CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director

Mayor Richard J. Berry

March 18, 2016

Richard Dourte, P.E.
RHD Engineering, LLC
4305 Purple Sage Ave NW
Albuquerque, NM 87120

RE: **Monterey Baptist Church**
12501 Lomas Blvd NE
Request Permanent C.O. - Approved
Engineers Stamp Date 6/17/15 (J22D012A)
Certification date: 3-16-16

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Dear Mr. Dourte,

Based on the Certification received 3/17/2016, the above site is acceptable for release of Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3695 or Totten Elliott at 924-3982.

Sincerely,

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

TE/RH
C: E-Mail Cordova, Camille C.; Connor, Miranda, Rachel; Sandoval, Darlene M.; Blocker, Lois

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

J22 D012A

Project Title: Monterey Baptist Church **Building Permit #:** _____ **City Drainage #:** _____

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

Legal Description: Lot 6A, Block D, Monterey Manor Subdivision

City Address: 12501 Lomas Blvd NE

Engineering Firm: RHD Engineering, LLC **Contact:** Richard Dourte

Address: 4305 Purple Sage Ave. NW, Albuquerque, NM, 87120

Phone#: 505-288-1621 **Fax#:** _____ **E-mail:** rhdengineering@outlook.com

Owner: _____ **Contact:** _____

Address: _____

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

Architect: Simons Architecture PC **Contact:** Joe Simons

Address: _____

Phone#: 505-480-4796 **Fax#:** _____ **E-mail:** joe@simonsarchitecture.com

Surveyor: Harris Surveys **Contact:** Tony Harris

Address: _____

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

Contractor: _____ **Contact:** _____

Address: _____

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

TYPE OF SUBMITTAL:

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

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

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

RECEIVED
MAR 14 2016
LAND DEVELOPMENT SECTION

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

DATE SUBMITTED: March 14, 2016 **By:** R Dourte

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

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

CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director

Mayor Richard J. Berry

February 11, 2016

Richard Dourte, P.E.
RHD Engineering, LLC
4305 Purple Sage Ave NW
Albuquerque, NM 87120

RE: **Monterey Baptist Church**
12501 Lomas Blvd NE
Request 90-Day Temporary C.O. - Approved
Engineers Stamp Date 6/17/15 (J22D012A)

Dear Mr. Dourte,

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Based on the e-mail received today 2/11/2016, the Monterey Baptist Church is acceptable for 90-Day Temporary release of Certificate of Occupancy by Hydrology. The permanent Certificate of Occupancy cannot be issued until the following comments are addressed:

- A portion of the existing cobble swale that connects to the new pond has been removed and is missing.

If you have any questions, you can contact me at 924-3695 or Totten Elliott at 924-3982.

Sincerely,

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

TE/RH
C: e-mail, Cordova, Camille C.; Connor, Miranda, Rachel; Sandoval, Darlene M.; Blocker, Lois

Planning Department
Suzanne Lubar, Director

Mayor Richard J. Berry

February 11, 2016

Richard Dourte, P.E.
RHD Engineering, LLC
4305 Purple Sage Ave NW
Albuquerque, NM 87120

RE: **Monterey Baptist Church**
12501 Lomas Blvd NE
Request 90-Day Temporary C.O. - Approved
Engineers Stamp Date 6/17/15 (J22D012A)

Dear Mr. Dourte,

Based on the e-mail received today 2/11/2016, the Monterey Baptist Church is acceptable for 90-Day Temporary release of Certificate of Occupancy by Hydrology. The permanent Certificate of Occupancy cannot be issued until the following comments are addressed:

- A portion of the existing cobble swale that connects to the new pond has been removed and is missing.

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Sincerely,

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

TE/RH
C: e-mail, Cordova, Camille C.; Connor, Miranda, Rachel; Sandoval, Darlene M.; Blocker, Lois

Elliott, Stanice

From: Richard Dourte <rhdengineering@outlook.com>
Sent: Thursday, February 11, 2016 10:57 AM
To: Elliott, Stanice; Carrasco, Martin N.
Cc: Joe Simons; Chris Romero; Patrick Joseph
Subject: Monterey Baptist Church

Ms. Elliot,
After a field visit to the site yesterday, I can verify that there is a swale on the north side of the sidewalk along Lomas. The swale is not lined or has there been stone place in this swale.

Please issue a temp. CO for this building until the swale has been lined and stone has been placed. Some regrading of the swale entrance to the pond may be needed...

Mr. Carrasco,
After our discussing this morning it is my understanding that there has not been a resolution on who removed the sidewalk adjacent to the missing stone swale (50ft +/-). You have contacted street maintenance to see if they replaced this section of sidewalk. You will contact us when you receive a response from street maintenance. You also plan on contacting the ABCWUA and see if they removed and replaced this sidewalk.

Another item I would like shed some light on is the sidewalk ordinance . It is my understanding that the adjacent property owner is responsible for the maintenance of their sidewalk. If the sidewalk was replaced due to disrepair of this sidewalk by the City, the church did benefit from this sidewalk replacement. It is not unusual that the cost of doing such work is borne by the adjacent property owner.

Thank you for everyone's help in this matter.

Richard

Sent from Windows Mail

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Monterey Baptist Church **Building Permit #:** _____ **City Drainage #:** J22D012A

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

Legal Description: Lot 6A, Block D, Monterey Manor Subdivision

City Address: 12501 Lomas Blvd NE

Engineering Firm: RHD Engineering, LLC **Contact:** Richard Dourte

Address: 4305 Purple Sage Ave. NW, Albuquerque, NM, 87120

Phone#: 505-288-1621 **Fax#:** _____ **E-mail:** rhdengineering@outlook.com

Owner: _____ **Contact:** _____

Address: _____

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

Architect: Simons Architecture PC **Contact:** Joe Simons

Address: _____

Phone#: 505-480-4796 **Fax#:** _____ **E-mail:** joe@simonsarchitecture.com

Surveyor: Harris Surveys **Contact:** Tony Harris

Address: _____

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

Contractor: _____ **Contact:** _____

Address: _____

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

TYPE OF SUBMITTAL:

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

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X BUILDING PERMIT APPROVAL
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___ PAVING PERMIT APPROVAL
___ WORK ORDER APPROVAL
___ GRADING CERTIFICATION

___ SO-19 APPROVAL
___ ESC PERMIT APPROVAL
___ ESC CERT. ACCEPTANCE
___ OTHER (SPECIFY)

RECEIVED
JAN 28 2016
LAND DEVELOPMENT SECTION

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

DATE SUBMITTED: 1-28-16 **By:** _____

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

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
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4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than any part of a larger common plan of development

Harmon Rita T.

To: rhdengineering@outlook.com
Cc: Elliott, Stanice
Subject: J22D012A - Monterey Baptist Church (Stamp Date: 6-17-15)

Mr. Dourte,

This email is being sent in lieu of an attached comment letter in order to expedite the response for initial reviews. Responses to comments should continue to be included in the re-submittal. A reply to this email with responses to comments will not be considered a re-submittal.

Based upon the information provided in your submittal received 1-28-2016, the above referenced plan cannot be approved for Certification of Occupancy by Hydrology until the following comments are addressed:

- A portion of the existing cobble swale that connects to the new pond has been removed and is missing.

If you have any question please do not hesitate to contact me.

Rita Harmon, P.E.
Senior Enginneer, Planning Department
Development Review Services
505-924-3695

CITY OF ALBUQUERQUE

June 22, 2015

Richard Dourte, P.E.
RHD Engineering, LLC
4305 Purple Sage Ave NW
Albuquerque, NM 87120

RE: **Monterey Baptist Church**
12501 Lomas Blvd NE
Grading and Drainage Plan
Engineers Stamp Date 6/17/15 (J22D012A)

Dear Mr. Dourte,

Based upon the information provided in your submittal received 6/12/15, this plan is approved for Building Permit.

Please attach a copy of this approved plan dated 6/17/15 to the construction sets in the permitting process prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, please contact me at 924-3695 or Rudy Rael at 924-3977.

Sincerely,

Rita Harmon, P.E.
Senior Engineer, Hydrology
Planning Department

RR/RH
C: File

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

J22D012A

Project Title: Monterey Baptist Church Building Permit #: _____ City Drainage #: J22D012A

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

Legal Description: Lot 6A, Block D, Monterey Manor Subdivision

City Address: 12501 Lomas.Blvd NE

Engineering Firm: RHD Engineering, LLC Contact: Richard Dourte

Address: 4305 Purple Sage Ave. NW, Albuquerque, NM, 87120

Phone#: 505-288-1621 Fax#: _____ E-mail: rhdengineering@outlook.com

Owner: _____ Contact: _____

Address: _____

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

Architect: Simons Architecture PC Contact: Joe Simons

Address: _____

Phone#: 505-480-4796 Fax#: _____ E-mail: joe@simonsarchitecture.com

Surveyor: Harris Surveys Contact: Tony Harris

Address: _____

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

Contractor: _____ Contact: _____

Address: _____

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

TYPE OF SUBMITTAL:

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___ DRAINAGE PLAN 1st SUBMITTAL
X DRAINAGE PLAN RESUBMITTAL
___ CONCEPTUAL G & D PLAN
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___ SO-19 APPROVAL
___ ESC PERMIT APPROVAL
___ ESC CERT. ACCEPTANCE
___ OTHER (SPECIFY)

RECEIVED
JUN 12 2015
LAND DEVELOPMENT SECTION

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

DATE SUBMITTED: June 12, 2015 By: _____

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

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Drainage Report

For

Monterey Baptist Church
12501 Lomas Blvd NE
Albuquerque, New Mexico

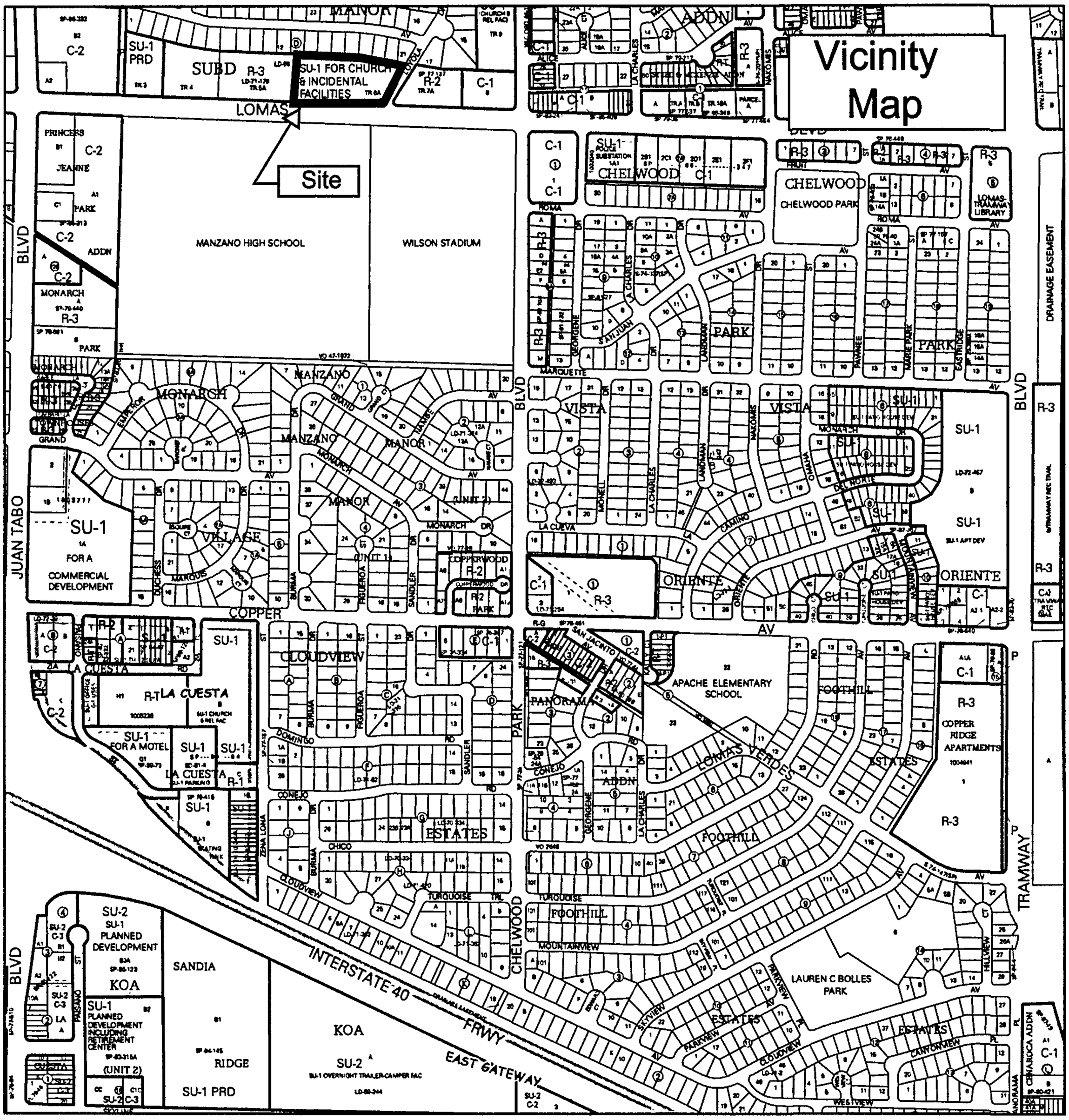
Prepared by

RHD Engineering, LLC
Albuquerque, New Mexico

June 2015

Table of Contents

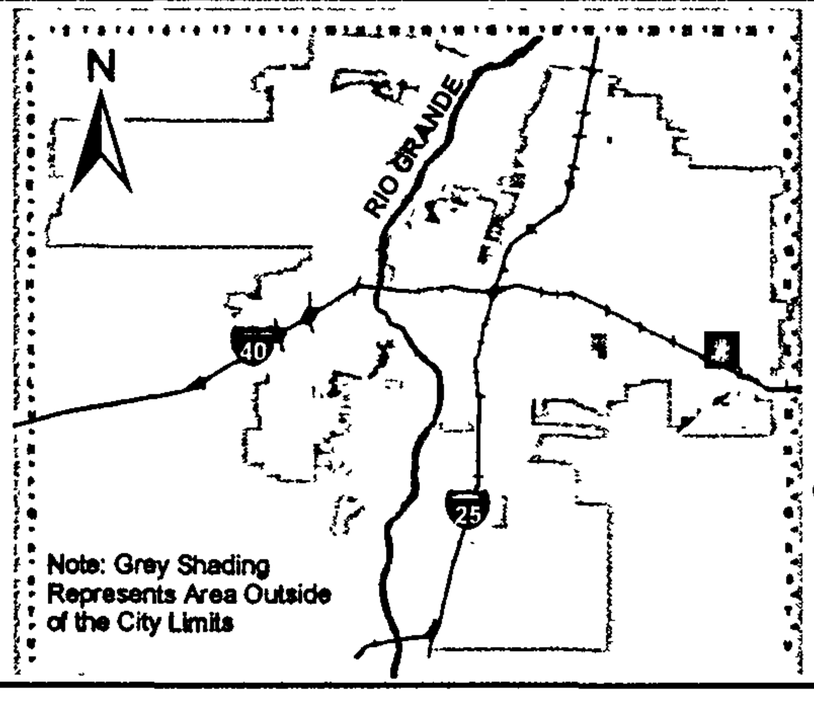
Vicinity Map



For more current information and details visit: http://www.cabq.gov/gis

Albuquerque Geographic Information System

Map amended through: 9/2/2014



Zone Atlas Page:

K-22-Z

Selected Symbols

- SECTOR PLANS
- Design Overlay Zones
- City Historic Zones
- H-1 Buffer Zone
- Petroglyph Mon.
- Escarpment
- 2 Mile Airport Zone
- Airport Noise Contours
- Wall Overlay Zone

0 750 1,500 Feet

Purpose:

The purpose of this drainage report is to provide a drainage management plan for the proposed changes to the Monterey Baptist Church. The site is approximately 2.92 acres in size. The proposed changes include increasing the square footage of the existing building by approximately 1100 sf. This drainage report and plan is prepared utilizing the City of Albuquerque Development Process Manual.

Introduction:

This site is located at 12501 Lomas Boulevard NE on zone atlas K-22.

The Monterey Baptist Church is presently developed, the proposed new improvements include the addition of approximately 1,100 sf of new building on the east side of the existing structure. The entrance into this church will also be reconfigured. No changing or altering of the parking lot is anticipated, thus the drainage pattern for this parking lot will remain the same.

FEMA Firm map 35001C0359G identifies that this site is located in zone x.
Please refer to the drainage plan.

Existing Drainage Conditions:

Approximately half of this site drains (sheet flows) into an existing pond located at the southwest corner of this site discharges that has a controlled outlet into Lomas Boulevard. The majority of the remaining portion of this site free discharges into an existing cobble stone swale that runs along the north side of the sidewalk that is adjacent to Lomas Boulevard and empties into the existing pond located at the southwest corner of this site, and it discharges as mentioned above.

Proposed Conditions:

The proposed conditions for the majority of the site will remain as they are today.

The runoff from drainage basin A will discharge into two inlets, located within the adjoining sidewalk area of the new addition. The pipe from these catch basins will daylight onsite and discharge into the cobble stone swale that empties into the pond at the southwest corner of the site.

The runoff from drainage basin B will sheet flow toward the southeast corner of this basin and discharge into Lomas blvd into the cobble stone swale that empties into the pond at the southwest corner of the site.

The runoff from drainage basin C will flow onto drainage basin A and discharge and discharge into the inlets.

The required first flush volume of stormwater generated by the new impervious areas (1,100 sf addition) is 31cf.

Summary:

This site will discharge the stormwater flows in the same manner as it is today.

For Basin A

The peak flows will increase from .34 cfs to .39 cfs or by 0.05 cfs for the 100 yr 6 hr. event.

The excess precipitation will increase from 529 cf to 642 cf or by 113 cf for the 100 yr 6 hr event.

For Basin B

The peak flows will increase from .45 cfs to .49 cfs or by 0.04 cfs for the 100 yr 6 hr. event.

The excess precipitation will increase from 748 cf to 843 cf or by 95 cf for the 100 yr 6 hr event.

For Basin C

The peak flows will remain the same at 0.32 cfs.

The excess precipitation will remain the same at 594 cf.

The City of Albuquerque's first flush requirements will be adhered to for the construction of the proposed improvements. The first flush for the proposed improvements is 31 cf. The existing pond is going to be increased by 140cf, thus the increased volume of the pond is greater than the first flush requirements.

APPENDIX A

Drainage Calculations for Basin D

Zone 4 (100yr, 6hr)

Land Treatment	Peak discharge	Excess Precipitation
Type A -	2.20 cfs/ac	0.80 inches
Type B -	2.92 cfs/ac	1.08 inches
Type C -	3.73 cfs/ac	1.46 inches
Type D -	5.25 cfs/ac	2.64 inches

Existing Conditions for Basin A

Impervious area (type D)= 800 sf = 0.018 ac

Area other than Impervious (type C)= 3,700 sf – 800 sf = 2900 sf= .067 ac

Peak Flow generated

.018 ac x 5.25 cfs = .09 cfs
.067 ac x 3.73 cfs = .25 cfs
Total = .34 cfs

Excess Precipitation

800 sf x 2.64 in/12 = 176 cf
2900 sf x 1.46 in/12 = 353 cf
Total = 529 cf

Existing Conditions for Basin B

Impervious area (type D)= 2160 sf = 0.050 ac

Area other than Impervious (type C)= 4400 sf – 2160 sf = 2240 sf = .051 ac

Peak Flow generated

.050 ac x 5.25 cfs = .26 cfs
.051 ac x 3.73 cfs = .19 cfs
Total = .45 cfs

Excess Precipitation

2160 sf x 2.64 in/12 = 475 cf
2240 sf x 1.46 in/12 = 273 cf
Total = 748 cf

Existing Conditions for Basin C

Impervious area (type D)= 2700 sf = 0.06 ac

Peak Flow generated

.060 ac x 5.25 cfs = .32 cfs

Total = .32 cfs

Excess Precipitation

2700 sf x 2.64 in/12 = 594 cf

Total = 594 cf

Proposed Conditions for Basin A

Impervious area (type D)= 1950 sf = 0.045 ac

Area other than Impervious (type C)= 3,700 sf – 1950sf = 1750 sf= .040ac

Peak Flow generated

.045 ac x 5.25 cfs = .24 cfs
.040 ac x 3.73 cfs = .15 cfs
Total = .39 cfs

Excess Precipitation

1950 sf x 2.64 in/12 = 429 cf
1750 sf x 1.46 in/12 = 213 cf
Total = 642 cf

Proposed Conditions for Basin B

Impervious area (type D)= 3125 sf = 0.072 ac

Area other than Impervious (type C)= 4400 sf – 3125 sf = 1275 sf = .029 ac

Peak Flow generated

.072 ac x 5.25 cfs = .38cfs
.029 ac x 3.73 cfs = .11 cfs
Total = .49 cfs

Excess Precipitation

3125 sf x 2.64 in/12 = 688 cf
1275 sf x 1.46 in/12 = 155 cf
Total = 843 cf

First flush requirements (for new impervious area)

1,100 sf x 0.34 inches/12 = 31 cf.

Increase in pond volume

The area of pond at contour 5623 is 280 sf, by increasing the depth of the pond by 0.5 ft, the increased volume is 280/2 x .5 = 140 cf.

Inlet Grate Capacity (see Appendix B)

Each grate @ 0.1 ft depth has a capacity of .40 cfs, with a clogging factor of 50%, each grate will have a capacity of 0.20cfs. Thus four inlet at 0.20 cfs capactiy each for a total capacity of 0.80 cfs >0.71cfs (0.39 cfs + 0.32cfs) needed for drainage Basin A.

6 inch PVC capacity

$$Q = \frac{1.49 \times A \times R^{.67} \times S^{.5}}{n}$$

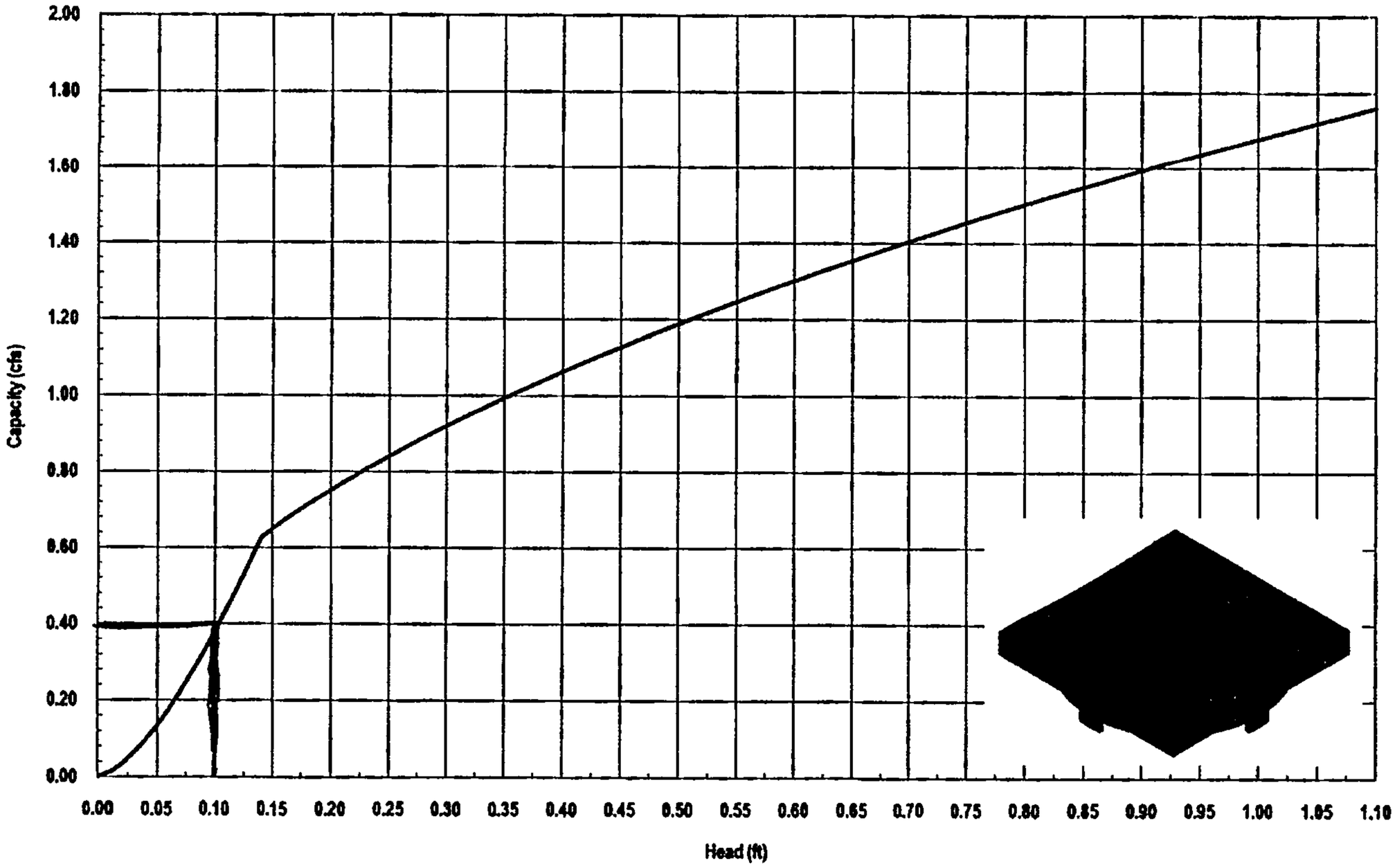
Area = 0.20 sf
R = A/P = 0.20/1.57 = 0.13
S = 0.01
n = .009

$$Q = \frac{1.49(0.20)((0.13)^{.67})((.01)^{.5})}{.009}$$

Q = 0.84 cfs

Thus the capacity of the 6 inch pvc pipe, 0.84 cfs >0.71 cfs required for Basin A.
Use an 8 inch pvc pipe

Nyloplast 12" Pedestrian Grate Inlet Capacity Chart



Nyloplast
3130 Verona Avenue • Buford, GA 30518
(866) 888-8479 / (770) 932-2443 • Fax: (770) 932-2490

Appendix B

CITY OF ALBUQUERQUE

July 10, 2013

David Soule, PE
Rio Grande Engineering
PO Box 93924
Albuquerque, NM 87199

Re: Monterey Baptist Church
12501 Lomas Blvd NE
Request for Permanent C.O. –Accepted
Engineer's Stamp dated: 1-23-12, (J22/D012A)
Certification dated: 7-3-13

Dear Mr. Soule,

Based upon the information provided in the Certification received 7-03-13, the above referenced Certification is acceptable for a release of a Permanent Certificate of Occupancy by Hydrology.

Hydrology is asking for an electronic copy, in .pdf format, of this certification for our records. This certification can be e-mailed to me at: ccherne@cabq.gov or rrael@cabq.gov.

If you have any questions, you can contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Curtis A. Cherne, P.E.
Principal Engineer—Hydrology Section
Development and Building Services

RR/CC
C: CO Clerk—Katrina Sigala
e-mail

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE: ***Monterey Baptist Church*** ZONE MAP/DRG. FILE #: J22/ D012A

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: **tract 6 monterrey Mannor**

CITY ADDRESS: **12501 Lomas NE**

ENGINEERING FIRM:	Rio Grande Engineering	CONTACT:	David Soule, PE
ADDRESS:	po box 93924	PHONE:	(505)321-9099
CITY, STATE:	Albuquerque, New Mexico	ZIP CODE:	87199
OWNER:	***Montery baptist church***	CONTACT:	
ADDRESS:	12501 Lomas ne	PHONE:	
CITY, STATE:	Albuquerque, NM 87102	ZIP CODE:	87112
ARCHITECT:	Joe simmons.	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
SURVEYOR:	Geo surv co	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
CONTRACTOR:		CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	

CHECK TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- ____ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL GRADING & DRAINAGE PLAN
- ____ GRADING PLAN
- ____ EROSION CONTROL PLAN
- x ENGINEER'S CERTIFICATION (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ENGINEERS CERTIFICATION (TCL)
- ____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ____ SIA / FINANACIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D. APPROVAL
- ____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- ____ FOUNDATION PERMIT APPROVAL
- ____ BUILDING PERMIT APPROVAL
- x CERTIFICATE OF OCCUPANCY (PERM.)
- ____ CERTIFICATE OF OCCUPANCY (TEMP.)
- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- x YES
- ____ NO
- ____ COPY PROVIDED

RECEIVED
JUL 0 3 2013
LAND DEVELOPMENT SECTION

DATE SUBMITTED: 6/6/2013 BY: David Soule

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal.
The particular nature, location and scope of the proposed development defines the degree of drainage detail.
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1. **Conceptual Grading and Drainage Plans**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
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CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

July 3, 2013

Joseph F. Simons, R.A.
Simons Architecture.com
PO Box 67408
Cedar Crest, NM 87193-7408

Re: Request for Certificate of Occupancy for
Monterey Baptist Church (J-22/D012A)
12501 Lomas NE
Architect's Stamp dated 05-30-13

Dear Mr. Simons,

Based upon the information provided in your submittal received 07-03-13, Transportation Development has no objection to the issuance of a **Permanent Certificate of Occupancy.**. This letter serves as a "green tag" from Transportation Development for a **Permanent Certificate of Occupancy** to be issued by the Building and Safety Division.

If you have any questions, please contact me at (505)924-3630.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.
Senior Traffic Engineer
Development Review Services
Planning Department

C: File
Hydrology
CO Clerk

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

J-22/D012

Project Title: MONTEREY BAPTIST CHURCH Building Permit #: 20129062S City Drainage #: _____

DRB#: 1006921 EPC#: _____ Work Order#: _____

Legal Description: TRACT G-A, BLOCK D, MONTEREY MANOR SUBDIVISION

City Address: 12501 LOMAS, NE ABQ. NM

Engineering Firm: RIO GRANDE ENGINEERING Contact: DAVID SOULE

Address: 1606 CENTRAL AVE SE #201 ABQ. 87106

Phone#: 321-9099 Fax#: _____ E-mail: davide riograndeengineering.com

Owner: MONTEREY BAPTIST CHURCH Contact: JOHN NYSTROM

Address: 12501 LOMAS BLVD. NE ABQ. NM

Phone#: 294-7679 Fax#: _____ E-mail: montereybcequestoffice.net

Architect: SIMONS ARCHITECTURE PC Contact: JOE SIMONS

Address: P.O. BOX 67408 ABQ. NM 87193

Phone#: 480-4796 Fax#: _____ E-mail: jfs@simonsarchitecture.com

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: BRITTON CONSTRUCTION Contact: KEVIN BRITTON

Address: _____

Phone#: 268-2626 Fax#: _____ E-mail: kbritton@brittonconstruction.com

TYPE OF SUBMITTAL:

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

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

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

RECEIVED
JUL 03 2013
LAND DEVELOPMENT SECTION

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

DATE SUBMITTED: 6.5.13 By: JOE SIMONS, AIA

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

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
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4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

SIMONS ARCHITECTURE.COM

PO Box 67408
ALBUQUERQUE, NM 87193-7408
JFS @ SIMONSARCHITECTURE.COM

505.480.4796 VOICE

May 30, 2013

TRAFFIC CERTIFICATION

I, JOE SIMONS JR., NMRA 002890, OF THE FIRM SIMONS ARCHITECTURE PC, HEREBY CERTIFY THAT THIS PROJECT IS IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE DRB, AA OR TCL APPROVED PLAN DATED 1/27/2012. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY JOE SIMONS JR., OF THE FIRM SIMONS ARCHITECTURE. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 5/29/13 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY (PERMANENT). ANY ALTERATIONS TO THE APPROVED TCL IS NOTED IN RED ON THE ATTACHED PLAN AND IS NOTED AS FOLLOWS:

THE RECORD INFORMATION PRESENTED HERON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE TRAFFIC ASPECTS OF THIS PROJECT. THOSE RELYING ON THE RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

STATE OF NEW MEXICO
Joseph F.
Simons, Jr.
No. 2890
5-30-13
REGISTERED ARCHITECT

Signature of Engineer or Architect

5-30-2013
Date

RECEIVED
JUN - 5 2013

Salgado-Fernandez, Nilo E.

From: Salgado-Fernandez, Nilo E.

Sent: Tuesday, July 02, 2013 3:49 PM

To: 'Simons Architecture'

Subject: RE: Permanent CO for 12501 Lomas Blvd. NE

Mr. Simons, in accordance with the Drainage and Transportation Information Sheet a Temporary C.O. was requested and checked on this sheet. So a temporary CO was approved by our office.
Nilo Salgado-Fernandez

From: Simons Architecture [mailto:jfs@simonsarchitecture.com]
Sent: Tuesday, July 02, 2013 3:35 PM
To: Salgado-Fernandez, Nilo E.
Subject: Permanent CO for 12501 Lomas Blvd. NE

Hello Nilo

We talked on the phone earlier today regarding the final C.O. for this property. The address is 12501 Lomas Blvd. NE. The file number is 11-10136. The project number is 1006921.

Last month I provided a the letter request for the permanent certificate of occupancy. You granted a temporary 120 day which is totally fine but we now need the permanent C.O. letter.

The only traffic room that was done was paving a fire turnaround and striping stating that there was no parking in that turnaround. That was completed at the time of the Certificate of Occupancy letter.

Attached is another copy of the letter I submitted to you last month and a copy of the approved site plan.

We are looking to get the permanent letter tomorrow if that is possible. I can come by before lunch or after lunch whichever is convenient for you.

Thanks so much for the help you always provide on these projects.

Joe Simons, AIA

SIMONS ARCHITECTURE.COM

Building Design With Integrity

Mr. Joe Simons Jr.
Simons Architecture
architect aia
(505) 480-4796 Work
(505) 480-4796 Mobile
jfs@simonsarchitecture.com
P.O. Box 67408
Albuquerque, NM 87193-7408
http://www.simonsarchitecture.com

7/2/2013

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

J-22/D012A

Project Title: Monterey Baptist Church Building Permit #: 201229062 City Drainage #: _____

DRB#: 1006921 EPC#: _____ Work Order#: _____

Legal Description: Tract 6-A, block D, Monterey Manor Subdivision

City Address: 12501 Lomas, NE, Abq., NM

Engineering Firm: Rio Grande Engineering Contact: David Soule

Address: 1606 Central Ave., SE, #201, Abq., 87106

Phone#: 321-9099 Fax#: _____ E-mail: david@riograndeengineerin

Owner: Monterey Baptist Church Contact: _____

Address: 12501 Lomas Blvd., NE, Abq., NM

Phone#: 294-7679 Fax#: _____ E-mail: montereybc@qwestoffice.n

Architect: Simons Architecture PC Contact: _____

Address: P.O. Box 67408, Abq., NM 87103

Phone#: 480-4796 Fax#: _____ E-mail: jfs@simonsarchitecture.com

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: Britton Construction Contact: Kevin Britton

Address: _____

Phone#: 268-2626 Fax#: _____ E-mail: kbritton@brittonconstructio

TYPE OF SUBMITTAL:

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

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

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

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

DATE SUBMITTED: 7.3.13 By: Joe Simons Jr., AIA

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

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
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CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

June 6, 2013

Joseph F. Simons, R.A.
Simons Architecture.com
PO Box 67408
Cedar Crest, NM 87193-7408

Re: Request for Certificate of Occupancy for
Monterey Baptist Church (J-22/D012A)
12501 Lomas NE
Architect's Stamp dated 05-30-13

Dear Mr. Simons,

The issuance of a **120-day Temporary Certificate of Occupancy** has been provided until all minor modification has been completed. This letter serves as a "green tag" from Transportation Development for a **120-day Temporary Certificate of Occupancy** to be issued by the Building and Safety Division.

Once all modifications have been completed, please resubmit an acceptable package along with fully completed Drainage Information Sheet to front counter personnel for log in and evaluation by Transportation for a Permanent C.O. submittal.

If you have any questions, please contact me at (505)924-3630.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.
Senior Traffic Engineer
Development Review Services
Planning Department

C: File, Hydrology, and CO Clerk

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

F-22/D012A

Project Title: MONTEREY BAPTIST CHURCH Building Permit #: 201290625 City Drainage #: _____

DRB#: 1006921 EPC#: _____ Work Order#: _____

Legal Description: TRACT G-A, BLOCK D, MONTEREY MANOR SUBDIVISION

City Address: 12501 LOMAS, NE ABQ. NM

Engineering Firm: RIO GRANDE ENGINEERING Contact: DAVID SOULE

Address: 1606 CENTRAL AVE SE #201 ABQ. 87106

Phone#: 321-9099 Fax#: _____ E-mail: david@riograndeengineering.com

Owner: MONTEREY BAPTIST CHURCH Contact: JOHN NYSTROM

Address: 12501 LOMAS BLVD. NE ABQ. NM

Phone#: 294-7679 Fax#: _____ E-mail: montereybcewestoffice.net

Architect: SIMONS ARCHITECTURE PC Contact: JOE SIMONS

Address: P.O. BOX 67408 ABQ. NM 87193

Phone#: 480-4796 Fax#: _____ E-mail: jfs@simonsarchitecture.com

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: BRITTON CONSTRUCTION Contact: KEVIN BRITTON

Address: _____

Phone#: 268-2626 Fax#: _____ E-mail: kbritton@brittonconstruction.com

TYPE OF SUBMITTAL:

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

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

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____ PRELIMINARY PLAT APPROVAL
____ S. DEV. PLAN FOR SUB'D APPROVAL
____ S. DEV. FOR BLDG. PERMIT APPROVAL
____ SECTOR PLAN APPROVAL
____ FINAL PLAT APPROVAL
____ CERTIFICATE OF OCCUPANCY (PERM)
✓ CERTIFICATE OF OCCUPANCY (TCL TEMP)
____ FOUNDATION PERMIT APPROVAL
____ BUILDING PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ PAVING PERMIT APPROVAL
____ WORK ORDER APPROVAL
____ GRADING CERTIFICATION

____ SO-19 APPROVAL
____ ESC PERMIT APPROVAL
____ ESC CERT. ACCEPTANCE
____ OTHER (SPECIFY)

RECEIVED
JUN 05 2013

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

DATE SUBMITTED: 6.5.13 By: JOE SIMONS, AIA

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

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SIMONS
ARCHITECTURE

P.O. Box 67408
Albuquerque, NM 87193-7408
505-480-4796 voice

jfs@simonsarchitecture.com
www.simonsarchitecture.com

September 30, 2011

City of Albuquerque Planning Department
Environmental Planning Commission
Design Review Board
600 2nd St. NW
Albuquerque, NM 87103

Re: Letter of Authorization
Monterey Baptist Church
12501 Lomas Blvd. NE
Albuquerque, NM 87112

To Whom It May Concern:

This letter authorizes David Soule of Rio Grande Engineering and/or Joe Simons of Simons Architecture to act as our representative during the City of Albuquerque Planning Department EPC / DRB process for our church located at 12501 Lomas Blvd. Ne, Albuquerque, New Mexico 87112.

Sincerely,

Claude W. Cone

Senior Pastor
Monterey Baptist Church

CITY OF ALBUQUERQUE

January 27, 2012

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

Re: Monterey Baptist Church Grading and Drainage Plan,
Engineer's Stamp Date 1/27/2012 (J22/D012A)

Dear Mr. Soule,

Based upon the information provided in your submittal received 1-27-12, the Grading and Drainage Plan is approved for Building Permit, Grading Permit, and SO-19 Permit.

A separate SO-19 permit is required for construction within City ROW. A copy of this approval letter must be on hand when applying for the excavation/barricading permit. The work in the City ROW must be inspected and accepted. Contractor must contact Martin Pacheco at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist and a Green Tag for the SO-19 permit will be required

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

Sincerely,

Shahab Biazar, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: File

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE: ***Monterey Baptist Church*** ZONE MAP/DRG. FILE #: J22/ D012A

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: **tract 6 monterrey Mannor**

CITY ADDRESS: **12501 Lomas NE**

ENGINEERING FIRM:	Rio Grande Engineering	CONTACT:	David Soule, PE
ADDRESS:	po box 93924	PHONE:	(505)321-9099
CITY, STATE:	Albuquerque, New Mexico	ZIP CODE:	87199
OWNER:	***Montery baptist church***	CONTACT:	
ADDRESS:	12501 Lomas ne	PHONE:	
CITY, STATE:	Albuquerque, NM 87102	ZIP CODE:	87112
ARCHITECT:	Joe simmons.	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
SURVEYOR:	Geo surv co	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
CONTRACTOR:		CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	

CHECK TYPE OF SUBMITTAL:

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- ____ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- x ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL GRADING & DRAINAGE PLAN
- x ____ GRADING PLAN
- ____ EROSION CONTROL PLAN
- ____ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ENGINEERS CERTIFICATION (TCL)
- ____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

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- ____ FINAL PLAT APPROVAL
- ____ FOUNDATION PERMIT APPROVAL
- x ____ BUILDING PERMIT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY (PERM.)
- ____ CERTIFICATE OF OCCUPANCY (TEMP.)
- x ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- x ____ YES
- ____ NO
- ____ COPY PROVIDED

RECEIVED
JAN 27 2012
HYDROLOGY SECTION

RECEIVED
JAN 26 2012
HYDROLOGY SECTION

DATE SUBMITTED: 1/26/2012 BY: David Soule

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal.
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RIO GRANDE ENGINEERING OF NEW MEXICO, LLC

January 26, 2012

Mr. Shahab Biazar, PE
Senior Engineer
Planning Department
City of Albuquerque

RE: Grading and Drainage Plan
Monterey Baptist Church (J22/D012A)

Dear Shahab:

The purpose of this letter is to accompany the enclosed grading plan for the referenced project. This plan has been modified to address your verbal comments . The following is a summary of your comments with the annotation as to how the plans were modified to address the comments.

1. Hydrology recommends both basin A and B discharge into detention pond.

The site grading has been modified so both A and B are route through pond. The outfall has been increased from 8" to a 10". The provided peak discharge rate of 6.28 which is less than if native (7.08). Due to increase in pipe size and flow rate two sidewalk culverts are being proposed

Should you have any questions regarding this resubmittal, please do not hesitate to call me.

Sincerely,

David Soule, PE

Enclosures

VOLUME CALCULATIONS

ACTUAL ELEV.	DEPTH (FT)	CONTOUR AREA	VOLUME cf	VOLUME AC-FT	Q (CFS)	
	(above outlet)					BOTH PIPES
5621	0		0		0.000	
5622.00	0.00	0.00	0.0000	0.0000	0.000	
5623.00	0.00	1350.00	0.0000	0.0000	0.000	0
5624.00	0.67	2550.00	1950.0000	0.0448	1.322	2.643612141
5625.00	1.67	4100.00	5275.0000	0.1211	2.940	5.88010206
5626.00	2.67	5500.00	10075.0000	0.2313	3.942	7.884320853

inv=23.50

Orifice Equation

Q = CA SQRT(2gH)

C =	0.6
Diameter (in)	10
Area (ft^2)=	0.545415391
g =	32.2
H (Ft) =	Depth of water above center of orifice
Q (CFS)=	Flow

```
*S      AHYMO - MONTEREY
*S                POND ROUTING

START                   TIME=0.0   PUNCH CODE=0


RAINFALL                TYPE=2
                        QUARTER=0.0     ONE= 2.60 IN
                        SIX= 3.10 IN    DAY= 3.95 IN    DT = 0.05 HR



COMPUTE NM HYD          ID=1   HYD NO=101   DA= .004647 SQ MI
                        PER A=30   PER B=21   PER C=19   PER D=30
                        TP=-.20    MASSRAIN=-1

PRINT HYD               ID=1   CODE=3


* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR         ID=2    HYD NO=102    INFLOW=1    CODE=3
                        OUTFLOW(CFS)     STORAGE(AC-FT)     ELEV(FT)
                           0.0               0.000          23.00

                           2.64              0.045          24.00
                           5.88              0.121          25.00
                           7.88              0.231          26.00



PRINT HYD               ID=2    CODE=3


FINISH
```

```
        AHYMO PROGRAM (AHYMO-S4)                        - Version: S4.01a - Rel: 01a
             RUN DATE (MON/DAY/YR) = 01/26/2012
             START TIME (HR:MIN:SEC) = 14:44:14     USER NO.=
RioGrandeSingleA41963517
             INPUT FILE =  and Settings\Owner\Desktop\2011jobs\1162-monterey baptist
churc\POND 022612.txt


    *S      AHYMO - MONTEREY
    *S              POND ROUTING

    START                   TIME=0.0   PUNCH CODE=0

    RAINFALL                TYPE=2
                            QUARTER=0.0     ONE= 2.60 IN
                            SIX= 3.10 IN    DAY= 3.95 IN    DT = 0.05 HR


                  24-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE
AREAS (NM & AZ) - D1
                  DT =   0.050000 HOURS        END TIME =    24.000002 HOURS
                    0.0000  0.0033  0.0068  0.0105  0.0145  0.0186  0.0233
                    0.0299  0.0400  0.0510  0.0624  0.0749  0.0876  0.1007
                    0.1142  0.1280  0.1434  0.1595  0.1769  0.2078  0.2454
                    0.2958  0.3529  0.4234  0.5175  0.6233  0.8060  1.0901
                    1.5769  1.9190  2.1889  2.3245  2.4433  2.5287  2.5966
                    2.6559  2.6992  2.7390  2.7718  2.7937  2.8101  2.8246
                    2.8382  2.8502  2.8614  2.8724  2.8830  2.8917  2.8967
                    2.9017  2.9066  2.9111  2.9157  2.9201  2.9244  2.9286
                    2.9327  2.9366  2.9405  2.9444  2.9482  2.9518  2.9553
                    2.9588  2.9623  2.9657  2.9690  2.9722  2.9754  2.9785
                    2.9816  2.9847  2.9877  2.9907  2.9936  2.9965  2.9994
                    3.0022  3.0050  3.0078  3.0105  3.0132  3.0159  3.0185
                    3.0211  3.0237  3.0263  3.0288  3.0313  3.0338  3.0362
                    3.0387  3.0411  3.0434  3.0458  3.0481  3.0504  3.0527
                    3.0550  3.0572  3.0594  3.0616  3.0638  3.0660  3.0681
                    3.0702  3.0723  3.0744  3.0765  3.0785  3.0806  3.0826
                    3.0846  3.0866  3.0885  3.0905  3.0924  3.0943  3.0962
                    3.0981  3.1000  3.1024  3.1047  3.1071  3.1094  3.1118
                    3.1142  3.1165  3.1189  3.1212  3.1236  3.1260  3.1283
                    3.1307  3.1331  3.1354  3.1378  3.1401  3.1425  3.1449
                    3.1472  3.1496  3.1519  3.1543  3.1567  3.1590  3.1614
                    3.1637  3.1661  3.1685  3.1708  3.1732  3.1756  3.1779
                    3.1803  3.1826  3.1850  3.1874  3.1897  3.1921  3.1944
                    3.1968  3.1992  3.2015  3.2039  3.2062  3.2086  3.2110
                    3.2133  3.2157  3.2181  3.2204  3.2228  3.2251  3.2275
                    3.2299  3.2322  3.2346  3.2369  3.2393  3.2417  3.2440
                    3.2464  3.2487  3.2511  3.2535  3.2558  3.2582  3.2606
                    3.2629  3.2653  3.2676  3.2700  3.2724  3.2747  3.2771
                    3.2794  3.2818  3.2842  3.2865  3.2889  3.2912  3.2936
                    3.2960  3.2983  3.3007  3.3031  3.3054  3.3078  3.3101
                    3.3125  3.3149  3.3172  3.3196  3.3219  3.3243  3.3267
                    3.3290  3.3314  3.3337  3.3361  3.3385  3.3408  3.3432
                    3.3456  3.3479  3.3503  3.3526  3.3550  3.3574  3.3597
                    3.3621  3.3644  3.3668  3.3692  3.3715  3.3739  3.3762
                    3.3786  3.3810  3.3833  3.3857  3.3880  3.3904  3.3928
                    3.3951  3.3975  3.3999  3.4022  3.4046  3.4069  3.4093
                    3.4117  3.4140  3.4164  3.4187  3.4211  3.4235  3.4258
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3.4282	3.4305	3.4329	3.4353	3.4376	3.4400	3.4424
3.4447	3.4471	3.4494	3.4518	3.4542	3.4565	3.4589
3.4612	3.4636	3.4660	3.4683	3.4707	3.4730	3.4754
3.4778	3.4801	3.4825	3.4849	3.4872	3.4896	3.4919
3.4943	3.4967	3.4990	3.5014	3.5037	3.5061	3.5085
3.5108	3.5132	3.5155	3.5179	3.5203	3.5226	3.5250
3.5274	3.5297	3.5321	3.5344	3.5368	3.5392	3.5415
3.5439	3.5462	3.5486	3.5510	3.5533	3.5557	3.5580
3.5604	3.5628	3.5651	3.5675	3.5699	3.5722	3.5746
3.5769	3.5793	3.5817	3.5840	3.5864	3.5887	3.5911
3.5935	3.5958	3.5982	3.6005	3.6029	3.6053	3.6076
3.6100	3.6124	3.6147	3.6171	3.6194	3.6218	3.6242
3.6265	3.6289	3.6312	3.6336	3.6360	3.6383	3.6407
3.6430	3.6454	3.6478	3.6501	3.6525	3.6548	3.6572
3.6596	3.6619	3.6643	3.6667	3.6690	3.6714	3.6737
3.6761	3.6785	3.6808	3.6832	3.6855	3.6879	3.6903
3.6926	3.6950	3.6973	3.6997	3.7021	3.7044	3.7068
3.7092	3.7115	3.7139	3.7162	3.7186	3.7210	3.7233
3.7257	3.7280	3.7304	3.7328	3.7351	3.7375	3.7398
3.7422	3.7446	3.7469	3.7493	3.7517	3.7540	3.7564
3.7587	3.7611	3.7635	3.7658	3.7682	3.7705	3.7729
3.7753	3.7776	3.7800	3.7823	3.7847	3.7871	3.7894
3.7918	3.7942	3.7965	3.7989	3.8012	3.8036	3.8060
3.8083	3.8107	3.8130	3.8154	3.8178	3.8201	3.8225
3.8248	3.8272	3.8296	3.8319	3.8343	3.8367	3.8390
3.8414	3.8437	3.8461	3.8485	3.8508	3.8532	3.8555
3.8579	3.8603	3.8626	3.8650	3.8673	3.8697	3.8721
3.8744	3.8768	3.8791	3.8815	3.8839	3.8862	3.8886
3.8910	3.8933	3.8957	3.8980	3.9004	3.9028	3.9051
3.9075	3.9098	3.9122	3.9146	3.9169	3.9193	3.9216
3.9240	3.9264	3.9287	3.9311	3.9335	3.9358	3.9382
3.9405	3.9429	3.9453	3.9476	3.9500		

COMPUTE NM HYD ID=1 HYD NO=101 DA= .004647 SQ MI
PER A=30 PER B=21 PER C=19 PER D=30
TP=-.20 MASSRAIN=-1

K = 0.109000HR TP = 0.200000HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 3.6684 CFS UNIT VOLUME = 0.9960 B = 526.28 P60 = 2.6000
AREA = 0.001394 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

K = 0.214779HR TP = 0.200000HR K/TP RATIO = 1.073894 SHAPE CONSTANT, N = 3.288961
UNIT PEAK = 4.9541 CFS UNIT VOLUME = 0.9972 B = 304.60 P60 = 2.6000
AREA = 0.003253 SQ MI IA = 0.52357 INCHES INF = 1.31600 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

PRINT HYD ID=1 CODE=3

PARTIAL HYDROGRAPH 101.00

TIME	FLOW	TIME	FLOW	TIME	FLOW

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	5.100	0.0	10.200	0.0
15.300	0.0	20.400	0.0		
0.150	0.0	5.250	0.0	10.350	0.0
15.450	0.0	20.550	0.0		
0.300	0.0	5.400	0.0	10.500	0.0
15.600	0.0	20.700	0.0		
0.450	0.0	5.550	0.0	10.650	0.0
15.750	0.0	20.850	0.0		
0.600	0.0	5.700	0.0	10.800	0.0
15.900	0.0	21.000	0.0		
0.750	0.0	5.850	0.0	10.950	0.0
16.050	0.0	21.150	0.0		
0.900	0.1	6.000	0.0	11.100	0.0
16.200	0.0	21.300	0.0		
1.050	0.3	6.150	0.0	11.250	0.0
16.350	0.0	21.450	0.0		
1.200	0.6	6.300	0.0	11.400	0.0
16.500	0.0	21.600	0.0		
1.350	2.1	6.450	0.0	11.550	0.0
16.650	0.0	21.750	0.0		
1.500	8.7	6.600	0.0	11.700	0.0
16.800	0.0	21.900	0.0		
1.650	9.8	6.750	0.0	11.850	0.0
16.950	0.0	22.050	0.0		
1.800	5.7	6.900	0.0	12.000	0.0
17.100	0.0	22.200	0.0		
1.950	3.1	7.050	0.0	12.150	0.0
17.250	0.0	22.350	0.0		
2.100	1.7	7.200	0.0	12.300	0.0
17.400	0.0	22.500	0.0		
2.250	1.1	7.350	0.0	12.450	0.0
17.550	0.0	22.650	0.0		
2.400	0.8	7.500	0.0	12.600	0.0
17.700	0.0	22.800	0.0		
2.550	0.6	7.650	0.0	12.750	0.0
17.850	0.0	22.950	0.0		
2.700	0.4	7.800	0.0	12.900	0.0
18.000	0.0	23.100	0.0		
2.850	0.3	7.950	0.0	13.050	0.0
18.150	0.0	23.250	0.0		
3.000	0.2	8.100	0.0	13.200	0.0
18.300	0.0	23.400	0.0		
3.150	0.2	8.250	0.0	13.350	0.0
18.450	0.0	23.550	0.0		
3.300	0.1	8.400	0.0	13.500	0.0
18.600	0.0	23.700	0.0		
3.450	0.1	8.550	0.0	13.650	0.0
18.750	0.0	23.850	0.0		
3.600	0.1	8.700	0.0	13.800	0.0
18.900	0.0	24.000	0.0		
3.750	0.1	8.850	0.0	13.950	0.0
19.050	0.0	24.150	0.0		
3.900	0.1	9.000	0.0	14.100	0.0
19.200	0.0	24.300	0.0		
4.050	0.1	9.150	0.0	14.250	0.0
19.350	0.0	24.450	0.0		
4.200	0.1	9.300	0.0	14.400	0.0
19.500	0.0	24.600	0.0		
4.350	0.0	9.450	0.0	14.550	0.0
19.650	0.0	24.750	0.0		

4.500	0.0	9.600	0.0	14.700	0.0
19.800	0.0	24.900	0.0		
4.650	0.0	9.750	0.0	14.850	0.0
19.950	0.0				
4.800	0.0	9.900	0.0	15.000	0.0
20.100	0.0				
4.950	0.0	10.050	0.0	15.150	0.0
20.250	0.0				

RUNOFF VOLUME = 2.10272 INCHES = 0.5211 ACRE-FEET
PEAK DISCHARGE RATE = 10.64 CFS AT 1.600 HOURS BASIN AREA = 0.0046 SQ. MI.

* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR

ROUTE RESERVOIR ID=2 HYD NO=102 INFLOW=1 CODE=3

OUTFLOW(CFS)	STORAGE(AC-FT)	ELEV(FT)
0.0	0.000	23.00
2.64	0.045	24.00
5.88	0.121	25.00
7.88	0.231	26.00

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	23.00	0.000	0.00
0.15	0.00	23.00	0.000	0.00
0.30	0.00	23.00	0.000	0.00
0.45	0.00	23.00	0.000	0.00
0.60	0.00	23.00	0.000	0.00
0.75	0.02	23.00	0.000	0.00
0.90	0.14	23.02	0.001	0.04
1.05	0.28	23.05	0.002	0.13
1.20	0.64	23.12	0.005	0.30
1.35	2.12	23.30	0.014	0.79
1.50	8.71	24.14	0.055	3.08
1.65	9.83	25.02	0.123	5.92
1.80	5.71	25.20	0.143	6.28
1.95	3.06	24.99	0.120	5.84
2.10	1.70	24.53	0.086	4.37
2.25	1.09	24.15	0.056	3.12
2.40	0.80	23.79	0.036	2.08
2.55	0.58	23.51	0.023	1.36
2.70	0.43	23.34	0.015	0.91
2.85	0.32	23.24	0.011	0.63
3.00	0.25	23.17	0.008	0.45
3.15	0.19	23.12	0.006	0.33
3.30	0.15	23.09	0.004	0.24
3.45	0.12	23.07	0.003	0.19
3.60	0.10	23.05	0.002	0.14
3.75	0.08	23.04	0.002	0.12
3.90	0.07	23.04	0.002	0.10

4.05	0.06	23.03	0.001	0.08
4.20	0.05	23.03	0.001	0.07
4.35	0.05	23.02	0.001	0.06
4.50	0.04	23.02	0.001	0.05
4.65	0.03	23.02	0.001	0.04
4.80	0.03	23.01	0.001	0.04
4.95	0.03	23.01	0.001	0.03
5.10	0.03	23.01	0.001	0.03
5.25	0.03	23.01	0.000	0.03
5.40	0.03	23.01	0.000	0.03
5.55	0.03	23.01	0.001	0.03
5.70	0.03	23.01	0.001	0.03
5.85	0.03	23.01	0.001	0.03
6.00	0.03	23.01	0.001	0.03
6.15	0.04	23.01	0.001	0.03
6.30	0.04	23.01	0.001	0.04
6.45	0.04	23.01	0.001	0.04
6.60	0.04	23.02	0.001	0.04
6.75	0.04	23.02	0.001	0.04
6.90	0.04	23.02	0.001	0.04
7.05	0.04	23.02	0.001	0.04
7.20	0.04	23.02	0.001	0.04
7.35	0.04	23.02	0.001	0.04
7.50	0.04	23.02	0.001	0.04
7.65	0.04	23.02	0.001	0.04
7.80	0.04	23.02	0.001	0.04
7.95	0.04	23.02	0.001	0.04
8.10	0.04	23.02	0.001	0.04
8.25	0.04	23.02	0.001	0.04

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
8.40	0.04	23.02	0.001	0.04
8.55	0.04	23.02	0.001	0.04
8.70	0.04	23.02	0.001	0.04
8.85	0.04	23.02	0.001	0.04
9.00	0.04	23.02	0.001	0.04
9.15	0.04	23.02	0.001	0.04
9.30	0.04	23.02	0.001	0.04
9.45	0.04	23.02	0.001	0.04
9.60	0.04	23.02	0.001	0.04
9.75	0.04	23.02	0.001	0.04
9.90	0.04	23.02	0.001	0.04
10.05	0.04	23.02	0.001	0.04
10.20	0.04	23.02	0.001	0.04
10.35	0.04	23.02	0.001	0.04
10.50	0.04	23.02	0.001	0.04
10.65	0.04	23.02	0.001	0.04
10.80	0.04	23.02	0.001	0.04
10.95	0.04	23.02	0.001	0.04
11.10	0.04	23.02	0.001	0.04
11.25	0.04	23.02	0.001	0.04
11.40	0.04	23.02	0.001	0.04
11.55	0.04	23.02	0.001	0.04
11.70	0.04	23.02	0.001	0.04
11.85	0.04	23.02	0.001	0.04
12.00	0.04	23.02	0.001	0.04
12.15	0.04	23.02	0.001	0.04
12.30	0.04	23.02	0.001	0.04
12.45	0.04	23.02	0.001	0.04
12.60	0.04	23.02	0.001	0.04
12.75	0.04	23.02	0.001	0.04

12.90	0.04	23.02	0.001	0.04
13.05	0.04	23.02	0.001	0.04
13.20	0.04	23.02	0.001	0.04
13.35	0.04	23.02	0.001	0.04
13.50	0.04	23.02	0.001	0.04
13.65	0.04	23.02	0.001	0.04
13.80	0.04	23.02	0.001	0.04
13.95	0.04	23.02	0.001	0.04
14.10	0.04	23.02	0.001	0.04
14.25	0.04	23.02	0.001	0.04
14.40	0.04	23.02	0.001	0.04
14.55	0.04	23.02	0.001	0.04
14.70	0.04	23.02	0.001	0.04
14.85	0.04	23.02	0.001	0.04
15.00	0.04	23.02	0.001	0.04
15.15	0.04	23.02	0.001	0.04
15.30	0.04	23.02	0.001	0.04
15.45	0.04	23.02	0.001	0.04
15.60	0.04	23.02	0.001	0.04
15.75	0.04	23.02	0.001	0.04
15.90	0.04	23.02	0.001	0.04
16.05	0.04	23.02	0.001	0.04
16.20	0.04	23.02	0.001	0.04
16.35	0.04	23.02	0.001	0.04
16.50	0.04	23.02	0.001	0.04
16.65	0.04	23.02	0.001	0.04

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
16.80	0.04	23.02	0.001	0.04
16.95	0.04	23.02	0.001	0.04
17.10	0.04	23.02	0.001	0.04
17.25	0.04	23.02	0.001	0.04
17.40	0.04	23.02	0.001	0.04
17.55	0.04	23.02	0.001	0.04
17.70	0.04	23.02	0.001	0.04
17.85	0.04	23.02	0.001	0.04
18.00	0.04	23.02	0.001	0.04
18.15	0.04	23.02	0.001	0.04
18.30	0.04	23.02	0.001	0.04
18.45	0.04	23.02	0.001	0.04
18.60	0.04	23.02	0.001	0.04
18.75	0.04	23.02	0.001	0.04
18.90	0.04	23.02	0.001	0.04
19.05	0.04	23.02	0.001	0.04
19.20	0.04	23.02	0.001	0.04
19.35	0.04	23.02	0.001	0.04
19.50	0.04	23.02	0.001	0.04
19.65	0.04	23.02	0.001	0.04
19.80	0.04	23.02	0.001	0.04
19.95	0.04	23.02	0.001	0.04
20.10	0.04	23.02	0.001	0.04
20.25	0.04	23.02	0.001	0.04
20.40	0.04	23.02	0.001	0.04
20.55	0.04	23.02	0.001	0.04
20.70	0.04	23.02	0.001	0.04
20.85	0.04	23.02	0.001	0.04
21.00	0.04	23.02	0.001	0.04
21.15	0.04	23.02	0.001	0.04
21.30	0.04	23.02	0.001	0.04
21.45	0.04	23.02	0.001	0.04
21.60	0.04	23.02	0.001	0.04

21.75	0.04	23.02	0.001	0.04
21.90	0.04	23.02	0.001	0.04
22.05	0.04	23.02	0.001	0.04
22.20	0.04	23.02	0.001	0.04
22.35	0.04	23.02	0.001	0.04
22.50	0.04	23.02	0.001	0.04
22.65	0.04	23.02	0.001	0.04
22.80	0.04	23.02	0.001	0.04
22.95	0.04	23.02	0.001	0.04
23.10	0.04	23.02	0.001	0.04
23.25	0.04	23.02	0.001	0.04
23.40	0.04	23.02	0.001	0.04
23.55	0.04	23.02	0.001	0.04
23.70	0.04	23.02	0.001	0.04
23.85	0.04	23.02	0.001	0.04
24.00	0.04	23.02	0.001	0.04
24.15	0.03	23.02	0.001	0.04
24.30	0.01	23.01	0.001	0.03
24.45	0.01	23.01	0.000	0.02
24.60	0.00	23.00	0.000	0.01
24.75	0.00	23.00	0.000	0.01
24.90	0.00	23.00	0.000	0.00

PEAK DISCHARGE = 6.280 CFS - PEAK OCCURS AT HOUR 1.80
MAXIMUM WATER SURFACE ELEVATION = 25.200
MAXIMUM STORAGE = 0.1430 AC-FT INCREMENTAL TIME= 0.050000HRS

PRINT HYD ID=2 CODE=3

PARTIAL HYDROGRAPH 102.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	5.100	0.0	10.200	0.0	15.300	0.0
0.150	0.0	5.250	0.0	10.350	0.0	15.450	0.0
0.300	0.0	5.400	0.0	10.500	0.0	15.600	0.0
0.450	0.0	5.550	0.0	10.650	0.0	15.750	0.0
0.600	0.0	5.700	0.0	10.800	0.0	15.900	0.0
0.750	0.0	5.850	0.0	10.950	0.0	16.050	0.0
0.900	0.0	6.000	0.0	11.100	0.0	16.200	0.0
1.050	0.1	6.150	0.0	11.250	0.0	16.350	0.0
1.200	0.3	6.300	0.0	11.400	0.0	16.500	0.0
1.350	0.8	6.450	0.0	11.550	0.0	16.650	0.0
1.500	3.1	6.600	0.0	11.700	0.0	16.800	0.0
1.650	5.9	6.750	0.0	11.850	0.0	16.950	0.0
1.800	6.3	6.900	0.0	12.000	0.0	17.100	0.0
1.950	5.8	7.050	0.0	12.150	0.0	17.250	0.0
2.100	4.4	7.200	0.0	12.300	0.0		

17.400	0.0	22.500	0.0				
	2.250	3.1		7.350	0.0	12.450	0.0
17.550	0.0	22.650	0.0				
	2.400	2.1		7.500	0.0	12.600	0.0
17.700	0.0	22.800	0.0				
	2.550	1.4		7.650	0.0	12.750	0.0
17.850	0.0	22.950	0.0				
	2.700	0.9		7.800	0.0	12.900	0.0
18.000	0.0	23.100	0.0				
	2.850	0.6		7.950	0.0	13.050	0.0
18.150	0.0	23.250	0.0				
	3.000	0.4		8.100	0.0	13.200	0.0
18.300	0.0	23.400	0.0				
	3.150	0.3		8.250	0.0	13.350	0.0
18.450	0.0	23.550	0.0				
	3.300	0.2		8.400	0.0	13.500	0.0
18.600	0.0	23.700	0.0				
	3.450	0.2		8.550	0.0	13.650	0.0
18.750	0.0	23.850	0.0				
	3.600	0.1		8.700	0.0	13.800	0.0
18.900	0.0	24.000	0.0				
	3.750	0.1		8.850	0.0	13.950	0.0
19.050	0.0	24.150	0.0				
	3.900	0.1		9.000	0.0	14.100	0.0
19.200	0.0	24.300	0.0				
	4.050	0.1		9.150	0.0	14.250	0.0
19.350	0.0	24.450	0.0				
	4.200	0.1		9.300	0.0	14.400	0.0
19.500	0.0	24.600	0.0				
	4.350	0.1		9.450	0.0	14.550	0.0
19.650	0.0	24.750	0.0				
	4.500	0.1		9.600	0.0	14.700	0.0
19.800	0.0	24.900	0.0				
	4.650	0.0		9.750	0.0	14.850	0.0
19.950	0.0	25.050	0.0				
	4.800	0.0		9.900	0.0	15.000	0.0
20.100	0.0	25.200	0.0				
	4.950	0.0		10.050	0.0	15.150	0.0
20.250	0.0						

RUNOFF VOLUME = 2.10265 INCHES = 0.5211 ACRE-FEET
PEAK DISCHARGE RATE = 6.28 CFS AT 1.800 HOURS BASIN AREA = 0.0046 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 14:44:14

```
*S      AHYMO - MONTEREY
*S                POND ROUTING

START                   TIME=0.0   PUNCH CODE=0


RAINFALL                TYPE=2
                        QUARTER=0.0     ONE= 2.60 IN
                        SIX= 3.10 IN    DAY= 3.95 IN    DT = 0.05 HR



COMPUTE NM HYD          ID=1  HYD NO=101  DA= .004647 SQ MI
                        PER A=30  PER B=21  PER C=19  PER D=30
                        TP=-.20   MASSRAIN=-1

PRINT HYD               ID=1  CODE=3

* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR         ID=2   HYD NO=102   INFLOW=1   CODE=3
                        OUTFLOW(CFS)     STORAGE(AC-FT)     ELEV(FT)
                           0.0               0.000          23.00

                           2.64              0.045          24.00
                           5.88              0.121          25.00
                           7.88              0.231          26.00



PRINT HYD               ID=2   CODE=3


FINISH
```

CITY OF ALBUQUERQUE

January 4, 2012

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

Re: Monterey Baptist Church Grading and Drainage Plan
Engineer's Stamp date 12-20-11 (J22/D012A)

Dear Mr. Soule,

Based upon the information provided in your submittal received 12-21-11, the above referenced plan cannot be approved for Building and Grading Permit until the following comments are addressed:

- Hydrology is recommending that both Basin A & Basin B be discharged into the detention pond on site.
- It appears that flows on the northern portion of Basin C will flow into Basin D, will a swale be used to direct these flows to the pond?
- The southern portion of Basin C also appears to flow across the sidewalk into Lomas Blvd., how will these flows be directed to the pond?
- Details will be needed on the pond's sidewalk culvert illustrating how the 8" HDPE pipe will drain into the 6" culvert.
- Will there be an emergency overflow for the retention pond?
- Please define the hatching adjacent to the existing asphalt paving (at the turnaround area).
- Hydrology requests that proposed landscape areas be depressed to retain/infiltrate the rain that falls on them.

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

Sincerely,

Shahab Biazar, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: File
CJH\SB

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE: ***Monterey Baptist Church*** ZONE MAP/DRG. FILE #: J-22/D042A

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: **tract 6 monterrey Mannor**

CITY ADDRESS: **12501 Lomas NE**

ENGINEERING FIRM:	Rio Grande Engineering	CONTACT:	David Soule, PE
ADDRESS:	po box 93924	PHONE:	(505)321-9099
CITY, STATE:	Albuquerque, New Mexico	ZIP CODE:	87199
OWNER:	***Montery baptist church***	CONTACT:	
ADDRESS:	12501 Lomas ne	PHONE:	
CITY, STATE:	Albuquerque, NM 87102	ZIP CODE:	87112
ARCHITECT:	Joe simmons.	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
SURVEYOR:	Geo surv co	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
CONTRACTOR:		CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	

CHECK TYPE OF SUBMITTAL:

- x DRAINAGE REPORT
- _____ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- _____ DRAINAGE PLAN RESUBMITTAL
- _____ CONCEPTUAL GRADING & DRAINAGE PLAN
- x GRADING PLAN
- _____ EROSION CONTROL PLAN
- _____ ENGINEER'S CERTIFICATION (HYDROLOGY)
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ ENGINEERS CERTIFICATION (TCL)
- _____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- _____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- _____ SIA / FINANACIAL GUARANTEE RELEASE
- _____ PRELIMINARY PLAT APPROVAL
- _____ S. DEV. PLAN FOR SUB'D. APPROVAL
- _____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- _____ SECTOR PLAN APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ FOUNDATION PERMIT APPROVAL
- x BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY (PERM.)
- _____ CERTIFICATE OF OCCUPANCY (TEMP.)
- x GRADING PERMIT APPROVAL
- _____ PAVING PERMIT APPROVAL
- _____ WORK ORDER APPROVAL
- _____ OTHER (PROJECT)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- x YES
- _____ NO
- _____ COPY PROVIDED

$50.00

RECEIVED
DEC 21 2011
HYDROLOGY SECTION

DATE SUBMITTED: 12/20/2011 BY: David Soule

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

1. **Conceptual Grading and Drainage Plans**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

RIO GRANDE ENGINEERING OF NEW MEXICO, LLC

January 17, 2012

Mr. Shahab Biazar, PE
Senior Engineer
Planning Department
City of Albuquerque

RE: Grading and Drainage Plan
Monterey Baptist Church (J22/D012A)

erosion control/fencing along SW by pond

Dear Shahab:

The purpose of this letter is to accompany the enclosed grading plan for the referenced project. This plan has been modified to address your comments dated December 21, 2011. The following is a summary of your comments with the annotation as to how the plans were modified to address the comments.

1. Hydrology recommends both basin A and B discharge into detention pond.

   The entire site will develop in the future with more impervious area to the west. If all basins drain to the pond the ponds will impact the future development area. An additional culvert has been added to safely get water to street form basin A

2. Flow in basin C will flow into A, will swale be used

   There is a building located at the north corner of the site. This building and the existing grading around the building force the water south of the building. Basin C does not drain north of the building. The existing flows that discharge to the adjacent property are significantly reduced form current.

3. Basin C appear to drain across sidewalk, provide swale to pond.

   A cobble swale has been added along the south property line. This swale directs all flows to the pond.

Erosion protection carried all the way to bottom of pond

4. Provide details for how discharge pipe drains into culvert. .

   The 8" discharge pipe was set back 42" from the sidewalk culvert. The transition will be via cobble swale made up of 8" landscape cobbles. The outfall was moved to allow the smooth transition in swale shown

5. Provide emergency overflow. Should be along 5626 contour

   A 7' wide overflow has been provided.

6. Define hatching adjacent to existing asphalt paving

   The hatching is new asphalt and has been added to legend.

7. Depress proposed landscape areas for infiltration

   The areas around the east side of building are existing. The flat grade of the swale in

Come in 12" with edge of pond

RECEIVED
JAN 17 2012
HYDROLOGY SECTION

the area provides for infiltration. The swale along the sidewalk is made of cobbles to allow nuisance flows to be absorbed. The pond outlet is 6" above the pond bottom for harvesting.

Should you have any questions regarding this resubmittal, please do not hesitate to call me.

Sincerely,

David Soule, PE

Enclosures

Pond overflow

Weir Equation:

$$Q = CLH^{3/2}$$

Q=7.1 cfs
C = 2.95
H = 0.5 ft
L = 7

=2.95X7X.5^3/2

=7.3 cfs

CITY OF ALBUQUERQUE

January 4, 2012

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

Re: Monterey Baptist Church Grading and Drainage Plan
Engineer's Stamp date 12-20-11 (J22/D012A)

Dear Mr. Soule,

Based upon the information provided in your submittal received 12-21-11, the above referenced plan cannot be approved for Building and Grading Permit until the following comments are addressed:

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

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JAN 17 2012
HYDROLOGY SECTION

Sincerely,

Shahab Biazar, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

C: File
CJH\SB

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE: ***Monterey Baptist Church*** ZONE MAP/DRG. FILE #: J22/ D012A

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: **tract 6 monterrey Mannor**

CITY ADDRESS: **12501 Lomas NE**

ENGINEERING FIRM:	Rio Grande Engineering	CONTACT:	David Soule, PE
ADDRESS:	po box 93924	PHONE:	(505)321-9099
CITY, STATE:	Albuquerque, New Mexico	ZIP CODE:	87199
OWNER:	***Montery baptist church***	CONTACT:	
ADDRESS:	12501 Lomas ne	PHONE:	
CITY, STATE:	Albuquerque, NM 87102	ZIP CODE:	87112
ARCHITECT:	Joe simmons.	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
SURVEYOR:	Geo surv co	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
CONTRACTOR:		CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	

CHECK TYPE OF SUBMITTAL:

- x DRAINAGE REPORT
- _____ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- _____ DRAINAGE PLAN RESUBMITTAL
- _____ CONCEPTUAL GRADING & DRAINAGE PLAN
- x GRADING PLAN
- _____ EROSION CONTROL PLAN
- _____ ENGINEER'S CERTIFICATION (HYDROLOGY)
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ ENGINEERS CERTIFICATION (TCL)
- _____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- _____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- _____ SIA / FINANACIAL GUARANTEE RELEASE
- _____ PRELIMINARY PLAT APPROVAL
- _____ S. DEV. PLAN FOR SUB'D. APPROVAL
- _____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- _____ SECTOR PLAN APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ FOUNDATION PERMIT APPROVAL
- x BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY (PERM.)
- _____ CERTIFICATE OF OCCUPANCY (TEMP.)
- x GRADING PERMIT APPROVAL
- _____ PAVING PERMIT APPROVAL
- _____ WORK ORDER APPROVAL
- _____ OTHER (SPECIFY)

RECEIVED
JAN 17 2012
HYDROLOGY SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- x YES
- _____ NO
- _____ COPY PROVIDED

DATE SUBMITTED: 1/17/2012 BY: David Soule

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal.
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2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

DRAINAGE REPORT

For

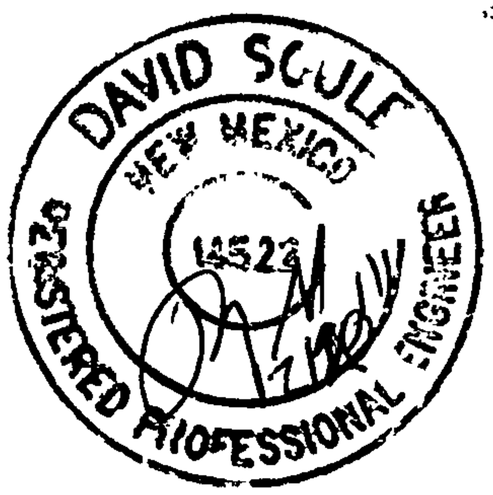
MONTEREY BAPTIST CHURCH
11501 LOMAS NE

Albuquerque, New Mexico

Prepared by

Rio Grande Engineering
PO Box 67305
Albuquerque, New Mexico 87193

DECEMBER 2011



David Soule P.E. No. 14522

TABLE OF CONTENTS

PURPOSE

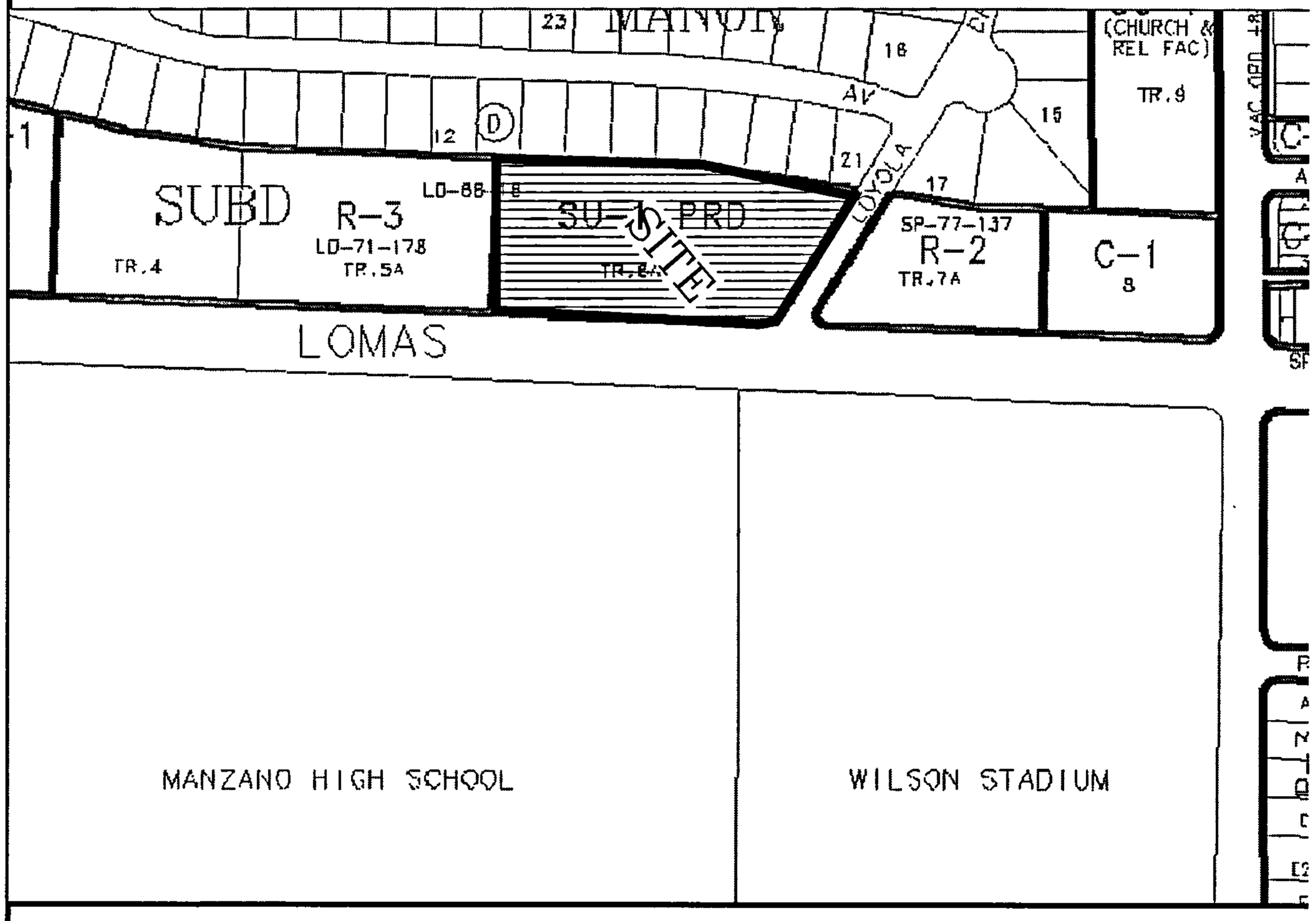
The purpose of this report is to provide the Drainage Management Plan for an approximately 6000 square foot addition and a 600 sf portable unit located on the northwest corner of Lomas and Loyola NE. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City 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 an existing developed parcel containing an area of 3 acres of land located on the northwest corner of Lomas and Loyola. The legal description of this site is tract 6 Monterey manor Addition. As shown on FIRM map35013C0359E, the entire property is located within Flood Zone X. This site is surrounded by fully developed parcels. This site development will add to an existing church. The development of this site will accommodate the flow from the new addition, correct any onsite drainage issues and allow for future implementation of additional site development and match native conditions as closely as possible.

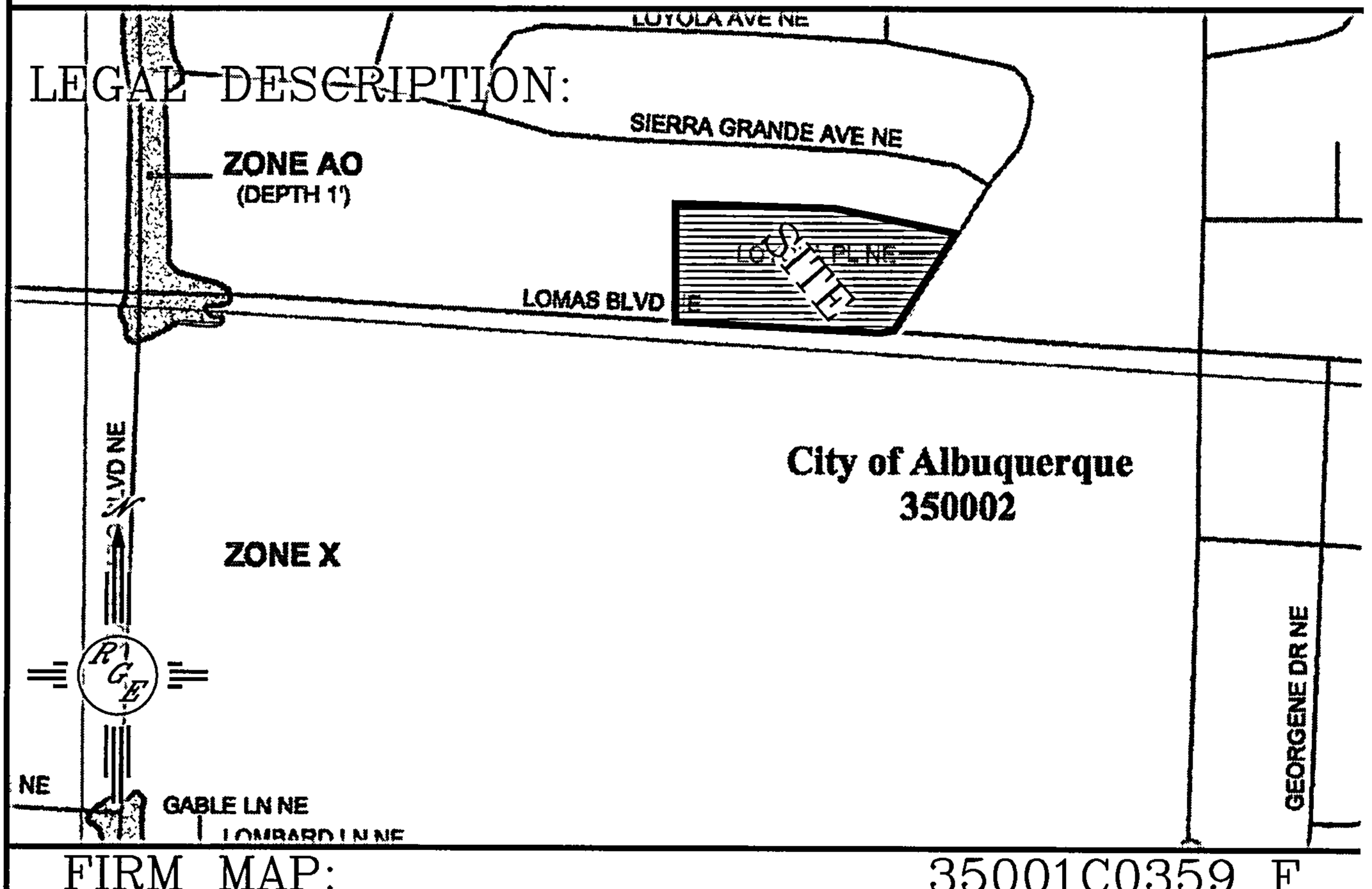
EXISTING CONDITIONS

The site is currently developed. The site slopes from northeast to southwest. The site currently free discharges into Lomas Boulevard. The site is not impacted by any measurable offsite flows, and is surrounded by developed properties with solid walls and upland adjacent streets. As shown in Appendix A, the native site discharges at a peak rate of 7.09 cfs in a 100-year, 6-hour event.



ZONE ATLAS K-22-Z

LEGAL DESCRIPTION:



FIRM MAP: 35001C0359 F

LEGAL DESCRIPTION:

PROPOSED CONDITIONS

The proposed improvements consist of an approximately 5,800 square foot addition to the existing building and a 600 square foot portable. As shown in appendix A, the site will be graded to contain four basins. Basin A contains the eastern parking lot and the area of building addition. Basin, it will free discharge at a peak rate of 3.74 cfs to Lomas. Basin B contains a courtyard area that is created with the development of the addition; it will discharge .65 cfs via a 12" underground pipe that daylights to the landscape are along Lomas. Basin C contains the majority of the building, parking and site; this basin will drain 7.06 cfs to a detention pond built at the southwest corner of the site. As shown in appendix a, the AYHMO pond routing demonstrates the pond will fill to elevation of 5625.4 and discharge at a peak rate of 2.17 cfs. Basin D is a small portion of land that discharges .09 cfs to the adjacent property. As designed the redeveloped site will discharge 6.64 cfs during the 100-year, 6-hour event, which is less than the 7.09 cfs the site would discharge in native conditions. The design of the pond will allow for future development of the site with minor adjustments to volume.

SUMMARY AND RECOMMENDATIONS

This project is a redevelopment project within a completely developed area of northwest Albuquerque. The site discharges will be reduced to less than native. The proposed detention pond was created with a 6" harvesting basin to capture all nuisance flows. Since the disturbed area of the site encompasses less than 1 acre, a NPDES permit should not be required prior to any construction activity.

4

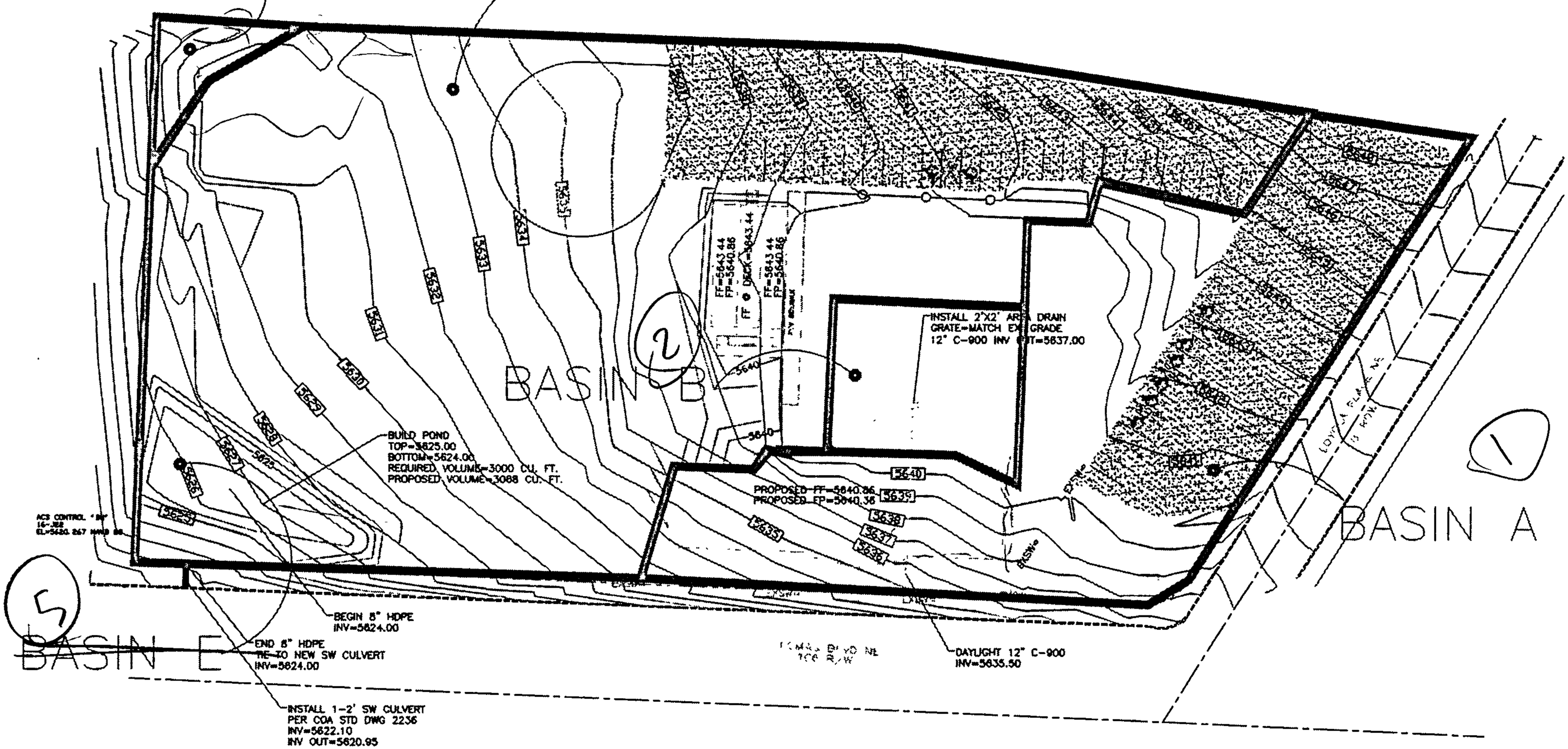
3

BASIN D

BASIN C

4. REPAIR OF DAMAGED FACI
ACCUMULATIONS ON ADJACEN
RESPONSIBILITY OF THE CON

5. ALL EXPOSED EARTH SUR
WATER EROSION PRIOR TO F



Should be 4 basins, not 5

APPENDIX A

SITE HYDROLOGY

Weighted E Method

Existing Developed Basins

											100-Year, 6-hr.			10-day
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
			%	(acres)	%	(acres)	%	(acres)	%	(acres)				
basin a	35320.00	0.811	0%	0	21%	0.170	10%	0.08108	69%	0.559	2.194	0.148	3.74	0.223
basinb	6100.00	0.140	0%	0	20%	0.028	10%	0.014	70%	0.098	2.210	0.026	0.65	0.039
basinc	86400.00	1.983	30%	0.595041322	21.0%	0.417	19.0%	0.37686	30%	0.595	1.536	0.254	7.06	0.333
basind	1742.00	0.040	100%	0.039990817	0.0%	0.000	0.0%	0	0%	0.000	0.800	0.003	0.09	0.003
native	129562.00	2.974	80%	2.379467401	15.0%	0.446	5.0%	0.14872	0%	0.000	0.875	0.217	7.09	0.217

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

Ea= 0.8
Eb= 1.08
Ec= 1.46
Ed= 2.64

Qa= 2.2
Qb= 2.92
Qc= 3.73
Qd= 5.25

POND VOLUME(6-hour)	0.25	AC-FT	11060.64 CF
UNTHROTTLED	11.53	cfs	
TOTAL SITE AFTER POND ROUTE	6.64	cfs	
NATIVE	7.09	cfs	
NET DECREASE	0.45	cfs	

Pipe Capacity

Pipe	D	Slope	Area	R	Q Provided	Q Required	Velocity
	(in)	(%)	(ft^2)		(cfs)	(cfs)	(ft/s)
culvert	12	1.9	0.79	0.25	4.27	0.65	0.83

Manning's Equation:

Q = 1.49/n * A * R^(2/3) * S^(1/2)

A = Area
R = D/4
S = Slope
n = 0.015

VOLUME CALCULATIONS

ACTUAL ELEV.	DEPTH (FT)	CONTOUR AREA	VOLUME cf	VOLUME AC-FT	Q (CFS)
	(above outlet)				
5621	0		0		0.000
5622.00	0.00	0.00	0.0000	0.0000	0.000
5623.00	0.00	1350.00	0.0000	0.0000	0.000
5624.00	0.67	2550.00	1950.0000	0.0448	0.975
5625.00	1.67	4100.00	5275.0000	0.1211	1.943
5626.00	2.67	5500.00	10075.0000	0.2313	2.569

inv=23.50

Orifice Equation

Q = CA SQRT(2gH)

C =	0.6
Diameter (in)	8
Area (ft^2)=	0.34906585
g =	32.2
H (Ft) =	Depth of water above center of orifice
Q (CFS)=	Flow

```
*S      AHYMO - MONTEREY
*S              POND ROUTING

START                   TIME=0.0   PUNCH CODE=0


RAINFALL                TYPE=2
                        QUARTER=0.0     ONE= 2.60 IN
                        SIX= 3.10 IN    DAY= 3.95 IN    DT = 0.05 HR


COMPUTE NM HYD          ID=1  HYD NO=101  DA= .003098 SQ MI
                        PER A=30  PER B=21  PER C=19  PER D=30
                        TP=-.20   MASSRAIN=-1


PRINT HYD               ID=1  CODE=3


* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR         ID=2   HYD NO=102   INFLOW=1   CODE=3
                        OUTFLOW(CFS)     STORAGE(AC-FT)     ELEV(FT)
                           0.0               0.000          23.00

                           0.98              0.045          24.00
                           1.94              0.121          25.00
                           2.57              0.231          26.00


PRINT HYD               ID=2   CODE=3


FINISH
```

```
        AHYMO PROGRAM (AHYMO-S4)                          - Version: S4.01a - Rel: 01a
             RUN DATE (MON/DAY/YR) = 12/20/2011
             START TIME (HR:MIN:SEC) = 09:11:29     USER NO.=
RioGrandeSingleA41963517
             INPUT FILE =  and Settings\Owner\Desktop\2011jobs\1162-monterey baptist
churc\POND 122011.txt


    *S      AHYMO - MONTEREY
    *S              POND ROUTING

    START                 TIME=0.0  PUNCH CODE=0


    RAINFALL              TYPE=2
                          QUARTER=0.0    ONE= 2.60 IN
                          SIX= 3.10 IN   DAY= 3.95 IN   DT = 0.05 HR

                  24-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE
AREAS (NM & AZ) - D1
                   DT =   0.050000 HOURS       END TIME =    24.000002 HOURS
                     0.0000  0.0033  0.0068  0.0105  0.0145  0.0186  0.0233
                     0.0299  0.0400  0.0510  0.0624  0.0749  0.0876  0.1007
                     0.1142  0.1280  0.1434  0.1595  0.1769  0.2078  0.2454
                     0.2958  0.3529  0.4234  0.5175  0.6233  0.8060  1.0901
                     1.5769  1.9190  2.1889  2.3245  2.4433  2.5287  2.5966
                     2.6559  2.6992  2.7390  2.7718  2.7937  2.8101  2.8246
                     2.8382  2.8502  2.8614  2.8724  2.8830  2.8917  2.8967
                     2.9017  2.9066  2.9111  2.9157  2.9201  2.9244  2.9286
                     2.9327  2.9366  2.9405  2.9444  2.9482  2.9518  2.9553
                     2.9588  2.9623  2.9657  2.9690  2.9722  2.9754  2.9785
                     2.9816  2.9847  2.9877  2.9907  2.9936  2.9965  2.9994
                     3.0022  3.0050  3.0078  3.0105  3.0132  3.0159  3.0185
                     3.0211  3.0237  3.0263  3.0288  3.0313  3.0338  3.0362
                     3.0387  3.0411  3.0434  3.0458  3.0481  3.0504  3.0527
                     3.0550  3.0572  3.0594  3.0616  3.0638  3.0660  3.0681
                     3.0702  3.0723  3.0744  3.0765  3.0785  3.0806  3.0826
                     3.0846  3.0866  3.0885  3.0905  3.0924  3.0943  3.0962
                     3.0981  3.1000  3.1024  3.1047  3.1071  3.1094  3.1118
                     3.1142  3.1165  3.1189  3.1212  3.1236  3.1260  3.1283
                     3.1307  3.1331  3.1354  3.1378  3.1401  3.1425  3.1449
                     3.1472  3.1496  3.1519  3.1543  3.1567  3.1590  3.1614
                     3.1637  3.1661  3.1685  3.1708  3.1732  3.1756  3.1779
                     3.1803  3.1826  3.1850  3.1874  3.1897  3.1921  3.1944
                     3.1968  3.1992  3.2015  3.2039  3.2062  3.2086  3.2110
                     3.2133  3.2157  3.2181  3.2204  3.2228  3.2251  3.2275
                     3.2299  3.2322  3.2346  3.2369  3.2393  3.2417  3.2440
                     3.2464  3.2487  3.2511  3.2535  3.2558  3.2582  3.2606
                     3.2629  3.2653  3.2676  3.2700  3.2724  3.2747  3.2771
                     3.2794  3.2818  3.2842  3.2865  3.2889  3.2912  3.2936
                     3.2960  3.2983  3.3007  3.3031  3.3054  3.3078  3.3101
                     3.3125  3.3149  3.3172  3.3196  3.3219  3.3243  3.3267
                     3.3290  3.3314  3.3337  3.3361  3.3385  3.3408  3.3432
                     3.3456  3.3479  3.3503  3.3526  3.3550  3.3574  3.3597
                     3.3621  3.3644  3.3668  3.3692  3.3715  3.3739  3.3762
                     3.3786  3.3810  3.3833  3.3857  3.3880  3.3904  3.3928
                     3.3951  3.3975  3.3999  3.4022  3.4046  3.4069  3.4093
                     3.4117  3.4140  3.4164  3.4187  3.4211  3.4235  3.4258
```

3.4282	3.4305	3.4329	3.4353	3.4376	3.4400	3.4424
3.4447	3.4471	3.4494	3.4518	3.4542	3.4565	3.4589
3.4612	3.4636	3.4660	3.4683	3.4707	3.4730	3.4754
3.4778	3.4801	3.4825	3.4849	3.4872	3.4896	3.4919
3.4943	3.4967	3.4990	3.5014	3.5037	3.5061	3.5085
3.5108	3.5132	3.5155	3.5179	3.5203	3.5226	3.5250
3.5274	3.5297	3.5321	3.5344	3.5368	3.5392	3.5415
3.5439	3.5462	3.5486	3.5510	3.5533	3.5557	3.5580
3.5604	3.5628	3.5651	3.5675	3.5699	3.5722	3.5746
3.5769	3.5793	3.5817	3.5840	3.5864	3.5887	3.5911
3.5935	3.5958	3.5982	3.6005	3.6029	3.6053	3.6076
3.6100	3.6124	3.6147	3.6171	3.6194	3.6218	3.6242
3.6265	3.6289	3.6312	3.6336	3.6360	3.6383	3.6407
3.6430	3.6454	3.6478	3.6501	3.6525	3.6548	3.6572
3.6596	3.6619	3.6643	3.6667	3.6690	3.6714	3.6737
3.6761	3.6785	3.6808	3.6832	3.6855	3.6879	3.6903
3.6926	3.6950	3.6973	3.6997	3.7021	3.7044	3.7068
3.7092	3.7115	3.7139	3.7162	3.7186	3.7210	3.7233
3.7257	3.7280	3.7304	3.7328	3.7351	3.7375	3.7398
3.7422	3.7446	3.7469	3.7493	3.7517	3.7540	3.7564
3.7587	3.7611	3.7635	3.7658	3.7682	3.7705	3.7729
3.7753	3.7776	3.7800	3.7823	3.7847	3.7871	3.7894
3.7918	3.7942	3.7965	3.7989	3.8012	3.8036	3.8060
3.8083	3.8107	3.8130	3.8154	3.8178	3.8201	3.8225
3.8248	3.8272	3.8296	3.8319	3.8343	3.8367	3.8390
3.8414	3.8437	3.8461	3.8485	3.8508	3.8532	3.8555
3.8579	3.8603	3.8626	3.8650	3.8673	3.8697	3.8721
3.8744	3.8768	3.8791	3.8815	3.8839	3.8862	3.8886
3.8910	3.8933	3.8957	3.8980	3.9004	3.9028	3.9051
3.9075	3.9098	3.9122	3.9146	3.9169	3.9193	3.9216
3.9240	3.9264	3.9287	3.9311	3.9335	3.9358	3.9382
3.9405	3.9429	3.9453	3.9476	3.9500		

COMPUTE NM HYD ID=1 HYD NO=101 DA= .003098 SQ MI
PER A=30 PER B=21 PER C=19 PER D=30
TP=-.20 MASSRAIN=-1

K = 0.109000HR TP = 0.200000HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 2.4456 CFS UNIT VOLUME = 0.9949 B = 526.28 P60 = 2.6000
AREA = 0.000929 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

K = 0.214779HR TP = 0.200000HR K/TP RATIO = 1.073894 SHAPE CONSTANT, N = 3.288961
UNIT PEAK = 3.3028 CFS UNIT VOLUME = 0.9958 B = 304.60 P60 = 2.6000
AREA = 0.002169 SQ MI IA = 0.52357 INCHES INF = 1.31600 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

PRINT HYD ID=1 CODE=3

PARTIAL HYDROGRAPH 101.00

TIME	FLOW	TIME	FLOW	TIME	FLOW

TIME HRS	FLOW HRS CFS	CFS	TIME HRS	FLOW HRS CFS	CFS	HRS	CFS
	0.000	0.0		5.100	0.0	10.200	0.0
15.300	0.0		20.400	0.0			
	0.150	0.0		5.250	0.0	10.350	0.0
15.450	0.0		20.550	0.0			
	0.300	0.0		5.400	0.0	10.500	0.0
15.600	0.0		20.700	0.0			
	0.450	0.0		5.550	0.0	10.650	0.0
15.750	0.0		20.850	0.0			
	0.600	0.0		5.700	0.0	10.800	0.0
15.900	0.0		21.000	0.0			
	0.750	0.0		5.850	0.0	10.950	0.0
16.050	0.0		21.150	0.0			
	0.900	0.1		6.000	0.0	11.100	0.0
16.200	0.0		21.300	0.0			
	1.050	0.2		6.150	0.0	11.250	0.0
16.350	0.0		21.450	0.0			
	1.200	0.4		6.300	0.0	11.400	0.0
16.500	0.0		21.600	0.0			
	1.350	1.4		6.450	0.0	11.550	0.0
16.650	0.0		21.750	0.0			
	1.500	5.8		6.600	0.0	11.700	0.0
16.800	0.0		21.900	0.0			
	1.650	6.6		6.750	0.0	11.850	0.0
16.950	0.0		22.050	0.0			
	1.800	3.8		6.900	0.0	12.000	0.0
17.100	0.0		22.200	0.0			
	1.950	2.0		7.050	0.0	12.150	0.0
17.250	0.0		22.350	0.0			
	2.100	1.1		7.200	0.0	12.300	0.0
17.400	0.0		22.500	0.0			
	2.250	0.7		7.350	0.0	12.450	0.0
17.550	0.0		22.650	0.0			
	2.400	0.5		7.500	0.0	12.600	0.0
17.700	0.0		22.800	0.0			
	2.550	0.4		7.650	0.0	12.750	0.0
17.850	0.0		22.950	0.0			
	2.700	0.3		7.800	0.0	12.900	0.0
18.000	0.0		23.100	0.0			
	2.850	0.2		7.950	0.0	13.050	0.0
18.150	0.0		23.250	0.0			
	3.000	0.2		8.100	0.0	13.200	0.0
18.300	0.0		23.400	0.0			
	3.150	0.1		8.250	0.0	13.350	0.0
18.450	0.0		23.550	0.0			
	3.300	0.1		8.400	0.0	13.500	0.0
18.600	0.0		23.700	0.0			
	3.450	0.1		8.550	0.0	13.650	0.0
18.750	0.0		23.850	0.0			
	3.600	0.1		8.700	0.0	13.800	0.0
18.900	0.0		24.000	0.0			
	3.750	0.1		8.850	0.0	13.950	0.0
19.050	0.0		24.150	0.0			
	3.900	0.0		9.000	0.0	14.100	0.0
19.200	0.0		24.300	0.0			
	4.050	0.0		9.150	0.0	14.250	0.0
19.350	0.0		24.450	0.0			
	4.200	0.0		9.300	0.0	14.400	0.0
19.500	0.0		24.600	0.0			
	4.350	0.0		9.450	0.0	14.550	0.0
19.650	0.0		24.750	0.0			

4.500	0.0	9.600	0.0	14.700	0.0
19.800	0.0				
4.650	0.0	9.750	0.0	14.850	0.0
19.950	0.0				
4.800	0.0	9.900	0.0	15.000	0.0
20.100	0.0				
4.950	0.0	10.050	0.0	15.150	0.0
20.250	0.0				

RUNOFF VOLUME = 2.10272 INCHES = 0.3474 ACRE-FEET
PEAK DISCHARGE RATE = 7.10 CFS AT 1.600 HOURS BASIN AREA = 0.0031 SQ. MI.

* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR ID=2 HYD NO=102 INFLOW=1 CODE=3

OUTFLOW(CFS)	STORAGE(AC-FT)	ELEV(FT)
0.0	0.000	23.00
0.98	0.045	24.00
1.94	0.121	25.00
2.57	0.231	26.00

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	23.00	0.000	0.00
0.15	0.00	23.00	0.000	0.00
0.30	0.00	23.00	0.000	0.00
0.45	0.00	23.00	0.000	0.00
0.60	0.00	23.00	0.000	0.00
0.75	0.01	23.00	0.000	0.00
0.90	0.09	23.01	0.001	0.01
1.05	0.19	23.04	0.002	0.04
1.20	0.43	23.11	0.005	0.10
1.35	1.42	23.27	0.012	0.27
1.50	5.82	24.03	0.048	1.01
1.65	6.56	24.90	0.113	1.84
1.80	3.81	25.29	0.153	2.12
1.95	2.04	25.36	0.161	2.17
2.10	1.14	25.30	0.154	2.13
2.25	0.73	25.16	0.139	2.04
2.40	0.54	25.01	0.122	1.95
2.55	0.39	24.79	0.105	1.73
2.70	0.28	24.57	0.089	1.53
2.85	0.21	24.38	0.074	1.35
3.00	0.16	24.21	0.061	1.18
3.15	0.12	24.05	0.049	1.03
3.30	0.10	23.85	0.038	0.84
3.45	0.08	23.67	0.030	0.66
3.60	0.07	23.53	0.024	0.52
3.75	0.06	23.42	0.019	0.41
3.90	0.05	23.33	0.015	0.33

4.05	0.04	23.26	0.012	0.26
4.20	0.04	23.21	0.009	0.21
4.35	0.03	23.17	0.008	0.17
4.50	0.02	23.13	0.006	0.13
4.65	0.02	23.11	0.005	0.10
4.80	0.02	23.09	0.004	0.08
4.95	0.02	23.07	0.003	0.07
5.10	0.02	23.06	0.003	0.06
5.25	0.02	23.05	0.002	0.05
5.40	0.02	23.04	0.002	0.04
5.55	0.02	23.04	0.002	0.04
5.70	0.02	23.03	0.001	0.03
5.85	0.02	23.03	0.001	0.03
6.00	0.02	23.03	0.001	0.03
6.15	0.02	23.03	0.001	0.03
6.30	0.03	23.03	0.001	0.03
6.45	0.03	23.03	0.001	0.03
6.60	0.03	23.03	0.001	0.03
6.75	0.03	23.03	0.001	0.03
6.90	0.03	23.03	0.001	0.03
7.05	0.03	23.03	0.001	0.03
7.20	0.03	23.03	0.001	0.03
7.35	0.03	23.03	0.001	0.03
7.50	0.03	23.03	0.001	0.03
7.65	0.03	23.03	0.001	0.03
7.80	0.03	23.03	0.001	0.03
7.95	0.03	23.03	0.001	0.03
8.10	0.03	23.03	0.001	0.03
8.25	0.03	23.03	0.001	0.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
8.40	0.03	23.03	0.001	0.03
8.55	0.03	23.03	0.001	0.03
8.70	0.03	23.03	0.001	0.03
8.85	0.03	23.03	0.001	0.03
9.00	0.03	23.03	0.001	0.03
9.15	0.03	23.03	0.001	0.03
9.30	0.03	23.03	0.001	0.03
9.45	0.03	23.03	0.001	0.03
9.60	0.03	23.03	0.001	0.03
9.75	0.03	23.03	0.001	0.03
9.90	0.03	23.03	0.001	0.03
10.05	0.03	23.03	0.001	0.03
10.20	0.03	23.03	0.001	0.03
10.35	0.03	23.03	0.001	0.03
10.50	0.03	23.03	0.001	0.03
10.65	0.03	23.03	0.001	0.03
10.80	0.03	23.03	0.001	0.03
10.95	0.03	23.03	0.001	0.03
11.10	0.03	23.03	0.001	0.03
11.25	0.03	23.03	0.001	0.03
11.40	0.03	23.03	0.001	0.03
11.55	0.03	23.03	0.001	0.03
11.70	0.03	23.03	0.001	0.03
11.85	0.03	23.03	0.001	0.03
12.00	0.03	23.03	0.001	0.03
12.15	0.03	23.03	0.001	0.03
12.30	0.03	23.03	0.001	0.03
12.45	0.03	23.03	0.001	0.03
12.60	0.03	23.03	0.001	0.03
12.75	0.03	23.03	0.001	0.03

12.90	0.03	23.03	0.001	0.03
13.05	0.03	23.03	0.001	0.03
13.20	0.03	23.03	0.001	0.03
13.35	0.03	23.03	0.001	0.03
13.50	0.03	23.03	0.001	0.03
13.65	0.03	23.03	0.001	0.03
13.80	0.03	23.03	0.001	0.03
13.95	0.03	23.03	0.001	0.03
14.10	0.03	23.03	0.001	0.03
14.25	0.03	23.03	0.001	0.03
14.40	0.03	23.03	0.001	0.03
14.55	0.03	23.03	0.001	0.03
14.70	0.03	23.03	0.001	0.03
14.85	0.03	23.03	0.001	0.03
15.00	0.03	23.03	0.001	0.03
15.15	0.03	23.03	0.001	0.03
15.30	0.03	23.03	0.001	0.03
15.45	0.03	23.03	0.001	0.03
15.60	0.03	23.03	0.001	0.03
15.75	0.03	23.03	0.001	0.03
15.90	0.03	23.03	0.001	0.03
16.05	0.03	23.03	0.001	0.03
16.20	0.03	23.03	0.001	0.03
16.35	0.03	23.03	0.001	0.03
16.50	0.03	23.03	0.001	0.03
16.65	0.03	23.03	0.001	0.03

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
16.80	0.03	23.03	0.001	0.03
16.95	0.03	23.03	0.001	0.03
17.10	0.03	23.03	0.001	0.03
17.25	0.03	23.03	0.001	0.03
17.40	0.03	23.03	0.001	0.03
17.55	0.03	23.03	0.001	0.03
17.70	0.03	23.03	0.001	0.03
17.85	0.03	23.03	0.001	0.03
18.00	0.03	23.03	0.001	0.03
18.15	0.03	23.03	0.001	0.03
18.30	0.03	23.03	0.001	0.03
18.45	0.03	23.03	0.001	0.03
18.60	0.03	23.03	0.001	0.03
18.75	0.03	23.03	0.001	0.03
18.90	0.03	23.03	0.001	0.03
19.05	0.03	23.03	0.001	0.03
19.20	0.03	23.03	0.001	0.03
19.35	0.03	23.03	0.001	0.03
19.50	0.03	23.03	0.001	0.03
19.65	0.03	23.03	0.001	0.03
19.80	0.03	23.03	0.001	0.03
19.95	0.03	23.03	0.001	0.03
20.10	0.03	23.03	0.001	0.03
20.25	0.03	23.03	0.001	0.03
20.40	0.03	23.03	0.001	0.03
20.55	0.03	23.03	0.001	0.03
20.70	0.03	23.03	0.001	0.03
20.85	0.03	23.03	0.001	0.03
21.00	0.03	23.03	0.001	0.03
21.15	0.03	23.03	0.001	0.03
21.30	0.03	23.03	0.001	0.03
21.45	0.03	23.03	0.001	0.03
21.60	0.03	23.03	0.001	0.03

21.75	0.03	23.03	0.001	0.03
21.90	0.03	23.03	0.001	0.03
22.05	0.03	23.03	0.001	0.03
22.20	0.03	23.03	0.001	0.03
22.35	0.03	23.03	0.001	0.03
22.50	0.03	23.03	0.001	0.03
22.65	0.03	23.03	0.001	0.03
22.80	0.03	23.03	0.001	0.03
22.95	0.03	23.03	0.001	0.03
23.10	0.03	23.03	0.001	0.03
23.25	0.03	23.03	0.001	0.03
23.40	0.03	23.03	0.001	0.03
23.55	0.03	23.03	0.001	0.03
23.70	0.03	23.03	0.001	0.03
23.85	0.03	23.03	0.001	0.03
24.00	0.03	23.03	0.001	0.03
24.15	0.02	23.03	0.001	0.03
24.30	0.01	23.03	0.001	0.02
24.45	0.00	23.02	0.001	0.02
24.60	0.00	23.02	0.001	0.02
24.75	0.00	23.01	0.001	0.01
24.90	0.00	23.01	0.000	0.01
25.05	0.00	23.01	0.000	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
25.20	0.00	23.01	0.000	0.01
25.35	0.00	23.00	0.000	0.00

PEAK DISCHARGE = 2.169 CFS - PEAK OCCURS AT HOUR 1.95
MAXIMUM WATER SURFACE ELEVATION = 25.364
MAXIMUM STORAGE = 0.1610 AC-FT INCREMENTAL TIME= 0.050000HRS

PRINT HYD ID=2 CODE=3

PARTIAL HYDROGRAPH 102.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	5.250	0.0	10.500	0.0	15.750	0.0
0.150	0.0	5.400	0.0	10.650	0.0	15.900	0.0
0.300	0.0	5.550	0.0	10.800	0.0	16.050	0.0
0.450	0.0	5.700	0.0	10.950	0.0	16.200	0.0
0.600	0.0	5.850	0.0	11.100	0.0	16.350	0.0
0.750	0.0	6.000	0.0	11.250	0.0	16.500	0.0
0.900	0.0	6.150	0.0	11.400	0.0	16.650	0.0
1.050	0.0	6.300	0.0	11.550	0.0	16.800	0.0
1.200	0.1	6.450	0.0	11.700	0.0	16.950	0.0
1.350	0.3	6.600	0.0	11.850	0.0	17.100	0.0
1.500	1.0	6.750	0.0	12.000	0.0	17.250	0.0
21.000	0.0	22.500	0.0				
21.150	0.0	22.350	0.0				
21.300	0.0	22.200	0.0				
21.450	0.0	22.050	0.0				
21.600	0.0	21.900	0.0				
21.750	0.0						

	1.650	1.8		6.900	0.0	12.150	0.0
17.400	0.0		22.650	0.0			
	1.800	2.1		7.050	0.0	12.300	0.0
17.550	0.0		22.800	0.0			
	1.950	2.2		7.200	0.0	12.450	0.0
17.700	0.0		22.950	0.0			
	2.100	2.1		7.350	0.0	12.600	0.0
17.850	0.0		23.100	0.0			
	2.250	2.0		7.500	0.0	12.750	0.0
18.000	0.0		23.250	0.0			
	2.400	1.9		7.650	0.0	12.900	0.0
18.150	0.0		23.400	0.0			
	2.550	1.7		7.800	0.0	13.050	0.0
18.300	0.0		23.550	0.0			
	2.700	1.5		7.950	0.0	13.200	0.0
18.450	0.0		23.700	0.0			
	2.850	1.3		8.100	0.0	13.350	0.0
18.600	0.0		23.850	0.0			
	3.000	1.2		8.250	0.0	13.500	0.0
18.750	0.0		24.000	0.0			
	3.150	1.0		8.400	0.0	13.650	0.0
18.900	0.0		24.150	0.0			
	3.300	0.8		8.550	0.0	13.800	0.0
19.050	0.0		24.300	0.0			
	3.450	0.7		8.700	0.0	13.950	0.0
19.200	0.0		24.450	0.0			
	3.600	0.5		8.850	0.0	14.100	0.0
19.350	0.0		24.600	0.0			
	3.750	0.4		9.000	0.0	14.250	0.0
19.500	0.0		24.750	0.0			
	3.900	0.3		9.150	0.0	14.400	0.0
19.650	0.0		24.900	0.0			
	4.050	0.3		9.300	0.0	14.550	0.0
19.800	0.0		25.050	0.0			
	4.200	0.2		9.450	0.0	14.700	0.0
19.950	0.0		25.200	0.0			
	4.350	0.2		9.600	0.0	14.850	0.0
20.100	0.0		25.350	0.0			
	4.500	0.1		9.750	0.0	15.000	0.0
20.250	0.0		25.500	0.0			
	4.650	0.1		9.900	0.0	15.150	0.0
20.400	0.0		25.650	0.0			
	4.800	0.1		10.050	0.0	15.300	0.0
20.550	0.0		25.800	0.0			
	4.950	0.1		10.200	0.0	15.450	0.0
20.700	0.0		25.950	0.0			
	5.100	0.1		10.350	0.0	15.600	0.0
20.850	0.0		26.100	0.0			

RUNOFF VOLUME = 2.10260 INCHES = 0.3474 ACRE-FEET
PEAK DISCHARGE RATE = 2.17 CFS AT 1.950 HOURS BASIN AREA = 0.0031 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 09:11:29

CITY OF ALBUQUERQUE

February 4, 2009

Jack Tillman, PE
Tillman and Associates
5065 Hunter's Chase
Las Cruces, NM 88011

Re: Monterey Baptist Church Grading and Drainage Plan
Engineer's Stamp dated 8-28-08 (J22/D12A)

Dear Mr. Tillman,

Based upon the information provided in your submittal dated 1-28-09, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Also, prior to Certificate of Occupancy release, Engineer Certification of the grading plan per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham

Bradley L. Bingham, PE
Principal Engineer, Planning Dept.
Development and Building Services

C: file

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(REV 12/2005)

PROJECT TITLE: Monterey Baptist Church ZONE MAP: J-22/D012A
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: _____
CITY ADDRESS: _____

ENGINEERING FIRM: Tillman and Associates CONTACT: Jack Tillman
ADDRESS: 5065 Hunter's Chase PHONE: 505-379-9715
CITY, STATE: Las Cruces, NM ZIP CODE: 88011

OWNER: Monterey Baptist Church CONTACT: _____
ADDRESS: 12501 Lomas Blvd NE PHONE: 505-294-7679
CITY, STATE: Albuquerque, NM ZIP CODE: 87112

ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

RECEIVED
JAN 26 2009
HYDROLOGY SECTION

TYPE OF SUBMITTAL:
_____ DRAINAGE REPORT
__X__ DRAINAGE PLAN 1st SUBMITTAL
__✓__ DRAINAGE PLAN RESUBMITTAL
_____ CONCEPTUAL G & D PLAN
_____ GRADING PLAN
_____ EROSION CONTROL PLAN
_____ ENGINEER'S CERT (HYDROLOGY)
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT
_____ ENGINEER'S CERT (TCL)
_____ ENGINEER'S CERT (DRB SITE PLAN)
_____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
_____ SIA/FINANCIAL GUARANTEE RELEASE
_____ PRELIMINARY PLAT APPROVAL
_____ S. DEV. PLAN FOR SUB'D APPROVAL
_____ S. DEV. FOR BLDG. PERMIT APPROVAL
_____ SECTOR PLAN APPROVAL
_____ FINAL PLAT APPROVAL
_____ FOUNDATION PERMIT APPROVAL
__X__ BUILDING PERMIT APPROVAL
_____ CERTIFICATE OF OCCUPANCY (PERM)
_____ CERTIFICATE OF OCCUPANCY (TEMP)
__✓__ GRADING PERMIT APPROVAL
_____ PAVING PERMIT APPROVAL
_____ WORK ORDER APPROVAL
_____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:
_____ YES
_____ NO
_____ COPY PROVIDED

DATE SUBMITTED: 1/26/09 BY: George Taylor

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

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

8.0 9.0 10.0 11.0 12.0 13.0

NORTH PROPERTY LINE

7.0

50'

40'

* FOUNDATION @ 8.0 FROM MONUMENT.

6.0

BERM

DRAINAGE

5.0

4.0

3.0

24'

10'

CURB CUT

CURB CUT

ELEVATION TO MATCH STREET

4" thick CONCRETE APRON SLOPED TO MATCH EXISTING GRADE w/ #5 REBAR GRID @ 12" O.C.

DRAINAGE SWALE

SIDEWALK

NOTES :

SURVEY: CONTROL STATION 3_J22
- MONUMENT 16 J 22 USED FOR ZERO ELEV. HERE ON. MONUMENT 16 J 22 IS LOCATED ON PLATFORM OF LIGHT POLE JUST WEST OF SW CORNER OF THE PROPERTY. ELEV. = 5620.267

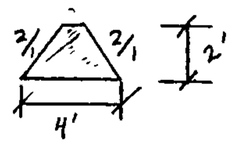
LEGAL: TRACK 6A, BLOCK D, OF MONTEREY MANOR SUBDIVISION.

* THIS PROPERTY IS NOT IN FHBM BOUNDARY

- DESIGN DRAINAGE FLOW FROM NEW DEVELOPMENT
Q_P = 0.24 cfs, 100 yr, 6 hr STORM EVENT

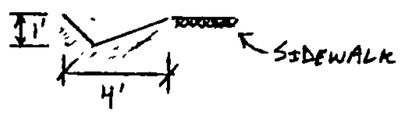
DRAINAGE BERM CROSS-SECTION

SCALE 1" = 10'

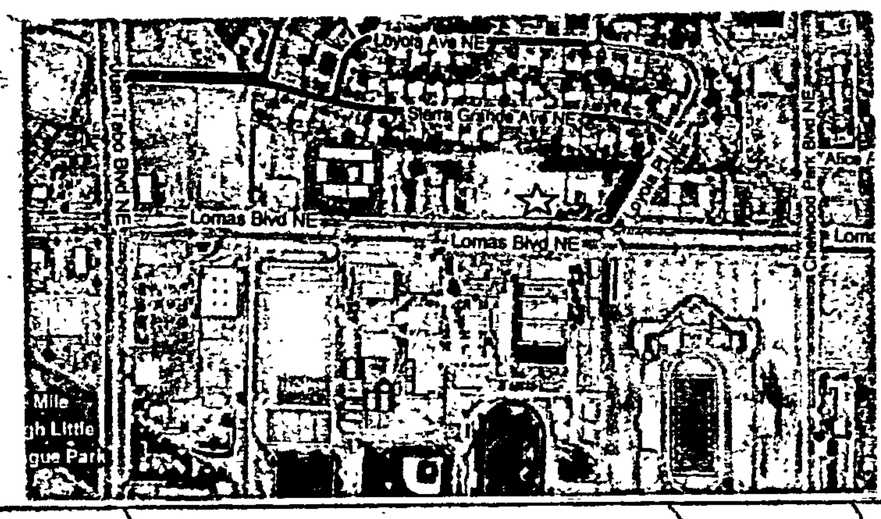


DRAINAGE SWALE CROSS-SECTION

SCALE 1" = 10'



VICINITY MAP



LEGEND :
- EXISTING CONTOURS
- NEW CONTOURS
- PROPERTY LINE

N

SCALE: 1" = 20

LOMAS N.E.

RECEIVED

JAN 28 2009

TITLE:	PROJECT: HYDROLOGY SECTION	DATE:
DRAINAGE PLAN	MONTEREY BAPTIST CHURCH	8/28/2008