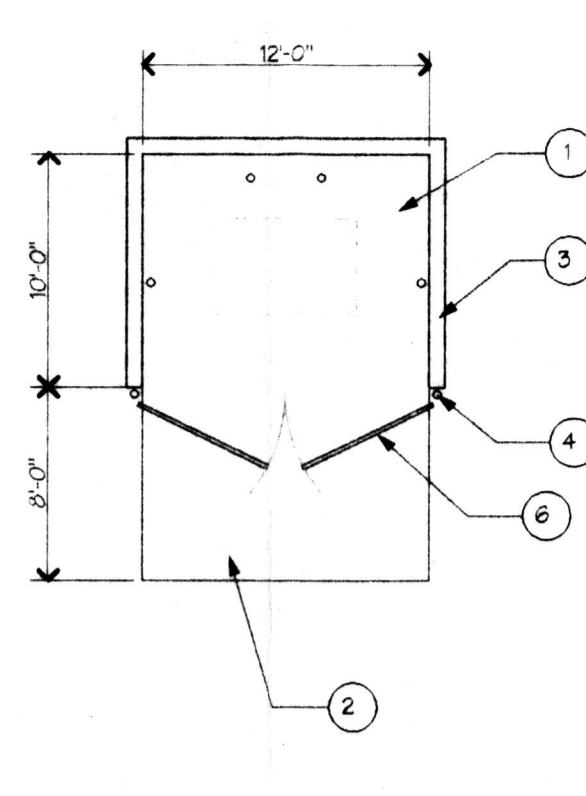
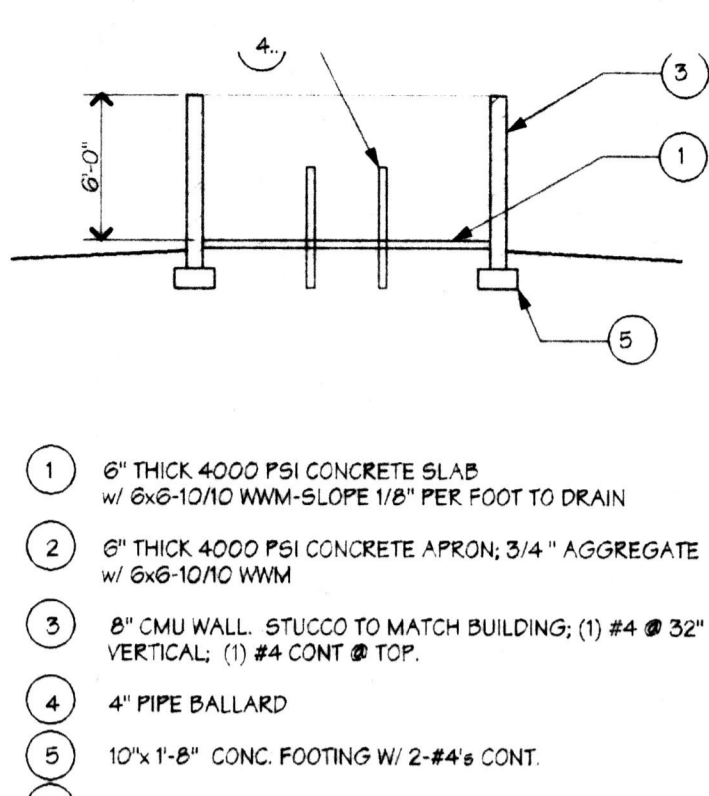


A BIKE RACK

1/4" = 1'-0"

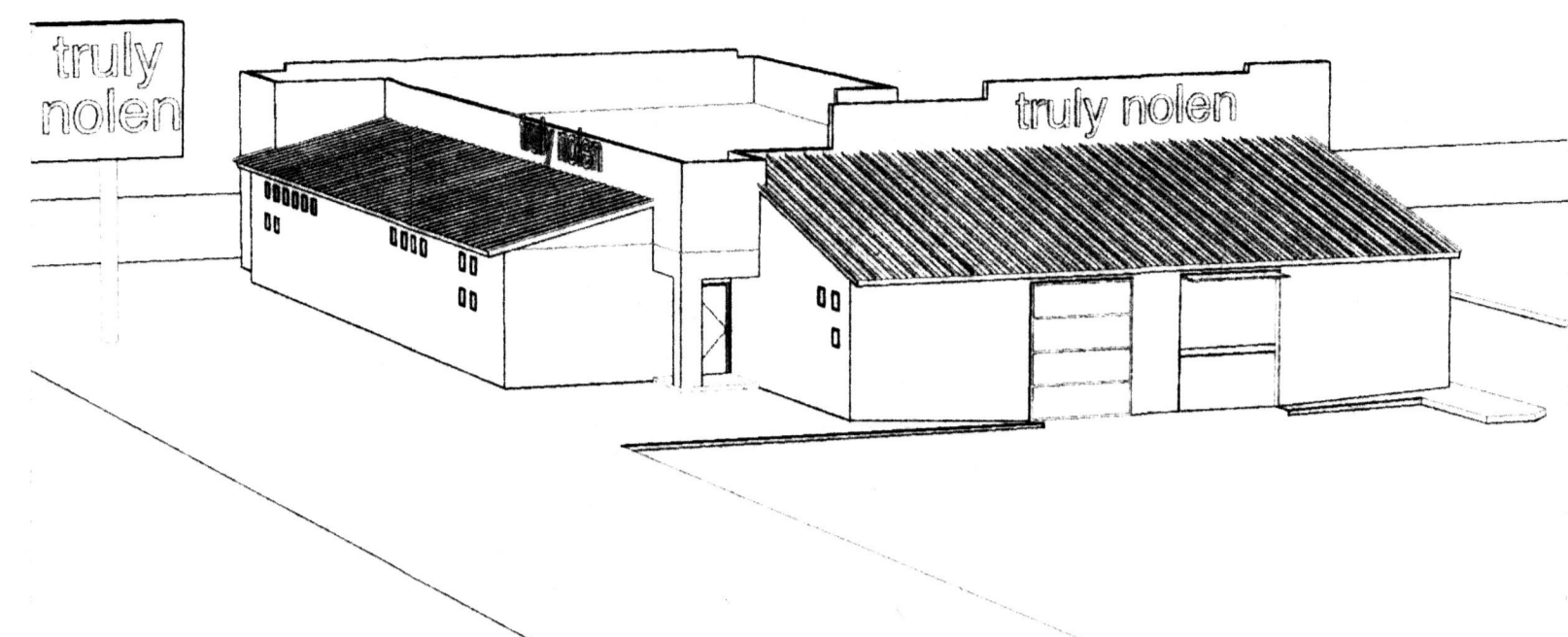


B STD TRASH ENCLOSURE



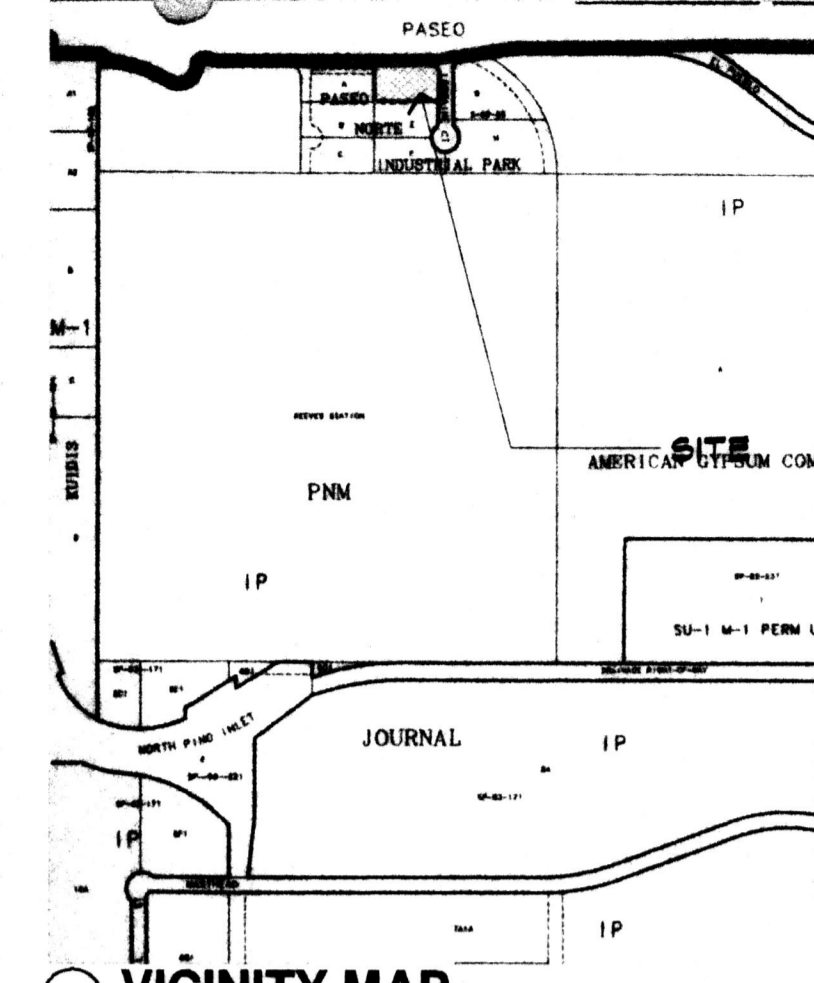
C AERIAL VIEW

1/8" = 1'-0"

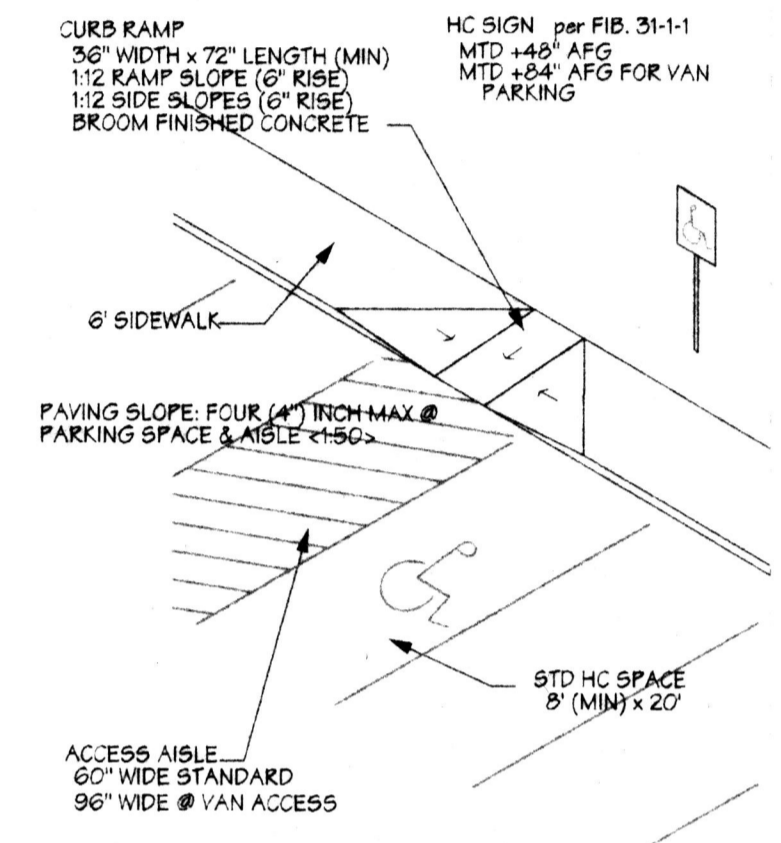
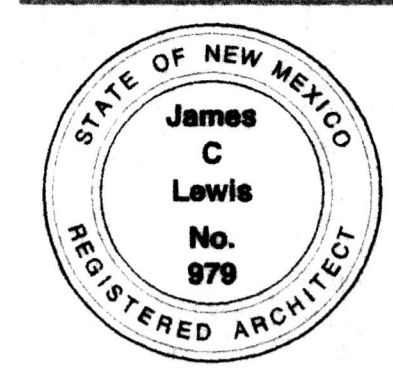


D Detail

1/4" = 1'-0"

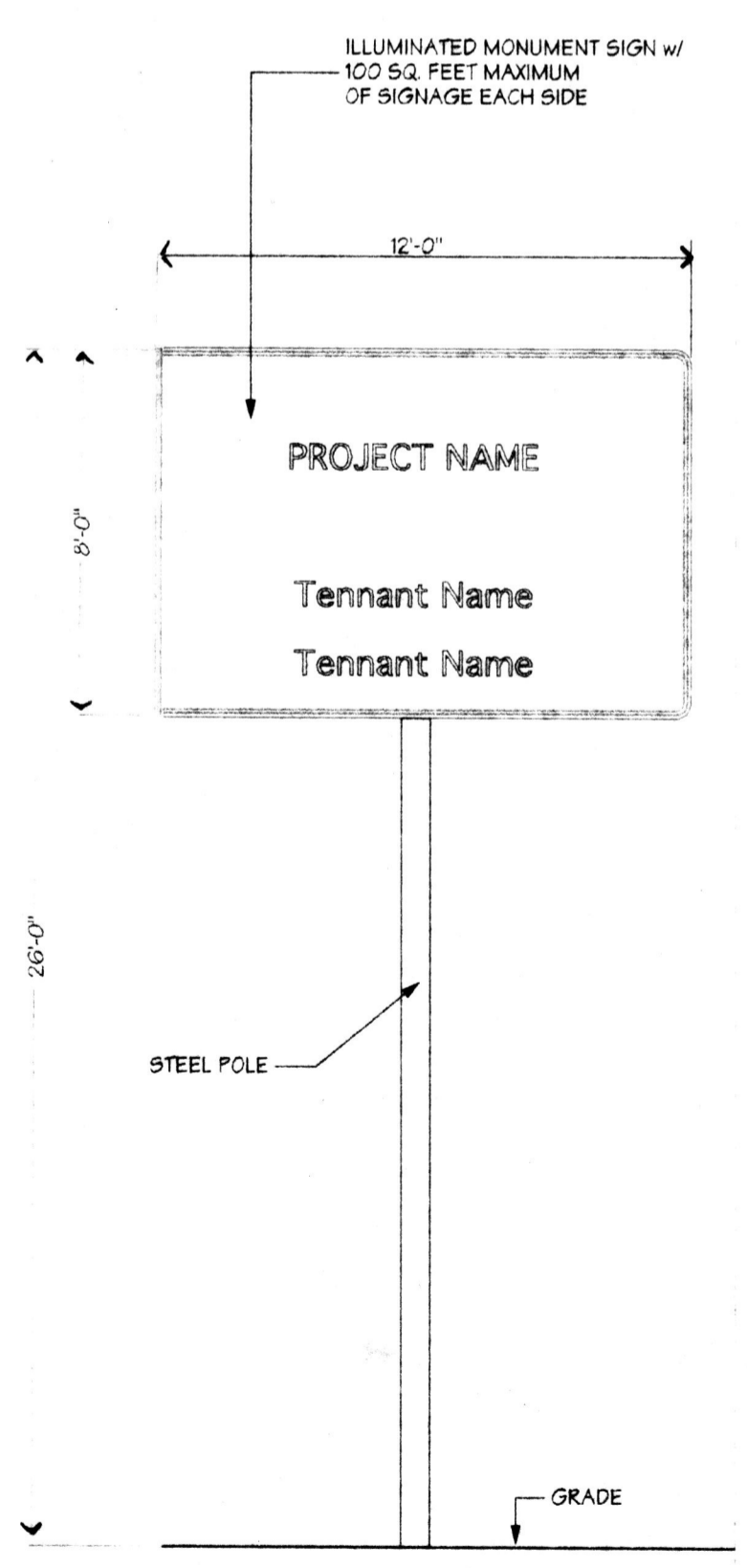


E VICINITY MAP



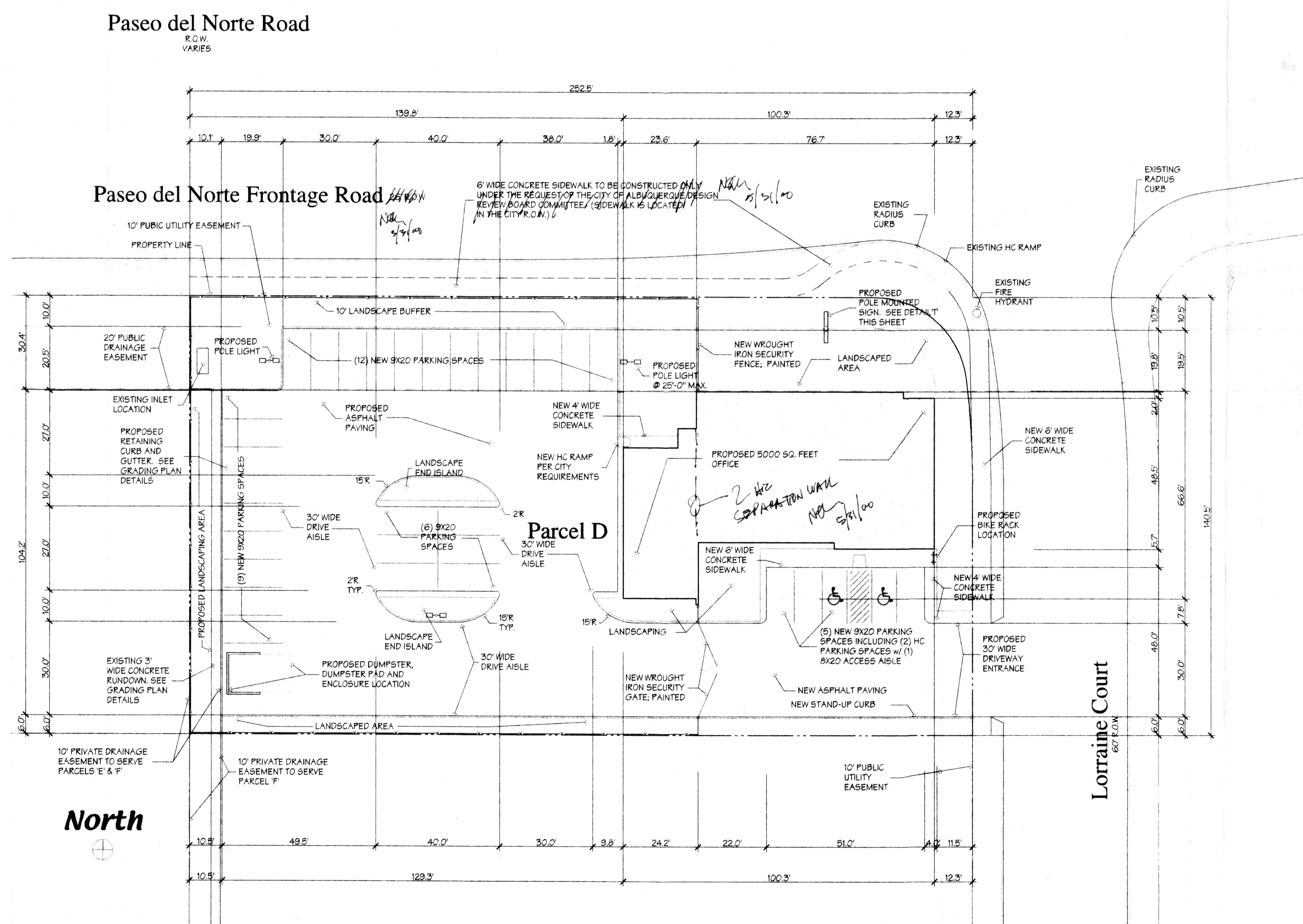
G STANDARD HC RAMP

NYS



T POLE SIGN

1/4" = 1'-0"



U SITE PLAN

SHEET INDEX

- SDP-1 SITE PLAN & DETAILS
- SDP-2 LANDSCAPE PLANS & ELEVATIONS
- SDP-3 GRADING PLANS
- SDP-4 GRADING NOTES AND DETAILS

LEGAL DESCRIPTION

PARCEL D, PASEO DEL NORTE INDUSTRIAL PARK
7921 PASEO DEL NORTE NE
ALBUQUERQUE, NEW MEXICO 87113

ZONING INFORMATION

CURRENT ZONING: IP
ZONE ATLAS PAGE: D-17-Z
CONSTRUCTION TYPE: V-N

SITE AREAS

GROSS BUILDINGS	35,042 SF	(3.52 ACRES)
NET LOT AREA	5,000 SF	
NET LOT AREA	30,042 SF	

WALKS & PLAZAS	1,617 SF
PAVED AREA	19,115 SF

LANDSCAPING

REQUIRED:	4,506 SF (15% OF NET)
PROVIDED:	9,658 SF (32% OF NET)

PARKING

REQUIRED:	1 PER 200 SF = 25 SPACES
PROVIDED:	32 SPACES (INCL 2 HC SPACES)

BICYCLES

- REQUIRED: (1) BICYCLE SPACE PER EACH (20) AUTOMOBILE SPACES = 2 SPACES
- PROVIDED: (1) BICYCLE RACK w/ (4) BICYCLE SPACES

GENERAL NOTES

- SITE LIGHTING FIXTURES: 25'-0" MAXIMUM w/ SHARP CUT-OFFS.
- ALL WALLS SHALL FOLLOW THE CITY'S WALL DESIGN GUIDELINES.
- BUILDING MOUNTED SIGNS SHALL BE LIMITED TO 15% OF THE FACADE AREA, EXCEPT THE SIGN FACING PASEO DEL NORTE WHICH IS LIMITED TO 20%. SIGNAGE SHALL BE INDIVIDUAL CHANNELIZED LETTERS, METAL LETTERS OR NEON LETTERS AT A MAXIMUM HEIGHT OF 4'-0" FEET.
- ONE POLE MOUNTED SIGNAGE PER DETAIL.
- THE ENGINEER'S CERTIFICATION REQUIRED BY THE HYDROLOGY SECTION NEEDS TO INCLUDE CERTIFICATION THAT THIS SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE TRAFFIC CIRCULATION LAY-OUT (TLC) BEFORE C.O. IS RELEASED.

NOTES

SITE DEVELOPMENT PLAN FOR BUILDING PERMIT
CASE NUMBER: 00450-00000-00627
PROJECT NUMBER: 1000514

John De 5-31-00
Traffic Engineer, TRANSPORTATION DEPT
James 5/31/00
Roger & Jean 5/31/00
UTILITIES DEVELOPMENT DEPT
Ann Colangelo 5-31-00
City Engineer, ENGINEERING DIV/AMFCA

APPROVAL AND CONDITIONAL ACCEPTANCE: As specified by the Development Process Manual.
John S 6/23/00
City Engineer, PLANNING DEPARTMENT

SIGNATURE BLOCK

Schlegel Lewis Architects
1620 Central Ave SE
Albuquerque NM 87106
(505) 242-3529
FAX (505) 242-6701

Truly Nolen
7921 Lorraine Court NE
Albuquerque New Mexico

ISSUE DATE: 09 MAY 00
REVISIONS: 31 MAY 00

SITE PLAN
SHEET SDP-1 OF 4

PROJ 1000514

PLANT LEGEND

Qty.	Symbol	Scientific Name Common Name	Size	Initial Size/Spacing Ultimate Size	Water Use
11	○	Fraxinus velutina 'Modesto' Modesto Ash (Female)	2" B&B	16' ht. x 6' spr. 40' ht. x 36' spr.	Medium
10	⊗	Koelerutera paniculata Golden-rain Tree	2" B&B	16' ht. x 6' spr. 25' ht. x 20' spr.	Medium
9	○	Fyrus calleryana 'Bradford' Bradford Pear	2" B&B	16' ht. x 6' spr. 30' ht. x 25' spr.	Medium
21	○	Artemisia 'Powis Castle' Powis Castle Sage	1-Gal	3' o.c. 3' ht. x 4' spr.	Low
16	○	Baccharis 'Stam' Thompson Baccharis	5-Gal	4' o.c. 2' ht. x 4' spr.	Low
19	⊗	Caryopteris clandonensis Blue Mist	5-Gal	4' o.c. 3' ht. x 4' spr.	Medium
23	⊗	Cotoneaster apiculatus Cranberry cotoneaster	5-Gal	4' o.c. 3' ht. x 4' spr.	Medium
26	○	Lonicera japonica 'Halliana' Hall's Honeysuckle	1-Gal	4' o.c. 2' ht. x 5' spr.	Medium
24	⊗	Miscanthus sinensis Maiden Grass	1-Gal	4' o.c. 5' ht. x 4' spr.	Medium
32	⊗	Muhlenbergia capillaris 'Regal Mist' Muhly Grass	5-Gal	3' o.c. 3' ht. x 3' spr.	Medium
25	○	Perovskia atriplicifolia Russian Sage	1-Gal	5' o.c. 4' ht. x 5' spr.	Medium
22	○	Potentilla fruticosa Shrubby Cinquefoil	1-Gal	2.5' o.c. 2.5' ht. x 2.5' spr.	Medium
16	⊕	Rhus trilobata 'Autumn Amber' 'Autumn Amber' Sumac	5-Gal	4' o.c. 2' ht. x 5' spr.	Medium
27	○	Salvia argaei Cherry Sage	1-Gal	3' o.c. 3' ht. x 3' spr.	Medium
15	⊗	Teucrium chamaedrys 'Prostratum'- Creeping Germander	1-Gal	2' o.c. 6' ht. x 2' spr.	Medium

ROCK MULCH
Santa Fe Brown Crusher Fines, 2"-4" Santa Ana Tan Cobbles (8" Depth)

GENERAL PLANT PALETTE
This list is provided as a guide only. Additional plant materials included in the Albuquerque Plant List are acceptable subject to the Water Conservation Landscaping and Water Waste Ordinance. High water use plant material to be no more than 20% of the landscape area.

THE DESIGN AND PROVISION OF LANDSCAPE FEATURES WITHIN THIS PROJECT WILL BE IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE ZONING CODE, STREET TREE ORDINANCE, POLLEN ORDINANCE, AND THE WATER CONSERVATION LANDSCAPING AND WATER WASTE ORDINANCE. IN GENERAL, WATER CONSERVATIVE, ENVIRONMENTALLY SOUND LANDSCAPE PRINCIPLES WILL BE FOLLOWED IN DESIGN AND INSTALLATION.

STREET TREES REQUIRED UNDER THE CITY OF ALBUQUERQUE STREET TREE ORDINANCE ARE AS FOLLOWS:

REQUIRED: 11 PROVIDED: 11

TREES WITHIN THE PARKING AREA ARE REQUIRED AT A RATE OF (1) TREE PER (8) PARKING SPACES.

REQUIRED: 4 PROVIDED: 19

IRRIGATION SYSTEM STANDARDS OUTLINED IN THE WATER CONSERVATION LANDSCAPING AND WATER WASTE ORDINANCE SHALL BE STRICTLY ADHERED TO. A FULLY AUTOMATED DRIP IRRIGATION SYSTEM WILL BE UTILIZED TO IRRIGATE TREES, SHRUB, AND GROUNDCOVER PLANTING AREAS.

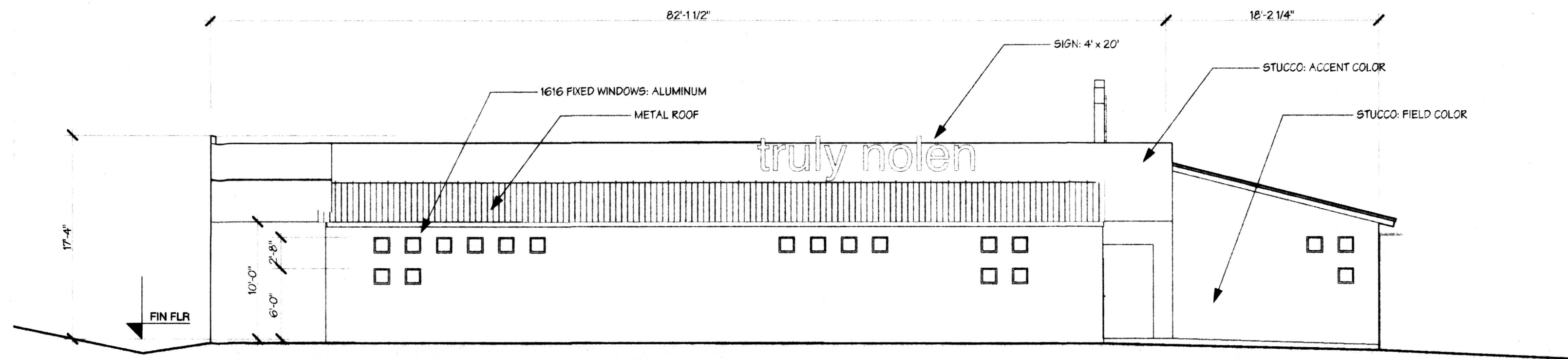
MAINTENANCE OF THE LANDSCAPING AND IRRIGATION SYSTEM, INCLUDING THAT WITHIN THE ADJACENT PUBLIC RIGHT-OF-WAY, SHALL BE THE RESPONSIBILITY OF THE OWNER.

ZONING CODE LANDSCAPE REQUIREMENTS

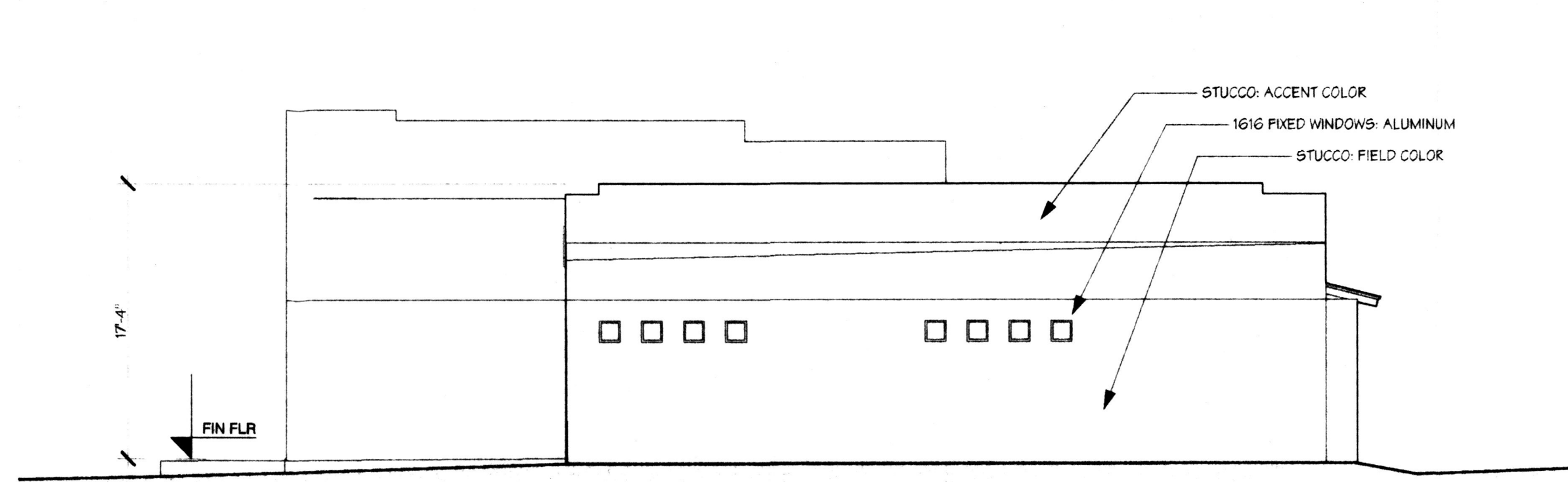
TOTAL SITE AREA 35,043 SF
BUILDING FOOTPRINT / SERVICE AREAS 5,000 SF

TOTAL AREA 30,043 SF
REQUIRED PERCENTAGE X 15
LANDSCAPE AREA REQUIRED 4,506 SF
LANDSCAPE AREA PROVIDED 9,658 SF

NOTE: THE APPROVAL OF THIS LANDSCAPE PLAN DOES NOT CONSTITUTE OR IMPLY EXEMPTION FROM THE WATER CONSERVATION LANDSCAPING AND WATER WASTE ORDINANCE.



D NORTH ELEVATION



J EAST ELEVATION

STUCCO COLORS

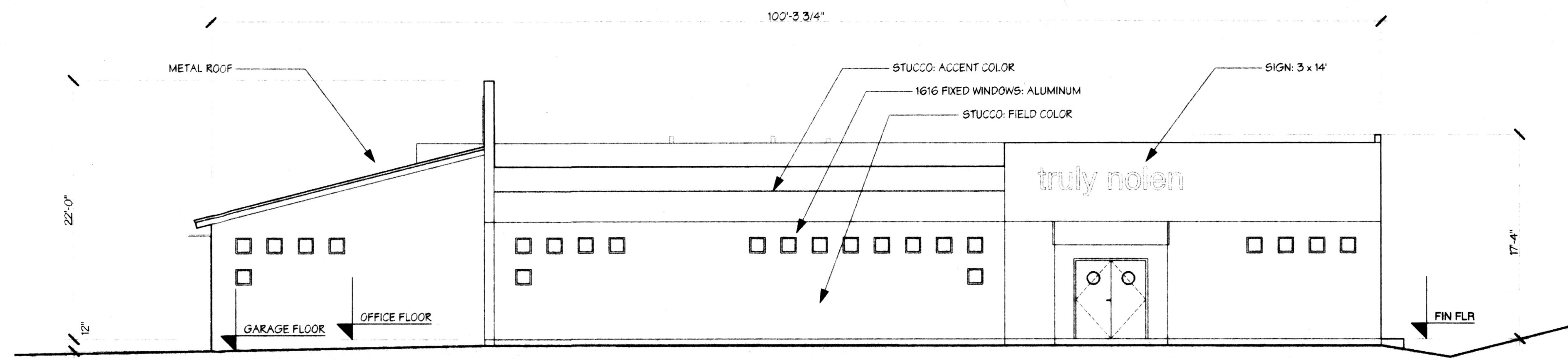
- FIELD LIGHT TAN
- ACCENT BAND DESERT ROSE

ROOFING COLORS

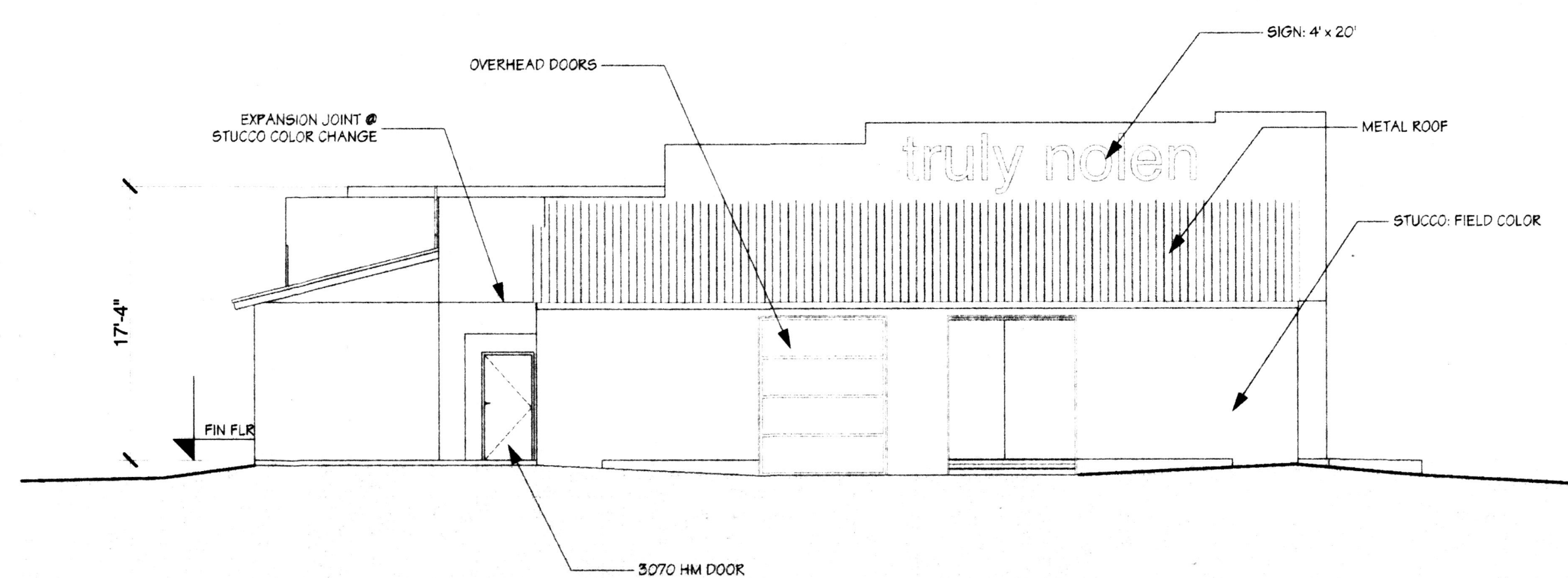
- METAL ROOF GREEN

TRIM COLORS

- WINDOWS CLEAR ALUMINUM
- DOORS GRAY
- MISCELLANEOUS DARK GREEN



Q SOUTH ELEVATION



W WEST ELEVATION

AREAS

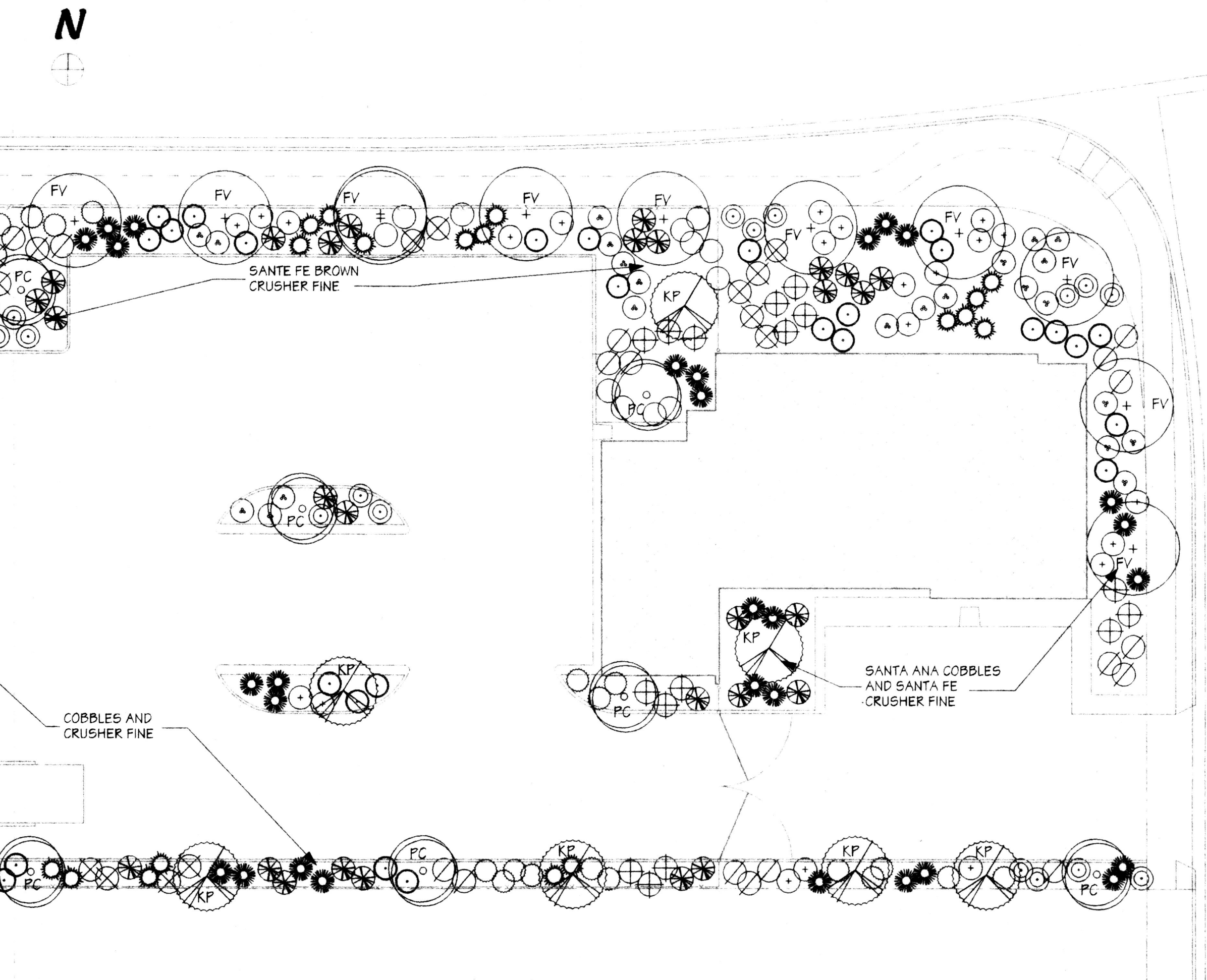
BUILDING AREA	5,000 SF
SIDEWALKS	1,320 SF
PAVED AREAS	19,116 SF
LANDSCAPE AREAS	9,658 SF
TOTALS	35,094 SF

Z PROJECT SUMMARY

G LANDSCAPE LEGEND

N LANDSCAPE NOTES

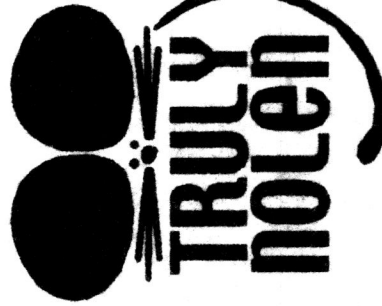
M COLORS



T LANDSCAPE



Scaligel Lewis Architects
1620 Central Ave SE
Albuquerque NM 87106
(505) 247-1329
FAX (505) 243-8701



Truly Nolen
7921 Lorraine Court NE
Albuquerque New Mexico

ISSUE DATE:
09 MAY 00

REVISIONS:
31 MAY 00

LANDSCAPE ELEVATIONS

PROJECT **99-15** SHEET **SDP-2**
OF 4

EASEMENT KEYED NOTES

- 10' PUBLIC UTILITY EASEMENT GRANTED BY PLAT 99C-129
- ORIGINAL 50' P.N.M. RIGHT-OF-WAY EASEMENT (RAILROAD SPUR) GRANTED BY DOCUMENT FILED 08-10-1956, BOOK D359, PAGES 283-288, DOC. #3175
- AMENDED 50' P.N.M. RIGHT-OF-WAY EASEMENT (RAILROAD SPUR) GRANTED BY DOCUMENT FILED 10-15-1956, BOOK D365, PAGES 383-388, DOC. #9158
- AMENDED 50' P.N.M. RIGHT-OF-WAY EASEMENT (RAILROAD SPUR) GRANTED BY DOCUMENT FILED 05-28-1957, BOOK D387, PAGES 397-399, DOC. # 30315
- 70' PUBLIC DRAINAGE EASEMENT GRANTED BY PLAT 99C-129
- 10' PRIVATE DRAINAGE EASEMENT GRANTED BY PLAT 99C-129 TO SERVE PARCELS E AND F. MAINTENANCE SHALL BE SHARED EQUALLY BY THE OWNERS OF PARCELS D, E AND F.
- 10' PRIVATE DRAINAGE EASEMENT GRANTED BY PLAT 99C-129 TO SERVE PARCEL F. MAINTENANCE SHALL BE SHARED EQUALLY BY THE OWNERS OF PARCELS E AND F.

PROJECT BENCHMARK

STATION IS A STANDARD BRASS TABLET (AMAFCA RIGHT-OF-WAY MARKER) STAMPED, "NAA-9", SET IN CONCRETE PROJECTING 0.3 FEET. THE STATION IS LOCATED AT THE INTERSECTION OF LOS ANGELES BLVD. N.E. AND THE NORTH DIVERSION CHANNEL IN THE SOUTHEAST QUADRANT OF THE CROSSING.
ELEVATION = 5069.27 FEET (M.S.L.D.)

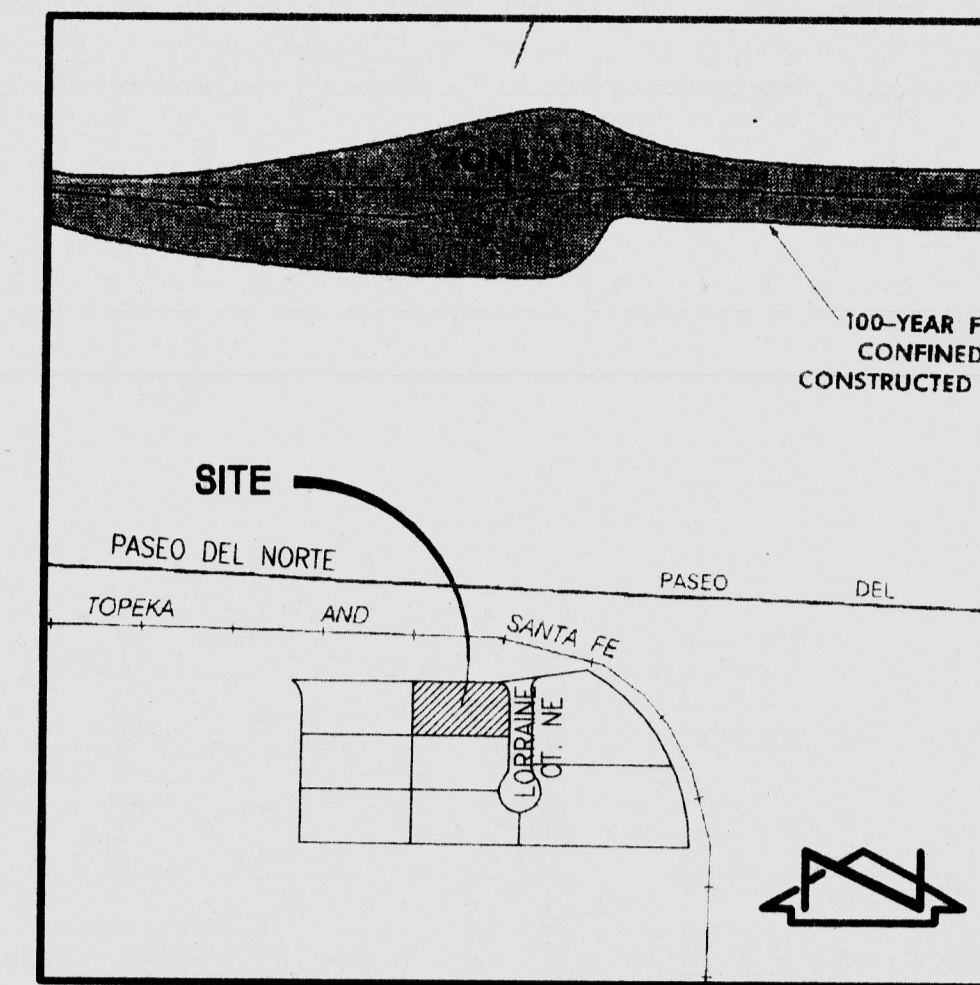
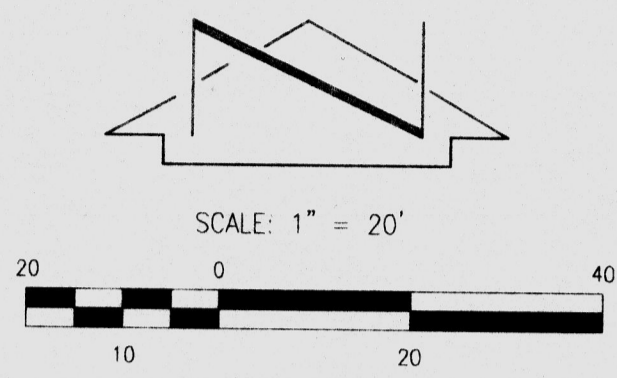
T.B.M.
T.B.M. #1
A "1" CHISELED ON TOP OF THE CURB NEAR THE NORTHWEST CORNER OF THE PROPERTY AS SHOWN ON THE DRAWING.
ELEVATION = 5081.01 FEET (M.S.L.D.)

LEGAL DESCRIPTION

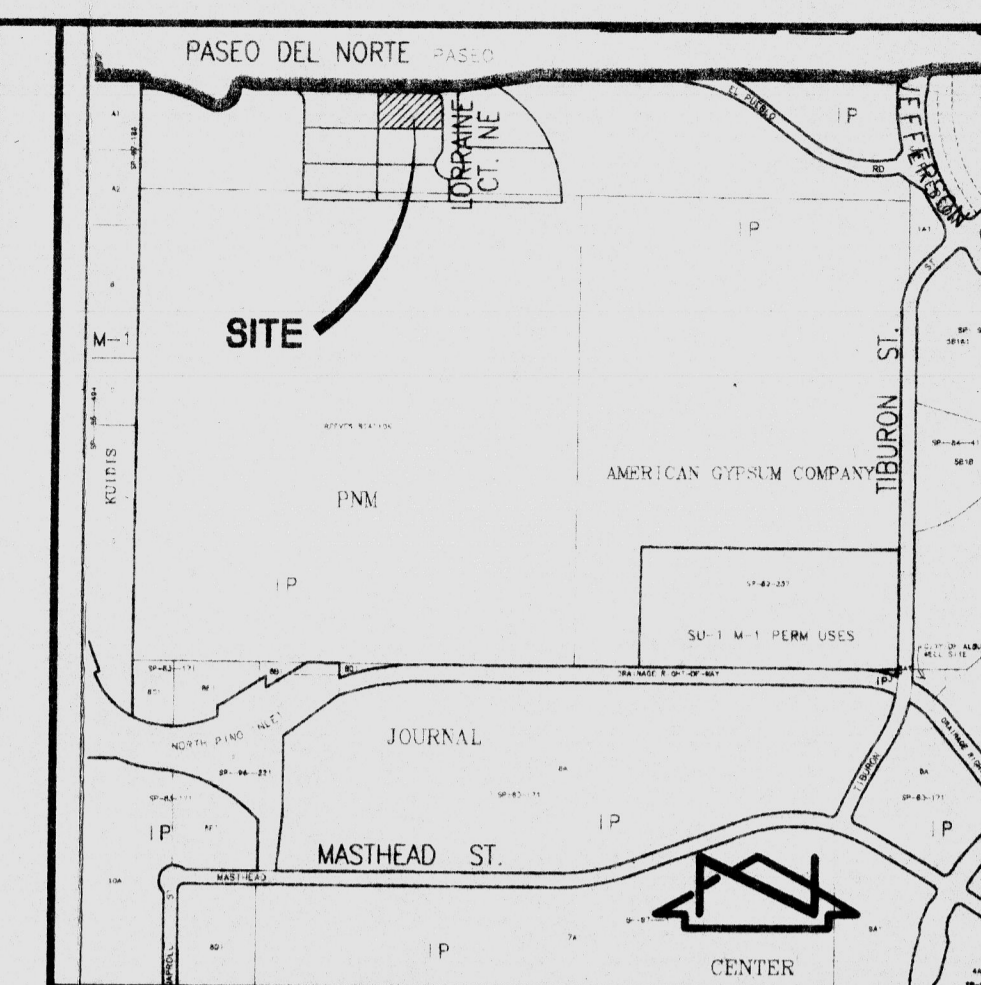
PARCEL D, PASEO DEL NORTE INDUSTRIAL PARK
(DRB 98 - 208)

LEGEND

- | | | | |
|------|----------------------------|---------|--|
| C&G | CURB & GUTTER | SAS | SANITARY SEWER |
| CLF | CHAIN LINK FENCE | SD | STORM DRAIN |
| CMP | CORRUGATED METAL PIPE | SG | RAILROAD SPUR MANUAL SWITCH GEAR |
| CONC | CONCRETE | SGP | STEEL GUARD POST |
| DBL | DOUBLE | STD C&G | STANDARD CURB & GUTTER |
| E(1) | ELECTRIC LINE (# OF LINES) | SV | SPRINKLER VALVE |
| EA | EDGE OF ASPHALT | TA | TOP OF ASPHALT |
| ELEC | ELECTRIC | TC | TOP OF CURB |
| EP | ELECTRIC PANEL | TCO | TOP OF CONCRETE |
| EPB | ELECTRIC PULL BOX | TEL | TELEPHONE |
| EH | FIRE HYDRANT | TR | TOP OF GRATE |
| FL | FLOW LINE | TRR | TELEPHONE RISER |
| G | GAS | VB | VALVE BOX |
| HC | HEADER CURB | VG | VALLEY GUTTER |
| INV | INVERT | W | WATER |
| MB | MAILBOX | WCR | WHEEL CHAIR RAMP |
| MH | MANHOLE | WM | WATER METER |
| MLP | METAL LIGHT POLE | XC | EXTRUDED CURB |
| MS | METAL SIGN | 0.4' | DIAMETER OF TREE |
| PSB | PHONE & SPEAKER BOX | | EXISTING DECIDUOUS TREE |
| PVC | POLYVINYL CHLORIDE PIPE | | PROPOSED FLOWLINE |
| RCP | REINFORCED CONCRETE PIPE | | PROPOSED CONTOUR |
| ROW | RIGHT OF WAY | | PROPOSED SPOT ELEVATION |
| RR | TOP OF RAIL | | PROPOSED RETAINING DRAINAGE CURB (WEST END OF PARKING LOT) |
| RPS | RAILROAD CROSSING SIGN | | PROPOSED HEADER CURB PER C.O.A. STD. DWG. 2415 |
| RRX | RAILROAD CROSSING SIGNAL | | HIGH POINT |



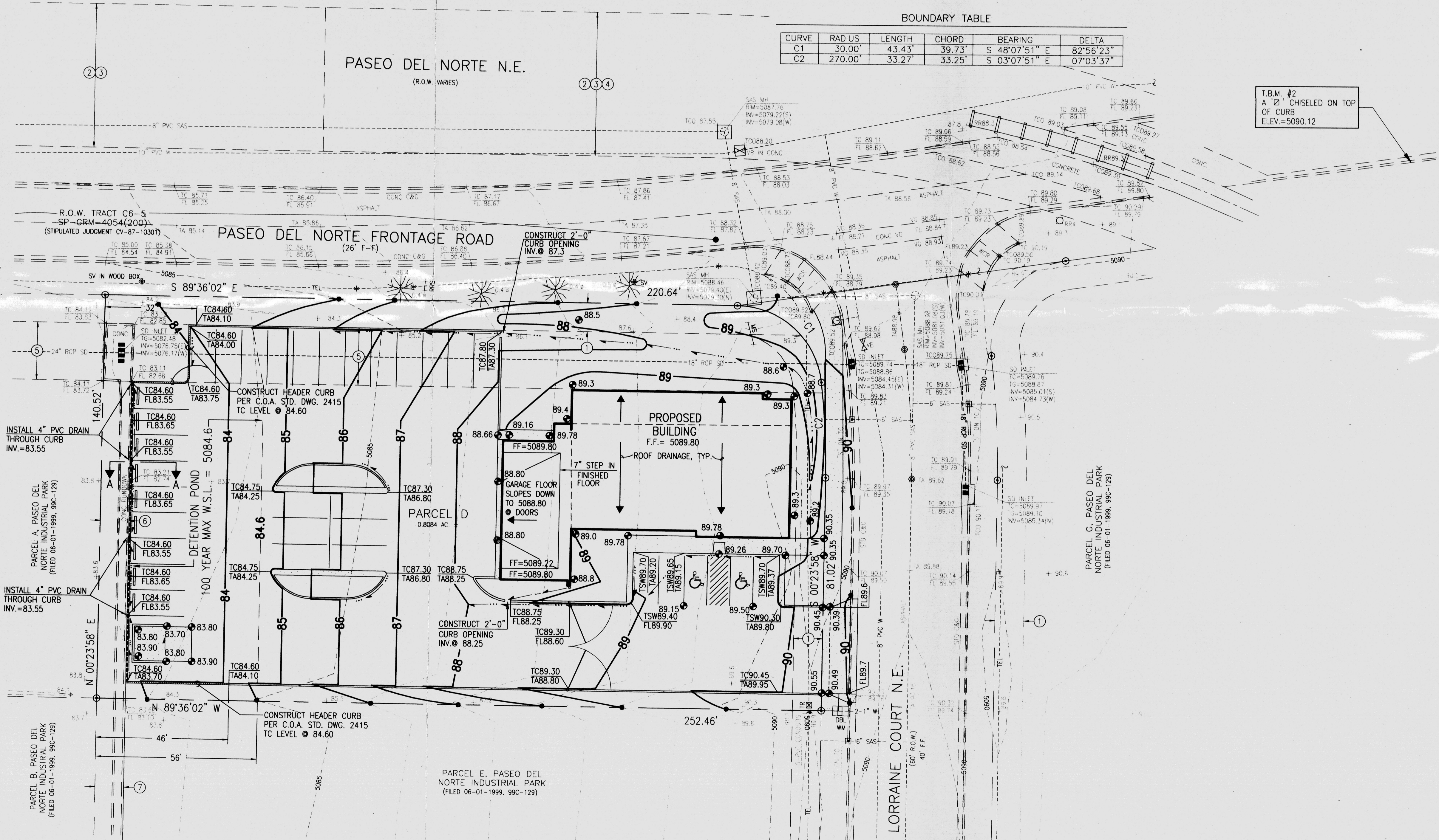
F.I.R.M. MAP
SCALE: 1" = 500'



VICINITY MAP
SCALE: 1" = 750'

BOUNDARY TABLE

CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA
C1	30.00'	43.43'	39.73'	S 48°07'51" E	82°56'23"
C2	270.00'	33.27'	33.25'	S 03°07'51" E	07°03'37"



CONSTRUCTION NOTES:

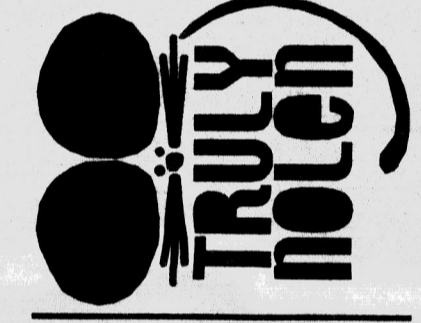
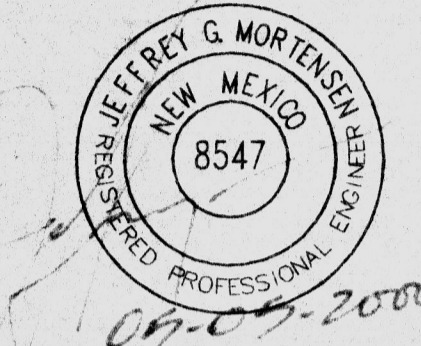
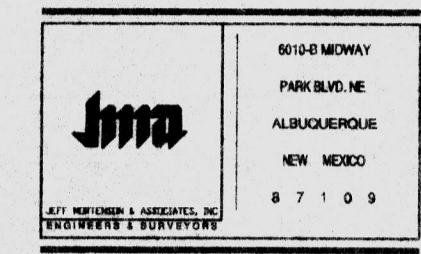
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 (ALBUQUERQUE AREA), 1-800-321-ALERT(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION 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.
- 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.

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.
- ANY AREAS OF EXCESS DISTURBANCE (TRAFFIC ACCESS, STORAGE YARD, EXCAVATED MATERIAL, ETC.) SHALL BE RE-SEEDDED ACCORDING TO C.O.A. SPECIFICATION 1012 "NATIVE GRASS SEEDING". THIS WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.

NOTE:

THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN HEREON FOR ORIENTATION PURPOSES ONLY. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON ARE FROM A.L.T.A./A.C.S.M. LAND TITLE SURVEY OF PARCEL D, PASEO DEL NORTE INDUSTRIAL PARK BY JEFF MORTENSEN AND ASSOCIATES DATED 09-17-1999.



Truly Nolen
Paseo del Norte near Jefferson NE
Albuquerque New Mexico 87106

ISSUE DATE:
08 MAY 00

REVISIONS:

Grading Plan

PROJECT 9945 SHEET C-1 OF

DRAINAGE PLAN

EXECUTIVE SUMMARY AND INTRODUCTION:

THIS PROJECT IS LOCATED IN NORTHERN ALBUQUERQUE ON THE SOUTH SIDE OF THE PASEO DEL NORTE FRONTAGE SOUTH ROAD BETWEEN JEFFERSON STREET N.E. AND EDITH BOULEVARD N.E. THIS PROJECT CONSISTS OF NEW BUILDING CONSTRUCTION WITHIN THE RECENTLY CONSTRUCTED PASEO DEL NORTE INDUSTRIAL PARK IN ACCORDANCE WITH THE RECOMMENDATIONS AND REQUIREMENTS OF A PREVIOUSLY APPROVED MASTER DRAINAGE PLAN. THE DESIGNED OUTFALL IS TO AN EXISTING PUBLIC STORM INLET LOCATED AT THE NORTHWEST CORNER OF THE SITE WHICH WAS CONSTRUCTED CONCURRENTLY WITH INFRASTRUCTURE IMPROVEMENTS FOR THE PASEO DEL NORTE INDUSTRIAL PARK. THE STORM DRAIN ULTIMATELY DISCHARGES TO THE NORTH DIVERSION CHANNEL. ALL DEVELOPED SITE RUNOFF WILL BE DIRECTED TO THIS PUBLIC STORM DRAIN WHICH IS SIZED FOR DEVELOPED RUNOFF FROM THIS SITE AT A PEAK RATE OF 1.3 CFS IN ACCORDANCE WITH THE PREVIOUSLY APPROVED MASTER DRAINAGE PLAN. THIS SUBMITTAL IS MADE IN SUPPORT OF BUILDING PERMIT APPROVAL FOR THE PROPOSED BUILDING CONSTRUCTION.

PROJECT DESCRIPTION:

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED ON THE SOUTH SIDE OF THE PASEO DEL NORTE SOUTH FRONTAGE ROAD APPROXIMATELY 800 FEET WEST OF JEFFERSON STREET N.E. THE SITE IS ZONED IP. THE LEGAL DESCRIPTION IS: PARCEL D, PASEO DEL NORTE INDUSTRIAL PARK. AS SHOWN BY PANEL 136 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS FOR BERNALILLO COUNTY, NEW MEXICO, AND INCORPORATED AREAS, DATED SEPTEMBER 20, 1996, THIS SITE DOES NOT LIE WITHIN, NOR UPSTREAM OF A DESIGNATED FLOOD HAZARD ZONE.

BACKGROUND DOCUMENTS:

THE FOLLOWING DOCUMENT WAS USED IN THE PREPARATION OF THIS PLAN:

1. MASTER DRAINAGE PLAN FOR PASEO DEL NORTE INDUSTRIAL PARK PREPARED BY JEFF MORTENSEN & ASSOCIATES, INC. DATED JANUARY 28, 1999 AND SUBSEQUENTLY CERTIFIED FOR FINANCIAL GUARANTY RELEASE, JANUARY 28, 1999 (D17/D67). THE SITE SPECIFIC GRADING AND DRAINAGE PLAN FOR PARCEL D IS CONSISTENT WITH THE DRAINAGE CONCEPTS PREVIOUSLY ESTABLISHED FOR THIS SUBDIVISION BY THIS MASTER DRAINAGE PLAN.

EXISTING CONDITIONS:

AT PRESENT, THE SITE IS UNDEVELOPED. PRELIMINARY ROUGH GRADING WAS ACCOMPLISHED IN CONJUNCTION WITH THE AFOREMENTIONED CONSTRUCTION OF PASEO DEL NORTE INDUSTRIAL PARK. AN EXISTING 18" PUBLIC STORM DRAIN LIES WITHIN A 20' PUBLIC STORM DRAIN EASEMENT AT THE NORTH END OF THE SITE. AN EXISTING PRIVATE CONCRETE RUNDOWN CHANNEL LIES WITHIN A PRIVATE DRAINAGE EASEMENT AT THE WEST END OF THE SITE. AN EXISTING DOUBLE "D" STORM INLET IS CONTAINED WITHIN THE PUBLIC STORM DRAIN EASEMENT AT THE NORTHWEST CORNER OF THE SITE. ALL OF THE AFOREMENTIONED DRAINAGE FACILITIES WERE CONSTRUCTED IN ACCORDANCE WITH THE MASTER DRAINAGE PLAN FOR THE PURPOSE OF PROVIDING AN OUTFALL FOR DEVELOPED STORM DRAIN RUNOFF FROM THE PASEO DEL NORTE INDUSTRIAL PARK. OFFSITE FLOWS DO NOT ENTER THE SITE FROM PASEO DEL NORTE FRONTAGE ROAD OR FROM LORRAINE COURT N.E. WHICH ARE DEVELOPED STREETS WITH CURB AND GUTTER. OFFSITE FLOWS DO NOT ENTER THE SITE FROM PARCEL A, PASEO DEL NORTE INDUSTRIAL PARK WHICH LIES TO THE WEST AND IS TOPOGRAPHICALLY LOWER THAN THE SITE. OFFSITE FLOWS DO NOT ENTER THE SITE FROM PARCEL E, PASEO DEL NORTE INDUSTRIAL PARK WHICH LIES TO THE SOUTH AND EXHIBITS PARALLEL TOPOGRAPHY.

DEVELOPED CONDITIONS:

THE PROPOSED DEVELOPMENT CONSISTS OF NEW BUILDING CONSTRUCTION WITH ASSOCIATED PAVED PARKING AND LANDSCAPING IMPROVEMENTS. OFFSITE RUNOFF WILL BE DIRECTED TO A DETENTION POND LOCATED WITHIN THE WEST END OF THE PARKING LOT. THIS DETENTION POND WILL OUTLET TO THE PRIVATE DRAINAGE RUNDOWN VIA FOUR 4" CURB PENETRATIONS WHICH WILL RESTRICT DISCHARGE FROM THIS SITE TO 1.3 CFS AS REQUIRED BY THE AFOREMENTIONED APPROVED MASTER DRAINAGE PLAN FOR THIS SITE. IN THE EVENT THAT THE CURB PENETRATIONS BECOME IMPERMEABLE DUE TO CLOGGING OR OTHER FAILURE, RUNOFF FROM THIS SITE WILL OVERTOP THE WEST CURB DIRECTLY INTO THE PRIVATE DRAINAGE EASEMENT.

GRADING PLAN:

THE GRADING PLAN SHOWS: 1) EXISTING GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'0" INTERVALS AS TAKEN FROM THE A.L.T.A./A.C.S.M. LAND TITLE SURVEY PREPARED BY THIS OFFICE DATED SEPTEMBER 17, 1999, 2) PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'0" INTERVALS, 3) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS, 4) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS, AND 5) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. THE GRADING PLAN APPEARS ON SHEET C1.

CALCULATIONS:

THE CALCULATIONS CONTAINED HEREIN ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS DEMONSTRATED BY THE DRAINAGE CALCULATIONS CONTAINED HEREIN, THERE WILL BE A GROSS INCREASE IN THE PEAK RATE AND THE VOLUME OF RUNOFF GENERATED BY THIS SITE. AS FURTHER DEMONSTRATED BY HYDROGRAPH AND ORIFICE CALCULATIONS, THE PROPOSED DETENTION POND WILL RESTRICT THE PEAK RATE OF DISCHARGE FROM THIS SITE TO 1.3 CFS WHICH IS A NET DECREASE IN PEAK RATE OF RUNOFF GENERATED BY THIS SITE.

CONCLUSION:

THE PROPOSED DEVELOPMENT OF THIS SITE IS CONSISTENT WITH THE REQUIREMENTS OF THE PREVIOUSLY APPROVED MASTER DRAINAGE PLAN WHICH RESTRICTS THE PEAK RATE OF RUNOFF FROM THIS PARCEL TO 1.3 CFS. THIS RESTRICTION IS ACCOMPLISHED VIA DETENTION PONDING WHICH LIMITS THE DISCHARGE TO A PUBLIC STORM INLET LOCATED AT THE NORTHWEST CORNER OF THE SITE. THERE ARE NO PLATING OR PUBLIC INFRASTRUCTURE REQUIREMENTS ASSOCIATED WITH THIS PROJECT. THERE ARE NO DPM DESIGN VARIANCES OR NEW EASEMENTS REQUIRED BY THIS PROJECT.

CALCULATIONS

I. SITE CHARACTERISTICS

- A. PRECIPITATION ZONE = 2
- B. $P_{6,100} = P_{360} = 2.35$ IN.
- C. TOTAL AREA (A_T) = 35,210 SF/0.81 AC
- D. EXISTING LAND TREATMENT
TREATMENT AREA (SF/AC) %
C 35,210/0.81 100
- E. DEVELOPED LAND TREATMENT
TREATMENT AREA (SF/AC) %
B 8,600/0.20 24
D 26,610/0.61 76

II. EXISTING CONDITION

- A. VOLUME
 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_W = (1.13)(0.81) / 0.81 = 1.13$ IN.
 $V_{100} = (E_W / 12) A_T$
 $V_{100} = (1.13 / 12)(35,210) = 3,320$ CF

- B. PEAK DISCHARGE
 $Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
 $Q_p = Q_{100} = (3.14)(0.81) = 2.5$ CFS

III. DEVELOPED CONDITION

- A. VOLUME
 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$
 $E_W = [(0.78)(0.20) + (2.12)(0.61)] / (0.81) = 1.79$ IN.
 $V_{100} = (E_W / 12) A_T$
 $V_{100} = (1.79 / 12)(35,210) = 5,250$ CF

- B. PEAK DISCHARGE
 $Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
 $Q_p = Q_{100} = (2.28)(0.20) + (4.70)(0.61) = 3.3$ CFS

IV. HYDROGRAPH CALCULATIONS

- A. TIME TO PEAK
 $t_p = 0.7t_c + (1.6 - A_D/A_T) / 12$
 $t_p = (0.7)(0.2) + (1.6 - 0.76) / 12$
 $t_p = 0.21$ HR

- B. BASE TIME
 $t_b = (2.107 * E * A_T / Q_p) - (0.25 + A_D/A_T)$
 $t_b = (2.107)(1.79)(0.81) / 3.3 - (0.25) / (0.76)$
 $t_b = 0.74$ HR

- C. PEAK ATTENUATION
 $t = (0.25)(A_D/A_T)$
 $t = (0.25)(0.76)$
 $t = 0.19$ HR

- D. RETENTION VOLUME REQUIRED
 $V = (0.53 + 0.19)(0.5)(2)(3600)$
 $V = 2,590$ CFS (REQUIRED)

V. POND VOLUME CALCULATIONS (MAX W.S.L. = 5084.6)

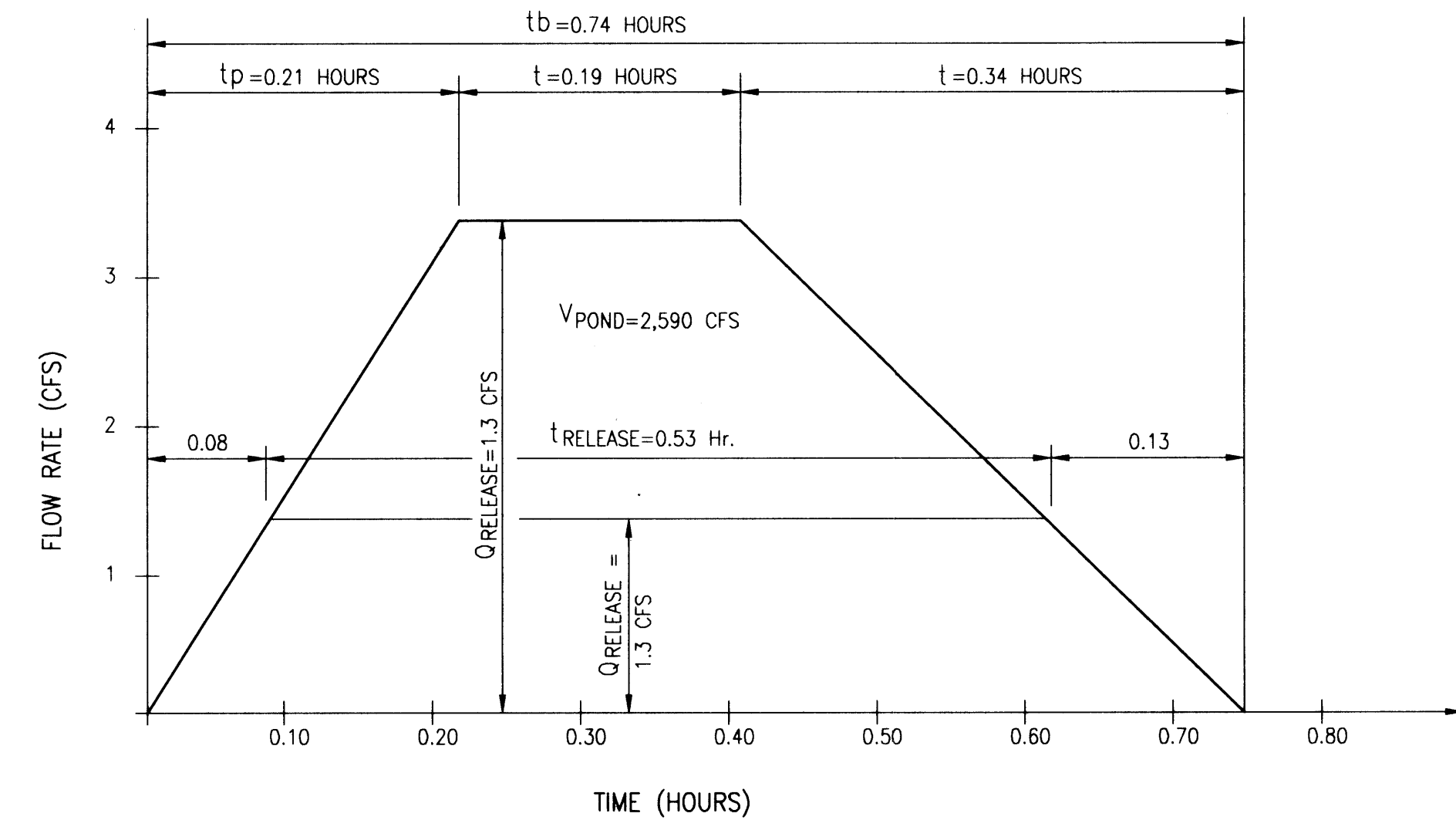
- A. $A_{83.6} = 0$ SF
 $A_{84.0} = 3,580$ SF
 $A_{84.6} = 5,200$ SF
B. $V = (1/2)(A_{83.6} + A_{84.0})(84.0 - 83.6)$
 $+ (1/2)(A_{84.6} - A_{84.0})(84.6 - 84.0)$
 $V = 3,350$ CF > $V_{REQUIRED}$

VI. ORIFICE EQUATION (4" ORIFICE)

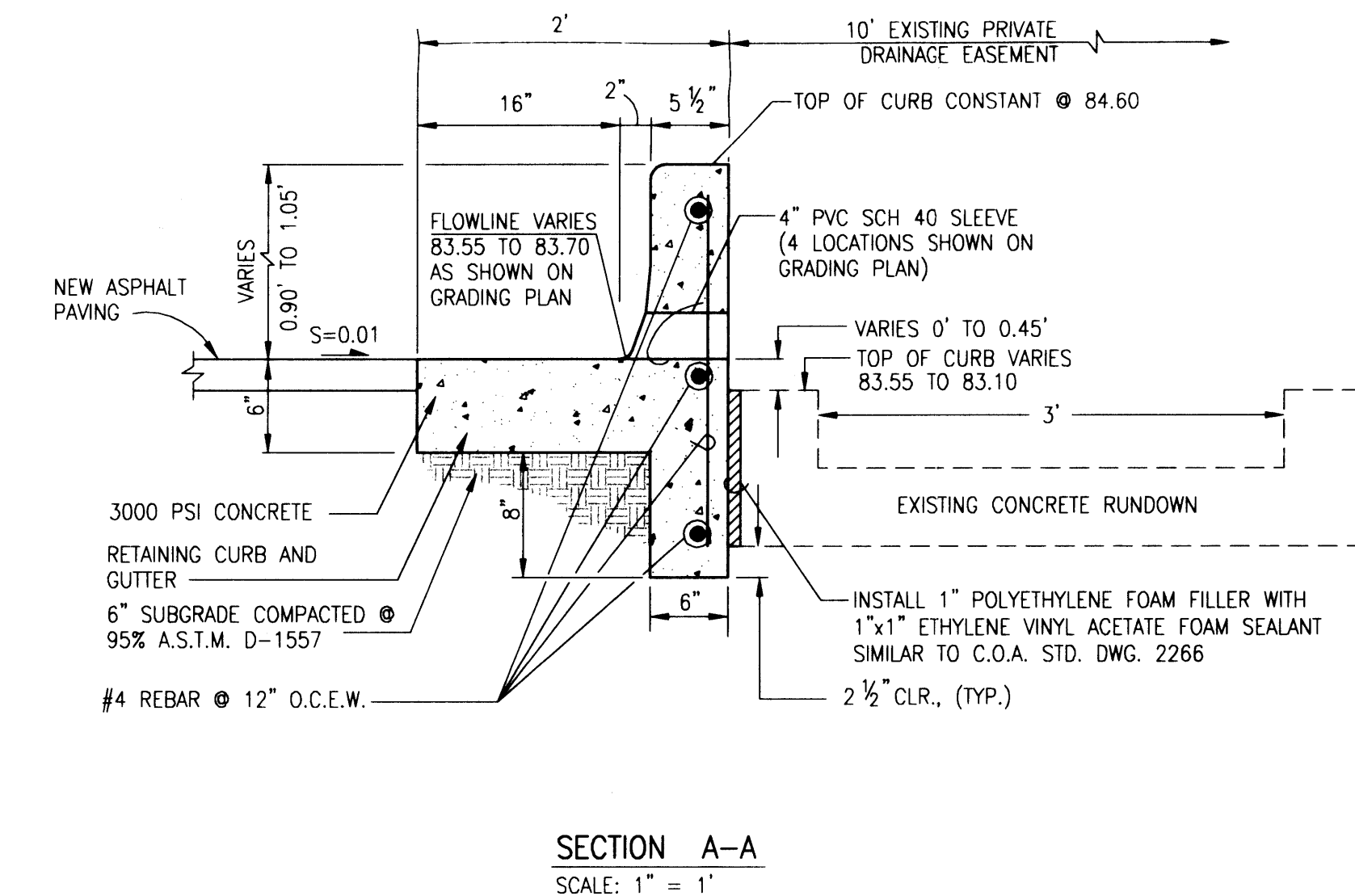
- A. $Q = CA(2gh)^{1/2}$
C = 0.6
A = 0.9 SF (4" PIPE)
g = 32.2 FT/S²
h = 0.54 FT (AVG. DEPTH TO CENTER OF PIPE)
Q = 0.32 CFS/PIPE
 $Q_{100} = (4)(0.32) = 1.3$ CFS (TOTAL)

VII. COMPARISON

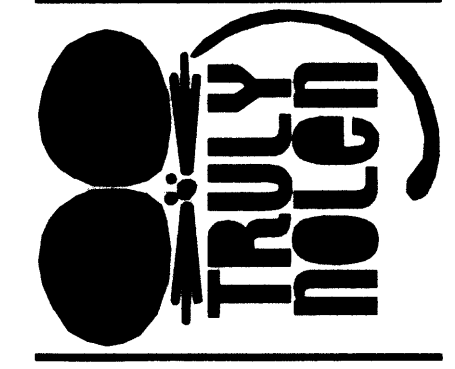
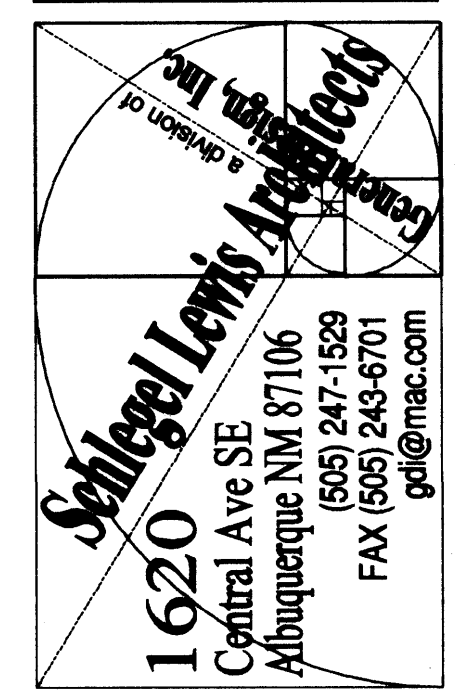
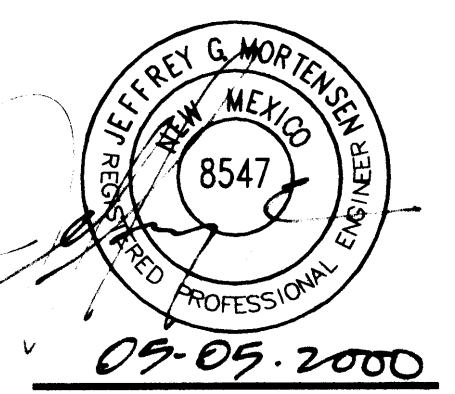
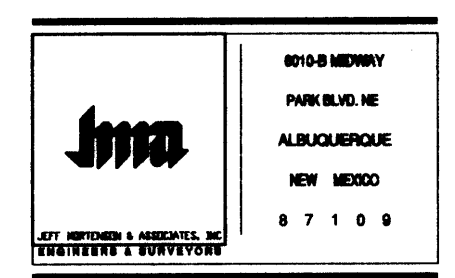
- $\Delta V_{100} = 5,250 - 3,320 = 1,930$ CF (INCREASE)
 $\Delta Q_{100} = 2.5 - 1.3 = 1.2$ CFS (DECREASE THROUGH DETENTION)



HYDROGRAPH
SCALE: 1" = 1 CFS (VERTICAL)
1" = 0.1 HOURS (HORIZONTAL)



SECTION A-A
SCALE: 1" = 1'



Truly Nolen
Paseo del Norte near Jefferson NE
Albuquerque New Mexico 87106

ISSUE DATE:
08 MAY 00

REVISIONS:

Drainage Plan, Calculations
Sections and Details

SHEET
PROJECT 9945
C-2
OF

File Path: C:\JMA\WORK\0351\1
File Name: 0351.DWG
Plot Date: 05-04-2000
Plot Time: 10:09 am