

GRADING AND DRAINAGE

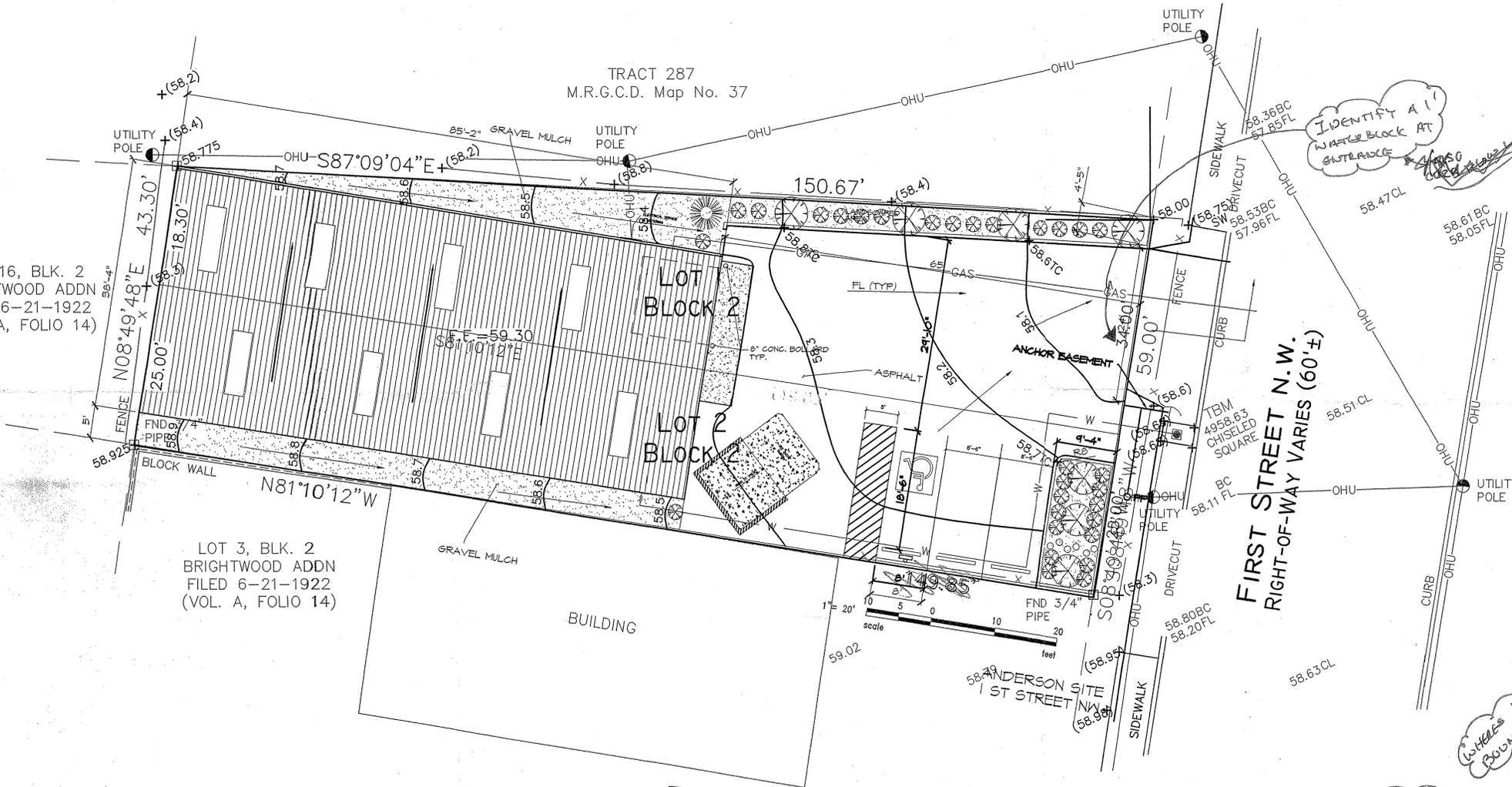
SCALE: 1"=10'



LOT 16, BLK. 2
BRIGHTWOOD ADDN
FILED 6-21-1922
(VOL. A, FOLIO 14)

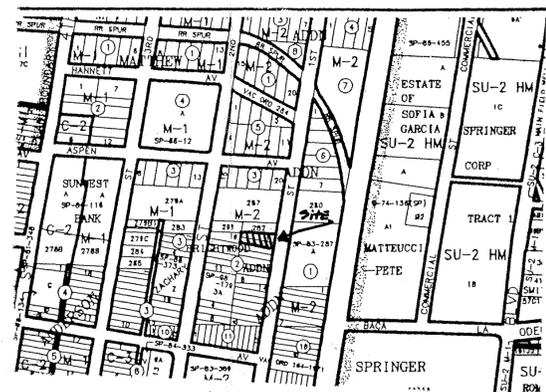
LOT 3, BLK. 2
BRIGHTWOOD ADDN
FILED 6-21-1922
(VOL. A, FOLIO 14)

TRACT 287
M.R.G.C.D. Map No. 37



Ⓢ SANITARY SEWER MANHOLE

FIRST STREET N.W.
RIGHT-OF-WAY VARIES (60'±)



J-14-Z

ARG LOTS 2 + 1
ARE THE SAME?
THE SAME?
OWNER?

NEED 25'
of CONTOURS AND
PROPERTY OUTSIDE
SITE
NOT GOOD INFORMATION

WHERE IS YOUR PROPERTY
BOUNDARY?

WHERE ARE THE
INLETS ON 1ST?
PLEASE PROVIDE
MASTER PLAN OR
BASIN MAP OF IT

IDENTIFY A 1'
WATER BLOCK AT
ENTRANCE

Proposed
Q point?

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:	PROPOSED CONDITIONS:
TREATMENT A 0 AC.	0 AC.
TREATMENT B 0 AC.	0 AC.
TREATMENT C 0.1740 AC.	0.1510 AC.
TREATMENT D 0 AC.	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)
= 2454 CFS

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 = 1.216 (0.1740) / 12 = 0.0183 ACFT = 800 CFS
V100 -1440 = 0.19 + 0.734 X (2.75 - 2.35) / 12 = 0.0024 ACFT = 206 CFS
V100 -1440 = 0.19 + 0.734 X (3.85 - 2.35) / 12 = 0.0636 ACFT = 2771 CFS

BENCHMARK:
THE BASIS OF ELEVATIONS IS ACSB BENCHMARK 24-IN. THE PUBLISHED
ELEVATION OF WHICH IS 468.368 SAID BENCHMARK IS LOCATED AT THE
NORTHEAST QUADRANT OF THE INTERSECTION OF FOURTH ST. N.W. AND
CONSTITUTION N.W.

- EROSION CONTROL MEASURES
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGEMENT OF STORM RUN-OFF DURING CONSTRUCTION. HE/SHE SHALL ASSURE THAT THE FOLLOWING MEASURES ARE TAKEN:
 - ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERMS, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTY.
 - 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.
 - 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 BONHAMMAN-HOUSLON IN FEBRUARY OF 1998. ON-SITE RUN-OFF WILL TRAVEL ON FIRST STREET AND INTO INLETS WHICH DRAIN INTO A COMMON POINT PROVIDED BY THE MASTER DRAINAGE PLAN (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.

DOWN STREAM CONDITIONS
PER THE APPROVED MASTER DRAINAGE PLAN, FREE DISCHARGE HAS BEEN ALLOWED INTO A COMMON POND PROVIDED BY THE ^{OWNER?}

EXISTING CONTOURS IN PARENTHESIS.
PROPOSED CONTOURS _____

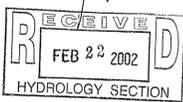
KICC
DESIGN COLLABORATIVE
THE ART AND SCIENCE OF MODERN BUILDINGS

JOB TITLE:
ANDERSON WAREHOUSE

REVISION:	FILE NAME	JOB NO.	DATE
01/01/02	AND-C-1		10/5/01

SHEET TITLE:
GRADING AND DRAINAGE PLAN

DRAWN BY:
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