

CONSTRUCTION PLANS
FOR
MANCHESTER FARMS SUBDIVISION

GRADING, PAVING, WATER AND
SANITARY SEWER IMPROVEMENTS

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CITY PROJECT N° 4238.90

APPROVAL OF AS BUILT DRAWINGS
CITY ENGINEER
5-27-93

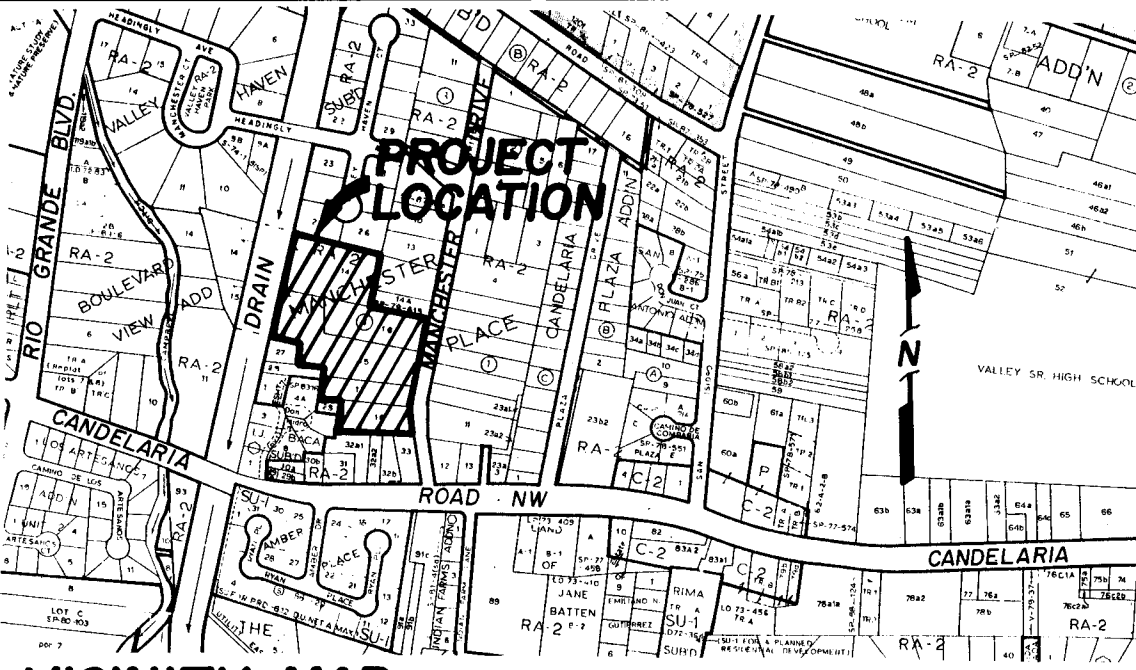


AS-BUILT RECORD PLANS,
date 2/25/93, PUC
Contractor: Sundance Mechanical
Inspector: City, Tony Tafoya
TMS & Associates, Inc.

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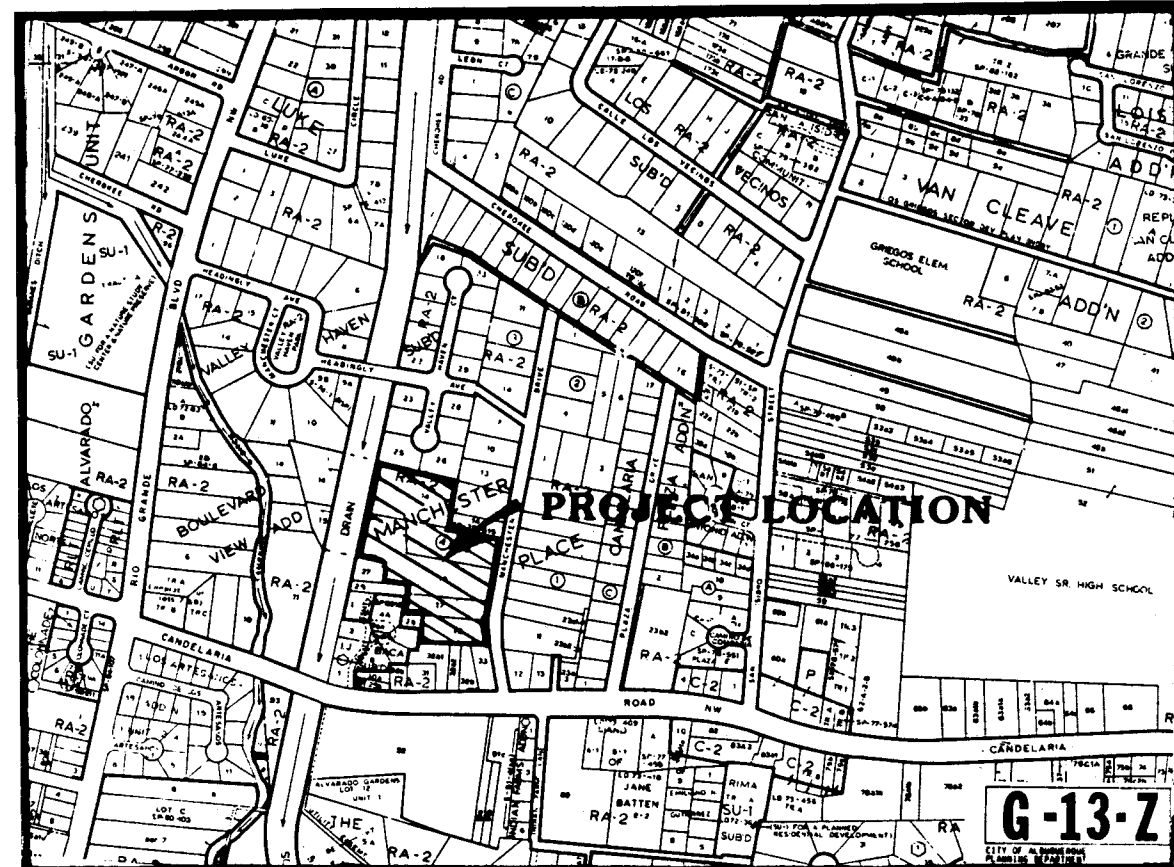
REV	SHEETS	CITY	ENG.	DATE	USER	DEPT.	DATE	USER	DEPT.	DATE
4054		B. J. Boudry		9-20-94	7/2	9/27/94		Albat		9-20-94
APPROVAL OF REVISIONS										

	TMS TECHNICAL MANAGEMENT SERVICES CO. 5905 MARBLE AVE., SUITE 102 ALBUQUERQUE, NEW MEXICO 87110 PHONE (505) 262-1755 FAX - 262-1757	<i>Russell B. Linder</i> 11-16-92 C.E.
4238.90	SHEET 1 OF 4	



VICINITY MAP
N.T.S. ZONE MAP G-13-Z

- GENERAL NOTES
- 1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS, 1986 EDITION (REFERRED TO HEREIN AS THE STANDARD SPECIFICATIONS).
 - 2. ALL WORK PERFORMED ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
 - 3. CONTRACTOR SHALL NOTIFY AND COORDINATE ALL CONSTRUCTION TWO WEEKS PRIOR TO START WITH THE FOLLOWING UTILITIES: US WEST COMMUNICATIONS, PUBLIC SERVICE CO. OF NEW MEXICO, AND THE GAS CO. OF NEW MEXICO.
 - 4. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
 - 5. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
 - 6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
 - 7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
 - 8. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
 - 9. TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER.
 - 10. THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE REGARDING TRAFFIC CONTROL. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. SEE SECTION 19 OF THE SPECIFICATIONS.
 - 11. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED BY CONTRACTOR TO EXISTING LOCATION.



VICINITY MAP

DRAINAGE PLAN & REPORT

MANCHESTER FARMS SUBDIVISION IS A PROPOSED 16 LOT, SINGLE FAMILY DETACHED DWELLING UNIT DEVELOPMENT LOCATED IN THE NORTH VALLEY AREA OF ALBUQUERQUE, NEW MEXICO. THE SUBDIVISION IS 5.4 ACRES IN SIZE AND CURRENTLY AND TO REMAIN ZONED RA-2, 1/2 AC. MINIMUM. THE PLAN IS REQUIRED BY THE CITY SUBDIVISION ORDINANCE IN ORDER TO FACILITATE PRELIMINARY PLAT APPROVAL, AND SUBSEQUENTLY APPROVAL FOR BUILDING PERMIT. THE PROPOSED GRADING AND DRAINAGE PLAN SHOWS:

- 1.) EXISTING AND PROPOSED SPOT ELEVATIONS.
- 2.) EXISTING AND PROPOSED IMPROVEMENTS: SCHEMATIC DWELLING LAYOUT WITH MINIMUM FINISH FLOOR ELEVATIONS, DRIVEPADS, PUBLIC RESIDENTIAL STREET, MOUNTABLE CURB, AND A REQUIRED PERIMETER WALL FOR STORM WATER CONTAINMENT.
- 3.) CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
- 4.) STORM RUN-OFF CALCULATIONS.

THE PURPOSE OF THE PLAN IS TO DEMONSTRATE THAT THE PROPOSED FINISH FLOOR ELEVATIONS SHOWN HEREON ARE ABOVE THE ORDINANCES DESIGN STORM WATER SURFACE LEVEL. SPECIFICALLY, THE PLAN DETERMINES THE RUN-OFF RESULTING FROM THE 100-YEAR, 6-HOUR STORM FOR BOTH THE EXISTING AND DEVELOPED CONDITIONS.

THE SITE IS BOUNDED ON THE EAST BY PAVED MANCHESTER DRIVE WITH ALL OTHER ADJACENT LANDS DEVELOPED AND ZONED RA-2. THE SITE IS GENERALLY FLAT WITH A SMALL DEPRESSION AREA LOCATED IN THE NORTHWEST PORTION. THE SOILS ARE CLASSIFIED BY THE BERNALILLO COUNTY SOILS SURVEY AS TYPE 'B', AGUA, Ag. THE PROPOSED SUBDIVISION IS NOT ENCUMBERED BY A DESIGNATED F.E.M.A. FLOODPLAIN, AS SHOWN ON PANEL 22 OF FLOODWAY MAPS ON FILE WITH CITY HYDROLOGY.

THE MAIN DRAINAGE CONCEPT DEPICTED HEREON (AND AGREED TO DURING CITY PRE-DESIGN CONFERENCES) IS TO PERMIT THE DEVELOPED RUN-OFF GENERATED FROM THE PUBLIC RIGHT-OF-WAY TO TRAVERSE TO THE IMMEDIATE ADJACENT LOTS, AND THENCE CONVEYED TO PROPOSED ELEVATIONS DESIGNATED ON INDIVIDUAL LOTS. A PERMANENT PERIMETER CUT-OFF WALL WILL BE REQUIRED TO BE CONSTRUCTED AROUND THE SUBDIVISION AS ASSURANCE THAT STORM WATER WILL BE COMPLETELY CONTAINED WITHIN THE DEVELOPMENT. NO OFFSITE FLOWS ENTER THE DEVELOPMENT.

HYDROLOGIC PROCEDURES AND CALCULATIONS OUTLINED HEREIN ARE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (D.P.M.), VOLUME II, CHAPTER 22.

CALCULATIONS

I. DESIGN CRITERIA

Design Storm - 100 yr./6-hr.
 $Q = CIA \dots$ Volumetric discharge rate... Rational Method
 $Vol. = R.O.x A \dots$ Discharge Volume... SCS Method as outlined in Ch. 22, Vol. II, Development Process Manual, City of Albuquerque

$P_{100} = 2.2$ in. $I = P(6.84) TC^{-.051}$
 $TC = 0.0078 L^{.77} \div s^{.385}$
 'C' (pavement) = 0.95 'C' (landscape) = 0.25
 'C' (roof) = 0.90 'C' (undev.) = 0.40
 Soil Type - Agua, Ag - Type 'B'

II. EXISTING CONDITIONS

Site Area = 5.4 Ac. 'CC' = 0.45
 $TC = 10$ min. $I_{100} = 4.65$ in/hr.
 $Q_{100} = 11.3$ cfs $Q_{10} = 7.4$ cfs.
 $CN = 61$ $R.O. = 0.50$ in.
 $Vol._{100} = 9801$ C.F. $Vol._{10} = 4410$ C.F.

III. DEVELOPED CONDITIONS

--FOR TYPICAL LOT DRAINAGE BASIN

0.34 Ac. Lot maximum + street frontage
 0.10 Ac. pavement/roof/street frontage
 0.12 Ac. landscape
 0.12 Ac. undeveloped
 0.34 Ac. total

'CC' = $0.10(0.92) + 0.12(0.25) + 0.12(0.40) \div 0.34$
 'CC' = 0.50, 'CCN' = 75, R.O. = 0.5 in.
 $Q(100) = 0.79$ cfs $Q(10) = 0.51$ cfs
 $Vol(100) = 617$ cf $Vol(10) = 250$ cf

IV. TYPICAL LOT CALCS. (LOT 7)

$Vol._{100} = 0.34 \times 0.6 \times (0.3)^{.45} = 653$ C.F.
 $Vol._{100} = 0.34 \times 0.4 \times (0.4)^{.45} = 706$ C.F.
 THEREFORE: 100 YR. -W.S.(D=0.4') = 64.9 ELEV.

