

GENERAL NOTES

- A. THE CONTRACTOR SHALL ABIDE BY ALL STATE, LOCAL, AND FEDERAL LAWS, CODES, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA AND ADA REQUIREMENTS.
- B. NO WORK SHALL BE PERFORMED WITHOUT THE APPROPRIATE PERMITS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION, OR PRIOR TO OCCUPANCY, AS APPROPRIATE.
- C. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING OBSTRUCTIONS, AND CONDITION OF ALL EXISTING INFRASTRUCTURE PRIOR TO CONSTRUCTION. REPORT ALL DISCREPANCIES TO THE OWNER.
- D. CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK. CONTRACTOR SHALL REGULARLY UPDATE OWNER REGARDING THE STATUS OF THE INSPECTIONS.
- E. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT STRUCTURES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- F. FIVE WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NMB#11 (811) FOR LOCATION OF EXISTING UTILITIES.
- G. ALL SITE PREPARATION, GRADING OPERATIONS, FOUNDATION CONSTRUCTION, AND PAVEMENT INSTALLATION WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, WHICH WILL BE PROVIDED BY THE OWNER.
- H. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.
- I. VIBRATORY COMPACTION SHALL NOT BE USED OVER IN-PLACE UTILITIES.
- J. ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.
- K. CONTRACTOR SHALL COMPLY WITH LOCAL REGULATIONS FOR RESEEDING OF DISTURBED AREAS.
- L. GRADING SHALL BE PERFORMED AT THE ELEVATIONS SHOWN ON THIS PLAN.
- M. 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.
- N. IF THE SITE IS SMALL ENOUGH NOT TO REQUIRE A SWPPP/NPDES PERMIT (LESS THAN ONE ACRE), THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR USING EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PUBLIC RIGHT-OF-WAY.
- O. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.
- P. ALL NEW PAVEMENT SURFACES SHALL BE CONSTRUCTED WITH POSITIVE SLOPE AWAY FROM BUILDINGS AND POSITIVE SLOPE TOWARD EXISTING AND/OR PROPOSED DRAINAGE PATHS. PAVING AND ROADWAY GRADES SHALL BE ±0.1' FROM PLAN ELEVATIONS. BUILDING PAD ELEVATION SHALL BE ±0.05' FROM PLAN ELEVATION.
- Q. PAVEMENT GRADES IN MARKED HANDICAPPED PARKING AREAS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. FOR ALL ACCESSIBLE ROUTES, MAXIMUM ALLOWABLE GROSS SLOPE IS 2.0% AND MAXIMUM LONGITUDINAL SLOPE WITHOUT RAMP IS 5.0%. FOLLOW ALL ADA ACCESSIBILITY GUIDELINES OR CITY CODES, WHICHEVER IS MORE STRINGENT.
- R. ALL EROSION PROTECTION TO BE INSTALLED AS 4" AVG. DIA. ANGULAR FACED ROCK (F.F. ROCK) PLACED OVER GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.).
- S. SIDESLOPES STEEPER THAN 3:1 BUT LESS THAN 2:1 MUST HAVE PERMANENT EROSION PROTECTION INSTALLED, TYPICAL NO SLOPE SHALL BE STEEPER THAN 2:1.
- T. POND DESIGN PARAMETERS AND STORMWATER CONTROL MEASURES SHOWN ON THIS PLAN (TOP OF POND, BOTTOM OF POND, SIZE OF ORIFICE, AREA OF POND, ETC.) TO BE STRICTLY ADHERED TO FOR CERTIFICATION PURPOSES.
- U. 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.
- V. 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);
 - POND OVERFLOW ELEVATIONS
 - 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.
- W. GRADING OF FIRST FLUSH RETENTION BASINS WILL BE INSPECTED AS PART OF ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY.

CALCULATIONS

STORMWATER CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF FIRST FLUSH DEFINED AS THE 90TH PERCENTILE STORM [LESS INITIAL ABSTRACTION] OR 0.34" OF STORMWATER WHICH DISCHARGES FROM IMPERVIOUS SURFACES. STORM WATER FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO STORMWATER QUALITY VOLUME BASINS.

CALCULATIONS: SAN JOSE CATHOLIC CHURCH - PERISH HALL :

Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan. 1993

ON-SITE			
AREA OF SITE:	30870	SF	= 0.7
100-year, 6-hour			
HISTORIC FLOWS:	DEVELOPED FLOWS:	EXCESS PRECIP:	
Treatment SF	%	Treatment SF	% Precip. Zone 2
Area A = 0	0%	Area A = 0	0%
Area B = 7717.5	25%	Area B = 6174	20%
Area C = 23152.5	75%	Area C = 14818	48%
Area D = 0	0%	Area D = 9878	32%
Total Area = 30870	100%	Total Area = 30870	100%

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$$

Historic E	=	1.04 in.	Developed E	=	1.38 in.
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On-Site Volume of Runoff: $V_{360} = E \cdot A / 12$

Historic V_{360}	=	2682 CF	Developed V_{360}	=	3542 CF
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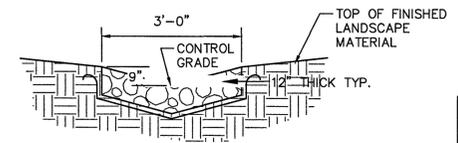
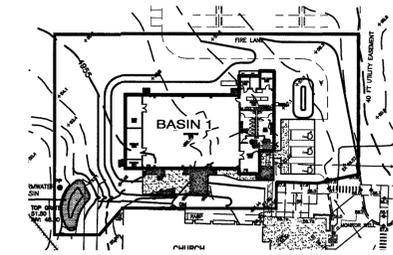
On-Site Peak Discharge Rate: $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D / 43,560$

For Precipitation Zone 2

Q_{pA}	=	1.56	Q_{pC}	=	3.14
Q_{pB}	=	2.28	Q_{pD}	=	4.70
Historic Q_p	=	2.1 CFS	Developed Q_p	=	2.5 CFS

FIRST FLUSH POND		
Contour	Area	Volume
4952.00	517	
4951.00	124	321 CF
TOTAL VOL.		321 CF

REQUIRED FIRST FLUSH VOLUME = $8644 \text{ SF} \cdot 0.34" / 12 = 280 \text{ CF}$



- VARY FRACTURED FACE ROCK SIZE BETWEEN 2" AND 6" DIA. (AVG.=4").
- PLACE GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.) BENEATH ALL EROSION PROTECTION.

CONSTRUCT ALL SWALES AND FRACTURED FACE ROCK EROSION PROTECTION BELOW ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY

FRACTURED FACE ROCK SWALE

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Original drawings remain the property of the Architect and as such the Architect retains total ownership and control. The design represented by these drawings is sold to the client for a one time use, unless otherwise agreed upon in writing by the Architect.

PROFESSIONAL SEAL

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PROJECT NAME
**SAN JOSÉ CATHOLIC CHURCH
 PARISH HALL**

**SAN JOSÉ CATHOLIC CHURCH
 2401 BROADWAY BLVD SE
 ALBUQUERQUE, NM 87102**

MARK	DATE	DESCRIPTION
▲	10/17/18	SITE REVISIONS

PROJECT NUMBER IA2270
 DRAWN BY BJB
 CHECKED BY FCA
 ISSUE DATE 10-17-18

SHEET NAME
**GRADING AND DRAINAGE
 NOTES AND DETAILS**

SHEET NUMBER
CG-101