

# CITY OF ALBUQUERQUE



October 28, 2004

Mr. Steve J. Salazar, P.E.  
**WILSON & COMPANY**  
2600 The American Rd. SE, Suite 100  
Rio Rancho, NM 87124

**Re: WRANGLER PROPERTIES PROPOSED BUILDING**  
**The American Road, Lot 4**  
**Approval of Permanent Certificate of Occupancy (C.O.)**  
**Engineer's Stamp dated 04/23/2004 (A-13/D010A)**  
**Certification dated 10/28/2004**

Dear Steve,

P.O. Box 1293

Based upon the information provided in your submittal received 10/28/2004, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, you can contact me at 924-3982.

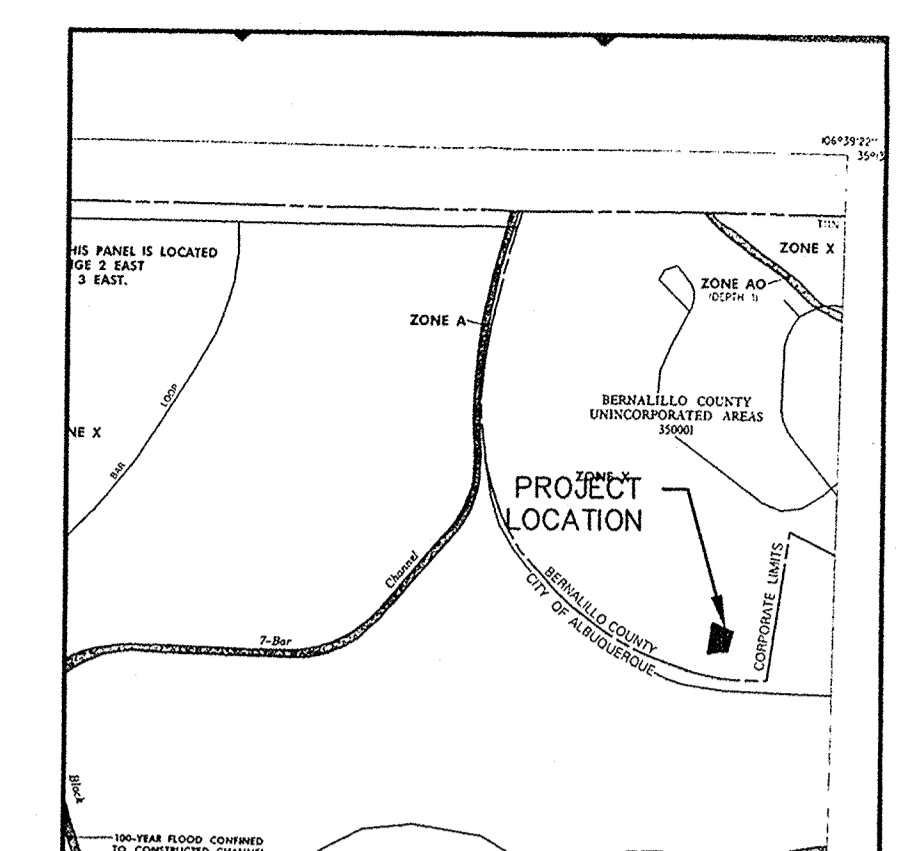
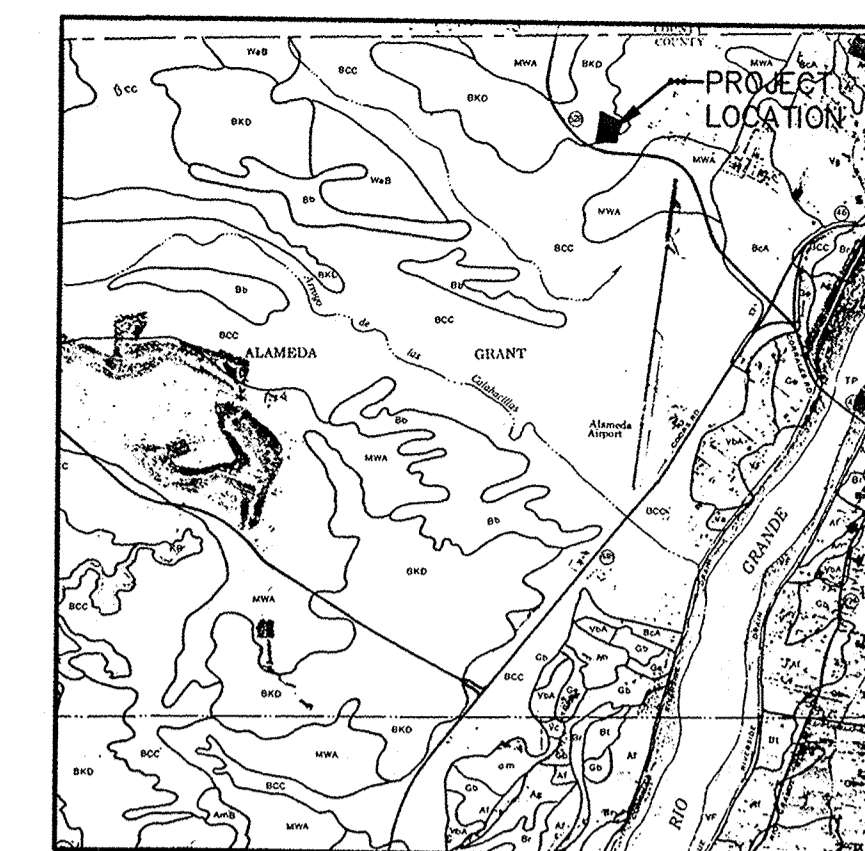
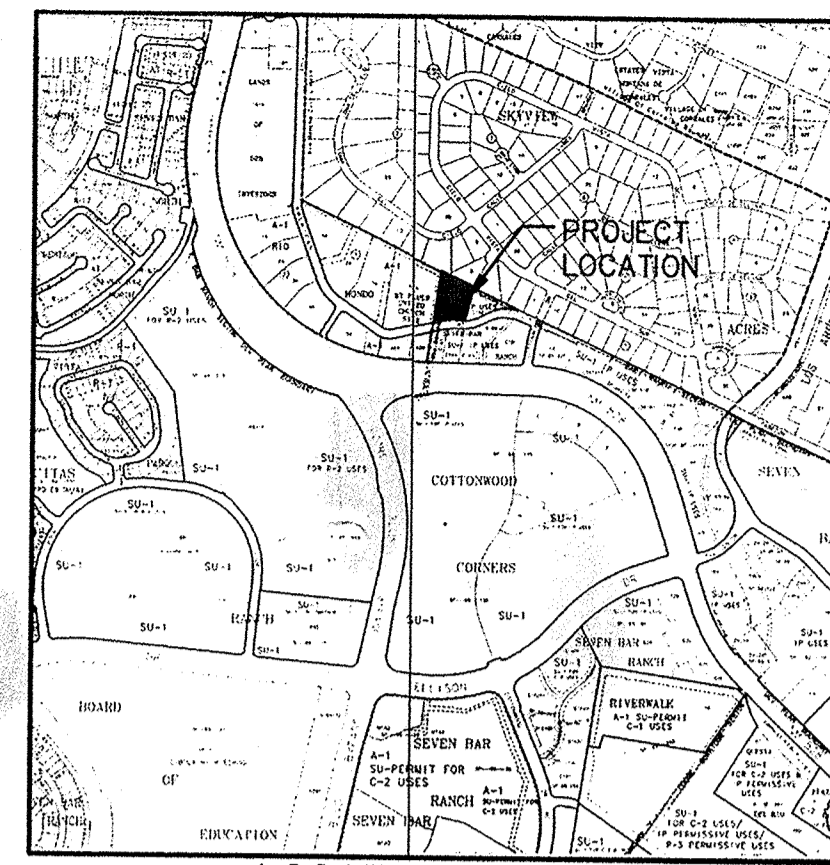
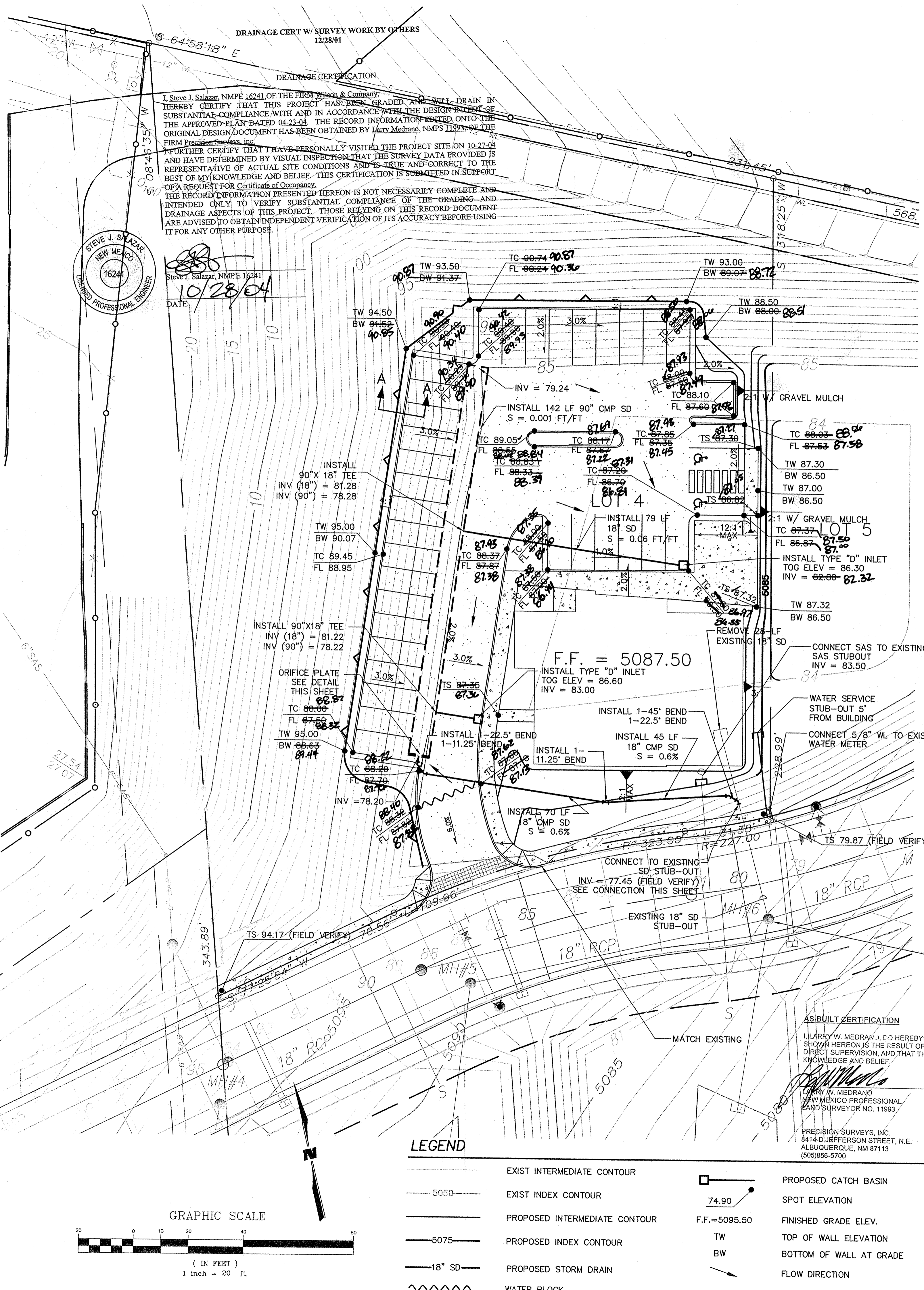
New Mexico 87103

Sincerely,

Arlene V. Portillo  
Plan Checker, Planning Dept. - Hydrology  
Development and Building Services

[www.cabq.gov](http://www.cabq.gov)

C: Phyllis Villanueva  
File



**EXISTING CONDITIONS:**

THE 1.37 AC. HAS BEEN MASS GRADED AS PART OF THE SEVEN BAR RANCH. IT IS CURRENTLY UNDEVELOPED. ON THE NORTHERN AND WESTERN PORTION OF THE PROPERTY THERE ARE 3:1 SLOPES WHICH DRAIN INTO THE SUBJECT PROPERTY. THE LOT IS DESIGNED TO TEMPORARILY RETAIN FLOWS FROM THE SITE UNTIL THE SITE IS FULLY DEVELOPED.

**DEVELOPED CONDITIONS:**

AN OFFICE BUILDING IS PLANNED FOR THIS SITE. THE SITE WILL DRAIN INTO THE STORM DRAIN UNDER THE AMERICAN ROAD AND CONVEYED TO THE NM 528 STORM DRAIN SYSTEM PER THE DRAINAGE REPORT FOR THE SEVEN BAR RANCH BY MARK GOODWIN AND ASSOCIATES. DEVELOPED FLOWS ABOVE THE ALLOWABLE 0.5-CFS/AC WILL BE DETAINED ON SITE IN AN UNDERGROUND 90" CMP. THE RUNOFF WILL DISCHARGE FROM THE SUBJECT LOT THROUGH AN ORIFICE AT OR BELOW THE ALLOWABLE DISCHARGE INTO THE EXISTING STORM DRAIN STUBOUT.

**HYDROLOGY NOTES**

PERCIPITATION ZONE: 1  
BASIN: 1  
TOTAL TRACT AREA = 1.37 Ac  
LAND TREATMENT AREAS WITHIN TRACT CONTRIBUTING TO RETENTION POND:  
66.4% LAND TREATMENT B = 0.91 Ac  
33.6% LAND TREATMENT D = 0.46 Ac  
PEAK DISCHARGE  $Q_{p100} - 6HR = (AREA)_B(Q_B) + (AREA)_D(Q_D)$   
 $= (0.91)(2.03cfs/Ac) + (0.46)(4.37cfs/Ac)$   
 $= 3.86 cfs$   
RUNOFF VOLUME  $(V1440) = V360 + Ad(P1440 - P360)$   
 $= 0.126Ac + 0.46Ac(2.66in - 2.20in)$   
 $= 6270cu-ft$

VOLUME OF 90" PIPE = 6273cu-ft

**ORIFICE DISCHARGE TABLE (cfs)**

DEPTH IN (in.)	ORIFICE DIAM (in.)	AREA (sq. ft.)
90" PIPE	3	0.049
6	0.120	
12	0.208	
18	0.269	
24	0.318	
30	0.360	
36	0.398	
42	0.433	
48	0.465	
54	0.495	
60	0.524	
66	0.551	
72	0.576	
78	0.601	
84	0.624	
90	0.647	

$Q = C \cdot A \cdot (2 \cdot g \cdot h)^{0.5}; C = 0.61$

TOTAL LOT AREA = 1.37 ac.  
ALLOWABLE DISCHARGE = 0.5 cfs/ac.

$Q_{ALLOWABLE} = 0.685 cfs$

**GENERAL NOTES:**

- ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1987 EDITION.
- A 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.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- MAINTENANCE OF DRAINAGE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY ON WHICH THEY ARE CONSTRUCTED. ROOF DRAINS AND APPURTENANCES SHALL BE REGULARLY INSPECTED AND OBSTRUCTIONS REMOVED.
- ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CONSTRUCTION SAFETY: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S SOLE RESPONSIBILITY.
- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO WASHING DOWN THE STREET.
- THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO DISTURB OR DAMAGE EXISTING FEATURES TO REMAIN DURING ALL PHASES OF CONSTRUCTION.
- ALL SIDEWALKS SHALL HAVE A 2% CROSS-SLOPE UNLESS OTHERWISE INDICATED.

**LEGAL DESCRIPTION:**

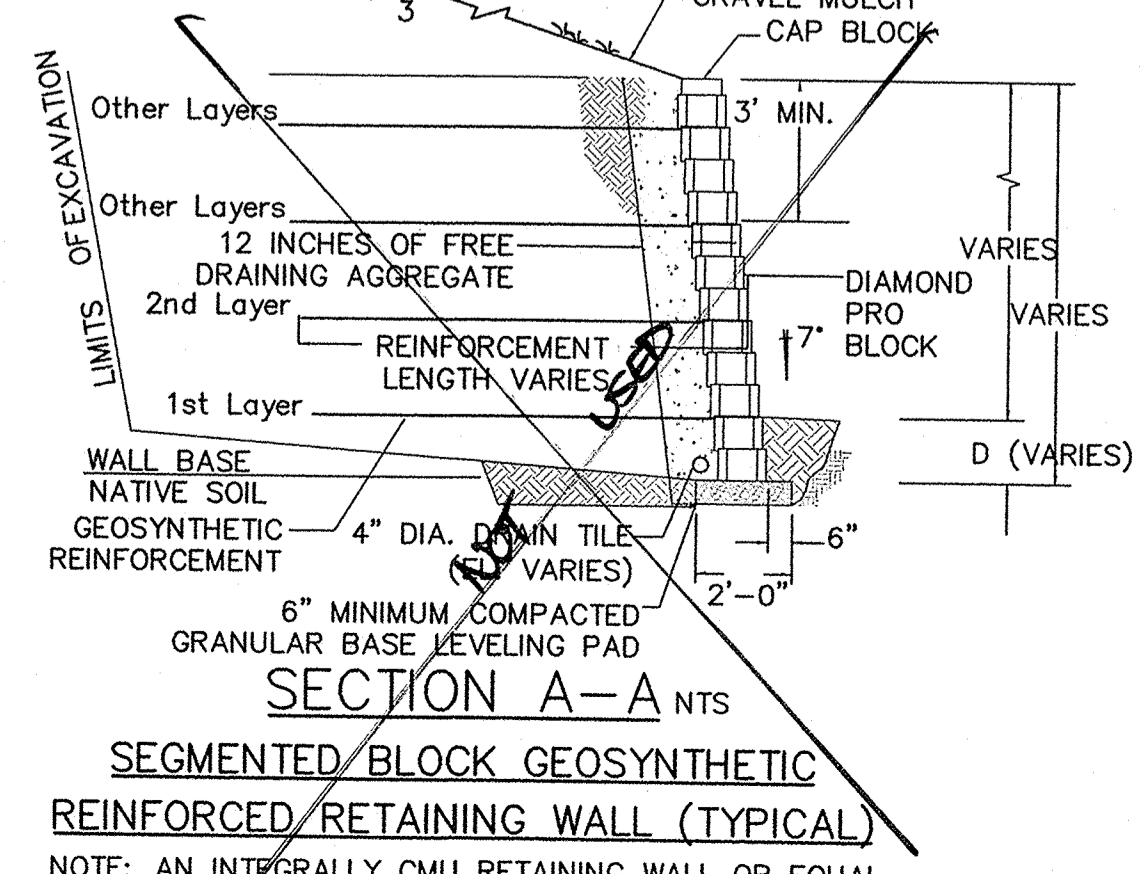
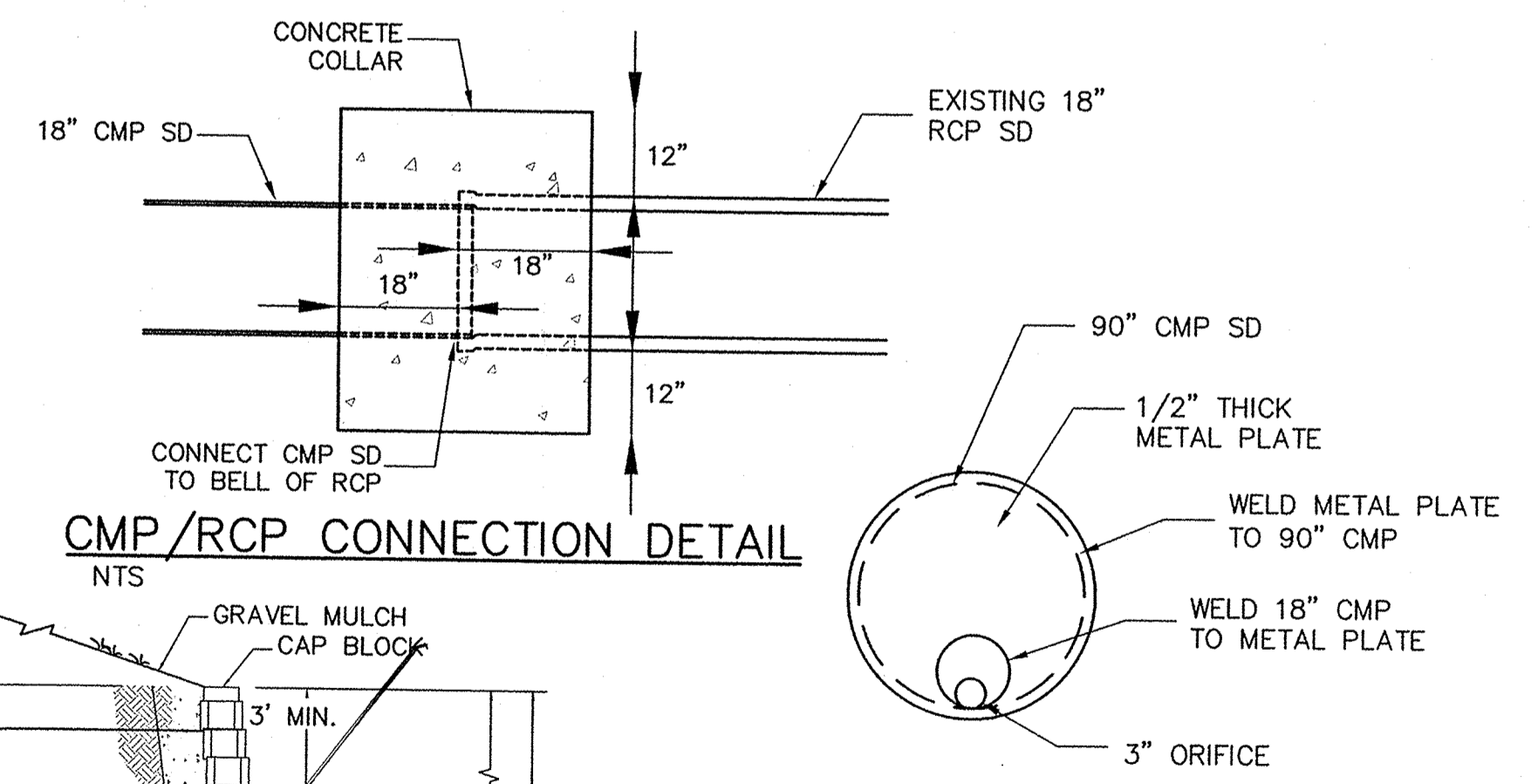
LOT 4, TRACT C-1A1, SEVEN-BAR RANCH

**BENCH MARK:**

ACS STATION "16-K14" BRASS TABLET AT THE INTERSECTION OF THE CENTERLINE OF CENTRAL AVE. & WALTER ST. ELEV. = 4998.602'

**TEMPORARY BENCH MARK:**

5/8" REBAR WITH ALUMINUM CAP STAMPED "CP-205" N=1533796.243, E=1517701.409 ELEV. = 5202.889'



rev	▲	▲	▲	▲
date				
by				
revision				

**Mullen Heller**  
Architecture P.C.  
1104 Hermosa Drive SE  
Albuquerque 87108  
505 268 4144 [p]  
505 268 4244 [f]

**RECEIVED**  
OCT 28 2004  
HYDROLOGY SECTION

STEVE J. SALAZAR  
NEW MEXICO  
16241  
REGISTERED PROFESSIONAL ENGINEER

X3218064	ANY	SIS	03/02/04
job number	drawn by	project manager	date

project title: **Proposed Office Building**  
sheet title: **Lot 4, Tract C-1A1, Seven-Bar Ranch**  
sheet: **Grading, Drainage and Utility Plan**

**WILSON & COMPANY**  
2600 THE AMERICAN ROAD S.E.  
SUITE 100  
RIO RANCHO, NEW MEXICO  
87124  
(505) 898-8021