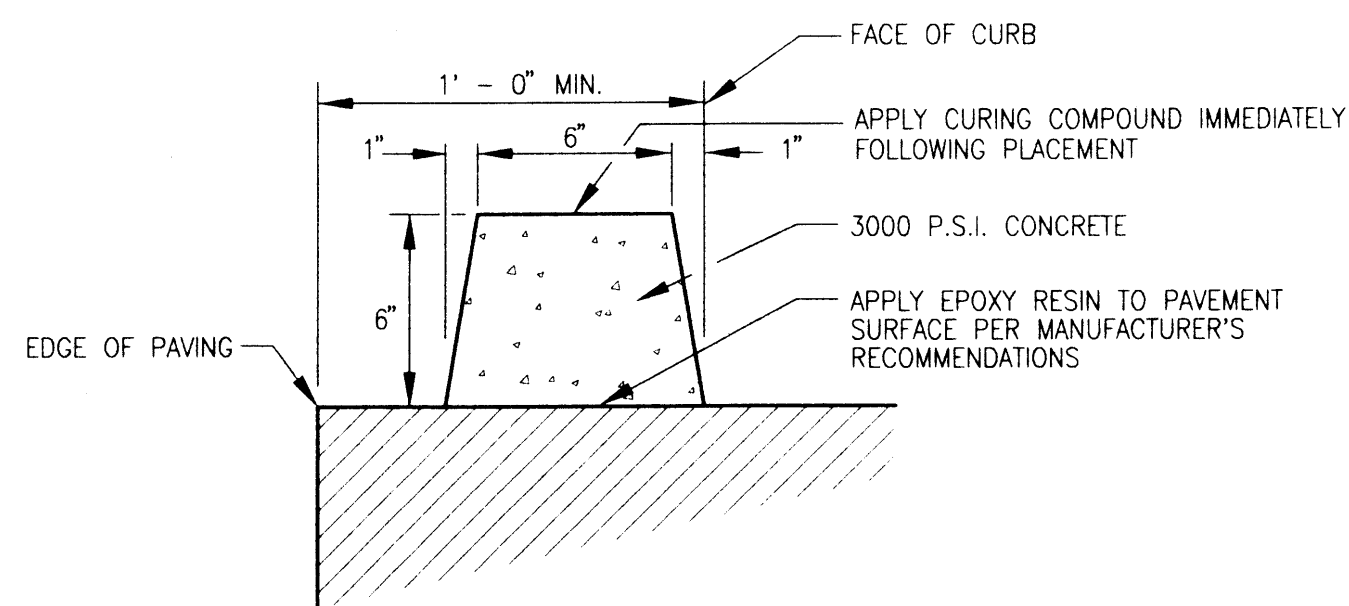
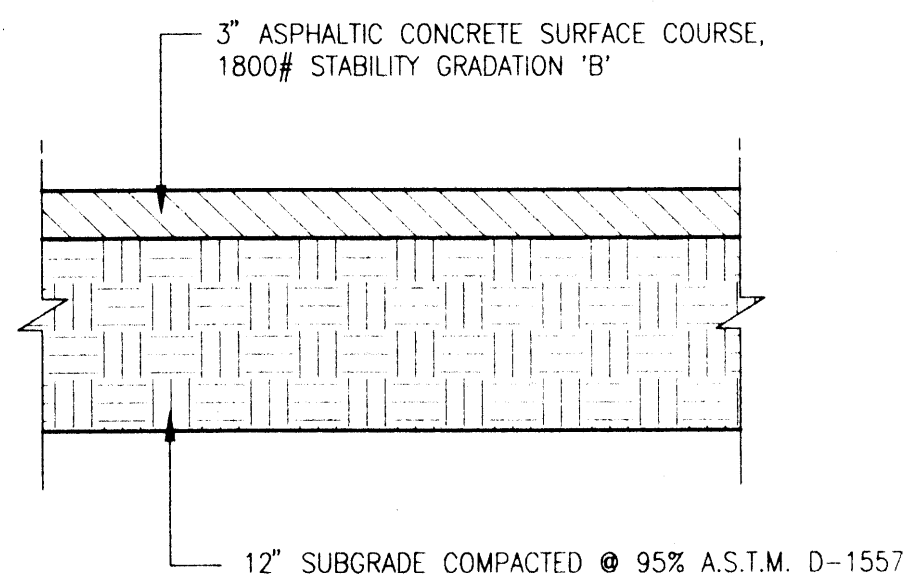


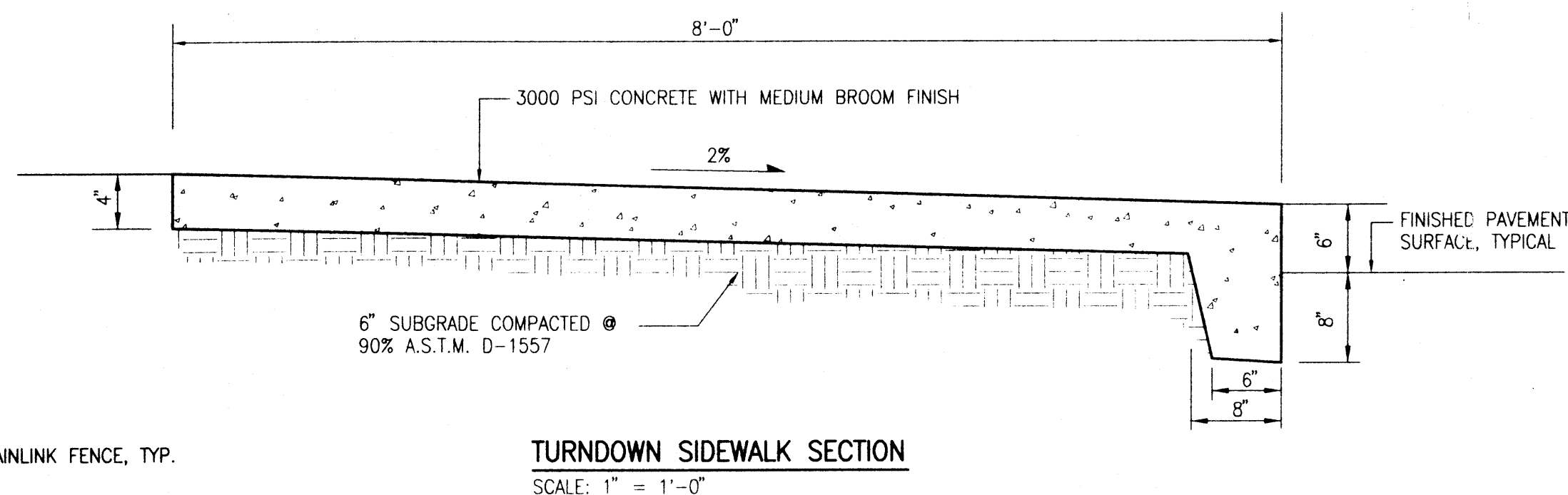
TYPICAL RUNDOWN SECTION
SCALE: 1" = 1' - 0"



TYPICAL EXTRUDED CONCRETE CURB SECTION
SCALE: 1" = 6"



TYPICAL PAVING SECTION
SCALE: 1" = 5"



TURNDOWN SIDEWALK SECTION
SCALE: 1" = 1' - 0"

PROJECT BENCHMARK

STATION IS A STANDARD ACS ALUMINUM CAP STAMPED "9-C18 1985". STATION IS RIVETED TO A 2 1/2" ALUMINUM TUBE WITH THE CAP PROJECTING .05 FEET ABOVE THE GROUND. THE STATION IS LOCATED NEAR THE INTERSECTION OF SAN PEDRO DR. N.E. AND WILSHIRE AVE. N.E. APPROXIMATELY 29 FEET WEST OF THE CENTERLINE OF SAN PEDRO AVE. AND APPROXIMATELY 30 FEET SOUTH OF THE CENTERLINE OF WILSHIRE AVE. N.E. ELEVATION = 5229.79 FEET (M.S.L.D.)

T.B.M.

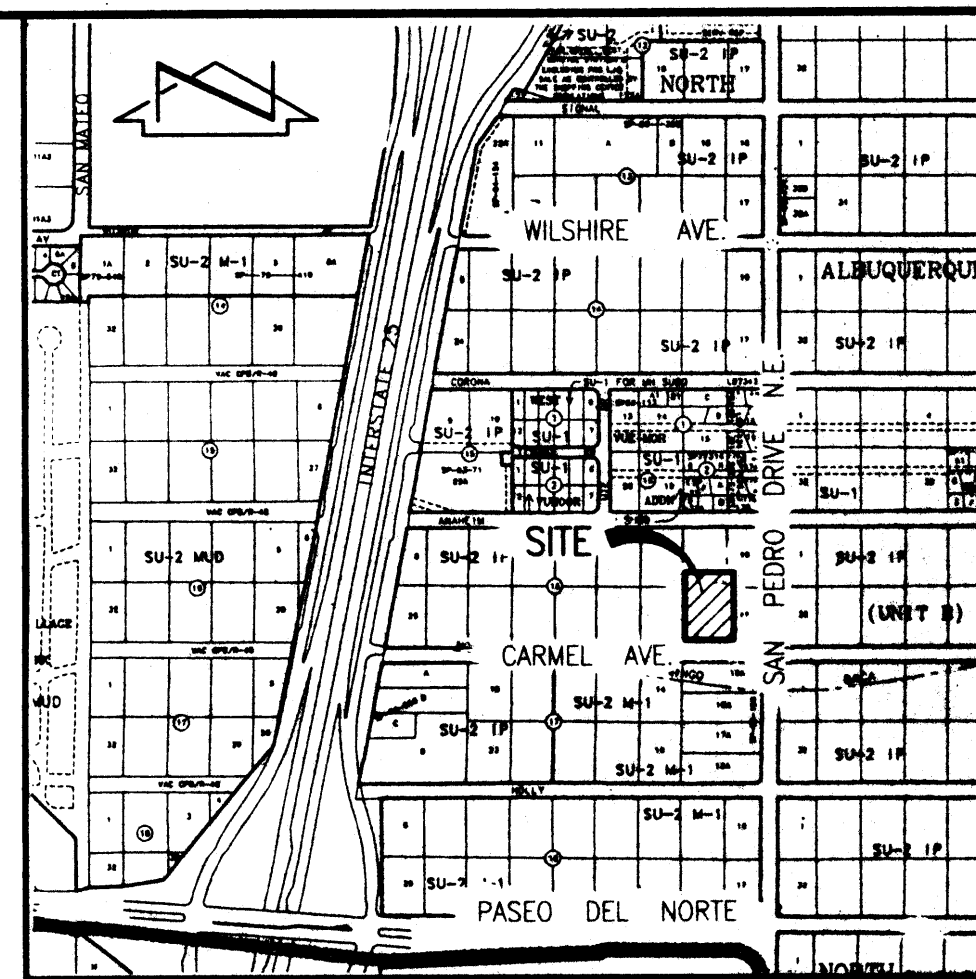
TOP OF REBAR AS SHOWN ON THE DRAWING
ELEVATION = 5233.73 FEET (M.S.L.D.)

LEGAL DESCRIPTION

LOT 18, BLOCK 16, TRACT A, UNIT B, NORTH ALBUQUERQUE ACRES

NOTE:

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. A TOPOGRAPHIC SURVEY WAS PERFORMED BY JEFF MORTENSEN AND ASSOCIATES ON FEB. 26, 1998. BOUNDARY INFORMATION TAKEN FROM SURVEY INSPECTION REPORT BY DOUG SMITH SURVEYING, INC. JANUARY 29, 1998.



SITE INFORMATION

1. SITE AREA: 0.8864 AC +/- (GROSS)
2. ZONING: SU-2 IP
3. PARKING ANALYSIS
 - A. REQUIRED: 3,320 SF RETAIL AND SERVICE (NET)
3,320/200 = 17 SPACES
 - B. PROVIDED:

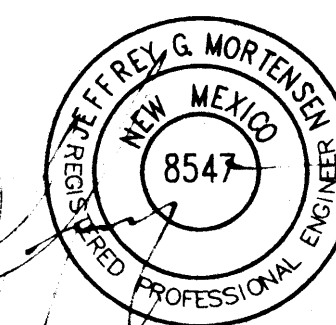
REGULAR SPACES	16
DISABLED PARKING SPACES	2
GARAGE BAYS	4
TOTAL PROVIDED:	22 SPACES

KEYED NOTES:

1. CONSTRUCT NEW ASPHALTIC CONCRETE PAVEMENT PER TYPICAL SECTION
2. CONSTRUCT EXTRUDED CONCRETE CURB PER TYPICAL SECTION
3. CONSTRUCT 2" CONCRETE RUNDOWN PER TYPICAL SECTION
4. CONSTRUCT 24" SIDEWALK CULVERT PER C.O.A. STD. DRAWING 2236
5. PAINT 4" WIDE WHITE PARKING LOT STRIPES (TRAFFIC PAINT), TYPICAL
6. NEATLY SAWCUT, REMOVE & DISPOSE OF EXISTING SIDEWALK, CURB AND GUTTER, AND 1'-0" MINIMUM ASPHALTIC CONCRETE PAVEMENT. CONSTRUCT 26" DRIVEPAD PER C.O.A. STD. DRAWING 2425 AND REPLACE PAVEMENT PER C.O.A. STD. DRAWING 2465.
7. PAINT ONE ADA APPROVED INTERNATIONAL SYMBOL OF ACCESSIBILITY IN EACH DESIGNATED PARKING SPACE.
8. INSTALL ONE ADA APPROVED HANDICAP PARKING SIGN WITH VAN ACCESSIBLE PLACARD.
9. INSTALL ONE ADA APPROVED HANDICAP PARKING SIGN
10. CONSTRUCT HANDICAP ACCESS RAMPS AS SHOWN. REFER TO GRADING PLAN FOR GRADES.
11. CONSTRUCT TURNDOWN SIDEWALK PER TYPICAL SECTION.
12. CONSTRUCT 12' X 9'-6" CONCRETE DUMPSTER SLAB; 4" THICK 3,000 PSI 3/4" PORTLAND CEMENT CONCRETE WITH 6 X 6 - 10/10 WWM. GUARD PIPES SHALL BE 4" O.D. STEEL PIPES CONCRETE FILLED AND EMBEDDED 24" INTO 12" DIAMETER CONCRETE BLOCKING.
13. CONSTRUCT 12' X 8' DUMPSTER APRON; 6" THICK 3,000 PSI 3/4" PORTLAND CEMENT CONCRETE W/ 6 X 6 - 10/10 WWM. INSTALL 1/2" EXPANSION JOINT BETWEEN APRON AND SLAB.
14. CONSTRUCT 6' HIGH CMU DUMPSTER ENCLOSURE.

INDEX OF DRAWINGS

SHEET	DESCRIPTION
1	SITE PLAN
2	GRADING AND DRAINAGE PLAN
3	LANDSCAPE PLAN

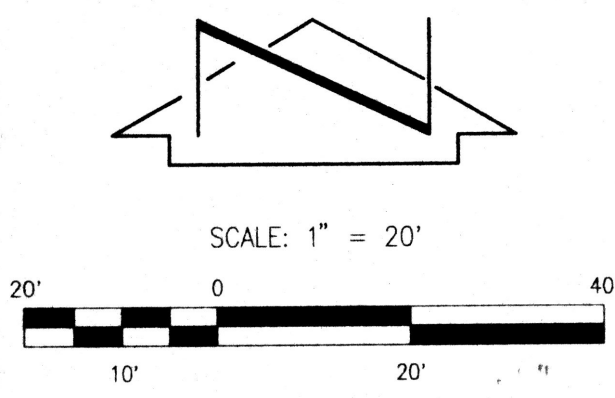


JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250

SITE PLAN MARK KING PROPERTY

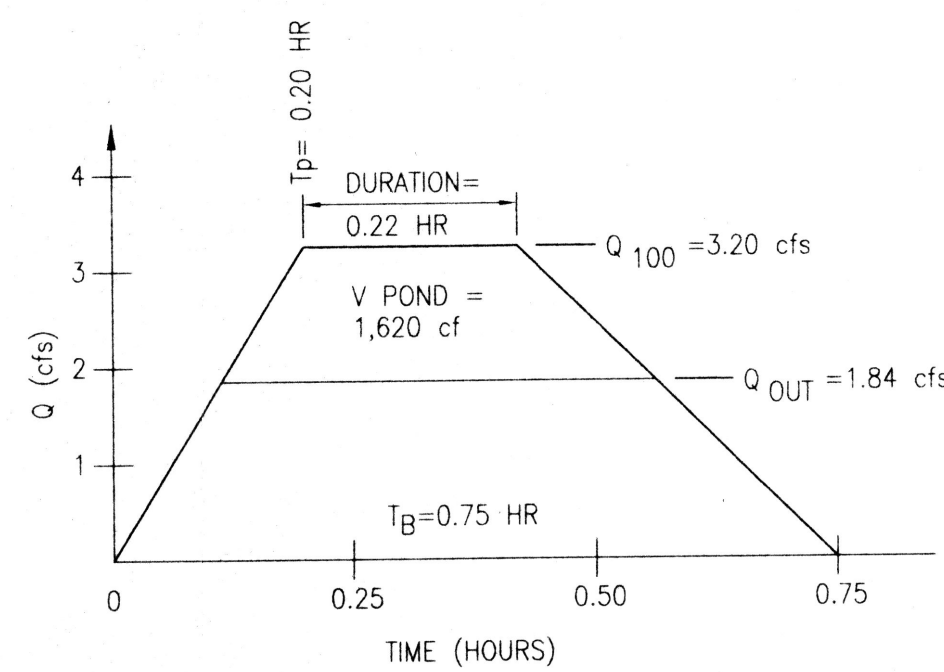
DESIGNED BY	NO.	DATE	BY	REVISIONS	JOB NO.
J.G.M.					980113
DRAWN BY					DATE
S.G.H./D.L.M.					04-1998
APPROVED BY					SHEET
J.G.M.					1 OF 3

C18-D49



CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 (ALBUQUERQUE AREA), 1-800-321-ALERT(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.
 - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
 - ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
 - ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
 - IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE. THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE 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. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
 - AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
 - BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
 - MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
 - THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.
 - ALL ROOF DRAINAGE SHALL BE DIRECTED TO BASIN B, EAST OF THE BUILDING. ROOF DRAINAGE SHALL NOT DISCHARGE TO BASIN A, WEST OF THE BUILDING.
- EROSION CONTROL MEASURES:
- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
 - THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
 - THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.



BASIN B HYDROGRAPH
(N.T.S.)

PROJECT BENCHMARK

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T.B.M.

TOP OF REBAR AS SHOWN ON THE DRAWING
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LOT 18, BLOCK 16, TRACT A, UNIT B, NORTH ALBUQUERQUE ACRES

NOTE:

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CALCULATIONS

I. SITE CALCULATIONS

SITE CHARACTERISTICS

1. PRECIPITATION ZONE =	3	
2. $P_{6,100} = P_{360} =$	2.60 IN.	
3. TOTAL AREA (A_T) =	38,610 SF/0.89 AC	
4. EXISTING LAND TREATMENT		
TREATMENT	AREA (SF/AC)	%
A	36,910/0.85	96
C	1,700/0.04	4
5. DEVELOPED LAND TREATMENT		
TREATMENT	AREA (SF/AC)	%
A. Basin A		
B	1,770/0.04	20
D	6,880/0.16	80
B. Basin B		
B	4,050/0.09	13
D	25,910/0.59	87

EXISTING CONDITION

- VOLUME
 $E_w = (E_{A_A} + E_{B_B} + E_{C_C} + E_{D_D})/A_T$
 $E_w = [(0.66)(0.85) + (1.29)(0.04)]/(0.89) = 0.69$ IN.
 $V_{100} = (E_w/12)A_T$
 $V_{100} = (0.69/12)(38,610) = 2,220$ CF
- PEAK DISCHARGE
 $Q_p = Q_{PA}A + Q_{PB}B + Q_{PC}C + Q_{PD}D$
 $Q_p = Q_{100} = (1.87)(0.85) + (3.45)(0.04) = 1.7$ CFS

DEVELOPED CONDITION

A. BASIN A

- VOLUME
 $E_w = (E_{A_A} + E_{B_B} + E_{C_C} + E_{D_D})/A_T$
 $E_w = [(0.92)(0.04) + (2.36)(0.16)]/(0.20) = 2.07$ IN.
 $V_{100} = (E_w/12)A_T$
 $V_{100} = (2.07/12)(8,650) = 1,490$ CF
- PEAK DISCHARGE
 $Q_p = Q_{PA}A + Q_{PB}B + Q_{PC}C + Q_{PD}D$
 $Q_p = Q_{100} = (2.60)(0.04) + (5.02)(0.16) = 0.9$ CFS

B. BASIN B

- VOLUME
 $E_w = (E_{A_A} + E_{B_B} + E_{C_C} + E_{D_D})/A_T$
 $E_w = [(0.92)(0.09) + (2.36)(0.59)]/(0.68) = 2.17$ IN.
 $V_{100} = (E_w/12)A_T$
 $V_{100} = (2.17/12)(29,960) = 5,420$ CF
- PEAK DISCHARGE
 $Q_p = Q_{PA}A + Q_{PB}B + Q_{PC}C + Q_{PD}D$
 $Q_p = Q_{100} = (2.60)(0.09) + (5.02)(0.59) = 3.2$ CFS (GROSS)

II. OFFSITE BASIN CALCULATIONS

- AREA = 0.27 AC; LAND TREATMENT = A
 $Q_{100} = (1.87)(0.27) = 0.5$ CFS

III. ALLOWABLE DISCHARGE CALCULATIONS

TOTAL AREA = 12.1 AC.
STREET AREA (TREATMENT D) = 1.2 AC.
REMAINING AREA = 12.1 - 1.2 = 10.9 AC.
TOTAL ALLOWABLE DISCHARGE = 38 CFS (S.A.D. 221)
STREET DISCHARGE = (1.2 AC.)(5.02 CFS/AC) = 6.0 CFS
REMAINING ALLOWABLE DISCHARGE = 38 - 6.0 = 32 CFS
ALLOWABLE DISCHARGE PER ACRE = 32/10.9 = 2.9 CFS/ACRE
TOTAL ALLOWABLE DISCHARGE = (0.89 AC.)(2.9 CFS/AC) = 2.6 CFS

IV. DETENTION CALCULATIONS (BASIN B)

WEIR EQUATION FOR 1'-10" WIDTH CURB OPENING:
 $Q = C L H^{3/2}$, $C = 2.6$, $L = 1.83'$, $H = 0.5'$
 $Q = 1.7$ CFS (NET)
 $Q = 1.7$ CFS (NET)
TOTAL DISCHARGE = BASIN A + BASIN B = 0.9 + 1.7 = 2.6 CFS

V. HYDROGRAPH CALCULATIONS (BASIN B)
 $T_p = (0.7)(T_c) + (1.6 - A_p/A_T)/12 = 0.20$ HR
DURATION = $(0.25)(A_p/A_T) = 0.22$ HR
 $T_b = (2.107)(E)(A_p/Q_p) - \text{DURATION} = 0.75$ HR
 $Q_{OUT} = 1.6$ CFS
 $V_{POND} = (1.5 \text{ CFS})(0.33 \text{ HRS})(3,600 \text{ SEC/HR}) = 1,780$ CF

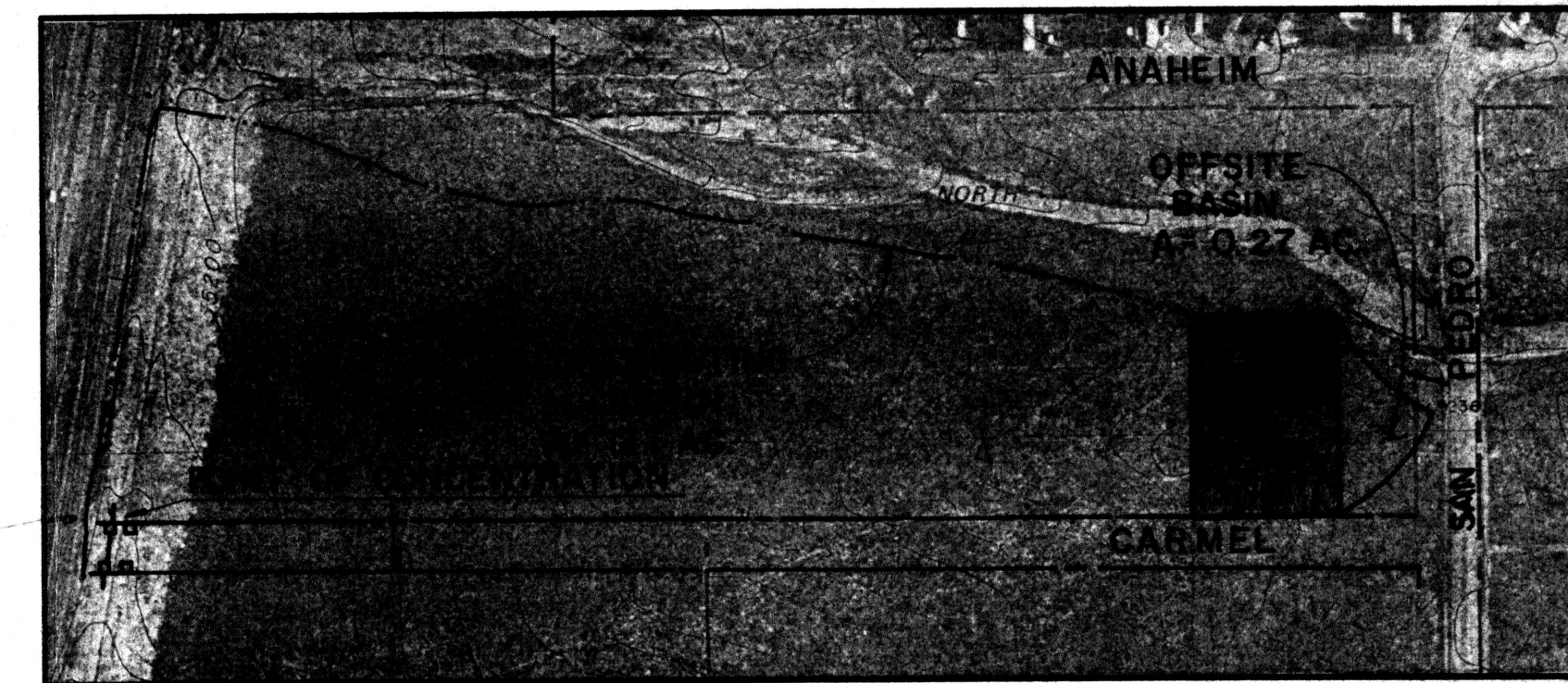
VI. POND VOLUME CALCULATIONS

- A. @ W.S.L. = 28.70; $V = (2,360 \text{ SF})(0.5) = 1,180$
B. @ W.S.L. = 27.90; $V = (1,540 \text{ SF})(0.5) = 770$ CF
C. TOTAL PONDING PROVIDED = 1,180 + 770 = 1,950 CF
> 1,780 CF = O.K.

VII. COMPARISON

- $\Delta V_{100} = 6,910 - 2,220 = 4,690$ CF (INCREASE)
- $\Delta Q_{100} = 2.6 - 0.9 = 1.0$ CFS (INCREASE)

T.B.M.
FOUND #4 REBAR (NO I.D.)
ELEVATION=5229.73 FEET (M.S.L.D.)



DRAINAGE BASIN MAP
SCALE: 1" = 200'

C-18



JEFF MORTENSEN & ASSOCIATES, INC.
6000-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, N.M. 87109
ENGINEERS SURVEYORS (505) 345-4250

GRADING AND DRAINAGE PLAN MARK KING PROPERTY

APPROVALS	NAME	DATE	DESIGNED BY	G.M.	DRAWN BY	S.G.H./J.Y.R.	APPROVED BY	J.G.M.	NO.	DATE	BY	REVISIONS	JOB NO.	980112	DATE	04-1998	SHEET	2	OF	3
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