CITY OF ALBUQUERQUE



December 28, 2015

Richard J. Berry, Mayor

David Soule, PE RIO GRANDE ENGINEERING P.O. Box 93924 Albuquerque, NM 87199

RE: Montoya Street Townhomes (File: H12D019A)

Tracts A1 and A2 Lands of David Maciel Montoya St NW between Floral Rd and I-40

Grading Plan and Drainage Report Engineer's Stamp Date – 12/16/2015

Dear Mr. Soule:

Based upon the information provided in your submittal received 12-16-2015, the above referenced Grading Plan and Drainage Report is approved for Preliminary Plat, Final Plat and Grading Permit.

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 924-3986.

Albuquerque

New Mexico 87103

Sincerely.

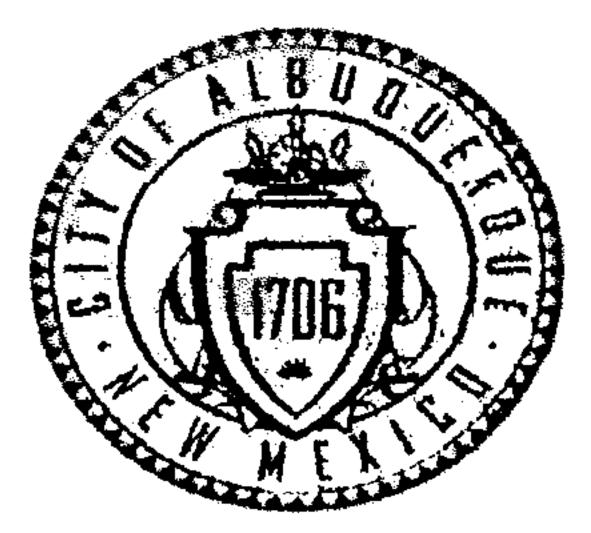
Abiel Carrillo, P.E.

Principal Engineer, Planning Dept.

Development Review Services

www.cabq.gov

Orig: Drainage file



City of Albuquerque

Planning Department

Development & Building Services Division

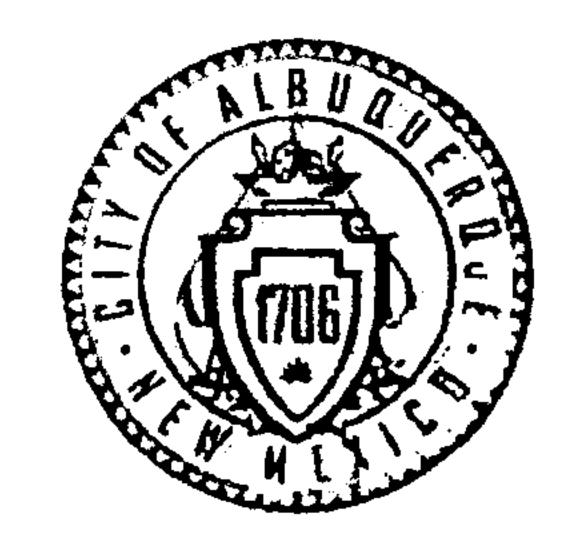
DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: montoya town homes	Building Permit #:	City Drainage #: H12d019a
DRB#: 1004732 EPC#:	V	Vork Order#:
Legal Description: tracts a1 and a2 lands of david maciel		
City Address:		· · · · · · · · · · · · · · · · · · ·
Engineering Firm: RIO GRANDE ENGINEERING	C	ontact: DAVID SOULE
Address: PO BOX 93924, ALBUQUERQUE, NM 87199		
Phone#: 505.321.9099 Fax#: 505.872.0999	E	-mail: DAVID@RIOGRANDEENGINEERING.COM
Owner:	C	Contact:
Address:		
Phone#: Fax#:	E	-mail:
Architect:	C	Contact:
Address:		
Phone#:	E	-mail:
Other Contact:	C	Contact:
Address:	· · · · · · · · · · · · · · · · · · ·	——————————————————————————————————————
Phone#:	E	-mail:
X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTROL TYPE OF SUBMITTAL:	CERTIFICATE	MIT APPROVAL OF OCCUPANCY
ENGINEER/ ARCHITECT CERTIFICATION		PLAT APPROVAL
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)	SITE PLAN FOR X FINAL PLAT A SIA/ RELEASE FOUNDATION	OF FINANCIAL GUARANTEE PERMIT APPROVAL MIT APPROVAL AL IT APPROVAL CERTIFICATION
OTHER (SPECIFY)	PRE-DESIGN MED OTHER (SPECIA	ETING FY)
IS THIS A RESUBMITTAL?: X Yes No		
DATE SUBMITTED: 12/15/15 By:		

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED:

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

November 30, 2015

David Soule, PE RIO GRANDE ENGINEERING P.O. Box 93924 Albuquerque, NM 87199

RE: Montoya Street Townhomes (File: H12D019A) Tracts A1 and A2 Lands of David Maciel Montoya St NW between Floral Rd and I-40 Grading Plan and Drainage Report Engineer's Stamp Date - 10/15/15

Dear Mr. Soule:

Based upon the information provided in your submittal received 10-15-15, the above referenced Grading Plan and Drainage Report cannot be approved for Preliminary Plat, Final Plat and Grading Permit until the following comments are addressed.

•	Provide drainage flow areas to better identify over	all site drainage patterns.	ADDED	BASIN MAP
•	Provide most flow direction and outfall locations	ADDED TO DI ANI		•

- vide roof now direction and outlan locations. ADDED 10 PLAN /

PO Box 1293

Albuquerque

- Clearly identify and define property lines.
- Clearly identify the location and limits of the 10 ft Ditch Easement located on the north property line. . \

• The Drainage Report indicates flows from a storm event exceeding the 100-yr, 6 hr storm event will discharge to Montoya Street. Per the spot elevations identified on the Grading Plan, it appears flows will be directed east away from Montoya Street. Show on the Grading Plan how this will be achieved. REVISED REPORT TO CORRECT

New Mexico 87103

The Drainage Report states the platting action will allow for cross lot drainage easement on all parcels yet the Drainage Report identifies flows to be retained onsite or discharged onto Montoya Street during a larger design storm. Provide offsite flow information and how offsite flows will be managed onsite. ADDED BASIN MAP

www.cabq.gov

A scale check on the area for townhomes 1-5 appears as though the area provided is incorrect. Re-check the areas to ensure the information is correct. CORRECTED

If you have any questions, you can contact me at 924-3994.

Sincerely,

/D/FF = 0.672(.38) = 0.25 ac

Rudy Archuleta, P.E. Senior Engineer, Planning Dept. Development Review Services

LAND DEVELOPMENT SECTION

DEC 1 6 2015

Orig. Drainage file Addressee via Email c pdf

H12D019A_PP_FP_GP_Cmmt

1 of 1

REVISED DRAINAGE REPORT

For

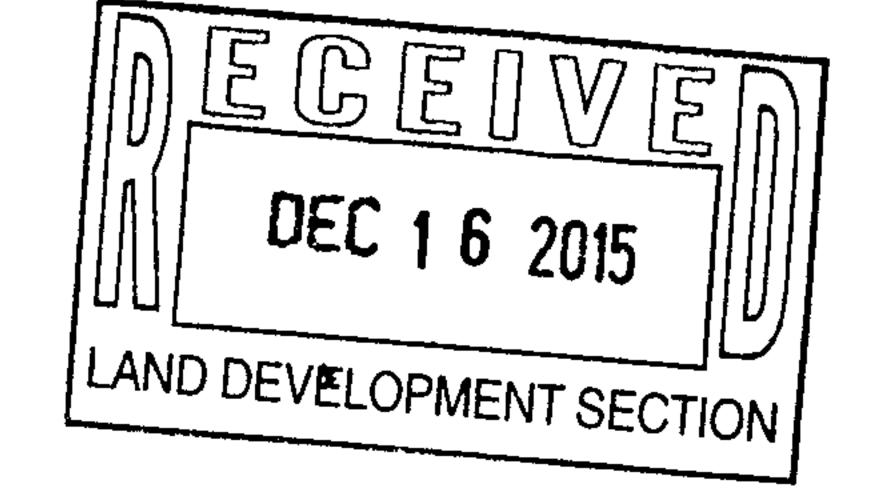
Montoya Street Townhomes Lots 1-5 Maciel-David Subdivision Albuquerque, New Mexico

Prepared by

Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

DECEMBER 2015

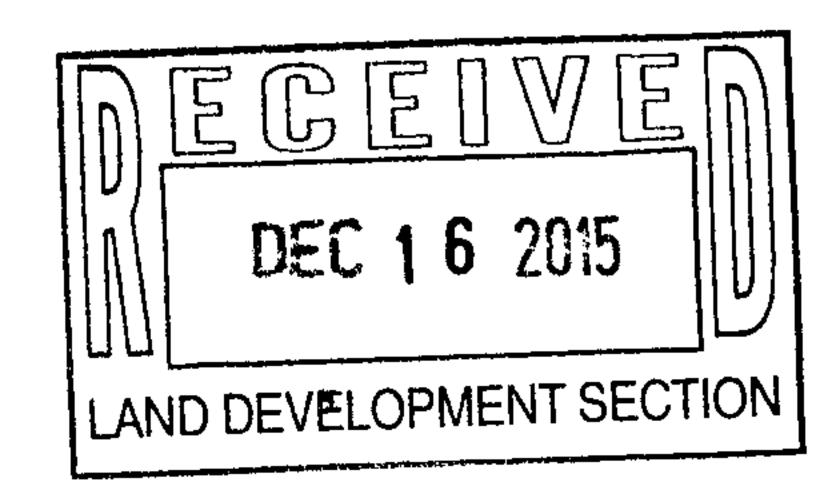




David Soule P.E. No. 14522

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<u>Map</u> Site Grading and Drainage Plan	



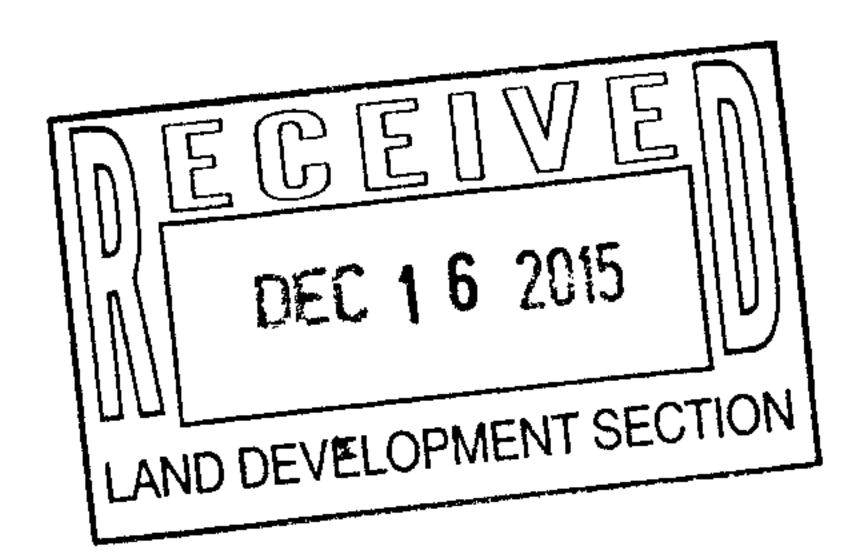
PURPOSE

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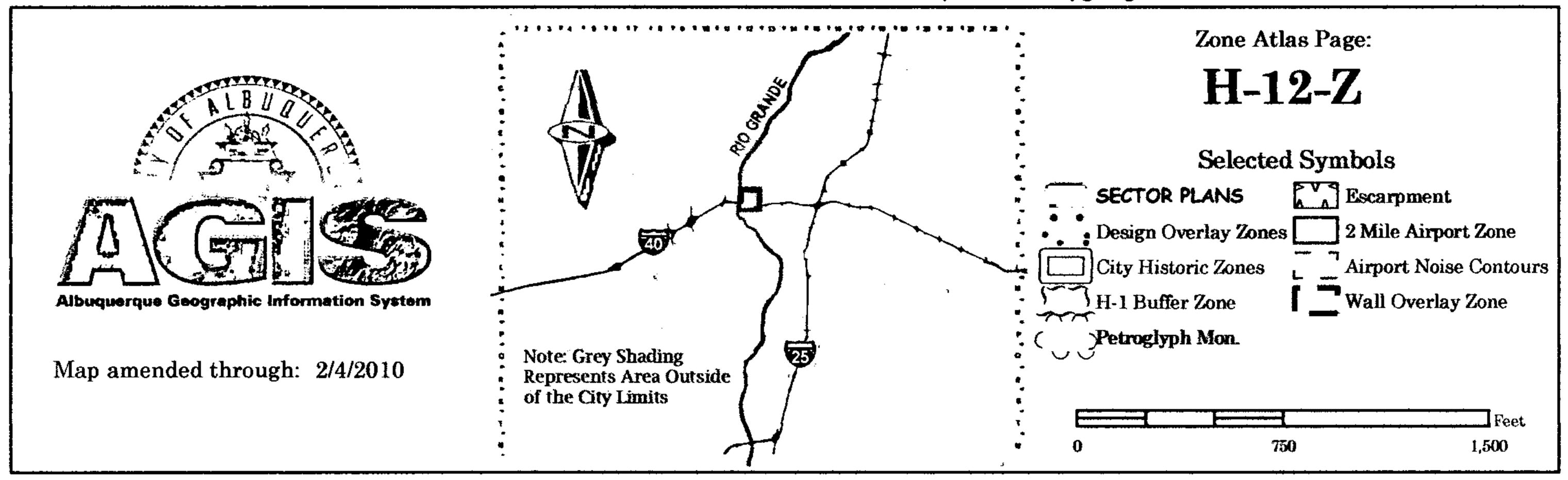
The purpose of this report is to provide the Drainage Management Plan for the development of a 5-lot subdivision located on Montoya Street NW between Floral Road and Interstate 40. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's Development Process Manual drainage guidelines. This report will demonstrate that the grading does not adversely affect the surrounding properties, nor the upstream or downstream facilities.

INTRODUCTION

The subject of this report, as shown on the Exhibit A, is a 0.68-acre parcel of land located on the east side of Montoya Road south of Floral Road NW. The existing legal description of this site is tracts A1& A2 Land of David Maciel; the developed property will be known as lots 1-5 Montoya Street Townhomes Subdivision. As shown on FIRM map35013C0331H, the entire site is located within Flood Zone X. The site has had grading activities upon it in the past. It appears a structure may have occupied the parcel in the past, and the site appears to have been graded and compacted in the past, there is no native vegetation on the site. The site is lower than the road and currently ponds its storm water on site. The site discharges to the east in a large storm event. The site is located within a generally flat area of town. The surrounding properties typically have shallow onsite ponding that will overflow and discharge to surrounding properties in large events. Due to this flat grade the site is impacted by flow from adjacent properties, It does not appear that the site is impacted by significant upland flows, as the general area is flat and localized shallow ponding is evident on the surrounding properties and roadways. The development of the site will require the site to either discharge at a maximum rate of 2.75 per acre or pond the entire 100-year 10-day developed storm.







EXISTING CONDITIONS

4 4 A . N

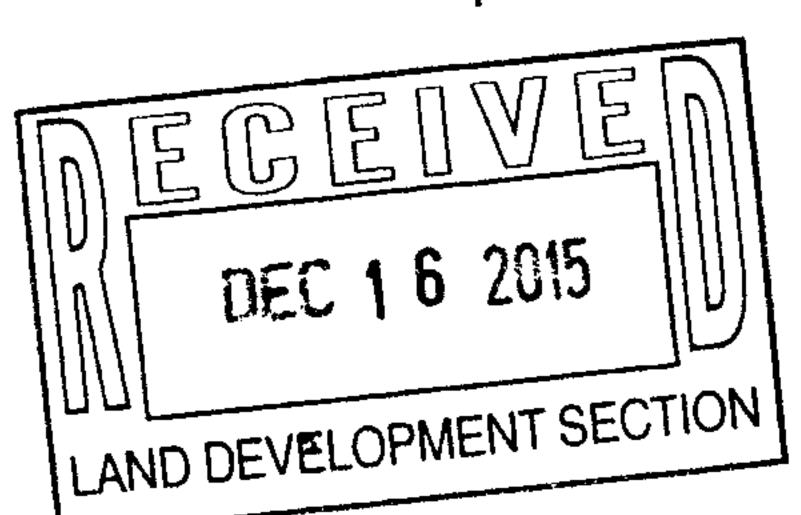
The site currently generates 1.53 cfs and 1,900 cubic of developed storm water in a 100-year event. Due to the fact the site contains a low spot; the site does not discharge except in major rain events. It appears this low point may have been the remnant of grading associated with the removal of a structure. The surrounding area is flat and the area contains shallow ponding in yards and general flow from west to east. A copy of the surrounding topography located in appendix a shows the immediate area generally flows from west to east, with a hard to determine but significant amount of shallow onsite ponding on adjacent properties.

PROPOSED CONDITIONS

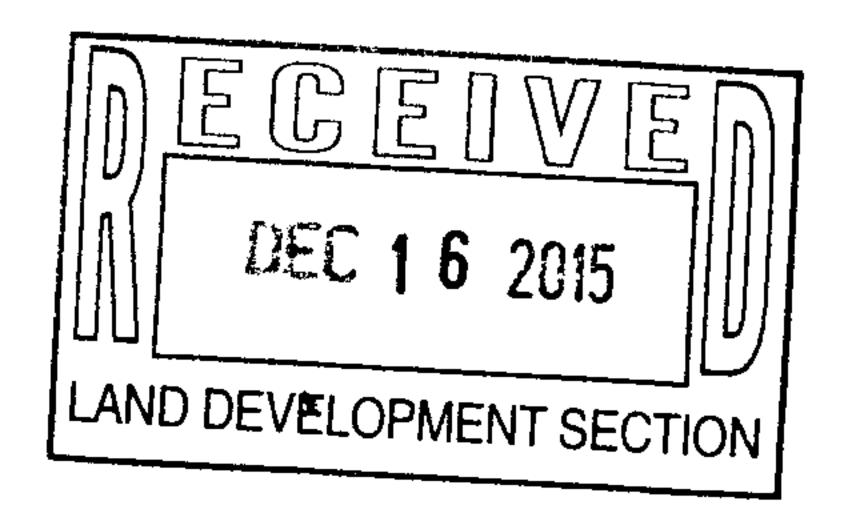
The proposed improvements consist of a new 5-lot subdivision serviced by existing roadways and private easements. Due to the existing grades of the lot, and the flat nature of Montoya road, the valley drainage scheme of 2.75 cfs per acre is not achievable. Therefore, the lots will retain the entire developed flow on site. The platting action will allow for cross lot drainage easement on all parcels. The purpose of the cross lot easement is to allow the ponding to cross lot lines. As shown in appendix A, the developed site will generate a peak discharge of 2.26 cfs and a 10-day volume of 4,797 cubic feet. The site consists of raised pads and 18" deep ponds in the front and back yards. The proposed perimeter and intermediate fencing will contain turned blocks every 18' to allow cross lot drainage in conformance to the valley grading scheme. The on site ponding exceeds the required volume. The first flush volume of 315 cubic feet is retained on site.

SUMMARY AND RECOMMENDATIONS

This project is an infill development of a 5-lot residential subdivision with the near north valley. The development is consistent with the valley flat grading scheme policies of the city of Albuquerque. The site allows for cross lot drainage and the overall development retains the

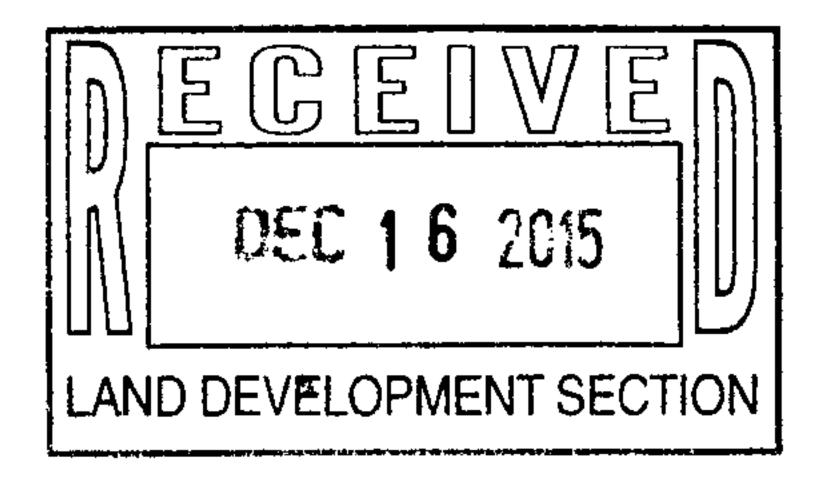


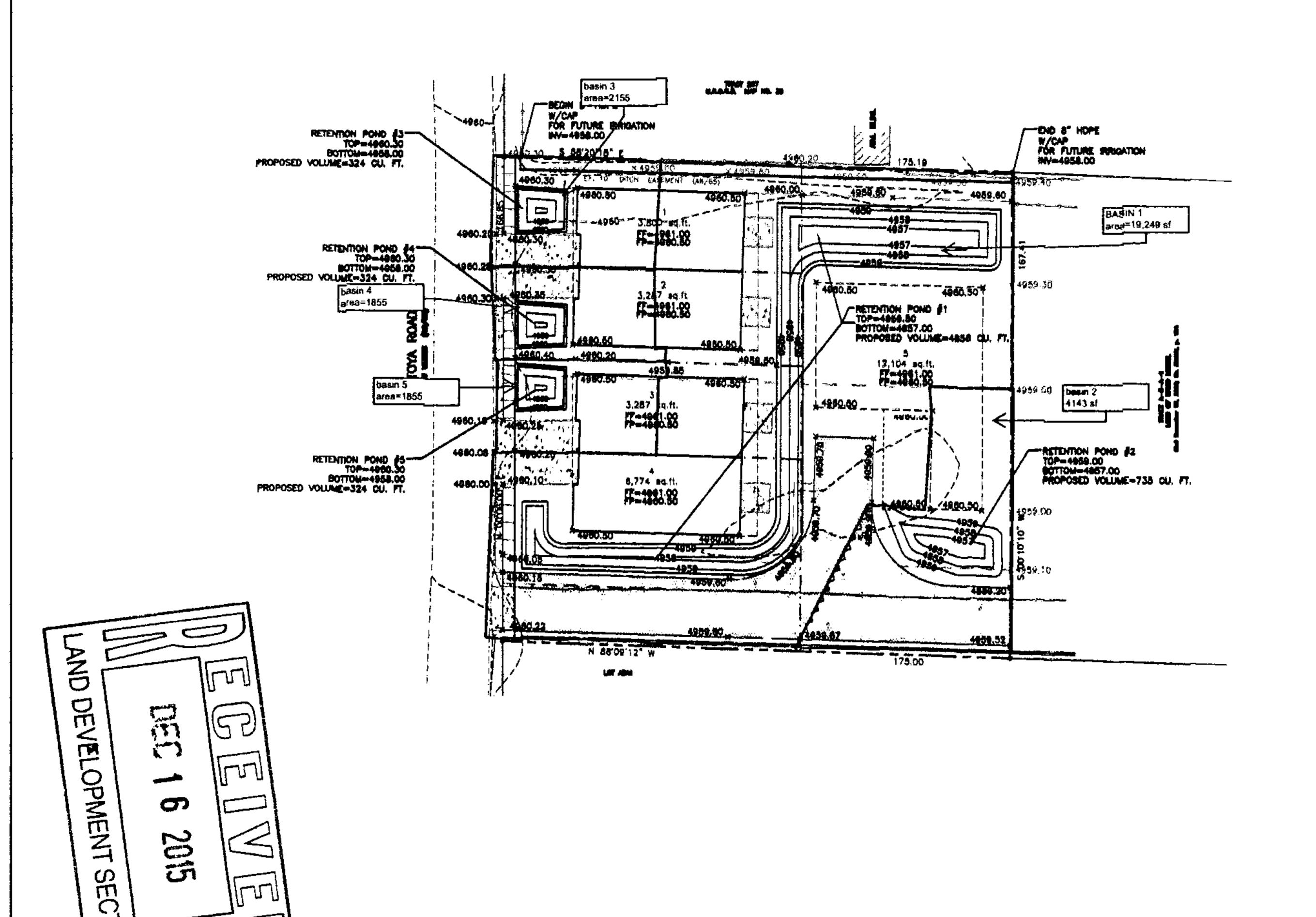
entire 100-year, 10-day storm water volume generated. The pads are raised such that they are higher than the existing adjacent grades and surrounding streets. In an event exceeding the 100-year event, the site will discharge to the historical direction south east. The site has been designed in accordance with City of Albuquerque Drainage ordinance. This drainage plan and report conforms to the governing drainage regulations of the Valley Grading Scheme. Since the effected area site encompasses less than 1 acre, a NPDES permit may not be required prior to any construction activity.



4 4 4

APPENDIX A SITE HYDROLOGY





EROSION CONTROL NOTES:

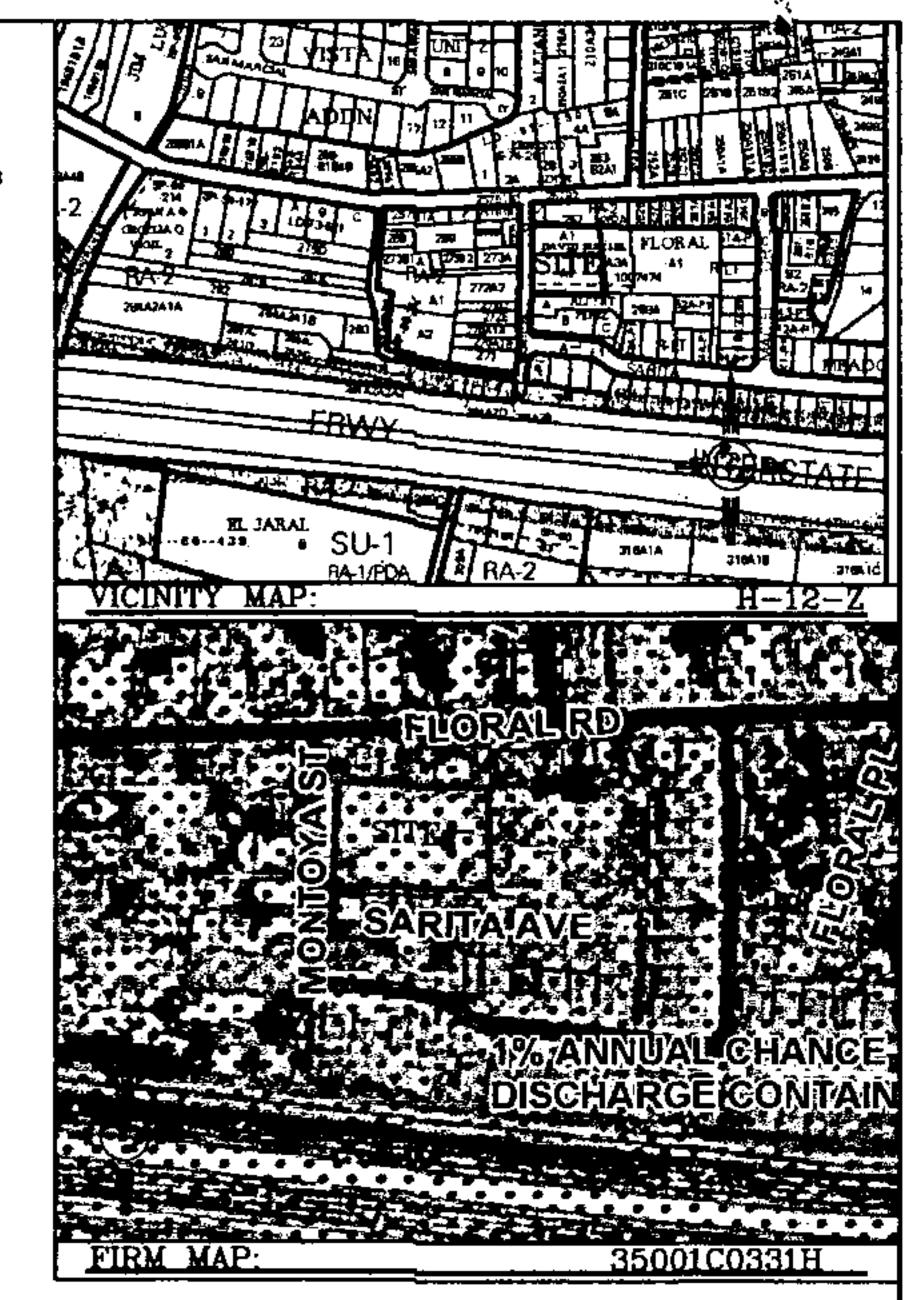
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN—OFF ON SITE DURING CONSTRUCTION,

3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



LEGAL DESCRIPTION:
TRACTS A-1 AND A-2 LAND OF DAVID MACKEL

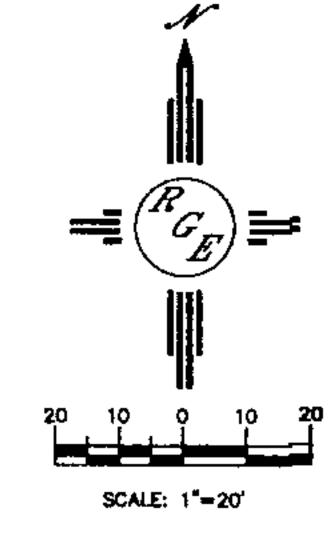
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.

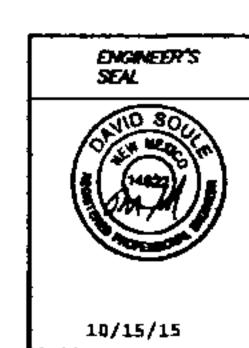
2. All walls shall provide 1 turned block at grade every 18'

3. All lots shall be provided reciprocal cross lot drainage easement

LEGEND

LEGENU	
	EXISTING CONTOUR
	EXISTING IMPEX CONTOUR
5414	PROPOSED CONTOUR
	PROPOSED INDEX CONTOUR
-	SLOPE TIE
¥ 4048.25	EXISTING SPOT ELEVATION
× 4048.25	PROPOSED SPOT ELEVATION
	BOUNDARY
	CENTERLINE
	RIGHT-OF-WAY
	EASEMENT
	PROPOSED EDGE OF GRAVEL
	EXISTING EDGE OF PAVEMENT
	EXISTING SCREEN WALL
Diegioipheair	PROPOSED SCREEN WALL
E	PROPOSED GRAVEL DRIVE





DAVID SOULE P.E. #14522

	ENGINEER'S SEAL
Ī	10/15/15

	DRAINAGE
_	
1	

DRAWN BY WCWJ MONTOYA STREET TOWNHOMES DATE 10--15--15 GRADING AND DRAINAGE PLAN 21525-LANDUT-#-05-15 SHEET 🦸

Rio Grande 1406 CENTAL AMBRIE SE SUITE SOI ALBUQUESCUE, HAI STICK (SON) E72-0000

JOB 🦸 21523

CAUTION:

EXISTING UTILITIES ARE NOT SHOWN.

IT SHALL BE THE SOLE RESPONSIBILITY

OF THE CONTRACTOR TO CONDUCT ALL

NECESSARY FIELD INVESTIGATIONS PRIOR

TO ANY EXCAVATION TO DETERMINE THE

ACTUAL LOCATION OF UTILITIES & OTHER

IMPROVEMENTS.

9

Weighted E Method

											100-	Year, 6-hr.		10-day
Basin	Area	Area	Treat	nent A	Trea	tment B	Treati	ment C	Treatr	nent D	Weighted E	Volume	Flow	Volume
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)
Existing	29257.00	0.672	0%	0	100%	0.672	0%	0.000	0%	0.000	0.780	0.044	1.53	0.044
basin 1	19249.00	0.442	0%	0	42%	0.186	20%	0.088	38%	0.168	1.359	0.050	1.49	0.072
basin2	4143.00	0.095	0%	0	42%	0.040	20%	0.019	38%	0.036	1.359	0.011	0.32	0.016
basin 3	2155.00	0.049	0%	0	42%	0.021	20%	0.010	38%	0.019	1.359	0.006	0.17	0.008
basin 4	1855.00	0.043	0%	O	42%	0.018	20%	0.009	38%	0.016	1.359	0.005	0.14	0.007
basin 5	1855.00	0.043	0%	0	42%	0.018	20%	0.009	38%	0.016	1.359	0.005	0.14	0.007
PROPOSED	29257.00	0.672	0%	0	42%	0.282	20%	0.134	38%	0.255	1.359	0.076	2.26	0.110
		<u>l</u>												

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

First flush requirement 315.0004 cubic feet

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm(zone2)

Ea= 0.53 Qa= 1.56 Eb= 0.78 Qb= 2.28 Ec= 1.13 Qc= 3.14 Ed= 2.12 Qd= 4.7

Developed Conditions

FLAT GRADING SCHEME

VOLUME GENERATED

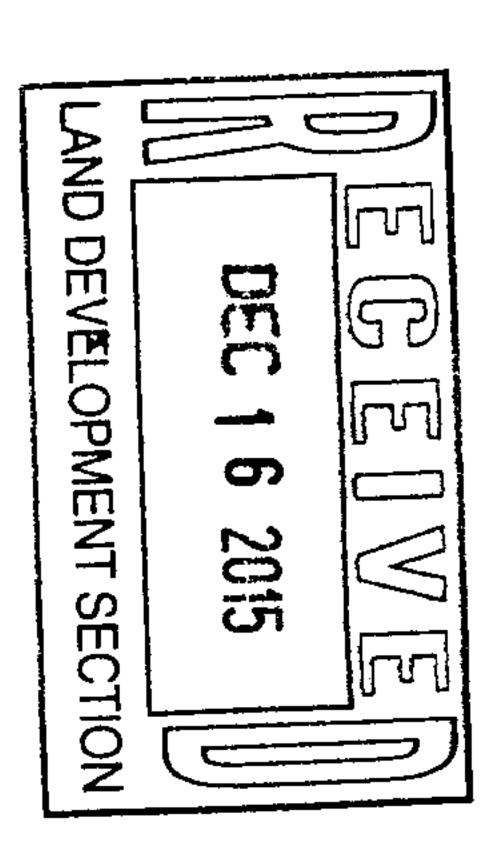
10-day

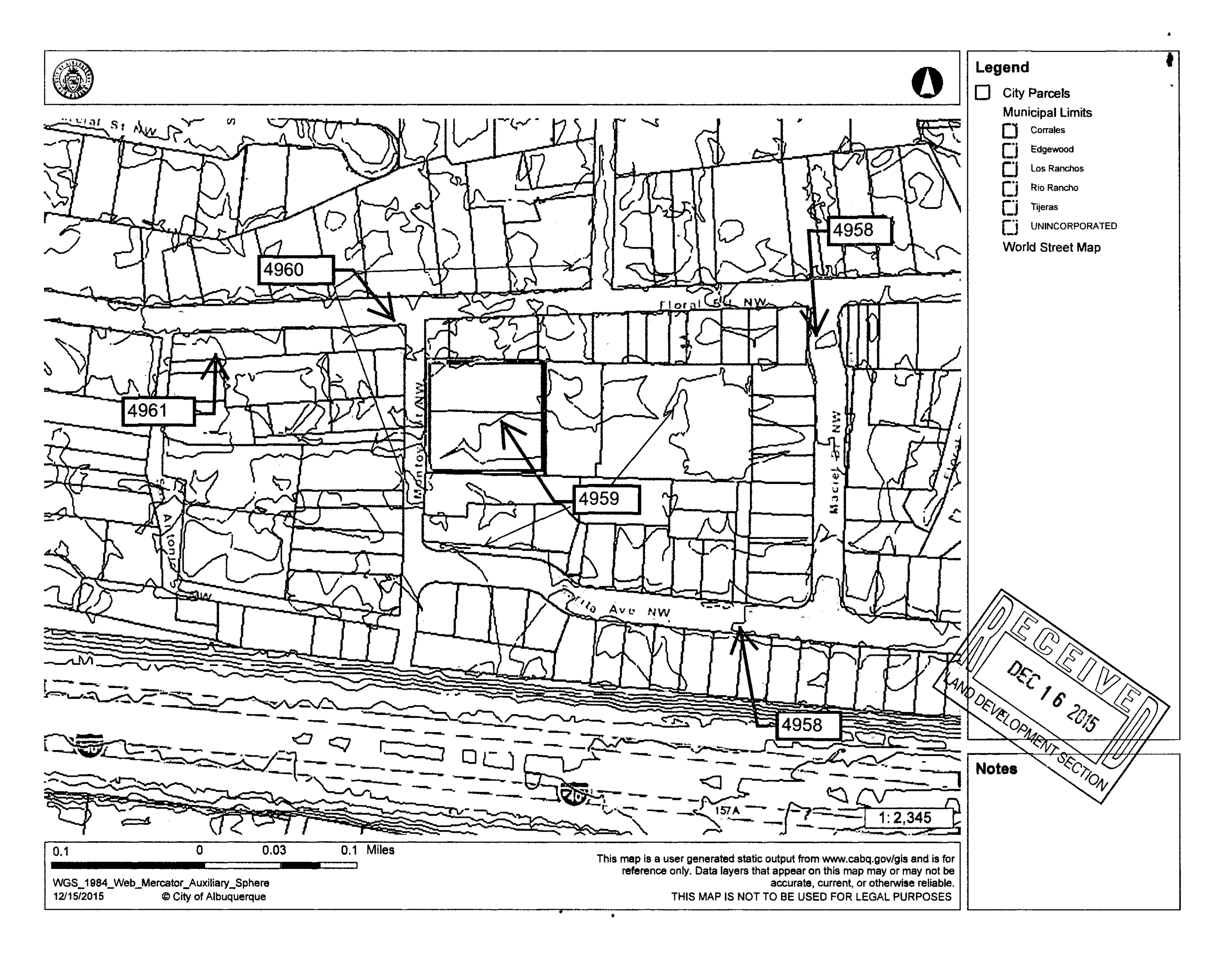
 EXISITNG
 1.53 CFS
 0.044 AC-FT
 1901.705 CF

 PROPOSED
 2.26 CFS
 0.110 AC-FT
 4796.19753 CF

ALLLOWED 1.85 CFS

PONDING PRO		GENERATED	
POND	1	4896	3156
POND	2	735	679
POND	3	324	353
POND	4	324	304
POND	5	324	304
TOTAL PROV	IDED	6603	





CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

November 30, 2015

David Soule, PE **RIO GRANDE ENGINEERING** P.O. Box 93924 Albuquerque, NM 87199

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Engineer's Stamp Date – 10/15/15

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Albuquerque

New Mexico 87103

www.cabq.gov

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Rudy Archuleta, P.E.

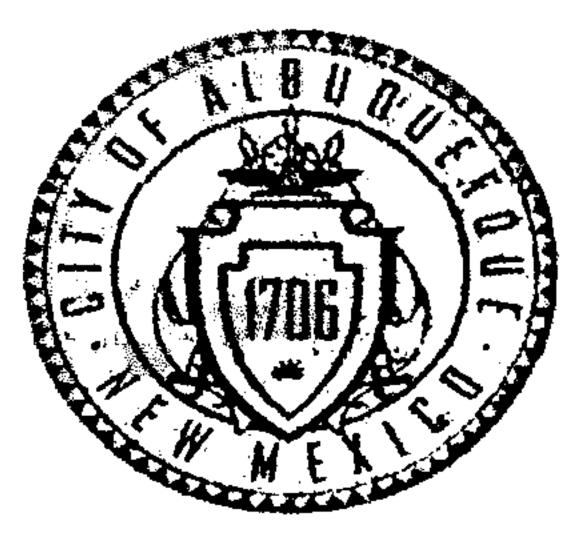
Senior Engineer, Planning Dept.

Development Review Services

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Drainage file Addressee via Email

1 of 1



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: montoya town ho	· · · · · · · · · · · · · · · · · · ·	Building Permit #:	City Drainage #: <u>H12D</u>
DRB#: 1004732	EPC#:		Work Order#:
<u></u>	a2 lands of david maciel		
City Address:	· · · · · · · · · · · · · · · · · · ·		
Engineering Firm: RIO GRAND	DE ENGINEERING		Contact: DAVID SOULE
Address: PO BOX 93924, ALBUC	QUERQUE, NM 87199	· · · · · · · · · · · · · · · · · · ·	
Phone#: 505.321.9099	Fax#: 505.872.0999		E-mail: DAVID@RIOGRANDEENGINEERING.COM
Owner:			Contact
Address:			Contact:
Phone#:	$\Gamma_{\alpha \gamma r} H$.		To 11
none#:	Fax#:	· · · · · · · · · · · · · · · · · · ·	E-mail:
Architect:			Contact:
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Phone#:	Fax#:	<u>- </u>	E-mail:
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REVISED DRAINAGE REPORT

For

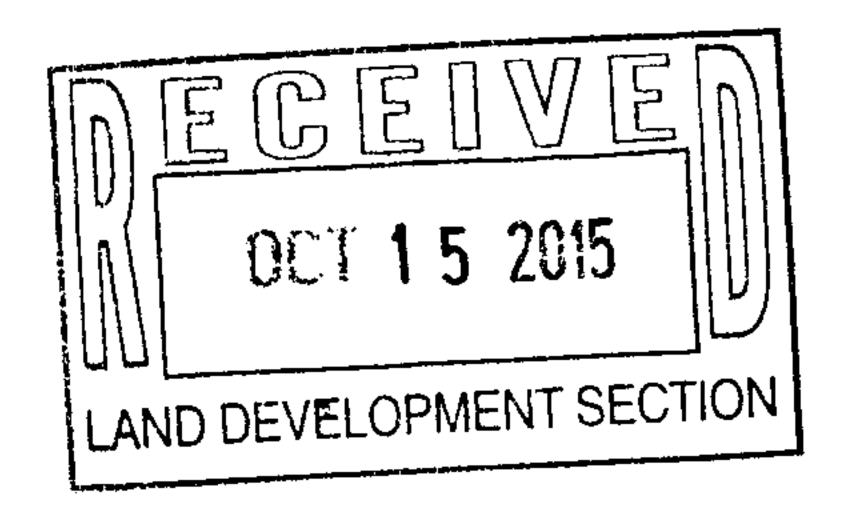
Montoya Street Townhomes Lots 1-4 Maciel-David Subdivision Albuquerque, New Mexico

Prepared by

Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

OCTOBER 2015





David Soule P.E. No. 14522

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Map Site Grading and Drainage Plan	

PURPOSE

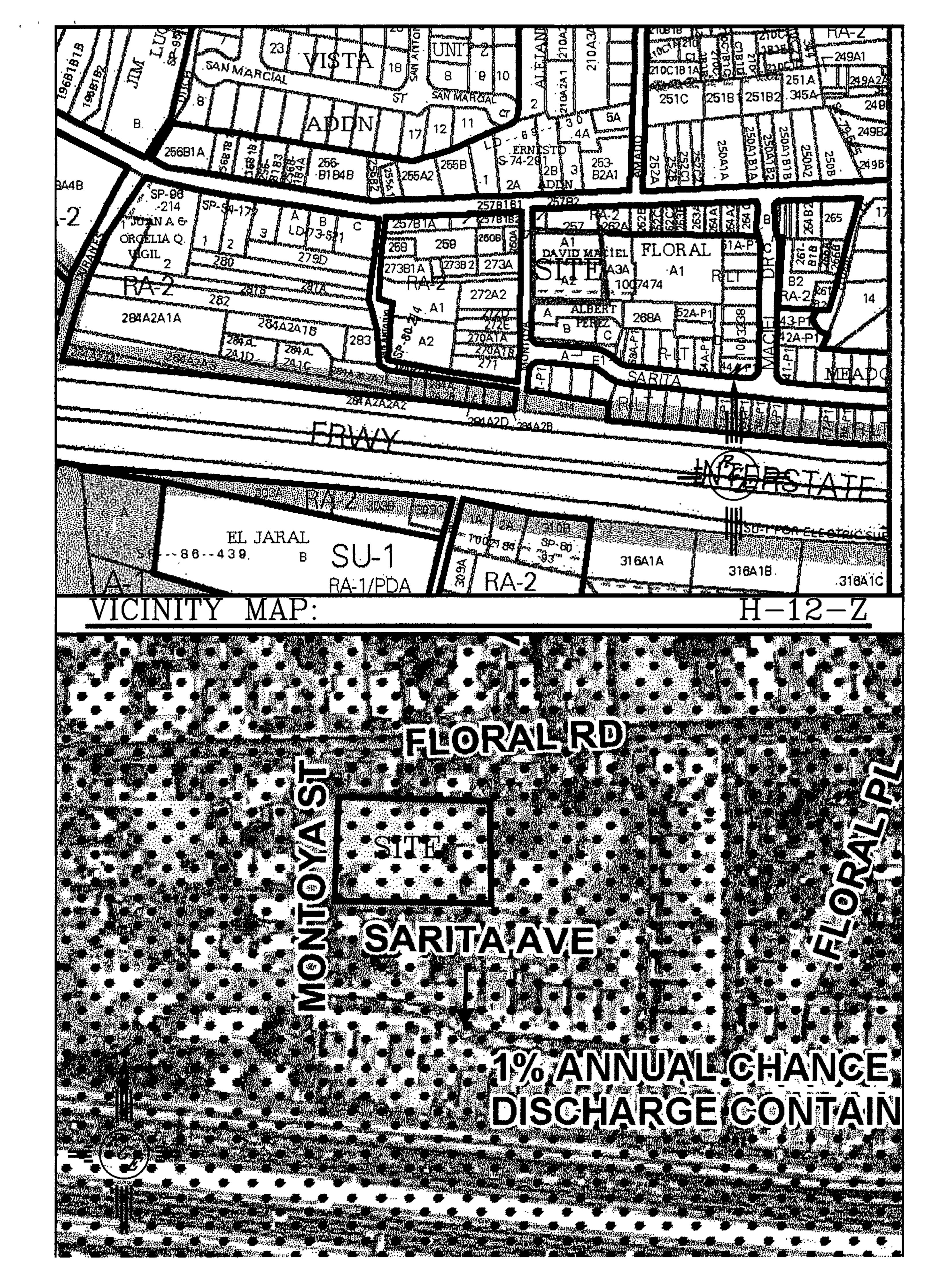
The purpose of this report is to provide the Drainage Management Plan for the development of a 5-lot subdivision located on Montoya Street NW between Floral Road and Interstate 40. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's Development Process Manual drainage guidelines. This report will demonstrate that the grading does not adversely affect the surrounding properties, nor the upstream or downstream facilities.

INTRODUCTION

The subject of this report, as shown on the Exhibit A, is a 0.68-acre parcel of land located on the east side of Montoya Road south of Floral Road NW. The existing legal description of this site is tracts A1&A2 Land of David Maciel; the developed property will be known as lots 1-5 Montoya Street Townhomes Subdivision. As shown on FIRM map35013C0331H, the entire site is located within Flood Zone X. The site has had grading activities upon it in the past. It appears a structure may have occupied the parcel in the past, and the site appears to have been graded and compacted in the past, there is no native vegetation on the site. The site is lower than the road and currently ponds its storm water on site. The site will discharge to Montoya street in a large storm event. It does not appear that the site is impacted by significant upland flows, as the general area is flat and localized shallow ponding is evident on the surrounding properties and roadways. The development of the site will require the site to either discharge at a maximum rate of 2.75 per acre or pond the entire 100-year 10-day developed storm.

EXISTING CONDITIONS

The site currently generates 1.53 cfs and 1,900 cubic of developed storm water in a 100-year event. Due to the fact the site contains a low spot, the site does not discharge. It appears this low point may have been the remnant of grading associated with the removal of a structure. The surrounding area is flat and the area contains shallow ponding in yards and general flow from east to west.



PROPOSED CONDITIONS

The proposed improvements consist of a new 5-lot subdivision serviced by existing roadways and private easements. Due to the existing grades of the lot, and the flat nature of Montoya road, the valley drainage scheme of 2.75 cfs per acre is not achievable. The lots will retain the entire developed flow on site. The platting action will allow for cross lot drainage easement on all parcels. As shown in appendix A, the developed site will generate a peak discharge of 2.26 cfs and a 10-day volume of 4,797 cubic feet. The site consists of raised pads and 18" deep ponds in the front and back yards. The proposed perimeter and intermediate fencing will contain turned blocks every 18' to allow cross lot drainage in conformance to the valley grading scheme. The on site ponding exceeds the required volume. The first flush volume of 315 cubic feet is retained on site.

SUMMARY AND RECOMMENDATIONS

This project is an infill development of a 5-lot residential subdivision with the near north valley. The development is consistent with the valley flat grading scheme policies of the city of Albuquerque. The site allows for cross lot drainage and retains the entire 100-year, 10-day storm water volume generated. The pads are raised such that they are higher than the existing adjacent grades and surrounding streets. In an event exceeding the 100-year event, the site will discharge to Montoya road. The site has been designed in accordance with City of Albuquerque Drainage ordinance. This drainage plan and report conforms to the governing drainage regulations of the Valley Grading Scheme. Since the effected area site encompasses less than 1 acre, a NPDES permit may not be required prior to any construction activity.

APPENDIX A SITE HYDROLOGY

Weighted E Method

	· · · · · · · · · · · · · · · · · · ·										100	-Year, 6-hr	•	10-day			
Basin	Area				Area		ment A		ment B	Treatr	nent C	Treatr	ment D	Weighted E	Volume	Flow	Volume
	(sf)	(acres)	<u>%</u>	(acres)	%	(acres)	<u>%</u>	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)			
Existing	29257.00	0.672	0%	0	100%	0.672	0%	0.000	0%	0.000	,0.780	0.044	1.53	0.044			
PROPOSED	29257.00	0.672	0%	0	42%	0.282	20%	0.134	38%	0.255	1.359	√ 0.076	2.26	0.110			
						1											

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm(zone2)

Ea= 0.53 Qa= 1.56 Eb = 0.78Qb= 2.28 Ec= 1.13 Qc = 3.14Ed= 2.12 Qd = 4.7

Developed Conditions

FLAT GRADING SCHEME

EXISITNG 1.53 CFS PROPOSED 2.26 CFS 1.85 CFS

ALLLOWED

PONDING PROVIDED POND 4896 POND

FRONT YARDS 972 (THREE PONDS

TOTAL PROVIDED 6603 First flush requirement 315.0004 cubic feet

· 255 ac 43560 sf

VOLUME GENERATED

10-day

0.044 AC-FT 1901.705 CF 0.110 AC-FT 4796.19753 CF

4791.53Cf