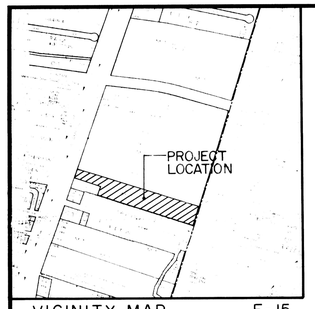


VICINITY MAP F-15
SCALE 1" = 800'

LEGEND

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- 4975 EXISTING CONTOUR
- 75 PROPOSED CONTOUR
- PROPOSED CONCRETE
- PROPOSED ASPHALT PAVING
- WATER BLOCK

T.B.M.:

N.N.E BONNET BOLT, AT PROPERTY CORNER AS SHOWN.
ELEVATION: 4975.45 FEET (M.S.L.D)

PROJECT BENCHMARK:

THE STATION, A STANDARD NGS HC BRASS TABLET STAMPED "STA NM47-8" & SET IN TOP OF A CONCRETE POST PROJECTING 0.1 FT. ABOVE THE GROUND, IS LOCATED 4 MILES NORTH OF DOWNTOWN ALBUQUERQUE, AT THE INTERSECTION OF SECOND ST. N.W. & MONTANO RD. N.W. TO REACH THE STATION FROM THE INTERSECTION OF CENTRAL AVE. & SECOND ST., GO NORTH ON SECOND ST. 3.9 MILES TO MONTANO RD. & THE STATION.
ELEVATION: 4974.569 FEET (M.S.L.D.)

DESCRIPTION:

TRACTS B-1 AND C
LANDS OF MEL SANCHEZ
AND LATH AND PLASTER INC.
TRACTS 110-a 110-b MRGCD MAP NO 32

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL MEASURES

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey,
Plate 21 1 Cb Gila Loam
Hydrologic Soil Group B
Fervious CN = 70 (DPM Plate 22.2 C-2)
Pasture or Range Land: fair condition)

Time of Concentration/Time to Peak

$T_c = 0.0078\ L^{0.77}/S^{0.385}$ (Kirpich Equation)

$T_p = T_c =$ 10 min.

Point Rainfall

$P_6 =$ 2.2 in. (DPM Plate 22.2 D-1)

Existing Condition

$A_{total} =$ 486,890 sf = 11.2 Ac

$A_{imp} =$ 120,000 sf; % impervious = 25 %

Composite CN = 77 (DPM Plate 22.2 C-3)
DRO = 0.6 in (DPM Plate 22.2 C-4)
$q_p = 45.4\ A/T_p =$ 50.8 cfs/in runoff
$Q_{100} = Q_{peak} = q_p$ (DRO) = 30.5 cfs
$V_{100} = 3630$ (DRO)A = 24,390 cf

Developed Condition

$A_{total} =$ 486,890 sf = 11.2 Ac

$A_{imp} =$ 224,000 sf; % impervious = 46 %

Composite CN = 84 (DPM Plate 22.2 C-3)
DRO = 0.9 in (DPM Plate 22.2 C-4)
$q_p = 45.4\ A/T_p =$ 50.8 cfs/in runoff
$Q_{100} = Q_{peak} = q_p$ (DRO) = 45.7 cfs
$V_{100} = 3630$ (DRO) A = 36,590 cf

Comparison

$\Delta Q_{100} = 45.7 - 30.5 = 15.2$ cfs (increase)
$\Delta V_{100} = 36,590 - 24,390 = 2200$ cf (increase)

Ponding

$V_{pond} = \frac{1}{3}[(A_{72} + A_{73})(73-72)]$
$= \frac{1}{3}[(270 \times 110) + (310 \times 150 + 120 \times 45)]$ (1)
$= \frac{1}{3}(29,700 + 46,500 + 5400)$
$= 40,800$ cf $\neq V_{100}$

100 year water surface level will be below 4973.0, therefore pond depth will be less than 1'. Maximum pond level will be 4973.5 which will overflow at the waterblock and discharge to the street via the proposed drivepad.

DRAINAGE PLAN

The following items concerning the Revised Drainage Plan for Lath and Plaster are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

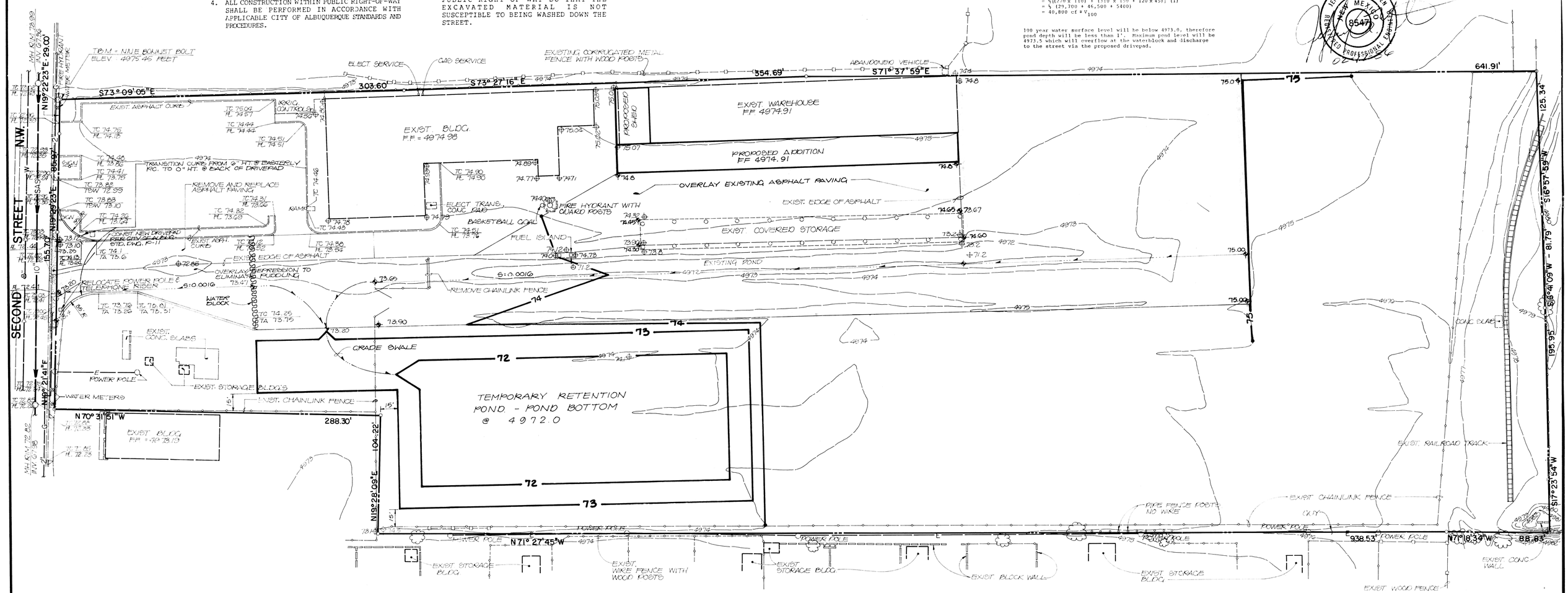
The proposed improvements, as shown by the Vicinity Map, are located on the east side of Second Street N.W. just south of Montano Road N.W. At present, approximately one-fourth of this site is occupied by warehouse and retail facilities with appropriate paving for parking and vehicular travel. Much of the surrounding area is already developed in a similar fashion with commercial uses the emphasis. With this in mind, this site is essentially an infill site which will undergo modification to the existing facilities.

As shown by Plate F-15 of the Albuquerque Master Drainage Study, this site does not lie within a designated Flood Hazard Zone. It has also been learned that there is an existing flooding problem within Second Street N.W. necessitating City forces to use pumps and trucks to remove the water from the street. Because of this, this site will implement 100% retention as an interim solution until such time as the downstream conditions are improved to permit either the free discharge or controlled discharge of runoff.

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements 3) the limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. As shown by this plan, the proposed improvements consist of two building additions along with adjacent paving and landscaping. This will affect slightly less than fifty percent of the site with the remainder of the site being left undeveloped. This undeveloped portion is intended for future development at a later time. At that time, the retention ponding situation will be improved to provide discharge to Second Street N.W. if the downstream conditions have been improved to warrant such a discharge.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The SCS Method has been used for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. As shown by these calculations, the proposed improvements will result in an increase in runoff generated by this site. This runoff will not impact Second Street N.W. at this time due to the fact that 100% retention ponding will be implemented as an interim solution. This will avoid aggravating the existing flooding problem within the street.

The offsite flow condition has not changed since the 10-8-84 submittal by this office. As stated at that time, no offsite flows impact this site due to the existing trend in runoff being from east to west and the presence of the elevated railroad grade along the east property line which blocks all flows from the east.



RECEIVED FEB 18 1986 HYDROLOGY SECTION

Tom Mann Associates, Inc. 811 DALLAS, N.E. • ALBUQUERQUE • NEW MEXICO • 87110 ENGINEERS	NO.	DATE	BY	REVISIONS	
	1	11-21-86	TM	MODIFIED BUILDINGS	

DESIGNED BY J.G.M.
DRAWN BY L.B.D.
APPROVED J.G.M.

JOB NO. 41122
DATE 2-86

REVISED
GRADING & DRAINAGE PLAN
LATH & PLASTER

FILE NO.
SHEET 1 OF 1

N40867