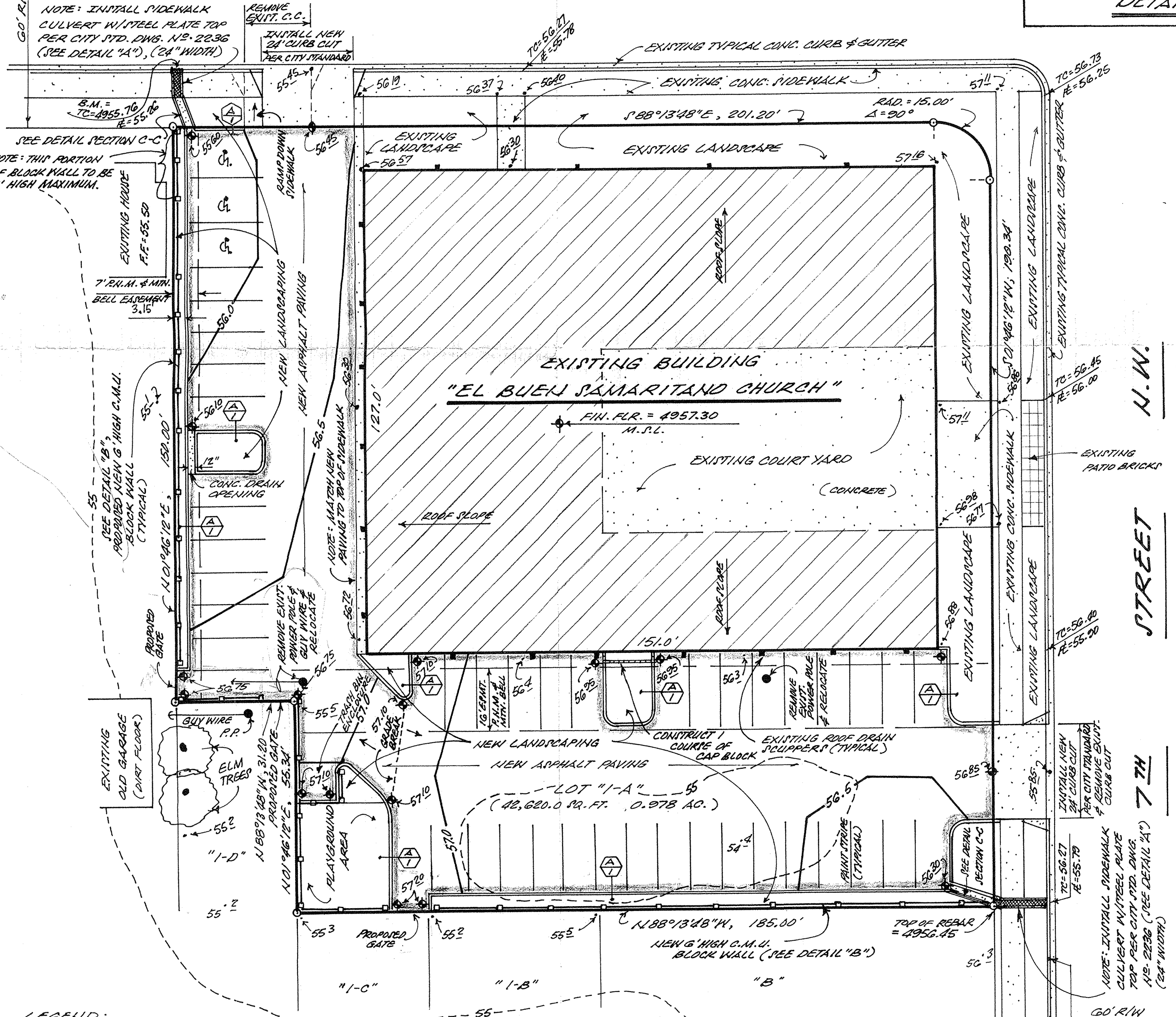




VICINITY MAP

SCALE: 1"=20'

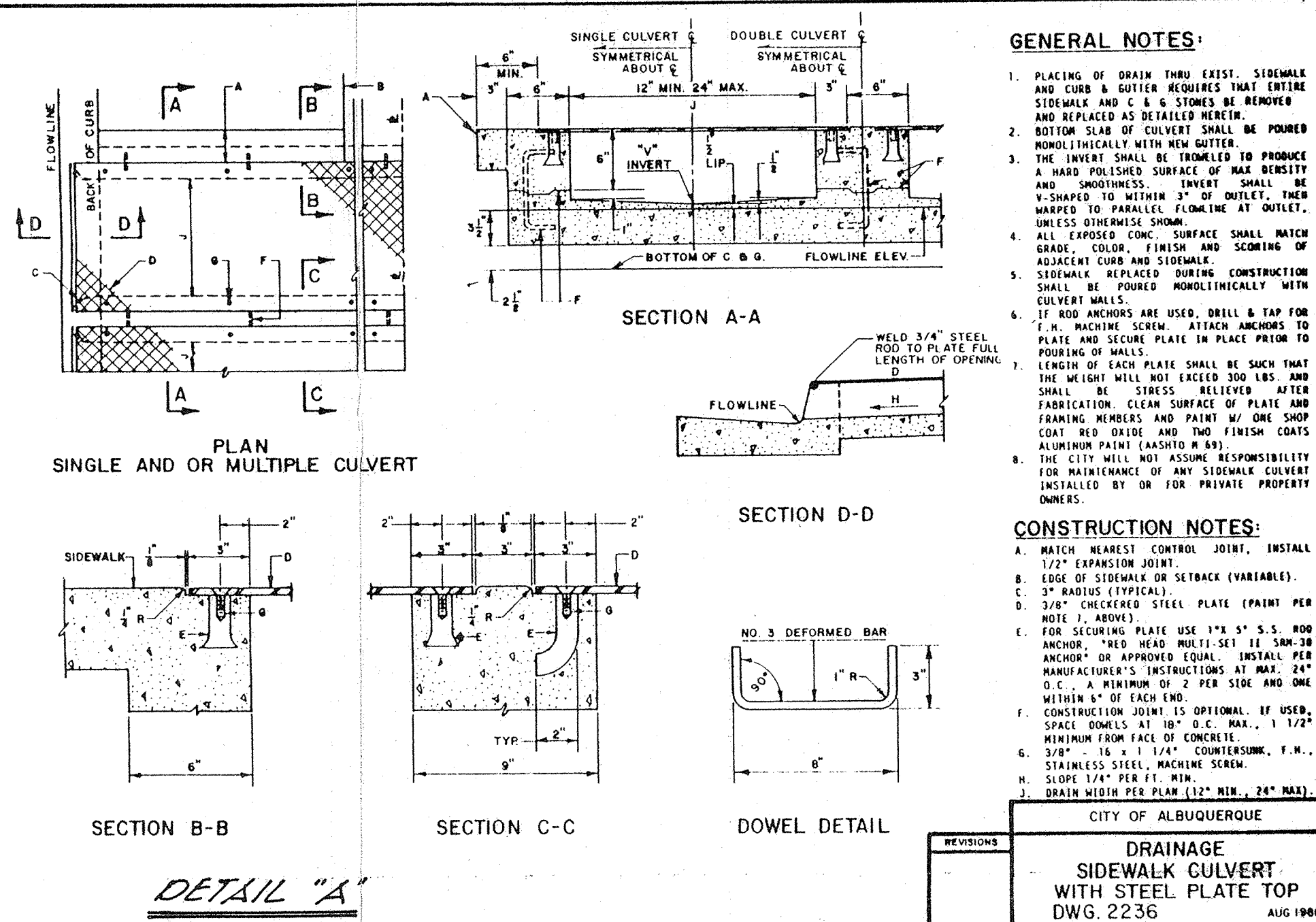
GRANITE AVENUE N.W.



- LEGEND:
- T.C. = 56.40 = TOP OF CURB ELEVATION
 - E = 56.35 = CURB FINISH ELEVATION
 - 55 --- = EXISTING CONTOUR
 - 56 --- = PROPOSED CONTOUR
 - 57 --- = EXISTING FENCE
 - 58 --- = PROPOSED SPOT ELEVATION
 - 59 --- = PROPOSED LIMIT OF NEW PAVING
 - 60 --- = EXISTING SPOT ELEVATION

LEGAL DESCRIPTION:
LOT "1-A" IN BLOCK NUMBERED THIRTY-TWO (32), OF THE PERFECTO ARMIJO & BROTHERS ADDITION, AN ADDITION TO THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (REPLAT FILED: JANUARY 20, 1988, BK. C35, P. 1370).

BENCH MARK REFERENCE:
CITY OF ALBUQUERQUE - SURVEY DEPARTMENT STATION "12-J14A", LOCATED AT THE SOUTHWEST INTERSECTION OF 7th STREET N.W. AND MOUNTAIN ROAD N.W., (A SQUARE CUT OF THE TOP OF THE WSW CURB RETURN); M.S.L. DATUM ELEVATION = 4957.76.



GENERAL NOTES:

1. NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
2. NO SEARCH 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 LINE 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.

GENERAL NOTES:

1. PLACING OF GRAIN THROUGH EXIST. SIDEWALK AND CURB & GUTTER REQUIRES THAT EXIST. SIDEWALK AND CURB & GUTTER BE REMOVED AND REPLACED AS SHOWN HEREON.
2. BOTTOM SLAB OF CULVERT SHALL BE POWERED MODULITHY WITH MODULITHY.
3. THE INVERT SHALL BE FINISHED TO PRODUCE A HARD FINISHED SURFACE OF MAX. DEPTH AND SMOOTHNESS. INVERT SHALL BE V-SHAPED TO WITHIN 3" OF OUTLET, THEN HAMPED TO PARALLEL FLOWLINE AT OUTLET, UNLESS OTHERWISE SHOWN.
4. ALL EXPOSED CONCRETE SURFACES SHALL MATCH GRADE, COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK.
5. SIDEWALKS SHALL BE FINISHED TO MATCH GRADE, COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK.
6. THE CITY WILL NOT ASSUME RESPONSIBILITY FOR MAINTENANCE OF ANY SIDEWALK OR CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

CONSTRUCTION NOTES:

1. MATCH EXISTING CONTROL JOINT, INSTALL 1/2" EXPANSION JOINT. PLACE PRIOR TO POURING OF SLAB.
2. EDGE OF SIDEWALK OR SETBACK (VARIABLE).
3. 3" RADIUS (TYPICAL).
4. 3/4" CHECKED STEEL PLATE (PAINT PER NOTE 1, ABOVE).
5. FOR SINKING PLATE USE 1/2" 5" 5.5. 800 ANCHOR, "RED HEAD MULTI-SET 11 1/2" 3/8" ANCHOR" OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS AT MAX. 24" O.C. A MINIMUM OF 2 PER SIDE AND ONE WITHIN 4" OF EACH END.
6. CONSTRUCTION JOINT IS OPTIONAL, IF USED, SPACE JOINTS AT 10' O.C. MAX. 1 1/2" MINIMUM TOP FACE OF CONCRETE.
7. 3/8" IS A 1/4" COUNTERSINK, F.M., STAINLESS STEEL, MACHINE SCREW.
8. SLOPE 1/4" PER 1' MIN.
9. DRAIN WIDTH PER PLAN (12" MIN., 24" MAX.).

CITY OF ALBUQUERQUE

DRAINAGE SIDEWALK CULVERT WITH STEEL PLATE TOP DWG. 2256 AUG 1988

REVISIONS

DETAIL "A"

DETAIL "B"

TYPICAL BLOCK WALL

TYPICAL CURB

APPROVALS

NAME

DATE

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
- 2.) VICINITY MAP
- 3.) LEGAL DESCRIPTION
- 4.) LIMITS AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS
- 5.) HYDRAULIC DRAINAGE CALCULATIONS

AS SHOWN ON THE VICINITY MAP HEREON THE SUBJECT SITE IS LOCATED IN THE PERFECTO ARMIJO & BROTHERS ADDITION AT THE SOUTHWEST INTERSECTION OF SEVENTH (7th) STREET N.W. AND GRANITE AVENUE N.W., WITHIN THE CITY LIMITS OF THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (CITY ZONE ATLAS MAP "J-14-Z").

THE PROJECT SITE, (1.) DOES NOT LIE WITHIN A FLOOD PLAIN, (2.) DOES NOT LIE ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, (3.) HAS NO DRAINAGE EASEMENTS ON THE PROPERTY.

BASED ON A SITE INVESTIGATION, IT HAS BEEN DETERMINED THAT THE FREE DISCHARGE OF SURFACE FLOWS OF THE EXISTING AND PROPOSED QUANTITIES HAVE NO ADVERSE AFFECT ON DOWNSTREAM PROPERTIES.

DRAINAGE CALCULATIONS:

I. REFERENCES:

- A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), VOL. 2, DESIGN CRITERIA, CHAPTER 22, DRAINAGE, FLOOD CONTROL AND EROSION CONTROL.
- B. SOIL SURVEY OF BERNALILLO COUNTY AND PARTS OF SANDOVAL AND VALENCIA COUNTIES, NEW MEXICO, UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, (SCS SHEET NO. 30).

II. GENERAL INFORMATION:

- A. SOIL TYPE: SOIL TYPE IS GLENDALE LOAM ("GK"), HYDROLOGIC SOIL GROUP "B".
- B. IMPERVIOUSNESS:

SITE AREA = 0.978 ACRES, (42,620.0 SQ. FT.).
PRESENT UNDEVELOPED "C" FACTOR = 0.40

C. TYPE OF SURFACE (DEVELOPED):

EXISTING
HARD SURFACED (ASPHALT/GRAVEL) = 0.014 AC. = 0.014 X (C=0.95) = 0.01
BUILDING ROOF AREA = 0.440 AC. = 0.440 X (C=0.90) = 0.41
LANDSCAPED AREA = 0.071 AC. = 0.071 X (C=0.25) = 0.02
UNDEVELOPED AREA = 0.453 AC. = 0.453 X (C=0.40) = 0.19
AVERAGE "WEIGHTED" "C" = 0.63

C-1. TYPE OF SURFACE (PROPOSED DEVELOPED):

HARD SURFACED (ASPHALT/CONC.) = 0.401 AC. = 0.401 X (C=0.95) = 0.39
BUILDING ROOF AREA = 0.440 AC. = 0.440 X (C=0.90) = 0.41
LANDSCAPED AREA = 0.137 AC. = 0.137 X (C=0.25) = 0.04
UNDEVELOPED AREA = 0.000 AC. = 0.000 X (C=0.40) = 0.00
AVERAGE "WEIGHTED" "C" = 0.84

D. RAINFALL, 100-YR., 6-HR., R_6 (SEE REF. A., PLATE 22.2 D-1)

$R_6 = 2.2$ INCHES.

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

F. RAINFALL INTENSITY, "I", (SEE REF. A., PLATE 22.2 D-2)

$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times (10)^{-0.51} = 4.65$ IN./HR.

III. PEAK DISCHARGE: ($Q = CIA$)

UNDEVELOPED: $Q_{100} = 0.63 \times 4.65 \times 0.978 = 2.87$ cfs (EXISTING)

$Q_{10} = 0.657 \times 2.87 = 1.89$ cfs

DEVELOPED: $Q_{100} = 0.84 \times 4.65 \times 0.978 = 3.82$ cfs (PROPOSED)

$Q_{10} = 0.657 \times 3.82 = 2.51$ cfs

** Q_{100} INCREASE = 0.95 cfs

IV. PEAK VOLUME:

A. EXISTING CONDITIONS:

$V_{100} = 0.63 \times (2.2/12) \times 42,620.0 = 4,922.6$ CU. FT.

$V_{10} = 0.657 \times 4,922.6 = 3,234.2$ CU. FT.

B. DEVELOPED CONDITIONS:

$V_{100} = 0.84 \times (2.2/12) \times 42,620.0 = 6,563.5$ CU. FT.

$V_{10} = 0.657 \times 6,563.5 = 4,312.2$ CU. FT.

** V_{100} INCREASE = 1,640.9 CU. FT.

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

GRADING AND DRAINAGE PLAN
FOR NEW PARKING LOT
EL BUEN SAMARITANO
UNITED METHODIST CHURCH
(7TH STREET N.W. & GRANITE AVENUE N.W.)
ALBUQUERQUE, NEW MEXICO
DECEMBER, 1988



ENGINEER'S SEAL

