

F.L. 53.96

GENERAL NUTES

:60-7:1₽

- 1. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
- 2. ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCATION OF THESE AND FACILITIES.
- 4. THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
- 5. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE COMPLETION OF THE WORK PRIOR TO
- 6. RELOCATION OF THE STCRM DRAIN INLET(S) AND ANY ADDITIONAL WORK IN THE CITY ROW WILL BE HANDLED BY THE WORK ORDER PROCESS.

 7. THERE ARE NO OFFSITE FLOWS.

GRADING/DRAINAGE PLAN
CUNDADO RETAIL CENTERIS CONTAINED
HEREON THE FOLLOWING TEMS CONCERNING

1. VICINITY MAP
2. DRAINAGE CALCULATIONS

 CUNADO RETAIL CENTER, SAN MATEO N.E.

 BUILDING AREA
 = 0.521 ACRES (22,702 SF)

 LANDSCAPE AREA
 = 0.120 ACRES (5,227 SF)

 PARKING/ASPHALT AREA
 = .811 ACRES (35,340 SF)

 TOTAL SITE
 = 1.45 ACRES (63,269 SF)

PRECIPITATION: 360 = 2.35 IN. 1440 = 2.75 IN. 10DA = 3.95 IN

EXISTING CONDITIONS: PROPOSED CONDITIONS:

TREATMENT A 1.45 AC. 0 AC.

TREATMENT B 0 AC. 0.120 AC.

TREATMENT C 0 AC. 0 AC.

TREATMENT D 0 AC. 1.33 AC.

EXCESS PRECIPITATION:

TREATMENT A 0.53 IN. SEE SHEET C100.1

TREATMENT B 0.78 IN.

TREATMENT C 1.13 IN.

TREATMENT D 2.12 IN.

BENCHMARK:

PROJECT BENCHMARK OF 57.87 LOCATED AT SANITARY SEWER MANHOLE NEAR NORTHWEST CORNER OF PROPERTY

SION CONTROL MEASURES

THERE ARE NO OFFSITE FLOWS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGEMENT OF STORM RUN-OFF DURING CONSTRUCTION, HE/SHE SHALL ASSURE THAT THE

A. ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERMS, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTY.

B. ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUN-OFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 1.45 ACRES AND IS LOCATED EAST OF SAN MATEO RD N.E. AND NORTH OF OAKLAND AVE. N.E.

THE SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE.

PROPOSED CONDITIONS

PROJECT TO DETAIN RUN OFF ON SITE IN COLLECTION BASINS AND CONTROL FLOW (RATE EQUAL TO 1.76 CFS / ACRE) OUT TO EXISTING COA DROP INLETS IN SAN MATEO.

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

NOTICE TO CONTRACTORS

- 2. ALL WORK DETAILED ON THE SE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HERON, 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 LOCATION 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.

APPROVAL NAME DATE
INSPECTOR

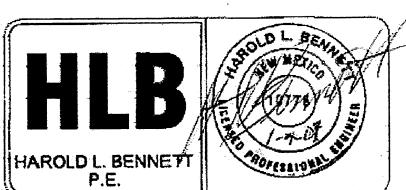
JAN 1 0 2007

DESIGN COLLABORATIVE

HYDROLOGY SECTION

THE ART AND SCIENCE OF MODERN BUILDINGS

ALL DRAWINGS, SPECIFICATIONS, PLAI_{IS}, IDEAS, ARRANGEMENTS AND DESIGNS REPRESENTED OR REFFERED TO ARE THE PROPERTY OF AND OWNED BY KLEE DESIGN COLLABORATIVE WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THEY WERE DEPREMENDED FOR THE SOLE USE OF AND IN CONNECTION WITH THIS PROJECT AND NONE OF THE ABOVE MAY BE DISCLOSED OR GIVEN OR USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY USE OR PURPOSE WHATSOEVER INCLUDING ANY WHITHER PREMENTSICENCERND UPDRECTION OF KLEE DESIGN COLLABORATIVE



JOB TITLE:			
CUNADO RETAI	L CENTER	2	
REVISION:	FILE NAME	JOB NO.	DATE
1/9/07			7./11./0
SHEET TITLE:	·		DRAWN E
GRA	ADING AND		GO

DRAINAGE PLAN



VOLUME CALCULATIONS

PARKING LOT PONDING (DETENTION POND)

Ab - Bottom Of The Pond Surface Area
At - Fop Of The Pond Surface Area
D - Water Depth
Dt - Total Pond Depth
C Change In Surface Area / Water Depth

Volume = $Ab * D + 0.5 * C * D^2$

C = tAt - Ab) / Dt

Ab =	0.00
At =	7.128.88
Dt =	1.25
C =	5703.10

ACTUAL CONTROL	DEPTH (FT)	VOLUME (AC-FT)	Q (4-4.75° DIA. OPENINGS) (CFS)
5154.25	0.00	0.0000	0.00
5154.50	0.25	0.0041	0.54
5154.75	0.50	0.0164	1.30
5155.00	0.75	0.0368	1.76
5155.25	1.00	0.0655	2.12
5155.35	1.10	0.0792	2.25
5155.45	1.20	0.0943	2.37
5155.50	1.25	0.1023	2.43

Orifice Equation Q = CA SQRT(2gH)

C =	0.6
Diameter (in)	4.75
Area (fi^2)=	0.12

H(Ft) = Depth of water above center of orifice

Q (CFS)= Flow

AHYMO OUTPUT FILE (PARKING LOT PONDING CONDITIONS)

	PROGRAM (AHYMO 97) - RUN DATE (MON/DĀY/YR) = 12/05/2006 START TIME (HR:MIN:SEC) = 11:12:06 INPUT FILE = 664PD	- Version: 1997.02d USER NO.= AHYMO-1-9702c01000R31-AH
	RETAIL CENTER - PARKING LOT PONDING C	ALCULATION

******	100-year, 6-hr storm (under proposed	CONDITIONS)
* START		
RAINFALL	TYFE-1 RAIN QUARTER=0.0 IN RAIN ONE=2.14 IN RAIN SIX-RAIN DELAY=3.10 IN DT=0.03	2.60 IN
	COMPUTED 6-HOUR RAINFALL DISTRI DT = .033330 HOURS END	BUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
	.0000 .0027 .0055 .008 .0204 .0236 .0269 .030	4 .0113 .0143 .0173
	.0445 .0484 .0523 .056 .0741 .0789 .0839 .089	4 .0606 .0649 .0694
	.1126 .1192 .1262 .132	2 .1385 .1452 .1597
	.1922 .2422 .3139 .411 1.1588 1.3904 1.4871 1.568	7 1.6414 1.7074 1.7683
	2.1354 2.1707 2.2041 2.235	5 2.0174 2.0589 2.0982 9 2.2661 2.2737 2.2807
	2.3277 2.3329 2.3376 2.342	0 2.3117 2.3172 2.3226 3 2.3470 2.3514 2.3558
	2.3601 2.3643 2.3683 2.372 2.3875 2.3911 2.3947 2.398	2 2.4016 2.4050 2.4083
	2.4115 2.4147 2.4179 2.421 2.4330 2.4359 2.4388 2.441	6 2.4444 2.4472 2.4499
	2.4526 2.4553 2.4579 2.460 2.4706 2.4731 2.4755 2.477	5 2.4631 2.4656 2.4681 9 2.4803 2.4827 2.4850
	2.4873 2.4836 2.4919 2.494 2.5030 2.5052 2.5073 2.509	2 2.4964 2.4986 2.5008 4 2.5115 2.5136 2.5157
	2.5177 2.5198 2.5218 2.523 2.5317 2.5336 2.5355 2.537	8 2.5258 2.5277 2.5297
	2.5449 2.5467 2.5486 2.550 2.5575 2.5593 2.5610 2.562	4 2.5522 2.5540 2.5557
	2.5696 2.5713 2.5729 2.574 2.5811 2.5828 2.5844 2.586	6 2.5762 2.5779 2.5795
	2.5923 2.5938 2.5954 2.596	9 2.5984 2.6000
COMPUTE NI	4 HYD ID=10 HYD NO-101.0 AREA-0. PER A≈0.00 PER B-4.00 PER TP=0.1333 HR MASS RAINFALL	C=4.00 PER D=92.00
UNIT AREA	PEAK = 7.7221 CFS UNIT VOLUME = .001956 SQ MI IA = .100	TP RATIO = .545000 SHAPE CONSTANT, N = 7.106 = .9978 B = 526.28 P60 = 2.1400 00 INCHES INF = .04000 INCHES PER HOUR FILTRATION NUMBER METHOD - DT = .033330
AREA	PEAK = .44395 CFS UNIT VOLUME = .000170 SQ MI IA = .425	TP RATIO = .909858 SHAPE CONSTANT, N = 3.892 = .9709 B = 347.95 P60 = 2.1400 00 INCRES INF = 1.04000 INCRES PER HOUR FILTRATION NUMBER METHOD - DT = .033330
********** *	PONDING CONDITION	***************************************
********** ROUTE RESE	************	**************************************
	OUTFLOW(CFS) STORAGE (A	C-FT) ELEVATION (FT)
	0.54 0.00 1.30 0.01	5156.50
	1.76 0.03 2.12 0.06	5155.00
	2.25 G.07 2.37 G.09	92 5155.35
	2.43 0.10	
* * *	* * * * * * * * * * * * *	* *
	INFLOW ELEV VOLUME OUT (CFS) (FEET) (AC-FT) (CF	FLOW S)
TIME (HRS)		
(HRS) .00	.00 5154.25 .000	. 00
(HRS) .00 .80 1.60	.00 5154.25 .000 4.57 5155.35 .079	.00 2.25
(HRS) .00 .80 1.60 2.40 3.20	.00 5154.25 .000 4.57 5155.35 .079 .36 5155.05 .042 .08 5154.29 .001	.00 2.25 1.83 .09
.00 .80 1.60 2.40 3.20 4.00 4.80	.00 5154.25 .000 4.57 5155.35 .079 .30 5155.05 .042 .08 5154.29 .001 .06 5154.28 .000 .05 5154.27 .000	.00 2.25 1.83 .09 .06
(HRS) .00 .80 1.60 2.40 3.20 4.00	.00 5154.25 .000 4.57 5155.35 .079 .30 5155.05 .042 .08 5154.29 .001 .06 5154.28 .000 .05 5154.27 .000 .05 5154.27 .000 .05 5154.27 .000	.00 2.25 1.83 .09 .06 .05

END TIME (HR:MIN:SEC) = 11:12:06

FINISH

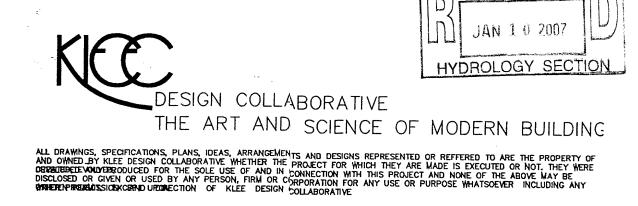
NORMAL PROGRAM FINISH

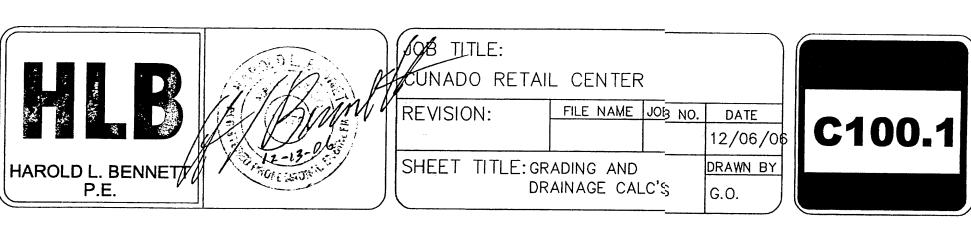
AHYMO INPUT FILE (PARKING LOT PONDING CONDITIONS)

* * CUANDO RETAIL CEN	TER - PARKING LO	T PONDING CALCULAT	NOI
*		*****	*********
**	6-HR STORM (UND	ER PROPOSED CONDIT	TIONS) *
*			
START			
RAINFALL		RTER=0.0 IN N RAIN SIX=2.60 IN IN DT=0.03333 HR	1
COMPUTE NM HYD	ID=10 HYD NO=10 PER A=0.00 PER TP=0.1333 HR MA	1.0 AREA=0.002126 B=4.00 PER C=4.00 SS RAINFALL=-1	SQ MI PER D=92.00
*			
****			*
****	PONDING CONDITI	ON	*******
		1.1 INFLOW ID=10 C	
ROUTE RESERVOIR	OUTFLOW(CFS) 0.00 0.54 1.30 1.76 2.12 2.25 2.37 2.43	STORAGE (AC-FT) 0.0000 0.0041 0.0164 0.0368 0.0655 0.0792 0.0943 0.1023	ELEVATION (FT) 5154.25 5154.50 5154.75 5155.00 5155.25 5155.35 5155.45 5155.50
******	*****	***********	
4-			• •

SUMMARY OUTPUT FILE (PARKING LOT PONDING CONDITIONS)

AHYMO PROGRAM INPUT FILE =	SUMMARY TABLE 664PD	ONYHA	97) -		-	VERSION: 199	97.02d	RUN DATE USER NO.=		/YR) =12/0 9702c01000	
COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO TD NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ~ ACRE	PAGE =	
START RAINFALL TYPE COMPUTE NM HYE ROUTE RESERVO FINISH	101.00	- 10	10 20	.00213	6.63 2.36	.256 .256	2.25410 2.25398			TIME= RAIN6= PER IMP= AC-FT=	.00 2.600 92.00 .093





 $M_{\rm s}^{\rm total}(0)$

Market His

Paragraphy at the

Property of

A.L.T.A / A.C.S.M. LAND TITLE SURVEY with TOPOGRAPHY

LOT 32A, BLOCK 10 TRACT A, UNIT B

NORTH ALBUQUERQUE ACRES

CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO JULY, 2006

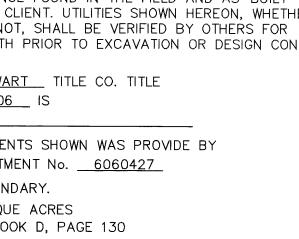
GENERAL NOTES:

- 1: CONTOUR INTERVAL IS ONE (1) FOOT.
- 2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION "NDC 6-1A", HAVING AN ELEVATION OF 5052.50 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 CON-
- 4: OWNER OF RECORD PER ______ STEWART___ TITLE CO. TITLE BINDER DATED: <u>JUNE 19, 2006</u> IS RGR Ltd., Co.
- 5: LEGAL DESCRIPTION AND EASEMENTS SHOWN WAS PROVIDE BY

SAN MATEO BOULEVARD N.E

- STEWART TITLE CO. COMMITMENT No. 6060427 6: PLATS USED TO ESTABLISH BOUNDARY.
- A: PLAT OF NORTH ALBUQUERQUE ACRES FILED: APRIL 24, 1936 IN BOOK D, PAGE 130 7: FIELD WORK PERFORMED ON: ___JUNE, 2006

THROUGH THE HEADER



BLOCK 10

12" SD/WK

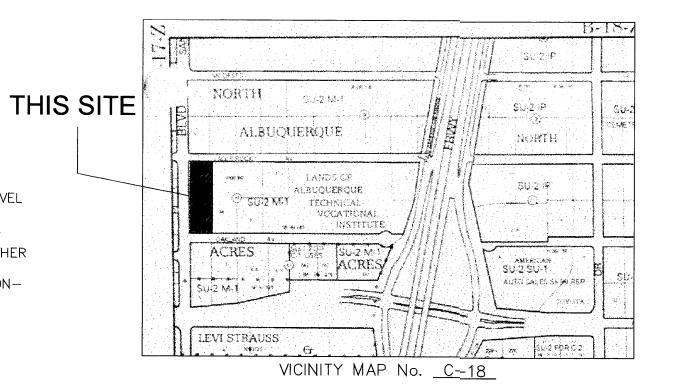
CULVERT PER

CITY STD. DWG#

MIN. WATER

BLOCK V

ELEVATION TO



LEGAL DESCRIPTION: LGT NUMBERED THIRTY-TWO (32 A) OF BLOCK NUMBERED TEN (10), NORTH ALBUQUERQUE ACRES, TRACT A, UNIT B, BERNALILLO COUNTY, NEW MEXICO AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON APRIL 24, 1936, IN PLAT BOOK D. PAGE 130 2-4.75" DIA OPENING WALL WITH AN IVNVERT OF 5154.25 (DAYLIGHTED TO THE BACK OF SD/WK) RELOCATE DROP INLETS AND FIRE HYDRANT THROUGH THE HEADER WALL WITH AN IVNVERT OF 5154.25 (DAYLIGHTED TO THE BACK OF SD/WK)

HEADER WALL/

RETAINING WALL

MIN. TOP

MIN. WATER BLOCK

LELEVATION TO BE SET AT

5155.50

FND #4 R/B ELEV.= 5155.75 CULVERT PER BE SET AT w/CAP PS 11463 HEADER WALL/ 5155.50 CITY STD. DWG# RETAINING WALL SCALE = 1:30MIN. TOP ELEV.= 5155.75 1/4 -T.O.W 60.86 (VARIES) existing T.O.C /5155.50(VARIES) 56.5 F.L. 53.96 SITE RETAINING 57.00 WALL. HEIGHT **VARIES** Site Section AA

12" SD/WK

SCALE: $\frac{1}{8}$ " = 1'-0"

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GRADING/DRAINAGE PLAN	
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HEREON THE FOLLOWING ITEMS CONCERNING	
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2. DRAINAGE CALCULATIONS	

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PROPOSED CONDITIONS: **EXISTING CONDITIONS**

TREATMENT A 0.120 AC. TREATMENT B TREATMENT C 1.33 AC. TREATMENT D **EXCESS PRECIPITATION:** SEE SHEET C100.1 TREATMENT A TREATMENT B 0.78 IN. TREATMENT C

BENCHMARK

TREATMENT D

PROJECT BENCHMARK OF 57.87 LOCATED AT SANITARY SEWER MANHOLE NEAR NORTHWEST CORNER OF PROPERTY

EROSION CONTROL MEASURES

2.12 IN.

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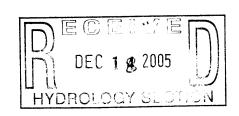
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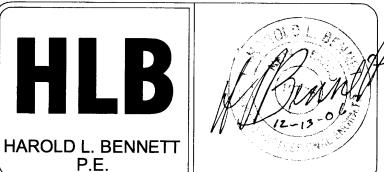
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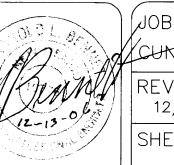
APPROVAL NAME DATE INSPECTOR



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ESIGN COLLABORATIVE THE ART AND SCIENCE OF MODERN BUILDING





JOB TITLE: CUNADO RETAII	L CENTER		
REVISION:	FILE NAME	JOB NO.	DATE
12/06/06			7/11/06
SHEET TITLE:			DRAWN BY
	ADING AND	K I	G.O.



VOLUME CALCULATIONS

PARKING LOT PONDING (DETENTION POND)

```
Ab - Bottom Of The Pond Surface Area
At - Top Of The Pond Surface Area
D - Water Depth
Dt - Total Pond Depth
```

C - Change In Surface Area / Water Depth

Volume = $Ab * D + 0.5 * C * D^2$

C = (At - Ab) / Dt Ab = 0.00

At = Dt =	7.1 _{28.88}	
C =	57 _{03.1} ()
UAL	DEPTH (ET)	VOLU

ACTUAL DEPTH VOLUME	Q (4-4.75" DIA. OPENINGS)
ELEV. (FT) (AC-FT)	(CFS)
5154.25 0.00 0.0000	0.00
5154.50 0.25 0.0041	0.54
5154.75 0.50 0.0164	1.30
5155.00 0.75 0.0368	1.76
5155.25 1.00 0.0655	2.12
5155.35 1.10 0.0792	2.25
5155.45 1.20 0.0943	2.37
5155.50 1.25 0.1023	2.43

Orifice Equation Q = CA SQRT(2gH)

C = 0.6Diameter (in)
Area (ft^2)= g = 32.2 0.6 0.6 0.7 0.12 0.12 0.12 0.12

H (F1) = Depth of water above center of orifice Q(CFS)= Flow $= 2\sqrt{3} \sqrt{3}$

AHYMO OUTPUT FILE (PARKING LOT PONDING CONDITIONS)

START 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

COMPUTE NM HYD ID=10 HYD NO=101.0 AREA=0.002126 SQ MI PER A=0.00 PER B=4.00 PER C=4.00 PER D=92.00 TP=0.1333 HR MASS RAINFALL=-1

K=.072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420 UNIT PEAK = 7.7221 CFS UNIT VOLUME = .9978 B = 526.28 P60 = 2.1400 AREA = .001956 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .0333330

**************************************	I D=	******** 20 HYD N FLOW(CF3 1.00 0.54	0=501.	1 INF	AGE (AC	-FT)		.****** TION (FT	* \
ROUTE RESERVOIR		FLOW(CF3 0.00 0.54			AGE (AC	-FT)		ION(FI	1/
; /	OUT:	0.00)	STOR			ELEVAI	TION (FI	71 \
; /		0.54			0.000				· 1
, ,					0,000		5154		
; /		1.30			0.004		5154		
; /					0.016		5154		
1		1.76			0.036		5155		
		2.12			0.065		5155		
		2.25			0.079		5155		
		2.37			0.094		5155		
		2.43~			0.102	3	5155	>.50	
* * * * *	* * :	v * *	# #	* *	* *	*			
TIME INF	LOW	ELEV	VOL	UME	OUTE	LOW			
(HRS) (CF	S}	(FEET)	(AC	-FT)	(CFS)			
.00		5154.25		.000		. 00			
		5154.25		.000		.00			
1.60 4		5155.35		.079	2	. 25			
		5155.05		.042		.83			
3.20	.08 5	5154.29		.001		.09			
4.00		154.28		.000		.06			
		5154.27		.000		.05			
		154.27		.000		. 05			
6.40	.00 5	5154.25		.000	Separate Sep	.01			
PEAK DISCHARGE =		2.361			OCCURS	AT HO	JUR	1.80	
MAXIMUM WATER SU					5.443				
MAXIMUM STORAGE :	=	.093	2 AC-F	T	INCR	EMENT!	AL TIME	, esc	.033330нг
******				`	-				

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 11:12:06

AHYMO INPUT FILE (PARKING LOT PONDING CONDITIONS)

**************************************	R PROPOSED CONDIT					
6-HR STORM (UNDE	R PROPOSED CONDIT					
6-HR STORM (UNDE	K EKOLOZED CONDII					
*****		++++++++++++				

	0 0 711					
TYPE=1 RAIN QUAR	TER=U.U IN					
RAIN ONE=2.14 IN RAIN SIX=2.60 IN						
RAIN DELAY=3.10	IN DT=0.03333 HR	20 MT				
ID=10 HYD NO=101.0 AREA=0.002126 SQ MI						
TP=0.1333 HR MASS RAINFALL=-1						

PONDING CONDITION						
******	·********	****				
ID=20 HYD NO=501	.1 INFLOW ID=10 C	ODE=24				
OUTFLOW(CFS)	STORAGE (AC-FT)	ELEVATION (FT)				
0.00		5154.25				
0.54		5154.50				
1.30		5154.75				
1.76		5155.00				
2.12	0.0655					
2.25	0.0792	5155.35				
2.37	0.0943	5155.45				
2 43	0.1023	5155.50				
*****	*****	*****				
	RAIN ONE=2.14 IN RAIN DELAY=3.10 ID=10 HYD NO=101 PER A=0.00 PER B TP=0.1333 HR MAS ************** PONDING CONDITION ************* ID=20 HYD NO=501 OUTFLOW(CFS) 0.00 0.54 1.30 1.76 2.12 2.25 2.37 2.43	0.54 0.0041 1.30 0.0164 1.76 0.0368 2.12 0.0655 2.25 0.0792 2.37 0.0943				

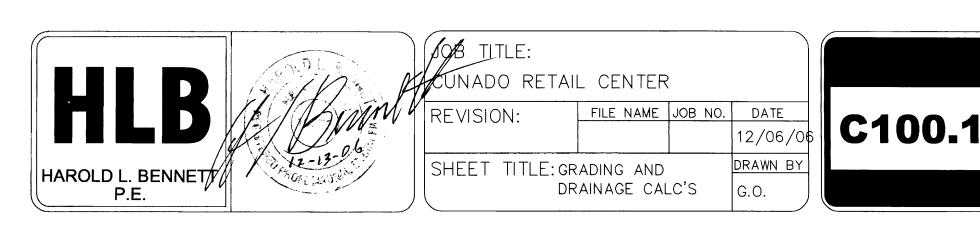
SUMMARY OUTPUT FILE (PARKING LOT PONDING CONDITIONS)

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - INPUT FILE = 664PD					- 7	/ERSION: 199	7.02d	RUN DATE (MON/DAY/YR) =12/05/20 USER NO.= AHYMO-I-9702c01000R31-				
COMMAND	HYDROGRAPH IDENTIFICATION			ID	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1	
START RAINFALL T	TYPE= 1					·					TIME= RAIN6=	.00 2.600
COMPUTE NM		101.00	-	10	.00213	(6.63)	.256	2.25410	1.500	4.872	PER IMP=	92.00
ROUTE RESER	RVOIR	501.10	10	20	.00213	2.36	.256	2.25398	1.800	1.735	AC-FT=	.093
										163		

DESIGN COLLABORATIVE

THE ART AND SCIENCE OF MODERN BUILDING

ALL DRAWINGS, SPECIFICATIONS, PLANS, IDEAS, ARRANGEMENTS AND DESIGNS REPRESENTED OR REFFERED TO ARE THE PROPERTY OF AND OWNED BY KLEE DESIGN COLLABORATIVE WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THEY WERE DREMEINGELY AND/DEPRODUCED FOR THE SOLE USE OF AND IN CONNECTION WITH THIS PROJECT AND NONE OF THE ABOVE MAY BE DISCLOSED OR GIVEN OR USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY USE OR PURPOSE WHATSOEVER INCLUDING ANY WHIETEN-PREJECTION OF KLEE DESIGN COLLABORATIVE



A.L.T.A / A.C.S.M. LAND TITLE SURVEY with TOPOGRAPHY

> LOT 32A, BLOCK 10 TRACT A, UNIT B NORTH ALBUQUERQUE ACRES

CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO JULY, 2006

LOT NUMBERED THIRTY-TWO (32 A) OF BLOCK NUMBERED TEN (10), NORTH

ALBUQUERQUE ACRES, TRACT A, UNIT B, BERNALILLO COUNTY, NEW MEXICO

AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN

THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO

ON APRIL 24, 1936, IN PLAT BOOK D, PAGE 130

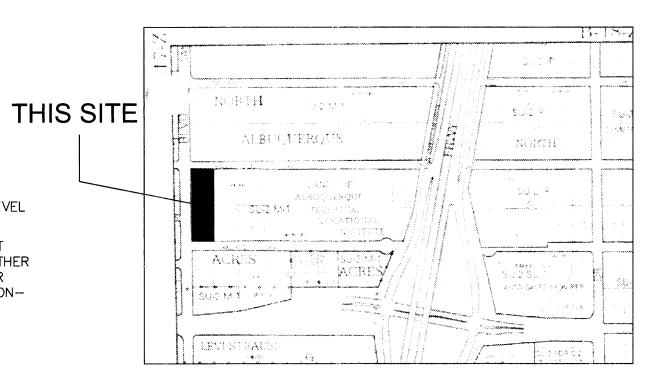
LEGAL DESCRIPTION:

4 (4) (4) (4)

GENERAL NOTES:

- 1: CONTOUR INTERVAL IS ONE (1) FOOT.
- 2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION "NDC 6-1A", HAVING AN ELEVATION OF 5052.50 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 CON-
- 4: OWNER OF RECORD PER __STEWART__ TITLE CO. TITLE BINDER DATED: <u>JUNE 19, 2006</u> IS RGR Ltd., Co.
- 5: LEGAL DESCRIPTION AND EASEMENTS SHOWN WAS PROVIDE BY
- STEWART TITLE CO. COMMITMENT No. 6060427 6: PLATS USED TO ESTABLISH BOUNDARY.
- A: PLAT OF NORTH ALBUQUERQUE ACRES FILED: APRIL 24, 1936 IN BOOK D, PAGE 130

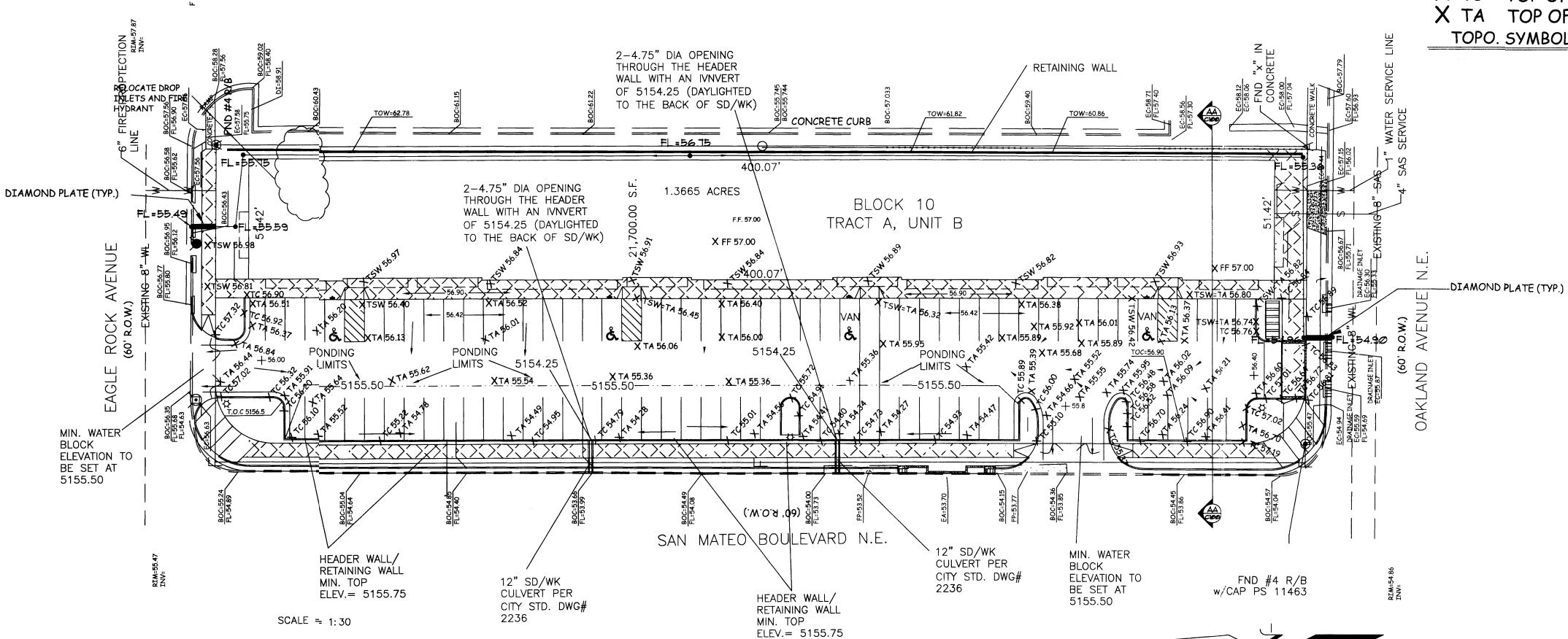
7: FIELD WORK PERFORMED ON: ___JUNE, 2006

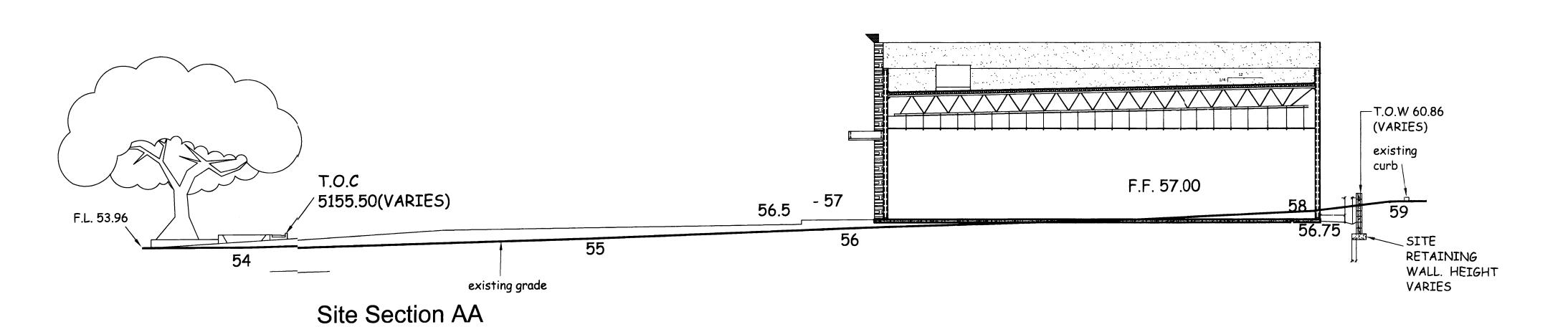


PROPOSED

AS BUILT

X TSW TOP OF SIDEWALK X TC TOP OF CURB X TA TOP OF ASPHALT TOPO. SYMBOL LEGEND





SCALE: $\frac{1}{8}$ " = 1'-0"

GENERAL NOTES

- PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
- ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS
- 4. THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED
- 5. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE COMPLETION OF THE WORK PRIOR TO
- GRADING/DRAINAGE PLAN
- CUNDADO RETAIL CENTER IS CONTAINED HEREON THE FOLLOWING ITEMS CONCERNING
- 1. VICINITY MAP 2. DRAINAGE CALCULATIONS
- CUNADO RETAIL CENTER, SAN MATEO N.E = 0.120 ACRES (5,227 SF) LANDSCAPE AREA
- PARKING/ASPHALT AREA = .811 ACRES (35,340 SF = 1.45 ACRES (63,269 SF) TOTAL SITE

PRECIPITATION: 360 = 2.35 IN. 1440 = 2.75 IN. 10DA = 3.95 IN.

PROPOSED CONDITIONS: **EXISTING CONDITIONS**

TREATMENT A 0.120 AC. TREATMENT B TREATMENT C 1.33 AC. TREATMENT D **EXCESS PRECIPITATION** SEE SHEET C100.1 TREATMENT A TREATMENT B

TREATMENT C 2.12 IN. TREATMENT D

PROJECT BENCHMARK OF 57.87 LOCATED AT SANITARY SEWER MANHOLE NEAR NORTHWEST CORNER OF PROPERTY

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGEMENT. OF STORM RUN-OFF DURING CONSTRUCTION, HE/SHE SHALL ASSURE THAT THE
- A. ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERMS, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTY.
- B. ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUN-OFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS
- AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 1.45 ACRES AND IS LOCATED EAST OF SAN MATEO RD N.E. AND NORTH OF OAKLAND AVE. N.E.

THE SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE PROPOSED CONDITIONS

PROJECT TO DETAIN RUN OFF ON SITE IN COLLECTION BASINS AND CONTROL FLOW (RATE EQUAL TO 1.76 CFS / ACRE) OUT TO EXISTING COA DROP

DRAINAGE CERT W/ SURVEY WORK BY OTHERS 12-28-01

DRAINAGE CERTIFICATION

energy, NMPE 1077C, OF THE FIRM C 1 + L For 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 1-09-07 HE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY /// smn/t, NMPS 10776, OF THE FIRM

CV + L Eng . I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 12-1507 REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUMITTED IN SUPPORT OF A REQUEST FOR cont of occ.

ANY EXCEPTIONS AND/OR QUALIFICATIONS AS LISTED BELOW:

None

ANY DEFICIENCIES AND/OR REQUIRED CORRECTIONS AS LISTED BELOW:

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

APPROVED BY THE EXECUTIVE COMMITTEE ON 4-9-02

JAN 3 0 2008 HYDROLOGY

As Built Measurements by:

ESIGN COLLABORATIVE THE ART AND SCIENCE OF MODERN BUILDINGS LL PRANTINGS, SPECIFICATIONS, PLANS, IDEAS, ARRANGEMENTS AND DESIGNS REPRESENTED OR REFFERED TO ARE THE PROPERTY OF AND OWNED AND PROPERTY OF AND OWNED OF THE PROPERTY OF AND OWNED OF THE PROPERTY OF AND PROPERTY OF AND OWNED OF THE ABOVE MAY BE DISCLOSED OR GIVEN A VASED BY ANY OTHER PERSON, FIRM OF COPPORATION FOR ANY USE OR PURPOSE WHATSOEVER INCLUDING ANY OTHER PROJECT, EXCEPT UPON AND PERMISSION AND DIRECTION OF KLEE DESIGN COLLABORATIVE. JOB TITLE:

CUNADO RETAIL CENTER FILE NAME JOB NO. REVISION: DATE 1/24/08 7/11/06 DRAWN BY SHEET TITLE: GRADING AND DRAINAGEG.O.

C100

P.E.

HAROLD L. BENNETT

