

CITY OF ALBUQUERQUE



January 15, 2016

Scott McGee, PE
Scott M. McGee PE, LLC
9700 Tanoan Dr. NE
Albuquerque, NM 87111

**Re: Santuario De San Martin De Porres Church
8301 Camino San Martin SW
Request for Permanent C.O. - Accepted
Engineer's Stamp dated: 10-29-14 (M10D002)
Certification dated: 1-14-16**

Dear Mr. McGee,

Based on the Certification received on 1/14/2016, the site is acceptable for release of Certificate of Occupancy by Hydrology.

PO Box 1293

If you have any questions, you can contact me at 924-3686 or Totten Elliott at 924-3982.

Albuquerque

Sincerely,

New Mexico 87103

Abiel Carrillo, P.E.
Principal Engineer, Planning Department
Development and Review Services

www.cabq.gov

TE/AC

C: CO Clerk, Cordova, Camille C.; Miranda, Rachel; Sandoval, Darlene M.;
Barreras, Gary S.; Blocker, Lois

Elliott, Stanice

From: Scott McGee <scottmmcgee@gmail.com>
Sent: Friday, January 15, 2016 2:11 PM
To: Elliott, Stanice
Subject: Re: Santuario De San Martin Church

Hi Totten,

I noticed the narrower curb openings also when I visited the site. With the multiple number of curb openings designed and constructed the narrower (17") width will not be a problem.

Scott McGee PE
263.2905

On Fri, Jan 15, 2016 at 1:55 PM, Elliott, Stanice <staniceelliott@cabq.gov> wrote:

Scott

I was at the site today for the hydrology CO. The drawing calls out for 3' curb openings. Most of the openings are approximately 17". Please see attached pics of a couple of them. Would you please confirm that this will have no impact on the drainage of the site? Thank you.

Stanice 'Totten' Elliott

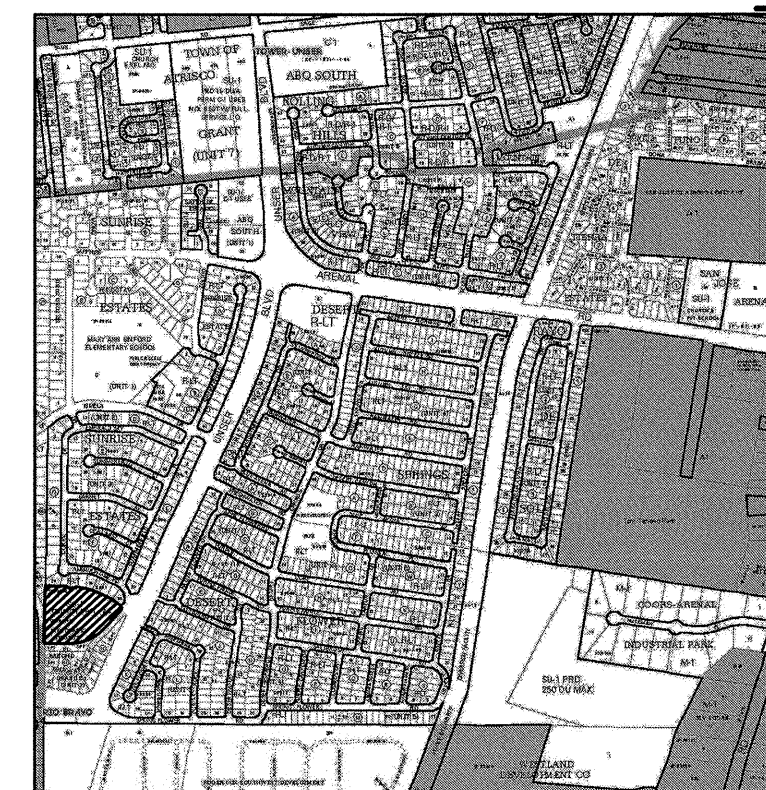
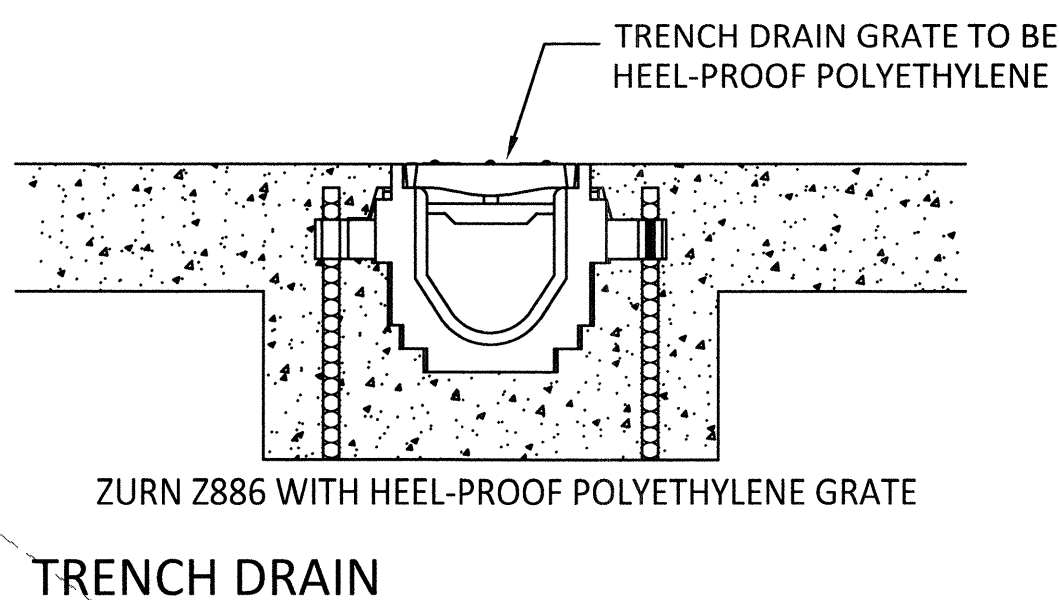
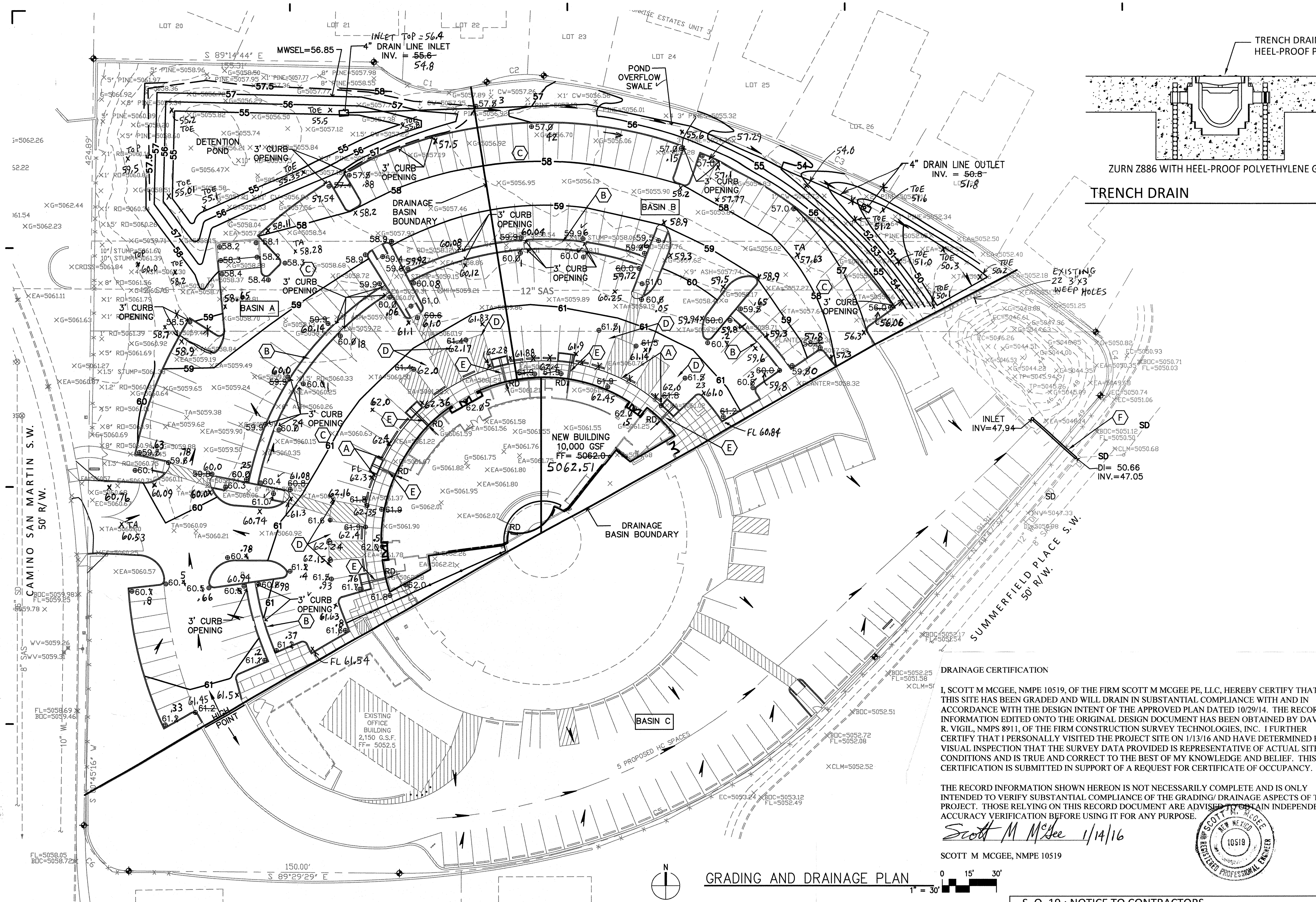
Planning Department

Hydrology Section

City of Albuquerque

505-924-3982

505-924-3864 fax



N.T.S.

DRAINAGE

LEGAL: Tract A, Westgate Heights

AREA: 4.555 acres (198,410 SF) PRECIPITATION ZONE: 1

BENCHMARK: City of Albuquerque Station '5-M10' being a brass cap
ELEV= 5042.77 (NAVD 1988)

SURVEYOR: Harris Surveying, Inc. dated December 2009

FLOOD HAZARD: From FEMA Panel 336, this site is identified as being within
Zone 'X' which is located outside the 100-year floodplain

EXISTING CONDITIONS: The existing church site was developed in 1981 and includes a 9,500 SF sanctuary building along with two other smaller buildings, associated paved parking, and landscaping. Two existing retention ponds are located at the northwest corner and eastern end of the site. The two abutting public streets are both higher than the retention pond areas. Runoff in Basin A drains to the pond shown in the northwest corner of the site. Basin B drains to the northeast and runoff passes through a group of 3" square weep holes in a block wall on its way to the eastern retention pond. Basin C surface flows to the same retention pond. No runoff discharges from the site located in Zone 1.

BASIN	ACRES	'A'	'B'	'C'	'D'	Q(EXISTING)
A	1.791	0	32	44	24	1.791 x 2.96= 5.3
B	0.937	0	9	73	18	0.937 x 3.07= 2.9
C	1.827	0	5	5	90	1.827 x 4.18= 7.6
						Total Q = 15.8 CFS

PROPOSED IMPROVEMENTS: The proposed improvements include a 10,000 SF church building along with additional paved parking. The proposed additional parking, located in the NW half of the site, is within Basins A & B with no improvements proposed in Basin C.

FIRST FLUSH: The first flush volume is calculated using the impervious areas within Basins A & B only. It is based on 0.44" rainfall less the 0.1" initial abstraction giving $V = [(1.791)(.74) + (0.937)(.85)](43560)(0.34/12) = 2,618$ CF. The enlarged pond at the NW corner of the site provides 2,800 CF storage volume at 0.6' depth.

DRAINAGE APPROACH: The site drainage will continue to follow historic flow paths, but increased impervious area will require additional onsite storage volume. The pond design is based on the 100-year 6-hour volume as site discharge is allowed at 0.1 CFS/Acre. The storm water pond in the northwest corner of the site will discharge to the east via a 4" drain line. The flow rate will vary with depth as determined by the Orifice equation. The maximum flow rate when $H=1.1'$ as follows:

$$Q = K \times A \times (2gh)^{1/2} = (0.6)(0.0873)(8.42) = 0.44 \text{ CFS} \quad [<0.45 \text{ CFS}]$$

BASIN	AREA (SF)	'A'	'B'	'C'	'D'	V(DEVELOPED)
A	78,005	0	12	14	74	(78005)(0.1398) = 10,905 CF
B	40,804	0	9	6	85	(40804)(0.1496) = 6,104 CF
C	79,584	0	5	5	90	(79584)(0.1547) = 12,310 CF

POND VOLUMES ARE AS FOLLOWS:

NW	ELEV	AREA	VOL(CF)
55	4,137	0	
56	5,900	5,018	
57	7,670	11,800	[>10,905 CF]

EAST - EXISTING	ELEV	AREA	VOL(CF)
45	300	0	
46	560	430	
47	880	1150	
48	1400	2290	
49	1930	3955	
50	3790	6815	
51	5810	11615	
52	8040	18540	[>18,414 CF]

4" drain line is proposed to discharge storm water to Summerfield Place SW into the back of an existing storm drain inlet. A 3" by 6" reducer will be located at the inlet end to control discharge to the allowable 0.1 CFS/Acre based on a maximum water depth of 52-48.1= 3.9' 4" DISCHARGE USED SMM
 $Q = K \times A \times (2gh)^{1/2} = (0.6)(0.049)(15.8) = 0.46 \text{ CFS}$
Developed runoff will surface flow to the storm water basins at the NW and NE corners of the site per historic conditions. The proposed improvements will increase site runoff, but by enlarging the onsite detention pond, the impact to downstream drainage facilities will be minimized.

GRADING AND DRAINAGE PLAN

LEGEND

- RD = ROOF DRAIN
- FF= 5062.0 = FINISH FLOOR ELEVATION
- INV = INVERT
- EXISTING CONTOUR
- PROPOSED CONTOUR
- FLOW ARROW
- BASIN A DRAINAGE BASIN ID
- DRAINAGE BASIN BOUNDARY
- SPOT ELEVATION
- AS-BUILT ELEVATION

KEYED NOTES

- NEW ASPHALT PAVING TO BE FLUSH WITH SIDEWALK ELEVATION AROUND BUILDING PERIMETER.
- NEW LANDSCAPE MEDIAN AREAS WITH FINISH GRADE DEPRESSED 2-4" BELOW ADJACENT ASPHALT ELEVATION.
- NEW CURB OPENINGS TO ALLOW RUNOFF TO ENTER/EXIT MEDIANS.
- NEW ACCESSIBLE PARKING SPACE AND ACCESSWAY TO NOT EXCEED 2% SLOPE IN ANY DIRECTION.
- NEW TRENCH DRAIN (6) LOCATED AT ROOF DRAIN OUTLETS TO DISCHARGE TO PLANTER. PROVIDE 8" WIDE BY 6" HIGH CURB OPENING ON OPPOSITE SIDE OF PLANTER FOR OVERFLOW.
- BUILD NEW 32 LF 8" PVC DRAIN LINE TO CONNECT TO EXISTING CATCH BASIN ON SUMMERFIELD PLACE PER COA STD DWG NO 2237. INVERT AT CATCH BASIN = 47.30 AND INLET INV = 47.94. INSTALL 3" BY 6" REDUCER AT INLET END SMM 10/29/14

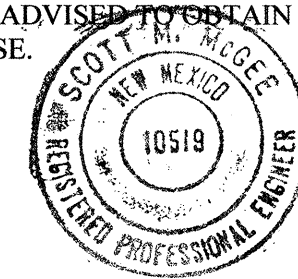
DRAINAGE CERTIFICATION

I, SCOTT M MCGEE, NMPE 10519, OF THE FIRM SCOTT M MCGEE PE, LLC, HEREBY CERTIFY THAT THIS SITE HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 10/29/14. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY DAVID R. VIGIL, NMPS 8911, OF THE FIRM CONSTRUCTION SURVEY TECHNOLOGIES, INC. I FURTHER CERTIFY THAT I PERSONALLY VISITED THE PROJECT SITE ON 1/13/16 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.

THE RECORD INFORMATION SHOWN HEREON IS NOT NECESSARILY COMPLETE AND IS ONLY INTENDED TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING/ DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT ACCURACY VERIFICATION BEFORE USING IT FOR ANY PURPOSE.

Scott M McGee 1/14/16

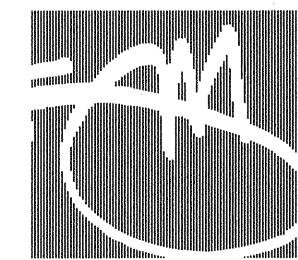
SCOTT M MCGEE, NMPE 10519



S. O. 19 : NOTICE TO CONTRACTORS

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R/W.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE LINE LOCATING SERVICE, NEW MEXICO ONE CALL 260-1990, (NM ONE CALL "811") FOR THE LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVAL	NAME	DATE
INSPECTOR		



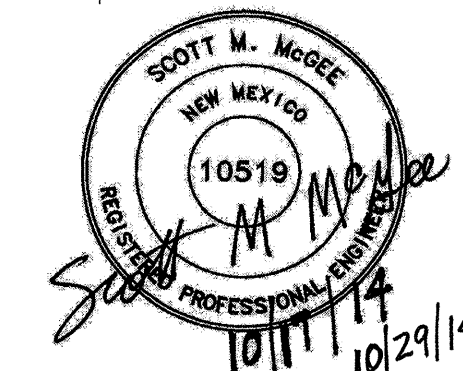
J M Z arquitectos
architecture | urbanism

Jose M. Zelaya, AIA

6100 Seagull St. Suite B203
Albuquerque, NM 87109
Ph: (505) 508-8512

www.JMZarchitecture.com

Stamp



Consultant

Client

Archdiocese of Santa Fe
4000 St. Joseph Pl. N.W.
Albuquerque, NM 87120

Revisions

No.	Date	Description

Issue Date: SEPTEMBER 4, 2014

Project No. JMZ 032013

Doc. Phase: 100% CDS

FOR PERMIT
AND FOR CONSTRUCTION

Drawn By: CB

Checked By: SMM

Principal: SMM

Signed:

Date:

License No.

Project Name

Santuario
San Martin De Porres
8301 Camino San Martin SW
Westgate Heights
Albuquerque, NM 87121

Sheet Title

GRADING AND DRAINAGE PLAN

Sheet Number

C-101

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