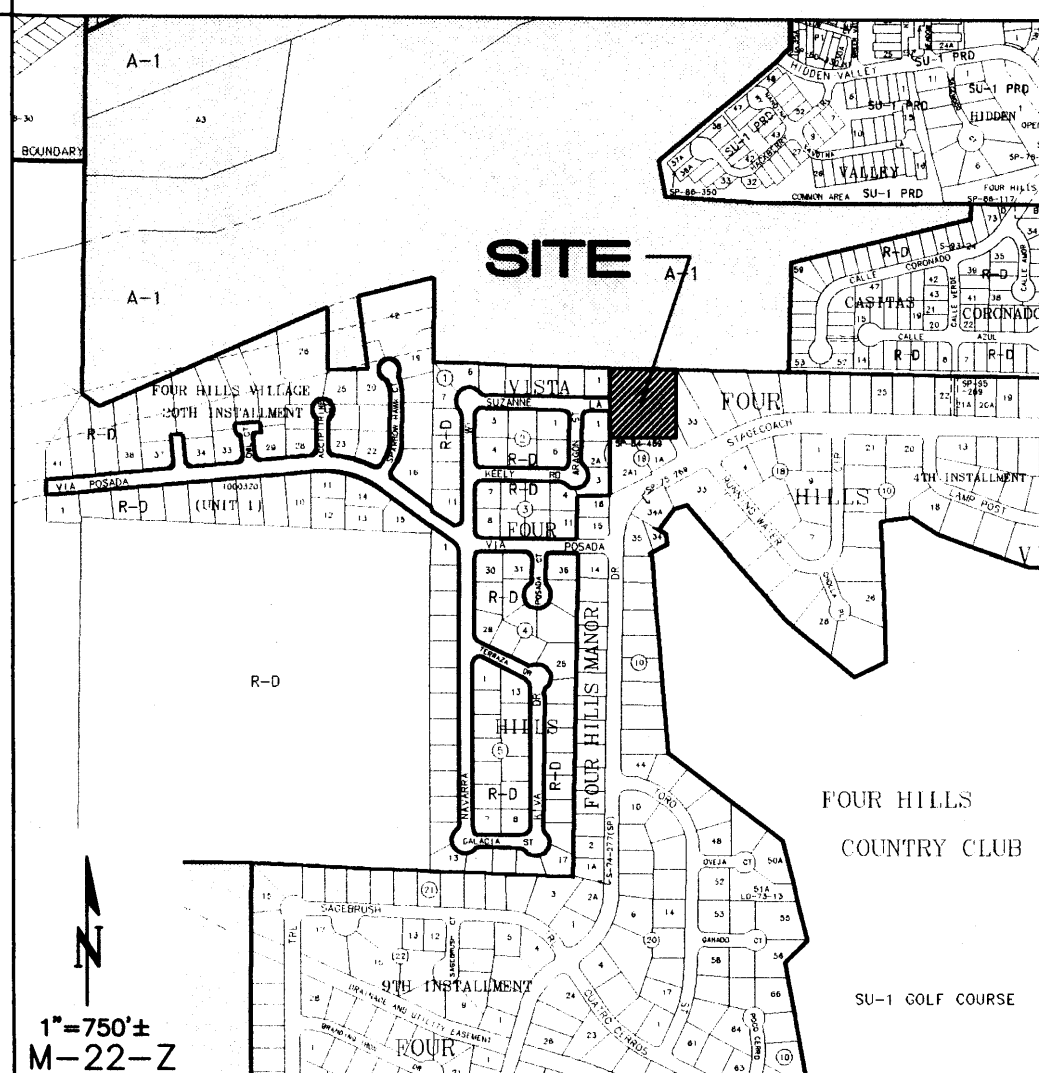


GENERAL NOTES

- A. COORDINATE WORK WITH SITE PLAN AND LANDSCAPE PLAN.
- B. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.
- C. FINAL GRADES SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF PLAYGROUND MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION.
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- F. EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. CONTRACTOR SHALL CONTACT NM-811 FOR UTILITY LINE SPOTS TWO WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES.
- G. THE ENVIRONMENTAL PROTECTION AGENCY AND THE CITY OF ALBUQUERQUE REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES (INCLUDING OTHER LAND-DISTURBING ACTIVITIES) DISTURB ONE ACRE OR MORE (BY OTHERS). A SWPPP MUST BE OBTAINED BY THE CONTRACTOR AND INCLUDED WITH THE CONTRACTOR'S SUBMITTAL FOR A ROUGH GRADING, GRADING, PAVING OR BUILDING PERMIT. THE SWPPP MUST BE IN PDF OR MS WORD FORMAT ON A CD.
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- K. ALL EROSION PROTECTION SHALL BE FRACTURED-FACE ROCK (F.F. ROCK)=6" AVG. DIA. ANGULAR FACED ROCK (COLOR TO BE SELECTED BY LANDSCAPE ARCHITECT) PLACED OVER GEOTEX 50 NON-WOVEN GEOTEXTILE FABRIC (O.E.)

VICINITY MAP



PROJECT DATA

LEGAL DESCRIPTION: FOUR HILLS WELL SITE, BERNALILLO
COUNTY, NEW MEXICO.

SITE AREA: 1.5 ACRES

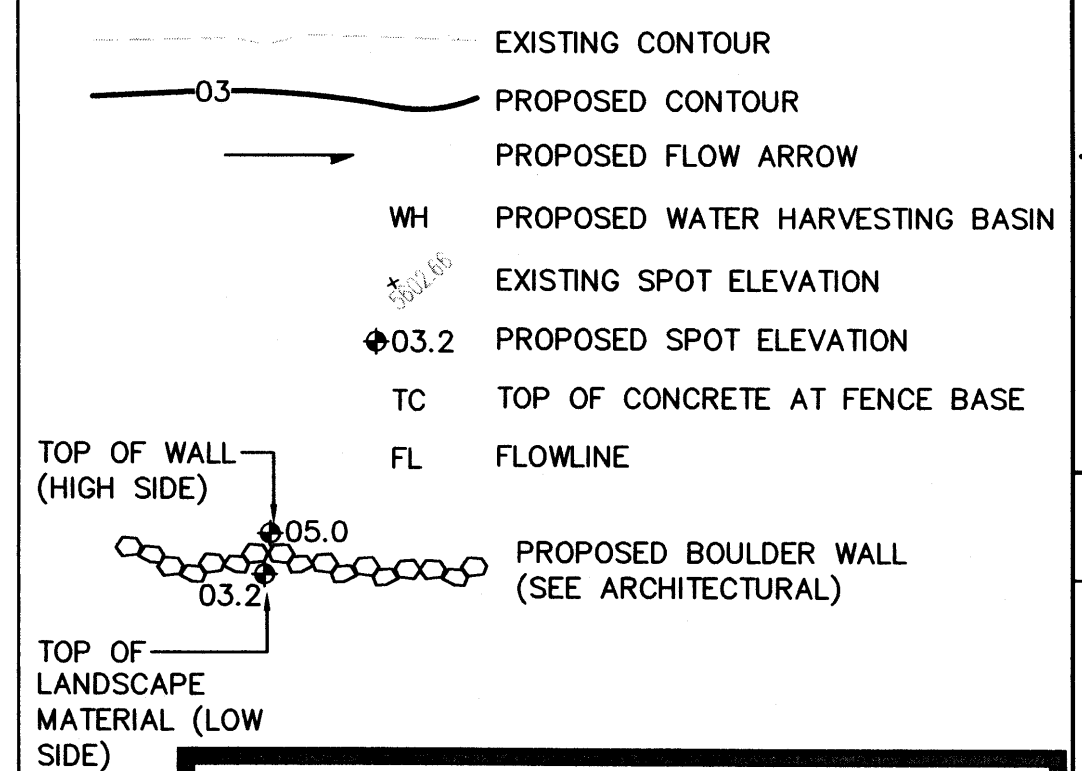
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ISAACSON & ARFMAN, P.A.
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
SURVEYOR: ROBERT LOCKMAN
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PHONE: (505.) 823-1000

BENCHMARK: COA STATION 5_M22. SEE PLAN

LEGEND



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CITY OF ALBUQUERQUE
STRATEGIC PLANNING AND DESIGN
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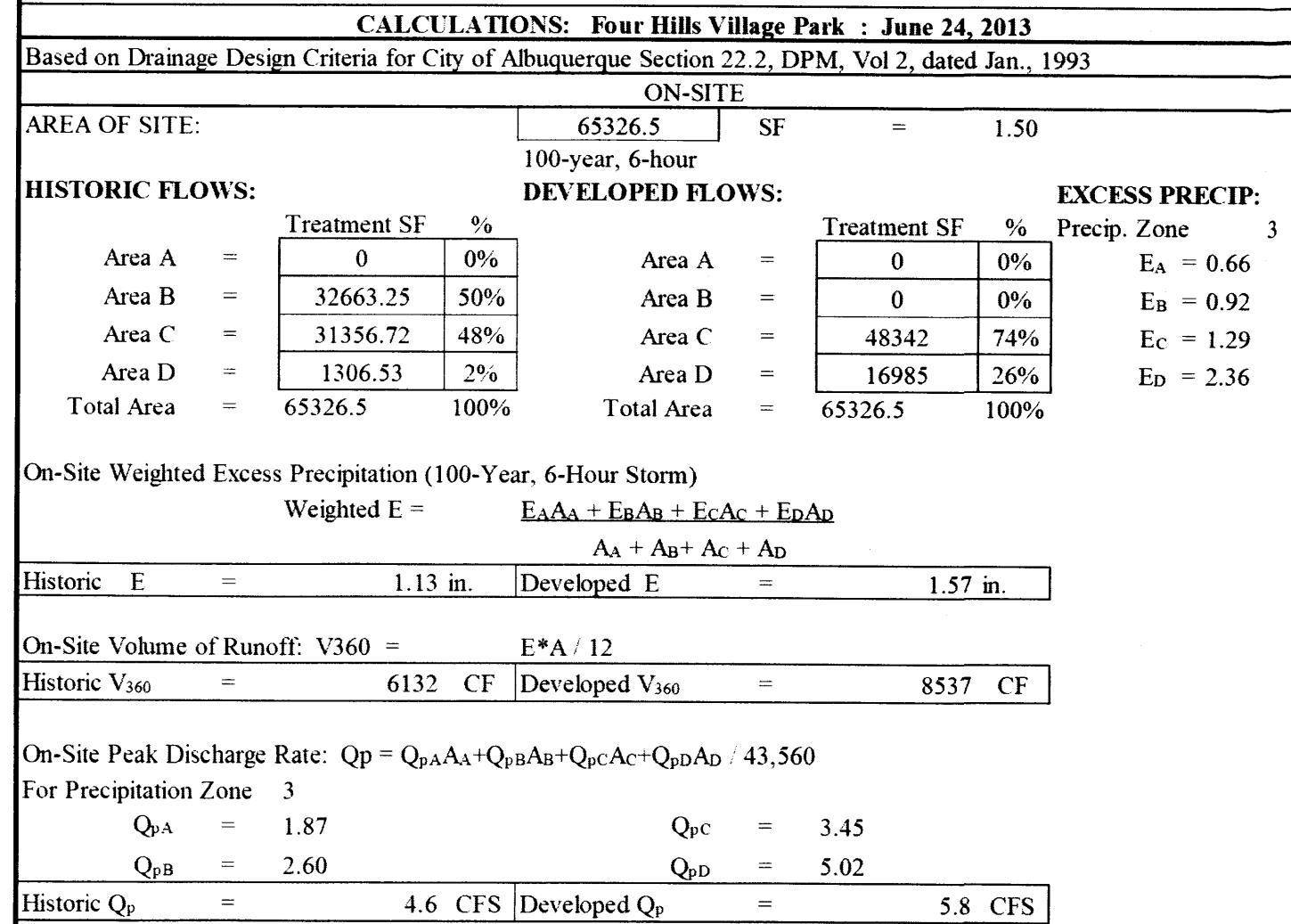
FOUR HILLS VILLAGE PARK GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. 503891	Zone Map No. M-22	Sheet 6A	Of 15	

FOUR HILLS VILLAGE PARK

PROJECT# 503891

RECORD DRAWINGS
DATE:



CALCULATIONS

THE PROJECT LIMITS REPRESENT 1.5 ACRES OF PARTIALLY DEVELOPED PROPERTY. THE PROPOSED DEVELOPMENT OF THE PROPERTY INTO A PUBLIC PARK WILL INCREASE THE STORMWATER BY 1.2 CFS (2405 CF VOLUME) DURING THE 100-YEAR, 6-HOUR STORM.

THIS INCREASE WILL BE CAPTURED WITHIN DEPRESSED WATER HARVESTING AREAS INCORPORATED INTO THE LANDSCAPING THROUGHOUT THE PARK. IN ADDITION, THE MAIN PLAY AREAS WILL SELF POND WITHIN THE WOOD MULCH TO PERCOLATE INTO THE GROUND. FLOW IN EXCESS OF THE WATER HARVESTING AND SELF-PONDING AREAS WILL CONTINUE TO PASS TO THE NORTH TO FOLLOW HISTORIC FLOWPATHS.

ON-SITE RETENTION:

THE TWO MAIN PLAY AREAS HATCHED AT LEFT TOTAL 5053 SF. THESE WILL BE GRADED AND FILLED WITH 12" DEEP WOOD FIBER PLAYGROUND MULCH.

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BASED ON THE BERNALILLO COUNTY SOIL MAPS, THE PROPERTY CONSISTS OF 100% Te (TESAJU-MILLETT STONY SANDY LOAMS), CLASSIFIED AS HYDROLOGIC SOIL GROUP 'B' DEFINED AS HAVING MODERATE INFILTRATION (MODERATELY WELL DRAINED OR WELL DRAINED SOILS) WHEN THOROUGHLY WET. PERMEABILITY OF 6.0 TO 20.0 INCHES PER HOUR.



1. 3000 PSI CONCRETE.
2. EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE EDGED WITH A 3/8" EDGING TOOL.
3. CONSTRUCTION CONTROL JOINTS AT 6' O.C. MAX.
4. 1/2" EXPANSION JOINTS 24' O.C.

SCALE: N.T.S.



1. VARY ANGULAR FACE ROCK SIZE BETWEEN 4" AND 8" DIA. (AVG.=6")
2. PLACE GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.) BENEATH ALL EROSION PROTECTION

SCALE: N.T.S.



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SCALE: N.T.S.



FOUR HILLS VILLAGE PARK



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CITY OF ALBUQUERQUE
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PARKS AND RECREATION DEPARTMENT

FOUR HILLS VILLAGE PARK GRADING AND DRAINAGE DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. 503891		Zone Map No. M-22	Sheet 6B	Of 15

RECORD DRAWINGS
DATE:

BENCHMARK
S.M22
E. 1476295.600
N. 1564235.798
Z. 5596.97

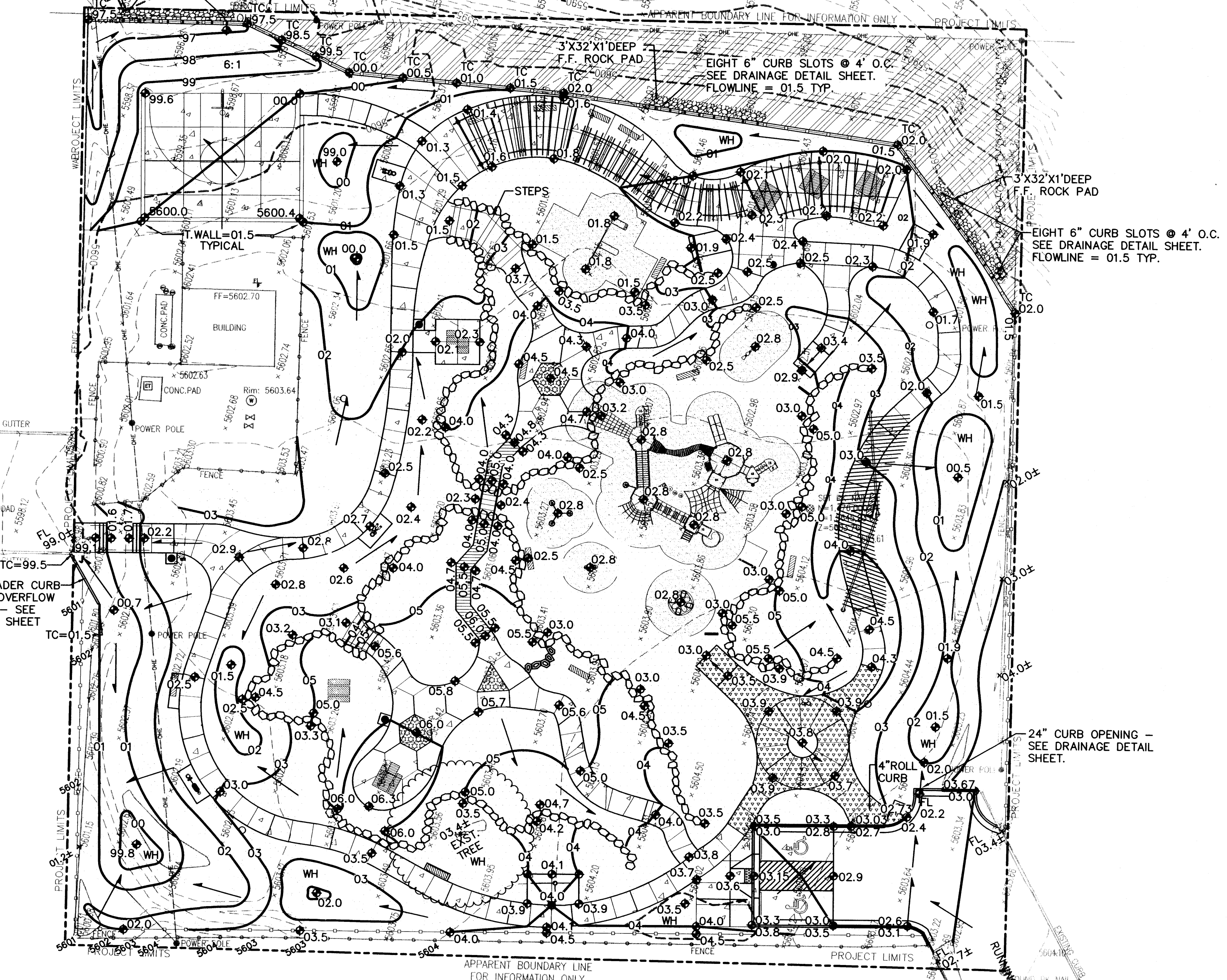
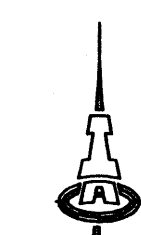
3'X32'X1'DEEP
F.F. ROCK PAD

EIGHT 6" CURB SLOTS @ 4' O.C.
SEE DRAINAGE DETAIL SHEET.
FLOWLINE = 97.0 TYP.

3'X32'X1'DEEP
F.F. ROCK PAD

EIGHT 6" CURB SLOTS @ 4' O.C.
SEE DRAINAGE DETAIL SHEET.
FLOWLINE = 01.5 TYP.

0 10 20 40 60
SCALE 1"=20'



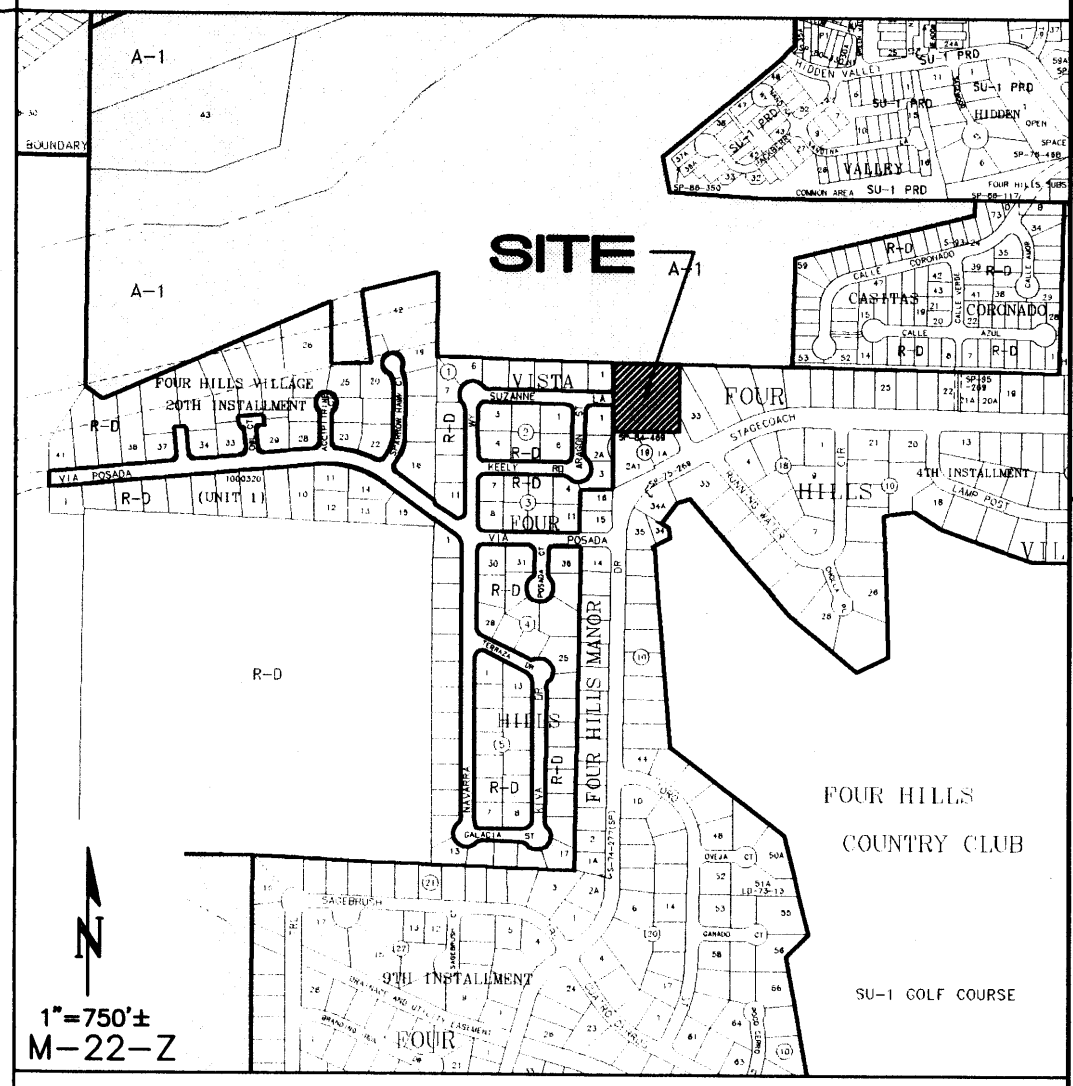
15.5 LF HEADER CURB
TO DIRECT OVERFLOW
TO STREET - SEE
DETAIL THIS SHEET

24" CURB OPENING -
SEE DRAINAGE DETAIL
SHEET.

GENERAL NOTES

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VICINITY MAP



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7500 JEFFERSON ST NE, ABO. NM 87109
PHONE: (505.) 823-1000

BENCHMARK: COA STATION 5_M22. SEE PLAN

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED FLOW ARROW
- WH PROPOSED WATER HARVESTING BASIN
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- TC TOP OF CONCRETE AT FENCE BASE
- FL FLOWLINE
- TOP OF WALL (HIGH SIDE)
- TOP OF LANDSCAPE MATERIAL (LOW SIDE)
- PROPOSED BOULDER WALL (SEE ARCHITECTURAL)

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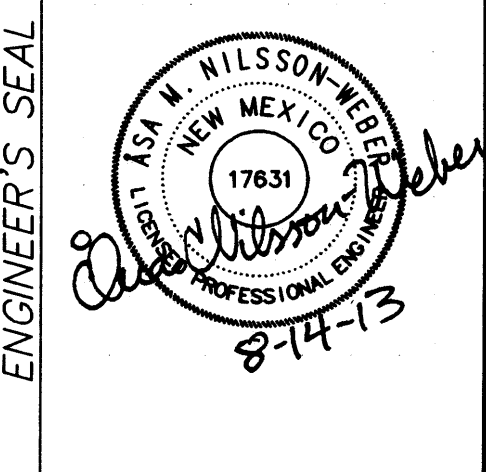
CITY OF ALBUQUERQUE
STRATEGIC PLANNING AND DESIGN
PARKS AND RECREATION DEPARTMENT

FOUR HILLS VILLAGE PARK GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of
503891	M-22	6A	15

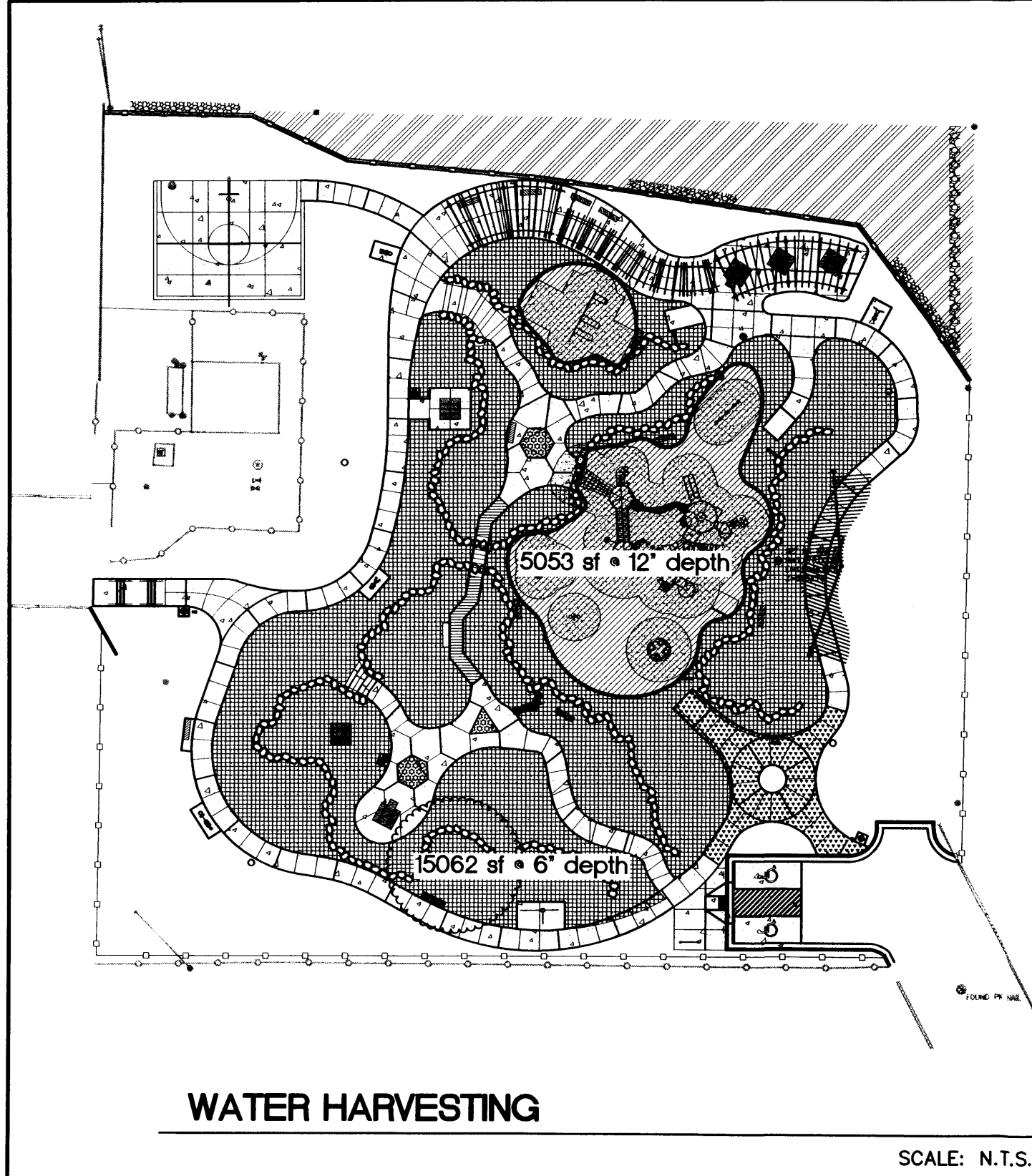
AS-BUILT INFORMATION			
CONTRACTOR	DATE	INSPECTOR'S	DATE
STAMPED BY	DATE	FIELD	DATE
VERIFICATION BY	DATE	CORRECTED BY	DATE
MICRO-FILM INFORMATION			
NO.	DATE	NO.	DATE

SURVEY INFORMATION		FIELD NOTES	
NO.	DATE	BY	DATE



REVISIONS		REMARKS	
NO.	DATE	BY	DATE

FOUR HILLS VILLAGE PARK
PROJECT# 503891
RECORD DRAWINGS
DATE:



WATER HARVESTING

SCALE: N.T.S.

CALCULATIONS: Four Hills Village Park : June 24, 2013									
Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993									
ON-SITE									
AREA OF SITE:		65326.5		SF		=		1.50	
100-year, 6-hour									
HISTORIC FLOWS:				DEVELOPED FLOWS:				EXCESS PRECIP:	
Treatment SF		%		Treatment SF		%		Precip. Zone	
Area A	=	0	0%	Area A	=	0	0%	E _A	= 0.66
Area B	=	32663.25	50%	Area B	=	0	0%	E _B	= 0.92
Area C	=	31356.72	48%	Area C	=	48342	74%	E _C	= 1.29
Area D	=	1306.53	2%	Area D	=	16985	26%	E _D	= 2.36
Total Area	=	65326.5	100%	Total Area	=	65326.5	100%		
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)									
Weighted E =		$E_A A_A + E_B A_B + E_C A_C + E_D A_D$							
		$A_A + A_B + A_C + A_D$							
Historic E	=	1.13 in.		Developed E		=		1.57 in.	
On-Site Volume of Runoff: V ₃₆₀ = E * A * 12									
Historic V ₃₆₀	=	6132 CF		Developed V ₃₆₀		=		8537 CF	
On-Site Peak Discharge Rate: Q _p = Q _{pA} A _A + Q _{pB} A _B + Q _{pC} A _C + Q _{pD} A _D / 43,560									
For Precipitation Zone 3									
Q _{pA}	=	1.87		Q _{pC}	=	3.45			
Q _{pB}	=	2.60		Q _{pD}	=	5.02			
Historic Q _p	=	4.6 CFS		Developed Q _p	=	5.8 CFS			

CALCULATIONS

DRAINAGE CONCEPT

THE PROJECT LIMITS REPRESENT 1.5 ACRES OF PARTIALLY DEVELOPED PROPERTY. THE PROPOSED DEVELOPMENT OF THE PROPERTY INTO A PUBLIC PARK WILL INCREASE THE STORMWATER BY 1.2 CFS (2405 CF VOLUME) DURING THE 100-YEAR, 6-HOUR STORM.

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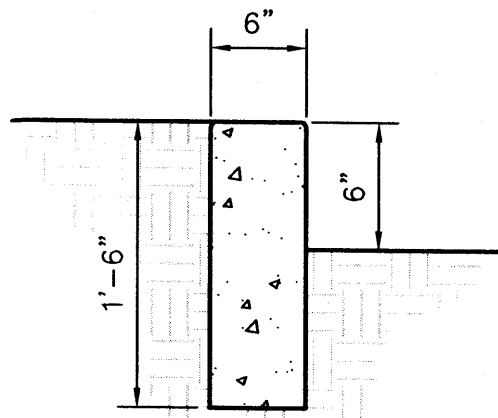
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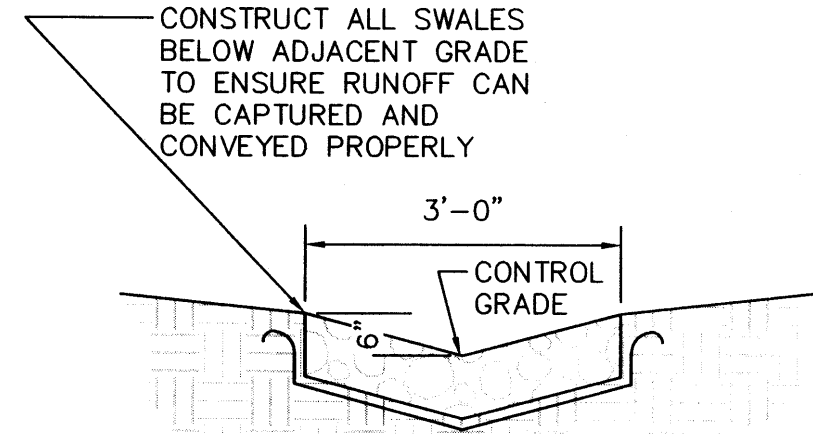


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- CONSTRUCTION CONTROL JOINTS AT 6' O.C. MAX.
- 1/2" EXPANSION JOINTS 24' O.C.

HEADER CURB

SCALE: N.T.S.

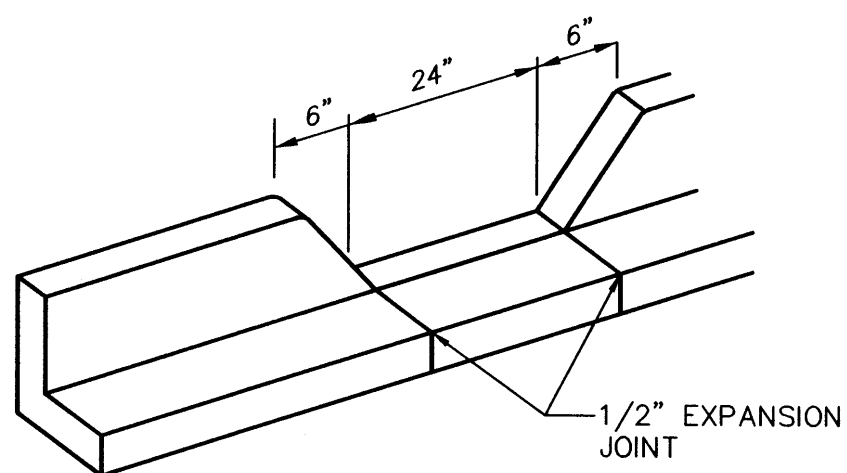


GENERAL NOTES

- VARY ANGULAR FACE ROCK SIZE BETWEEN 4" AND 8" DIA. (AVG.=6")
- PLACE GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.) BENEATH ALL EROSION PROTECTION

ROCK SWALE

SCALE: N.T.S.

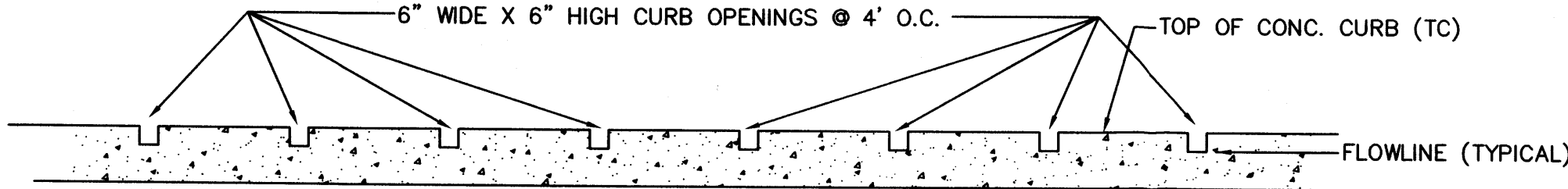


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CURB OPENING

SCALE: N.T.S.



CURB SLOTS

SCALE: N.T.S.

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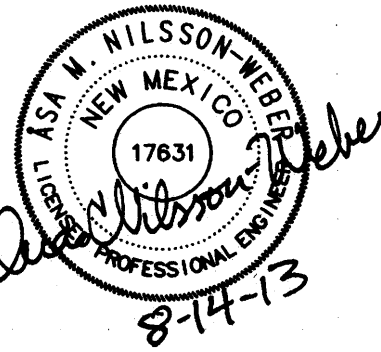


CITY OF ALBUQUERQUE
STRATEGIC PLANNING AND DESIGN
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FOUR HILLS VILLAGE PARK
GRADING AND DRAINAGE DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of	
503891	M-22	6B	15	

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

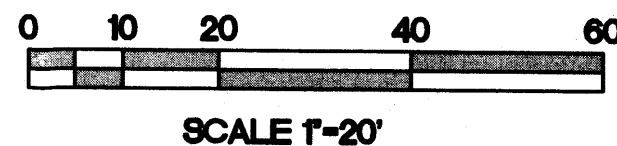


FOUR HILLS VILLAGE PARK

PROJECT# 503891

RECORD DRAWINGS
DATE:

BENCHMARK



VICINITY MAP

-

PROJECT DATA

LEGAL DESCRIPTION: FOUR HILLS WELL SITE, BERNALILLO
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SITE AREA: 1.5 ACRES

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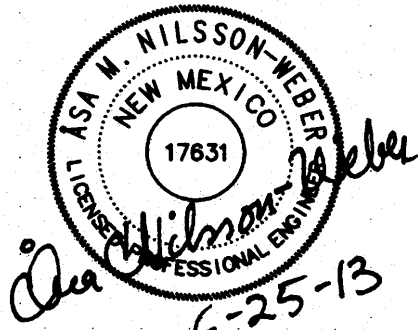
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BENCHMARK: COA STATION 5_M22. SEE PLAN

LEGEND

-
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED FLOW ARROW
- WH PROPOSED WATER HARVESTING BASIN
- EXISTING SPOT ELEVATION
- 03.2 PROPOSED SPOT ELEVATION
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- TOP OF WALL (HIGH SIDE)
- 05.0
- 03.2
- PROPOSED BOULDER WALL (SEE ARCHITECTURAL)
- TOP OF LANDSCAPE MATERIAL (LOW SIDE)
- RECEIVED JUN 28 2013



CALCULATIONS

CALCULATIONS: Four Hills Village Park : June 24, 2013

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

ON-SITE

AREA OF SITE:

65326.5

SF

=

1.50

Ac.

100-year, 6-hour

DEVELOPED FLOWS:

EXCESS PRECIP:

	Treatment SF	%		Treatment SF	%	Precip. Zone	
Area A	=	0	0%	Area A	=	0	EA = 0.66
Area B	=	32663.25	50%	Area B	=	0	EB = 0.92
Area C	=	31356.72	48%	Area C	=	48342	EC = 1.29
Area D	=	1306.53	2%	Area D	=	16985	ED = 2.36
Total Area	=	65326.5	100%	Total Area	=	65326.5	100%

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

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

Historic E	=	1.13 in.	Developed E	=	1.57 in.
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On-Site Volume of Runoff: $V_{360} = E \cdot A / 12$

Historic V_{360}	=	6132 CF	Developed V_{360}	=	8537 CF
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On-Site Peak Discharge Rate: $Q_p = Q_{pA}A_A + Q_{pB}A_B + Q_{pC}A_C + Q_{pD}A_D / 43,560$

$Q_{pA} = 1.87$ $Q_{pB} = 2.60$	$Q_{pC} = 3.45$ $Q_{pD} = 5.02$
Historic $Q_p = 4.6$ CFS	Developed $Q_p = 5.8$ CFS

GENERAL NOTES

1. 3000 PSI CONCRETE.
2. EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE EDGED WITH A 3/8" EDGING TOOL.
3. CONSTRUCTION CONTROL JOINTS AT 6' O.C. MAX.
4. 1/2" EXPANSION JOINTS 24' O.C.

HEADER CURB

SCALE: N.T.S.

GENERAL NOTES

1. VARY ANGULAR FACE ROCK SIZE BETWEEN 4" AND 8" DIA. (AVG.=6")
2. PLACE GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.) BENEATH ALL EROSION PROTECTION

ROCK SWALE

SCALE: N.T.S.

GENERAL NOTES

1. EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE SHAPED WITH A 3/8" EDGING TOOL.

CURB OPENING

SCALE: N.T.S.

FOUR HILLS VILLAGE PARK

PROJECT# 503891

RECORD DRAWINGS
DATE: