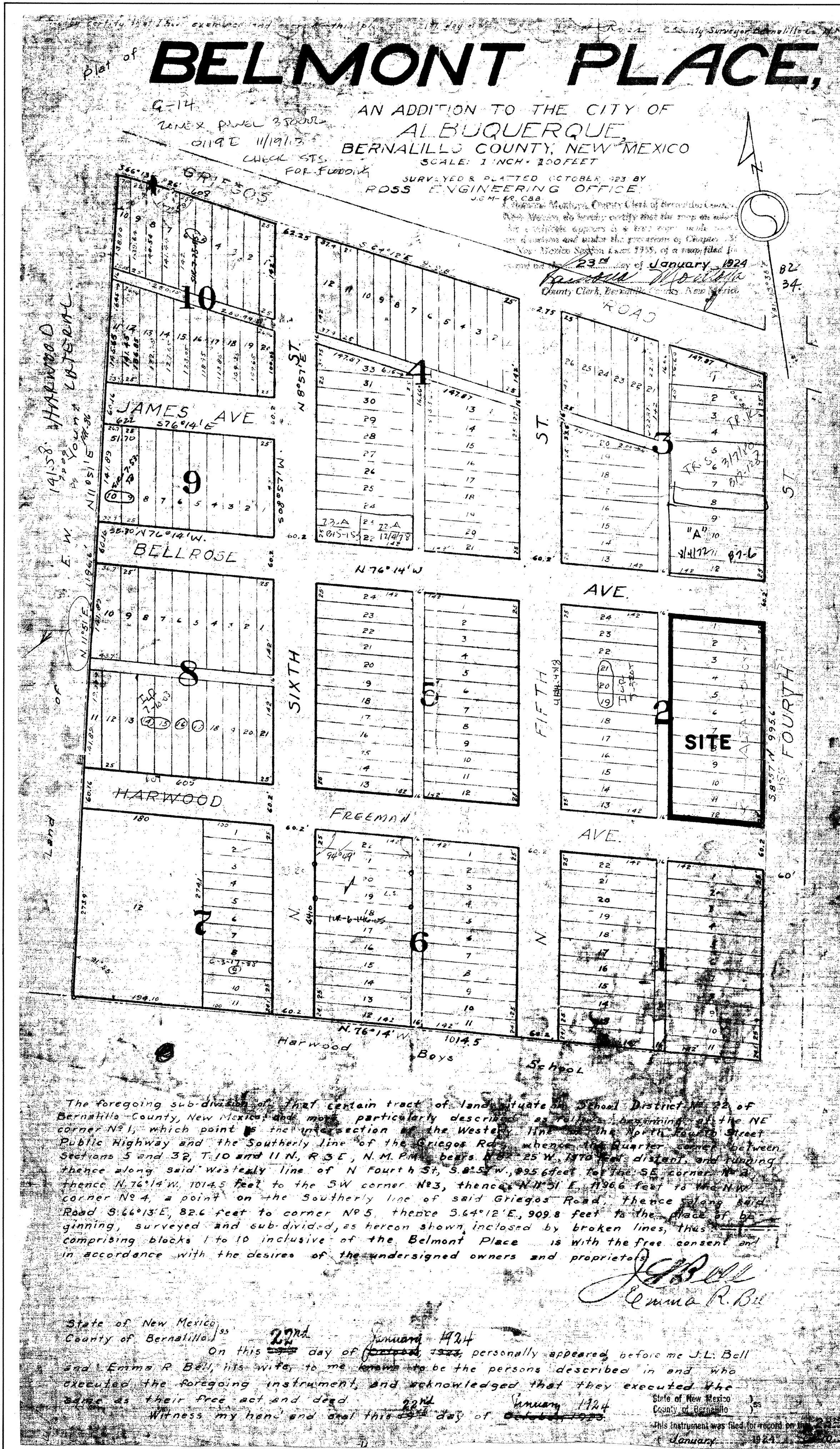
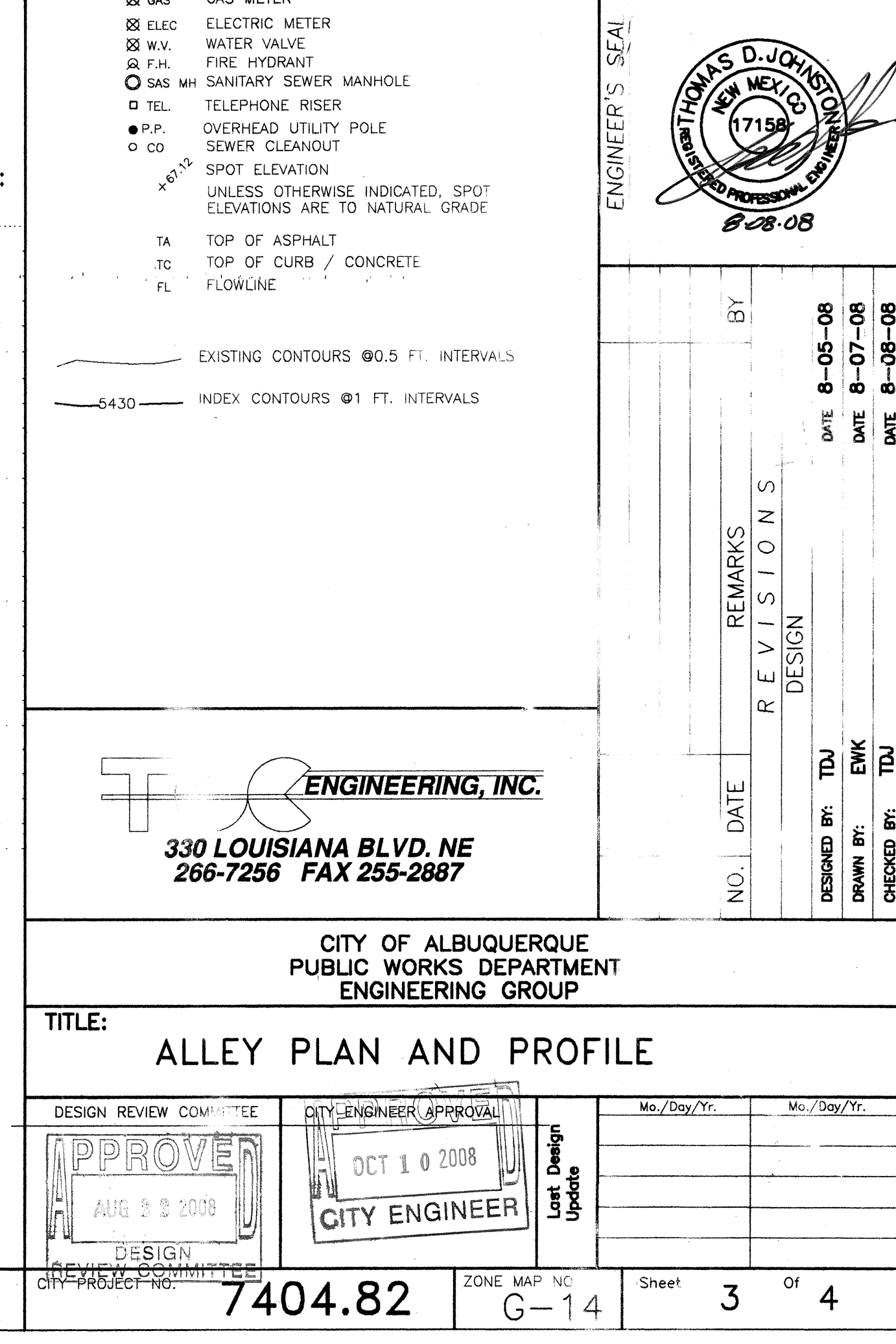
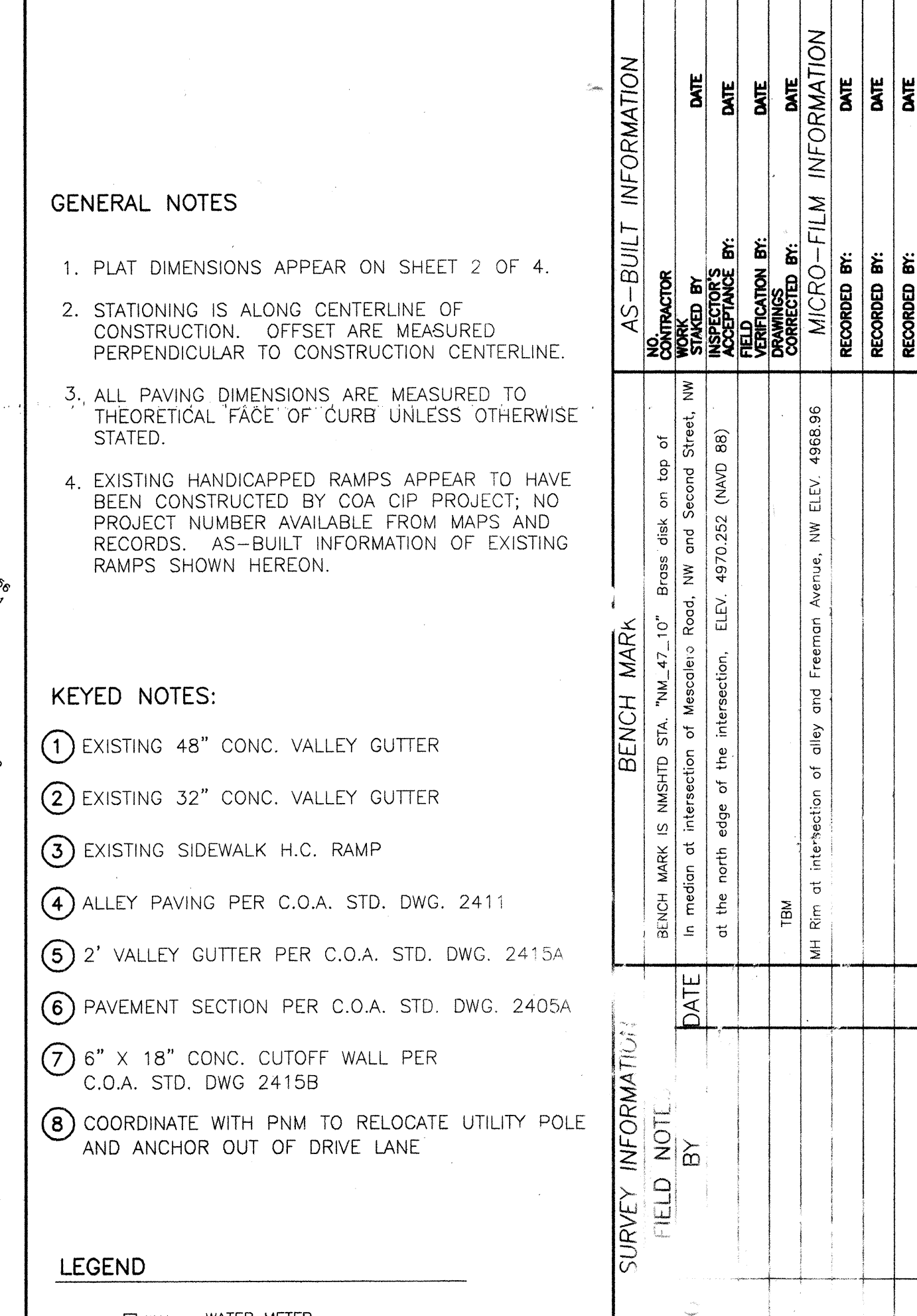
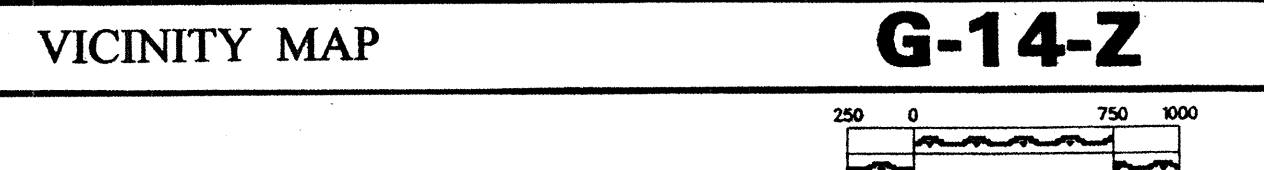
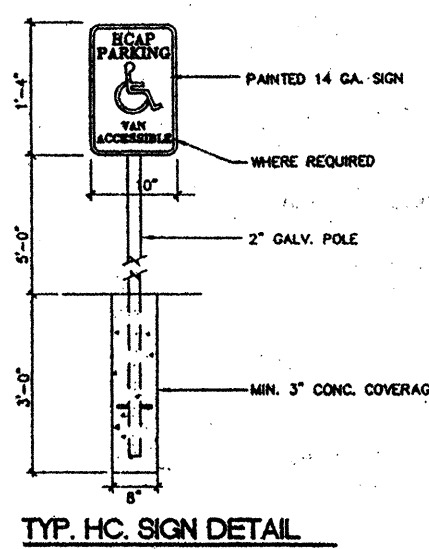
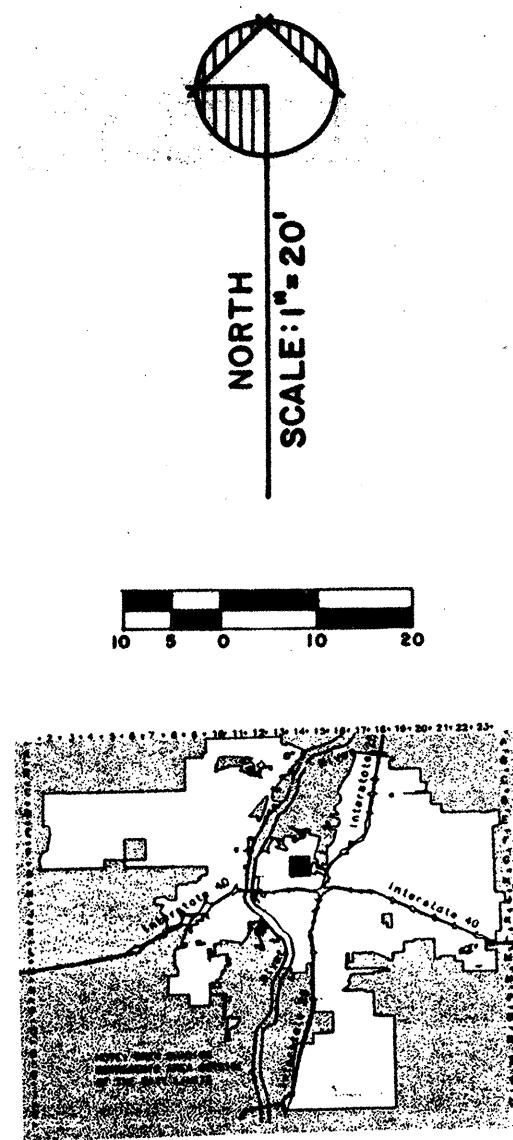
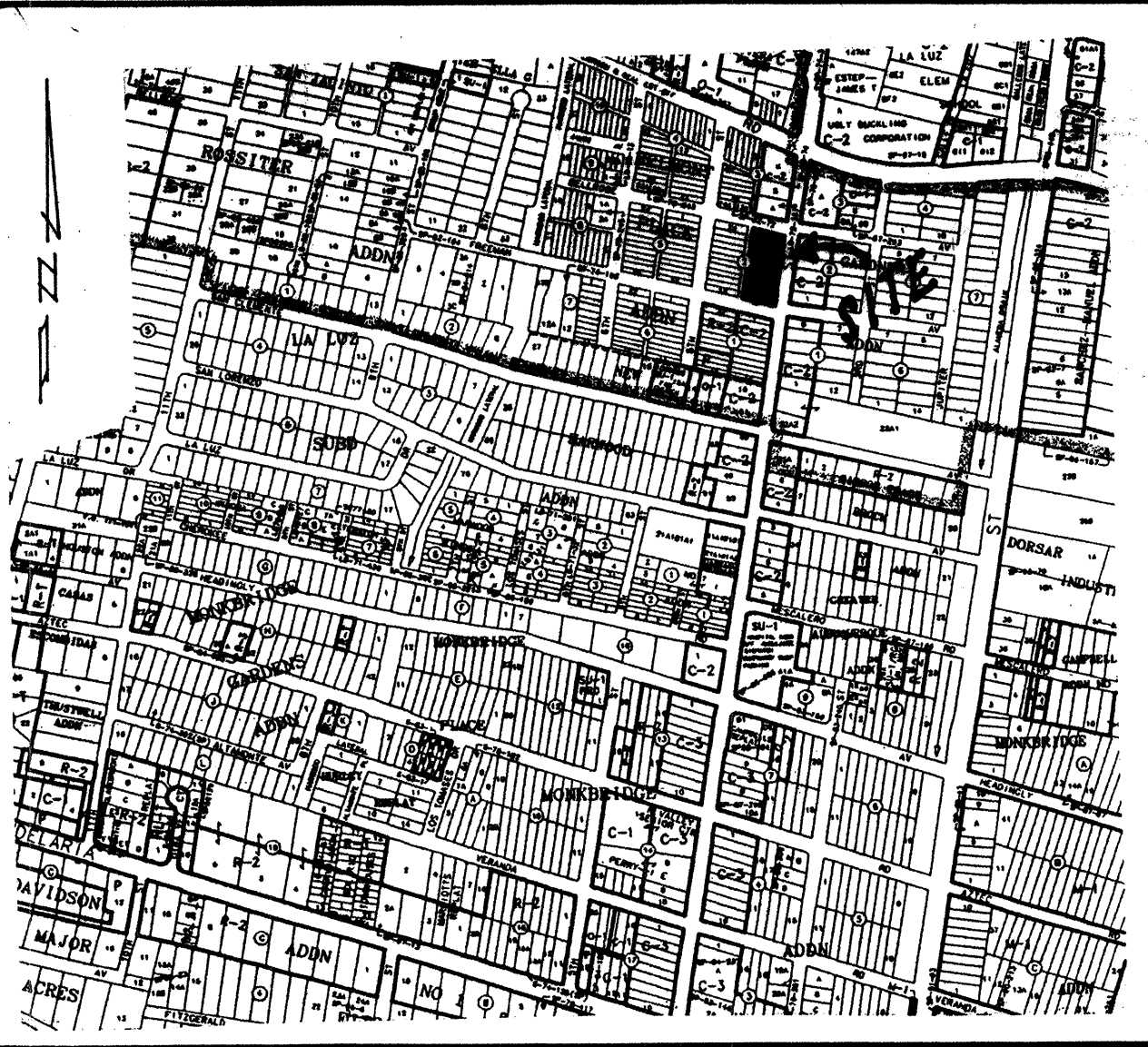


REV.	SHEETS	COUNTY	DATE	USER DEPT.	DATE	USER DEPT.	DATE
ENGINEER'S SEAL		APPROVAL	ENGINEER	DATE	APPROVED FOR CONSTRUCTION		
		DRC CHAIRMAN	<i>A Woodall</i>	8/22/07			
		TRANSPORTATION	<i>[Signature]</i>	8-11-08			
		HYDROLOGY	<i>Wm G. Chen</i>	7-29-08			
		ABCWUA	<i>[Signature]</i>	6-2-08			
		CONSTR. MNGMT.			 ENGINEER DATE 10-16-08		
		CONSTR. COORD.					
CITY PROJECT NO. 7404.82				SHEET OF 1 4			

SCANNED BY
PLANNING

[illegible]





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.

CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 200-1990 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 LOCATIONS 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-WAYS SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

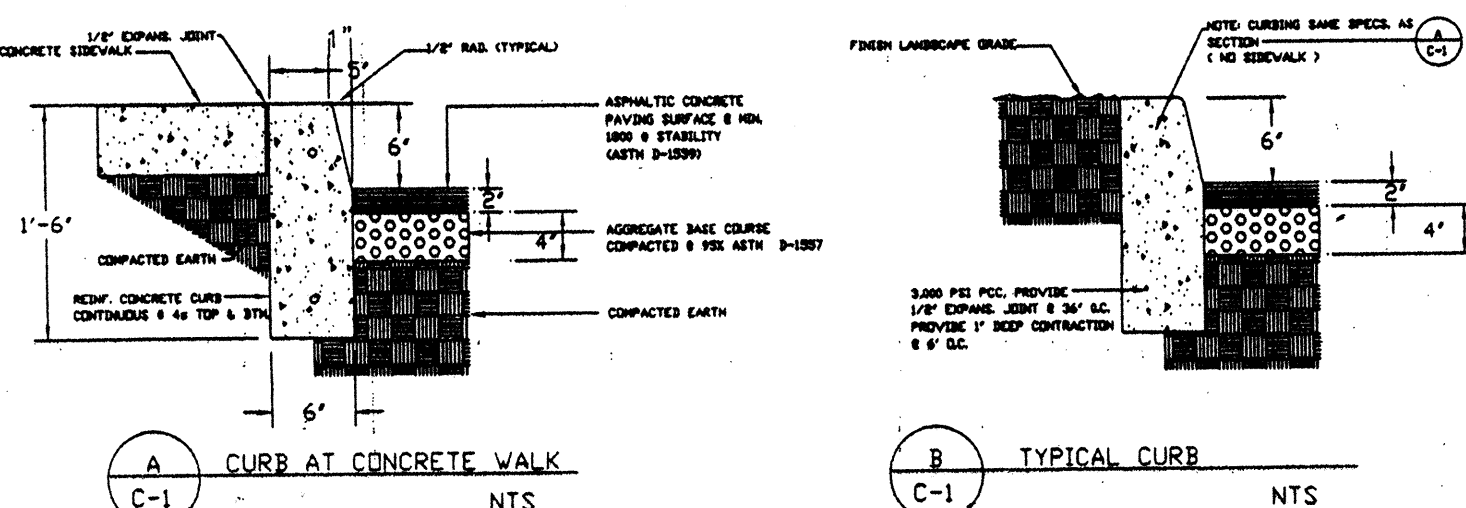
LEGEND:

TOP OF CURB ELEVATION = 70'-0.0"
CURB FLOWLINE ELEVATION = 69'-6.0"
EXISTING SPOT ELEVATION = 69'-0.0"
EXISTING CONTOUR ELEVATION = 69'-0.0"
PROPOSED SPOT ELEVATION = 70'-0.0"
PROPOSED CONTOUR ELEVATION = 69'-0.0"
PROPOSED OR EXISTING CONCRETE SURFACE = 69'-0.0"
EXISTING FENCE LINE = 69'-0.0"

PROPOSED LANDSCAPE AREA

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.



STORM INLET SECTION
N.T.S.

CURB AT CONCRETE WALK
N.T.S.

TYPICAL CURB
N.T.S.

LEGAL DESCRIPTION:

LOTS ONE (1) THROUGH TWELVE (12), INCLUSIVE, IN BLOCK TWO (2), OF BELMONT PLACE ADDITION, TO THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCHMARK REFERENCE:

ACS STATION "NM47-10"; PROJECT T.B.M. AS SHOWN ON THE PLAN HEREON.

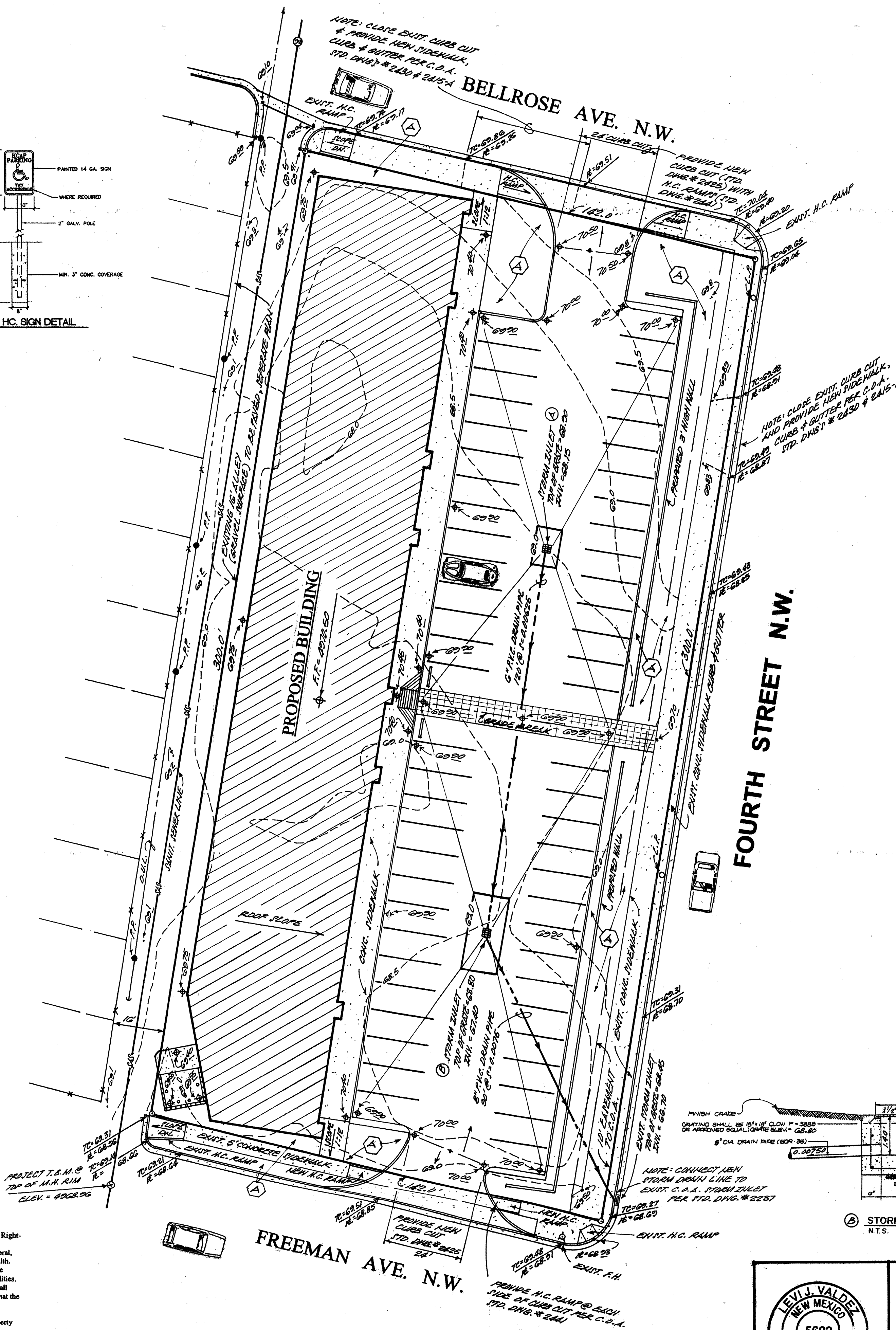
Drainage Facilities within City Right-of-Way Notice to Contractor

- An excavation permit will be required before beginning any work within City Right-of-Way.
- 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.
- Two working days prior to any excavation, the contractor must contact the line locating service, New Mexico One Call 260-1990, for the location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the 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.
- Backfill compaction shall be according to traffic/street use.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets shall be performed on a 24-hour basis.

APPROVALS	NAME	DATE
HYDROLOGY INSPECTOR		

NOTE: ALL WORK WITHIN PUBLIC EASEMENT SHALL BE PERFORMED UNDER SEPARATE PERMIT.

NOTE: LAYOUT OF PROPOSED IMPROVEMENTS SHALL BE PER ARCHITECT SITE PLAN.

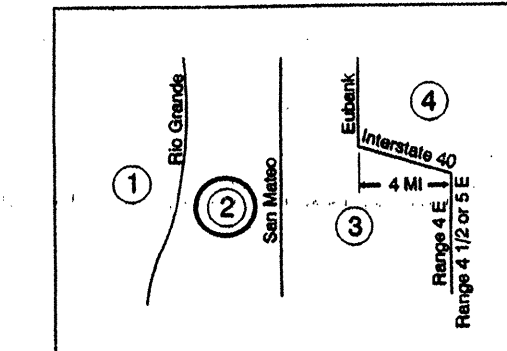


A.1 PRECIPITATION ZONES

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

FIGURE A-1



Zone	Intensity [2-YR 10-YR]
1	4.70 [1.84, 3.14]
2	5.08 [2.04, 3.41]
3	5.38 [2.21, 3.65]
4	5.81 [2.34, 3.83]

OPM SECTION 22.2 - HYDROLOGY
January, 1995 Page A-4

TABLE A-4. LAND TREATMENTS

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, groundwater and infiltration capacity. Croplands, undisturbed areas.
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 (seal) 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.

Zone	A	B	C	D
1	1.39 [0.00, 0.24]	2.03 [0.00, 0.78]	2.87 [0.00, 1.49]	4.37 [1.00, 2.88]
2	1.58 [0.00, 0.38]	2.28 [0.00, 0.95]	3.14 [0.00, 1.71]	4.70 [1.00, 3.14]
3	1.67 [0.00, 0.48]	2.39 [0.00, 1.19]	3.46 [0.00, 2.00]	5.02 [1.00, 3.50]
4	1.81 [0.00, 0.67]	2.59 [0.00, 1.45]	3.73 [1.00, 2.38]	5.38 [1.00, 3.83]

DRAINAGE COMMENTS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED ON THE WEST SIDE OF FOURTH ST. N.W. BETWEEN BELLROSE AVE. N.W. AND FREEMAN AVE. N.W., IN THE CITY OF ALBUQUERQUE, NEW MEXICO.

THE SUBJECT SITE, 1, IS PRESENTLY A VACANT SITE THAT OLD BUILDINGS AND ASSOCIATED IMPROVEMENTS HAVE BEEN REMOVED THEREFROM, 2, IS NOT LOCATED WITHIN A DESIGNATED FLOODPLAIN (RE: F.E.M.A. PANEL 119 OF 825), 3, DOES NOT CONTRIBUTE TO THE OFFSITE FLOWS OF ADJACENT PROPERTIES, 4, DOES NOT ACCEPT OFFSITE FLOWS OF ADJACENT PROPERTIES.

CALCULATIONS:

PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE AND BERNALILLO COUNTY, NEW MEXICO.

SITE AREA: 0.97 ACRE
PRECIPITATION ZONE: TWO (2), TABLE A-1
PEAK INTENSITY: IN/HR. AT T_c = TWELVE (12) MINUTES, 100-YR.=5.05
LAND TREATMENT METHOD FOR CALCULATION OF "Q_p", TABLES A-6 & A-9
LAND TREATMENT FACTORS, TABLE A-4

PRECIPITATION: 360 = 2.35 in.
1440 = 2.75 in.
10 DAY = 3.95 in.

EXCESS PRECIPITATION:

TREATMENT A 0.53 in.
TREATMENT B 0.78 in.
TREATMENT C 1.13 in.
TREATMENT D 2.12 in.

PEAK DISCHARGE:

1.56 cfs/ac.
2.28 cfs/ac.
3.14 cfs/ac.
4.70 cfs/ac.

EXISTING CONDITIONS:

AREA
TREATMENT A 0.00 ac.
TREATMENT B 0.00 ac.
TREATMENT C 0.39 ac.
TREATMENT D 0.58 ac.

PROPOSED CONDITIONS:

AREA
TREATMENT A 0.00 ac.
TREATMENT B 0.00 ac.
TREATMENT C 0.12 ac.
TREATMENT D 0.85 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = (0.53) x (0.00) + (0.78) x (0.00) + (1.13) x (0.39) + (2.12) x (0.58) 0.97 = 1.72 in.
V100-360 = (1.72) x (0.97) 12 = 0.13903 ac-ft = 6,056.3 cf

EXISTING PEAK DISCHARGE:

Q100 = (1.56) x (0.00) + (2.28) x (0.00) + (3.14) x (0.39) + (4.70) x (0.58) = 3.95

PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.53) x (0.00) + (0.78) x (0.00) + (1.13) x (0.12) + (2.12) x (0.85) 0.97 = 2.00 in.
V100-360 = (2.00) x (0.97) 12 = 0.16167 ac-ft = 7,042.3 cf
V100-1440 = (0.162) + (0.85) x (2.75 - 2.35) 12 = 0.1903 ac-ft = 8,289.5 cf
V100-10day = (0.162) + (0.85) x (3.95 - 2.35) 12 = 0.2753 ac-ft = 11,992.1 cf

PROPOSED PEAK DISCHARGE:

Q100 = (1.56) x (0.00) + (2.28) x (0.00) + (3.14) x (0.12) + (4.70) x (0.85) = 4.38
INCREASE = 4.38 - 3.95 = 0.43 CFS



A PROPOSED
GRADING AND DRAINAGE PLAN
FOR
4501 NORTH FOURTH STREET
ALBUQUERQUE, NEW MEXICO
AUGUST, 2007

ENGINEER'S SEAL

CITY PROJECT NO 7404.82
ZONE MAP NO G-14-Z
SHEET 4 OF 4
FOR INFORMATIONAL PURPOSES ONLY