

**DRAINAGE DATA**

CONDITION	B	STORM RETURN PERIOD	TREATMENT TYPE	TREATMENT AREA	EXCESS PRECIPITATION	PEAK RUNOFF	RUNOFF VOLUME	RUNOFF RATE
		year	(table 4)	sq. ft.	in.	cfs/acre	cu. ft.	cfs
EXISTING	S	10	A	13500	0.08	0.24	90	0.07
	I		B	0	0.22	0.76	0	0.00
	T		C	0	0.44	1.49	0	0.00
	E		D	0	1.24	2.89	0	0.00
			TOTAL	13500			90	0.07
		100	A	13500	0.44	1.29	495	0.40
			B	0	0.67	2.03	0	0.00
			C	0	0.99	2.87	0	0.00
			D	0	1.97	4.37	0	0.00
			TOTAL	13500			495	0.40
DEVELOPED	S	10	A	0	0.08	0.24	0	0.00
	I		B	5616	0.22	0.76	103	0.10
	T		C	0	0.44	1.49	0	0.00
	E		D	7884	1.24	2.89	815	0.52
			TOTAL	13500			918	0.62
		100	A	0	0.44	1.29	0	0.00
			B	5616	0.67	2.03	314	0.28
			C	0	0.99	2.87	0	0.00
			D	7884	1.97	4.37	1294	0.79
			TOTAL	13500			1608	1.05
	A	100	B	1381	0.67	2.03	77	0.08
			D	2898	1.97	4.37	476	0.29
			TOTAL	4279			553	0.36
	B	100	B	1476	0.67	2.03	82	0.07
			D	949	1.97	4.37	156	0.10
			TOTAL	2425			238	0.16
	C	100	B	1707	0.67	2.03	95	0.08
			D	1986	1.97	4.37	323	0.20
			TOTAL	3673			418	0.28
	D	100	B	1052	0.67	2.03	59	0.05
			D	2071	1.97	4.37	340	0.21
			TOTAL	3123			399	0.26

**WATER HARVESTING PONDS**

**BASIN A**  
REQ'D. VOLUME = (2898)(0.44-0.10)/12 = 82 CF  
PROVIDED VOLUME  
TOP 400 SF, BOTTOM 137 SF  
DEPTH 0.30 FT. VOL. = 53 CF  
OVERFLOW TO B

**BASIN B**  
REQ'D. VOLUME = (949)(0.44-0.10)/12 = 27 C.F.  
PROVIDED VOLUME  
TOP 670 SF, BOTTOM 454 SF  
DEPTH 0.3 FT. VOL. = 112 CF

**BASIN C**  
REQ'D. VOLUME = (1966)(0.44-0.10)/12 = 56 C.F.  
PROVIDED VOLUME;  
TOP 306 SF, BOTTOM 124 SF  
DEPTH 0.30 FT., VOLUME = 64 CF

**BASIN D**  
REQ'D. VOLUME = (2071)(0.44-0.10)/12 = 59 C.F.  
PROVIDED VOLUME;  
TOP 293 SF, BOTTOM 131 SF  
DEPTH 0.30 FT., VOLUME = 63 CF

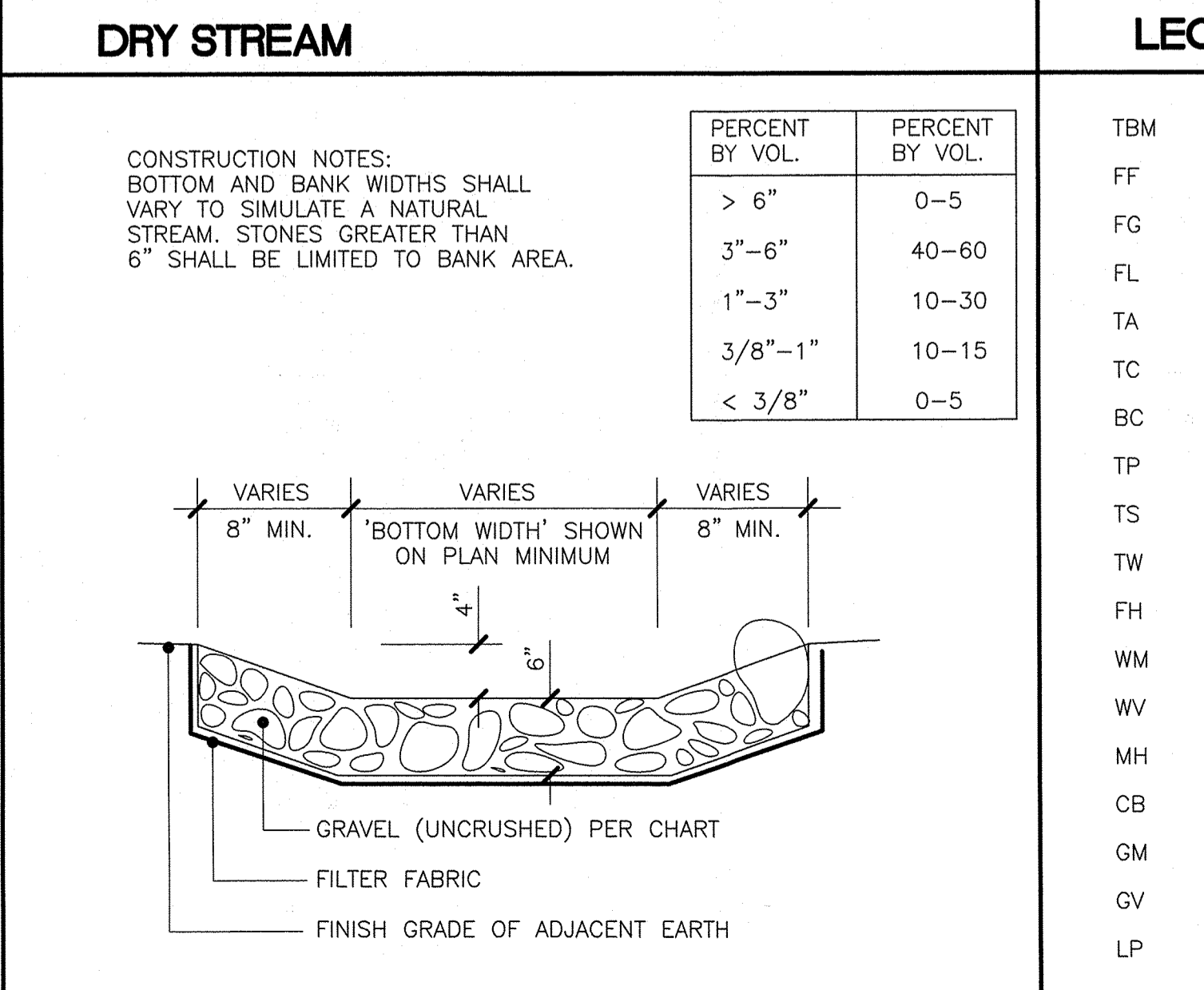
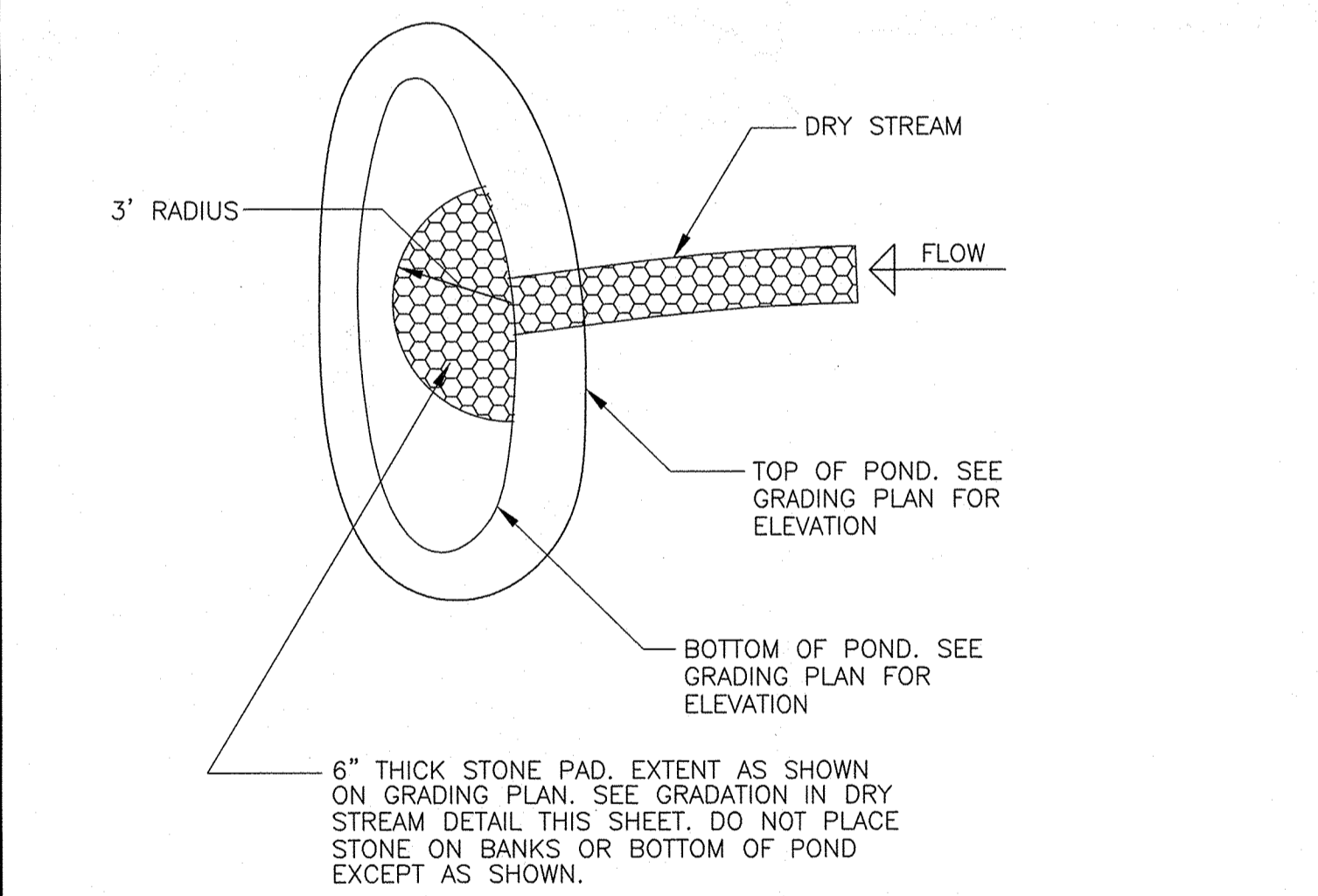
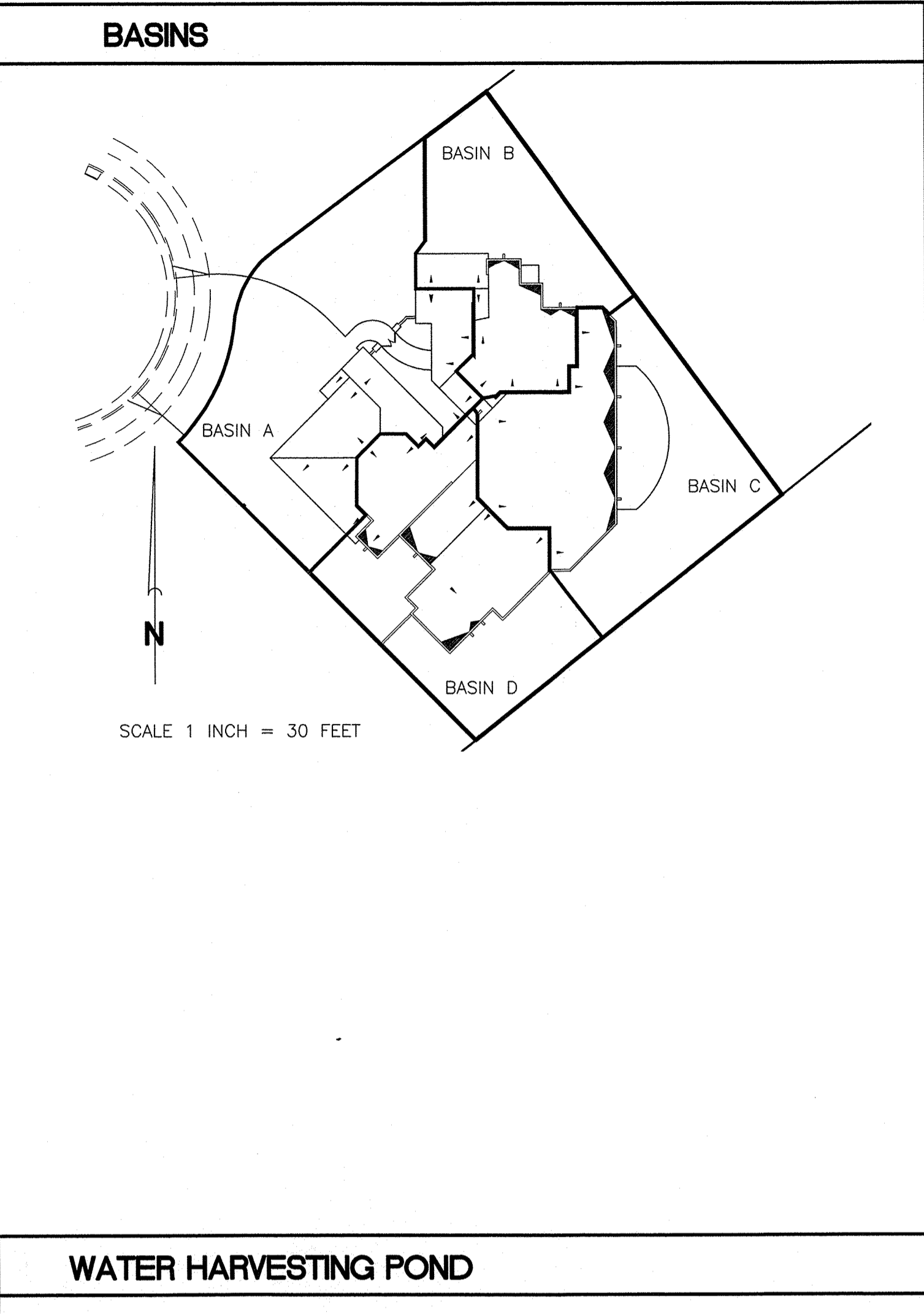
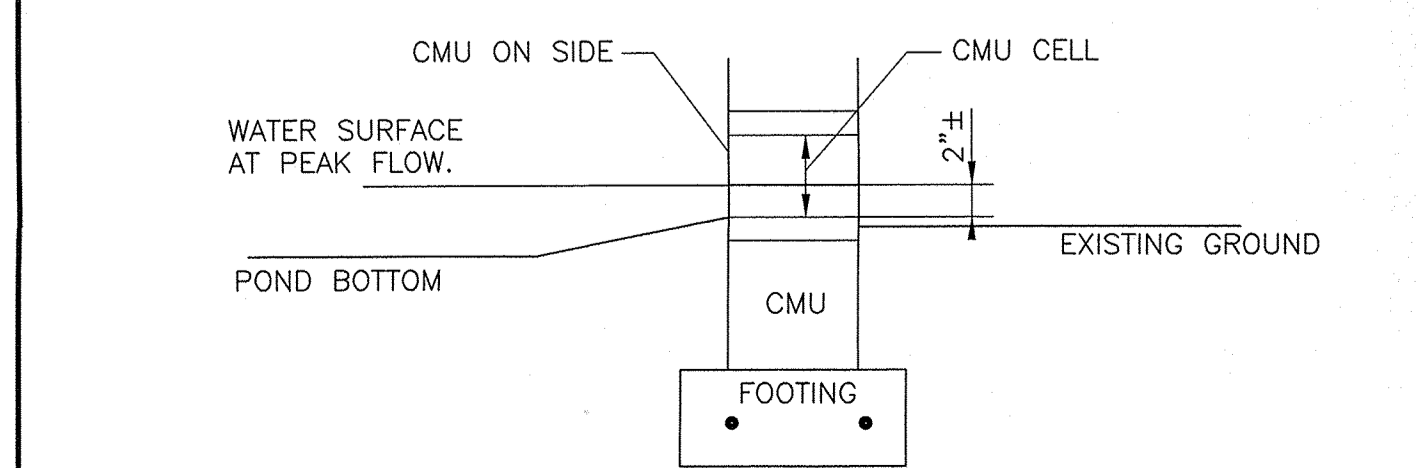
**POND OVERFLOW OUTLETS**  
(SEE SKETCH BELOW LEFT)  
SET CMU SO THAT PEAK FLOW IS 2" DEEP. THEREFORE EACH CMU WILL DISCHARGE A MAXIMUM OF Q = CLH<sup>3/2</sup> = 0.17 CFS WHERE WEIR C=2.8 AND L= 0.906 FT.

**BASIN A**  
PEAK FLOW = 0.36 CFS,  
USE 2 CMU'S ON EDGE

**BASIN B**  
PEAK FLOW = 0.52 CFS,  
USE 4 CMU'S ON EDGE

**BASIN A**  
PEAK FLOW = 0.28 CFS,  
USE 2 CMU'S ON EDGE

**BASIN A**  
PEAK FLOW = 0.26 CFS,  
USE 2 CMU'S ON EDGE



- KEYED NOTES**
1. NEW RESIDENCE
  2. CONCRETE DRIVE.
  3. CONCRETE PATIO/PORCH.
  4. CONCRETE WALK.
  5. 4'x4' CONCRETE A/C PAD.
  6. CMU YARD WALL.
  7. WROUGHT IRON FENCE.
  8. 2-3" PVC PIPES THRU WALL FOR DRAINAGE.
  9. DRY STREAM w/ EROSION CONTROL PAD. SEE DETAIL THIS SHEET
  10. INSTALL 2-CMU'S ON EDGE TO PROVIDE DRAINAGE THRU WALL. BOTTOM OF CELL OPENING AT ELEVATION 19.8 IN PONDS A AND B. BOTTOM OF CELL OPENING AT ELEVATION 20.1 IN POND C AND 20.3 IN POND D.
  11. WATER HARVESTING POND.
  12. SEE SHEET 13 OF ARCHITECTURAL PLANS FOR YARD WALL DETAILS. PROVIDE 2" PVC PIPE THRU PERIMETER YARD WALLS AT 4' ON CENTER AT 3" ABOVE FINISHED GRADE.

- DRAINAGE NOTES**
1. THE SITE IS PRESENTLY IN IT'S NATURAL STATE AND RELATIVELY FLAT. THE SITE ABUTS THE PETROGLYPH NATIONAL PARK AND IS APPROXIMATELY 250 FEET WEST OF THE LAVA ESCARPMENT.
  2. THERE IS A FLOW INCREASE OF 0.55 AND 0.65 CFS FOR THE 10 YEAR AND 100 YEAR STORMS RESPECTIVELY AND THE 6 HOUR RUNOFF VOLUMES FOR THE 10 YEAR AND 100 YEAR STORM INCREASE BY 828 AND 1113 CUBIC FEET RESPECTIVELY. THERE ARE NO RUNOFF CONVEYANCE SYSTEMS IN THE AREA. THE SITE IS DESIGNED TO SELF CONTAIN THE STORM WATER GENERATED ONSITE BY THE 90th PERCENTILE STORM.
  3. THE SITE IS LOCATED IN A 'ZONE X' PER FEMA FIRM MAP NO. 113-G, DATED SEPTEMBER 26, 2008.
  4. TOPO SURVEY DATA SHOWN ON THIS DRAWING WAS PREPARED BY HARRIS SURVEYING, INC. DATED MARCH, 2018.

- GRADING NOTES**
1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE NM811 FOR LOCATION OF EXISTING UTILITIES. DIAL 811 TO SUBMIT REQUEST OR 505-260-1165 WITH QUESTIONS.
  2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
  3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
  4. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

**EROSION CONTROL NOTES**

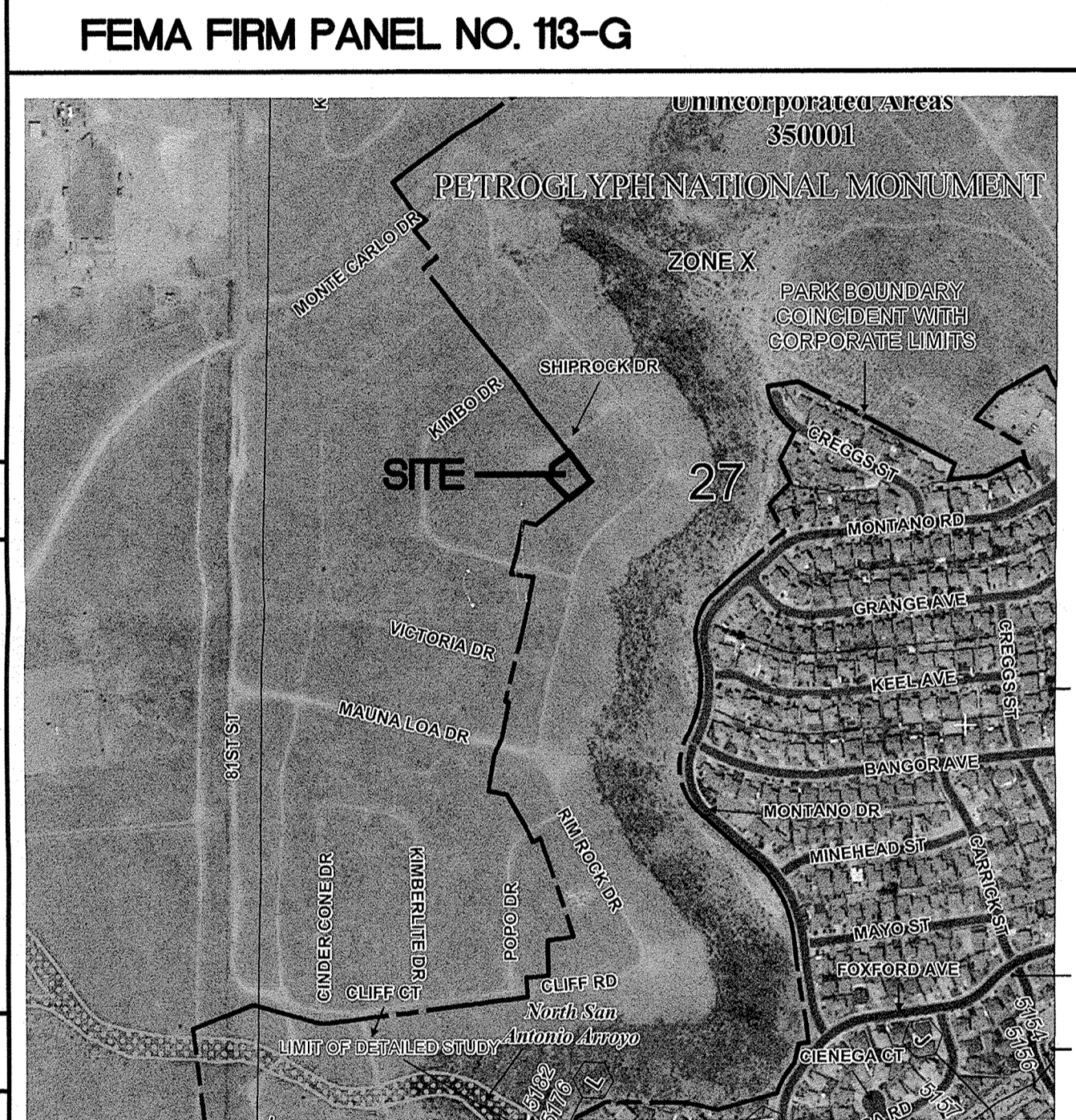
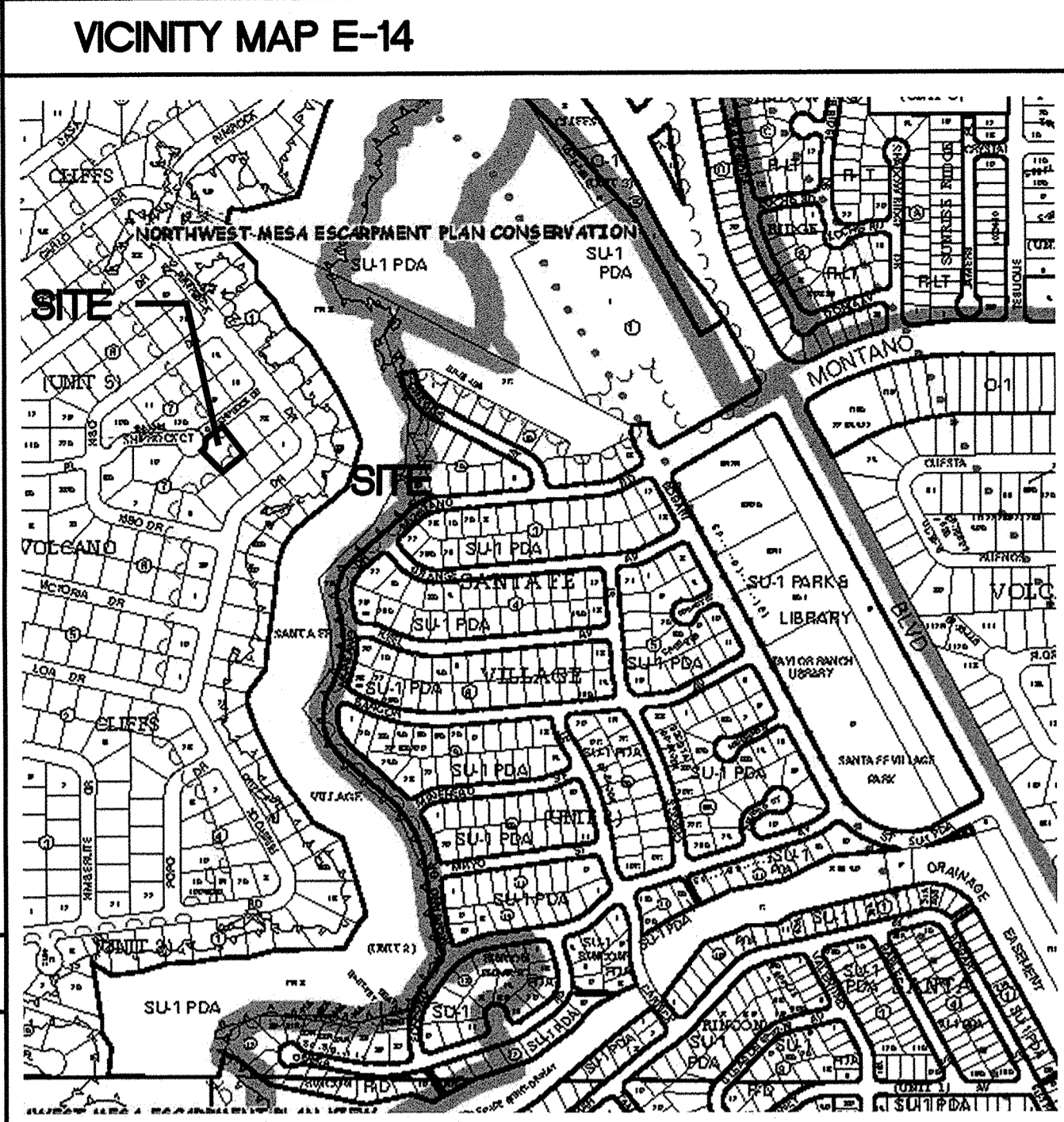
1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO PUBLIC RIGHT-OF-WAY OR PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY THE CONSTRUCTION OF TEMPORARY SOIL BERMS OR SILT FENCES AT PROPERTY LINES AND WETTING SOIL TO PREVENT IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING TRACKED DOWN THE STREET.

**LEGEND**

TBM	TEMPORARY BENCHMARK	PP	POWER POLE
FF	FINISH FLOOR	GW	GUY WIRE
FG	FINISH GRADE	PED	ELEC. OR TEL. PEDESTAL
FL	FLOWLINE	RD OR C	ROOF DRAIN OR CANALE
TA	TOP OF ASPHALT		DIRECTION OF FLOW
TC	TOP OF CONCRETE SLAB		
BC	TOP/BACK OF CURB		
TP	TOP OF EARTH PAD		
TS	TOP OF SIDEWALK		
TW	TOP OF WALL		
FH	FIRE HYDRANT		
WM	WATER METER		
WV	WATER VALVE		
MH	MANHOLE		
CB	CATCH BASIN GRATE		
GM	GAS METER		
GV	GAS VALVE		
LP	LIGHT POLE		

XX.XX EXISTING SPOT ELEVATION  
XX.XX PROPOSED SPOT ELEVATION  
-XX.XX- RECORD SPOT ELEVATION

FEMA FLOODPLAIN BOUNDARY  
DRAINAGE BASIN BOUNDARY  
EROSION SETBACK LINE  
EXISTING CONTOUR  
PROPOSED CONTOUR



**LEGAL DESCRIPTION**

LOT 21, BLOCK 7, VOLCANO CLIFFS SUBDIVISION, UNIT 5

**PERMANENT BENCHMARK**

ACS 22-E10 ELEVATION 5318.435 (NAVD 1988)

**REVISIONS**

no.	date	remarks	by

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