HYDROLOGY

H16/D52
2 PLANS

H16/D52

2 PLANS

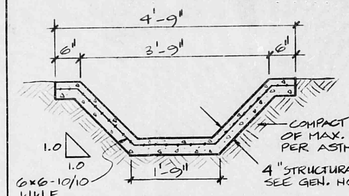
SOLV - EX CORP. PROPERTY

2121 MENAUL BLVD N.E. ALBUQUERQUE, NEW MEXICO

SEPT. - 1983

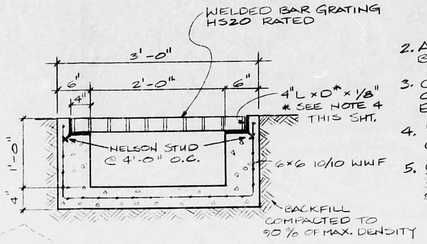
LEGEND

--60--	EXISTING CONTOURS
—10—	PROPOSED CONTOURS
62.4	EXISTING SPOT ELEVATION
→	PROPOSED DIRECTION OF SURFACE FLOW
	NEW CONSTRUCTION ITEMS
	BAR GRATING - EW CHANNEL ONLY
F.F.	FINISHED FLOOR ELEVATION
T.O.S.	TOP OF SLAB ELEVATION
T.C.	TOP OF CHANNEL OR CURB ELEVATION
F.L.	FLOW LINE ELEVATION
	EXISTING BUILDING
	EXISTING BUNKER WALL
	EXISTING RETAINING WALL
T.O.W.	TOP OF WALL ELEVATION
CCCCCC	TEMPORARY EARTHEN BERM



NS CHANNEL SECTION

SCALE: 3/4" = 1'-0"



EW CHANNEL SECTION

SCALE: 1" = 1'-0"

GENERAL NOTES:

1. NS DRAINAGE CHANNEL & TRAFFIC CONTROL BUMP SHALL BE CONSTRUCTED OF THE SAME MATERIALS AS FOLLOWS:
   - AGGREGATE SHALL BE CLASS "B" AS PER SECTION 115.023 OF THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1979.
   - MIX SHALL CONTAIN 6% ± 0.5 ASPHALT CEMENT. ASPHALT CEMENT SHALL BE PENETRATION RATED AT 85-100
2. APPLY TACK COAT BEFORE CONSTRUCTION OF TRAFFIC CONTROL BUMP AT SOUTH ENTRANCE TO SITE.
3. CONCRETE FOR NS AND EW CHANNEL SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. ENTRAINED AIR SHALL BE PROVIDED AT 5% ± 1%.
4. "D" SHALL BE DEPTH OF GRATING BEARING BAR PLUS 1/8" (THICKNESS OF ANGLE)
5. CONSTRUCTION ITEMS INCLUDE TRAFFIC CONTROL BUMPER, NS & EW CHANNELS, CULVERT W/ CHECKER PLATE & SITE GRADING ONLY. ALL OTHER SITE IMPROVEMENTS ARE EXISTING.

CULVERT NOTES:

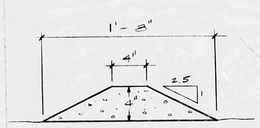
1. PLACEMENT OF DRAIN THRU EXISTING SIDEWALK, DRAIN & GUTTER WILL REQUIRE REMOVAL AND REPLACEMENT OF ENTIRE STONES OF SIDEWALK, CURB & GUTTER AS DETAILED HEREIN.
2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. THE INVERT SHALL BE TROWELED & RETROWELED TO PRODUCE A HARD POLISHED SURFACE OF MAX. DENSITY & SMOOTHNESS. "V" INVERT SHALL BE V-SHAPED TO WITHIN 3" OF THE OUTLET & WARPED FROM THIS POINT TO OUTLET. INVERT AT OUTLET SHALL PARALLEL GUTTER FLOWLINE UNLESS OTHERWISE SHOWN ON PLANS.
4. SURFACE OF ALL EXPOSED CONCRETE SHALL MATCH THE GRADE, COLOR, FINISH & SCORING OF ADJACENT CURB & SIDEWALK.
5. SIDEWALK REPLACED DURING CONSTRUCTION SHALL BE POURED MONOLITHICALLY WITH CULVERT WALLS.
6. STAINLESS STEEL ROD ANCHORS DRILLED & TAPPED FOR FLATHEAD MACH. SCREWS, SPACED 24" O.C. MAX AND A MIN. OF 2 PER SIDE PER PLATE. THERE SHALL BE AN ANCHOR WITHIN 6" OF EACH END. ANCHORS SHALL BE ATTACHED TO THE PLATE AND THE PLATE SECURED IN PLACE PRIOR TO POURING THE WALLS.
7. THE CULVERT STEEL TOP PLATE SHALL BE CUT PERPENDICULAR TO THE WALLS UNLESS OTHERWISE SPECIFIED. LENGTHS SHALL BE SUCH THAT THE WEIGHT PER PLATE DOES NOT EXCEED 300 LBS. IT SHALL BE STRESSED RELIEVED AFTER FABRICATION. AFTER CLEANING SURFACE OF SCALE, RUST, ETC., THE PLATE & FRAMING MEMBERS SHALL BE PAINTED WITH ONE SHOP COAT RED OXIDE & TWO FINISH COATS OF ALUMINUM PAINT (AASHTO M29).
8. JOINT & DOWELS OPTIONAL. DOWELS SPACED 24" O.C. MAX., 1 1/2" MIN. CLEARANCE FROM FACE OF CONCRETE, MAY BE INCLINED IF NECESSARY.
9. THE CITY OF ALBUQUERQUE DOES NOT ACCEPT RESPONSIBILITY FOR MAINTENANCE FOR ANY DRAIN LINES INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

BENCH MARK:

A STANDARD CITY OF ALBUQUERQUE BRASS CAP MARKED "I-40-12", IS LOCATED IN THE CENTER OF THE MEDIAN OF MENAUL BLVD., AT THE CROSSING OF THE AMAFCA NORTH DIVERSION CHANNEL ON THE WEST SIDE OF THE BRIDGES. SET IN TOP OF A CONCRETE POST FLUSH WITH GROUND. ELEVATION=5114.549, 1st ORDER.

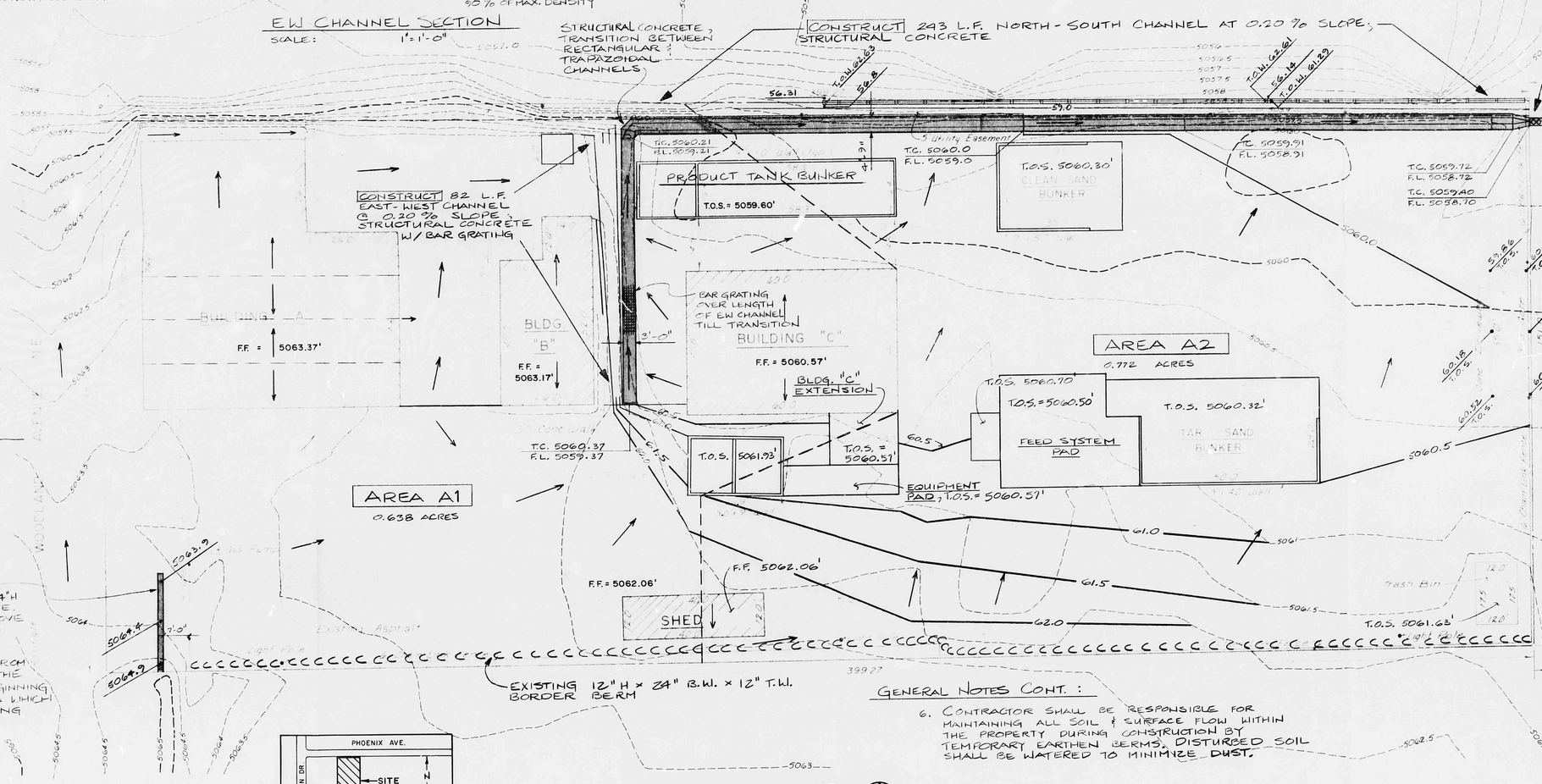
NOTE:

UNDERGROUND UTILITY LINE LOCATIONS ARE APPROX. & MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR OR BY CALLING BLUESTAKE 765-1234 48 HRS. BEFORE CONSTRUCTION



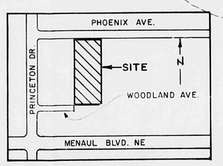
SECTION

SCALE: 1 1/2" = 1'-0"



GENERAL NOTES CONT.:

6. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SOIL & SURFACE FLOW WITHIN THE PROPERTY DURING CONSTRUCTION BY TEMPORARY EARTHEN BERMS. DISTURBED SOIL SHALL BE WATERED TO MINIMIZE DUST.



VICINITY MAP

SCALE: 1" = 400'

SITE DRAINAGE MAP

SCALE: 1/16" = 1'-0"

CONTOUR INTERVAL: 0.5'
ZONE ATLAS MAP NO. H-16-Z
LOT E-4-A, REPLAT OF PORTIONS OF TRACT D AND E, MENAUL DEVELOPMENT AREA, FILED DEC. 9, 1977

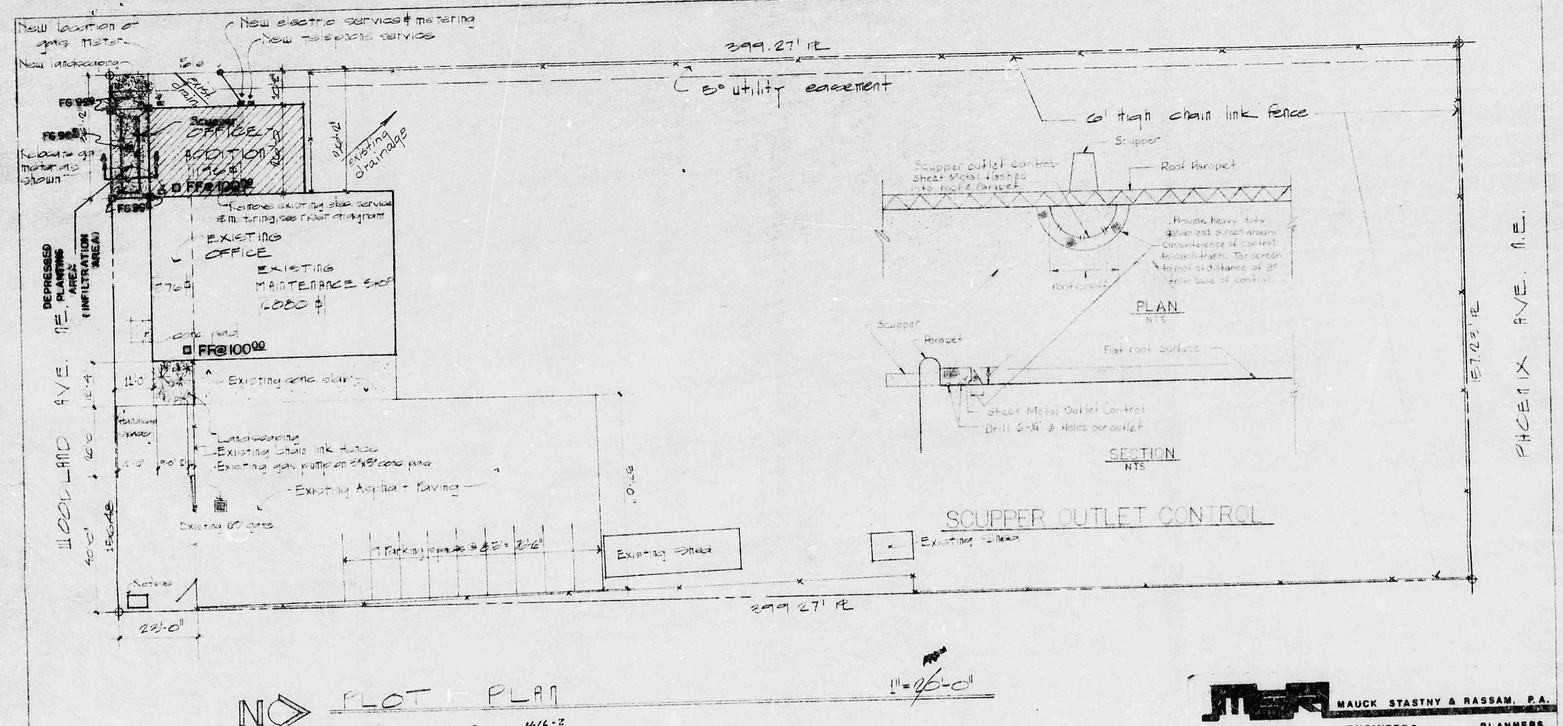
ALBUQUERQUE SURVEYING COMPANY, INC.
2119 MENAUL BOULEVARD N.E. • ALBUQUERQUE, N.M. 87107
PHONE 884-2236

Fred Sanchez

RECEIVED
APR 04 1984
HYDROLOGY SECTION

10-24-83

G. A. BACA AND ASSOC., LTD.
CONSULTING ENGINEERS
1520 PASEO DE PERALTA, P O BOX 2023
SANTA FE, NEW MEXICO 87501 (505)983-2594



N

PLOT PLAN

1" = 20'-0"

Lot E-4-A H-16-2

Replat of portions of tract "D" & "E"

Mesa Development Area

Filed Dec. 9, 1977

Don Coe Office Addition Roof Top Drainage.

Use Scupper outlet controls to delay rooftop runoff. Use 1 control with a orifice each, locate along the southside of the building so that the rooftop runoff will spill into the planting area located directly behind. This planting area will serve as an infiltration point for the rooftop runoff which will be spread over a 24 hr period.

A_r = Area of roof per orifice
$= 100 \times 149.53/6 = 2492.2$ s.f.

t_f = time to deplete half rainfall
$= 24 \text{ hrs} \times 60 \times 60 = 86,400$ sec

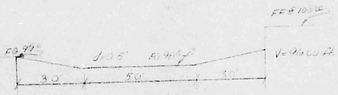
Y_1 = depth @ time one $= 24/12 = 2$ ft

Y_2 = depth @ end of 24 hrs $= 0$

C_d = coefficient of discharge $= 0.62$

A_o = Area of orifice $= (2A_r/C_d\, t_f \sqrt{2g})(\sqrt{Y_1} - \sqrt{Y_2})$
$= 0.00041$ s.f.

$A_o = \pi D^2/4 \quad D = \sqrt{4A_o/\pi} = 0.275''$
use 3/4" orifice diameter



(depressed planting area)

SEC A-A

MAUCK STASTNY & RASSAM, P.A.
ARCHITECTS - ENGINEERS - PLANNERS
FARMINGTON, ALBUQUERQUE NEW MEXICO 87401

DON COE'S OFFICE ADDITION

DATE	
DRAWN	
SHEET	1 OF 6
PROJECT NO.	CHECKED	REVISED

APPROVAL	DON COE'S OFFICE ADD.
HYDROLOGY ENGR. DATE 6/2/78	DRAINAGE PLAN
REVISIONS	GODWIN ENGINEERING CORPORATION

DATE: 10-2-78
DRWN: JJH
CHKD: NFG
SCALE: 1:20'
JOB NO. 12-3
SHT. NO. OF

H16-1052
D2