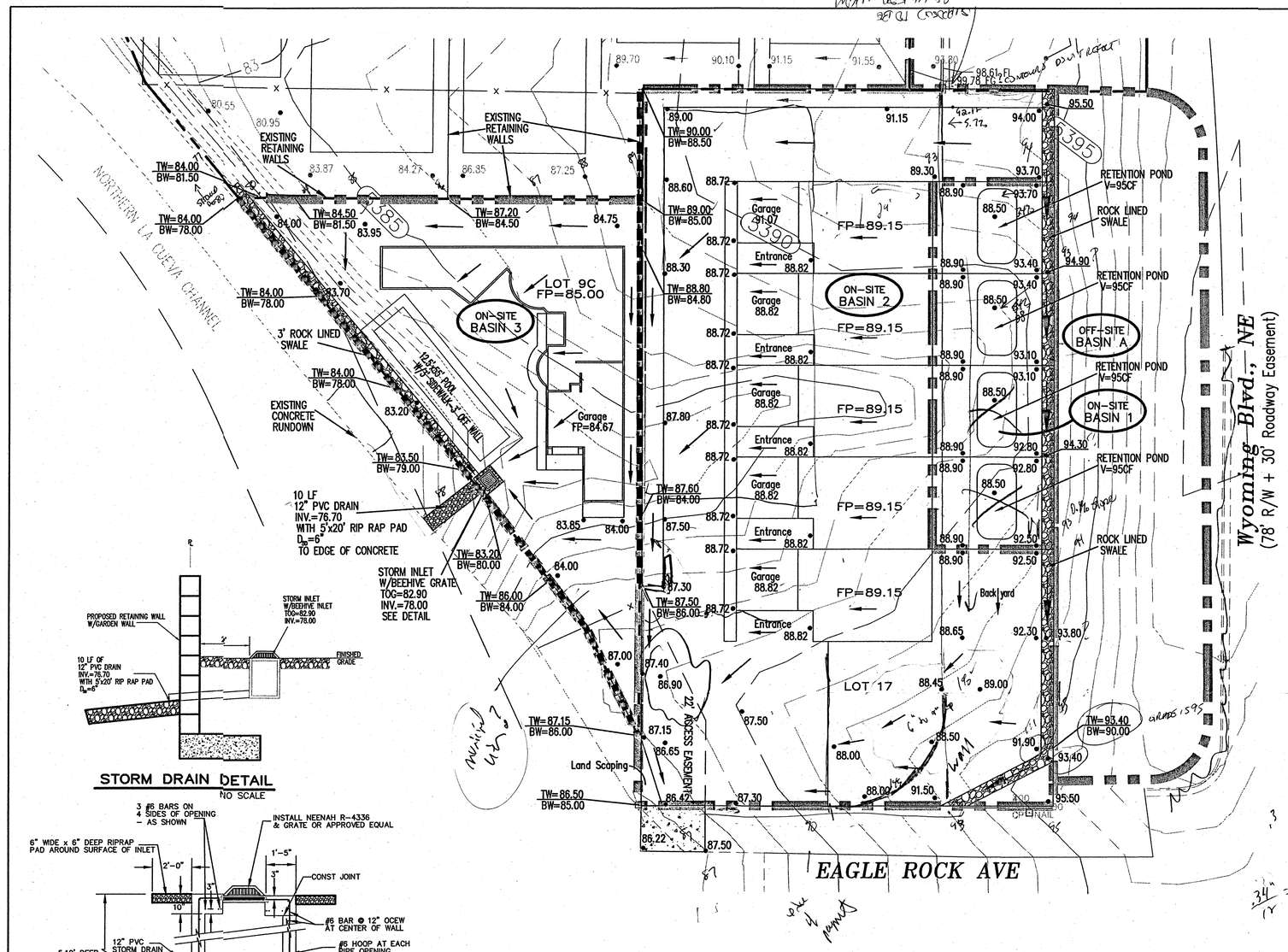
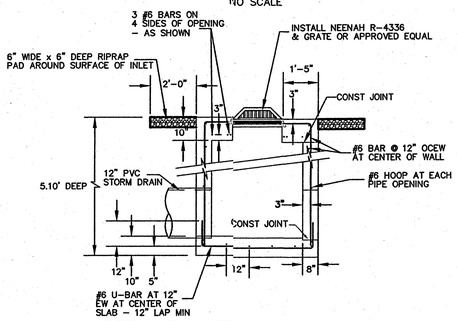


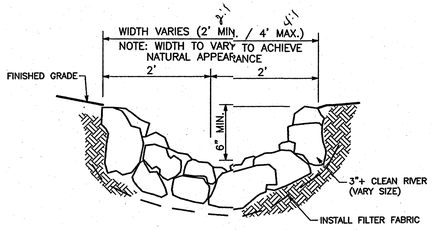
STORM DRAIN DETAIL

NO SCALE



BEEHIVE INLET DETAIL

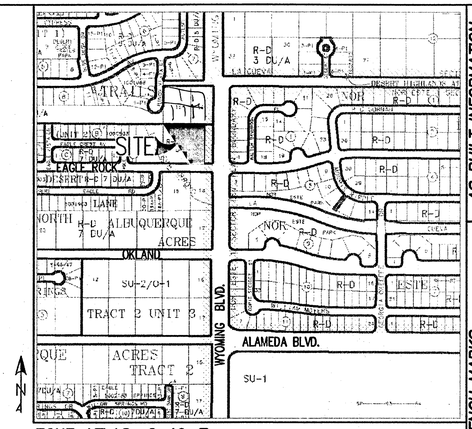
NO SCALE



ROCK-LINED SWALE

NTS

100-YEAR HYDROLOGIC CALCULATIONS											
		LAND TREATMENT				WEIGHTED	100-YEAR PRECIPITATION				
BASIN #	AREA (acre)	A (%)	B (%)	C (%)	D (%)	E (in)	V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
OFF-SITE A	0.2535	100.00	0.00	0.00	0.00	0.66 ✓	0.01	607	0.01	607	0.47
ON-SITE 1	0.1102	100.00	0.00	0.00	0.00	0.66	0.01	264	0.01	264	0.21
ON-SITE 2	0.6175	100.00	0.00	0.00	0.00	0.66	0.03	1,479	0.03	1,479	1.15
ON-SITE 3	0.2436	100.00	0.00	0.00	0.00	0.66	0.01	584	0.01	584	0.46
TOTAL RUNOFF	1.22						0.07	2,934	0.07	2,934	2.29
PROPOSED CONDITIONS											
ON-SITE 1	0.1102	0.00	92.50	7.50	0.00	0.95 ✓	0.01 ✓	379	0.01	379	0.29
ON-SITE 2	0.6175	0.00	34.70	28.30	37.00	1.56	0.08 ✓	3,491	0.09	3,906	2.31
ON-SITE 3	0.2436	0.00	45.40	14.90	39.70	1.55	0.03	1,368	0.04	1,543	0.90
TOTAL RUNOFF	0.97						0.12	5,238	0.13	5,828	3.50
EXCESS PRECIP.		0.66	0.92	1.29	2.36	E (in)					
PEAK DISCHARGE		1.87	2.6	3.45	5.02	Q (cfs)					
									ZONE =	3	
WEIGHTED E (in) = (E)(%A) + (E)(%B) + (E)(%C) + (E)(%D)									P_{360} (in.) =	2.60	
V (acre-ft) = (WEIGHTED E)(AREA)/12									P_{1440} (in.) =	3.10	
V (acre-ft) = V + (A)(P − P)/12									$P_{10\,day}$ (in.) =	4.90	
Q (cfs) = (Q)(A) + (Q)(A) + (Q)(A) + (Q)(A)											



ZONE ATLAS: C-19-Z

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 9C, LA VISTA AT DESERT RIDGE SUBDIVISION; AND LOT 17, BLOCK 1, NAA TRACT 2, UNIT 3

SITE AREA:0.97 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0133G & 35001C0141G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE NORTH LA CUEVA CHANNEL AT THE SOUTHWEST CORNER HAS A FLOOD HAZARD ZONE A WITH A 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL.

LOCATION AND DESCRIPTION: THE LOTS ARE LOCATED ON EAGLE ROCK AVENUE WEST OF WYOMING BOULEVARD. AT THE SOUTHWEST CORNER OF THE PROPERTY IS THE NORTH LA CUEVA CHANNEL.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL SECTION 22.2, HYDROLOGY. THE PROPERTY IS LOCATED IN ZONE 3. THE 100-YEAR, 6-HOUR STORM IS 2.60 INCHES.

THE SITE CURRENTLY DRAINS FROM EAST TO WEST TO THE NORTH LA CUEVA CHANNEL. CURRENTLY THERE ARE OFFSITE FLOWS FROM THE EAST.

DEVELOPED DRAINAGE CONDITIONS:

THE PROPERTY HAS BEEN DIVIDED INTO THREE ONSITE DRAINAGE BASINS AND ONE OFFSITE DRAINAGE BASIN. RUNOFF FROM OFFSITE BASIN A WILL BE COLLECTED IN A ROCK-LINED SWALE ALONG THE LOT 17 EAST PROPERTY LINE AND WILL BE DIVERTED TO EAGLE ROCK AVENUE AND WILL EVENTUALLY DRAIN TO THE NORTH LA CUEVA CHANNEL.

RUNOFF FROM THE ONSITE BASIN 1, WHICH INCLUDES THE BACKYARDS OF THE NORTHERN 4 TOWNHOMES ON LOT 17, WILL POND IN THE EACH BACKYARD. EACH POND WILL HOLD 95 CUBIC FEET OF RUNOFF. RUNOFF FROM ONSITE BASIN 2, WHICH INCLUDES THE REMAINDER OF LOT 17, WILL BE DIRECTED TO EAGLE ROCK AVENUE THROUGH THE GRAVEL DRIVEWAY. A TOTAL OF 2.31 CFS WILL DRAIN TO EAGLE ROCK AVENUE AND WILL DRAIN TO THE NORTH LA CUEVA CHANNEL. RUNOFF FROM ONSITE BASIN 3, WHICH INCLUDES ALL OF LOT 9C, WILL DRAIN TO A STORM INLET ALONG THE WEST PROPERTY LINE WILL BE DISCHARGED TO THE NORTH LA CUEVA CHANNEL THROUGH A 12" PVC STORM DRAIN ONTO A RIPRAP PAD TO THE NORTH LA CUEVA CHANNEL. A TOTAL OF 0.90 CFS WILL BE COLLECTED IN THE STORM INLET AND WILL BE DISCHARGED TO THE CHANNEL.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

LEGEND

FP=09.07	FINISHED PAD SITE ELEVATION
60.23	PROPOSED SPOT ELEVATION
TW=12.51 / BW=11.84	TOP OF WALL / BOTTOM OF WALL
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED RETAINING WALL
	PROPOSED MOUNTABLE CURB AND GUTTER
ON-SITE BASIN	PROPOSED BASIN NUMBER
	PROPOSED BASIN BOUNDARY
	PROPOSED WHEEL CHAIR RAMPS

Thompson Engineering Consultants, Inc.
tecnm@yahoo.com
P.O. BOX 65760 ALBUQUERQUE, NM 87193
PHONE: (505) 271-2199
FAX: (505) 830-9428

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
TRANSPORTATION DEVELOPMENT

LOT 9C, LA VISTA AT DESERT RIDGE AND
LOT 17, BLOCK 1, NAA TRACTS 2, UNIT 3
GRADING AND DRAINAGE PLAN FOR LOTS 11 & 17

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL		MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXXX	C-19-Z	1	1

7848-81 12

AS BUILT INFORMATION
CONTRACTOR / WORK STAKED BY / INSPECTOR'S ACCEPTANCE BY / FIELD VERIFICATION BY / DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

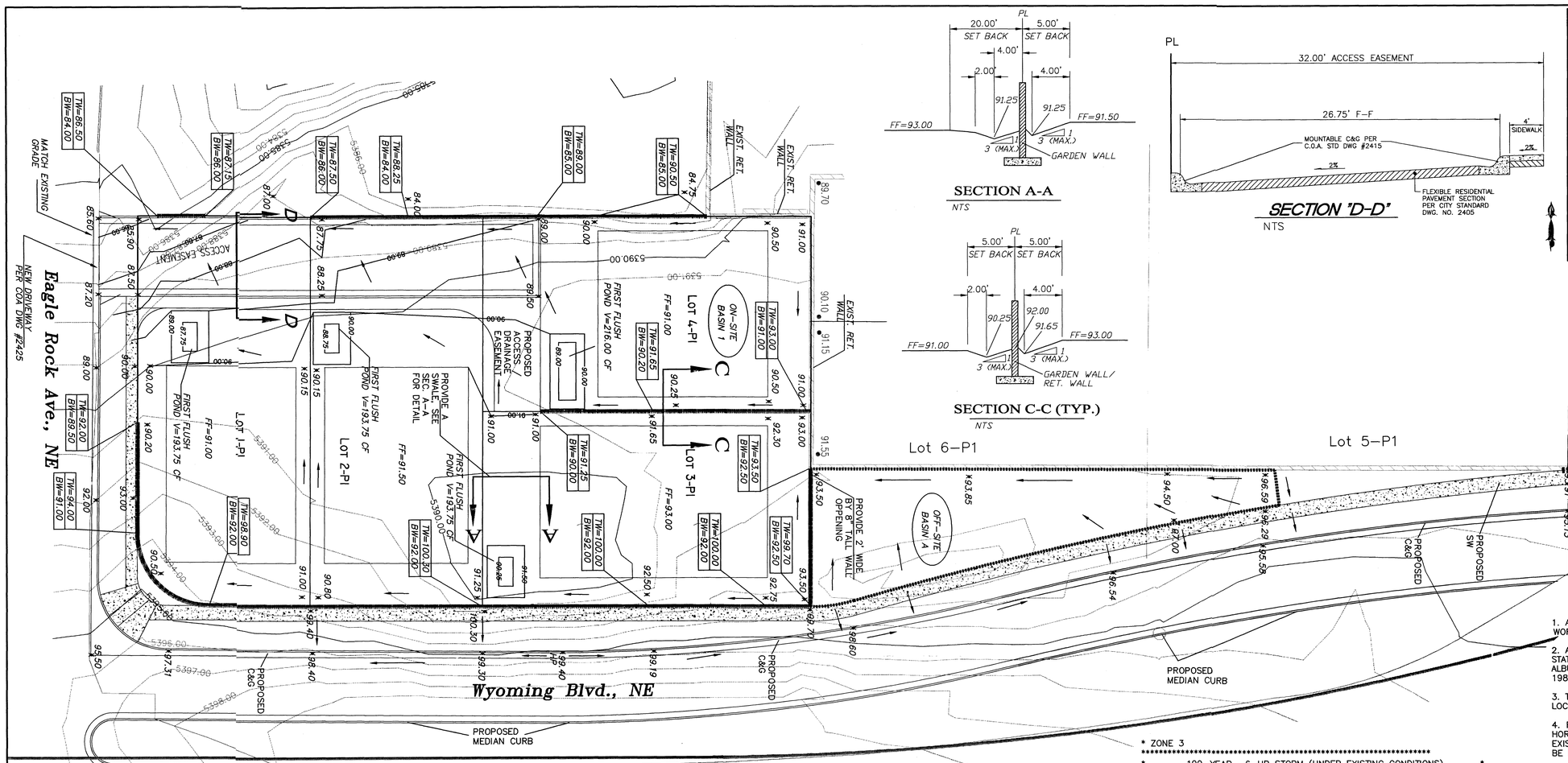
BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY

DESIGN
DESIGNED BY DBT — DATE 6-2014
DRAWN BY DEM — DATE 6-2014
CHECKED BY DBT — DATE 6-2014



SECTION A-A

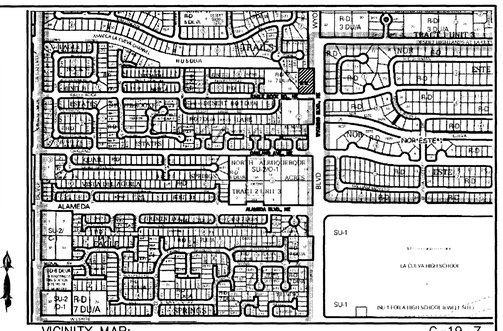
NTS

SECTION "D-D"

NTS

SECTION C-C (TYP.)

NTS



VICINITY MAP: C-19-Z

LEGAL DESCRIPTION:

LOT 17, BLOCK 1, NAA, TRACT 2, UNIT 3, CONTAINING 0.7277 ACRE

GENERAL NOTES:

1: CONTOUR INTERVAL IS HALF (1.00) FOOT.
2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 9_D15, HAVING AN ELEVATION OF 4988.802 FEET ABOVE SEA LEVEL.
3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
4: THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
5: SLOPES ARE AT 3:1 MAXIMUM.
6: IF THE DRIVEWAY LOCATIONS CONFLICTS WITH THE PROPOSED LOCATION OF A FIRST FLUSH PONDS, CONTRACTOR MUST RELOCATE THE PONDS WITH THE SAME VOLUME ELSEWHERE ON THE LOT, EXCEPT IN THE REAR LOT AREA.

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.

2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, 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.

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 17, BLOCK 1, NAA TRACT 2, UNIT 3

SITE AREA: 0.7277 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0133G & 35001C0141G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE NORTH LA CUEVA CHANNEL AT THE SOUTHWEST CORNER HAS A FLOOD HAZARD ZONE A WITH A 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL.

LOCATION AND DESCRIPTION: THE LOT IS LOCATED ON EAGLE ROCK AVENUE WEST OF WYOMING BOULEVARD. AT THE SOUTHWEST CORNER OF THE PROPERTY IS THE NORTH LA CUEVA CHANNEL.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL SECTION 22.2, HYDROLOGY. THE PROPERTY IS LOCATED IN ZONE 3. THE 100-YEAR, 6-HOUR STORM IS 2.60 INCHES.

THE SITE CURRENTLY DRAINS FROM EAST TO WEST TO THE NORTH LA CUEVA CHANNEL. CURRENTLY THERE ARE OFFSITE FLOWS FROM THE EAST AND NORTH.

DEVELOPED DRAINAGE CONDITIONS:

THERE IS ONE OFF-SITE BASINS DRAINING ONTO LOT 17. OFF-SITE BASIN A IS LOCATED NORTH OF LOT 17. RUNOFF FROM OFF-SITE BASIN B WILL DRAIN TO THE POND PROVIDED JUST NORTH OF THE LOT 17, 377.50 CFS. THE PEAK FLOW OF 0.71 CFS WILL BE CONVEYED TO THE POND.

RUNOFF FROM ON-SITE BASIN 1, WHICH INCLUDES ALL OF LOT 17, WILL BE DIRECTED TO EAGLE ROCK AVENUE THROUGH THE PAVED DRIVEWAY. THE ROOF OF THE BUILDINGS WILL DRAIN TO THE WEST AND EAST. EACH LOT WILL HAVE A PONDING AREA FOR THE FIRST FLUSH. AFTER SENDING THE WATER INTO THE PONDS, THEN THE FLOWS WILL BE DIRECTD INTO PAVED RAOD AND FINALLY INTO EAGLE ROACK. A TOTAL OF 2.63 CFS FROM LOT 17 WILL DRAIN TO EAGLE ROCK AVENUE AND WILL DRAIN TO THE NORTH LA CUEVA CHANNEL. THE FIRST FLUSH FROM ON-SITE BASIN 1 WILL BE RETAINED IN THE PONDS PROVIDED ON EACH LOT. THE FIRST FLUSH VOLUME FOR A 0.44-INCH RAIN IS 304 CUBIC-FEET.

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - VERSION: 1997.02d RUN DATE (MON/DAY/YR) =04/24/2016
INPUT FILE = HAYDARI.txt USER NO.= AHYMO-I-9702c01000R31-AH

COMMAND	HYDROGRAPH IDENTIFICATION		FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
START											TIME= .00
RAINFALL TYPE= 1											RAIN6= 2.600
COMPUTE NM HYD	101.00	-	1		.00017	.30	.008	.92230	1.526	2.731	PER IMP= .00
COMPUTE NM HYD	103.00	-	1		.00114	1.93	.056	.92024	1.526	2.646	PER IMP= .00
START											TIME= .00
RAINFALL TYPE= 1											RAIN6= 1.730
COMPUTE NM HYD	111.00	-	1		.00017	.13	.003	.35547	1.533	1.209	PER IMP= .00
COMPUTE NM HYD	113.00	-	1		.00114	1.43	.037	.60463	1.500	1.971	PER IMP= .00
START											TIME= .00
RAINFALL TYPE= 1											RAIN6= 2.600
COMPUTE NM HYD	103.10	-	1		.00114	3.18	.117	1.93606	1.500	4.368	PER IMP= 68.00
START											TIME= .00
RAINFALL TYPE= 1											RAIN6= 1.730
COMPUTE NM HYD	113.10	-	1		.00114	1.99	.070	1.15661	1.500	2.739	PER IMP= 68.00
FINISH											

REQUIRED FIRST FLUSH PONDING CALCULATIONS

LOT 1-P1, IMPERVIOUS AREA = 5,430 CF
PONDING VOLUME REQUIRED = 5,430 X 0.34/12 = 153.85 CF

LOT 2-P1, IMPERVIOUS AREA = 5,770 CF
PONDING VOLUME REQUIRED = 5,770 X 0.34/12 = 163.48 CF

LOT 3-P1, IMPERVIOUS AREA = 4,547.50 CF
PONDING VOLUME REQUIRED = 4,547.50 X 0.34/12 = 153.85 CF

LOT 4-P1, IMPERVIOUS AREA = 5,142.50 CF
PONDING VOLUME REQUIRED = 5,142.50 X 0.34/12 = 145.70 CF

PROPOSED FIRST FLUSH PONDING VOLUME CALCULATIONS

LOT 1-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'
PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 2-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'
PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 3-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'
PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 4-P1, TOP AREA=312 SF, BOTTOM AREA=120 SF, DEPTH= 1.0'
PONDING VOLUME PROVIDED = (312 + 120)/2 * 1 = 216.00 CF

```
* ZONE 3
*****************************************************************
*        100-YEAR,  6-HR STORM (UNDER EXISTING CONDITIONS)      *
*****************************************************************
START              TIME=0.0
RAINFALL           TYPE=1 RAIN QUARTER=0.0 IN
                   RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                   RAIN DELAY=3.10 IN DT=0.00512 HR
* OFF-STIE BASIN A
COMPUTE NM HYD       ID=1 HYD NO=101.0 AREA=0.000169 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
* ON-SITE
COMPUTE NM HYD       ID=1 HYD NO=103.0 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
*         10-YEAR,  6-HR STORM (UNDER EXISTING CONDITIONS)      *
*****************************************************************
START              TIME=0.0
RAINFALL           TYPE=1 RAIN QUARTER=0.0 IN
                   RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                   RAIN DAY=2.07 IN DT=0.03333 HR
* OFF-STIE BASIN A
COMPUTE NM HYD       ID=1 HYD NO=111.0 AREA=0.000169 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
* ON-SITE
COMPUTE NM HYD       ID=1 HYD NO=113.0 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=0.00 PER C=100.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
*        100-YEAR,  6-HR STORM (UNDER PROPOSED CONDITIONS)      *
*****************************************************************
START              TIME=0.0
RAINFALL           TYPE=1 RAIN QUARTER=0.0 IN
                   RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                   RAIN DELAY=3.10 IN DT=0.03333 HR
* ON-SITE
COMPUTE NM HYD       ID=1 HYD NO=103.1 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=20.00 PER C=12.00 PER D=68.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
*         10-YEAR,  6-HR STORM (UNDER PROPOSED CONDITIONS)      *
*****************************************************************
START              TIME=0.0
RAINFALL           TYPE=1 RAIN QUARTER=0.0 IN
                   RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                   RAIN DAY=2.07 IN DT=0.03333 HR
* ON-SITE
COMPUTE NM HYD       ID=1 HYD NO=113.1 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=20.00 PER C=12.00 PER D=68.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
FINISH
```

LAST REVISION: 06-10-16

LEGEND

5100	EXISTING CONTOUR (MAJOR)
5102	EXISTING CONTOUR (MINOR)
	BOUNDARY LINE
× 85.46	PROPOSED SPOT ELEVATION
× 4986.40 AC-PA	EXISTING GRADE
	PROPOSED RET. WALL

GRAPHIC SCALE

20 10 0 20

SCALE: 1"=20'

REZA AFAGHPOUR NEW MEXICO 11814 LICENSED PROFESSIONAL ENGINEER 06/13/16

RECEIVED 6-21-16

REZA AFAGHPOUR
P.E. #11814

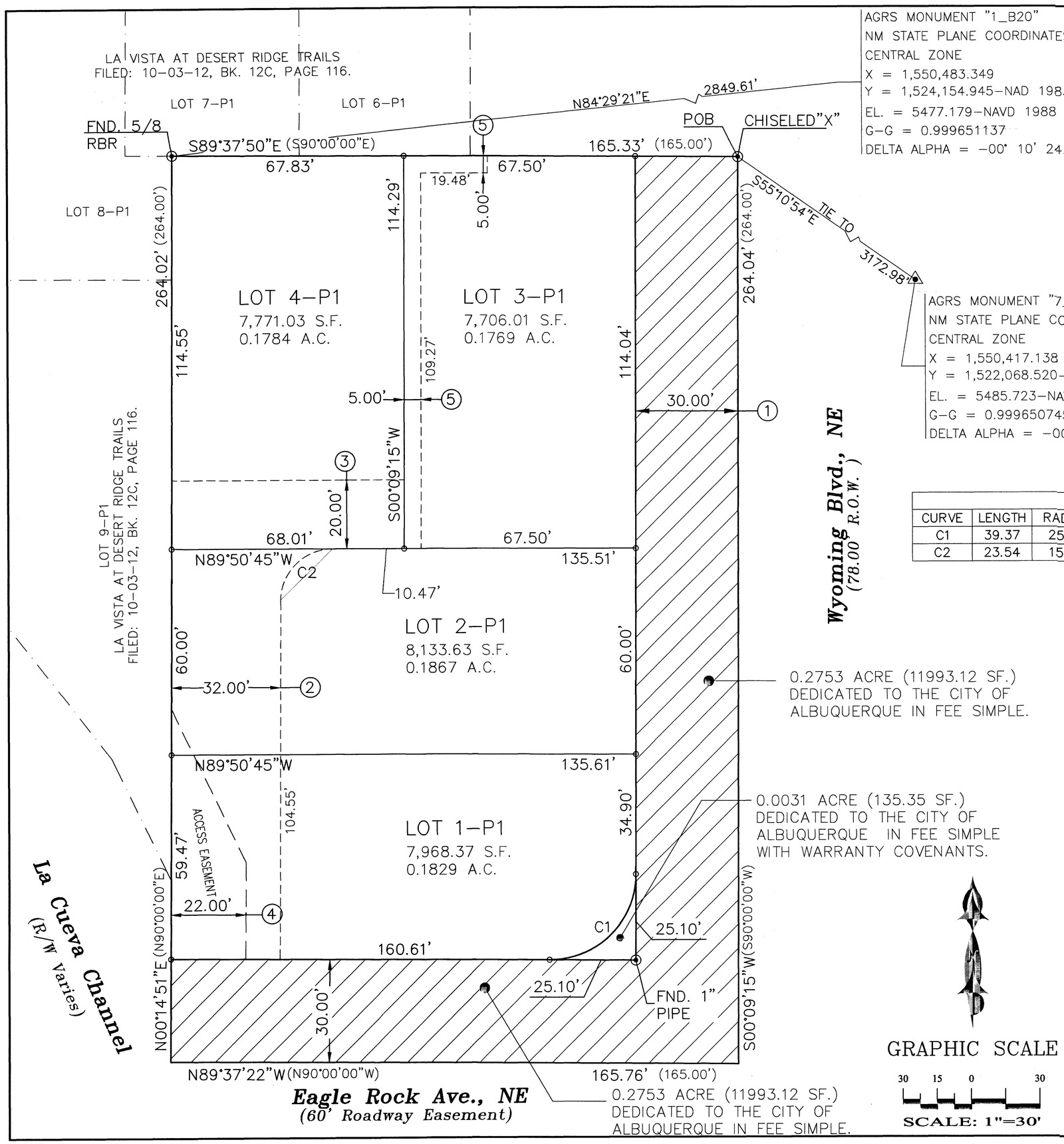
SBS CONSTRUCTION AND ENGINEERING, LLC
10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)804-5013

LOTS 1 THRU 4, ROHAN SUBDIVISION GRADING AND DRAINAGE PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
201605-GR.DWG	SH-B	03-22-2016	1

PLAT OF
LOTS 1-P1 THRU 4-P1
ROHAN SUBDIVISION

WITHIN
SECTION 18 , T. 11 N., R. 4 E., N.M.P.M.
AS PROJECTED IN THE ELENA GALLEGOS GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
JUNE 2016



AGRS MONUMENT "1_B20"
NM STATE PLANE COORDINATES
CENTRAL ZONE
X = 1,550,483.349
Y = 1,524,154.945-NAD 1983
EL. = 5477.179-NAVD 1988
G-G = 0.999651137
DELTA ALPHA = -00° 10' 24.45"

AGRS MONUMENT "7_C19"
NM STATE PLANE COORDINATES
CENTRAL ZONE
X = 1,550,417.138
Y = 1,522,068.520-NAD 1983
EL. = 5485.723-NAVD 1988
G-G = 0.999650745
DELTA ALPHA = -00° 10' 24.78"

EASEMENTS:

1. EXISTING 30' ROADWAY EASEMENT (9-10-31, D-21).
2. 32.00' PRIVATE ACCESS, PUBLIC DRAINAGE AND UTILITY EASEMENT GRANTED BY THIS PLAT. ALL THE PROPERTY OWNERS ARE RESPONSIBLE FOR THE MAINTENANCE OF THIS EASEMENT.
3. 20.00' PRIVATE ACCESS, PUBLIC DRAINAGE UTILITY EASEMENT GRANTED BY THIS PLAT. ALL THE PROPERTY OWNERS ARE RESPONSIBLE FOR THE MAINTENANCE OF THIS EASEMENT.
4. EXISTING ACCESS EASEMENT FOR LOT 9-P1 LA VISTA. FILED: 12/17/2012, DOC #2012132615.
5. 5.00' PUBLIC DRAINAGE EASEMENT GRANTED BY THIS PLAT. ALL THE PROPERTY OWNERS ARE RESPONSIBLE FOR THE MAINTENANCE OF THIS EASEMENT.

CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	CHORD	CHORD DIRECTION	DELTA
C1	39.37	25.00	25.10	35.42	S45°15'56"W	90°13'23"
C2	23.54	15.00	14.98	21.20	N45°12'03"E	89°54'24"

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF:
A. PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM"), A NEW MEXICO CORPORATION, (PNM ELECTRIC) FOR INSTALLATION, MAINTENANCE, AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICES.
B. NEW MEXICO GAS COMPANY FOR INSTALLATION, MAINTENANCE, AND SERVICE OF NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS SERVICES.
C. QWEST FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE, AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE COMMUNICATION SERVICES.
D. CABLE TV FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE, AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE SERVICES.

INCLUDED, IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE, CHANGE, REMOVE, REPLACE, MODIFY, RENEW, OPERATE AND MAINTAIN FACILITIES FOR PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID EASEMENTS, WITH THE RIGHT AND PRIVILEGE OF GOING UPON, OVER AND ACROSS ADJOINING LANDS OF GRANTOR FOR THE PURPOSES SET FORTH HEREIN AND WITH THE RIGHT TO UTILIZE THE RIGHT OF WAY AND EASEMENT TO EXTEND SERVICES TO CUSTOMERS OF GRANTEE, INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRIC TRANSFORMERS, WITH THE RIGHT AND PRIVILEGE TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH HEREIN. NO BUILDING, SIGN, POOL (ABOVEGROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING, OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE BY CONSTRUCTION OF POOLS, DECKING, OR ANY STRUCTURES ADJACENT TO OR NEAR EASEMENTS SHOWN ON THIS PLAT.
EASEMENTS FOR ELECTRIC TRANSFORMER/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN (10) FEET IN FRONT OF TRANSFORMER/SWITCHGEAR DOORS AND FIVE (5) FEET ON EACH SIDE.

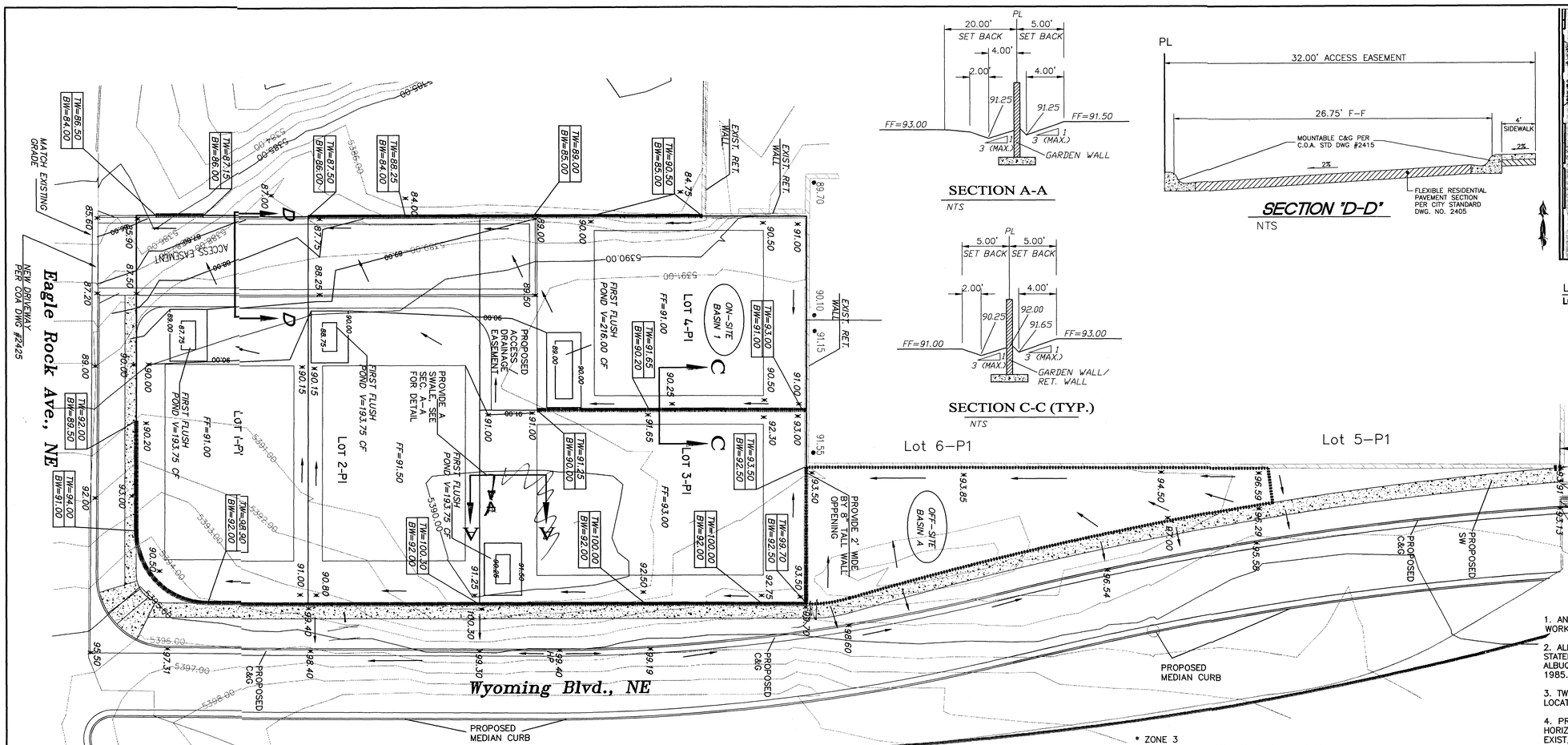
DISCLAIMER

IN APPROVING THIS PLAT, PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM) AND NEW MEXICO GAS COMPANY (NMGC) DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM AND NMGC DO NOT WAIVE OR RELEASE ANY EASEMENT OR EASEMENT RIGHTS WHICH MAY HAVE BEEN GRANTED BY PRIOR PLAT, REPLAT OR OTHER DOCUMENT AND WHICH ARE NOT SHOWN ON THIS PLAT.

GRAPHIC SCALE
30 15 0 30
SCALE: 1"=30'

RECEIVED 6-21-16

SBS CONSTRUCTION AND ENGINEERING, LLC
10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)804-5013



SECTION A-A

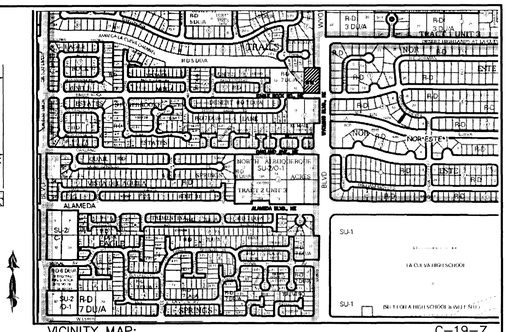
NTS

SECTION C-C (TYP.)

NTS

SECTION 'D-D'

NTS



VICINITY MAP: C-19-Z

LEGAL DESCRIPTION:

LOT 17, BLOCK 1, NAA, TRACT 2, UNIT 3, CONTAINING 0.7277 ACRE

GENERAL NOTES:

1. CONTOUR INTERVAL IS HALF (1.00) FOOT.
2. ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 9_D15, HAVING AN ELEVATION OF 4988.802 FEET ABOVE SEA LEVEL.
3. UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
4. THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
5. SLOPES ARE AT 3:1 MAXIMUM.
6. IF THE DRIVEWAY LOCATIONS CONFLICTS WITH THE PROPOSED LOCATION OF A FIRST FLUSH PONDS, CONTRACTOR MUST RELOCATE THE PONDS WITH THE SAME VOLUME ELSEWHERE ON THE LOT, EXCEPT IN THE REAR LOT AREA.

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.

2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, 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.

LEGEND

5100	EXISTING CONTOUR (MAJOR)
5102	EXISTING CONTOUR (MINOR)
	BOUNDARY LINE
× 85.46	PROPOSED SPOT ELEVATION
× 4986.40 AC-PA	EXISTING GRADE
	PROPOSED RET. WALL

RECEIVED JUN 14 2016 LAND DEVELOPMENT SECTION

GRAPHIC SCALE

20 10 0 20

SCALE: 1"=20'

REZA AFAGHPOUR
P.E. #11814

SBS CONSTRUCTION AND ENGINEERING, LLC
10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)804-5013

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 17, BLOCK 1, NAA TRACT 2, UNIT 3

SITE AREA: 0.7277 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0133G & 35001C0141G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE NORTH LA CUEVA CHANNEL AT THE SOUTHWEST CORNER HAS A FLOOD HAZARD ZONE A WITH A 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL.

LOCATION AND DESCRIPTION: THE LOT IS LOCATED ON EAGLE ROCK AVENUE WEST OF WYOMING BOULEVARD. AT THE SOUTHWEST CORNER OF THE PROPERTY IS THE NORTH LA CUEVA CHANNEL.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL SECTION 22.2, HYDROLOGY. THE PROPERTY IS LOCATED IN ZONE 3. THE 100-YEAR, 6-HOUR STORM IS 2.60 INCHES.

THE SITE CURRENTLY DRAINS FROM EAST TO WEST TO THE NORTH LA CUEVA CHANNEL. CURRENTLY THERE ARE OFFSITE FLOWS FROM THE EAST AND NORTH.

DEVELOPED DRAINAGE CONDITIONS:

THERE IS ONE OFF-SITE BASINS DRAINING ONTO LOT 17. OFF-SITE BASIN A IS LOCATED NORTH OF LOT 17. RUNOFF FROM OFF-SITE BASIN B WILL DRAIN TO THE POND PROVIDED JUST NORTH OF THE LOT 17, 377.50 CFS. THE PEAK FLOW OF 0.71 CFS WILL BE CONVEYED TO THE POND.

RUNOFF FROM ON-SITE BASIN 1, WHICH INCLUDES ALL OF LOT 17, WILL BE DIRECTED TO EAGLE ROCK AVENUE THROUGH THE PAVED DRIVEWAY. THE ROOF OF THE BUILDINGS WILL DRAIN TO THE WEST AND EAST. EACH LOT WILL HAVE A PONDING AREA FOR THE FIRST FLUSH. AFTER SENDING THE WATER INTO THE PONDS, THEN THE FLOWS WILL BE DIRECTD INTO PAVED RAOD AND FINALLY INTO EAGLE ROACK. A TOTAL OF 2.63 CFS FROM LOT 17 WILL DRAIN TO EAGLE ROCK AVENUE AND WILL DRAIN TO THE NORTH LA CUEVA CHANNEL. THE FIRST FLUSH FROM ON-SITE BASIN 1 WILL BE RETAINED IN THE PONDS PROVIDED ON EACH LOT. THE FIRST FLUSH VOLUME FOR A 0.44-INCH RAIN IS 304 CUBIC-FEET.

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) – – VERSION: 1997.02d RUN DATE (MON/DAY/YR) =04/24/2016
INPUT FILE = HAYDARI.txt USER NO.= AHYMO-I-9702c01000R31-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 2.600
COMPUTE NM HYD	101.00	–	1	.00017	.30	.008	.92230	1.526	2.731	PER IMP= .00
COMPUTE NM HYD	103.00	–	1	.00114	1.93	.056	.92024	1.526	2.646	PER IMP= .00
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 1.730
COMPUTE NM HYD	111.00	–	1	.00017	.13	.003	.35547	1.533	1.209	PER IMP= .00
COMPUTE NM HYD	113.00	–	1	.00114	1.43	.037	.60463	1.500	1.971	PER IMP= .00
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 2.600
COMPUTE NM HYD	103.10	–	1	.00114	3.18	.117	1.93606	1.500	4.368	PER IMP= 68.00
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 1.730
COMPUTE NM HYD	113.10	–	1	.00114	1.99	.070	1.15661	1.500	2.739	PER IMP= 68.00
FINISH										

REQUIRED FIRST FLUSH PONDING CALCULATIONS

LOT 1-P1, IMPERVIOUS AREA = 5,430 CF
PONDING VOLUME REQUIRED = 5,430 X 0.34/12 = 153.85 CF

LOT 2-P1, IMPERVIOUS AREA = 5,770 CF
PONDING VOLUME REQUIRED = 5,770 X 0.34/12 = 163.48 CF

LOT 3-P1, IMPERVIOUS AREA = 4,547.50 CF
PONDING VOLUME REQUIRED = 4,547.50 X 0.34/12 = 153.85 CF

LOT 4-P1, IMPERVIOUS AREA = 5,142.50 CF
PONDING VOLUME REQUIRED = 5,142.50 X 0.34/12 = 145.70 CF

PROPOSED FIRST FLUSH PONDING VOLUME CALCULATIONS

LOT 1-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'
PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 2-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'
PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 3-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'
PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 4-P1, TOP AREA=312 SF, BOTTOM AREA=120 SF, DEPTH= 1.0'
PONDING VOLUME PROVIDED = (312 + 120)/2 * 1 = 216.00 CF

```
* ZONE 3
*****************************************************************
*        100-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS)       *
*****************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                RAIN DELAY=3.10 IN DT=0.00512 HR
* OFF-STIE BASIN A
COMPUTE NM HYD        ID=1 HYD NO=101.0 AREA=0.000169 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
* ON-SITE
COMPUTE NM HYD        ID=1 HYD NO=103.0 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
*        10-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS)        *
*****************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                     RAIN DAY=2.07 IN DT=0.03333 HR
* OFF-STIE BASIN A
COMPUTE NM HYD        ID=1 HYD NO=111.0 AREA=0.000169 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
* ON-SITE
COMPUTE NM HYD        ID=1 HYD NO=113.0 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=0.00 PER C=100.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
*        100-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS)       *
*****************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                     RAIN DELAY=3.10 IN DT=0.03333 HR
* ON-SITE
COMPUTE NM HYD        ID=1 HYD NO=103.1 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=20.00 PER C=12.00 PER D=68.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
*        10-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS)        *
*****************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                     RAIN DAY=2.07 IN DT=0.03333 HR
* ON-SITE
COMPUTE NM HYD        ID=1 HYD NO=113.1 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=20.00 PER C=12.00 PER D=68.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
FINISH
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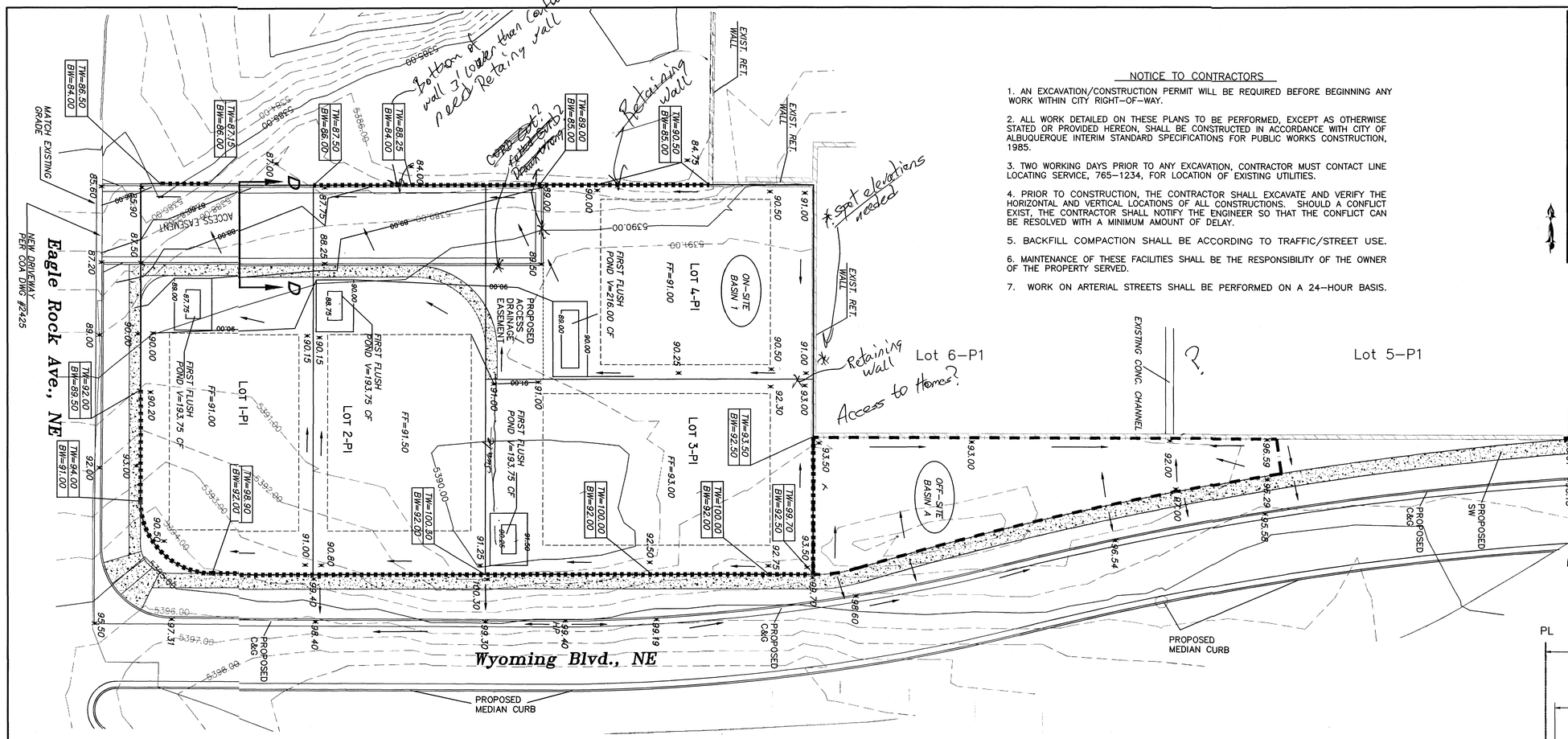
LAST REVISION: 06-10-16

LOTS 1 THRU 4, ROHAN SUBDIVISION GRADING AND DRAINAGE PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
201605-GR.DWG	SH-B		



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5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.

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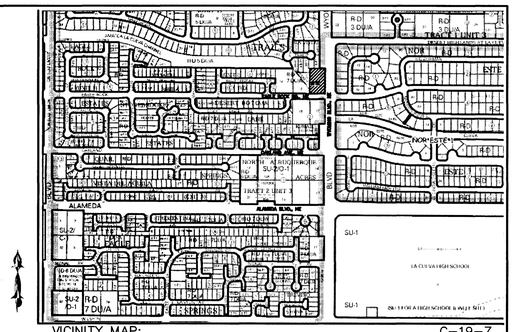
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.



VICINITY MAP: C-19-Z

LEGAL DESCRIPTION:
LOT 17, BLOCK 1, NAA, TRACT 2, UNIT 3, CONTAINING 0.7277 ACRE

GENERAL NOTES:

1: CONTOUR INTERVAL IS HALF (1.00) FOOT.
2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 9_D15, HAVING AN ELEVATION OF 4988.802 FEET ABOVE SEA LEVEL.
3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
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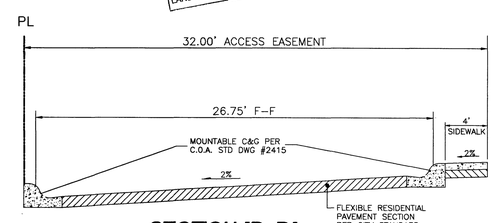
RECEIVED
APR 29 2016
LAND DEVELOPMENT SECTION



SECTION 'D-D'
NTS

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 17, BLOCK 1, NAA TRACT 2, UNIT 3

SITE AREA: 0.7277 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0133G & 35001C0141G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE NORTH LA CUEVA CHANNEL AT THE SOUTHWEST CORNER HAS A FLOOD HAZARD ZONE A WITH A 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL.

LOCATION AND DESCRIPTION: THE LOT IS LOCATED ON EAGLE ROCK AVENUE WEST OF WYOMING BOULEVARD. AT THE SOUTHWEST CORNER OF THE PROPERTY IS THE NORTH LA CUEVA CHANNEL.

EXISTING DRAINAGE CONDITIONS:

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THE SITE CURRENTLY DRAINS FROM EAST TO WEST TO THE NORTH LA CUEVA CHANNEL. CURRENTLY THERE ARE OFFSITE FLOWS FROM THE EAST AND NORTH.

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RUNOFF FROM ON-SITE BASIN 1, WHICH INCLUDES ALL OF LOT 17, WILL BE DIRECTED TO EAGLE ROCK AVENUE THROUGH THE PAVED DRIVEWAY. THE ROOF OF THE BUILDINGS WILL DRAIN TO THE WEST AND EAST. EACH LOT WILL HAVE A PONDING AREA FOR THE FIRST FLUSH. AFTER SENDING THE WATER INTO THE PONDS, THEN THE FLOWS WILL BE DIRECTD INTO PAVED RAOD AND FINALLY INTO EAGLE ROACK. A TOTAL OF 2.63 CFS FROM LOT 17 WILL DRAIN TO EAGLE ROCK AVENUE AND WILL DRAIN TO THE NORTH LA CUEVA CHANNEL. THE FIRST FLUSH FROM ON-SITE BASIN 1 WILL BE RETAINED IN THE PONDS PROVIDED ON EACH LOT. THE FIRST FLUSH VOLUME FOR A 0.44-INCH RAIN IS 304 CUBIC-FEET.

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02d RUN DATE (MON/DAY/YR) =04/24/2016
INPUT FILE = HAYDARI.txt USER NO.= AHYMO-I-9702c01000R31-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 2.600
COMPUTE NM HYD	101.00	-	1	.00017	.30	.008	.92230	1.526	2.731	PER IMP= .00
COMPUTE NM HYD	103.00	-	1	.00114	1.93	.056	.92024	1.526	2.646	PER IMP= .00
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 1.730
COMPUTE NM HYD	111.00	-	1	.00017	.13	.003	.35547	1.533	1.209	PER IMP= .00
COMPUTE NM HYD	113.00	-	1	.00114	1.43	.037	.60463	1.500	1.971	PER IMP= .00
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 2.600
COMPUTE NM HYD	103.10	-	1	.00114	3.18	.117	1.93606	1.500	4.368	PER IMP= 68.00
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 1.730
COMPUTE NM HYD	113.10	-	1	.00114	1.99	.070	1.15661	1.500	2.739	PER IMP= 68.00
FINISH										

REQUIRED FIRST FLUSH PONDING CALCULATIONS

LOT 1-P1, IMPERVIOUS AREA = 5,430 CF
PONDING VOLUME REQUIRED = 5,430 X 0.34/12 = 153.85 CF

LOT 2-P1, IMPERVIOUS AREA = 5,770 CF
PONDING VOLUME REQUIRED = 5,770 X 0.34/12 = 163.48 CF

LOT 3-P1, IMPERVIOUS AREA = 4,547.50 CF
PONDING VOLUME REQUIRED = 4,547.50 X 0.34/12 = 153.85 CF

LOT 4-P1, IMPERVIOUS AREA = 5,142.50 CF
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PROPOSED FIRST FLUSH PONDING VOLUME CALCULATIONS

LOT 1-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'
PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 2-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'
PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 3-P1, TOP AREA=260 SF, BOTTOM AREA=50 SF, DEPTH= 1.25'
PONDING VOLUME PROVIDED = (260 + 50)/2 * 1 = 193.75 CF

LOT 4-P1, TOP AREA=312 SF, BOTTOM AREA=120 SF, DEPTH= 1.0'
PONDING VOLUME PROVIDED = (312 + 120)/2 * 1 = 216.00 CF

```
* ZONE 3
*****************************************************************
*        100-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS)       *
*****************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                RAIN DELAY=3.10 IN DT=0.00512 HR
* OFF-STIE BASIN A
COMPUTE NM HYD         ID=1 HYD NO=101.0 AREA=0.000169 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
* ON-SITE
COMPUTE NM HYD         ID=1 HYD NO=103.0 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
*          10-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS)      *
*****************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                     RAIN DAY=2.07 IN DT=0.03333 HR
* OFF-STIE BASIN A
COMPUTE NM HYD         ID=1 HYD NO=111.0 AREA=0.000169 SQ MI
                     PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
* ON-SITE
COMPUTE NM HYD         ID=1 HYD NO=113.0 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=0.00 PER C=100.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
*        100-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS)       *
*****************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                     RAIN DELAY=3.10 IN DT=0.03333 HR
* ON-SITE
COMPUTE NM HYD         ID=1 HYD NO=103.1 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=20.00 PER C=12.00 PER D=68.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
*          10-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS)      *
*****************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                     RAIN DAY=2.07 IN DT=0.03333 HR
* ON-SITE
COMPUTE NM HYD         ID=1 HYD NO=113.1 AREA=0.001137 SQ MI
                     PER A=0.00 PER B=20.00 PER C=12.00 PER D=68.00
                     TP=0.1333 HR MASS RAINFALL=-1
*****************************************************************
FINISH
```

LEGEND

-----5100------	EXISTING CONTOURS (MAJOR)
-----5102------	EXISTING CONTOUR (MINOR)
————————	BOUNDARY LINE
* 85.46	PROPOSED SPOT ELEVATION
× 4986.40 AC-PA	EXISTING GRADE
■ ■ ■ ■ ■ ■ ■	PROPOSED BERM

show detail compaction where is wall?

GRAPHIC SCALE

20 10 0 20

SCALE: 1"=20'

REZA AFAGHPOUR
NEW MEXICO
11814
04/27/16
LICENSED PROFESSIONAL ENGINEER

REZA AFAGHPOUR
P.E. #11814

SBS CONSTRUCTION AND ENGINEERING, LLC
10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)804-5013

LOTS 1 THRU 4, ROHAN SUBDIVISION GRADING AND DRAINAGE PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
201605-GR.DWG	SH-B	03-22-2016	1

LAST REVISION: 04-27-16

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 17, BLOCK 1, NAA TRACT 2, UNIT 3

SITE AREA: 0.7277 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0133G & 35001C0141G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE NORTH LA CUEVA CHANNEL AT THE SOUTHWEST CORNER HAS A FLOOD HAZARD ZONE A WITH A 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL.

LOCATION AND DESCRIPTION: THE LOT IS LOCATED ON EAGLE ROCK AVENUE WEST OF WYOMING BOULEVARD. AT THE SOUTHWEST CORNER OF THE PROPERTY IS THE NORTH LA CUEVA CHANNEL.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL SECTION 22.2, HYDROLOGY. THE PROPERTY IS LOCATED IN ZONE 3. THE 100-YEAR, 6-HOUR STORM IS 2.60 INCHES.

THE SITE CURRENTLY DRAINS FROM EAST TO WEST TO THE NORTH LA CUEVA CHANNEL. CURRENTLY THERE ARE OFFSITE FLOWS FROM THE EAST AND NORTH.

DEVELOPED DRAINAGE CONDITIONS:

THERE IS ONE OFF-SITE BASINS DRAINING ON TO LOT 17. OFF-SITE BASIN A IS LOCATED NORTH OF LOT 17. RUNOFF FROM OFF-SITE BASIN B WILL DRAIN TO THE POND PROVIDED JUST NORTH OF THE LOT 17. 377.50 CFS. THE PEAK FLOW OF 0.71 CFS WILL BE CONVEYED TO THE POND.

Previous plan says 900 CF

RUNOFF FROM ON-SITE BASIN 1, WHICH INCLUDES ALL OF LOT 17, WILL BE DIRECTED TO EAGLE ROCK AVENUE THROUGH THE PAVED DRIVEWAY. THE ROOF OF THE BUILDINGS WILL DRAIN TO THE WEST AND EAST. EACH LOT WILL HAVE A PONDING AREA FOR THE FIRST FLUSH. AFTER SENDING THE WATER INTO THE PONDS, THEN THE FLOWS WILL BE DIRECTD INTO PAVED RAOD AND FINALLY INTO EAGLE ROACK. A TOTAL OF 2.63 CFS FROM LOT 17 WILL DRAIN TO EAGLE ROCK AVENUE AND WILL DRAIN TO THE NORTH LA CUEVA CHANNEL. THE FIRST FLUSH FROM ON-SITE BASIN 1 WILL BE RETAINED IN THE PONDS PROVIDED ON EACH LOT. THE FIRST FLUSH VOLUME FOR A 0.44-INCH RAIN IS 304 CUBIC-FEET.

2.9 acres
No ESC

Where is Basin B?

```
* ZONE 3
*****************************************************
*        100-YEAR,  6-HR STORM (UNDER EXISTING CONDITIONS)        *
*****************************************************
START                  TIME=0.0
RAINFALL               TYPE=1 RAIN QUARTER=0.0 IN
                       RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                 RAIN DELAY=3.10 IN DT=0.00512 HR
* OFF-STIE A
COMPUTE NM HYD         ID=1 HYD NO=101.0 AREA=0.000396 SQ MI
                       PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                       TP=0.1333 HR MASS RAINFALL=-1
* OFF-SITE B
COMPUTE NM HYD         ID=1 HYD NO=102.0 AREA=0.000592 SQ MI
                       PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                       TP=0.1333 HR MASS RAINFALL=-1
* ON-SITE
COMPUTE NM HYD         ID=1 HYD NO=103.0 AREA=0.001137 SQ MI
                       PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                       TP=0.1333 HR MASS RAINFALL=-1
*****************************************************
*        10-YEAR,  6-HR STORM (UNDER EXISTING CONDITIONS)         *
*****************************************************
START                  TIME=0.0
RAINFALL               TYPE=1 RAIN QUARTER=0.0 IN
                       RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                       RAIN DAY=2.07 IN DT=0.03333 HR
* OFF-STIE A
COMPUTE NM HYD         ID=1 HYD NO=111.0 AREA=0.000396 SQ MI
                       PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                       TP=0.1333 HR MASS RAINFALL=-1
* OFF-SITE B
COMPUTE NM HYD         ID=1 HYD NO=112.0 AREA=0.000592 SQ MI
                       PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00
                       TP=0.1333 HR MASS RAINFALL=-1
* ON-SITE
COMPUTE NM HYD         ID=1 HYD NO=113.0 AREA=0.001137 SQ MI
                       PER A=0.00 PER B=0.00 PER C=100.00 PER D=0.00
                       TP=0.1333 HR MASS RAINFALL=-1
*****************************************************
*        100-YEAR,  6-HR STORM (UNDER PROPOSED CONDITIONS)        *
*****************************************************
START                  TIME=0.0
RAINFALL               TYPE=1 RAIN QUARTER=0.0 IN
                       RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                       RAIN DELAY=3.10 IN DT=0.03333 HR
* ON-SITE
COMPUTE NM HYD         ID=1 HYD NO=103.1 AREA=0.001137 SQ MI
                       PER A=0.00 PER B=0.00 PER C=27.00 PER D=46.00
                       TP=0.1333 HR MASS RAINFALL=-1
*****************************************************
*        10-YEAR,  6-HR STORM (UNDER PROPOSED CONDITIONS)         *
*****************************************************
START                  TIME=0.0
RAINFALL               TYPE=1 RAIN QUARTER=0.0 IN
                       RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                       RAIN DAY=2.07 IN DT=0.03333 HR
COMPUTE NM HYD         ID=1 HYD NO=113.1 AREA=0.001137 SQ MI
                       PER A=0.00 PER B=0.00 PER C=27.00 PER D=46.00
                       TP=0.1333 HR MASS RAINFALL=-1
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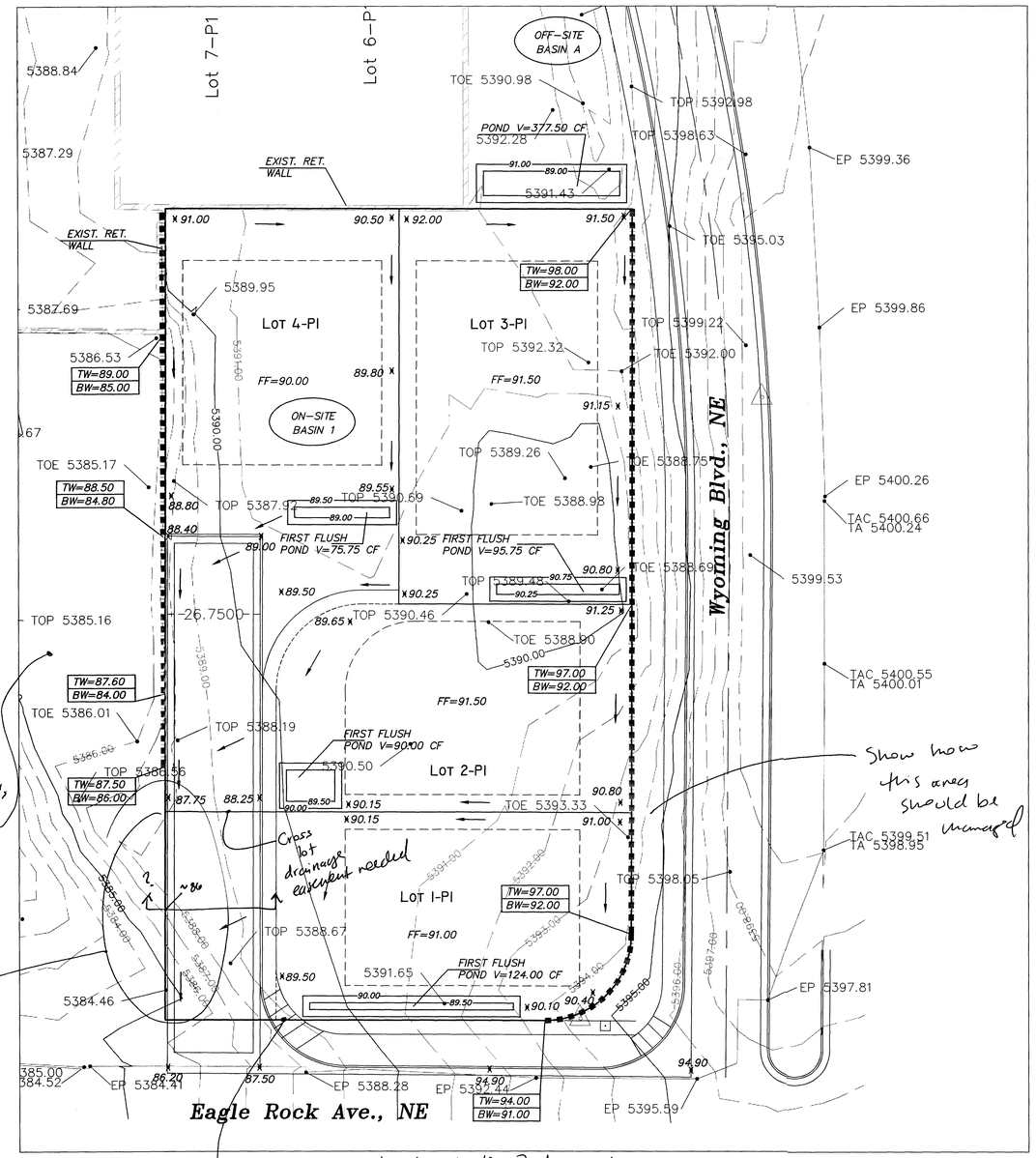
FINISH
```



Coordinate plan w/ Dave Thompson's Project on adjacent lot

Show how this area should be managed

Cross lot drainage easement needed

Blocks access easement

What are the limits of construction? ~~How are the concerns~~ The Eagle Rock driveway needs to be built enough to handle the concentrated flow

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02d RUN DATE (MON/DAY/YR) =03/22/2016
INPUT FILE = HAYDARI.TXT USER NO.= AHYMO-I-9702c01000R31-AH

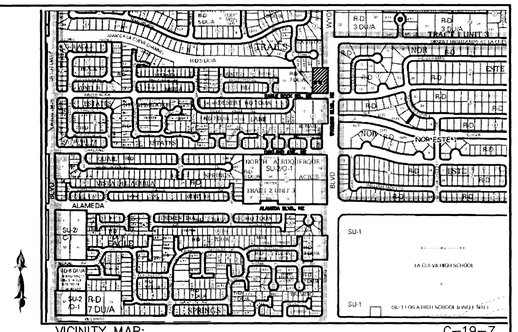
COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 2.600
COMPUTE NM HYD	101.00	-	1	.00040	.68	.019	.92229	1.526	2.673	PER IMP= .00
COMPUTE NM HYD	102.00	-	1	.00059	1.01	.029	.92212	1.526	2.659	PER IMP= .00
COMPUTE NM HYD	103.00	-	1	.00114	1.93	.056	.92024	1.526	2.646	PER IMP= .00
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 1.730
COMPUTE NM HYD	111.00	-	1	.00040	.30	.008	.35547	1.533	1.183	PER IMP= .00
COMPUTE NM HYD	112.00	-	1	.00059	.45	.011	.35547	1.533	1.178	PER IMP= .00
COMPUTE NM HYD	113.00	-	1	.00114	1.43	.037	.60463	1.500	1.971	PER IMP= .00
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 2.600
COMPUTE NM HYD	103.10	-	1	.00114	3.25	.119	1.96128	1.500	4.464	PER IMP= 63.01
START										TIME= .00
RAINFALL TYPE= 1										RAIN6= 1.730
COMPUTE NM HYD	113.10	-	1	.00114	2.07	.071	1.16607	1.500	2.842	PER IMP= 63.01
FINISH										

REQUIRED FIRST FLUSH PONDING SAMPLE CALCULATIONS (LOT 3-P1)

IMPERVIOUS AREA = 3,540 CF
PONDING VOLUME REQUIRED = 3,540 X 0.34/12 = 100.30 CF ?

Show full calculations not just a "sample".

Provide contours



VICINITY MAP: C-19-Z

LEGAL DESCRIPTION:
LOT 17, BLOCK 1, NAA, TRACT 2, UNIT 3, CONTAINING 0.7277 ACRE

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.

2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, 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.

GENERAL NOTES:

1: CONTOUR INTERVAL IS HALF (1.00) FOOT.
2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 20_C18, HAVING AN ELEVATION OF 5393.48 FEET ABOVE SEA LEVEL.
3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
4: THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
5: SLOPES ARE AT 3:1 MAXIMUM.

5100	EXISTING CONTOUR (MAJOR)
5102	EXISTING CONTOUR (MINOR)
	BOUNDARY LINE
* 85.46	PROPOSED SPOT ELEVATION
× 4986.40 AC-PA	EXISTING GRADE
	PROPOSED BERM

GRAPHIC SCALE
20 10 0 20
SCALE: 1"=20'

REZA AFAGHPOUR
NEW MEXICO
11814
03/23/16
LICENSED PROFESSIONAL ENGINEER

RECEIVED
MAR 24 2016
LAND DEVELOPMENT SECTION

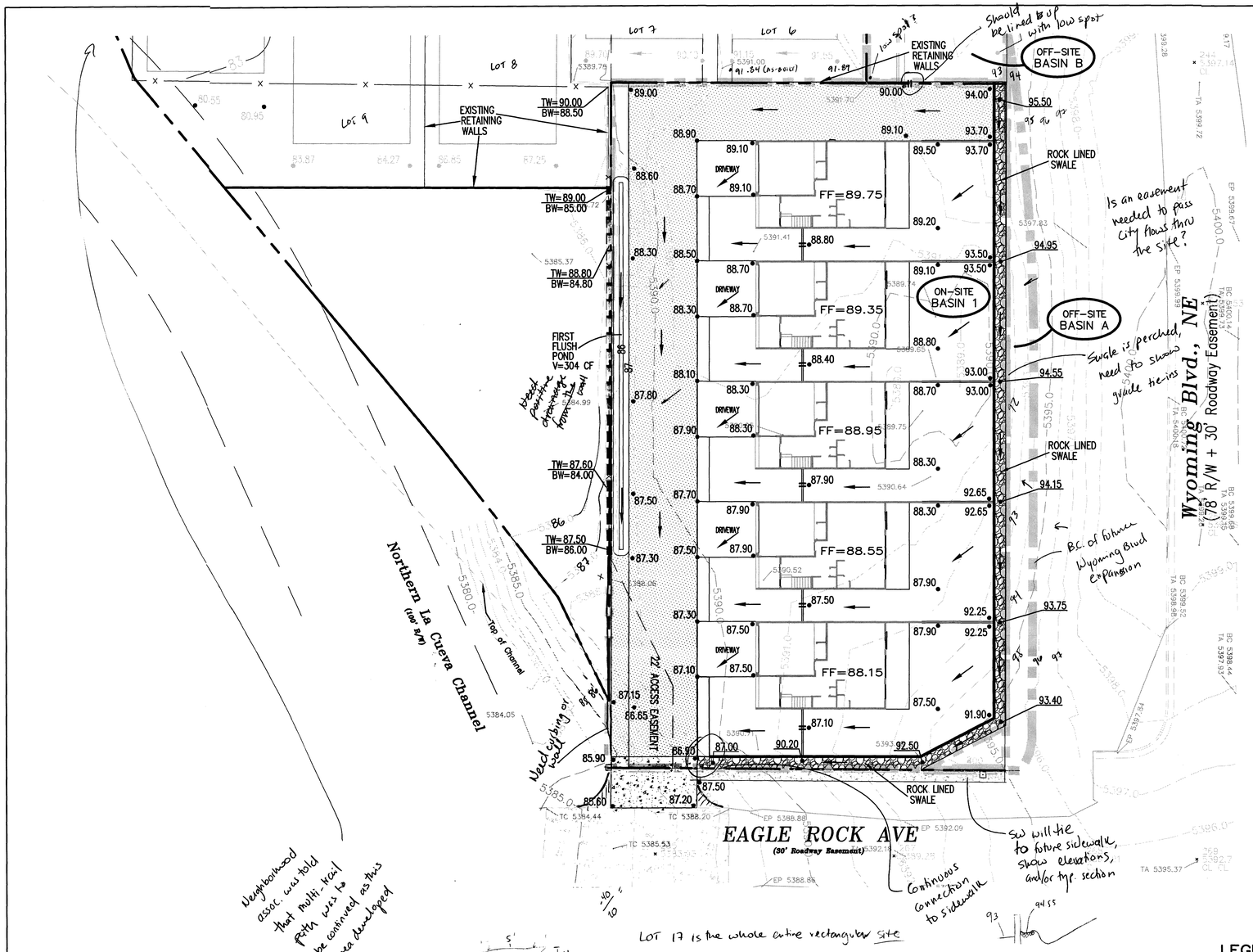
REZA AFAGHPOUR
P.E. #11814

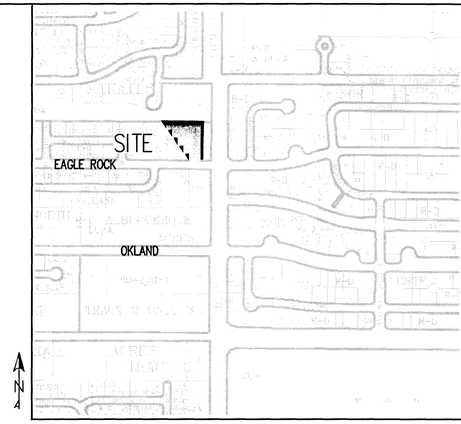
SBS CONSTRUCTION AND ENGINEERING, LLC
10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)804-5013

LOTS 1 THRU 4, ROHAN SUBDIVISION GRADING AND DRAINAGE PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
201605-GR.DWG	SH-B	03-22-2016	1

LAST REVISION: 03-23-16





ZONE ATLAS: C-19-Z

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 17, BLOCK 1, NAA TRACT 2, UNIT 3

SITE AREA:0.7277 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0133G & 35001C0141G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE NORTH LA CUEVA CHANNEL AT THE SOUTHWEST CORNER HAS A FLOOD HAZARD ZONE A WITH A 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL.

LOCATION AND DESCRIPTION: THE LOT IS LOCATED ON EAGLE ROCK AVENUE WEST OF WYOMING BOULEVARD. AT THE SOUTHWEST CORNER OF THE PROPERTY IS THE NORTH LA CUEVA CHANNEL.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL SECTION 22.2, HYDROLOGY. THE PROPERTY IS LOCATED IN ZONE 3. THE 100-YEAR, 6-HOUR STORM IS 2.60 INCHES.

THE SITE CURRENTLY DRAINS FROM EAST TO WEST TO THE NORTH LA CUEVA CHANNEL. CURRENTLY THERE ARE OFFSITE FLOWS FROM THE EAST AND NORTH.

DEVELOPED DRAINAGE CONDITIONS:

THERE ARE TWO OFF-SITE BASINS DRAINING ONTO LOT 17. OFF-SITE BASIN A IS DIRECTLY EAST OF LOT 17. RUNOFF FROM OFF-SITE BASIN A WILL BE COLLECTED IN A ROCK-LINED SWALE ALONG THE LOT 17 EAST PROPERTY LINE AND WILL BE DIVERTED TO A ROCK-LINED SWALE ALONG THE SOUTH PROPERTY LINE OF LOT 17 TO THE LOT 17 DRIVEWAY. THE PEAK FLOW OF 0.47 CFS WILL DISCHARGE TO EAGLE ROCK AVENUE. OFF-SITE BASIN B IS LOCATED NORTH OF LOT 17. RUNOFF FROM OFF-SITE BASIN B WILL DRAIN TO LOT 17 VIA A 2-FOOT WIDE BY 8-INCH HIGH OPENING IN THE WALL. THE PEAK FLOW OF 0.71 CFS WILL BE CONVEYED WITH THE ON-SITE FLOWS IN THE GRAVEL DRIVE TO THE WEST AND SOUTH OF THE RESIDENTIAL BUILDING TO BE DISCHARGED TO EAGLE ROCK AVENUE THROUGH THE DRIVEWAY AND WILL EVENTUALLY DRAIN TO THE NORTH LA CUEVA CHANNEL.

RUNOFF FROM ON-SITE BASIN 1, WHICH INCLUDES ALL OF LOT 17, WILL BE DIRECTED TO EAGLE ROCK AVENUE THROUGH THE GRAVEL DRIVEWAY. THE ROOF OF THE BUILDING WILL DRAIN TO THE WEST TO THE GRAVEL DRIVE. THE BACK YARD AREA WILL HAVE SWALES TO DIRECT THE FLOWS SOUTH TO THE GRAVEL DRIVE. THE WALLS ALONG THE SIDE OF THE BACK YARDS WILL HAVE AN 8-INCH BY 8-INCH OPENING AT THE SWALE LOCATION. A TOTAL OF 2.63 CFS FROM LOT 17 WILL DRAIN TO EAGLE ROCK AVENUE AND WILL DRAIN TO THE NORTH LA CUEVA CHANNEL. A TOTAL OF 3.81 CFS FROM OFF-SITE BASINS A AND B AND ON-SITE BASIN 1 WILL DRAIN THROUGH THE DRIVEWAY TO EAGLE ROCK AVENUE. THE FIRST FLUSH FROM ON-SITE BASIN 1 WILL BE RETAINED IN THE LANDSCAPED AREA WEST OF THE GRAVEL DRIVEWAY. THE FIRST FLUSH VOLUME FOR A 0.44-INCH RAIN IS 304 CUBIC-FEET.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

LEGEND

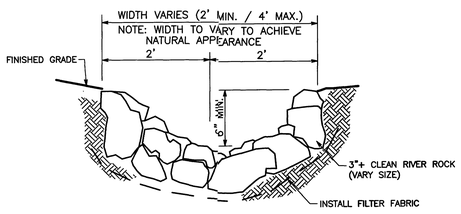
FP=09.07	FINISHED PAD SITE ELEVATION
*60.23	PROPOSED SPOT ELEVATION
TW=12.51 / BW=11.84	TOP OF WALL / BOTTOM OF WALL
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED RETAINING WALL
	PROPOSED GARDEN WALL
	PROPOSED MOUNTABLE CURB AND GUTTER
ON-SITE BASIN	PROPOSED BASIN NUMBER
	PROPOSED BASIN BOUNDARY
	PROPOSED CONCRETE
	PROPOSED GRAVEL
	PROPOSED RIP RAP
=	PROPOSED 2'X8" HIGH OPENING IN WALL

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
OFF-SITE A	0.2535	100.00	0.00	0.00	0.00	0.66	0.01	607	0.01	607	0.47
OFF-SITE B	0.3790	100.00	0.00	0.00	0.00	0.66	0.02	908	0.02	908	0.71
ON-SITE 1	0.7277	100.00	0.00	0.00	0.00	0.66	0.04	1,749	0.04	1,749	1.36
TOTAL RUNOFF	1.36						0.07	3,259	0.07	3,259	2.54
PROPOSED CONDITIONS											
ON-SITE 1	0.7277	0.00	42.60	23.60	33.80	1.49	0.09	3,947	0.10	4,393	2.63
TOTAL RUNOFF	0.73						0.09	3,947	0.10	4,393	2.63
EXCESS PRECIP.		0.66	0.92	1.29	2.36	E_x (in)					
PEAK DISCHARGE		1.87	2.6	3.45	5.02	Q_{PK} (cfs)					

WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$
V_{6HR} (acre-ft) = (WEIGHTED E)(AREA)/12
V_{100DAY} (acre-ft) = $V_{6HR} + (A_P)(P_{100DAY} - P_{6HR})/12$
Q (cfs) = $(Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

ZONE = 3
P_{6HR} (in.) = 2.60
P_{24HR} (in.) = 3.10
P_{100DAY} (in.) = 4.90



ROCK-LINED SWALE
NTS

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY

DESIGN
DESIGNED BY DBT DATE 10-2015
DRAWN BY DEM DATE 10-2015
CHECKED BY DBT DATE 10-2015

Thompson Engineering Consultants, Inc.
tecnm@yahoo.com
P.O. BOX 65760 PHONE: (505) 271-2199
ALBUQUERQUE, NM 87193 FAX: (505) 830-9428

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
TRANSPORTATION DEVELOPMENT

LOT 17, BLOCK 1, NAA TRACTS 2, UNIT 3
GRADING AND DRAINAGE PLAN FOR LOT 17

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL		MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXXX	C-19-Z	1	2

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
OFF-SITE A	0.2535	100.00	0.00	0.00	0.00	0.66	0.01	607	0.01	607	0.47
OFF-SITE B	0.3790	100.00	0.00	0.00	0.00	0.66	0.02	908	0.02	908	0.71
ON-SITE 1	0.7277	100.00	0.00	0.00	0.00	0.66	0.04	1,743	0.04	1,743	1.36
TOTAL RUNOFF	1.36						0.07	3,259	0.07	3,259	2.54
PROPOSED CONDITIONS											
ON-SITE 1	0.7277	0.00	42.60	23.60	33.80	1.49	0.09	3,947	0.10	4,393	2.63
TOTAL RUNOFF	0.73						0.09	3,947	0.10	4,393	2.63
EXCESS PRECIP.		0.66	0.92	1.29	2.36	E_i (in)					
PEAK DISCHARGE		1.87	2.6	3.45	5.02	Q_{Pi} (cfs)					

WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$

$V_{6\text{-}HR}$ (acre-ft) = (WEIGHTED E)(AREA)/12

V_{10DAY} (acre-ft) = $V_{6\text{-}HR} + (A_D)(P_{10DAY} - P_{6\text{-}HR})/12$

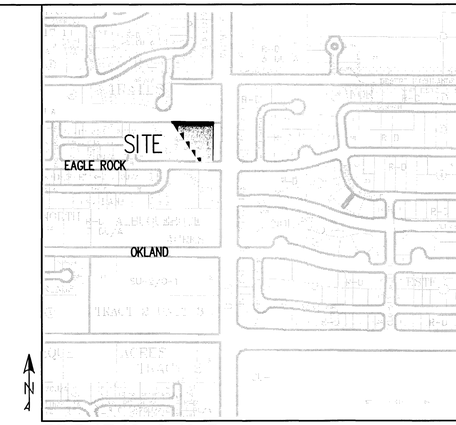
Q (cfs) = $(Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

ZONE = 3

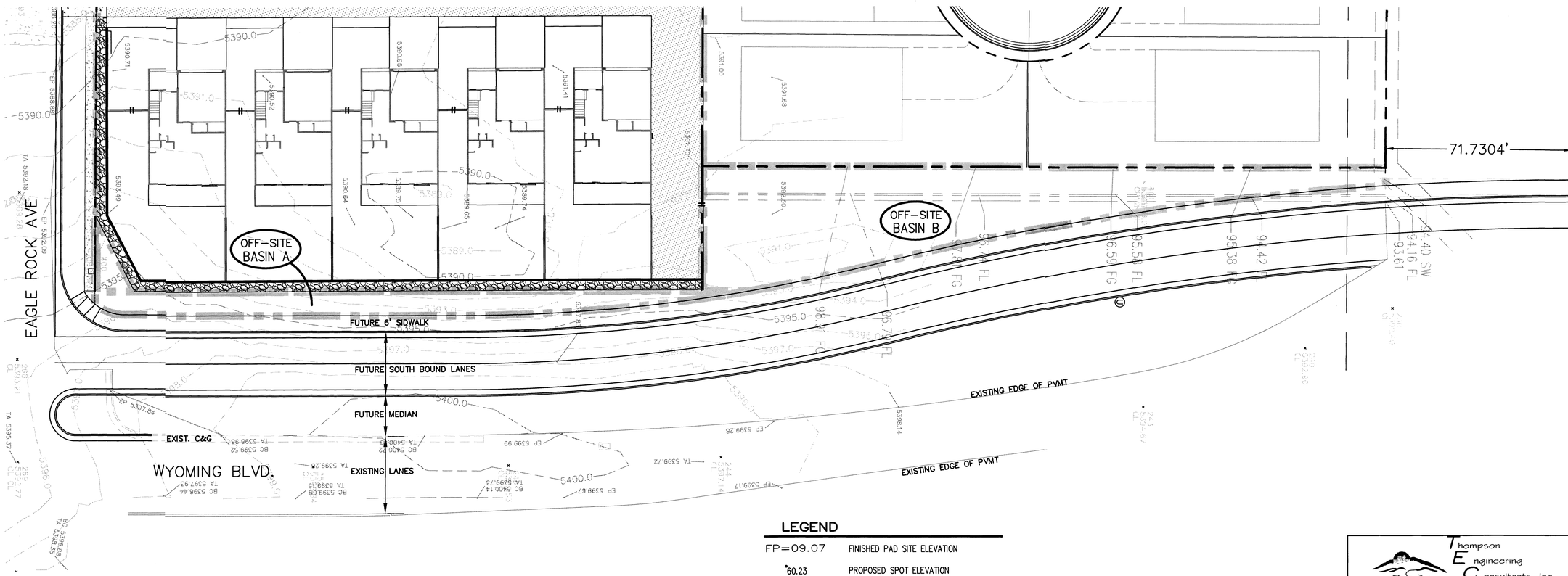
$P_{6\text{-}HR}$ (in.) = 2.60

$P_{24\text{-}HR}$ (in.) = 3.10

P_{10DAY} (in.) = 4.90



ZONE ATLAS: C-19-Z



LEGEND

FP=09.07	FINISHED PAD SITE ELEVATION
*60.23	PROPOSED SPOT ELEVATION
TW=12.51 / BW=11.84	TOP OF WALL / BOTTOM OF WALL
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED RETAINING WALL
	PROPOSED MOUNTABLE CURB AND GUTTER
ON-SITE BASIN	PROPOSED BASIN NUMBER
	PROPOSED BASIN BOUNDARY
	PROPOSED CONCRETE
	PROPOSED GRAVEL
	PROPOSED RIP RAP

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Thompson Engineering Consultants, Inc.
tecnm@yahoo.com
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ALBUQUERQUE, NM 87193
PHONE: (505) 271-2199
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
TRANSPORTATION DEVELOPMENT

LOT 17, BLOCK 1, NAA TRACTS 2, UNIT 3
WYOMING IMPROVEMENT LAYOUT

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL		MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXXX	C-19-Z	2	2

AS BUILT INFORMATION

CONTRACTOR | DATE
WORK STAKED BY | DATE
INSPECTOR'S ACCEPTANCE BY | DATE
FIELD VERIFICATION BY | DATE
DRAWINGS CORRECTED BY | DATE

MICRO-FILM INFORMATION
RECORDED BY | DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

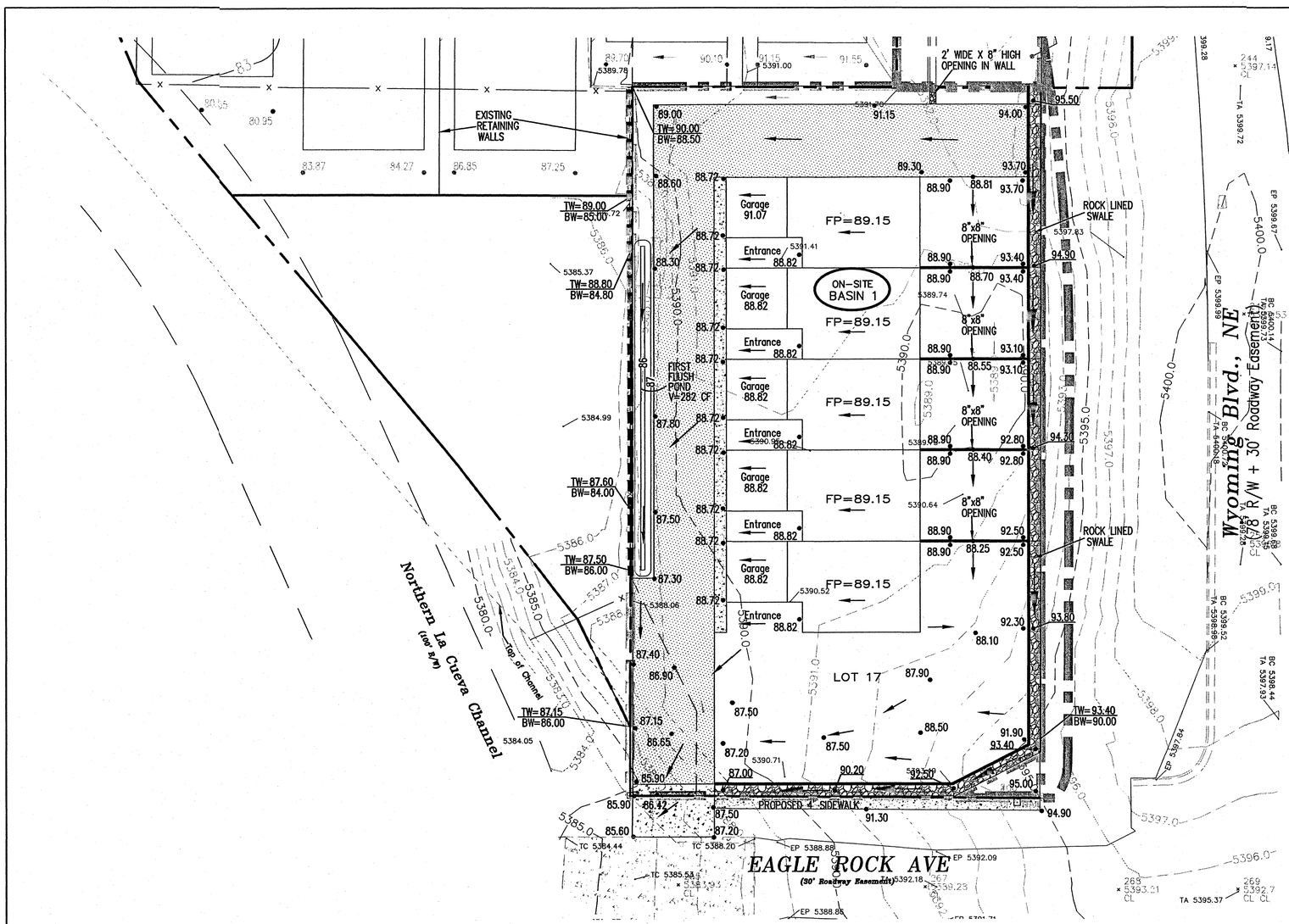
NO.	BY	DATE

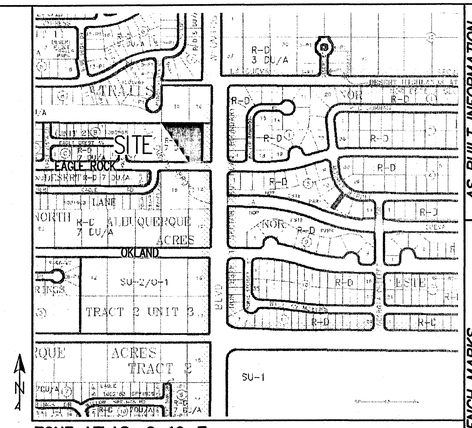
ENGINEER'S SEAL

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	DBT	DATE 10-2015
DRAWN BY	DEM	DATE 10-2015
CHECKED BY	DBT	DATE 10-2015





ZONE ATLAS: C-19-Z

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 17, BLOCK 1, NAA TRACT 2, UNIT 3

SITE AREA:0.73 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0133G & 35001C0141G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE NORTH LA CUEVA CHANNEL AT THE SOUTHWEST CORNER HAS A FLOOD HAZARD ZONE A WITH A 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL.

LOCATION AND DESCRIPTION: THE LOT IS LOCATED ON EAGLE ROCK AVENUE WEST OF WYOMING BOULEVARD. AT THE SOUTHWEST CORNER OF THE PROPERTY IS THE NORTH LA CUEVA CHANNEL.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL SECTION 22.2, HYDROLOGY. THE PROPERTY IS LOCATED IN ZONE 3. THE 100-YEAR, 6-HOUR STORM IS 2.60 INCHES.

THE SITE CURRENTLY DRAINS FROM EAST TO WEST TO THE NORTH LA CUEVA CHANNEL. CURRENTLY THERE ARE OFFSITE FLOWS FROM THE EAST AND NORTH.

DEVELOPED DRAINAGE CONDITIONS:

THERE ARE TWO OFF-SITE BASINS DRAINING ONTO LOT 17. OFF-SITE BASIN A IS DIRECTLY EAST OF LOT 17. RUNOFF FROM OFF-SITE BASIN A WILL BE COLLECTED IN A ROCK-LINED SWALE ALONG THE LOT 17 EAST PROPERTY LINE AND WILL BE DIVERTED TO A ROCK-LINED SWALE ALONG THE SOUTH PROPERTY LINE OF LOT 17 TO THE LOT 17 DRIVEWAY. THE PEAK FLOW OF 0.47 CFS WILL DISCHARGE TO EAGLE ROCK AVENUE. OFF-SITE BASIN B IS LOCATED NORTH OF LOT 17. RUNOFF FROM OFF-SITE BASIN B WILL DRAIN TO LOT 17 VIA A 2-FOOT WIDE BY 8-INCH HIGH OPENING IN THE WALL. THE PEAK FLOW OF 0.71 CFS WILL BE CONVEYED WITH THE ON-SITE FLOWS IN THE GRAVEL DRIVE TO THE WEST AND SOUTH OF THE RESIDENTIAL BUILDING TO BE DISCHARGED TO EAGLE ROCK AVENUE THROUGH THE DRIVEWAY AND WILL EVENTUALLY DRAIN TO THE NORTH LA CUEVA CHANNEL.

RUNOFF FROM ON-SITE BASIN 1, WHICH INCLUDES ALL OF LOT 17, WILL BE DIRECTED TO EAGLE ROCK AVENUE THROUGH THE GRAVEL DRIVEWAY. THE ROOF OF THE BUILDING WILL DRAIN TO THE WEST TO THE GRAVEL DRIVE. THE BACK YARD AREA WILL HAVE SWALES TO DIRECT THE FLOWS SOUTH TO THE GRAVEL DRIVE. THE WALLS ALONG THE SIDE OF THE BACK YARDS WILL HAVE AN 8-INCH BY 8-INCH OPENING AT THE SWALE LOCATION. A TOTAL OF 2.60 CFS FROM LOT 17 WILL DRAIN TO EAGLE ROCK AVENUE AND WILL DRAIN TO THE NORTH LA CUEVA CHANNEL. A TOTAL OF 3.78 CFS FROM OFF-SITE BASINS A AND B AND ON-SITE BASIN 1 WILL DRAIN THROUGH THE DRIVEWAY TO EAGLE ROCK AVENUE. THE FIRST FLUSH FROM ON-SITE BASIN 1 WILL BE RETAINED IN THE LANDSCAPED AREA WEST OF THE GRAVEL DRIVEWAY. THE FIRST FLUSH VOLUME FOR A 0.44-INCH RAIN IS 282 CUBIC-FEET.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

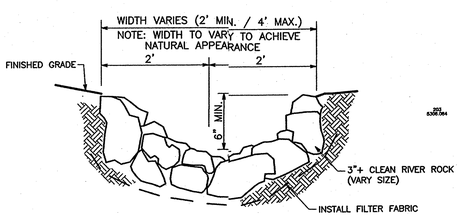
RECEIVED
AUG 28 2014
LAND DEVELOPMENT SECTION

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
OFF-SITE A	0.2535	100.00	0.00	0.00	0.00	0.66	0.01	607	0.01	607	0.47
OFF-SITE B	0.3790	100.00	0.00	0.00	0.00	0.66	0.02	908	0.02	908	0.71
ON-SITE 1	0.7277	100.00	0.00	0.00	0.00	0.66	0.04	1,743	0.04	1,743	1.36
TOTAL RUNOFF	1.36						0.07	3,259	0.07	3,259	2.54
PROPOSED CONDITIONS											
ON-SITE 1	0.7277	0.00	43.50	25.20	31.30	1.46	0.09	3,867	0.10	4,281	2.60
TOTAL RUNOFF	0.73						0.09	3,867	0.10	4,281	2.60
EXCESS PRECIP.		0.66	0.92	1.29	2.36	E_i (in)					
PEAK DISCHARGE		1.87	2.6	3.45	5.02	Q_{Pi} (cfs)					

WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$
V_{6HR} (acre-ft) = (WEIGHTED E)(AREA)/12
V_{100DAY} (acre-ft) = $V_{6HR} + (A_D)(P_{100DAY} - P_{6HR})/12$
Q (cfs) = $(Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

ZONE = 3
P_{6HR} (in.) = 2.60
P_{24HR} (in.) = 3.10
P_{100DAY} (in.) = 4.90



ROCK-LINED SWALE
NTS

LEGEND

FP=09.07	FINISHED PAD SITE ELEVATION
*60.23	PROPOSED SPOT ELEVATION
TW=12.51 / BW=11.84	TOP OF WALL / BOTTOM OF WALL
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED RETAINING WALL
	PROPOSED GARDEN WALL
	PROPOSED MOUNTABLE CURB AND GUTTER
ON-SITE BASIN	PROPOSED BASIN NUMBER
	PROPOSED BASIN BOUNDARY
	PROPOSED CONCRETE
	PROPOSED GRAVEL
	PROPOSED RIP RAP

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
TRANSPORTATION DEVELOPMENT

LOT 17, BLOCK 1, NAA TRACTS 2, UNIT 3
GRADING AND DRAINAGE PLAN FOR LOT 17

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL		MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXXX	C-19-Z	1	1

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY — DATE
INSPECTOR ACCEPTANCE — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
NEW MEXICO LICENSED PROFESSIONAL ENGINEER 9677
8-28-14

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	DBT	DATE 8-2014
DRAWN BY	DEM	DATE 8-2014
CHECKED BY	DBT	DATE 8-2014

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
OFF-SITE A	0.0507	100.00	0.00	0.00	0.00	0.66	0.00	121	0.00	121	0.09
OFF-SITE B	0.1562	100.00	0.00	0.00	0.00	0.66	0.01	374	0.01	374	0.29
TOTAL RUNOFF	0.21						0.01	496	0.01	496	0.39
EXCESS PRECIP.		0.66	0.92	1.29	2.36	E_i (in)					
PEAK DISCHARGE		1.87	2.6	3.45	5.02	Q_{Pi} (cfs)					

WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$

$V_{6\text{-}HR}$ (acre-ft) = (WEIGHTED E)(AREA)/12

$V_{100\text{-}YR}$ (acre-ft) = $V_{6\text{-}HR} + (A_O)(P_{100\text{-}YR} - P_{6\text{-}HR})/12$

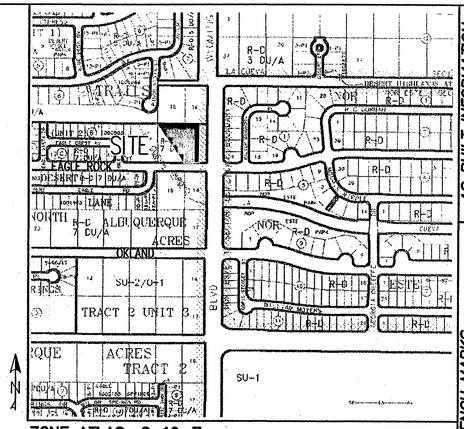
Q (cfs) = $(Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

ZONE = 3

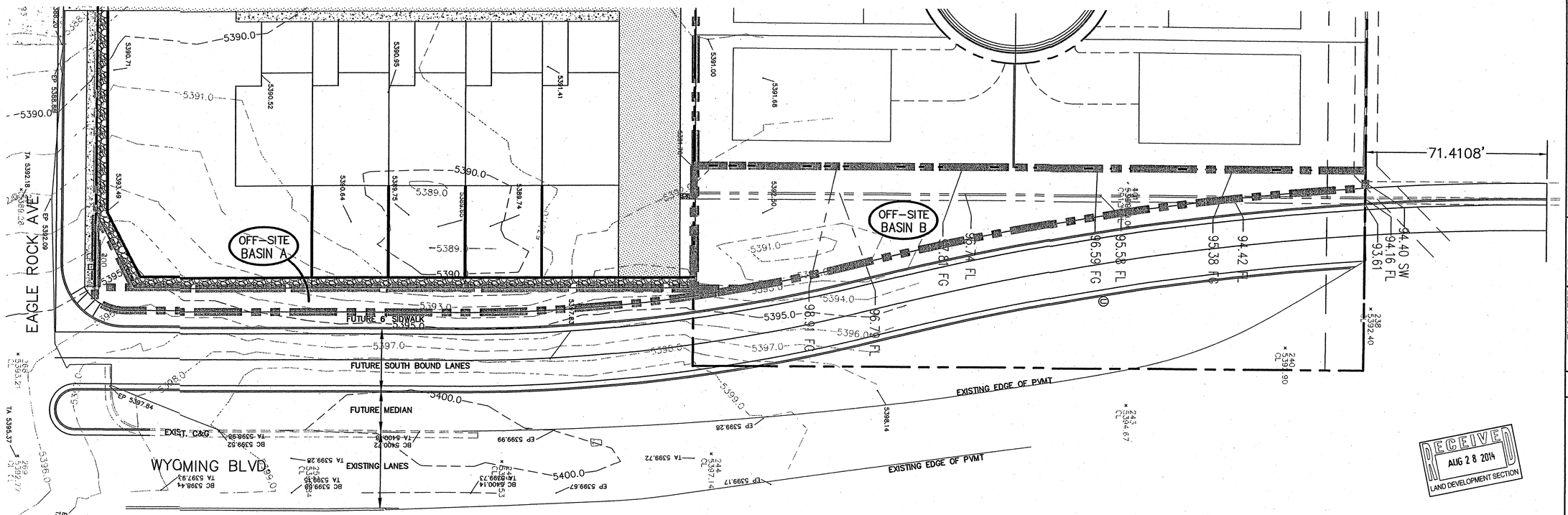
$P_{6\text{-}HR}$ (in.) = 2.60

$P_{24\text{-}HR}$ (in.) = 3.10

$P_{100\text{-}YR}$ (in.) = 4.90



ZONE ATLAS: C-19-Z



RECEIVED
AUG 28 2014
LAND DEVELOPMENT SECTION

LEGEND

FP=09.07	FINISHED PAD SITE ELEVATION
*60.23	PROPOSED SPOT ELEVATION
TW=12.51 / BW=11.84	TOP OF WALL / BOTTOM OF WALL
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED RETAINING WALL
	PROPOSED MOUNTABLE CURB AND GUTTER
ON-SITE BASIN	PROPOSED BASIN NUMBER
	PROPOSED BASIN BOUNDARY
	PROPOSED CONCRETE
	PROPOSED GRAVEL
	PROPOSED RIP RAP

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL
NEW MEXICO LICENSED PROFESSIONAL ENGINEER 9677
8/28/14

NO.	DATE	REMARKS	BY

DESIGN
DESIGNED BY DBT — DATE 8-2014
DRAWN BY DEM — DATE 8-2014
CHECKED BY DBT — DATE 8-2014

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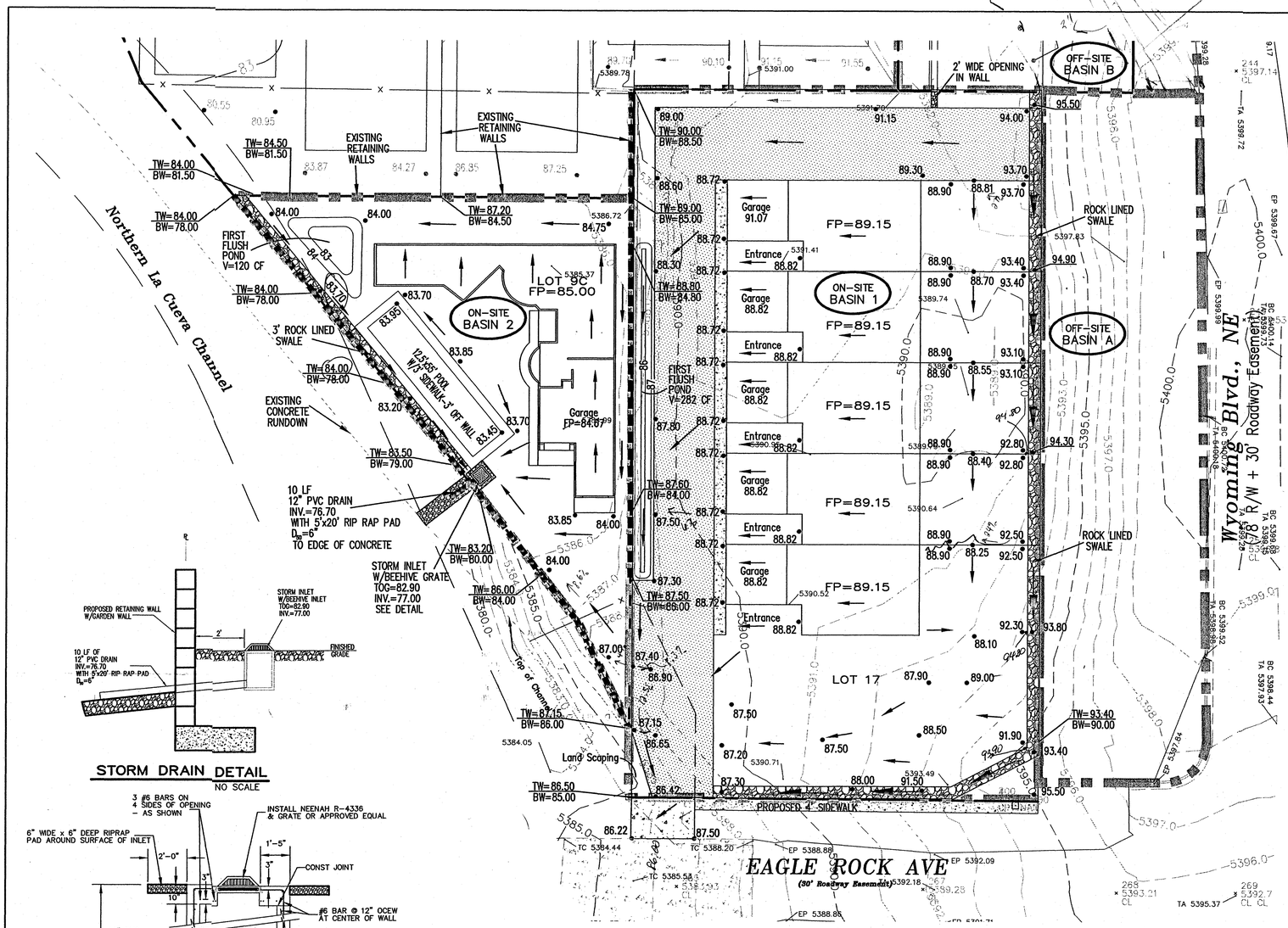
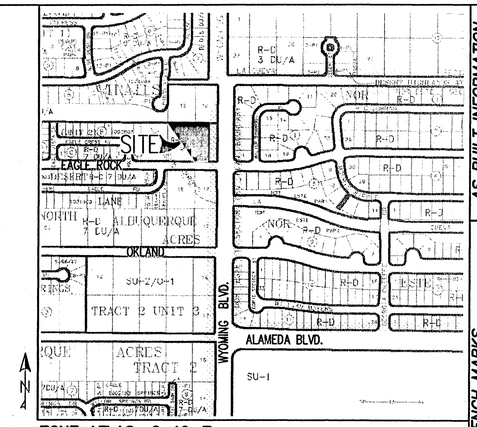
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
TRANSPORTATION DEVELOPMENT

LOT 17, BLOCK 1, NAA TRACTS 2, UNIT 3
WYOMING IMPROVEMENT LAYOUT

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL		MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXXX	C-19-Z	1	1





ZONE ATLAS: C-19-Z

DRAINAGE PLAN:

LEGAL DESCRIPTION: LOT 9C, LA VISTA AT DESERT RIDGE SUBDIVISION; AND LOT 17, BLOCK 1, NAA TRACT 2, UNIT 3

SITE AREA:0.97 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0133G & 35001C0141G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE NORTH LA CUEVA CHANNEL AT THE SOUTHWEST CORNER HAS A FLOOD HAZARD ZONE A WITH A 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL.

LOCATION AND DESCRIPTION: THE LOTS ARE LOCATED ON EAGLE ROCK AVENUE WEST OF WYOMING BOULEVARD. AT THE SOUTHWEST CORNER OF THE PROPERTY IS THE NORTH LA CUEVA CHANNEL.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL SECTION 22.2, HYDROLOGY. THE PROPERTY IS LOCATED IN ZONE 3. THE 100-YEAR, 6-HOUR STORM IS 2.60 INCHES.

THE SITE CURRENTLY DRAINS FROM EAST TO WEST TO THE NORTH LA CUEVA CHANNEL. CURRENTLY THERE ARE OFFSITE FLOWS FROM THE EAST AND NORTH.

DEVELOPED DRAINAGE CONDITIONS:

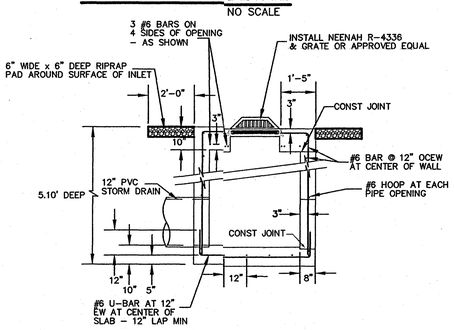
THERE ARE TWO OFF-SITE BASINS DRAINING ONTO LOT 17. OFF-SITE BASIN A IS DIRECTLY EAST OF LOT 17. RUNOFF FROM OFF-SITE BASIN A WILL BE COLLECTED IN A ROCK-LINED SWALE ALONG THE LOT 17 EAST PROPERTY LINE AND WILL BE DIVERTED TO A ROCK-LINED SWALE ALONG THE SOUTH PROPERTY LINE OF LOT 17 TO THE LOT 17 DRIVEWAY. THE PEAK FLOW OF 0.47 CFS WILL DISCHARGE TO EAGLE ROCK AVENUE. OFF-SITE BASIN B IS LOCATED NORTH OF LOT 17. RUNOFF FROM OFF-SITE BASIN B WILL DRAIN TO LOT 17 VIA AN OPENING IN THE WALL. THE PEAK FLOW OF 0.71 CFS WILL BE CONVEYED WITH THE ON-SITE FLOWS IN THE GRAVEL DRIVE TO THE WEST AND SOUTH OF THE RESIDENTIAL BUILDING TO BE DISCHARGED TO EAGLE ROCK AVENUE THROUGH THE DRIVEWAY AND WILL EVENTUALLY DRAIN TO THE NORTH LA CUEVA CHANNEL.

THE PROPERTY HAS BEEN DIVIDED INTO TWO ON-SITE DRAINAGE BASINS. RUNOFF FROM ON-SITE BASIN 1, WHICH INCLUDES ALL OF LOT 17, WILL BE DIRECTED TO EAGLE ROCK AVENUE THROUGH THE GRAVEL DRIVEWAY. A TOTAL OF 2.60 CFS FROM LOT 17 WILL DRAIN TO EAGLE ROCK AVENUE AND WILL DRAIN TO THE NORTH LA CUEVA CHANNEL. A TOTAL OF 3.78 CFS FROM OFF-SITE BASINS A AND B AND ON-SITE BASIN 1 WILL DRAIN THROUGH THE DRIVEWAY TO EAGLE ROCK AVENUE. THE FIRST FLUSH FROM ON-SITE BASIN 1 WILL BE RETAINED IN THE LANDSCAPED AREA WEST OF THE GRAVEL DRIVEWAY. THE FIRST FLUSH VOLUME FOR A 0.44-INCH RAIN IS 282 CUBIC-FEET.

RUNOFF FROM ON-SITE BASIN 2, WHICH INCLUDES ALL OF LOT 9C, WILL DRAIN TO A STORM INLET ALONG THE WEST PROPERTY LINE AND WILL BE DISCHARGED TO THE NORTH LA CUEVA CHANNEL THROUGH A 12 INCH PVC STORM DRAIN AT A 3 PERCENT SLOPE ONTO A RIPRAP PAD. A TOTAL OF 0.90 CFS WILL BE COLLECTED IN THE STORM INLET AND DISCHARGED TO THE CHANNEL THROUGH THE 12 INCH STORM DRAIN. USING THE MANNING'S EQUATION, FOR A PEAK FLOW OF 0.90 CFS THE 12 INCH STORM DRAIN WILL HAVE A NORMAL DEPTH OF 0.26 FEET AND VELOCITY OF 5.61 FPS. THE FIRST FLUSH FROM ON-SITE BASIN 2 WILL BE RETAINED IN THE LANDSCAPED AREA IN THE NORTHWEST CORNER OF THE PROPERTY. THE FIRST FLUSH VOLUME FOR A 0.44 INCH RAIN IS 120 CUBIC-FEET.

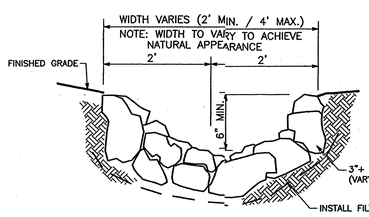
STORM DRAIN DETAIL

NO SCALE



BEEHIVE INLET DETAIL

NO SCALE



ROCK-LINED SWALE

NTS

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
OFF-SITE A	0.2535	100.00	0.00	0.00	0.00	0.66 ✓	0.01	607	0.01	607	0.47
OFF-SITE B	0.3790	100.00	0.00	0.00	0.00	0.66	0.02	908	0.02	908	0.71
ON-SITE 1	0.7277	100.00	0.00	0.00	0.00	0.66	0.04	1,743	0.04	1,743	1.36
ON-SITE 2	0.2436	100.00	0.00	0.00	0.00	0.66	0.01	584	0.01	584	0.46
TOTAL RUNOFF	1.60						0.09	3,842	0.09	3,842	3.00
PROPOSED CONDITIONS											
ON-SITE 1	0.7277	0.00	43.50	25.20	31.30	1.46	0.09	3,867	0.10	4,281	2.60
ON-SITE 2	0.2436	0.00	45.40	14.90	39.70	1.55	0.03	1,368	0.04	1,543	0.90
TOTAL RUNOFF	0.97						0.12	5,235	0.13	5,824	3.50
EXCESS PRECIP.		0.66	0.92	1.29	2.36	E_x (in)					
PEAK DISCHARGE		1.87	2.6	3.45	5.02	Q_{Px} (cfs)					

WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$

$V_{6\text{-}HR}$ (acre-ft) = (WEIGHTED E)(AREA)/12

V_{10DAY} (acre-ft) = $V_{6\text{-}HR} + (A_C)(P_{10DAY} - P_{6\text{-}HR})/12$

Q (cfs) = $(Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

ZONE = 3

P_{6HR} (in.) = 2.60

$P_{24\text{-}HR}$ (in.) = 3.10

P_{10DAY} (in.) = 4.90

LEGEND

FP=09.07	FINISHED PAD SITE ELEVATION
60.23	PROPOSED SPOT ELEVATION
TW=12.51 / BW=11.84	TOP OF WALL / BOTTOM OF WALL
	EXISTING MAJOR CONTOUR
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	PROPOSED RETAINING WALL
	PROPOSED MOUNTABLE CURB AND GUTTER
ON-SITE BASIN	PROPOSED BASIN NUMBER
	PROPOSED BASIN BOUNDARY
	PROPOSED CONCRETE
	PROPOSED GRAVEL
	PROPOSED RIP RAP

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

RECEIVED
AUG 25 2014
LAND DEVELOPMENT SECTION

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
TRANSPORTATION DEVELOPMENT

LOT 9C, LA VISTA AT DESERT RIDGE AND
LOT 17, BLOCK 1, NAA TRACTS 2, UNIT 3
GRADING AND DRAINAGE PLAN FOR LOTS 9C & 17

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL		MO./DAY/YR.	MO./DAY/YR.

City Project No.	Zone Map No.	Sheet	Of
XXXXXX	C-19-Z	1	1

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY
INSPECTOR'S ACCEPTANCE BY
FIELD VERIFICATION BY
DRAWINGS CORRECTED BY
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BENCH MARKS

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FIELD NOTES
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ENGINEER'S SEAL

NO. DATE REMARKS BY

DESIGN
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Ph.2
C19D042A