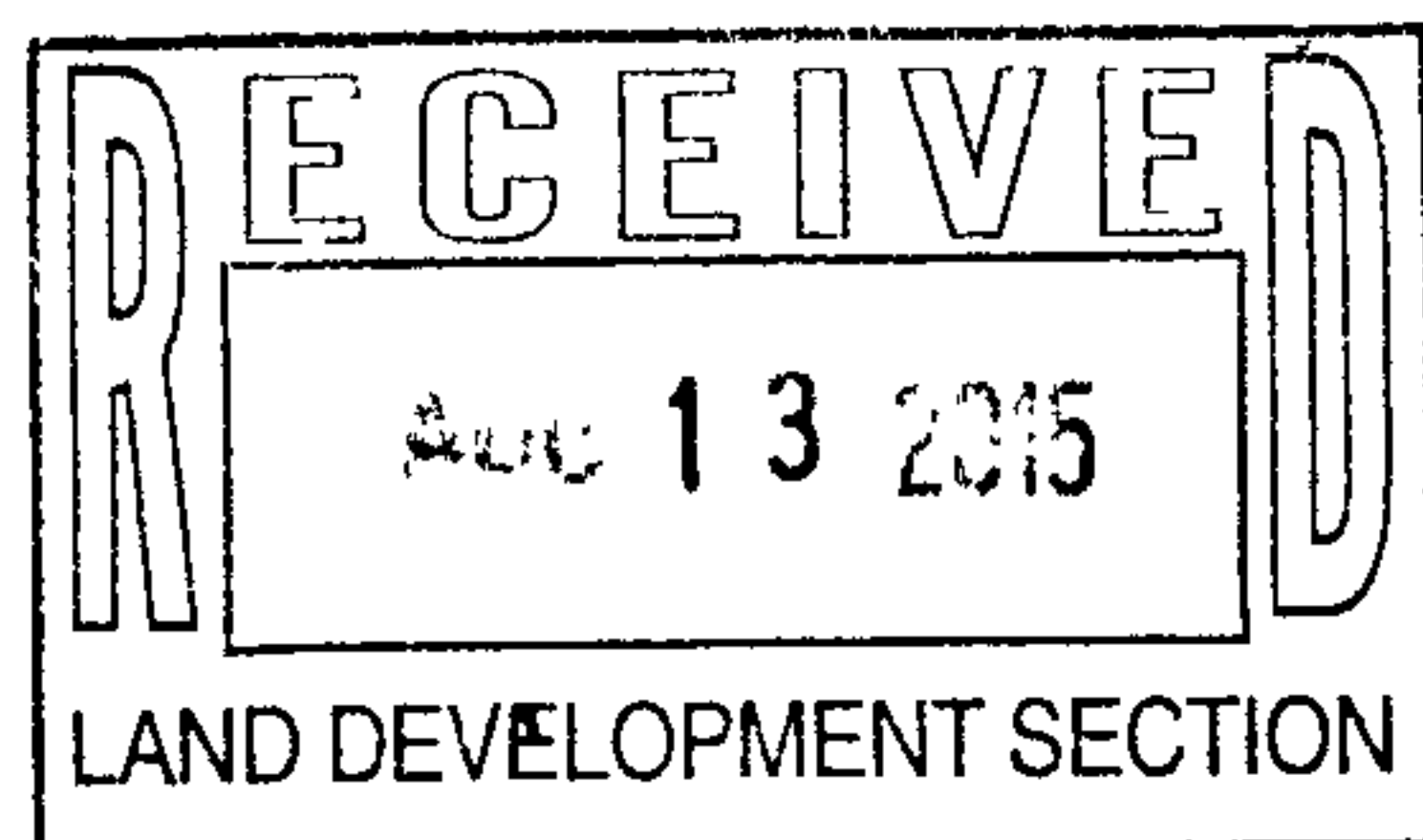
Thanks,

Scott J. Steffen
Vice President
Community Development and Planning

Bohannon Huston

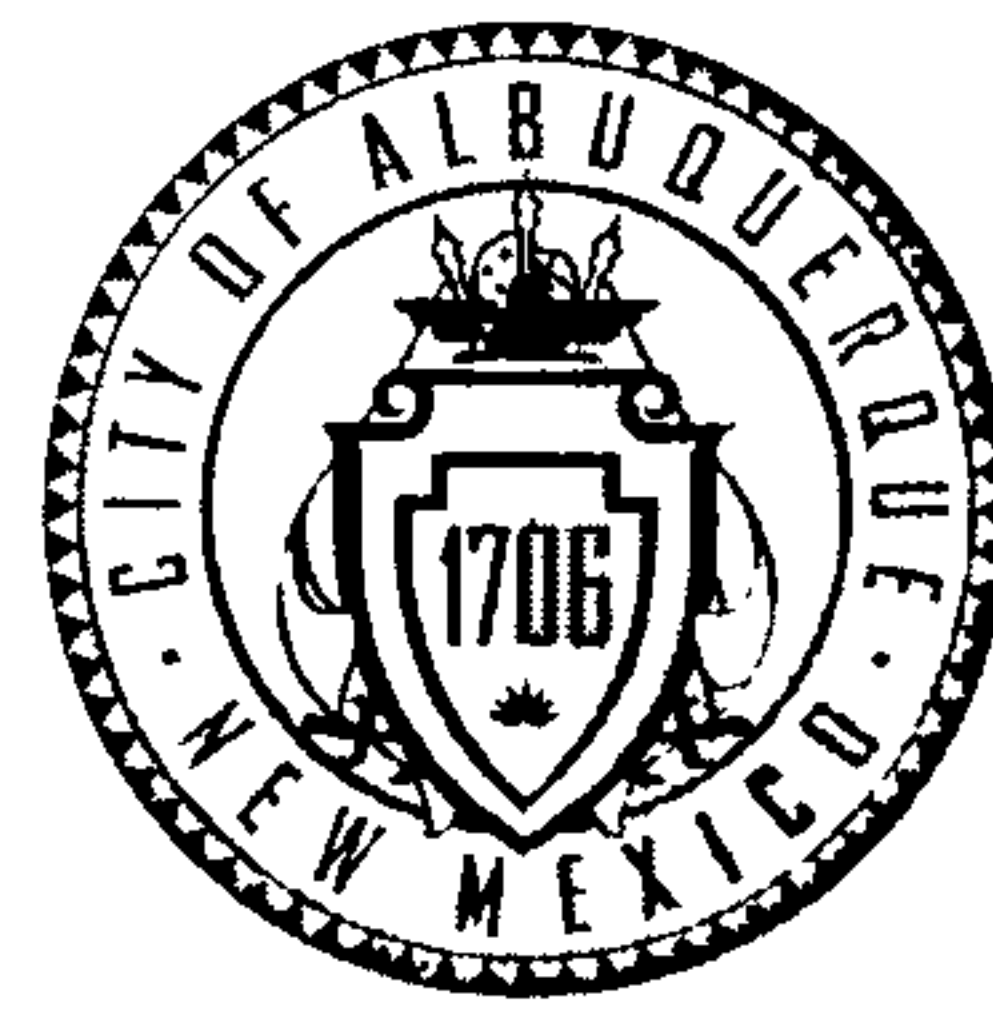
Courtyard I
7500 Jefferson St. NE
Albuquerque, NM 87109-4335
www.bhinc.com

voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332



CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



May 28, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: **Durango at the Trails (File: C09D012), Unit 1**
Grading and Drainage plans, Stamp Date 5-20-15

(includes Interim)
5/20/15

Dear Mr. Steffen:

Based upon the information provided in your submittal received 5-20-15, the above referenced submittals are approved for DRB action on the Preliminary Plat and Site Plan for Subdivision **for Unit 1** with the following conditions:

1. As a condition of Final Plat, the Storm drain easement width should be based on formula in DPM. It should be 25' wide south of Lot 6 and possibly 30' west of Lot 6.
2. As a condition of Work Order acceptance, provide temporary drainage easements over interim ponds.

PO Box 1293

Albuquerque

The Grading and Drainage Plans cannot be approved for Grading Permit until DRB approval and the following comments are addressed:

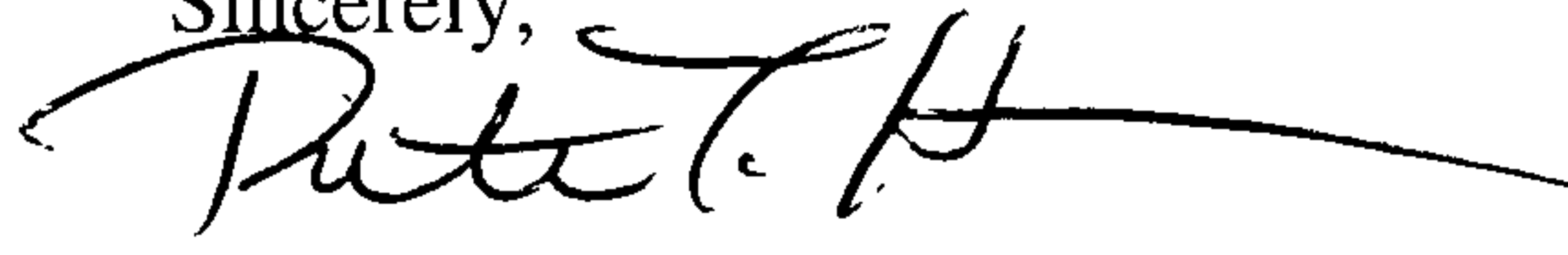
New Mexico 87103

www.cabq.gov

- ✓ 3. Hatch pattern for the double garden walls need to be reflected on the legend
- ✓ 4. Lot 5, Unit 1 – show a garden wall on NW side of lot.
- ✓ 5. Submit Sheet 5 showing a corrected cross-section of the double garden walls, labeled as "TYPICAL TIERED WALL NOMENCLATURE".
- ✓ 6. Revise contours at intersection of Red Mountain and Window Peak so that the high point in front of Lot 1 is reflected.
- ✓ 7. Provide a valley gutter in front of Lot 2 to direct flows to sump in Red Mountain
- ✓ 8. Adjust MH13 so that it ties into SD in Woodmont at 90 deg or less
- ✓ 9. Show existing contour lines of Woodmont Avenue

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

Sincerely,

A handwritten signature in black ink, appearing to read "Rita H.", with a long horizontal flourish extending to the right.

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

Orig: Drainage file
c.pdf Addressee via Email

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



May 28, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: Durango at the Trails (File: C09D012), Unit 2
Grading and Drainage plans, Stamp Date 5-20-15

Dear Mr. Steffen:

Based upon the information provided in your submittal received 5-20-15, the above referenced submittals is approved for DRB action on the Preliminary Plat and Site Plan for Subdivision *for Unit 2* with the following condition:

1. Approvals from APS and owners of Lots 5 thru 9 on Valle Vista are required for grading on their properties. Approval letters are to reference the stamp date on the drawings

PO Box 1293

The Grading and Drainage Plans cannot be approved for Grading Permit until DRB approval and the following comments are addressed:

Albuquerque

2. Label the Interim Grading Plan as such. This applies to Unit 1 as well.
3. Hatch pattern for the double garden walls need to be reflected on the legend
4. SWPPP must cover the APS site as well.

New Mexico 87103

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

www.cabq.gov

Sincerely,

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

Orig: Drainage file
c.pdf Addressee via Email


C09D012_PP_Cmnt_Unit2.doc

1 of 1

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



May 28, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

**RE: Durango at the Trails (File: C09D012), Unit 3&4
Grading and Drainage plans, Stamp Date 5-20-15**

Dear Mr. Steffen:

Based upon the information provided in your submittal received 5-20-15, the above referenced submittals cannot be approved for DRB action on the Preliminary Plat and Site Plan for Subdivision *for Units 3&4* for the following reason:

1. It is anticipated that there may be some changes in these units. Therefore the grading will not be reviewed until the plans are further developed and resubmitted.

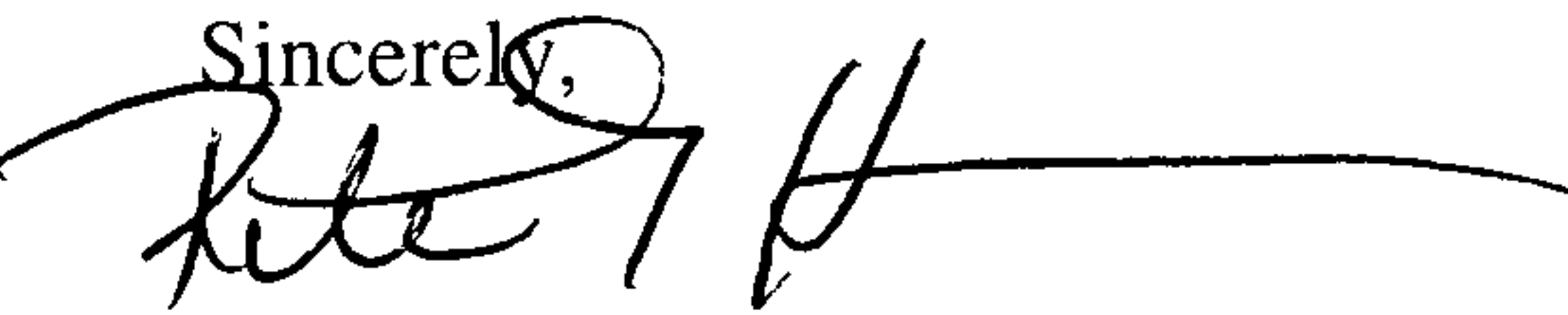
PO Box 1293

Albuquerque

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

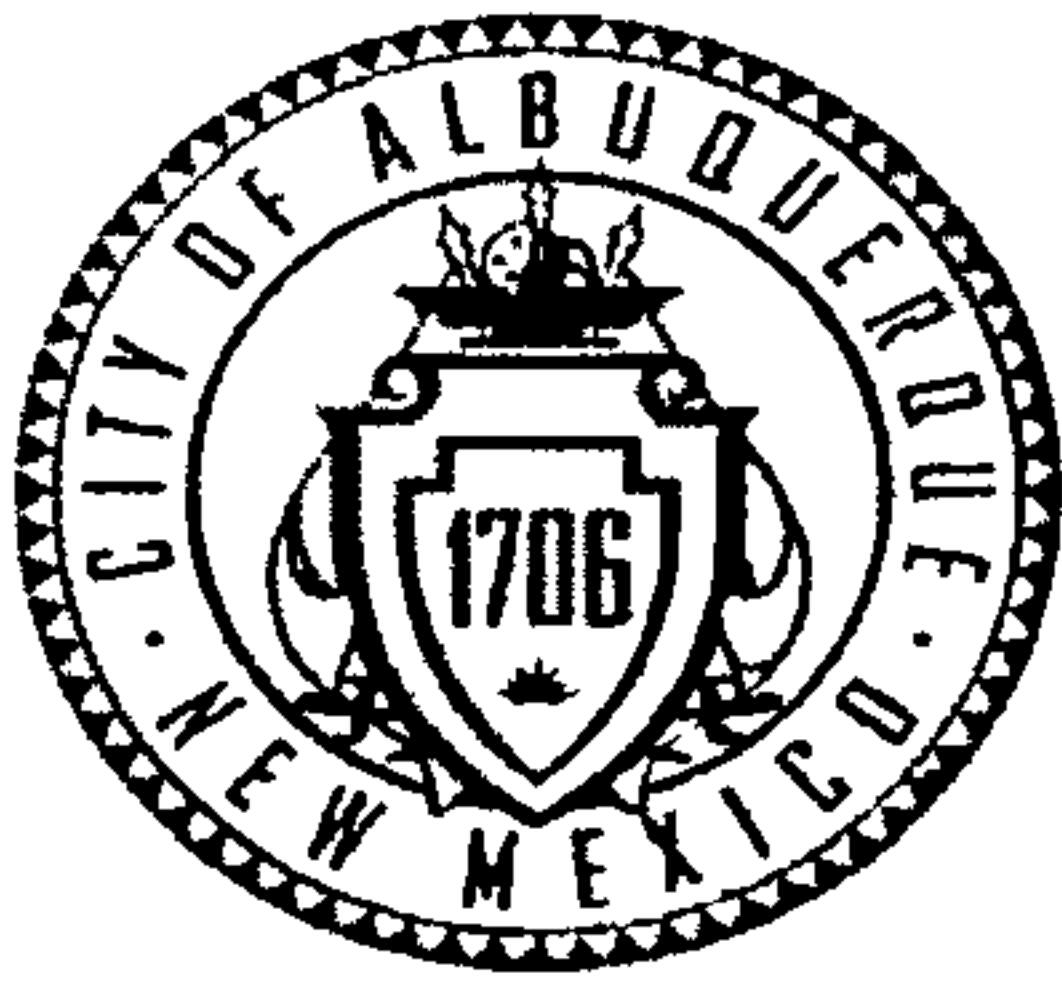
New Mexico 87103

www.cabq.gov

Sincerely,


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

Orig: Drainage file
c.pdf Addressee via Email



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: DMP FOR DURANGO Building Permit #: _____ City Drainage #: C09D012
DRB#: 1004404 EPC#: _____ Work Order#: _____
Legal Description: TRACTS 7 AND 8 AT THE TRAILS UNIT 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: BRIAN PATTERSON
Address: 7500 JEFFERSON ST NE COURTYARD 1 ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: BPATTERSON@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: 505-639-4798 Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

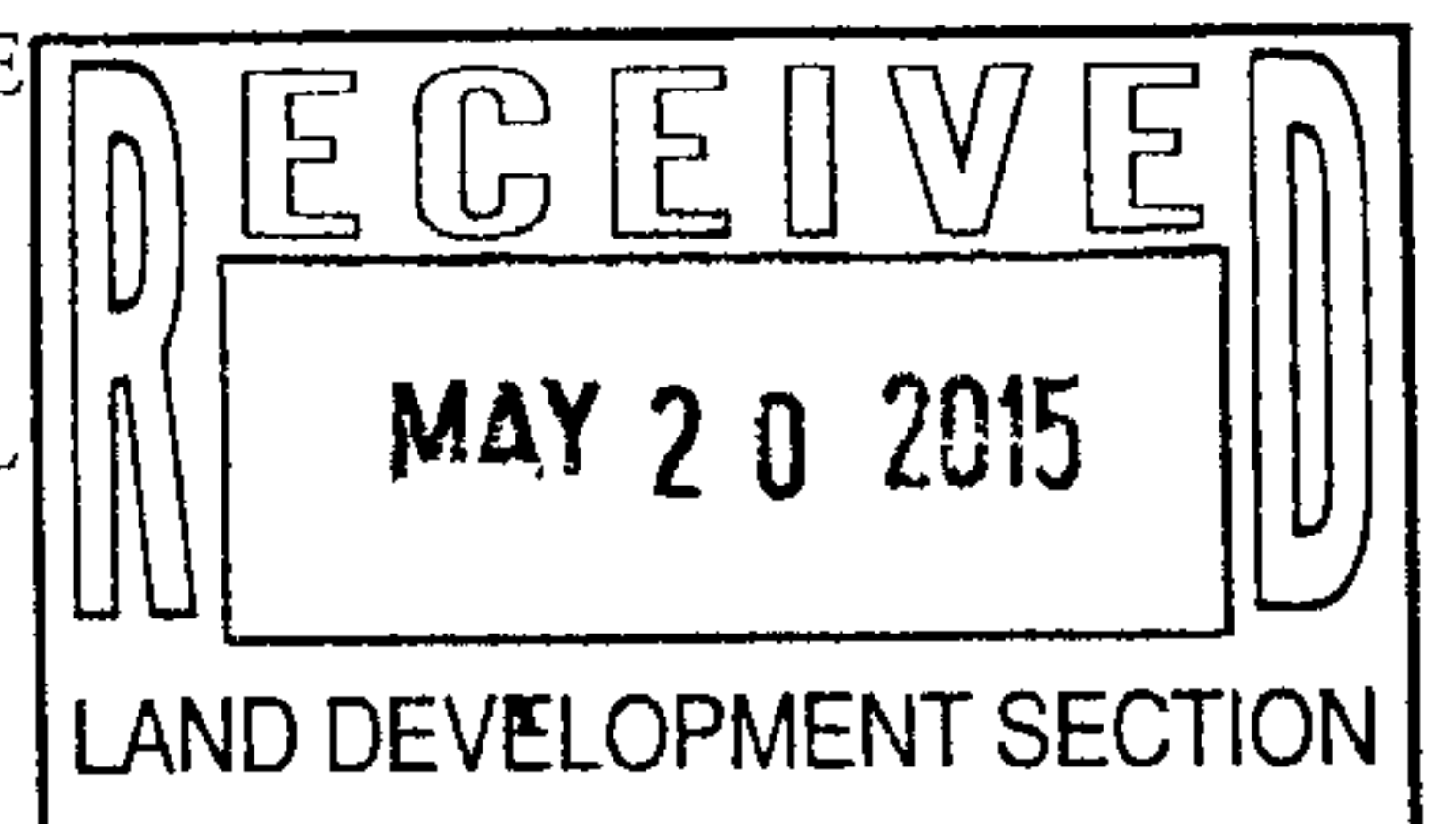
Contractor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ 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
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) _____



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

DATE SUBMITTED: 5/20/15 By: SCOTT STEFFEN

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
- 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

May 20, 2015

Rita Harmon, P. E.
Planning Department
Hydrology Review Section
City of Albuquerque
P. O. Box 1293
Albuquerque, NM 87103

Re: Durango at the Trails, Grading and Drainage Plan (C09/D012)

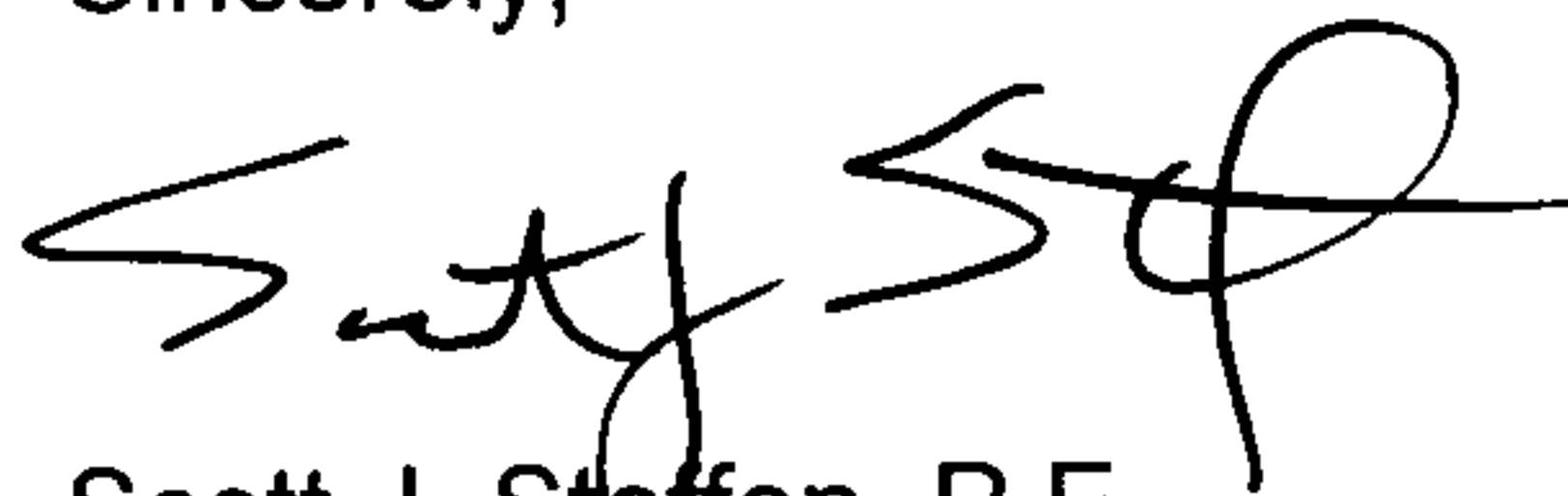
Dear Rita:

This letter provides a written response to your comments dated May 5, 2015:

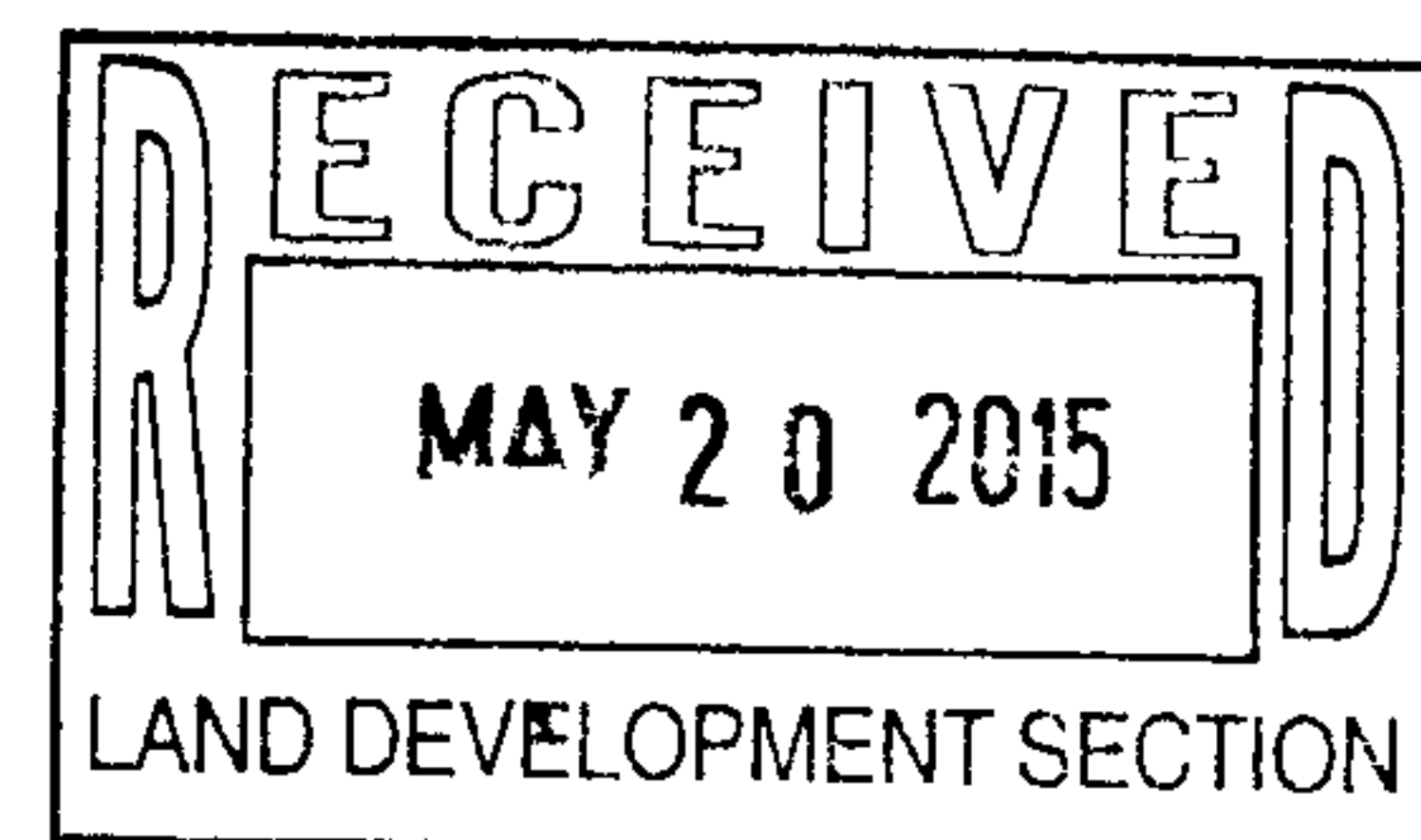
1. *Units 1 thru 4 are to be phased. Provide an interim grading plan for each phase, showing sediment ponds and tie slopes. **Interim grading plans are provided for Units 1 and 2. The tie slopes and sediment ponds for Units 3 and 4 are shown on the respective grading plans. At this point in time we are requesting preliminary plat approval of Units 1 and 2.***
2. *Provide revised grading plan showing recent changes. Grades and retaining walls will be checked after this plan is submitted. **Revised grading plan for Units 1 through 4 are provided.***
3. *Revise infrastructure list with separate line items for each run/size of pipe. **Infrastructure list has been revised per markup provided at 5/5/2015 meeting.***

If you have any questions or require further information in order to approve the Grading and Drainage Plan, please feel free to contact me at 823-1000. I am available to meet to go over the changes.

Sincerely,



Scott J. Steffen, P.E.
Vice President
Community Development and Planning Group



Enclosures

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲

- *1. need water pattern for dble wall
- ✓2. dbl wall detail on skt 5 needs to be reused

✗ lot 5 - NW side - contours overlap
- need ret. wall on back side?

✓4. - what are triangles? PVI

✓5. Lot ~~3~~ 2+3 to drain down red mtn
need valley gutter.

✓6. need to direct flows fr. Window Peak Rd to
Sump in Red Mountain Rd.

7. why SD in Molas so close to C&G? - 10' off sewer

~~8. ~~

✓9. ~~wasn't~~ wasn't MH #13 going to be adjusted?

10. lot 27 (Durango 3) percentages? will turn off

~~11. water block @ Sunlight Peak? will reflect~~

✓12. contour lines on other p. side of Woodmont

~~13. @ Valle Vista - possible ponding?~~ OK

~~14. Strater & Molas intersection~~

✓15. How do you get to MH 22? Access Rd.

16. Marty Echard - to approve -

17. Valle Vista lots - Twilight Homes:

will put
10' area
drain

Cap all
drain
All water
Vehicle access to MH 22
I.L. List

acceptance of
to C&G.
prior
to C&G.

Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

CLIENT/COURIER TRANSMITTAL

To: Rita Harmon
Hydrology Section
City of Albuquerque
600 2nd St NW

Requested by: Scott Steffen

Date: May 20, 2015

Time Due: ☒ This A.M.
☐ This P.M.
☐ Rush _____
☒ By Tomorrow

Phone: 924-3695

Job No.: 20140164.005.01.cdp

Job Name: Durango at the Trails

DELIVERY VIA

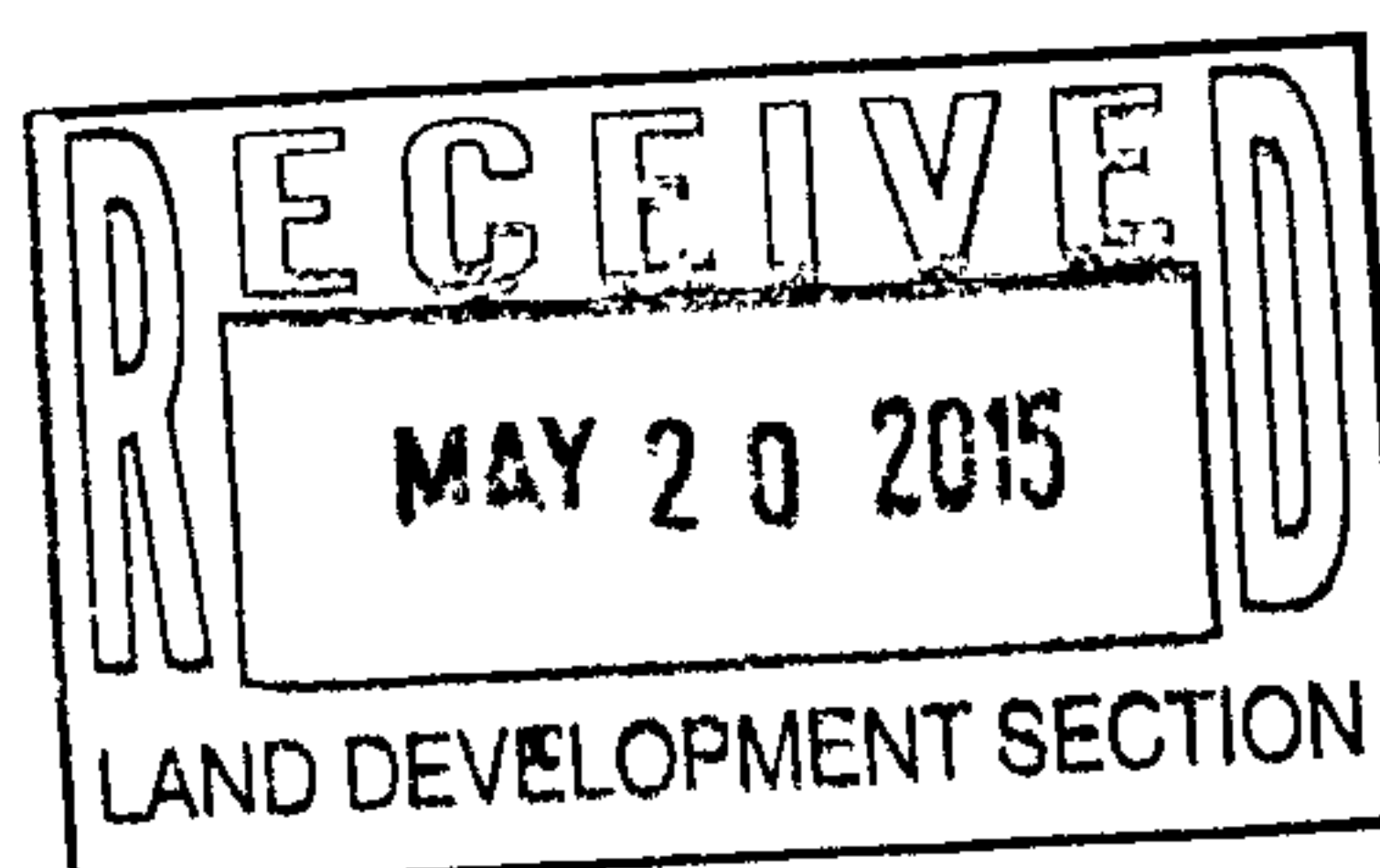
☒ Courier ☐ Federal Express
☐ Mail ☐ UPS
☐ Other

PICK UP

Item: _____

<u>ITEM NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
1	1	Units 1-4 grading plan
2	1	Units 1-2 interim grading plan

COMMENTS / INSTRUCTIONS



REC'D BY: _____ DATE: _____ TIME: _____

Scott Steffen

From: Scott Steffen
Sent: Wednesday, May 20, 2015 10:18 AM
To: Harmon Rita T. (rharmon@cabq.gov); 'PLNDRS@cabq.gov'
Cc: Scott Steffen
Subject: Durango at the Trails

Rita,

Use the following link to download the revised grading plan and interim grading plan.

<http://sfspublic.bhinc.com/EmailAccess.aspx?tk=TKssteffenD2052015101629>

NOTE: These files will expire in 14 days from the time this email was generated.

Using Gmail and IE? Please right click on the link and select Open in new window.

Let me know if you have any issues accessing the files.

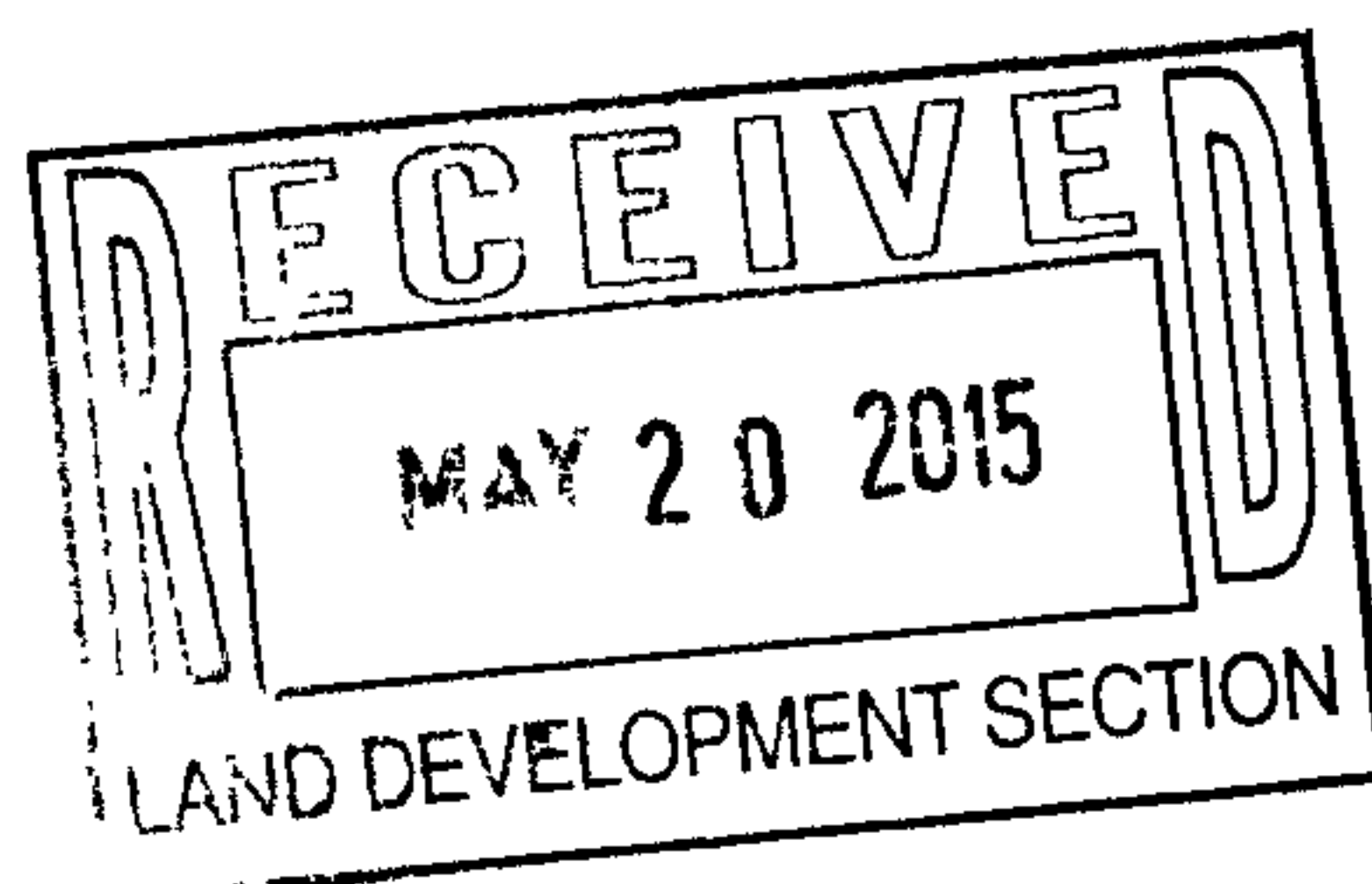
Thanks,

Scott J. Steffen
Vice President
Community Development and Planning

Bohannon Huston

Courtyard I
7500 Jefferson St. NE
Albuquerque, NM 87109-4335
www.bhinc.com

voice: 505.823.1000 facsimile: 505.798.7988 toll free: 800.877.5332



CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



May 28, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: Durango at the Trails (File: C09D012)
Drainage Report for Units 1 to 4
Engineer's Stamp Date 3-5-2015

Dear Mr. Steffen:

Based upon the information provided in your submittal received 3-06-15, the above referenced drainage report is approved for Preliminary Plat action by the DRB and Grading Permit. This approval is for the Drainage Report only which is to be the basis for the Grading Plans. Approvals for the Grading Plans for each of four units will be separate.

PO Box 1293

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

Albuquerque

New Mexico 87103

www.cabq.gov

Sincerely,

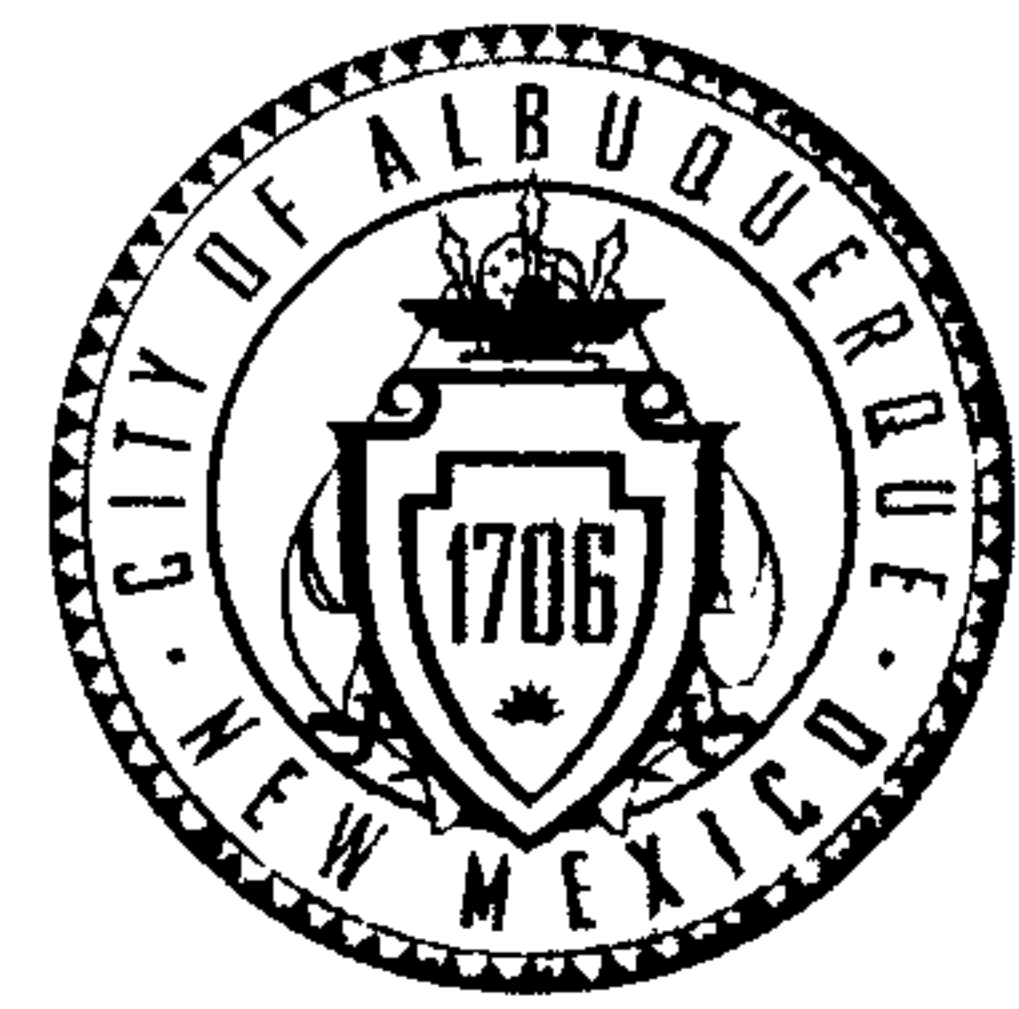
Rita Harmon, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Orig: Drainage file
c.pdf Addressee via Email

7% D = 13.29 Az

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



May 5, 2015

Richard J. Berry, Mayor

Scott Steffen, PE
BOHANNAN-HUSTON, INC.
7500 Jefferson Street NE Courtyard I
Albuquerque, NM 87109

RE: **Durango at the Trails (File: C09D012)**
Drainage Report for Units 1 to 4
Engineer's Stamp Date ~~10-24-2014~~

3-5-15

Dear Mr. Steffen:

Based upon the information provided in your submittal received 3-06-15, the above referenced plan cannot be approved for Preliminary Plat action by the DRB, or Grading Permit until the following comments are addressed.

PO Box 1293

Albuquerque

New Mexico 87103

1. Units 1 thru 4 are to be phased. Provide an interim grading plan for each phase, showing sediment ponds and tie slopes.
2. Provide revised grading plan showing recent changes. Grades and retaining walls will be checked after this plan is submitted.
3. Revise I.L list with for separate line items for each run/size of pipe.

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

www.cabq.gov

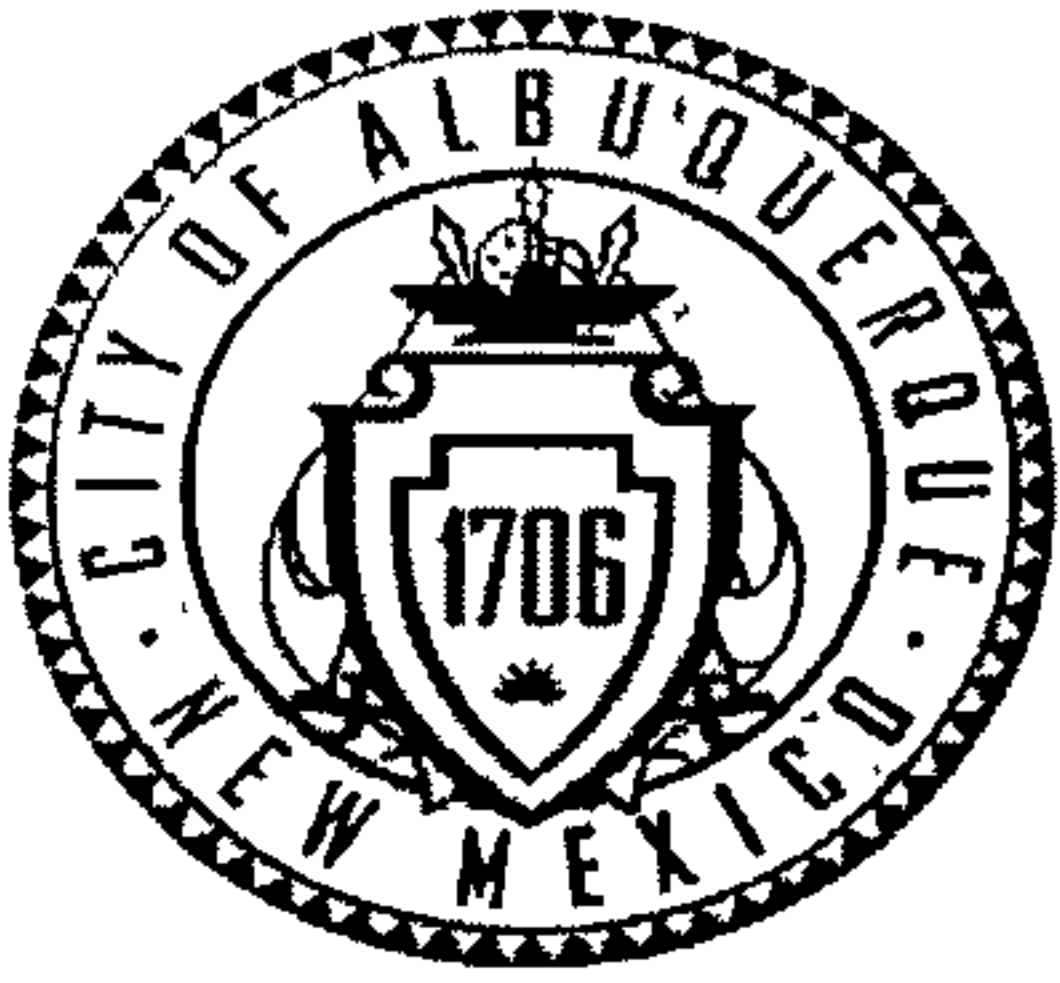
Sincerely,

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

Orig: Drainage file
c.pdf Addressee via Email

BASIN	AREA (AC)	%D	AREA %D
BASIN E1.1A	8.25	44.0%	3.63
BASIN E1.1B	2.81	49.0%	1.38
BASIN E1.2A	4.56	40.0%	1.82
BASIN E1.2B	1.33	20.0%	0.27
BASIN E1.2C	6.97	50.0%	3.48
BASIN E2	6.30	43.0%	2.71
TOTAL	30.21		13.29





City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: DMP FOR DURANGO Building Permit #: _____ City Drainage #: C09D012
DRB#: 1004404 EPC#: _____ Work Order#: _____
Legal Description: TRACTS 7 AND 8 AT THE TRAILS UNIT 3A
City Address: _____

Engineering Firm: BOHANNAN HUSTON INC Contact: BRIAN PATTERSON
Address: 7500 JEFFERSON ST NE COURTYARD 1 ALBUQUERQUE NM 87109
Phone#: 823-1000 Fax#: _____ E-mail: BPATTERSON@BHINC.COM

Owner: WOODMONT PASEO, LLC Contact: RICK BELTRAMO
Address: 6330 RIVERSIDE PLAZA LANE #160 ALBUQUERQUE NM 87120
Phone#: 505-639-4798 Fax#: _____ E-mail: _____

Architect: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☒ 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)
 - ☐ FOUNDATION PERMIT APPROVAL
 - ☐ BUILDING PERMIT APPROVAL
 - ☒ GRADING PERMIT APPROVAL
 - ☐ PAVING PERMIT APPROVAL
 - ☐ WORK ORDER APPROVAL
 - ☐ GRADING CERTIFICATION
- Partial*
\$1,260.00
- RECEIVED**
MAR 8 6 28 AM '15
LAND DEVELOPMENT SECTION

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

DATE SUBMITTED: 3-6-15 By: SCOTT STEFFEN

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
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

DRAINAGE REPORT FOR DURANGO AT THE TRAILS SUBDIVISION

MARCH 2015

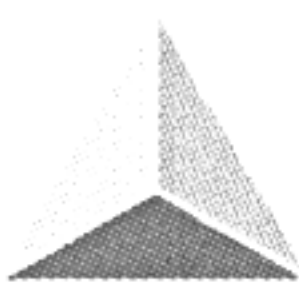


Prepared for:

Woodmont Paseo, LLC

6300 Riverside Plaza Lane, Suite 160

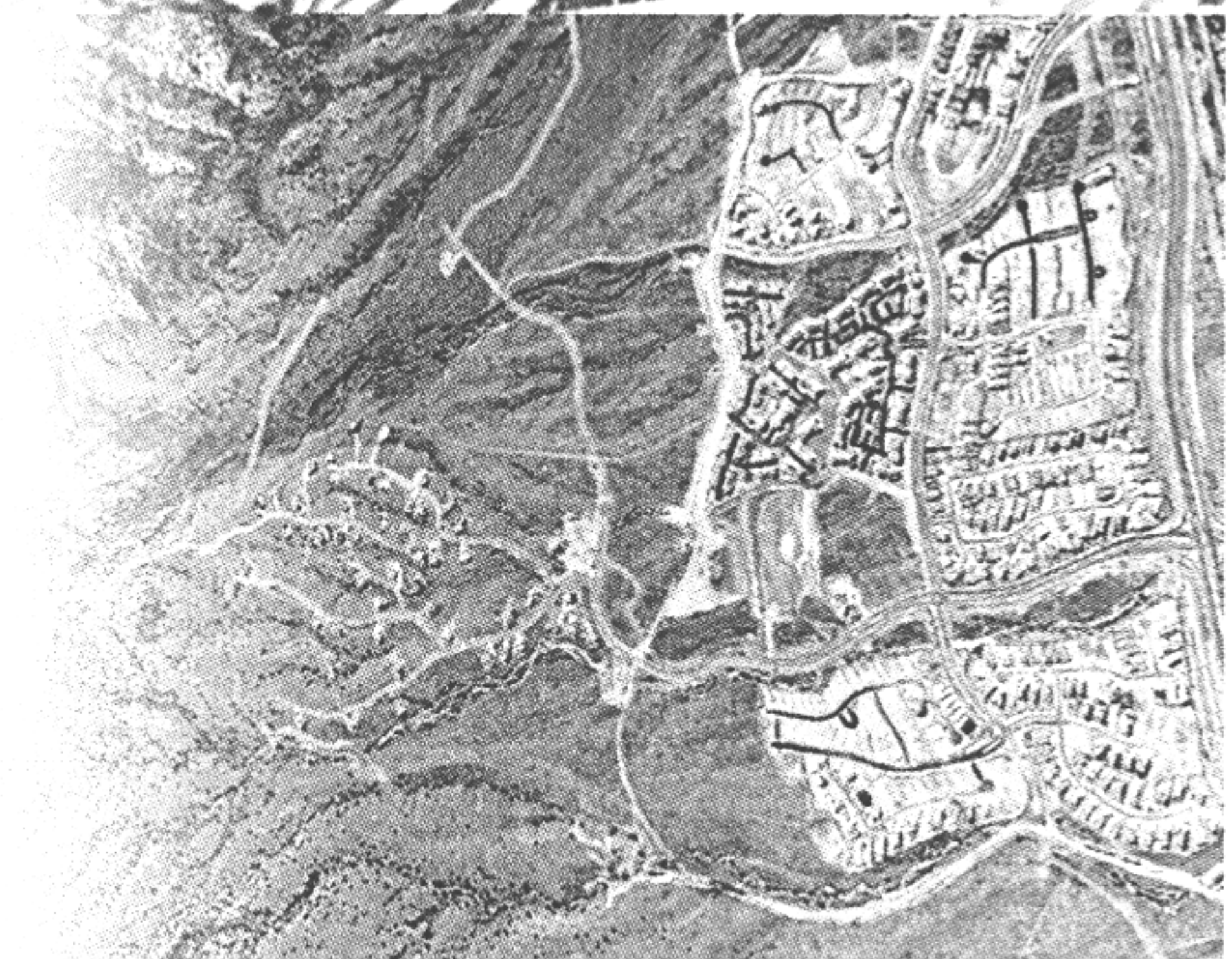
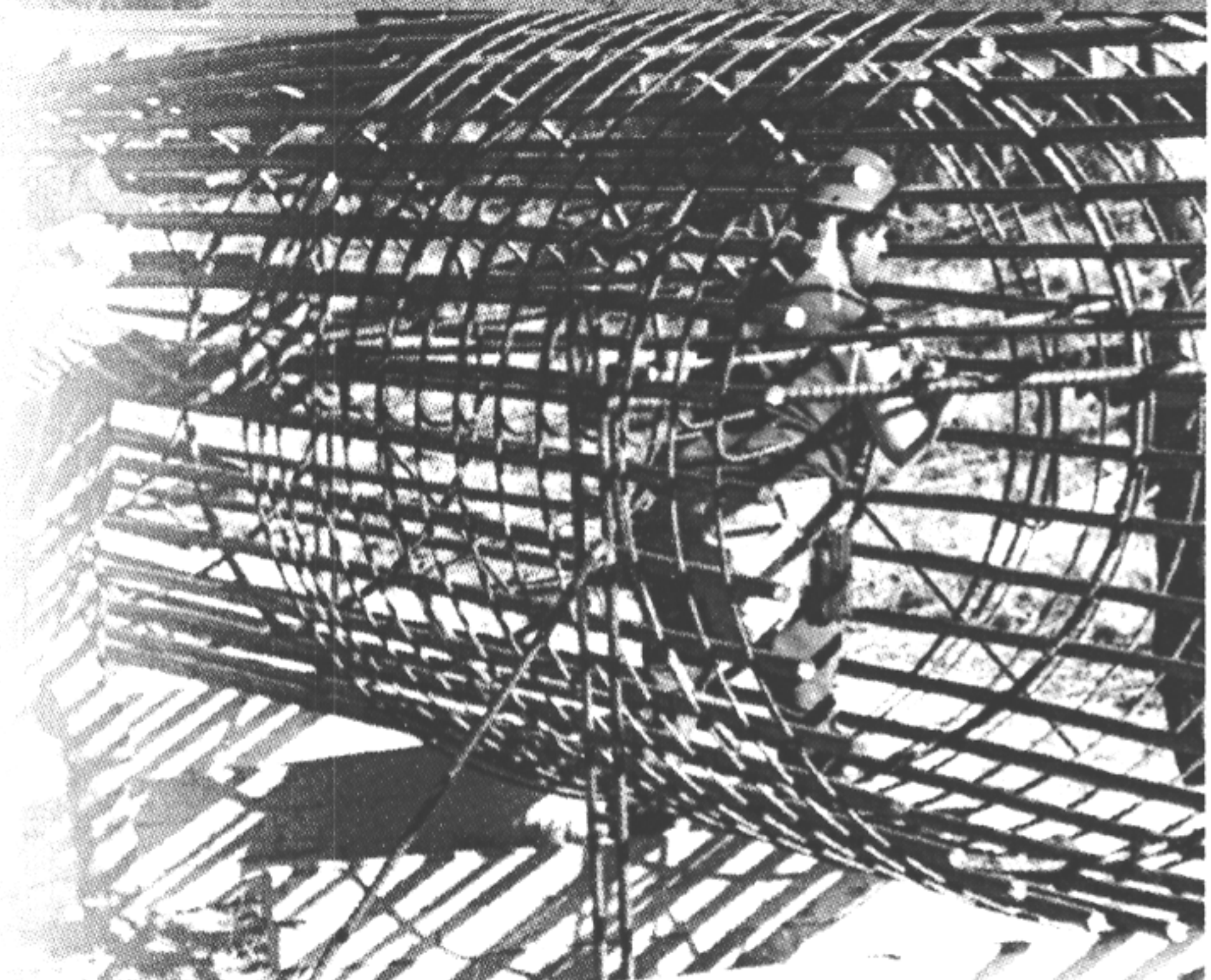
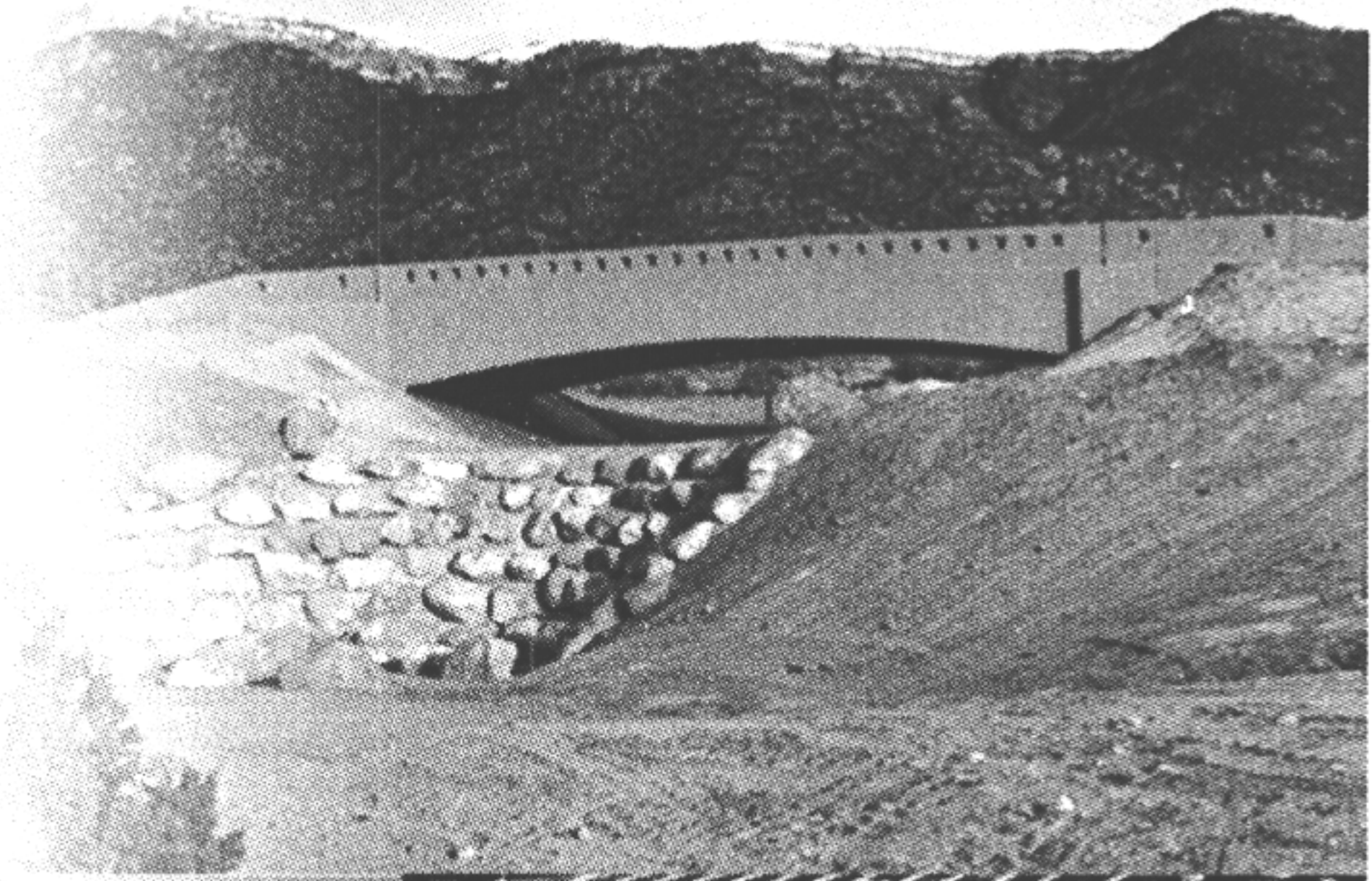
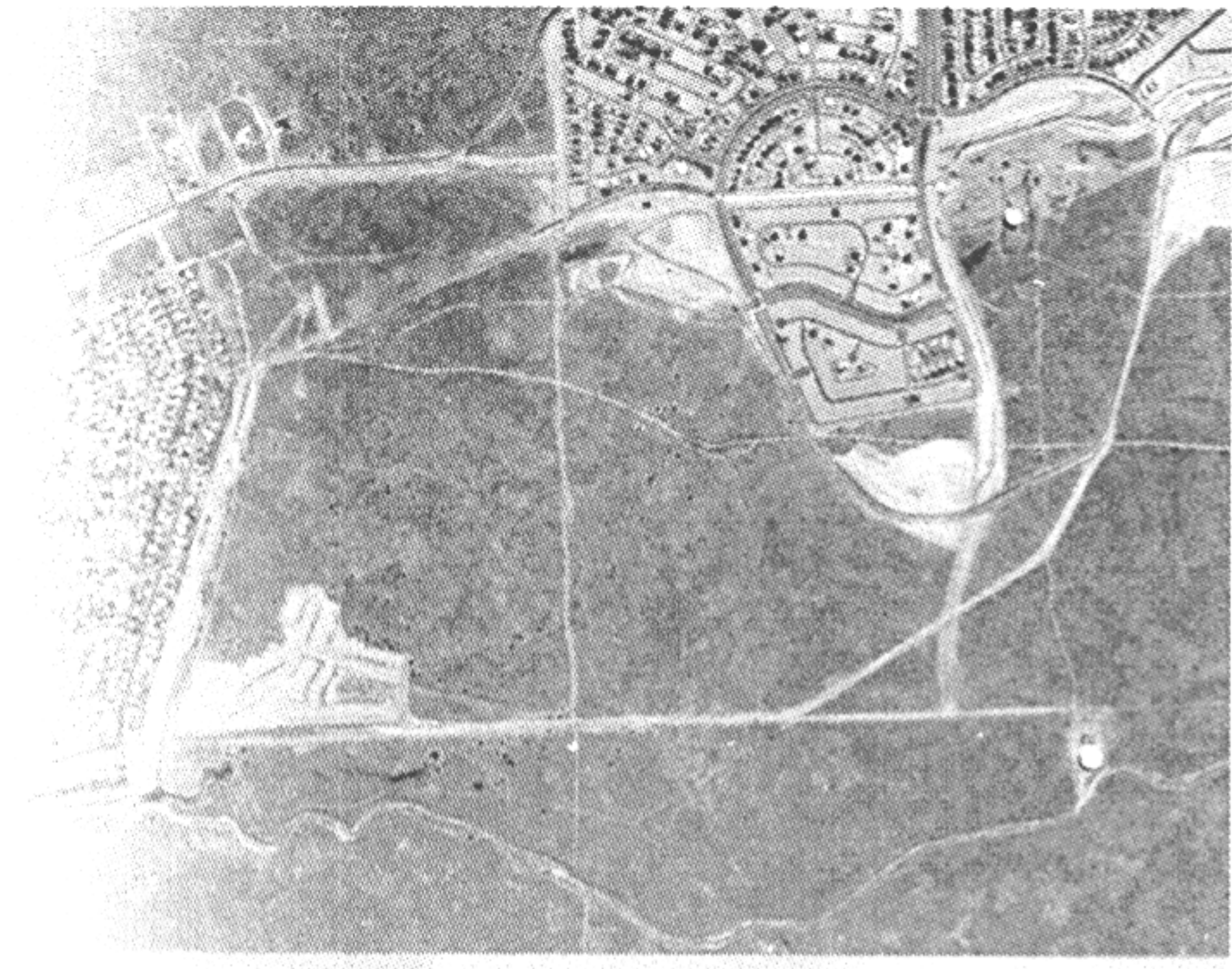
Albuquerque, NM 87120

Bohannon  **Huston**

Engineering

Spatial Data

Advanced Technologies



**DRAINAGE REPORT
FOR
DURANGO AT THE TRAILS
SUBDIVISION**

MARCH 5, 2015

Prepared for:

**WOODMONT PASEO, LLC
6300 RIVERSIDE PLAZA LANE, SUITE 160
ALBUQUERQUE, NM 87120**

Prepared by:

**BOHANNAN HUSTON, INC.
COURTYARD I
7500 JEFFERSON STREET NE
ALBUQUERQUE, NM 87109**

Prepared By:

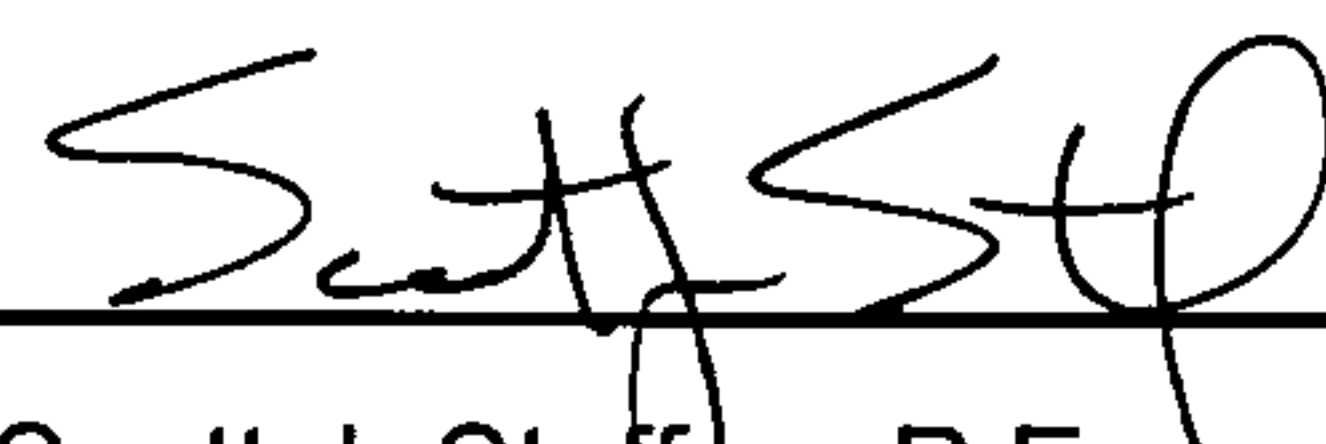
 3/5/15
Scott J. Steffen, P.E. Date
Project Manager



TABLE OF CONTENTS

I. PURPOSE	1
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A. Offsite Flows	2
B. Onsite Flows	2
C. First flush requirements.....	3
V. CONCLUSION.....	4

APPENDICES

APPENDIX A – DEVELOPED CONDITIONS AHYMO SUMMARY, OUTPUT, AND INPUT FILES	
APPENDIX B – STREET HYDRAULICS AND STORM DRAIN INLET ANALYSIS	
APPENDIX C – INROADS STORM DRAIN NETWORK FILE	

EXHIBITS

EXHIBIT 1 – PRELIMINARY PLATS	
EXHIBIT 2 – DEVELOPED BASIN MAP	
EXHIBIT 3 – INLET AND STORM DRAIN NETWORK MAP	
EXHIBIT 4 – GRADING PLAN	
EXHIBIT 5 – SUPPLEMENTAL EXHIBITS FROM DMP	

This report establishes a drainage management plan for Durango at the Trails. The proposed development subdivides Tracts 7 and 8 at the Trails Unit 3A and consists of 127 single family detached residential lots on approximately 30 acres to be developed in five Units. This project is located within the Volcano Trails Sector Plan area, in northwest Albuquerque, east of Rainbow Blvd and south of Woodmont Avenue. Durango is in the Trails Units 1-3 Drainage Master Plan (DMP) area and has discharge of developed flows to an existing storm drain system in Woodmont Avenue, which discharges to DMP Pond E. The Trails drainage outfall is to the Boca Negra Dam through a storm drain in Universe Boulevard. Discharge to the Boca Negra Dam is limited by the Trails Universe storm drain capacity. Flows in excess of the storm drain capacity surge to detention ponds east of Universe Boulevard. This report is submitted in support of grading and preliminary plat approval for Units 1 through 4 by the DRB.

Drainage conditions were analyzed utilizing the 100-year, 24-hour storm event ($P_{60}=1.84$ in, $P_{360}=2.20$ in, $P_{1440}=2.66$ in), in accordance with the City of Albuquerque DPM. The use of the 24-hour storm event is consistent with the Trails Units 1-3 DMP. The Arid-lands Hydrologic Model (AHYMO) was utilized to determine peak flow rates for design of the storm drainage improvements within the project. The results are included in Appendix A. . The storm drain inlets were sized using the 24-hour storm event (the 24-hour and 6-hour storm event produced the same Q). Street capacity and storm drain inlet calculations supporting this study are located in Appendix B.

The following document was referenced in the preparation of this report:

- *Update to the Amendment to the Drainage Master Plan for the Trails Units 1, 2, and 3* prepared by Thompson Engineering Consultants, Inc., dated February 26, 2015.

Tracts 7 and 8 are currently undeveloped with grades ranging from one percent to three percent. The site generally slopes from west to east. It is bounded by Woodmont Avenue to the north, the Valle Vista subdivision to the east, Tierra Antigua Elementary School to the south and City Open Space to the west. Access to Durango will be from Woodmont Avenue.

IV. DEVELOPED HYDRAULIC AND HYDROLOGIC CONDITIONS

Durango Units 1 through 5 is a proposed single-family residential development with 127 lots on 30 acres. Unit 1 consists of 29 lots on approximately 7 acres, Unit 2 consists of 22 lots on approximately 5 acres, Unit 3 consists of 30 lots on approximately 6 acres, Unit 4 consists of 27 lots on approximately 5 acres and Unit 5 consists of 19 lots on approximately 7 acres. Proposed street and lot configurations are shown on the *Preliminary Plat*, **Exhibit 1**, and Basin Map, **Exhibit 2**.

The percent impervious land treatment for the proposed conditions is determined from Table A-5 of the DPM, Section 22.2. The composite percent impervious land treatment value used in the Trails DMP AHYMO analysis that encompasses Tracts 7 & 8 is 42.8%. The composite percent impervious land treatment for Durango is 43.1%. The developed runoff from Durango, 87.4 cfs, is essentially unchanged from the DMP, 86.8 cfs.

A. OFFSITE FLOWS

The only offsite flows that reach Durango are from the City Open Space (DMP Offsite Basin 2) along the west boundary. The original DMP routed these flows through Offsite Pond 2. The Update to the DMP Addendum removed Offsite Pond 2. As a result, these flows will be intercepted by Mancos Street, which runs along the Durango west boundary, and will be conveyed via the street network to the internal storm drain network. Offsite, upstream flows from DMP Basin B will be captured by Future Pond B as described in the DMP. The DMP Update rerouted the flows from Pond B to Pond 5A north of Woodmont Avenue. As a result, flows from Pond B are no longer conveyed through the Durango Subdivision. Offsite flows from the north are intercepted by Woodmont Avenue (DMP Basins E4 and E6). Durango is higher in elevation than the property to the south (Tierra Antigua Elementary School) and east (Valle Vista Subdivision). Plates (exhibits) from the DMP Update have been included in this submittal as supplemental information, see **Exhibit 6**. For detailed analysis of the offsite flows and future ponds, please see the DMP Update.

B. ONSITE FLOWS

Developed flows from Durango will be conveyed via the internal street network, collected by the internal storm drain network, which connects to the existing storm drain network located in Woodmont Avenue. These flows are described in **Appendix A**. Flows from the Durango Subdivision have free discharge to Pond E as described in the Valle

Prado Units 1 and 2 Drainage Plan. For reference, see **Exhibit 2** for basin locations and **Exhibit 3** for the storm drain and inlet locations.

Basin E1.1A (23.9 cfs) drains to two Type A double grate inlets (Inlets #30 and 31) at a low point in Red Mountain Road south of Window Peak Road. Inlets #30 and 31 are in a sump condition and there is no emergency spill way present, therefore the inlets have been sized to capture two times the 100-year storm event as shown in **Appendix B**. Runoff from Basin E1.1B (8.3 cfs) is intercepted by three Type A single grate inlets (Inlets #23, 26 and 27). These inlets intercept 6.5 cfs, with 1.8 cfs of by-pass into Basin E2. The Basin E1.1A and E1.1B storm drain connects to an existing storm drain in Sunlight Peak Street, which discharges to the Woodmont Avenue storm drain.

Runoff from Basin E1.2A (12.9 cfs) is conveyed in Mancos Street and combines with runoff from Offsite Basin 2 (3.8 cfs). This combined runoff (16.7cfs) enters Basin E1.2C (20.8 cfs) and is conveyed in Weminuche Road. Just upstream of Strater Street, the flow in Weminuche Road is intercepted by two Type A single grate inlets (Inlets #24 and 25). These inlets intercept 12.4 cfs, with 13.2 cfs of by-pass flow continuing to the low point in Weminuche Road. The backyards of Lots 19-22, Unit 2 in Basin E1.2C (0.4 cfs) is captured by individual lot rear yard retention ponds sized to hold 2 times the 100-year volume (0.01 acre-feet). The required pond capacity on each lot is 140 cubic-feet.

Runoff from Basin E1.2B (3.4 cfs) is captured by individual lot rear yard retention ponds sized to hold 2 times the 100-year volume (0.25 acre-feet). The 13 lots with rear yard ponding are in Durango Unit 5. The required pond capacity on each lot is 0.02 acre-feet (840 cubic-feet).

By-pass flow from Basin E1.1B combines with runoff from Basin E2 (18.1 cfs). The flow is intercepted by two Type A double grate inlets (Inlets #19 and 20) in Weminuche Road just south of Molas Road. These inlets intercept 12.4 cfs, with 7.6 cfs of by-pass flow continuing to the low point in Weminuche Road. Two Type A double grate inlets (Inlets #21 and 22) intercept 32.6 cfs at the low point in Weminuche Road. Inlets #21 and 22 are in a sump condition and there is no emergency spillway present, therefore the inlets have been sized to capture two times the 100-year storm event as shown in **Appendix B**. The Weminuche Road storm drain network discharges to the Woodmont Avenue storm drain.

C. FIRST FLUSH REQUIREMENTS

The Durango Subdivision is required to meet the first flush requirements of the new City Drainage Ordinance. The Durango storm drain network ultimately discharges to Pond

E, which has 0.9 acre-feet of storage volume for the first flush per the Valle Prado Units 1 and 2 Drainage Plan. The first flush requirement for Durango is 0.35 acre-feet and is calculated as 0.34 in. (0.44 in. - 0.1 in. initial abstraction) times the cumulative impervious land treatment (43%) times the Durango area of 28.9 acres (30.2 acres less Basin E1.2B).

V. CONCLUSION

This report provides a detailed study of the developed runoff and street capacities for the proposed Durango at the Trails Subdivision. Included are the Units 1 through 4 preliminary plats, basin map, grading plan, and all necessary hydrologic and hydraulic analyses. The proposed drainage plan for Durango can be safely conveyed by the existing and proposed improvements in this drainage plan. This drainage plan maintains the overall drainage pattern of the area, is consistent with the Trails Units 1-3 DMP and allows for the safe management of storm runoff in the fully developed condition as well as interim conditions.

APPENDICES

**APPENDIX A: DEVELOPED CONDITIONS AHYMO
SUMMARY, OUTPUT, AND INPUT
FILES**

**APPENDIX B: STREET HYDRAULICS AND
STORM DRAIN INLET ANALYSIS**

**APPENDIX C: INROADS STORM DRAIN
NETWORK FILE**

APPENDIX A

DEVELOPED CONDITIONS AHYMO SUMMARY, OUTPUT, AND INPUT FILES

DEVELOPED CONDITIONS AHYMO SUMMARY FILE

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
INPUT FILE = DEV_Cond.HYM

- VERSION: 1997.02c

RUN DATE (MON/DAY/YR) =03/04/2015
USER NO.= AHYMO-S-9702c1BohanHu-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
*S	DURANGO @ THE TRAILS DRAINAGE BASIN (D) PROPOSED									
*S	100 YEAR 24 HOUR STORM									
*S										
START										TIME= .00
LOCATION			DEFAULT							
RAINFALL TYPE= 2										RAIN24= 2.660
*S										
*S										
*S										
*S										
*S										
*S	START VALLE PRADO ANALYSIS									
*S										
*S	COMPUTE BASIN 1									
COMPUTE NM HYD	1.00	-	1	.00500	8.92	.439	1.64591	1.500	2.788 PER IMP=	52.00
*S	COMPUTE BASIN 2									
COMPUTE NM HYD	2.00	-	2	.00451	7.86	.380	1.58072	1.500	2.721 PER IMP=	48.00
*S	COMPUTE BASIN 3									
COMPUTE NM HYD	3.00	-	3	.00688	11.22	.520	1.41777	1.500	2.550 PER IMP=	38.00
*S	COMPUTE BASIN 4									
COMPUTE NM HYD	4.00	-	4	.00359	6.26	.303	1.58072	1.500	2.722 PER IMP=	48.00
*S	COMPUTE BASIN 5									
COMPUTE NM HYD	5.00	-	5	.00188	3.05	.140	1.40148	1.500	2.541 PER IMP=	37.00
*S	COMPUTE FUTURE BASIN 1									
COMPUTE NM HYD	FB.1	-	6	.01078	19.93	1.003	1.74368	1.500	2.888 PER IMP=	58.00
*S	COMPUTE FUTURE BASIN 2									
COMPUTE NM HYD	FB.2	-	7	.00750	13.54	.671	1.67850	1.500	2.821 PER IMP=	54.00
*S	COMPUTE FUTURE BASIN 3									
COMPUTE NM HYD	FB.3	-	8	.00594	10.79	.537	1.69479	1.500	2.839 PER IMP=	55.00
*S	COMPUTE FUTURE BASIN 4									
COMPUTE NM HYD	FB.4	-	9	.00484	8.07	.379	1.46666	1.500	2.602 PER IMP=	41.00
*S	COMPUTE OFFSITE BASIN 2									
COMPUTE NM HYD	OFF.2	-	10	.00094	.62	.023	.45840	1.500	1.035 PER IMP=	.00
*S	COMPUTE OFFSITE BASIN 3									
COMPUTE NM HYD	OFF.3	-	11	.00109	.74	.027	.46712	1.500	1.056 PER IMP=	.00
*S	COMPUTE OFFSITE BASIN 4									
COMPUTE NM HYD	OFF.4	-	12	.00141	.93	.034	.45840	1.500	1.033 PER IMP=	.00
*S	COMPUTE OFFSITE BASIN 5									
COMPUTE NM HYD	OFF.5	-	13	.00328	1.99	.075	.42601	1.500	.948 PER IMP=	.00
*S	COMPUTE OFFSITE BASIN WELL									
COMPUTE NM HYD	OFF.WELL	-	14	.00156	2.26	.094	1.12446	1.500	2.256 PER IMP=	20.00
*S	ADD BASINS 1 AND 2 TO CREATE TEMP A									
ADD HYD	TEMP.A	1& 2	15	.00951	16.78	.819	1.61490	1.500	2.757	

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 = 2	NOTATION
*S ADD BASINS TEMP A AND 3 TO CREATE TEMP 1.B*****											
ADD HYD	TEMP.B 15& 3	16		.01639	28.00	1.339	1.53218	1.500	2.670		
*S ADD BASINS TEMP B AND 5 TO CREATE TEMP C*****											
ADD HYD	TEMP.C 16& 5	17		.01826	31.05	1.479	1.51874	1.500	2.657		
*S ADD BASINS TEMP C AND FUTURE BASIN 1 TO CREATE TEMP D*****											
ADD HYD	TEMP.D 17& 6	18		.02904	50.98	2.482	1.60222	1.500	2.743		
*S ADD BASINS TEMP D AND FUTURE BASIN 2 TO CREATE TEMP E*****											
ADD HYD	TEMP.E 18& 7	19		.03654	64.52	3.153	1.61787	1.500	2.759		
*S ADD BASINS TEMP E AND FUTURE BASIN 3 TO CREATE TEMP F*****											
ADD HYD	TEMP.F 19& 8	20		.04248	75.31	3.690	1.62861	1.500	2.770		
*S ADD BASINS TEMP F AND OFFSITE BASIN 3 TO CREATE TEMP G*****											
ADD HYD	TEMP.G 20&11	21		.04358	76.05	3.717	1.59945	1.500	2.727		
*S ADD BASINS TEMP G AND OFFSITE BASIN 4 TO CREATE TEMP H*****											
ADD HYD	TEMP.H 21&12	22		.04498	76.98	3.752	1.56378	1.500	2.674		
*S ADD BASINS TEMP H AND OFFSITE BASIN WELL TO CREATE TEMP I*****											
ADD HYD	TEMP.I 22&14	23		.04655	79.24	3.845	1.54902	1.500	2.660		
*S ADD BASINS TEMP I AND OFFSITE BASIN 5 TO CREATE TEMP J*****											
ADD HYD	TEMP.J 23&13	24		.04983	81.23	3.920	1.47507	1.500	2.547		
*S TEMP BASIN J REPLACES BASIN E3 AND E5 FROM THE DMP AHYMO FILE*****											
*S START DURANGO ANALYSIS*****											
COMPUTE NM HYD	OFFSITE2	-	25	.08050	13.87	1.783	.41534	2.000	.269	PER IMP=	.00
COMPUTE NM HYD	BASINE1.1A	-	31	.01289	23.86	1.042	1.51554	1.500	2.893	PER IMP=	44.00
COMPUTE NM HYD	BASINE1.1B	-	32	.00439	8.33	.374	1.59702	1.500	2.967	PER IMP=	49.00
ADD HYD	E1.1AB 32&31	33		.01727	32.19	1.415	1.53620	1.500	2.912		
COMPUTE NM HYD	BASINE1.2A	-	34	.00712	12.92	.551	1.45036	1.500	2.837	PER IMP=	40.00
ADD HYD	OFF.E1.2A 25&34	26		.08762	16.69	2.334	.49942	1.500	.298		
COMPUTE NM HYD	BASINE1.2B	-	27	.00208	3.40	.125	1.12446	1.500	2.557	PER IMP=	20.00
COMPUTE NM HYD	BASINE1.2C	-	28	.01089	20.76	.937	1.61332	1.500	2.979	PER IMP=	50.00
ADD HYD	OFF.E1.2AC 28&26	29		.09851	37.45	3.271	.62256	1.500	.594		
COMPUTE NM HYD	BASIN.E2	-	35	.00985	18.14	.787	1.49925	1.500	2.879	PER IMP=	43.00
ADD HYD	OFF.E2.E12AC 29&35	36		.10835	55.59	4.058	.70222	1.500	.802		
ROUTE MCUNGE	RTE.E12	36	37	.10835	55.59	4.058	.70222	1.500	.802	CCODE =	.0
*S END DURANGO ANALYSIS*****											
*S BEGIN WOODMONT AVENUE ANALYSIS*****											
COMPUTE NM HYD	BASIN.E4	-	38	.00577	13.11	.697	2.26513	1.500	3.550	PER IMP=	90.00
ADD HYD	AP1 38&33	39		.02304	45.30	2.112	1.71870	1.500	3.072		
ROUTE MCUNGE	RTE.E1E4	39	40	.02304	45.30	2.112	1.71870	1.500	3.072	CCODE =	.0
ADD HYD	AP2 37&40	41		.13140	100.89	6.170	.88049	1.500	1.200		
ROUTE MCUNGE	RTE.E1E4	41	42	.13140	100.89	6.170	.88049	1.500	1.200	CCODE =	.0
ADD HYD	AP3 42&24	43		.18122	182.12	10.090	1.04396	1.500	1.570		
COMPUTE NM HYD	BASIN.OFF6	-	44	.00140	2.33	.072	.96928	1.500	2.597	PER IMP=	.00
ADD HYD	POND 43&44	45		.18262	184.45	10.163	1.04339	1.500	1.578		
*S POND E ANALYSIS*****											
ROUTE RESERVOIR	POND.E	45	46	.18262	20.55	9.695	.99537	2.400	.176	AC-FT=	6.295
COMPUTE NM HYD	BASIN.E6	-	47	.00488	11.09	.590	2.26512	1.500	3.550	PER IMP=	90.00
ADD HYD	TOTALE 46&47	48		.18750	21.94	10.284	1.02841	2.000	.183		
FINISH											

$\Delta = 3.77$ cfs for offsite Basin 2 @ $T_p = 1.5$ hr.

Not incl. since back yard ponding

VS 103.78 fr. Amendment OK

Durango

A-2

DEVELOPED CONDITIONS AHYMO OUTPUT FILE

AHYMO PROGRAM (AHYMO_97) - - Version: 1997.02c
 RUN DATE (MON/DAY/YR) = 03/04/2015
 START TIME (HR:MIN:SEC) = 14:23:51 USER NO.= AHYMO-S-9702c1BohanHu-AH
 INPUT FILE = DEV_Cond.HYM

*S DURANGO @ THE TRAILS DRAINAGE BASIN (D) PROPOSED
 *S 100 YEAR - 24 HOUR STORM
 *S
 * CREATED MARCH 1, 2015
 *
 *

*CONVERT TO NMHYMO
 START TIME=0.0 HR PUNCH CODE=0

LOCATION NM
 Soil infiltration values (LAND FACTORS) for this location are not available.
 The following default values were used.

Land Treatment	Initial Abstr.(in)	Unif. Infilt.(in/hour)
A	0.65	1.67
B	0.50	1.25
C	0.35	0.83
D	0.10	0.04

*

 *

 *100 YEAR - 24 HOUR
 RAINFALL TYPE=2 RAIN QUARTER=0
 RAIN ONE=1.84 IN RAIN SIX=2.20 IN
 RAIN DAY=2.66 IN DT=0.10 HRS

COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
 DT = .100000 HOURS END TIME = 24.000000 HOURS

.0000	.0060	.0124	.0193	.0266	.0347	.0435
.0532	.0640	.0764	.0908	.1071	.1906	.4476
.9796	1.3314	1.5028	1.6393	1.7527	1.8488	1.9308
1.9485	1.9639	1.9776	1.9899	2.0013	2.0117	2.0215
2.0306	2.0393	2.0475	2.0553	2.0627	2.0698	2.0766
2.0832	2.0895	2.0956	2.1015	2.1072	2.1128	2.1182
2.1234	2.1285	2.1335	2.1383	2.1431	2.1477	2.1522
2.1566	2.1610	2.1652	2.1694	2.1734	2.1774	2.1814
2.1852	2.1890	2.1927	2.1964	2.2000	2.2039	2.2078
2.2117	2.2155	2.2193	2.2231	2.2268	2.2305	2.2342
2.2379	2.2416	2.2452	2.2488	2.2524	2.2559	2.2595
2.2630	2.2665	2.2700	2.2734	2.2768	2.2802	2.2836
2.2870	2.2903	2.2937	2.2970	2.3002	2.3035	2.3068
2.3100	2.3132	2.3164	2.3196	2.3227	2.3259	2.3290
2.3321	2.3352	2.3383	2.3413	2.3444	2.3474	2.3504
2.3534	2.3563	2.3593	2.3622	2.3652	2.3681	2.3710
2.3739	2.3767	2.3796	2.3824	2.3853	2.3881	2.3909
2.3937	2.3965	2.3992	2.4020	2.4047	2.4074	2.4101
2.4128	2.4155	2.4182	2.4208	2.4235	2.4261	2.4287
2.4314	2.4340	2.4365	2.4391	2.4417	2.4442	2.4468
2.4493	2.4518	2.4543	2.4568	2.4593	2.4618	2.4643
2.4667	2.4692	2.4716	2.4740	2.4765	2.4789	2.4813
2.4837	2.4860	2.4884	2.4908	2.4931	2.4955	2.4978
2.5001	2.5024	2.5047	2.5070	2.5093	2.5116	2.5139
2.5161	2.5184	2.5206	2.5229	2.5251	2.5273	2.5295
2.5317	2.5339	2.5361	2.5383	2.5404	2.5426	2.5448
2.5469	2.5490	2.5512	2.5533	2.5554	2.5575	2.5596
2.5617	2.5638	2.5659	2.5680	2.5700	2.5721	2.5741
2.5762	2.5782	2.5803	2.5823	2.5843	2.5863	2.5883
2.5903	2.5923	2.5943	2.5963	2.5982	2.6002	2.6022
2.6041	2.6061	2.6080	2.6099	2.6119	2.6138	2.6157
2.6176	2.6195	2.6214	2.6233	2.6252	2.6271	2.6290
2.6308	2.6327	2.6346	2.6364	2.6383	2.6401	2.6419
2.6438	2.6456	2.6474	2.6492	2.6510	2.6528	2.6546
2.6564	2.6582	2.6600				

```
*S *****  
*S *COMPUTE ONSITE BASINS*  
*S *****  
*S  
*S START VALLE PRADO ANALYSIS  
*S  
*S COMPUTE BASIN 1 *****  
*  
COMPUTE NM HYD ID=1 HYD=1 AREA=0.005 PER A=0 PER B=24  
PER C=24 PER D=52 TP=-0.1715 RAINFALL=-1  
  
K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
UNIT PEAK = 7.9785 CFS UNIT VOLUME = 1.005 B = 526.28 P60 = 1.8400  
AREA = .002600 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000  
  
K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068  
UNIT PEAK = 4.9601 CFS UNIT VOLUME = 1.002 B = 354.44 P60 = 1.8400  
AREA = .002400 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000  
  
PRINT HYD ID=1 CODE=1  
  
OUTFLOW HYDROGRAPH REACH 1.00  
  
RUNOFF VOLUME = 1.64591 INCHES = .4389 ACRE-FEET  
PEAK DISCHARGE RATE = 8.92 CFS AT 1.500 HOURS BASIN AREA = .0050 SQ. MI.  
  
*  
*S COMPUTE BASIN 2 *****  
COMPUTE NM HYD ID=2 HYD=2 AREA=0.004513 PER A=0 PER B=26  
PER C=26 PER D=48 TP=-0.1715 RAINFALL=-1  
  
K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
UNIT PEAK = 6.6475 CFS UNIT VOLUME = 1.004 B = 526.28 P60 = 1.8400  
AREA = .002166 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000  
  
K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068  
UNIT PEAK = 4.8501 CFS UNIT VOLUME = 1.002 B = 354.44 P60 = 1.8400  
AREA = .002347 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000  
  
PRINT HYD ID=2 CODE=1  
  
OUTFLOW HYDROGRAPH REACH 2.00  
  
RUNOFF VOLUME = 1.58072 INCHES = .3805 ACRE-FEET  
PEAK DISCHARGE RATE = 7.86 CFS AT 1.500 HOURS BASIN AREA = .0045 SQ. MI.  
  
*  
*S COMPUTE BASIN 3 *****  
COMPUTE NM HYD ID=3 HYD=3 AREA=0.006875 PER A=0 PER B=31  
PER C=31 PER D=38 TP=-0.1715 RAINFALL=-1  
  
K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
UNIT PEAK = 8.0169 CFS UNIT VOLUME = 1.005 B = 526.28 P60 = 1.8400  
AREA = .002613 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000  
  
K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068  
UNIT PEAK = 8.8093 CFS UNIT VOLUME = 1.003 B = 354.44 P60 = 1.8400  
AREA = .004263 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000  
  
PRINT HYD ID=3 CODE=1  
  
OUTFLOW HYDROGRAPH REACH 3.00  
  
RUNOFF VOLUME = 1.41777 INCHES = .5198 ACRE-FEET  
PEAK DISCHARGE RATE = 11.22 CFS AT 1.500 HOURS BASIN AREA = .0069 SQ. MI.
```

*

*S COMPUTE BASIN 4 *****

COMPUTE NM HYD ID=4 HYD=4 AREA=0.003594 PER A=0 PER B=26
PER C=26 PER D=48 TP=-0.1715 RAINFALL=-1

K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 5.2938 CFS UNIT VOLUME = 1.004 B = 526.28 P60 = 1.8400
AREA = .001725 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068
UNIT PEAK = 3.8624 CFS UNIT VOLUME = 1.001 B = 354.44 P60 = 1.8400
AREA = .001869 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=4 CODE=1

OUTFLOW HYDROGRAPH REACH 4.00

RUNOFF VOLUME = 1.58072 INCHES = .3030 ACRE-FEET
PEAK DISCHARGE RATE = 6.26 CFS AT 1.500 HOURS BASIN AREA = .0036 SQ. MI.

*

*S COMPUTE BASIN 5 *****

COMPUTE NM HYD ID=5 HYD=5 AREA=0.001875 PER A=0 PER B=31.5
PER C=31.5 PER D=37 TP=-0.1715 RAINFALL=-1

K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 2.1289 CFS UNIT VOLUME = 1.001 B = 526.28 P60 = 1.8400
AREA = .000694 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068
UNIT PEAK = 2.4413 CFS UNIT VOLUME = .9998 B = 354.44 P60 = 1.8400
AREA = .001181 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=5 CODE=1

OUTFLOW HYDROGRAPH REACH 5.00

RUNOFF VOLUME = 1.40148 INCHES = .1401 ACRE-FEET
PEAK DISCHARGE RATE = 3.05 CFS AT 1.500 HOURS BASIN AREA = .0019 SQ. MI.

*

*S COMPUTE FUTURE BASIN 1 *****

COMPUTE NM HYD ID=6 HYD=FB.1 AREA=0.010781 PER A=0 PER B=21
PER C=21 PER D=58 TP=-0.1715 RAINFALL=-1

K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 19.188 CFS UNIT VOLUME = 1.005 B = 526.28 P60 = 1.8400
AREA = .006253 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068
UNIT PEAK = 9.3581 CFS UNIT VOLUME = 1.003 B = 354.44 P60 = 1.8400
AREA = .004528 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=6 CODE=1

HYDROGRAPH FROM AREA FB.1

RUNOFF VOLUME = 1.74368 INCHES = 1.0026 ACRE-FEET
PEAK DISCHARGE RATE = 19.93 CFS AT 1.500 HOURS BASIN AREA = .0108 SQ. MI.

*
 *S COMPUTE FUTURE BASIN 2 *****
 COMPUTE NM HYD ID=7 HYD=FB.2 AREA=0.0075 PER A=0 PER B=23
 PER C=23 PER D=54 TP=-0.1715 RAINFALL=-1

 K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 12.428 CFS UNIT VOLUME = 1.005 B = 526.28 P60 = 1.8400
 AREA = .004050 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

 K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068
 UNIT PEAK = 7.1301 CFS UNIT VOLUME = 1.002 B = 354.44 P60 = 1.8400
 AREA = .003450 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=7 CODE=1

HYDROGRAPH FROM AREA FB.2

RUNOFF VOLUME = 1.67850 INCHES = .6714 ACRE-FEET
 PEAK DISCHARGE RATE = 13.54 CFS AT 1.500 HOURS BASIN AREA = .0075 SQ. MI.

*
 *S COMPUTE FUTURE BASIN 3 *****
 COMPUTE NM HYD ID=8 HYD=FB.3 AREA=0.005938 PER A=0 PER B=22.5
 PER C=22.5 PER D=55 TP=-0.1715 RAINFALL=-1

 K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 10.022 CFS UNIT VOLUME = 1.005 B = 526.28 P60 = 1.8400
 AREA = .003266 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

 K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068
 UNIT PEAK = 5.5224 CFS UNIT VOLUME = 1.002 B = 354.44 P60 = 1.8400
 AREA = .002672 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=8 CODE=1

HYDROGRAPH FROM AREA FB.3

RUNOFF VOLUME = 1.69479 INCHES = .5367 ACRE-FEET
 PEAK DISCHARGE RATE = 10.79 CFS AT 1.500 HOURS BASIN AREA = .0059 SQ. MI.

*
 *S COMPUTE FUTURE BASIN 4 *****
 COMPUTE NM HYD ID=9 HYD=FB.4 AREA=0.004844 PER A=0 PER B=29.5
 PER C=29.5 PER D=41 TP=-0.1715 RAINFALL=-1

 K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 6.0945 CFS UNIT VOLUME = 1.004 B = 526.28 P60 = 1.8400
 AREA = .001986 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

 K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068
 UNIT PEAK = 5.9066 CFS UNIT VOLUME = 1.002 B = 354.44 P60 = 1.8400
 AREA = .002858 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=9 CODE=1

HYDROGRAPH FROM AREA FB.4

RUNOFF VOLUME = 1.46666 INCHES = .3789 ACRE-FEET
 PEAK DISCHARGE RATE = 8.07 CFS AT 1.500 HOURS BASIN AREA = .0048 SQ. MI.

*

*S COMPUTE OFFSITE BASIN 2 *****

COMPUTE NM HYD ID=10 HYD=OFF.2 AREA=0.000938 PER A=80 PER B=20
PER C=0 PER D=0 TP=-0.1715 RAINFALL=-1

K = .203093HR TP = .171500HR K/TP RATIO = 1.184216 SHAPE CONSTANT, N = 2.997519
UNIT PEAK = 1.5403 CFS UNIT VOLUME = .9852 B = 281.62 P60 = 1.8400
AREA = .000938 SQ MI IA = .62000 INCHES INF = 1.58600 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=10 CODE=1

HYDROGRAPH FROM AREA OFF.2

RUNOFF VOLUME = .45840 INCHES = .0229 ACRE-FEET
PEAK DISCHARGE RATE = .62 CFS AT 1.500 HOURS BASIN AREA = .0009 SQ. MI.

*S COMPUTE OFFSITE BASIN 3 *****

COMPUTE NM HYD ID=11 HYD=OFF.3 AREA=0.001094 PER A=76 PER B=24
PER C=0 PER D=0 TP=-0.1715 RAINFALL=-1

K = .201399HR TP = .171500HR K/TP RATIO = 1.174338 SHAPE CONSTANT, N = 3.020870
UNIT PEAK = 1.8086 CFS UNIT VOLUME = .9871 B = 283.52 P60 = 1.8400
AREA = .001094 SQ MI IA = .61400 INCHES INF = 1.56920 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=11 CODE=1

HYDROGRAPH FROM AREA OFF.3

RUNOFF VOLUME = .46712 INCHES = .0273 ACRE-FEET
PEAK DISCHARGE RATE = .74 CFS AT 1.500 HOURS BASIN AREA = .0011 SQ. MI.

*

*S COMPUTE OFFSITE BASIN 4 *****

COMPUTE NM HYD ID=12 HYD=OFF.4 AREA=0.001406 PER A=80 PER B=20
PER C=0 PER D=0 TP=-0.1715 RAINFALL=-1

K = .203093HR TP = .171500HR K/TP RATIO = 1.184216 SHAPE CONSTANT, N = 2.997519
UNIT PEAK = 2.3088 CFS UNIT VOLUME = .9875 B = 281.62 P60 = 1.8400
AREA = .001406 SQ MI IA = .62000 INCHES INF = 1.58600 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=12 CODE=1

HYDROGRAPH FROM AREA OFF.4

RUNOFF VOLUME = .45840 INCHES = .0344 ACRE-FEET
PEAK DISCHARGE RATE = .93 CFS AT 1.500 HOURS BASIN AREA = .0014 SQ. MI.

*

*S COMPUTE OFFSITE BASIN 5 *****

COMPUTE NM HYD ID=13 HYD=OFF.5 AREA=0.003281 PER A=95 PER B=5
PER C=0 PER D=0 TP=-0.1715 RAINFALL=-1

K = .209446HR TP = .171500HR K/TP RATIO = 1.221261 SHAPE CONSTANT, N = 2.914129
UNIT PEAK = 5.2562 CFS UNIT VOLUME = .9902 B = 274.74 P60 = 1.8400
AREA = .003281 SQ MI IA = .64250 INCHES INF = 1.64900 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=13 CODE=1

HYDROGRAPH FROM AREA OFF.5

RUNOFF VOLUME = .42601 INCHES = .0745 ACRE-FEET
PEAK DISCHARGE RATE = 1.99 CFS AT 1.500 HOURS BASIN AREA = .0033 SQ. MI.

*

*S COMPUTE OFFSITE BASIN WELL *****

COMPUTE NM HYD ID=14 HYD=OFF.WELL AREA=0.001563 PER A=0 PER B=40
PER C=40 PER D=20 TP=-0.1715 RAINFALL=-1

K = .093468HR TP = .171500HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = .95926 CFS UNIT VOLUME = .9965 B = 526.28 P60 = 1.8400
AREA = .000313 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .152490HR TP = .171500HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989068
UNIT PEAK = 2.5842 CFS UNIT VOLUME = .9998 B = 354.44 P60 = 1.8400
AREA = .001250 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=14 CODE=1

HYDROGRAPH FROM AREA OFF.WELL

RUNOFF VOLUME = 1.12446 INCHES = .0937 ACRE-FEET
PEAK DISCHARGE RATE = 2.26 CFS AT 1.500 HOURS BASIN AREA = .0016 SQ. MI.

*
*S
*

*S ADD BASINS 1 AND 2 TO CREATE TEMP A *****

ADD HYD ID=15 HYD=TEMP.A ID I=1 II=2
PRINT HYD ID=15 CODE=1

HYDROGRAPH FROM AREA TEMP.A

RUNOFF VOLUME = 1.61490 INCHES = .8193 ACRE-FEET
PEAK DISCHARGE RATE = 16.78 CFS AT 1.500 HOURS BASIN AREA = .0095 SQ. MI.

*

*S ADD BASINS TEMP A AND 3 TO CREATE TEMP 1.B*****

ADD HYD ID=16 HYD=TEMP.B ID I=15 II=3
PRINT HYD ID=16 CODE=1

HYDROGRAPH FROM AREA TEMP.B

RUNOFF VOLUME = 1.53218 INCHES = 1.3392 ACRE-FEET
PEAK DISCHARGE RATE = 28.00 CFS AT 1.500 HOURS BASIN AREA = .0164 SQ. MI.

*

*S ADD BASINS TEMP B AND 5 TO CREATE TEMP C*****

ADD HYD ID=17 HYD=TEMP.C ID I=16 II=5
PRINT HYD ID=17 CODE=1

HYDROGRAPH FROM AREA TEMP.C

RUNOFF VOLUME = 1.51874 INCHES = 1.4793 ACRE-FEET
PEAK DISCHARGE RATE = 31.05 CFS AT 1.500 HOURS BASIN AREA = .0183 SQ. MI.

*

*S ADD BASINS TEMP C AND FUTURE BASIN 1 TO CREATE TEMP D*****

ADD HYD ID=18 HYD=TEMP.D ID I=17 II=6
PRINT HYD ID=18 CODE=1

HYDROGRAPH FROM AREA TEMP.D

RUNOFF VOLUME = 1.60222 INCHES = 2.4818 ACRE-FEET
PEAK DISCHARGE RATE = 50.98 CFS AT 1.500 HOURS BASIN AREA = .0290 SQ. MI.

*
*S ADD BASINS TEMP D AND FUTURE BASIN 2 TO CREATE TEMP E*****
ADD HYD ID=19 HYD=TEMP.E ID I=18 II=7
PRINT HYD ID=19 CODE=1

HYDROGRAPH FROM AREA TEMP.E

RUNOFF VOLUME = 1.61787 INCHES = 3.1532 ACRE-FEET
PEAK DISCHARGE RATE = 64.52 CFS AT 1.500 HOURS BASIN AREA = .0365 SQ. MI.

*
*S ADD BASINS TEMP E AND FUTURE BASIN 3 TO CREATE TEMP F*****
ADD HYD ID=20 HYD=TEMP.F ID I=19 II=8
PRINT HYD ID=20 CODE=1

HYDROGRAPH FROM AREA TEMP.F

RUNOFF VOLUME = 1.62861 INCHES = 3.6899 ACRE-FEET
PEAK DISCHARGE RATE = 75.31 CFS AT 1.500 HOURS BASIN AREA = .0425 SQ. MI.

*
*S ADD BASINS TEMP F AND OFFSITE BASIN 3 TO CREATE TEMP G*****
ADD HYD ID=21 HYD=TEMP.G ID I=20 II=11
PRINT HYD ID=21 CODE=1

HYDROGRAPH FROM AREA TEMP.G

RUNOFF VOLUME = 1.59945 INCHES = 3.7172 ACRE-FEET
PEAK DISCHARGE RATE = 76.05 CFS AT 1.500 HOURS BASIN AREA = .0436 SQ. MI.

*
*S ADD BASINS TEMP G AND OFFSITE BASIN 4 TO CREATE TEMP H*****
ADD HYD ID=22 HYD=TEMP.H ID I=21 II=12
PRINT HYD ID=22 CODE=1

HYDROGRAPH FROM AREA TEMP.H

RUNOFF VOLUME = 1.56378 INCHES = 3.7516 ACRE-FEET
PEAK DISCHARGE RATE = 76.98 CFS AT 1.500 HOURS BASIN AREA = .0450 SQ. MI.

*
*S ADD BASINS TEMP H AND OFFSITE BASIN WELL TO CREATE TEMP I*****
ADD HYD ID=23 HYD=TEMP.1 ID I=22 II=14
PRINT HYD ID=23 CODE=1

HYDROGRAPH FROM AREA TEMP.1

RUNOFF VOLUME = 1.54902 INCHES = 3.8453 ACRE-FEET
PEAK DISCHARGE RATE = 79.24 CFS AT 1.500 HOURS BASIN AREA = .0465 SQ. MI.

*
*S ADD BASINS TEMP I AND OFFSITE BASIN 5 TO CREATE TEMP J*****
ADD HYD ID=24 HYD=TEMP.J ID I=23 II=13
PRINT HYD ID=24 CODE=1

HYDROGRAPH FROM AREA TEMP.J

RUNOFF VOLUME = 1.47507 INCHES = 3.9198 ACRE-FEET
PEAK DISCHARGE RATE = 81.23 CFS AT 1.500 HOURS BASIN AREA = .0498 SQ. MI.

```

*
*S TEMP BASIN J REPLACES BASIN E3 AND E5 FROM THE DMP AHYMO FILE*****
*
*
*S START DURANGO ANALYSIS*****
*
COMPUTE NM HYD      ID=25  HYD NO=OFFSITE2  DA=.0805 SQ MI
                    %A=100  %B=0.0  %C=0.0  %D=0.0
                    TP=-.66 HR  RAIN=-1

      K = .803590HR    TP = .660000HR    K/TP RATIO = 1.217560    SHAPE CONSTANT, N = 2.922175
      UNIT PEAK = 33.592 CFS    UNIT VOLUME = .9995    B = 275.41    P60 = 1.8400
      AREA = .080500 SQ MI    IA = .65000 INCHES    INF = 1.67000 INCHES PER HOUR
      RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD          ID=25 CODE=1

                                HYDROGRAPH FROM AREA OFFSITE2

      RUNOFF VOLUME = .41534 INCHES    = 1.7832 ACRE-FEET
      PEAK DISCHARGE RATE = 13.87 CFS AT 2.000 HOURS    BASIN AREA = .0805 SQ. MI.

*
*REMOVE OFFSITE POND 2 FROM ANALYSIS
*
*ROUTE RESERVOIR      ID=26 HYD=OFFPOND2  INFLOW ID=25 CODE=5
*
*      OUTFLOW      STORAGE  DEPTH
*      0      0      0
*      2.16  0.047      1
*      3.06  0.222      2
*      3.75  0.466      3
*      4.33  0.751      4
*      4.84  1.081      5
*
*
*PRINT HYD          ID=26 CODE=10
*
*
*COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.011
*      DIA=2.0 N=0.013
*ROUTE MCUNGE      ID=27 HYD=RTE.OFFPOND2 INFLOW ID=26
*      DT=0.0 L=900 NS=0 SLOPE=0.011
*      MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
*
*PRINT HYD          ID=27 CODE=0
*
*REMOVE BASIN B FROM ANALYSIS
*
*COMPUTE NM HYD      ID=28 HYD NO=BASIN.B  DA=.01998 SQ MI
*      %A=0  %B=34.0  %C=34.0  %D=32.0
*      TP=-.133 HR  RAIN=-1
*PRINT HYD          ID=28 CODE=10
*
*
*ROUTE RESERVOIR      ID=29 HYD=POND.B  INFLOW ID=28 CODE=5
*
*      OUTFLOW      STORAGE  DEPTH
*      0      0      5515
*      1.71  0.06      5516
*      2.42  0.24      5517
*      2.96  0.55      5518
*      3.42  0.99      5519
*      3.82  1.67      5520
*
*
*PRINT HYD          ID=29 CODE=10
*
*
*COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.03
*      DIA=2.0 N=0.013
*ROUTE MCUNGE      ID=30 HYD=RTE.PONDB INFLOW ID=29
*      DT=0.0 L=1180 NS=0 SLOPE=0.03
*      MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
*
*PRINT HYD          ID=30 CODE=0
*
*DISCONNECT OFFSITE BASIN 2 AND B
*
*ADD HYD      ID=31 HYD=OFF.B ID I=30 II=25
*PRINT HYD      ID=31 CODE=10
*

```

*
 COMPUTE NM HYD ID=31 HYD NO=BASINE1.1A DA=.0128885 SQ MI
 %A=0.0 %B=28.0 %C=28.0 %D=44.0
 TP=-0.133 HR RAIN=-1

 K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 22.440 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
 AREA = .005671 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

 K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
 UNIT PEAK = 19.235 CFS UNIT VOLUME = 1.006 B = 354.44 P60 = 1.8400
 AREA = .007218 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=31 CODE=1

HYDROGRAPH FROM AREA BASINE1.1A

RUNOFF VOLUME = 1.51554 INCHES = 1.0418 ACRE-FEET
 PEAK DISCHARGE RATE = 23.86 CFS AT 1.500 HOURS BASIN AREA = .0129 SQ. MI.

*
 *
 COMPUTE NM HYD ID=32 HYD NO=BASINE1.1B DA=.0043859 SQ MI
 %A=0.0 %B=25.5 %C=25.5 %D=49.0
 TP=-0.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 8.5039 CFS UNIT VOLUME = 1.029 B = 526.28 P60 = 1.8400
 AREA = .002149 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
 UNIT PEAK = 5.9610 CFS UNIT VOLUME = 1.005 B = 354.44 P60 = 1.8400
 AREA = .002237 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=32 CODE=1

HYDROGRAPH FROM AREA BASINE1.1B

RUNOFF VOLUME = 1.59702 INCHES = .3736 ACRE-FEET
 PEAK DISCHARGE RATE = 8.33 CFS AT 1.500 HOURS BASIN AREA = .0044 SQ. MI.

*
 *
 ADD HYD ID=33 HYD=E1.1AB ID I=32 II=31
 PRINT HYD ID=33 CODE=1

HYDROGRAPH FROM AREA E1.1AB

RUNOFF VOLUME = 1.53620 INCHES = 1.4153 ACRE-FEET
 PEAK DISCHARGE RATE = 32.19 CFS AT 1.500 HOURS BASIN AREA = .0173 SQ. MI.

*
 *
 COMPUTE NM HYD ID=34 HYD NO=BASINE1.2A DA=.0071179 SQ MI
 %A=0.0 %B=30.0 %C=30.0 %D=40.0
 TP=-0.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 11.266 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
 AREA = .002847 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
 UNIT PEAK = 11.381 CFS UNIT VOLUME = 1.006 B = 354.44 P60 = 1.8400
 AREA = .004271 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=34 CODE=1

HYDROGRAPH FROM AREA BASINE1.2A

RUNOFF VOLUME = 1.45036 INCHES = .5506 ACRE-FEET
 PEAK DISCHARGE RATE = 12.92 CFS AT 1.500 HOURS BASIN AREA = .0071 SQ. MI.

*
 *

ADD HYD ID=26 HYD=OFF.E1.2A ID I=25 II=34
 PRINT HYD ID=26 CODE=1

HYDROGRAPH FROM AREA OFF.E1.2A

RUNOFF VOLUME = .49942 INCHES = 2.3337 ACRE-FEET
 PEAK DISCHARGE RATE = 16.69 CFS AT 1.500 HOURS BASIN AREA = .0876 SQ. MI.

*
 *

COMPUTE NM HYD ID=27 HYD NO=BASINE1.2B DA=.0020765 SQ MI
 %A=0.0 %B=40.0 %C=40.0 %D=20.0
 TP=-0.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 1.6433 CFS UNIT VOLUME = 1.026 B = 526.28 P60 = 1.8400
 AREA = .000415 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
 UNIT PEAK = 4.4270 CFS UNIT VOLUME = 1.004 B = 354.44 P60 = 1.8400
 AREA = .001661 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=27 CODE=1

HYDROGRAPH FROM AREA BASINE1.2B

RUNOFF VOLUME = 1.12446 INCHES = .1245 ACRE-FEET
 PEAK DISCHARGE RATE = 3.40 CFS AT 1.500 HOURS BASIN AREA = .0021 SQ. MI.

*
 *

COMPUTE NM HYD ID=28 HYD NO=BASINE1.2C DA=.0108902 SQ MI
 %A=0.0 %B=25.0 %C=25.0 %D=50.0
 TP=-0.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 21.546 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
 AREA = .005445 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
 UNIT PEAK = 14.511 CFS UNIT VOLUME = 1.006 B = 354.44 P60 = 1.8400
 AREA = .005445 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=28 CODE=1

HYDROGRAPH FROM AREA BASINE1.2C

RUNOFF VOLUME = 1.61332 INCHES = .9370 ACRE-FEET
 PEAK DISCHARGE RATE = 20.76 CFS AT 1.500 HOURS BASIN AREA = .0109 SQ. MI.

*
 *

ADD HYD ID=29 HYD=OFF.E1.2AC ID I=28 II=26
 PRINT HYD ID=29 CODE=1

HYDROGRAPH FROM AREA OFF.E1.2AC

RUNOFF VOLUME = .62256 INCHES = 3.2707 ACRE-FEET
 PEAK DISCHARGE RATE = 37.45 CFS AT 1.500 HOURS BASIN AREA = .0985 SQ. MI.

*
*

COMPUTE NM HYD ID=35 HYD NO=BASIN.E2 DA=.0098462 SQ MI
%A=0.0 %B=28.5 %C=28.5 %D=43.0
TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 16.753 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .004234 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 14.957 CFS UNIT VOLUME = 1.006 B = 354.44 P60 = 1.8400
AREA = .005612 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=35 CODE=1

HYDROGRAPH FROM AREA BASIN.E2

RUNOFF VOLUME = 1.49925 INCHES = .7873 ACRE-FEET
PEAK DISCHARGE RATE = 18.14 CFS AT 1.500 HOURS BASIN AREA = .0098 SQ. MI.

*
*

ADD HYD ID=36 HYD=OFF.E2.E12AC ID I=29 II=35
PRINT HYD ID=36 CODE=1

HYDROGRAPH FROM AREA OFF.E2.E12AC

RUNOFF VOLUME = .70222 INCHES = 4.0580 ACRE-FEET
PEAK DISCHARGE RATE = 55.59 CFS AT 1.500 HOURS BASIN AREA = .1084 SQ. MI.

*
*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.003
DIA=4.0 N=0.013

RATING CURVE PIPE SECTION 1.0			
WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.21	.25	.41	1.78
.42	.69	1.79	2.44
.63	1.25	4.16	2.91
.83	1.90	7.49	3.25
1.04	2.60	11.70	3.51
1.25	3.36	16.69	3.71
1.46	4.15	22.36	3.85
1.67	4.96	28.58	3.94
1.88	5.79	35.24	3.99
2.08	6.62	42.17	4.00
2.29	7.45	49.23	4.00
2.50	8.27	56.25	4.00
2.71	9.06	63.05	4.00
2.92	9.82	69.41	4.00
3.13	10.54	75.11	4.00
3.34	11.20	79.85	4.00
3.54	11.77	83.24	4.00
3.75	12.24	84.63	4.00
4.00	12.57	84.63	4.00

ROUTE MCUNGE ID=37 HYD=RTE.E12 INFLOW ID=36
DT=0.0 L=400 NS=0 SLOPE=0.003
MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED

PRINT HYD ID=37 CODE=1

HYDROGRAPH FROM AREA RTE.E12

RUNOFF VOLUME = .70222 INCHES = 4.0580 ACRE-FEET
PEAK DISCHARGE RATE = 55.59 CFS AT 1.500 HOURS BASIN AREA = .1084 SQ. MI.

*
*

*S END DURANGO ANALYSIS*****

*

*S BEGIN WOODMONT AVENUE ANALYSIS*****

*

COMPUTE NM HYD ID=38 HYD NO=BASIN.E4 DA=.00577 SQ MI
%A=0.0 %B=5.0 %C=5.0 %D=90.0
TP=-0.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 20.548 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .005193 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 1.5377 CFS UNIT VOLUME = .9989 B = 354.44 P60 = 1.8400
AREA = .000577 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=38 CODE=1

HYDROGRAPH FROM AREA BASIN.E4

RUNOFF VOLUME = 2.26513 INCHES = .6971 ACRE-FEET
PEAK DISCHARGE RATE = 13.11 CFS AT 1.500 HOURS BASIN AREA = .0058 SQ. MI.

*
*

ADD HYD ID=39 HYD=AP1 ID I=38 II=33
PRINT HYD ID=39 CODE=1

HYDROGRAPH FROM AREA AP1

RUNOFF VOLUME = 1.71870 INCHES = 2.1123 ACRE-FEET
PEAK DISCHARGE RATE = 45.30 CFS AT 1.500 HOURS BASIN AREA = .0230 SQ. MI.

*
*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.05
DIA=4.0 N=0.013

RATING CURVE PIPE SECTION 1.0			
WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.21	.25	1.68	1.78
.42	.69	7.31	2.44
.63	1.25	17.00	2.91
.83	1.90	30.58	3.25
1.04	2.60	47.75	3.51
1.25	3.36	68.13	3.71
1.46	4.15	91.27	3.85
1.67	4.96	116.70	3.94
1.88	5.79	143.86	3.99
2.08	6.62	172.17	4.00
2.29	7.45	201.00	4.00
2.50	8.27	229.66	4.00
2.71	9.06	257.40	4.00
2.92	9.82	283.38	4.00
3.13	10.54	306.64	4.00
3.34	11.20	325.98	4.00
3.54	11.77	339.82	4.00
3.75	12.24	345.51	4.00
4.00	12.57	345.51	4.00

ROUTE MCUNGE ID=40 HYD=RTE.E1E4 INFLOW ID=39
 DT=0.0 L=450 NS=0 SLOPE=0.05
 MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
 ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED

*
 PRINT HYD ID=40 CODE=1

HYDROGRAPH FROM AREA RTE.E1E4

RUNOFF VOLUME = 1.71870 INCHES = 2.1123 ACRE-FEET
 PEAK DISCHARGE RATE = 45.30 CFS AT 1.500 HOURS BASIN AREA = .0230 SQ. MI.

*
 *
 ADD HYD ID=41 HYD=AP2 ID I=37 II=40
 PRINT HYD ID=41 CODE=1

HYDROGRAPH FROM AREA AP2

RUNOFF VOLUME = .88049 INCHES = 6.1704 ACRE-FEET
 PEAK DISCHARGE RATE = 100.89 CFS AT 1.500 HOURS BASIN AREA = .1314 SQ. MI.

*
 *
 COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.026
 DIA=4.0 N=0.013

RATING CURVE PIPE SECTION 1.0			
WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.21	.25	1.21	1.78
.42	.69	5.27	2.44
.63	1.25	12.26	2.91
.83	1.90	22.05	3.25
1.04	2.60	34.43	3.51
1.25	3.36	49.13	3.71
1.46	4.15	65.82	3.85
1.67	4.96	84.15	3.94
1.88	5.79	103.74	3.99
2.08	6.62	124.15	4.00
2.29	7.45	144.94	4.00
2.50	8.27	165.61	4.00
2.71	9.06	185.62	4.00
2.92	9.82	204.35	4.00
3.13	10.54	221.12	4.00
3.34	11.20	235.07	4.00
3.54	11.77	245.05	4.00
3.75	12.24	249.15	4.00
4.00	12.57	249.15	4.00

ROUTE MCUNGE ID=42 HYD=RTE.E1E4 INFLOW ID=41
 DT=0.0 L=600 NS=0 SLOPE=0.026
 MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
 ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED

*
 PRINT HYD ID=42 CODE=1

HYDROGRAPH FROM AREA RTE.E1E4

RUNOFF VOLUME = .88049 INCHES = 6.1704 ACRE-FEET
 PEAK DISCHARGE RATE = 100.89 CFS AT 1.500 HOURS BASIN AREA = .1314 SQ. MI.

*
 ADD HYD ID=43 HYD=AP3 ID I=42 II=24
 PRINT HYD ID=43 CODE=1

HYDROGRAPH FROM AREA AP3

RUNOFF VOLUME = 1.04396 INCHES = 10.0902 ACRE-FEET
 PEAK DISCHARGE RATE = 182.12 CFS AT 1.500 HOURS BASIN AREA = .1812 SQ. MI.

*PLOT HYD ID=43

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*
COMPUTE NM HYD      ID=44  HYD NO=BASIN.OFF6  DA=.0014 SQ MI
                    %A=0.0  %B=0  %C=100.0  %D=0
                    TP=-0.133 HR  RAIN=-1

K = .105291HR      TP = .133000HR      K/TP RATIO = .791661      SHAPE CONSTANT, N = 4.531123
UNIT PEAK = 4.0963 CFS      UNIT VOLUME = 1.011      B = 389.14      P60 = 1.8400
AREA = .001400 SQ MI      IA = .35000 INCHES      INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

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PRINT HYD      ID=44  CODE=1

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HYDROGRAPH FROM AREA BASIN.OFF6

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RUNOFF VOLUME = .96928 INCHES      = .0724 ACRE-FEET
PEAK DISCHARGE RATE = 2.33 CFS AT 1.500 HOURS      BASIN AREA = .0014 SQ. MI.

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*
ADD HYD      ID=45  HYD=POND ID I=43 II=44
PRINT HYD      ID=45  CODE=1

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HYDROGRAPH FROM AREA POND

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RUNOFF VOLUME = 1.04339 INCHES      = 10.1625 ACRE-FEET
PEAK DISCHARGE RATE = 184.45 CFS AT 1.500 HOURS      BASIN AREA = .1826 SQ. MI.

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*PLOT HYD      ID=45

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*S POND E ANALYSIS*****

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ROUTE RESERVOIR		ID=46 HYD=POND.E INFLOW ID=45 CODE=5		OUTFLOW STORAGE DEPTH	
		0	0.014	5440	
	0.011	0.029		5440.5	
	0.012	0.048		5441	
	0.013	0.07		5441.5	
	0.014	0.097		5442	
	0.015	0.128		5442.5	
	0.016	0.164		5443	
	0.017	0.207		5443.5	
	0.018	0.274		5444	
	0.02	0.380		5444.5	
	0.03	0.529		5445	
	0.50	0.728		5445.5	
	1.3	0.975		5446	
	2.2	1.267		5446.5	
	3.3	1.605		5447	
	4.5	1.989		5447.5	
	5.8	2.411		5448	
	7.6	2.867		5448.5	
	9.5	3.356		5449	
	11.5	3.879		5449.5	
	13.6	4.433		5450	
	15.8	5.018		5450.5	
	18.1	5.634		5451	
	20.5	6.279		5451.5	
	23.0	7.017		5452	

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TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5440.00	.014	.00
.50	.00	5440.00	.014	.00
1.00	.00	5440.00	.014	.00
1.50	184.45	5447.83	2.270	5.37
2.00	53.42	5451.20	5.894	19.07
2.50	16.40	5451.50	6.273	20.48
3.00	7.61	5451.22	5.919	19.16
3.50	4.11	5450.81	5.399	17.22
4.00	2.48	5450.37	4.861	15.21

4.50	2.05	5449.94	4.363	13.34
5.00	1.87	5449.54	3.928	11.68
5.50	1.77	5449.19	3.550	10.24
6.00	1.71	5448.87	3.225	8.99
6.50	1.66	5448.58	2.947	7.91
7.00	1.54	5448.32	2.706	6.96
7.50	1.42	5448.09	2.497	6.14
8.00	1.33	5447.89	2.314	5.50
8.50	1.25	5447.69	2.151	5.00
9.00	1.18	5447.52	2.004	4.55
9.50	1.11	5447.35	1.872	4.13
10.00	1.07	5447.19	1.754	3.77
10.50	1.02	5447.06	1.648	3.44
11.00	.98	5446.92	1.554	3.13
11.50	.94	5446.80	1.469	2.86
12.00	.91	5446.69	1.395	2.62
12.50	.87	5446.59	1.328	2.40
13.00	.85	5446.50	1.269	2.20
13.50	.82	5446.41	1.215	2.04
14.00	.80	5446.33	1.168	1.89
14.50	.78	5446.26	1.125	1.76
15.00	.76	5446.19	1.087	1.64
15.50	.74	5446.13	1.052	1.54
16.00	.73	5446.08	1.021	1.44
16.50	.71	5446.03	.993	1.35
17.00	.70	5445.99	.968	1.28
17.50	.68	5445.94	.945	1.20
18.00	.67	5445.90	.925	1.14
18.50	.66	5445.86	.906	1.08
19.00	.64	5445.83	.890	1.02
19.50	.63	5445.80	.875	.97
20.00	.62	5445.77	.861	.93
20.50	.61	5445.74	.849	.89
21.00	.60	5445.72	.838	.86
21.50	.60	5445.70	.828	.82
22.00	.58	5445.68	.819	.79
22.50	.57	5445.67	.810	.77
23.00	.56	5445.65	.803	.74
23.50	.55	5445.64	.796	.72
24.00	.55	5445.62	.789	.70
24.50	.03	5445.58	.769	.63
25.00	.00	5445.53	.745	.55
25.50	.00	5445.49	.723	.49
26.00	.00	5445.44	.704	.44
26.50	.00	5445.40	.687	.40
27.00	.00	5445.36	.671	.36
27.50	.00	5445.32	.656	.33

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
28.00	.00	5445.29	.643	.30
28.50	.00	5445.26	.632	.27
29.00	.00	5445.23	.621	.25
29.50	.00	5445.21	.611	.22
30.00	.00	5445.18	.602	.20
30.50	.00	5445.16	.594	.18
31.00	.00	5445.15	.587	.17
31.50	.00	5445.13	.581	.15
32.00	.00	5445.11	.575	.14
32.50	.00	5445.10	.569	.12
33.00	.00	5445.09	.564	.11
33.50	.00	5445.08	.560	.10
34.00	.00	5445.07	.556	.09
34.50	.00	5445.06	.552	.08
35.00	.00	5445.05	.549	.08
35.50	.00	5445.04	.546	.07
36.00	.00	5445.04	.543	.06
36.50	.00	5445.03	.540	.06
37.00	.00	5445.02	.538	.05
37.50	.00	5445.02	.536	.05
38.00	.00	5445.01	.534	.04
38.50	.00	5445.01	.533	.04
39.00	.00	5445.01	.531	.04
39.50	.00	5445.00	.530	.03
40.00	.00	5445.00	.529	.03
40.50	.00	5444.99	.527	.03
41.00	.00	5444.99	.526	.03
41.50	.00	5444.99	.525	.03
42.00	.00	5444.98	.524	.03
42.50	.00	5444.98	.522	.03

43.00	.00	5444.97	.521	.03
43.50	.00	5444.97	.520	.03
44.00	.00	5444.97	.519	.03
44.50	.00	5444.96	.517	.03
45.00	.00	5444.96	.516	.03
45.50	.00	5444.95	.515	.03
46.00	.00	5444.95	.514	.03
46.50	.00	5444.95	.513	.03
47.00	.00	5444.94	.512	.03
47.50	.00	5444.94	.510	.03
48.00	.00	5444.93	.509	.03
48.50	.00	5444.93	.508	.03
49.00	.00	5444.93	.507	.03
49.50	.00	5444.92	.506	.03
50.00	.00	5444.92	.504	.03
50.50	.00	5444.91	.503	.03
51.00	.00	5444.91	.502	.03
51.50	.00	5444.91	.501	.03
52.00	.00	5444.90	.500	.03
52.50	.00	5444.90	.499	.03
53.00	.00	5444.89	.497	.03
53.50	.00	5444.89	.496	.03
54.00	.00	5444.89	.495	.03
54.50	.00	5444.88	.494	.03
55.00	.00	5444.88	.493	.03
55.50	.00	5444.88	.492	.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
56.00	.00	5444.87	.491	.03
56.50	.00	5444.87	.489	.03
57.00	.00	5444.86	.488	.03
57.50	.00	5444.86	.487	.03
58.00	.00	5444.86	.486	.03
58.50	.00	5444.85	.485	.03
59.00	.00	5444.85	.484	.03
59.50	.00	5444.84	.483	.03

PEAK DISCHARGE = 20.553 CFS - PEAK OCCURS AT HOUR 2.40
 MAXIMUM WATER SURFACE ELEVATION = 5451.511
 MAXIMUM STORAGE = 6.2947 AC-FT INCREMENTAL TIME= .100000HRS

*
 PRINT HYD ID=46 CODE=0

HYDROGRAPH FROM AREA POND.E

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	2.6	24.000	.7	36.000	.1	48.000	.0
.100	.0	12.100	2.6	24.100	.7	36.100	.1	48.100	.0
.200	.0	12.200	2.5	24.200	.7	36.200	.1	48.200	.0
.300	.0	12.300	2.5	24.300	.7	36.300	.1	48.300	.0
.400	.0	12.400	2.4	24.400	.6	36.400	.1	48.400	.0
.500	.0	12.500	2.4	24.500	.6	36.500	.1	48.500	.0
.600	.0	12.600	2.4	24.600	.6	36.600	.1	48.600	.0
.700	.0	12.700	2.3	24.700	.6	36.700	.1	48.700	.0
.800	.0	12.800	2.3	24.800	.6	36.800	.1	48.800	.0
.900	.0	12.900	2.2	24.900	.6	36.900	.1	48.900	.0
1.000	.0	13.000	2.2	25.000	.6	37.000	.1	49.000	.0
1.100	.0	13.100	2.2	25.100	.5	37.100	.1	49.100	.0
1.200	.0	13.200	2.1	25.200	.5	37.200	.0	49.200	.0
1.300	.0	13.300	2.1	25.300	.5	37.300	.0	49.300	.0
1.400	1.3	13.400	2.1	25.400	.5	37.400	.0	49.400	.0
1.500	5.4	13.500	2.0	25.500	.5	37.500	.0	49.500	.0
1.600	10.3	13.600	2.0	25.600	.5	37.600	.0	49.600	.0
1.700	13.8	13.700	2.0	25.700	.5	37.700	.0	49.700	.0
1.800	16.2	13.800	2.0	25.800	.5	37.800	.0	49.800	.0
1.900	17.8	13.900	1.9	25.900	.5	37.900	.0	49.900	.0
2.000	19.1	14.000	1.9	26.000	.4	38.000	.0	50.000	.0
2.100	19.9	14.100	1.9	26.100	.4	38.100	.0	50.100	.0
2.200	20.4	14.200	1.8	26.200	.4	38.200	.0	50.200	.0
2.300	20.5	14.300	1.8	26.300	.4	38.300	.0	50.300	.0
2.400	20.6	14.400	1.8	26.400	.4	38.400	.0	50.400	.0
2.500	20.5	14.500	1.8	26.500	.4	38.500	.0	50.500	.0
2.600	20.3	14.600	1.7	26.600	.4	38.600	.0	50.600	.0
2.700	20.1	14.700	1.7	26.700	.4	38.700	.0	50.700	.0
2.800	19.8	14.800	1.7	26.800	.4	38.800	.0	50.800	.0
2.900	19.5	14.900	1.7	26.900	.4	38.900	.0	50.900	.0
3.000	19.2	15.000	1.6	27.000	.4	39.000	.0	51.000	.0
3.100	18.8	15.100	1.6	27.100	.4	39.100	.0	51.100	.0
3.200	18.4	15.200	1.6	27.200	.4	39.200	.0	51.200	.0
3.300	18.0	15.300	1.6	27.300	.3	39.300	.0	51.300	.0
3.400	17.6	15.400	1.6	27.400	.3	39.400	.0	51.400	.0
3.500	17.2	15.500	1.5	27.500	.3	39.500	.0	51.500	.0
3.600	16.8	15.600	1.5	27.600	.3	39.600	.0	51.600	.0
3.700	16.4	15.700	1.5	27.700	.3	39.700	.0	51.700	.0

Top of Pond = 5452.0 OK

3.800	16.0	15.800	1.5	27.800	.3	39.800	.0	51.800	.0
3.900	15.6	15.900	1.5	27.900	.3	39.900	.0	51.900	.0
4.000	15.2	16.000	1.4	28.000	.3	40.000	.0	52.000	.0
4.100	14.8	16.100	1.4	28.100	.3	40.100	.0	52.100	.0
4.200	14.4	16.200	1.4	28.200	.3	40.200	.0	52.200	.0
4.300	14.1	16.300	1.4	28.300	.3	40.300	.0	52.300	.0
4.400	13.7	16.400	1.4	28.400	.3	40.400	.0	52.400	.0
4.500	13.3	16.500	1.4	28.500	.3	40.500	.0	52.500	.0
4.600	13.0	16.600	1.3	28.600	.3	40.600	.0	52.600	.0
4.700	12.6	16.700	1.3	28.700	.3	40.700	.0	52.700	.0
4.800	12.3	16.800	1.3	28.800	.3	40.800	.0	52.800	.0
4.900	12.0	16.900	1.3	28.900	.3	40.900	.0	52.900	.0
5.000	11.7	17.000	1.3	29.000	.2	41.000	.0	53.000	.0
5.100	11.4	17.100	1.3	29.100	.2	41.100	.0	53.100	.0
5.200	11.1	17.200	1.2	29.200	.2	41.200	.0	53.200	.0
5.300	10.8	17.300	1.2	29.300	.2	41.300	.0	53.300	.0
5.400	10.5	17.400	1.2	29.400	.2	41.400	.0	53.400	.0
5.500	10.2	17.500	1.2	29.500	.2	41.500	.0	53.500	.0
5.600	10.0	17.600	1.2	29.600	.2	41.600	.0	53.600	.0
5.700	9.7	17.700	1.2	29.700	.2	41.700	.0	53.700	.0
5.800	9.5	17.800	1.2	29.800	.2	41.800	.0	53.800	.0
5.900	9.2	17.900	1.1	29.900	.2	41.900	.0	53.900	.0
6.000	9.0	18.000	1.1	30.000	.2	42.000	.0	54.000	.0
6.100	8.8	18.100	1.1	30.100	.2	42.100	.0	54.100	.0
6.200	8.5	18.200	1.1	30.200	.2	42.200	.0	54.200	.0
6.300	8.3	18.300	1.1	30.300	.2	42.300	.0	54.300	.0
6.400	8.1	18.400	1.1	30.400	.2	42.400	.0	54.400	.0
6.500	7.9	18.500	1.1	30.500	.2	42.500	.0	54.500	.0
6.600	7.7	18.600	1.1	30.600	.2	42.600	.0	54.600	.0
6.700	7.5	18.700	1.1	30.700	.2	42.700	.0	54.700	.0
6.800	7.3	18.800	1.0	30.800	.2	42.800	.0	54.800	.0
6.900	7.1	18.900	1.0	30.900	.2	42.900	.0	54.900	.0
7.000	7.0	19.000	1.0	31.000	.2	43.000	.0	55.000	.0
7.100	6.8	19.100	1.0	31.100	.2	43.100	.0	55.100	.0
7.200	6.6	19.200	1.0	31.200	.2	43.200	.0	55.200	.0
7.300	6.5	19.300	1.0	31.300	.2	43.300	.0	55.300	.0
7.400	6.3	19.400	1.0	31.400	.2	43.400	.0	55.400	.0
7.500	6.1	19.500	1.0	31.500	.2	43.500	.0	55.500	.0
7.600	6.0	19.600	1.0	31.600	.1	43.600	.0	55.600	.0
7.700	5.8	19.700	1.0	31.700	.1	43.700	.0	55.700	.0
7.800	5.7	19.800	.9	31.800	.1	43.800	.0	55.800	.0
7.900	5.6	19.900	.9	31.900	.1	43.900	.0	55.900	.0
8.000	5.5	20.000	.9	32.000	.1	44.000	.0	56.000	.0
8.100	5.4	20.100	.9	32.100	.1	44.100	.0	56.100	.0
8.200	5.3	20.200	.9	32.200	.1	44.200	.0	56.200	.0
8.300	5.2	20.300	.9	32.300	.1	44.300	.0	56.300	.0
8.400	5.1	20.400	.9	32.400	.1	44.400	.0	56.400	.0
8.500	5.0	20.500	.9	32.500	.1	44.500	.0	56.500	.0
8.600	4.9	20.600	.9	32.600	.1	44.600	.0	56.600	.0
8.700	4.8	20.700	.9	32.700	.1	44.700	.0	56.700	.0
8.800	4.7	20.800	.9	32.800	.1	44.800	.0	56.800	.0
8.900	4.6	20.900	.9	32.900	.1	44.900	.0	56.900	.0
9.000	4.5	21.000	.9	33.000	.1	45.000	.0	57.000	.0
9.100	4.5	21.100	.8	33.100	.1	45.100	.0	57.100	.0
9.200	4.4	21.200	.8	33.200	.1	45.200	.0	57.200	.0
9.300	4.3	21.300	.8	33.300	.1	45.300	.0	57.300	.0
9.400	4.2	21.400	.8	33.400	.1	45.400	.0	57.400	.0
9.500	4.1	21.500	.8	33.500	.1	45.500	.0	57.500	.0
9.600	4.1	21.600	.8	33.600	.1	45.600	.0	57.600	.0
9.700	4.0	21.700	.8	33.700	.1	45.700	.0	57.700	.0
9.800	3.9	21.800	.8	33.800	.1	45.800	.0	57.800	.0
9.900	3.8	21.900	.8	33.900	.1	45.900	.0	57.900	.0
10.000	3.8	22.000	.8	34.000	.1	46.000	.0	58.000	.0
10.100	3.7	22.100	.8	34.100	.1	46.100	.0	58.100	.0
10.200	3.6	22.200	.8	34.200	.1	46.200	.0	58.200	.0
10.300	3.6	22.300	.8	34.300	.1	46.300	.0	58.300	.0
10.400	3.5	22.400	.8	34.400	.1	46.400	.0	58.400	.0
10.500	3.4	22.500	.8	34.500	.1	46.500	.0	58.500	.0
10.600	3.4	22.600	.8	34.600	.1	46.600	.0	58.600	.0
10.700	3.3	22.700	.8	34.700	.1	46.700	.0	58.700	.0
10.800	3.3	22.800	.8	34.800	.1	46.800	.0	58.800	.0
10.900	3.2	22.900	.7	34.900	.1	46.900	.0	58.900	.0
11.000	3.1	23.000	.7	35.000	.1	47.000	.0	59.000	.0
11.100	3.1	23.100	.7	35.100	.1	47.100	.0	59.100	.0
11.200	3.0	23.200	.7	35.200	.1	47.200	.0	59.200	.0
11.300	3.0	23.300	.7	35.300	.1	47.300	.0	59.300	.0
11.400	2.9	23.400	.7	35.400	.1	47.400	.0	59.400	.0
11.500	2.9	23.500	.7	35.500	.1	47.500	.0	59.500	.0
11.600	2.8	23.600	.7	35.600	.1	47.600	.0	59.600	.0
11.700	2.8	23.700	.7	35.700	.1	47.700	.0	59.700	.0
11.800	2.7	23.800	.7	35.800	.1	47.800	.0	59.800	.0
11.900	2.7	23.900	.7	35.900	.1	47.900	.0	59.900	.0

RUNOFF VOLUME = .99537 INCHES = 9.6948 ACRE-FEET
PEAK DISCHARGE RATE = 20.55 CFS AT 2.400 HOURS BASIN AREA = .1826 SQ. MI.

*PLOT HYD ID=46
*

COMPUTE NM HYD ID=47 HYD NO=BASIN.E6 DA=.00488 SQ MI
 %A=0.0 %B=5.0 %C=5.0 %D=90.0
 TP=-0.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 17.379 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
 AREA = .004392 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
 UNIT PEAK = 1.3005 CFS UNIT VOLUME = .9989 B = 354.44 P60 = 1.8400
 AREA = .000488 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=47 CODE=1

HYDROGRAPH FROM AREA BASIN.E6

RUNOFF VOLUME = 2.26512 INCHES = .5895 ACRE-FEET
 PEAK DISCHARGE RATE = 11.09 CFS AT 1.500 HOURS BASIN AREA = .0049 SQ. MI.

*
 ADD HYD ID=48 HYD=TOTALE ID I=46 II=47
 PRINT HYD ID=48 CODE=10

HYDROGRAPH FROM AREA TOTALE

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	2.7	24.000	.7	36.000	.1	48.000	.0
1.000	.0	13.000	2.3	25.000	.6	37.000	.1	49.000	.0
2.000	21.9	14.000	2.0	26.000	.4	38.000	.0	50.000	.0
3.000	19.3	15.000	1.7	27.000	.4	39.000	.0	51.000	.0
4.000	15.3	16.000	1.5	28.000	.3	40.000	.0	52.000	.0
5.000	11.8	17.000	1.3	29.000	.2	41.000	.0	53.000	.0
6.000	9.1	18.000	1.2	30.000	.2	42.000	.0	54.000	.0
7.000	7.1	19.000	1.1	31.000	.2	43.000	.0	55.000	.0
8.000	5.6	20.000	1.0	32.000	.1	44.000	.0	56.000	.0
9.000	4.6	21.000	.9	33.000	.1	45.000	.0	57.000	.0
10.000	3.9	22.000	.8	34.000	.1	46.000	.0	58.000	.0
11.000	3.2	23.000	.8	35.000	.1	47.000	.0	59.000	.0

RUNOFF VOLUME = 1.02841 INCHES = 10.2843 ACRE-FEET
 PEAK DISCHARGE RATE = 21.94 CFS AT 2.000 HOURS BASIN AREA = .1875 SQ. MI.

*
 *
 FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 14:23:51

DEVELOPED CONDITIONS AHYMO INPUT FILE

```

*S  DURANGO @ THE TRAILS DRAINAGE BASIN (D) PROPOSED
*S  100 YEAR - 24 HOUR STORM
*S
*  CREATED MARCH 1, 2015
*
*
*CONVERT TO NMHYMO
START                TIME=0.0 HR  PUNCH CODE=0
*****
LOCATION  NM
*
*****
*
*****
*100 YEAR - 24 HOUR
RAINFALL                TYPE=2  RAIN QUARTER=0
                        RAIN ONE=1.84 IN  RAIN SIX=2.20 IN
                        RAIN DAY=2.66 IN  DT=0.10 HRS

*S
*S                      *****
*S                      *COMPUTE ONSITE BASINS*
*S                      *****
*S
*S
*S
*S START VALLE PRADO ANALYSIS
*S
*S COMPUTE BASIN 1 *****
*
COMPUTE NM HYD          ID=1 HYD=1  AREA=0.005  PER A=0 PER B=24
                        PER C=24 PER D=52  TP=-0.1715  RAINFALL=-1
PRINT HYD              ID=1  CODE=1
*
*S COMPUTE BASIN 2 *****
COMPUTE NM HYD          ID=2 HYD=2  AREA=0.004513  PER A=0 PER B=26
                        PER C=26 PER D=48  TP=-0.1715  RAINFALL=-1
PRINT HYD              ID=2  CODE=1
*
*S COMPUTE BASIN 3 *****
COMPUTE NM HYD          ID=3 HYD=3  AREA=0.006875  PER A=0 PER B=31
                        PER C=31 PER D=38  TP=-0.1715  RAINFALL=-1
PRINT HYD              ID=3  CODE=1
*
*S COMPUTE BASIN 4 *****
COMPUTE NM HYD          ID=4 HYD=4  AREA=0.003594  PER A=0 PER B=26
                        PER C=26 PER D=48  TP=-0.1715  RAINFALL=-1
PRINT HYD              ID=4  CODE=1
*
*S COMPUTE BASIN 5 *****
COMPUTE NM HYD          ID=5 HYD=5  AREA=0.001875  PER A=0 PER B=31.5
                        PER C=31.5 PER D=37  TP=-0.1715  RAINFALL=-1
PRINT HYD              ID=5  CODE=1
*
*S COMPUTE FUTURE BASIN 1 *****
COMPUTE NM HYD          ID=6 HYD=FB.1  AREA=0.010781  PER A=0 PER B=21
                        PER C=21 PER D=58  TP=-0.1715  RAINFALL=-1
PRINT HYD              ID=6  CODE=1
*

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*S COMPUTE FUTURE BASIN 2 *****
COMPUTE NM HYD      ID=7 HYD=FB.2  AREA=0.0075  PER A=0 PER B=23
                    PER C=23 PER D=54  TP=-0.1715  RAINFALL=-1
PRINT HYD          ID=7  CODE=1
*
*S COMPUTE FUTURE BASIN 3 *****
COMPUTE NM HYD      ID=8 HYD=FB.3  AREA=0.005938  PER A=0 PER B=22.5
                    PER C=22.5 PER D=55  TP=-0.1715  RAINFALL=-1
PRINT HYD          ID=8  CODE=1
*
*S COMPUTE FUTURE BASIN 4 *****
COMPUTE NM HYD      ID=9 HYD=FB.4  AREA=0.004844  PER A=0 PER B=29.5
                    PER C=29.5 PER D=41  TP=-0.1715  RAINFALL=-1
PRINT HYD          ID=9  CODE=1
*
*S COMPUTE OFFSITE BASIN 2 *****
COMPUTE NM HYD      ID=10 HYD=OFF.2  AREA=0.000938  PER A=80 PER B=20
                    PER C=0 PER D=0  TP=-0.1715  RAINFALL=-1
PRINT HYD          ID=10  CODE=1
*
*S COMPUTE OFFSITE BASIN 3 *****
COMPUTE NM HYD      ID=11 HYD=OFF.3  AREA=0.001094  PER A=76 PER B=24
                    PER C=0 PER D=0  TP=-0.1715  RAINFALL=-1
PRINT HYD          ID=11  CODE=1
*
*S COMPUTE OFFSITE BASIN 4 *****
COMPUTE NM HYD      ID=12 HYD=OFF.4  AREA=0.001406  PER A=80 PER B=20
                    PER C=0 PER D=0  TP=-0.1715  RAINFALL=-1
PRINT HYD          ID=12  CODE=1
*
*S COMPUTE OFFSITE BASIN 5 *****
COMPUTE NM HYD      ID=13 HYD=OFF.5  AREA=0.003281  PER A=95 PER B=5
                    PER C=0 PER D=0  TP=-0.1715  RAINFALL=-1
PRINT HYD          ID=13  CODE=1
*
*S COMPUTE OFFSITE BASIN WELL
*****
COMPUTE NM HYD      ID=14 HYD=OFF.WELL  AREA=0.001563  PER A=0 PER B=40
                    PER C=40 PER D=20  TP=-0.1715  RAINFALL=-1
PRINT HYD          ID=14  CODE=1
*
*S
*
*S ADD BASINS 1 AND 2 TO CREATE TEMP A *****
ADD HYD            ID=15 HYD=TEMP.A ID I=1 II=2
PRINT HYD          ID=15 CODE=1
*
*S ADD BASINS TEMP A AND 3 TO CREATE TEMP 1.B*****
ADD HYD            ID=16 HYD=TEMP.B ID I=15 II=3
PRINT HYD          ID=16 CODE=1
*
*S ADD BASINS TEMP B AND 5 TO CREATE TEMP C*****
ADD HYD            ID=17 HYD=TEMP.C ID I=16 II=5
PRINT HYD          ID=17 CODE=1
*
*S ADD BASINS TEMP C AND FUTURE BASIN 1 TO CREATE TEMP
D*****
ADD HYD            ID=18 HYD=TEMP.D ID I=17 II=6
PRINT HYD          ID=18 CODE=1

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*
*S ADD BASINS TEMP D AND FUTURE BASIN 2 TO CREATE TEMP
E*****
ADD HYD          ID=19 HYD=TEMP.E ID I=18 II=7
PRINT HYD        ID=19 CODE=1
*
*S ADD BASINS TEMP E AND FUTURE BASIN 3 TO CREATE TEMP
F*****
ADD HYD          ID=20 HYD=TEMP.F ID I=19 II=8
PRINT HYD        ID=20 CODE=1
*
*S ADD BASINS TEMP F AND OFFSITE BASIN 3 TO CREATE TEMP
G*****
ADD HYD          ID=21 HYD=TEMP.G ID I=20 II=11
PRINT HYD        ID=21 CODE=1
*
*S ADD BASINS TEMP G AND OFFSITE BASIN 4 TO CREATE TEMP
H*****
ADD HYD          ID=22 HYD=TEMP.H ID I=21 II=12
PRINT HYD        ID=22 CODE=1
*
*S ADD BASINS TEMP H AND OFFSITE BASIN WELL TO CREATE TEMP
I*****
ADD HYD          ID=23 HYD=TEMP.1 ID I=22 II=14
PRINT HYD        ID=23 CODE=1
*
*S ADD BASINS TEMP I AND OFFSITE BASIN 5 TO CREATE TEMP
J*****
ADD HYD          ID=24 HYD=TEMP.J ID I=23 II=13
PRINT HYD        ID=24 CODE=1
*
*S TEMP BASIN J REPLACES BASIN E3 AND E5 FROM THE DMP AHYMO
FILE*****
*
*
*S START DURANGO ANALYSIS*****
*
COMPUTE NM HYD    ID=25  HYD NO=OFFSITE2  DA=.0805 SQ MI
                  %A=100  %B=0.0  %C=0.0 %D=0.0
                  TP=-.66 HR  RAIN=-1
PRINT HYD        ID=25 CODE=1
*
*REMOVE OFFSITE POND 2 FROM ANALYSIS
*
*ROUTE RESERVOIR  ID=26 HYD=OFFPOND2  INFLOW ID=25 CODE=5
*                OUTFLOW  STORAGE  DEPTH
*                0  0          0
*                2.16      0.047    1
*                3.06      0.222    2
*                3.75      0.466    3
*                4.33      0.751    4
*                4.84      1.081    5
*
*
*PRINT HYD        ID=26 CODE=10
*
*
*COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1  SLP=0.011
*                DIA=2.0  N=0.013

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*ROUTE MCUNGE          ID=27 HYD=RTE.OFFPOND2 INFLOW ID=26
*                      DT=0.0  L=900 NS=0  SLOPE=0.011
*                      MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
*
*PRINT HYD             ID=27 CODE=0
*
*REMOVE BASIN B FROM ANALYSIS
*
*COMPUTE NM HYD        ID=28  HYD NO=BASIN.B  DA=.01998 SQ MI
*                      %A=0  %B=34.0  %C=34.0 %D=32.0
*                      TP=-.133 HR  RAIN=-1
*PRINT HYD             ID=28 CODE=10
*
*
*ROUTE RESERVOIR       ID=29 HYD=POND.B  INFLOW ID=28 CODE=5
*                      OUTFLOW  STORAGE  DEPTH
*                      0  0          5515
*                      1.71      0.06      5516
*                      2.42      0.24      5517
*                      2.96      0.55      5518
*                      3.42      0.99      5519
*                      3.82      1.67      5520
*
*PRINT HYD             ID=29 CODE=10
*
*COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.03
*                      DIA=2.0 N=0.013
*ROUTE MCUNGE          ID=30 HYD=RTE.PONDB INFLOW ID=29
*                      DT=0.0  L=1180 NS=0  SLOPE=0.03
*                      MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
*
*PRINT HYD             ID=30 CODE=0
*
*DISCONNECT OFFSITE BASIN 2 AND B
*
*ADD HYD               ID=31 HYD=OFF.B ID I=30 II=25
*PRINT HYD             ID=31 CODE=10
*
*COMPUTE NM HYD        ID=31  HYD NO=BASINE1.1A  DA=.0128885 SQ MI
*                      %A=0.0  %B=28.0  %C=28.0 %D=44.0
*                      TP=-0.133 HR  RAIN=-1
PRINT HYD             ID=31 CODE=1
*
*COMPUTE NM HYD        ID=32  HYD NO=BASINE1.1B  DA=.0043859 SQ MI
*                      %A=0.0  %B=25.5  %C=25.5 %D=49.0
*                      TP=-0.133 HR  RAIN=-1
PRINT HYD             ID=32 CODE=1
*
*ADD HYD               ID=33 HYD=E1.1AB ID I=32 II=31
PRINT HYD             ID=33 CODE=1
*
*COMPUTE NM HYD        ID=34  HYD NO=BASINE1.2A  DA=.0071179 SQ MI
*                      %A=0.0  %B=30.0  %C=30.0 %D=40.0

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```

TP=-0.133 HR  RAIN=-1
PRINT HYD      ID=34 CODE=1
*
*
ADD HYD        ID=26 HYD=OFF.E1.2A ID I=25 II=34
PRINT HYD      ID=26 CODE=1
*
*
COMPUTE NM HYD  ID=27  HYD NO=BASINE1.2B  DA=.0020765 SQ MI
                %A=0.0  %B=40.0  %C=40.0 %D=20.0
                TP=-0.133 HR  RAIN=-1
PRINT HYD      ID=27 CODE=1
*
*
COMPUTE NM HYD  ID=28  HYD NO=BASINE1.2C  DA=.0108902 SQ MI
                %A=0.0  %B=25.0  %C=25.0 %D=50.0
                TP=-0.133 HR  RAIN=-1
PRINT HYD      ID=28 CODE=1
*
*
ADD HYD        ID=29 HYD=OFF.E1.2AC ID I=28 II=26
PRINT HYD      ID=29 CODE=1
*
*
COMPUTE NM HYD  ID=35  HYD NO=BASIN.E2  DA=.0098462 SQ MI
                %A=0.0  %B=28.5  %C=28.5 %D=43.0
                TP=-.133 HR  RAIN=-1
PRINT HYD      ID=35 CODE=1
*
*
ADD HYD        ID=36 HYD=OFF.E2.E12AC ID I=29 II=35
PRINT HYD      ID=36 CODE=1
*
*
COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1  SLP=0.003
                DIA=4.0  N=0.013
ROUTE MCUNGE    ID=37 HYD=RTE.E12 INFLOW ID=36
                DT=0.0  L=400 NS=0  SLOPE=0.003
                MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
*
PRINT HYD      ID=37 CODE=1
*
*
*S END DURANGO ANALYSIS*****
*
*
*S BEGIN WOODMONT AVENUE ANALYSIS*****
*
*
COMPUTE NM HYD  ID=38  HYD NO=BASIN.E4  DA=.00577 SQ MI
                %A=0.0  %B=5.0  %C=5.0 %D=90.0
                TP=-0.133 HR  RAIN=-1
PRINT HYD      ID=38 CODE=1
*
*
ADD HYD        ID=39 HYD=AP1 ID I=38 II=33
PRINT HYD      ID=39 CODE=1
*
*

```

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.05
 DIA=4.0 N=0.013
 ROUTE MCUNGE ID=40 HYD=RTE.E1E4 INFLOW ID=39
 DT=0.0 L=450 NS=0 SLOPE=0.05
 MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

*

PRINT HYD ID=40 CODE=1

*

*

ADD HYD ID=41 HYD=AP2 ID I=37 II=40

PRINT HYD ID=41 CODE=1

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.026
 DIA=4.0 N=0.013

ROUTE MCUNGE ID=42 HYD=RTE.E1E4 INFLOW ID=41
 DT=0.0 L=600 NS=0 SLOPE=0.026
 MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

*

PRINT HYD ID=42 CODE=1

*

ADD HYD ID=43 HYD=AP3 ID I=42 II=24

PRINT HYD ID=43 CODE=1

*PLOT HYD ID=43

*

COMPUTE NM HYD ID=44 HYD NO=BASIN.OFF6 DA=.0014 SQ MI
 %A=0.0 %B=0 %C=100.0 %D=0
 TP=-0.133 HR RAIN=-1

PRINT HYD ID=44 CODE=1

*

ADD HYD ID=45 HYD=POND ID I=43 II=44

PRINT HYD ID=45 CODE=1

*PLOT HYD ID=45

*

*

*S POND E ANALYSIS*****

*

*

ROUTE RESERVOIR ID=46 HYD=POND.E INFLOW ID=45 CODE=5
 OUTFLOW STORAGE DEPTH

0	0.014	5440
0.011	0.029	5440.5
0.012	0.048	5441
0.013	0.07	5441.5
0.014	0.097	5442
0.015	0.128	5442.5
0.016	0.164	5443
0.017	0.207	5443.5
0.018	0.274	5444
0.02	0.380	5444.5
0.03	0.529	5445
0.50	0.728	5445.5
1.3	0.975	5446
2.2	1.267	5446.5
3.3	1.605	5447
4.5	1.989	5447.5
5.8	2.411	5448
7.6	2.867	5448.5

9.5	3.356	5449
11.5	3.879	5449.5
13.6	4.433	5450
15.8	5.018	5450.5
18.1	5.634	5451
20.5	6.279	5451.5
23.0	7.017	5452

```

*
PRINT HYD          ID=46 CODE=0
*PLOT HYD          ID=46
*
COMPUTE NM HYD      ID=47  HYD NO=BASIN.E6  DA=.00488 SQ MI
                    %A=0.0  %B=5.0  %C=5.0 %D=90.0
                    TP=-0.133 HR  RAIN=-1
PRINT HYD          ID=47 CODE=1
*
ADD HYD             ID=48 HYD=TOTALE ID I=46 II=47
PRINT HYD          ID=48 CODE=10
*
*
FINISH

```

APPENDIX B

STREET HYDRAULICS AND STORM DRAIN INLET ANALYSIS

Mancos St Std S=2.95%.txt

MANNING'S N = 0.017 SLOPE = 0.030

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1.0	0.0	0.9	5.0	11.5	0.1	9.0	37.7	0.7
2.0	8.9	0.7	6.0	23.5	0.4	10.0	38.1	0.7
3.0	9.3	0.7	7.0	35.5	0.1	11.0	47.0	0.9
4.0	9.5	0.0	8.0	37.5	0.0			

WSEL FT.	DEPTH INC	FLOW AREA SQ. FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID PLUS OBSTRUCTIONS	TOTAL ENERGY (FT)
0.050	0.050	0.039	0.049	1.645	1.241	2.484	0.074
0.100	0.100	0.156	0.308	3.290	1.970	4.048	0.160
0.150	0.150	0.366	0.822	6.318	2.246	6.996	0.228
0.200	0.200	0.795	2.020	11.423	2.541	12.021	0.300
0.250	0.250	1.476	4.427	16.527	3.000	17.047	0.390
0.300	0.300	2.408	8.365	21.631	3.474	22.072	0.488
0.350	0.350	3.591	14.141	26.735	3.938	27.098	0.591
0.400	0.400	4.981	23.190	28.839	4.656	29.123	0.737
0.450	0.450	6.391	35.058	28.942	5.485	29.148	0.918
0.500	0.500	7.803	48.780	29.045	6.251	29.174	1.108
0.550	0.550	9.217	64.225	29.148	6.968	29.199	1.305
0.600	0.600	10.631	81.289	29.251	7.646	29.224	1.509
0.650	0.650	12.047	99.887	29.354	8.291	29.250	1.719
0.700	0.700	13.536	111.577	33.273	8.243	32.217	1.757
0.750	0.750	15.270	124.402	38.202	8.147	37.144	1.782
0.800	0.800	17.250	140.592	43.131	8.150	42.072	1.833

CHECK EGL @ MANCOS ST / WEMINUCHE RD
 OFFSITE BASIN 2 ≈ 3.8 cfs @ PEAK h=1.5 hrs
 90% BASIN EL. 2A ≈ 15.0 cfs
 TOTAL Flow ≈ 18.8 cfs

$$\text{EGL} : \frac{23.19 - 14.14}{0.74 - 0.59} = \frac{23.19 - X}{0.74 - 0.67} \Rightarrow \frac{9.05}{.15} = \frac{23.19 - X}{.07} \Rightarrow 4.22 = 23.19 - X$$

$$X = 19.0 \text{ cfs}$$

$$\text{Flow} \approx 18.8 \text{ cfs} < 19.0 \text{ cfs}$$

$\therefore$ OK

NO INLETS
REQUIRED

Flow CONTINUES EAST IN
WEMINUCHE ROAD

MANNING'S N = 0.017 SLOPE = 0.020

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1.0	0.0	0.9	5.0	11.5	0.1	9.0	37.7	0.7
2.0	8.9	0.7	6.0	23.5	0.4	10.0	38.1	0.7
3.0	9.3	0.7	7.0	35.5	0.1	11.0	47.0	0.9
4.0	9.5	0.0	8.0	37.5	0.0			

INLET # 24 & 25

WSEL FT.	DEPTH INC	FLOW AREA SQ. FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID PLUS OBSTRUCTIONS	TOTAL ENERGY (FT)
0.050	0.050	0.039	0.041	1.645	1.047	2.484	0.067
0.100	0.100	0.156	0.260	3.290	1.662	4.048	0.143
0.150	0.150	0.366	0.693	6.318	1.895	6.996	0.206
0.200	0.200	0.795	1.704	11.423	2.144	12.021	0.271
0.250	0.250	1.476	3.735	16.527	2.531	17.047	0.350
0.300	0.300	2.408	7.058	21.631	2.931	22.072	0.434
0.350	0.350	3.591	11.931	26.735	3.322	27.098	0.522
0.400	0.400	4.981	19.566	28.839	3.928	29.123	0.640
0.450	0.450	6.391	29.579	28.942	4.628	29.148	0.783
0.500	0.500	7.803	41.157	29.045	5.274	29.174	0.933
0.550	0.550	9.217	54.188	29.148	5.879	29.199	1.088
0.600	0.600	10.631	68.585	29.251	6.451	29.224	1.247
0.650	0.650	12.047	84.277	29.354	6.996	29.250	1.411
0.700	0.700	13.536	94.139	33.273	6.955	32.217	1.452
0.750	0.750	15.270	104.961	38.202	6.874	37.144	1.485
0.800	0.800	17.250	118.620	43.131	6.876	42.072	1.535

Flow: OFF SITE BASIN 2 $\approx$ 3.8 cfs @ PEAK 1.5 HRSBASIN E1.2A = ~~12.92~~ cfs

43% BASIN E1.2C = 8.9 cfs

Flow $\approx$ 25.6 cfsSTREET CAPACITY

$$\frac{41.16 - 29.58}{0.93 - 0.78} = \frac{41.16 - x}{0.93 - 0.85} \Rightarrow \frac{11.58}{.15} = \frac{41.16 - x}{.08} \Rightarrow 6.18 = 41.16 - x$$

$$x = 34.98 > 25.6 \text{ cfs}$$

∴ OK

INLET CAPACITY

$$\text{Flow Depth: } \frac{29.58 - 19.57}{.45 - .40} = \frac{29.58 - 25.6}{.45 - x} \Rightarrow 200.2 = \frac{3.98}{.45 - x}$$

$$\Rightarrow .45 - x = 0.02$$

$$x = .43'$$

INLET CAPACITY = 6.2 cfs (PER SINGLE 'A')

(SEE NOMOGRAPH)

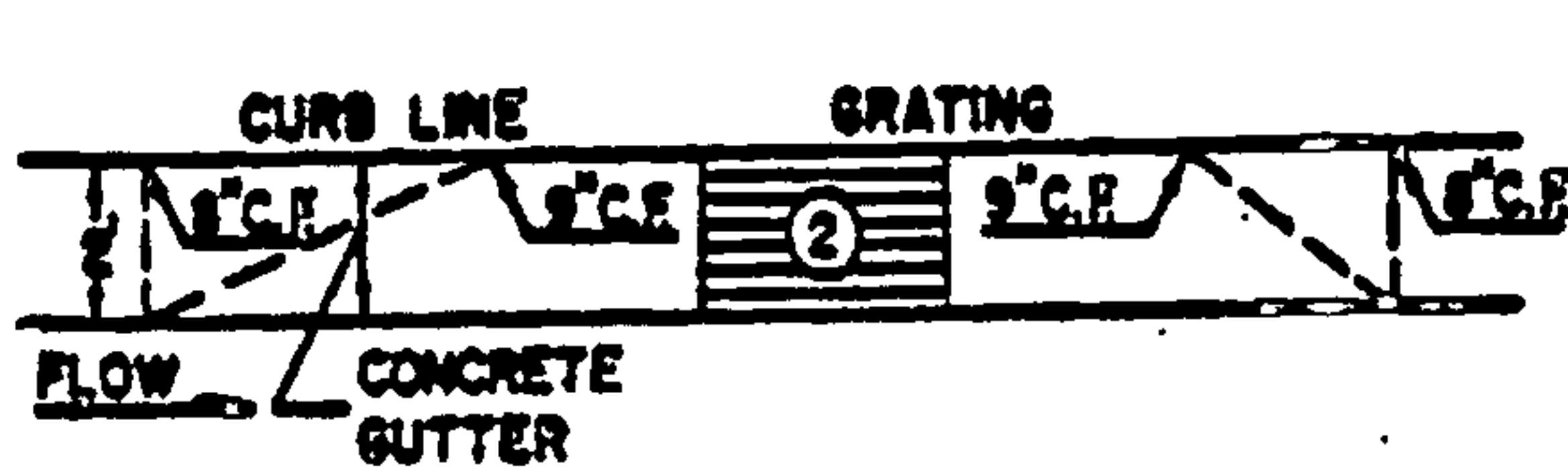
RESIDUAL FLOW TO WEMINUICHE SUMP

$$25.6 \text{ cfs} - 2(6.2 \text{ cfs})$$

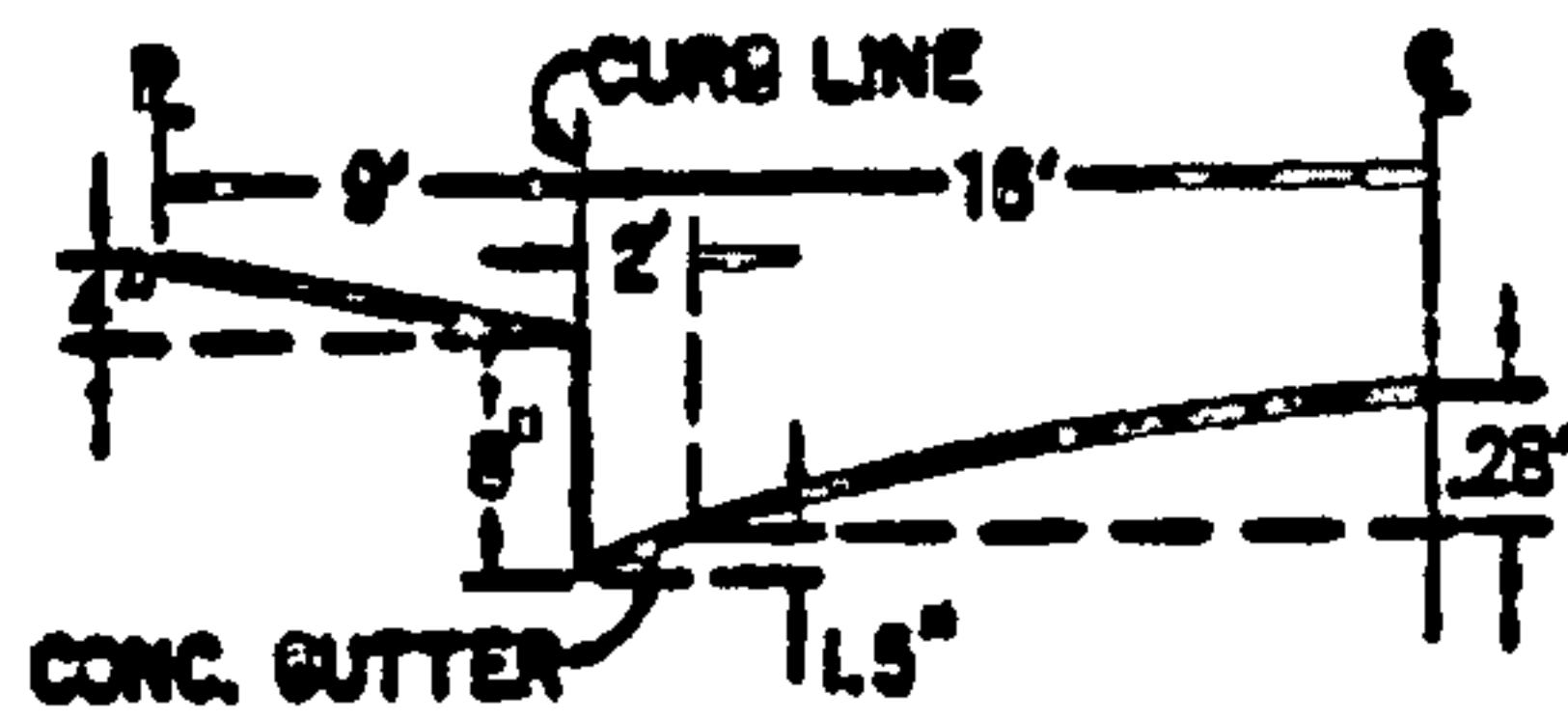
$$= 13.2 \text{ cfs}$$

Chapter 22 - Drainage, Flood Control and Erosion Control

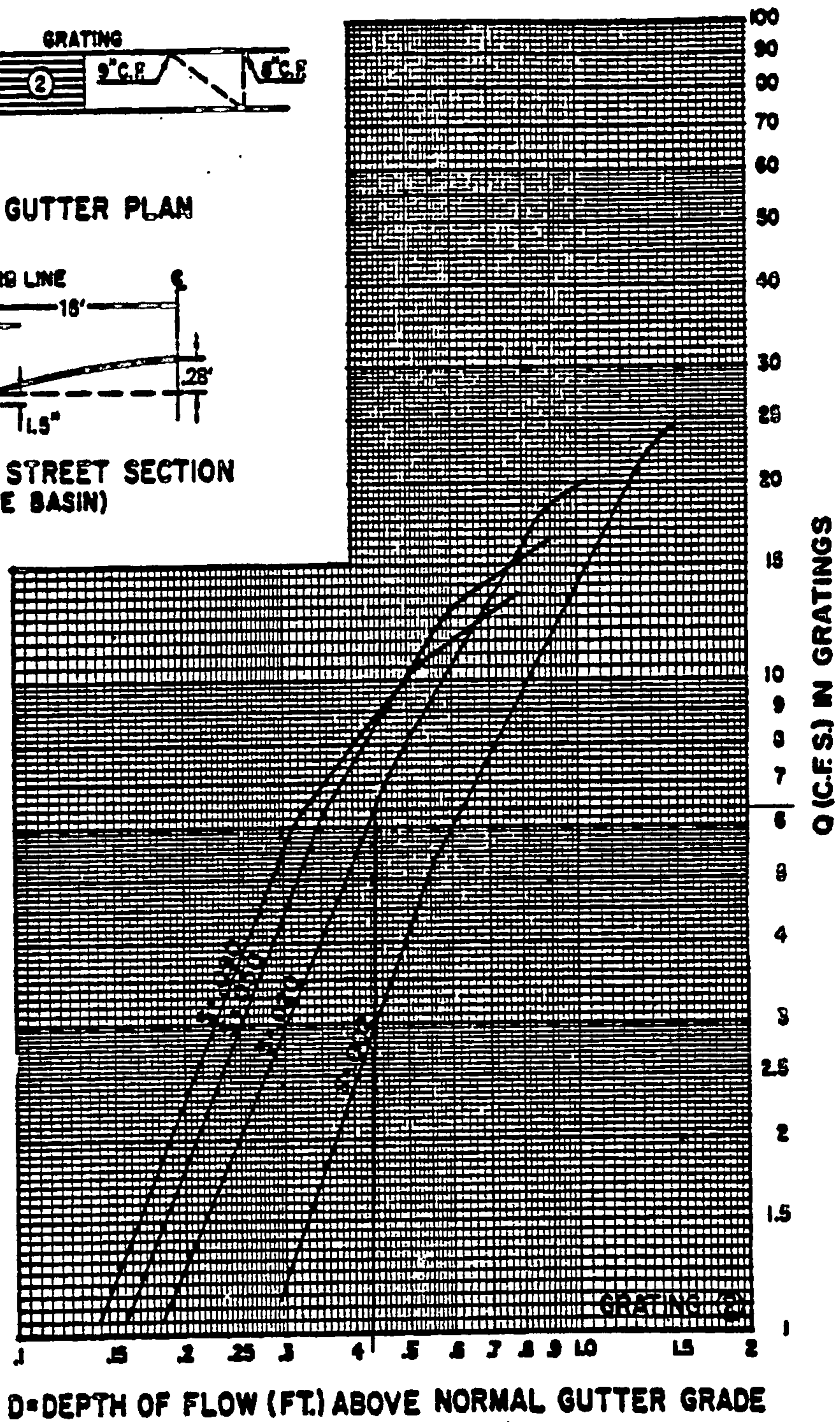
GRATING CAPACITIES FOR TYPE 'A' , 'C' and 'D'



GRATING & GUTTER PLAN



TYPICAL HALF STREET SECTION
(ABOVE BASIN)



$$D = 0.43'$$

$$S = 2.0\%$$

$$Q = 6.2 \text{ cfs}$$

PLATE 22.3 D-5

May 2001

B-3

22-144

WINDOW PEAK

~~Los Pinos~~ Rd S=5.0%.txt

MANNING'S N = 0.010 SLOPE = 0.050

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1.0	0.0	0.9	5.0	11.5	0.1	9.0	37.7	0.7
2.0	8.9	0.7	6.0	23.5	0.4	10.0	38.1	0.7
3.0	9.3	0.7	7.0	35.5	0.1	11.0	47.0	0.9
4.0	9.5	0.0	8.0	37.5	0.0			

JUST UPSTREAM
OF MOLAS RD

WSEL FT.	DEPTH INC	FLOW AREA SQ. FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID PLUS OBSTRUCTIONS	TOTAL ENERGY (FT)
0.050	0.050	0.039	0.107	1.645	2.747	2.484	0.167
0.100	0.100	0.156	0.682	3.290	4.360	4.048	0.396
0.150	0.150	0.366	1.818	6.318	4.972	6.996	0.534
0.200	0.200	0.795	4.471	11.423	5.623	12.021	0.692
0.250	0.250	1.476	9.798	16.527	6.639	17.047	0.935
0.300	0.300	2.408	18.514	21.631	7.689	22.072	1.220
0.350	0.350	3.591	31.296	26.735	8.715	27.098	1.531
0.400	0.400	4.981	51.324	28.839	10.305	29.123	2.052
0.450	0.450	6.391	77.591	28.942	12.140	29.148	2.742
0.500	0.500	7.803	107.961	29.045	13.835	29.174	3.477
0.550	0.550	9.217	142.143	29.148	15.422	29.199	4.249
0.600	0.600	10.631	179.910	29.251	16.923	29.224	5.054
0.650	0.650	12.047	221.071	29.354	18.350	29.250	5.888
0.700	0.700	13.536	246.943	33.273	18.243	32.217	5.877
0.750	0.750	15.270	275.328	38.202	18.031	37.144	5.807
0.800	0.800	17.250	311.159	43.131	18.038	42.072	5.861

Flow $\approx$ 38% BASIN E2 $\approx$ 6.9 cfs

STREET CAPACITY

$$\frac{9.80 - 4.47}{0.94 - 0.69} = \frac{9.80 - x}{0.94 - 0.85} \Rightarrow 21.32 = \frac{9.80 - x}{0.09} \Rightarrow 1.92 = 9.80 - x$$

$$x = 7.9 \text{ cfs}$$

$$> 6.9 \text{ cfs}$$

$\therefore$ NO INLETS REQUIRED

Flow CONTINUES TO

INLET # 19 & 20 IN

WEMINUCHE RD SOUTH OF
MOLAS RD

Molas Rd Std S=1.2%.txt

MANNING'S N = 0.017 SLOPE = 0.012

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1.0	0.0	0.9	5.0	11.5	0.1	9.0	37.7	0.7
2.0	8.9	0.7	6.0	23.5	0.4	10.0	38.1	0.7
3.0	9.3	0.7	7.0	35.5	0.1	11.0	47.0	0.9
4.0	9.5	0.0	8.0	37.5	0.0			

INLET #'S 23, 26 & 27

WSEL FT.	DEPTH INC	FLOW AREA SQ. FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID PLUS OBSTRUCTIONS	TOTAL ENERGY (FT)
0.050	0.050	0.039	0.031	1.645	0.792	2.484	0.060
0.100	0.100	0.156	0.197	3.290	1.257	4.048	0.125
0.150	0.150	0.366	0.524	6.318	1.433	6.996	0.182
0.200	0.200	0.795	1.288	11.423	1.620	12.021	0.241
0.250	0.250	1.476	2.823	16.527	1.913	17.047	0.307
0.300	0.300	2.408	5.335	21.631	2.216	22.072	0.376
0.350	0.350	3.591	9.019	26.735	2.511	27.098	0.448
0.400	0.400	4.981	14.790	28.839	2.970	29.123	0.537
0.450	0.450	6.391	22.360	28.942	3.498	29.148	0.640
0.500	0.500	7.803	31.112	29.045	3.987	29.174	0.747
0.550	0.550	9.217	40.962	29.148	4.444	29.199	0.857
0.600	0.600	10.631	51.845	29.251	4.877	29.224	0.970
0.650	0.650	12.047	63.707	29.354	5.288	29.250	1.085
0.700	0.700	13.536	71.163	33.273	5.257	32.217	1.130
0.750	0.750	15.270	79.343	38.202	5.196	37.144	1.170
0.800	0.800	17.250	89.668	43.131	5.198	42.072	1.220

CAPACITY

Flow $\approx$ 72% BASIN EL. 1B $\approx$ 6.0 cfs (INLETS 23 & 26)

STREET CAPACITY $\approx$ 41 cfs $>$ 6.0 cfs $\therefore$ OK

INLET 23 & 26 CAPACITY

$$\text{DEPTH OF FLOW: } \frac{9.02 - 5.35}{0.35 - 0.30} = \frac{9.02 - 6.0}{0.35 - X}$$

$$\Rightarrow 73.4 = \frac{3.02}{0.35 - X} \Rightarrow 0.35 - X = 0.04$$

$$X = 0.31'$$

INLET CAPACITY = 2.5 cfs (PER SINGLE 'A')
(SEE NOMOGRAPH)

RESIDUAL FLOW TO INLET 27
 $= 6.0 - 2 \times 2.5 = 1.0$ cfs

Flow @ INLET 27

90% BASIN EL. 1B $\approx$ 7.5 cfs
LESS 5.0 cfs (INLETS 23 & 26)
2.5 cfs

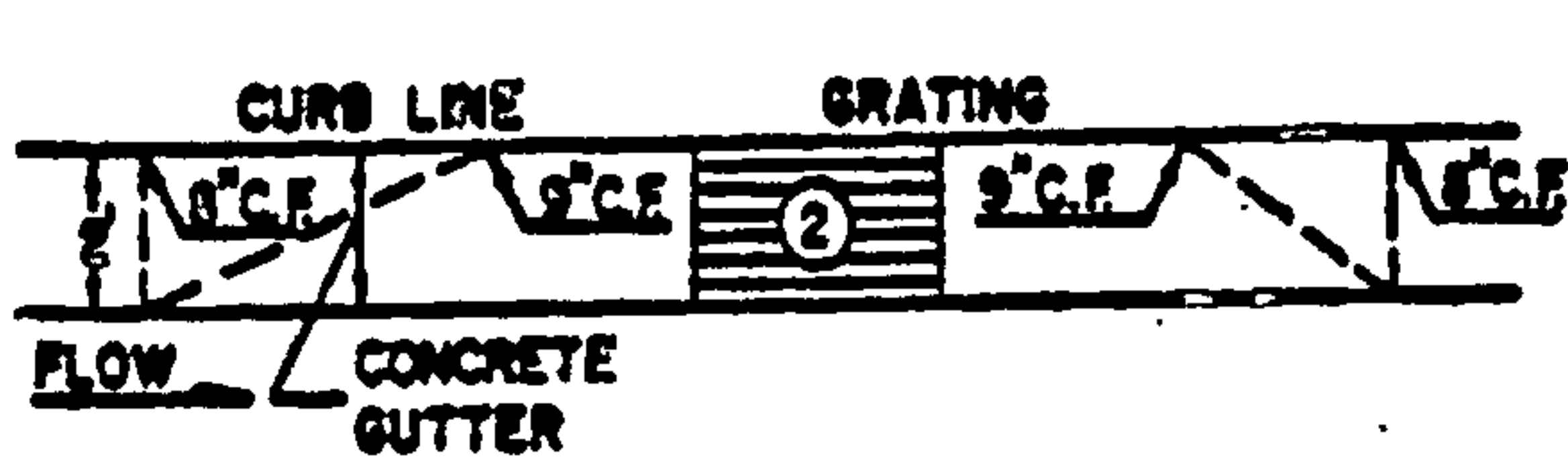
$$\text{DEPTH OF FLOW: } \frac{2.82 - 1.29}{0.25 - 0.2} = \frac{2.82 - 2.5}{.25 - X} \Rightarrow 30.6 = \frac{0.32}{.25 - X}$$

$$\Rightarrow .25 - X = 0.01$$

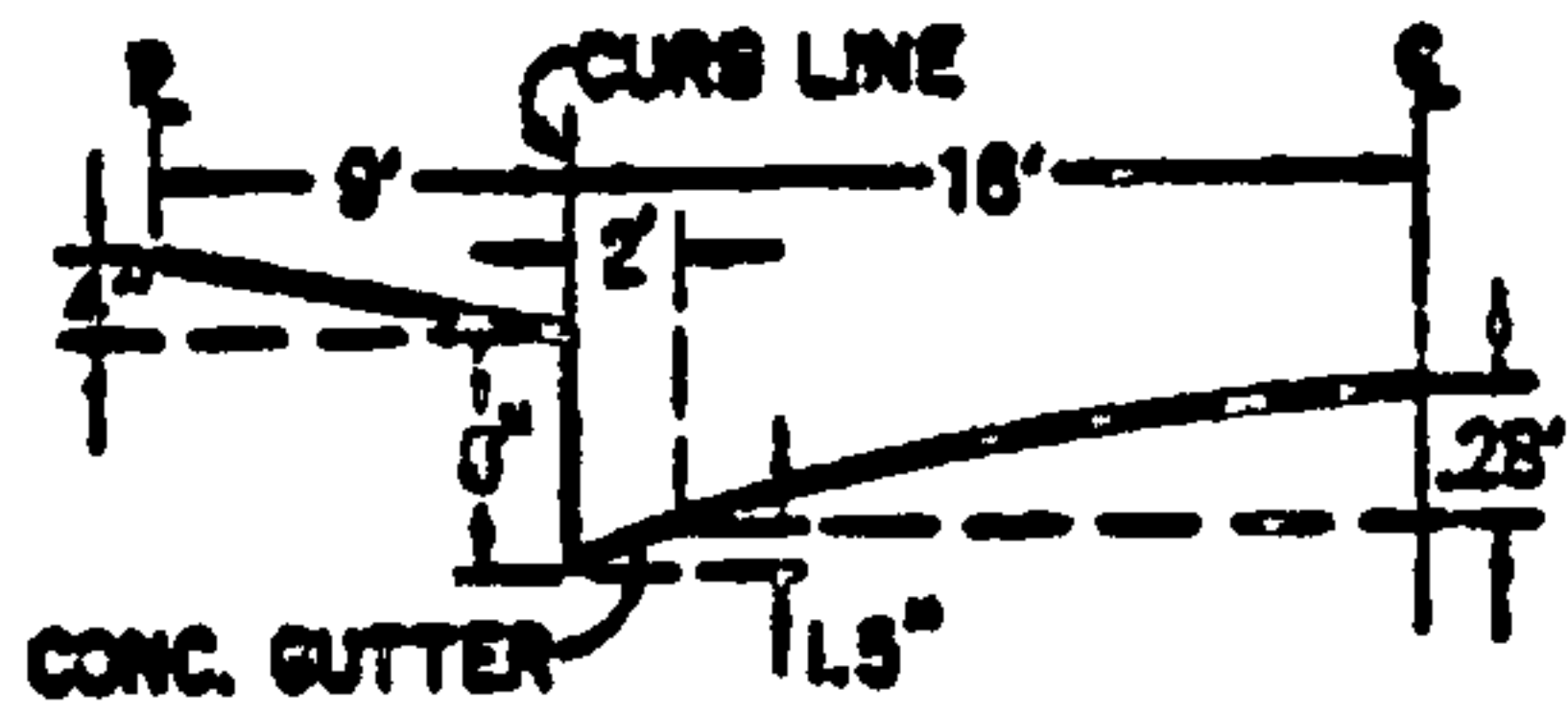
INLET CAPACITY = 1.5 cfs (PER SINGLE 'A') $X = 0.24'$ B-5
BY-PASS: ELB - 5.0 cfs - 1.5 cfs = 1.83 cfs TO WEMINUCHE RD

Chapter 22 - Drainage, Flood Control and Erosion Control

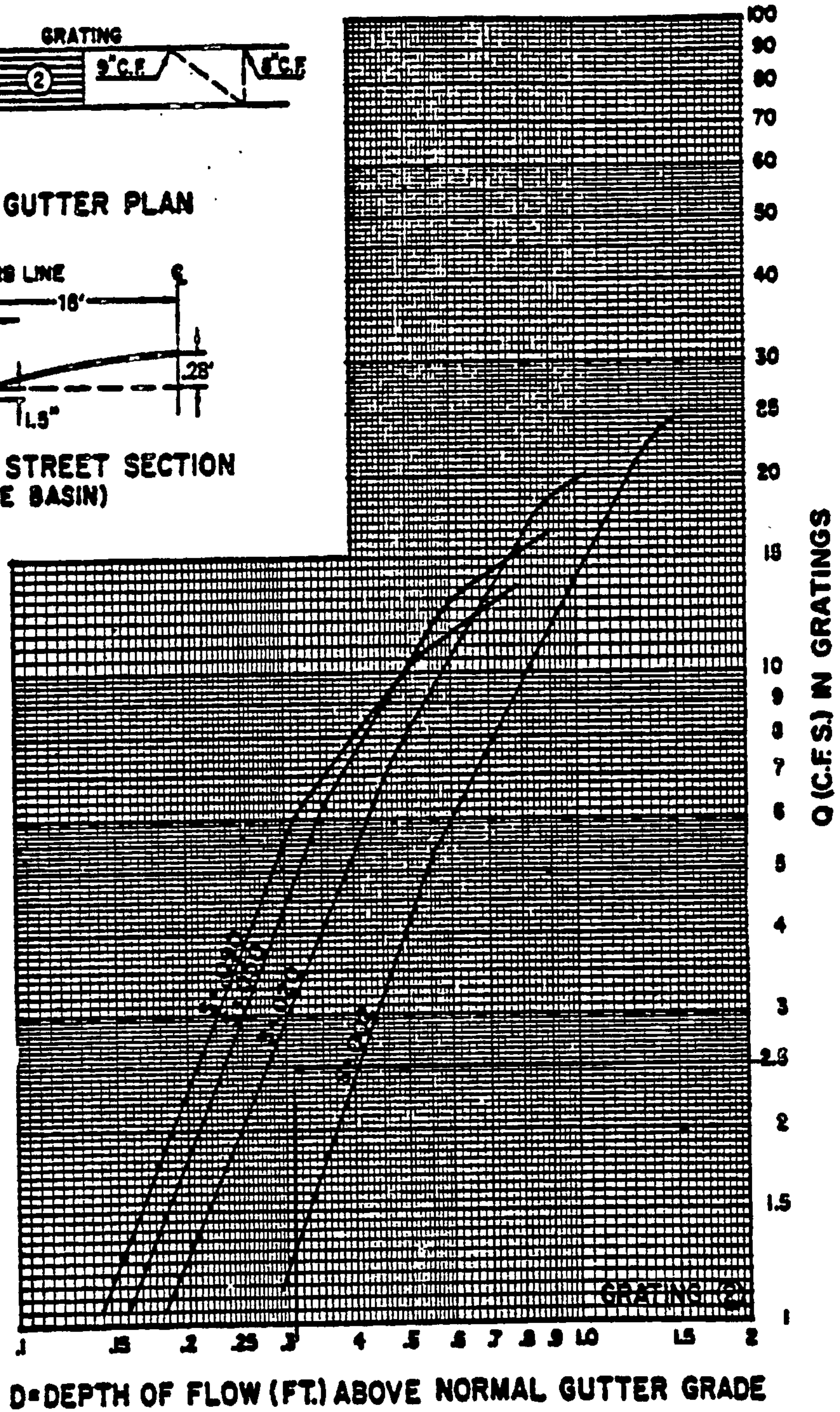
GRATING CAPACITIES FOR TYPE 'A' , 'C' and 'D'



GRATING & GUTTER PLAN



TYPICAL HALF STREET SECTION
(ABOVE BASIN)



INLETS 23 & 26

$$D = 0.31'$$

$$S = 1.2\%$$

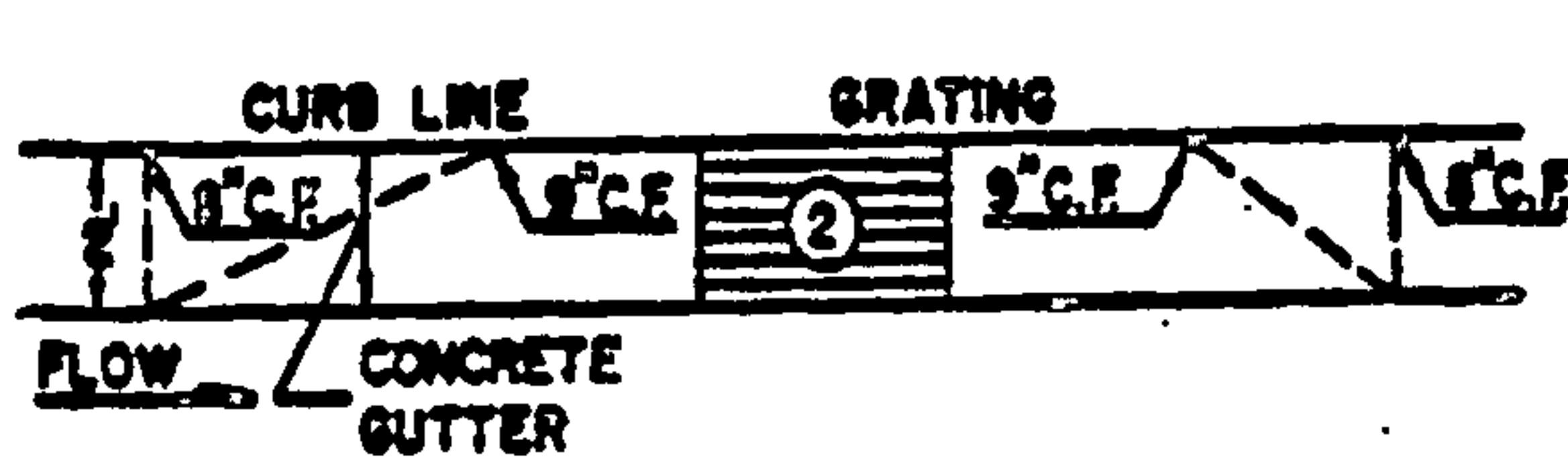
$$Q = 2.5 \text{ cfs}$$

PLATE 22.3 D-5

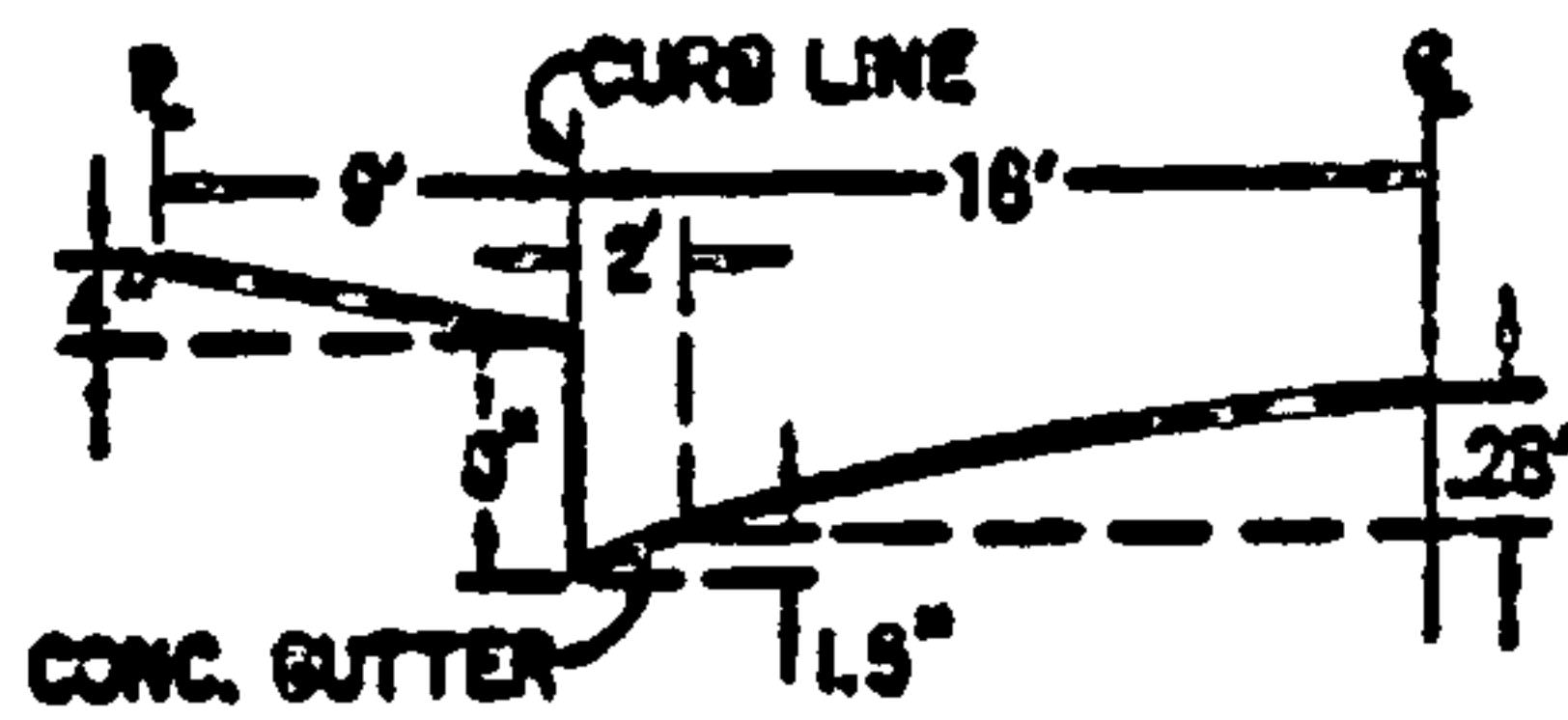
B-6

Chapter 22 - Drainage, Flood Control and Erosion Control

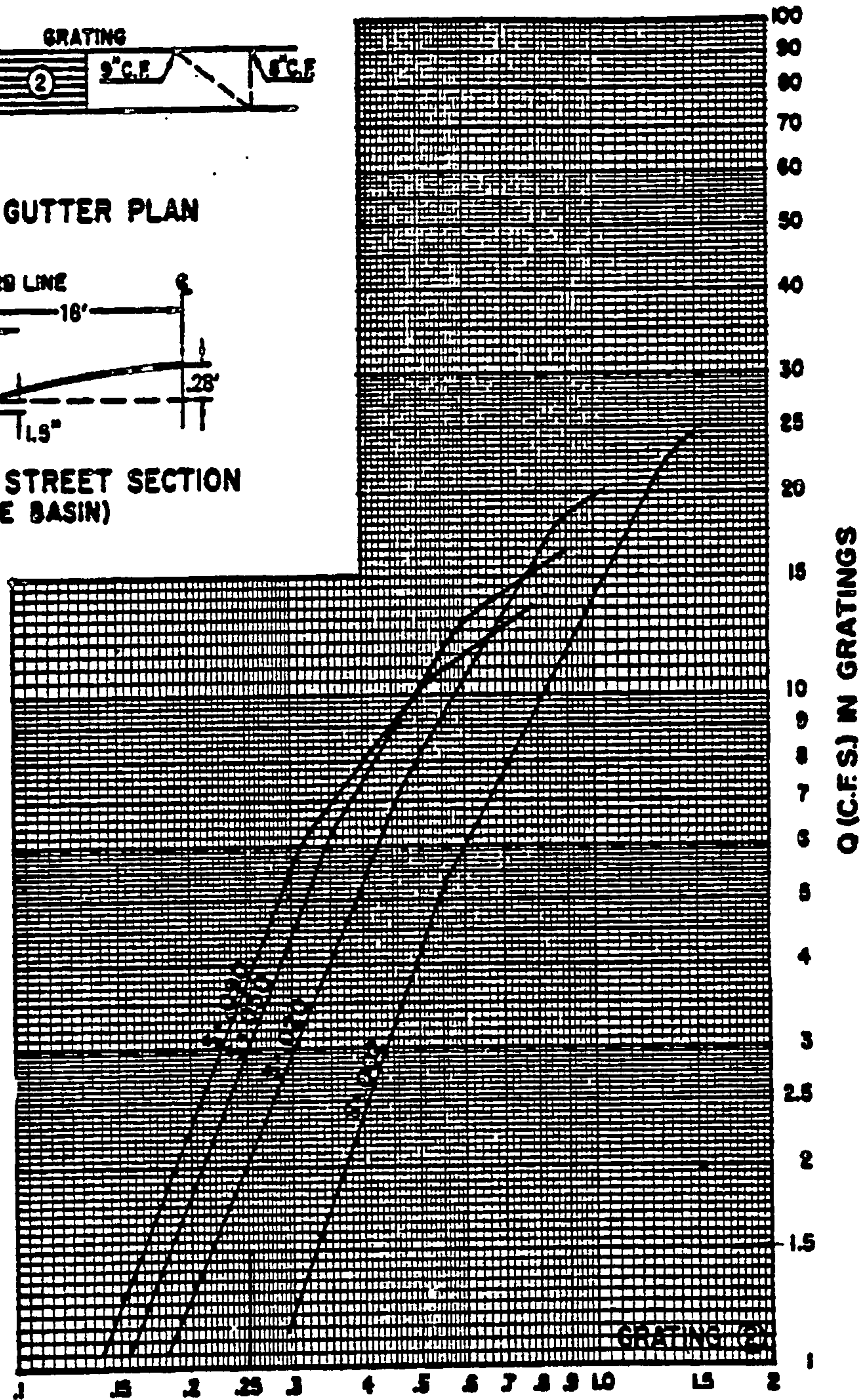
GRATING CAPACITIES FOR TYPE 'A', 'C' and 'D'



GRATING & GUTTER PLAN



TYPICAL HALF STREET SECTION
(ABOVE BASIN)



D = DEPTH OF FLOW (FT.) ABOVE NORMAL GUTTER GRADE

$$D = 0.24'$$

$$Q = 1.5 \text{ cfs}$$

$$S = 1.2\%$$

INLET 27

Weminuche Rd Std S=0.6%.txt

MANNING'S N = 0.017 SLOPE = 0.006

INLETS #19 & 20

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1.0	0.0	0.9	5.0	11.5	0.1	9.0	37.7	0.7
2.0	8.9	0.7	6.0	23.5	0.4	10.0	38.1	0.7
3.0	9.3	0.7	7.0	35.5	0.1	11.0	47.0	0.9
4.0	9.5	0.0	8.0	37.5	0.0			

WSEL FT.	DEPTH INC	FLOW AREA SQ. FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID PLUS OBSTRUCTIONS	TOTAL ENERGY (FT)
0.050	0.050	0.039	0.022	1.645	0.560	2.484	0.055
0.100	0.100	0.156	0.139	3.290	0.889	4.048	0.112
0.150	0.150	0.366	0.371	6.318	1.013	6.996	0.166
0.200	0.200	0.795	0.911	11.423	1.146	12.021	0.220
0.250	0.250	1.476	1.996	16.527	1.353	17.047	0.278
0.300	0.300	2.408	3.773	21.631	1.567	22.072	0.338
0.350	0.350	3.591	6.377	26.735	1.776	27.098	0.399
0.400	0.400	4.981	10.458	28.839	2.100	29.123	0.469
0.450	0.450	6.391	15.811	28.942	2.474	29.148	0.545
0.500	0.500	7.803	21.999	29.045	2.819	29.174	0.624
0.550	0.550	9.217	28.965	29.148	3.143	29.199	0.704
0.600	0.600	10.631	36.660	29.251	3.448	29.224	0.785
0.650	0.650	12.047	45.048	29.354	3.739	29.250	0.867
0.700	0.700	13.536	50.320	33.273	3.717	32.217	0.915
0.750	0.750	15.270	56.104	38.202	3.674	37.144	0.960
0.800	0.800	17.250	63.405	43.131	3.676	42.072	1.010

CAPACITY

Flow BASIN E2 + E1.1B BY-PASS Flow = 18.14 + 1.83
= 20.0 cfs

STREET CAPACITY

CAPACITY $\approx$ 45 cfs > 20 cfs $\therefore$ OK

INLET CAPACITY

$$\text{DEPTH OF FLOW: } \frac{22.00 - 15.81}{.50 - .45} = \frac{22.00 - 20.00}{.50 - x} \Rightarrow 123.8 = \frac{2.0}{.50 - x}$$

$$\Rightarrow .50 - x = .02 \\ x = 0.48'$$

INLET CAPACITY = 6.2 cfs (PER DOUBLE A)

RESIDUAL FLOW TO WEMINUICHE SUMP

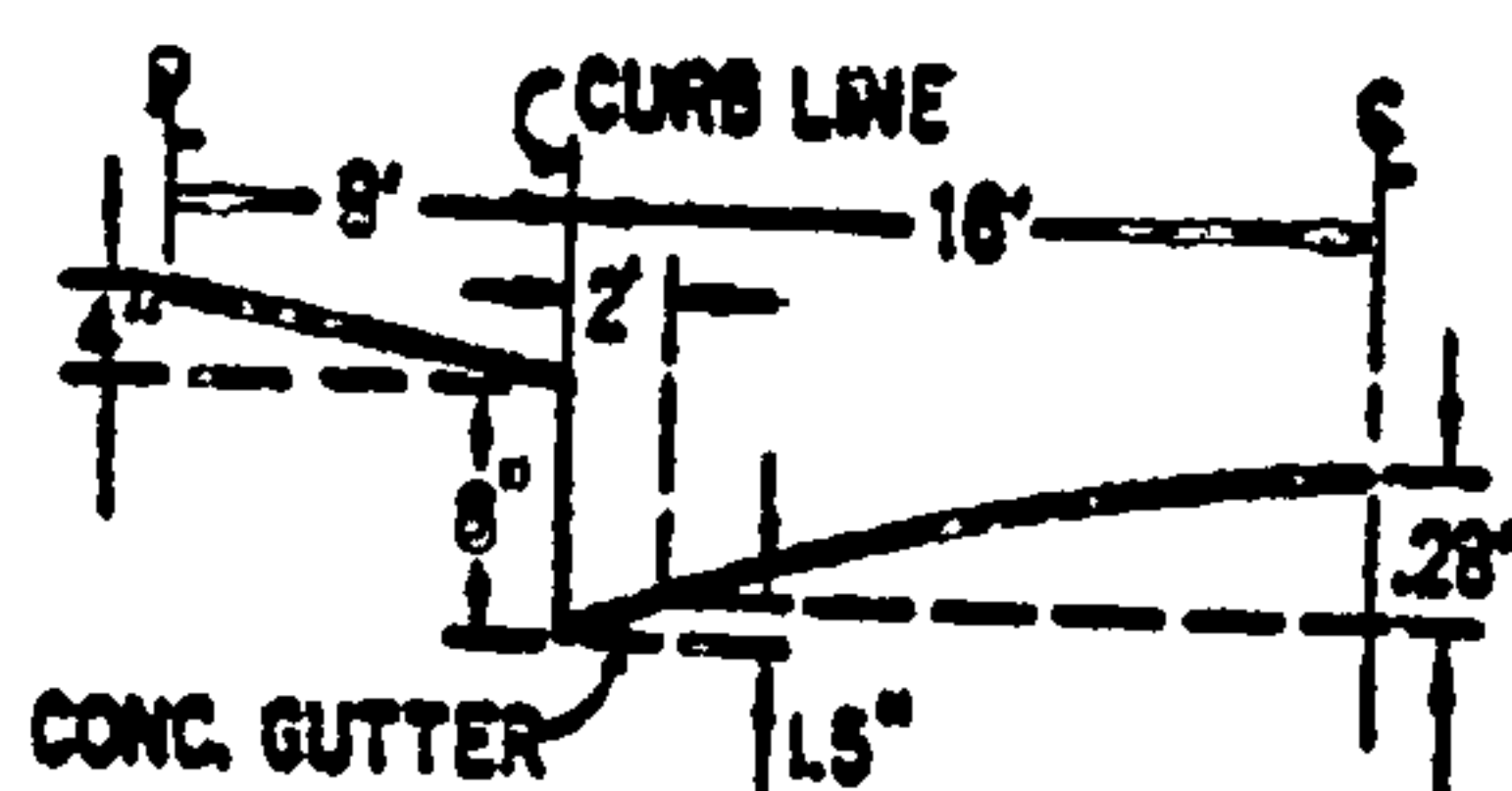
$$= 20 \text{ cfs} - 2(6.2) = 7.6 \text{ cfs}$$

Chapter 22 - Drainage, Flood Control and Erosion Control

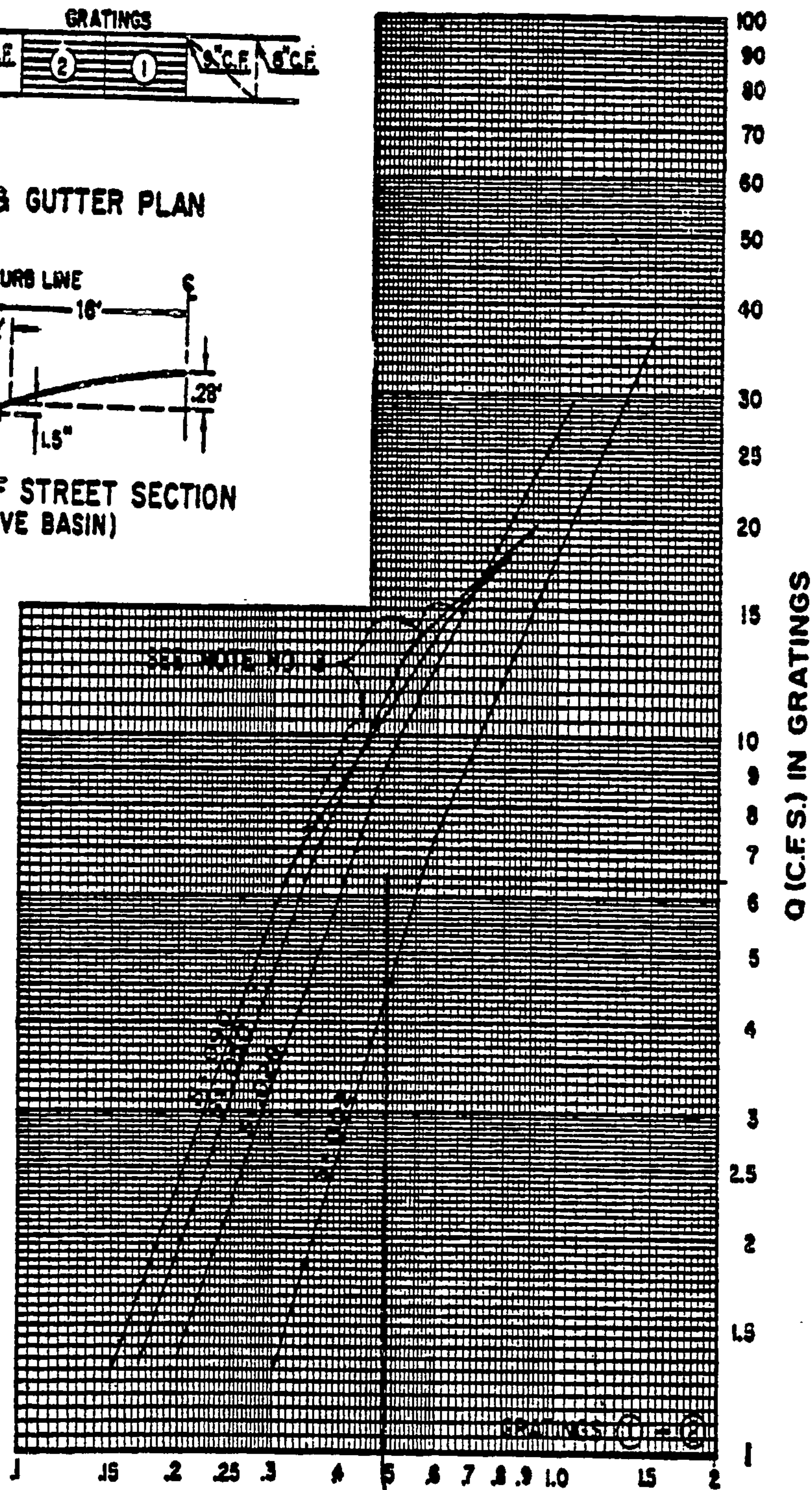
GRATING CAPACITIES FOR TYPE DOUBLE °C, ° AND °D°



GRATING & GUTTER PLAN



TYPICAL HALF STREET SECTION (ABOVE BASIN)



D = DEPTH OF FLOW (FT.) ABOVE NORMAL GUTTER GRADE

$$D = 0.48'$$

$$S = 0.60\%$$

$$Q = 6.2 \text{ cfs}$$

INLETS 19 & 20

PLATE 22.3 D-6

Weminuche Rd Std S=0.6%.txt

MANNING'S N = 0.017 SLOPE = 0.006

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1.0	0.0	0.9	5.0	11.5	0.1	9.0	37.7	0.7
2.0	8.9	0.7	6.0	23.5	0.4	10.0	38.1	0.7
3.0	9.3	0.7	7.0	35.5	0.1	11.0	47.0	0.9
4.0	9.5	0.0	8.0	37.5	0.0			

INLETS #21 & 22

WSEL FT.	DEPTH INC	FLOW AREA SQ. FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID PLUS OBSTRUCTIONS	TOTAL ENERGY (FT)
0.050	0.050	0.039	0.022	1.645	0.560	2.484	0.055
0.100	0.100	0.156	0.139	3.290	0.889	4.048	0.112
0.150	0.150	0.366	0.371	6.318	1.013	6.996	0.166
0.200	0.200	0.795	0.911	11.423	1.146	12.021	0.220
0.250	0.250	1.476	1.996	16.527	1.353	17.047	0.278
0.300	0.300	2.408	3.773	21.631	1.567	22.072	0.338
0.350	0.350	3.591	6.377	26.735	1.776	27.098	0.399
0.400	0.400	4.981	10.458	28.839	2.100	29.123	0.469
0.450	0.450	6.391	15.811	28.942	2.474	29.148	0.545
0.500	0.500	7.803	21.999	29.045	2.819	29.174	0.624
0.550	0.550	9.217	28.965	29.148	3.143	29.199	0.704
0.600	0.600	10.631	36.660	29.251	3.448	29.224	0.785
0.650	0.650	12.047	45.048	29.354	3.739	29.250	0.867
0.700	0.700	13.536	50.320	33.273	3.717	32.217	0.915
0.750	0.750	15.270	56.104	38.202	3.674	37.144	0.960
0.800	0.800	17.250	63.405	43.131	3.676	42.072	1.010

CAPACITY

Flow: 57% BASIN ELZC $\approx$ 11.8 cfs
 INLET 24 & 25 BY PARS = 13.2 cfs
 INLET 19 & 20 BY PASS = 7.6 cfs
32.6 cfs

STREET CAPACITY

CAPACITY $\approx$ 45 cfs $>$ 32.6 cfs $\therefore$ OK

INLET CAPACITY

$$\text{Flow DEPTH: } \frac{36.66 - 28.97}{.60 - .55} = \frac{36.66 - 32.6}{.60 - x} \Rightarrow 153.8 = \frac{4.06}{.60 - x}$$

$$\Rightarrow .60 - x = .03$$

$$x = .57'$$

CAPACITY @ D=0.57' = 19 cfs (PER DOUBLE 'A')

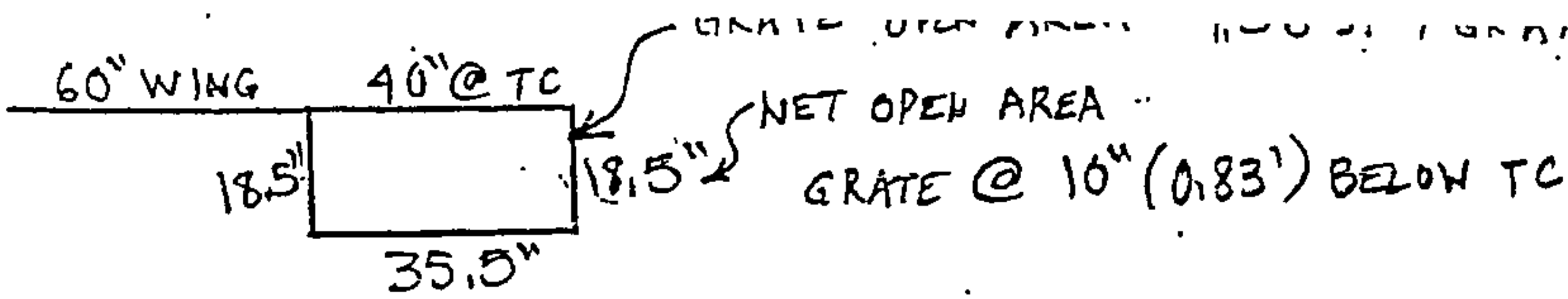
2 INLETS = 38 cfs $>$ 32.6 cfs $\therefore$ OK
 (SEE NOMOGRAPH)

PROVIDE CHECK ON 2X100-YEAR:

CAPACITY @ D=0.83' = 35.4 cfs

Page 1 2 INLETS = 70.8 cfs $>$ 65.2 cfs
 $\therefore$ OK

B-10

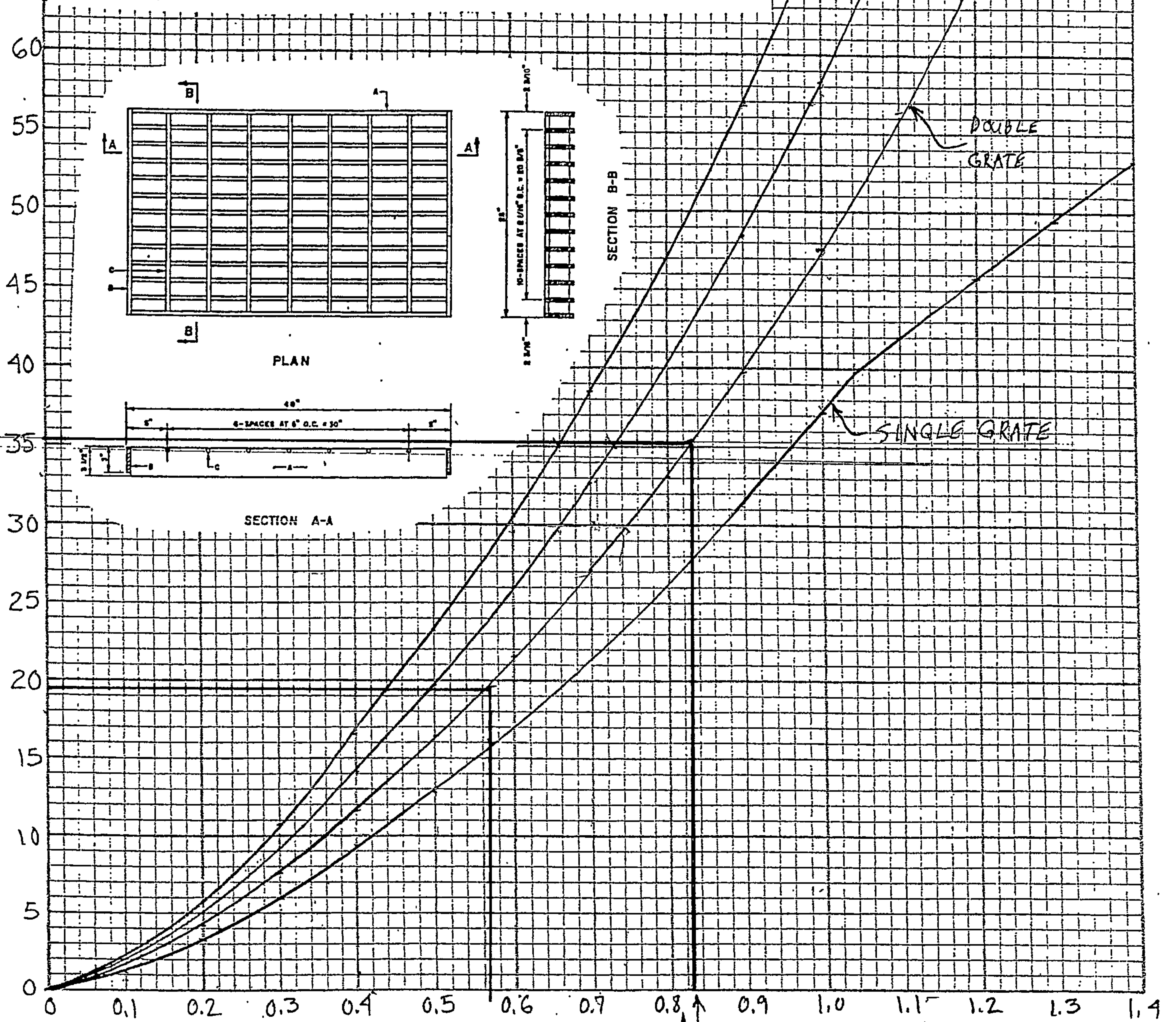
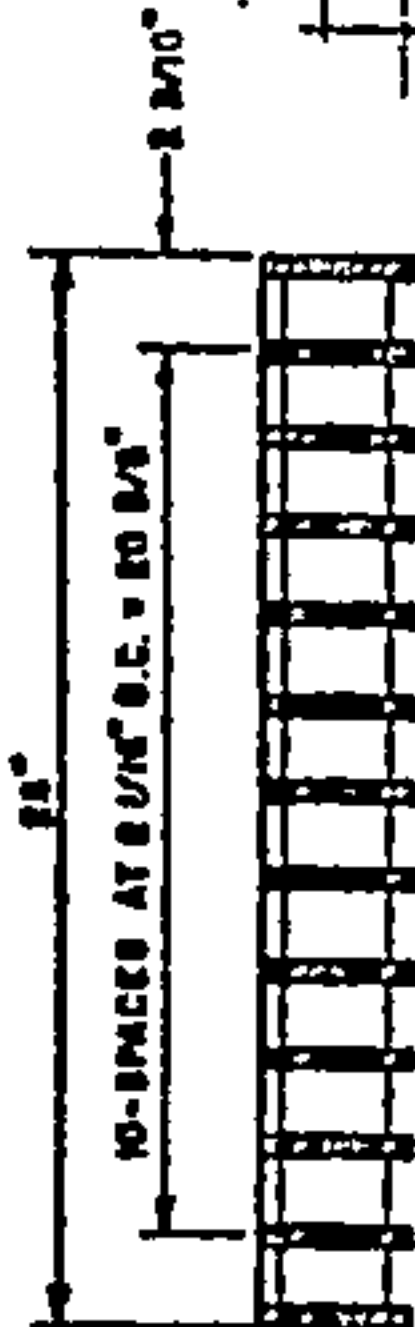
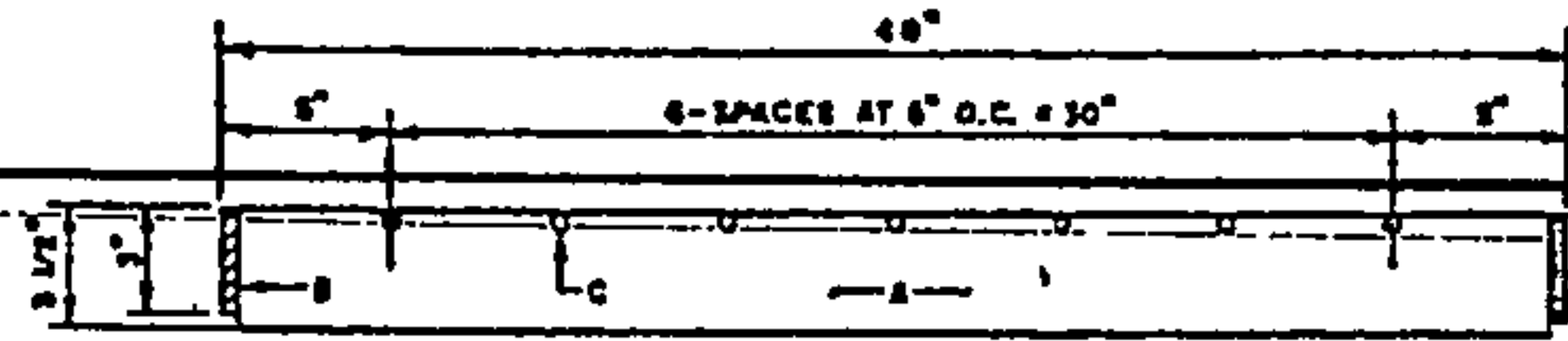
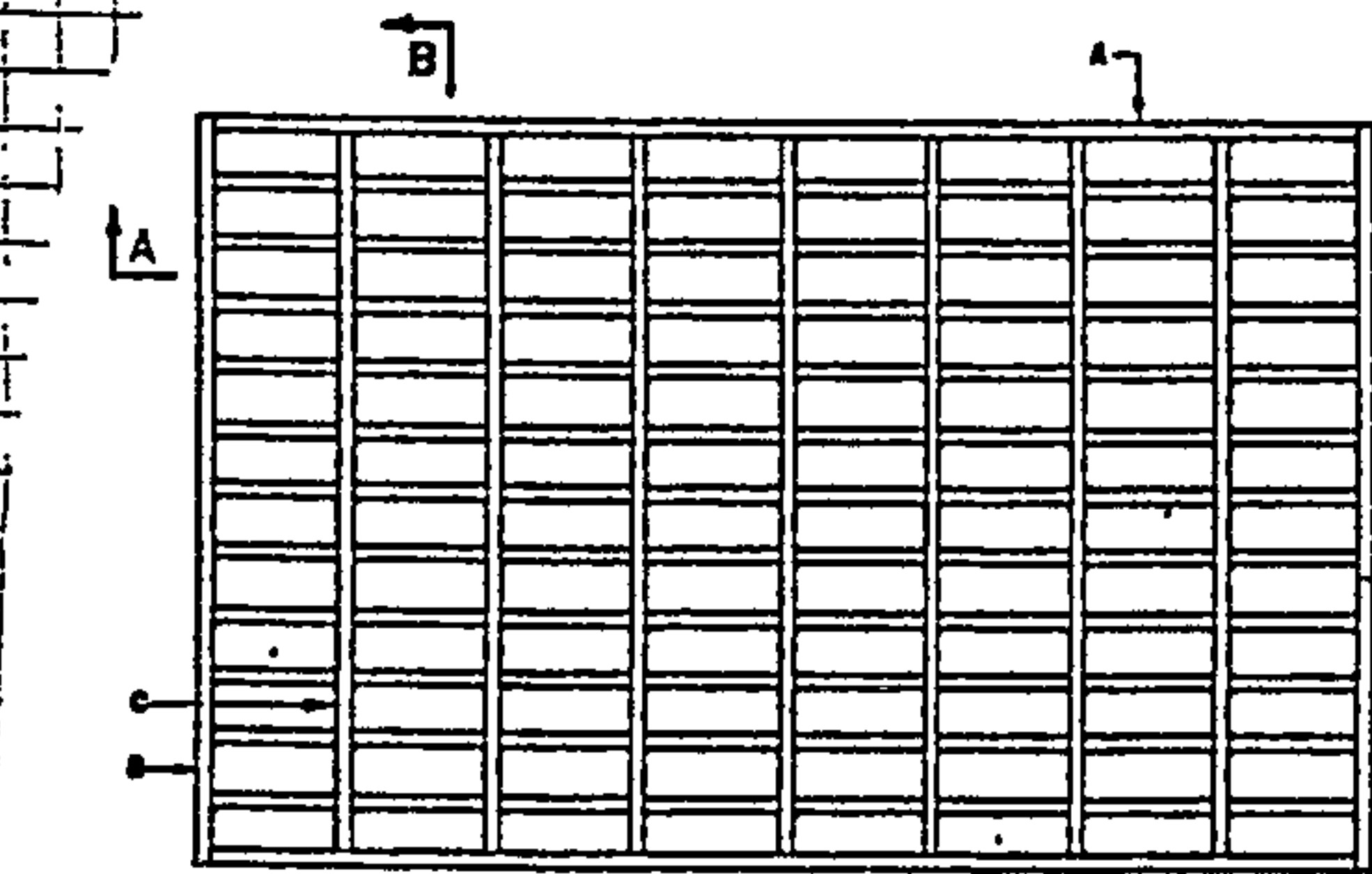


EQUATION	SGL A	DBL A	TRPL A	QDPL A
1) ORIFICE	$22.0 h^{0.5} + 16.5 h^{1.5}$	$43.9 h^{0.5} + 16.5 h^{1.5}$	$65.9 h^{0.5} + 16.5 h^{1.5}$	$87.8 h^{0.5} + 16.5 h^{1.5}$
2) 3-SIDED WEIR ($h \leq 0.83'$)	$36.4 h^{1.5}$	$46.2 h^{1.5}$	$56.0 h^{1.5}$	$65.7 h^{1.5}$
3) 4-SIDED WEIR ($h > 0.83'$)	ADD TO 2): $11(h-0.83)^{1.5}$	ADD TO 2): $22(h-0.83)^{1.5}$	ADD TO 2): $33(h-0.83)^{1.5}$	ADD TO 2): $44(h-0.83)^{1.5}$

1) $Q = 0.6 A \sqrt{2gh} + 3.3(5') h^{1.5}$

2) & 3) $Q = 3.3 P h^{1.5}$

GRATE CAPACITY (Q) IN CFS



HEAD (h) IN FEET

BOHANNAN-HUSTON INC.

PROJECT NAME DURANGO INLETS 21 EZZ SHEET OF

PROJECT NO. BY JPK DATE 4/9/92

SUBJECT PATENT CURVE FOR TYPE A INLETS CH'D DATE B-11

WINDOW PEAK

~~Los Pinos~~ Rd S=1.0%.txt

MANNING'S N = 0.017 SLOPE = 0.010

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1.0	0.0	0.9	5.0	11.5	0.1	9.0	37.7	0.7
2.0	8.9	0.7	6.0	23.5	0.4	10.0	38.1	0.7
3.0	9.3	0.7	7.0	35.5	0.1	11.0	47.0	0.9
4.0	9.5	0.0	8.0	37.5	0.0			

At Red Mountain Rd

WSEL FT.	DEPTH INC	FLOW AREA SQ. FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID PLUS OBSTRUCTIONS	TOTAL ENERGY (FT)
0.050	0.050	0.039	0.028	1.645	0.723	2.484	0.058
0.100	0.100	0.156	0.179	3.290	1.147	4.048	0.120
0.150	0.150	0.366	0.478	6.318	1.308	6.996	0.177
0.200	0.200	0.795	1.176	11.423	1.479	12.021	0.234
0.250	0.250	1.476	2.577	16.527	1.746	17.047	0.297
0.300	0.300	2.408	4.870	21.631	2.023	22.072	0.364
0.350	0.350	3.591	8.233	26.735	2.293	27.098	0.432
0.400	0.400	4.981	13.502	28.839	2.711	29.123	0.514
0.450	0.450	6.391	20.412	28.942	3.194	29.148	0.609
0.500	0.500	7.803	28.401	29.045	3.640	29.174	0.706
0.550	0.550	9.217	37.393	29.148	4.057	29.199	0.806
0.600	0.600	10.631	47.328	29.251	4.452	29.224	0.908
0.650	0.650	12.047	58.156	29.354	4.827	29.250	1.012
0.700	0.700	13.536	64.962	33.273	4.799	32.217	1.058
0.750	0.750	15.270	72.430	38.202	4.743	37.144	1.100
0.800	0.800	17.250	81.856	43.131	4.745	42.072	1.150

CAPACITY

Flow: $\approx 63\%$ BASIN E.I.A ≈ 15.0 cfs

STREET CAPACITY

CAPACITY ≈ 42 cfs > 15.0 cfs $\therefore$ OK

NO INLETS REQUIRED

Flow CONTINUES TO

Red Mountain Road SUMP

MANNING'S N = 0.017 SLOPE = 0.039

INLETS # 30 & 31

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1.0	0.0	0.9	5.0	11.5	0.1	9.0	37.7	0.7
2.0	8.9	0.7	6.0	23.5	0.4	10.0	38.1	0.7
3.0	9.3	0.7	7.0	35.5	0.1	11.0	47.0	0.9
4.0	9.5	0.0	8.0	37.5	0.0			

WSEL FT.	DEPTH INC	FLOW AREA SQ. FT.	FLOW RATE (CFS)	WETTED PER (FT)	FLOW VEL (FPS)	TOPWID PLUS OBSTRUCTIONS	TOTAL ENERGY (FT)
0.050	0.050	0.039	0.056	1.645	1.427	2.484	0.082
0.100	0.100	0.156	0.354	3.290	2.265	4.048	0.180
0.150	0.150	0.366	0.945	6.318	2.583	6.996	0.254
0.200	0.200	0.795	2.323	11.423	2.921	12.021	0.333
0.250	0.250	1.476	5.090	16.527	3.449	17.047	0.435
0.300	0.300	2.408	9.618	21.631	3.995	22.072	0.548
0.350	0.350	3.591	16.259	26.735	4.528	27.098	0.669
0.400	0.400	4.981	26.664	28.839	5.354	29.123	0.846
0.450	0.450	6.391	40.310	28.942	6.307	29.148	1.069
0.500	0.500	7.803	56.087	29.045	7.188	29.174	1.304
0.550	0.550	9.217	73.846	29.148	8.012	29.199	1.548
0.600	0.600	10.631	93.466	29.251	8.792	29.224	1.802
0.650	0.650	12.047	114.850	29.354	9.533	29.250	2.064
0.700	0.700	13.536	128.290	33.273	9.478	32.217	2.097
0.750	0.750	15.270	143.037	38.202	9.367	37.144	2.115
0.800	0.800	17.250	161.652	43.131	9.371	42.072	2.166

Flow: BASIN E1.1A = 23.9 cfs

STREET CAPACITYCAPACITY $\approx$ 26.7 cfs > 23.9 cfs $\therefore$ OKINLET CAPACITY

$$\text{Flow Depth: } \frac{26.66 - 16.26}{.40 - .35} = \frac{26.66 - 23.9}{.40 - X}$$

$$\Rightarrow 208.0 = \frac{2.76}{.40 - X} \Rightarrow .40 - X = .01$$

$$\Rightarrow X = .39'$$

REQ'D WATER DEPTH FOR DOUBLE 'A' INLET
 @ Q = 12.0 cfs $D \approx 0.40'$

$\therefore$ WATER WILL POND TO 0.40'
 TO ACCEPT 12.0 cfs PER INLET

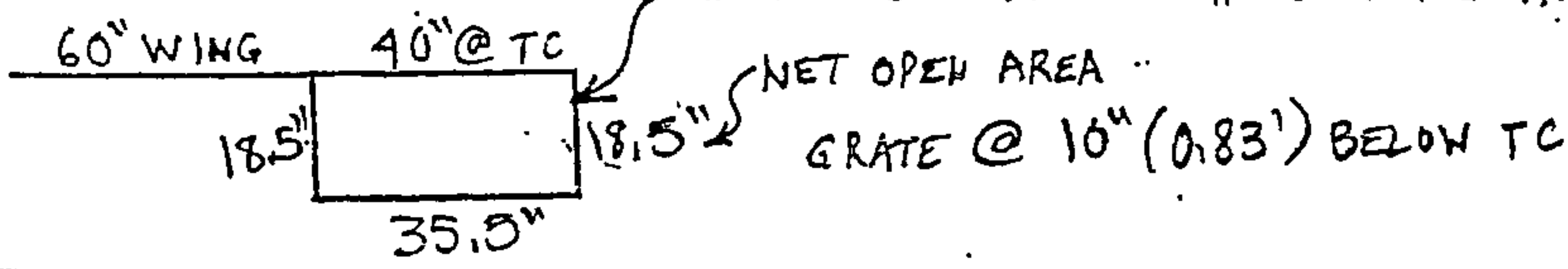
CHECK 2x 100-YEAR CAPACITY:

@ $D = 0.83' = 35.4$ cfs PER INLET

Page 1 35.4 cfs > 24 cfs PER INLET

OR 70.8 cfs > 48 cfs $\therefore$ OK

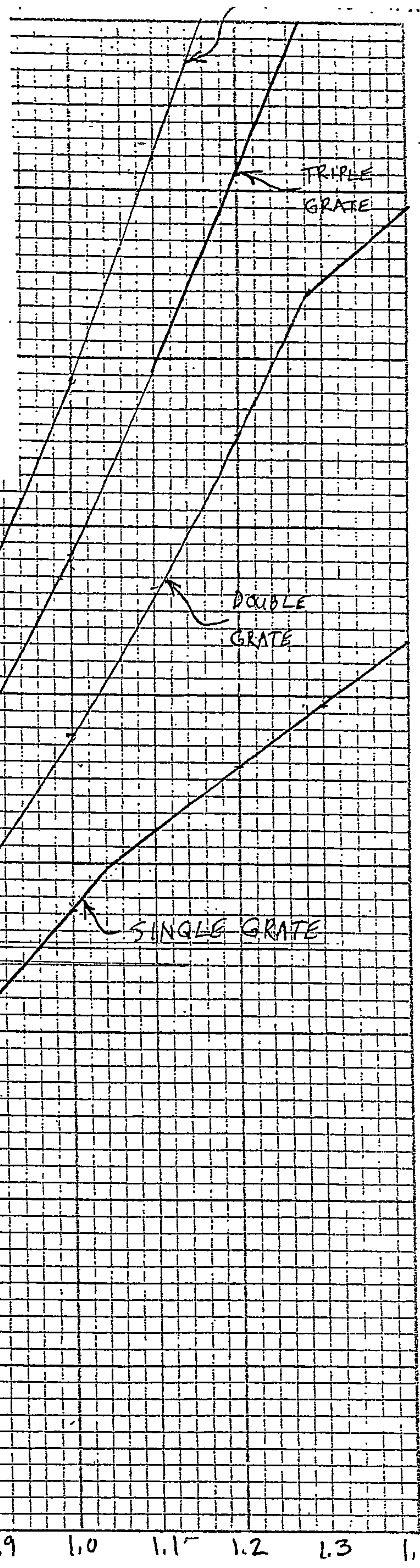
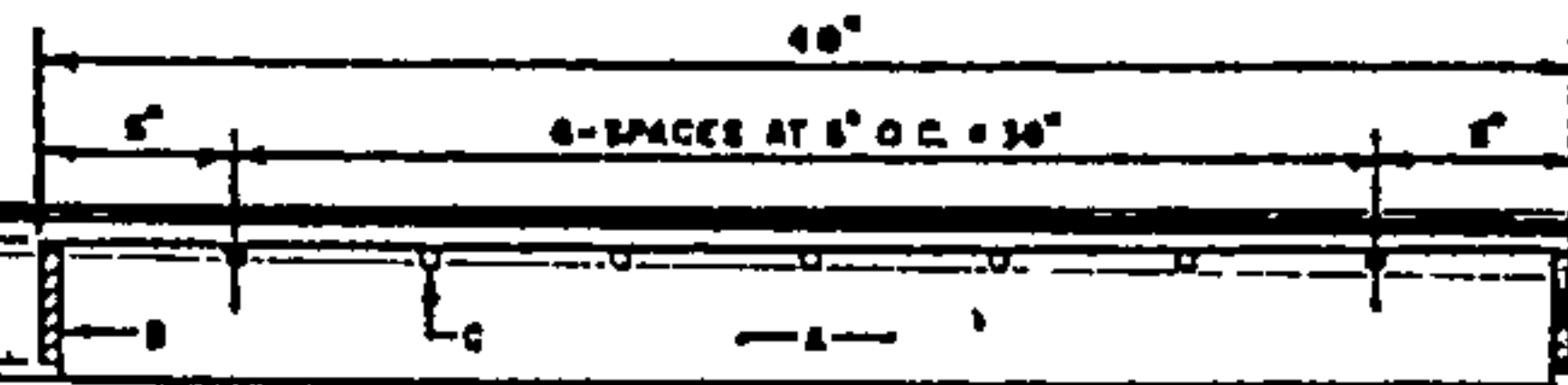
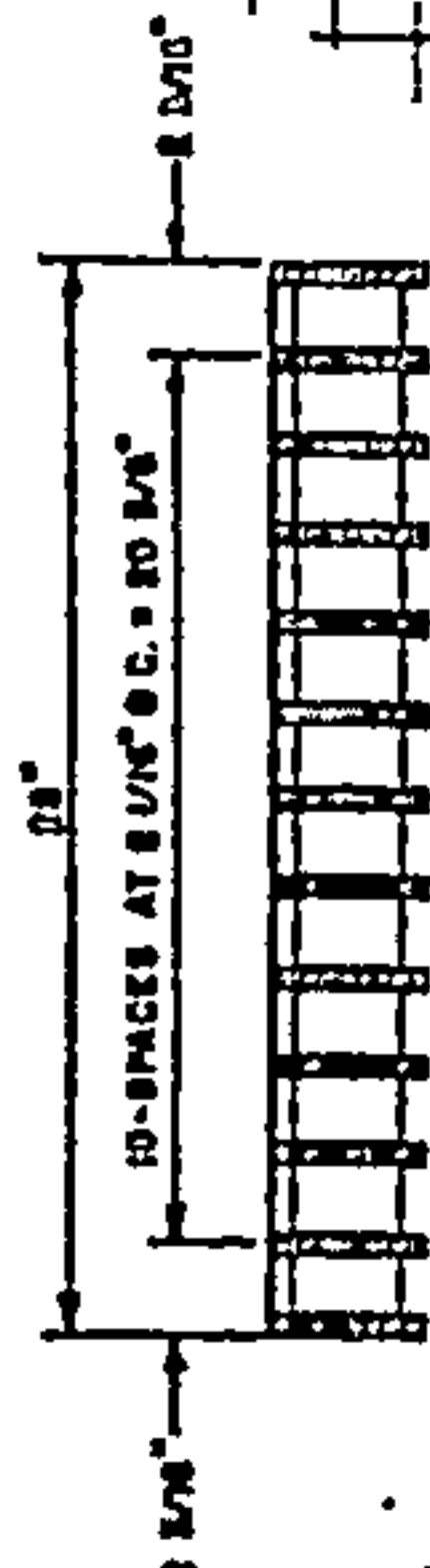
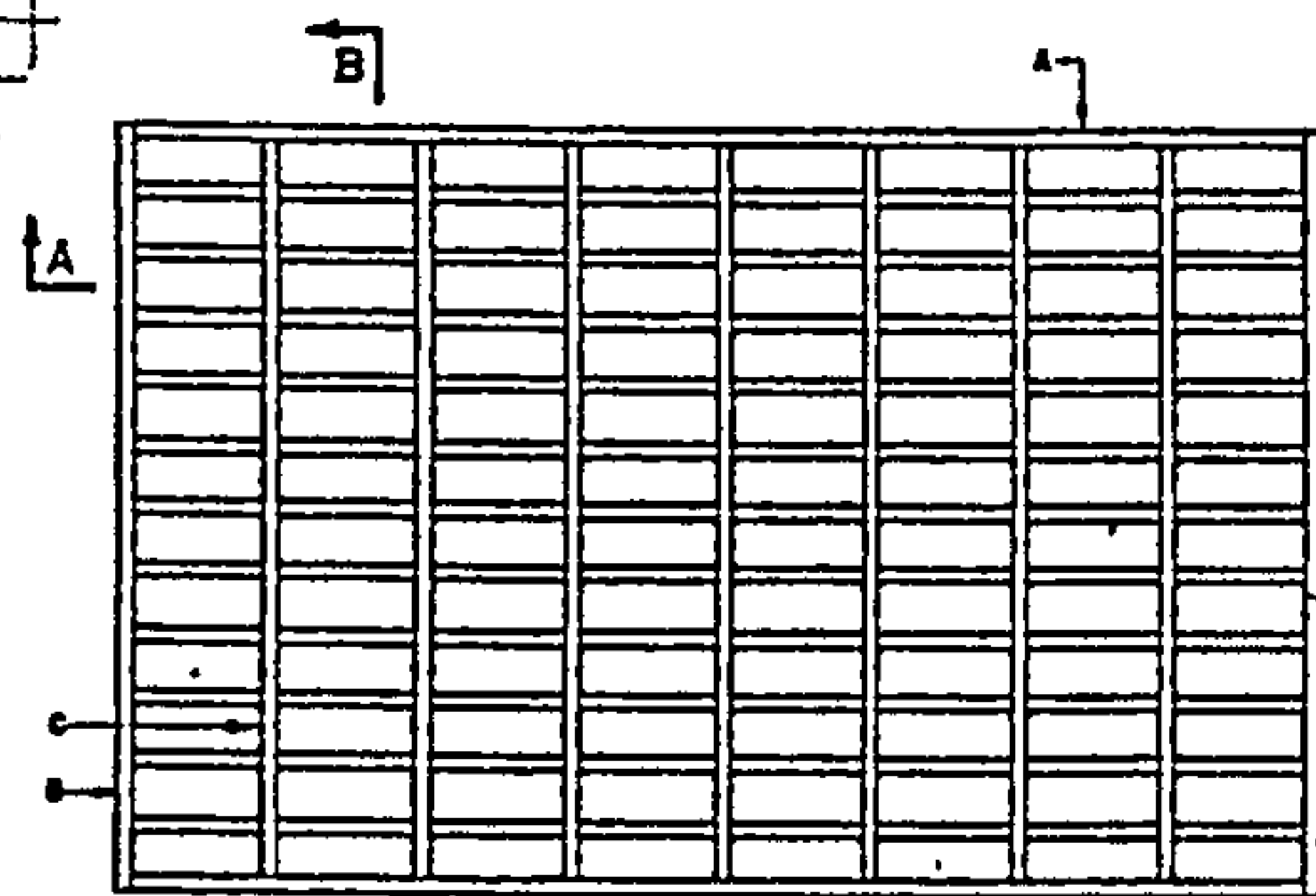
B-13



EQUATION	SGL A	DBL A	TRPL A	QDPL A
1) ORIFICE	$22.0 h^{0.5} + 16.5 h^{1.5}$	$43.9 h^{0.5} + 16.5 h^{1.5}$	$65.9 h^{0.5} + 16.5 h^{1.5}$	$87.8 h^{0.5} + 16.5 h^{1.5}$
2) 3-SIDED WEIR ($h \leq 0.83'$)	$36.4 h^{1.5}$	$46.2 h^{1.5}$	$56.0 h^{1.5}$	$65.7 h^{1.5}$
3) 4-SIDED WEIR ($h > 0.83'$)	ADD TO 2): $11(h-0.83)^{1.5}$	ADD TO 2): $22(h-0.83)^{1.5}$	ADD TO 2): $33(h-0.83)^{1.5}$	ADD TO 2): $44(h-0.83)^{1.5}$

1) $Q = 0.6 A \sqrt{2gh} + 3.3(5') h^{1.5}$
 2) & 3) $Q = 3.3 P h^{1.5}$

GRATE CAPACITY (Q) IN CFS



TC 0.83'
HEAD (h) IN FEET

BOHANNAN-HUSTON INC.

PROJECT NAME DURANGO Inlets 30 & 31 SHEET OF
 PROJECT NO. BY JPK DATE 4/9/92
 SUBJECT GRATE CURVE CAP. TYPES A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z DATE B-14

APPENDIX C

INROADS STORM DRAIN NETWORK FILE

Design Log

InRoads Storm & Sanitary Design Log

Drainage File: P:\20150324\CDP\Control\Data\Utility\20150013_SD.sdb

Design File: \\A-ABQ-NAS1\ABQ-USERS\SSTEFFEN\DOCUMENTS\DRAWING1.DWG

Display Log: \\A-ABQ-NAS1\ABQ-USERS\SSTEFFEN\DOCUMENTS\design.log

Date: Thursday, March 05, 2015 6:33:36 AM

HGL/EGL Computations:

Table A:

Struct_ID	D (in)	Q (cfs)	L (ft)	V (ft/s)	d (ft)	dc (ft)	V ² /2g (ft)	Sf (ft/ft)	Dn_Soffit (ft)	EGLdn (ft)	HGLdn (ft)	Tot_Loss (ft)	EGLup (ft)	HGLup (ft)	Rim_Elev. (ft)
Outfall	-	-	-	-	-	-	-	-	-	-	-	-	-	5447.87	-
SDP60 <i>Pond</i>	60	175.76	96.09	8.95	-	-	1.25	0.0046	5443.97	5449.12	5447.87	0.44	5449.55	5448.31	-
IN16	-	-	-	-	-	-	-	-	-	5449.55	5448.31	0.46	5450.01	5448.77	5452.43
SDP24	60	164.86	9.51	8.40	-	-	1.10	0.0040	5444.55	5450.01	5448.77	0.04	5450.05	5448.96	-
SDMH11	-	-	-	-	-	-	-	-	-	5450.05	5448.96	0.58	5450.63	5449.53	5453.03
SDP23	54	98.56	96.20	6.20	-	-	0.60	0.0025	5444.50	5450.63	5449.53	0.24	5450.87	5450.27	-
exSDMH1	-	-	-	-	-	-	-	-	-	5450.87	5450.27	0.52	5451.39	5450.79	5452.15
SDP8	48	98.56	211.12	7.84	-	-	0.96	0.0047	5448.76	5451.39	5450.79	0.99	5452.39	5451.43	-
SDMH7	-	-	-	-	-	-	-	-	-	5452.39	5451.43	0.39	5452.77	5451.82	5458.40
SDP18	48	57.40	35.52	4.57	-	-	0.32	0.0016	5450.55	5452.77	5451.82	0.06	5452.83	5452.51	-
SDMH13	-	-	-	-	-	-	-	-	-	5452.83	5452.51	0.05	5452.88	5452.56	5455.20
SDP61	48	57.40	245.98	4.57	-	-	0.32	0.0016	5450.74	5452.88	5452.56	0.39	5453.28	5452.95	-
SDMH14	-	-	-	-	-	-	-	-	-	5453.28	5452.95	0.05	5453.33	5453.01	5454.42
SDP36	42	45.00	127.62	4.68	-	-	0.34	0.0020	5451.06	5453.33	5453.01	0.26	5453.58	5453.24	-
SDMH15	-	-	-	-	-	-	-	-	-	5453.58	5453.24	0.09	5453.68	5453.34	5453.96
SDP37 <i>-0127</i>	24	16.30	21.81	5.19	-	-	0.42	0.0052	5450.42	5453.68	5453.34	0.11	5453.79	5453.37	-
IN22	-	-	-	-	-	-	-	-	-	5453.79	5453.37	-	5453.79	5453.37	5453.80
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	5449.55	5448.31	-
IN16	-	-	-	-	-	-	-	-	-	-	-	-	5449.55	5448.31	-
(Alternate HGL and EGL Used)	-	-	-	-	-	-	-	-	-	5449.55	5448.31	0.12	5449.67	5448.43	5452.43
SDP28	18	7.50	16.85	15.65	-	-	3.81	0.0051	5448.95	5449.01	5448.73	-	5449.01	5448.73	-
IN14	-	-	-	-	-	-	-	-	-	5453.21	5449.40	-	5453.21	5449.40	5452.93
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	5450.05	5448.96	-
SDMH11	-	-	-	-	-	-	-	-	-	5450.05	5448.96	0.31	5450.36	5449.26	5453.03
SDP29	36	55.40	74.61	7.84	-	-	0.95	0.0069	5446.83	5450.36	5449.26	0.51	5450.87	5449.92	-
SDMH2	-	-	-	-	-	-	-	-	-	5450.87	5449.92	0.16	5451.03	5450.08	5454.09
SDP3	24	30.20	97.95	9.61	-	-	1.44	0.0178	5449.25	5451.03	5450.08	1.75	5452.78	5451.34	-
SDMH3	-	-	-	-	-	-	-	-	-	5452.78	5451.34	0.46	5453.24	5451.80	5455.53
SDP4	24	30.20	113.83	13.96	-	-	3.03	0.0178	5451.74	5453.24	5451.80	-	5457.48	5454.45	-
SDMH4	-	-	-	-	-	-	-	-	-	5457.48	5454.45	-	5457.48	5454.45	5459.00
SDP5	24	30.20	177.97	15.83	1.17	1.86	3.90	-	5455.23	5458.35	5454.45	-	5465.69	5461.80	-
SDMH5	-	-	-	-	-	-	-	-	-	5465.69	5461.80	-	5465.69	5461.80	5466.43
SDP32	24	17.80	59.75	8.55	1.26	1.52	1.14	-	5464.62	5465.02	5463.88	-	5465.65	5464.52	-
IN11	-	-	-	-	-	-	-	-	-	5465.65	5464.52	-	5465.65	5464.52	5467.76
SDP31	24	8.90	28.04	12.18	0.57	1.06	2.30	-	5465.26	5466.82	5464.52	-	5467.37	5465.06	-
IN12	-	-	-	-	-	-	-	-	-	5467.37	5465.06	-	5467.37	5465.06	5469.00
SDP30	18	5.50	20.01	10.87	0.49	0.90	1.84	-	5466.00	5466.90	5465.06	-	5467.51	5465.67	-
IN10	-	-	-	-	-	-	-	-	-	5467.51	5465.67	-	5467.51	5465.67	5470.17
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	5450.05	5448.96	-
SDMH11	-	-	-	-	-	-	-	-	-	5450.05	5448.96	0.24	5450.29	5449.20	5453.03
SDP27	24	10.90	41.04	3.47	-	-	0.19	0.0023	5446.03	5450.29	5449.20	0.10	5450.39	5450.20	-
IN15	-	-	-	-	-	-	-	-	-	5450.39	5450.20	0.13	5450.52	5450.34	5453.15
SDP26	18	7.50	20.03	4.24	-	-	0.28	0.0051	5450.15	5450.52	5450.34	0.10	5450.62	5450.34	-
IN13	-	-	-	-	-	-	-	-	-	5450.62	5450.34	-	5450.62	5450.34	5453.36

Hal

SeitePage 2

2-2

Dn solr

20150324 conceptual sd hgl.txt

SDP7	24	10.80	72.15	15.26	0.55	1.17	3.62	-	5472.67	5475.15	5471.53	-	5480.25	5476.63	-
SDMH10	-	-	-	-	-	-	-	-	-	5480.25	5476.63	-	5480.25	5476.63	5482.23
SDP21	18	5.40	30.83	11.27	0.47	0.89	1.97	-	5477.63	5478.61	5476.63	-	5480.11	5478.13	-
IN1	-	-	-	-	-	-	-	-	-	5480.11	5478.13	-	5480.11	5478.13	5482.34
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	5474.63	5474.34	-
SDMH22	-	-	-	-	-	-	-	-	-	5474.63	5474.34	0.12	5474.74	5474.46	5481.81
SDP53	30	6.50	130.28	1.32	-	-	0.03	0.0003	5473.75	5474.74	5474.46	0.03	5474.78	5474.75	-
SDMH17	-	-	-	-	-	-	-	-	-	5474.78	5474.75	0.02	5474.80	5474.77	5475.17
SDP54	24	6.50	43.71	2.07	-	-	0.07	0.0008	5473.71	5474.80	5474.77	0.04	5474.84	5474.77	-
SDMH24	-	-	-	-	-	-	-	-	-	5474.84	5474.77	0.01	5474.85	5474.78	5476.11
SDP55	24	5.00	81.28	1.59	-	-	0.04	0.0005	5473.93	5474.85	5474.78	0.04	5474.89	5474.85	-
SDMH23	-	-	-	-	-	-	-	-	-	5474.89	5474.85	0.02	5474.91	5474.87	5476.92
SDP56	18	2.50	36.71	1.41	-	-	0.03	0.0006	5473.76	5474.91	5474.87	0.02	5474.93	5474.90	-
IN26	-	-	-	-	-	-	-	-	-	5474.93	5474.90	-	5474.93	5474.90	5477.15
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	5467.39	5465.95	-
SDMH18	-	-	-	-	-	-	-	-	-	5467.39	5465.95	-	5467.39	5465.95	5470.16
SDP45	18	6.20	8.23	3.51	-	-	0.19	0.0035	5465.82	5467.39	5465.95	0.03	5467.42	5467.23	-
IN25	-	-	-	-	-	-	-	-	-	5467.42	5467.23	-	5467.42	5467.23	5470.20
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	5455.46	5451.46	-
IN5	-	-	-	-	-	-	-	-	-	5455.46	5451.46	-	5455.46	5451.46	5454.96
SDP12	18	5.30	28.02	9.62	0.52	0.88	1.44	-	5451.96	5452.90	5451.46	-	5453.32	5451.88	-
IN6	-	-	-	-	-	-	-	-	-	5453.32	5451.88	-	5453.32	5451.88	5455.36
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	5480.25	5476.63	-
SDMH10	-	-	-	-	-	-	-	-	-	5480.25	5476.63	-	5480.25	5476.63	5482.23
SDP22	18	5.40	29.98	7.60	0.63	0.89	0.90	-	5477.71	5477.74	5476.84	-	5478.24	5477.34	-
IN2	-	-	-	-	-	-	-	-	-	5478.24	5477.34	-	5478.24	5477.34	5481.96
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	5474.84	5474.77	-
SDMH24	-	-	-	-	-	-	-	-	-	5474.84	5474.77	0.01	5474.85	5474.78	5476.11
SDP58	18	1.50	22.54	0.85	-	-	0.01	0.0002	5473.68	5474.85	5474.78	0.00	5474.86	5474.84	-
IN27	-	-	-	-	-	-	-	-	-	5474.86	5474.84	-	5474.86	5474.84	5476.05
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	5474.89	5474.85	-
SDMH23	-	-	-	-	-	-	-	-	-	5474.89	5474.85	0.02	5474.91	5474.87	5476.92
SDP57	18	2.50	9.51	1.41	-	-	0.03	0.0006	5473.76	5474.91	5474.87	0.01	5474.91	5474.88	-
IN23	-	-	-	-	-	-	-	-	-	5474.91	5474.88	-	5474.91	5474.88	5476.92

Table B:

LOSSES								- LOSS_COEFFICIENTS							
Str_ID	Hf	Hb	Hstr	Hc	He	Hj	Total	Dstr	Ko	CD	Cd	Cq	Cp	Cb	K
Outfall	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP60	0.44	-	-	-	-	-	0.44	-	-	-	-	-	-	-	-
IN16	-	-	0.46	-	-	-	0.46	8.86	0.496	1.000	0.705	1.056	1.000	1.000	0.369
SDP24	0.04	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-
SDMH11	-	-	0.58	-	-	-	0.58	8.96	1.502	1.000	0.709	0.495	1.000	1.000	0.527
SDP23	0.24	-	-	-	-	-	0.24	-	-	-	-	-	-	-	-
exSDMH1	-	-	0.52	-	-	-	0.52	5.64	1.526	1.000	0.573	1.000	1.000	1.000	0.874
SDP8	0.99	-	-	-	-	-	0.99	-	-	-	-	-	-	-	-
SDMH7	-	-	0.39	-	-	-	0.39	4.88	1.477	1.000	0.563	0.489	1.000	1.000	0.407
SDP18	0.06	-	-	-	-	-	0.06	-	-	-	-	-	-	-	-
SDMH13	-	-	0.05	-	-	-	0.05	5.87	0.256	1.000	0.629	1.000	1.000	1.000	0.161
SDP61	0.39	-	-	-	-	-	0.39	-	-	-	-	-	-	-	-
SDMH14	-	-	0.05	-	-	-	0.05	5.49	0.211	1.000	0.605	1.288	1.000	1.000	0.164
SDP36	0.26	-	-	-	-	-	0.26	-	-	-	-	-	-	-	-
SDMH15	-	-	0.09	-	-	-	0.09	5.32	1.518	1.000	0.643	0.286	1.000	1.000	0.279
SDP37	0.11	-	-	-	-	-	0.11	-	-	-	-	-	-	-	-
IN22	-	-	-	-	-	-	-	5.74	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN16	-	-	0.12	-	-	-	0.12	8.86	1.412	1.000	0.705	0.097	1.000	1.000	0.096
SDP28	0.09	-	-	-	-	-	0.09	-	-	-	-	-	-	-	-
IN14	-	-	-	-	-	-	-	0.47	-	-	-	-	-	-	-

C-3

New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH11	-	-	0.31	-	-	-	0.31	8.96	1.502	1.000	0.709	0.264	1.000	1.000	0.282	-
SDP29	0.51	-	-	-	-	-	0.51	-	-	-	-	-	-	-	-	-
SDMH2	-	-	0.16	-	-	-	0.16	2.77	0.228	1.000	0.477	1.531	1.000	1.000	0.166	-
SDP3	1.75	-	-	-	-	-	1.75	-	-	-	-	-	-	-	-	-
SDMH3	-	-	0.46	-	-	-	0.46	1.69	0.704	1.000	0.452	1.000	1.000	1.000	0.318	-
SDP4	2.03	-	-	-	-	-	2.03	-	-	-	-	-	-	-	-	-
SDMH4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP5	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-
SDMH5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP32	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-
IN11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP31	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-
IN12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP30	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-
IN10	-	-	-	-	-	-	-	0.49	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH11	-	-	0.24	-	-	-	0.24	8.96	0.160	1.000	0.709	1.950	1.000	1.000	0.221	-
SDP27	0.10	-	-	-	-	-	0.10	-	-	-	-	-	-	-	-	-
IN15	-	-	0.13	-	-	-	0.13	1.55	1.671	1.000	0.429	1.000	1.000	1.000	0.717	-
SDP26	0.10	-	-	-	-	-	0.10	-	-	-	-	-	-	-	-	-
IN13	-	-	-	-	-	-	-	0.98	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH7	-	-	0.15	-	-	-	0.15	4.88	0.174	1.000	0.563	1.642	1.000	1.000	0.161	-
SDP6	0.16	-	-	-	-	-	0.16	-	-	-	-	-	-	-	-	-
SDMH6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP17	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-
SDMH9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP14	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-
SDMH12	-	-	1.03	-	-	-	1.03	0.96	1.551	1.000	0.212	0.635	1.000	1.000	0.209	-
SDP59	0.47	-	-	-	-	-	0.47	-	-	-	-	-	-	-	-	-
SDMH21	-	-	0.07	-	-	-	0.07	2.62	0.318	1.000	0.420	1.000	1.000	1.000	0.134	-
SDP35	0.32	-	-	-	-	-	0.32	-	-	-	-	-	-	-	-	-
SDMH22	-	-	0.16	-	-	-	0.16	3.19	1.553	1.000	0.519	0.685	1.000	1.000	0.552	-
SDP34	1.94	-	-	-	-	-	1.94	-	-	-	-	-	-	-	-	-
IN31	-	-	0.84	-	-	-	0.84	1.13	0.901	1.000	0.355	1.000	1.000	1.000	0.320	-
SDP25	0.35	-	-	-	-	-	0.35	-	-	-	-	-	-	-	-	-
IN30	-	-	-	-	-	-	-	1.99	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH14	-	-	0.02	-	-	-	0.02	5.49	1.487	1.000	0.605	0.084	1.000	1.000	0.075	-
SDP39	0.08	-	-	-	-	-	0.08	-	-	-	-	-	-	-	-	-
IN19	-	-	-	-	-	-	-	1.52	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH14	-	-	0.02	-	-	-	0.02	5.49	1.487	1.000	0.605	0.084	1.000	1.000	0.075	-
SDP40	0.03	-	-	-	-	-	0.03	-	-	-	-	-	-	-	-	-
IN20	-	-	-	-	-	-	-	1.47	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH15	-	-	0.09	-	-	-	0.09	5.32	1.518	1.000	0.643	0.286	1.000	1.000	0.279	-
SDP38	0.06	-	-	-	-	-	0.06	-	-	-	-	-	-	-	-	-
IN21	-	-	-	-	-	-	-	2.82	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH15	-	-	0.07	-	-	-	0.07	5.32	0.172	1.000	0.643	1.785	1.000	1.000	0.197	-
SDP41	0.11	-	-	-	-	-	0.11	-	-	-	-	-	-	-	-	-
SDMH20	-	-	0.22	-	-	-	0.22	4.00	1.186	1.000	0.758	1.000	1.000	1.000	0.899	-
SDP42	0.21	-	-	-	-	-	0.21	-	-	-	-	-	-	-	-	-
SDMH19	-	-	0.10	-	-	-	0.10	1.22	1.128	1.000	0.372	1.000	1.000	1.000	0.419	-
SDP43	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-
SDMH18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP44	0.15	-	-	-	-	-	0.15	-	-	-	-	-	-	-	-	-
IN24	-	-	-	-	-	-	-	0.47	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH2	-	-	0.26	-	-	-	0.26	2.77	1.553	1.000	0.477	0.366	1.000	1.000	0.271	-

										20150324 conceptual sd hgl.txt							
SDP11	0.88	-	-	-	-	-	0.88	-	-	-	-	-	-	-	-	-	-
IN5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP15	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-	-
IN3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP16	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-	-
IN4	-	-	-	-	-	-	-	0.59	-	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP2	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-	-
IN8	-	-	1.05	-	-	-	1.05	0.72	1.667	1.000	0.270	1.000	1.000	1.000	1.000	0.450	-
SDP1	0.17	-	-	-	-	-	0.17	-	-	-	-	-	-	-	-	-	-
IN7	-	-	-	-	-	-	-	1.25	-	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP33	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-	-
IN9	-	-	-	-	-	-	-	0.46	-	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP7	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-	-
SDMH10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP21	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-	-
IN1	-	-	-	-	-	-	-	0.47	-	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH22	-	-	0.12	-	-	-	0.12	3.19	1.090	1.000	0.519	0.737	1.000	1.000	1.000	0.417	-
SDP53	0.03	-	-	-	-	-	0.03	-	-	-	-	-	-	-	-	-	-
SDMH17	-	-	0.02	-	-	-	0.02	3.12	1.502	1.000	0.571	1.000	1.000	1.000	1.000	0.858	-
SDP54	0.04	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-
SDMH24	-	-	0.01	-	-	-	0.01	2.95	0.200	1.000	0.631	1.333	1.000	1.000	1.000	0.168	-
SDP55	0.04	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-
SDMH23	-	-	0.02	-	-	-	0.02	2.69	1.080	1.000	0.597	0.821	1.000	1.000	1.000	0.529	-
SDP56	0.02	-	-	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-
IN26	-	-	-	-	-	-	-	0.80	-	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP45	0.03	-	-	-	-	-	0.03	-	-	-	-	-	-	-	-	-	-
IN25	-	-	-	-	-	-	-	1.14	-	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP12	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-	-
IN6	-	-	-	-	-	-	-	0.52	-	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDP22	-	-	-	-	-	-	SuperCrt	-	-	-	-	-	-	-	-	-	-
IN2	-	-	-	-	-	-	-	0.63	-	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH24	-	-	0.01	-	-	-	0.01	2.95	1.518	1.000	0.631	0.222	1.000	1.000	1.000	0.212	-
SDP58	0.00	-	-	-	-	-	0.00	-	-	-	-	-	-	-	-	-	-
IN27	-	-	-	-	-	-	-	2.22	-	-	-	-	-	-	-	-	-
New Branch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDMH23	-	-	0.02	-	-	-	0.02	2.69	0.823	1.000	0.597	1.047	1.000	1.000	1.000	0.514	-
SDP57	0.01	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-
IN23	-	-	-	-	-	-	-	0.37	-	-	-	-	-	-	-	-	-

EXHIBITS

EXHIBIT 1: PRELIMINARY PLAT

EXHIBIT 2: DEVELOPED BASIN MAP

**EXHIBIT 3: INLET AND STORM DRAIN NETWORK
MAP**

EXHIBIT 4: GRADING PLAN

**EXHIBIT 5: SUPPLEMENTAL EXHIBITS FROM
DMP**

EXHIBIT 1

PRELIMINARY PLAT

*See DRB file
#1010401*

EXHIBIT 2

DEVELOPED BASIN MAP

EXHIBIT 3

INLET AND STORM DRAIN NETWORK MAP

EXHIBIT 4

GRADING PLAN

EXHIBIT 5

SUPPLEMENTAL EXHIBITS FROM DMP

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