

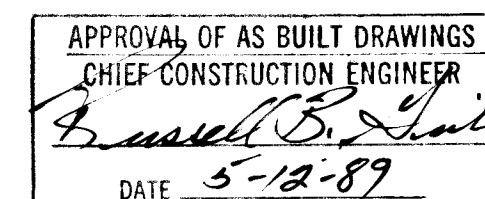
CONSTRUCTION PLANS
FOR
**WATERLINE EXTENSION
AND
DRAINAGE IMPROVEMENTS**

FOR
TRACTS A-1 & A-2 BLOCK 123
PRINCESS JEANNE ADDITION(Phase I)
MARCH 1988

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TOPOGRAPHIC MAP
3	GRADING PLAN (FOR REFERENCE ONLY)
4	WATERLINE EXTENSION LAYOUT
5	WATERLINE PLAN & PROFILE
6	CHANNEL DETAILS (FOR REFERENCE ONLY)
7	GRADING DETAILS (FOR REFERENCE ONLY)

NOTE:SHEETS 3,6 & 7 ARE
FOR REFERENCE ONLY-
NOT PART OF THIS
CONTRACT



REV.	SHEETS	CITY ENGINEER	DATE	USER	DEPT.	DATE	USER	DEPT.	DATE
APPROVAL OF REVISIONS									

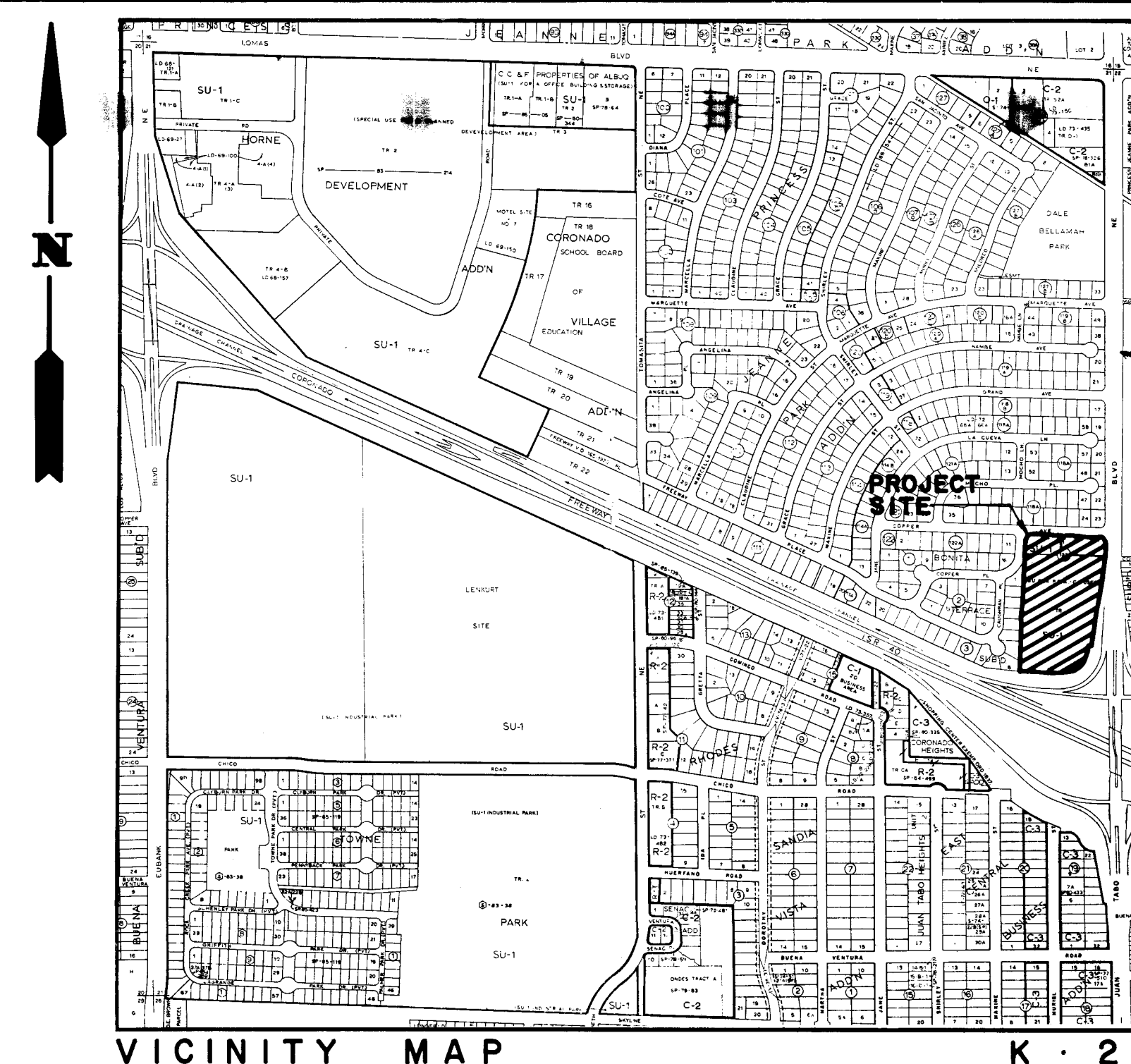


DMJM
Daniel, Mann, Johnson & Mendenhall
6501 Americas Parkway NE, Suite 690
Albuquerque New Mexico 87110
(505) 884-4031

CITY PROJECT NO. 3509

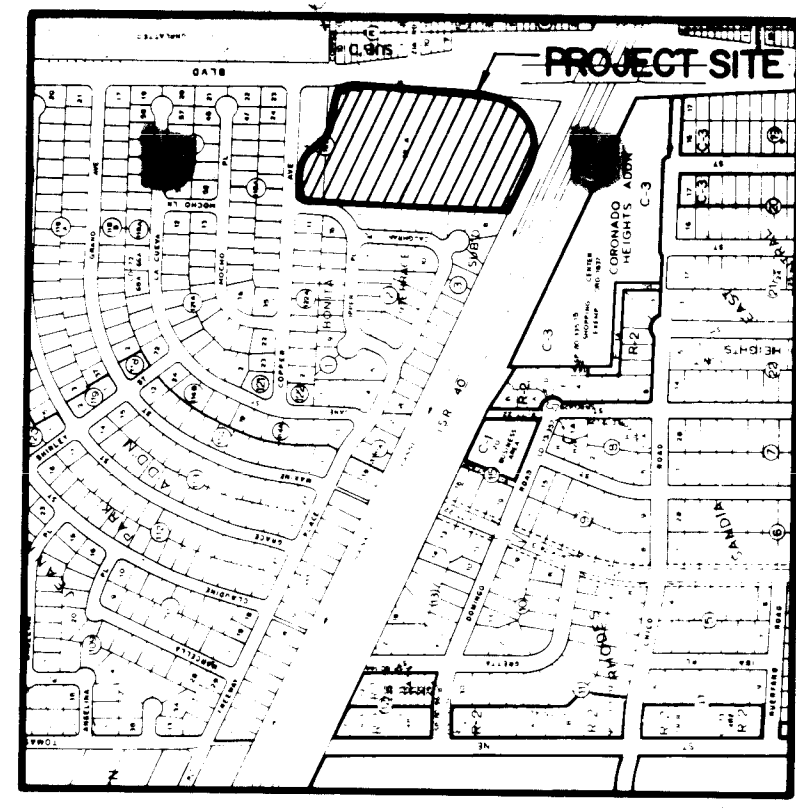
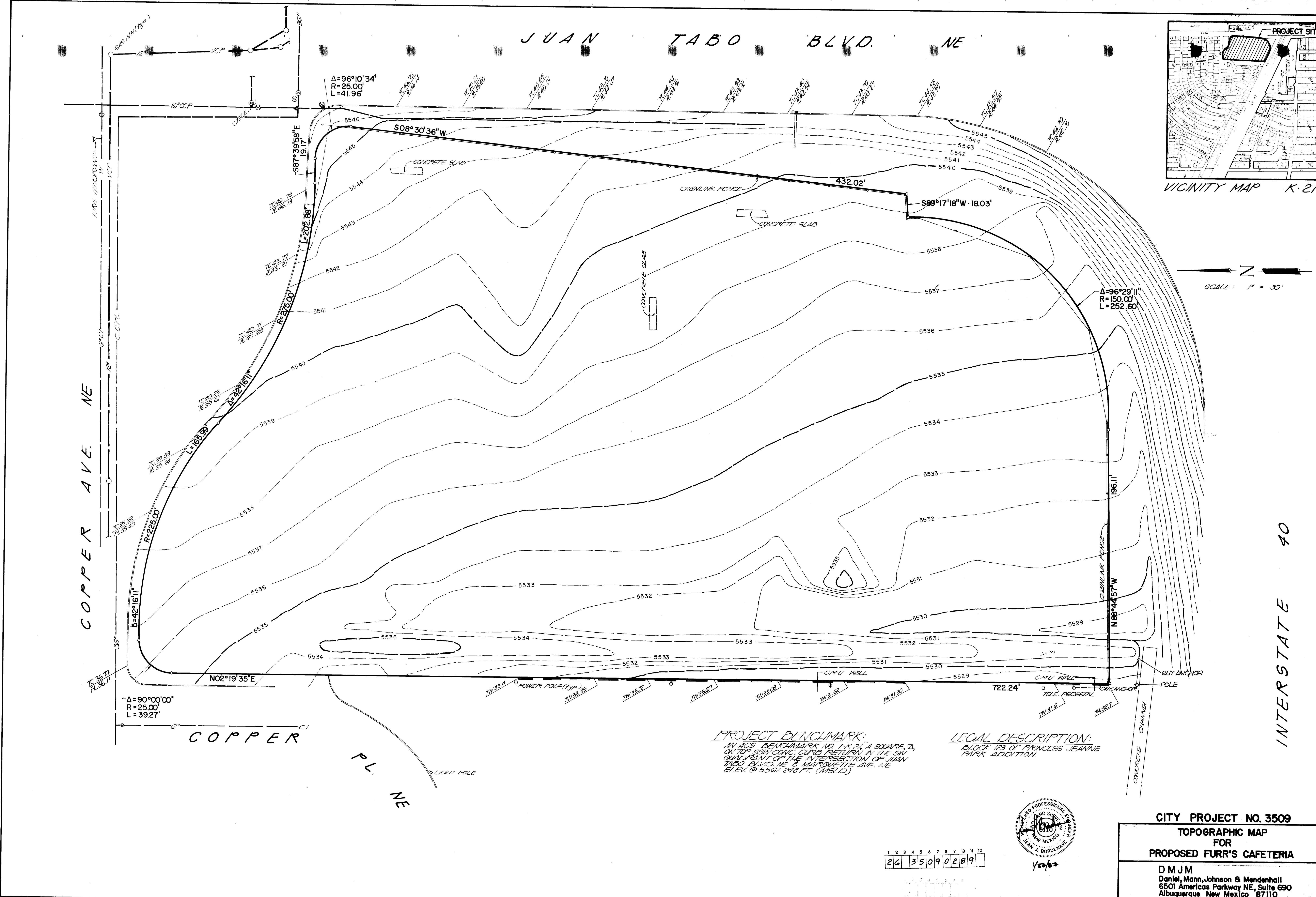
APPROVED FOR
CONSTRUCTION

SHEET 1 OF 7



GENERAL NOTES

- All work detailed on these plans to be performed under this contract shall, except as otherwise stated or provided for herein, be constructed in accordance with "City of Albuquerque Standard Specifications Public Works Construction, 1986."
- Two (2) working days prior to any excavation, Contractor shall contact Line Locating Service, 765-1234, for location of existing lines.
- References made to Standard Drawings refer to City of Albuquerque Standard Detail Drawings.
- Stations shown are centerline stations.
- 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 a minimum amount of delay.
- Two (2) working days in advance of any work on existing public water utilities the Contractor shall contact the Water Systems Division for the execution of the Valve Shut-off Plan.
- Three (3) working days prior to beginning construction the Contractor shall submit to Traffic Engineering Division a detailed construction schedule. Two (2) working days prior to construction the Contractor shall obtain a barricading permit from the Traffic Engineering Division.
- Contractor will not be allowed to use Class IV or V soils for embedment of flexible pipe. Contractor will not be allowed to deflect joints in flexible pipe. Any deflections required to meet vertical alignment will be achieved between joints.
- All work done within New Mexico State Highway Department's access control area west side of Juan Tabo Blvd. will be within the limits of access control fence and west sidewalk. No construction vehicles or construction equipment will be allowed in or near the traveled way of ramp leading to entrance of Interstate I-40 west bound. Restriction of traffic during this phase of construction in the access control area, will not be allowed.



VICINITY MAP K-21

SCALE: 1" = 30'

PROJECT BENCHMARK:

AN ACS BENCHMARK NO. T-R 21, A SQUARE, ON TOP SSW CONC. CURB RETURN IN THE SW QUADRANT OF THE INTERSECTION OF JUAN TABO BLVD. NE & MARQUETTE AVE. NE ELEV. @ 5561.248 FT. (MSLO)

LEGAL DESCRIPTION:

BLOCK 123 OF PRINCESS JEANNE PARK ADDITION.

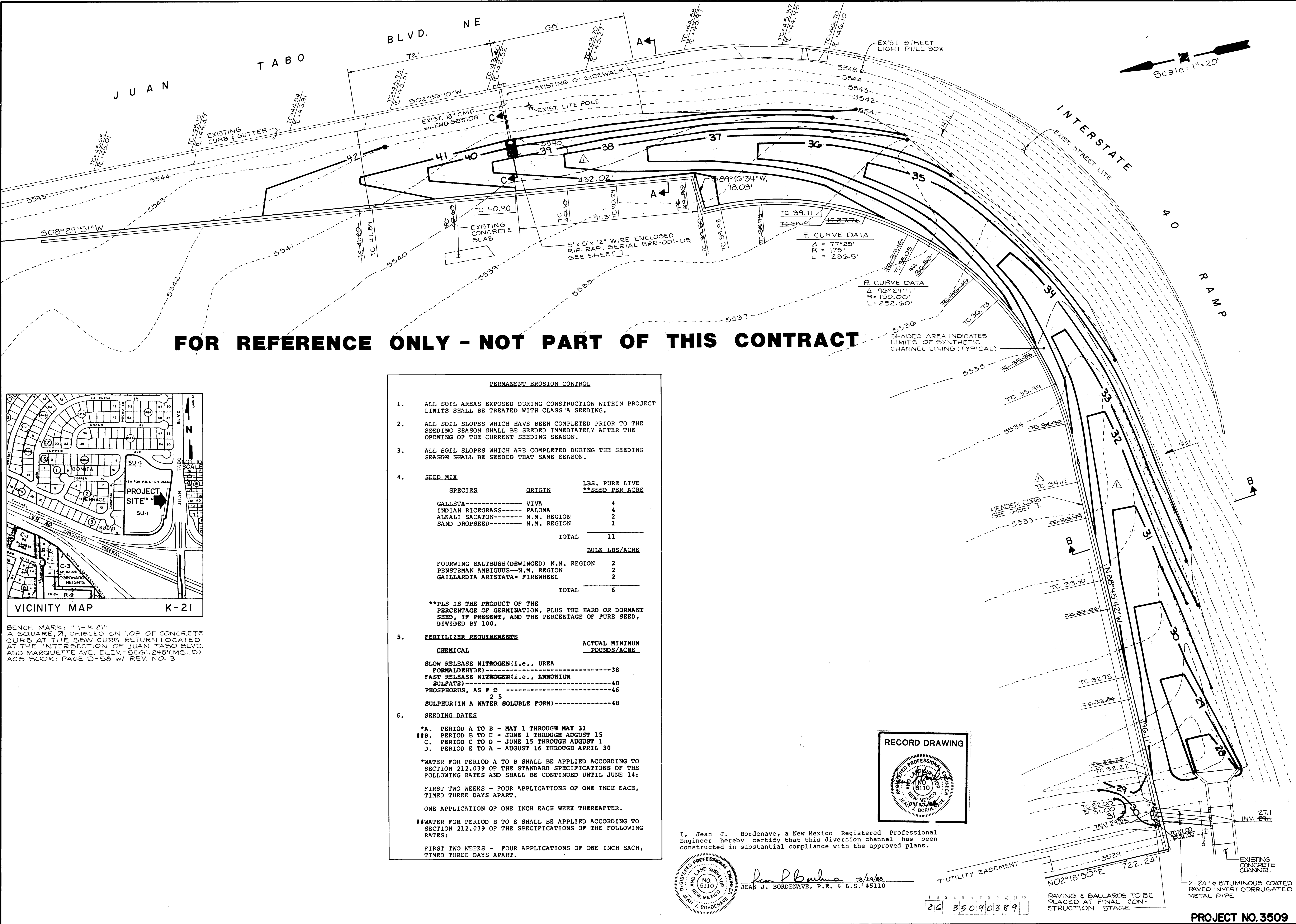


CITY PROJECT NO. 3509

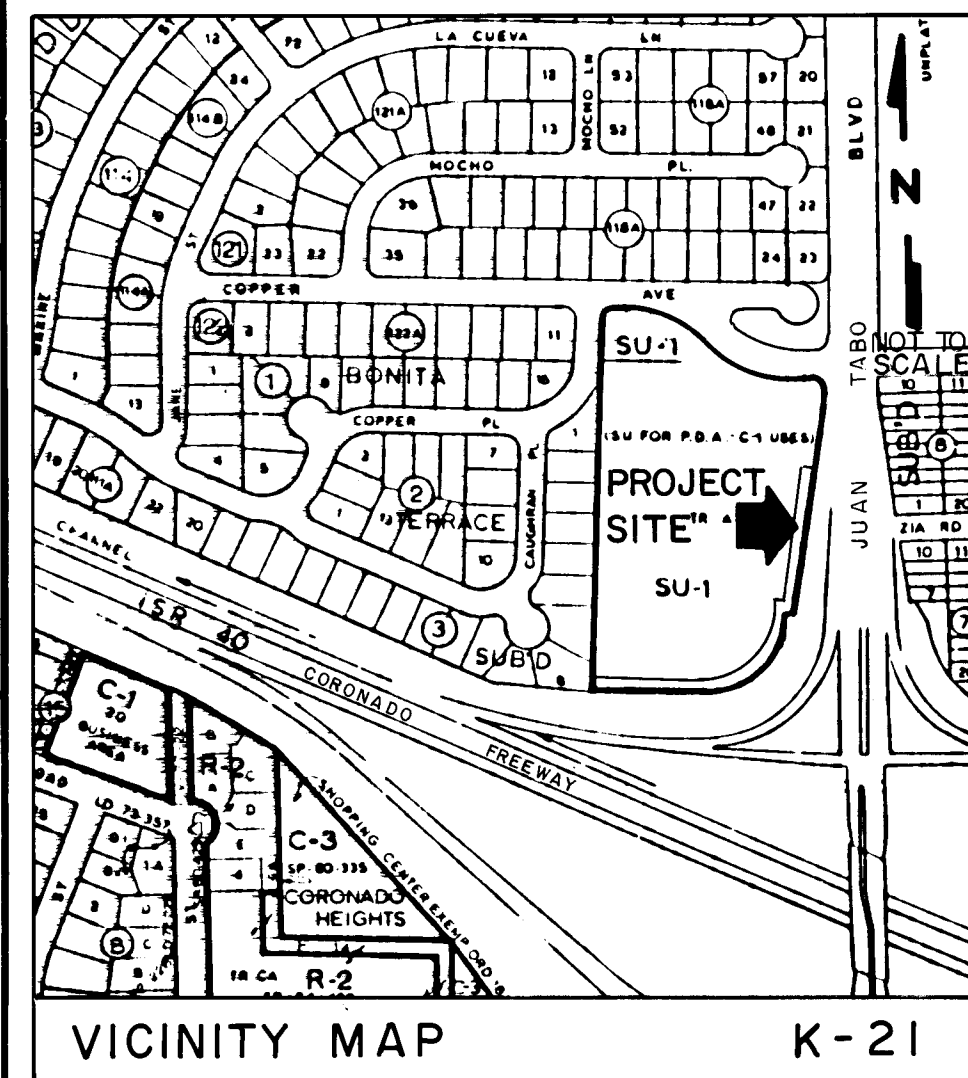
TOPOGRAPHIC MAP
FOR
PROPOSED FURR'S CAFETERIA

D M J M
Daniel, Mann, Johnson & Mendenhall
6501 Americas Parkway NE, Suite 690
Albuquerque New Mexico 87110
(505) 884-4031

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



FOR REFERENCE ONLY - NOT PART OF THIS CONTRACT



BENCH MARK: "1-K 21"
A SQUARE, CHISELED ON TOP OF CONCRETE CURB AT THE SSW CURB RETURN LOCATED AT THE INTERSECTION OF JUAN TABO BLVD. AND MARQUETTE AVE. ELEV. 5561.248 (MSLD) ACS BOOK: PAGE D-58 W/ REV. NO. 3

PERMANENT EROSION CONTROL

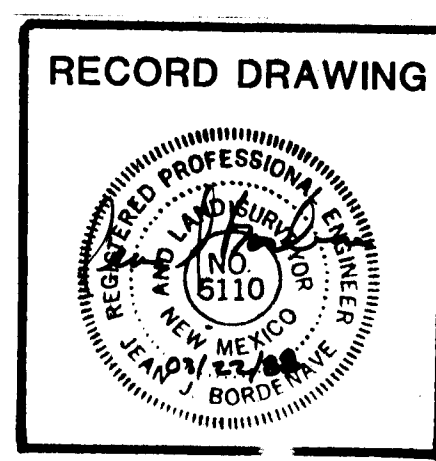
- ALL SOIL AREAS EXPOSED DURING CONSTRUCTION WITHIN PROJECT LIMITS SHALL BE TREATED WITH CLASS A SEEDING.
- ALL SOIL SLOPES WHICH HAVE BEEN COMPLETED PRIOR TO THE SEEDING SEASON SHALL BE SEEDED IMMEDIATELY AFTER THE OPENING OF THE CURRENT SEEDING SEASON.
- ALL SOIL SLOPES WHICH ARE COMPLETED DURING THE SEEDING SEASON SHALL BE SEEDED THAT SAME SEASON.

SEED MIX		LBS. PURE LIVE **SEED PER ACRE
SPECIES	ORIGIN	
GALLETA	VIVA	4
INDIAN RICEGRASS	PALOMA	4
ALKALI SACATON	N.M. REGION	2
SAND DROPSEED	N.M. REGION	1
TOTAL		11
		BULK LBS/ACRE
FOURWING SALT BUSH (DEWINGED)	N.M. REGION	2
PENSTEMAN AMBIGUUS	N.M. REGION	2
GAILLARDIA ARISTATA	FIREWHEEL	2
TOTAL		6

**PLS IS THE PRODUCT OF THE PERCENTAGE OF GERMINATION, PLUS THE HARD OR DORMANT SEED, IF PRESENT, AND THE PERCENTAGE OF PURE SEED, DIVIDED BY 100.

FERTILIZER REQUIREMENTS		ACTUAL MINIMUM POUNDS/ACRE
CHEMICAL		
SLOW RELEASE NITROGEN (i.e., UREA FORMALDEHYDE)		38
FAST RELEASE NITROGEN (i.e., AMMONIUM SULFATE)		40
PHOSPHORUS, AS P ₂ O ₅		46
SULPHUR (IN A WATER SOLUBLE FORM)		48

- SEEDING DATES
 - *A. PERIOD A TO B - MAY 1 THROUGH MAY 31
 - **B. PERIOD B TO E - JUNE 1 THROUGH AUGUST 15
 - C. PERIOD C TO D - JUNE 15 THROUGH AUGUST 1
 - D. PERIOD E TO A - AUGUST 16 THROUGH APRIL 30
- *WATER FOR PERIOD A TO B SHALL BE APPLIED ACCORDING TO SECTION 212.039 OF THE STANDARD SPECIFICATIONS OF THE FOLLOWING RATES AND SHALL BE CONTINUED UNTIL JUNE 14:
- FIRST TWO WEEKS - FOUR APPLICATIONS OF ONE INCH EACH, TIMED THREE DAYS APART.
- ONE APPLICATION OF ONE INCH EACH WEEK THEREAFTER.
- **WATER FOR PERIOD B TO E SHALL BE APPLIED ACCORDING TO SECTION 212.039 OF THE SPECIFICATIONS OF THE FOLLOWING RATES:
- FIRST TWO WEEKS - FOUR APPLICATIONS OF ONE INCH EACH, TIMED THREE DAYS APART.



I, Jean J. Bordenave, a New Mexico Registered Professional Engineer hereby certify that this diversion channel has been constructed in substantial compliance with the approved plans.

JEAN J. BORDENAVE, P.E. & L.S. #5110
3/19/88

26 35090389

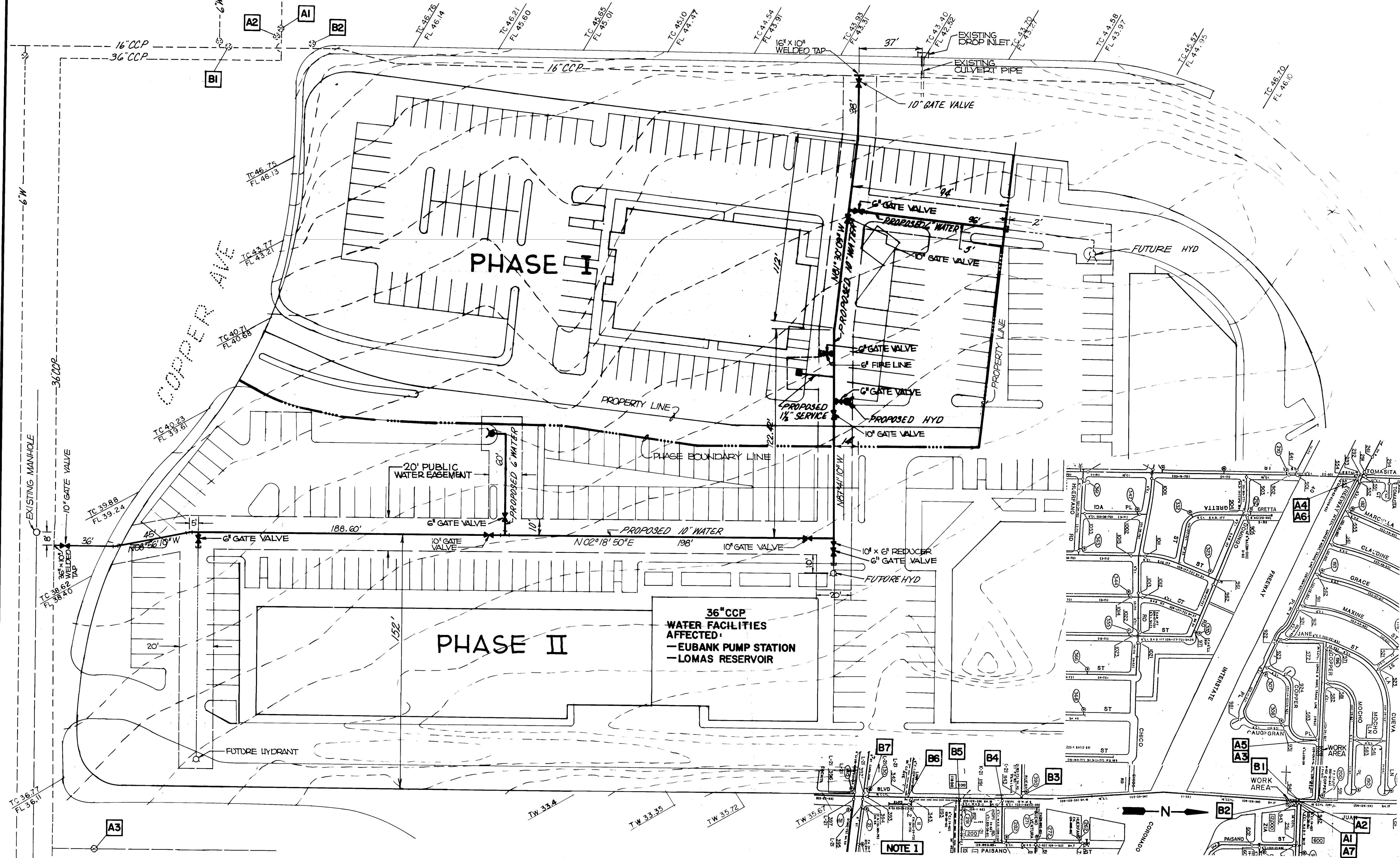
PAVING & BALLARDS TO BE PLACED AT FINAL CONSTRUCTION STAGE

PROJECT NO. 3509

CLIENT Investment Asset Management, Inc.		CBB DESIGNED 4-87		DATE 4-87	
DMJM Daniel Mann Johnson & Mendenhall 6501 Americas Parkway NE Suite 680 Albuquerque, New Mexico 87110 (505) 884-4031		SP DRAWN 4-87		DATE 4-87	
JJB REVIEWED 4-87		JJB REVIEWED 4-87		DATE 4-87	
ASBUILT DRAINAGE CHANNEL & CURB ELEVATIONS		SP		BY	
3-22-88				DATE	
JJB		AC8521		REVISIONS	
6394.00		FILE NUMBER		NO.	
MARCH 1988		DATE		REVISIONS	
GRADING PLAN WATERLINE EXTENSION AND DRAINAGE IMPROVEMENTS TRACTS A-1 & A-2 BLOCK 123 PRINCESS JEANNE ADDITION					
SHEET 3 OF 7					

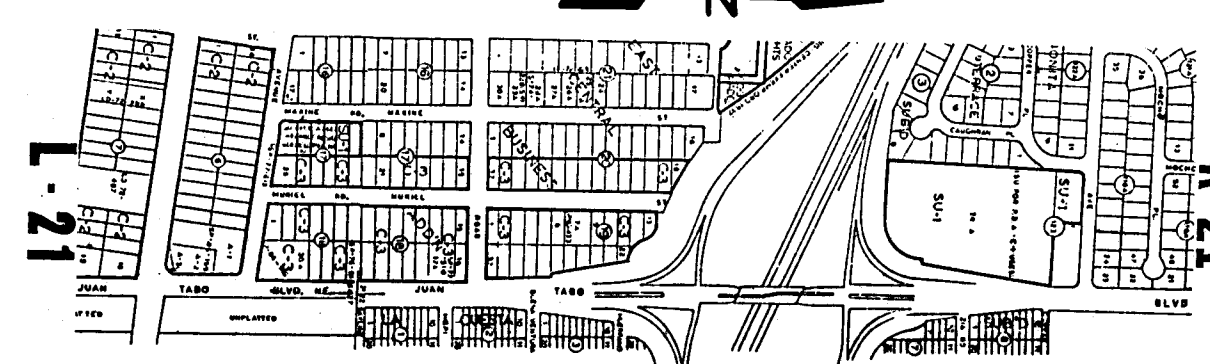
JUAN TABO BLVD.

1" = 30'



NOTE:

- HYDRANT #11 ON EAST SIDE OF JUAN TABO, ACROSS FROM LINN AVE. AND TWO WATER METERS WILL BE OUT OF SERVICE.
- AFTER CONNECTION HAS BEEN MADE, CONTRACTOR WILL FLUSH LINE WHERE CONNECTION WAS MADE BY OPENING VALVE AT INTERSECTION OF COPPER AVE. AND JUAN TABO LABELED AS B1.
- AFTER FLUSHING IS COMPLETED TURN ON VALVES IN THE FOLLOWING ORDER: VALVE NO. 1143, VALVE NO. 1191, VALVE NO. 1193 AND VALVE NO. 393, VALVE NO. B-2 AND VALVE NO. 342.



16\"/>

- | | |
|-----|---|
| #B1 | SHUT DOWN VALVE AT INTERSECTION OF COPPER AVE. AND JUAN TABO (VALVE IS NOT SHOWN ON WATER MASTER PLAN). |
| #B2 | SHUT DOWN VALVE AT SOUTHWEST CURB RETURN AT INTERSECTION JUAN TABO & COPPER AVE. (VALVE IS NOT SHOWN ON MASTER PLAN). |
| B3 | SHUT DOWN VALVE NO. 1143 FOR 5\"/> |
| D4 | SHUT DOWN VALVE NO. 1191 FOR 6\"/> |
| B5 | SHUT DOWN VALVE NO. 1193 FOR 6\"/> |
| B6 | SHUT DOWN VALVE NO. 342 FOR 6\"/> |
| B7 | SHUT DOWN VALVE NO. 393 NORTH SIDE, C/2 INTERSECTION OF CENTRAL AVE. AND JUAN TABO. |

* SEE PLAN MAP LEFT FOR SPECIFIC LOCATION. IT IS ASSUMED THAT VALVE NO. 941 (A2) IS CURRENTLY CLOSED. LEAVE AS SAME AFTER CONNECTIONS

36\"/>

- | | |
|-----|---------------------------|
| *A1 | SHUT DOWN VALVE NO. 943 |
| *A2 | SHUT DOWN VALVE NO. 941 |
| *A3 | SHUT DOWN VALVE NO. 583 |
| A4 | SHUT DOWN VALVE NO. 553 |
| A5 | MAKE CONNECTION TO 36\"/> |
| A6 | TURN ON VALVE NO. 553 |
| A7 | TURN ON VALVE NO. 943 |

APPROVAL:

[Signature] 7-8-88
WATER OPERATIONS DATE

1 2 3 4 5 6 7 8 9 10 11 12
26 35 0 9 0 4 8 9

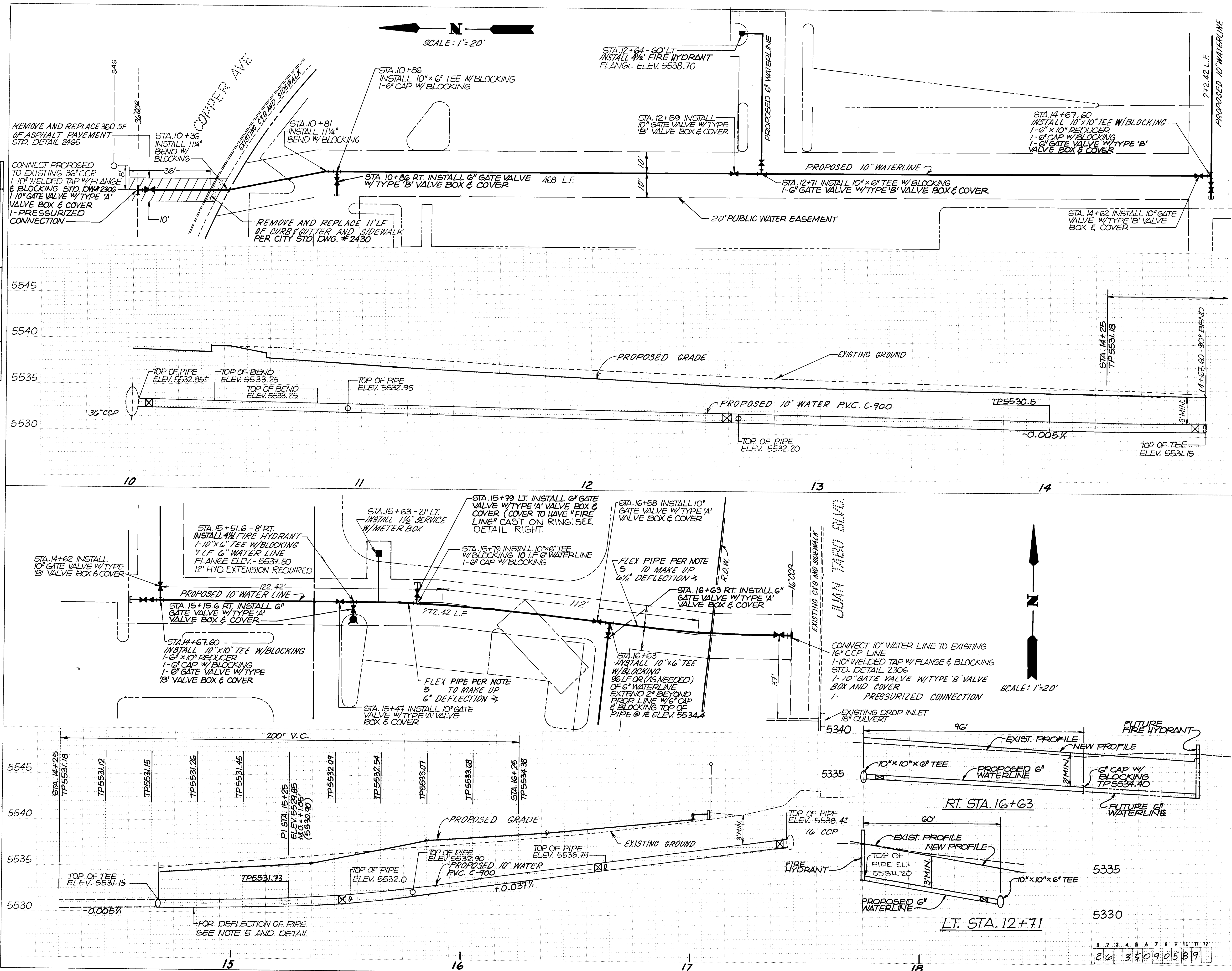
- ALL STATIONS ARE CENTERLINE OF PIPE
- BEARINGS AND DISTANCES SHOWN IN PLAN VIEW FOR WATER LINES ARE FROM CENTER OF FITTING TO CENTER OF FITTING.
- WATERLINES ARE SET AT A MINIMUM OF 3.00' BELOW FINISHED GRADE
- USE CITY OF ALBUQUERQUE STANDARD DETAIL DRAWING 2118, 2306, 2118, 2315, 2320, 2325, 2326, 2328, 2330, 2331, 2333, 2340, 2363, 2367, 2465 TO CONSTRUCT THIS PROJECT.
- CONTRACTOR WILL NOT BE ALLOWED TO DEFLECT JOINTS IN FLEXIBLE PIPE. ANY DEFLECTIONS REQUIRED TO MEET VERTICAL AND HORIZONTAL ALIGNMENT WILL BE ACHIEVED BETWEEN JOINTS.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGN	
CONTRACTOR	DATE	PROJECT BENCHMARK	DATE	NO.	BY			NO.	DATE	BY	DATE
INSPECTOR	DATE	ACS BOOK I, PAGE D58 w/rev. no. 3	DATE	DATE	DATE			REMARKS	DESIGNED BY	DATE	3 / 88
ACCEPTANCE BY	DATE	ELEV. 5561.248 ft. (MSLD)	DATE	NO.	BY			DESIGNED BY	DRAWN BY	DATE	3 / 88
RECEIVED BY	DATE							CHECKED BY	JJB	DATE	3 / 88

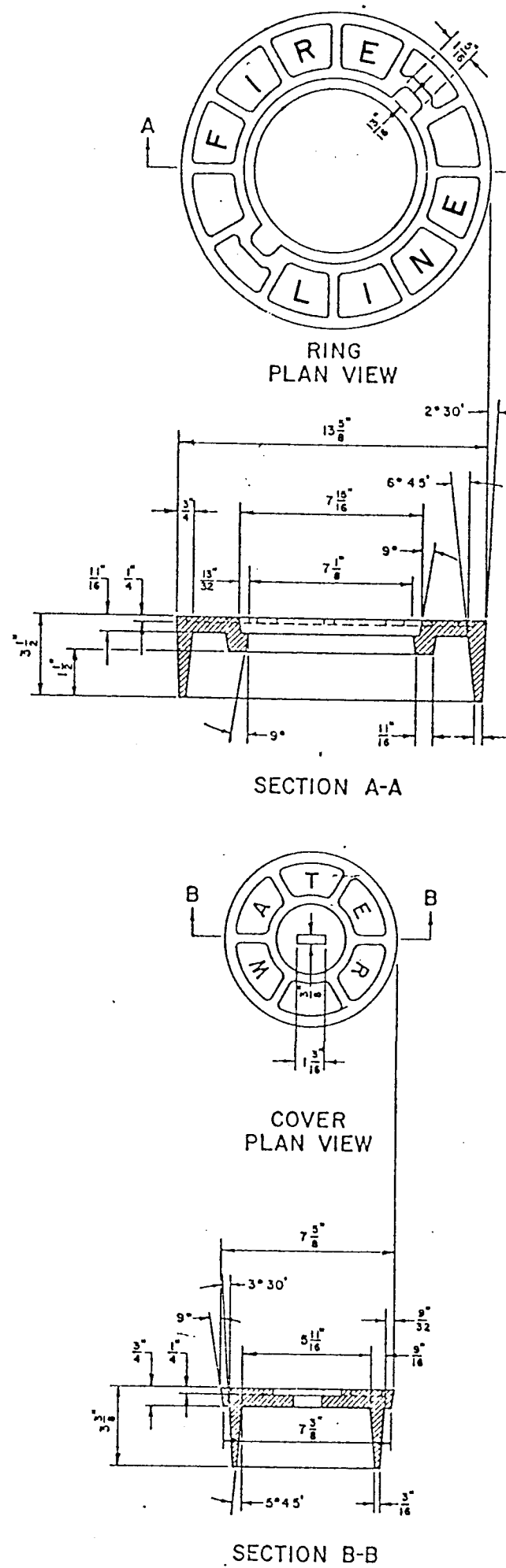
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: WATERLINE EXTENSION AND DRAINAGE IMPROVEMENTS WATERLINE EXTENSION LAYOUT					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair	<i>[Signature]</i>	7/7/88			
Trans. Dev					
Utility Dev	<i>[Signature]</i>	8/1/88			
DRAWING NO.	3509	MAP NO.	K:21	SHEET	4 OF 7

PLAN	DATE	BY	DATE	BY
SURVEYED				
NOTED				
ALIGNED				
CHECKED				
RT. OF WAY				
NO.				

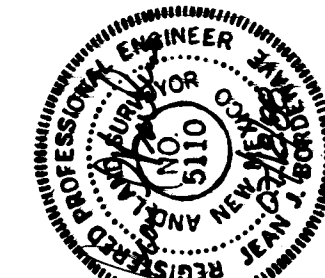
PROFILE	DATE	BY	DATE	BY
SURVEYED				
NOTED				
GRADES				
CHECKED				
B.M. NOTED				
STRUCTURE				
NOTATIONS				
CHKD				



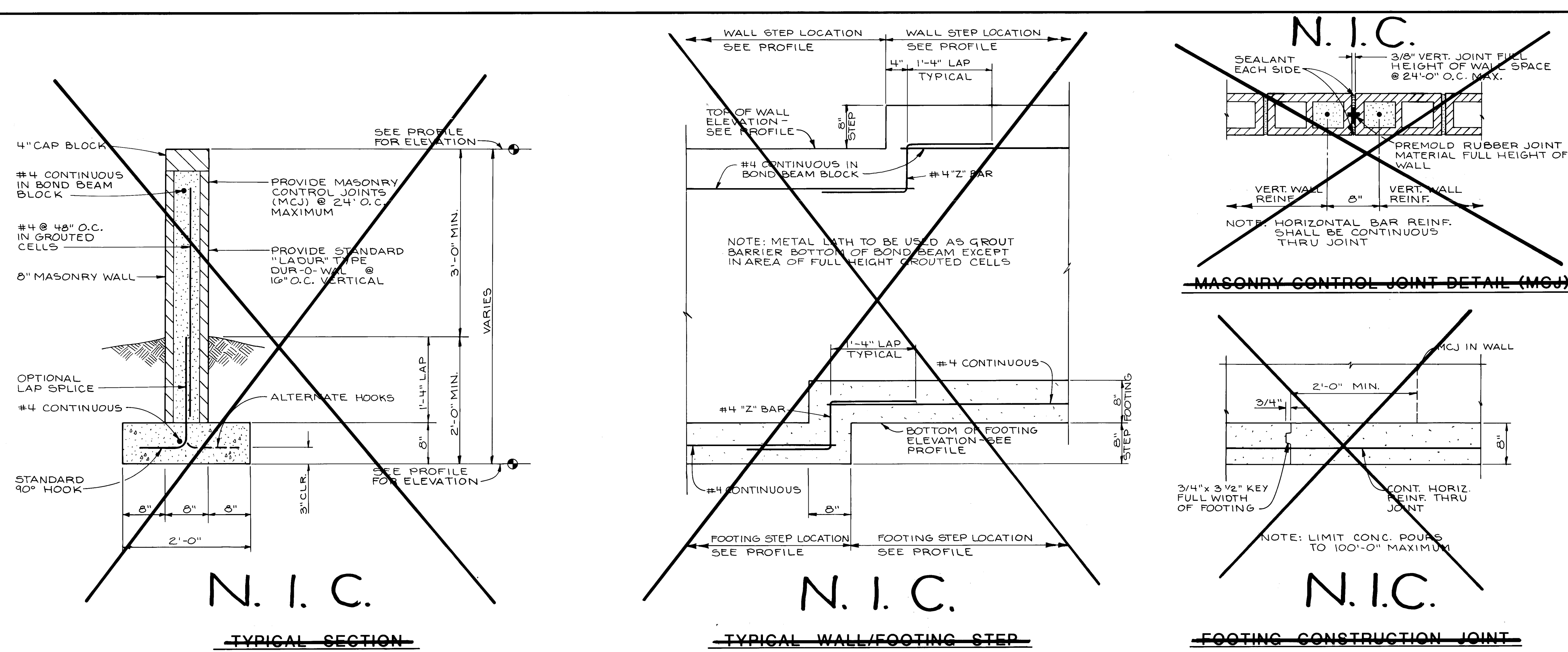
1. ALL STATIONS ARE CENTERLINE OF PIPE THRU EASEMENTS.
2. BEARINGS AND DISTANCES SHOWN IN PLAN VIEW FOR WATER LINES ARE FROM CENTER OF FITTING TO CENTER OF FITTING.
3. WATERLINES ARE SET AT A MINIMUM OF 3.00' BELOW FINISHED GRADE AT CENTERLINE OF PIPE.
4. USE CITY OF ALBUQUERQUE STANDARD DETAIL DRAWING 2118, 2306, 2119, 2315, 2320, 2325, 2326, 2328, 2330, 2331, 2333, 2340, 2353, 2357, 2455 TO CONSTRUCT THIS PROJECT.
5. CONTRACTOR WILL NOT BE ALLOWED TO DEFLECT JOINTS IN FLEXIBLE PIPE. ANY DEFLECTIONS REQUIRED TO MEET VERTICAL AND HORIZONTAL ALIGNMENT WILL BE ACHIEVED BETWEEN JOINTS.



PROJECT BENCHMARK: I-K-21
ACS BOOK 1, PAGE D56 w/rev no. 3
ELEV 5561.248 ft. (MSLD)



3 / 88
3 / 88
3 / 88



MATERIAL SPECIFICATIONS

CONCRETE: $f'_c = 3,000$ PSI @ 28 DAYS, SLUMP 2" to 5".
BAR REINFORCING: ASTM A-615, GRADE 40.
MASONRY UNITS: ASTM C-90.
MORTAR: TYPE 1S, ASTM C-270.
GROUT: $f'_c = 2,000$ PSI @ 28 DAYS, SLUMP 9", ASTM C-476.
JOINT REINFORCING: STANDARD LAOUR TYPE DUR-0-WALL, ASTM A-82.

SOILS INFORMATION

Per **GEOTECHNICAL INVESTIGATION REPORT NO. E-5-1169** prepared by Sergeant, Hawkins & Beckwith Consulting Geotechnical Engineers dated December 2, 1985.

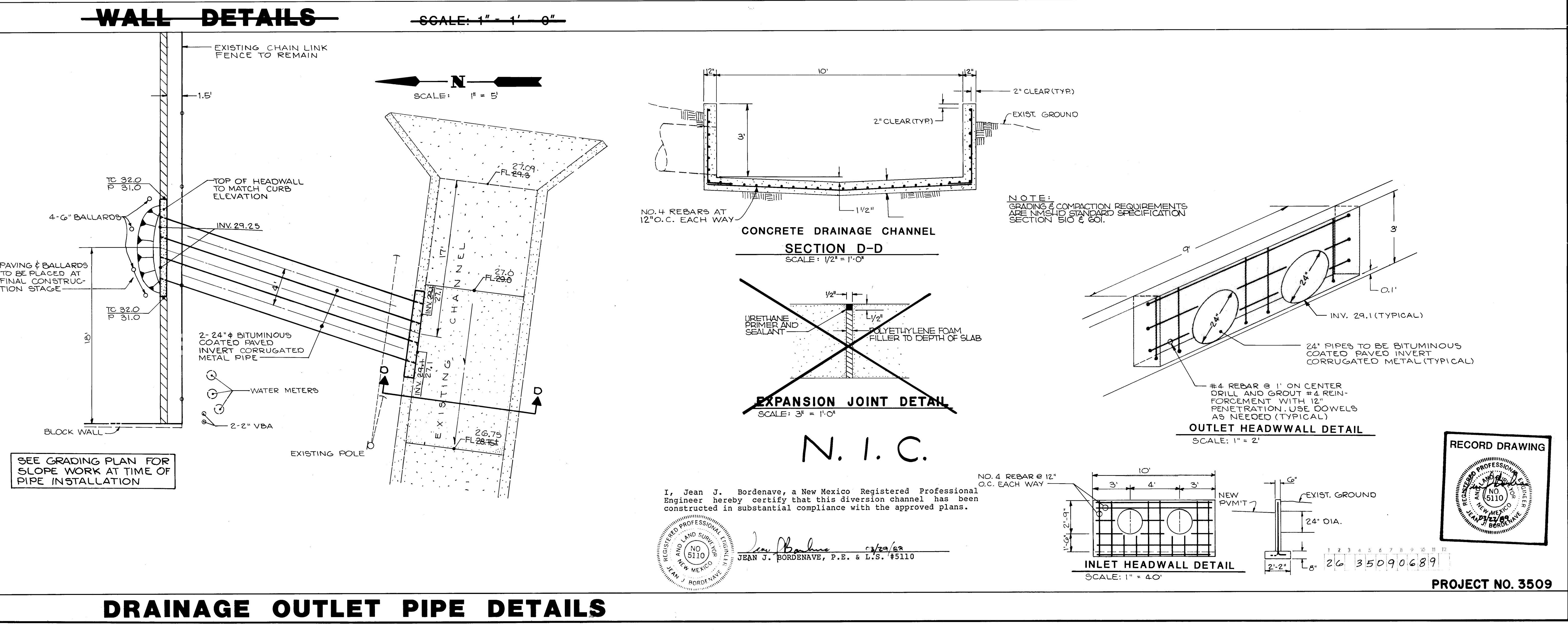
ACTIVE EARTH PRESSURE: 35 PSF/FT.
PASSIVE EARTH PRESSURE: 350 PCF
COEFFICIENT OF FRICTION: 0.40
SOIL BEARING PRESSURE: 3,000 BPF
FOOTING SUBGRADE PREPARATION: Scarify minimum top 8" of trench bottom and compact to 95% of ASTM D1557 dry density.
WALLBACK FILL: Compact to 95% of ASTM D1557 dry density.

WALL CONSTRUCTION NOTES

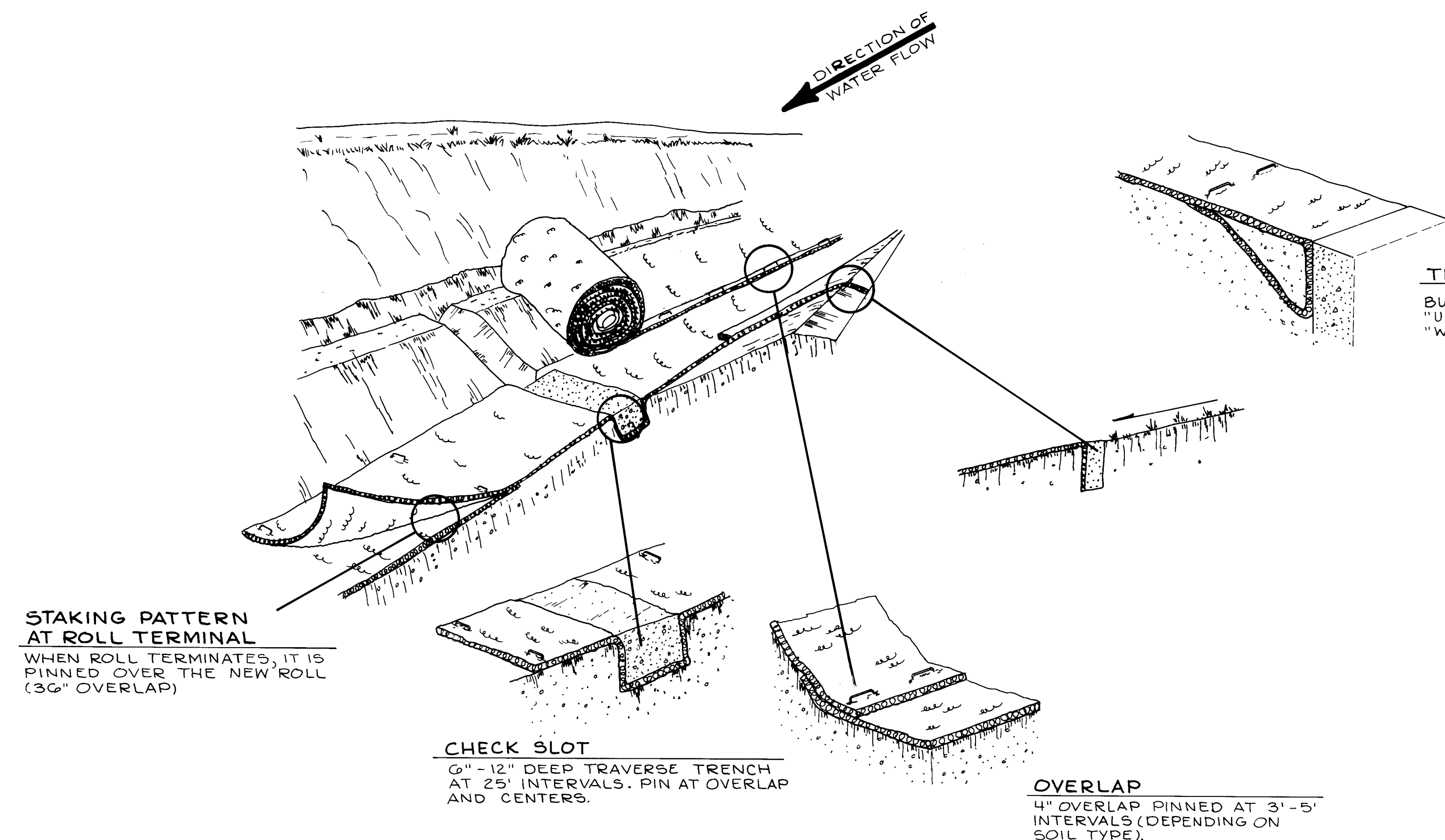
- Clean all footing trenches free of loose material.
- Step footings per detail.
- Limit footing pour length to 100 feet maximum.
- Slope backfill away from wall for positive drainage.
- Lap bar reinforcing 1'-4" minimum.
- Provide horizontal joint reinforcing at 16" on center vertical.
- Lap joint reinforcing 9" minimum.
- Provide MASONRY CONTROL JOINTS per detail at 24 feet on center maximum.
- Grout cells with vertical rebar solid full height.
- Grout bond beam with continuous rebar solid full length of wall.
- Vibrate all concrete and grout.

NOTES **N.I.C.**

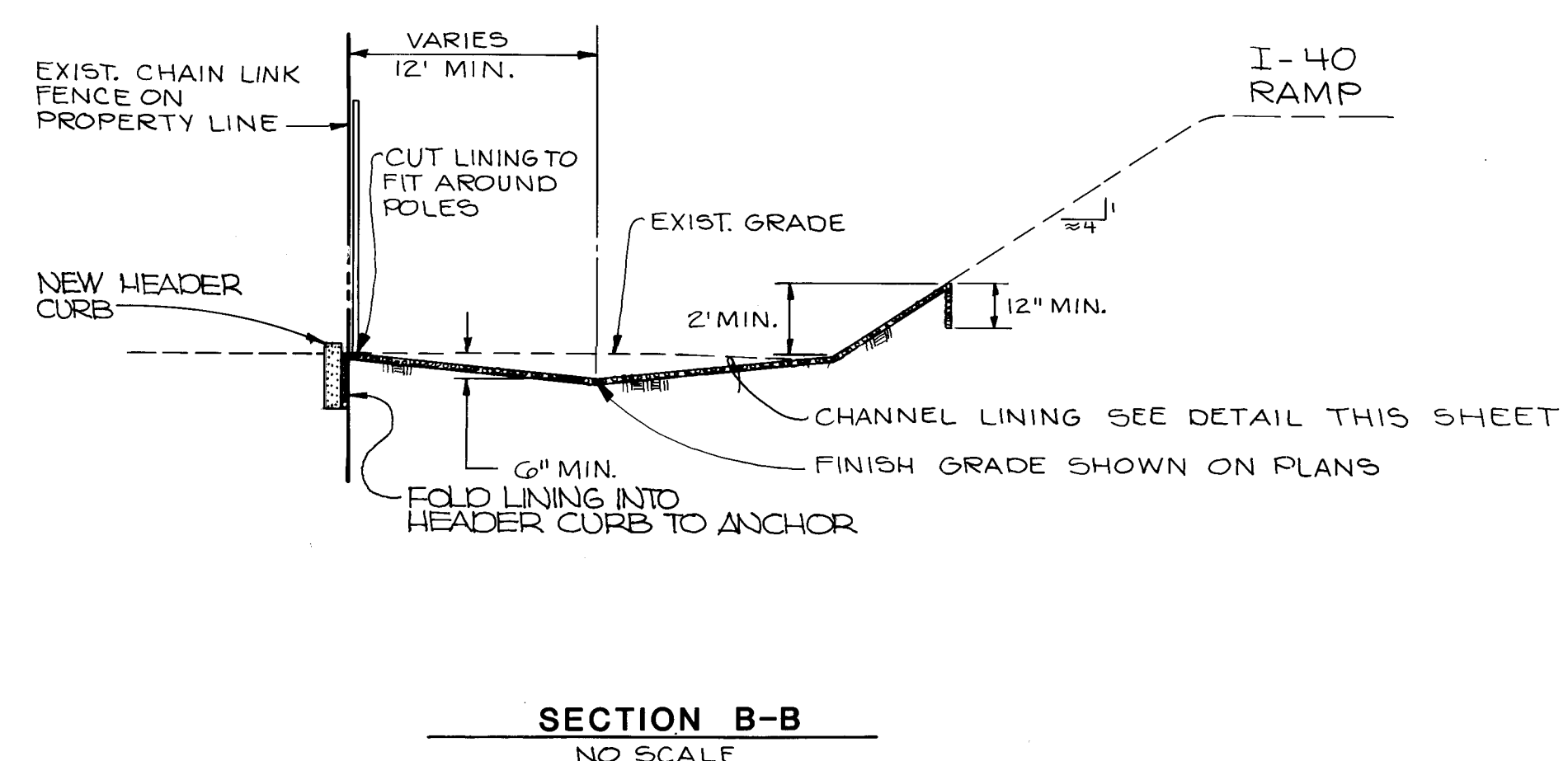
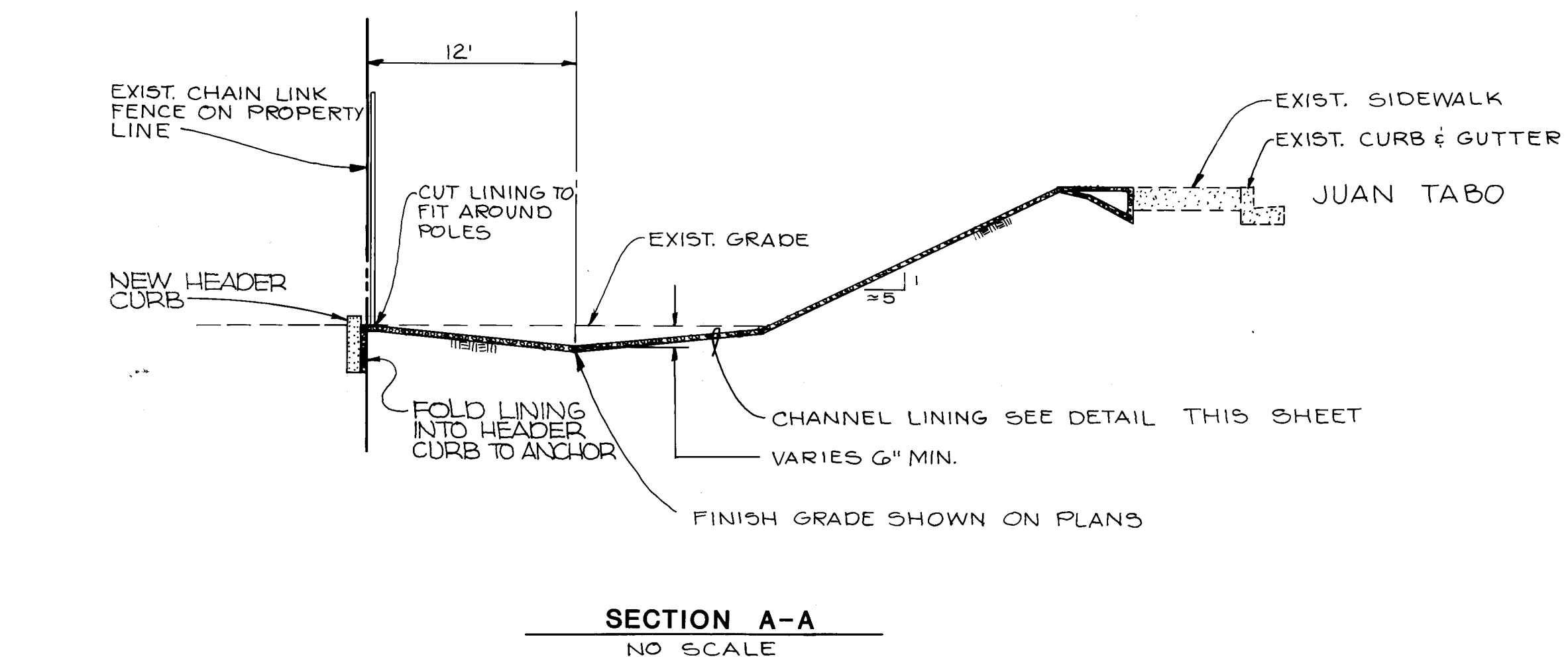
TITLE										JOB NUMBER										FILE NUMBER										DATE										NO.										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DRAINAGE OUTLET PIPE DETAILS



SYNTHETIC LINING OR EQUAL - ANCHORING DETAILS
NO SCALE
NOTE: FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION



SYNTHETIC CHANNEL LINING

DESCRIPTION OF WORK

This work shall consist of furnishing and installing a flexible, synthetic channel lining on the sides and bottoms of channels in substantial compliance with the specifications and at locations shown on the plans or established by the Engineer.

MATERIALS

Flexible Lining. Flexible Lining shall be "Enkamat" Type 7020, as manufactured by American Enka Company, Enka, North Carolina; or approved equal.

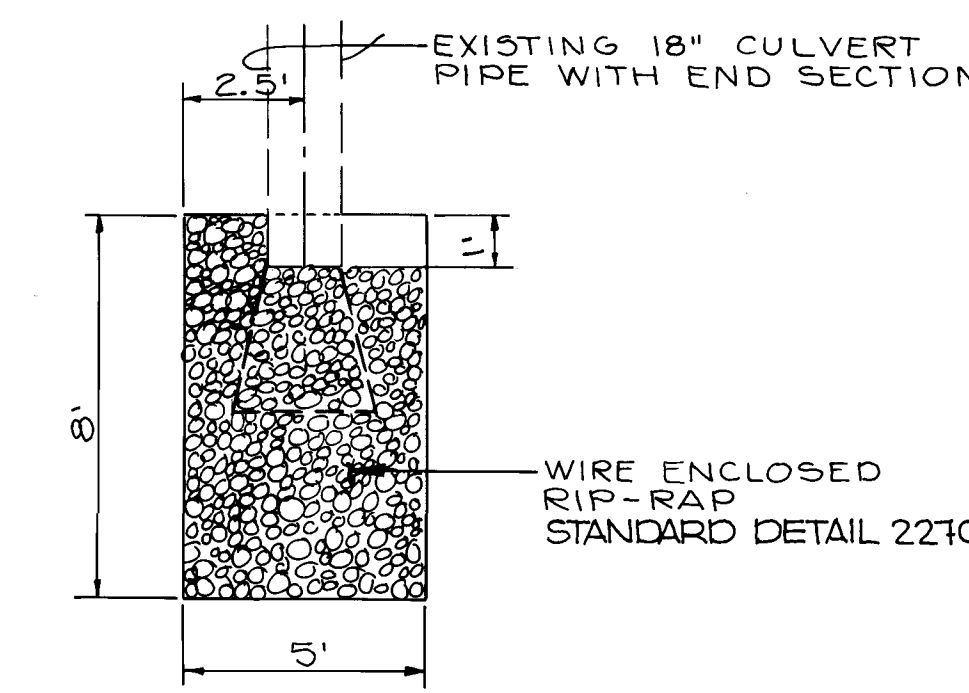
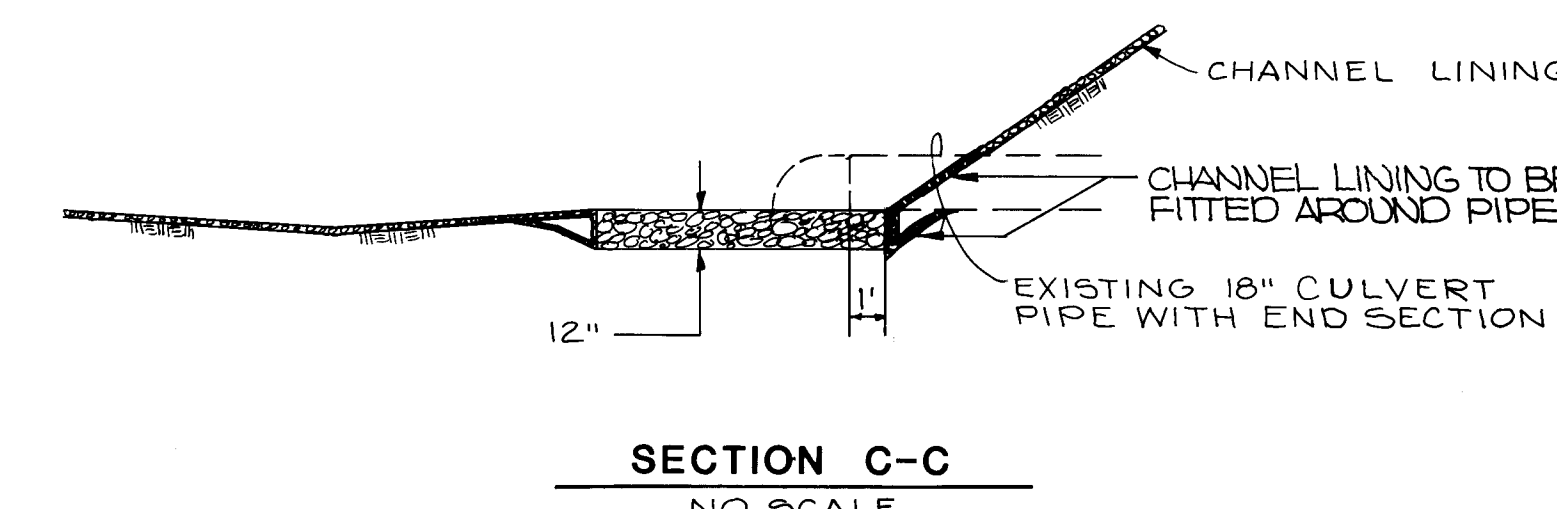
GROUND FASTENERS

Metal Stakes (Staples). Metal stakes shall be smooth, No. 6 gauge or heavier wire and shall have a minimum penetration length of 12 inches. The stake shall be a full or partial U-shape with the least dimension of 2 inches. The penetration leg of the stake shall be bent to increase anchoring capability.

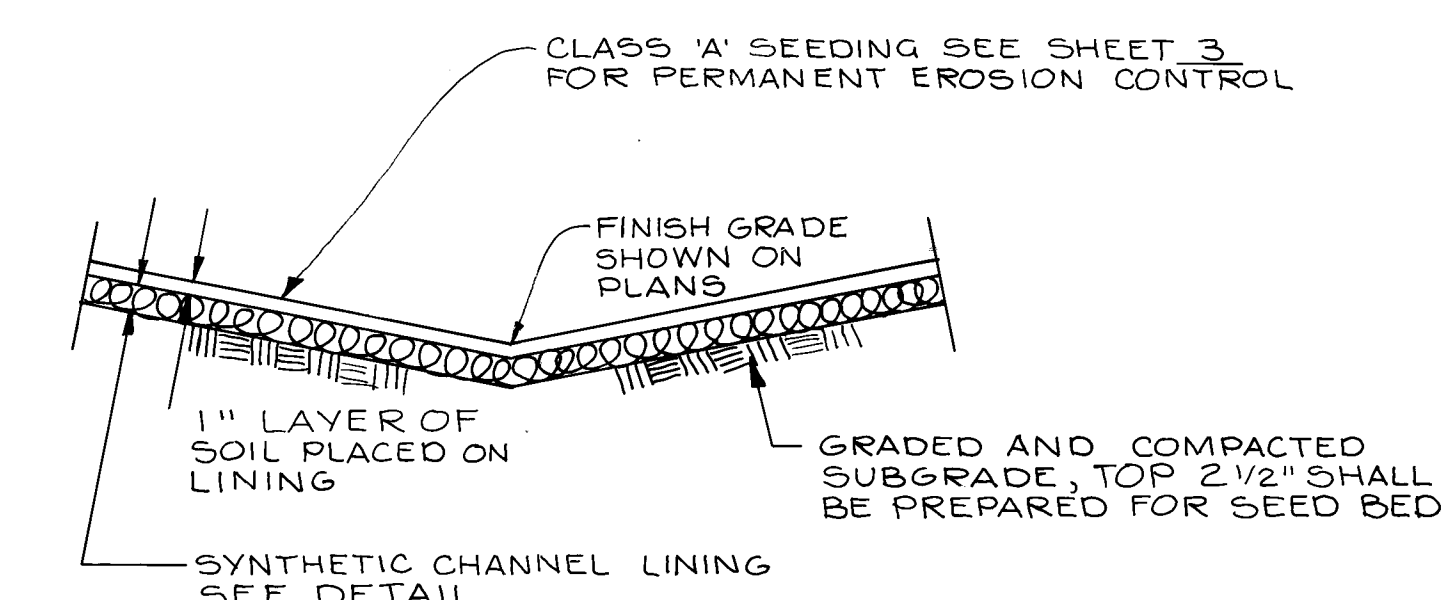
CONSTRUCTION REQUIREMENTS

The channel earth surface shall meet all requirements of NMSHD STANDARD SPECIFICATIONS SECTION 208 - LINEAR GRADING prior to installing lining. Care shall be taken to avoid bridging due to stretching the lining over depressions in the earth surface. Lining shall be unrolled in direction of water flow.

All end or edge anchoring and lapping shall be as shown on the plans with minimum end laps of 12 inches and minimum side laps of 3 inches. Fasteners shall be installed at a maximum spacing of 3 feet on center and shall be installed in bottom of side or terminal trenches and check slots.



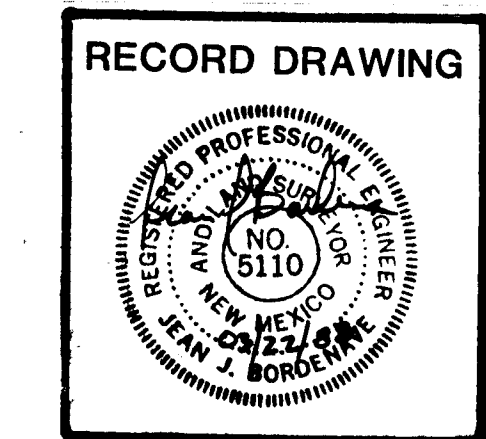
WIRE ENCLOSED RIP-RAP - PLAN VIEW



FOR REFERENCE ONLY - NOT PART OF THIS CONTRACT

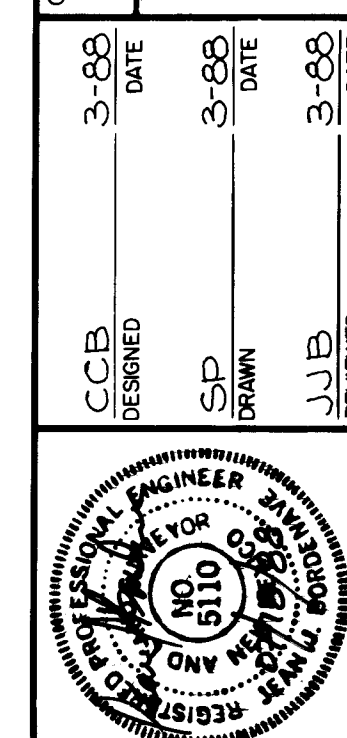
I, Jean J. Bordenave, a New Mexico Registered Professional Engineer hereby certify that this diversion channel has been constructed in substantial compliance with the approved plans.

JEAN J. BORDENAVE, P.E. & L.S. #5110
03/19/88



CLIENT	Investment Asset Management, Inc.	
	DATE	3-88
	DESIGNED	CCB
	DRAWN	SP
REVISIONS	DATE	3-88
	REMARKS	BY
	DATE	3-88
	REMARKS	BY
JOB NUMBER	6394.00	
	FILE NUMBER	
	AC 8521	
	DATE	
TITLE	WATERLINE EXTENSION AND DRAINAGE IMPROVEMENTS	
	TRACTS A-18 A-2 BLOCK 123 PRINCESS JEANNE ADDITION	
	SHEET	
	7 OF 7	

CLIENT: Investment Asset Management, Inc.
DATE: 3-88
DESIGNED: CCB
DRAWN: SP
DATE: 3-88
REMARKS: BY
DATE: 3-88
REMARKS: BY



REVISIONS
DATE
REMARKS
BY

JOB NUMBER: 6394.00
FILE NUMBER: AC 8521
DATE: MARCH 1988

WATERLINE EXTENSION AND DRAINAGE IMPROVEMENTS
TRACTS A-18 A-2 BLOCK 123 PRINCESS JEANNE ADDITION
SHEET 7 OF 7