

CITY OF ALBUQUERQUE

Planning Department
David S. Campbell, Director



Timothy M. Keller, Mayor

April 9, 2019

Diane Hoelzer, PE
Mark Goodwin & Associates, PA.
PO Box 90606
Albuquerque, NM 87199

**Re: Cinnamon Morning - 2700 Rio Grande Blvd NW
Grading and Drainage Plan and Drainage Report
Engineer's Stamp dated: 4/5/2019 (G12D024)**

Dear Ms. Hoelzer,

Based upon the information provided in the submittal received on 4/05/2019 the above-referenced plan is approved for Site Plan, Preliminary Plat, Work Order, and Grading Permit.

PO Box 1293

An Engineer's Certification is required prior to release of Financial Guarantees and/or Building Permit(s).

Albuquerque

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, ccherne@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

NM 87103

If you have any questions, please contact me at 924-3986 or e-mail at jhughes@cabq.gov.

www.cabq.gov

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Cinnamon Morning Building Permit #: _____ Hydrology File #: _____

DRB#: PR-2019-002044 EPC#: _____ Work Order#: _____

Legal Description: 3A, Alvarado Gardens Unit 1

City Address: 2700 Rio Grande Blvd, Albuquerque, NM 87104

Applicant: Cinnamon Morning Development, LLC Contact: Skip Kruzich

Address: 2700 Rio Grande Blvd., Albuquerque, NM 87104

Phone#: 235-0754 Fax#: _____ E-mail: _____

Other Contact: Mark Goodwin & Associates, PA Contact: _____

Address: PO BOX 90606, Albuquerque, NM 87199

Phone#: 828.2200 Fax#: _____ E-mail: diane@goodwinengineers.com

TYPE OF DEVELOPMENT: 8 PLAT (# of lots) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE _____

IS THIS A RESUBMITTAL? ☒ Yes _____ No

DEPARTMENT _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

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
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: April 5, 2019 By: Diane Hoezler, PE

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



A TRACT OF LAND SITUATE WITHIN PROJECT SECTION 1 & 6, TOWNSHIP 10 NORTH, RANGE 2 & 3 EAST, NEW MEXICO PRINCIPAL MERIDIAN, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO BEING ALL OF LOT 3A, ALVARADO GARDENS AS SHOWN AND DESIGNATED ON SAID PLAT FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO AND CONTAINS 2.617 ACRES MORE OR LESS.

1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
5. THE EARTHWORK CONTRACTOR SHALL STOCKPILE ENOUGH MATERIAL ADJACENT TO RETAINING WALL LOCATIONS TO BE UTILIZED FOR WALL BACKFILL.
6. SITE DOES NOT LIE IN A 100 YEAR FLOOD ZONE.
7. ALL SITE WALLS SHALL CONFORM TO THE GENERAL HEIGHT AND DESIGN REGULATIONS CONTAINED IN DOB TABLE 5-7-1, SECTION 14-16-5.

ANY FENCING ALONG THE WEST PROPERTY BOUNDARY (ADJACENT TO RIO GRANDE BLVD.) SHALL MAINTAIN PUBLIC VIEW AND ANY NON-TRANSPARENT WALL CONSTRUCTED SHALL NOT EXCEED 3 FEET IN HEIGHT. WALLS ALONG THE NORTH, EAST AND SOUTH PROPERTY BOUNDARY MAY BE UP TO 6 FEET IN HEIGHT. A COYOTE FENCE OR CMU WALL MAY BE CONSTRUCTED ALONG THE NORTH AND EAST PROPERTY LINE AS DETAILED ON THIS SHEET. SOME AREAS ALONG THE NORTH PROPERTY LINE HAVE AN EXISTING COYOTE FENCE AND CMU/STUCCO WALL. THESE AREAS WILL NOT REQUIRE A NEW COYOTE FENCE TO BE CONSTRUCTED. ALONG THE SOUTH PROPERTY BOUNDARY, THERE IS AN EXISTING CMU WALL THAT SHALL REMAIN.

EXISTING CONDITIONS - PROJECT SITE IS BASICALLY FLAT. RAINFALL ON THE SITE REMAINS ON THE SITE. NO OFFSITE RUNOFF ENTERS THE SITE FROM ANY DIRECTION. THERE ARE A COUPLE OF DEPRESSION AREAS ON SITE THAT COLLECT RUNOFF FROM THE SITE.

PROPOSED CONDITIONS - RUNOFF FROM EACH OF THE 7 LOTS IN THE CLUSTER DEVELOPMENT WILL FLOW TO THE STREET AND BE CONVEYED AS SURFACE STREET RUNOFF TO THE OPEN SPACE RETENTION POND ON TRACT A. THE RETENTION POND IS DESIGNED FOR THE 100 YEAR-10 DAY STORM VOLUME WHICH IS 15,345 CU.FT. THE MAXIMUM WATER SURFACE ELEVATION AT THIS VOLUME IS 4963.51 FEET.

1. FINAL GRADE OF DIRT TO BE 1 TO 2 INCHES BELOW TOP OF CURB AND TOP OF SIDEWALK GRADE.
2. SURFACE BETWEEN BACK OF CURB AND SIDEWALK TO BE COVERED WITH GRAVEL MULCH (MINIMUM 3/4") OR LANDSCAPE COBBLES. DO NOT FILL ENTIRE SWALE.
3. LANDSCAPE FABRIC IS RECOMMENDED, BUT NOT REQUIRED, BETWEEN THE DIRT AND THE STONE. IF LANDSCAPE FABRIC IS TO BE USED IT IS TO BE PERMEABLE.

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: ***CINNAMON MORNING CLUSTER DEVELOPMENT
GRADING & DRAINAGE PLAN***

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
	G-12/G-13	1	1

F:\A16\JRS\A16051 Cinnamon Morning Project\GRADE & DRAIN\A16051 G&D PLAN 4.dwg Last saved by: Digne 4/5/19

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***Cinnamon Morning Cluster Development
(7 lots plus 1 lot)***

Drainage Management Plan

***Prepared by
Mark Goodwin & Associates, P.A.***

March 2019



Cinnamon Morning

A Cluster Development Community

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AHYMO Summary files (100Y-6H)

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GRADING AND DRAINAGE PLAN

PRELIMINARY PLAT

SITE PLAN

CITY OF ALBUQUERQUE

Planning Department
David S. Campbell, Director



Timothy M. Keller, Mayor

February 14, 2019

Diane Hoelzer, PE
Mark Goodwin & Associates, PA.
PO Box 90606
Albuquerque, NM 87199

**Re: Cinnamon Morning - 2700 Rio Grande Blvd NW
Grading and Drainage Plan and Drainage Report
Engineer's Stamp dated: 1/16/2019 (G12D024)**

Dear Ms. Hoelzer,

Based upon the information provided in the submittal received on 2/02/2019 the above-referenced plan can't be approved for Site Plan, Preliminary Plat, Work Order, or Grading Permit until the following are addressed.

A Flat Grading Scheme, per DPM 22.5.G, is proposed which must include a block wall around the perimeter and onsite retention of the 100 year 10 day volume.

Prior to Site Plan approval:

1. A block wall must be shown and labeled on both the G&D Plan and the Site Plan. Include a typical cross-section of the wall showing the proximity to the property line and the existing and proposed grades.
2. Existing spot elevations must be added on the adjacent property at each of the lot corners.
3. The hatch pattern at the edge of the pond must be identified and added to the legend.

Prior to Preliminary Plat, Grading Permit and Work Order approval:

4. The emergency spillway appears to be through Los Amigos Drive into Rio Grande Blvd. and should be sized for the peak 100 year inflow into the pond. Weir depth calculations are required on the G&D Plan to identify the emergency overflow elevation which must be lower than the Top of Pond.

Additional comments for the Plat are as follows:

5. The perimeter wall, ponds, and an engineer's certification must be shown as private drainage infrastructure on the Infrastructure List. Drainage easements must be shown on the plat for all ponds using the standard plat language found on the Hydrology Section web page.
6. Drainage easements must be shown on the plat for all ponds using the standard plat language found on the Hydrology Section web page.

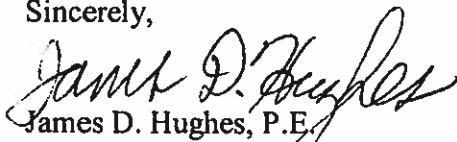
Planning Department
David S. Campbell, Director

Timothy M. Keller, Mayor

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, ccherne@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3986 or e-mail at jhughes@cabq.gov.

Sincerely,



James D. Hughes, P.E.
Principal Engineer, Hydrology
Planning Department



D. Mark Goodwin & Associates, P.A.
Consulting Engineers

P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 828-2200 FAX 797-9539

March 19, 2019

James Hughes, PE
Hydrology Division, Planning Dept.
Development and Building Services
City of Albuquerque
PO Box 1293
Albuquerque, NM 87103

**Re: Cinnamon Morning 2700 Rio Grande Blvd NW
Engineers stamp date 3-18-19 (G12 / G024)**

Dear Mr. Hughes:

In response to your February 14 comment letter,

SITE PLAN

1. Along the south property line there is an existing CMU wall that will remain as the property boundary. Along the east property line there is an existing wire fence. Along the north property line there is a combination of CMU stucco wall, coyote fence and wire/wood fence. Under proposed conditions, the entire north and east boundary will have at a minimum an 8" CMU filled flood wall. This will prevent any potential for cross lot drainage between adjacent properties. In the areas where there is no fencing the typical coyote fence as show on the Site Plan and Grading and Drainage Plan will be constructed. In the areas along the north boundary where there is an existing solid wall barrier, no additional wall construction is required. A special note to this affect has been added to the Site Plan and the Grading and Drainage Plan.
2. A few additional spot elevations on the adjacent properties have been added to the grading plan. This whole area is rather flat so no additional existing spots should be necessary.
3. Okay.
4. As we discussed on the phone, it is not possible to create an overflow spillway for this project. The site has been lowered considerably in an effort to balance the required earthwork. As an alternative design, an 8" CMU concrete filled flood wall has been added to the drainage plan to prevent any offsite/onsite cross lot drainage. In addition, a 1.0 foot water block at the entrance road is created to prevent any drainage from Rio Grande Blvd from entering the site. In addition, there is almost twice the required capacity available in the retention pond.
5. A note has been added to the infrastructure list. The drainage language will be placed on the final plat prior to recordation. A templated for the required language on the final plat is in this report right after the 11x17 preliminary plat exhibit.
6. A blanket drainage easement has been added to Tract A.
7. Okay, an Erosion and Sediment control plan will be prepared prior to any earthwork.

Please call me if you have any questions.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.


Diane Hoelzer, PE
Senior Engineer

DLH/dlh

f:\16051/ Cinnamon Morning response letter.docx

I. PROJECT DESCRIPTION

The Cinnamon Morning project site is located east of Rio Grande Blvd. between Candelaria and Indian School Road. The site covers an approximate area of 2.5 acres. The two buildings located in the far southwest corner of the site are to remain and will be separated out from the cluster development community. All other existing buildings on the site will be demolished. This includes all the existing buildings adjacent to the north property boundary and the large rectangular building located in the center of the site adjacent to the south property boundary.

The project site is bounded by Rio Grande Blvd. to the west, partial open space corridor with a natural ditch to the east, and residential developments to the north and south.

This property is zoned R-A which allows for Cluster Development community (per section 4-3(B)(2)). The portion of the parcel to be used as the cluster development is 1.9 acres and will consist of 7 residential lots, a private gated road and common open space area. The remaining 0.6 acres will consist of the existing home and a public road that will connect to the private road.

II. DESIGN CRITERIA AND PREVIOUS DEVELOPMENT

The design criteria used in this report was in accordance with Section 22.2 Hydrology of the Development Process Manual, Volume 2, Design Criteria, Latest edition. The 100-year 6-hour storm event was analyzed to determine street capacities using $P(1 \text{ hr})=1.72"$, $P(6 \text{ hr})=2.20"$ and $P(24)=2.48"$. The onsite Land Treatment values used were based on Table A-5, in the DPM. The retention pond located in Tract A was sized for the 100 year-10 day storm event.

III. EXISTING DRAINAGE CONDITIONS

The entire project site is basically flat, varying in elevation by less than a foot, with the exception of a 2' high landscape buffer located adjacent to Rio Grande Blvd. There are three oval shaped landscaped areas that appear to be slightly depressed in the middle of the property that capture onsite runoff. It does not appear that any offsite flows enter the project site from any direction.

IV. DEVELOPED DRAINAGE CONDITIONS

Under developed conditions, all runoff from the cluster development, including from lots 1 through 7 and the private and public Los Amigos Road will be conveyed through surface street flow to the retention pond located on Tract A. The retention pond is designed to contain runoff from the 100 year 10 day storm with a maximum WSEL at 4963.51'. The 100 year 6 hour volume is contained at an elevation of 4963.12'. There is a 5 foot wide bench around the perimeter of the pond with an elevation that varies from 4967.0 along the northern boundary and then down to 4965.0' along the southern boundary'.

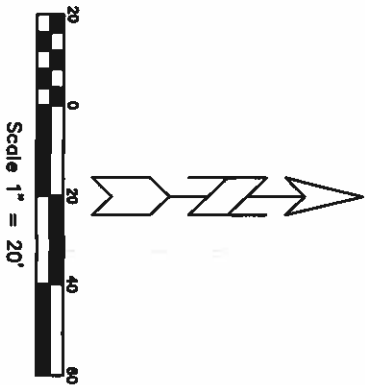
Lot 8 and the existing home that is being subdivided from the cluster development will remain as-is unchanged. Since all runoff from the site is remaining on the site, first flush is taken care of in the retention pond.



Figure 2 Aerial Google Earth Map

THIS IS NOT A BOUNDARY SURVEY.
IT IS A TOPOGRAPHIC SURVEY.
PROPERTY LINES ARE SHOWN AS
INFORMATION ONLY. BOUNDARY DATA
SHOWN IS FROM PREVIOUS SURVEY
REFERENCED HEREON.

BENCHMARKS	
ADMS Bench Peg stamped "3-012"	
From the intersection of I-40 and Rio Grande Boulevard NW, travel north on Rio Grande Boulevard 0.3 miles to the intersection with Lechero Ave. and the station on the left.	
Geographic Position, N.T.S. (NAD83)	
U.S. State Plane Coordinates (United Zone)	
Elevation, N.T.S. (NAD83) = 4400.540	



TOPOGRAPHIC SURVEY FOR
LOT 3
ALVARADO GARDENS
UNIT 1
WITHIN THE
TOWN OF ALBUQUERQUE GRANT
PROJECTED SECTION 1
TOWNSHIP 10 NORTH, RANGE 2 EAST, NMPM
AND
PROJECTED SECTION 6
TOWNSHIP 10 NORTH, RANGE 3 EAST, NMPM
MRGCD MAP 34
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
MAY, 2016

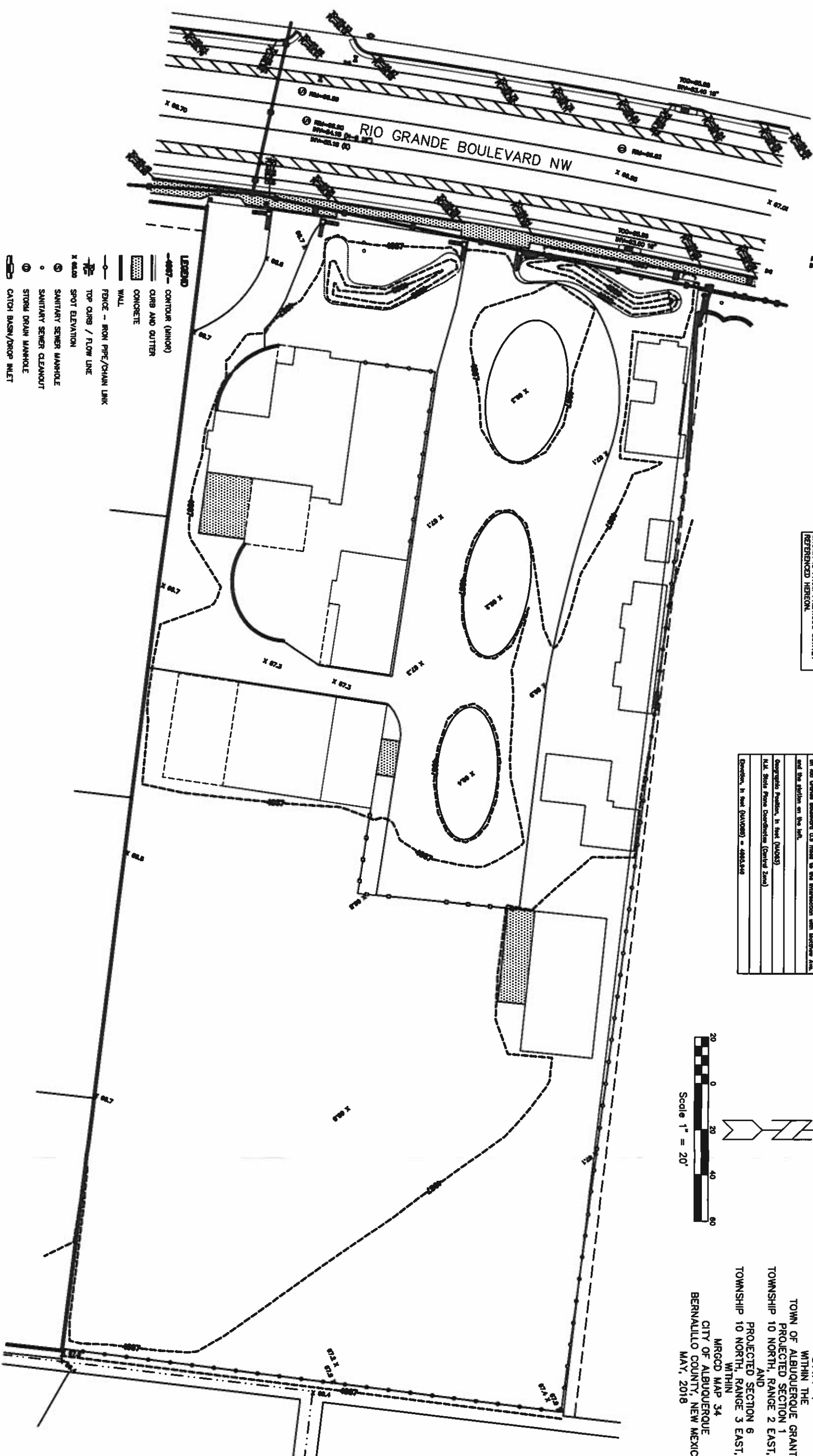




Figure 4 Onsite Sub Basin Boundary Exhibit

**Cinnamom Morning Cluster Development
Common Open Space Calculations**

THIS WORKS- 7 LOTS			
Lot ID	Lot Size SF	Minimum SF	Deficit SF
1	7261.43	10890	3628.57
2	7260.26	10890	3629.74
3	8350.87	10890	2539.13
4	8102.76	10890	2787.24
5	6832.00	10890	4058.00
6	6794.47	10890	4095.53
7	6865.50	10890	4024.50
REQ'D OPEN SPACE =			24762.71

Lot ID	Area SF	
Tract B	6403.87	
Lot 1	7261.43	
Lot 2	7260.26	
Lot 3	8350.87	
Lot 4	8102.76	
Lot 5	6832.00	
Lot 6	6794.47	
Lot 7	6865.50	
Tract A	20893.97	OPEN SPACE
Tract C	3917.00	OPEN SPACE
Total Area	82682.1	
30% of Area	24804.6	

(Revised 3-15-19)

RULE: COMMON OPEN SPACE =
1. 30% OF GROSS ACREAGE OR
2. 100% OF THE AREA GAINED THROUGH LOT SIZE REDUCTION, WHICHEVER IS GREATER.

REQUIRED COMMON OPEN SPACE = 24,804.6 SF
COMMON OPEN SPACE PROVIDED = 24811 SF

Figure 5 Common Open Space Calculations

INFRASTRUCTURE LIST

(Rev. 2-16-18)

EXHIBIT "A"

TO SUBDIVISION IMPROVEMENTS AGREEMENT

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

DRB Project No.: **PR-2019-002044**

DRB Application No.: **SD-2019-00034**

CINNAMON MORNING

PROPOSED NAME OF PLAT AND/OR SITE DEVELOPMENT PLAN

Remaining Portion of Lot 3, Alvarado Gardens, Unit No. 1

EXISTING LEGAL DESCRIPTION PRIOR TO PLATTING ACTION

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

Financially Guaranteed DRC #	Size	Type of Improvement	Location	From	To	Construction Certification		
						Inspector	P.E.	City Cnst Engineer
	24' FF	RES PVMT	LOS AMIGOS DRIVE	RIO GRANDE	LOT 7	/	/	/
	4'	SIDEWALK (SOUTHSIDE)		BLVD.		/	/	/
	6"	ESTATE CURB SOUTHSIDE				/	/	/
	6"	MTBL C&G NORTHSIDE				/	/	/
	24' FF	RES PVMT	LOS AMIGOS LANE	WEST LOT 7	LOT 3/4 END	/	/	/
	4'	SIDEWALK (SOUTHSIDE)				/	/	/
	6"	ESTATE CURB SOUTHSIDE				/	/	/
	6"	STD C&G NORTHSIDE				/	/	/
	20' FF	70 LF One-sided HAMMERHEAD	Los Amigos Lane	btwn Lot 1 / 2		/	/	/
		6" STD C&G bothsides				/	/	/
	12'	RES PVMT	Public Access- Turnaround Esmt	LOT 8		/	/	/
	6"	WATERLINE	Los Amigos Drive & Los Amigos Lane	EX 6" WL at Rio Grande Blvd	LOT 3 / 4	/	/	/
	8"	SANITARY SEWER	Los Amigos Drive & Los Amigos Lane	EX 8" SAS at Rio Grande Blvd	LOT 3 / 4	/	/	/

Financially Guaranteed DRC #	Constructed Under DRC #
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Construction Certification	
Private Inspector	City Cnst Engineer
/	/
/	/

Size: 6' Type of Improvement: Sidewalk Location: East side Rio Grande Blvd From: North P.L. To: South P.L.

RETENTION POND WITH RUNDOWNS

The items listed below are on the CCIP and approved for Impact Fee credits. Signatures from the Impact Fee Administrator and the City User Department is required prior to DRB approval of this listing. The items listed below are subject to the standard SIA requirements.			
Financially Guaranteed DRC #	Constructed Under DRC #	Type of Improvement	Location
<input type="text"/>	<input type="text"/>		
<input type="text"/>	<input type="text"/>		

Construction Certification			
Private Inspector	City Cnst Engineer	Approval of Creditable Items:	Date
/	/		
Impact Fee Administrator Signature		City User Dept. Signature	Date

NOTES

- 1 If the site is located in a floodplain, then the financial guarantee will not be released until the LOMR is approved by FEMA. Street lights per City requirements.
- 2 An engineer's certification is required for the grading and drainage plan that includes the construction of the perimeter wall and ponding area prior to acceptance of the close out package for the onsite infrastructure construction.

AGENT / OWNER	DEVELOPMENT REVIEW BOARD MEMBER APPROVALS
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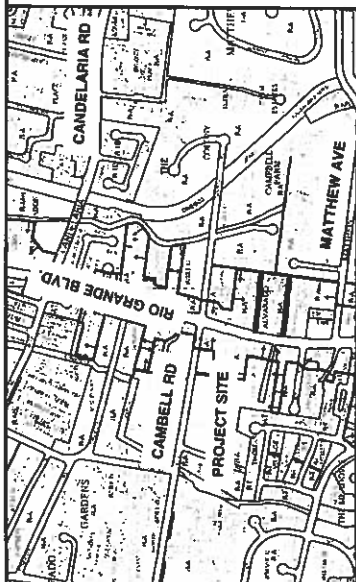
DIANE HOELZER, PE
NAME (print)

MARK GOODWIN & ASSOC.
FIRM
Diene Hoelzer 3/30/19
SIGNATURE / date

DRB CHAIR - date	PARKS & RECREATION - date
TRANSPORTATION DEVELOPMENT - date	AMAFCA - date
UTILITY DEVELOPMENT - date	CODE ENFORCEMENT - date
CITY ENGINEER - date	- date

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



LOCATION MAP (NTS) ZONE ATLAS MAP: G-12-Z & G-13-Z

SUBDIVISION DATA

GROSS ACREAGE 2.5103 AC
ZONE ATLAS NO. G-12-Z & G-13-Z
TOTAL NO. OF EXISTING LOTS 1 LOTS
TOTAL NO. OF TRACTS CREATED 3 TRACTS
TOTAL NO. OF LOTS CREATED 8 LOTS
EXISTING ZONING R-A
DATE OF SURVEY MAY, 2018
AREA OF DEDICATED PUBLIC RIGHT-OF-WAY 0.1766 AC.
MILEAGE OF STREETS CREATED 0.04 MILES

PURPOSE OF PLAT

1. SUBDIVIDE REMAINING PORTION OF "LOT 3A, ALVARADO GARDENS UNIT 1" INTO 8 RESIDENTIAL LOTS, 2 OPEN SPACE TRACTS, AND 1 PRIVATE ROADWAY TRACT.
2. GRANT NEW EASEMENTS AS SHOWN.
3. CREATE OPEN SPACE AREA.
4. TO DEDICATE PUBLIC RIGHT-OF-WAY AS SHOWN.

FREE CONSENT AND DEDICATION

The subdivision hereon described is with the free consent and in accordance with the desires of the undersigned owner(s) and/or proprietor(s) thereof and said owner(s) and/or proprietor(s) do hereby dedicate all streets, public right-of-ways shown hereon to the City of Albuquerque in fee simple with warranty covenants and do hereby grant: all access, utility and drainage easements shown hereon including the right to construct, operate, inspect, and maintain facilities therein; and all public utility easements shown hereon for the common and joint use of electric power, water, sewer, gas, and communication lines for burial, distribution, and including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees and shrubs and/or proprietor(s) do hereby consent to the elimination of lot lines as shown hereon. Said owner(s) and/or proprietor(s) do hereby consent to all of the foregoing and do hereby certify that this subdivision is their free act and deed. Said owner(s) warrant that they hold among them complete and indefeasible title in fee simple to the land subdivided.

Owner: CINNAMON MORNING DEVELOPMENT, LLC.
By: SUE PEROLICH, MANAGING MEMBER

Sue Perolich
SUE PEROLICH
OWNER'S ACKNOWLEDGEMENT
DATE 1/17/19

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on 1-17-19
By SUE PEROLICH, MANAGING MEMBER
MANAGING MEMBER.

Notary Public
NOTARY PUBLIC
MY COMMISSION EXPIRES 8-19-19



LEGAL DESCRIPTION

A tract of land situated within the Town of Albuquerque Grant, projected Section 1, Township 10 North, Range 2 East, New Mexico Principal Meridian and projected Section 6, Township 10 North, Range 3 East, New Mexico Principal Meridian, within M.R.G.C.D. Map No. 34, City of Albuquerque, Bernalillo County, New Mexico, being the REMAINING PORTION OF LOT 3, ALVARADO GARDENS, UNIT NO. 1, as the same is shown and designated on said plat, filed for record in the office of the County Clerk of Bernalillo County, New Mexico, on July 15, 1932, in Volume 027, Folio 010, and containing 2.5103 acres more or less.

SOLAR NOTE

No property within the area of requested final action shall at any time be subject to a deed restriction, covenant or binding agreement prohibiting solar collectors from being installed on buildings or erected on the lots or parcels within the area of this plat.

DISCLAIMER

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

NOTES

1. Bearings are grid based on the New Mexico State Plane Coordinate System (Central Zone).
2. Distances are ground distances.
3. Bearings and distances in parenthesis are record.
4. Basis of boundary are the following plots of record entitled:
"ALVARADO GARDENS, UNIT NO. 1", (05-15-1932, 002-010)
"RO GRANDE BLVD NW RIGHT OF WAY MAP", (07-09-1956, 002-025)
"TRACT 21, IN UNIT ONE, ALVARADO GARDENS", (01-03-1962, 002-096)
"LOT 4-A THRU 4-H, ALVARADO GARDENS, UNIT 1", (04-08-2003, 2003C-096)
"PHON ENCANTADA SUBDIVISION", (12-13-2006, 2006C-380)
"LOTS 4-C-1 & 4-D-1, ALVARADO GARDENS, UNIT 1", (05-15-2007, 2007C-122)
"LOTS 23-A-1-A-1, 23-A-1-A-2 AND 23-B-1-A-1, ALVARADO GARDENS, UNIT 1", (06-19-2014, 2014C-057)
"WARRANTY DEED - LEWIS TO COA", (12-30-1956, D370-047)
"WARRANTY DEED - MASTERSON TO COA", (02-25-1957, D378-357)
"OUTCLOAM DEED - LUTTRELL TO COA", (02-28-1957, D378-358)
"WARRANTY DEED - MONTOTA", (04-08-2001, 2001C-99008)
all being records of Bernalillo County, New Mexico.
5. Field Survey performed in May, 2018.
6. City of Albuquerque, New Mexico 800 Zone R-A
7. 100 Year Flood Zone Designation: Zone X (areas protected by levees), as shown on Panel 331 of 825, Flood Insurance Rate Map, City of Albuquerque, Bernalillo County, New Mexico, dated August 16, 2012. This property does not lie in the 100 Year Flood Zone.
8. Title Report: None provided
9. All street centerline monumentation shall be installed at all centerline p.c.'s, p.t's, angle points, and street intersections and shown thus, Δ will be marked by a four inch (4") aluminum cap stamped
"CITY OF ALBUQUERQUE CENTERLINE MONUMENTATION"
"DO NOT DISTURB"
N.M.P.S. 7719
10. Monuments will be affixed at all points of curvature, points of tangency, street intersections, and at other angle points to show use of centerline monumentation.
11. Address: 2700 & 2714 Rio Grande Boulevard NW, Albuquerque, NM 87104

PRELIMINARY PLAT
FOR
CINNAMON MORNING CLUSTER DEVELOPMENT
WITHIN
THE TOWN OF ALBUQUERQUE GRANT
PROJECTED SECTION 1, TOWNSHIP 10 NORTH, RANGE 2 EAST, N.M.P.M.
AND PROJECTED SECTION 6, TOWNSHIP 10 NORTH, RANGE 3 EAST, N.M.P.M.
M.R.G.C.D. MAP NO. 34
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
JANUARY, 2019

PROJECT NUMBER:
Application Number:

PLAT APPROVAL

Utility Approvals:

Public Service Company of New Mexico	Date
New Mexico Gas Company	Date
Qwest Corporation and CenturyLink QC	Date
City Approvals:	Date
City Surveyor	1/23/19

Red Property Division	Date
Traffic Engineering, Transportation Division	Date
Albuquerque-Bernalillo County Water Utility Authority	Date
Parks and Recreation Department	Date
ANAFCA	Date
City Engineer	Date
Code Enforcement	Date
DOB Chairperson, Planning Department	Date

SURVEYOR'S CERTIFICATION:

I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that this plat and description were prepared by me or under my supervision, shows all easements as shown on the plat of record or made known to me by the owners and/or proprietors of the subdivision shown hereon, utility companies and other parties expressing an interest and meets the minimum requirements for monumentation and survey of the Albuquerque Subdivision Ordinance, and further meets the Minimum Standards for Land Surveying in the State of New Mexico, and is true and correct to the best of my knowledge and belief.



ALDRICH LAND
SURVEYING

P.O. BOX 30701, ALBUQ., N.M. 87190
505-884-1990

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

Public Utilities Commission of New Mexico (PUC), a New Mexico corporation, for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines, and for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines, and for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines.

Public Utilities Commission of New Mexico (PUC), a New Mexico corporation, for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines, and for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines, and for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines.

privilege of going upon, over and across adjoining lands of Grantor for the purpose and to install, maintain, and repair electric lines, gas lines, and other utility lines, and for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines, and for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines.

with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purpose and to install, maintain, and repair electric lines, gas lines, and other utility lines, and for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines, and for the purpose of installing, maintaining, and repairing electric lines, gas lines, and other utility lines.

PLAT FOR

CINNAMON MORNING CLUSTER DEVELOPMENT

WITHIN

THE TOWN OF ALBUQUERQUE GRANT

PROJECTED SECTION 1, TOWNSHIP 10 NORTH, RANGE 2 EAST, N.M.P.M.

AND PROJECTED SECTION 6, TOWNSHIP 10 NORTH, RANGE 3 EAST,

N.M.P.M.

M.R.G.C.D. MAP NO. 34

CITY OF ALBUQUERQUE

BERNALILLO COUNTY, NEW MEXICO

JANUARY, 2019

EASEMENTS

① EXISTING 10' PUE (12-13-2006, 2006C-380)

② EXISTING 5' PUE (04-09-2003, 2003C-095)

③ EXISTING 5' PUE (01-03-1962, C05-096)

④ EXISTING ENCROACHMENT AGREEMENT

ENCROACHMENT

① EXISTING 10' PUE (12-13-2006, 2006C-380)

② EXISTING 5' PUE (04-09-2003, 2003C-095)

③ EXISTING 5' PUE (01-03-1962, C05-096)

④ EXISTING ENCROACHMENT AGREEMENT

PROPERTY CORNERS

① SET 1/2' REBAR WITH CAP OR PK WITH TAG "LS 7719"

② FOUND 1/2" REBAR WITH CAP "LS 11463"

③ FOUND 2" PPE

④ FOUND 1/2" REBAR WITH CAP "LS 14268"

⑤ FOUND 1/2" REBAR (04-09-2003, 2003C-095)

Parcel Line Table

Line #	Length	Direction
L1	24.70	S08°28'53"W
L2	8.84	S49°55'59"W
L3	19.00	S52°37'53"E
L4	12.00	S52°37'53"W
L5	2.87	S83°28'37"E
L6	2.00	S06°33'23"W
L7	20.00	S83°28'37"E
L8	2.00	N06°33'23"E
L9	3.00	S83°03'44"E
L10	5.75	N82°33'53"W
L11	24.33	N64°38'45"W
L12	26.92	S07°25'02"W
L13	2.60	N82°33'53"W

LOS AMIGOS DRIVE AS SHOWN HEREON IS DEDICATED IN FULL TO THE CITY OF ALBUQUERQUE FOR THE USE OF THE PUBLIC.

AGRS MONUMENT

"6-G-13AR 1880/1997"

N=1500719.134

E=1515743.949

C-G=0.999684045

Δα=-0014°23.60"

CENTRAL ZONE (NAAD83)

TRACT A

20,884 SQ FT

0.4737 ACRES

TRACT B

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT C

3,917 SQ FT

0.0899 ACRES

Parcel Line Table

Line #	Length	Direction
L14	33.50	S07°26'07"W
L15	42.78	N82°33'53"W
L16	18.24	S07°27'51"W
L17	3.01	S83°25'54"E

LOS AMIGOS DRIVE

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT D

18,975 SQ FT

0.4356 ACRES

(NET 0.4223 AC.)

TRACT E

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT F

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

Parcel Line Table

Line #	Length	Direction
L18	2.80	N82°33'53"W
L19	3.00	S83°03'44"E
L20	5.75	N82°33'53"W
L21	24.33	N64°38'45"W
L22	26.92	S07°25'02"W
L23	2.60	N82°33'53"W

LOS AMIGOS DRIVE

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT G

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT H

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT I

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

Parcel Line Table

Line #	Length	Direction
L24	2.80	N82°33'53"W
L25	3.00	S83°03'44"E
L26	5.75	N82°33'53"W
L27	24.33	N64°38'45"W
L28	26.92	S07°25'02"W
L29	2.60	N82°33'53"W

LOS AMIGOS DRIVE

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT J

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT K

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT L

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

Parcel Line Table

Line #	Length	Direction
L30	2.80	N82°33'53"W
L31	3.00	S83°03'44"E
L32	5.75	N82°33'53"W
L33	24.33	N64°38'45"W
L34	26.92	S07°25'02"W
L35	2.60	N82°33'53"W

LOS AMIGOS DRIVE

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT M

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT N

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT O

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

Parcel Line Table

Line #	Length	Direction
L36	2.80	N82°33'53"W
L37	3.00	S83°03'44"E
L38	5.75	N82°33'53"W
L39	24.33	N64°38'45"W
L40	26.92	S07°25'02"W
L41	2.60	N82°33'53"W

LOS AMIGOS DRIVE

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT P

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT Q

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT R

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

Parcel Line Table

Line #	Length	Direction
L42	2.80	N82°33'53"W
L43	3.00	S83°03'44"E
L44	5.75	N82°33'53"W
L45	24.33	N64°38'45"W
L46	26.92	S07°25'02"W
L47	2.60	N82°33'53"W

LOS AMIGOS DRIVE

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT S

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT T

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT U

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

Parcel Line Table

Line #	Length	Direction
L48	2.80	N82°33'53"W
L49	3.00	S83°03'44"E
L50	5.75	N82°33'53"W
L51	24.33	N64°38'45"W
L52	26.92	S07°25'02"W
L53	2.60	N82°33'53"W

LOS AMIGOS DRIVE

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT V

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT W

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT X

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

Parcel Line Table

Line #	Length	Direction
L54	2.80	N82°33'53"W
L55	3.00	S83°03'44"E
L56	5.75	N82°33'53"W
L57	24.33	N64°38'45"W
L58	26.92	S07°25'02"W
L59	2.60	N82°33'53"W

LOS AMIGOS DRIVE

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT Y

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT Z

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT AA

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

Parcel Line Table

Line #	Length	Direction
L60	2.80	N82°33'53"W
L61	3.00	S83°03'44"E
L62	5.75	N82°33'53"W
L63	24.33	N64°38'45"W
L64	26.92	S07°25'02"W
L65	2.60	N82°33'53"W

LOS AMIGOS DRIVE

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT AB

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT AC

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

TRACT AD

7,201 SQ FT

0.1667 ACRES

(NET 0.1521 AC.)

Parcel Line Table

Line #	Length	Direction
L66	2.80	N82°33'53"W
L67	3.00	S83°03'44"E
L68	5.75	N82°33'53"W
L69	24.33	N64°38'45"W
L70	26.92	S07°25'02"W
L71	2.60	N82°33'53"W

ALDRICH LAND SURVEYING

P.O. BOX 30701, ALBUQUERQUE, N.M. 87190

505-884-1990

Scale: AS SHOWN

Drawn: DMR

Checked: TA

Date: 3/18/2019

Job: A16051

Sheet of 2

Curve Table			
Curve #	Length	Delta	Chord Length
C1	216.63	2824.79	4.30
C2	10.85	17.00	41.45
C3	4.30	17.00	5.25
C4	14.33	16.00	91.33
C5	37.80	47.00	46.07
C6	1.47	16.00	5.25
C7	42.10	47.00	51.33
C8	12.87	18.00	46.07
C9	3.14	2.00	90.00
C10	3.14	2.00	90.00
C11	42.87	27.37	88.12

Curve Table			
Curve #	Length	Delta	Chord Length
C12	41.32	27.37	90.68
C13	11.24	20.00	32.20
C14	8.15	20.00	36.18
C15	38.18	2821.79	0.73
C16	34.35	35.00	51.33
C17	2.57	28.00	5.25
C18	22.52	28.00	46.07
C19	48.78	2821.79	1.01
C20	17.48	67.63	14.84
C21	60.34	2821.79	1.23
C22	70.35	2821.79	1.43

Section 4. EASEMENT LANGUAGE FOR SUBDIVISION PLAT

A. Drainage Facilities and/or Detention Areas Maintained by Lot Owner

Areas designated on the accompanying plat as "drainage easements" ["detention areas"] are hereby dedicated by the owner as a perpetual easement for the common use and benefit of the various lots within the subdivisions for the purpose of permitting the conveyance of storm water runoff and the constructing* and maintaining of drainage facilities [storm water detention facilities] in accordance with standards prescribed by the City of Albuquerque.** No fence, wall, planting, building or other obstruction may be placed or maintained in easement area without approval of the City Engineer of the City of Albuquerque. There also shall be no alteration of the grades or contours in said easement area without the approval of the City Engineer. It shall be the duty of the lot owners of this subdivision to maintain said drainage easement [detention area] and facilities at their cost in accordance with standards prescribed by the City of Albuquerque. The City shall have the right to enter periodically to inspect the facilities. In the event said lot owners fail to adequately and properly maintain drainage easement [detention area] and facilities, at any time following fifteen (15) days written notice to said lot owners, the City may enter upon said area, perform said maintenance, and the cost of performing said maintenance shall be paid by applicable lot owners proportionately on the basis of lot ownership. In the event lot owners fail to pay the cost of maintenance within thirty (30) days after demand for payment made by the City, the City may file a lien against all lots in the subdivision for which proportionate payment has not been made. The obligations imposed herein shall be binding upon the owner, his heirs, and assigns and shall run with all lots within this subdivision.

The Grantor agrees to defend, indemnify, and hold harmless, the City, its officials, agents and employees from and against any and all claims, actions, suits, or proceedings of any kind brought against said parties for or on account of any matter arising from the drainage facility provided for herein or the Grantor's failure to construct, maintain, or modify said drainage facility.

*This assumes owner's promise to construct will be imposed by separate Subdivision Improvements Agreement.

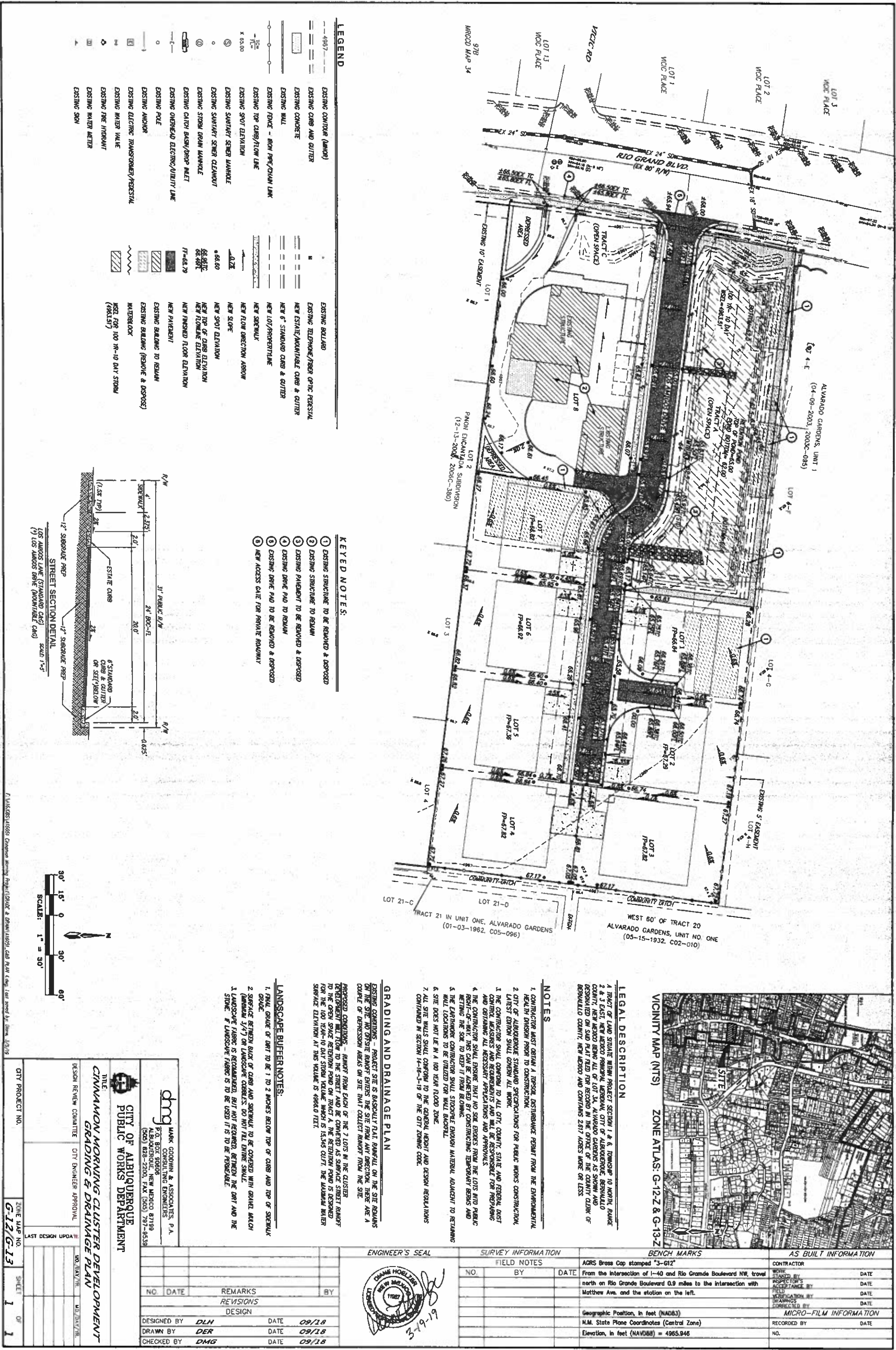
**[Possible alternative:] Grantor shall construct drainage [detention] facilities in the easement in accordance with standards prescribed by the City and plans and specifications approved by the City Engineer in accordance with the drainage report entitled _____, submitted by _____ on, _____ and approved by the Albuquerque City Engineer on _____, together with the amendments approved on _____, which report and amendments are on file in the office of the City Engineer.

B. Dedication of Drainage Easements: City Constructs and Maintains

A perpetual easement on the areas designated on this plat as "drainage easement" ["detention area"] is hereby dedicated to the City of Albuquerque for the purpose of permitting the conveyance of storm water runoff and for the purpose of constructing, maintaining, operating, removing, and replacing storm water drainage facilities ["detention facilities"]. No fence, wall, planting, building, or other obstruction may be placed or maintained in said easement area and there shall be no alteration of the grades or contours in said dedicated area without the approval of the City Engineer of the City of Albuquerque. No obstructions may be placed in easement area which would prevent ingress and egress to same by maintenance vehicles or which would prevent vehicles traveling on drainage way for maintenance purposes.

*The City could require dedication of this property in fee simple since the City here will be responsible for construction and maintenance. The beginning of the first sentence could read: "the areas designated on this plat as 'drainage facilities' are hereby dedicated to the City of Albuquerque in fee simple for the purpose of _____." We might then add: "the City may use the property hereby dedicated for other public purposes."

Drainage Esmt Language for Final Plat



C:\Users\116051\Documents\Cinnamon Morning Project\GRADE & DRAINAGE\CLUSTER PLAN 4.dwg, 3/18/2019 12:06:29 PM, L:\CINCH D BOND.pcl



VICINITY MAP (N)

ZONE ATLAS: G-12-Z & G-13-Z

WEST 60' OF TRACT 20
ALVARADO GARDENS, UNIT NO. ONE
(05-15-1932, C02-010)

TRACT 21 IN UNIT ONE, ALVARADO GARDENS
(01-03-1962, C05-096)

COMMUNITY DITCH

LOT 13
WIDE PLACE

LOT 12
WIDE PLACE

LOT 11
WIDE PLACE

LOT 10
WIDE PLACE

LOT 9
WIDE PLACE

LOT 8
WIDE PLACE

LOT 7
WIDE PLACE

LOT 6
WIDE PLACE

LOT 5
WIDE PLACE

LOT 4
WIDE PLACE

LOT 3
WIDE PLACE

LOT 2
WIDE PLACE

LOT 1
WIDE PLACE

ALVARADO GARDENS UNIT 1
(04-09-2003, 2003C-095)

TRACT 21 IN UNIT ONE, ALVARADO GARDENS
(01-03-1962, C05-096)

COMMUNITY DITCH

LOT 13
WIDE PLACE

LOT 12
WIDE PLACE

LOT 11
WIDE PLACE

LOT 10
WIDE PLACE

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WIDE PLACE

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LOT 4
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LOT 3
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LOT 2
WIDE PLACE

LOT 1
WIDE PLACE

ALVARADO GARDENS UNIT 1
(04-09-2003, 2003C-095)

TRACT 21 IN UNIT ONE, ALVARADO GARDENS
(01-03-1962, C05-096)

COMMUNITY DITCH

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LOT 1
WIDE PLACE

ALVARADO GARDENS UNIT 1
(04-09-2003, 2003C-095)

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LOT 1
WIDE PLACE

ALVARADO GARDENS UNIT 1
(04-09-2003, 2003C-095)

TRACT 21 IN UNIT ONE, ALVARADO GARDENS
(01-03-1962, C05-096)

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LOT 1
WIDE PLACE

ALVARADO GARDENS UNIT 1
(04-09-2003, 2003C-095)

TRACT 21 IN UNIT ONE, ALVARADO GARDENS
(01-03-1962, C05-096)

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LOT 1
WIDE PLACE

ALVARADO GARDENS UNIT 1
(04-09-2003, 2003C-095)

TRACT 21 IN UNIT ONE, ALVARADO GARDENS
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WIDE PLACE

ALVARADO GARDENS UNIT 1
(04-09-2003, 2003C-095)

TRACT 21 IN UNIT ONE, ALVARADO GARDENS
(01-03-1962, C05-096)

COMMUNITY DITCH

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ALVARADO GARDENS UNIT 1
(04-09-2003, 2003C-095)

TRACT 21 IN UNIT ONE, ALVARADO GARDENS
(01-03-1962, C05-096)

COMMUNITY DITCH

LOT 13
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ALVARADO GARDENS UNIT 1
(04-09-2003, 2003C-095)

TRACT 21 IN UNIT ONE, ALVARADO GARDENS
(01-03-1962, C05-096)

COMMUNITY DITCH</

APPENDIX A - HYDROLOGY

Table 1 Summary of Hydrology

AHYMO Summary files (100y-6h)

AHYMO Input file

Precipitation Table

Cinnamon Morning Cluster Development												
Table 1 Summary of Hydrology Parameters												
LOT ID	AREA SF	AREA SQ.MI.	PAD SF	DRIVEWAY SF	Land Treatment Values				DISCHARGE CFS	VOLUME AC.FT.	D	C
					A	B	C	D				
Lot 1	7261.43	0.0002605	3687	400	3174.4							
Lot 2	7260.26	0.0002604	3675	400	3185.3							
Lot 3	8350.87	0.0002995	4990	609	2752.4							
Lot 4	8102.76	0.0002906	4717	609	2776.8							
Lot 5	6832.00	0.0002451	3615	400	2817.0							
Lot 6	6794.47	0.0002437	3599	400	2795.5							
Lot 7	6865.50	0.0002463	3513	400	2952.5							
Lots 1- thru 7	51467.29	0.0018461	27796	3218	20453.8	0	20	20	60	4.12	60	0.149
Public Road	7042.94	0.0002526			538.0	0	0	8	92	0.66	92	0.025
Private Road	6403.87	0.0002297			612.0	0	0	10	90	0.6	90	0.023
Tract A O.S.	20893.97	0.0007495			21729.1	0	50	50	0	1.21	0	0.034
Tract C O.S.	3917.59	0.0001405			5012.9	0	50	50	0	0.23	0	0.006
Lot 8	18971.42	0.0006805	6781	0	12190.4		25	40	Total	6.82	35	0.237
												0.046

Retention Volume Requirement= $100\text{yr}-10\text{day} = V_{10\text{day}} = V_{360} + AD \times (P_{10\text{DAY}} - P_{360})/12$

AD Lots = $1.1815 \times 0.60 = 0.70892$ acres
 AD Public = $0.16168 \times 0.92 = 0.14875$ acres
 AD Private = $0.14701 \times 0.90 = 0.13231$ acres
 AD Total = 0.98998 acres

Volume 100 yr- 6 hr = 0.237 AF = 10,324 cu.ft.

Volume 100 yr-10day = $0.237 + (0.98998 \times (3.57 - 2.20)/12) = 0.350023$ Ac.Ft. = 15,247.00 Cu.Ft.

Cinnamon Morning Cluster Development					
Pond Volume Calculations					
ELEV	AREA	VOLUME	SUM-VOL	SUM-VOL	
ft.	sq.ft.	cu.ft.	cu.ft.	ac.ft.	
62.0	4055.59	0			
62.5	10,119.82	3,430	3,430		
63.0	11,285.99	5,349	8,779		
63.1			10,324		100 yr-6 hr
63.5			15,247		100 yr-10 day
64.0	13,673.98	12,461	21,240		
65.0	15,812.20	14,730	35,970		

THE POND HAS 2 TIMES CAPACITY OF THE 100 YEAR 10 DAY STORM EVENT.
 Revised: 3-18-19

AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4) - Ver. S4.01a, Rel: 01a RUN DATE (MON/DAY/YR) =03/18/2019
INPUT FILE = C:\Program Files (x86)\AHYMO-S4\cinmorn_6.dat USER NO.= M-GoodwinMMSiteA90075759

COMMAND	IDENTIFICATION	NO.	FROM TO ID ID	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE =
*S CINNAMON MORNING SUBDIVISION DEVELOPED CONDITIONS										
*S	100 YEAR 6-HOUR STORM EVENT FILE: CINMORN_6.DAT (3-18-19)									
START										
RAINFALL	TYPE=	1	NOAA	14						
*s	*****									
*s	Onsite Lots 1-7									
*S	*****									
COMPUTE NM HYD	100.00	-	1	0.00185	4.12	0.149	1.51173	1.500	3.487 PER IMP=	60.00
*S	*****									
*s	Lot 8									
*S	*****									
COMPUTE NM HYD	100.10	-	1	0.00068	1.38	0.046	1.25498	1.500	3.159 PER IMP=	35.00
*S	*****									
*s	PUBLIC ROAD									
*S	*****									
COMPUTE NM HYD	201.00	-	1	0.00025	0.66	0.025	1.87157	1.500	4.095 PER IMP=	92.00
*S	*****									
*s	PRIVATE ROAD									
*S	*****									
COMPUTE NM HYD	202.00	-	1	0.00023	0.60	0.023	1.85210	1.500	4.076 PER IMP=	90.00
*S	*****									
*s	OPEN SPACE-TRACT A									
*S	*****									
COMPUTE NM HYD	301.00	-	1	0.00075	1.21	0.034	0.85517	1.500	2.523 PER IMP=	0.00
*S	*****									
*s	OPEN SPACE-TRACT C									
*S	*****									
COMPUTE NM HYD	302.00	-	1	0.00014	0.23	0.006	0.85517	1.500	2.600 PER IMP=	0.00
FINISH										

TIME= 0.00
RAIN6= 2.200

```

*S      CINNAMON MORNING SUBDIVISION DEVELOPED CONDITIONS
*S      100 YEAR 6-HOUR STORM EVENT FILE: CINMORN_6.DAT (3-18-19)
START    0.0 HRS PUNCH CODE=0 PRINT LINES=-6
RAINFALL TYPE=1 RAIN QUARTER=0.0 RAIN ONE=1.72
          RAIN SIX=2.20 RAIN DAY=2.48 DT=.05
*S *****
*S Onsite Lots 1-7
*S *****
COMPUTE NM HYD      ID=1  HYD=100.00 DA=.0018461 SQ MI
                    PER A=0  B=20  C=20 D=60
                    TP=.133 HRS      RAIN=-1
PRINT HYD      ID=1  CODE=1
*S *****
*s Lot 8
*S *****
COMPUTE NM HYD      ID=1  HYD=100.10 DA=.0006805 SQ MI
                    PER A=0  B=25  C=40 D=35
                    TP=.133 HRS      RAIN=-1
PRINT HYD      ID=1  CODE=1
*S *****
*s PUBLIC ROAD
*S *****
COMPUTE NM HYD      ID=1  HYD=201. DA=.0002526 SQ MI
                    PER A=0  B=0  C=8  D=92
                    TP=.133 HRS      RAIN=-1
PRINT HYD      ID=1  CODE=1
*S *****
*s PRIVATE ROAD
*S *****
COMPUTE NM HYD      ID=1  HYD=202. DA=.0002297 SQ MI
                    PER A=0  B=0  C=10 D=90
                    TP=.133 HRS      RAIN=-1
PRINT HYD      ID=1  CODE=1
*S *****
*s OPEN SPACE-TRACT A
*S *****
COMPUTE NM HYD      ID=1  HYD=301. DA=.0007495 SQ MI
                    PER A=0  B=50  C=50 D=0
                    TP=.133 HRS      RAIN=-1
PRINT HYD      ID=1  CODE=1
*S *****
*s OPEN SPACE-TRACT C
*S *****
COMPUTE NM HYD      ID=1  HYD=302. DA=.0001405 SQ MI
                    PER A=0  B=50  C=50 D=0
                    TP=.133 HRS      RAIN=-1
PRINT HYD      ID=1  CODE=1
FINISH

```


PDS-based precipitation frequency estimates with 90% confidence intervals (in inches)¹

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.162 (0.139-0.190)	0.211 (0.179-0.246)	0.283 (0.241-0.332)	0.340 (0.288-0.397)	0.419 (0.353-0.488)	0.480 (0.404-0.560)	0.546 (0.455-0.636)	0.616 (0.509-0.716)	0.710 (0.581-0.827)	0.785 (0.638-0.913)
10-min	0.247 (0.212-0.289)	0.320 (0.273-0.375)	0.431 (0.366-0.505)	0.518 (0.439-0.604)	0.637 (0.537-0.743)	0.731 (0.614-0.852)	0.831 (0.692-0.967)	0.937 (0.774-1.09)	1.08 (0.884-1.26)	1.20 (0.970-1.39)
15-min	0.306 (0.263-0.359)	0.397 (0.338-0.464)	0.535 (0.454-0.626)	0.642 (0.544-0.749)	0.790 (0.666-0.921)	0.907 (0.761-1.06)	1.03 (0.858-1.20)	1.16 (0.960-1.35)	1.34 (1.10-1.58)	1.48 (1.20-1.72)
30-min	0.412 (0.354-0.483)	0.535 (0.455-0.625)	0.720 (0.611-0.843)	0.865 (0.733-1.01)	1.06 (0.897-1.24)	1.22 (1.02-1.42)	1.39 (1.16-1.62)	1.56 (1.29-1.82)	1.80 (1.48-2.10)	1.99 (1.62-2.32)
60-min	0.510 (0.438-0.598)	0.662 (0.563-0.774)	0.891 (0.756-1.04)	1.07 (0.907-1.25)	1.32 (1.11-1.54)	1.51 (1.27-1.76)	1.72 (1.43-2.00)	1.94 (1.60-2.25)	2.23 (1.83-2.60)	2.47 (2.01-2.87)
2-hr	0.594 (0.506-0.707)	0.760 (0.646-0.907)	1.01 (0.855-1.20)	1.21 (1.02-1.43)	1.49 (1.25-1.75)	1.71 (1.43-2.02)	1.95 (1.61-2.30)	2.21 (1.81-2.59)	2.56 (2.08-3.01)	2.85 (2.29-3.35)
3-hr	0.639 (0.550-0.757)	0.812 (0.696-0.964)	1.07 (0.916-1.26)	1.27 (1.09-1.50)	1.55 (1.32-1.83)	1.78 (1.50-2.09)	2.03 (1.70-2.37)	2.29 (1.90-2.68)	2.65 (2.17-3.10)	2.94 (2.39-3.46)
6-hr	0.742 (0.642-0.871)	0.937 (0.813-1.10)	1.21 (1.05-1.42)	1.43 (1.23-1.67)	1.73 (1.48-2.01)	1.96 (1.67-2.28)	2.20 (1.87-2.56)	2.46 (2.07-2.86)	2.82 (2.35-3.28)	3.11 (2.57-3.62)
12-hr	0.813 (0.712-0.933)	1.03 (0.899-1.18)	1.30 (1.14-1.49)	1.52 (1.33-1.74)	1.82 (1.58-2.07)	2.04 (1.77-2.33)	2.28 (1.98-2.60)	2.53 (2.15-2.88)	2.86 (2.42-3.31)	3.13 (2.62-3.66)
24-hr	0.924 (0.814-1.06)	1.16 (1.02-1.32)	1.45 (1.28-1.65)	1.68 (1.48-1.91)	1.99 (1.74-2.26)	2.23 (1.94-2.52)	2.48 (2.15-2.80)	2.73 (2.36-3.08)	3.06 (2.64-3.46)	3.33 (2.85-3.76)
2-day	0.964 (0.855-1.09)	1.21 (1.07-1.36)	1.50 (1.34-1.69)	1.74 (1.54-1.95)	2.05 (1.81-2.29)	2.28 (2.01-2.56)	2.53 (2.22-2.83)	2.77 (2.42-3.11)	3.10 (2.69-3.48)	3.35 (2.90-3.78)
3-day	1.07 (0.967-1.19)	1.34 (1.20-1.48)	1.65 (1.48-1.83)	1.89 (1.70-2.09)	2.22 (1.99-2.45)	2.47 (2.20-2.73)	2.72 (2.42-3.00)	2.97 (2.64-3.28)	3.30 (2.92-3.65)	3.55 (3.13-3.95)
4-day	1.18 (1.08-1.30)	1.47 (1.34-1.61)	1.79 (1.63-1.96)	2.05 (1.86-2.24)	2.39 (2.17-2.61)	2.65 (2.40-2.89)	2.91 (2.63-3.17)	3.16 (2.85-3.45)	3.50 (3.15-3.83)	3.75 (3.36-4.11)
7-day	1.34 (1.23-1.46)	1.66 (1.52-1.81)	2.01 (1.84-2.19)	2.29 (2.09-2.48)	2.64 (2.41-2.86)	2.90 (2.65-3.14)	3.16 (2.88-3.42)	3.40 (3.10-3.69)	3.72 (3.38-4.03)	3.94 (3.58-4.28)
10-day	1.48 (1.36-1.61)	1.83 (1.68-1.99)	2.23 (2.05-2.42)	2.55 (2.34-2.75)	2.96 (2.71-3.19)	3.26 (2.98-3.52)	3.57 (3.26-3.85)	3.86 (3.52-4.16)	4.24 (3.85-4.58)	4.51 (4.09-4.88)
20-day	1.83 (1.67-2.00)	2.26 (2.07-2.47)	2.74 (2.51-2.98)	3.09 (2.83-3.37)	3.54 (3.24-3.85)	3.87 (3.53-4.20)	4.17 (3.81-4.53)	4.46 (4.07-4.84)	4.81 (4.38-5.22)	5.05 (4.60-5.49)

c) By address 2700 Rio Grande Blvd NW, Albuquerque X Q

2) Use map (if ESRI interactive map is not loading, try adding the host: <https://js.arcgis.com/> to the firewall, or contact us at hdsc.questions@noaa.gov):

Satellite ▾
☒ Labels

+

-

100m

100ft

a) Select location
Move crosshair or double click

b) Click on station icon
☐ Show stations on map

Location information:

Name: Albuquerque, New Mexico, USA*

Latitude: 35.1200°

Longitude: -106.6747°

Elevation: 4965.45 ft **

* Source: ESRI Maps

** Source: USGS

POINT PRECIPITATION FREQUENCY (PF) ESTIMATES

WITH 90% CONFIDENCE INTERVALS AND SUPPLEMENTARY INFORMATION
NOAA Atlas 14, Volume 1, Version 5

APPENDIX A - HYDROLOGY

Table 1 Summary of Hydrology

AHYMO Summary files (100y-6h)

AHYMO Input file

Precipitation Table

Channel Report

Private Road to Swale-Standard C & G

Gutter

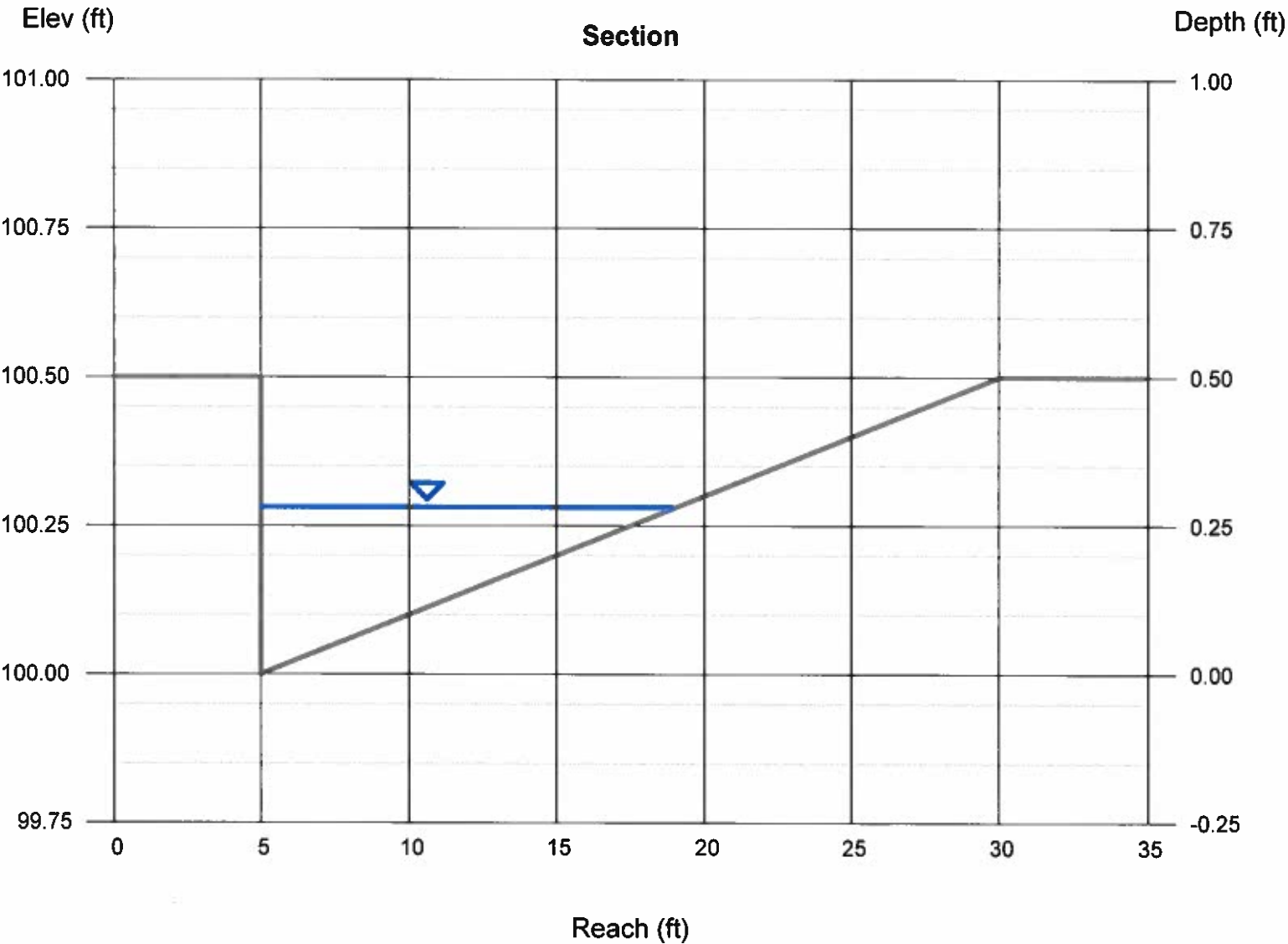
Cross SI, Sx (ft/ft)	= 0.020
Cross SI, Sw (ft/ft)	= 0.020
Gutter Width (ft)	= 2.00
Invert Elev (ft)	= 100.00
Slope (%)	= 0.60
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 4.85

Highlighted

Depth (ft)	= 0.28
Q (cfs)	= 4.850
Area (sqft)	= 1.97
Velocity (ft/s)	= 2.46
Wetted Perim (ft)	= 14.33
Crit Depth, Yc (ft)	= 0.30
Spread Width (ft)	= 14.05
EGL (ft)	= 0.37



Channel Report

Public Road to Swale-Mountable C & G

User-defined

Invert Elev (ft) = 0.13
Slope (%) = 0.60
N-Value = 0.015

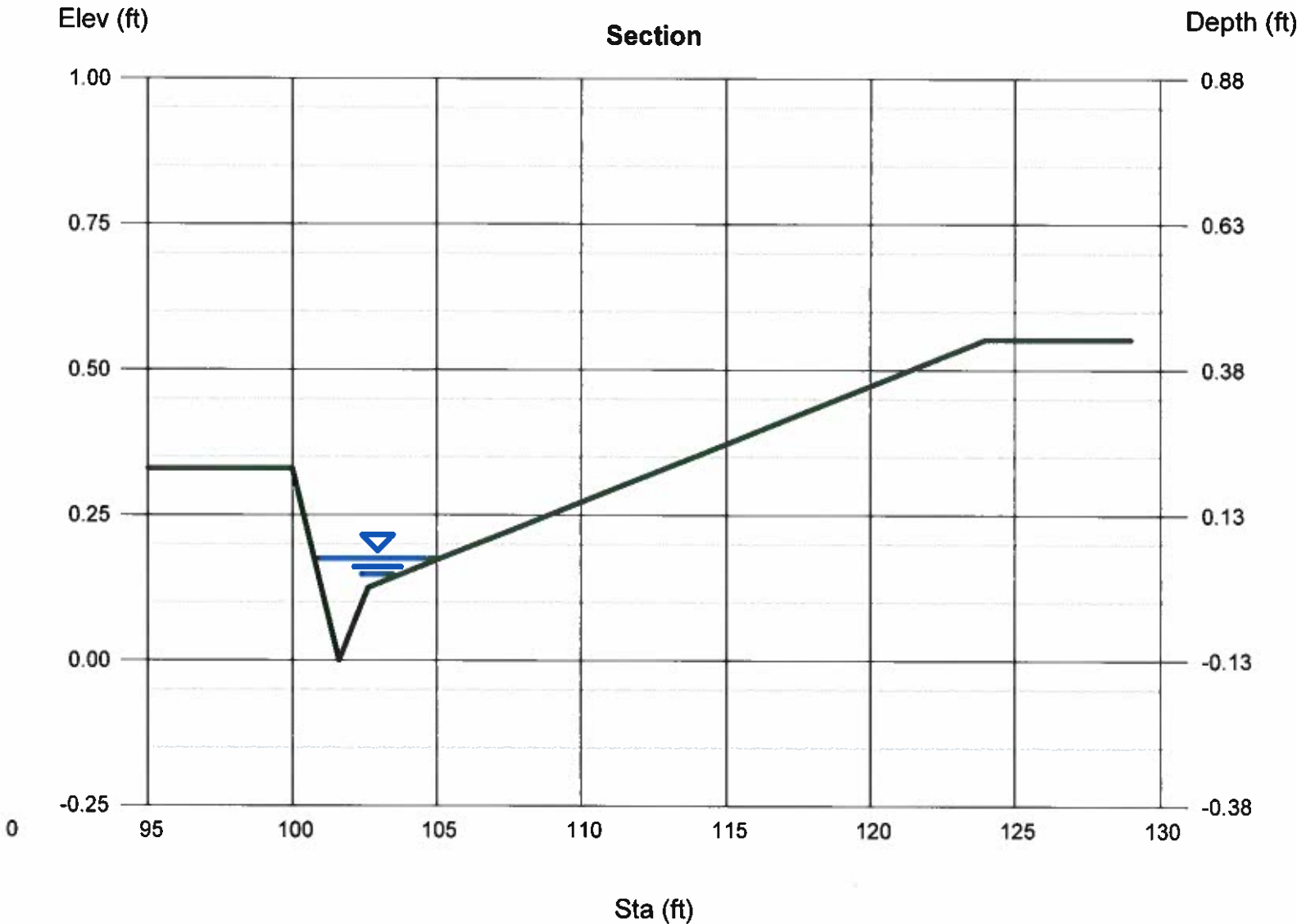
Calculations

Compute by: Known Q
Known Q (cfs) = 0.27

Highlighted

Depth (ft) = 0.05
Q (cfs) = 0.270
Area (sqft) = 0.25
Velocity (ft/s) = 1.07
Wetted Perim (ft) = 4.40
Crit Depth, Yc (ft) = 0.04
Top Width (ft) = 4.38
EGL (ft) = 0.07

(Sta, El, n)-(Sta, El, n)...
(100.00, 0.33)-(102.63, 0.13, 0.015)-(124.00, 0.55, 0.015)



Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Thursday, Jan 10 2019

Public Road to Swale-Mountable C & G (2)

User-defined

Invert Elev (ft) = 0.13
Slope (%) = 0.60
N-Value = 0.015

Calculations

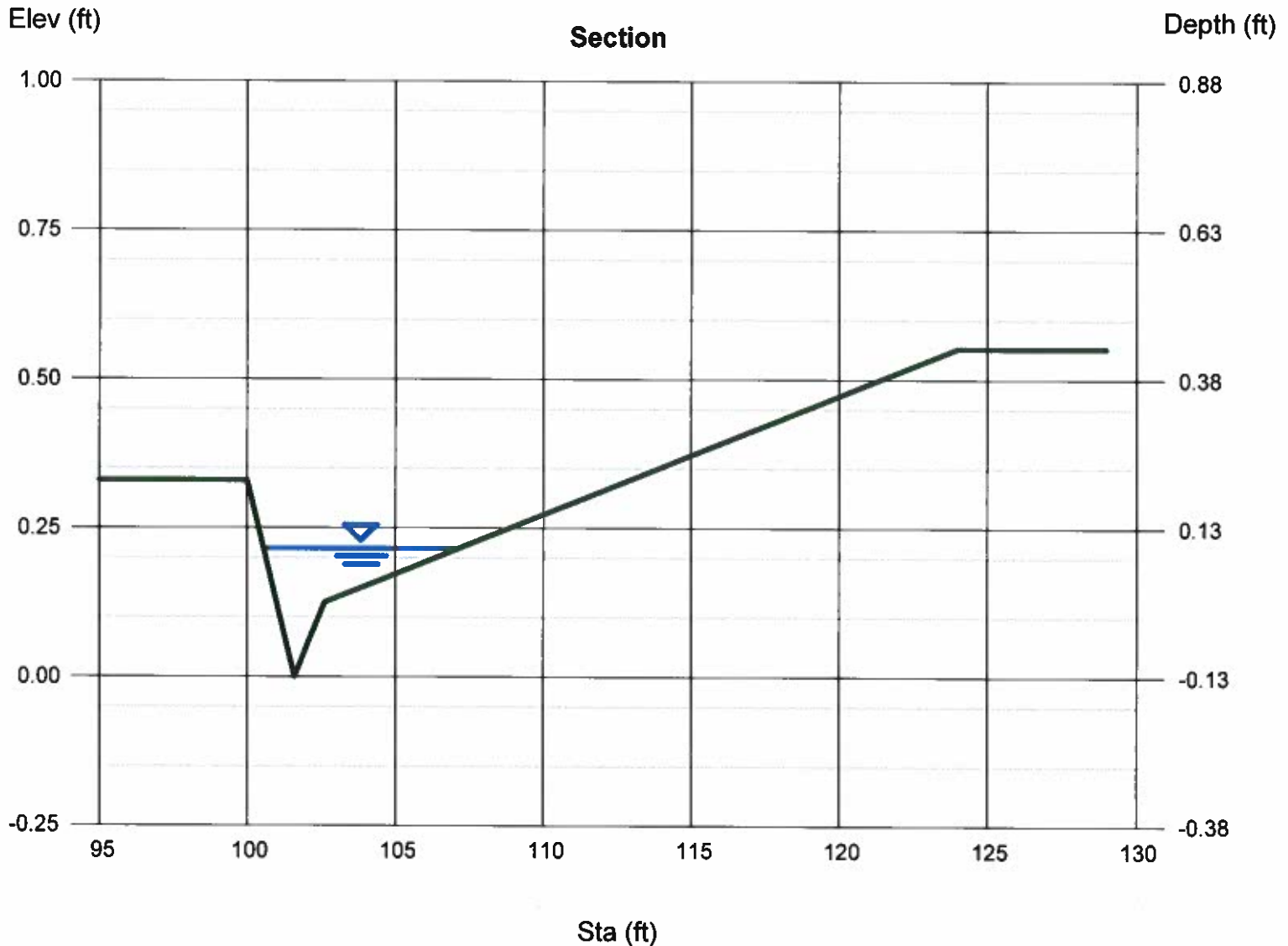
Compute by: Known Q
Known Q (cfs) = 0.54

Highlighted

Depth (ft) = 0.09
Q (cfs) = 0.540
Area (sqft) = 0.47
Velocity (ft/s) = 1.14
Wetted Perim (ft) = 6.60
Crit Depth, Yc (ft) = 0.08
Top Width (ft) = 6.57
EGL (ft) = 0.11

(Sta, El, n)-(Sta, El, n)...

(100.00, 0.33)-(102.63, 0.13, 0.015)-(124.00, 0.55, 0.015)



Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Thursday, Jan 10 2019

Private Road Sump Swale

Triangular

Side Slopes (z:1) = 5.00, 5.00

Total Depth (ft) = 1.00

Invert Elev (ft) = 100.00

Slope (%) = 1.00

N-Value = 0.025

Calculations

Compute by: Known Q

Known Q (cfs) = 4.85

Highlighted

Depth (ft) = 0.61

Q (cfs) = 4.850

Area (sqft) = 1.86

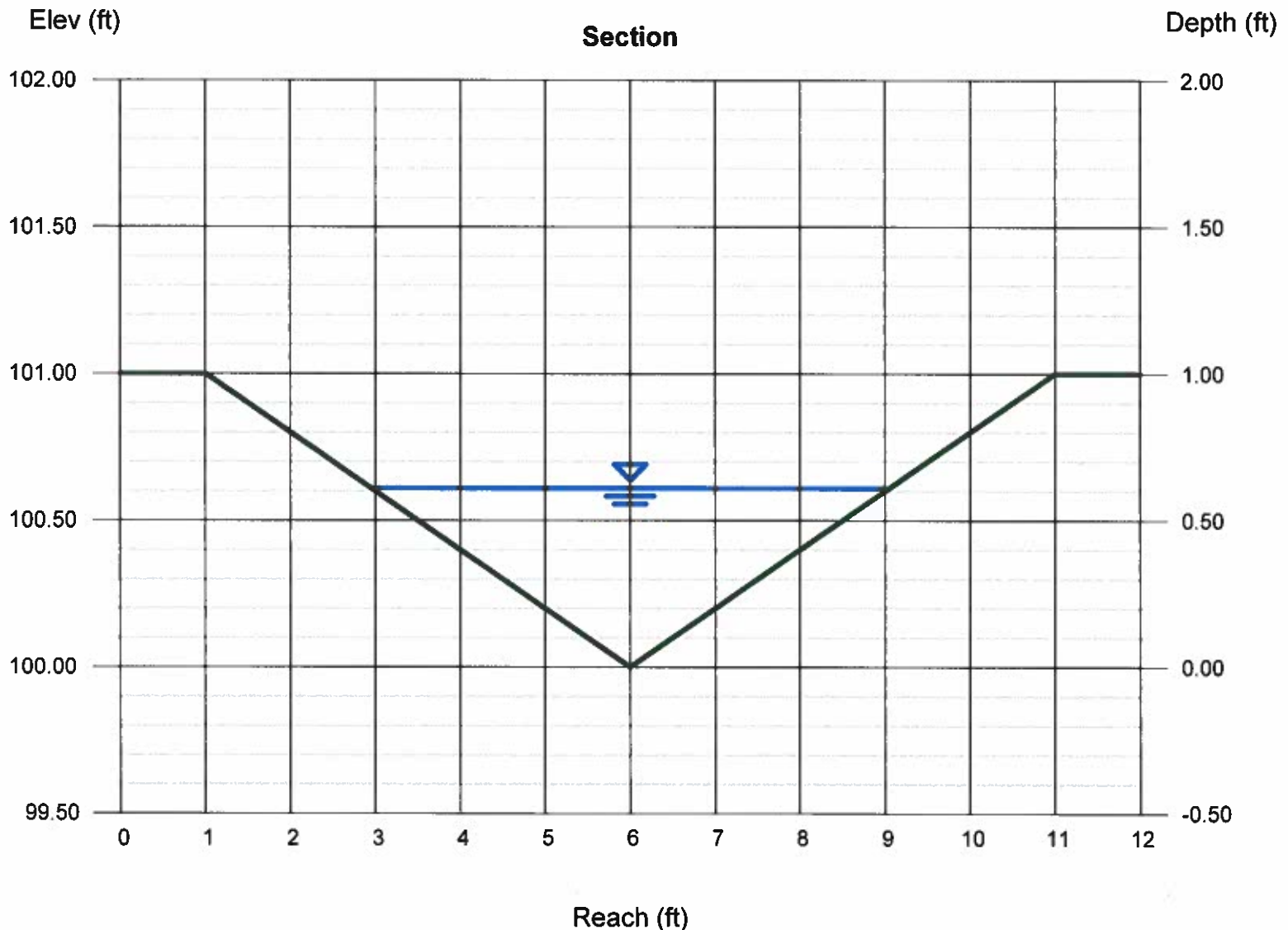
Velocity (ft/s) = 2.61

Wetted Perim (ft) = 6.22

Crit Depth, Y_c (ft) = 0.57

Top Width (ft) = 6.10

EGL (ft) = 0.72



Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Thursday, Jan 10 2019

Public Road Sump Swale

Triangular

Side Slopes (z:1) = 5.00, 5.00

Total Depth (ft) = 1.00

Invert Elev (ft) = 100.00

Slope (%) = 2.00

N-Value = 0.025

Calculations

Compute by: Known Q

Known Q (cfs) = 0.54

Highlighted

Depth (ft) = 0.24

Q (cfs) = 0.540

Area (sqft) = 0.29

Velocity (ft/s) = 1.87

Wetted Perim (ft) = 2.45

Crit Depth, Yc (ft) = 0.24

Top Width (ft) = 2.40

EGL (ft) = 0.29

