

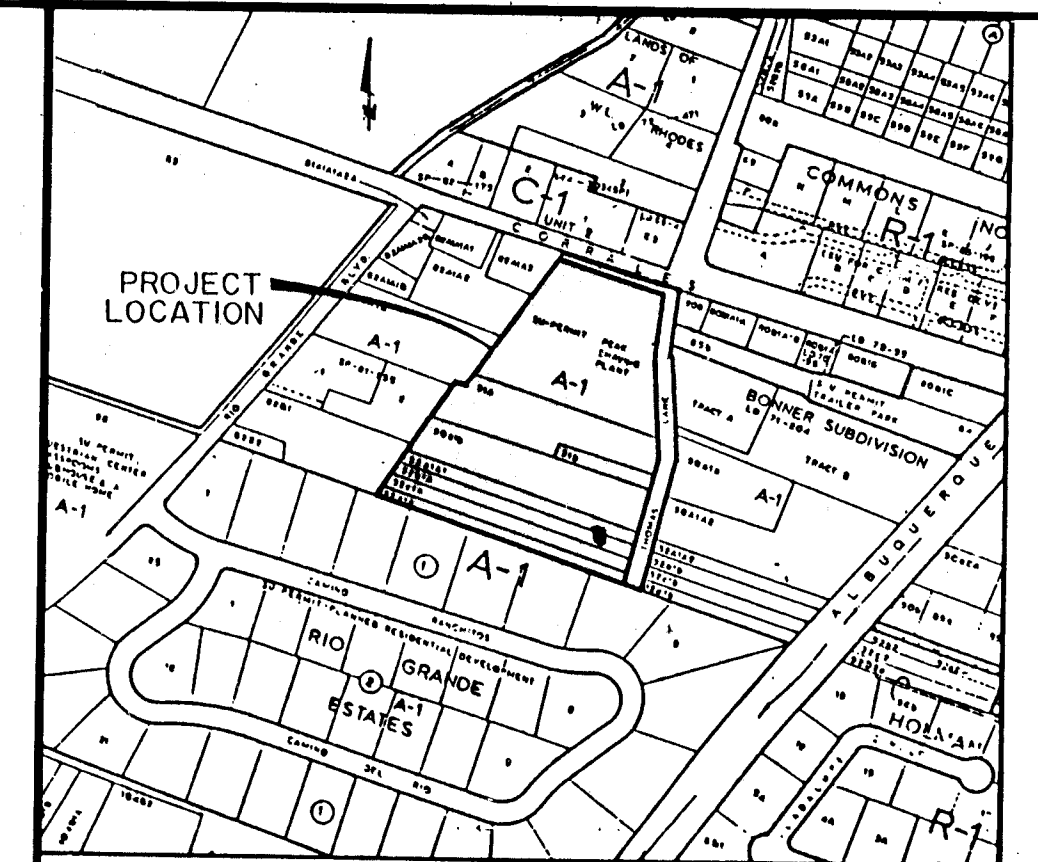
CONSTRUCTION PLANS FOR  
NORTH RIO GRANDE ESTATES

6" PVC WATERLINE PER CITY OF ALBUQUERQUE &  
PAVED STREETS PER BERNALILLO COUNTY

JUNE 1986

INDEX TO DRAWINGS

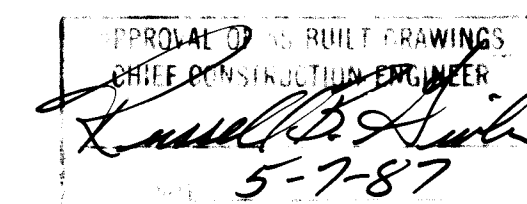
| SHEET NO. | DESCRIPTION                                        |
|-----------|----------------------------------------------------|
| 1         | TITLE SHEET                                        |
| 2         | PLAT                                               |
|           | <u>CITY OF ALBUQUERQUE</u>                         |
| 3         | OVERALL WATER UTILITY PLAN                         |
| 4         | WATERLINE DESIGN, PLAN & PROFILE                   |
| 5         | WATER SYSTEM DETAILS                               |
|           | <u>BERNALILLO COUNTY</u>                           |
| 6         | THOMAS LANE, PLAN & PROFILE                        |
| 7         | FOX HOLLOW PLACE AND QUAIL COURT<br>PLAN & PROFILE |
| 8         | DRAINAGE & GRADING PLAN                            |



VICINITY MAP  
ZONE ATLAS NO. B-15

GENERAL NOTES

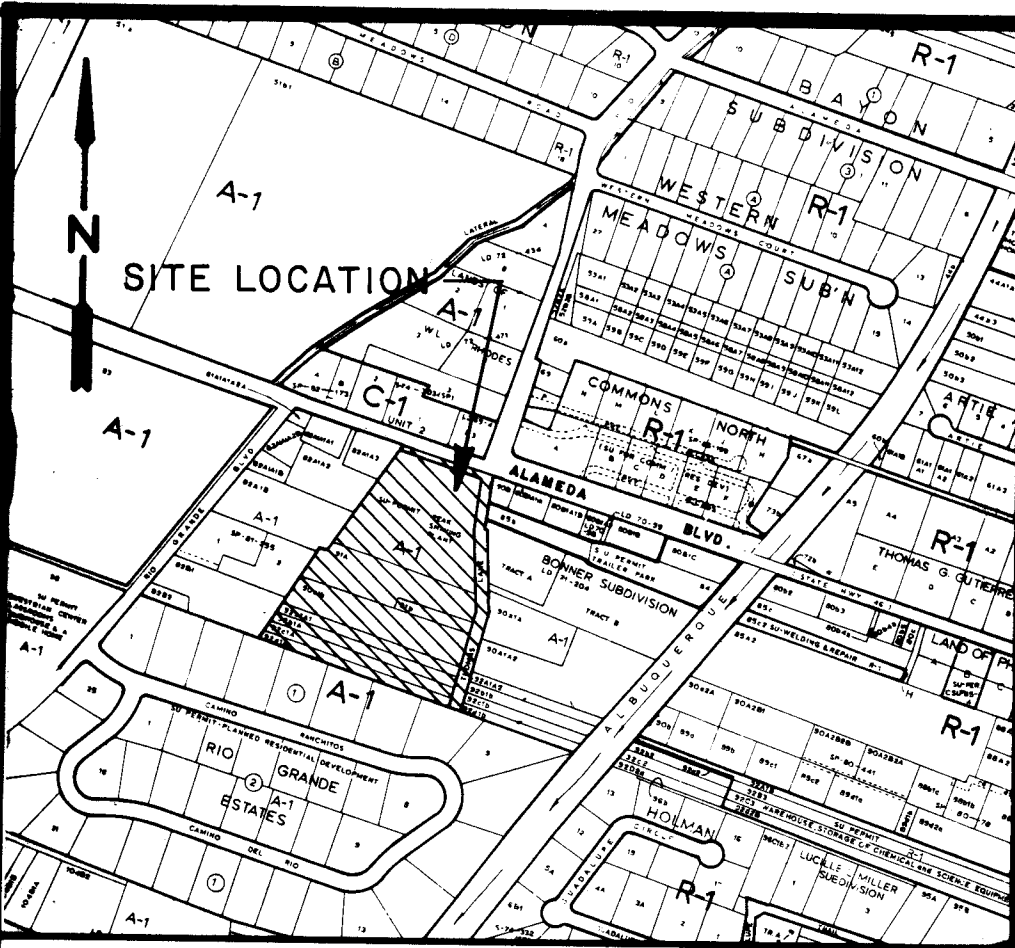
- All work detailed on these plans to be performed under contract shall, except as otherwise stated or provided hereon, be constructed in accordance with the City of Albuquerque Interim Standard Specifications, 1985.
- Two (2) working days prior to any excavation, Contractor must contact line locating service 765-1234, for location of existing utilities.
- Prior to construction, the Contractor shall excavate and verify the horizontal and vertical locations of all obstructions, should a conflict exist, the Contractor shall notify the Engineer or Surveyor so that the conflict can be resolved with minimum amount of delay.
- All utilities and utility service lines shall be installed prior to paving.
- Backfill compaction shall be according to specified street use.
- Tack coat requirements shall be determined by Bernalillo County Road Superintendent.
- Electronic Marker Discs (EMD's) are to be installed per section 131. In addition to those shown on the plans, the following EMD's are required:
  - Water - Single service. Over the main line at the service tap.
  - Water - Double service. Over the main line halfway between the service taps.



1 2 3 4 5 6 7 8 9 10 11 12  
2 6 2 9 6 6 0 1 8 7

|                                                                                                                                                 |                                                                                          |                       |                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------|
| PREPARED FOR:<br>D.A. McCALL<br>CHAD INCORPORATED<br>11000 SPAIN N.E.<br>ALBUQUERQUE, NEW MEXICO 87111                                          | REV SHEETS CITY ENGR DATE USER DEPT DATE USER DEPT DATE                                  | APPROVAL OF REVISIONS |                                                                       |
| PREPARED BY: <i>Robert M. Morehead</i> 7/15/86<br>ROBERT MOREHEAD<br><i>Daniel L. Morehead</i> 7/15/86<br>DANIEL L. MOREHEAD<br>PROJECT MANAGER | GREINER ENGINEERING<br>2601 WYOMING BLVD., NE<br>ALBUQUERQUE, NM 87112<br>(505) 292-1936 |                       | APPROVED FOR CONSTRUCTION<br>CITY OF ALBUQUERQUE<br>BERNALILLO COUNTY |
| PREPARED UNDER THE SUPERVISION OF:<br><i>Carl A. Tebbens</i> 7/16/86<br>CARL A. TEBBENS, VICE-PRESIDENT                                         | 2966<br>GREINER JOB NO. 0690541                                                          |                       | SHEET 1 OF 8                                                          |





VICINITY MAP  
SCALE: 1" = 800' (Approx.)

- GENERAL NOTES:
- The purpose of this replat is to create a 20 lot subdivision.
  - Basis of bearings: Plat of survey of a portion of M.R.G.C.D. map 22, prepared by Hall Surveying Co., Albuquerque, N.M., dated Sept. 25, 1984.
  - City of Albuquerque water service to NORTH RIO GRANDE ESTATES must be verified and coordinated with the Public Works Department, City of Albuquerque. City of Albuquerque sanitary sewer service is currently not available to these properties.
  - "N/R" indicates non-radial.
  - Set 5/8" rebar w/cap stamped Greiner LS 8324 at all property corners unless otherwise indicated.
  - Centerline (IN LIEU OF R/W) monumentation to be installed at all P.C.'s, P.T.'s, single points and street intersections prior to acceptance of subdivision street improvements and will consist of a four inch (4") aluminum alloy cap stamped "City of Albuquerque centerline monumentation survey marker. Do not disturb." N.M.R.L.S. No. 8324.
  - Ground to Grid rotation factor = 00° 29' 32" (clockwise)
  - Prior to development, City of Albuquerque water service to Tract A must be verified and coordinated with the Public Works Department, City of Albuquerque, via a request for a water and sanitary sewer availability statement.

LOT ACREAGE TABLE

| NO. | ACRES |
|-----|-------|
| 1   | 0.446 |
| 2   | 0.448 |
| 3   | 0.438 |
| 4   | 0.336 |
| 5   | 0.358 |
| 6   | 0.361 |
| 7   | 0.402 |
| 8   | 0.366 |
| 9   | 0.365 |
| 10  | 0.353 |
| 11  | 0.356 |
| 12  | 0.390 |
| 13  | 0.404 |
| 14  | 0.367 |
| 15  | 0.430 |
| 16  | 0.416 |
| 17  | 0.398 |
| 18  | 0.415 |
| 19  | 0.378 |
| 20  | 0.405 |

CERTIFICATION

I, Daniel L. Morehead, New Mexico Registered Land Surveyor No. 8324, do hereby certify that this plat was prepared under my supervision, that an actual field survey was performed in October, 1985 and on Dec. 4, 1985, that this plat shows all easements of record, that it meets the Standards for Land Surveys in New Mexico as adopted by the New Mexico State Board of Registration for Professional Engineers and Land Surveyors, that it meets the minimum requirements of the Albuquerque Subdivision Ordinance, and is true and correct to the best of my knowledge and belief.

*Daniel L. Morehead* 5-5-86  
Daniel L. Morehead  
N.M.R.L.S. No. 8324  
Date

State of New Mexico)  
County of Bernalillo)

The foregoing instrument was acknowledged before me this 5th day of May, 1986 by Daniel L. Morehead, on behalf of Greiner Engineering Sciences, Inc.

*Christina M. Henderson*  
Christina M. Henderson  
Notary Public  
Official Seal  
Notary Public  
Notary Seal Filed with Sec. of State  
My Commission Expires 8-24-88

# NORTH RIO GRANDE ESTATES BERNALILLO COUNTY, NEW MEXICO

BEING A REPLAT  
OF  
PORTIONS  
OF

TRACTS 81, 91A, 91B, 90A1B,  
92A1A1, 92B1A, 92C1A and 92D1A

OF  
M.R.G.C.D. MAP 22

MAY, 1986

LEGAL DESCRIPTION

A Tract of land situate within Projected Section 9, Township 11 North, Range 3 East, New Mexico Principal Meridian, being portions of Tracts 81, 91A, 91B, 90A1B, 92A1A1, 92B1A, 92C1A and 92D1A of M.R.G.C.D. Map No. 22, and being within the Town of Alameda Grant, and being more particularly described as follows:

Beginning at the Northwest corner of the Tract herein described being a point on the Southerly R/W line of N.M. State Highway 46, from whence ACS brass cap Sta. 9-B15 bears N 69° 19' 52" W, 411.47 feet;

Thence along said R/W line S 70° 33' 00" E, 322.00 feet to the Northeast corner, being a point on the Westerly R/W line of Thomas Lane; thence along said R/W line S 08° 57' 00" W, 197.83 feet; thence continuing S 00° 56' 00" E, 269.70 feet; thence S 61° 77' feet along a curve to the right whose radius is 211.50 feet and whose chord bears S 07° 26' 00" W, 61.55 feet through a central angle of 16° 44' 00"; thence S 15° 48' 00" W, 332.48 feet to the Southeast corner, being a point on the Northerly line of RIO GRANDE ESTATES; thence along said line N 69° 47' 38" W, 749.78 feet to the Southwest corner; thence leaving said line N 34° 53' 47" E, 413.09 feet to a point on the Easterly line of Tract 82B1B of M.R.G.C.D. Map 22; thence continuing S 71° 55' 06" E, 30.41 feet; thence N 35° 26' 00" E, 447.87 feet to the Northeast and beginning corner of the Tract herein described and containing 10.620 acres (462,624 sq. ft.), more or less.

CONSENT & DEDICATION

The undersigned owner and proprietor of the land shown hereon, does hereby consent to the replat shown hereon and said owner does hereby dedicate to the public in fee simple as additional R/W the 0.022 acre parcel (as shown hereon), and does hereby dedicate streets shown hereon together with all easements as shown hereon, including the rights of ingress and egress, maintenance and the right to trim interfering trees.

Electrical Power and Communication easements are reserved for overhead distribution lines for pole type utilities and buried distribution lines, conduits and pipes for underground utilities where shown or indicated, and including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees and shrubs. Also included are easements for the right to install power and communication service lines along side lot lines.

Additional P.W. easements may be required to serve future customers. These easements shall include minimum working space requirements for single and three phase transformers. See Public Service Company of New Mexico (P.W.) Distribution Standard Drawing DS-7-16.2 for details.

CHAD, INC.

*D.A. McCall* President  
D.A. McCall, President  
Date 3-31-86  
State of New Mexico)  
County of Bernalillo)

The foregoing instrument was acknowledged before me this 31st day of March, 1986 by D.A. McCall on behalf of CHAD, INC.

*Christina M. Henderson*  
Christina M. Henderson  
Notary Public  
Official Seal  
Notary Public  
Notary Seal Filed with Sec. of State  
My Commission Expires 8-24-88

Replat Data

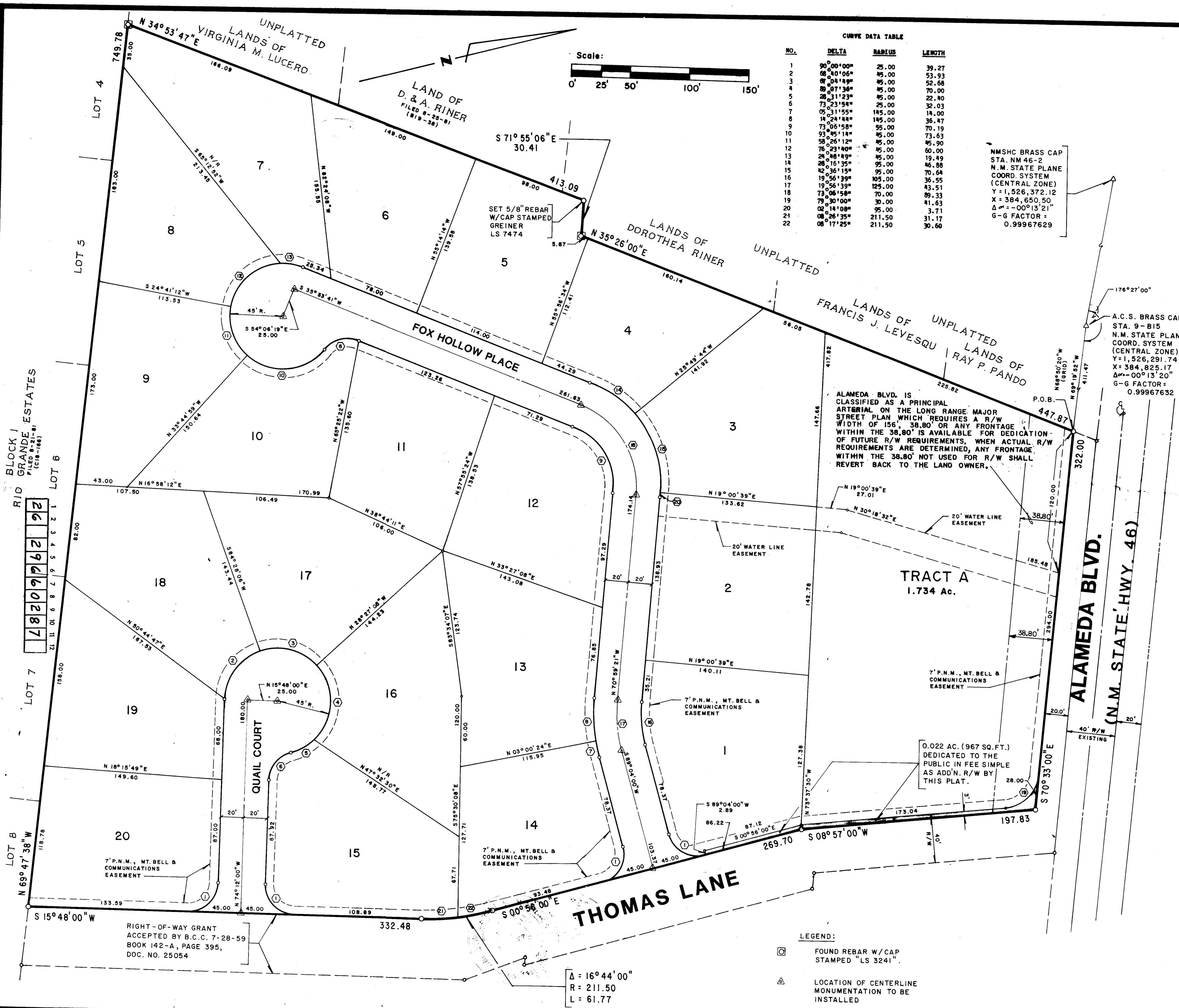
|                                  |            |
|----------------------------------|------------|
| D.R.B. Case Number               | 86-266     |
| Zone Atlas Number                | B-15       |
| Gross Acreage                    | 10.620     |
| Total Number Tracts Created      | 21         |
| Total Mileage of Streets Created | 0.172      |
| Date of Survey                   | DEC., 1985 |
| County Subdivision Number        | SC-5-8622  |

APPROVED BY:

|                                                               |           |
|---------------------------------------------------------------|-----------|
| Traffic Engineer, Transportation Department                   | Date      |
| Parks and Recreation Department                               | Date      |
| Chief City Surveyor, Engineering Division                     | 5/6/86    |
| Water Resources Department                                    | Date      |
| Property Management                                           | 5-6-86    |
| Albuquerque Metropolitan Arroyo Flood Control Authority       | 4-9-86    |
| City Engineer, Engineering Division                           | Date      |
| City Planner, Albuquerque/Bernalillo County Planning Division | 4-4-86    |
| Public Service Company of New Mexico                          | Date      |
| Mountain Bell                                                 | Date      |
| Gas Company of New Mexico                                     | 3-27-86   |
| County Environmental Health Dept.                             | 4/28/86 X |

Provided Lots are connected to city water; No domestic wells

County Planning Commission Date  
County Commission Chairman Date



CURVE DATA TABLE

| NO. | DELTA     | RADIUS | LENGTH |
|-----|-----------|--------|--------|
| 1   | 90°00'00" | 25.00  | 39.27  |
| 2   | 60°00'00" | 45.00  | 53.93  |
| 3   | 60°00'00" | 45.00  | 52.68  |
| 4   | 60°00'00" | 45.00  | 70.00  |
| 5   | 26°31'23" | 45.00  | 22.40  |
| 6   | 75°23'19" | 25.00  | 32.03  |
| 7   | 0°31'15"  | 185.00 | 18.00  |
| 8   | 14°24'44" | 145.00 | 36.47  |
| 9   | 73°06'50" | 55.00  | 70.19  |
| 10  | 93°11'14" | 45.00  | 73.63  |
| 11  | 58°26'12" | 45.00  | 46.90  |
| 12  | 76°23'49" | 45.00  | 60.00  |
| 13  | 26°31'23" | 45.00  | 19.49  |
| 14  | 26°16'35" | 95.00  | 46.88  |
| 15  | 42°06'19" | 95.00  | 70.64  |
| 16  | 15°26'39" | 95.00  | 36.55  |
| 17  | 15°26'39" | 125.00 | 43.51  |
| 18  | 73°06'50" | 70.00  | 89.33  |
| 19  | 73°06'50" | 30.00  | 41.63  |
| 20  | 02°14'08" | 95.00  | 3.71   |
| 21  | 08°26'35" | 211.50 | 31.17  |
| 22  | 08°17'25" | 211.50 | 30.60  |

NMSHC BRASS CAP  
STA. 9-B15  
N.M. STATE PLANE  
COORD. SYSTEM  
(CENTRAL ZONE)  
Y+1,526,372.12  
X+384,825.50  
Δm = 00°13'21"  
G-G FACTOR =  
0.99967632

A.C.S. BRASS CAP  
STA. 9-B15  
N.M. STATE PLANE  
COORD. SYSTEM  
(CENTRAL ZONE)  
Y+1,526,372.12  
X+384,825.50  
Δm = 00°13'21"  
G-G FACTOR =  
0.99967632

ALAMEDA BLVD. IS CLASSIFIED AS A PRINCIPAL ARTERIAL ON THE LONG RANGE MAJOR STREET PLAN WHICH REQUIRES A R/W WIDTH OF 156'-38.80' OR ANY FRONTAGE WITHIN THE 38.80' IS AVAILABLE FOR DEDICATION OF FUTURE R/W REQUIREMENTS, WHEN ACTUAL R/W REQUIREMENTS ARE DETERMINED, ANY FRONTAGE WITHIN THE 38.80' NOT USED FOR R/W SHALL REVERT BACK TO THE LAND OWNER.

TRACT A  
1.734 AC.

7" P.N.M., MT. BELL & COMMUNICATIONS EASEMENT

0.022 AC. (967 SQ. FT.) DEDICATED TO THE PUBLIC IN FEE SIMPLE AS ADD'L R/W BY THIS PLAT.

LEGEND:  
FOUND REBAR W/CAP STAMPED "LS 3241".  
LOCATION OF CENTERLINE MONUMENTATION TO BE INSTALLED

Greiner Engineering  
Greiner Engineering Sciences, Inc.  
Denver, Colorado  
Albuquerque, N.M.  
Kennesaw, Wyoming

Design  
Drawn KM  
Check JPD  
F.L.D. BK. 1714  
Scale 1" = 50'

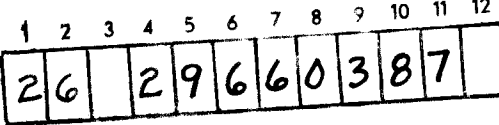
Date 5-5-86  
Job No. 0690542  
Sheet 1 of 2

Greiner Engineering  
Greiner Engineering Sciences, Inc.  
Denver, Colorado  
Albuquerque, N.M.  
Kennesaw, Wyoming

Design  
Drawn KM  
Check JPD  
Scale 1" = 50'

Date 5-5-86  
Job No. 0690542  
Sheet 2 of 2

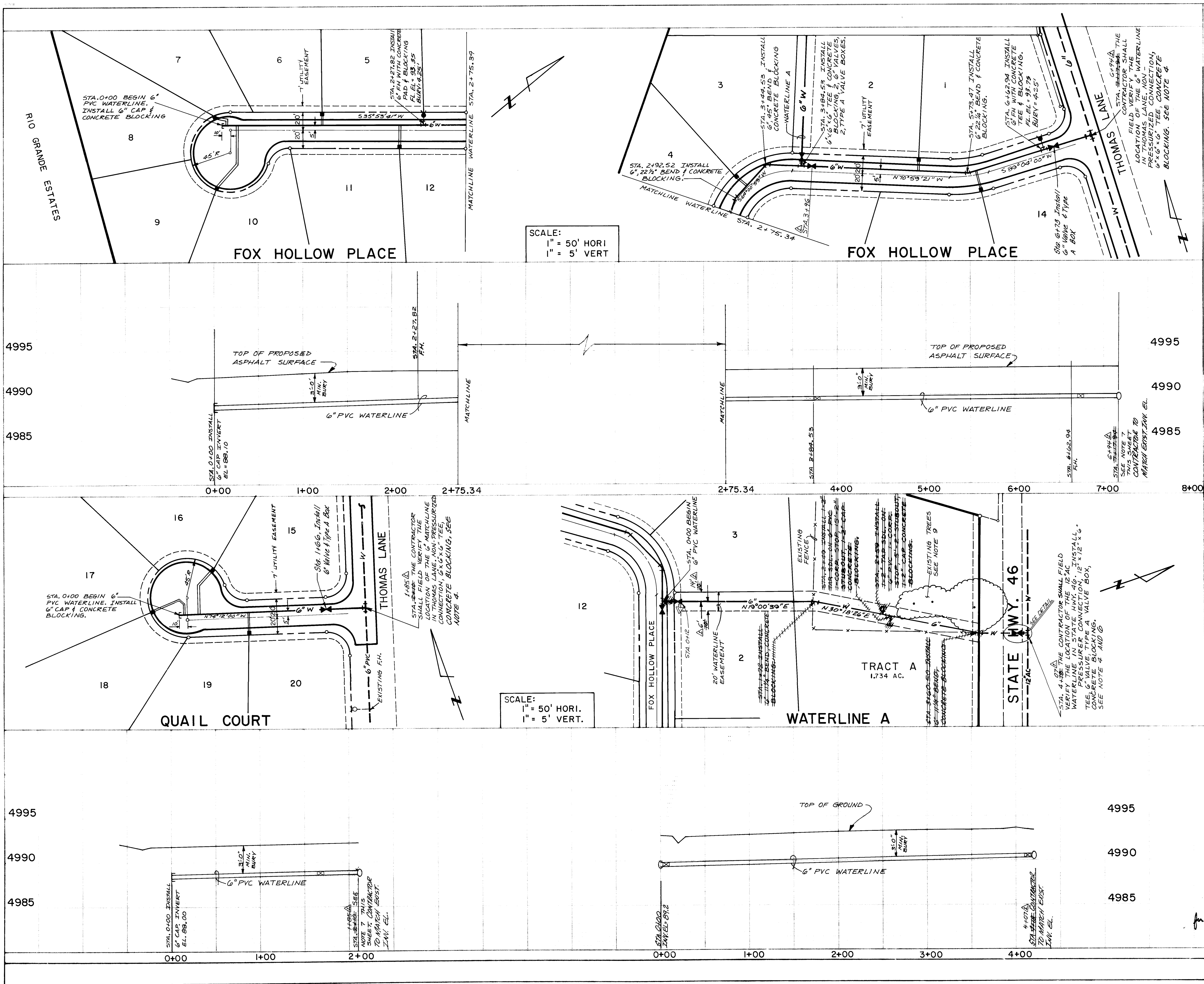




**JOB NO. 0690541**

| CITY OF ALBUQUERQUE<br>MUNICIPAL DEVELOPMENT DEPARTMENT<br>ENGINEERING DIVISION |                    |                          |              |                    |         |
|---------------------------------------------------------------------------------|--------------------|--------------------------|--------------|--------------------|---------|
| TITLE:                                                                          |                    | NORTH RIO GRANDE ESTATES |              |                    |         |
| OVERALL WATER UTILITY PLAN                                                      |                    |                          |              |                    |         |
| APPROVALS                                                                       | ENGINEER           | DATE                     | APPROVALS    | ENGINEER           | DATE    |
| City Engineer                                                                   | <i>[Signature]</i> | 8/16/06                  | Liquid Waste | <i>[Signature]</i> | 7/25/06 |
| A.C.E. Design                                                                   | " "                | " "                      | Traffic      | WADWH              | 7/25/06 |
| A.C.E. Hydrology                                                                | " "                | " "                      | Water        | <i>[Signature]</i> | 7/27/06 |
|                                                                                 |                    |                          |              |                    |         |
| DRAWING NO.                                                                     |                    | MAP NO.                  |              | SHEET              |         |
| 2966                                                                            |                    | B-15                     |              | 3 OF 8             |         |





GENERAL NOTES

- All waterline mains shall have a minimum bury of 3'-0" from top of ground or asphalt to top of pipe.
- Unless otherwise specified, construction and details shall be per the City of Albuquerque Interim Standard Specifications for Public Works Construction, 1985 Edition.
- The waterline connections at State Road 46 (6" to existing 12") and each 6" connection from cul-de-sacs to existing 6" on Thomas Lane shall be coordinated by the contractor with the City Public Water Dept.. The contractor shall be responsible for payment of construction costs.
- The existing waterline as shown on State Highway 46 and on Thomas Lane are only approximate. The contractor shall verify the exact location of the waterlines before construction.
- The contractor shall be responsible for all required traffic control and detour safety during waterline construction.
- Information on the existing 12" AC waterline on State Road 46 and existing 6" PVC waterline on Thomas Lane can be found on City of Albuquerque Waterline Project No. 09-003-84.
- The contractor shall be responsible for location and verification of existing gas lines, telephone lines, power lines and other utilities not mentioned.
- The contractor shall be as careful as possible not to harm existing trees.
- The Contractor shall make himself aware of the past history on this site. Previously the site was a fuel storage location. There may be buried gas lines where grading and trenching is required.

LEGEND

- Proposed Double Water Meter 3/4" SERVICE
- Proposed Single Water Meter 3/4" SERVICE
- Proposed Water Main
- Proposed Waterline Tee
- Proposed Waterline Bend
- Proposed Waterline Valve & Box
- Proposed Edge Of Street
- Proposed Centerline
- Proposed R/W Line

26 29660487

CITY OF ALBUQUERQUE  
MUNICIPAL ENGINEERING DIVISION

TITLE NORTH RIO GRANDE ESTATES  
**WATER LINE DESIGN**

|           |         |
|-----------|---------|
| Engineer  | 7/25/86 |
| Design    | 7/25/86 |
| Hydrology | 7/25/86 |

DRAWING NO. 2966 MAP NO. B-15 SHEET 4 OF 8

NEW MEXICO STATE HIGHWAY DEPARTMENT  
BRASS CAP STAMPED "NM 46-2", LOCATED ON  
10/9/85 SOUTH SIDE OF CORRALES ROAD AND WEST  
OF RIO GRANDE BLVD..  
ELEVATION = 4995.02

1714 P. TURNER

5/1/87 REVISED FROM AS BUILT INFORMATION

6-23-86  
6-23-86  
6-23-86

JOB NO. 0690541 7/1/86







SCALE:  
1" = 50' HORI.  
1" = 5' VERT.

5000

4995

4990

4985

STA. 4+63 CONSTRUCT CONCRETE CUT-OFF WALL AT END OF PAVED SECTION. ALL EXISTING PAVEMENT SHALL MATCH THE EXISTING GROUND ELEVATION WITH THE TOP OF THE CONCRETE CUT-OFF WALL.

5+00

6+00

7+00

8+00

9+00

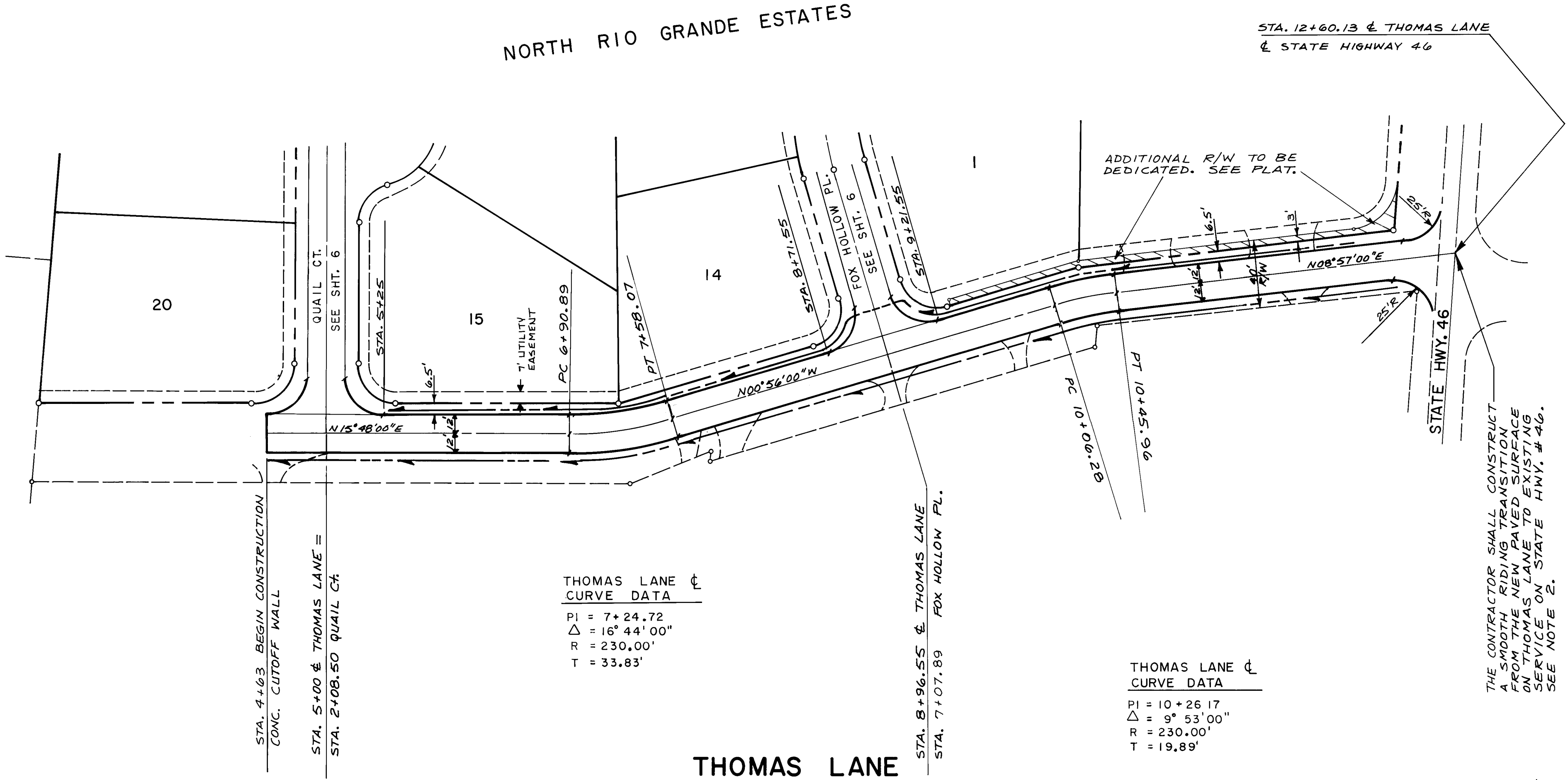
10+00

11+00

12+00

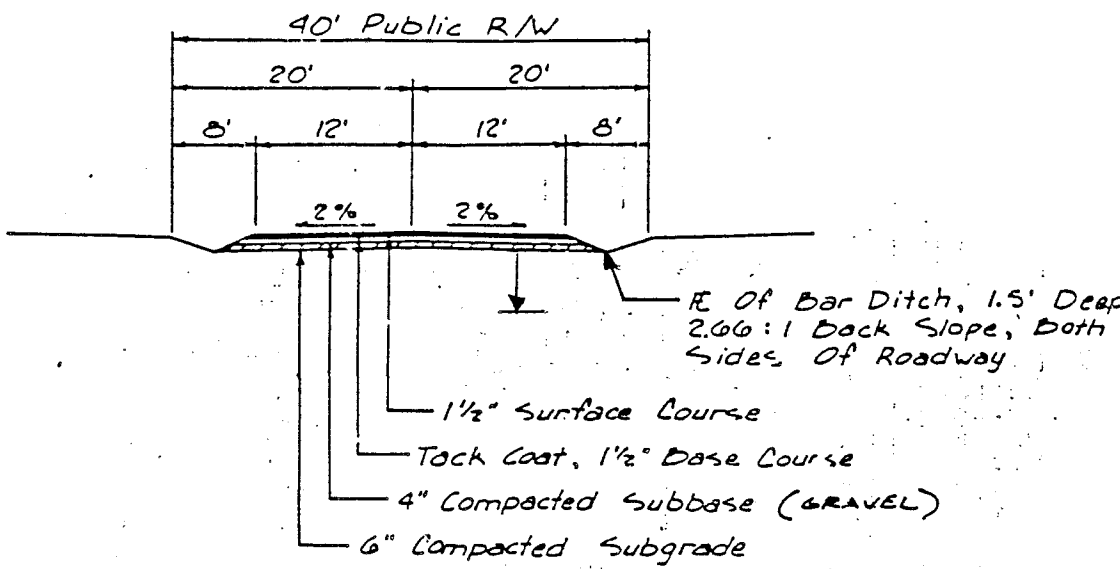
13

NORTH RIO GRANDE ESTATES



GENERAL NOTES

1. The Contractor shall be responsible for all required traffic control and detour safety during paving construction.
2. The Contractor shall saw cut 12" into existing pavement leaving a smooth, clean cut on State Highway 46 before laying new asphalt concrete pavement on Thomas Lane.
3. The street R/W width on Thomas Lane varies, minimum width = 40'.
4. The Contractor shall grade a smooth earthen transition to each driveway east of Thomas Lane. The Contractor shall install 1-18" x 24" maximum CMP at each driveway. The 18" CMP shall have a minimum of 6" cover and inlet and outlet flowlines shall be graded to daylight within 15' minimum.



- Note: 1. 24" Paved Section With Bar Ditches Will Be Constructed Within Thomas Lane R.O.W.  
2. West Paved Roadway Edge On Thomas Lane Shall Be Located 6' East OF West R.O.W. Line. Bar Ditch Shall Be 1' Deep With 3:1 Back Slopes.  
3. Cut-de-4ac: R/W = 45' R, Edge Of Pavement = 40' R

TYPICAL PAVEMENT SECTION

5000

4995

4990

4985

NOTE: ASPHALT PAVEMENT IS TO BE LAID AT THE SAME EXISTING GROUND ELEVATION.

2.6 29660687

NOTE: THIS DRAWING IS FOR INFORMATION ONLY & NOT PART OF THE CITY WORK ORDER.

GREINER ENGINEERING SCIENCES, INC. CONSULTING ENGINEERS-SURVEYORS-PLANNERS

PLANS PREPARED UNDER THE DIRECTION OF

*David G. Greiner*  
7/15/86

JOB NO. 0690541

BERNALILLO COUNTY  
ROAD DEPARTMENT  
TITLE NORTH RIO GRANDE ESTATES

THOMAS LANE

|           |                        |         |           |          |      |
|-----------|------------------------|---------|-----------|----------|------|
| APPROVALS | ENGINEER               | DATE    | APPROVALS | ENGINEER | DATE |
| COUNTY    | <i>John R. Greiner</i> | 7-15-86 |           |          |      |

DRAWING NO.

2966

SHEET

6 OF 8

AS BUILT INFORMATION

CONTRACTOR SURVEYOR MECH.  
WORK TAKEN BY  
ADJUSTMENT BY R. RUTLEDGE  
FIELD MEASUREMENT BY  
CORRECTION BY  
DIRECTED BY  
MICRO-FILM INFORMATION  
RECORDED BY  
DATE

BENCH MARKS

NEW MEXICO STATE HIGHWAY  
DEPARTMENT BRASS CAP STAMPED  
"NM 46-2", LOCATED ON SOUTH  
SIDE OF CORRALES ROAD AND  
WEST OF RIO GRANDE BLVD.  
ELEVATION = 4995.02

SURVEY INFORMATION

FIELD NOTES  
NO. 1714  
BY P. TURNER  
DATE 10/9/85

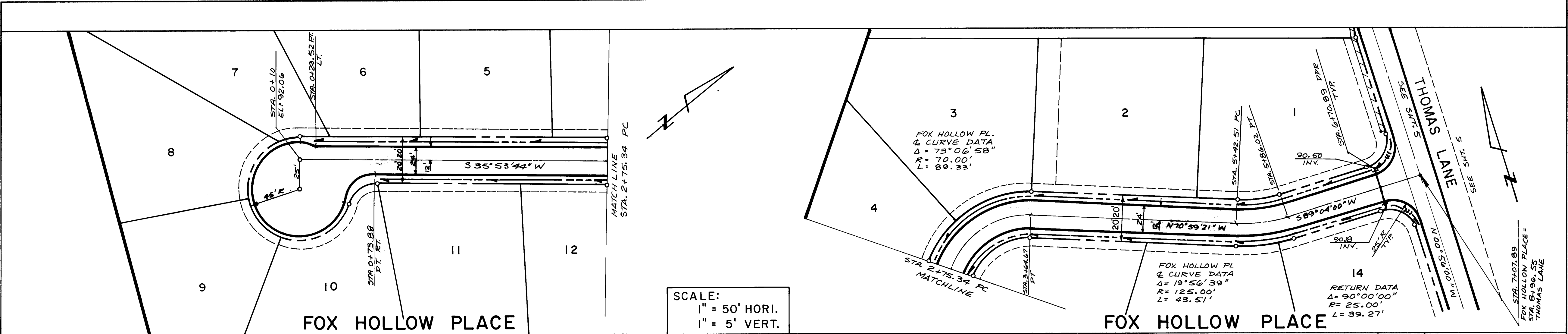
REFERENCES

MAP NO.  
EST. NO.  
W.O. NO.

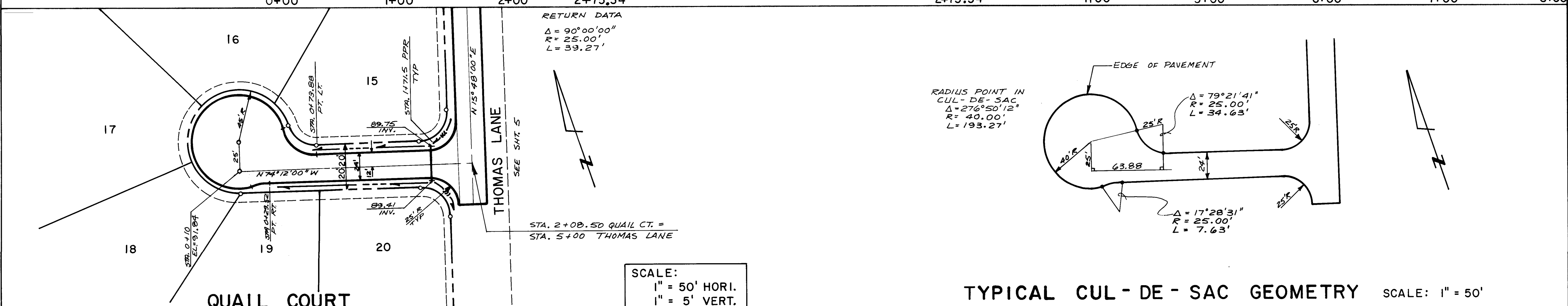
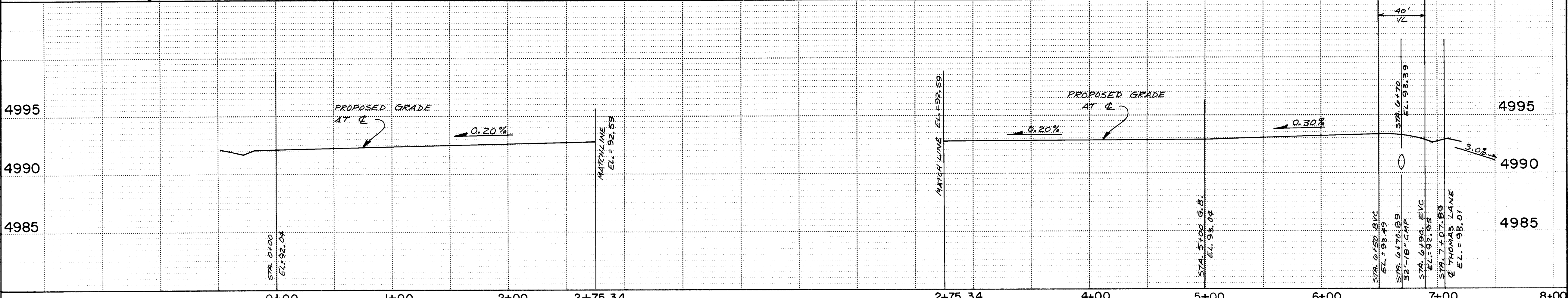
REMARKS  
REVISIONS  
DESIGN  
BY

DATE 6/23/86  
DATE 6/23/86  
DATE 6/23/86

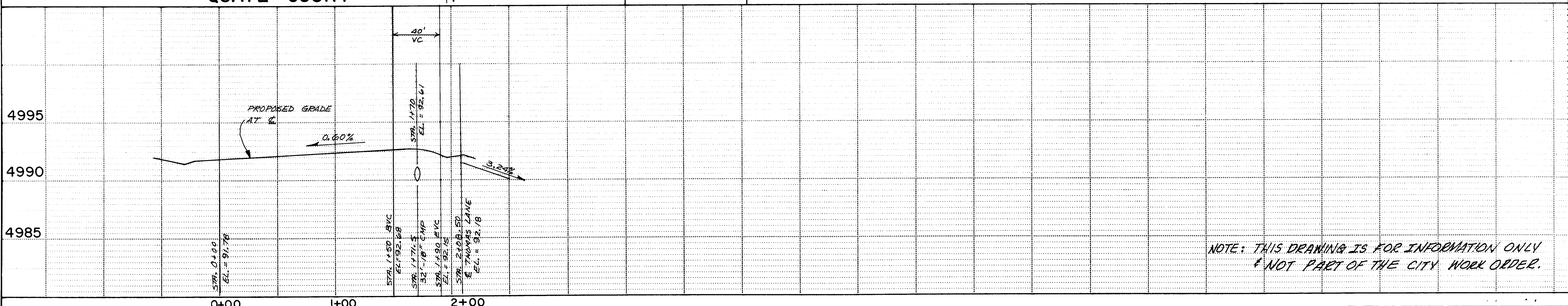




SCALE:  
1" = 50' HORI.  
1" = 5' VERT.



SCALE:  
1" = 50' HORI.  
1" = 5' VERT.



TYPICAL CUL - DE - SAC GEOMETRY SCALE: 1" = 50'

NOTE: THIS DRAWING IS FOR INFORMATION ONLY  
NOT PART OF THE CITY WORK ORDER.

GENERAL NOTES  
1. See typical pavement section on sheet 5.

26 29660787

GREINER ENGINEERING SCIENCES, INC.  
CONSULTING ENGINEERS-SURVEYORS-PLANNERS  
2601 WYOMING BLVD. N.E. SUITE F  
ALBUQUERQUE, NEW MEXICO 87112

BERNALILLO COUNTY  
ROAD DEPARTMENT

TITLE: NORTH RIO GRANDE ESTATES

FOX HOLLOW PLACE & QUAIL COURT

| APPROVALS | ENGINEER           | DATE    | APPROVALS | ENGINEER | DATE |
|-----------|--------------------|---------|-----------|----------|------|
| COUNTY    | <i>[Signature]</i> | 7-15-86 |           |          |      |

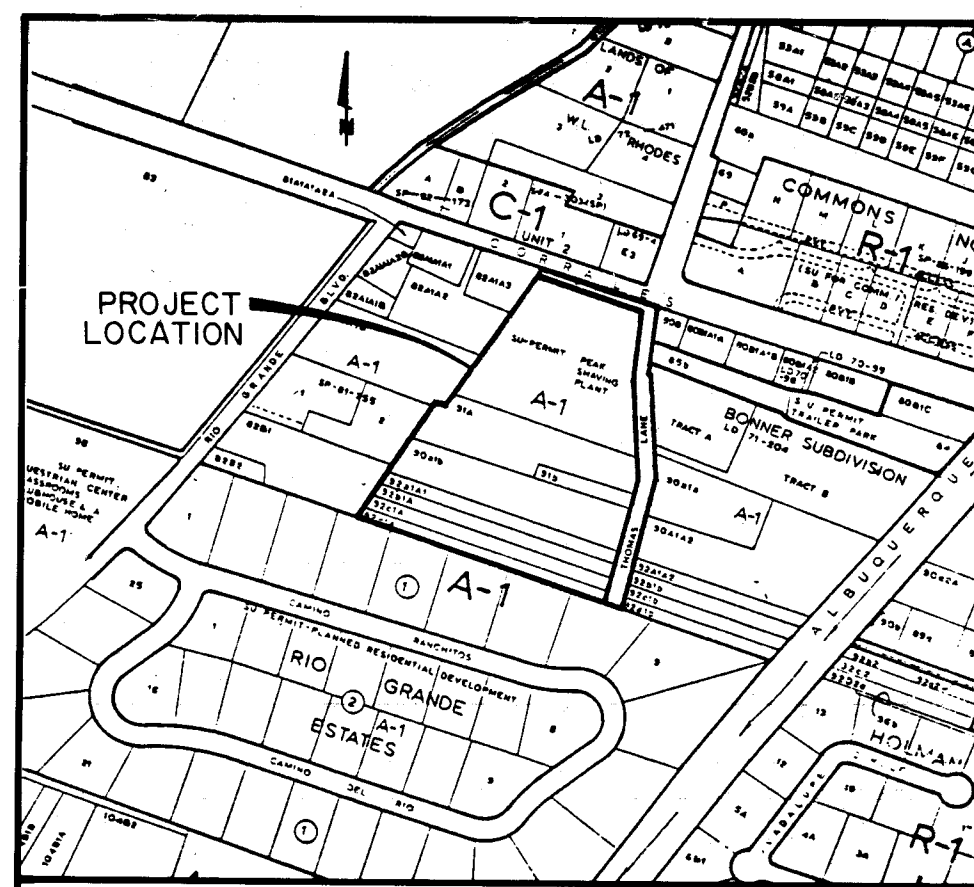
DRAWING NO. 2966 MAP NO. B-15 SHEET 7 OF 8

| SURVEY INFORMATION |             | BENCH MARKS |    | AS BUILT INFORMATION |    |
|--------------------|-------------|-------------|----|----------------------|----|
| NO.                | FIELD NOTES | DATE        | BY | DATE                 | BY |
| 1714               | P. TURNER   | 10/9/85     |    |                      |    |

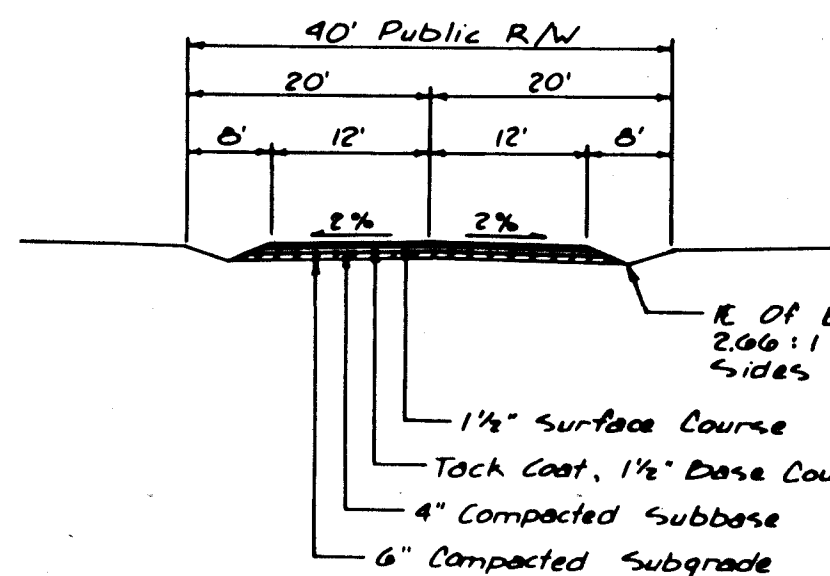
ENGINEER'S SEAL  
*[Signature]*  
JULIO P. TURNER  
REGISTERED PROFESSIONAL ENGINEER  
NO. 0690541  
EXPIRATION DATE 6-23-86

| REVISIONS | DATE    | BY                 |
|-----------|---------|--------------------|
| DESIGN    | 6-23-86 | <i>[Signature]</i> |



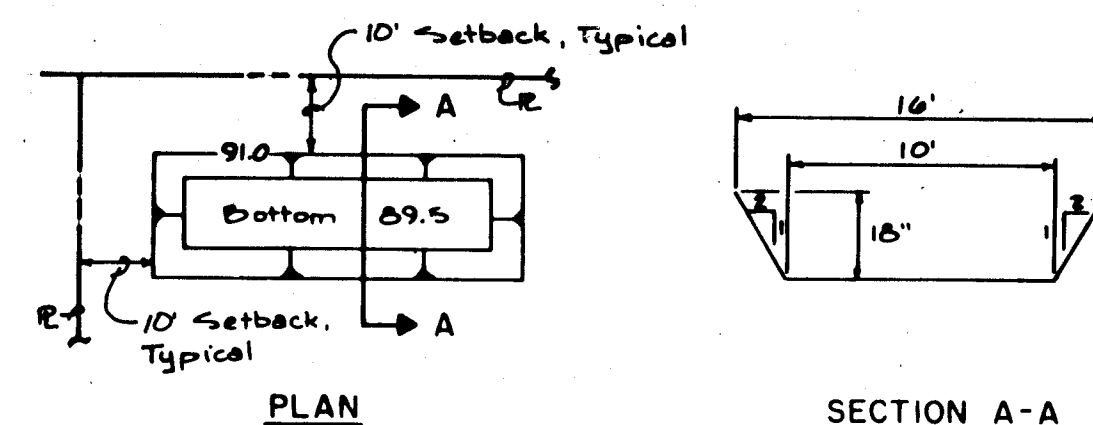


VICINITY MAP  
ZONE ATLAS NO. B-15



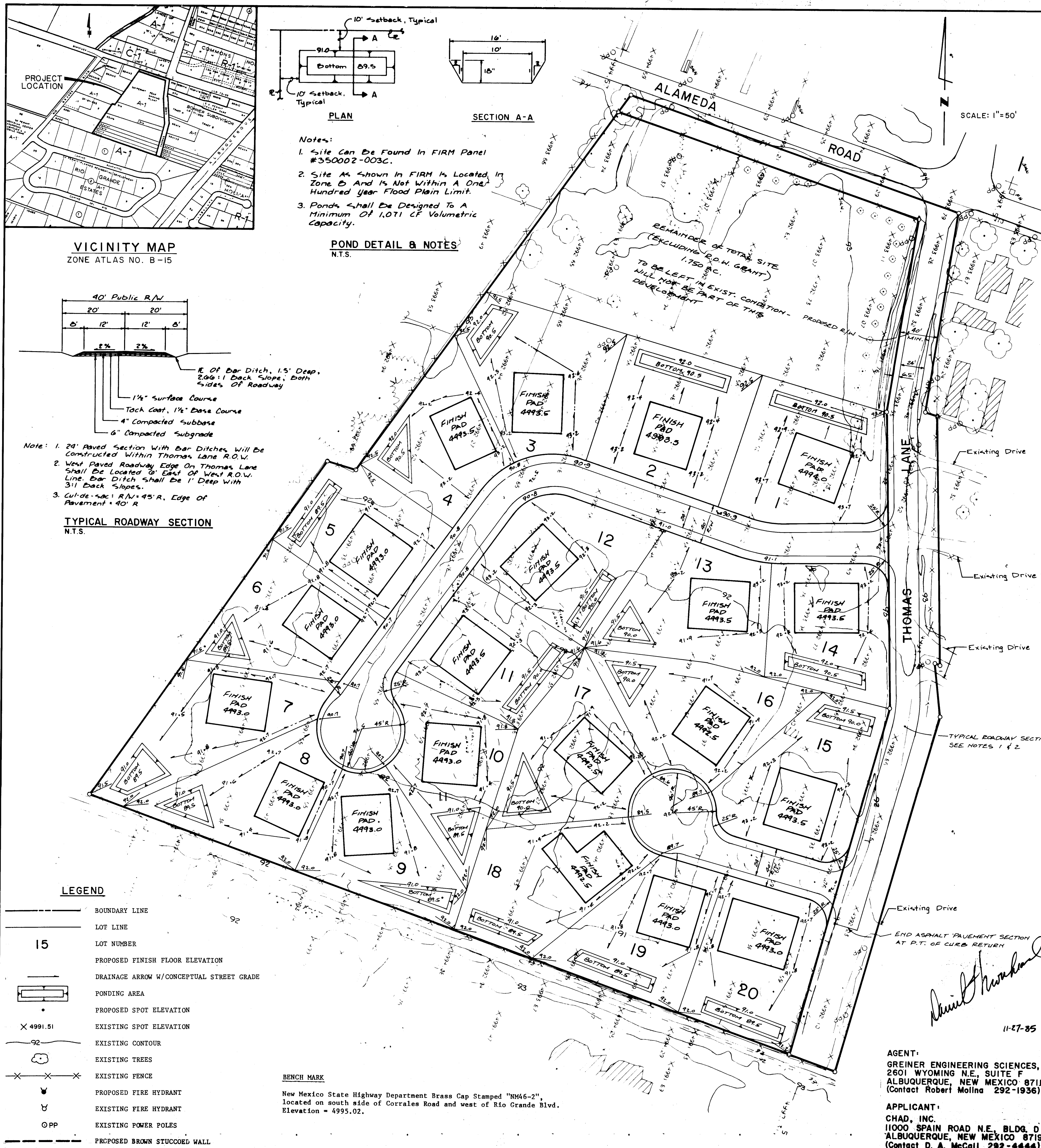
- Note: 1. 24' Paved Section With Bar Ditches Will Be Constructed Within Thomas Lane R.O.W.  
2. West Paved Roadway Edge On Thomas Lane Shall Be Located 6' East Of West R.O.W. Line. Bar Ditch Shall Be 1' Deep With 3% Back Slopes.  
3. Cul-de-sac: R/W = 45' R. Edge Of Pavement = 40' R

TYPICAL ROADWAY SECTION  
N.T.S.



- Notes:  
1. Site Can Be Found In FIRM Panel #350002-003C.  
2. Site As Shown In FIRM Is Located In Zone B And Is Not Within A One Hundred Year Flood Plain Limit.  
3. Ponds Shall Be Designed To A Minimum Of 1,071 CF Volumetric Capacity.

POND DETAIL & NOTES  
N.T.S.



LEGEND

- BOUNDARY LINE
- LOT LINE
- LOT NUMBER
- PROPOSED FINISH FLOOR ELEVATION
- DRAINAGE ARROW W/CONCEPTUAL STREET GRADE
- PONDING AREA
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- EXISTING TREES
- EXISTING FENCE
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- EXISTING POWER POLES
- PROPOSED BROWN STUCCOED WALL

BENCH MARK

New Mexico State Highway Department Brass Cap Stamped "NM46-2", located on south side of Corrales Road and west of Rio Grande Blvd. Elevation = 4995.02.

# DRAINAGE AND GRADING PLAN

FOR TRACTS: 81, 91-A  
91-B, 90-A-I-B AND WESTERLY PORTION OF TRACTS:  
92-A, 92-B, 92-C AND 92-D ON THE M.R.G.C.D. MAP 22

## NORTH RIO GRANDE ESTATES BERNALILLO COUNTY, NEW MEXICO

DRAINAGE CALCULATIONS AND NOTES

Lot Size = .33 acre or 14,374.80 sq. ft.

Rainfall, Q100 - 6 Hour Storm = 2.2" per plate 22.2 D-1 [City of Albuquerque, Development Process Manual (D.P.M.)]

Intensity, Used 10 minutes minimum - I = (6 hr Rain) 6.84  $tc^{-0.51}$   $.2.2" \times 2.114 = 4.65$  Per Plate 22.2 D-2 (City of Albuquerque, D.P.M.)

Hydrologic Soils Group = Type 'B' (Soils Survey of Bernalillo County)

Determination of 'C' Factor, House Floor Area varies 1,600 sf to 4,000 sf, used 4,000 sf (worst case) therefore 28% of proposed site is impervious. C = .48 per plate 22.2 C-1 (City of Albuquerque, D.P.M.)

Rational Formula, Q = CIA

Historic Runoff for .33 acre lot unimproved, Q = .34 x 4.65 x .33 = 0.52 cfs

Developed Runoff for .33 acre lot improved, Q = .48 x 4.65 x .33 = 0.74 cfs

Developed Runoff Ponding Requirements

Building Pad set back from street R/W = 20.0' minimum. Therefore lots shall be graded with a water block 20' from R/W line. The front yards shall be graded to drain into the bar ditches located within the street R/W lot graded to drain into designed backyard ponds. The roof drains shall be directed to drain into the back yard ponds.

Pond Volume and Bar Ditch Volume Calculations

Average lot size draining into back yard pond = 12,275 sq. ft.

Average lot size and street R/W draining into bar ditch = 4,400 sq. ft. total of which 1,320 sq. ft. is impervious (30%)

Back Yard Pond Requirements

$V = \frac{2.2 \times 12,175 \times .48}{12} = 1,071$  Cubic Feet Ponding Capacity Required

Note: Ponding Areas as delineated are capable of containing  $\pm$  110 Cubic Feet above the required 1,080 cf required.

All Ponding areas shall be 18" deep min. unless otherwise denoted.

Bar Ditch Requirements

C = .48 Per Plate 22.2 C-1

$V = \frac{2.2}{12} \times 4,400 \times .48 = 387$  Cubic Feet Ponding Capacity Required

Capacity of Bar Ditch = 1.5' x 4' x 110' average length = 660 Cubic Feet available

1 - 18" x 24" CMP Shall be installed in bar ditch where residential driveways are to be located.

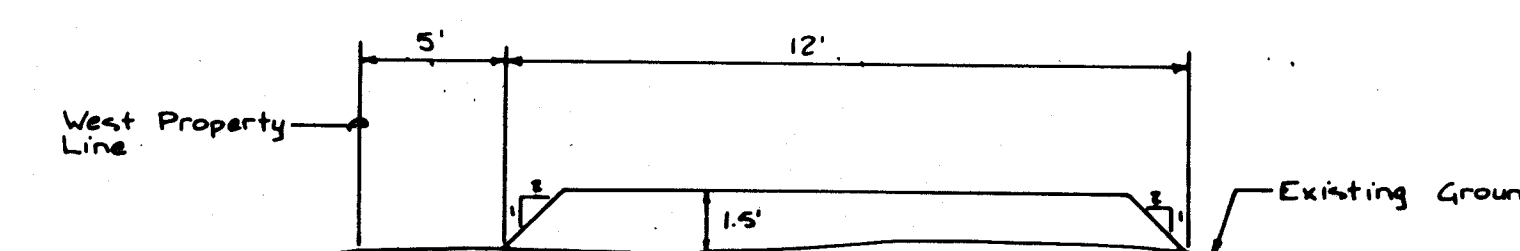
EROSION CONTROL

A berm shall be constructed on the west property line of clean earth material. The berm shall be constructed after the initial clearing and grubbing of the site and maintained throughout construction of proposed site improvements. The berm shall be removed prior to final grading. See berm detail this sheet.

DRAINAGE REPORT SUMMARY

The existing topography dictates that developed runoff will be retained on each lot and street R/W. All lots will be graded with a water block on each side of the proposed house pad. All house pads shall be built  $\pm$  18" above the existing ground. House pads shall be built with a 20' setback from the street right-of-way line. By the use of waterblocks the front yards will drain into bar ditches located in the street right-of-way (see Typical Roadway Section this sheet) and the remainder of the lot, including the roof drainage flows, will be directed into the designed sideyard drainage swales and backyard ponding areas.

The subdivision covenants as to be provided by the developer will require the homeowner to build and maintain the required backyard ponds and sideyard drainage swales. The ponding areas as shown are to scale and should be built as delineated. See pond notes and detail this sheet.



BERM DETAIL FOR EROSION CONTROL  
N.T.S.

AGENT:  
GREINER ENGINEERING SCIENCES, INC.  
2601 WYOMING N.E., SUITE F  
ALBUQUERQUE, NEW MEXICO 87110  
(Contact Robert Molina 292-1936)

APPLICANT:  
CHAD, INC.  
11000 SPAIN ROAD N.E. BLDG. D  
ALBUQUERQUE, NEW MEXICO 87191  
(Contact D. A. McCall 292-4444)

2 3 4 5 6 7 8 9 10 11 12  
26 29 60 87

#2966 SHEET 8 OF 8

2966  
G.E.S. IN 0690591