# • LEGEND •

## MATERIALS

- CONCRETE
- RIP-RAP

## LINES

- SUBDIVISION BOUNDARY
- PROPERTY LINE (PLAN)
- PROPERTY LINE (SECTION)
- CENTERLINE
- EASEMENT LINE
- MATCH LINE
- SECTION CUT LINE (A — A)

## EARTHWORK

| | EXISTING | NEW |
|---|---|---|
| CONTOUR LINE | 25 | 25 |
| SPOT ELEVATION | ⊕ | |
| PROJECT / PHASE BOUNDARY | | |
| FLOWLINE | | |
| DIRECTION OF FLOW | | |

## MISCELLANEOUS UTILITIES

- GAS LINE (G)
- UNDERGROUND TELEPHONE (UT)
- UNDERGROUND ELECTRICAL (UE)
- STORM DRAIN (SD)
- STORM DRAIN MANHOLE
- STORM DRAIN INLET



## SANITARY SEWER

- SANITARY SEWER LINE (SAS)
- SANITARY SEWER MANHOLE
- SAS SERVICE CONNECTIONS
- SAS CAP OR PLUG
- ENCASEMENT

## WATER

- WATER LINE (W)
- WATER SERVICE CONNECTIONS
- GATE VALVE
- FIRE HYDRANT
- BUTTERFLY VALVE
- REDUCER
- WATER PRESSURE ZONE BOUNDARY

## WATER FITTINGS

- CAPS AND PLUGS
- ELBOW
- CROSS
- TEE

## MISCELLANEOUS

- CHAINLINK FENCE
- FIELD FENCE
- COMMON YARD WALL
- RETAINING WALL
- POWER OR TELEPHONE POLE

# CONSTRUCTION PLANS

# for

# BONA TERRA FARMS

## BERNALILLO COUNTY, NEW MEXICO

## APRIL, 1994

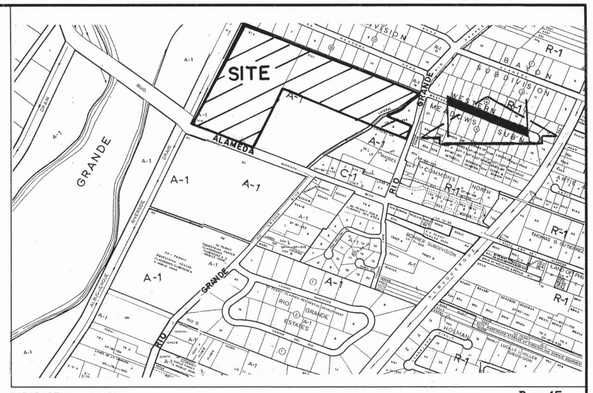
4

RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen — Date 4-18-95
NMPE No. 8547

JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — REGISTERED PROFESSIONAL ENGINEER




VICINITY MAP — B - 15

SCALE: 1" = 750' (APPROX.)

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 - PUBLIC WORKS CONSTRUCTION - 1986. (UPDATE NO.4) OR BERNALILLO COUNTY STANDARDS, WHICHEVER ARE MORE STRINGENT.

2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING UTILITIES.

3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

4. SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES.

5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.

6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.

7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.

8. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE, (REFER TO NOTE 18).

9. TACK COAT REQUIREMENTS SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT ENGINEER.

10. SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.

11. IF CURB IS DEPRESSED FOR A DRIVEPAD OR A HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.

12. ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.

13. CONTRACTOR SHALL COORDINATE WITH THE WATER SYSTEM DIVISION FOR THE EXECUTION OF THE VALVE SHUT OFF PLAN, NOT LESS THAN THREE (3) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT THE EXISTING PUBLIC WATER UTILITIES. ONLY WATER SYSTEM DIVISION PERSONNEL SHALL OPERATE EXISTING VALVES. REFER TO SECTION 18 OF THE SPECIFICATION.

14. CONTRACTOR SHALL NOTIFY THE CITY SURVEYOR NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE SPECIFICATIONS.

15. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES AND SCHEDULES WITH THE NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPT. (NMSHTD) AND THE BERNALILLO COUNTY PUBLIC WORKS DEPT. (BCPWD).

16. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED IN KIND BY CONTRACTOR TO LOCATION AND IN KIND AS EXISTING OR AS INDICATED BY THIS PLAN SET.

17. CONTRACTOR SHALL SECURE AND PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

18. ALL BACKFILL AND COMPACTION WITHIN COUNTY RIGHT-OF-WAY AND/OR EASEMENT SHALL BE 95% ASTM D-1557 FOR THE FULL DEPTH OF TRENCH PER COUNTY STANDARD DRAWING 2465.

19. THIS PROJECT IS TO BE CONSTRUCTED UNDER, AND IS SUBJECT TO THE TERMS AND CONDITIONS OF THE MASTER UTILITY EASEMENT AND RIGHT-OF-WAY AGREEMENT ENTERED INTO BETWEEN THE COUNTY OF BERNALILLO AND THE CITY OF ALBUQUERQUE, EFFECTIVE DATE 8/20/90.

## INDEX OF DRAWINGS



APPROVAL OF AS BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
Russell B. Fuller
DATE 5-12-95

4 RECORD DRAWING

| REV. | SHEETS | CITY ENGINEER | DATE | USER DEPARTMENT | DATE | USER DEPARTMENT | DATE |
|---|---|---|---|---|---|---|---|
| 4 | 1-16 | | 04/95 | | | | |
| | | | | | | | |
| | | | | | | | |

APPROVAL OF REVISIONS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 4910.900195

930824

JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — REGISTERED PROFESSIONAL ENGINEER
05-18-94

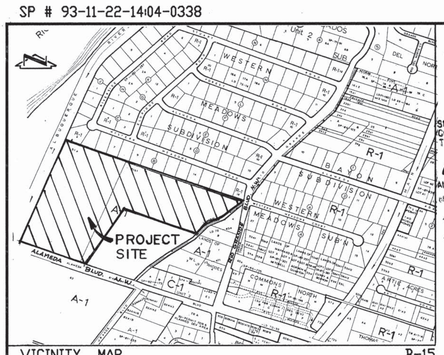
jma
JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 343-4250

APPROVED FOR CONSTRUCTION
Russell B. Fuller
C.E.

PROJECT NO. 4910.90

SHEET 1 OF 16

SP # 93-11-22-14:04-0338




VICINITY MAP B-15
SCALE: 1" = 750' ±

Notes:

1. A boundary survey was performed in October, 1993. Unless otherwise indicated, property corners were found as rebars with cap stamped "LS 5949". All honored property corners were tagged w/washer stamped "NMPS 11184".
2. Property located within Section 9, Township 11 North, Range 3 East, N.M.P.M. (projected).
3. Bearings shown hereon are based upon the plat of Tracts A & B, Lands of Blueher/Roehl Field December 17, 1992, Book 92C, Page 270. To achieve New Mexico State Plane Grid Bearings, Central Zone, rotate plat bearings 00°37'39" clockwise.
4. All distances are ground distances.
5. No street mileage has been created by this plat.
6. As shown by Panel 3 of 50 of the National Flood Insurance Program Flood Insurance Rate Maps for the City of Albuquerque, New Mexico, a portion of the property platted hereon is located within a designated flood hazard zone. The flood hazard zone bears a designation of AH with a maximum flood elevation of 4994 (see Sheet 2 of 2).
7. The property shown hereon is subject to the following:
   A. Reservations contained in the Patent from the United States of America recorded in Book 64, Page 412, Records of Bernalillo County, New Mexico.
   B. Terms and conditions of that certain License Agreement by and between Hope S. Blueher and Joseph E. Roehl and Jean Scott Roehl, husband and wife, dated July 23, 1992, recorded July 24, 1992, in Book BCR-9217, Page 3519 and Document No. 09274359, Records of Bernalillo County, New Mexico.
8. The purpose of this plat is to subdivide Tract A, Lands of Blueher/Roehl into thirteen individual parcels of land, and grant the necessary private and public easements as shown hereon.

Public Utility easements shown on this plat are granted for the common and joint use of:

A. The Public Service Company of New Mexico for the installation, maintenance, and service of overhead and underground electrical lines, transformers, poles and other equipment, fixtures, structures and related facilities reasonably necessary to provide electrical service.
B. The Gas Company of New Mexico for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.
C. U.S. West for the installation, maintenance, and service of all buried and aerial communication lines and other related equipment and facilities reasonably necessary to provide communication services including, but not limited to, above ground pedestals and closures.
D. Jones Intercable for the installation, maintenance, and service of such lines, cables, and other related equipment and facilities reasonably necessary to provide Cable TV service.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, modify, renew, operate, and maintain facilities for the purposes described above, together with free access to, from, and over said easements, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of the National Electric Safety Code caused by construction or pools, decking, or any structures adjacent to within or near easements shown on this plat.

9. City of Albuquerque sanitary sewer service is currently not available to these properties. An alternative on-site liquid waste disposal system designed by a sanitary and/or environmental engineer may be required if current on-site liquid waste disposal system requirements cannot be met.

**jma** JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

94083944 SUBDIVISION PLAT OF

# LOTS 1-13, BONA TERRA FARMS

BERNALILLO COUNTY, NEW MEXICO
JANUARY, 1994

State of New Mexico } SS
County of Bernalillo }
This instrument was filed for record on
JUN 30 1994
at 2:00 o'clock P.M. Recorded in Book 94C
Page 225 of the records of said County.
Witness my hand and seal of office
Deputy County Clerk & Ex-Officio Recorder

THIS IS TO CERTIFY THAT TAXES ARE CURRENT AND PAID ON UPC # 101305049730920
PROPERTY OWNER OF RECORD: George & Jeanette Brunacini
BERNALILLO COUNTY TREASURER'S OFFICE: Bernadette Santistevan 6/30/94

DESCRIPTION

A certain tract of land located within Bernalillo County, New Mexico, comprising Tract A, Lands of Blueher/Roehl as the same is shown and designated on the plat filed in the Office of the County Clerk of Bernalillo County, New Mexico, on December 17, 1992, Book 92C, Page 270, and being more particularly described as follows:

Beginning at the southwest corner of said Tract A, also being the point of intersection of the east right-of-way line of the Albuquerque Riverside Drain with the north right-of-way line of State Highway 46 (Alameda Boulevard); thence N 25°17'29" E a distance of 1032.62 feet along the east right-of-way line of the Albuquerque Riverside Drain to the northwest corner of said Tract A, also being the southwest corner of Lot 4, Block B, Western Meadows Subdivision, Unit 1, as shown on the plat filed December 12, 1962, Book D3, Page 51; thence S 69°19'04" E a distance of 170.00 feet along the south platted boundary of said Lot 4; thence N 35°30'36" E a distance of 1.07 feet to a point on the north line of said Tract A; thence S 69°39'53" E a distance of 643.91 feet along the north property line; thence S 69°03'37" E a distance of 1085.08 feet to the northeast corner of said Tract A, also being a point on the west right-of-way line of the Lane Lateral; thence S 53°08'39" W a distance of 60.29 feet along said right-of-way line; thence S 53°08'39" W a distance of 174.75 feet along said right-of-way line; thence S 68°37'12" W a distance of 191.77 feet along said right-of-way line; thence S 46°20'37" W a distance of 109.88 feet along said right-of-way line to the southeast corner of the parcel herein described, being common with the northeast corner of Tract B, Lands of Blueher/Roehl, as shown on the plat filed December 17, 1992, Book 92C, Page 270; thence N 69°25'56" W a distance of 841.91 feet; thence S 88°28'57" W a distance of 17.62 feet; thence S 43°29'40" W a distance of 150.17 feet; thence S 46°35'57" W a distance of 63.72 feet; thence S 50°49'18" W a distance of 124.16 feet; thence S 47°32'06" W a distance of 60.75 feet; thence S 41°16'24" W a distance of 275.33 feet; thence S 22°26'00" W a distance of 45.71 feet; thence S 03°47'40" W a distance of 28.98 feet to the southernmost point of the parcel herein described, also being the southwest corner of said Tract B, Lands of Blueher/Roehl, and also being a point on the north right-of-way line of State Highway 46 (Alameda Boulevard); thence N 71°02'50" W a distance of 153.28 feet along said right-of-way line; thence N 66°08'35" W a distance of 26.95 feet along said right-of-way line; thence N 54°26'25" W a distance of 374.07 feet along said right-of-way line to the point of beginning and containing 27.0522 acres more or less.

Notes: (Cont.)

10. Property Rights pertaining to land south of the existing fenceline, said fenceline bordering on the Southern Portion of the Western Meadows Subdivision, Unit 1, Block B, and the Northern Property of the Blueher Estate as described in the Special Warranty Deed filed in the Office of the County Clerk of Bernalillo County, New Mexico, on January 22, 1991, Book 91-1, Pages 9796-9797, have been Quitclaimed by referenced Property Owners in accordance with the following Quitclaim Deeds:

   Quitclaim Deed Filed 8-10-1992, Book BCR 92-18, Pages 6650-6651, Document No. 09279900. (Lot 13)
   Quitclaim Deed Filed 8-10-1992, Book BCR 92-18, Pages 6652-6653, Document No. 09279901. (Lot 12)
   Quitclaim Deed Filed 8-05-1992, Book BCR 92-18, Pages 3425-3426, Document No. 09278477. (Lot 18)
   Quitclaim Deed Filed 8-05-1992, Book BCR 92-18, Pages 3427-3428, Document No. 09278478. (Lot 17)
   Quitclaim Deed Filed 8-05-1992, Book BCR 92-18, Pages 3429-3430, Document No. 09278479. (Lot 16)
   Quitclaim Deed Filed 8-05-1992, Book BCR 92-18, Pages 3431-3432, Document No. 09278480. (Lot 15)
   Quitclaim Deed Filed 8-05-1992, Book BCR 92-18, Pages 3433-3434, Document No. 09278481. (Lot 7)
   Quitclaim Deed Filed 8-25-1992, Book BCR 92-19, Pages 8248-8249, Document No. 09284677. (Lot 10)
   Quitclaim Deed Filed 9-04-1992, Book BCR 92-21, Pages 799-800, Document No. 09289586. (Lot 5)
   Quitclaim Deed Filed 9-11-1992, Book BCR 92-21, Pages 5150-5151, Document No. 09291425. (Lot 11)
   Quitclaim Deed Filed 9-21-1992, Book BCR 92-22, Pages 1653-1654, Document No. 09294169. (Lot 14)
   Quitclaim Deed Filed 10-07-1992, Book BCR 92-23, Pages 8164-8165, Document No. 92101011. (Lot 6)
   Quitclaim Deed Filed 10-07-1992, Book BCR 92-23, Pages 8162-8163, Document No. 92101010. (Lot 9)
   Quitclaim Deed Filed 10-30-1992, Book BCR 92-25, Pages 9662-9663, Document No. 92109721. (Lot 8)

11. CITY OF ALBUQUERQUE WATER SERVICE IS AVAILABLE TO THE PROPERTIES PLATTED HEREON.
12. NO PRIVATE LIQUID WASTE DISPOSAL SYSTEM SHALL BE ALLOWED WHERE PUBLIC SEWER IS AVAILABLE.

DEDICATION AND FREE CONSENT

The undersigned owners of the land shown hereon do hereby consent to the subdivision of said land in the manner shown on this plat and do hereby grant the easements as shown including the rights of ingress and egress and the right to trim interfering trees.

George Brunacini 1-26-94 Date — Jeannette Brunacini 1-26-94 Date

ACKNOWLEDGEMENT

STATE OF NEW MEXICO )
) SS
COUNTY OF BERNALILLO ) 5-6-97

This foregoing instrument was acknowledged before me on this 26th day of January, 1994.

Notary Public

APPROVALS: DRB CASE NO. 93-430,SC5-93-41

| | |
|---|---|
| PLANNING DIRECTOR, CITY OF ALBUQUERQUE, NEW MEXICO | 1-30-94 DATE |
| UTILITY DEVELOPMENT, CITY OF ALBUQUERQUE, NEW MEXICO | 5-17-94 DATE |
| CITY ENGINEER, CITY OF ALBUQUERQUE, NEW MEXICO | 6-15-94 DATE |
| A.M.A.F.C.A. | 1/29/94 DATE |
| TRANSPORTATION DEVELOPMENT, CITY OF ALBUQUERQUE, NEW MEXICO | 5-17-94 DATE |
| PARKS AND RECREATION, CITY OF ALBUQUERQUE, NEW MEXICO | 5-17-94 DATE |
| CITY SURVEYOR, CITY OF ALBUQUERQUE, NEW MEXICO | 012894 DATE |
| REAL PROPERTY, CITY OF ALBUQUERQUE, NEW MEXICO | 5-2-94 DATE |
| BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT | 5-31-94 DATE |
| BERNALILLO COUNTY ENVIRONMENTAL HEALTH | 5/13/94 DATE |
| BERNALILLO COUNTY ZONING | 5/15/94 DATE |
| BERNALILLO COUNTY PLANNER | 6/30/94 DATE |
| CHAIRMAN, BERNALILLO COUNTY PLANNING COMMISSION | 6/30/94 DATE |
| CHAIRMAN, BOARD OF BERNALILLO COUNTY COMMISSIONERS | 6/30/94 DATE |
| PUBLIC SERVICE COMPANY OF NEW MEXICO | 5-3-94 DATE |
| U.S. WEST COMMUNICATIONS | 5-2-94 DATE |
| GAS COMPANY OF NEW MEXICO | 5-5-94 DATE |
| JONES INTERCABLE | 5-2-94 DATE |

CERTIFICATION

I, Charles G. Cala, Jr., a registered Professional Surveyor under the laws of the State of New Mexico, do hereby certify that this plat was prepared by me or under my supervision, shows all easements noted in the commitment for title insurance prepared by Stewart Title Limited dated 9-23-1992, Commitment No. 92080037, meets the minimum requirements of monumentation and surveys of the Albuquerque Subdivision Ordinance, complies with the minimum standards for surveying in New Mexico, and is true and correct to the best of my knowledge and belief.

Charles G. Cala, Jr., N.M.PS. 11184 — 1-27-1994 DATE

CHARLES G. CALA, JR. NEW MEXICO 11184 REGISTERED PROFESSIONAL SURVEYOR

JOB # 930822

SHEET 1 OF 2.

PWD - 93-234

SP # 93-11-22-14:04-0338

RECORD DRAWING

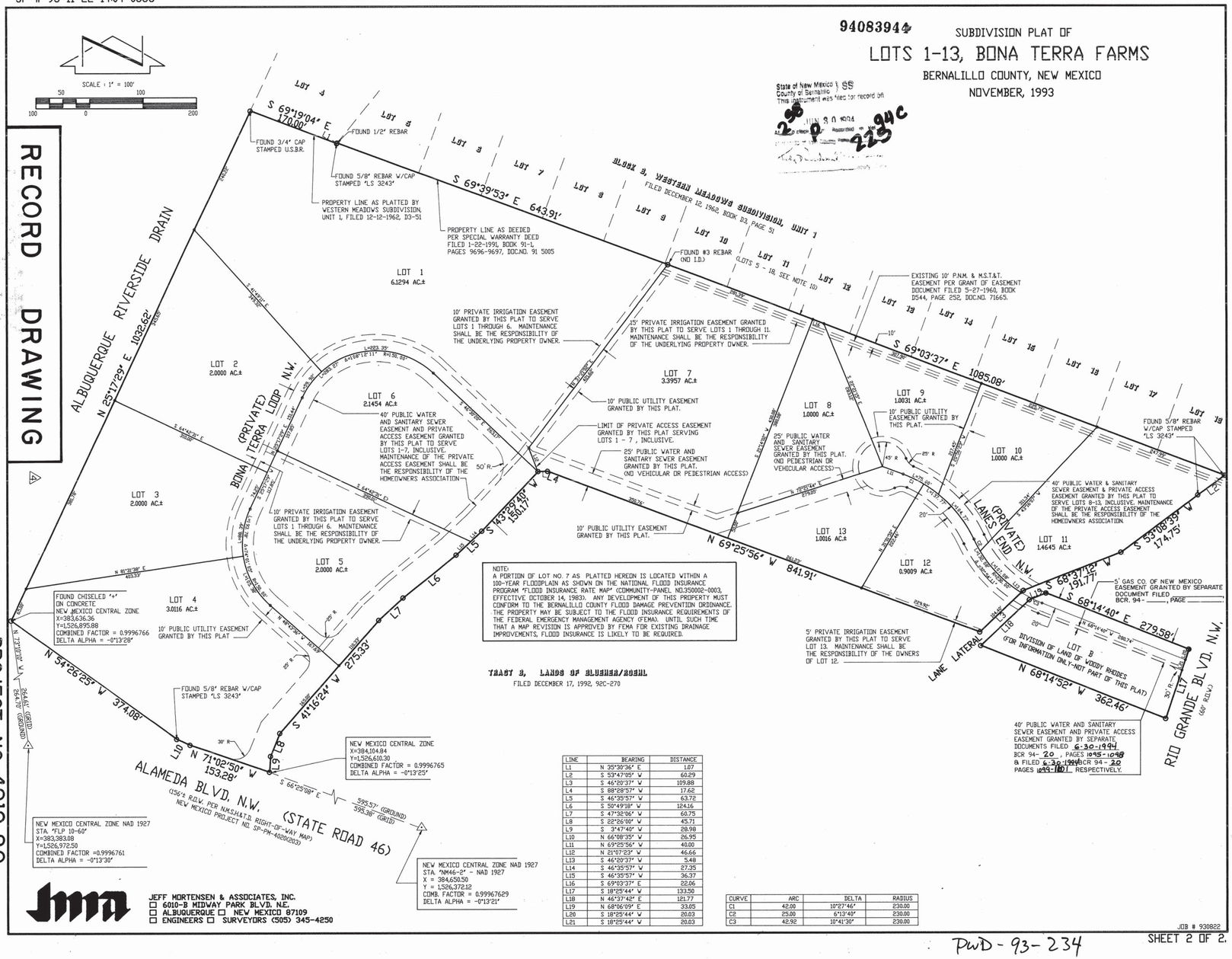
26 49 10 90 0245

94083944 SUBDIVISION PLAT OF

# LOTS 1-13, BONA TERRA FARMS

BERNALILLO COUNTY, NEW MEXICO
NOVEMBER, 1993

State of New Mexico } SS
County of Bernalillo }
This instrument was filed for record on
JUN 30 1994
at 2:00 o'clock P.M. Recorded in Book 94C
Page 225 of the records of said County.
Witness my hand and seal of office
Deputy County Clerk & Ex-Officio Recorder




NOTE:
A PORTION OF LOT NO. 7 AS PLATTED HEREON IS LOCATED WITHIN A 100-YEAR FLOODPLAIN AS SHOWN ON THE NATIONAL FLOOD INSURANCE PROGRAM "FLOOD INSURANCE RATE MAP" (COMMUNITY-PANEL NO.350002-0003, EFFECTIVE OCTOBER 14, 1983). ANY DEVELOPMENT OF THIS PROPERTY MUST CONFORM TO THE BERNALILLO COUNTY FLOOD DAMAGE PREVENTION ORDINANCE. THE PROPERTY MAY BE SUBJECT TO THE FLOOD INSURANCE REQUIREMENTS OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA). UNTIL SUCH TIME THAT A MAP REVISION IS APPROVED BY FEMA FOR EXISTING DRAINAGE IMPROVEMENTS, FLOOD INSURANCE IS LIKELY TO BE REQUIRED.

TRACT B, LANDS OF BLUEHER/ROEHL
FILED DECEMBER 17, 1992, 92C-270

| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | N 35°30'36" E | 1.07 |
| L2 | S 53°47'05" W | 60.29 |
| L3 | S 46°20'37" W | 109.88 |
| L4 | S 88°28'57" W | 17.62 |
| L5 | S 46°35'57" W | 63.72 |
| L6 | S 50°49'18" W | 124.16 |
| L7 | S 47°32'06" W | 60.75 |
| L8 | S 22°26'00" W | 45.71 |
| L9 | S 3°47'40" W | 28.98 |
| L10 | N 66°08'35" W | 26.95 |
| L11 | N 69°25'56" W | 40.00 |
| L12 | N 21°57'23" W | 46.66 |
| L13 | S 46°20'37" W | 5.48 |
| L14 | S 46°35'57" W | 27.35 |
| L15 | S 46°35'57" W | 36.37 |
| L16 | S 69°03'37" E | 22.06 |
| L17 | S 18°25'44" W | 133.50 |
| L18 | N 46°37'40" E | 121.77 |
| L19 | N 68°06'09" E | 33.65 |
| L20 | S 18°25'44" W | 20.03 |
| L21 | S 18°25'44" W | 20.03 |

| CURVE | ARC | DELTA | RADIUS |
|---|---|---|---|
| C1 | 42.00 | 10°27'46" | 230.00 |
| C2 | 25.00 | 6°13'46" | 230.00 |
| C3 | 42.52 | 10°41'30" | 230.00 |

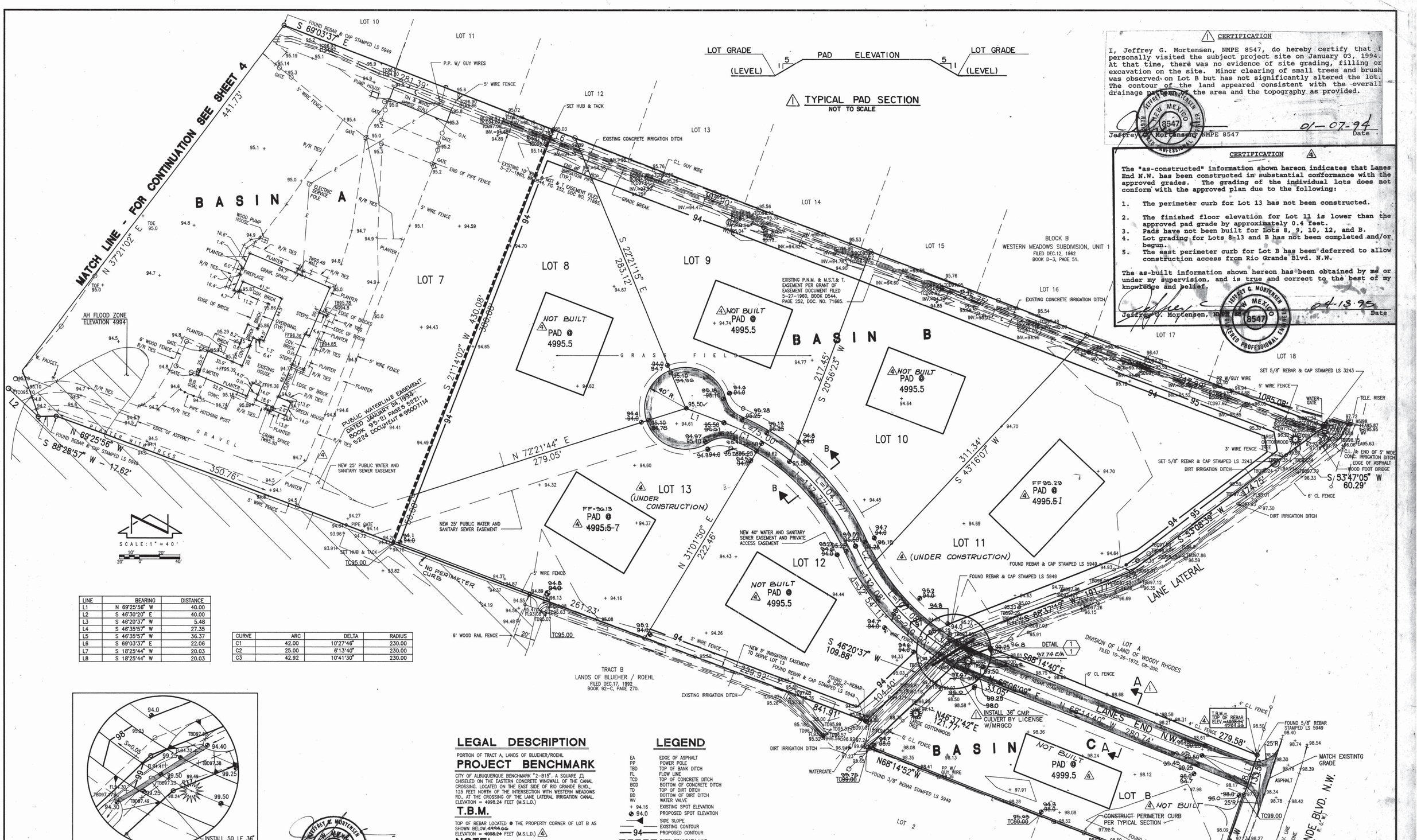
**jma** JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

PROJECT NO 4910 90
SHEET 2 OF 16

JOB # 930822

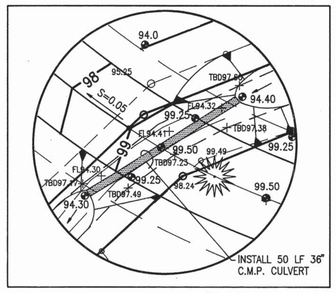
SHEET 2 OF 2.

PWD - 93-234




| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | N 69°25'56" W | 40.00 |
| L2 | S 46°30'20" E | 40.00 |
| L3 | S 46°20'37" W | 5.48 |
| L4 | S 46°35'57" W | 27.35 |
| L5 | S 46°35'57" W | 36.37 |
| L6 | S 69°03'37" E | 22.06 |
| L7 | S 18°25'44" W | 20.03 |
| L8 | S 18°25'44" W | 20.03 |

| CURVE | ARC | DELTA | RADIUS |
|---|---|---|---|
| C1 | 42.00 | 10°27'46" | 230.00 |
| C2 | 25.00 | 6°13'40" | 230.00 |
| C3 | 42.92 | 10°41'30" | 230.00 |




DETAIL 1/1
NOT TO SCALE

## LEGAL DESCRIPTION

PORTION OF TRACT A, LANDS OF BLUEHER/ROEHL

## PROJECT BENCHMARK

CITY OF ALBUQUERQUE BENCHMARK "2-B15". A SQUARE ⊥ CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING. LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD., 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOWS RD., AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL. ELEVATION = 4998.24 FEET (M.S.L.D.)

## T.B.M.

TOP OF REBAR LOCATED @ THE PROPERTY CORNER OF LOT B AS SHOWN BELOW. ~~4994.66~~ ELEVATION = ~~4998.24~~ FEET (M.S.L.D.) △4

## NOTE:

BOUNDARY INFORMATION SHOWN IS BASED UPON PREVIOUSLY PERFORMED SURVEY.

## LEGEND

| | |
|---|---|
| EA | EDGE OF ASPHALT |
| PP | POWER POLE |
| TBD | TOP OF BANK DITCH |
| FL | FLOW LINE |
| TCD | TOP OF CONCRETE DITCH |
| BCD | BOTTOM OF CONCRETE DITCH |
| TD | TOP OF DIRT DITCH |
| BD | BOTTOM OF DIRT DITCH |
| WV | WATER VALVE |
| + 94.16 | EXISTING SPOT ELEVATION |
| @ 94.0 | PROPOSED SPOT ELEVATION |
| ◄ | SIDE SLOPE |
| — | EXISTING CONTOUR |
| —94— | PROPOSED CONTOUR |
| - - - - | BASIN BOUNDARY LINE |
| △4 95.2 ~~94.8~~ | AS-BUILT ELEVATION △4 |

## △1 TYPICAL PAD SECTION
NOT TO SCALE

LOT GRADE (LEVEL) | 5 | PAD ELEVATION | 5 | LOT GRADE (LEVEL)

## △1 CERTIFICATION

I, Jeffrey G. Mortensen, NMPE 8547, do hereby certify that I personally visited the subject project site on January 03, 1994. At that time, there was no evidence of site grading, filling or excavation on the site. Minor clearing of small trees and brush was observed on Lot B but has not significantly altered the lot. The contour of the land appeared consistent with the overall drainage pattern of the area and the topography as provided.

Jeffrey G. Mortensen, NMPE 8547 — Date: 01-07-94

## △4 CERTIFICATION

The "as-constructed" information shown hereon indicates that Lanes End N.W. has been constructed in substantial conformance with the approved grades. The grading of the individual lots does not conform with the approved plan due to the following:

1. The perimeter curb for Lot 13 has not been constructed.
2. The finished floor elevation for Lot 11 is lower than the approved pad grade by approximately 0.4 feet.
3. Pads have not been built for Lots 8, 9, 10, 12, and B.
4. Lot grading for Lots 8-13 and B has not been completed and/or begun.
5. The east perimeter curb for Lot B has been deferred to allow construction access from Rio Grande Blvd. N.W.

The as-built information shown hereon has been obtained by me or under my supervision, and is true and correct to the best of my knowledge and belief.

Jeffrey G. Mortensen, NMPE 8547 — Date: 04-18-95

RECORD DRAWING

01-07-94
05-12-94

JMA — JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E. ☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

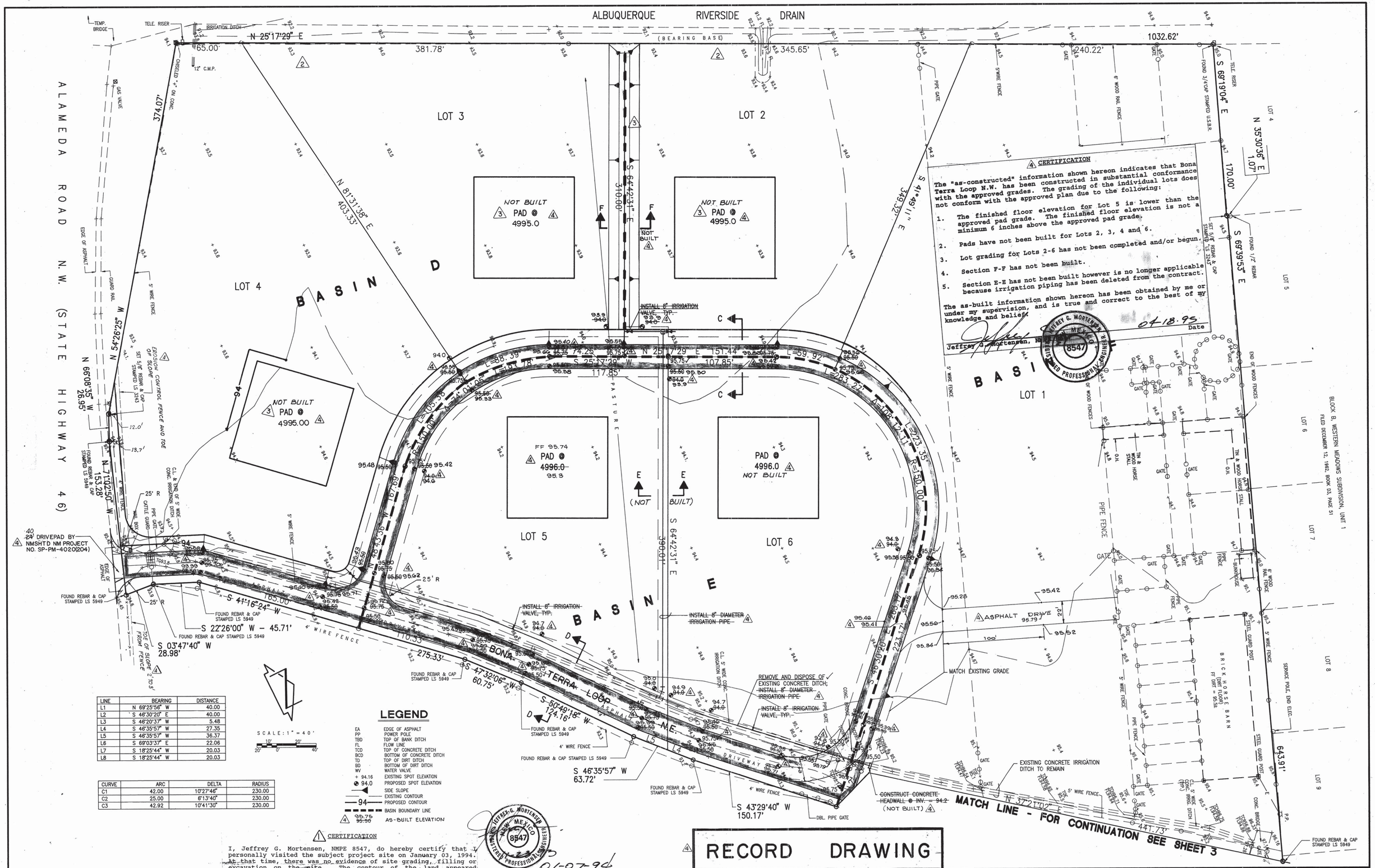
GRADING PLAN
BONA TERRA FARMS
(EAST)

26 49 10.90 0.39 5

DESIGNED BY J.G.M.
DRAWN BY ACAD
APPROVED BY J.G.M.

| NO | DATE | BY | REVISIONS |
|---|---|---|---|
| △1 | 01/94 | J.G.M. | ADD SECTION A-A, CERTIFICATION, REFERENCE TO MRGCD LICENSE, |
| | | | ADD TYPICAL PAD SECTION |
| △4 | 01/95 | J.M.A. | AS-BUILT AND CERTIFY |

JOB NO. 930823
DATE 11-1993
SHEET 3 OF 16




| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | N 69°25'56" W | 40.00 |
| L2 | S 46°30'20" E | 40.00 |
| L3 | S 46°20'37" W | 5.48 |
| L4 | S 46°35'57" W | 27.35 |
| L5 | S 46°35'57" W | 36.37 |
| L6 | S 69°03'37" E | 22.06 |
| L7 | S 18°25'44" W | 20.03 |
| L8 | S 18°25'44" W | 20.03 |

| CURVE | ARC | DELTA | RADIUS |
|---|---|---|---|
| C1 | 42.00 | 10°27'46" | 230.00 |
| C2 | 25.00 | 6°13'40" | 230.00 |
| C3 | 42.92 | 10°41'30" | 230.00 |

## LEGEND

| | |
|---|---|
| EA | EDGE OF ASPHALT |
| PP | POWER POLE |
| TBD | TOP OF BANK DITCH |
| FL | FLOW LINE |
| TCD | TOP OF CONCRETE DITCH |
| BCD | BOTTOM OF CONCRETE DITCH |
| TD | TOP OF DIRT DITCH |
| BD | BOTTOM OF DIRT DITCH |
| WV | WATER VALVE |
| + 94.16 | EXISTING SPOT ELEVATION |
| ● 94.0 | PROPOSED SPOT ELEVATION |
| ◄ | SIDE SLOPE |
| —94— | EXISTING CONTOUR |
| —94— | PROPOSED CONTOUR |
| ▬ ▬ ▬ | BASIN BOUNDARY LINE |
| 4 95.75 / ~~95.50~~ | AS-BUILT ELEVATION |

### 1 CERTIFICATION

I, Jeffrey G. Mortensen, NMPE 8547, do hereby certify that I personally visited the subject project site on January 03, 1994. At that time, there was no evidence of site grading, filling or excavation on the site. The contour of the land appeared consistent with the overall drainage pattern of the area and the topography as shown hereon.

Jeffrey G. Mortensen, NMPE 8547 — Date 01-07-94 — REVISED 05-12-94

JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — REGISTERED PROFESSIONAL ENGINEER

### 4 CERTIFICATION

The "as-constructed" information shown hereon indicates that Bona Terra Loop N.W. has been constructed in substantial conformance with the approved grades. The grading of the individual lots does not conform with the approved plan due to the following:

1. The finished floor elevation for Lot 5 is lower than the approved pad grade. The finished floor elevation is not a minimum 6 inches above the approved pad grade.
2. Pads have not been built for Lots 2, 3, 4 and 6.
3. Lot grading for Lots 2-6 has not been completed and/or begun.
4. Section F-F has not been built.
5. Section E-E has not been built however is no longer applicable because irrigation piping has been deleted from the contract.

The as-built information shown hereon has been obtained by me or under my supervision, and is true and correct to the best of my knowledge and belief.

Jeffrey G. Mortensen, NMPE 8547 — Date 04-18-95

JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — REGISTERED PROFESSIONAL ENGINEER

# RECORD DRAWING

JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

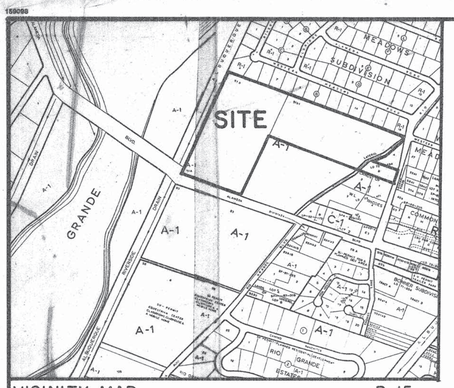
## GRADING PLAN
## BONA TERRA FARMS (WEST)

DESIGNED BY J.G.M.
DRAWN BY ACAD
APPROVED BY J.G.M.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 49910.90049 5

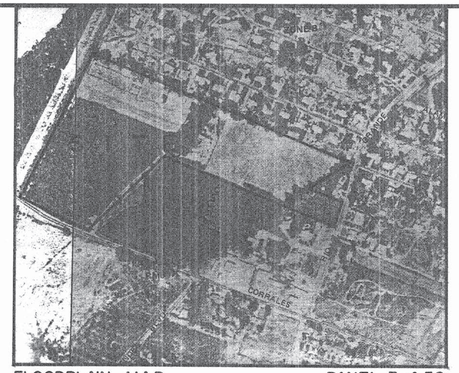
| NO. | DATE | BY | REVISIONS |
|---|---|---|---|
| 1 | 01/94 | J.G.M. | ADD DRIVEPAD & CERTIFICATION |
| 2 | 04/94 | J.G.M. | DELETE WEST PERIMETER CURB FOR LOTS 2,3, & 4 |
| 3 | 05/94 | J.G.M. | REVISE LOTS 2,3, 4 |
| 4 | 01/95 | J.M.A. | RECORD DRAWING |

JOB NO. 930823
DATE 11-1993
SHEET 4 OF 16



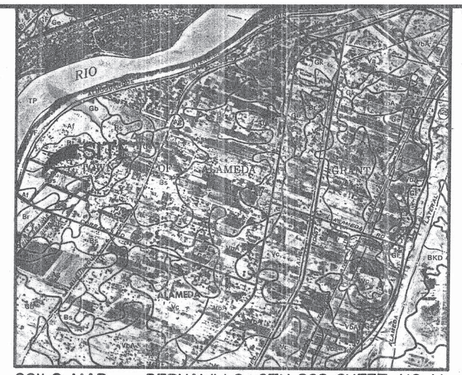

VICINITY MAP B-15

SCALE: 1"=750'(APPROX.)




FLOODPLAIN MAP PANEL 3 of 50

SCALE: 1"=500'




SOILS MAP ~ BERNALILLO CTY. SCS SHEET NO 11

SCALE: 1"=2000'

## DRAINAGE PLAN

The following items concerning the Bona Terra Farms Drainage Plan are contained hereon:

1. Vicinity Map
2. FIRM Map
3. Soils Map
4. Grading Plan
5. Typical Road Sections
6. Calculations

As shown by the Vicinity Map, the site is located north of Alameda Blvd., east of the Rio Grande. The site is described as a Tract A, Lands of Blueher/Roehl and Lot B Lands of W.L. Rhodes.

As shown by Panel 3 of 50 of the National Flood Insurance Rate Maps (FIRM) dated October 14, 1983, the site lies adjacent to a flood hazard zone designated as AH the AH zone does encroach upon Lot 7 which contains an existing single family residence.

The Grading Plan shows 1) existing grades indicated by spot elevations and contours at 1'0" intervals, 2) proposed grades indicated by contours at 1'0" intervals, 3) the limit and character of the existing improvements, 4) the limit and character of the proposed improvements, and 5) continuity between existing and proposed grades. As shown by this plan, the proposed development consists of single family residences and associated private roads. The topography of the site is flat with very little relief. No lots have slopes greater than 1.0%. The site will require minimal grading to construct the new road, build house pads and develop the flat grading scheme. The "flat" grading scheme will effect a zero discharge concept for managing stormwater runoff. Each lot, with the exception of the pad, will be graded "flat." This will contain the runoff generated within each respective basin. The "flat" grading will prohibit runoff from migrating from one lot to another which could create an excessive burden on the lowest lot. With each lot within the respective basin being graded at the same base elevation, this will not occur. △3 Lots 1, 2, 3 and 4 will deviate from this scheme slightly and will discharge excess runoff in its historic pattern to the Albuquerque Riverside Drain. A net decrease in runoff discharging to the Drain is noted in the Comparison hereon. In addition, Offsite flows will not be blocked by the development. Offsite flows are discussed in more detail elsewhere on this page.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. As shown by these calculations, a minor increase in runoff is anticipated due to the proposed development. The 10-day developed runoff volume ($V_{10\text{-}day}$) has also been calculated along with the associated water surface elevation (depth).

## CALCULATIONS

### Site Characteristics

1. Precipitation Zone 2
2. $P_{6,100} = P_{360} =$ 2.35 in
3. Total Area ($A_T$) 28.05 Acres
4. △3 Existing Land Treatment

| | | |
|---|---|---|
| Basin A | 148,110/3.4 | 100 |
| Treatment | Area (sf/ac) | % |
| A | 114,570/2.63 | 77 |
| B | 12,200/0.28 | 08 |
| C | 8,710/0.20 | 06 |
| D | 12,630/0.29 | 09 |
| Basin B | 277,480/6.37 | 100 |
| A | 271,820/6.24 | 98 |
| D | 5,660/0.13 | 02 |
| Basin C | 43,560/1.00 | 100 |
| A | 43,560/1.00 | 100 |
| Basin D | 216,240/5.01 | 100 |
| A | 212,320/4.92 | 98 |
| D | 3,920/0.09 | 02 |
| Basin E | 180,770/4.15 | 100 |
| A | 172,490/3.96 | 95 |
| D | 8,280/0.19 | 05 |
| Basin F | 353,710/8.12 | 100 |
| A | 291,420/6.69 | 82 |
| C | 48,790/1.12 | 14 |
| D | 13,500/0.31 | 4 |

△3 5. Developed Land Treatment

| | | |
|---|---|---|
| Basin A | 148,110/3.4 | 100 |
| Treatment | Area (sf/ac) | % |
| A | 114,570/2.63 | 77 |
| B | 12,200/0.28 | 08 |
| C | 8,710/0.20 | 06 |
| D | 12,630/0.29 | 09 |
| Basin B | 277,480/6.37 | 100 |
| A | 216,930/4.98 | 78 |
| D | 60,550/1.39 | 22 |
| Basin C | 43,560/1.00 | 100 |
| A | 29,190/0.67 | 67 |
| D | 14,370/0.33 | 33 |
| Basin D | 218,240/5.01 | 100 |
| A | 186,740/4.29 | 86 |
| D | 31,500/0.72 | 14 |
| Basin E | 180,770/4.15 | 100 |
| A | 140,260/3.22 | 78 |
| D | 40,510/0.93 | 22 |
| Basin F | 353,710/8.12 | 100 |
| A | 274,050/6.29 | 77 |
| C | 48,790/1.12 | 14 |
| D | 30,870/0.71 | 09 |

### Existing Condition

A. Basin A

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = [(0.53)(2.63)+(0.78)(0.28)+(1.13)(0.20)+(2.12)(0.29)]/3.4 = 0.72$ in.
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.72/12)3.4 = 0.2044$ ac.ft.; 8,900 cf

$V_{10\ Day} = V_{360} + A_D * (P_{10\ Days} - P_{360})/(12$ in/ft$)$
$V_{10\ Day} = 0.2044 + 0.29 * (3.95 - 2.35)/(12$ in/ft$)$
$= 0.2044 + 0.0387 = 0.2431$ ac.ft.; 10,590 cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = (1.56)(2.63)+(2.28)(0.28)+(3.14)(0.20)+(4.70)(0.29) = 6.7$ cfs

B. Basin B

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = [(0.53)(6.24)+(2.12)(0.13)]/6.37 = 0.56$ in.
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.56/12)6.37 = 0.2973$ ac.ft.; 12,950 cf

$V_{10\ Day} = V_{360} + A_D * (P_{10\ Days} - P_{360})/(12$ in/ft$)$
$V_{10\ Day} = 0.2973 + 0.13 * (3.95 - 2.35)/12$
$= 0.3146$ ac.ft.; 13,700 cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = (1.56)(6.24)+(4.70)(0.13) = 10.3$ cfs

C. Basin C

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = [(0.53)(1.00)]/1.00 = 0.53$ in.
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.53/12)1.00 = 0.0442$ ac.ft.; 1,925 cf

$V_{10\ Day} = V_{360} + A_D * (P_{10\ Days} - P_{360})/(12$ in/ft$)$
$V_{10\ Day} = 0.0442 + 0 = 0.0442$ ac.ft.; 1,925 cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = (1.56)(1.00) = 1.6$ cfs

△3 D. Basin D

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = [(0.53)(4.92)+(2.12)(0.09)]/5.01 = 0.56$ in.
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.56/12)5.01 = 0.2332$ ac.ft.; 10,160 cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = (1.56)(4.92)+(4.70)(0.09) = 8.1$ cfs

E. Basin E

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = [(0.53)(3.96)+(2.12)(0.19)]/4.15 = 0.60$ in.
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.60/12)4.15 = 0.2085$ ac.ft.; 9,080 cf

$V_{10\ Day} = V_{360} + A_D * (P_{10\ Days} - P_{360})/(12$ in/ft$)$
$V_{10\ Day} = 0.2085 + 0.19(3.95 - 2.35)/12$
$= 0.2338$ ac.ft.; 10,190 cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = (1.56)(3.96)+(4.70)(0.19) = 7.1$ cfs

△3 F. Basin F

1. Volume

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$
$E_W = [(0.53)(6.69)+(1.13)(1.12)+(2.12)(0.31)]/8.12 = 0.67$ in.
$V_{100} = (E_W/12)A_T$
$V_{100} = (0.67/12)8.12 = 0.4557$ ac.ft.; 19,850 cf

2. Peak Discharge

$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
$Q_p = Q_{100} = (1.56)(6.69)+(3.14)(1.12)+(4.70)(0.31) = 15.4$ cfs

### △1 Developed Condition

A. Basin A

1. Volume
(No Change)
$V_{10\ Day}$ (No Change)

10-Day Water Surface Elevation
10,590 cf/(148,110 - 12,630) sf = 0.08 ft

2. Peak Discharge
(No Change)

B. Basin B

1. Volume
$E_W = [(0.53)(4.98)+(2.12)(1.39)]/6.37 = 0.88$ in.
$V_{100} = (0.88/12)6.37 = 0.4671$ ac.ft.; 20,350 cf
$V_{10\ Day} = 0.4671 + 1.39(3.95 - 2.35)/12$
$= 0.6524$ ac.ft.; 28,420 cf

10-Day Water Surface Elevation
28,420 cf/(277,480 - 60,550) sf = 0.13 ft

2. Peak Discharge

$Q_p = Q_{100} = (1.56)(4.98)+(4.70)(1.39) = 14.3$ cfs

C. Basin C

1. Volume
$E_W = [(0.53)(0.67)+(2.12)(0.33)]/1.00 = 1.05$ in.
$V_{100} = (1.05/12)1.00 = 0.0879$ ac.ft.; 3,830 cf
$V_{10\ Day} = 0.0879 + 0.33(3.95 - 2.35)/12$
$= 0.1319$ ac.ft.; 5,750 cf

10-Day Water Surface Elevation
5,750 cf/(43,560 - 14,370 sf = 0.20 ft

2. Peak Discharge

$Q_p = Q_{100} = (1.56)(0.67)+(4.70)(0.33) = 2.6$ cfs

△3 D. Basin D

1. Volume
$E_W = [(0.53)(4.29)+(2.12)(0.72)]/5.01 = 0.76$ in.
$V_{100} = (0.76/12)5.01 = 0.3164$ ac.ft.; 13,780 cf

△4 RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future designs.

Jeffrey G. Mortensen — Date
NMPE No. 8547

JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — REGISTERED PROFESSIONAL ENGINEER

05-12-94
01-07-94

2. Peak Discharge

$Q_p = Q_{100} = (1.56)(4.29)+(4.70)(0.72) = 10.1$ cfs

E. Basin E

1. Volume
$E_W = [(0.53)(3.22)+(2.12)(0.93)]/4.15 = 0.89$ in.
$V_{100} = (0.89/12)4.15 = 0.3078$ ac.ft.; 13,410 cf
$V_{10\ Day} = 0.3078 + 0.93(3.95 - 2.35)/12$
$= 0.4318$ ac.ft.; 18,810 cf

10-Day Water Surface Elevation
18,810 cf/(180,770 - 40,510) sf = 0.13 ft

2. Peak Discharge

$Q_p = Q_{100} = (1.56)(3.22)+(4.70)(0.93) = 9.4$ cfs

△3 F. Basin F

1. Volume
$E_W = [(0.53)(6.29)+(1.13)(1.12)+(2.12)(0.71)]/8.12 = 0.75$ in.
$V_{100} = (0.75/12)8.12 = 0.5087$ ac.ft.; 22,160 cf

2. Peak Discharge

$Q_p = Q_{100} = (1.56)(6.29)+(3.14)(1.12)+(4.70)(0.71) = 16.7$ cfs

### Comparison

A. Basin A

1. $\Delta V_{100} =$ 8,900 - 8,900 = 0 cf (No Change)
2. $\Delta Q_{100} =$ 6.7 - 6.7 = 0 cfs (No Change)

B. Basin B

1. $\Delta V_{100} =$ 20,350 - 12,950 = 7,400 cf (increase)
2. $\Delta Q_{100} =$ 14.3 - 10.3 = 3.0 cfs (increase)

C. Basin C

1. $\Delta V_{100} =$ 3,830 - 1,925 = 1,905 cf (increase)
2. $\Delta Q_{100} =$ 2.6 - 1.6 = 1.0 cfs (increase)

D. Basin D

1. $\Delta V_{100} =$ 13,780 - 10,160 = 3,620 cf (increase)
2. $\Delta Q_{100} =$ 10.1 - 8.1 = 2.0 cfs (increase)

E. Basin E

1. $\Delta V_{100} =$ 13,410 - 9,080 = 4,330 cf (increase)
2. $\Delta Q_{100} =$ 9.4 - 7.1 = 2.3 cfs (increase)

F. Basin F

1. $\Delta V_{100} =$ 22,160 - 19,850 = 2,310 cf (increase)
2. $\Delta Q_{100} =$ 16.7 - 15.4 = 1.3 cfs (increase)

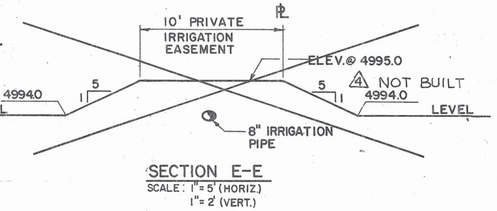
G. Discharge to Riverside Drain
(Basins D, E, & F)

1. $\Delta V_{100} =$ (10,160+9080+19,850) -(13,780+22,160) = 3150 cf (decrease)
2. $\Delta Q_{100} =$ (8.1+7.1+15.4)-(10.1-16.7) = 3.8 cfs (decrease)

Note: Retaining Basin E runoff and allowing Basins D and F to drain historically, will result in an overall decrease in runoff discharging from the site to the Albuquerque Riverside Drain

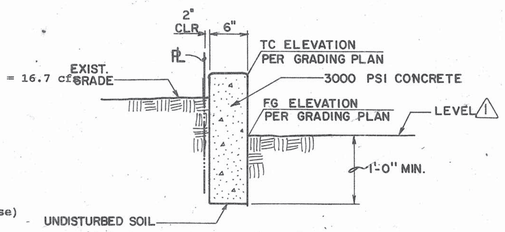
GRADING NOTES:

1. ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 90% ASTM D-1557; HOUSE PADS SHALL BE COMPACTED AT 95% ASTM D-1557; ROADWAYS SHALL BE COMPACTED AT 95% ASTM D-1557.
2. THE PAD ELEVATIONS SHOWN HEREON ARE FOR ROUGH GRADING PURPOSES.
3. △1 PAD LOCATIONS ARE APPROXIMATE IN HORIZONTAL PLACEMENT AND SIZE; LOCATIONS SHOWN ARE FOR ILLUSTRATION PURPOSES. INDIVIDUAL GRADING & DRAINAGE PLANS ARE REQUIRED FOR EACH LOT AS A CONDITION FOR BUILDING PERMIT APPROVAL.
4. FINISHED FLOOR ELEVATIONS MAY VARY FROM THE PAD ELEVATIONS AND WILL BE DETERMINED AS A FUNCTION OF INDIVIDUAL HOUSE DESIGN. (SEE NOTE 5)
5. FINISHED FLOOR ELEVATIONS SHOULD BE ESTABLISHED AT A MINIMUM OF 6 INCHES ABOVE PAD ELEVATIONS; DEVIATIONS FROM THESE GUIDELINES MUST BE BASED ON THE RECOMMENDATIONS AND/OR DESIGN OF A COMPETENT DESIGN PROFESSIONAL.
6. OFFSITE FLOWS SHALL NOT BE BLOCKED.
7. THE PAD ELEVATIONS SHOWN HEREON ARE MINIMUM ELEVATIONS; DEVIATIONS MUST BE BASED UPON THE RECOMMENDATIONS AND/OR DESIGN OF A COMPETENT DESIGN PROFESSIONAL.
8. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION FOR EXISTING UTILITIES.
9. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
10. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
11. 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 OR ONTO PRIVATE PROPERTY.
12. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.
13. △1 THE LANE LATERAL CROSSING WILL BE ACCOMPLISHED BY USING THE MRGCD. THE MRGCD WILL EVALUATE IF THE 36" CMP IS SIZED ADEQUATELY. A REVISED PLAN WILL BE SUBMITTED TO SHOW A DIFFERENT SIZE CROSSING IF REQUIRED BY THE MRGCD.




SECTION E-E

SCALE: 1"=5' (HORIZ.)
1"=2' (VERT.)




TYPICAL PERIMETER CURB SECTION

SCALE: 1"=1'-0"

### OFFSITE FLOWS

Review of City of Albuquerque Orthotopo Plate B15, existing onsite conditions and the topography shown hereon indicates that offsite flows do not presently enter the project site from adjacent properties. The existing concrete irrigation ditch, which lies along the north edge of Basins A & B blocks offsite flows which could potentially be generated on the properties which lie to the north. The land which lies to the south of Basins A & B is topographically lower hence does not contribute runoff to the property. Basins B & C are separated by the Lane Lateral which is an elevated unlined irrigation ditch. The elevated ditch serves as a physical barrier to block flows from draining east and west. The land which lies to the south of Basin C is extremely flat and may be slightly topographically lower than the site and therefore does not contribute runoff to the property. Likewise, the site which lies to the north of Basin C is also extremely flat, largely undeveloped, and does not drain onto Basin C. Rio Grande Blvd. N.W. has a gentle slope and drains from north to south away from the site. Basin D is bounded on the south by Alameda Blvd. N.W. which is currently under construction. The construction plans include curb and gutter which will block potential offsite flows which could enter the site from the south. The Albuquerque Riverside Drain lies to the west of Basin D & F. The Albuquerque Riverside Drain is topographically lower than the site hence does not contribute runoff. The Western Meadows Subdivision consists of developed residential lots which affectively contain the runoff generated on the respective properties. The land which lies to the east of Basins D & E is topographically lower than the site hence does not contribute to runoff. As demonstrated above, offsite flows do not enter the site. The perimeter curbs will tend to contain runoff generated by this project and prevent those flows from exiting onto the neighboring properties. The above conclusions are based upon careful examination of available mapping as well as onsite reconnaissance.

JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — REGISTERED PROFESSIONAL ENGINEER

05-12-94
01-07-94

JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS & SURVEYORS (505)345-4250

DRAINAGE PLAN & CALCULATIONS,
GRADING NOTES, SECTIONS & DETAILS

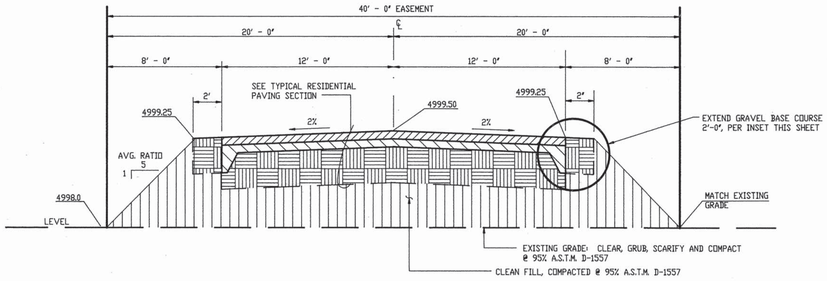
BONA TERRA FARMS

26 4910.900595

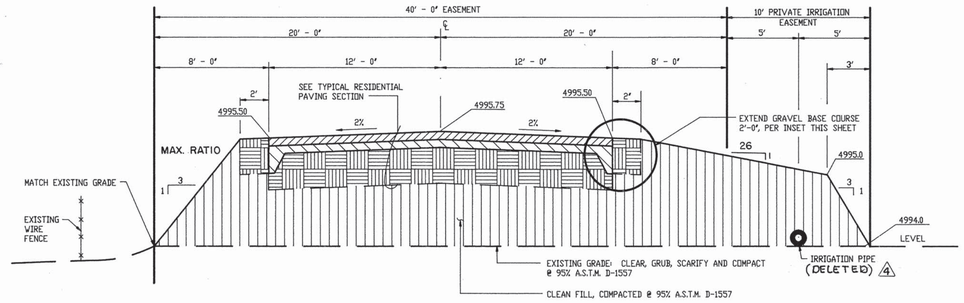
DESIGNED BY J.G.M.
DRAWN BY T.P.H.
APPROVED BY J.G.M.

| NO. | DATE | BY | REVISIONS |
|---|---|---|---|
| △1 | 01/94 | J.G.M. | EXPAND NOTE 3 ; REVISE CALCS ; OFFSITE FLOWS ; REVISE CURB SECTION ; ADD NOTE 13 ; REVISE TEXT. |
| △3 | 05/94 | J.G.M. | ADJUST BASIN BOUNDRIES & CALCULATIONS |
| △4 | 01/95 | J.M.A. | RECORD DRAWING |

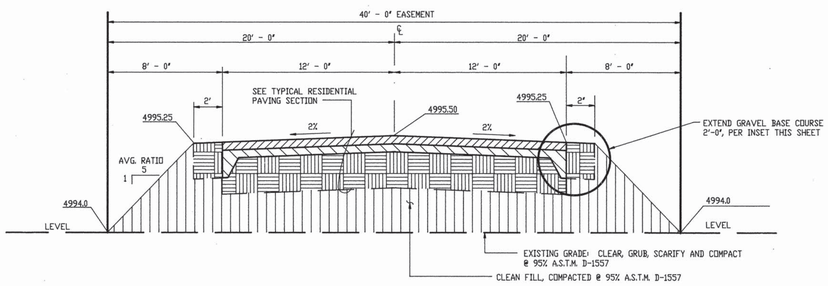
JOB NO. 930823
DATE 11/93
SHEET 5 OF 16



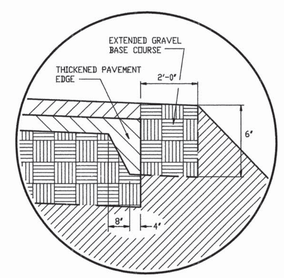

SECTION A-A
SCALE: 1" = 5'-0" HORIZONTAL
1" = 1'-0" VERTICAL



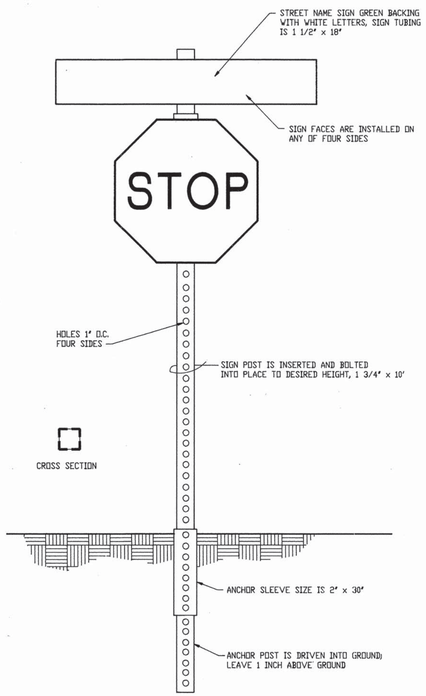

1 SECTION D-D
SCALE: 1" = 5'-0" HORIZONTAL
1" = 1'-0" VERTICAL




SECTION B-B
SCALE: 1" = 5'-0" HORIZONTAL
1" = 1'-0" VERTICAL

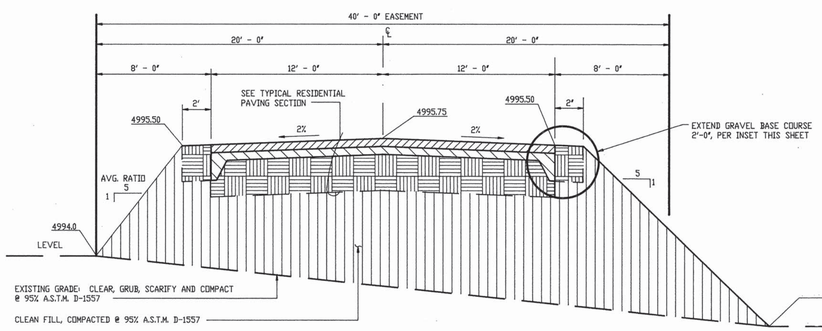



INSET
NOT TO SCALE

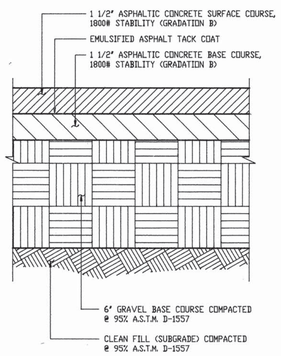



NOTE:
PRIOR TO INSTALLATION, CONTRACTOR SHALL CONTACT BCPWD (848-1523) TO VERIFY EXACT LOCATION.

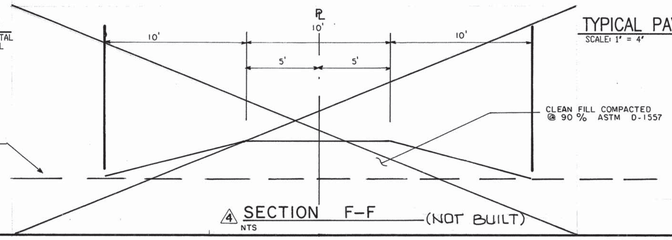
TYPICAL SIGN DETAIL
NOT TO SCALE




SECTION C-C
SCALE: 1" = 5'-0" HORIZONTAL
1" = 1'-0" VERTICAL




TYPICAL PAVEMENT SECTION
SCALE: 1" = 4'




4 SECTION F-F (NOT BUILT)
NTS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 4910.4000675

4 RECORD DRAWING

930823

AS BUILT INFORMATION

| | | |
|---|---|---|
| CONTRACTOR | HYDRO - SYSTEMS | |
| WORK STAKED BY | J.M.A. | DATE 09/94 |
| INSPECTORS ACCEPTANCE BY | M.F.D. | DATE 03/95 |
| VERIFICATION BY | J.M.A. | DATE 03/95 |
| DRAWINGS CORRECTED BY | M.F.D. | DATE 04/95 |
| MICRO-FILM INFORMATION | | |
| RECORDED BY | | DATE |
| NO. | | |

BENCH MARKS

CITY OF ALBUQUERQUE BENCHMARK "2-B15", A SQUARE, CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING, LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD. 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOWS RD., AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL. ELEVATION = 4998.24 FEET (M.S.L.D.)

SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| N/A | JMA | 11-93 |

ENGINEER'S SEAL

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
11-23-93 05-12-94

| NO. | DATE | REMARKS | BY |
|---|---|---|---|
| 4 | 01/95 | RECORD DRAWING | J.M.A. |
| 3 | 01/94 | REVISE SECTION D-D | J.G.M. |

REVISIONS

DESIGN

| | | |
|---|---|---|
| DESIGNED BY | J.G.M. | DATE 11-93 |
| DRAWN BY | S.G.H. | DATE 11-93 |
| CHECKED BY | J.G.M. | DATE 11-93 |

RECORD DRAWING 4

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen 5-24-1995
NMPE No. 8547 Date

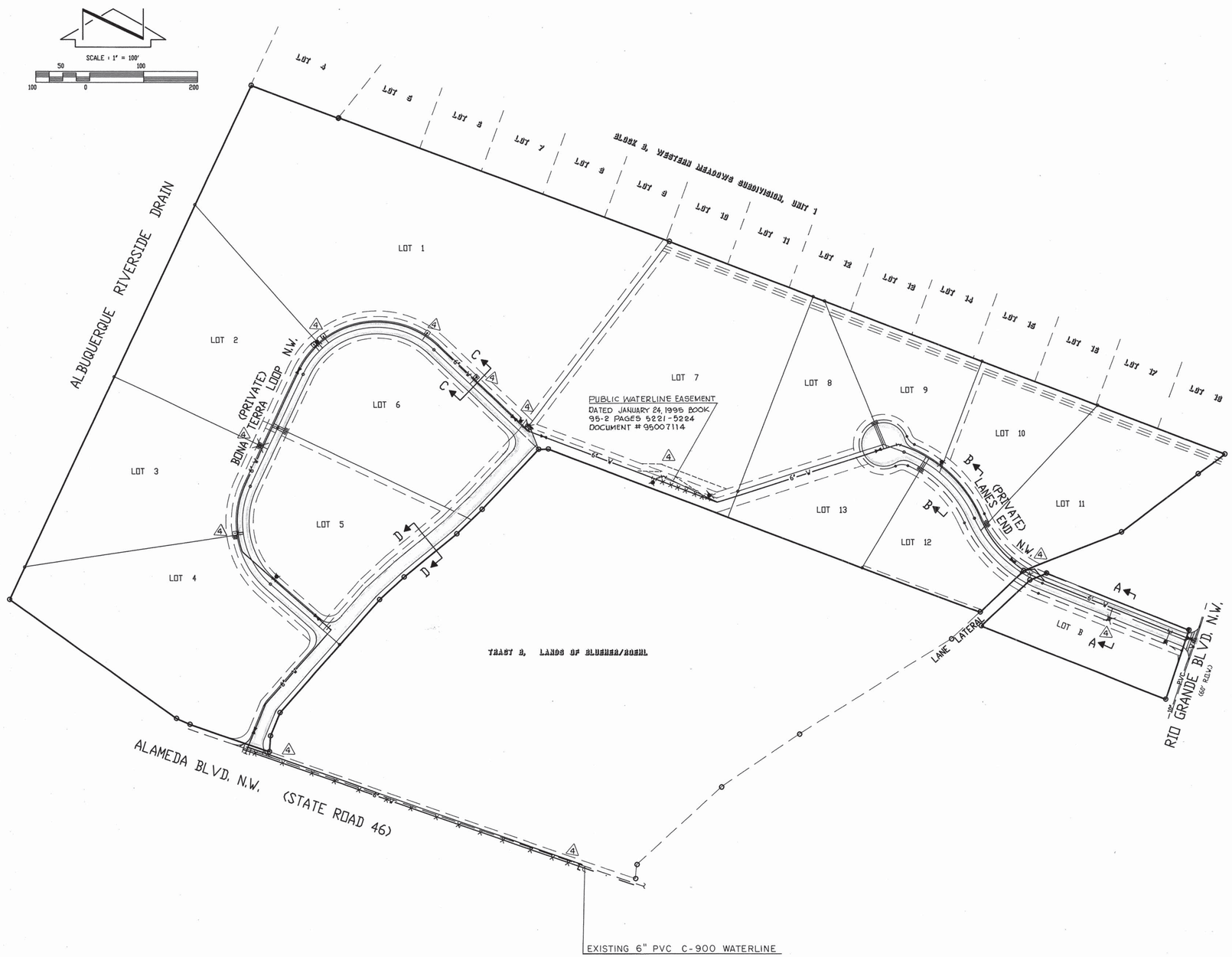
JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BONA TERRA FARMS
ROAD SECTIONS AND DETAILS

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | B.G. Goodwin | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | N/A | 6-03-94 | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | N/A | 6-13-94 | BCPWD | Jesse Calonge | 5-31-94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B-15 | 6 | 16 |






**RECORD DRAWING**

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen Date 4-13-95
NMPE No. 8547

JEFFREY G. MORTENSEN
NEW MEXICO
8547
REGISTERED PROFESSIONAL ENGINEER

## AS BUILT INFORMATION

CONTRACTOR HYDRO SYSTEMS

| | | |
|---|---|---|
| WORK STAKED BY | J.M.A. | DATE 09/94 |
| INSPECTION ACCEPTANCE BY | M.F.D. | DATE 03/95 |
| FIELD VERIFICATION BY | J.M.A. | DATE 03/95 |
| DRAWINGS CORRECTED BY | M.F.D. | DATE 04/95 |

MICRO-FILM INFORMATION

RECORDED BY DATE
NO.

## BENCH MARKS

C.O.A. BENCHMARK "2-B15" A SQUARE " " CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD. 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOW'S RD. AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL.
ELEVATION = 4998.24 FEET (M.S.L.D.)

## SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| | | |

ENGINEER'S SEAL

JEFFREY G. MORTENSEN
NEW MEXICO
8547
REGISTERED PROFESSIONAL ENGINEER

| NO. | DATE | BY |
|---|---|---|
| 1 | 01/95 | J.M.A |

AS-BUILT AND CERTIFY

REMARKS

REVISIONS

DESIGN

| | | DATE |
|---|---|---|
| DESIGNED BY | M.F.D. | DATE 04-94 |
| DRAWN BY | S.G.H. | DATE 04-94 |
| CHECKED BY | J.G.M. | DATE 04-94 |

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BONA TERRA FARMS
SITE PLAN

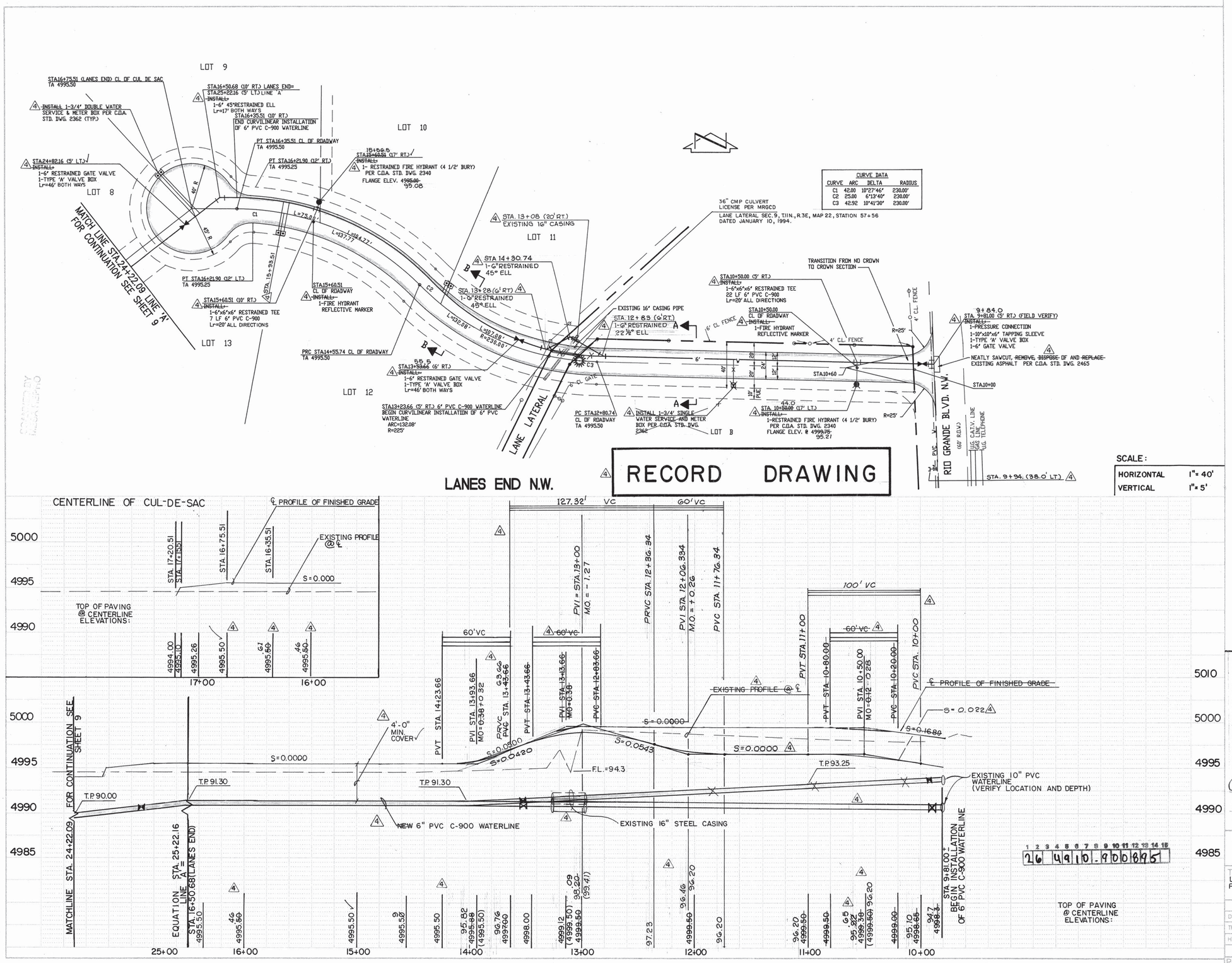
| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | B.G. Goodby | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | N/A CHD | 6-03-94 | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | N/A JGM | 6-03-94 | BCPWD | Jesse Calonge | 5-31-94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B-15 | 7 | 16 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2 6 4 9 1 0 . 9 0 0 7 9 5

9308224

RECORD DRAWING




| CURVE DATA | | | |
|---|---|---|---|
| CURVE | ARC | DELTA | RADIUS |
| C1 | 42.00 | 10°27'46" | 230.00' |
| C2 | 25.00 | 6°13'40" | 230.00' |
| C3 | 42.92 | 10°41'30" | 230.00' |

SCALE:

| | |
|---|---|
| HORIZONTAL | 1"= 40' |
| VERTICAL | 1"= 5' |

WATERLINE CONSTRUCTION NOTES:

1. ALL STATIONING IS BASED ON STREET CENTERLINE UNLESS INDICATED OTHERWISE.
2. FOR ALL LINES 12" AND SMALLER, WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. FOR ALL LINES 12" AND LARGER, WATER MAIN SHALL BE CONCRETE CYLINDER OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC AND CONCRETE CYLINDER.
3. WATERLINE SHALL HAVE A MINIMUM COVER OF 4'0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
4. ELECTRONIC MARKER DISCS (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
5. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. VALVE STEM AND FIRE HYDRANT EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF EACH EXTENSION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
7. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

STREET PAVING IMPROVEMENTS:

1. ALL SLOPES AS SHOWN ON PROFILES ARE BASED ON STREET CENTERLINE STATIONING EXCEPT CUL-DE-SACS WHERE STATIONING IS ALONG FACE-OF-CURB.
2. WHERE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK OR PAVEMENT IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. CURB AND GUTTER SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
3. ALL DIMENSIONS OF PAVING AND RETURNS ARE SHOWN TO EDGE OF PAVING.

WATER SERVICE SCHEDULE

| Lot | Station | Type | Size |
|---|---|---|---|
| 10/11 | 14+30.74 | Double | 3/4" |
| 8/9 | As Shown | Double | 3/4" |
| 13/12 | 15+93.51 | Double | 3/4" |
| B | 161.83 | Single | 3/4" |

**RECORD DRAWING**

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen, Date 04-18-95
NMPE No. 8547

JEFFREY G. MORTENSEN · NEW MEXICO · 8547 · REGISTERED PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BONA TERRA FARMS
LANES END WATERLINE AND PAVING IMPROVEMENTS
PLAN AND PROFILE

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | B.J. Godsey | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | N/A RHS | 6-03-94 | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | KA | 6-13-94 | BCPWD | Susan Calongne | 5-31-94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B-15 | 8 | 16 |

AS BUILT INFORMATION

CONTRACTOR HYDRO SYSTEMS
WORK STAKED BY J.M.A. DATE 09/94
WORK INSPECTED BY ACCEPTANCE BY M.F.D DATE 3/95
FIELD VERIFICATION BY J.M.A. DATE 3/95
DRAWINGS CORRECTED BY M.F.D. DATE 4/95
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

C.O.A. BENCHMARK "2-B15" A SQUARE □, CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING, LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD., 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOWS RD. AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL.
ELEVATION = 4998.24 FEET (MSLD)

SURVEY INFORMATION

FIELD NOTES

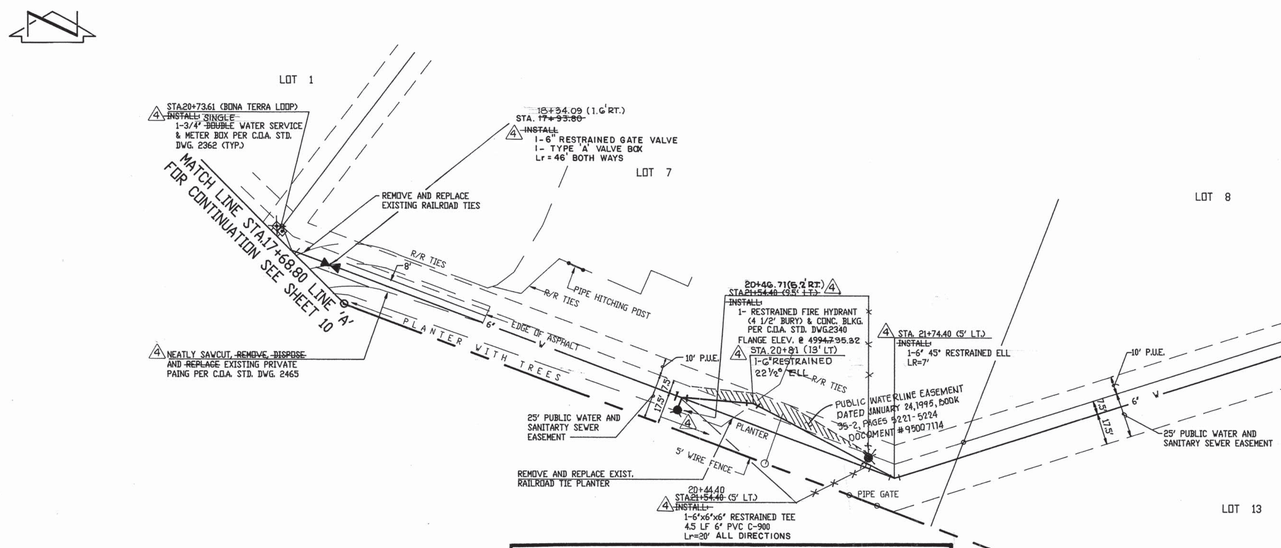
| NO. | BY | DATE |
|---|---|---|

ENGINEER'S SEAL

JEFFREY G. MORTENSEN · NEW MEXICO · 8547 · REGISTERED PROFESSIONAL ENGINEER

| NO. | DATE | REVISIONS | BY |
|---|---|---|---|
| 1 | 01/95 | AS-BUILT AND CERTIFY | J.M.A. |

DESIGNED BY M.F.D. DATE 3/94
DRAWN BY C.J.H./S.G.H. DATE 4/94
CHECKED BY J.G.M. DATE 4/94

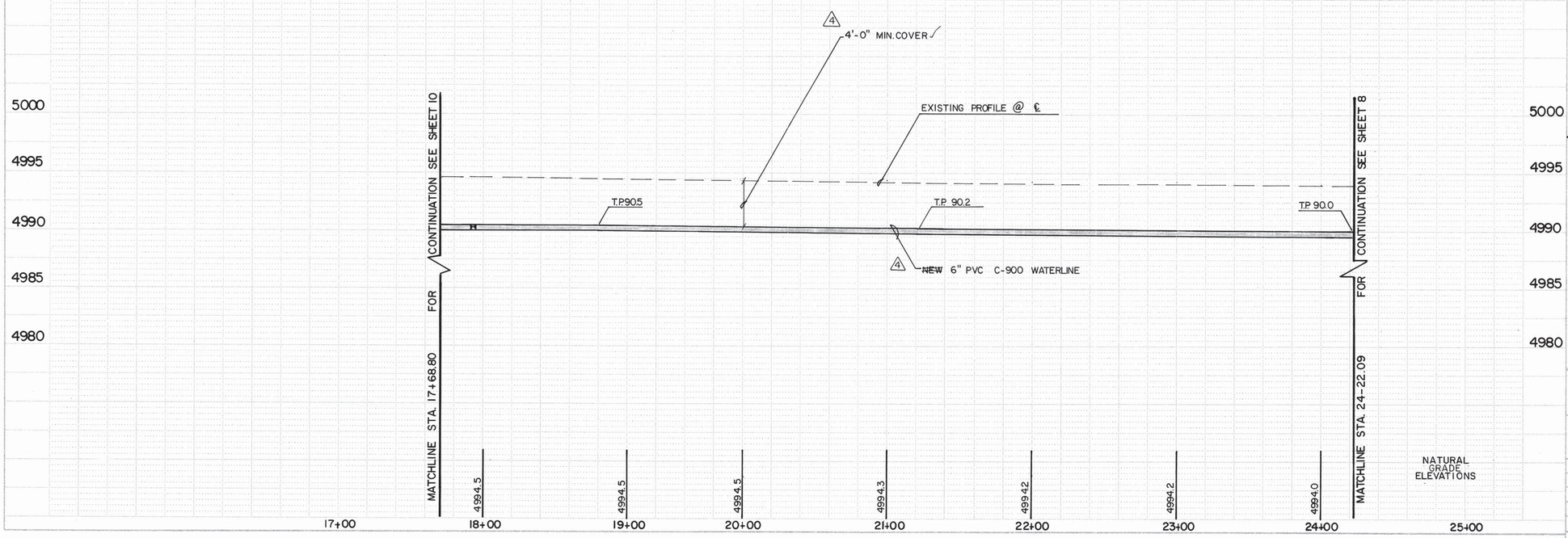



# RECORD DRAWING

## LINE 'A'

SCALE:

| | |
|---|---|
| HORIZONTAL | 1"= 40' |
| VERTICAL | 1"= 5' |




WATERLINE CONSTRUCTION NOTES:

1. ALL STATIONING IS BASED ON STREET CENTERLINE UNLESS INDICATED OTHERWISE.
2. FOR ALL LINES 12" AND SMALLER, WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. FOR ALL LINES 12" AND LARGER, WATER MAIN SHALL BE CONCRETE CYLINDER OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC AND CONCRETE CYLINDER.
3. WATERLINE SHALL HAVE A MINIMUM COVER OF 4'0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
4. ELECTRONIC MARKER DISCS (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
5. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. VALVE STEM AND FIRE HYDRANT EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF EACH EXTENSION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
7. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

STREET PAVING IMPROVEMENTS:

1. ALL SLOPES AS SHOWN ON PROFILES ARE BASED ON STREET CENTERLINE STATIONING EXCEPT CUL-DE-SACS WHERE STATIONING IS ALONG FACE-OF-CURB.
2. WHERE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK OR PAVEMENT IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. CURB AND GUTTER SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
3. ALL DIMENSIONS OF PAVING AND RETURNS ARE SHOWN TO EDGE OF PAVING.

WATER SERVICE SCHEDULE

| Lot | Station | Type | Size |
|---|---|---|---|
| 7/1 | As Shown | Double | 3/4" |

AS BUILT

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2 6 4 9 1 0 . 9 0 0 9 9 5

**RECORD DRAWING**

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen, Date
NMPE No. 8547

JEFFREY G. MORTENSEN 04-18-95 NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BONA TERRA FARMS
LINE 'A' WATERLINE IMPROVEMENTS PLAN AND PROFILE

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | B.J. Gockley | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | WA RHO | 6-03-94 | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | [illegible] NRA | 6-03-94 | BCPWD | [illegible] | 5-31-94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B-15 | 9 | 16 |

SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| | | |

BENCH MARKS

C.O.A. BENCHMARK "2-B15", A SQUARE ☐, CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING, LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD., 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOWS RD. AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL.
ELEVATION = 4998.24 FEET (MSLD)

AS BUILT INFORMATION

| | |
|---|---|
| CONTRACTOR | HYDRO SYSTEMS |
| WORK STAKED BY | J.M.A. DATE 09/94 |
| INSPECTOR ACCEPTANCE BY | M.F.D. DATE 3/95 |
| FIELD VERIFICATION BY | J.M.A. DATE 3/95 |
| DRAWINGS CORRECTED BY | M.F.D. DATE 3/95 |

MICRO-FILM INFORMATION

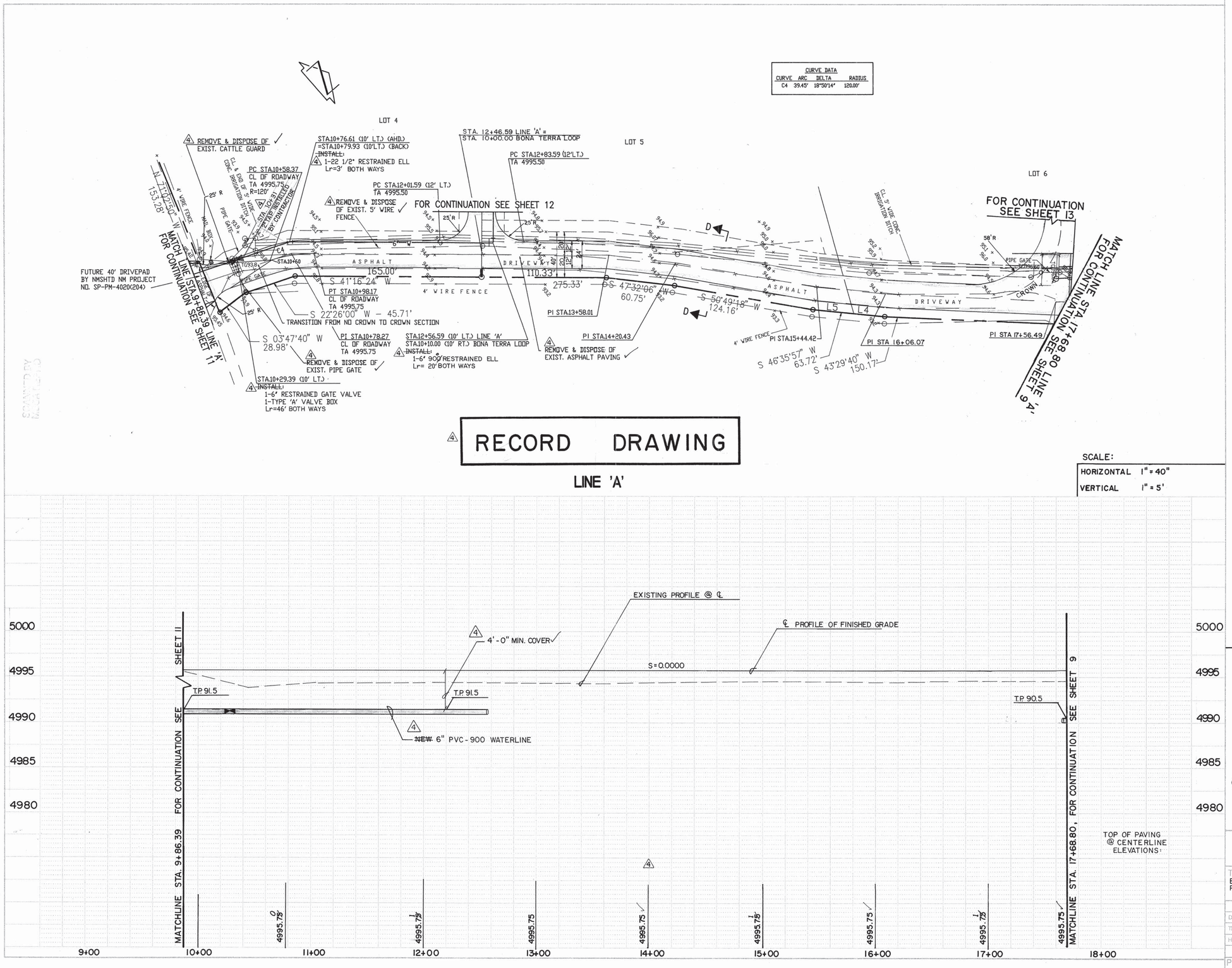
| | |
|---|---|
| RECORDED BY | DATE |
| NO. | |

ENGINEER'S SEAL

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER 04-18-95

| NO. | DATE | REVISIONS | BY |
|---|---|---|---|
| 4 | 01/95 | AS-BUILT AND CERTIFY | J.M.A. |

| | | |
|---|---|---|
| DESIGNED BY | M.F.D. | DATE 3/94 |
| DRAWN BY | C.J.H./S.G.H. | DATE 4/94 |
| CHECKED BY | J.G.M. | DATE 4/94 |







WATERLINE CONSTRUCTION NOTES:

1. ALL STATIONING IS BASED ON STREET CENTERLINE UNLESS INDICATED OTHERWISE.
2. FOR ALL LINES 12" AND SMALLER, WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. FOR ALL LINES 12" AND LARGER, WATER MAIN SHALL BE CONCRETE CYLINDER OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC AND CONCRETE CYLINDER.
3. WATERLINE SHALL HAVE A MINIMUM COVER OF 4'0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
4. ELECTRONIC MARKER DISCS (END) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
5. IN ACCORDANCE WITH SECTION 801 OF THE 'STANDARD SPECIFICATIONS', METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. VALVE STEM AND FIRE HYDRANT EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF EACH EXTENSION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
7. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

STREET PAVING IMPROVEMENTS:

1. ALL SLOPES AS SHOWN ON PROFILES ARE BASED ON STREET CENTERLINE STATIONING EXCEPT CUL-DE-SACS WHERE STATIONING IS ALONG FACE-OF-CURB.
2. WHERE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK OR PAVEMENT IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. CURB AND GUTTER SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
3. ALL DIMENSIONS OF PAVING AND RETURNS ARE SHOWN TO EDGE OF PAVING.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2 6 4 9 1 0 . 9 0 1 0 4 5

**RECORD DRAWING** 4

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen Date 04-18-95
NMPE No. 8547

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BONA TERRA FARMS
BONA TERRA LOOP (LINE 'A') WATERLINE AND PAVING IMPROVEMENTS PLAN AND PROFILE

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | B.J. Gadsby | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | RHR | 6-03-94 | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | RA | 6-13-94 | BCWPD | Susan Calongne | 5-31-94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B-15 | 10 | 16 |

ENGINEER'S SEAL

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

| NO. | DATE | REVISIONS | BY |
|---|---|---|---|
| 4 | 01/95 | AS-BUILT AND CERTIFY REMARKS | J.M.A. |

DESIGNED BY M.F.D. DATE 3/94
DRAWN BY C.J.H./S.G.H. DATE 4/94
CHECKED BY J.G.M. DATE 4/94

AS BUILT INFORMATION

CONTRACTOR HYDRO SYSTEMS
WORK STAKED BY J.M.A. DATE 09/94
STAKE CHECK BY M.F.D. DATE 3/95
ACCEPTANCE BY
FIELD LOCATION BY J.M.A. DATE 3/95
DRAWINGS CORRECTED BY M.F.D. DATE 4/95
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

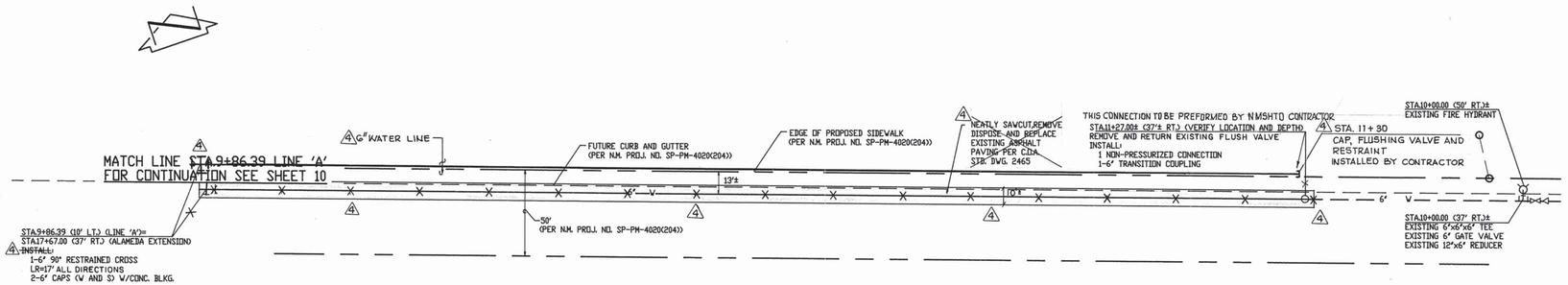
BENCH MARKS

C.O.A. BENCHMARK "2-B15" A SQUARE □ CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING, LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD., 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOWS RD. AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL.
ELEVATION = 4998.24 FEET (MSLD)

SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| | | |




# 4 RECORD DRAWING

## ALAMEDA BOULEVARD N.W. (STATE ROAD 46)

SCALE:

HORIZONTAL 1"= 40'

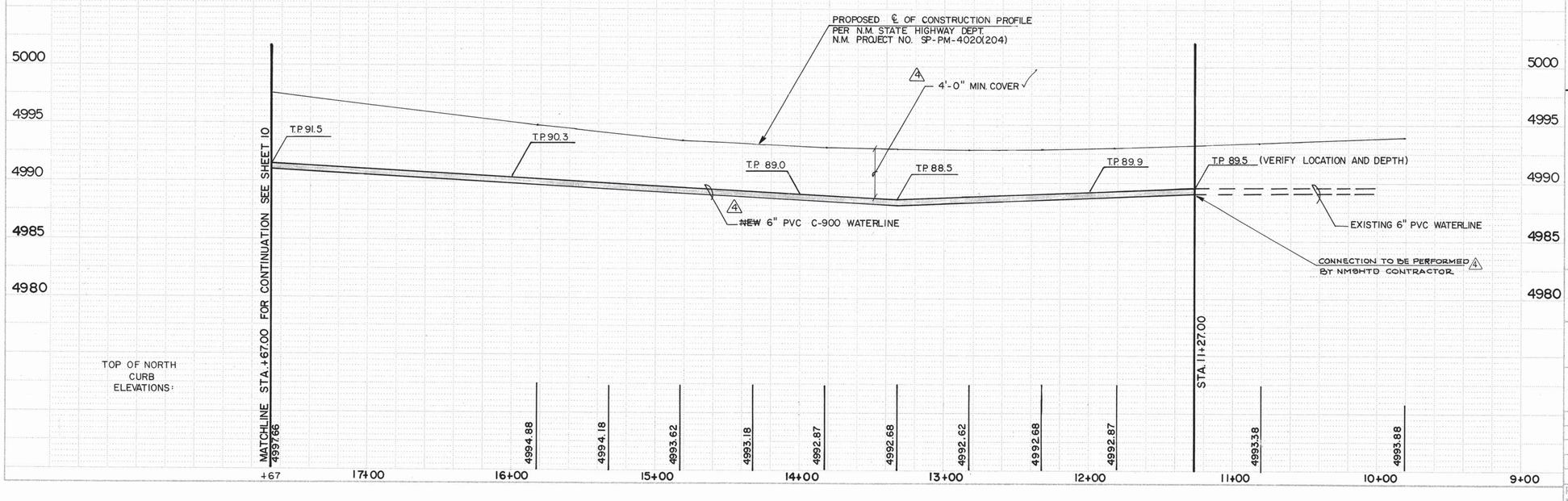
VERTICAL 1"= 5'

WATERLINE CONSTRUCTION NOTES:

1. ALL STATIONING IS BASED ON STREET CENTERLINE UNLESS INDICATED OTHERWISE.
2. FOR ALL LINES 12" AND SMALLER, WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. FOR ALL LINES 12" AND LARGER, WATER MAIN SHALL BE CONCRETE CYLINDER OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC AND CONCRETE CYLINDER.
3. WATERLINE SHALL HAVE A MINIMUM COVER OF 4'0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
4. ELECTRONIC MARKER DISCS (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
5. IN ACCORDANCE WITH SECTION 801 OF THE 'STANDARD SPECIFICATIONS', METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. VALVE STEM AND FIRE HYDRANT EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF EACH EXTENSION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
7. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

STREET PAVING IMPROVEMENTS:

1. ALL SLOPES AS SHOWN ON PROFILES ARE BASED ON STREET CENTERLINE STATIONING EXCEPT CUL-DE-SACS WHERE STATIONING IS ALONG FACE-OF-CURB.
2. WHERE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK OR PAVEMENT IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. CURB AND GUTTER SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
3. ALL DIMENSIONS OF PAVING AND RETURNS ARE SHOWN TO EDGE OF PAVING.




RECORD DRAWING 4

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen Date 4-18-95
NMPE No. 8547

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE BONA TERRA FARMS
ALAMEDA BLVD WATERLINE EXTENSION PLAN AND PROFILE

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | B.J. Gockeley | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | N/A RHD | 6-03-94 | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | N/A | 6-13-94 | BCPWD | Sam Calegari | 5-31-94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B-15 | 11 | 16 |

SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| | | |

BENCH MARKS

C.O.A. BENCHMARK "2-B15" A SQUARE □ CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING, LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD., 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOWS RD. AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL.
ELEVATION = 4998.24 FEET (MSLD)

AS BUILT INFORMATION

CONTRACTOR HYDRO SYSTEMS
WORK STAKED BY J.M.A. DATE 09/94
WORK INSPECTED BY M.F.D. DATE 3/95
ACCEPTANCE BY J.M.A. DATE 3/95
FIELD VERIFICATION BY M.F.D. DATE 4/95
DRAWINGS CORRECTED BY MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

ENGINEER'S SEAL

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER 05 18 94

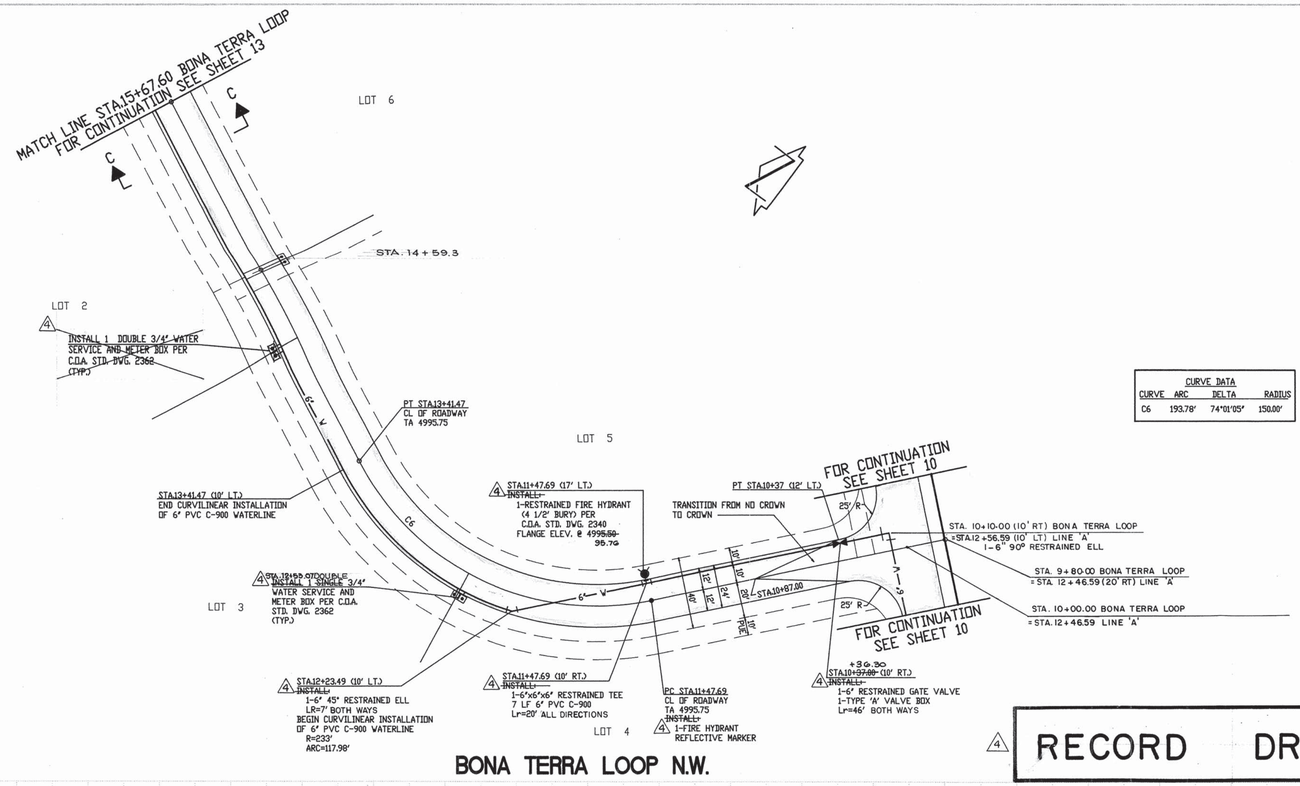
| NO. | DATE | REMARKS | BY |
|---|---|---|---|
| 1 | 01/95 | AS-BUILT AND CERTIFY | J.M.A. |

REVISIONS

| | | DATE |
|---|---|---|
| DESIGNED BY | M.F.D. | 3/94 |
| DRAWN BY | C.J.H./S.G.H. | 4/94 |
| CHECKED BY | J.G.M. | 4/94 |

26 4910.90 1195

SCANNED BY MICROFILMED



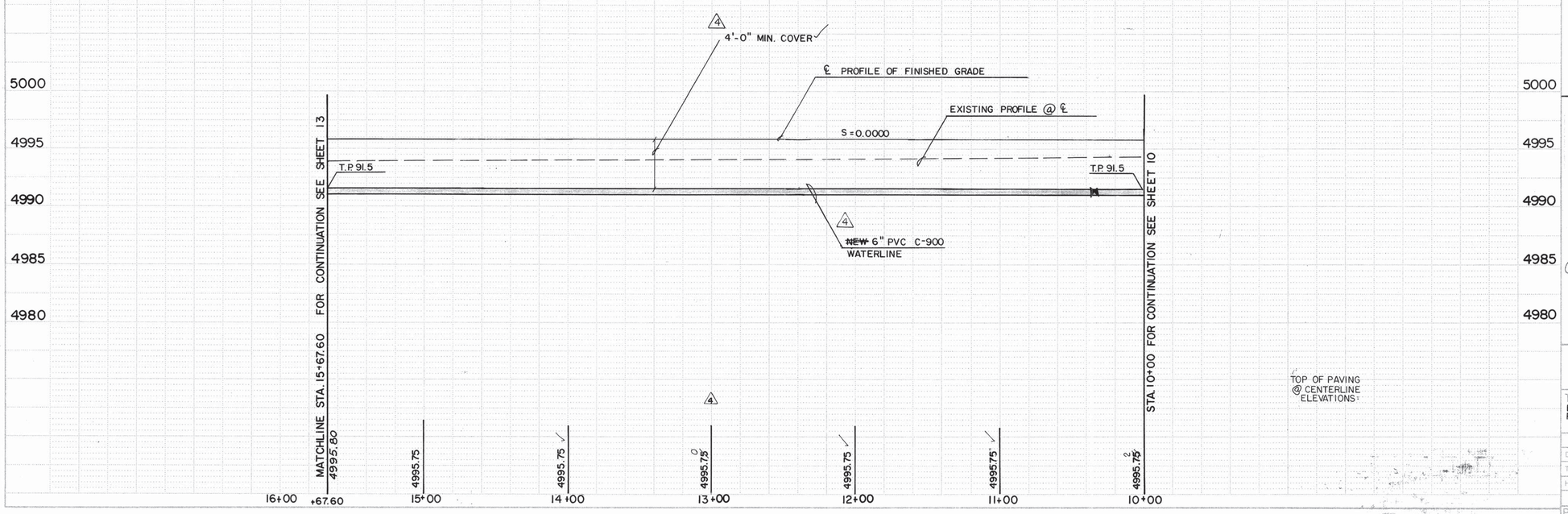

| CURVE DATA | | | |
|---|---|---|---|
| CURVE | ARC | DELTA | RADIUS |
| C6 | 193.78' | 74°01'05" | 150.00' |

BONA TERRA LOOP N.W.

RECORD DRAWING

SCALE:

| | |
|---|---|
| HORIZONTAL | 1"= 40' |
| VERTICAL | 1"= 5' |




WATERLINE CONSTRUCTION NOTES:

1. ALL STATIONING IS BASED ON STREET CENTERLINE UNLESS INDICATED OTHERWISE.
2. FOR ALL LINES 12' AND SMALLER, WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. FOR ALL LINES 12' AND LARGER, WATER MAIN SHALL BE CONCRETE CYLINDER OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC AND CONCRETE CYLINDER.
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5. IN ACCORDANCE WITH SECTION 801 OF THE 'STANDARD SPECIFICATIONS', METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18' ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. VALVE STEM AND FIRE HYDRANT EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF EACH EXTENSION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
7. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

STREET PAVING IMPROVEMENTS:

1. ALL SLOPES AS SHOWN ON PROFILES ARE BASED ON STREET CENTERLINE STATIONING EXCEPT CUL-DE-SACS WHERE STATIONING IS ALONG FACE-OF-CURB.
2. WHERE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK OR PAVEMENT IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. CURB AND GUTTER SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
3. ALL DIMENSIONS OF PAVING AND RETURNS ARE SHOWN TO EDGE OF PAVING.

WATER SERVICE SCHEDULE

| Lot | Station | Type | Size |
|---|---|---|---|
| 2/3 | 14+13.71 | Double | 3/4" |
| 4 | 12+51.07 | Single | 3/4" |
| 6/5 | 14+57.31 | Double | 3/4" |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2 6 4 9 1 0 . 9 0 1 2 4 5

RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen Date 04-18-95
NMPE No. 8547

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BONA TERRA FARMS
BONA TERRA LOOP(LINE 'B') WATERLINE AND PAVING IMPROVEMENTS
PLAN AND PROFILE
STA. 10+00 TO STA. 15+67.16

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | S.G. Goolsby | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | NA 2HO | 6-03-94 | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | [illegible] | 6-03-94 | BCPWD | Susan Calzagne | 5-31-94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B-15 | 12 | 16 |

AS BUILT INFORMATION

CONTRACTOR HYDRO SYSTEMS

| | | DATE |
|---|---|---|
| WORK STAKED BY | J.M.A | 09/94 |
| WORK INSPECTED BY | M.F.D. | 3/95 |
| ACCEPTANCE BY | J.M.A. | 3/95 |
| FIELD VERIFICATION BY | M.F.D. | 4/95 |
| DRAWINGS CORRECTED BY | | |

MICRO-FILM INFORMATION

RECORDED BY DATE
NO.

BENCH MARKS

C.O.A. BENCHMARK "2-B15" A SQUARE □ CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING, LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD., 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOWS RD. AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL.
ELEVATION = 4998.24 FEET (MSLD)

SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| | | |

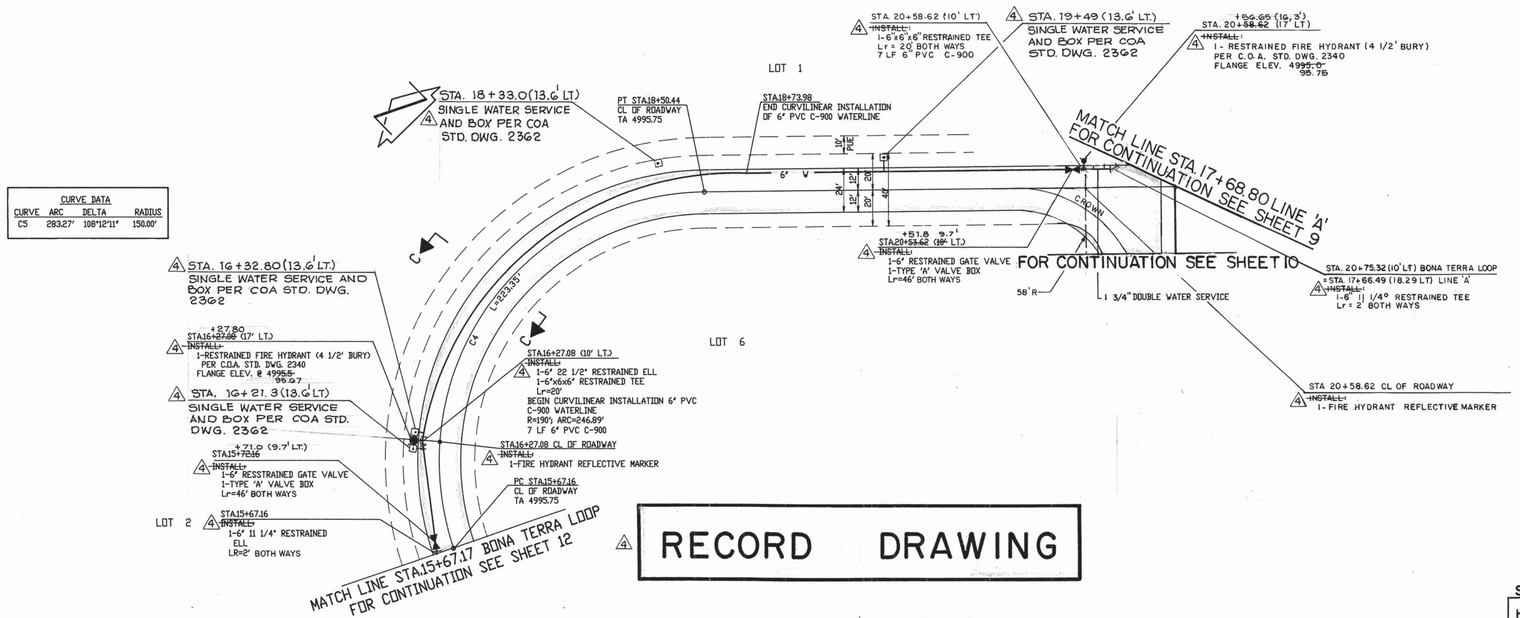
ENGINEER'S SEAL

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER 04-18-95

| NO. | DATE | REMARKS | BY |
|---|---|---|---|
| 1 | 01/95 | AS-BUILT AND CERTIFY | J.M.A. |

REVISIONS

| | | DATE |
|---|---|---|
| DESIGNED BY | M.F.D. | 3/94 |
| DRAWN BY | C.J.H./S.G.H. | 4/94 |
| CHECKED BY | J.G.M. | 4/94 |

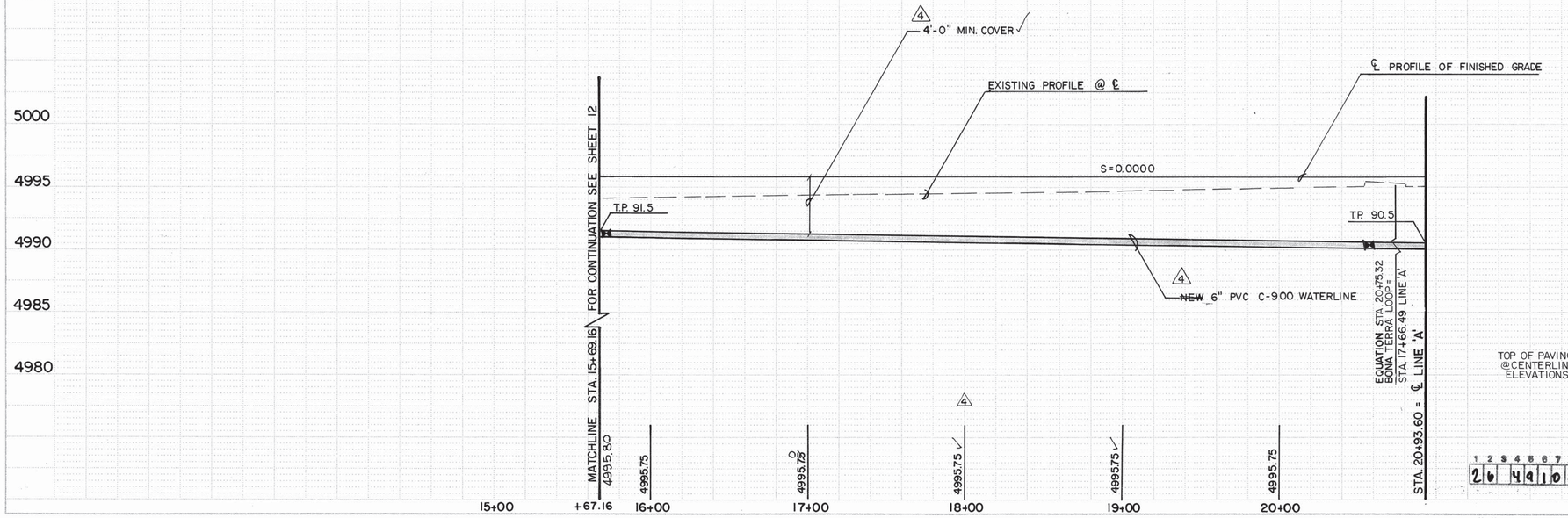



| CURVE DATA | | | |
|---|---|---|---|
| CURVE | ARC | DELTA | RADIUS |
| C5 | 283.27' | 108°12'11" | 150.00' |

## BONA TERRA LOOP N.W.

**SCALE:**

| | |
|---|---|
| HORIZONTAL | 1"= 40' |
| VERTICAL | 1"= 5' |




1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
2 6 4 9 1 0 . 9 0 1 3 9 5

WATERLINE CONSTRUCTION NOTES:

1. ALL STATIONING IS BASED ON STREET CENTERLINE UNLESS INDICATED OTHERWISE.
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3. ALL DIMENSIONS OF PAVING AND RETURNS ARE SHOWN TO EDGE OF PAVING.

| WATER SERVICE SCHEDULE | | | |
|---|---|---|---|
| Lot | Station | Type | Size |
| 7/1 | 20+73.61 | Double | 3/4" |

**RECORD DRAWING** 4

**I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.**

Jeffrey G. Mortensen, State
NMPE No. 8547

04-18-95

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

| NO. | DATE | AS-BUILT AND CERTIFY REMARKS REVISIONS DESIGN | BY |
|---|---|---|---|
| 4 | 01/95 | | J.M.A. |

| | | DATE |
|---|---|---|
| DESIGNED BY | M.F.D. | DATE 3/94 |
| DRAWN BY | C.J.H./S.G.H. | DATE 4/94 |
| CHECKED BY | J.G.M. | DATE 4/94 |

AS BUILT INFORMATION

| | | |
|---|---|---|
| CONTRACTOR | HYDRO SYSTEMS | |
| WORK STAKED BY | J.M.A. | DATE 09/94 |
| FIELD INSPECTIONS ACCEPTANCE BY | M.F.D. | DATE 3/95 |
| FIELD VERIFICATION BY | J.M.A. | DATE 3/95 |
| DRAWINGS CORRECTED BY | M.F.D. | DATE 4/95 |
| MICRO-FILM INFORMATION | | |
| RECORDED BY | | DATE |
| NO. | | |

BENCH MARKS

C.O.A. BENCHMARK "2-B15". A SQUARE □ CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING, LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD., 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOWS RD. AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL.

ELEVATION = 4998.24 FEET (MSLD)

SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|

ENGINEER'S SEAL

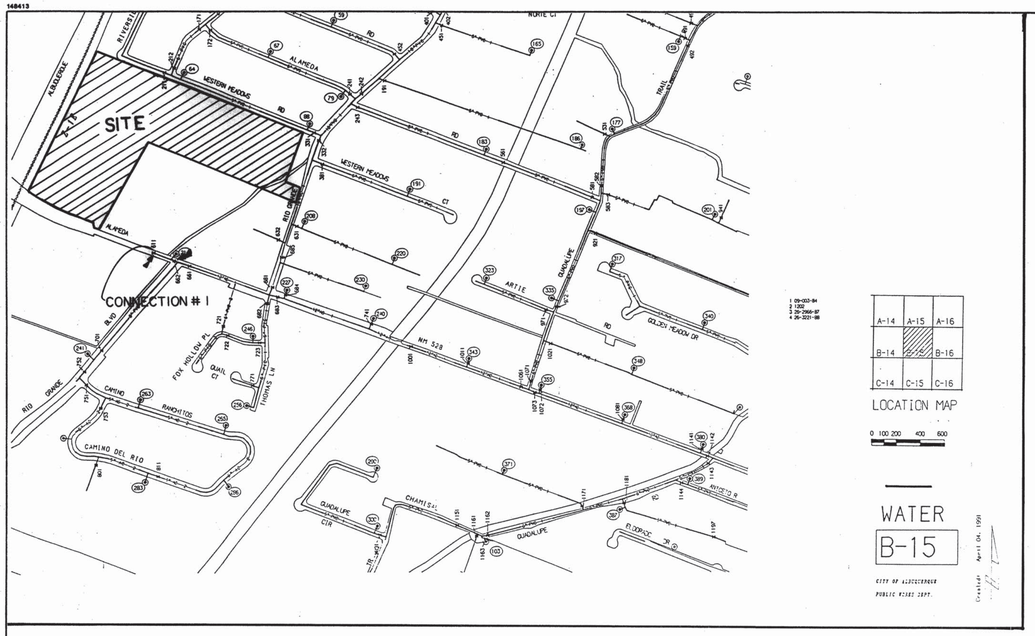
JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER 05-18-94

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BONA TERRA FARMS
BONA TERRA LOOP (LINE 'B') WATERLINE AND PAVING IMPROVEMENTS PLAN AND PROFILE.
STA. 15+67 TO STA. 20+93.60

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | B.J. Gockley | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | N/A LHD | 6-03-94 | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | N/A | 6-13-94 | BCPWD | Susan Calongne | 5-31-94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B-15 | 13 | 16 |




# WATER VALVE SHUTOFF PLAN

WATER VALVE SHUTOFF PLAN NOTES:

1. AS A MINIMUM, THE FOLLOWING VALVES SHALL BE CLOSED TO FACILITATE THE FOLLOWING CONNECTIONS:

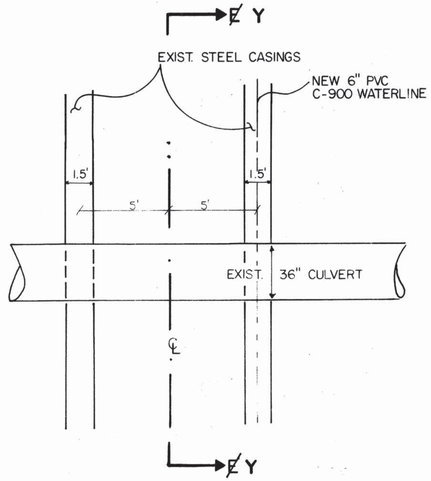
   A. CONNECTION #1
   611, 662

2. THE CONTRACTOR SHALL NOTIFY WATER SYSTEMS THREE (3) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING WATERLINE; ALL SHUTOFFS SHALL BE PERFORMED BY THE WATER SYSTEM DIVISION PERSONNEL (857-8200).

3. THE CONTRACTOR SHALL PROVIDE ALL RESTRAINTS AND THRUST BLOCKS NECESSARY TO EFFECT THE NECESSARY SHUTOFFS AND CONNECTIONS.

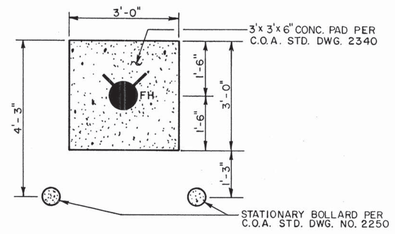
4. EXISTING WATER VALVE AND WATERLINE INFORMATION OBTAINED FROM CITY OF ALBUQUERQUE AUTOMATED WATER DISTRIBUTION SYSTEM SECTIONAL MAPS, PLATE B-15.

5. AT THE TIME OF WATER SHUTOFF APPLICATION, THE CONTRACTOR SHALL REQUEST THAT THE WATER SYSTEM DIVISION NOTIFY ALL AFFECTED PROPERTY OWNERS AT LEAST 24 HOURS IN ADVANCE OF THE RESPECTIVE SHUTOFFS.



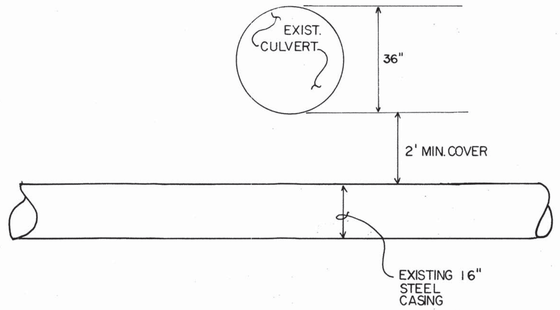

EXISTING STEEL CASING AND CULVERT DETAIL

SCALE: 1" = 4'



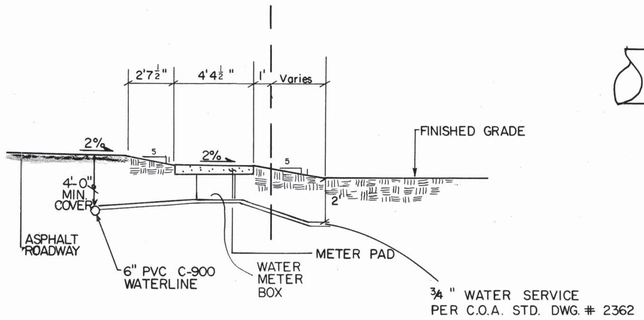

FIRE HYDRANT BOLLARD DETAIL

SCALE: 1" = 2'-0"
ALL FIRE HYDRANTS SHALL CONFORM TO THIS DETAIL



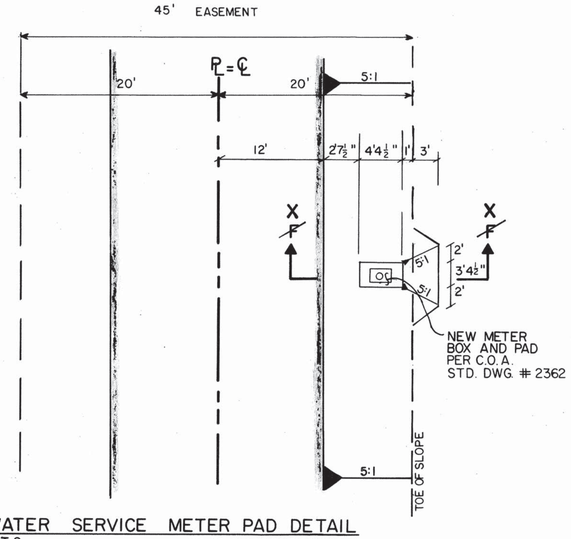

EXISTING STEEL CASING AND CULVERT SECTION

SECTION ~~E-E~~ Y-Y
SCALE: 1" = 2'




WATER METER PAD SECTION

SECTION ~~E-E~~ X-X
SCALE: 1" = 4'




WATER SERVICE METER PAD DETAIL

N.T.S.

4 RECORD DRAWING

RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen
NMPE No. 8547

04-18-95
Date

JEFFREY G. MORTENSEN
NEW MEXICO
8547
REGISTERED PROFESSIONAL ENGINEER

SURVEY INFORMATION

FIELD NOTES

| NO. | DATE | BY |
|---|---|---|
| | | N/A |

BENCH MARKS

C.O.A. BENCHMARK "2-B15" A SQUARE □ CHISELED ON THE EASTERN CONCRETE WINGWALL OF THE CANAL CROSSING, LOCATED ON THE EAST SIDE OF RIO GRANDE BLVD., 125 FEET NORTH OF THE INTERSECTION WITH WESTERN MEADOWS RD. AT THE CROSSING OF THE LANE LATERAL IRRIGATION CANAL.
ELEVATION = 4998.24 FEET (MSLD)

AS BUILT INFORMATION

| | | |
|---|---|---|
| CONTRACTOR | HYDRO SYSTEMS | |
| WORK STAKED BY | J.M.A. | DATE 9/94 |
| WORK PERFORMED ACCEPTANCE BY | M.F.D. | DATE 3/95 |
| FIELD VERIFICATION BY | J.M.A. | DATE 4/95 |
| DRAWINGS CORRECTED BY | M.F.D. | DATE 4/95 |
| MICRO-FILM INFORMATION | | |
| RECORDED BY | | DATE |
| NO. | | |

ENGINEER'S SEAL

JEFFREY G. MORTENSEN
NEW MEXICO
8547
REGISTERED PROFESSIONAL ENGINEER
05-18-95

| NO. | DATE | REMARKS | BY |
|---|---|---|---|
| 4 | 01/95 | AS-BUILT AND CERTIFY | J.M.A. |

REVISIONS

| DESIGN | | |
|---|---|---|
| DESIGNED BY | M.F.D. | DATE 4/94 |
| DRAWN BY | C.J.H. | DATE 4/94 |
| CHECKED BY | J.G.M. | DATE 4/94 |

26 4910.901495

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BONA TERRA FARMS
WATER VALVE SHUTOFF PLAN, AND LANE LATERAL CROSSING

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | J.G. Goolsby | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | W.A. Ehlig | 6-03-94 | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | [illegible] | 6-03-94 | BCPWD | Jerome Calderon | 5-31-94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B15 | 14 | 16 |

## CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.

2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.

3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.

11. CONTRACTOR SHALL NOT BEGIN WORK BEFORE 8:30 A.M. OR END WORK AFTER 4:00 P.M. WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY BERNALILLO COUNTY. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

19. 24 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
    1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
    2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
    3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.

23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.

25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

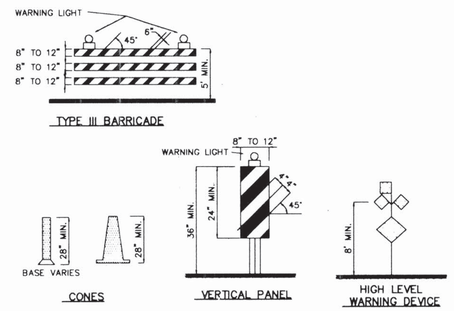
## PROJECT CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. NO CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY CAN OCCUR WITHOUT AN APPROVED TRAFFIC CONTROL PLAN. THE CONTRACTOR MUST SUBMIT A TRAFFIC CONTROL PLAN TO THE BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT A MINIMUM OF FOUR (4) WORKING DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY.

2. FOR THE PURPOSES OF THIS PROJECT, "CONSTRUCTION COORDINATION" SHALL BE REPLACED WITH "TRAFFIC CONTROL MANAGER, TRAFFIC CONTROL DIVISION, BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT". CONTACT MARTIN J. GARCIA, P.E., (~~843-6120~~ 848-1593), 2400 BROADWAY S.E.

3. THE PARKING OF CONSTRUCTION EQUIPMENT OR VEHICLES WITHIN PUBLIC RIGHT-OF-WAY SHALL NOT BE PERMITTED.

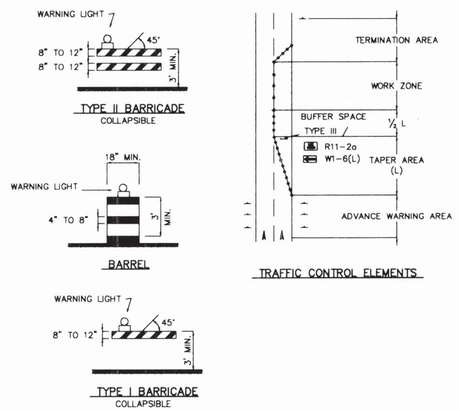
JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER 07-18-94




## LEGEND

- WORK AREA
- BARRICADE – TYPE I, TYPE II, OR BARREL
- BARRICADE – TYPE III
- VERTICAL PANEL
- WARNING SIGN
- D — DISTANCE BETWEEN SIGNS – A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- S — SPACING BETWEEN BARRICADES– A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
- L — TAPER LENGTH – SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.




### TAPER REQUIREMENTS

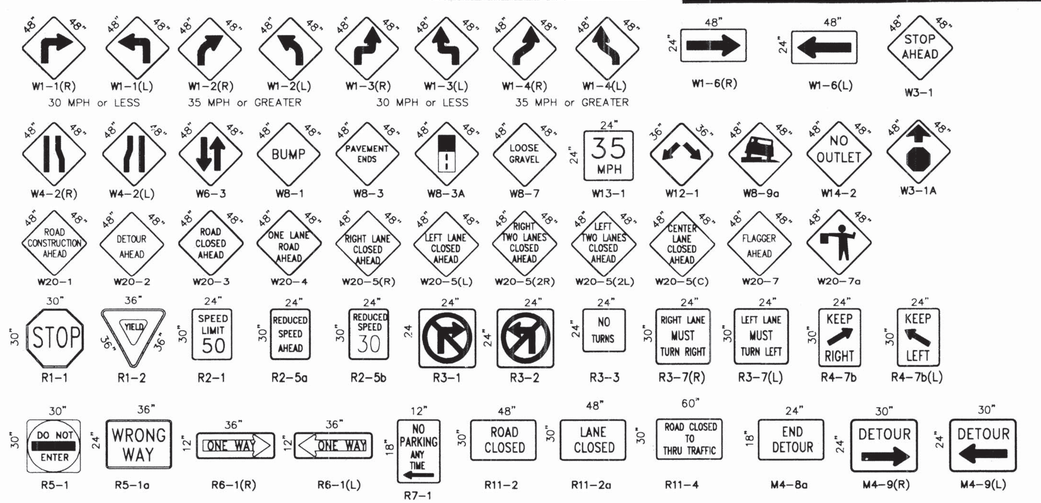
| SPEED LIMIT (MPH) | TAPER LENGTH (FEET) 10' LANE | 11' LANE | 12' LANE | MINIMUM NUMBER OF DEVICES FOR TAPER | MAXIMUM DEVICE SPACING IN FEET ALONG TAPER | AFTER TAPER |
|---|---|---|---|---|---|---|
| 20 | 70 | 75 | 80 | 5 | 20 | 20 |
| 25 | 105 | 115 | 125 | 6 | 25 | 25 |
| 30 | 150 | 165 | 180 | 7 | 30 | 30 |
| 35 | 205 | 225 | 245 | 8 | 35 | 35 |
| 40 | 270 | 295 | 320 | 9 | 40 | 40 |
| 45 | 450 | 495 | 540 | 13 | 45 | 45 |
| 50 | 500 | 550 | 600 | 13 | 50 | 50 |
| 55 | 550 | 605 | 660 | 13 | 55 | 55 |

### RECOMMENDED SIGN SPACING FOR ADVANCE WARNING SIGN SERIES

| SPEED MILES PER HOUR | MINIMUM DISTANCE IN FEET BETWEEN SIGNS | FROM LAST SIGN TO TAPER |
|---|---|---|
| 0–20 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |
| 25–30 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |
| 30–35 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |
| 40–45 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |
| 50–60 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |

RECORD DRAWING

## SIGN FACE DETAILS




ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF FORTY EIGHT (48) INCHES BY FORTY EIGHT (48) INCHES IN SIZE AND SHALL HAVE ONE WARNING LIGHT.

### TAPER CRITERIA

| TYPE OF TAPER | TAPER LENGTH |
|---|---|
| UPSTREAM TAPER: | |
| MERGING TAPER | L MINIMUM |
| SHIFTING TAPER | ½ L MINIMUM |
| SHOULDER TAPER | ½ L MINIMUM |
| TWO-WAY TRAFFIC TAPER | 100 FEET MAXIMUM |
| DOWNSTREAM TAPERS | 100 FEET PER LANE |

### TAPER LENGTH COMPUTATION

| SPEED LIMIT | |
|---|---|
| 40 MPH OR LESS | $L = \frac{WS^2}{60}$ |
| 45 MPH OR GREATER | $L = W \times S$ |

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

2 6 4 9 1 0 . 9 0 1 5 9 5

AS BUILT INFORMATION
CONTRACTOR HYDRO SYSTEMS DATE
WORK STAKED BY J.M.A. DATE 9/94
INSPECTOR'S ACCEPTANCE BY M.F.D. DATE 3/95
AS BUILT VERIFICATION BY J.M.A. DATE 3/95
DRAWINGS CORRECTED BY M.F.D. DATE 4/95
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL

| NO. | DATE | REMARKS | BY |
|---|---|---|---|
| 1 | 01/95 | RECORD DRAWING | J.M.A. |

REVISIONS

DESIGNED BY RICARDO ROYBAL, P.E. DATE AUG. 1992
DRAWN BY CADD.– A.F.V. DATE AUG. 1992
CHECKED BY DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

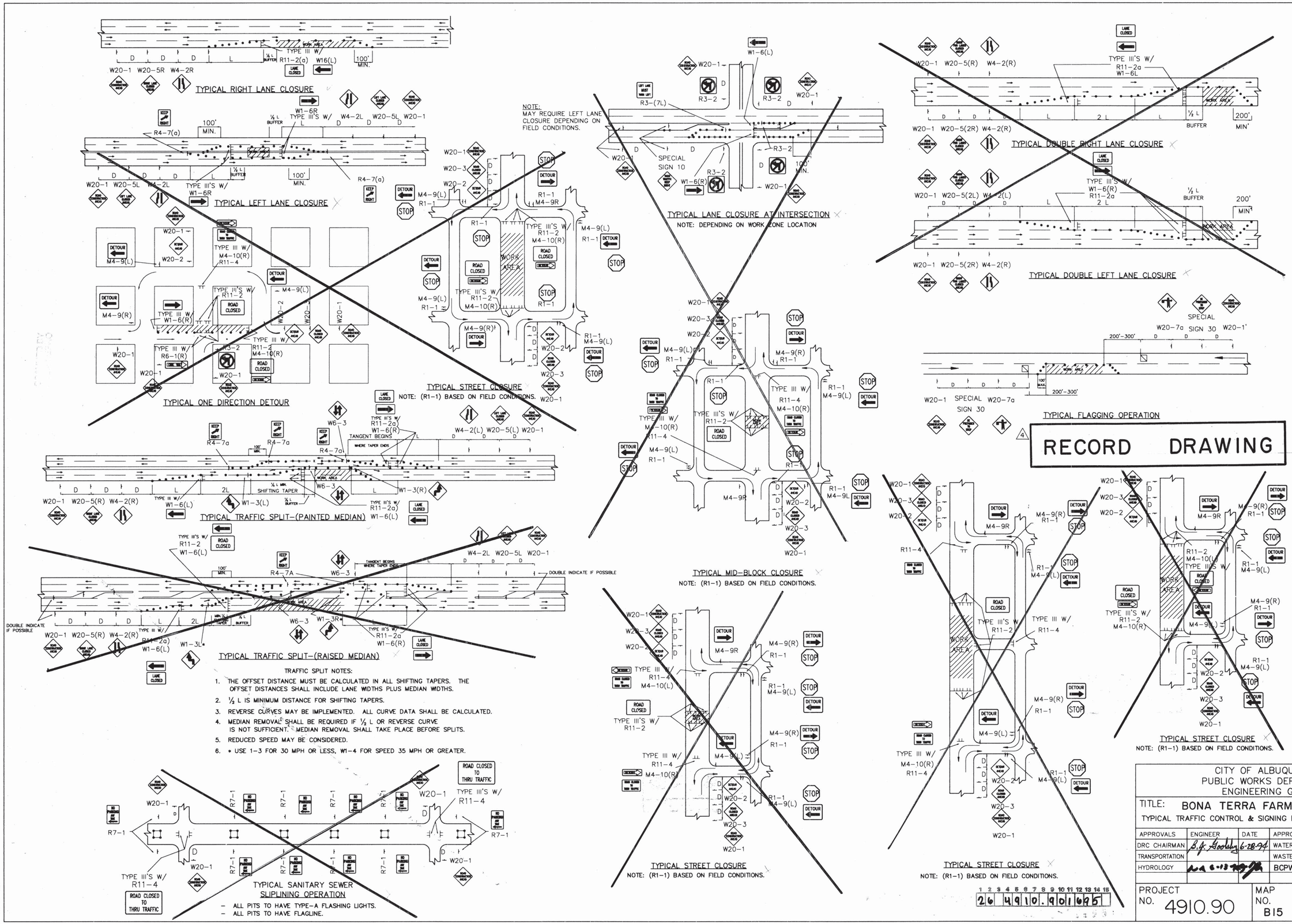
TITLE: BONA TERRA FARMS
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | B.G. Goodby | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | N/A | | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | [illegible] | 6-28-94 | BCPWD | [illegible] | 6/30/94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B15 | 15 | 16 |

08-11-92
CTCSTD1.DWG (1=1")

NOTE: THIS SHEET PROVIDED COURTESY OF CITY ENGINEER, PUBLIC WORKS DEPT., CITY OF ALBUQUERQUE




AS BUILT INFORMATION

| CONTRACTOR | HYDRO SYSTEMS | DATE |
|---|---|---|
| WORK INSPECTORS | J.M.A. | DATE 9/94 |
| ACCEPTANCE BY | M.F.D. | DATE 3/95 |
| AS BUILT VERIFICATION BY | J.M.A. | DATE 3/95 |
| DRAWINGS CORRECTED BY | M.F.D. | DATE 4/95 |
| MICRO-FILM INFORMATION RECORDED BY | | DATE |
| | | NO. |

BENCH MARKS

SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| | | |

ENGINEER'S SEAL

RICARDO B. ROYBAL
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER

| NO. | DATE | REMARKS | BY |
|---|---|---|---|
| 1 | 01/95 | RECORD DRAWING | J.M.A. |

REVISIONS

DESIGN

DESIGNED BY RICARDO ROYBAL, P.E. DATE NOV. 1991
DRAWN BY C.A.D.D./W.L.B./A.F.V. DATE NOV. 1991
CHECKED BY DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: BONA TERRA FARMS
TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF. M.U.T.C.D.)

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---|---|---|---|---|---|
| DRC CHAIRMAN | B.J. Goodsby | 6-28-94 | WATER | R.W. Kane | 6-3-94 |
| TRANSPORTATION | | | WASTE WATER | R.W. Kane | 6-3-94 |
| HYDROLOGY | N.A. | 6-28-94 | BCPWD | | 5/31/94 |

| PROJECT NO. | MAP NO. | SHEET | OF |
|---|---|---|---|
| 4910.90 | B15 | 16 | 16 |

05-13-92
CTCSTD2.DWG

NOTE: THIS SHEET PROVIDED COURTESY OF CITY ENGINEER, PUBLIC WORKS DEPT., CITY OF ALBUQUERQUE