

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

October 12, 2017

Jeffrey T. Wooten, P.E.
Wooten Engineering
1005 21st Street SE, Suite 13
Rio Rancho, NM, 87124

RE: Ventura Plaza - Parcel A-1 (Christian Brothers Automotive)
Grading Plan
Stamp Date: 10/10/17
Hydrology File: D20D010B

Dear Mr. Wooten:

PO Box 1293

Based upon the information provided in your submittal received 10/10/2017, the Grading Plan is approved for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

NM 87103

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

www.cabq.gov

Sincerely,

Reneé C. Brissette

Reneé C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____

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

Legal Description: _____

City Address: _____

Engineering Firm: _____ **Contact:** _____

Address: _____

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

Owner: _____ **Contact:** _____

Address: _____

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

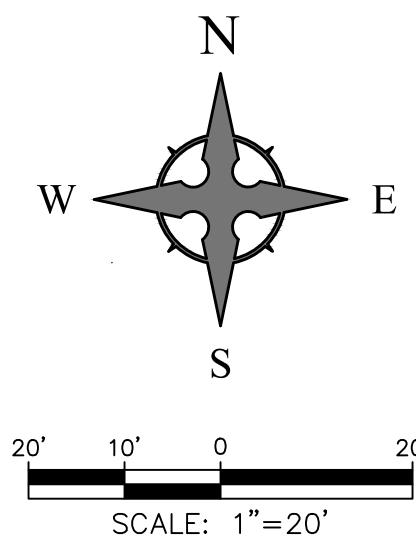
DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

NOTE:
THE CLOUDED AREA IS TO BE PERMITTED SEPARATELY THROUGH THE NMDOT. CONTRACTOR SHALL INCLUDE ALL WORK SHOWN WITHIN THE CLOUDED AREA IN HIS/HER BID. ADJUSTMENTS MAY BE NECESSARY ONCE THE NMDOT PLANS ARE AVAILABLE.

Paseo Del Norte Boulevard NE

(NM State Highway Proj. TPU_4054(2))
(R/W Varies)



CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL NEW MEXICO ONE CALL (811) AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

LEGEND

- FLOW ARROW
- 27.8 PROPOSED TOP OF GRADE/PVMT ELEVATIONS
- FL27.8 PROPOSED FLOW LINE/GUTTER ELEVATIONS
- TC27.8 PROPOSED TOP OF CURB ELEVATIONS
- FGH27.8 FINISHED GRADE AT TOP OF WALL
- FGL27.8 FINISHED GRADE AT BOTTOM OF WALL
- 515 EXISTING CONTOUR
- 515 PROPOSED CONTOUR
- EXISTING STORM DRAIN
- FLOW LINE
- RIDGE LINE

GRADING NOTES

- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEO-TECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
- EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
- IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
- THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
- A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
- PAVING AND ROADWAY GRADES SHALL BE +/- 0.05' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
- ALL PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR PAVEMENT, MEDIANS, AND ISLANDS.
- VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION (IF APPLICABLE) PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE THE SWPPP DOCUMENT (IF NECESSARY) AND SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.



VICINITY MAP

LEGAL DESCRIPTION:
A Portion of Parcel A, Ventura Plaza. 0.86 Acres.

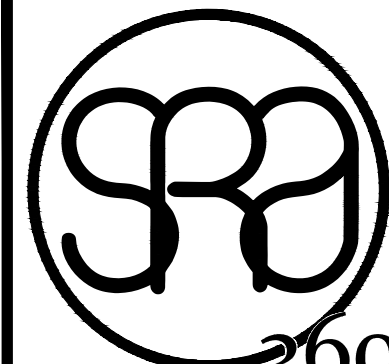
BENCHMARKS:
ACS MONUMENT "5-D21", NAD 1983, X=1555798.186, Y=1516443.33, Z=5653.331 (NAVD 1988), GROUND TO GRID = 0.999641651

ACS MONUMENT "6-C21", NAD 1983, X=1555754.364, Y=1523064.716, Z=5660.507 (NAVD 1988), GROUND TO GRID = 0.999641314



FIRM MAP 35001C0141G

Per FIRM Map 35001C0141G, dated September 26, 2008, the site is not located in the Floodplain and determined to be outside the 0.2% chance Annual Floodplain.



360
Stewart + Reindersma
architecture, PLLC
5450 E. High Street, Suite 200
Phoenix, Arizona 85054
P: 480.515.5123
www.sra360.com

Christian Brothers
Automotive
8001 Ventura St. NE
Albuquerque, NM 87109



Christian Brothers
Automotive
17725 Katy Freeway, St. 200
Houston, TX 77084



10/10/2017

Date

Revisions

04/25/17 - EPC Site Plan
07/28/17 - Permit Set
9/26/17 - Bid Plans
10/10/17 - City Revisions

Project No. 2016045

Drawn By: J Wooten

Date: 10/10/17

Sheet Title:

GRADING PLAN

Drawing No.

C1.1

9LHN-CBAC-1216-01



Wooten Engineering
1005 21st St SE, Suite 13
Rio Rancho, N.M. 87124
Phone: (505) 980-3560

Palomar Ave. NE

(R/W Varies)

Rim: 5536.6'
Inv.: 5527.8'

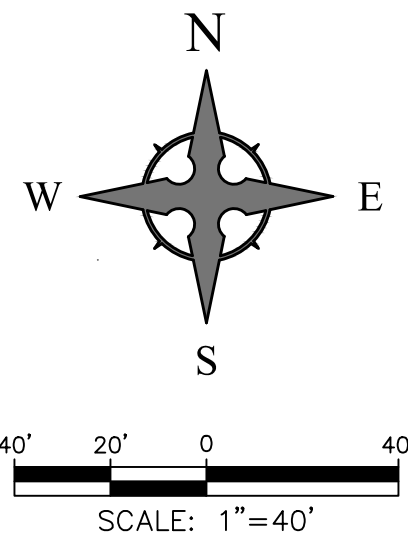
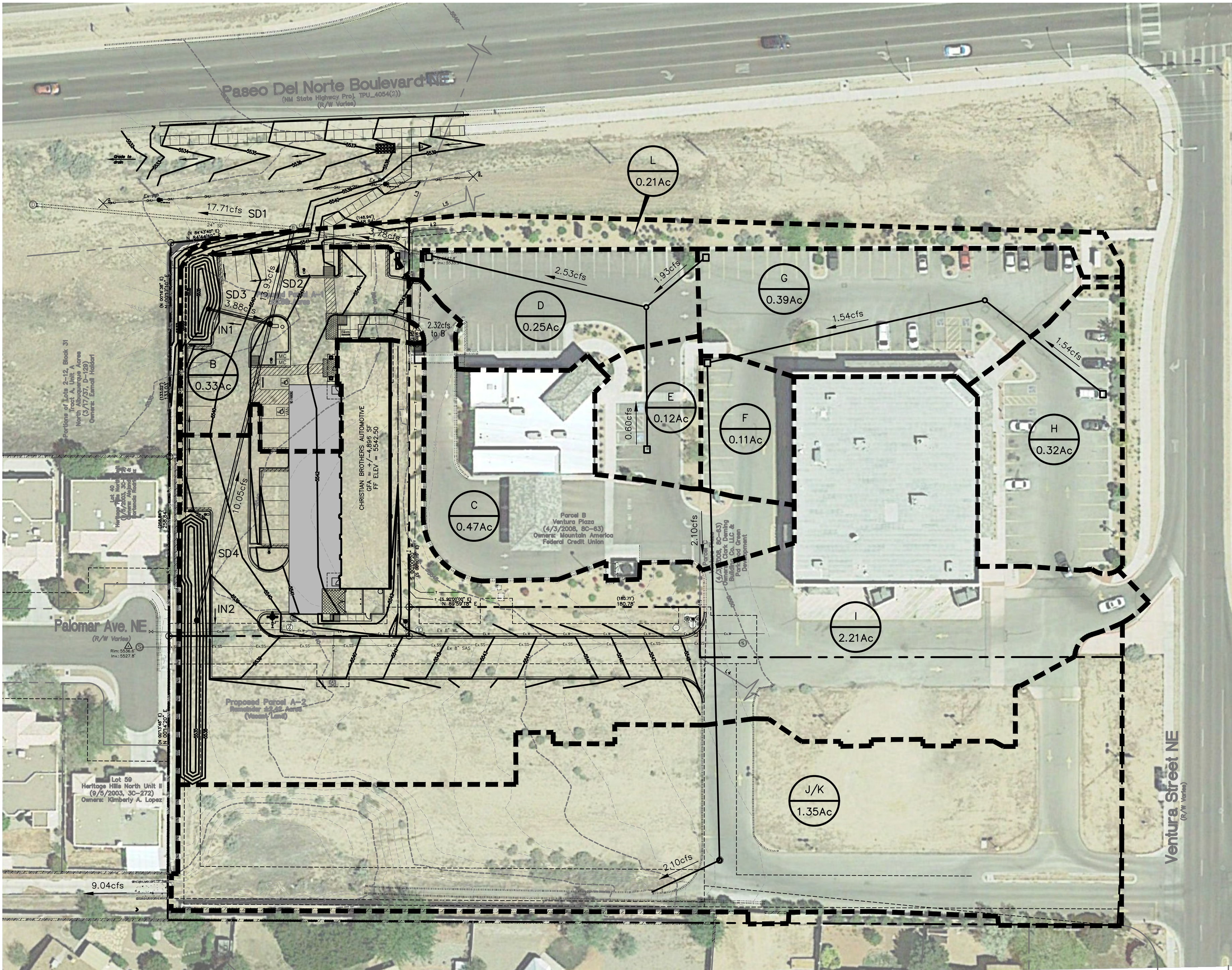
30" Nyloplast Drain
Basin or Equal w/
Beehive Grate.
Top Grate = 5537.75
Top Inlet = 5537.00
Inv 18" Out = 5533.46
Bot Pond = 5535.00
Pond Vol = 2,342 CF

Proposed Parcel A-2
Remainder ±2.42 Acres
(Vacant Land)

EXISTING NON-EXCLUSIVE, RECIPROCAL UTILITY,
DRAINAGE AND ACCESS EASEMENT FOR VEHICULAR
AND PEDESTRIAN INGRESS AND EGRESS, BLANKET
IN NATURE (4/3/2008, DOC. NO. 2008038109
AND RATIFIED 6/17/08, DOC. NO. 2008068606)

Parcel B
Ventura Plaza
(4/3/2008, 8C-63)
Owners: Mountain America
Federal Credit Union

Parcel C
Ventura Plaza
(4/3/2008, 8C-63)
Owners: Clark Deming
Building Co. LLC &
Parkwood Green
Development



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DRAINAGE MANAGEMENT PLAN

INTRODUCTION
The purpose of this submittal is to provide a grading plan and drainage management plan for Building Permit for the proposed Christian Brothers Automotive facility located in the Ventura Plaza development. The overall development contains approximately 5.44 acres and is located at the southwest corner of Paseo Del Norte Blvd NE and Ventura St NE in Albuquerque, NM. The original approved Shops 'A' portion of the development will be replaced by the new Christian Brothers Automotive shop.

For reference, there is an existing approved Drainage Management Plan prepared by Jeffrey L. Mulberry, P.E. at Bohannon Huston Inc. titled 'Paseo Del Norte and Ventura Blvd Development, Drainage Management Plan' (File Number D20/D010) dated 11/9/2009.

EXISTING HYDROLOGIC CONDITIONS
The site generally slopes from east to west. An approximate 68% of the development drains to a new storm drain system that was installed by the Walgreens project and connects into an existing storm drain system located in Paseo Del Norte Blvd that belongs to the NMDOT. The southern 32% of the site drains to an existing concrete lined channel located at the southwest corner of the development.

PROPOSED HYDROLOGIC CONDITIONS
The proposed development will generally conform to the original plan prepared by Bohannon Huston Inc. as described above. A new storm drain system collecting drainage from the central and western half of the site (Basins B, C, and I) will extend to the existing manhole located just inside the Paseo Del Norte Blvd Right-of-Way per the original approved Drainage Management Plan.

Per the original approved report from Bohannon Huston, there was a total of 16.72cfs draining to the pipe in Paseo Del Norte during the 100-Yr, 6-Hr storm. The proposed discharge to the southwest corner of the site was 8.96cfs.

Per the Drainage Calculations Table this sheet, we are proposing a total of 17.71cfs drain to the existing pipe in Paseo Del Norte which includes the prior Basin 'A' (1.26cfs) that surface discharged to the west. The proposed plan also reflects that there will be 9.04cfs draining to the existing concrete lined channel at the southwest corner of the site. The Christian Brothers development does not contribute any flows to the existing concrete lined channel.

As reflected in the First Flush and the Water Harvesting Pond Calculations tables this sheet, we are providing two new ponds which capture flows from the impervious areas within all basins contributing flows into those ponds, not just the Christian Brothers development. Basins 'B' and 'C' drain into pond 'B'. Basin 'I' drains into pond 'I'. The excess flows from the ponds will top over into new dome grated inlets and storm drains that are capable of conveying the 100-Yr, 6-Hr storm as reflected in the Inlet and Pipe Calculations tables this sheet.

CONCLUSION
This drainage management plan generally conforms to the original approved Drainage Management Plan prepared by Bohannon Huston, Inc. With this submittal, we are requesting Building Permit approval.



VICINITY MAP

NTS

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A Portion of Parcel A, Ventura Plaza. 0.86 Acres.

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FIRM MAP 35001C0141G

Per FIRM Map 35001C0141G, dated September 26, 2008, the site is not located in the Floodplain and determined to be outside the 0.2% chance Annual Floodplain.

INLET CALCULATIONS

- IN1. INLET TYPE = 24" DOME GRATE
SUMP CONDITION
Q = 3.88cfs
Depth of Flow per Nyloplast Capacity Chart = 0.35'
- IN2. INLET TYPE = 30" DOME GRATE
SUMP CONDITION
Q = 10.05cfs
Depth of Flow per Nyloplast Capacity Chart = 0.58'

PIPE CALCULATIONS

- SD1. Pipe Diameter = 24"; Pipe Material = RCP; n=0.013
Q = 17.71cfs
Pipe Slope = 4.29%
Capacity of Pipe = 22.68 cfs (GRAVITY FLOW)
- SD2. Pipe Diameter = 24"; Pipe Material = HDPE; n=0.010
Q = 13.93cfs
Pipe Slope = 0.50%
Capacity of Pipe = 20.85 cfs (GRAVITY FLOW)
- SD3. Pipe Diameter = 12"; Pipe Material = HDPE; n=0.010
Q = 3.88cfs
Pipe Slope = 1.00%
Capacity of Pipe = 4.64 cfs (GRAVITY FLOW)
- SD4. Pipe Diameter = 24"; Pipe Material = HDPE; n=0.010
Q = 10.05cfs
Pipe Slope = 0.50%
Capacity of Pipe = 20.85 cfs

WATER HARVESTING POND VOLUME CALCULATIONS

BASIN	CONTOUR	ELEVATION	AREA (SF)	VOLUME (CF)
B	5535.00		126 SF	213 CF
	5536.00		300 SF	403 CF
	5537.00		506 SF	281 CF
	5537.50		618 SF	
TOTAL				897 CF
I	5535.00		526 SF	845 CF
	5536.00		1164 SF	1497 CF
	5537.00		1830 SF	
TOTAL				2342 CF
GRAND TOTAL				3239 CF

FIRST FLUSH CALCULATIONS

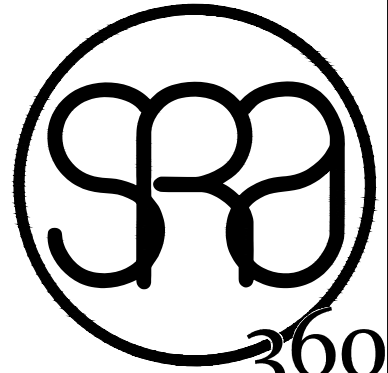
BASINS 'B' & 'C'
BASIN 'B'
BASIN AREA: 14,199 SF
IMPERVIOUS AREA: 12,069 SF
% IMPERVIOUS = 85.0%
FIRST FLUSH = 12,069 * 0.34" / 12 = **342 CF**

BASIN 'C'
BASIN AREA: 20,445 SF
IMPERVIOUS AREA: 19,422 SF
% IMPERVIOUS = 95.0%
FIRST FLUSH = 19,422 * 0.34" / 12 = **550 CF**
TOTAL FOR BASINS 'B' & 'C' = **892 CF**

BASIN 'I'
BASIN AREA: 93,000 SF
IMPERVIOUS AREA: 74,400 SF
% IMPERVIOUS = 80.0%
FIRST FLUSH = 74,400 * 0.34" / 12 = **2,108 CF**

Ventura Plaza Drainage Calculations											
This table is based on the COA DPM Section 22.2, Zone 3											
BASIN	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WT E (inches)	V(100)360 (CF)	Comments
			A	B	C	D					
A	0	0.00	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0	Basin Deleted
B	14199	0.33	0.0%	0.0%	15.0%	85.0%	4.78	1.56	2.20	2603	To Basin B Inlet then PDN Storm Drain
C	20445	0.47	0.0%	0.0%	5.0%	95.0%	4.94	2.32	2.31	3930	To Basin B
D	10977	0.25	0.0%	0.0%	5.0%	95.0%	4.94	1.25	2.31	2110	To Basin D Inlet then PDN Storm Drain
E	5388	0.12	0.0%	0.0%	10.0%	90.0%	4.86	0.60	2.25	1012	To Basin E Inlet then PDN Storm Drain
F	4850	0.11	0.0%	0.0%	0.0%	100.0%	5.02	0.56	2.36	954	To Basin F Inlet then SWC of Development
G	16984	0.39	0.0%	0.0%	5.0%	95.0%	4.94	1.93	2.31	3264	To Basin G Inlet then PDN Storm Drain
H	13795	0.32	0.0%	0.0%	10.0%	90.0%	4.86	1.54	2.25	2590	To Basin H Inlet then SWC of Development
I	93000	2.13	0.0%	0.0%	20.0%	80.0%	4.71	10.05	2.15	16632	To Basin I Inlet then PDN Storm Drain
J/K	62198	1.43	0.0%	0.0%	10.0%	90.0%	4.86	6.94	2.25	11678	To Future Flume at SWC of Development
L	9247	0.21	0.0%	0.0%	95.0%	5.0%	3.53	0.75	1.34	1035	Sheet Flows to PDN Right-of-Way
TOTAL	251083	5.76						27.49		45806	

W E Wooten Engineering
1005 21st St SE, Suite 13
Rio Rancho, N.M. 87124
Phone: (505) 980-3560



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Christian Brothers
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Automotive
17725 Katy Freeway, St. 200
Houston, TX 77084



10/10/2017
Date

Revisions

04/25/17 - EPC Site Plan
07/28/17 - Permit Set
9/26/17 - Bid Plans

Project No. 2016045
Drawn By: J Wooten
Date: 10/10/17

Sheet Title:
DRAINAGE
MANAGEMENT PLAN

Drawing No.

C1.2