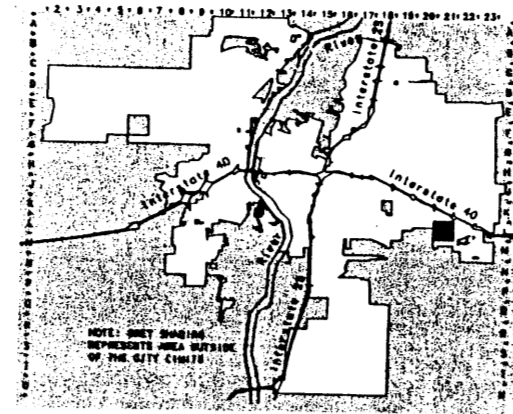


Zone Atlas Page
L-21-Z



AREA MAP

LEGAL DESCRIPTION :

LOTS 8-A AND 9-A, IN BLOCK TWO (2), EAST CENTRAL BUSINESS ADDITION, ALBUQUERQUE, NEW MEXICO.

BENCH MARK REFERENCE :

USDA/NGS (1934), STATION "NM BERN. 3", (L-21), ELEVATION = 5486.945; PROJECT T.B.M. AS SHOWN ON THE PLAN HEREON.

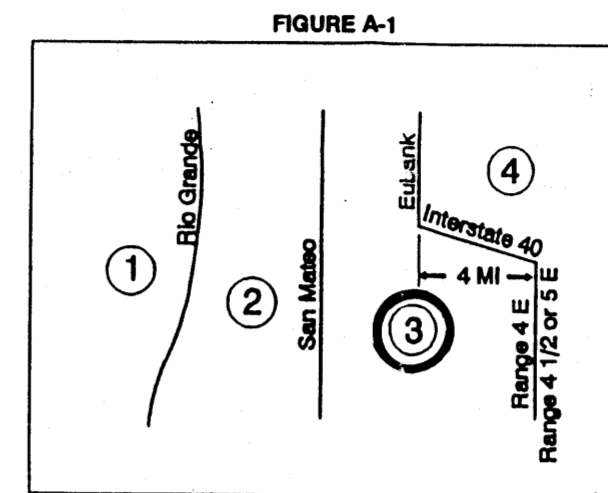
Zone	TABLE A-6. PEAK DISCHARGE (cfs/acre)			
	Treatment		100-YR (2-YR, 10-YR)	
	A	B	C	D
1	1.29 [0.00, 0.24]	2.03 [0.03, 0.76]	2.87 [0.47, 1.49]	4.37 [1.89, 2.89]
2	1.66 [0.00, 0.38]	2.28 [0.08, 0.95]	3.14 [0.80, 1.71]	4.70 [1.86, 3.14]
3	1.87 [0.00, 0.58]	2.80 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]
4	2.20 [0.05, 0.87]	2.92 [0.38, 1.45]	3.73 [1.00, 2.28]	5.25 [2.17, 3.57]

Zone	TABLE A-16. PEAK INTENSITY (IN/HR at $t_p = 0.2$ hour)	
	Intensity	100-YR (2-YR, 10-YR)
1	4.70 [1.84, 3.14]	5.81 [2.04, 3.41]
2	5.05 [2.04, 3.41]	5.38 [2.21, 3.55]
3	5.81 [2.21, 3.55]	5.25 [2.34, 3.83]
4	5.81 [2.34, 3.83]	

A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

Zone	Location
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40



Where a watershed extends across a zone boundary, use the zone which contains the largest portion of the watershed.

DPM SECTION 22.2 - HYDROLOGY
January, 1993 Page A-4

Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the area percentages in TABLE A-5 may be employed.

DRAINAGE COMMENTS :

AS SHOWN ON THE PLAN HEREON, THE SUBJECT SITE IS LOCATED ON THE NORTH SIDE OF CENTRAL AVENUE, N.E., APPROXIMATELY 325.0' WEST OF DOROTHY STREET, N.E., IN THE CITY OF ALBUQUERQUE, NEW MEXICO, (CITY ZONE ATLAS MAP "L-21-Z").

THE SUBJECT PROJECT SITE IS PRESENTLY A COMMERCIAL PROPERTY WITH EXISTING BUILDINGS AND ASSOCIATED IMPROVEMENTS LOCATED THEREON. A GRADING AND DRAINAGE PLAN FOR SAID PROPERTY WAS PREPARED, SUBMITTED TO, AND APPROVED BY THE C.O.A. HYDROLOGY DEPARTMENT ON FEBRUARY, 1991, (REVISED AND APPROVED JULY, 1991).

THE PROPOSED PLAN SHOWN HEREON IS FOR AN AREA CONSISTING OF APPROXIMATELY 650.0 SQUARE FEET OF AN EXISTING CONCRETE SLAB - OPEN PATIO WITH A WALLED ENCLOSURE; SAID EXISTING PATIO AREA IS TO BE FULLY ENCLOSED FOR THE PROPOSED ADDITION TO THE EXISTING BUILDING.

THE FACT THAT THE EXISTING AREA THAT IS TO BE AN ADDITION IS PRESENTLY IMPERVIOUS, THERE WILL THEREFORE BE NO INCREASE OF DEVELOPED FLOWS; THE PROPOSED ROOF RUN-OFF WILL BE DIRECTED WESTERLY TO A DRAIN DOWN-SPOUT AND WILL THEN OUTLET TO THE EXISTING GRAVEL SURFACED DRIVE AND PARKING AREA.

CALCULATION :

PROPOSED ADDITION SIZE : 650.0 SQ. FT. (0.015 ACRE)

PRECIPITATION ZONE : THREE (3)

PEAK INTENSITY : IN/HR. AT t_p = TWELVE (12) MINUTES, 100-YR. 6 HR. = 5.38

LAND TREATMENT METHOD FOR CALCULATION OF "Qp", TABLES A-8 & A-9

LAND TREATMENT FACTORS : TABLE A-4

TREATMENT	AREA/ACRES	FACTOR	CFS
D	0.015	X	5.02 = 0.08

"Qp" = 0.08 CFS

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

LEGEND:
TOP OF CURB ELEVATION = 503.53
CURB FLOWLINE ELEVATION = 503.20
EXISTING SPOT ELEVATION = 503.2
EXISTING CONTOUR ELEVATION = 4/4
PROPOSED SPOT ELEVATION = 4/4
PROPOSED CONTOUR ELEVATION = 4/4
PROPOSED OR EXISTING CONCRETE SURFACE =
EXISTING FENCE LINE =

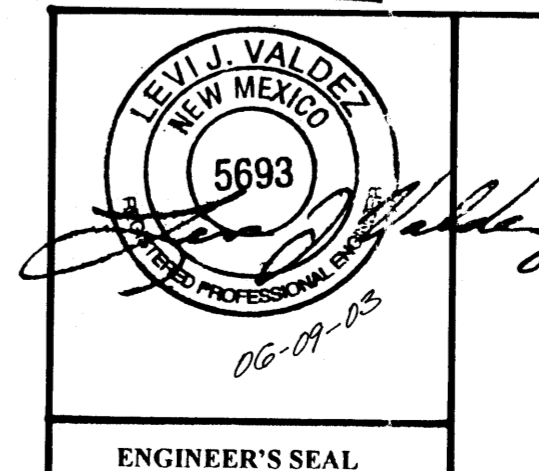
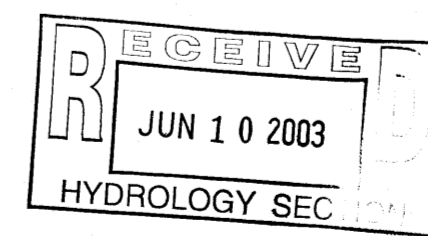
GENERAL NOTES:

- NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.

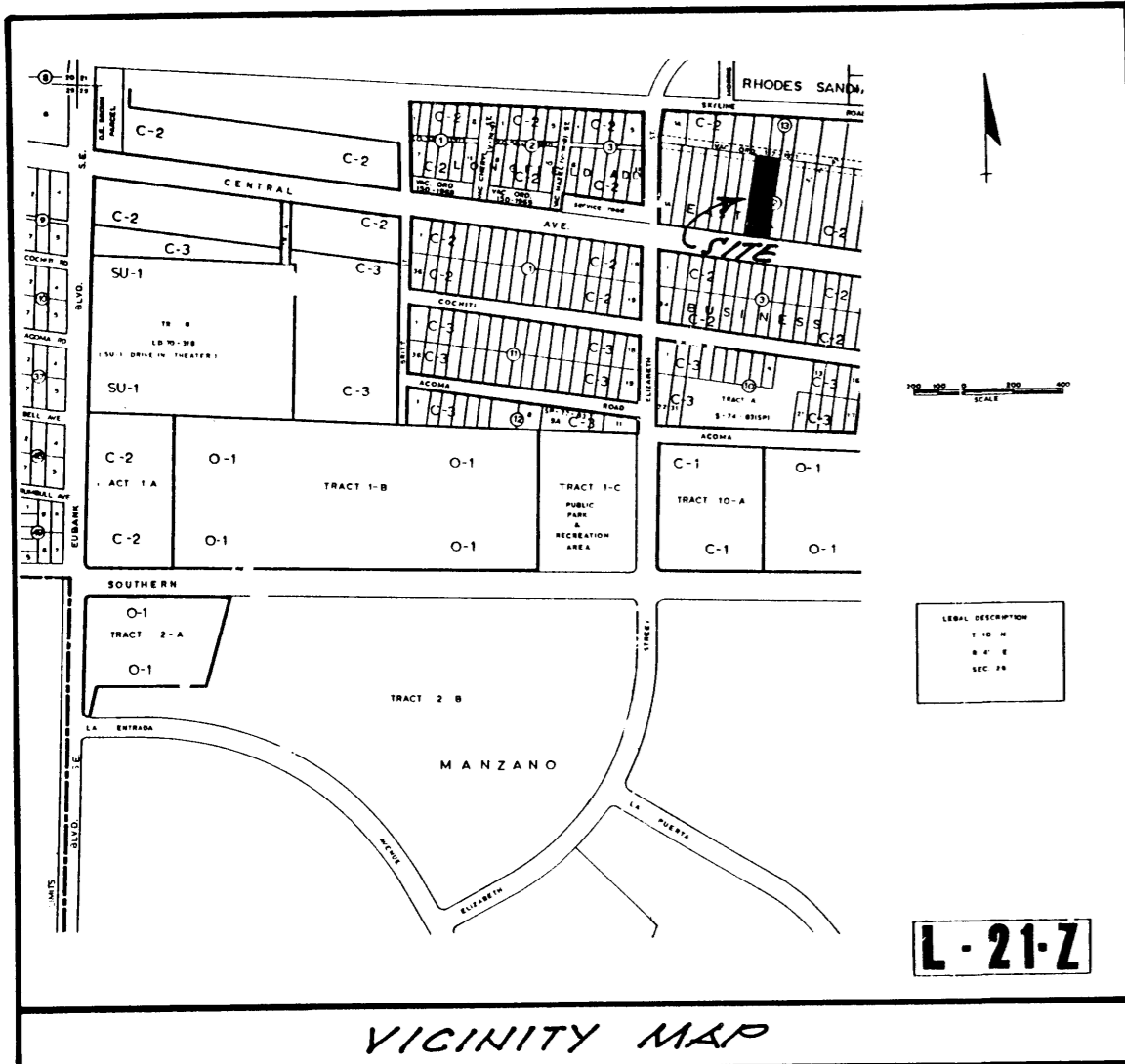
CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

CENTRAL AVE. N. E.



A DRAINAGE PLAN
FOR A PROPOSED ADDITION TO
"UTILITY SHACK"
(11035 CENTRAL AVE. N. E.)
ALBUQUERQUE, NEW MEXICO
MAY, 2003



CONSTRUCTION NOTES:

- 1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINN LOCATING SERVICE AT 765-1234 FOR LOCATION OF EXISTING UTILITIES.
- 2.) 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 SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- 3.) 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.
- 4.) ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUN-OFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- 1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.
- 3.) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

GENERAL NOTES:

- 1.) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2.) NO RECORD HAS BEEN MADE FOR EASEMENTS OF RECORD WITHIN THE SUBJECT SITE OTHER THAN THOSE SHOWN ON THE PLAT OF RECORD.
- 3.) REFER TO "ARCHITECTURAL SITE PLAN" FOR FIELD LAYOUT OF THE PROPOSED IMPROVEMENTS.
- 4.) TOPOGRAPHY SURVEY OBTAINED BY "TRANSIT-STADIA" METHOD.

NOTICE TO CONTRACTOR:

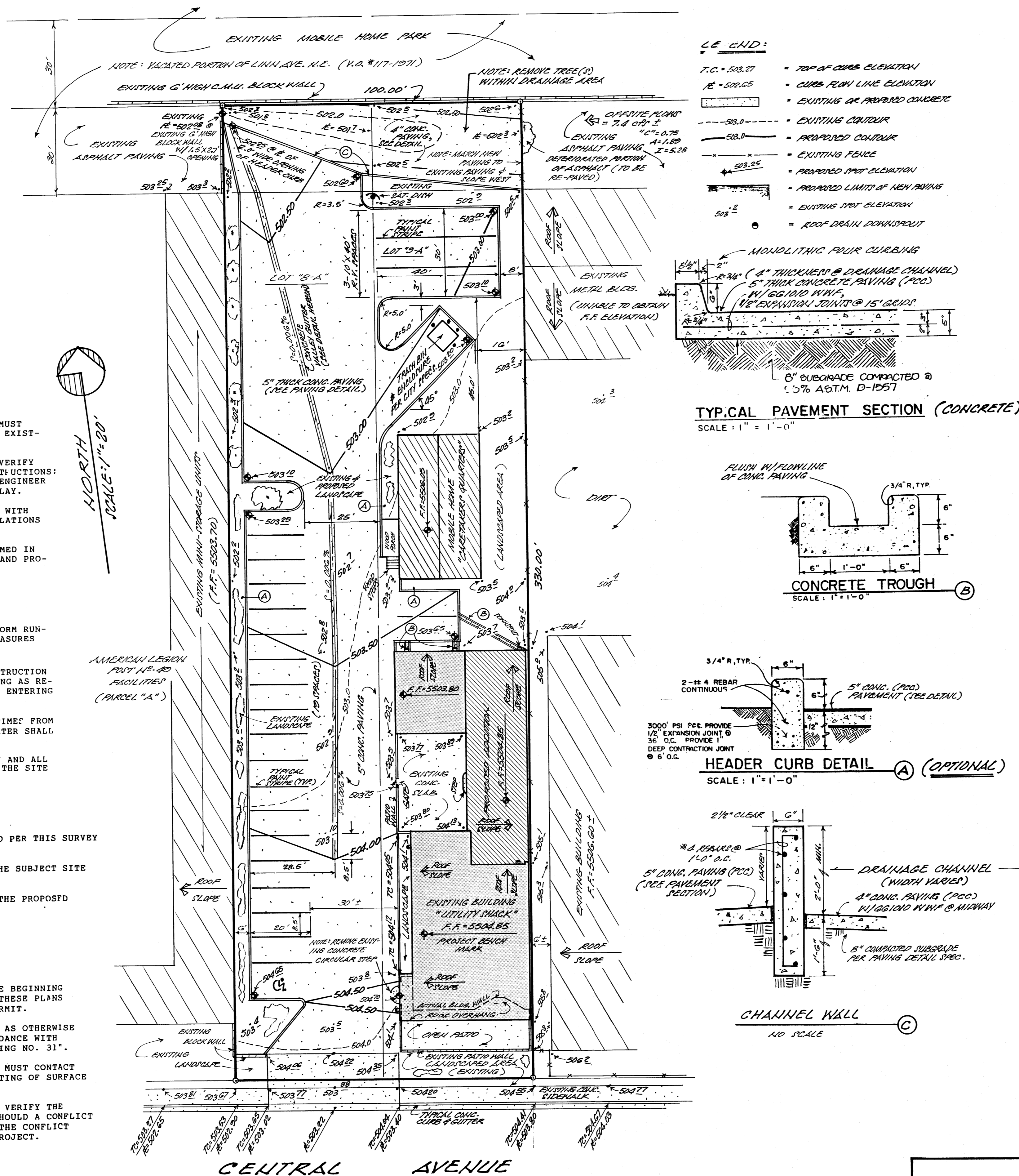
- 1.) AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- 2.) ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH "CONTRACT DOCUMENTS FOR CITY WIDE UTILITIES AND CASH PAVING NO. 31".
- 3.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINN LOCATING SERVICE (765-1234), FOR LOCATION OF EXISTING OF SURFACE AND SUBSURFACE UTILITIES.
- 4.) 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 THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR THE PROJECT.

LEGAL DESCRIPTION:

LOTS "8-A" & "9-A", IN BLOCK TWO (2), EAST CENTRAL BUSINESS ADDITION, ALBUQUERQUE, NEW MEXICO.

BENCH MARK REFERENCE:

USDA/NGS (1934), STATION "N.M. BER. 3, (L-21), M.S.L.D. ELEVATION = 5486.945; PROJECT BENCH MARK AS SHOWN ON THE PLAN HEREON.



DRAINAGE COMMENTS:

THE FOLLOWING ITEMS CONCERNING THE SUBJECT SITE ARE CONTAINED ON THE GRADING AND DRAINAGE PLAN AS SHOWN HEREON:

- 1.) SITE GRADING AND DRAINAGE PLAN (EXISTING AND PROPOSED)
- 2.) VICINITY MAP
- 3.) LEGAL DESCRIPTION
- 4.) LIMITS AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS
- 5.) DRAINAGE CALCULATIONS

AS SHOWN ON THE VICINITY MAP HEREON THE SUBJECT SITE IS LOCATED ON THE NORTH SIDE OF CENTRAL AVENUE N.E. APPROXIMATELY 325.0' EAST OF ELIZABETH STREET N.E., ALBUQUERQUE, NEW MEXICO.

THE PROJECT SITE DOES NOT LIE WITHIN A FLOOD PLAIN; HOWEVER, ACCEPTS AND CONTRIBUTES OFF-SITE FLOWS OF AND TO ADJACENT PROPERTIES. THE SITE PRESENTLY HAS GRAVELED SURFACE OVER 3-MIL BLACK PLASTIC COVERING THROUGHOUT THE ENTIRE UNDEVELOPED AREA(S).

THE SUBJECT SITE IN THE FINISHED DEVELOPED CONDITION WILL CONTINUE TO ACCEPT AND CONTRIBUTE TO THE AFOREMENTIONED OFF-SITE FLOWS.

DRAINAGE CALCULATIONS:

SITE AREA = 50.0' X 330.0' = 33,000.0 SQ. FT. = 0.76 ACRE

RAINFALL R_6 (100 YR./6-HR.) = 2.5 INCHES

TIME OF CONCENTRATION = T_c = TEN (10) MINUTES FOR A SITE THIS SIZE

RAINFALL INTENSITY, "I" = $2.5 \times 6.84 \times (10)^{-0.51} = 5.28$ IN./HR.

EXISTING DEVELOPED SITE:

ROOF AREA = 4,250.0 S.F.

LANDSCAPED AREA = 1,925.0 S.F.

PAVED/CONC. AREA = 1,645.0 S.F.

GRAVELED AREA = 25,180.0 S.F.

$C_c = \frac{4250.0 \times 0.90}{33,000.0} = 0.12$

$C_L = \frac{1925.0 \times 0.25}{33,000.0} = 0.01$

$C_p = \frac{1645.0 \times 0.95}{33,000.0} = 0.05$

$C_g = \frac{25180.0 \times 0.70}{33,000.0} = 0.53$ "C" = 0.71

$Q_{100} = 0.71 \times 5.28 \times 0.76 = 2.85$ cfs

$V_{100} = 0.71 \times (2.5/12) \times 33,000.0 = 4,881.3$ CU. FT.

PROPOSED DEVELOPED:

ROOF AREA = 5,690.0 S.F.

LANDSCAPED AREA = 8,200.0 S.F.

PAVED/CONC. AREA = 19,110.0 S.F.

$C_c = \frac{5690.0 \times 0.90}{33,000.0} = 0.16$

$C_L = \frac{7000.0 \times 0.25}{33,000.0} = 0.05$

$C_p = \frac{20,310.0 \times 0.95}{33,000.0} = 0.58$

"C" = 0.79

$Q_{100} = 0.79 \times 5.28 \times 0.76 = 3.17$ cfs

$V_{100} = 0.79 \times (2.5/12) \times 33,000.0 = 5,431.3$ CU. FT.

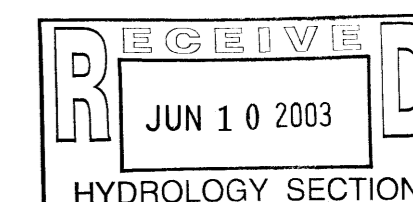
INCREASE = 0.32 cfs 550.0 CU. FT.

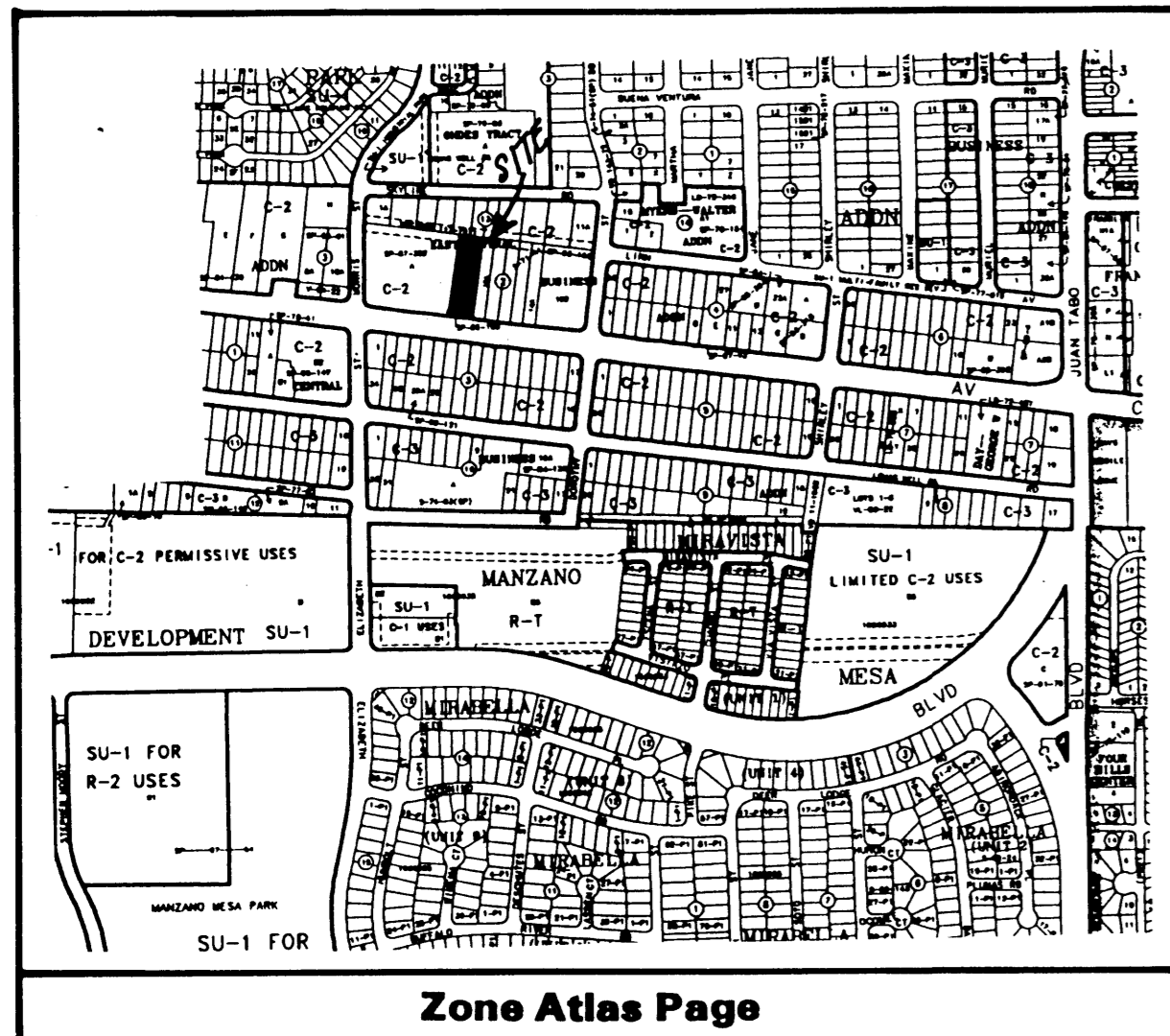
NOTE: DRAINAGE PLAN REVISION(S): JULY 17, 1991

- a.) ASPHALT PAVING SECTION TO CONCRETE PAVING SECTIONS.
- b.) ADDITIONAL PARKING AREA LOCATED AT NORTH END OF SUBJECT SITE.
- c.) REVISED DRAINAGE CALCULATIONS TO INCLUDE ADDITIONAL PARKING AREA.

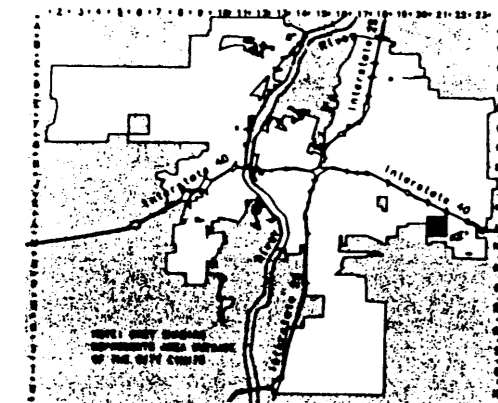
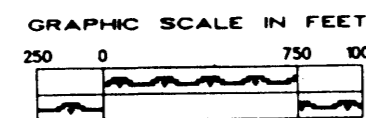
REVISED
GRADING AND DRAINAGE PLAN
FOR A PROPOSED ADDITION TO THE
"UTILITY SHACK"
(11035 CENTRAL AVENUE, N.E.)
ALBUQUERQUE, NEW MEXICO
FEBRUARY, 1991
(REVISION: JULY, 1991)

ENGINEER'S SEAL





L-21-Z



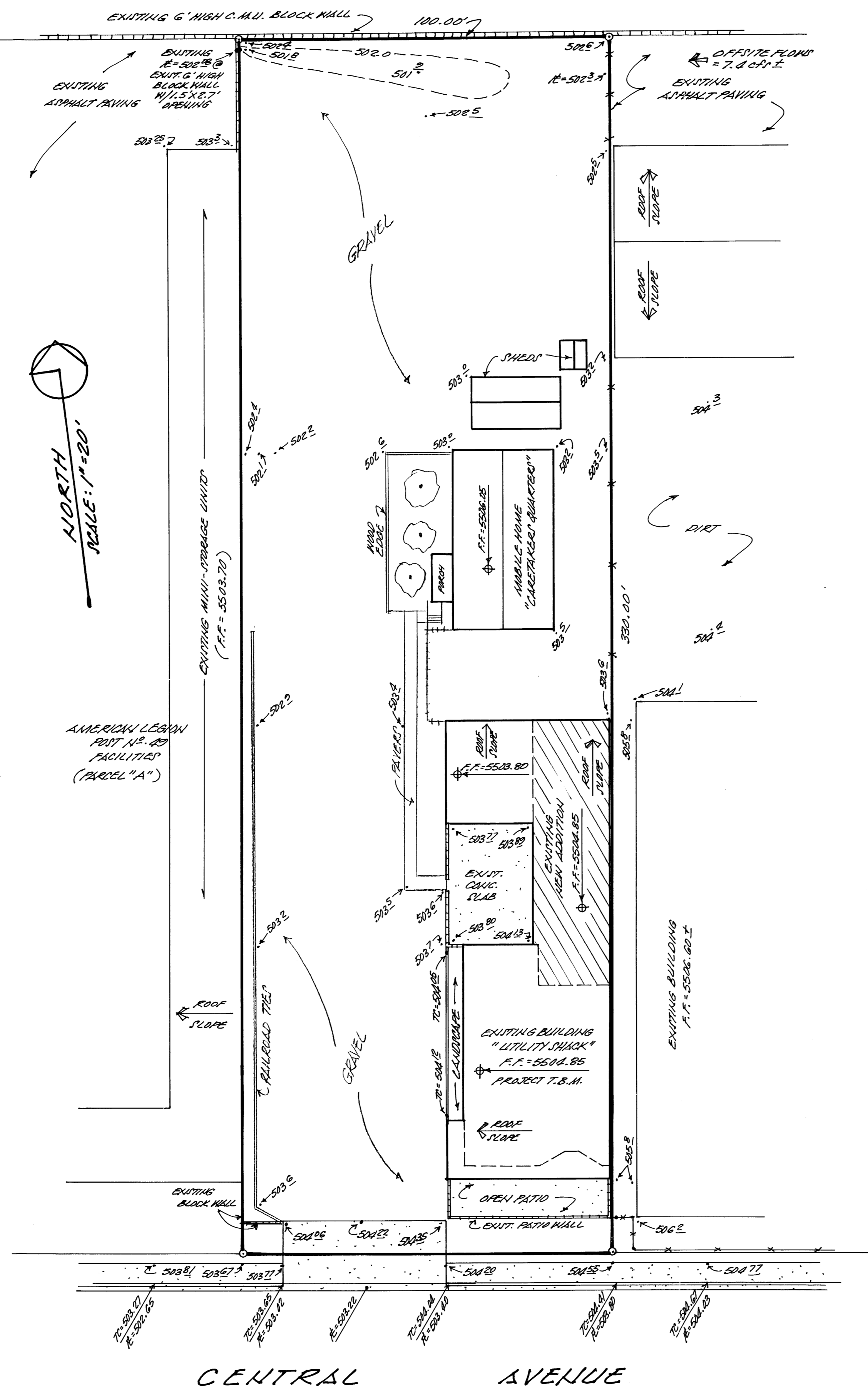
AREA MAP

LEGAL DESCRIPTION :

LOTS 8-A AND 9-A, IN BLOCK TWO (2), EAST CENTRAL BUSINESS ADDITION, ALBUQUERQUE, NEW MEXICO.

BENCH MARK REFERENCE :

USDA/NGS (1934), STATION "NM BERN. 3", (L-21), ELEVATION = 5486.945; PROJECT T.B.M. AS SHOWN ON THE PLAN HEREON.



DRAINAGE CERTIFICATION :

I, LEVI J. VALDEZ, N.M.P.E. NO. 5693, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED AUGUST 14, 1991. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.

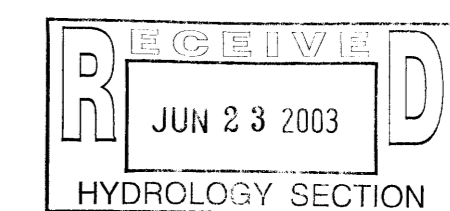
The paved parking area shown on the original approved plan was not paved, the existing area is all gravel surfaced.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSES.

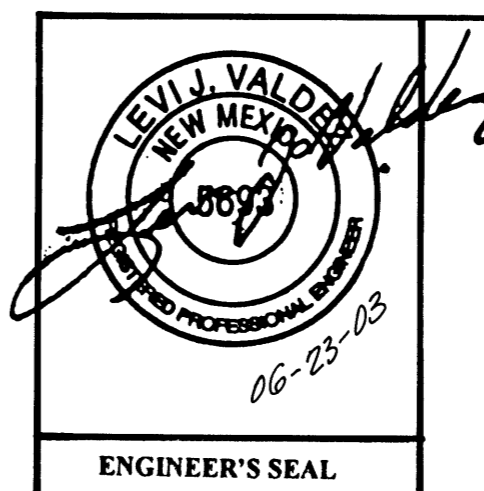
Levi J. Valdez
LEVI J. VALDEZ, N.M.P.E. NO. 5693

DATE 06-23-03

SEAL



"AS-BUILT" CERTIFICATION



A DRAINAGE PLAN
FOR A PROPOSED ADDITION TO
"UTILITY SHACK"
(11035 CENTRAL AVE. N.E.)
ALBUQUERQUE, NEW MEXICO
MAY, 2003