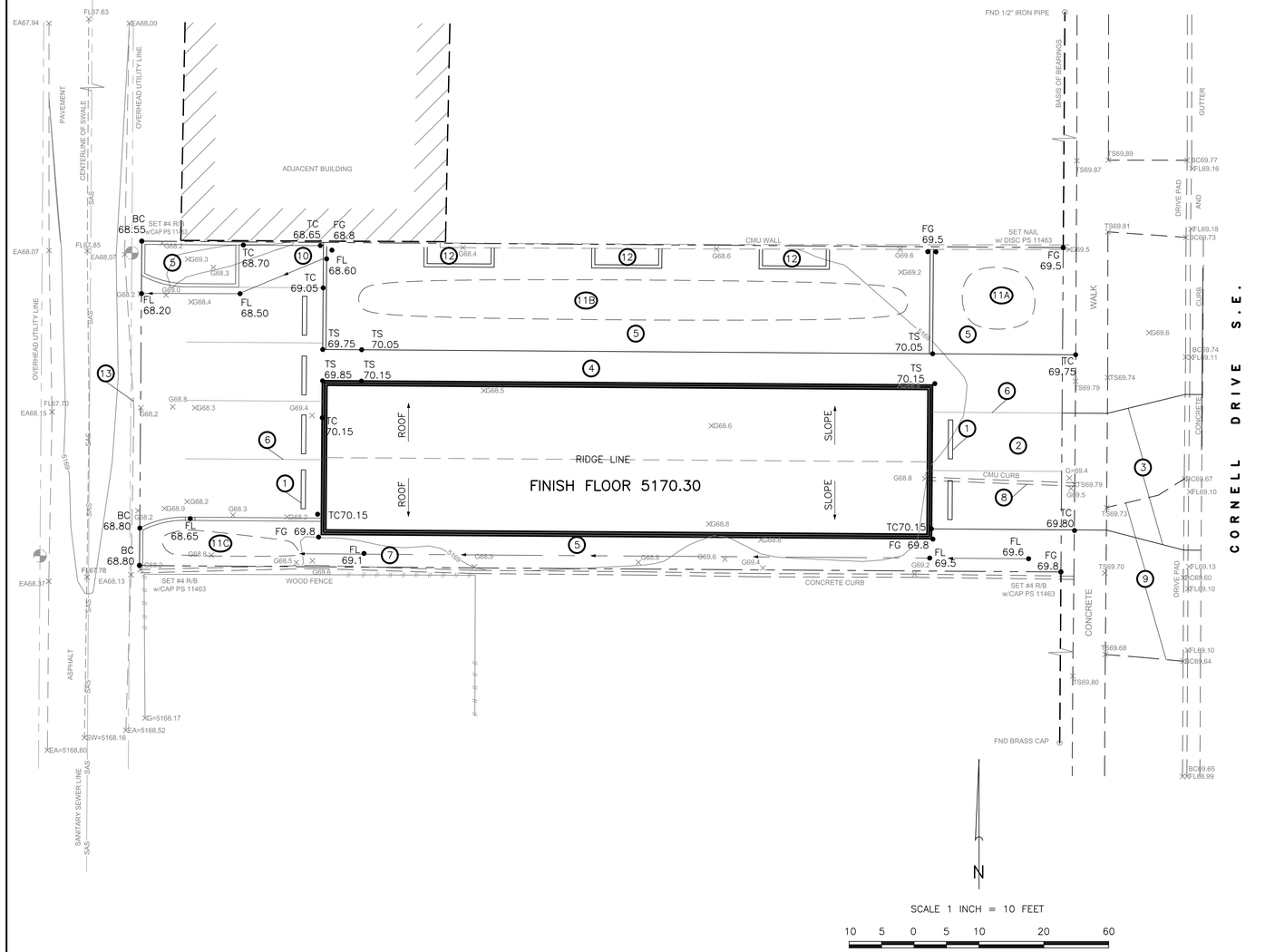
GRADING PLAN



SCALE 1 INCH = 10 FEET

10 5 0 5 10 20 60

KEYED NOTES

1. PRECAST CONCRETE PARKING BUMPER.
2. CONCRETE PAVEMENT.
3. BUILD DRIVEPAD PER COA STD. DWG. 2425.
4. CONCRETE SIDEWALK.
5. LANDSCAPED AREA. SEE ARCHITECTURAL.
6. PAINTED PARKING STRIPING.
7. EARTH SWALE.
8. REMOVE EXISTING CONCRETE CURB.
9. REMOVE EXISTING CONCRETE DRIVEPAD. BUILD NEW STANDARD CURB AND GUTTER TO MATCH GRADES PER COA STD. DWG. 2415A.
10. 4–3" PVC PIPES THROUGH WALL FOR DRAINAGE.
11. WATER HARVESTING PONDS (LINE INDICATES APPROX. POND BOTTOM LOCATION). BOTTOM ELEVATIONS: POND A 69.2, POND B 68.2, POND C 68.3. POND C TO HAVE AN 18" WIDE OUTLET AT LOCATION AND ELEVATION SHOWN.
12. PLANTERS.
13. SAW CUT NEAT EDGE IN EXISTING ASPHALT ALLEY PAVEMENT. PLACE 3" THICK ASPHALT PAVEMENT TRANSITION BETWEEN EXISTING ASPHALT AND NEW CONCRETE PAVEMENT.

NOTE: SEE ARCHITECTURAL SITE PLAN FOR SITE DIMENSIONS.

DRAINAGE NOTES

1. THE SITE WAS PREVIOUSLY DEVELOPED AND USED AS A SINGLE FAMILY RESIDENCE. THE STRUCTURES HAVE BEEN RAZED AND THE SITE WILL BE REDEVELOPED AS A MULTI–FAMILY RESIDENCE. DRAINAGE IS PRESENTLY DISCHARGED FROM THE SITE TO THE WEST TO A PAVED PUBLIC ALLEY. THE PROPOSED DRAINAGE WILL HAVE 15% OF THE AREA DRAINING TO THE STREET AND THE BALANCE DRAINING TO THE ALLEY.

2. THE PEAK DISCHARGE RATE WILL BE INCREASED BY 0.33 AND 0.39 CFS FOR THE 10 YEAR AND 100 YEAR STORMS RESPECTIVELY AND THE 6 HOUR RUNOFF VOLUMES FOR THE 10 YEAR AND 100 YEAR STORM WILL BE INCREASED BY 501 AND 672 CUBIC FEET RESPECTIVELY.

ALL DRAINAGE WILL BE DIRECTED TO THE EXISTING PAVED ALLEY.

3. THE SITE IS LOCATED IN A 'ZONE X' PER FEMA FIRM MAP NO. 353, DATED SEPTEMBER, 2008.

4. TOPO SURVEY DATA SHOWN ON THIS DRAWING WAS OBTAINED BY HARRIS SURVEYING, INC., DATED JUNE, 2011.

GRADING NOTES

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE NEW MEXICO ONE CALL SYSTEM AT 260–1990 FOR LOCATION OF EXISTING UTILITIES.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION 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.

3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

4. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT–OF–WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL NOTES

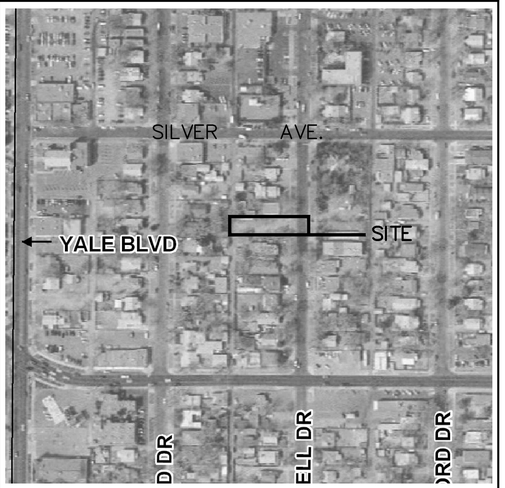
1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO PUBLIC RIGHT–OF–WAY OR PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY THE CONSTRUCTION OF TEMPORARY SOIL BERMS OR SILT FENCES AT PROPERTY LINES AND WETTING SOIL TO PREVENT IT FROM BLOWING. IF THE SITE IS CONTROLLED BY A SWPPP PLAN, EROSION CONTROL SHALL BE ACCOMPLISHED ACCORDING TO THE PLAN.

2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT–OF–WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.

3. THE CONTRACTOR SHALL SECURE THE APPROPRIATE BARRICADING, TOP SOIL DISTURBANCE AND EXCAVATION PERMITS FROM THE CITY PRIOR TO BEGINNING CONSTRUCTION.

VICINITY MAP K–16

FEMA FIRM PANEL NO. 353



LEGAL DESCRIPTION

LOT 20, BLOCK 7, UNIVERSITY HEIGHTS ADDITION

OFFSITE DRAINAGE MAP

NO DRAINAGE ENTERS THE SITE FROM OFFSITE.

ENGINEER'S CERTIFIATION

I, JEAN J. BORDENAVE, NMPE&LS NO. 5110, OF THE FIRM BORDENAVE DESIGNS, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED _____. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION 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.

EXCEPTIONS AND/OR QUALIFICATIONS:

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NO. 5110 NEW MEXICO JEAN J. BORDENAVE

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

LEGEND

TBM	TEMPORARY BENCHMARK	GM	GAS MATER
G	GROUND	GV	GAS VALVE
FF	FINISH FLOOR	LP	LIGHT POLE
FG	FINISH GRADE	PP	POWER POLE
FL	FLOWLINE	GW	GUY WIRE
TA	TOP OF ASPHALT	PED	ELEC. OR TEL. PEDESTAL
TC	TOP OF CONCRETE	RD	ROOF DRAINAGE POINT
BC	TOP BACK OF CURB		FEMA FLOODPLAIN BOUNDARY
TP	TOP OF EARTH PAD		DRAINAGE BASIN BOUNDARY
TS	TOP OF SIDEWALK		EROSION SETBACK LINE
TW	TOP OF WALL		EXISTING CONTOUR
FH	FIRE HYDRANT		PROPOSED CONTOUR
WM	WATER METER	XX.XX	EXISTING SPOT ELEVATION
WV	WATER VALVE	XX.XX	PROPOSED SPOT ELEVATION
MH	MANHOLE	~~XX.XX~~ XX.XX	RECORD SPOT ELEVATION
CB	CATCH BASIN GRATE		

DRAINAGE DATA

CONDITION	BASIN	STORM RETURN PERIOD	TREATMENT TYPE	TREATMENT AREA	EXCESS PRECIPITATION	PEAK RUNOFF	RUNOFF VOLUME	RUNOFF RATE
			(table 4)		(table 8)	(table 9)		
-	-	year	-	sq. ft.	in.	cfs/acre	cu. ft.	cfs
HISTORIC	S	10	A	7100	0.13	0.38	77	0.06
	I		B	0	0.28	0.95	0	0.00
	T		C	0	0.52	1.71	0	0.00
	E		D	0	1.34	3.14	0	0.00
			TOTAL	7100			77	0.06
		100	A	7100	0.53	1.56	314	0.25
			B	0	0.78	2.28	0	0.00
			C	0	1.13	3.14	0	0.00
			D	0	2.12	4.7	0	0.00
			TOTAL	7100			314	0.25
DEVELOPED	S	10	A	0	0.13	0.38	0	0.00
	I		B	1810	0.28	0.95	42	0.04
	T		C	800	0.52	1.71	35	0.03
	E		D	4490	1.34	3.14	501	0.32
			TOTAL	7100			578	0.39
		100	A	0	0.53	1.56	0	0.00
			B	1810	0.78	2.28	118	0.09
			C	800	1.13	3.14	75	0.06
			D	4490	2.12	4.7	793	0.48
			TOTAL	7100			986	0.64

PERMANENT BENCHMARK

ACS 5–K16A ELEVATION 5174.054 (NAVD 1988)

no.	date	remarks	by
		REVISIONS	

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NO. 5110 NEW MEXICO JEAN J. BORDENAVE
02/04/13

project title
CORNELL 4–PLEX
209 CORNELL NE
ALBUQUERQUE, NM

sheet title
GRADING & DRAINAGE PLAN

sheet date	design by	project no.
02/04/13	JJB	1107

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sheet
of