

# CONSTRUCTION PLANS FOR COTTONWOOD CROSSING PHASE II

## PAVING, STORM DRAIN, & STRIPING IMPROVEMENTS

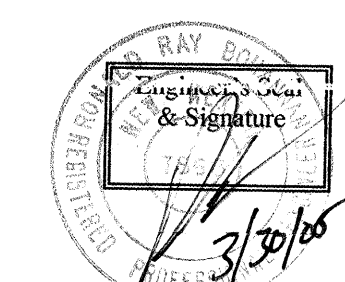
CITY OF ALBUQUERQUE  
NEW MEXICO  
MARCH 2004

*Handwritten signature*

### CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Ronald R. Bohannon, of the firm of Tierra West LLC, a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me, or personnel under my direction with survey information provided by

Russ Huggins, of Surv-Tek Inc., NMPS number 9750



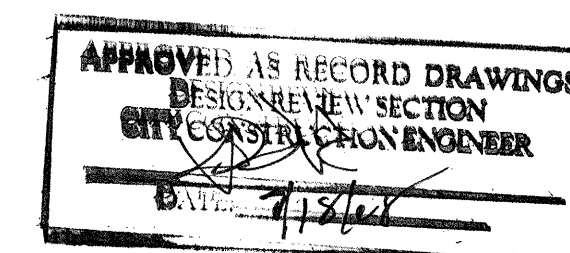
26 729081 8111105

DRB # 1002792

TIERRA WEST, LLC  
8509 JEFFERSON NE  
ALBUQUERQUE, NEW MEXICO 87113  
(505) 858-3100

### INDEX TO DRAWINGS

1. TITLE SHEET
2. PLAT
3. PLAT
4. GRADING AND DRAINAGE PLAN
5. DETAIL SHEET
6. DETAIL SHEET
7. APPROVED MASTER UTILITY PLAN
8. PAVING, STRIPING, & SIGNAGE IMPROVEMENTS  
COORS BLVD, NW STA: 11+30.40 TO STA: 20+03.31
9. STORM DRAIN IMPROVEMENTS  
COORS BLVD, NW STA: 10+00 TO STA: 14+69.03



1/220097/2297081.DWG/MP/02-12-2004

Elevations are in NGVD 29.



VICINITY MAP ZONE ATLAS: B-14-Z

### NOTICE TO CONTRACTORS

SCALE NONE

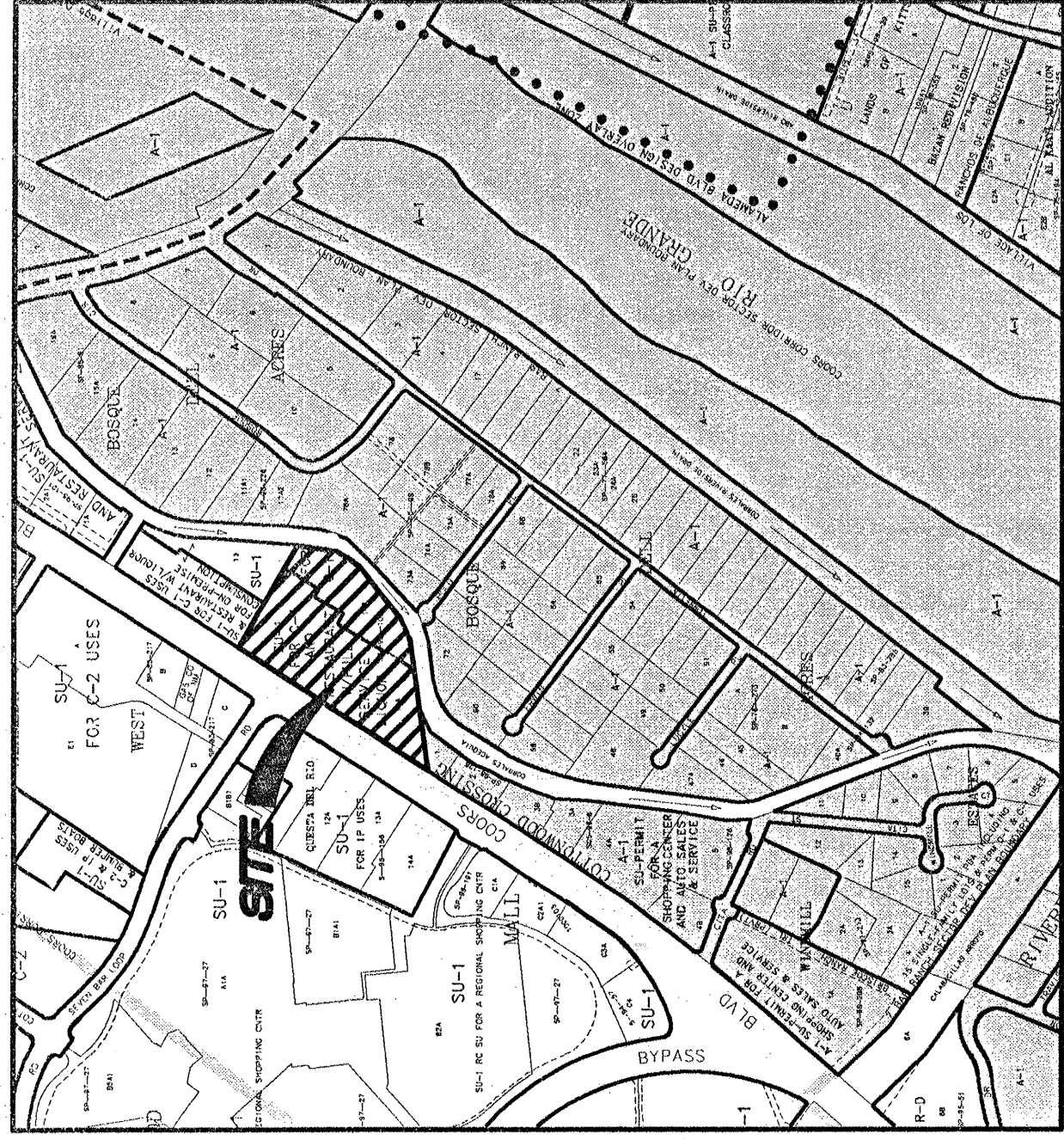
1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION (UPDATE #7)
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
3. ANY WORK AFFECTING AN ARTERIAL ROADWAY REQUIRES 24-HOUR CONSTRUCTION.
4. 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 IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. SEVEN (7) WORKING DAYS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATIONS DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO(2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONST. COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO STANDARD SPECIFICATIONS.
6. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
7. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER 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 ELEVATIONS 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 GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS. ANY PERMANENT SURVEY MONUMENT LOCATED WITHIN 50' OF THIS PROJECT THAT IS NOT SHOWN ON THE PLAN AND IS DESTROYED DURING CONSTRUCTION WILL BE REPLACED AT THE DESIGNER'S EXPENSE.
8. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
9. ALL UTILITY WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH NEW MEXICO UTILITIES, INC. SPECIFICATIONS FOR WATER AND WASTEWATER FACILITIES (MOST RECENT REVISIONS).
10. THE CONTRACTOR SHALL NOTIFY NEW MEXICO UTILITIES (898-2661) FIVE(5) WORKING DAYS PRIOR TO BEGINNING THE CONSTRUCTION OF THE UTILITIES.
11. FOR STORM DRAIN CONSTRUCTION, RCP PIPE JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.

### THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- ☒ 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 THE PROJECT ENGINEER.
- ☒ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☐ IF CURB IS DEPRESSIONED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
- ☒ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.

|                             |        |                            |      |                        |      |                          |      |
|-----------------------------|--------|----------------------------|------|------------------------|------|--------------------------|------|
| REV                         | SHEETS | CITY ENGINEER              | DATE | USER DEPT.             | DATE | USER DEPT.               | DATE |
| ENGINEERS STAMP & SIGNATURE |        | APPROVALS                  |      | ENGINEER               |      | DATE                     |      |
|                             |        | DRC Chairman               |      | <i>John Paul</i>       |      | 7-23-04                  |      |
|                             |        | Transportation             |      | <i>Mike</i>            |      | 3/29/04                  |      |
|                             |        | Water/Wastewater           |      | <i>Lang Huggins</i>    |      | 3/29/04                  |      |
|                             |        | Hydrology                  |      | <i>Bruce D. Blyden</i> |      | 3/29/04                  |      |
|                             |        | C.I.P.                     |      | <i>John Paul</i>       |      | 4-23-04                  |      |
| Constr. Coord.              |        | <i>Bohannon, m. blyden</i> |      | 4-8-04                 |      | <i>John Paul</i> 4-30-04 |      |
| CITY PROJECT NO.            |        | 729081                     |      | SHEET                  |      | 1 OF 9                   |      |





VICINITY MAP  
N.T.S.

#### SUBDIVISION DATA

1. City of Albuquerque Zone Atlas Page: B-14-Z
2. U.C.L.S. Log Number 2003451539
3. Total number of existing tracts: 2
4. Total number of new lots created: 6
5. Gross subdivision acreage: 9.7690 acres
6. Total mileage of full width streets created: 0.00 miles

#### NOTE

Said Lots 1, 2, 3, 4, 5 and 6 are subject to that certain New Mexico State Plane Grid Bearing Survey, Bernalillo County, New Mexico on the 21st day of October, 1996, in Book BCR 98-26, Pages 2764-2777, as Document No. 9615257. See Sheet 4 of 4 for Additional Restrictions.

#### NOTE

These properties lie within the New Mexico Utilities, Inc. (NMU), Inc., Franchise area. Water and Sanitary Sewer capabilities are based upon the NMU, Inc. facilities, not the City of Albuquerque.

#### DISCLOSURE STATEMENT

The purpose of this plat is to create 6 new lots. Grant City of Albuquerque sidewalk, public water line, public sanitary sewer line, public storm sewer, private cross access, public overhead and dry utility easements. Vacate existing easements as shown herein.

#### SHEET INDEX

- SHEET 1 - Approvals  
SHEET 2 - Legal Description, General Notes  
SHEET 3 - New Lot Boundaries and Existing Easements  
Vacated by 03DRB-01780VPE  
SHEET 4 - New Easements Granted by this Plat

030329P



SCANNED BY  
MESA REPORT

## LOTS 1, 2, 3, 4, 5 AND 6 COTTONWOOD CROSSING, PHASE II

(BEING A REPLAT OF TRACTS 14-A AND 14-B, BLACK RANCH)

WITHIN  
THE TOWN OF ALAMEDA GRANT

PROJECTED SECTION 8, TOWNSHIP 11 NORTH, RANGE 3 EAST  
NEW MEXICO PRINCIPAL MERIDIAN  
CITY OF ALBUQUERQUE  
BERNALILLO COUNTY, NEW MEXICO

NOVEMBER, 2003

#### TREASURER'S CERTIFICATION

This is to certify that taxes are current and paid on the following property:

UPC# 101406519031820301 TRACT 14-A, BLACK RANCH  
UPC# 10140652431320303 TRACT 14-B, BLACK RANCH

*[Signature]*  
Bernalillo County Treasurer's Office  
Date: 11/12/03

PROJECT NUMBER 1002182

Application Number: 04-00184

#### PLAT APPROVAL

##### UTILITY APPROVALS

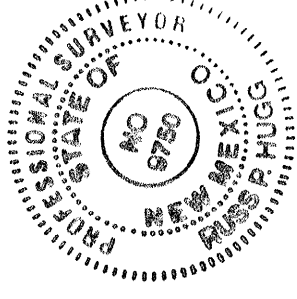
|                       |                    |          |
|-----------------------|--------------------|----------|
| PNM Electric Services | <i>[Signature]</i> | 12-21-03 |
| PNM Gas Services      | <i>[Signature]</i> | 12-21-03 |
| QWest Corporation     | <i>[Signature]</i> | 12-19-03 |
| Comcast               | <i>[Signature]</i> | 2-10-04  |
| New Mexico Utilities  | <i>[Signature]</i> | 2-10-04  |

##### CITY APPROVALS

|                                             |                    |         |
|---------------------------------------------|--------------------|---------|
| City Surveyor                               | <i>[Signature]</i> | 12-8-03 |
| Real Property Division                      | <i>[Signature]</i> |         |
| Environmental Health Department             | <i>[Signature]</i> |         |
| Traffic Engineering/Transportation Division | <i>[Signature]</i> | 2-18-04 |
| Utilities Department                        | <i>[Signature]</i> | 2-18-04 |
| Parks and Recreation Department             | <i>[Signature]</i> | 2-18-04 |
| AMAFCA                                      | <i>[Signature]</i> | 2-13-04 |
| City Engineer                               | <i>[Signature]</i> | 2-18-04 |
| DRB Chairperson, Planning Department        | <i>[Signature]</i> | 2/18/04 |

#### SURVEYOR'S CERTIFICATION

I, Russ P. Hugg, New Mexico Professional Surveyor, Number 9750, do hereby certify that I have personally supervised the field work of an actual ground survey performed by me or under my supervision; 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 I have met the minimum requirements for surveys and monumentation of the Albuquerque Subdivision Ordinance; that it shows all easements of record and that it is true and correct to the best of my knowledge and belief.



Russ P. Hugg  
NMPS No. 9750  
November 26, 2003

**SURVOTEK, INC.**  
Consulting Surveyors

6648 Paradise Blvd., N.W. Albuquerque, New Mexico 87114  
Phone: 800-897-5598  
Fax: 505-897-5597

SHEET 1 OF 4

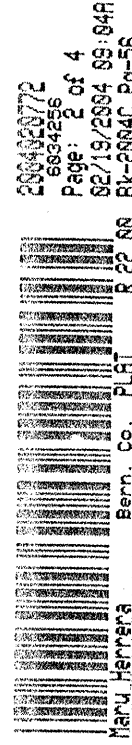
## LOTS 1, 2, 3, 4, 5 AND 6 COTTONWOOD CROSSING, PHASE II

(BEING A REPLAT OF TRACTS 14-A AND 14-B, BLACK RANCH)

WITHIN  
THE TOWN OF ALAMEDA GRANT

PROJECTED SECTION 8, TOWNSHIP 11 NORTH, RANGE 3 EAST  
NEW MEXICO PRINCIPAL MERIDIAN  
CITY OF ALBUQUERQUE  
BERNALILLO COUNTY, NEW MEXICO

NOVEMBER, 2003



030329P  
Page 2 of 4  
030329P  
030329P

#### GENERAL NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone - NAD 1927) originated at the Albuquerque Control Survey Monument "NM448-N12".
2. Distances are ground.
3. Distances along curved lines are arc lengths.
4. Record Plat or Deed bearings and distances, where they differ from those established by this field survey, are shown in parenthesis ( ).
5. All corners found in place and held were tagged with a brass disk stamped "HUGG L.S. 9750" unless otherwise indicated herein.
6. All corners that were set are either a 5/8" rebar with cap stamped "HUGG L.S. 9750" or a concrete nail with brass disk stamped "HUGG L.S. 9750" unless otherwise indicated herein.
7. Field surveys were performed during the month of April, 2003.
8. Documents used in the preparation of this survey are as follows:
  - A. Plat entitled "TRACTS 14-A AND 14-B, BLACK RANCH, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, JANUARY 1998", filed June 3, 1998, in Volume 98C, Folio 157, records of Bernalillo County, New Mexico.
  - B. Survey entitled "BOUNDARY SURVEY PLAT, TRACTS 13 AND 14, BLACK RANCH, TOWN OF ALAMEDA GRANT, BERNALILLO COUNTY, NEW MEXICO, records of Bernalillo County, New Mexico, filed July 9, 1998, in Volume 98C, Folio 68, records of Bernalillo County, New Mexico.
  - C. Plat entitled "LOTS 1, 2, 3, 4, 5 AND 6, COTTONWOOD CROSSING, TOWN OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, JANUARY 1998", filed July 9, 1998, in Volume 98C, Folio 156, records of Bernalillo County, New Mexico.
  - D. Title Report prepared for this property by Lawyers Title Insurance Company, Commitment for Title Lawyers No. 97209130, dated July 25, 1997.
  - E. All street centerline monumentation shall be installed at all centerline PCs, PTs, angle points and street intersections. Monumentation shall be set using a standard "4" diameter iron stake with "Copy of Albuquerque Centerline Monument - Do not disturb, PS Number 9750" and will be set flush with the final asphalt lift.
  - F. Manholes will be offset at all points of curvature, points of tangency, street intersections, and all other angle points to allow use of centerline monumentation.

#### AMAFCA EASEMENTS RELEASED BY SEPARATE DOCUMENT

- The following easements were released by the document entitled "QUITCLAIM DEED / RELEASE OF EASEMENT" filed February 12, 2004, Book A72, Page 9151, records of Bernalillo County, New Mexico.
- A. 30' Easement for Floodway & Storm Drainage Works to A.M.A.F.C.A. filed Dec. 19, 1992, Book BCR 92-30, Page 2666, vacated by 03DRB-01780VPE.
  - E. Temporary Road Easement to A.M.A.F.C.A. filed May 12, 1994, Book BCR 94-15, page 4446, vacated by 03DRB-01780VPE.
  - C. Albuquerque Metropolitan Arroyo Flood Control District, Inc. (AMAFCA) Flood Control District, Inc. 38A, pages 64-67, vacated by 03DRB-01780VPE.

#### LEGAL DESCRIPTION

Tracts numbered Fourteen-A (14-A) and Fourteen-B (14-B), Black Ranch, within the Town of Alameda Grant, Projected Section 8, Township 11 North, Range 3 East, N.M.P.M., Bernalillo County, City of Albuquerque, New Mexico as the same is shown and designated on the plat of the Cottonwood Crossing, Phase II, filed June 3, 1998, in Volume 98C, Folio 157, records of Bernalillo County, New Mexico, on June 3, 1998, in Plat Book 98C, Folio 157.

Said parcel contains 9.7690 acres more or less.

#### DEDICATION

SURVEYED and REPLATED and now comprising LOTS 1, 2, 3, 4, 5 AND 6, COTTONWOOD CROSSING, TOWN OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, PROJECTED SECTION 8, TOWNSHIP 11 NORTH, RANGE 3 EAST, NEW MEXICO PRINCIPAL MERIDIAN, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, is with undersigned owner(s) and proprietor(s) thereof. Said owner(s) and proprietor(s) do hereby grant the easements as shown herein, and do hereby dedicate Lot 3 in fee simple with warranty covenants to the public for use as a public utility easement. Said owner(s) and proprietor(s) do hereby grant the public utility easement to the public forever, as shown herein. Said owner(s) and proprietor(s) do hereby consent to all of the foregoing and do hereby certify that they are so authorized to act.

OWNER: TRACTS 14-A and 14-B, BLACK RANCH  
The Albert J. Black and Mary Jane Black Revocable Trust

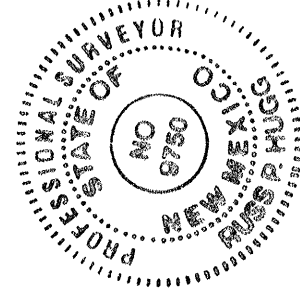
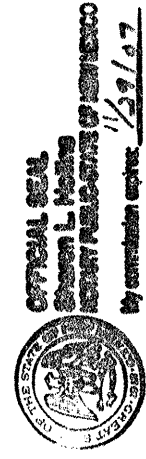
*[Signature]*  
John F. Black, Trustee

#### ACKNOWLEDGEMENT

STATE OF NEW MEXICO  
COUNTY OF BERNALILLO  
This instrument was acknowledged before me on this 14 day of December, 2003, by John F. Black.

*[Signature]*  
Notary Public

My Commission expires: Nov. 29, 2007



FOR REFERENCE ONLY

**SURVOTEK, INC.**  
Consulting Surveyors

6648 Paradise Blvd., N.W. Albuquerque, New Mexico 87114  
Phone: 800-897-5598  
Fax: 505-897-5597

SHEET 2 OF 4

030329P







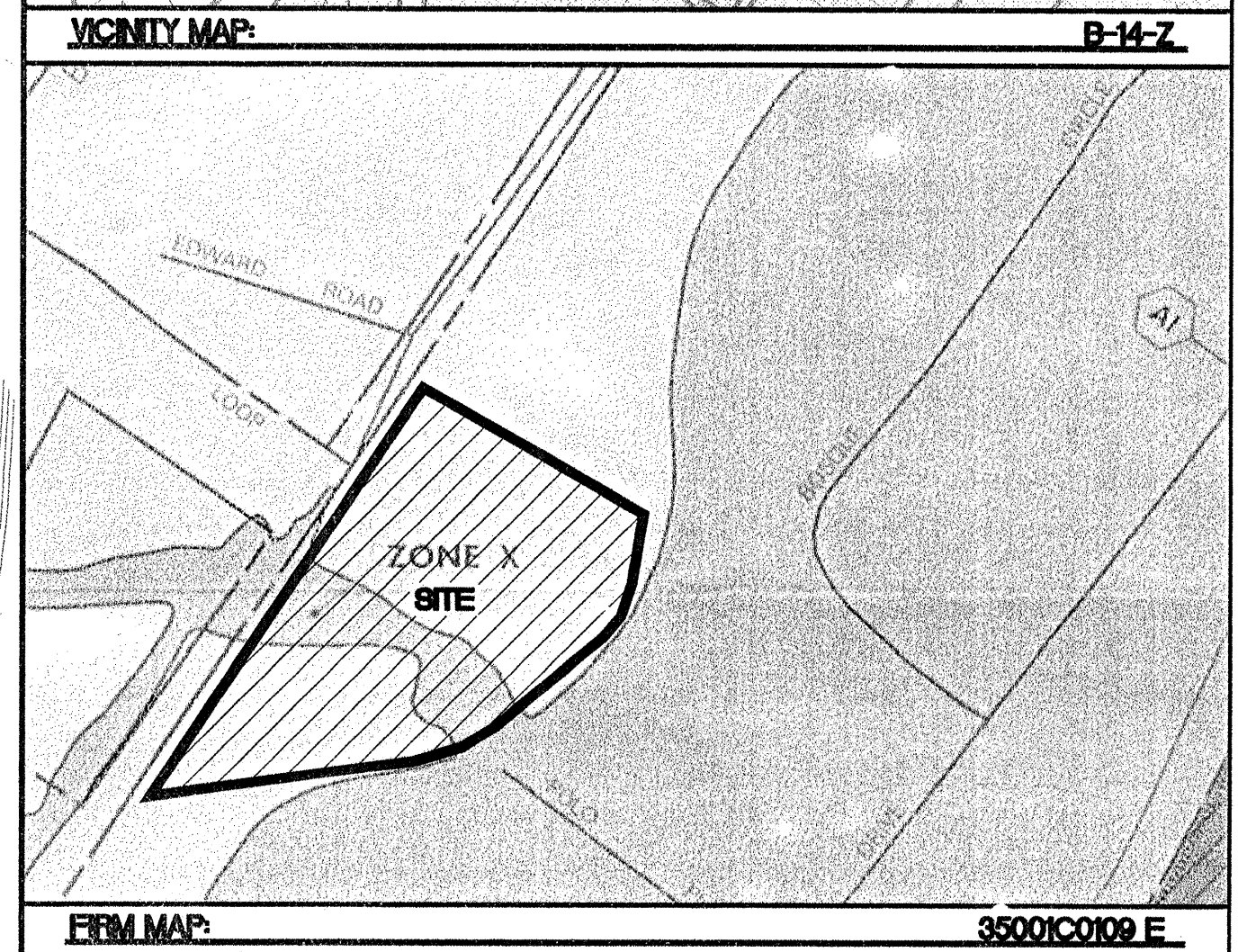
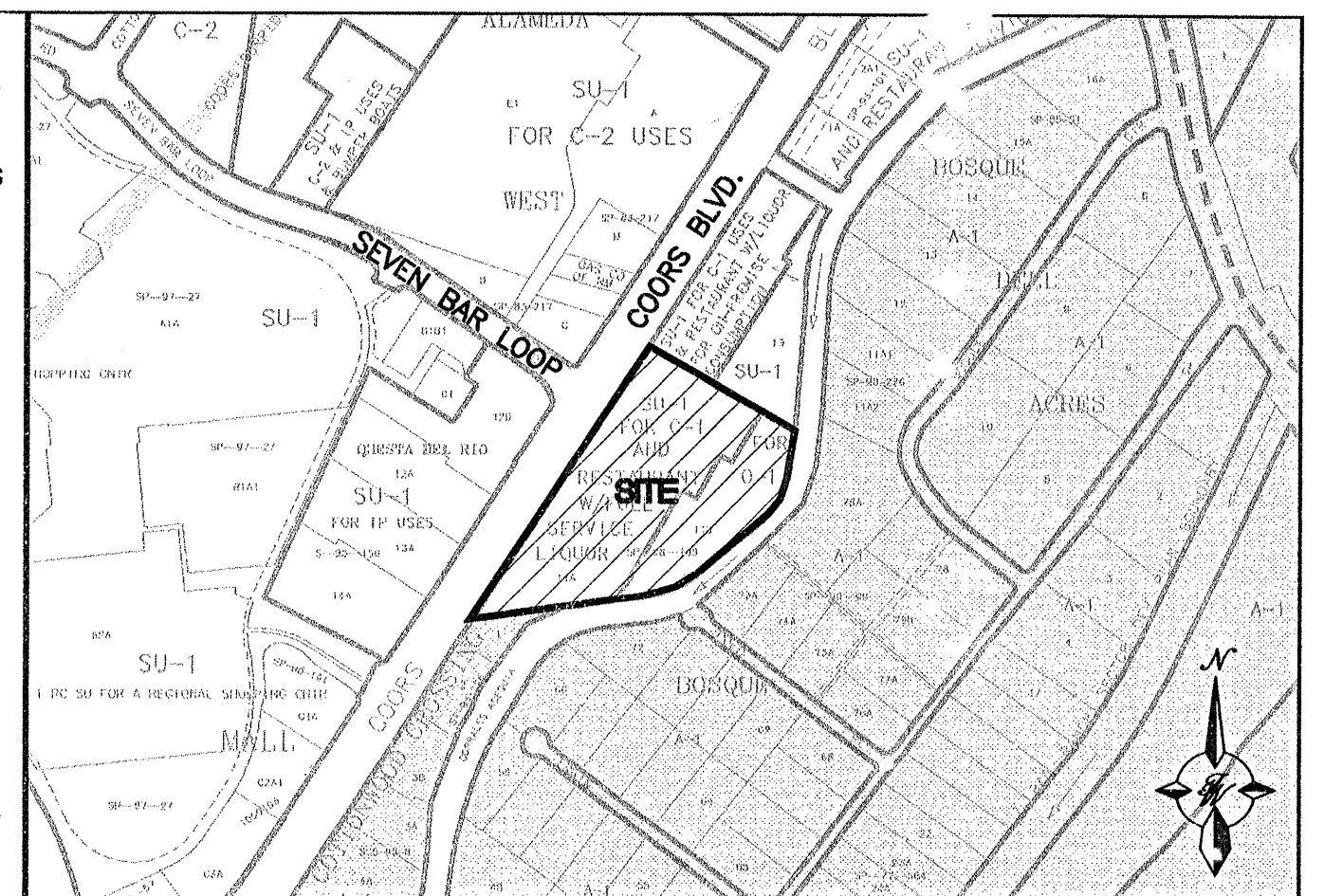
# LEGEND

- EXISTING STORM SEWER MANHOLE
- EXISTING STORM SEWER INLET
- EXISTING STORM SEWER LINE
- PROPOSED STORM SEWER MANHOLE
- PROPOSED 12" LANDSCAPE DRAIN
- PROPOSED DOUBLE "C" WATER QUALITY INLET
- 24" RCP
- PROPOSED STORM SEWER LINE
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- BOUNDARY LINE
- EXISTING SIDEWALK
- PROPOSED RETAINING WALL
- EXISTING RETAINING WALL
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- FLC'W ARROW
- SLOPE TIE
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION

**CAUTION:**  
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

## EROSION CONTROL NOTES:

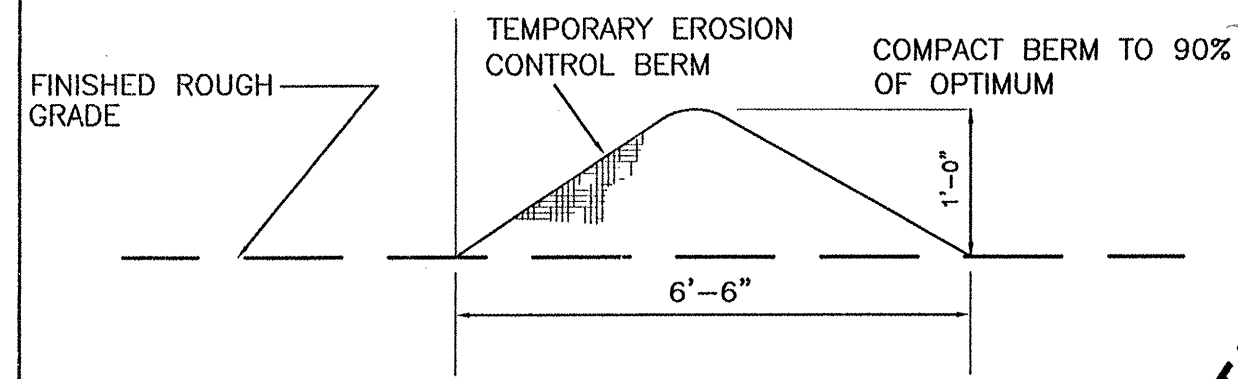
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.



- NOTES:**  
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.

## EROSION CONTROL BERM DETAIL

NTS

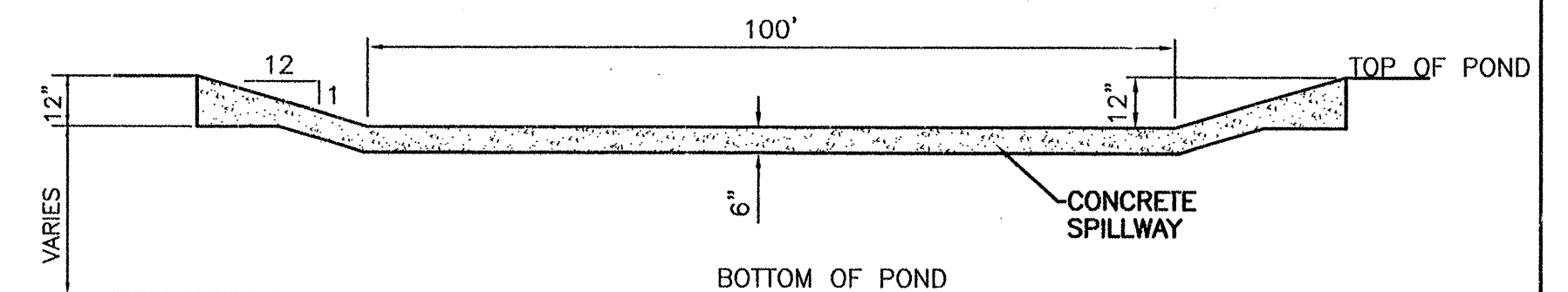


SCANNED BY  
MESA REPRO

**COOR ROAD NW. (NEW MEXICO STATE HIGHWAY NO. 448)**  
156' Right of Way

**ARCHAEOLOGICAL SITE NOT TO BE DISTURBED**

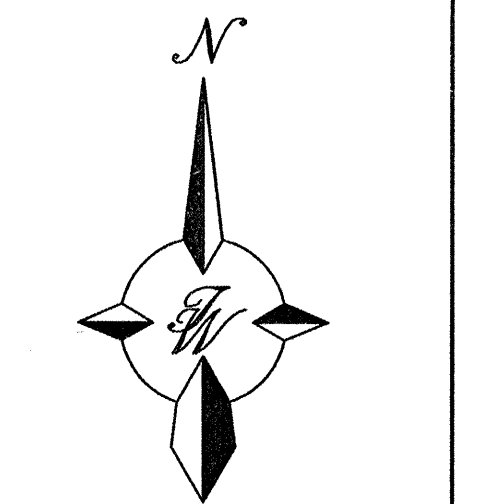
**FUTURE DEVELOPMENT (MASS GRADED W/ THIS PROJECT)**



NOTE: CONCRETE TO EXTEND TO CHANNEL LINING AND TIE INTO CANAL SLOPE PAVING

## EMERGENCY SPILLWAY DETAIL

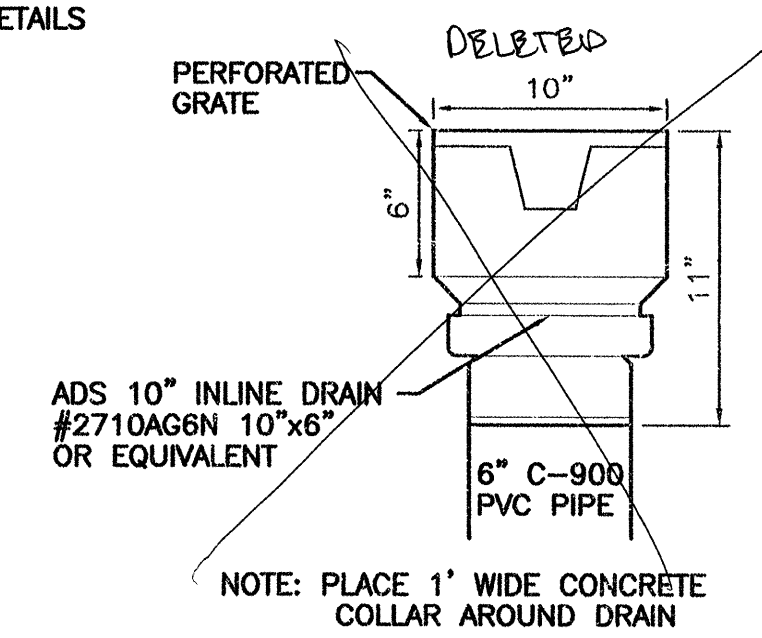
NTS



FOR REFERENCE ONLY

SCALE: 1"=40'

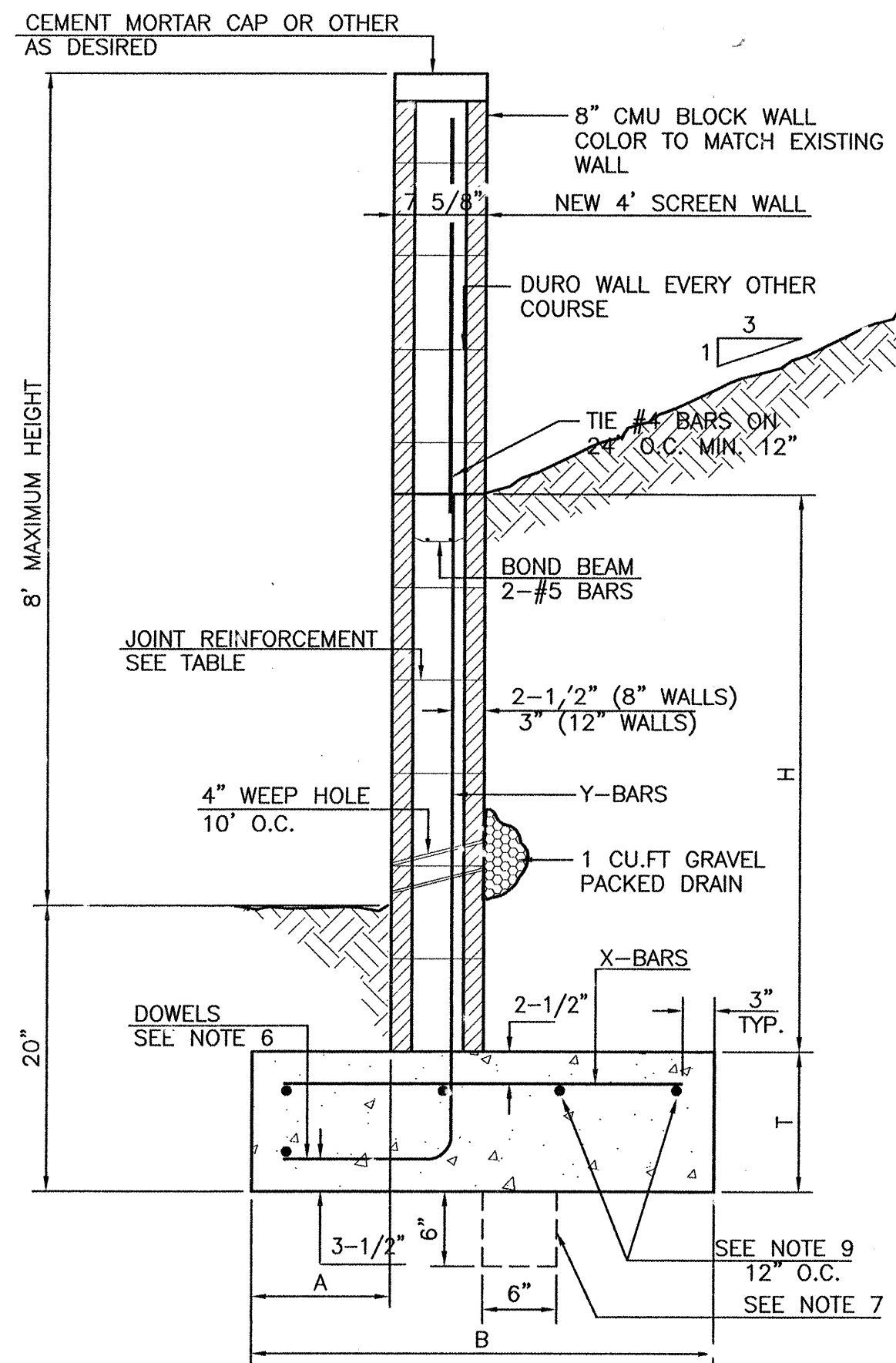
|                                                                  |                                                                                                                                                                                     |                                                                |                                                      |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------|
| <p>ENGINEER'S SEAL</p> <p>RONALD R. BOHANNAN<br/>P.E. #77968</p> | <p><b>COTTONWOOD CROSSING PHASE 2</b></p> <p><b>GRADING AND DRAINAGE PLAN</b></p> <p>TERRA WEST, LLC<br/>8509 JEFFERSON NE<br/>ALBUQUERQUE, NEW MEXICO 87113<br/>(505) 858-3100</p> | <p>DRAWN BY JDN</p> <p>DATE 10-20-03</p> <p>2297GRB-8-6-03</p> | <p>SHEET #</p> <p><b>C-1</b></p> <p>JOB # 220097</p> |
|                                                                  |                                                                                                                                                                                     |                                                                |                                                      |



## INLINE DRAIN DETAIL

NTS





8 INCH REINFORCED CONCRETE MASONRY WALL

| H       | X       | A   | B       | T   | Y-BARS       | X-BARS       |
|---------|---------|-----|---------|-----|--------------|--------------|
| ft.-in. | ft.-in. | in. | ft.-in. | in. |              |              |
| 2'-0"   | 1'-1"   | 8"  | 2'-4"   | 9"  | #3 @32" O.C. |              |
| 2'-8"   | 1'-9"   | 8"  | 2'-9"   | 9"  | #4 @32" O.C. | #3 @27" O.C. |
| 3'-4"   | 2'-5"   | 8"  | 2'-4"   | 9"  | #4 @32" O.C. | #3 @27" O.C. |
| 4'-0"   | 3'-1"   | 10" | 2'-9"   | 9"  | #4 @32" O.C. | #3 @27" O.C. |
| 4'-8"   | 3'-10"  | 12" | 3'-4"   | 10" | #5 @32" O.C. | #3 @27" O.C. |
| 5'-4"   | 4'-6"   | 14" | 3'-8"   | 10" | #4 @16" O.C. | #4 @30" O.C. |
| 6'-0"   | 5'-3"   | 16" | 4'-2"   | 12" | #6 @24" O.C. | #4 @25" O.C. |

| 12 INCH REINFORCED CONCRETE MASONRY WALL |  |         |  |     |  |         |  |     |  |              |  |              |  |
|------------------------------------------|--|---------|--|-----|--|---------|--|-----|--|--------------|--|--------------|--|
| H                                        |  | X       |  | A   |  | B       |  | T   |  | Y-BARS       |  | X-BARS       |  |
| ft.-in.                                  |  | ft.-in. |  | in. |  | ft.-in. |  | in. |  |              |  |              |  |
| 5'-4"                                    |  | 4'-8"   |  | 14" |  | 3'-8"   |  | 10" |  | #4 @24" O.C. |  | #3 @25" O.C. |  |
| 6'-0"                                    |  | 5'-4"   |  | 15" |  | 4'-2"   |  | 12" |  | #4 @16" O.C. |  | #4 @30" O.C. |  |
| 6'-8"                                    |  | 6'-"    |  | 16" |  | 4'-6"   |  | 12" |  | #6 @24" O.C. |  | #4 @22" O.C. |  |
| 7'-4"                                    |  | 6'-8"   |  | 18" |  | 4'-10"  |  | 12" |  | #5 @16" O.C. |  | #5 @26" O.C. |  |
| 8'-0"                                    |  | 7'-4"   |  | 20" |  | 5'-4"   |  | 12" |  | #7 @24" O.C. |  | #5 @21" O.C. |  |
| 8'-8"                                    |  | 8'-0"   |  | 20" |  | 5'-8"   |  | 12" |  | #7 @16" O.C. |  | #5 @21" C.C. |  |

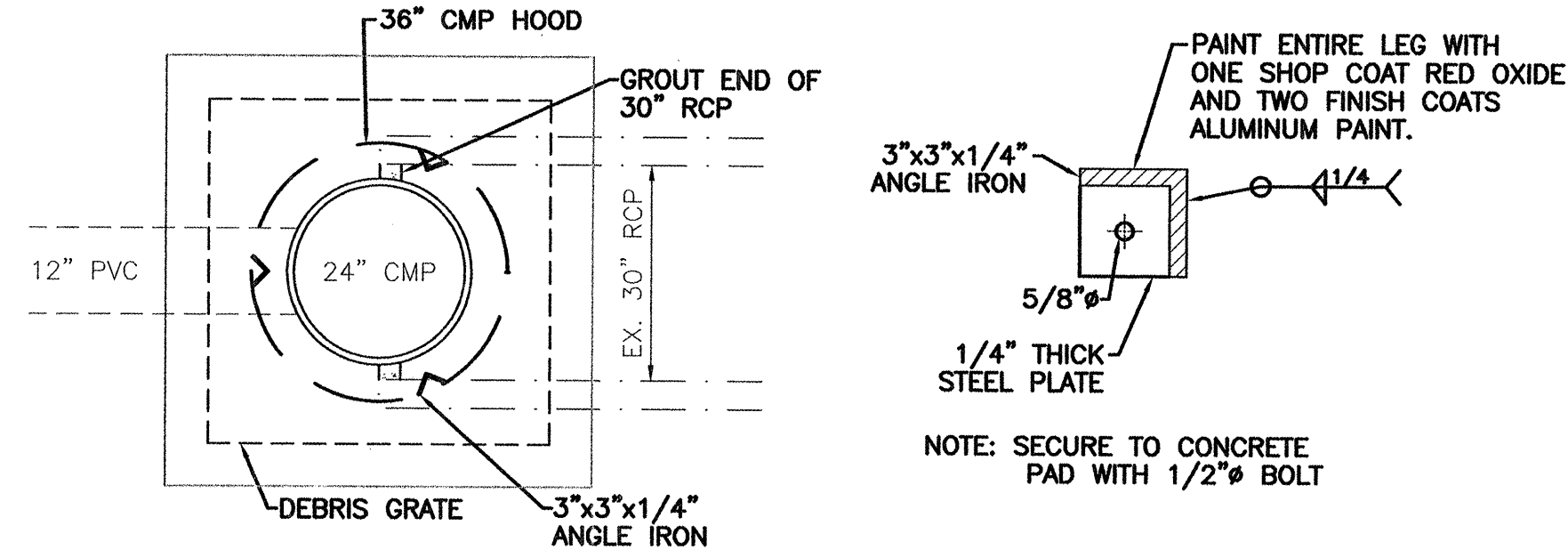
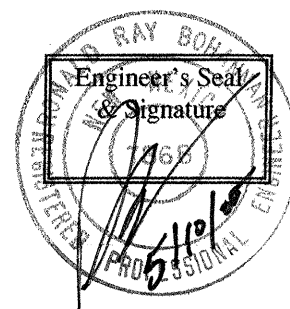
- GENERAL NOTES:
- ALL CONCRETE IS TO BE 4000 PSI @ 28 DAYS.
  - MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE  $\pm 2.0\%$ .
  - BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
  - ALL BARS ARE TO BE GRADE 60, ASTM 615.
  - TRUSS TYPE DWR-0-WALL EVERY OTHER COURSE.
  - DOWELS SHALL BE AT LEAST EQUAL IN SIZE AND SPACING TO Y-BARS. SHALL PROJECT A MINIMUM OF 30 BAR DIA. INTO THE FILLED BLOCK CORES, AND SHALL EXTEND TO THE TOE OF THE FOOTING.
  - PROVIDE KEY FOR 8" AND 12" WALLS WHERE H EXCEEDS A'-0".
  - USE EITHER EXPANSION JOINTS ON 20' CENTERS OR PILASTERS EVERY 16'.
  - #3 BARS TO BE USED ON WALLS LESS THAN 2'-8" IN HEIGHT.
  - #4 BARS TO BE USED ON WALLS GREATER THAN OR EQUAL TO 2'-8".
  - X BARS TO BE USED ON WALLS EXCEEDING 2'-8".
  - BOND BEAM, 1-#4 BARS FOR WALLS UNDER 3'-4", 2-#4 BARS FOR WALLS UNDER 5'-4", 2-#5 BARS FOR WALLS OVER 5'-4".

RETAINING WALL DETAIL  
NTS

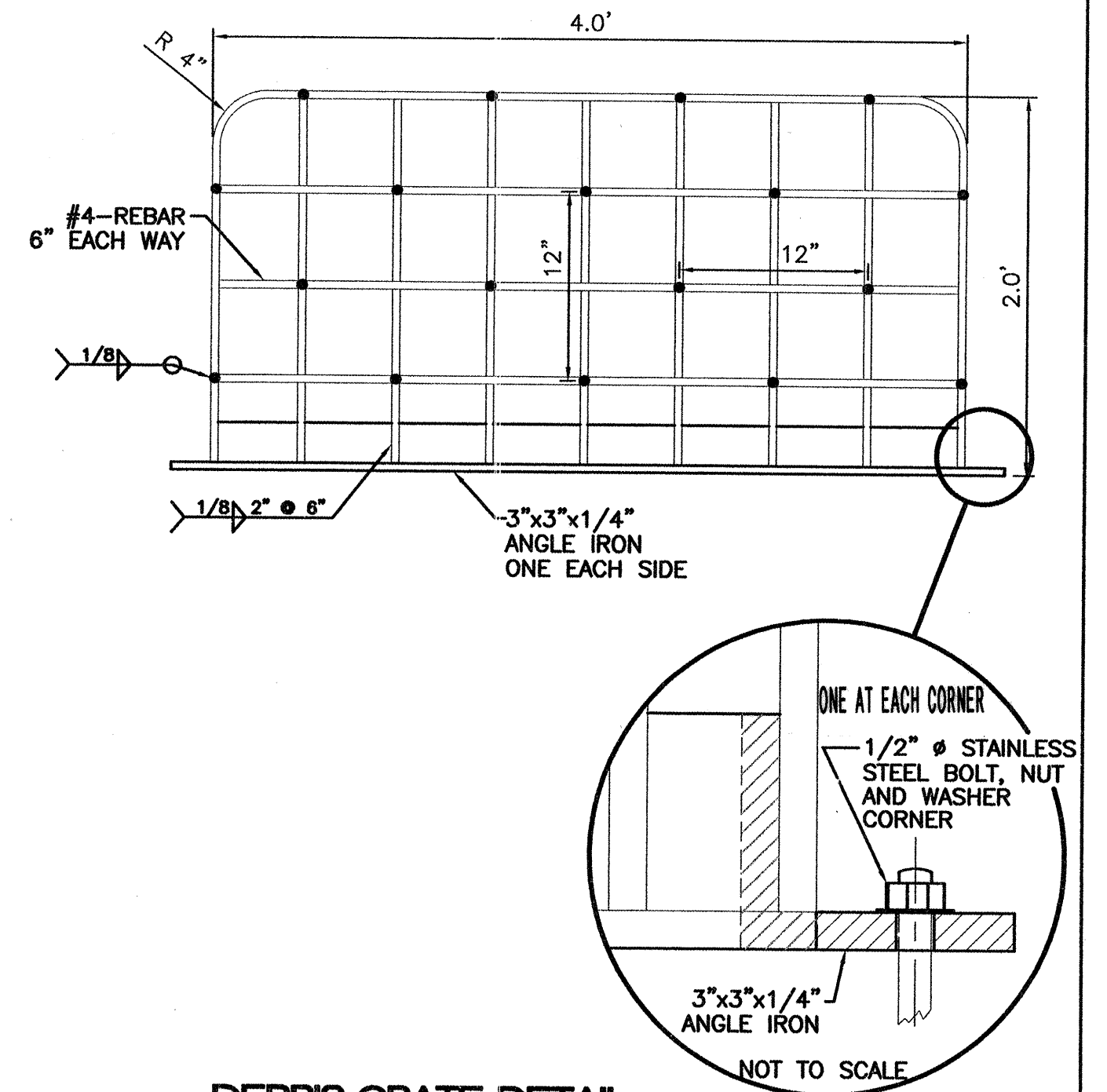
CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Ronald R. Bohannon, of the firm of Tierra West LLC, a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me, or personnel under my direction with survey information provided by

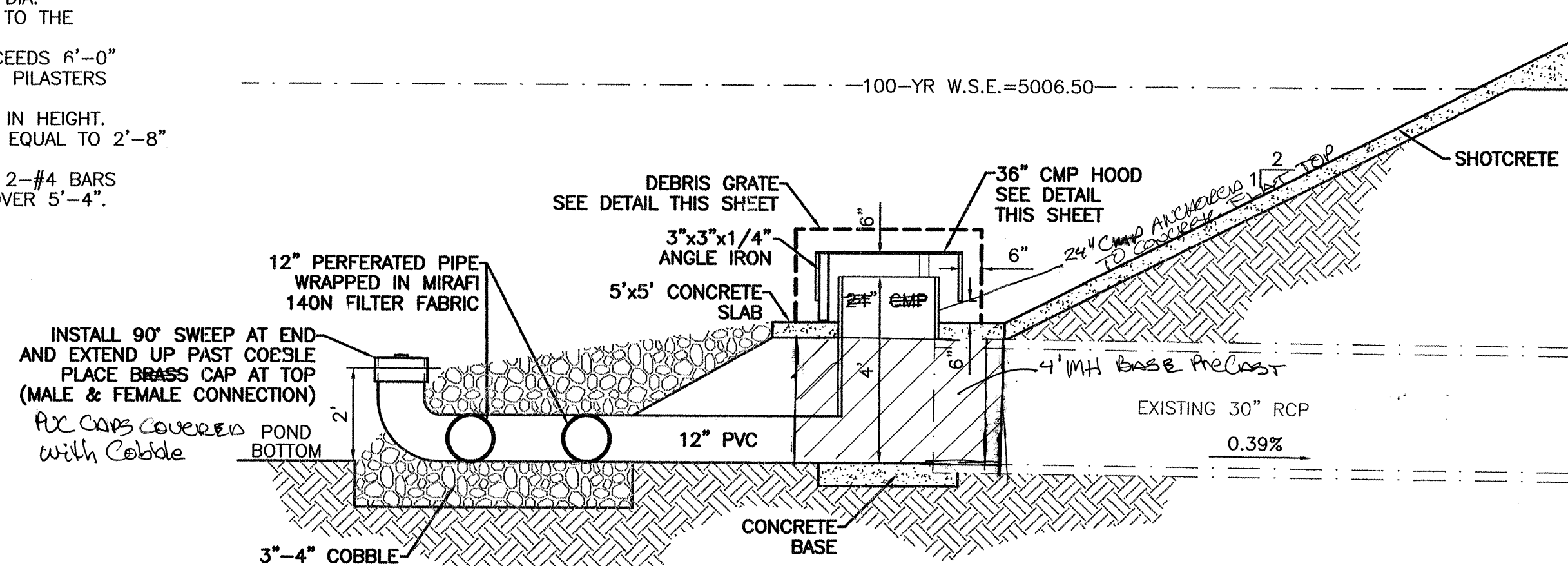
Russ Hugg, of Surv-Tek Inc., NMPS number 9750



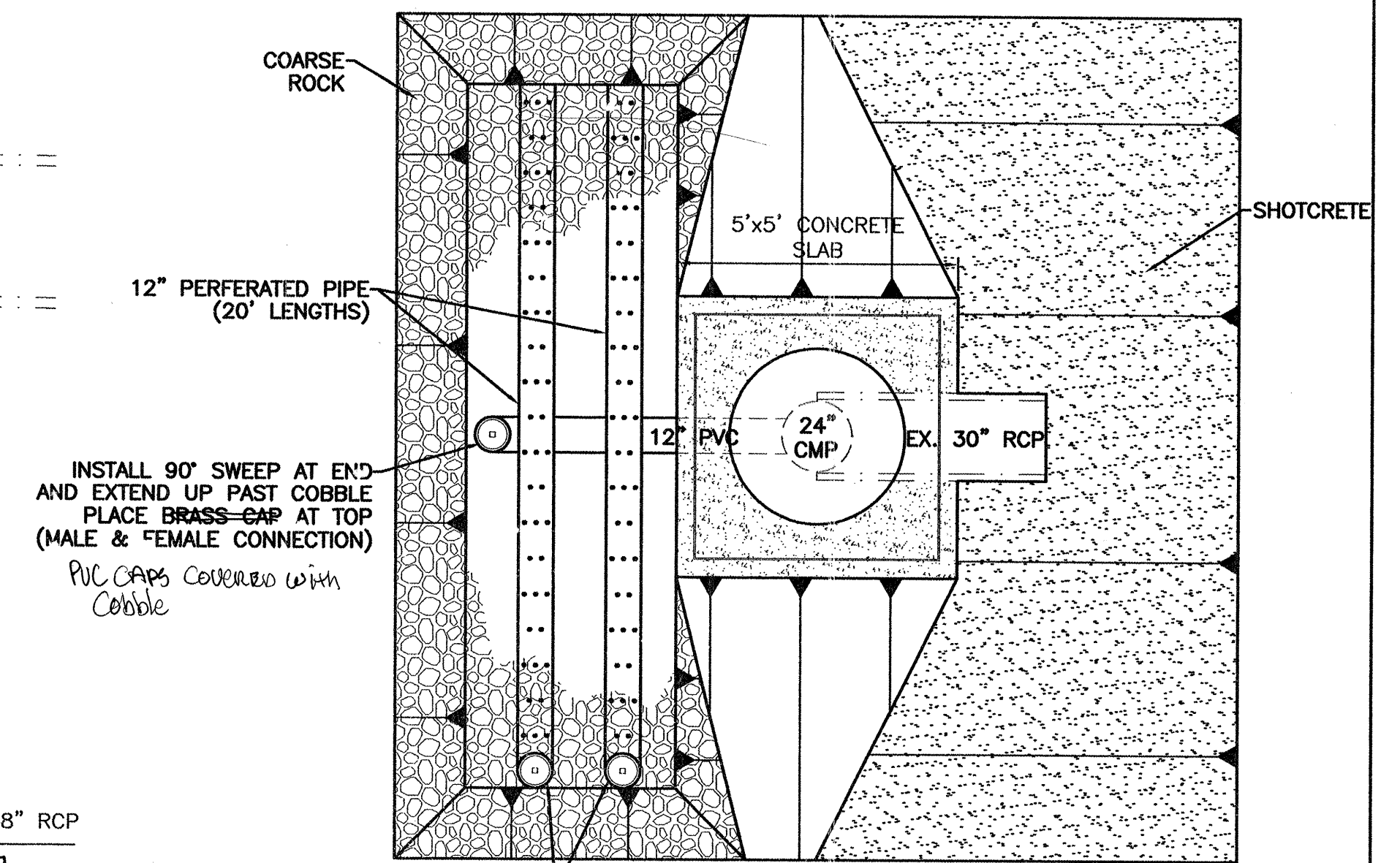
36" CMP HOOD DETAILS  
NTS



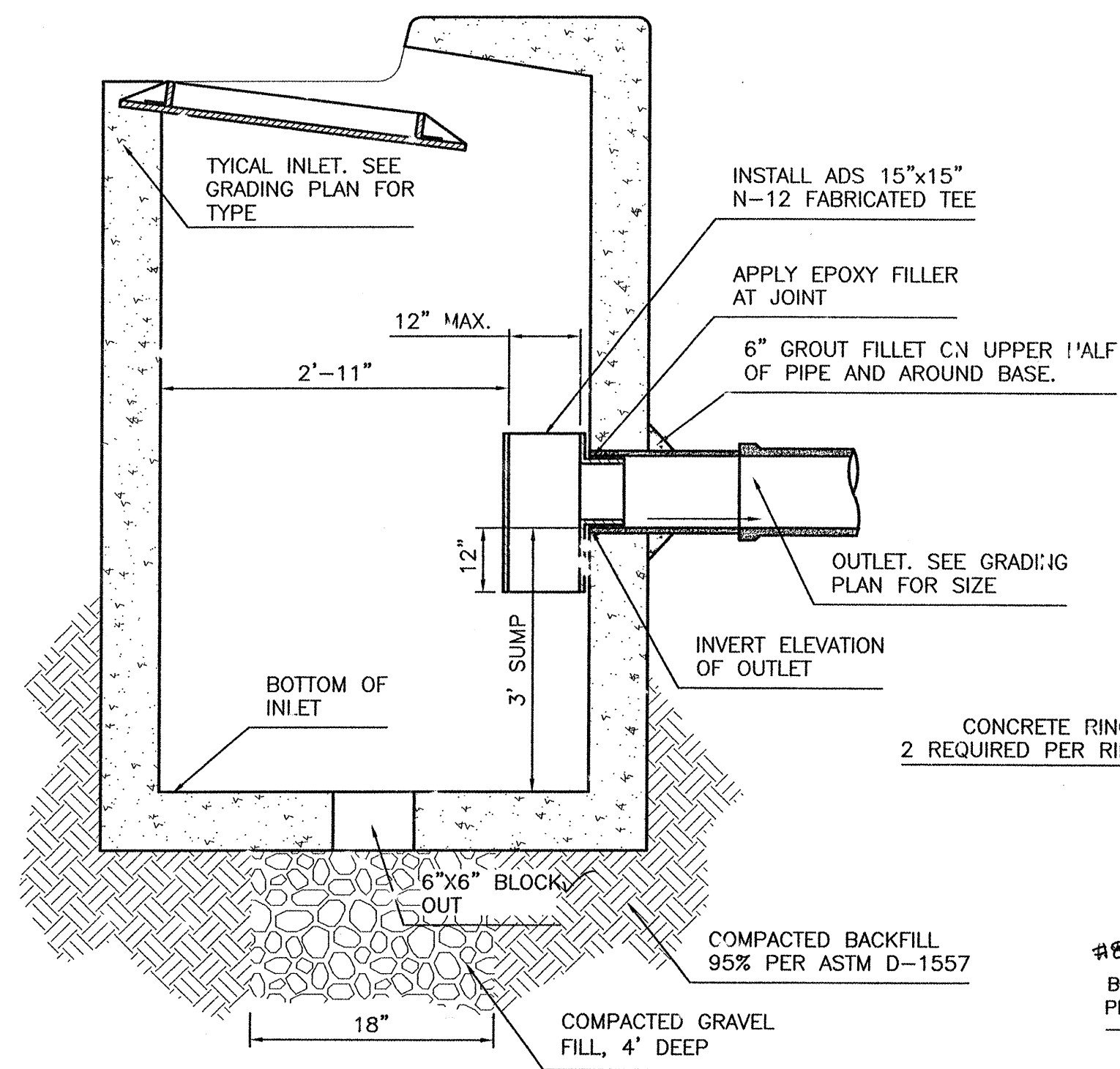
DEBRIS GRATE DETAIL  
NTS



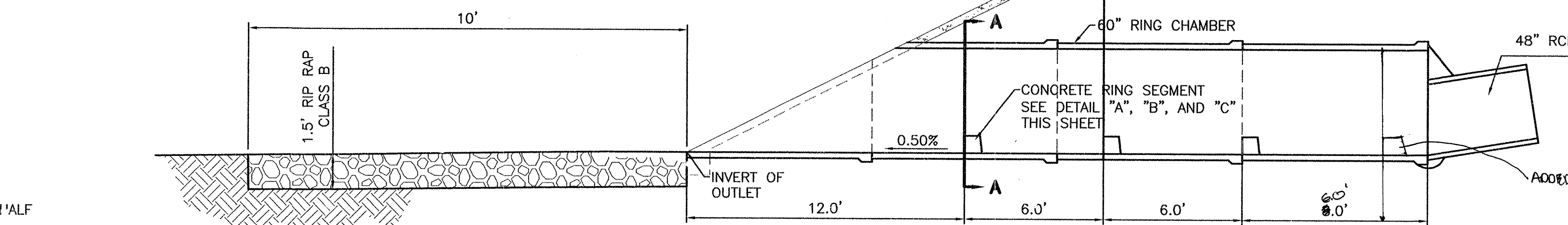
BAFFLE DETAIL  
SCALE: NTS



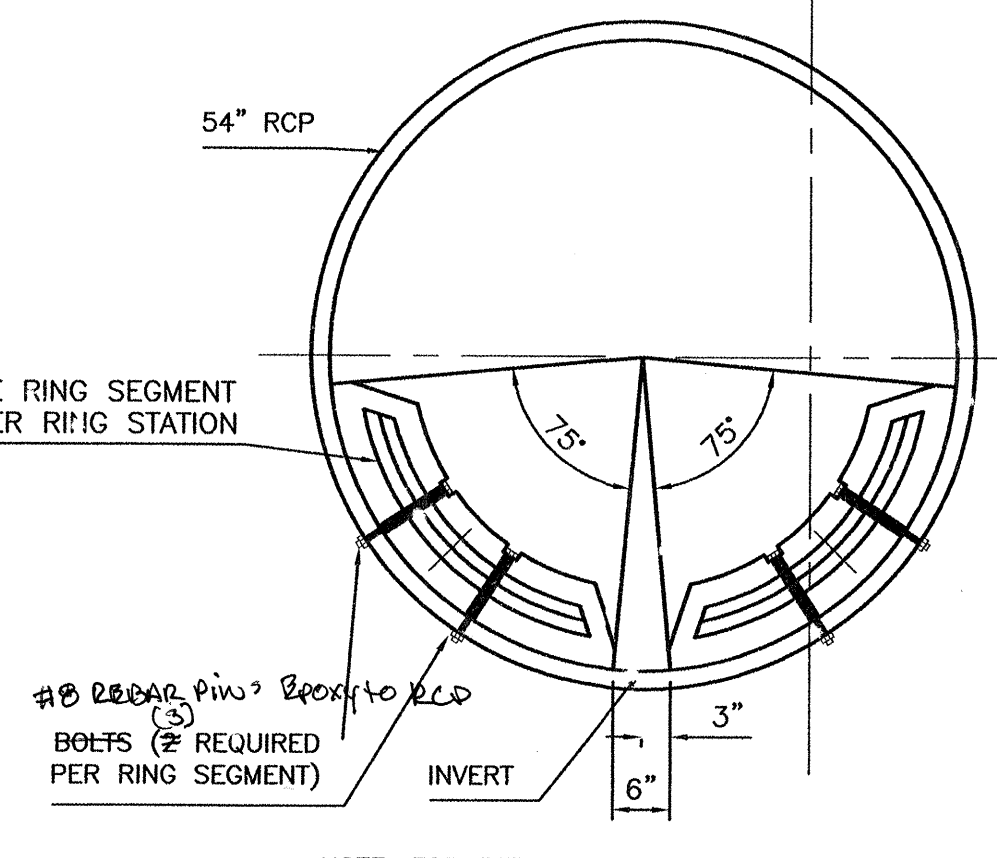
BAFFLE DETAIL PLAN VIEW  
SCALE: NTS



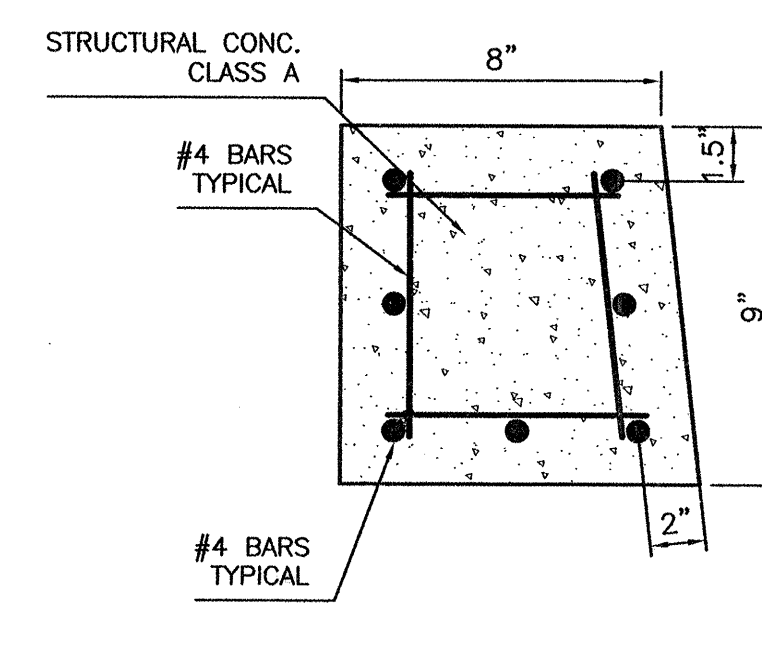
TYPICAL WATER QUALITY INLET DETAIL  
NTS



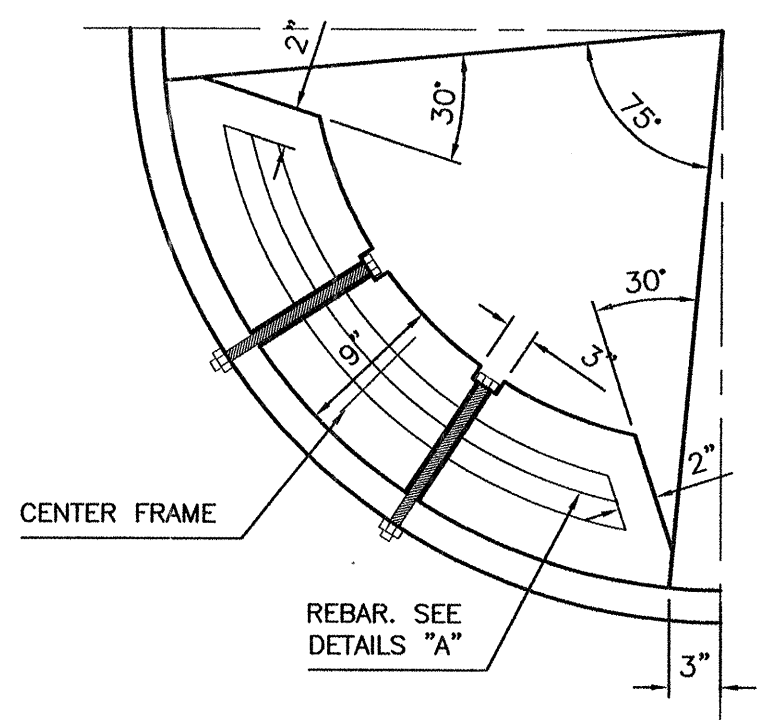
60" RING CHAMBER DETAIL  
NTS



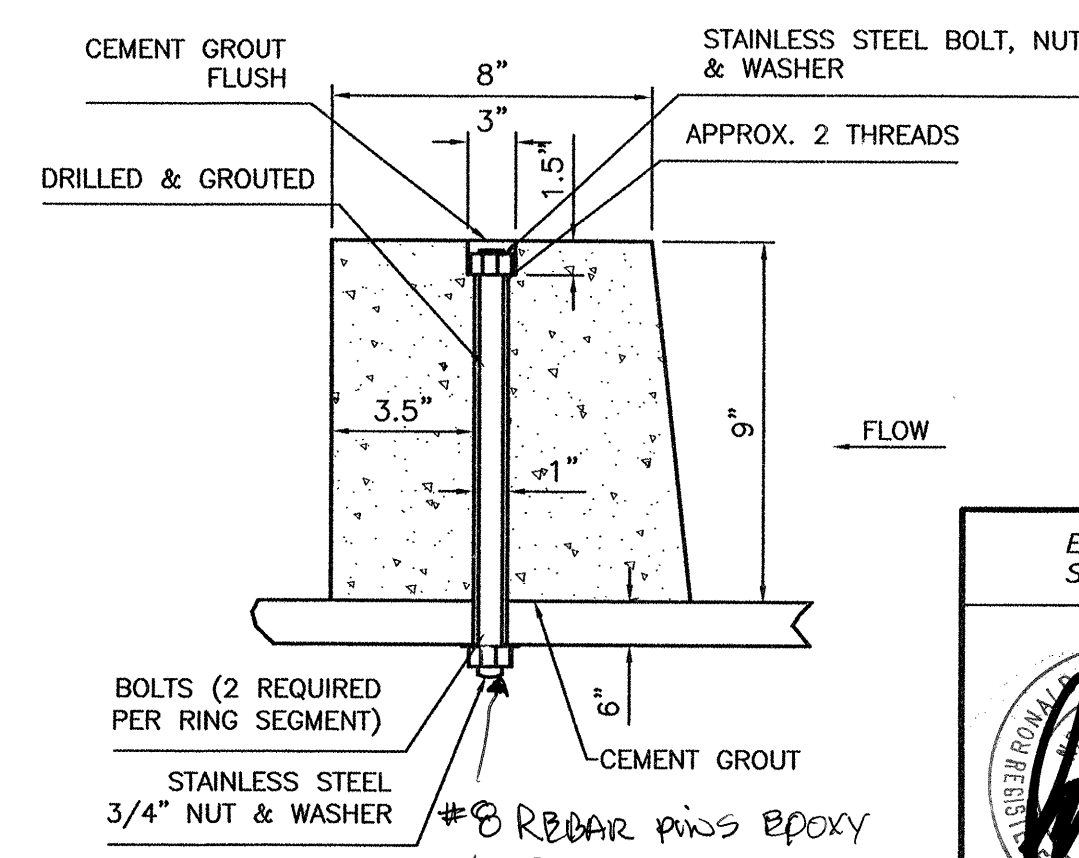
SECTION A-A RING SEGMENT  
NTS



DETAIL 'A'  
NTS



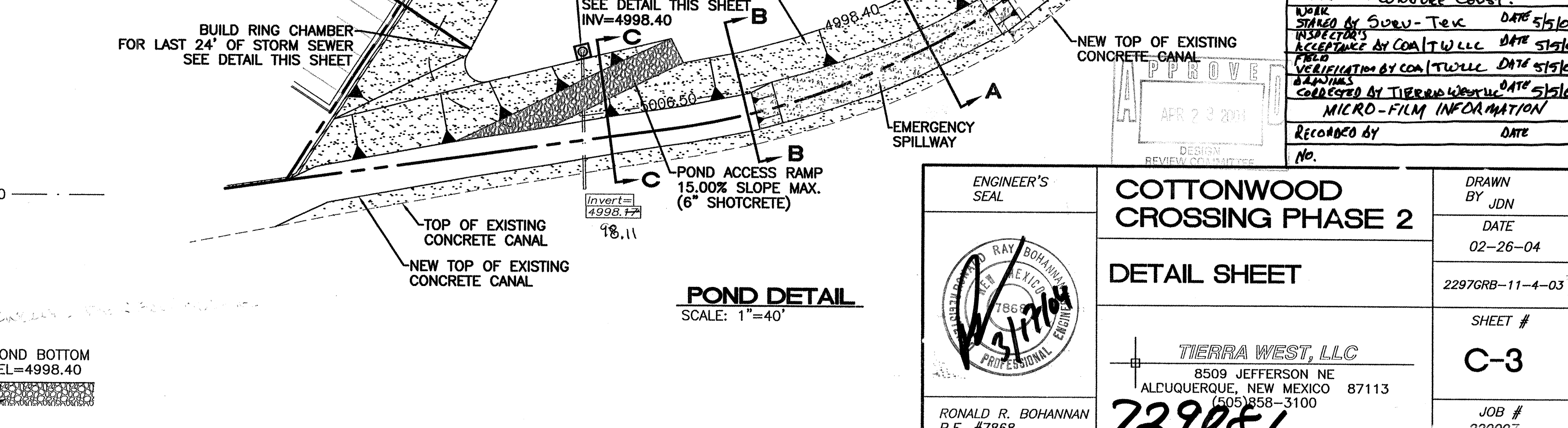
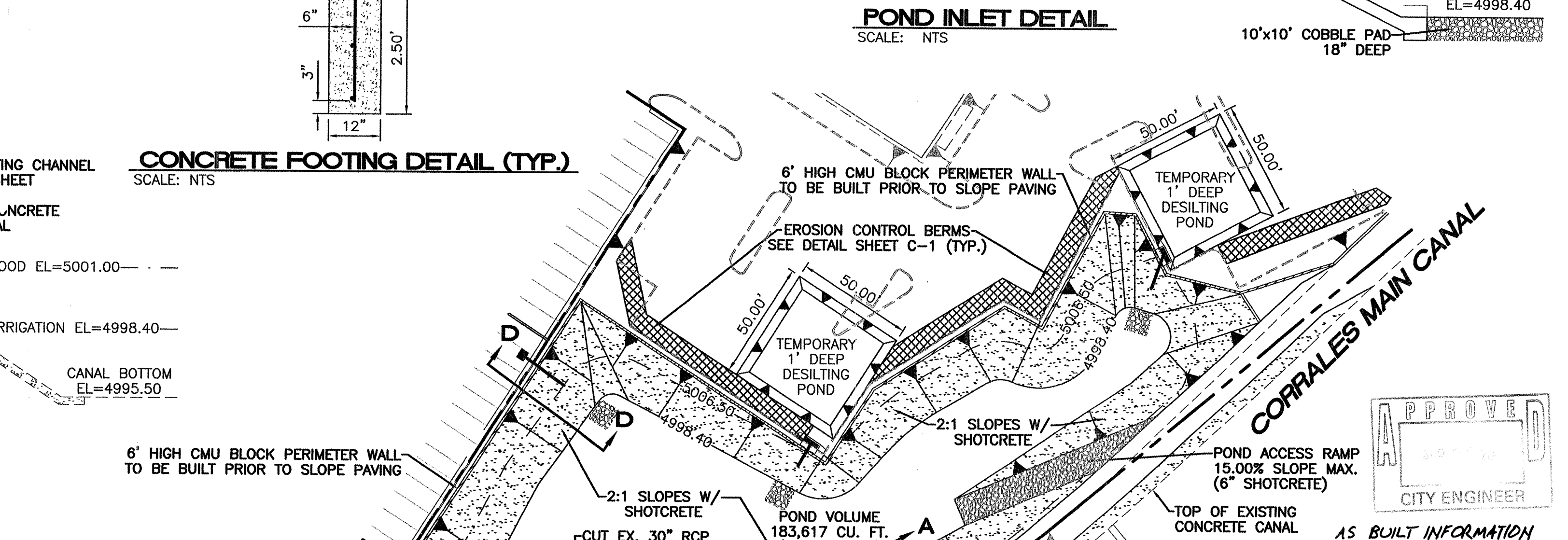
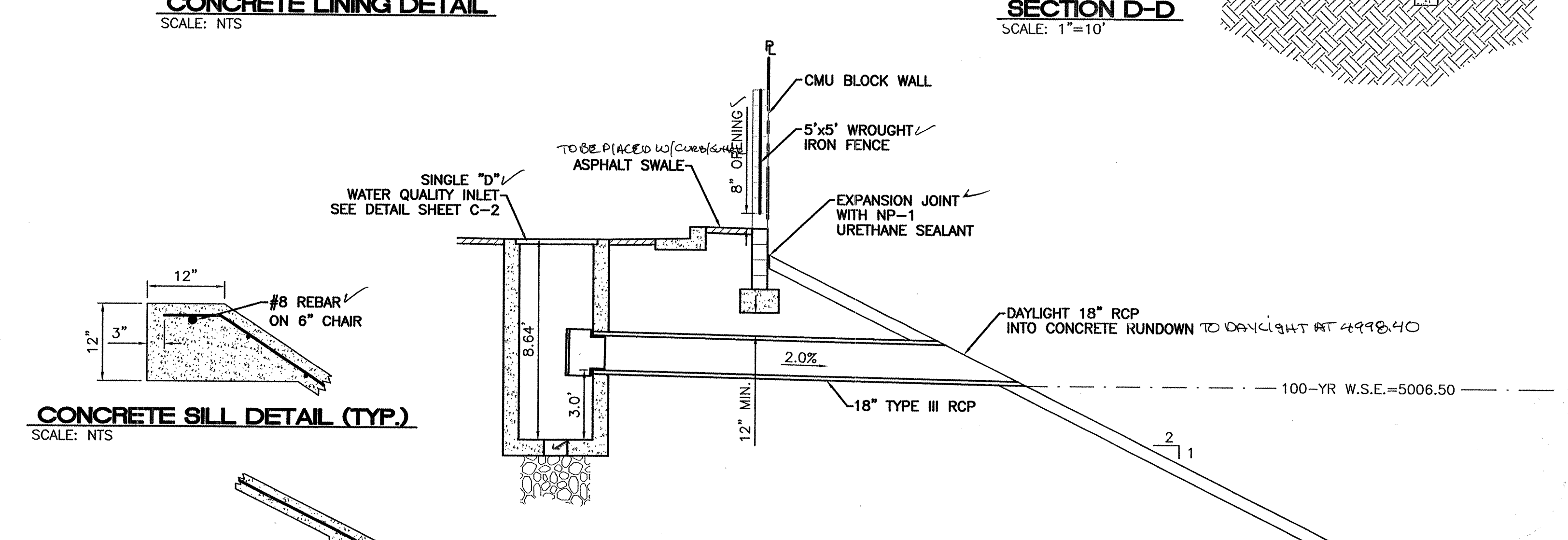
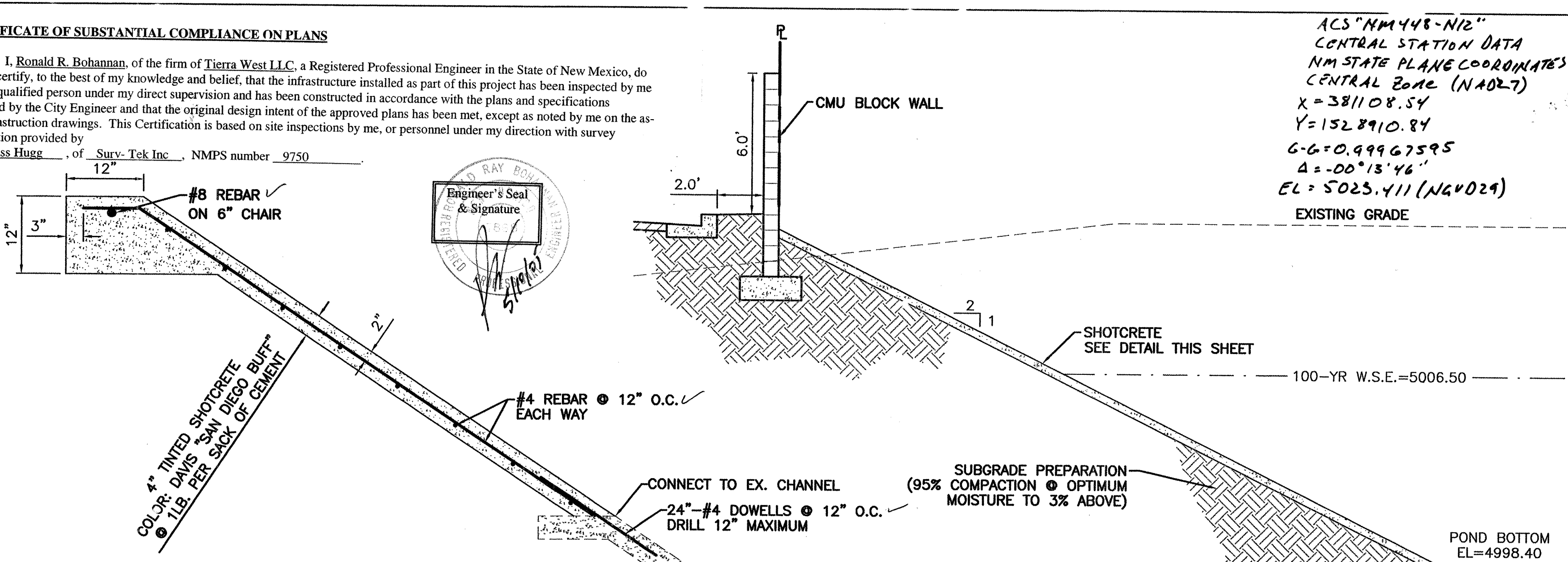
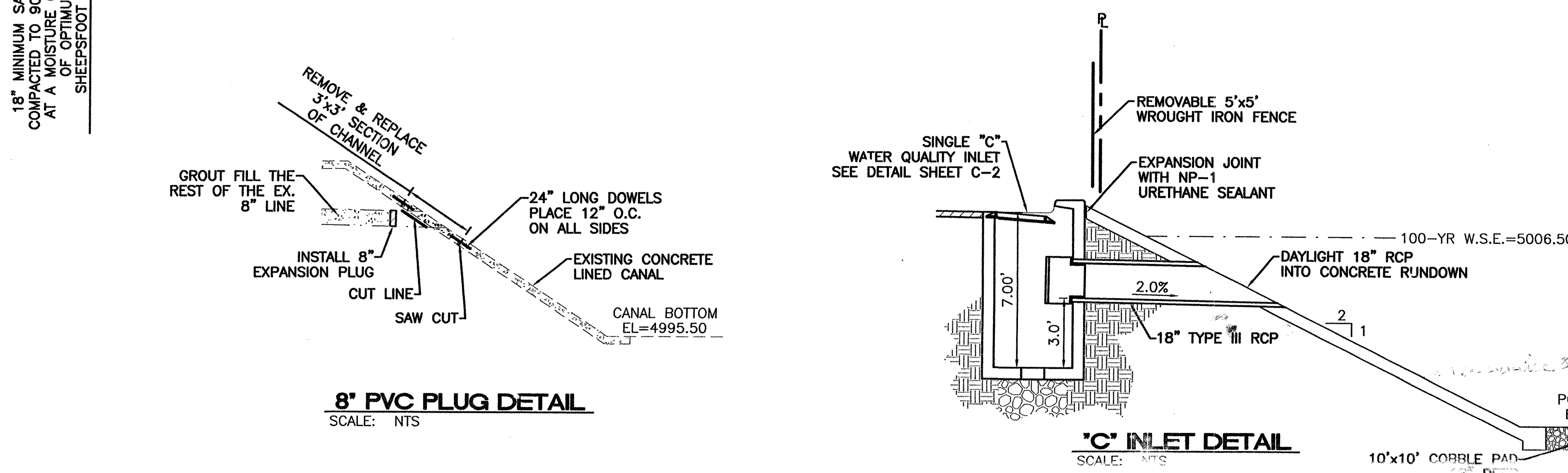
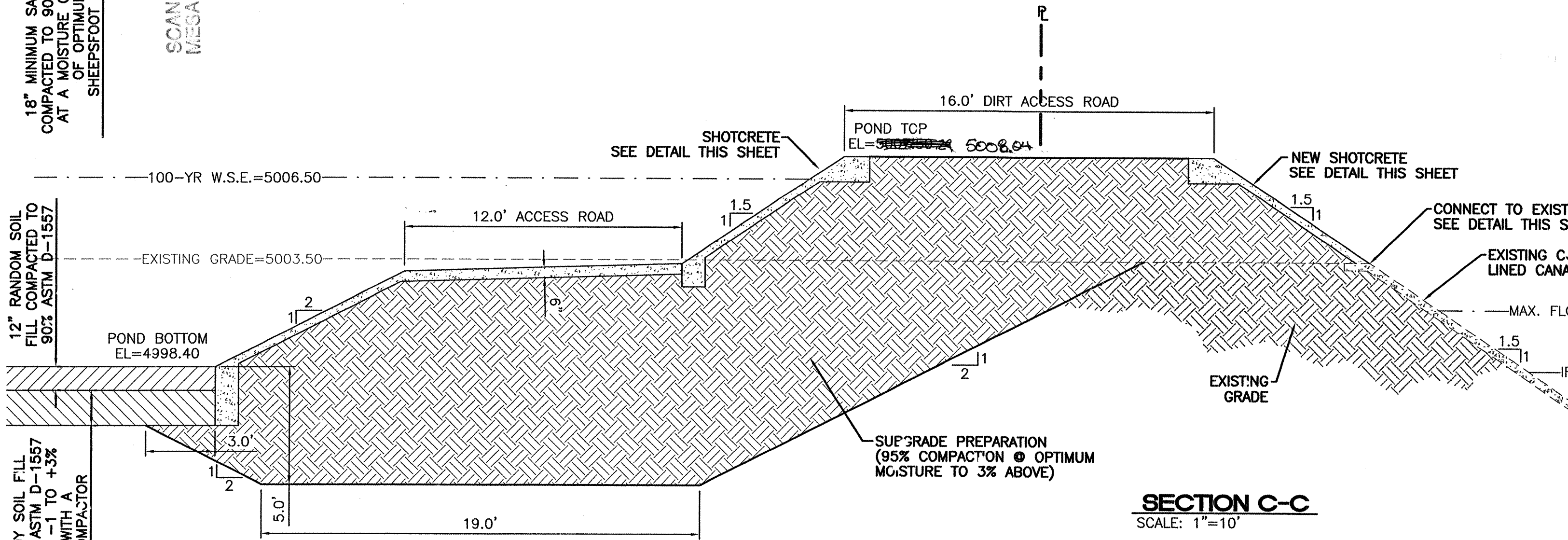
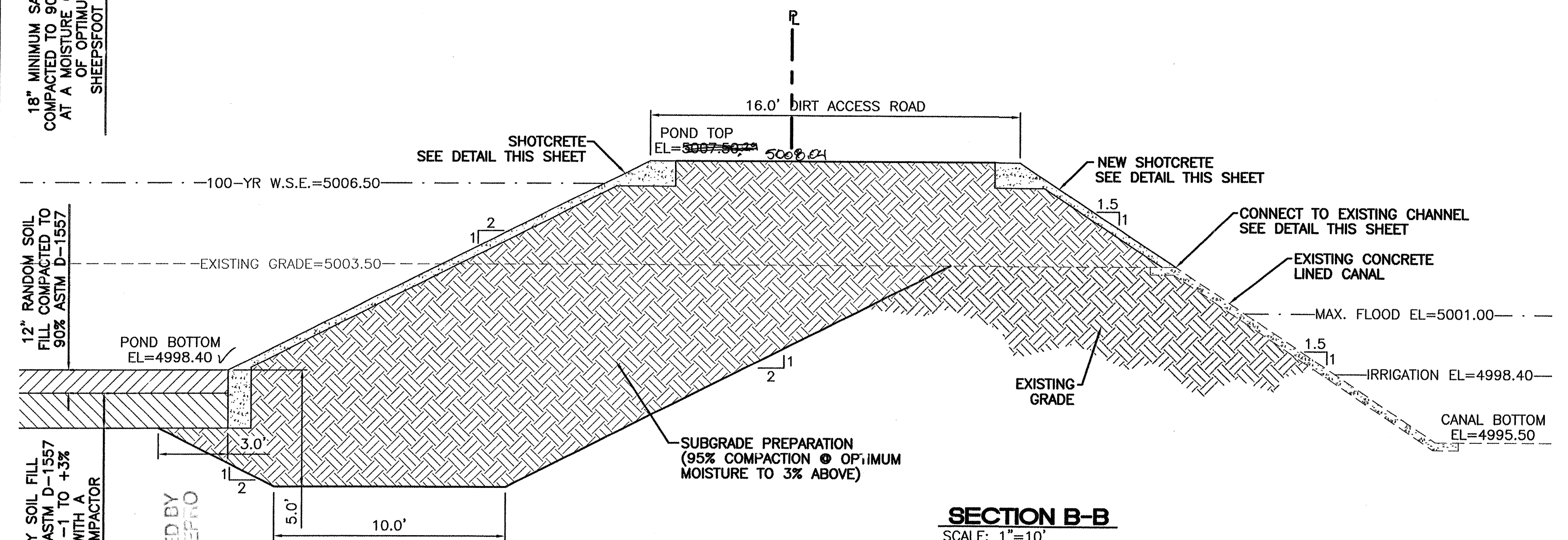
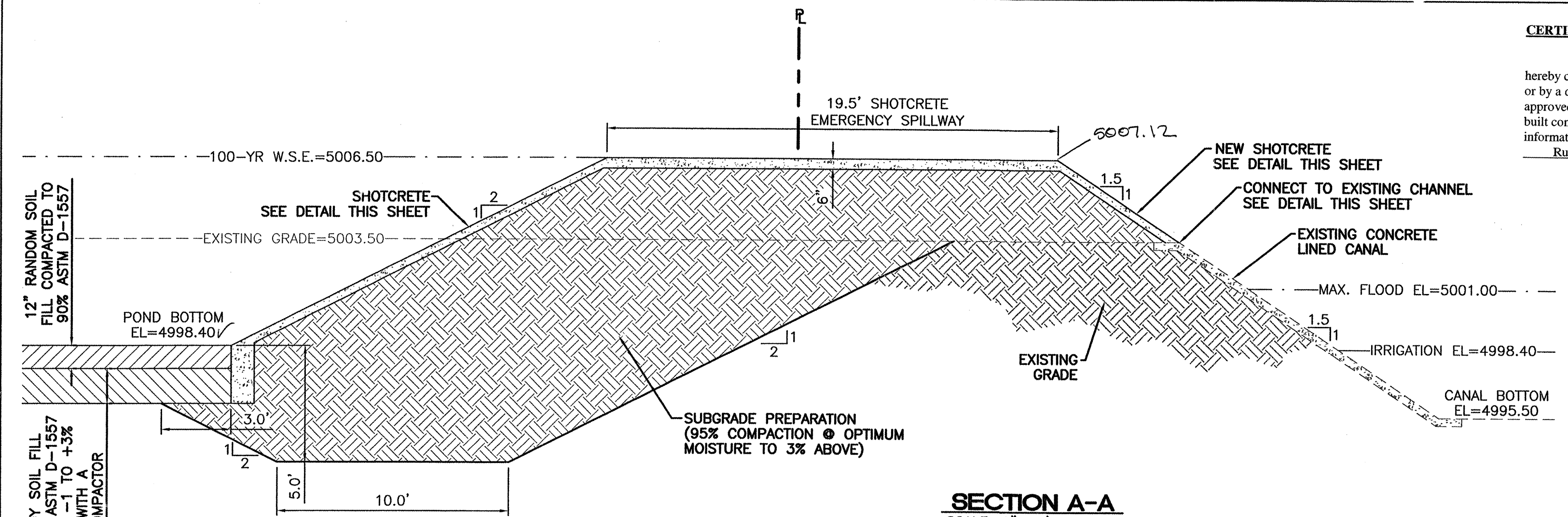
DETAIL 'B'  
NTS



DETAIL 'C'  
NTS

|                                                                                                    |                                                   |                          |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------|
| <p>ENGINEER'S SEAL</p> <p>RONALD R. BOHANNAN<br/>P.E. #7868</p>                                    | <p>COTTONWOOD CROSSING PHASE 2</p>                | <p>DRAWN BY JDN</p>      |
|                                                                                                    | <p>DETAIL SHEET</p>                               | <p>DATE<br/>02-26-04</p> |
| <p>TIERRA WEST, LLC<br/>8509 JEFFERSON NE<br/>ALBUQUERQUE, NEW MEXICO 87113<br/>(505) 858-3100</p> | <p>729081</p>                                     | <p>2297GRB-11-4-03</p>   |
| <p>APPROVED<br/>APR 23 2004<br/>DESIGN REVIEW COMMITTEE</p>                                        | <p>APPROVED<br/>APR 23 2004<br/>CITY ENGINEER</p> | <p>SHEET #<br/>C-2</p>   |
| <p>JOB #<br/>220097</p>                                                                            |                                                   |                          |





**CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS**

I, Ronald R. Bohannon, of the firm of Tierra West LLC, a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-information provided by Russ Hugg, of Surv. Tek Inc., NMPS number 9750.

Engineer's Seal & Signature  
RAY BOHANNON  
5/10/10

ACS "NM448-N12"  
CENTRAL STATION DATA  
NM STATE PLANE COORDINATES  
CENTRAL ZONE (NAD83)  
X=381108.54  
Y=1528910.84  
G-G=0.99967595  
A=0.001346"  
EL=5023.411 (NGVD29)  
EXISTING GRADE

APPROVED  
CITY ENGINEER

AS BUILT INFORMATION  
CONTRACTOR CORROBORATE CONST.  
WORK SHOWN BY SURVEY-TEK DATE 5/10/10  
ACCEPTANCE BY COM/TW/LLC DATE 5/10/10  
FIELD VERIFICATION BY COM/TW/LLC DATE 5/10/10  
RECORDED BY TIERRA WEST, LLC DATE 5/10/10  
MICRO-FILM INFORMATION  
Recorded by No.

|                                                                     |                                                                                          |              |                 |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------|-----------------|
| ENGINEER'S SEAL<br>RAY BOHANNON<br>5/10/10<br>PROFESSIONAL ENGINEER | <b>COTTONWOOD CROSSING PHASE 2</b>                                                       |              | DRAWN BY JDN    |
|                                                                     | <b>DETAIL SHEET</b>                                                                      |              | DATE 02-26-04   |
| RONALD R. BOHANNON<br>P.E. #7868                                    | TIERRA WEST, LLC<br>8509 JEFFERSON NE<br>ALBUQUERQUE, NEW MEXICO 87113<br>(505) 258-3100 |              | 2297GRB-11-4-03 |
|                                                                     | 729081                                                                                   |              | SHEET # C-3     |
|                                                                     |                                                                                          | JOB # 220097 |                 |



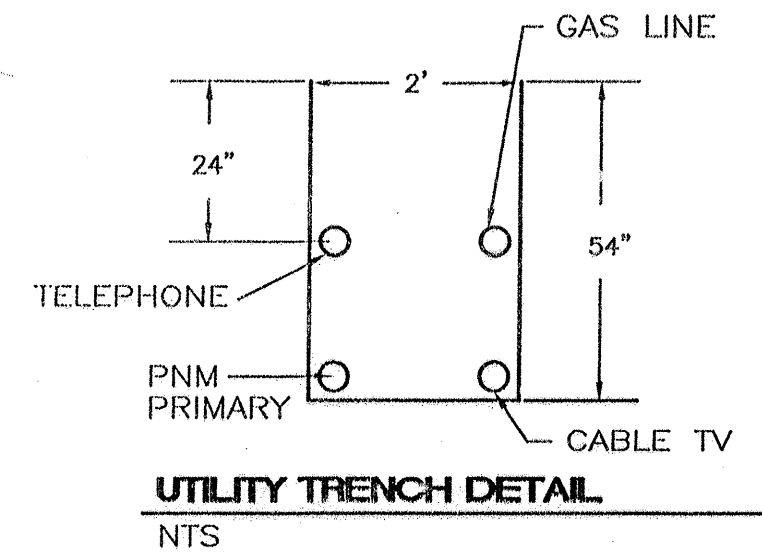
- LEGEND**
- EXISTING SAS MANHOLE
  - EXISTING SANITARY SEWER LINE
  - PROPOSED SAS MANHOLE
  - PROPOSED SAS CLEANOUT
  - DIRECTION OF FLOW
  - 8" SAS
  - PROPOSED SANITARY SEWER LINE
  - SANITARY SEWER SERVICE LINE
  - EXISTING METER
  - EXISTING VALVE W/BOX
  - EXISTING FIRE HYDRANT
  - EXISTING WATER LINE
  - PROPOSED METER
  - PROPOSED VALVE W/BOX
  - PROPOSED FIRE HYDRANT
  - PROPOSED WATER LINE
  - EXISTING STORM SEWER MANHOLE
  - EXISTING STORM SEWER LINE
  - PROPOSED STORM SEWER MANHOLE
  - PROPOSED STORM SEWER LINE
  - EXISTING CURB & GUTTER
  - PROPOSED CURB & GUTTER
  - BOUNDARY LINE
  - PROPOSED SIDEWALK
  - PROPOSED RETAINING WALL

**GENERAL NOTES:**

1. 4" MINIMUM BURY REQUIRED FOR ALL UTILITIES UNLESS OTHERWISE NOTED.
2. REFERENCE ARCHITECTURAL PLANS FOR WATER LINE RISER LOCATIONS.
3. CLEAN OUTS ARE TO BE BUILT PER UNIFORM PLUMBING CODE STANDARDS.
4. ALL BLOCKING IS PER CITY OF ALBUQUERQUE STANDARD DWG. 2320.
5. ALL PIPE MATERIAL TO BE USED PER UPC.

ACS "NM 1148-N12"  
CENTRAL STATION DATA  
NM STATE PLANE COORDINATES  
Central Zone (NAD 83)  
X=381108.54  
Y=1528910.94  
G=40.99967595  
A=-00°13'46"  
EL=5023.411 (NAVD)

COORS ROAD N.W. (NEW MEXICO STATE HIGHWAY NO. 448)  
150' Right of Way



**AS BUILT INFORMATION**

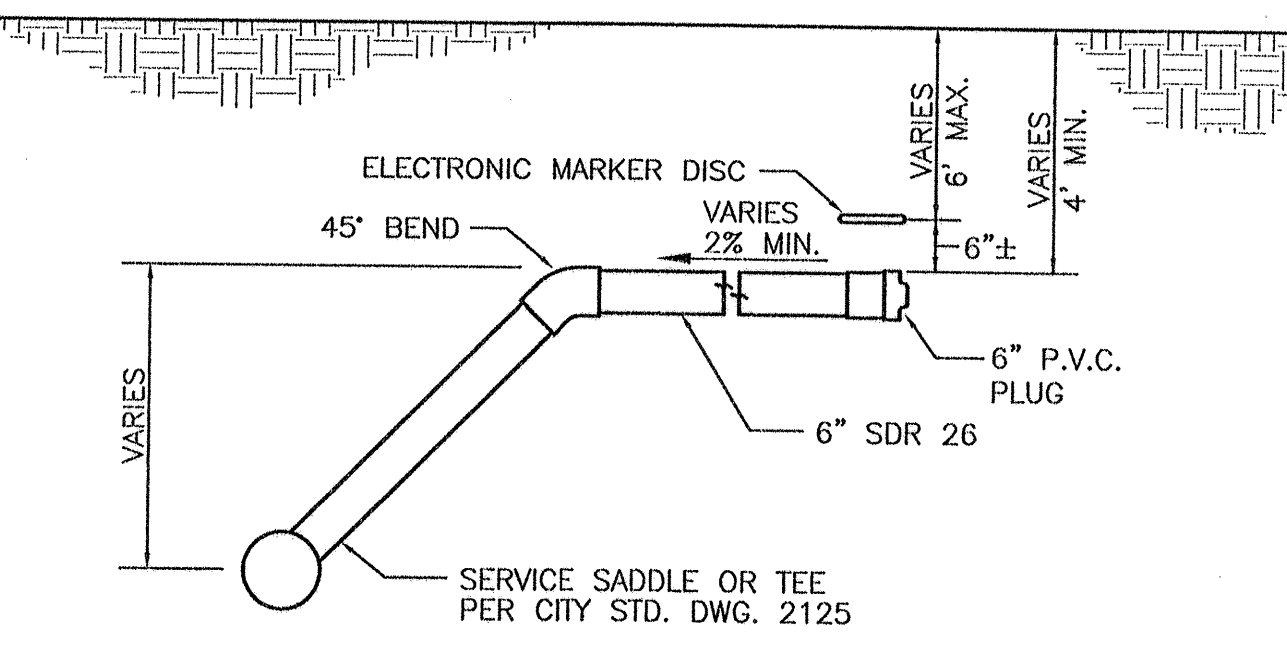
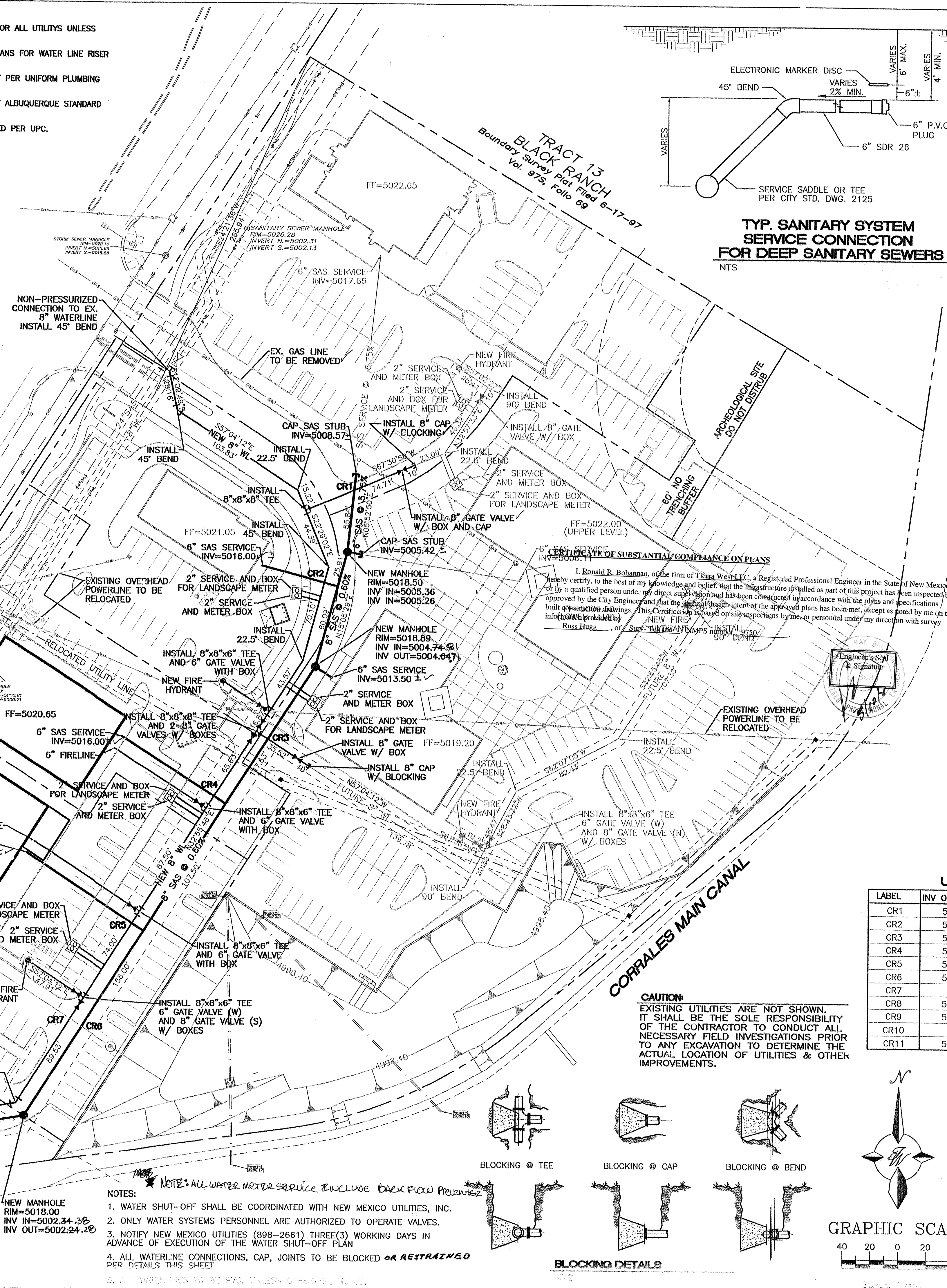
|                        |                       |
|------------------------|-----------------------|
| CONTRACTOR             | Concrete Construction |
| DATE                   | 5-5-05                |
| DESIGNED BY            | Sub-Tex               |
| DATE                   | 5-5-05                |
| INSPECTED BY           | INSPECTOR             |
| DATE                   | 5-5-05                |
| FIELD VERIFICATION BY  | TERRA WEST, LLC       |
| DATE                   | 5-5-05                |
| PLANNING COLLECTED BY  | TERRA WEST, LLC       |
| DATE                   | 5-5-05                |
| MICRO-FILM INFORMATION |                       |
| RECORDED BY            | DATE                  |
| NO.                    |                       |

SCANNED BY  
MESA REPRO

SANITARY SEWER MANHOLE  
RIM=5002.31  
INVERT N=5002.31  
INVERT S=5002.31

CONNECT TO EX.  
MANHOLE  
INV=5000.51

LOT 1  
COTTONWOOD CROSSING  
Filed 7-9-92, Vol. 980, Folio 126



**TYP. SANITARY SYSTEM  
SERVICE CONNECTION  
FOR DEEP SANITARY SEWERS**

NTS

THE FOLLOWING TABLES WERE CREATED USING EBAA FROM INC. SOFTWARE FOR RESTRAINING JOINTS WITH THESE CRITERIA:

DEPTH OF BURY: 3.0' MINIMUM  
SAFETY FACTOR: 1.5 TO 1  
PIPE MATERIAL: PVC  
SOIL TYPE: GM/SM-SILTY GRAVEL/SILTY SAND, GRAVEL-SAND MIXTURES  
TEST PRESSURE: 150 PSI  
PIPE BEDDED IN 4" MINIMUM LOOSE SOIL  
TRENCH TYPE 3: BACKFILL LIGHTLY CONSOLIDATED TO TOP OF PIPE

THESE LENGTHS WILL BE AFFECTED IF THE TYPE OF MATERIAL, GREATER DEPTH OF BURY, ETC. CHANGES. THESE MUST BE RECALCULATED BY THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.

**RESTRAINED JOINT LENGTHS FOR TEES\***

| SIZE     | 5' | 4' | 3' | 2' | 1' | 0' |
|----------|----|----|----|----|----|----|
| 12x12x12 | 14 | 18 | 22 | 25 | 29 | 33 |
| 12x12x10 | 6  | 10 | 14 | 19 | 23 | 28 |
| 12x12x8  | 1  | 1  | 7  | 12 | 18 | 23 |
| 12x12x6  | 1  | 1  | 1  | 3  | 10 | 18 |
| 12x12x4  | 1  | 1  | 1  | 1  | 2  | 12 |
| 10x10x10 | 9  | 13 | 17 | 20 | 24 | 28 |
| 10x10x8  | 1  | 5  | 10 | 14 | 19 | 23 |
| 10x10x6  | 1  | 1  | 1  | 6  | 12 | 18 |
| 10x10x4  | 1  | 1  | 1  | 1  | 4  | 12 |
| 8x8x8    | 5  | 9  | 13 | 16 | 20 | 23 |
| 8x8x6    | 1  | 1  | 3  | 8  | 13 | 18 |
| 8x8x4    | 1  | 1  | 1  | 1  | 6  | 12 |
| 8x8x2    | 1  | 3  | 7  | 10 | 14 | 18 |
| 8x8x1    | 1  | 1  | 1  | 1  | 6  | 12 |

**RESTRAINED JOINT LENGTHS FOR HORIZONTAL BENDS, VALVES, AND DEAD ENDS (EACH SIDE)**

| SIZE | 90° | 45° | 22-1/2° | 11-1/4° | VALVES DEAD END |
|------|-----|-----|---------|---------|-----------------|
| 12   | 15  | 6   | 3       | 1       | 34              |
| 10   | 13  | 5   | 3       | 1       | 29              |
| 8    | 11  | 4   | 2       | 1       | 24              |
| 6    | 8   | 3   | 2       | 1       | 18              |
| 4    | 6   | 2   | 1       | N/A     | 13              |

**RESTRAINED JOINT LENGTHS FOR VERTICAL OFFSETS/BENDS (EACH SIDE)**

| SIZE     | 90°       | 45° | 22-1/2° | 11-1/4° |
|----------|-----------|-----|---------|---------|
| 12 UPPER | DON'T USE | 14  | 7       | 3       |
| 12 LOWER | DON'T USE | 4   | 2       | 1       |
| 10 UPPER | DON'T USE | 12  | 6       | 3       |
| 10 LOWER | DON'T USE | 3   | 2       | 1       |
| 8 UPPER  | DON'T USE | 10  | 5       | 1       |
| 8 LOWER  | DON'T USE | 3   | 1       | 1       |
| 6 UPPER  | DON'T USE | 8   | 4       | 2       |
| 6 LOWER  | DON'T USE | 2   | 1       | N/A     |
| 4 UPPER  | DON'T USE | 5   | 3       | N/A     |
| 4 LOWER  | DON'T USE | 1   | 1       | N/A     |

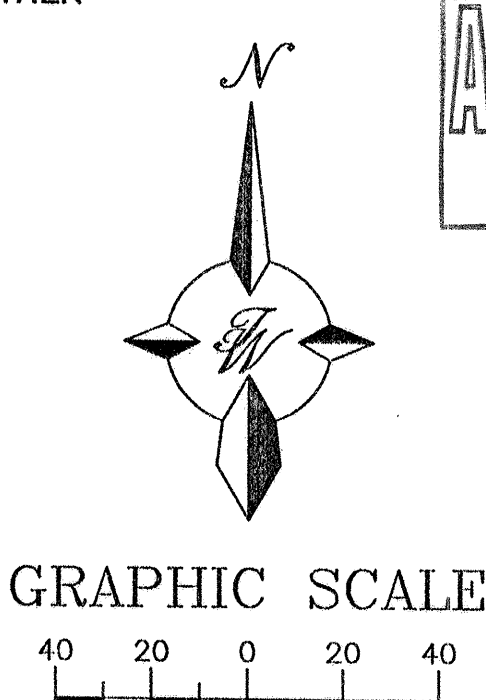
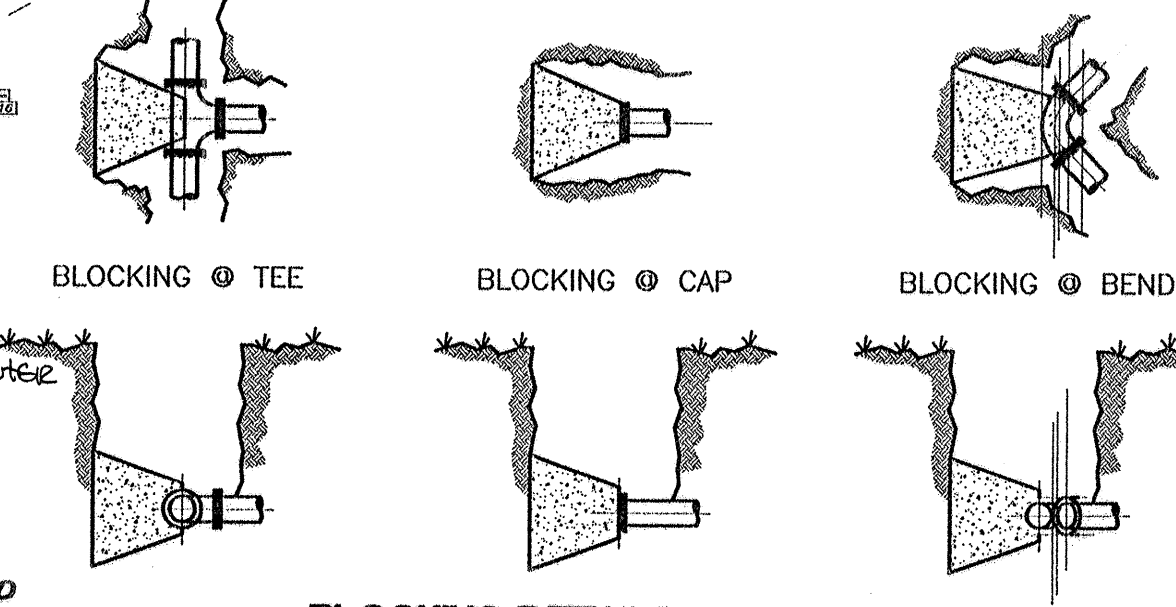
**NOTICE TO CONTRACTORS**

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARDS OF NEW MEXICO UTILITIES INCORPORATED AND WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1999), FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
6. MAINTENANCE OF THOSE FACILITIES NOT WITHIN DEDICATED EASEMENTS SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
8. CONTRACTOR IS RESPONSIBLE TO PROVIDE UTILITY STUBS 5' FROM BUILDING

**UTILITY CROSSING TABLE**

| LABEL | INV OF SAS PIPE | TOP OF SAS PIPE | BOTTOM OF WL | TOP OF WL | INV OF SD PIPE | TOP OF SD PIPE |
|-------|-----------------|-----------------|--------------|-----------|----------------|----------------|
| CR1   | 5005.63         | 5006.30         | 5017.73      | 5018.40   | -              | -              |
| CR2   | 5012.30         | 5012.97         | 5015.76      | 5016.43   | -              | -              |
| CR3   | 5004.27         | 5004.94         | 5012.53      | 5013.20   | -              | -              |
| CR4   | 5009.68         | 5010.18         | 5012.17      | 5012.84   | -              | -              |
| CR5   | 5008.74         | 5009.24         | 5011.79      | 5012.46   | -              | -              |
| CR6   | 5002.80         | 5003.47         | -            | -         | 5005.56        | 5009.81        |
| CR7   | -               | -               | 5013.06      | 5013.73   | 5005.77        | 5010.02        |
| CR8   | 5014.90         | 5015.40         | 5016.92      | 5017.59   | -              | -              |
| CR9   | 5000.63         | 5001.30         | 5025.33      | 5026.00   | -              | -              |
| CR10  | -               | -               | 5016.33      | 5017.00   | 5010.28        | 5014.53        |
| CR11  | 5000.39         | 5002.64         | -            | -         | 5010.71        | 5014.96        |

**CAUTION:**  
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



**APPROVED**  
APR 23 2004  
DESIGN REVIEW COMMITTEE

**ENGINEER'S SEAL**  
RONALD R. BOHANNAN  
2/3/04

**COTTONWOOD CROSSING PHASE 2**  
**MASTER UTILITY PLAN**

**APPROVED**  
APR 30 2004  
CITY ENGINEER

**729081**

**7 OF 9**







