

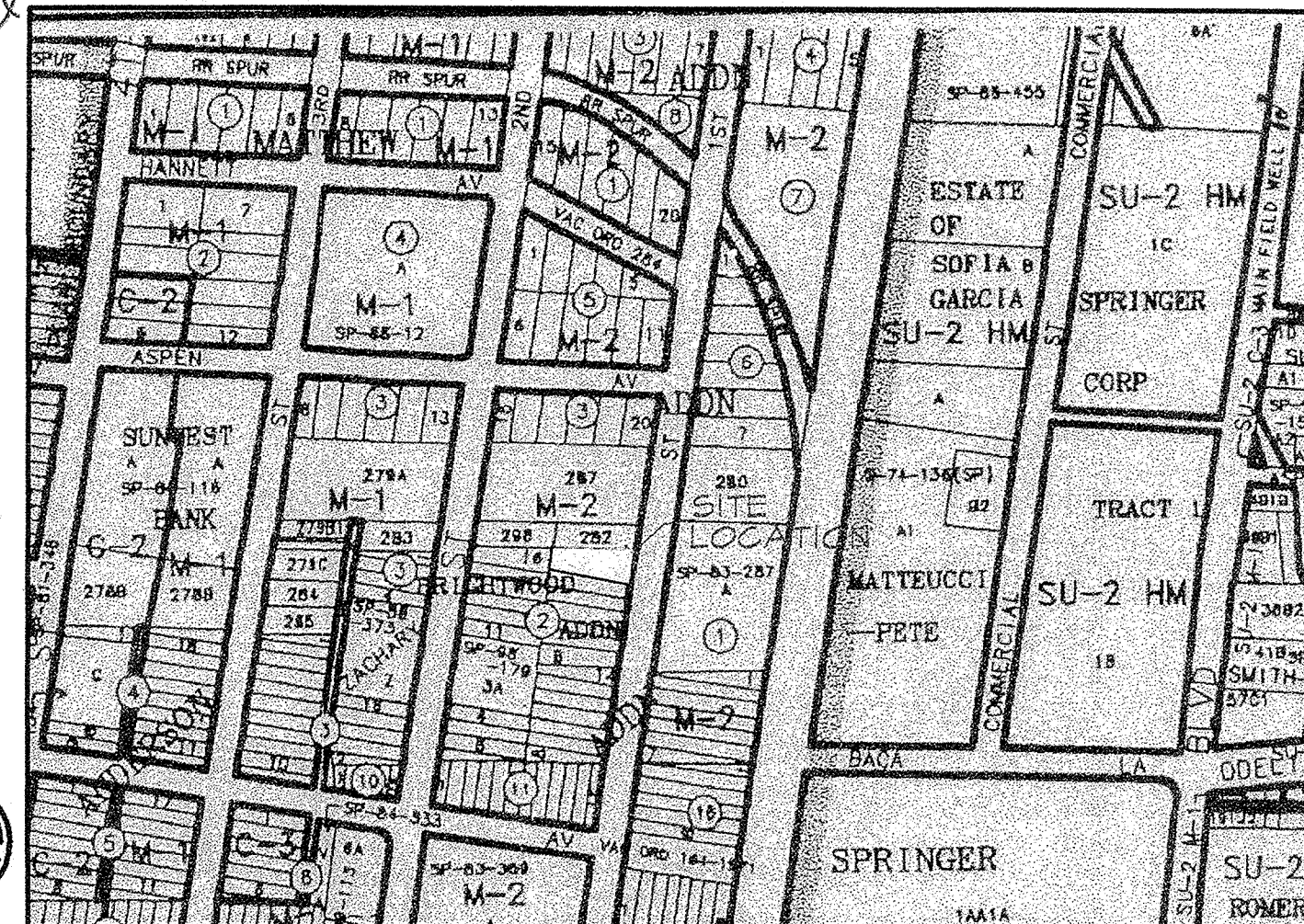
GRADING AND DRAINAGE

With the one foot water block the site low is going to the runoff from the drainage to the boundary is elevated 1 foot above the water block can be removed.

SCALE: 1"=10'



First Street is located within a 10 year floodplain (AO-1). The finish floor needs to be elevated 1 foot above the flood plain elev.



J-14

⑤ SANITARY SEWER MANHOLE

GRADING/DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING LOTS 1 AND 2 BRIGHTWOOD ADDITION ARE CONTAINED HEREON:

- VICINITY MAP
- DRAINAGE CALCULATIONS

ANDERSON WAREHOUSE - LOTS 1 AND 2

WAREHOUSE BUILDING AREA	= 0.0743 ACRES (3230 SF)
LANDSCAPE AREA	= 0.0230 ACRES (1002 SF)
PARKING/ASPHALT AREA	= 0.0767 ACRES (3348 SF)
TOTAL SITE	= 0.1740 ACRES (7580 SF)

PRECIPITATION: 360 = 2.35 IN.
1440 = 2.75 IN.
100A = 3.95 IN.

EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A 0.53 IN.	1.56 CFS/AC.
TREATMENT B 0.78 IN.	2.28 CFS/AC.
TREATMENT C 1.13 IN.	3.14 CFS/AC.
TREATMENT D 2.12 IN.	4.70 CFS/AC.

EXISTING CONDITIONS:	AREA	PROPOSED CONDITIONS:	AREA
TREATMENT A	0 AC.	TREATMENT A	0 AC.
TREATMENT B	0 AC.	TREATMENT B	0 AC.
TREATMENT C	0.1740 AC.	TREATMENT C	0.1510 AC.
TREATMENT D	0 AC.	TREATMENT D	0.0230 AC.

EXISTING EXCESS PRECIPITATION:
WEIGHTED E = $[0.53 (0.00) + 0.78 (0.00) + 1.13 (0.1740) + 2.12 (0.00)] / 0.1740$ AC.
= 1.13 IN.
V100 -360 = $1.13 (0.1740) / 12 = 0.0164$ ACFT. = 714 CFS

EXISTING PEAK DISCHARGE:
Q100 = $1.58 (0.00) + 2.28 (0.00) + 3.14 (0.1740) + 4.70 (0.00)$
= 0.0548 CFS
PROPOSED PEAK DISCHARGE CONDITIONS REMAIN THE SAME AS EXISTING PEAK DISCHARGE CONDITIONS.

PROPOSED EXCESS PRECIPITATION
WEIGHTED E = $[0.53 (0.00) + 0.78 (0.00) + 1.13 (0.1510) + 2.12 (0.0230)] / 0.1740$ AC.
= 1.261 IN.
V100 -360 = $1.261 (0.1740) / 12 = 0.0183$ ACFT = 800 CFS
V100 -1440 = $0.19 + 0.734 \times (2.75 - 2.35) / 12 = 0.0024$ ACFT = 208 CFS
V100 -1440 = $0.19 + 0.734 \times (3.95 - 2.35) / 12 = 0.0636$ ACFT = 2771 CFS

BENCHMARK:
THE BASIS OF ELEVATIONS IS ACS BENCHMARK 3A-JHA, THE PUBLISHED ELEVATION OF WHICH IS 4958.365. SAID BENCHMARK IS LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF FOURTH ST. NW AND CONSTITUTION HWY.

EROSION CONTROL MEASURES
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGEMENT OF STORM RUN-OFF DURING CONSTRUCTION, HE/SHE SHALL ASSURE THAT THE FOLLOWING MEASURES ARE TAKEN
1. ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERM, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTY.
2. ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUN-OFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.
3. DUE TO AN INCREASE IN LANDSCAPED AREA A SUBSTANTIAL REDUCTION IN RUNOFF IS EXPECTED.

EXISTING CONDITIONS
AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 0.1755 ACRES AND IS LOCATED WEST OF FIRST STREET
THE SITE HAS BEEN GRADED TO DRAIN FROM EAST TO WEST, ACCORDING TO THE FLOOD INSURANCE RATE MAP (ALL ASPHALT), DATED SEPTEMBER 20, 1996, THE SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE.

PROPOSED CONDITIONS
AS SHOWN BY THE GRADING/DRAINAGE PLAN, THE PROJECT WILL CONSIST OF ONE WAREHOUSE BUILDING TOTALING 3228 SQ. FT. ALONG WITH ASSOCIATED PAVED PARKING AND LANDSCAPED AREAS. A MASTER DRAINAGE PLAN WAS PREPARED BY BOHANNAN-HOUSTON IN FEBRUARY OF 1999. ON-SITE RUN-OFF WILL TRAVEL ON FIRST STREET AND INTO INLETS LOCATED ON THE SOUTHWEST CORNER OF 1ST AND ASPEN AVE (TRACT A). THE CALCULATIONS WHICH APPEAR HEREON, ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 100-YEAR, 6-HOUR EVENT. THE PROCEDURE FOR 40 ACRES AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2 HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME II, DESIGN CRITERIA DATED 1997, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUN-OFF GENERATED. PROPOSED PEAK DISCHARGE CONDITIONS REMAIN THE SAME AS EXISTING PEAK DISCHARGE CONDITIONS.

DOWN STREAM CONDITIONS
FREE DISCHARGE TO DRAIN NORTH ON 1ST STREET TO STORM WATER INLET LOCATED ON THE SOUTHWEST CORNER OF THE 1ST STREET AND ASPEN AVENUE INTERSECTION.

LEGAL:
LOTS 1 AND 2
BRIGHTWOOD ADDITION
SECTION 17, T. 10N., R. 3E, N.M.P.M.
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
SEPT. 2001

STREET ADDRESS:
FIRST STREET

EXISTING CONTOURS IN PARENTHESIS.

PROPOSED CONTOURS

KCC

DESIGN COLLABORATIVE
THE ART AND SCIENCE OF MODERN BUILDINGS

HLB
HAROLD L. BENNETT
P.E.

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NEW MEXICO
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10770
1-14-02

JOB TITLE:
ANDERSON WAREHOUSE
REVISION:
05-15-02 AND-C-1
FILE NAME: JOB NO.: DATE: 10/3/01
SHEET TITLE:
GRADING AND DRAINAGE PLAN
DRAWN BY: REFC

C-1

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MAY 17 2002
HYDROLOGY SECTION