HYDROLOGY

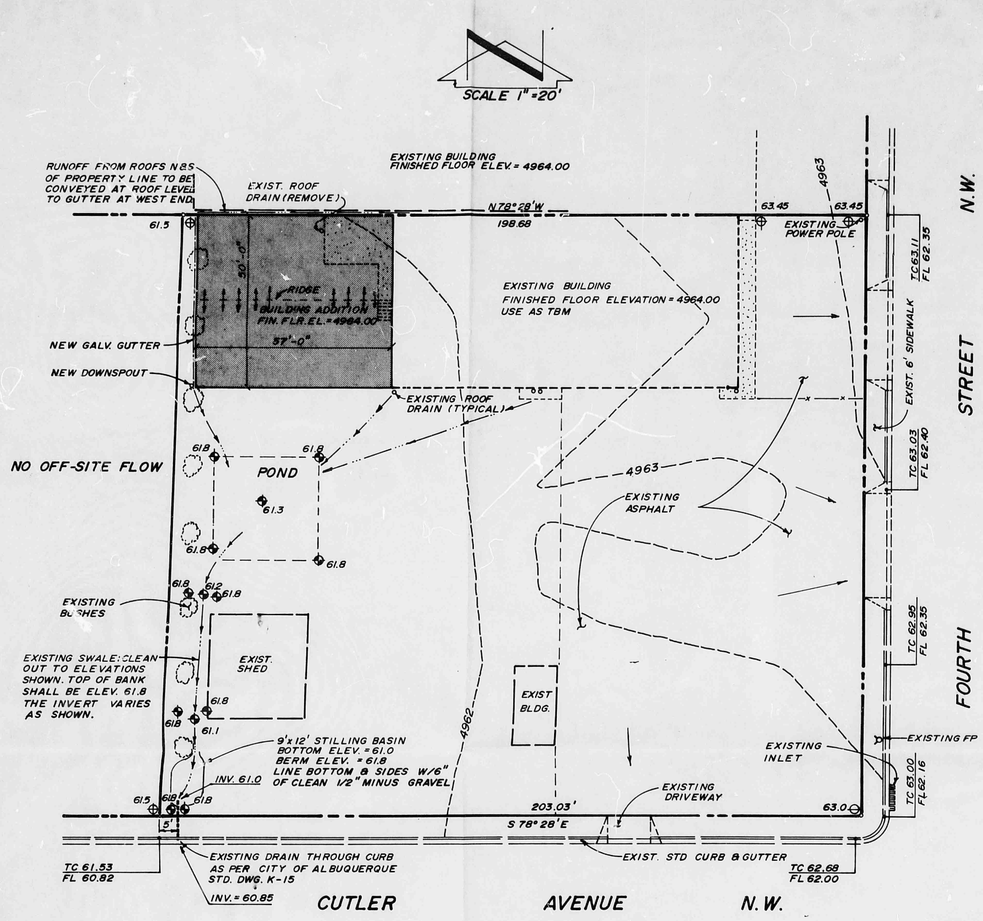
H14/D8

H14/D8

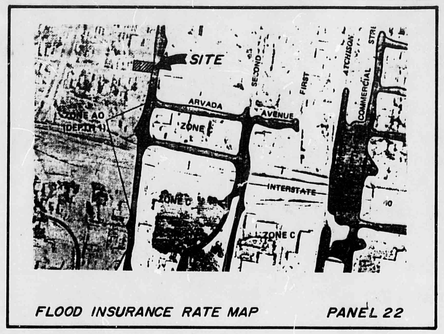
McCOMAS WAREHOUSE

ADDITION

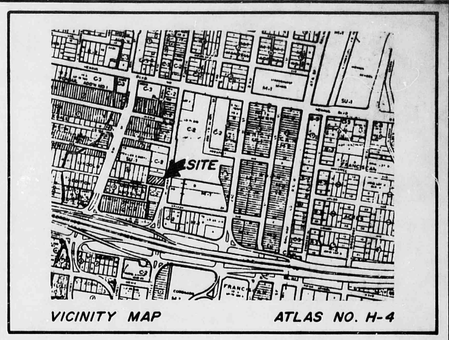
2 PLANS



GRADING PLAN



FLOOD INSURANCE RATE MAP PANEL 22



VICINITY MAP ATLAS NO. H-4

DRAINAGE COMMENTS

1. PER PRE-DESIGN CONFERENCE, THE FOLLOWING REQUIREMENTS HAVE BEEN ESTABLISHED FOR THE BUILDING ADDITION:

   A. THE SURVEY INFORMATION SHOWN ON THE DRAINAGE PLAN FOR THE FIRST ADDITION IS ADEQUATE FOR THIS PLAN.

   B. NO ADDITIONAL PONDING IS REQUIRED AND POND CAN BE ELIMINATED IF DESIRED. (A SMALL PORTION OF THE POND IS RETAINED TO REDUCE THE PEAK FLOW SO THAT THE CAPACITY OF THE 4" PIPE THROUGH THE CURB WILL NOT BE EXCEEDED. IF IT BECOMES DESIREABLE TO ELIMINATE THE POND ENTIRELY, THEN THE 4 INCH PIPE SHOULD BE REPLACED BY A SIDEWALK CULVERT. THE FIRM MAP SHOWS THAT 4TH STREET IS IN A FLOOD HAZARD AREA WITH A DEPTH OF 1 FOOT.

   C. EROSION CONTROL AT INLET OF 4" PIPE. (A GRAVEL LINED STILLING BASIN HAS BEEN PROVIDED.)

   D. SHOW OUTLINE OF PROPOSED BUILDING AND FINISHED FLOOR. (THIS HAS BEEN DONE.)

   E. ROOF DRAIN DIRECTION AND LOCATION. (THIS ALSO HAS BEEN DONE. ALL ROOF RUNOFF FROM THE ROOF WILL BE DIRECTED TO THE SOUTH SIDE OF THE BUILDING.

2. REFER TO "DRAINAGE PLAN FOR McCOMAS WAREHOUSE ADDITION: SEPTEMBER, 1981, REVISED FEBRUARY 21, 1983. THE SAME FINISHED SPOT ELEVATIONS SHOWN ON THE REFERENCED PLAN ARE SHOWN ON THIS PLAN. CLEAN AND REGRADE PONDS AND SWALES TO THE ELEVATIONS SHOWN.

DRAINAGE CALCULATIONS

I. **REFERENCES:**

   A. City of Albuquerque Development Process Manual (DPM) Volume 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.

   C. Flood Insurance Rate Map (FIRM), Panel No. 22.

II. **GENERAL INFORMATION:**

   A. **Soil Type (Ref.B., Sheet No.** 30) Soil type is Gk, Glendale Loam, Hydrologic Soil Group "B".

   B. Imperviousness:

Type of Surface	Existing Area Sq.Ft.	Existing Area Acres	Proposed Area Sq.Ft.	Proposed Area Acres
Building roof	6,188	0.1420	9,038	0.2075
Concrete Surfaces	616	0.0141	280	0.0064
Asphalt Surfaces	12,696	0.2915	12,696	0.2915
Landscaping Undeveloped surface	15,240	0.3499	12,726	0.7975
Site total	34,740	0.7975	34,740	0.7975
Percent impervious	56%		63%	

   C. "C" Factor (See Ref. A., Plate 22.2 C-1)
      1. Undeveloped "C" Factor = 0.61
      2. Developed "C" Factor = 0.65

   D. Rainfall, 100-year, 6-hour, R_6; (See Ref.A., Plate 22.2 D-1) R_6 = 2.2 inches.

   E. Time of Concentration, T_c; Use 10 minutes.

   F. Rainfall Intensity, I; (See Ref. A, Plate 22.2 D-2)

   $I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times (10)^{-0.51}$

   I = 4.65 In/Hr

III. **PEAK DISCHARGE:**

   A. Existing Conditions. (Use Rational Equation)
      Q_{100} = 0.61 x 4.65 x 0.8 = 2.27 cfs
      Q_{10} = 0.657 x 2.27 = 1.49 cfs

   B. Developed Conditions.
      Q_{100} = 0.65 x 4.65 x 0.8 = 2.42 cfs
      Q_{10} = 0.657 x 2.42 = ~~1.59 cfs~~ 1.59 cfs

LEGEND

— — — —	EXISTING CONTOUR
⊕	EXISTING SPOT ELEV.
⊕	PROPOSED SPOT ELEV.
———	PROPERTY LINE
—·—·—	SWALE
TC	TOP OF CURB
FL	FLOW LINE

LEGAL DESCRIPTION:

LOT 1, BLOCK B, LINCOLN ADDITION

BENCH MARK

CITY OF ALBUQUERQUE BRASS CAP NO. 3-H 14
ELEV. 4962.67

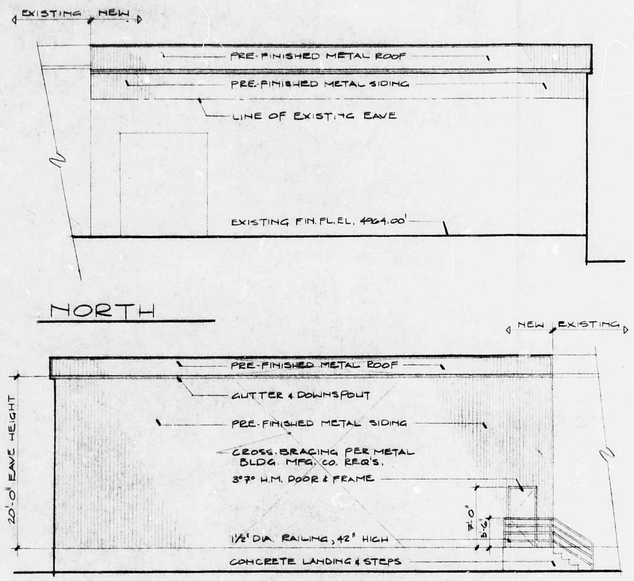
APPROVED FOR DRAINAGE
8-1-85
DATE
SIGNATURE TITLE
ADVISE DRANAGE INSPECTOR WHEN GRADING EXECUTED

RECEIVED
AUG 01 1985
HYDROLOGY SECTION

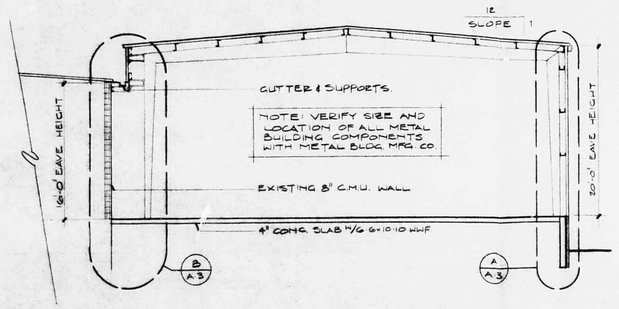
FRANK D. LOVELL
NEW MEXICO
6112
REGISTERED PROFESSIONAL ENGINEER
JULY 29, 1985

DRAINAGE PLAN
FOR
McCOMAS WAREHOUSE ADDITION NO.2
2315 4th Street, N.W.
ALBUQUERQUE, NEW MEXICO

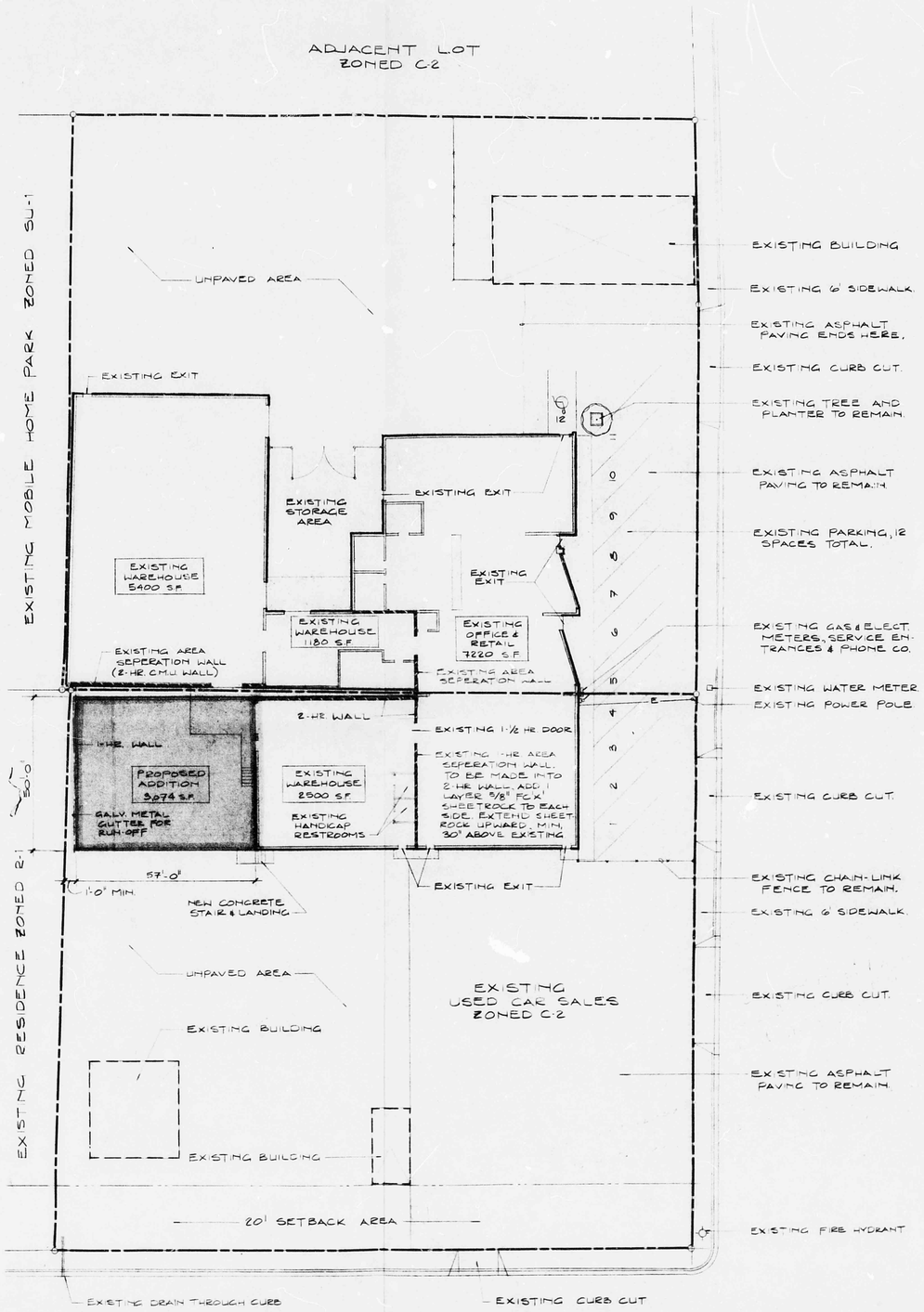
H14/D8



BUILDING ELEVATIONS SCALE: 1/8" = 1'-0"



SECTION 'A-A' SCALE: 1/8" = 1'-0"



Site Development Plan Scale: 1" = 20'

PROJECT DATA

ZONING C-2

SEISMIC ZONE 2

OCCUPANCY B-4

CONSTRUCTION TYPE II-N

BUILDING AREA
9080 EXIST. WHSE.
7220 EXIST. OFF/RET.
16300 TOTAL EXISTING
3074 PROPOSED ADD'N.
19374 TOTAL

PARKING
EXISTING - 12 SPACES

PAVED AREA
EXISTING - 18142 s.f.

LANDSCAPED AREA

ADDRESS
2315 FOURTH ST. NW
ALBUQUERQUE, NM

ZONE MAP H-14
VICINITY MAP north

LEGAL DESCRIPTION
LOTS 1, 2 & 3 ONLY, BLOCK B, LINCOLN ADDITION, ALBUQUERQUE, NEW MEXICO

GENERAL NOTES

GENERAL NOTES

1. ALL WORK SHALL MEET ALL APPLICABLE CODES, INCLUDING UBC, 1982 EDITION, NATIONAL ELECTRICAL CODE, UNIFORM MECHANICAL CODE, UNIFORM PLUMBING CODE, LIFE SAFETY CODE, AND NATIONAL FIRE CODE.
2. WHERE DRAWINGS DO NOT CONFORM WITH MINIMUM CODE REQUIREMENTS THE WORK SHALL BE INSTALLED IN ACCORD WITH CODES AT NO ADDITIONAL COST TO OWNER.
3. ALL WORK SHALL BE INSTALLED BY QUALIFIED PERSONNEL IN AN APPROVED STANDARD OF PRACTICE.
4. THE COST OF ADDITIONAL DESIGN WORK DUE TO ERRORS AND OMISSIONS IN CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.
5. VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR INCONSISTENCIES.
6. VERIFY IN FIELD ALL EXISTING CONDITIONS SHOWN ON DRAWINGS.
7. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR MECHANICAL, ELECTRICAL AND PLUMBING WITH APPLICABLE TRADES.
8. ELECTRICAL WORK SHALL PROVIDE FOR A COMPLETE, SAFE AND ACCEPTABLE POWER AND LIGHTING SYSTEM. ALL MATERIALS SHALL BE UL APPROVED AND ALL ELECTRICAL WORK SHALL MEET NATIONAL ELECTRICAL CODE.

CONTRACTOR

CAMBRO CONSTRUCTION INC.
7424 SECOND ST. NW
ALBUQUERQUE, NM
PHONE: (505) 345-1133

OWNER

McCOMUS SALES CO., INC.
2315 FOURTH ST. NW
ALBUQUERQUE, NM
PHONE: (505) 243-5263

RECEIVED
JUN 17 1985
HYDROLOGY SECTION

Addition to McComus Sales Co.

project: McCOMUS ADD'N
date: 6-11-85
revision:
drawn by: HEA

John Vanderpol architect, a.i.a.
2539B wyoming blvd N.E.
albuquerque new mexico 87112
505 - 298 7323

title: SITE PLAN, ELEVATION, SECTION, NOTES
sheet: A-1