

CITY OF ALBUQUERQUE

Planning Department

Suzanne Lubar, Director



Richard J. Berry, Mayor

May 16, 2016

Åsa Nilsson-Weber, P.E.
Isaacson & Arfman, P.A.
128 Monroe St NE
Albuquerque, New Mexico 87108

**RE: Risen Savior Catholic Community Parking Lot
Grading and Drainage Plan
Engineers Stamp Date 5/5/16 (D19D002)**

Dear Ms. Weber,

Based upon the information provided in your submittal received 4/27/16, this plan is approved for Grading Permit, Paving Permit and SO-19. Contact Jason Rodriguez at 235-8016 to schedule an inspection for the side walk culvert. A separate Excavation/Barricading Permit is required for SO-19 construction within City ROW. A copy of this approval letter must be on hand when applying for the permit.

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

Prior to release of approval for the parking lot, an approval letter from Jason Rodriguez for the sidewalk culvert will be required.

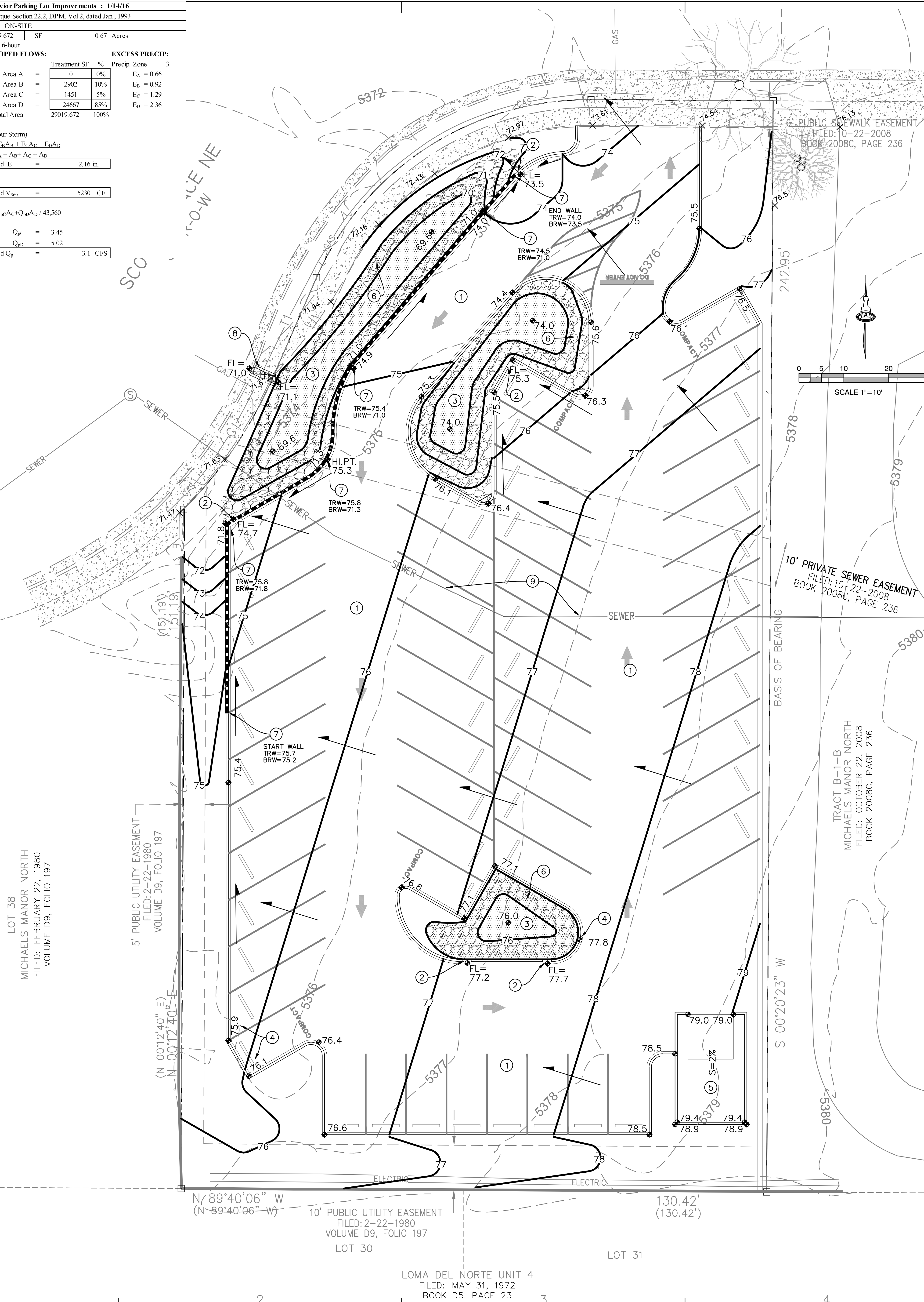
If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Hydrology
Planning Department

RR/AC
C: File

CALCULATIONS: Risen Savior Parking Lot Improvements : 1/14/16									
Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993									
ON-SITE									
AREA OF SITE:		29019.672		SF	=	0.67	Acres		
		100-year, 6-hour							
HISTORIC FLOWS:			DEVELOPED FLOWS:			EXCESS PRECIP:			
	Treatment SF	%		Treatment SF	%	Precip. Zone	3		
Area A	=	0	0%	Area A	=	0	0%	E _A	= 0.66
Area B	=	0	0%	Area B	=	2902	10%	E _B	= 0.92
Area C	=	29019.672	100%	Area C	=	1451	5%	E _C	= 1.29
Area D	=	0	0%	Area D	=	24667	83%	E _D	= 2.36
Total Area	=	29019.672	100%	Total Area	=	29019.672	100%		
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)									
Weighted E =		$E_A A_A + E_B A_B + E_C A_C + E_D A_D$							
		$A_A + A_B + A_C + A_D$							
Historic E	=	1.29 in.	Developed E	=	2.16 in.				
On-Site Volume of Runoff: V ₃₆₀ = E*A / 12									
Historic V ₃₆₀	=	3120	CF	Developed V ₃₆₀	=	5230	CF		
On-Site Peak Discharge Rate: Q _p = Q _{pA} A _A +Q _{pB} A _B +Q _{pC} A _C +Q _{pD} A _D / 43,560									
For Precipitation Zone 3									
Q _{pA}		=	1.87	Q _{pC}		=	3.45		
Q _{pB}		=	2.60	Q _{pD}		=	5.02		
Historic Q _p	=	2.3	CFS	Developed Q _p	=	3.1	CFS		



KEYED NOTES

- PROPOSED PAVING. SEE PAVING PLAN FOR PAVEMENT MATERIAL, JOINT INFORMATION, SECTIONS, PARKING LAYOUT, DIMENSIONS, STRIPING, ETC.
- CONSTRUCT 18" WIDE (BOTTOM WIDTH) CURB OPENING AT FLOWLINE (FL=) SHOWN TO PASS 'FIRST FLUSH' DISCHARGE TO RETENTION PONDING AREAS. ALL 'FIRST FLUSH' PONDING AND CURB OPENINGS MUST BE INSTALLED PER PLAN. SEE DETAIL THIS SHEET.
- DOT HATCHED AREA REPRESENTS EXTENTS OF 'FIRST FLUSH' RETENTION PONDING. CONSTRUCT TO ELEVATIONS SHOWN.
- NOTE: PAVEMENT SPOT ELEVATIONS SHOW FLOWLINE ELEVATION. ADD 0.5' TYPICAL FOR ADJACENT TOP OF CURB / TOP OF WALK ELEVATIONS.
- NEW GARAGE. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION.
- INSTALL FRACTURED FACE ROCK EROSION PROTECTION TO LIMITS SHOWN WITH HATCH. SEE GENERAL NOTE 'F'.
- CONSTRUCT RETAINING WALL (4' MAX. RETAINING) TO EXTENTS SHOWN. TOP OF WALL = 6" ABOVE ADJACENT PAVEMENT ELEVATIONS. CONTRACTOR TO COORDINATE WALL MATERIAL / FOOTING WITH ARCHITECT.
- CONSTRUCT 2" WIDE (BOTTOM WIDTH) COVERED SIDEWALK CULVERT WITH STEEL PLATE TOP PER C.O.A. STD. DWG. 2236. EXTEND BACK OF CULVERT 12" BEYOND EDGE OF WALK. ANCHOR STEEL PLATE TOP PER DETAIL THIS SHEET.
- SHALLOW EXISTING SANITARY SEWER LINE THIS AREA. LOCATION SHOWN IS APPROXIMATE BASED ON TOLLING. CONTRACTOR TO LOCATE AND PROTECT DURING CONSTRUCTION. COORDINATE WITH ARCHITECT.

GENERAL NOTES

A. PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.

B. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT.

C. THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE CITY OF ALBUQUERQUE REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND AN HDPES PERMIT FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES MEET THE EPA THRESHOLD. AN EROSION AND SEDIMENT CONTROL (ESC) PERMIT IS REQUIRED FOR ALL SITES. (SWPPP, HDPES PERMIT, AND ESC PLAN BY OTHERS.) A CURRENT CITY-APPROVED ESC PERMIT MUST BE INCLUDED WITH THE CONTRACTOR'S SUBMITTAL FOR A ROUGH GRADING, GRADING, PAVING, BUILDING, OR WORK ORDER PERMIT. CONTRACTOR WILL COORDINATE WITH OWNER TO DETERMINE WHO WILL PREPARE SWPPP AND INSPECT REQUIRED ELEMENTS.

D. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.

E. WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS SHALL BE SMOOTH.

F. ALL EROSION PROTECTION TO BE INSTALLED AS 6" AVG. DIA. FRACTURED FACED ROCK (F.F. ROCK) PLACED OVER GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.).

G. SIDESLOPES STEEPER THAN 3:1 MUST HAVE PERMANENT EROSION PROTECTION INSTALLED. TYPICAL NO SLOPE SHALL BE STEEPER THAN 2:1.

H. POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.

I. FOR ENGINEER'S CERTIFICATION OF SUBSTANTIAL COMPLIANCE (FOR CERTIFICATE OF OCCUPANCY) CONTRACTOR SHALL PROVIDE AN AUTOCAD FORMAT AS-BUILT SURVEY PREPARED BY A LICENSED SURVEYOR WHICH INCLUDES:

- AS-BUILT SPOT ELEVATIONS AT EACH DESIGN SPOT ELEVATION SHOWN ON THE APPROVED PLAN;
- TOP AND BOTTOM ELEVATIONS AS REQUIRED TO DEFINE THE PERIMETER OF PONDS (TO BE USED BY ENGINEER TO CALCULATE AS-BUILT VOLUME PROVIDED);
- ALL CONSTRUCTION, INCLUDING DRAIN INLETS, PIPES AND PONDS SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN IN ORDER TO RECEIVE ENGINEER'S CERTIFICATION.

P. GRADING OF FIRST FLUSH BASINS WILL BE INSPECTED AS PART OF ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY. DURING LANDSCAPING, FIRST FLUSH BASINS WILL BE SMOOTHLY INTEGRATED INTO LANDSCAPING WHILE MAINTAINING REQUIRED TOP AND BOTTOM ELEVATION, VOLUME AND INLET / OVERFLOW ELEVATIONS.

COVERED SIDEWALK CULVERT

CONSTRUCT PER C.O.A. STD. DWG. 2236 MODIFIED AS FOLLOWS:

- MODIFIED SECTION B-B FOR SECURING PLATE (SEE ABOVE).
- EXTEND BACK OF CULVERT 12" BEYOND EDGE OF WALK (SEE BELOW).

LANDSCAPING

EXISTING SIDEWALK

SMOOTH CONCRETE FINISH AT EXPOSED BACK OF CURB

1/2" EXPANSION JOINT

GENERAL NOTES

- EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE SHAPED WITH A 3/8" EDGING TOOL.

CURB OPENING

GENERAL NOTES

- EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE SHAPED WITH A 3/8" EDGING TOOL.

PROJECT INFORMATION

PROPERTY: THE SITE IS AN EXISTING DIRT OVERFLOW PARKING LOT ACROSS FROM THE RISEN SAVIOR CATHOLIC COMMUNITY CHURCH LOCATED WITHIN C.O.A. VICINITY MAP D-19. THE SITE IS BOUND TO THE EAST BY A DEVELOPED COMMERCIAL PROPERTY, TO THE SOUTH AND WEST BY DEVELOPED RESIDENTIAL PROPERTIES AND TO THE NORTH BY SCOTTS PLACE N.E.

SITE AREA: 0.6662 ACRES

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE PAVING THE EXISTING LOT TO PROVIDE FOR PARKING SPACES AND ASSOCIATED LANDSCAPING. IN ADDITION, A SINGLE VEHICLE GARAGE IS PROPOSED AT THE SOUTHEAST CORNER OF THE PROPERTY.

LEGAL: TRACT B-1-A MICHAEL'S MANOR NORTH, CITY OF ALBUQUERQUE, NEW MEXICO.

BENCHMARK: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL MONUMENT 16-D19 HAVING AN ELEVATION OF 5394.01 (NAVD 1988)

OFF-SITE: A PROPOSED CURB ALONG THE EAST PROPERTY LINE WILL SERVE TO DIRECT MINOR FLOW FROM THE ADJACENT PROPERTY NORTH TO SCOTTS PLACE N.E.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #3500IC0141G DATED 09/26/2008, THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

DRAINAGE CONCEPT: THE SITE IS CURRENTLY A COMPACTED DIRT / GRAVEL PARKING LOT CONSISTING OF 100% LAND TREATMENT 'C' LOCATED WITHIN A FULLY DEVELOPED AREA. EXISTING STORMWATER FLOWS FROM SOUTHEAST TO NORTHWEST FREE DISCHARGING AS SHEETFLOW OVER THE SIDEWALK TO SCOTTS PLACE NE. THE PROPOSED IMPROVEMENTS CONSIST OF PAVING THE PARKING AND CONSTRUCTING A GARAGE BUILDING AT THE SOUTHEAST CORNER OF THE PROPERTY. THE MAXIMUM IMPERVIOUS WILL BE 85% WITH THE REMAINING 15% LANDSCAPE. THE 100-YEAR 6-HOUR PEAK DISCHARGE WILL INCREASE 0.8 CFS WITH STORMWATER FREE DISCHARGING TO SCOTTS PLACE VIA A PROPOSED COVERED SIDEWALK CULVERT.

FIRST FLUSH REQUIREMENTS: STORMWATER CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' (DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).

THE ESTIMATED PONDING VOLUME REQUIRED IS 0.34" * TYPE 'D' AREA: 0.34/12 * 0.57 AC * 43560 = 700 CF

THERE ARE 'FIRST FLUSH' RETENTION BASIN AREAS THROUGHOUT THE SITE (SEE LEGEND). STORM WATER FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO THESE BASINS VIA CURB OPENINGS.

ENGINEER: ASA M. NILSSON-WEBER, P.E., NMPE 17631
ISAACSON & ARMAN, P.A.
128 MONROE NE, 87111
TELEPHONE: (505) 268-8828

SURVEYOR: ANTHONY L. HARRIS, NMLS 11463
THE SURVEY OFFICE, LLC
333 LOMAS BLVD., NE
TELEPHONE: (505) 998-0303

LEGEND

EXISTING SPOT ELEVATION
EXISTING CONTOUR
PROPOSED CONTOUR (1' INCREMENT)
PROPOSED SPOT ELEVATION
FLOW ARROW
RETAINING WALL (DESIGN BY OTHERS)
PROPOSED FIRST FLUSH RETENTION PONDING AREA WITH PERCOLATION PIT
LIMITS OF EROSION CONTROL
TRW=6" ABOVE PAVEMENT FLOWLINE
PAVEMENT FLOWLINE
RETAINING WALL (4' MAX. RETAINING)
FOOTING / WEAPHOLES / REINFORCEMENT TO BE COORDINATED WITH WALL CONTRACTOR. DESIGN BY OTHERS.

S.O.19 : NOTICE TO CONTRACTORS

1	AN EXCAVATION / CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
2	ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #8.
3	TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (CALL '811') FOR LOCATION OF EXISTING UTILITIES.
4	PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5	BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC / STREET USE.
6	MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7	WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
8	THE WORK IN THE CITY ROW MUST BE INSPECTED AND ACCEPTED. THE CONTRACTOR MUST CONTACT JASON RODRIGUEZ AT 235-8016 AND CONSTRUCTION COORDINATION AT 524-3416 TO SCHEDULE INSPECTIONS.

APPROVAL	NAME	DATE
INSPECTOR		

ISAACSON & ARMAN, P.A.
Consulting Engineering Associates
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Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iaacivil.com
2147 CG-101.dwg Apr. 20, 2016

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1777 LOUISIANA NE, SUITE 205
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FARMINGTON, NM 87401-3308
(505) 232-7475 • FAX: (505) 232-6464

THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED, AND DATED BELOW

ISAACSON & ARMAN, P.A.
17631
Professional Engineer
4-27-16

RISEN SAVIOR CATHOLIC COMMUNITY
PARKING LOT IMPROVEMENTS
7810 SCOTTS PL. NE
ALBUQUERQUE, NEW MEXICO 87120

PROJECT NO.	5173.01
CAD DWG FILE	CG-101
DRAWN BY:	BUB
CHECKED BY:	ANW
DATE	APRIL 20, 2016
ISSUE	

SHEET TITLE
GRADING & DRAINAGE PLAN

DRAWING SHEET
CG-101