

CONSTRUCTION PLANS  
FOR  
ENCLAVE AT TANOAN  
SUBDIVISION  
( CHANGE ORDER # 1 )  
ALBUQUERQUE, NEW MEXICO

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NOT IN THIS CONTRACT.

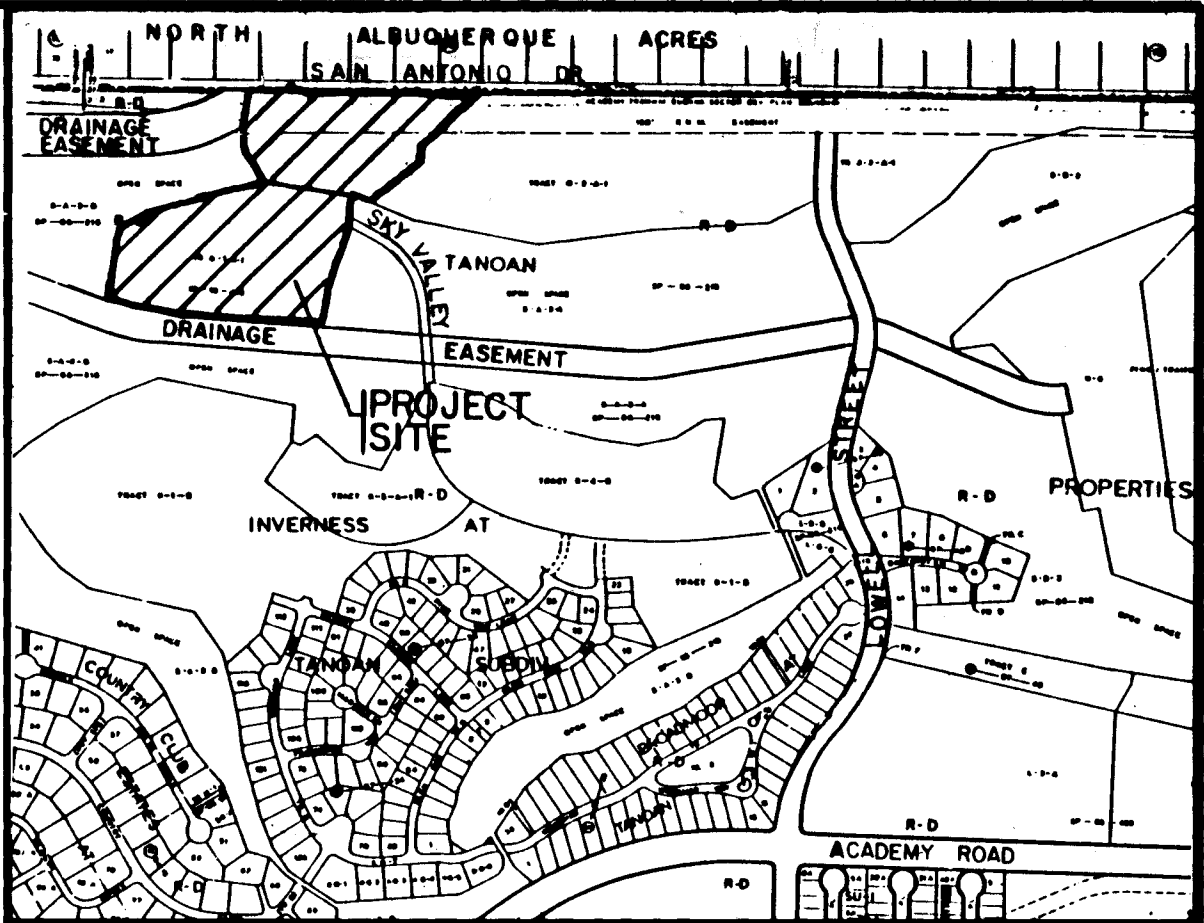
SCANNED BY  
BY LASON

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SURVEYOR'S CERTIFICATION

"I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the 'as-built' information shown on these drawings was obtained from field construction and 'as-built' surveys performed by me or under my supervision, that the 'as-built' information shown on these drawings was added by me or under my supervision, and that this 'as-built' information is true and correct to the best of my knowledge and belief." Aldrich Land Surveying is not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

Timothy Aldrich, P.S. No. 7719



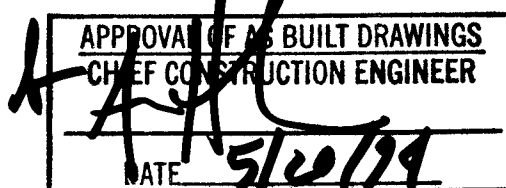
VICINITY MAP  
NOT TO SCALE  
E-22

NOTICE TO CONTRACTORS

- 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.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) 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 IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION 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 (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- 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.
- 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 ENGINEER. 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.

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 CITY ENGINEER.
- ☒ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED EXCEPT WHERE HANDICAMP RAMPS ARE OMITTED.
- ☒ IF CURB IS DEPRESSED 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.
- ☒ THE REQUESTOR OR DEVELOPER SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL CURB AND GUTTER OR SIDEWALK DAMAGED AFTER APPROVAL BY THE CITY ENGINEER OF WORK COMPLETED BY THE CONTRACTOR.

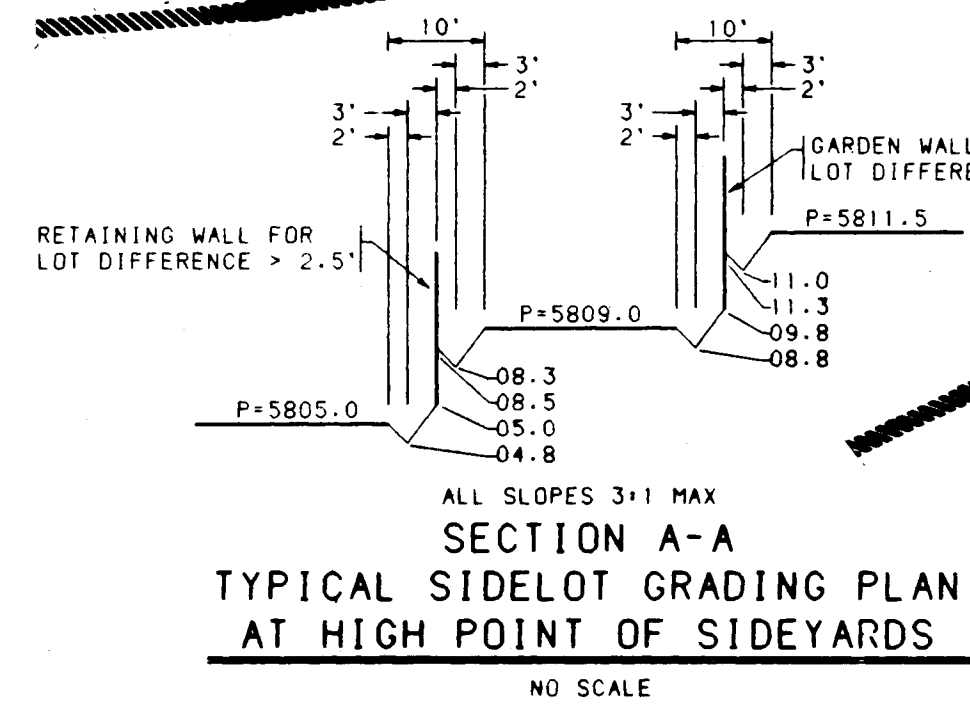
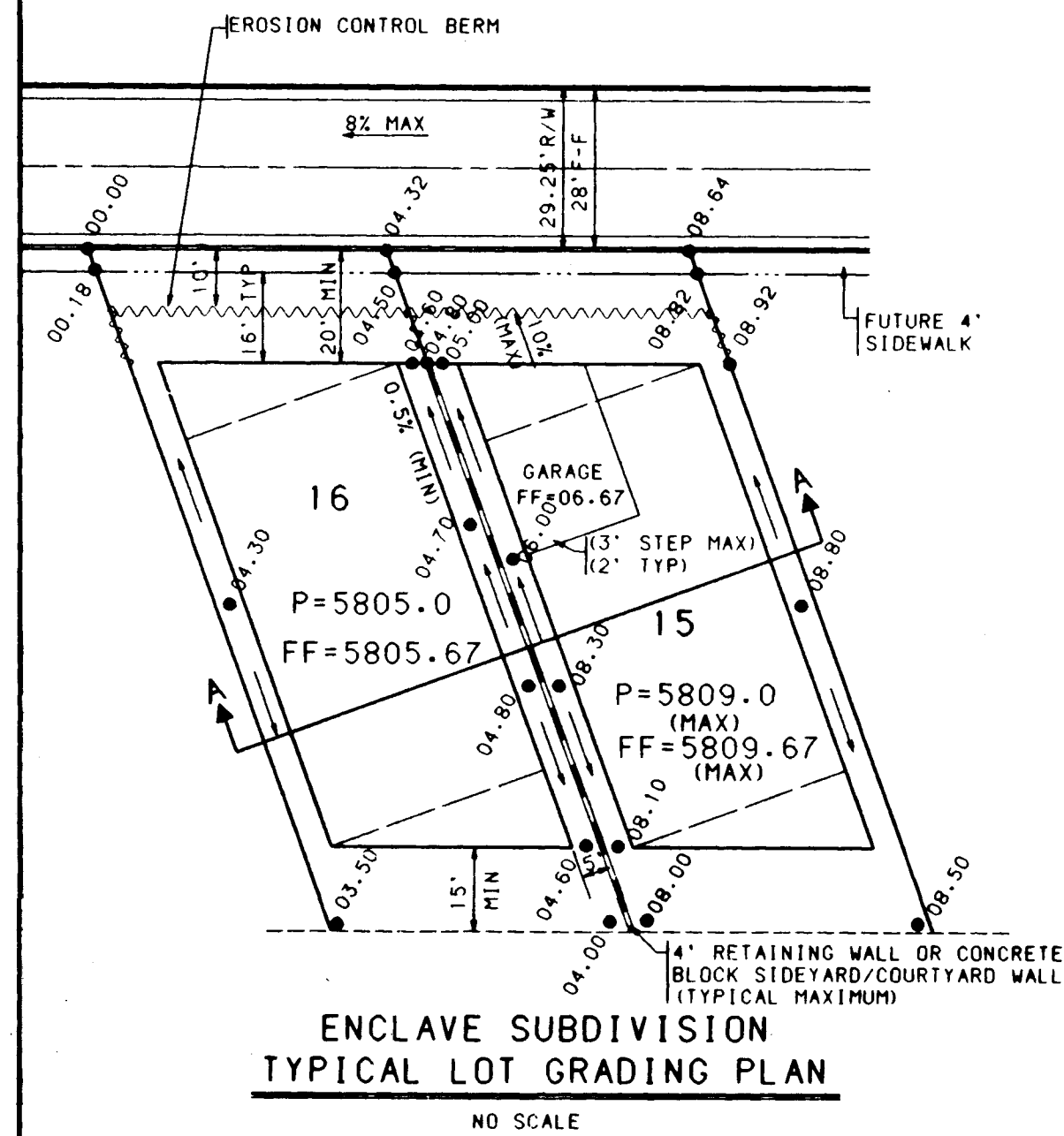
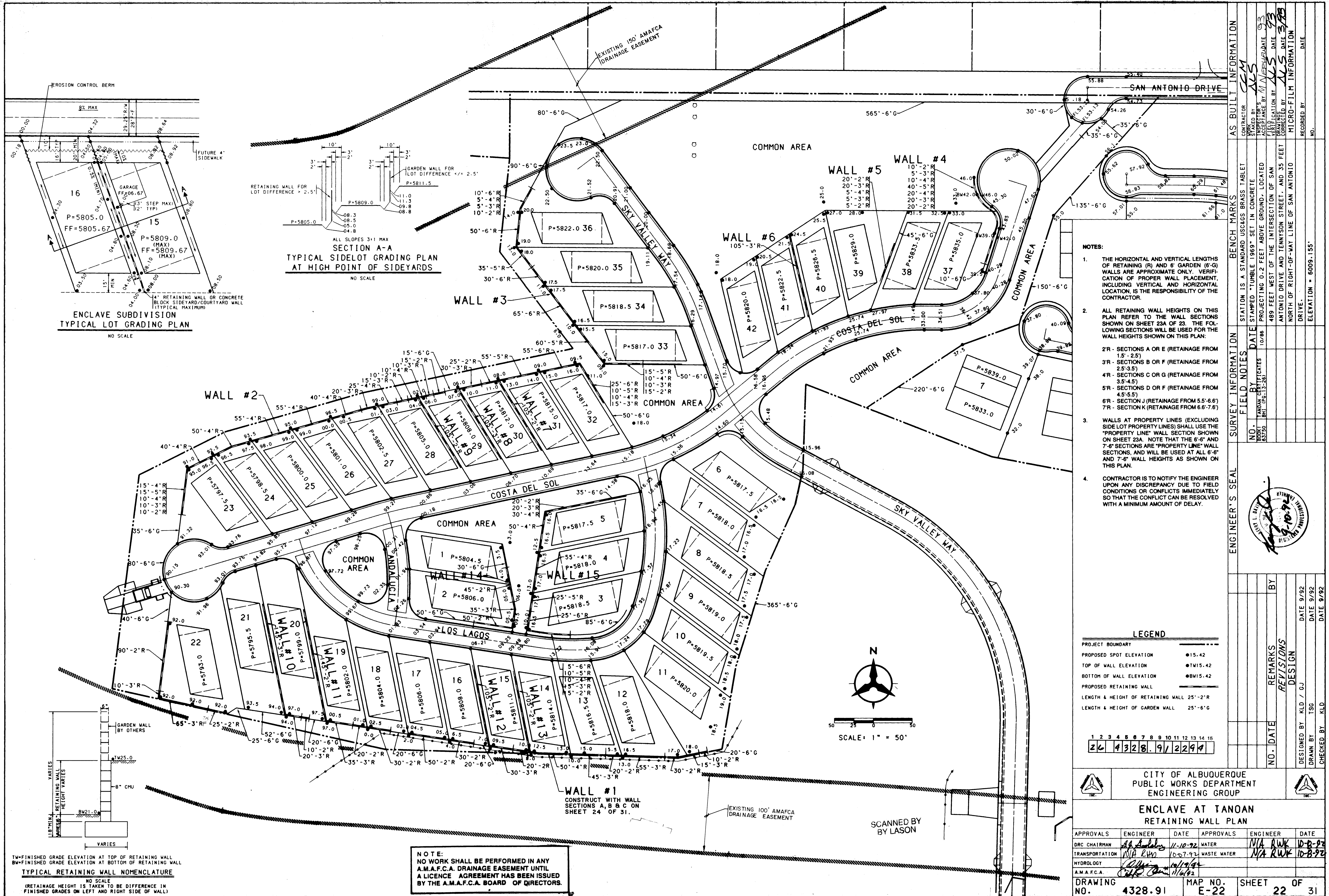


REV	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

APPROVAL OF REVISIONS

	<b>BOHANNAN HUSTON INC.</b> ALBUQUERQUE, NEW MEXICO ENGINEERS PLANNERS PHOTOGRAPHERS	APPROVED FOR CONSTRUCTION <i>Shawn Huston</i> 2-26-93 C.E.
	PROJECT NUMBER 4328.91	SHEET 1 OF 3

BHI JOB NO. 91182-06



- NOTES:
- THE HORIZONTAL AND VERTICAL LENGTHS OF RETAINING (R) AND 6' GARDEN (G) WALLS ARE APPROXIMATE ONLY. VERIFICATION OF PROPER WALL PLACEMENT, INCLUDING VERTICAL AND HORIZONTAL LOCATION, IS THE RESPONSIBILITY OF THE CONTRACTOR.
  - ALL RETAINING WALL HEIGHTS ON THIS PLAN REFER TO THE WALL SECTIONS SHOWN ON SHEET 23A OF 23. THE FOLLOWING SECTIONS WILL BE USED FOR THE WALL HEIGHTS SHOWN ON THIS PLAN:  
2'R - SECTIONS A OR E (RETAINAGE FROM 1.5' - 2.5')  
3'R - SECTIONS B OR F (RETAINAGE FROM 2.5' - 3.5')  
4'R - SECTIONS C OR G (RETAINAGE FROM 3.5' - 4.5')  
5'R - SECTIONS D OR F (RETAINAGE FROM 4.5' - 5.5')  
6'R - SECTION J (RETAINAGE FROM 5.5' - 6.6')  
7'R - SECTION K (RETAINAGE FROM 6.6' - 7.6')
  - WALLS AT PROPERTY LINES (EXCLUDING SIDE LOT PROPERTY LINES) SHALL USE THE "PROPERTY LINE" WALL SECTION SHOWN ON SHEET 23A. NOTE THAT THE 6'-6" AND 7'-6" SECTIONS ARE "PROPERTY LINE" WALL SECTIONS, AND WILL BE USED AT ALL 6'-6" AND 7'-6" WALL HEIGHTS AS SHOWN ON THIS PLAN.
  - CONTRACTOR IS TO NOTIFY THE ENGINEER UPON ANY DISCREPANCY DUE TO FIELD CONDITIONS OR CONFLICTS IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

LEGEND

PROJECT BOUNDARY	---
PROPOSED SPOT ELEVATION	● 15.42
TOP OF WALL ELEVATION	● 15.42
BOTTOM OF WALL ELEVATION	● 8.15.42
PROPOSED RETAINING WALL	---
LENGTH & HEIGHT OF RETAINING WALL	25'-2"
LENGTH & HEIGHT OF GARDEN WALL	25'-6"

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CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING GROUP

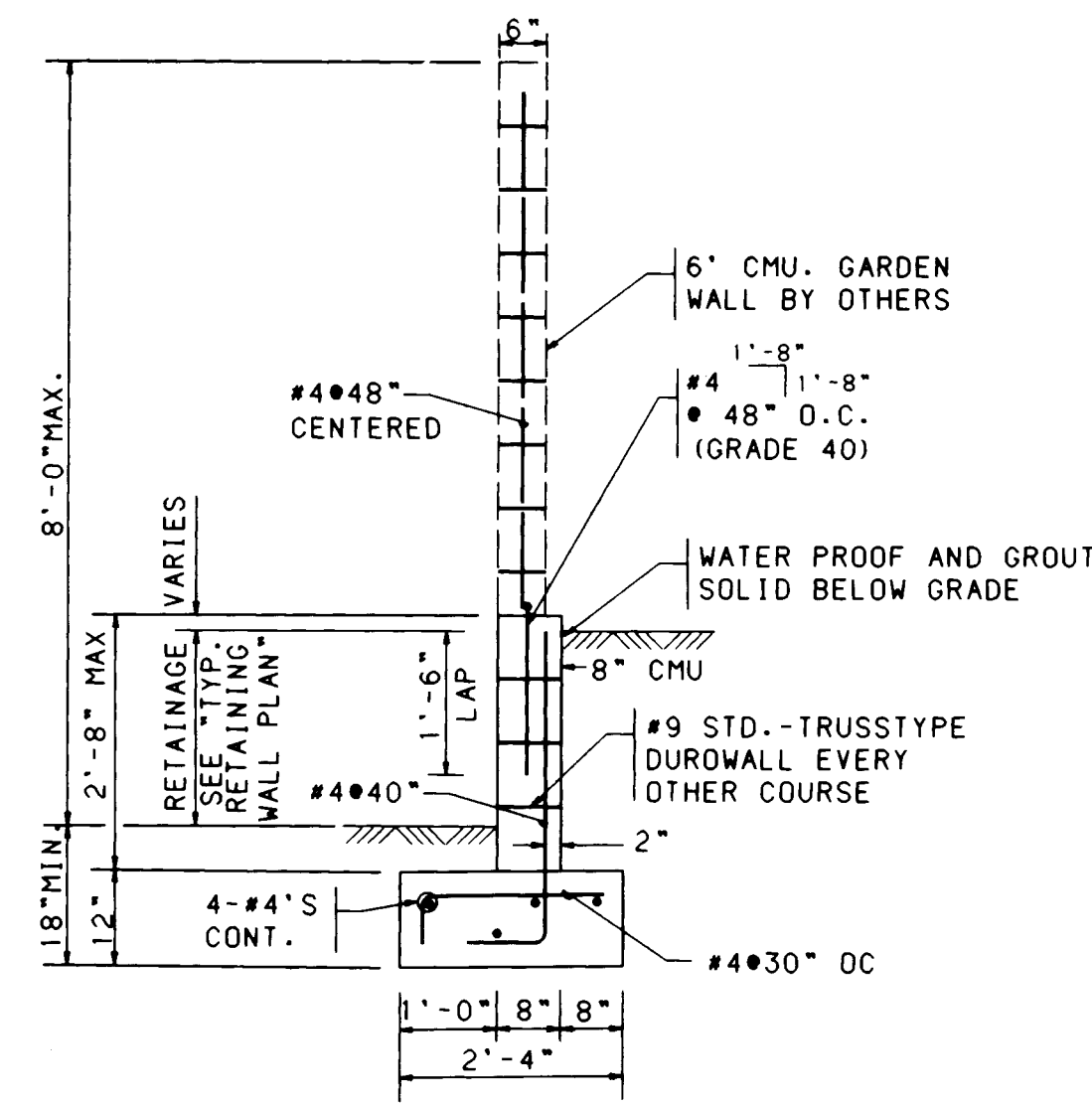
ENCLAVE AT TANOAN  
RETAINING WALL PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	11/10/92	11/10/92	WATER	N/A RWK	10-8-92
TRANSPORTATION	11/10/92	11/10/92	WASTE WATER	N/A RWK	10-8-92
HYDROLOGY	11/10/92	11/10/92			
A.M.A.F.C.A.	11/10/92	11/10/92			

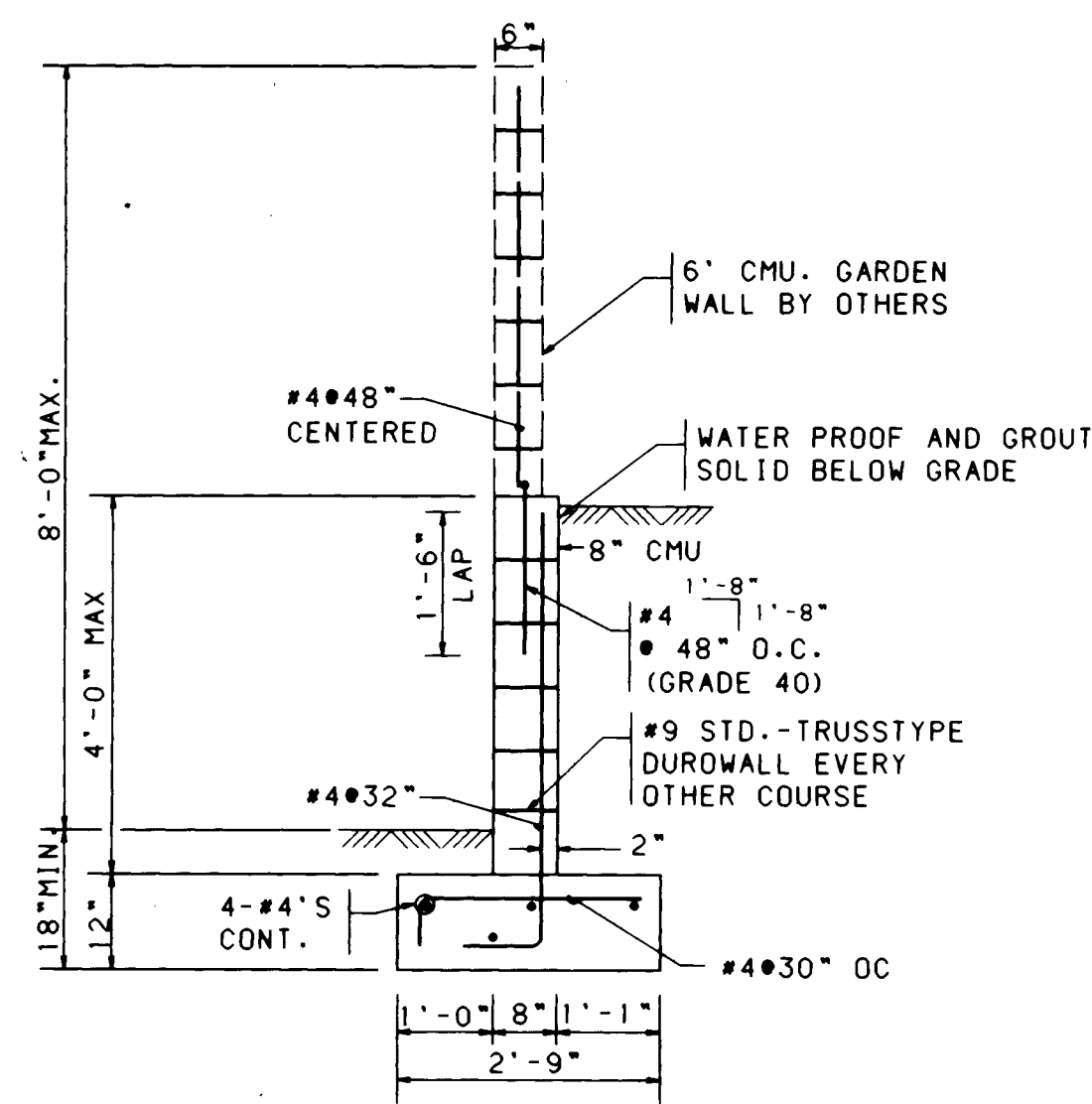
DRAWING NO. 4328.91 MAP NO. E-22 SHEET 22 OF 31

APPROVED BY: [Signature] DATE: 11/10/92

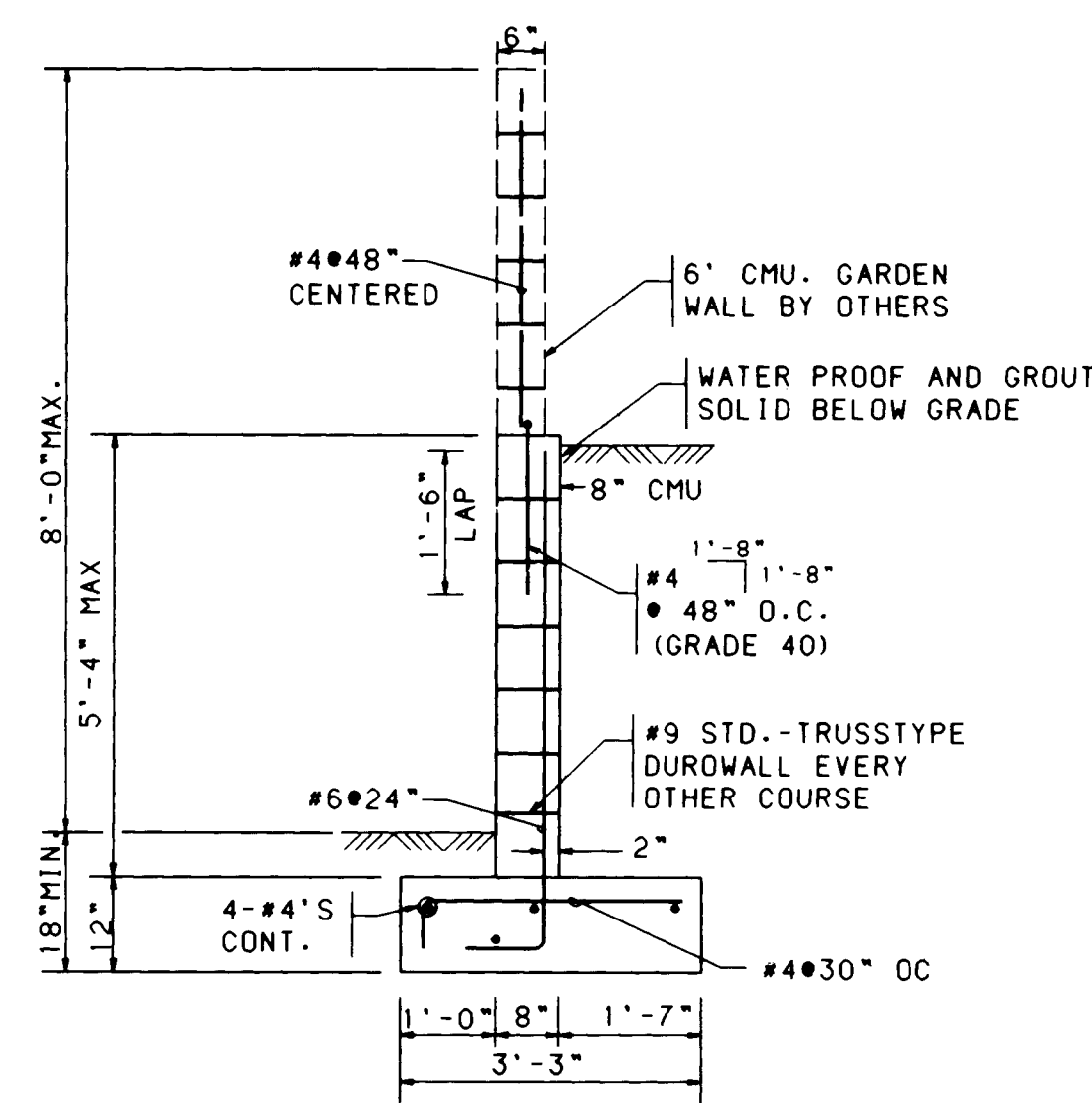




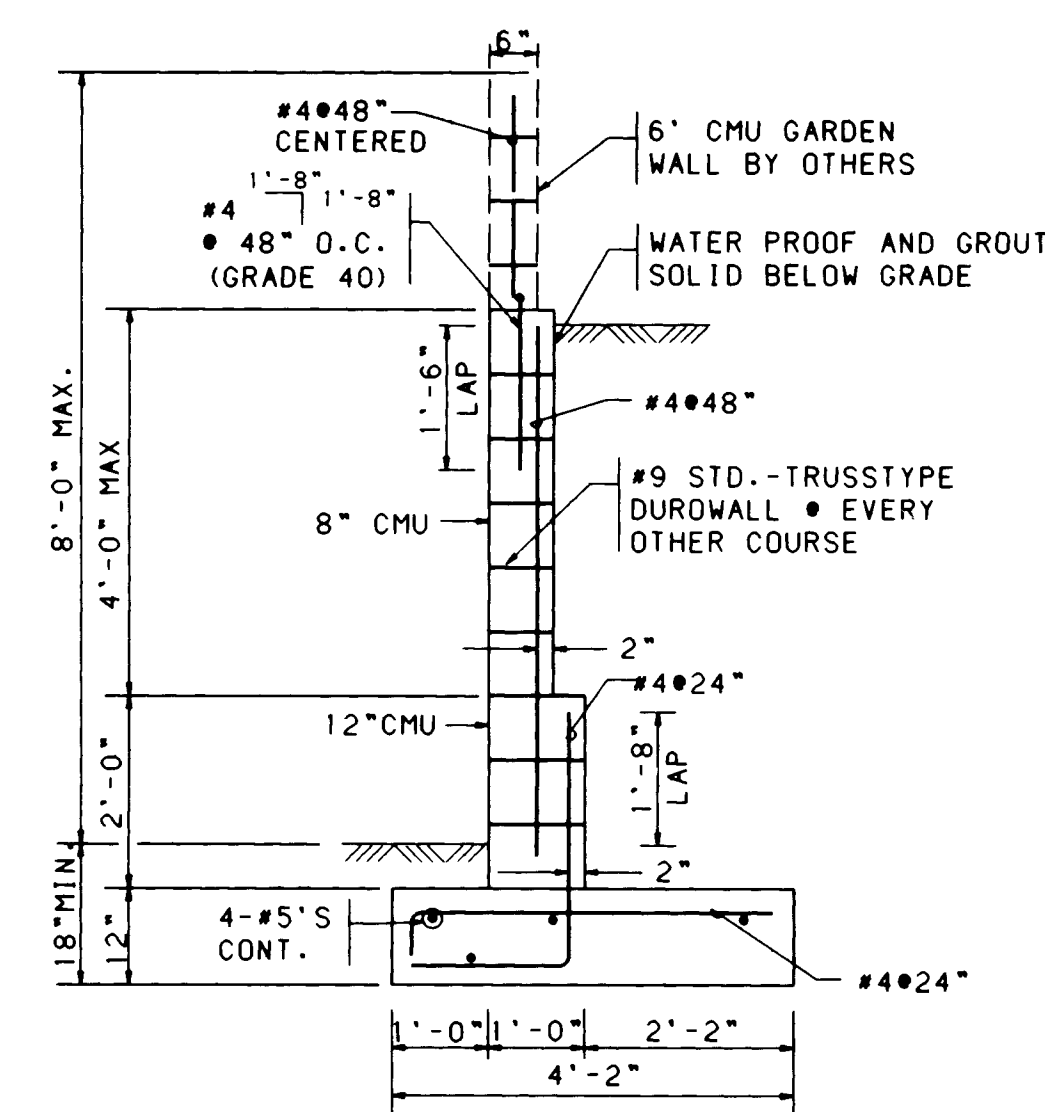
**RETAINING WALL FOR 2'-6" MAX. RETAINAGE**  
NO SCALE



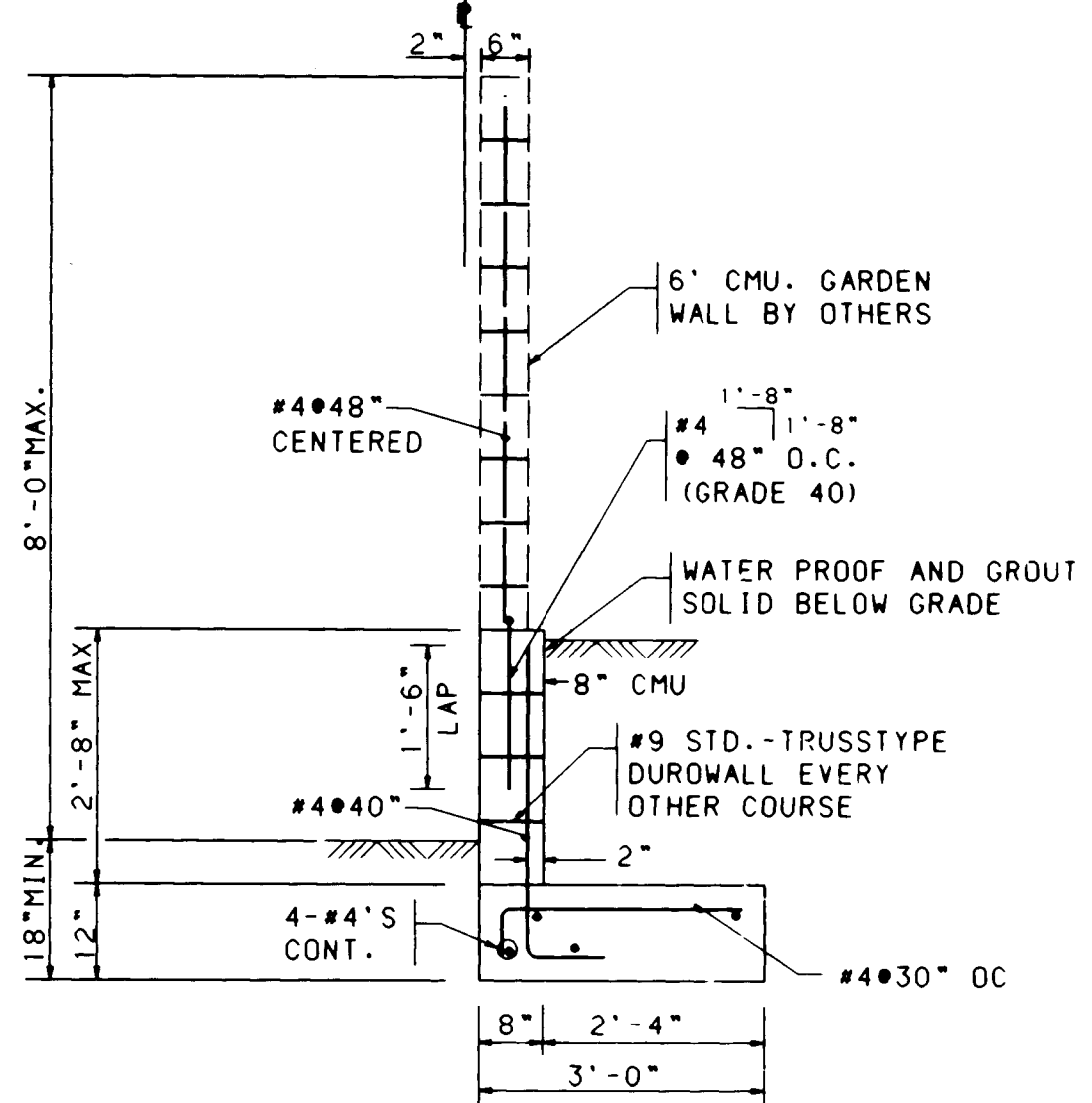
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NO SCALE



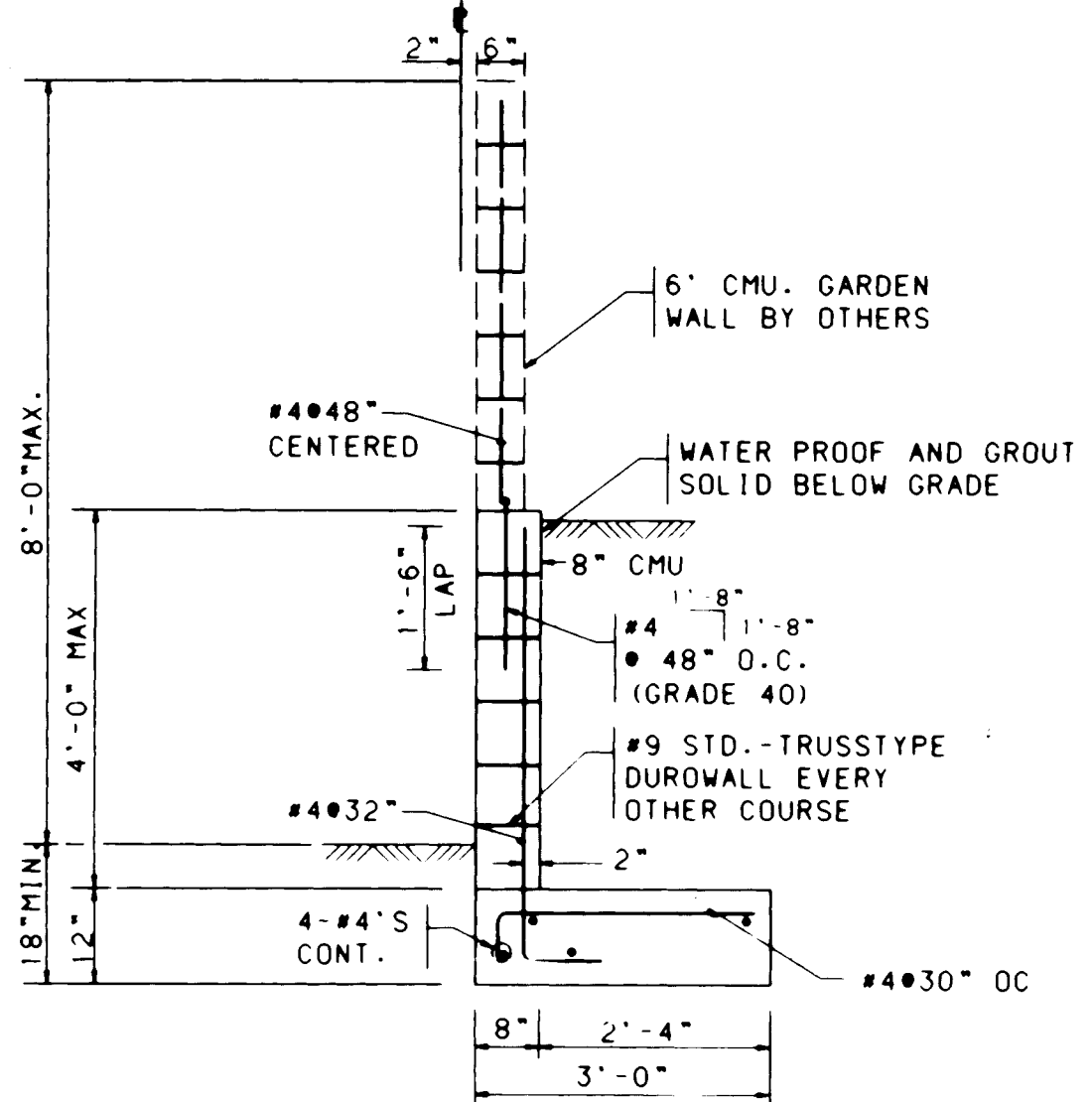
**RETAINING WALL FOR 4'-6" MAX. RETAINAGE**  
NO SCALE



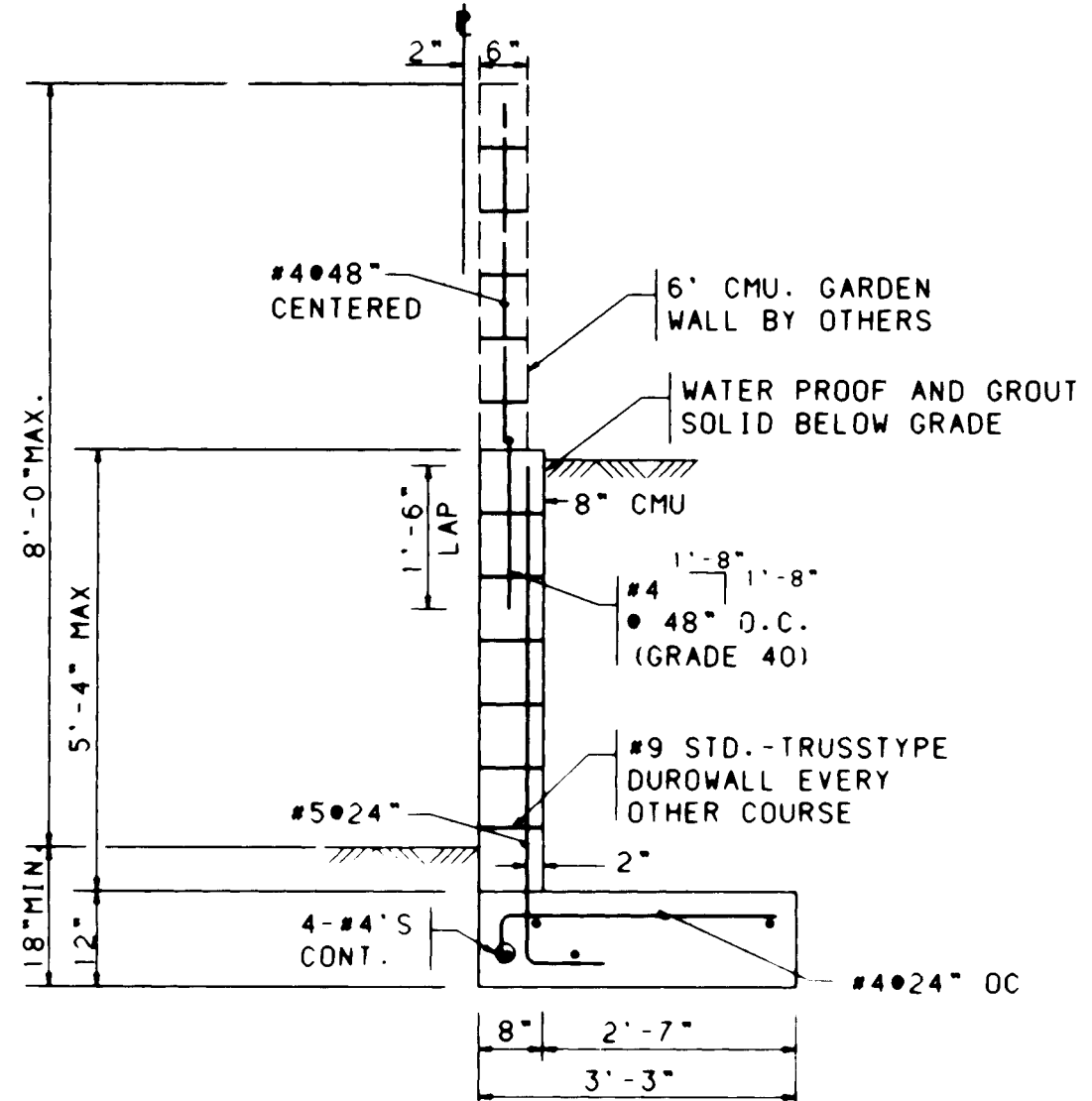
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NO SCALE



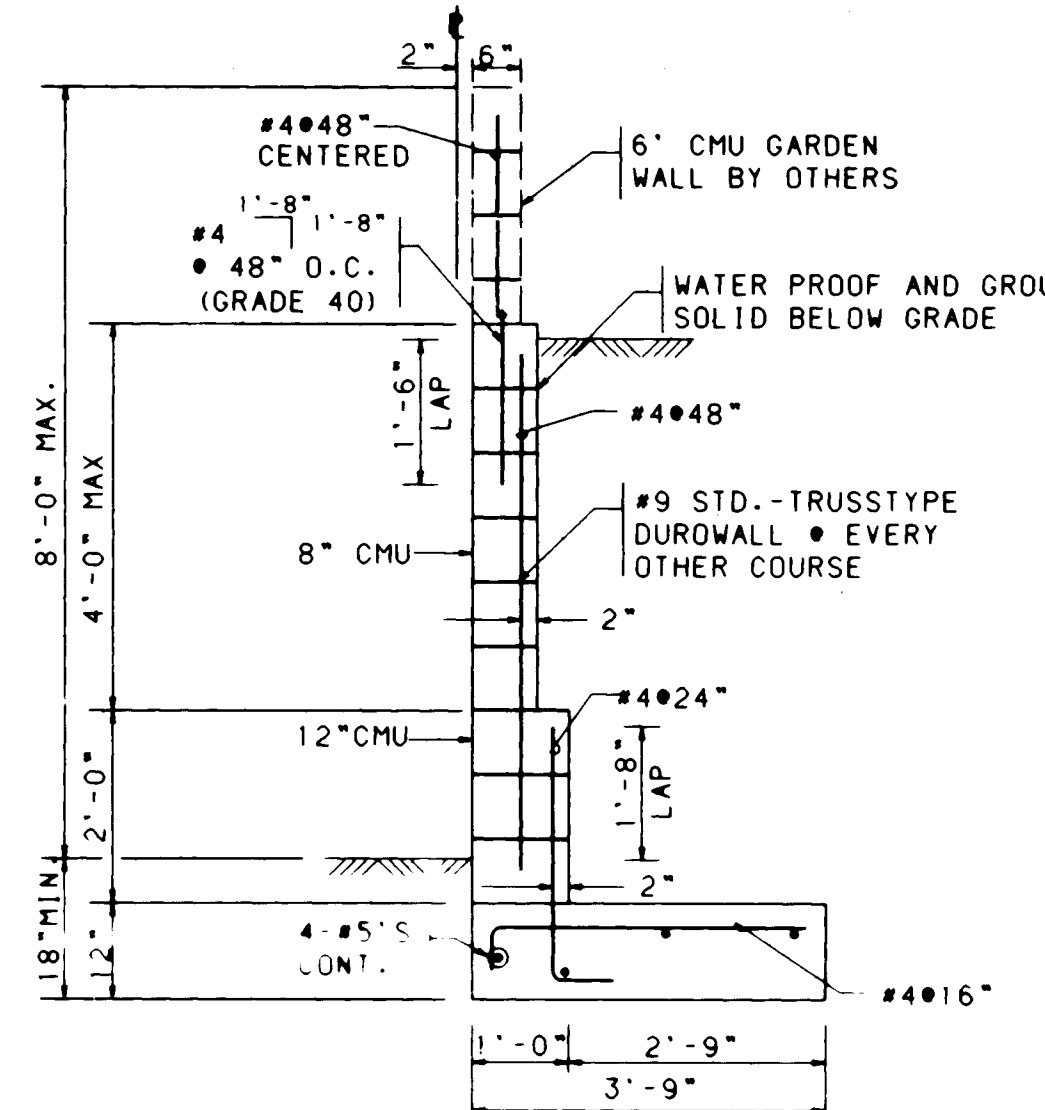
**RETAINING WALL FOR 2'-6" MAX. RETAINAGE**  
NO SCALE



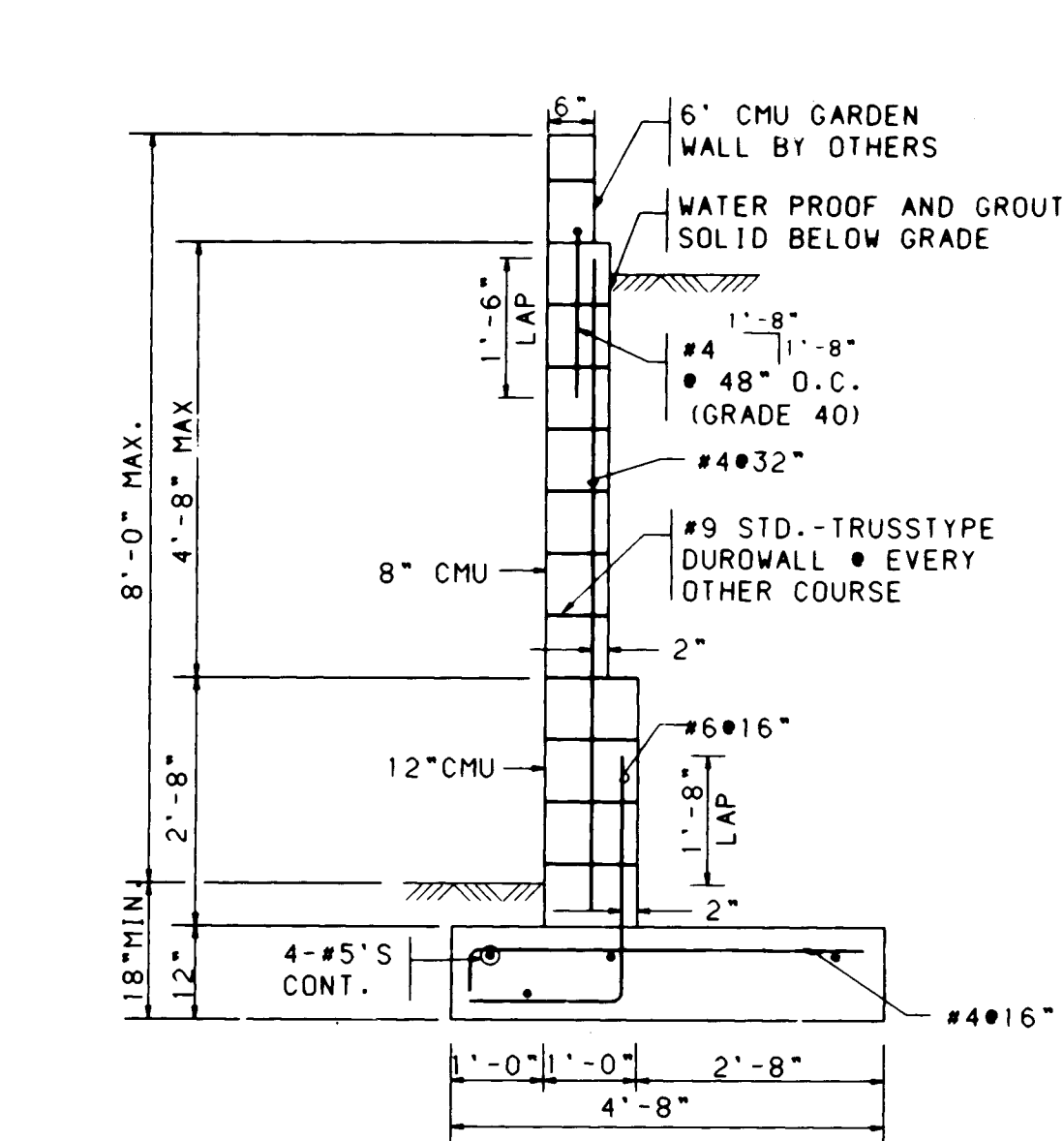
**RETAINING WALL FOR 3'-6" MAX. RETAINAGE**  
NO SCALE



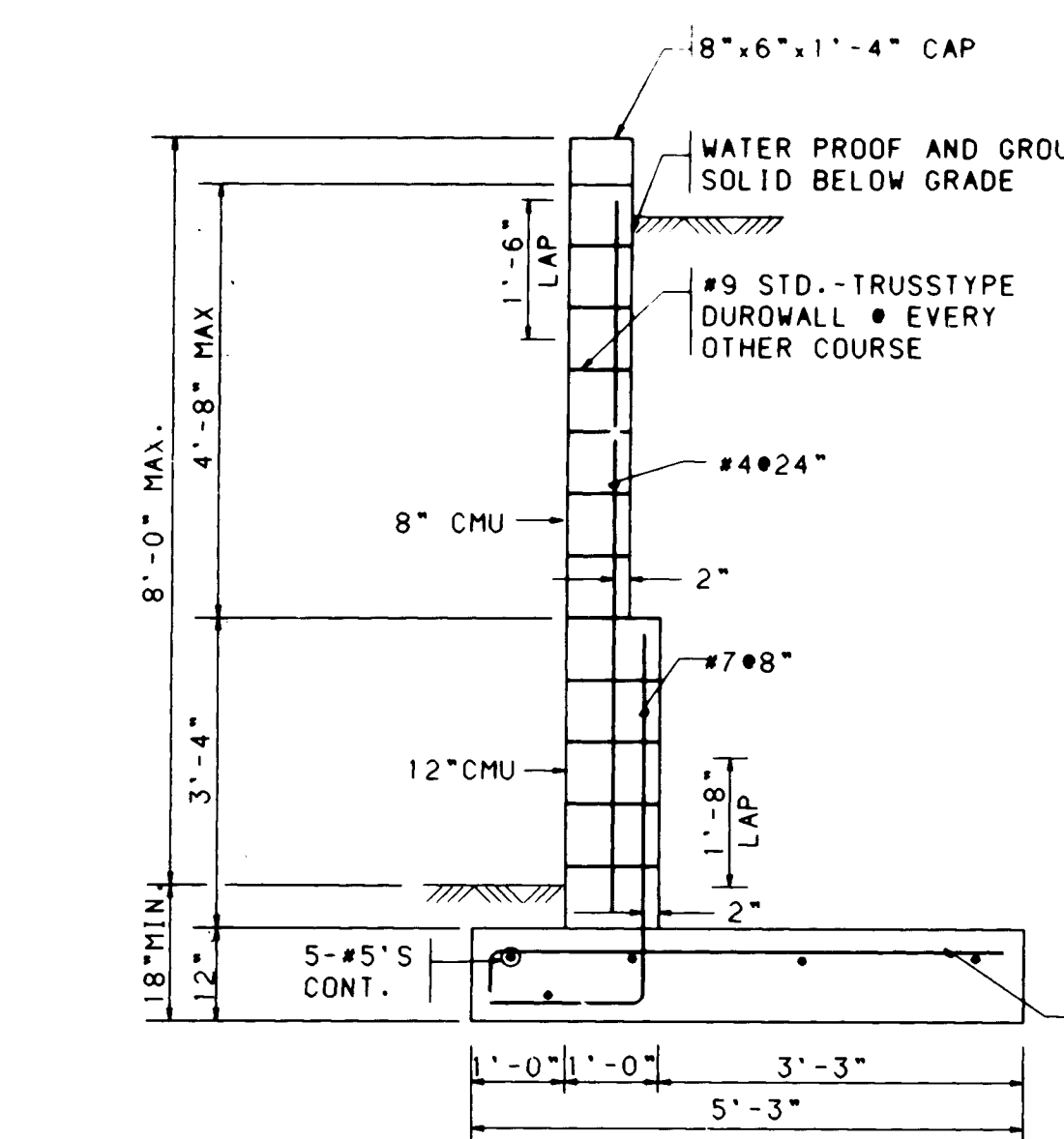
**RETAINING WALL FOR 4'-6" MAX. RETAINAGE**  
NO SCALE



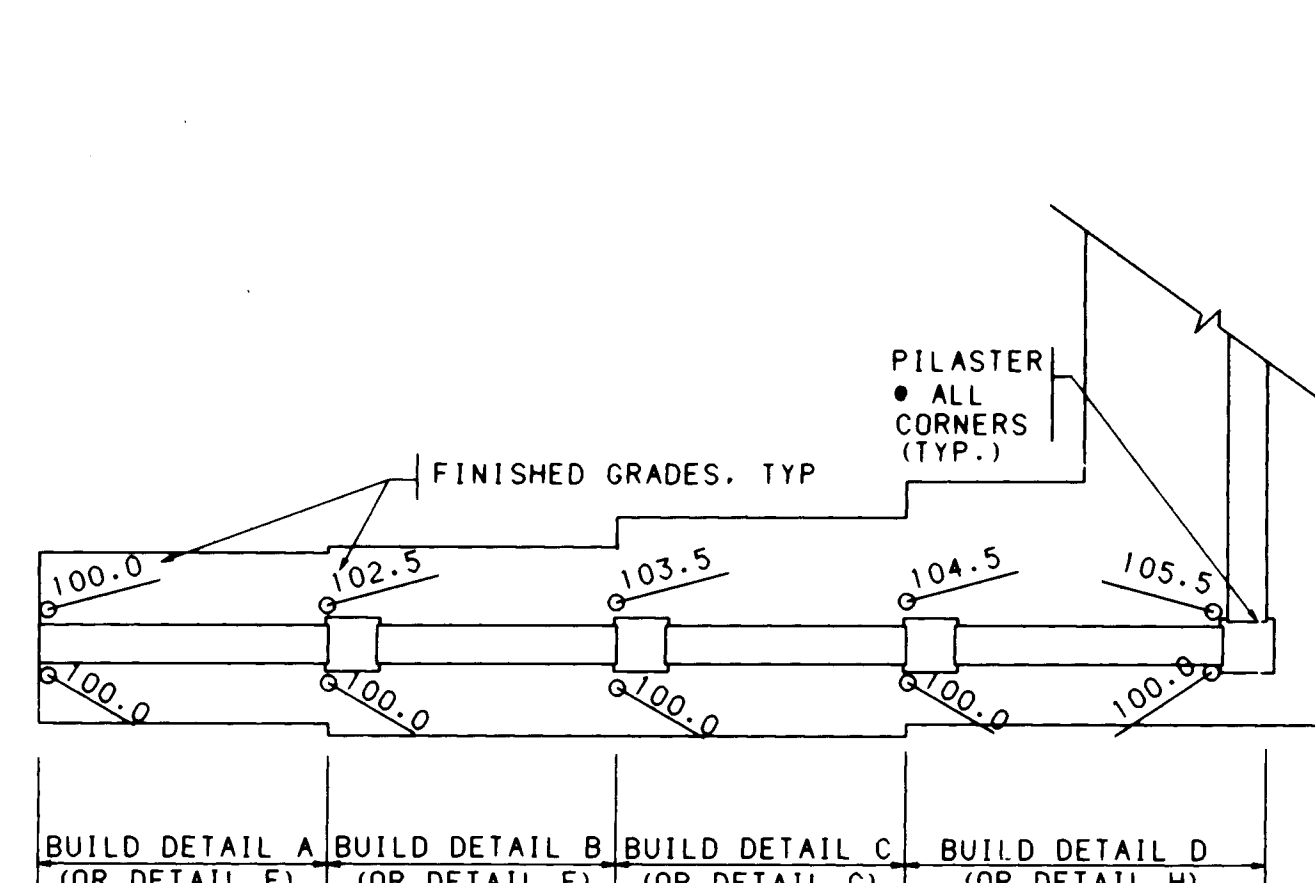
**RETAINING WALL FOR 5'-6" MAX. RETAINAGE**  
NO SCALE



**RETAINING WALL FOR 6'-6" MAX. RETAINAGE**  
NO SCALE



**RETAINING WALL FOR 7'-6" MAX. RETAINAGE**  
NO SCALE



NOTE: RETAINAGE HEIGHT IS TAKEN TO BE DIFFERENCE IN FINISHED GRADES ON LEFT AND RIGHT SIDE OF WALL.

**TYPICAL RETAINING WALL PLAN**  
NO SCALE

**GENERAL NOTES (CONTINUED)**

- RETAINING WALLS SHALL RECEIVE A BITUMINOUS WATERPROOFING MATERIAL ACCEPTABLE TO THE ENGINEER. WATERPROOFING SHALL BE APPLIED TO THE BACK OF THE CMU BELOW GRADE.
- SEE GRADING AND DRAINAGE PLAN SHEETS 4, 5, & 6 FOR ADDITIONAL NOTES PERTAINING TO RETAINING WALLS.
- 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.

NOTE: NO WORK SHALL BE PERFORMED IN ANY A.M.A.F.C.A. DRAINAGE EASEMENT UNTIL A LICENCE AGREEMENT HAS BEEN ISSUED BY THE A.M.A.F.C.A. BOARD OF DIRECTORS.

**GENERAL NOTES (RETAINING WALL CONST.)**

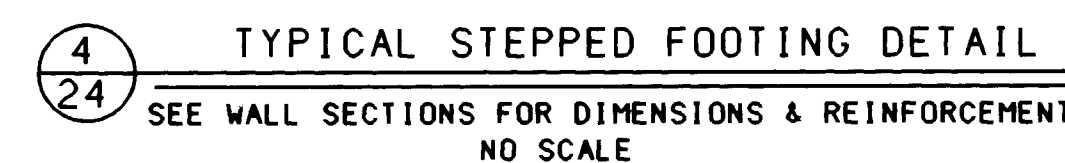
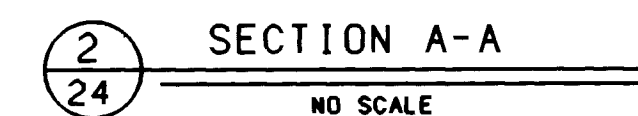
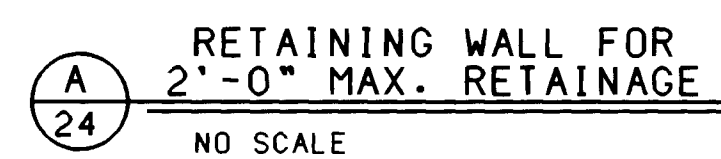
- RETAINING WALL FOOTINGS SHALL BE EMBEDDED A MINIMUM OF EIGHTEEN INCHES BELOW LOWEST ADJACENT GRADE. RETAINING WALL FOOTINGS SHALL BE PLACED ON A MINIMUM OF 2'-0" OF ENGINEERED FILL EXTENDING A MINIMUM OF 2'-0" FROM THE EDGE OF THE FOOTING AND COMPACTED TO A MINIMUM OF 95% OPTIMUM DENSITY (ASTM D-1557). BACKFILL SHALL BE FREE DRAINING MATERIAL AND SHALL BE PLACED IN 8" LOOSE LIFTS AND COMPACTED TO 90% OPTIMUM DENSITY (ASTM D-1557) WITH LIGHT VIBRATORY COMPACTING EQUIPMENT.
- RETAINING WALL SHALL NOT BE BACKFILLED UNTIL AT LEAST 7 DAYS AFTER PLACING OF FINAL GROUT LEVEL. WHERE HEAVY EQUIPMENT IS USED IN BACKFILLING, SUCH EQUIPMENT SHOULD NOT APPROACH CLOSER TO THE TOP OF THE WALL THAN A DISTANCE EQUAL TO THE HEIGHT OF THE WALL. CARE SHOULD BE TAKEN TO AVOID EXERTING FORCES ON THE WALL AS COULD BE CAUSED BY EARTH MOVING EQUIPMENT.
- SLOPES UP AWAY FROM WALLS SHALL BE LEVEL OR SLOPING DOWNWARD.
- REINFORCED EXPANSION CONTROL PILASTERS SHALL BE SPACED AT 12'-0" O.C. AND AT WALL TRANSITIONS. SEE PILASTER DETAIL SHEET 23B.
- DISCONTINUE HORIZONTAL WALL REINFORCEMENT AT JOINTS AND PILASTERS. USE 6" MIN. LAP SPLICES.
- REINFORCEMENT OF A SIZE AND SPACING OTHER THAN THAT GIVEN IN THE DETAILS MAY BE USED PROVIDING SUCH OTHER REINFORCEMENT FURNISHES AN AREA OF STEEL AT LEAST EQUAL TO THAT GIVEN IN THE DETAILS. LAP SPLICES IN REINFORCING BARS SHALL BE:
  - #3 BAR = 1'-4"
  - #4 BAR = 1'-8"
  - #5 BAR = 2'-2"
- HORIZONTAL REINFORCING IN FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH TRANSITIONS. FIELD BEND BARS AT TRANSITIONS AS REQUIRED.
- THE GRADE 40 "L" BAR AT TOP OF THE RETAINING WALL IS TO LAP WITH THE REQUIRED VERTICAL REINFORCEMENT OF THE 6" CMU GARDEN WALL. THE HORIZONTAL LEG OF THE "L" BAR SHALL BE ALIGNED WITH THE WALL.
- CONSTRUCTION OF RETAINING WALLS SHALL CONFORM TO REQUIREMENTS OF THE UNIFORM BUILDING CODE SECTION 24, LOW-LIFT GROUTING METHOD.
- OMISSION OF A VERTICAL MORTAR JOINT ON FIRST COURSE AT 48" O.C. SHALL BE USED FOR WEEP HOLES. WHITE SLUMP BLOCK WITH A MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI MAY BE SUBSTITUTED FOR STANDARD CMU GRADE N.
- DESIGN DATA
  - BLOCK WEIGHT 12" = 130 PSF
  - BLOCK WEIGHT 8" = 85 PSF
  - SOIL WEIGHT = 110 PCF
  - EQUIV. FLUID PRESSURE = 36 PCF
  - SOIL BEARING PRESSURE = 2000 PSF (1/3 INCREASE FOR WIND/SEISMIC)
  - COEFFICIENT OF FRICTION = 0.4
  - PASSIVE SOIL PRESSURE = 325 PCF
  - CONCRETE FC (28 DAYS) = 3000 PSI
  - GROUT STRENGTH = 2000 PSI
  - CMU GRADE N, 15 = 1500 PSI (GROUTED)
  - REINFORCEMENT = 60 ASTM A-615, UNLESS NOTED OTHERWISE
  - MORTAR = TYPE M
- CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONCRETE FOOTING POUR FOR INSPECTION OF COMPACTION UNDER FOOTING, FOOTING DEPTH AND WIDTH AND WALL STEEL AND SPACING. FINAL INSPECTION OF FOOTING AND WALL WILL BE REQUIRED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CODE ADMINISTRATION APPROVAL AND FEES ASSOCIATED WITH IT.

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CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING GROUP

ENCLAVE AT TANOAN  
RETAINING WALL DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN	B. J. ...	11-10-92	WATER	N/A R/W	10-8-92
TRANSPORTATION	...	...	WASTE WATER	N/A R/W	10-8-92
HYDROLOGY	...	...			
A.M.A.F.C.A.	...	...			
DRAWING NO.	4328.91	MAP NO. E-22	SHEET 23	OF 31	



1. SOIL CEMENT FLOOD WALL SHALL BE CONSTRUCTED ACCORDING TO THE DETAILS ON SHEET 25 AND TO THE HORIZONTAL AND VERTICAL DIMENSIONS SHOWN ON SHEETS 26-29.
2. SOIL CEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 625, SOIL CEMENT (ADDED SECTION) AVAILABLE FROM THE ENGINEER.
3. THE EXISTING SANITARY SEWER LINE SHOWN IN TYPICAL SECTION A AND ON THE CROSS SECTIONS ON PAGES 26-29 SHALL BE REMOVED AND REPLACED AS SHOWN ON SHEET 30, PRIOR TO CONSTRUCTION OF THE SOIL CEMENT FLOODWALL.
4. CONSTRUCTION AND MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE DRAINAGE COVENANT AND LICENSE AGREEMENT FILED IN THE OFFICE OF THE COUNTY CLERK ON JANUARY 5, 1993 IN MISC. BK. 93-1 P. 1808-1850, AS DOCUMENT #93000841.
5. SEE SHEET 23 FOR ADDITIONAL RETAINING WALL SECTIONS, NOTES AND DETAILS.

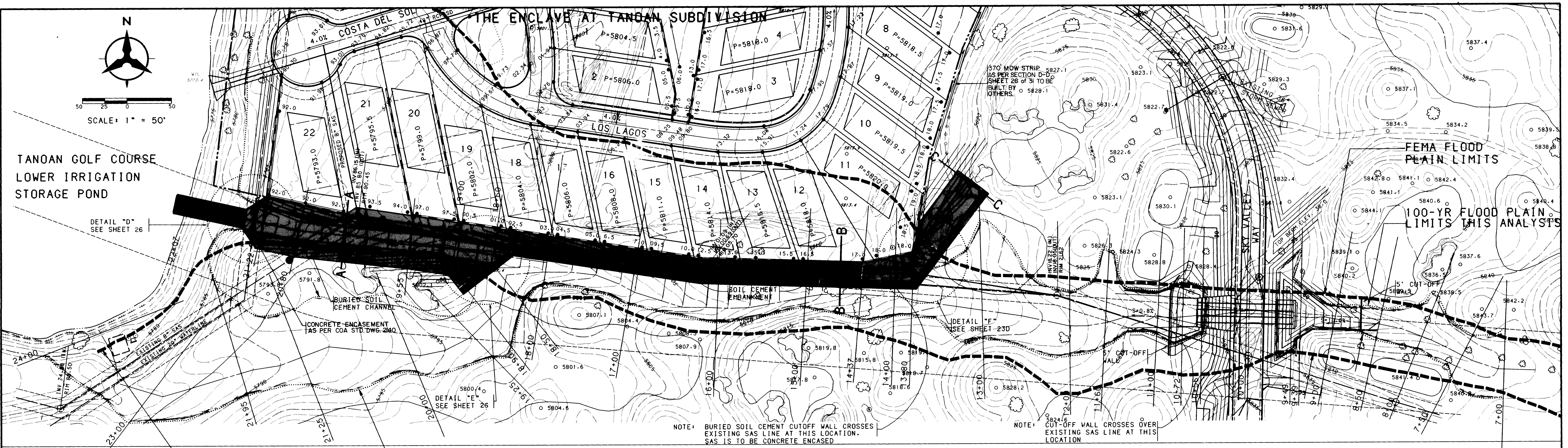
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APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>N/A</i>	2-25-93	WATER	<i>N/A</i>	2-18-93
TRANSPORTATION	<i>N/A</i>	2-18-93	WASTE WATER	<i>N/A</i>	2-18-93
HYDROLOGY	<i>N/A</i>	2-22-93			
ANALYSIS	<i>N/A</i>	2/18/93			
DRAWING NO.	4328-91	MAP NO.	F-22	SHEET	24 OF 31

BHI JOB NO. 91182.07



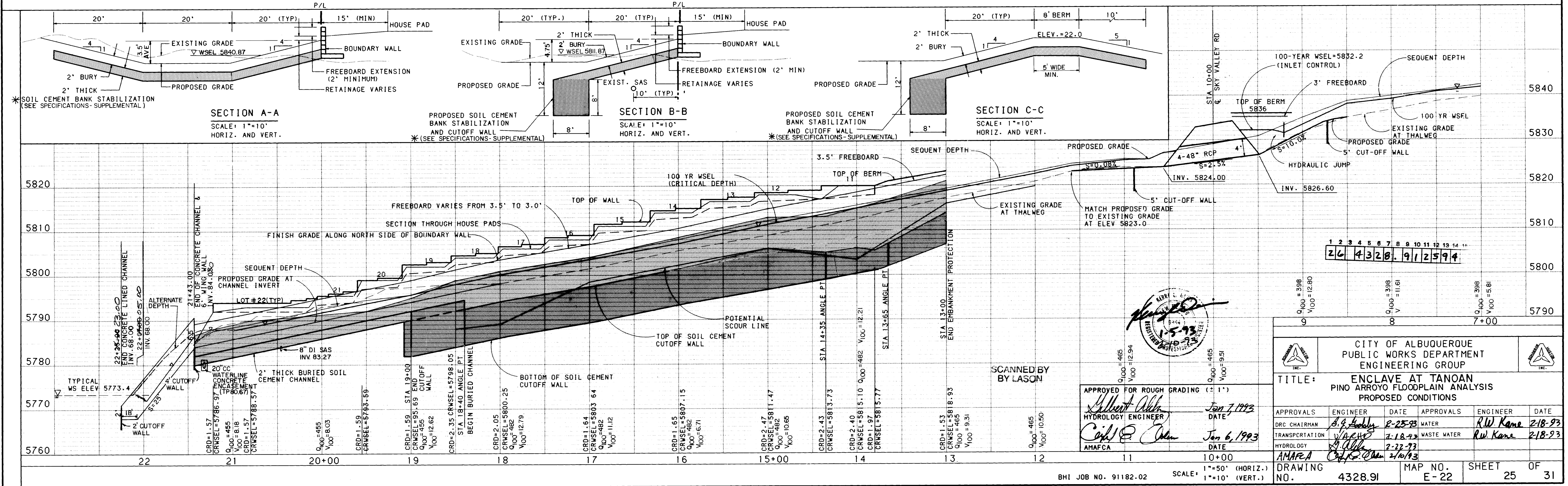


EXISTING FLOODPLAIN LIMITS PER FIRM

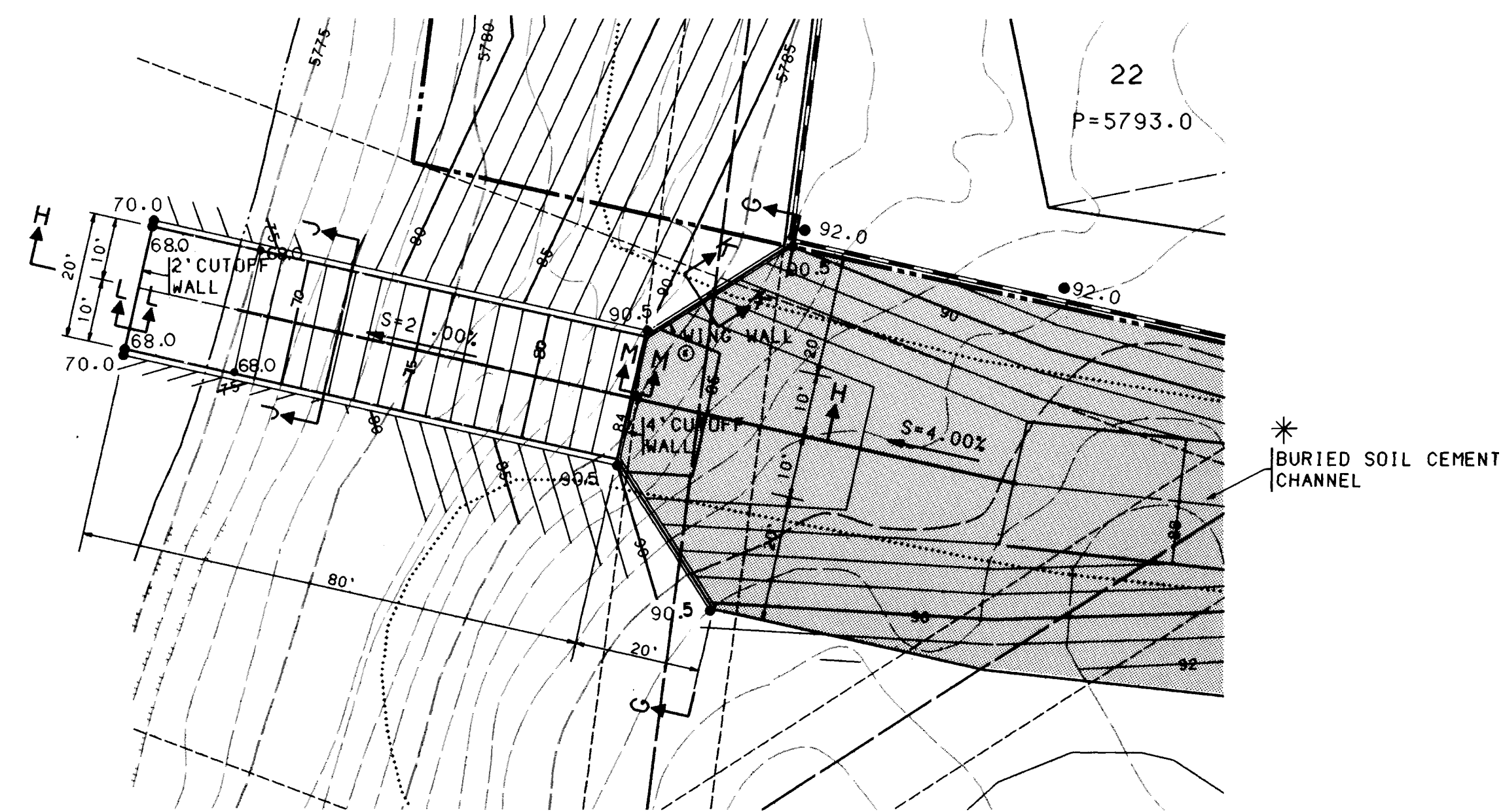
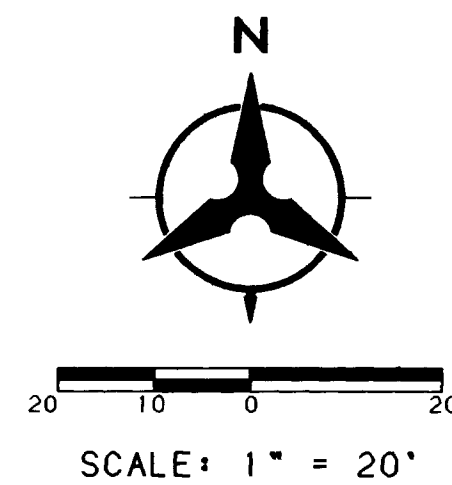
100-YR FLOOD PLAIN LIMITS WITH PROPOSED FLOODWALL

\*NOTE: SOIL CEMENT BANK STABILIZATION WILL BE CONSTRUCTED IN COMPLIANCE WITH SECTION 625; SOIL CEMENT (ADDED SECTION), AVAILABLE AT BOHANNAN-HUSTON INC.

NOTE: NO BASEMENTS WILL BE PERMITTED ON LOTS 11-22.



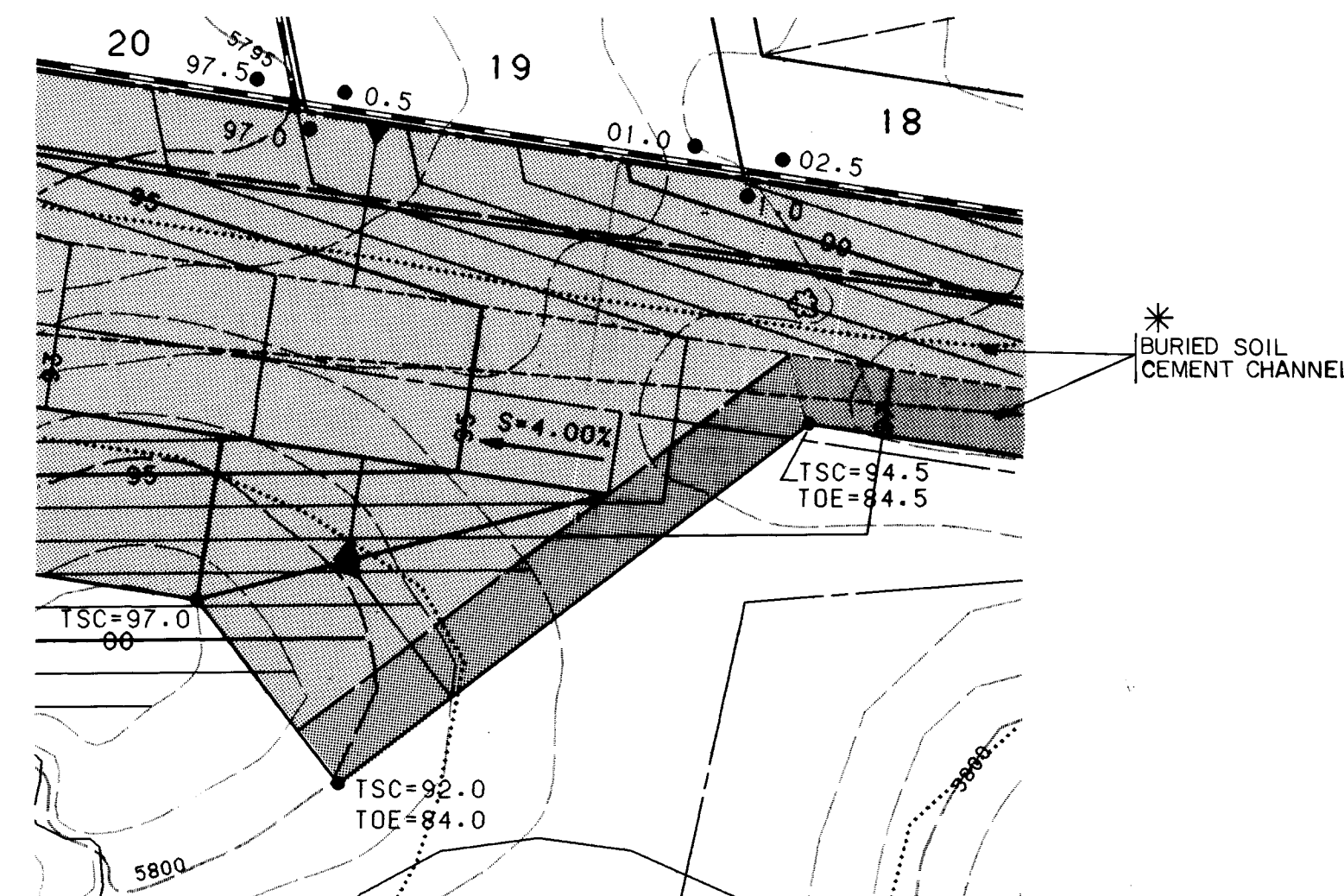




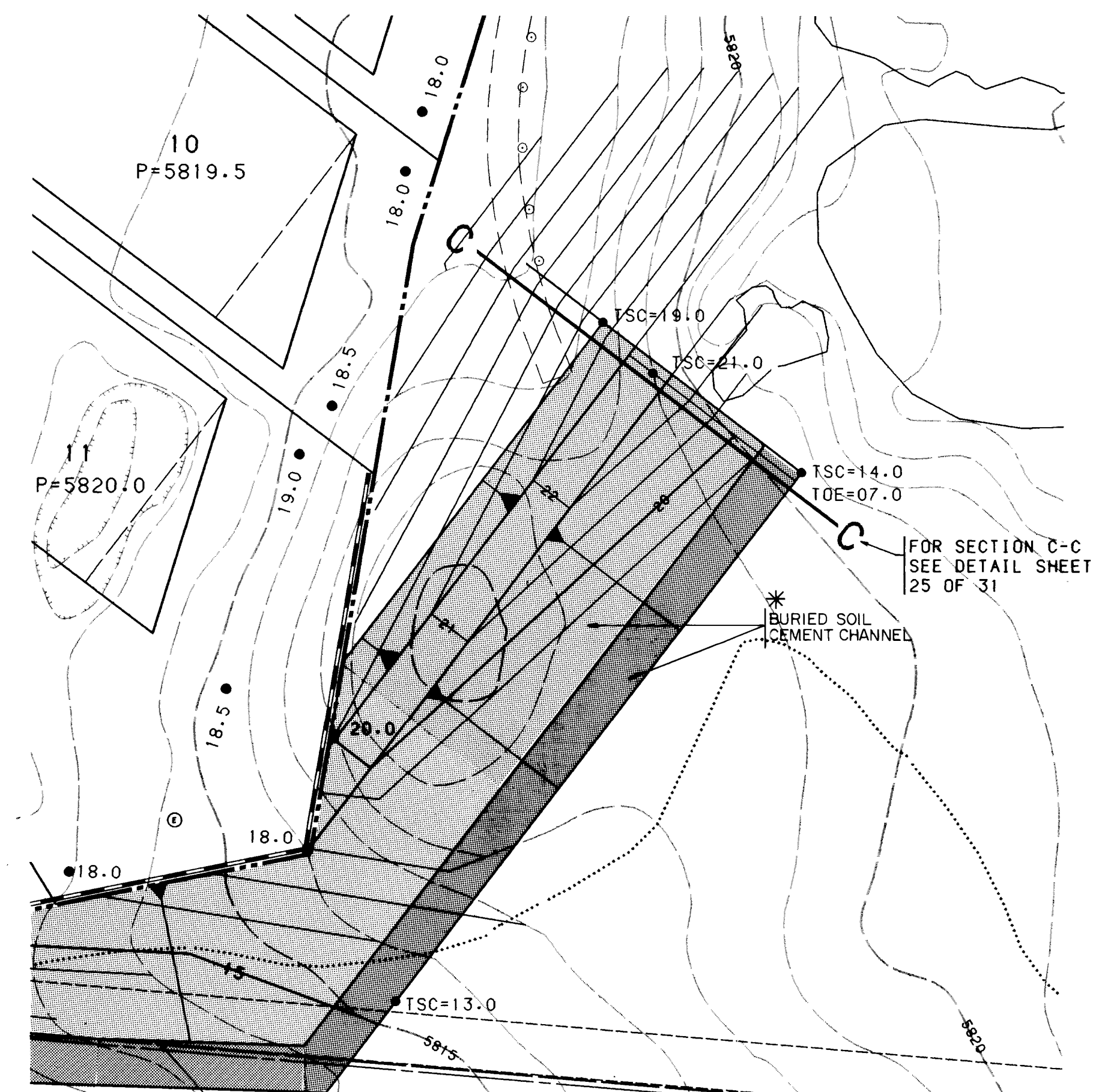
DETAIL "D"  
SCALE: 1"=20'

NOTE:  
FOR SECTIONS G THRU M  
SEE SHEET 27 OF 31.

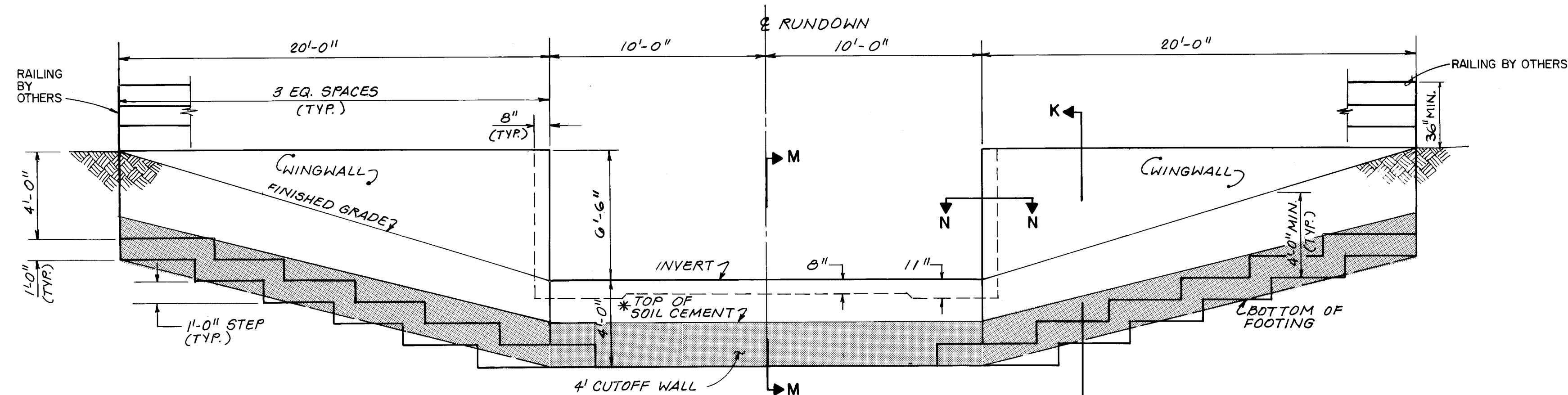
NOTE:  
SOIL CEMENT BANK STABILIZATION WILL BE  
CONSTRUCTED IN COMPLIANCE WITH SECTION  
625; SOIL CEMENT(ADDED SECTION), AVAILABLE  
AT BOHANNAN-HUSTON INC.



DETAIL "E"  
SCALE: 1"=20'







ELEVATION G-G

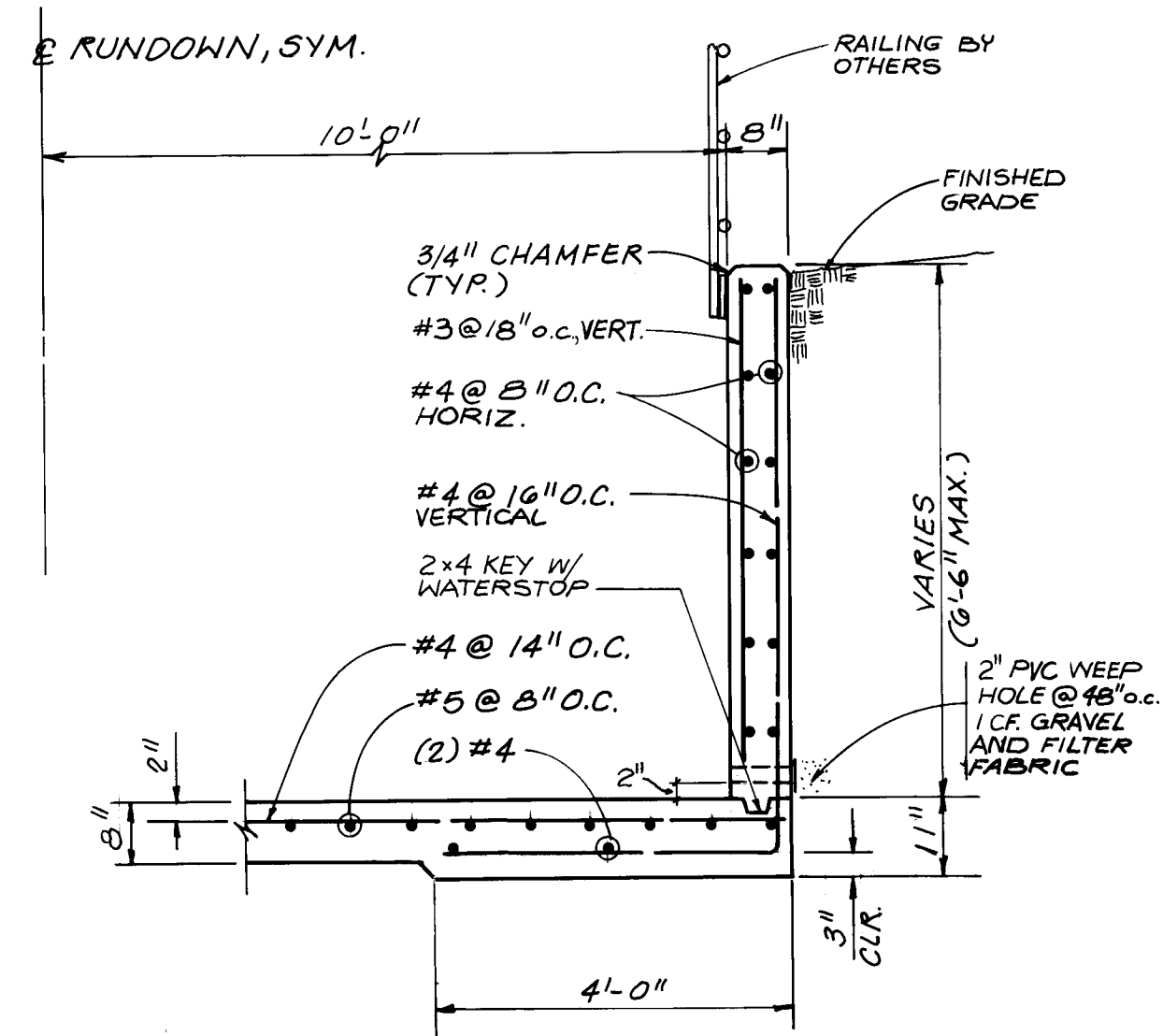
SCALE: 1/4" = 1'-0"

GENERAL STRUCTURAL NOTES FOR CONCRETE CONSTRUCTION

- CODES AND MANUALS: Uniform Building Code, 1991 Edition; City of Albuquerque Standard Specifications for Public Works Construction, 1986 Ed.; ACI 318, Latest Edition, Building Code Requirements for Reinforced Concrete.
- DESIGN LOADS:
  - Soil Loads: Density = 120 pcf; Active lateral = 36 pcf; Passive lateral = 350 pcf; Backfill slope = level.
  - Maximum Allowable soil bearing pressure: 2500 psf; \*Allowable 1/3 stress increase for wind or seismic loading.
- GENERAL:
  - The Contractor shall verify all dimensions in the field.
  - Shop drawings shall be furnished for review before any fabrication and erection is started. Poorly executed shop drawings shall be rejected and re-submitted.
  - The Contractor shall be responsible for providing safe and adequate shoring for all parts of the wall and adjacent structures during construction, as well as worker safety and compliance with OSHA or other agency safety guidelines.
  - The contractor shall notify the Engineer prior to concrete placement for inspection. Final inspection of the footing and wall is required.
  - The contractor is responsible for code administration approval and fees associated with it.
  - Retaining walls shall receive a Bituminous waterproofing material acceptable to the Engineer. Waterproofing shall be applied to the back of the wall below grade.
  - All work detailed on these plans shall 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 Ed.
  - Retainage height is taken to be the difference in finished grades on left and right side of the wall.

- EARTHWORK PROCEDURES: The preparation of supporting soils and fill construction shall be done in accordance with the Earthwork Procedures as outlined in the "Specifications for Earthwork" found in the geotechnical investigation report for Tract 0-1 at Tanoan, prepared by Sergeant, Hauskins & Beckwith; SHB Job No. E89-1047, dated April 25, 1989.
- MATERIALS:
  - Cast-in-Place Concrete:
    - All concrete shall conform to the specifications for Structural Concrete, ACI 301 Latest Ed.
    - Hardrock Concrete: Dry unit weight = 145 pcf;  $f_c = 3000$  psi @ 28 days (air entrained); Maximum dry unit weight = 145 pcf; Maximum slump = 4 inches; Maximum aggregate size = 3/4 inch; Minimum cement content, per ACI 301 design methods; Use Type I & II cement.
    - Type F flyash shall be incorporated in the concrete at a ratio of 1 to 4 (by weight).
  - Reinforcing Steel:
    - All reinforcing steel shall conform to ASTM A615 Grade 60; except stirrups, ties, may conform to ASTM A615 Grade 40.
    - Reinforcing shall be stored in such a manner as to inhibit rusting or the deposit of oils or other bond inhibiting deposits.
    - Reinforcing steel shall be fabricated and placed in accordance with the Building Code Requirements for Reinforced Concrete (ACI 318) and the CRSI Standard Manual.
    - Bar supports and spacers for rebar shall be provided in accordance with ACI and CRSI.
    - All lap splices shall be class B.
    - Concrete cover for reinforcing shall be as follows:
      - Concrete poured against earth 3 inches
      - Concrete poured in forms but exposed to weather or earth:
        - If bars are larger than No. 5 2 inches
        - If bars are No. 5 or smaller 1-1/2 inches

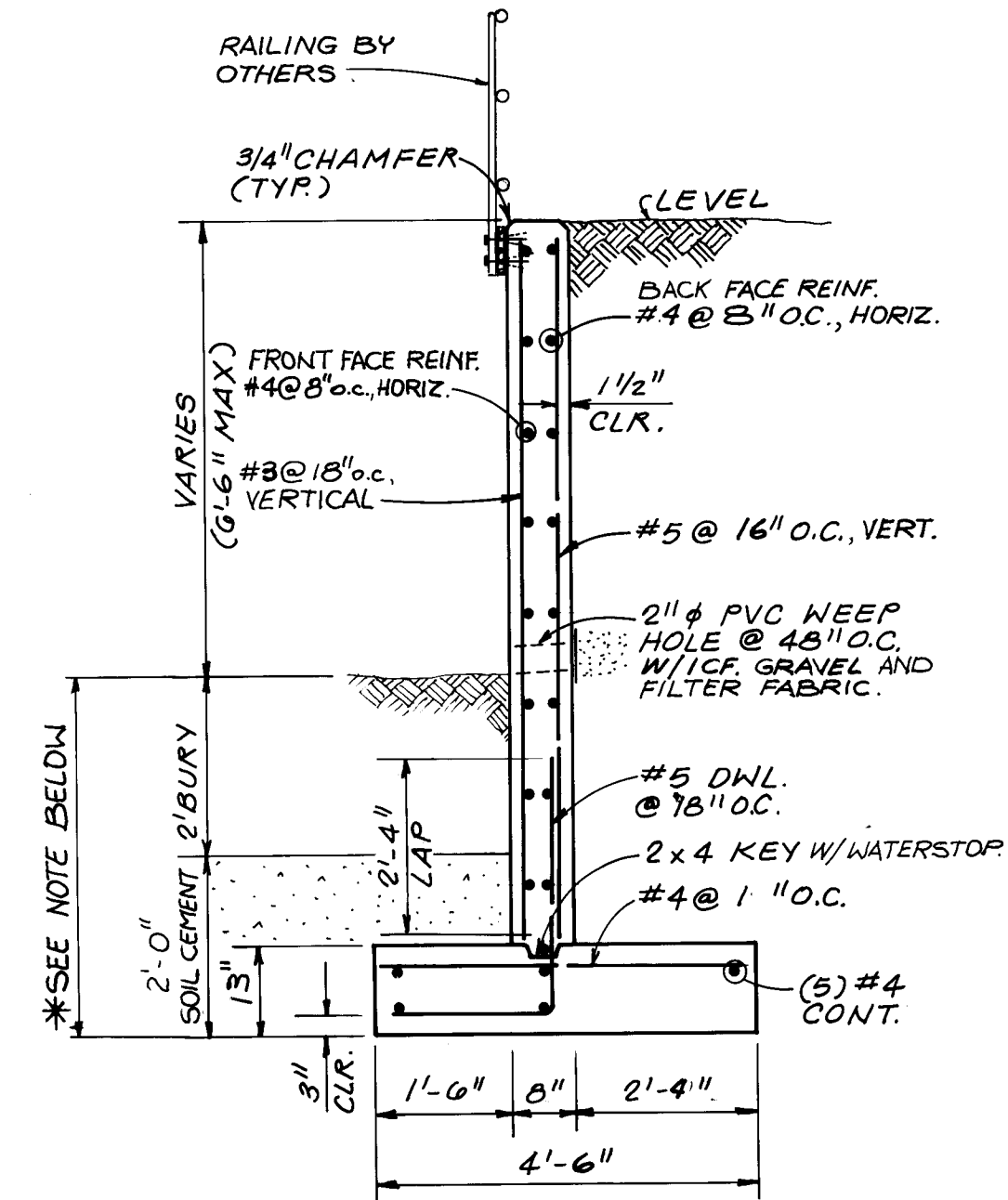
- The Contractor shall be responsible to see that all rebar is properly aligned and tied in place before placing concrete. All column, wall dowels and vertical steel shall be accurately located and secured in place so that it remains in the position shown during the concrete placing operation. Any rebar found to be improperly installed shall be removed at no additional cost to the Owner.
- Form ties shall be either of the threaded or snap-off type or other approved equal so that no metal will be left within 1 inch of the surface of the wall. Following removal of form ties, recesses are to be carefully filled and pointed with mortar.
- Gravel and Filter Fabric:
  - One cubic foot of gravel shall be placed behind each weep hole. Gravel shall be 1" crushed rock.
  - Apply one square foot of filter fabric directly behind each weep hole. Filter fabric shall be Myrafy 140N or Engineer approved alternate.
- Waterstop:
  - All construction joints shall be keyed with a 2x4 beveled keyway and shall receive waterstop material.
  - Waterstop material shall be Hydrotite CJR-0725-3K distributed by Gundle Lining Systems, Inc., Huston, Tx. or Engineer approved alternate.
- CONCRETE FINISHES: Surface finishes shall be in accordance with section 510.15 of the City of Albuquerque Standard Specifications for Public Works Construction.
  - Exposed surfaces shall receive a Class 1 surface finish.
  - All other surfaces shall receive an ordinary surface finish.
- RAILING: Railing shall be 36" minimum, meeting UBC requirements. Railing design and details shall be installed subject to approval by AMAFCA.



SECTION J-J

SCALE: 1/2" = 1'-0"

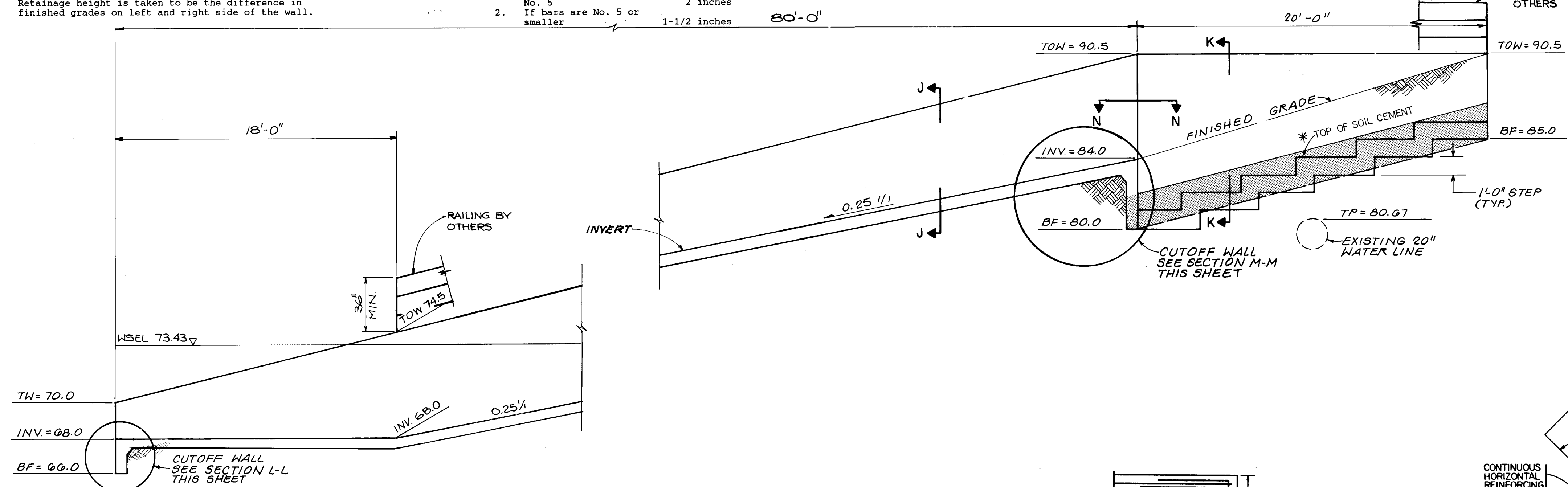
\* NOTE: SOIL CEMENT BANK STABILIZATION WILL BE CONSTRUCTED IN COMPLIANCE WITH SECTION 625, SOIL CEMENT (ADDED SECTION), AVAILABLE AT BOHANNAN-HUSTON INC.



SECTION K-K

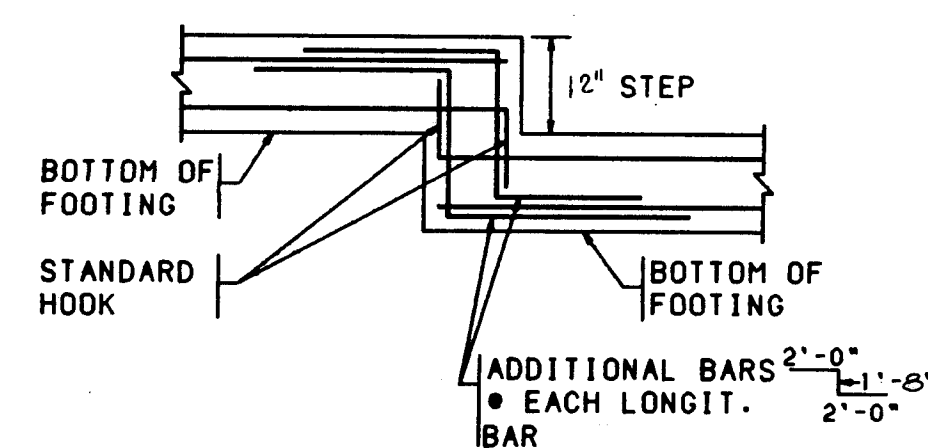
SCALE: 1/2" = 1'-0"

\* PLACE 4' OF COMPACTED FILL BEHIND WALL PRIOR TO PLACING 2' BURY AND 2' SOIL CEMENT.

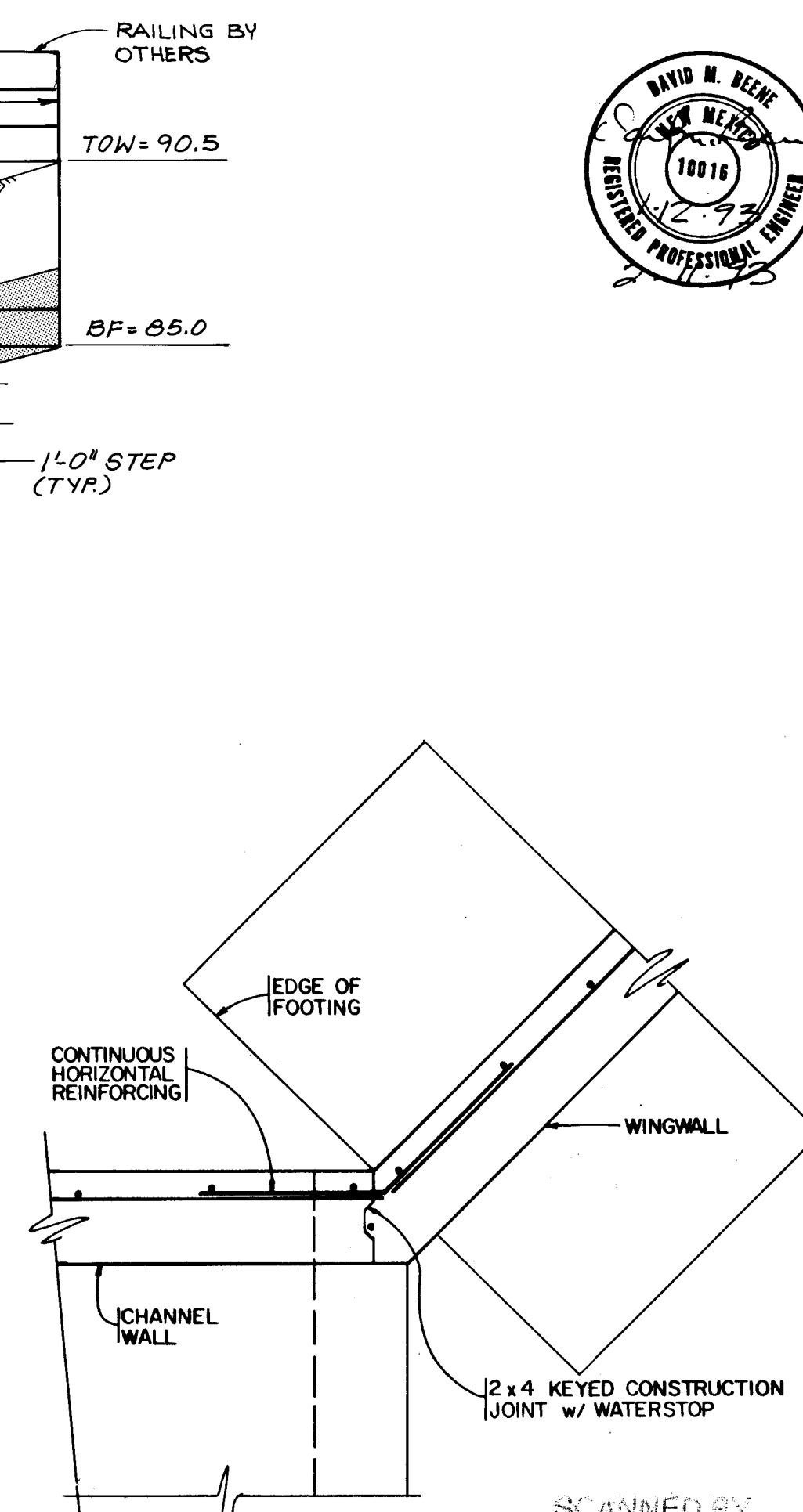


SECTION H-H

SCALE: 1/4" = 1'-0"

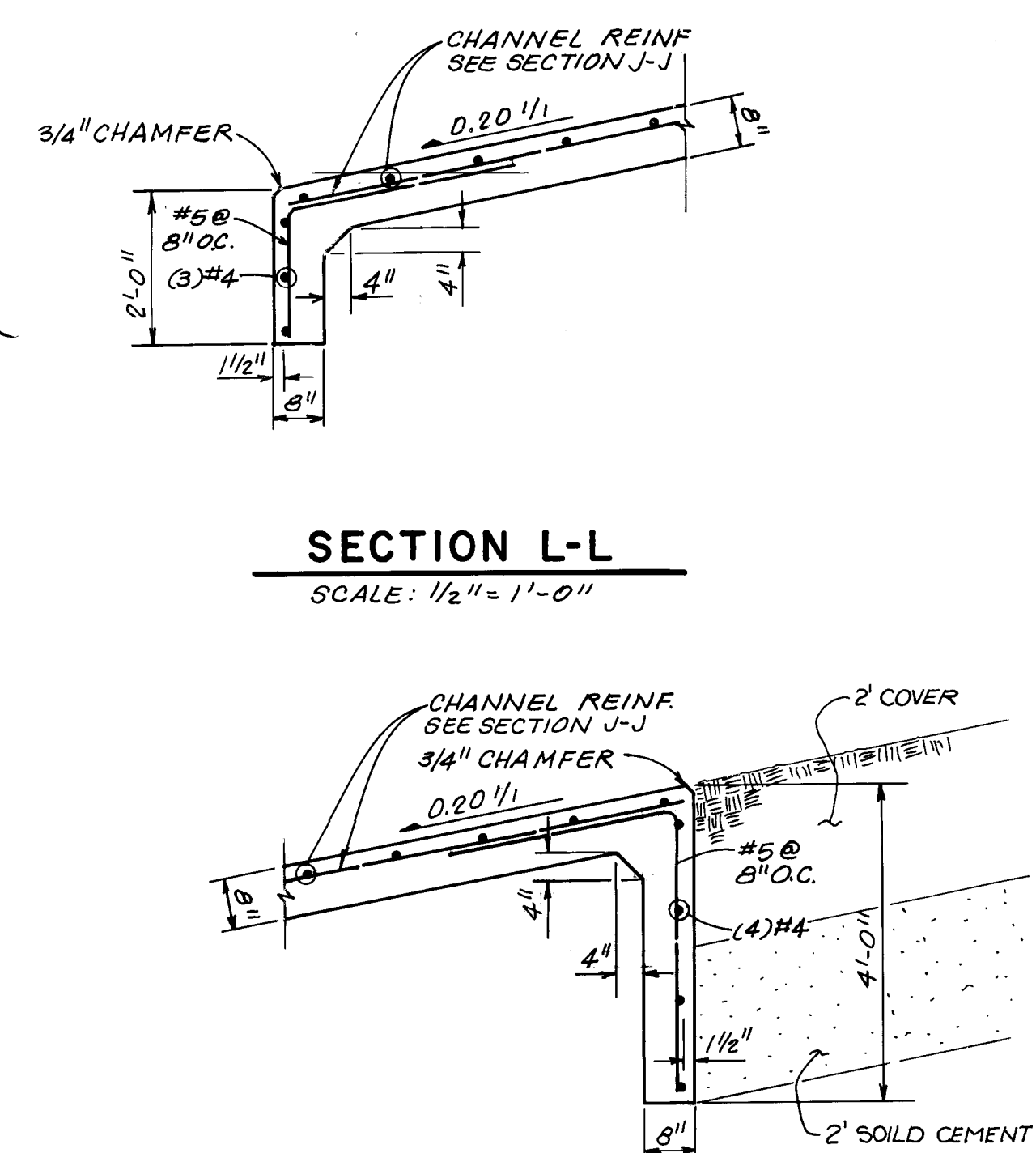


TYPICAL STEPPED FOOTING DETAIL  
SEE WALL SECTIONS FOR DIMENSIONS & REINFORCEMENT  
NO SCALE



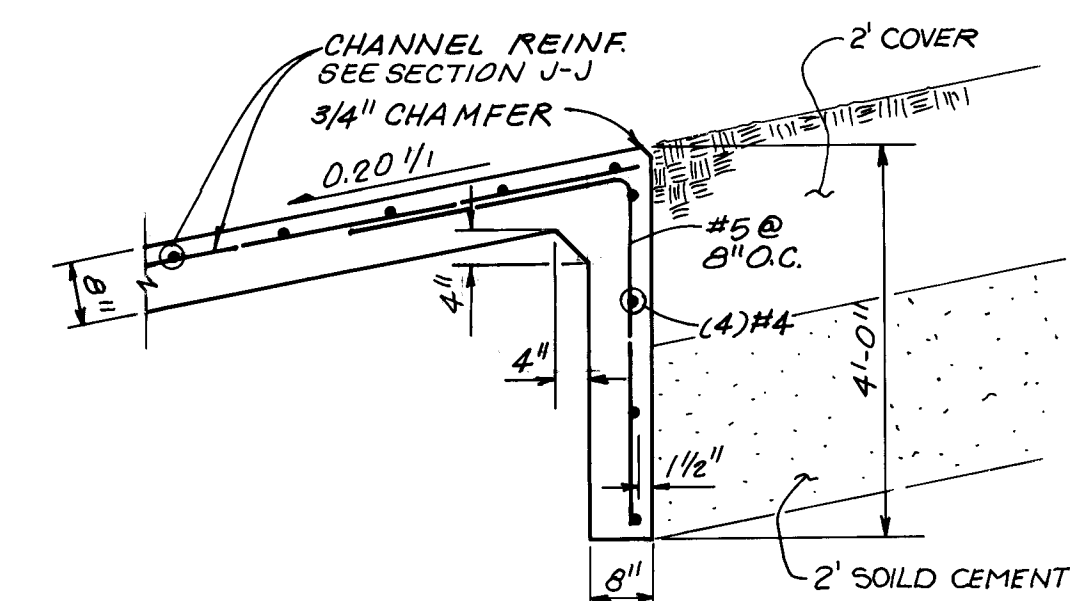
SECTION N-N

SCANNED BY



SECTION L-L

SCALE: 1/2" = 1'-0"



SECTION M-M

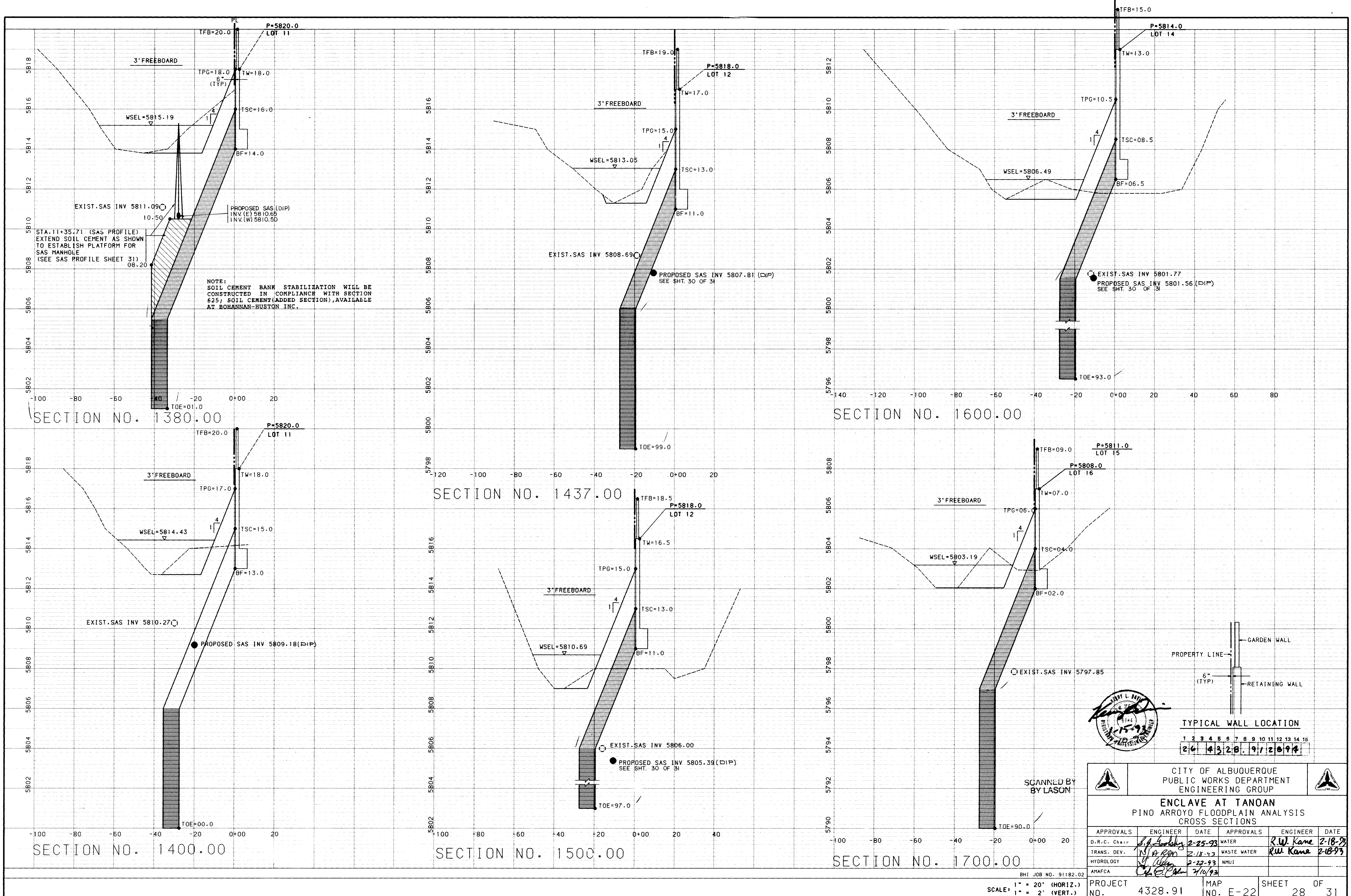
SCALE: 1/2" = 1'-0"



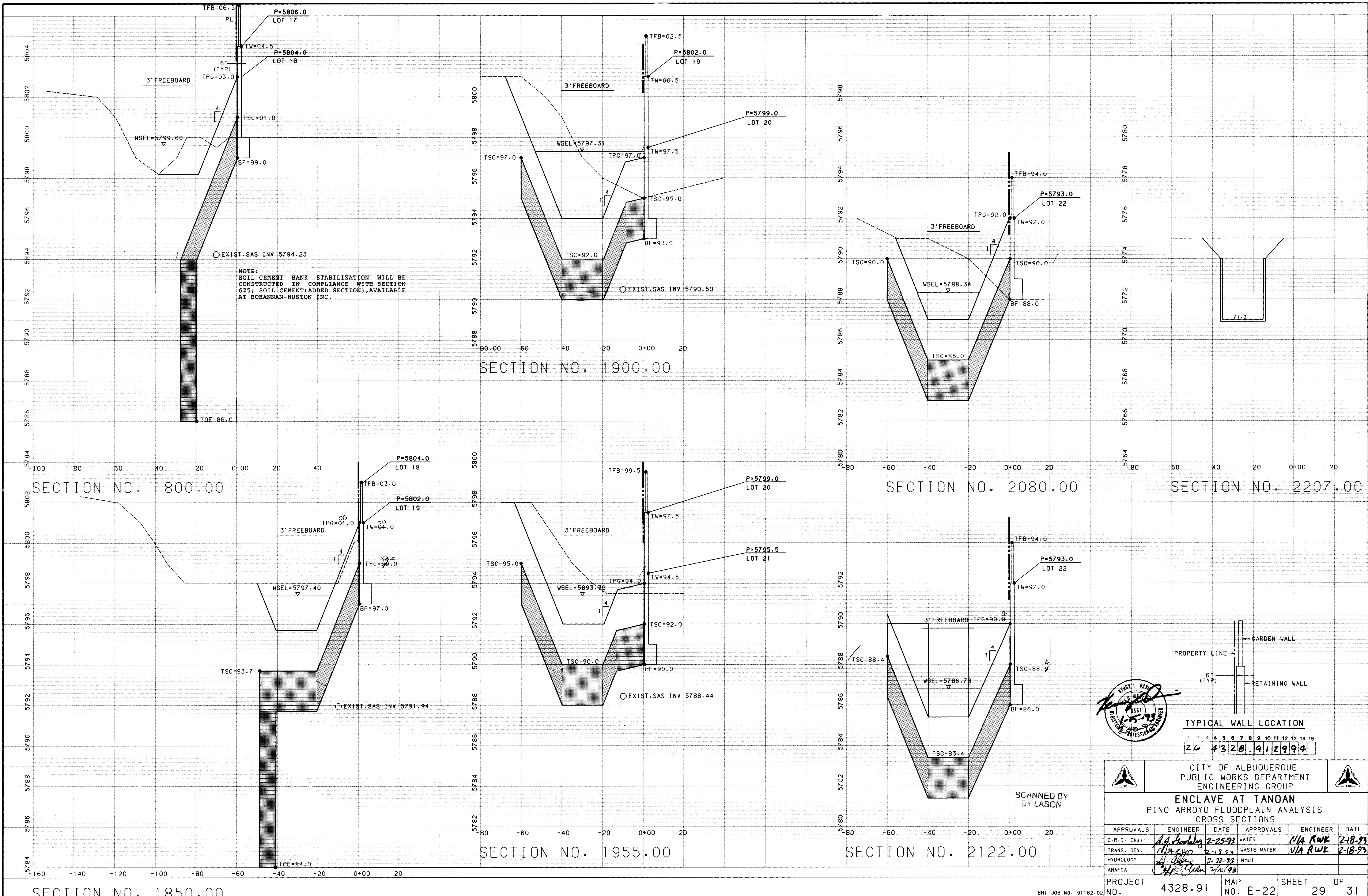
26 4328.91 2794

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
TITLE: ENCLAVE AT TANOAN PINO ARROYO FLOODPLAIN ANALYSIS DETAILS			
APPROVALS	ENGINEER	DATE	APPROVALS
D.R.C. Chair	2-25-93	WATER	N/A RWE 2-18-93
TRANS. DEV.	2-18-93	WASTE WATER	N/A RWE 2-18-93
HYDROLOGY	2-22-93	NHUI	
AMAFCA	2-4-93		
PROJECT NO.	4328.91	MAP NO.	E-22
		SHEET	27
		OF	31

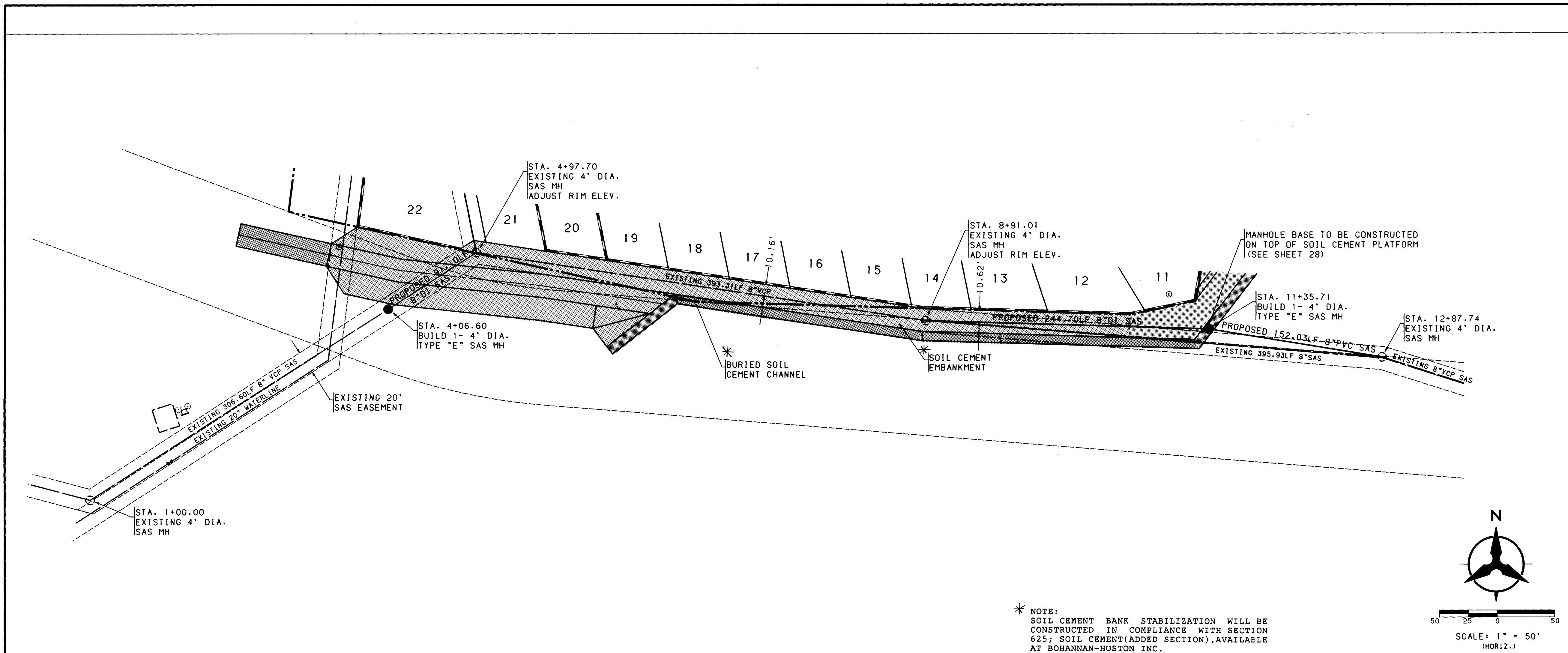












**NOTES**

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- ALL CURB RETURN RADI SHALL BE 25' TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
- ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
- GRADE ELEVATIONS, WHERE NOTED, ARE FOR TOP OF STANDARD CURB UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR IS TO INSTALL A 4"x4"x5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.
- CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
- ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
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- ANY DAMAGE TO THE EXISTING FACILITIES (CURB AND GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
- REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
- WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.

AS-BUILT INFORMATION			
CONTRACTOR	CCM	DATE	10/86
INSPECTOR'S	ALLS	DATE	10/86
FILED	ALLS	DATE	10/86
RECORDED	ALLS	DATE	10/86
MICRO-FILM INFORMATION			
RECORDED BY		DATE	
NO.		DATE	

BENCH MARKS			
STATION	IS A STANDARD USGS BRASS TABLE	DATE	10/86
PROJECT	PROJECTING 0.2 FEET ABOVE GROUND, LOCATED	DATE	10/86
489 FEET WEST OF THE INTERSECTION OF SAN		DATE	10/86
ANTONIO DRIVE AND TENNYSON STREET, AND 35 FEET		DATE	10/86
NORTH OF RIGHT-OF-WAY LINE OF SAN ANTONIO		DATE	10/86
DRIVE.		DATE	10/86
ELEVATION	= 6009.155'	DATE	10/86

SURVEY INFORMATION			
NO.	DATE	BY	REMARKS
BOOK 10/86	10/86	ALLS	DESIGN
REVISIONS			
DESIGNED BY	6/1/86	DATE	1/93
DRAWN BY	TSG	DATE	1/93
CHECKED BY	KD	DATE	1/93

**CITY OF ALBUQUERQUE**  
**PUBLIC WORKS DEPARTMENT**  
**ENGINEERING**

**ENCLAVE AT TANOAN**  
**PINO ARROYO FLOODPLAIN ANALYSIS**  
**SANITARY SEWER REDESIGN**

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	2-25-93	WATER	<i>[Signature]</i>	2-18-93
TRANSPORTATION	<i>[Signature]</i>	2-12-93	WASTE WATER	<i>[Signature]</i>	2-18-93
HYDROLOGY	<i>[Signature]</i>	2-22-93			

SCANNED BY  
BY LASON

SCALE: 1" = 50' (HORIZ.)  
1" = 10' (VERT.)

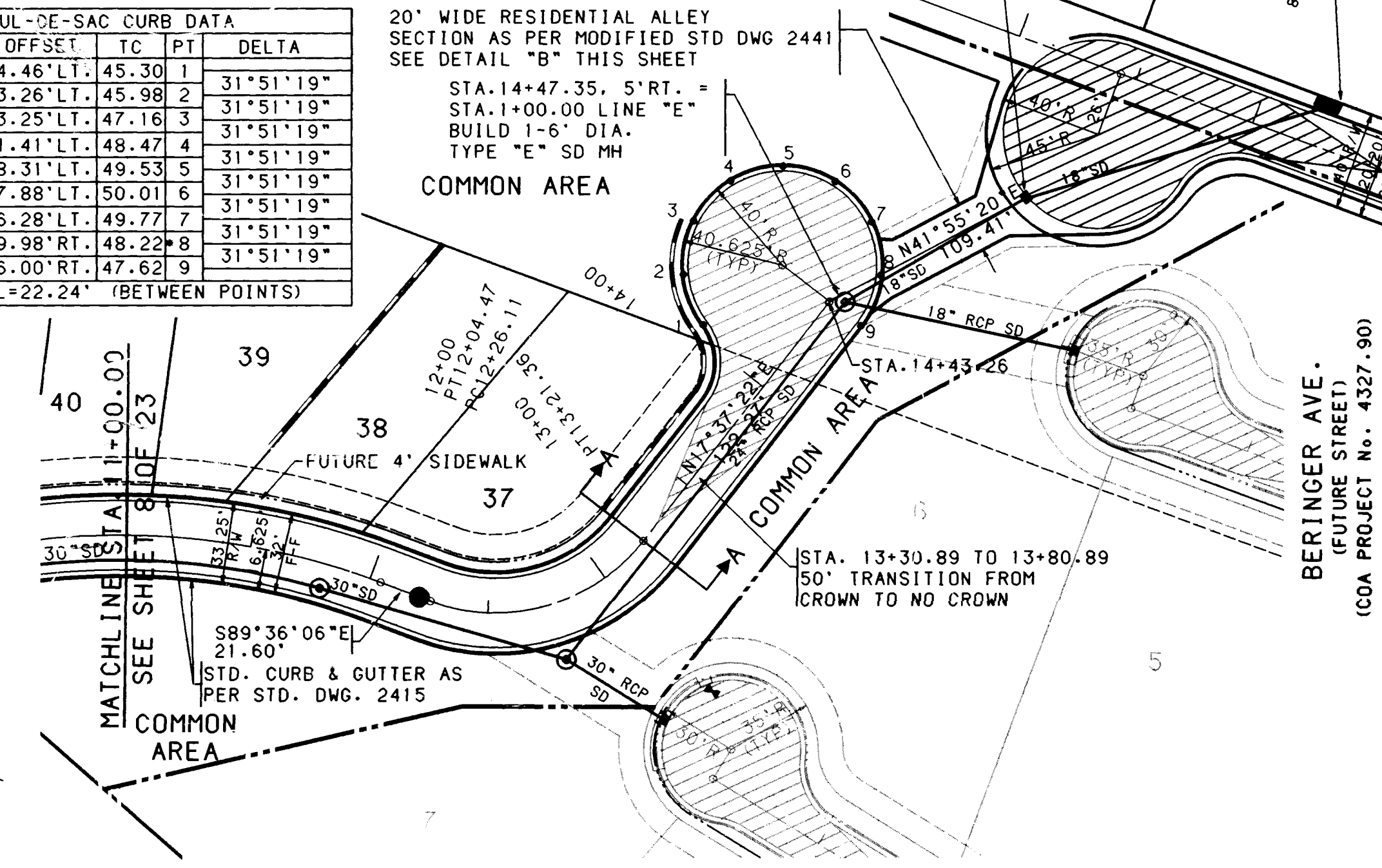
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FILENAME: SAS.GRF

BHI JOB NO. 91182.06

JAN. 15, 1993



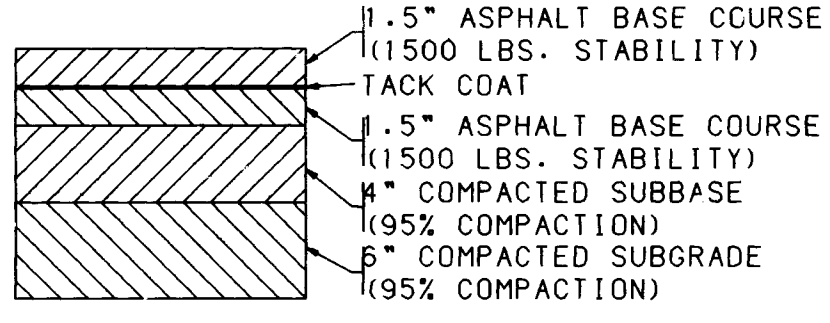
CUL-DE-SAC CURB DATA				
STATION & OFFSET	TC	PI	DELTA	
14+05.02, 34.66' LT.	45.30	1	31°51'19"	
14+16.36, 53.26' LT.	45.98	2	31°51'19"	
14+35.91, 63.25' LT.	47.16	3	31°51'19"	
14+57.78, 61.41' LT.	48.47	4	31°51'19"	
14+75.40, 48.31' LT.	49.53	5	31°51'19"	
14+83.44, 27.88' LT.	50.01	6	31°51'19"	
14+79.49, 6.28' LT.	49.77	7	31°51'19"	
14+64.74, 9.98' RT.	48.22	8	31°51'19"	
14+43.63, 16.00' RT.	47.62	9	31°51'19"	
R=40.00', L=22.24' (BETWEEN POINTS)				



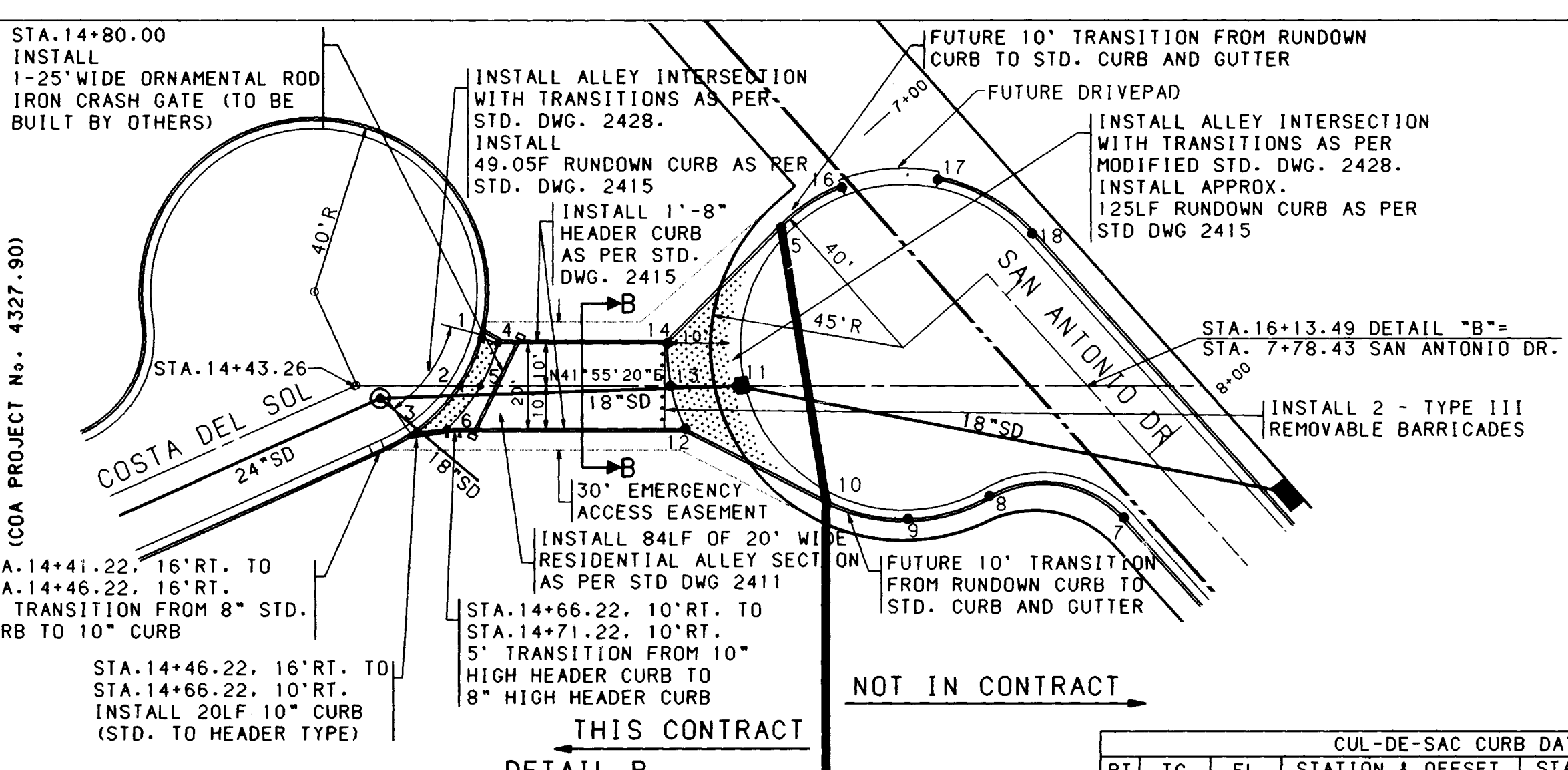
**NOTE:**  
FOR STORM DRAIN PLAN & PROFILE  
SEE SHEET 18-20 OF 23

NOTE:  
FOR TYPICAL STREET SECTION  
A-A SEE SHEET 7 OF 23

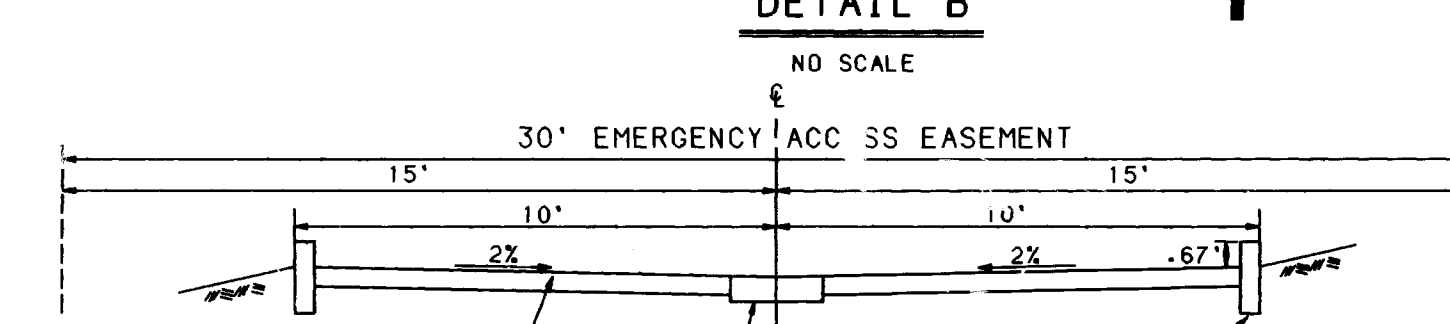
COSTA DEL SOL



ASPHALT CONCRETE SECTION  
NO SCALE



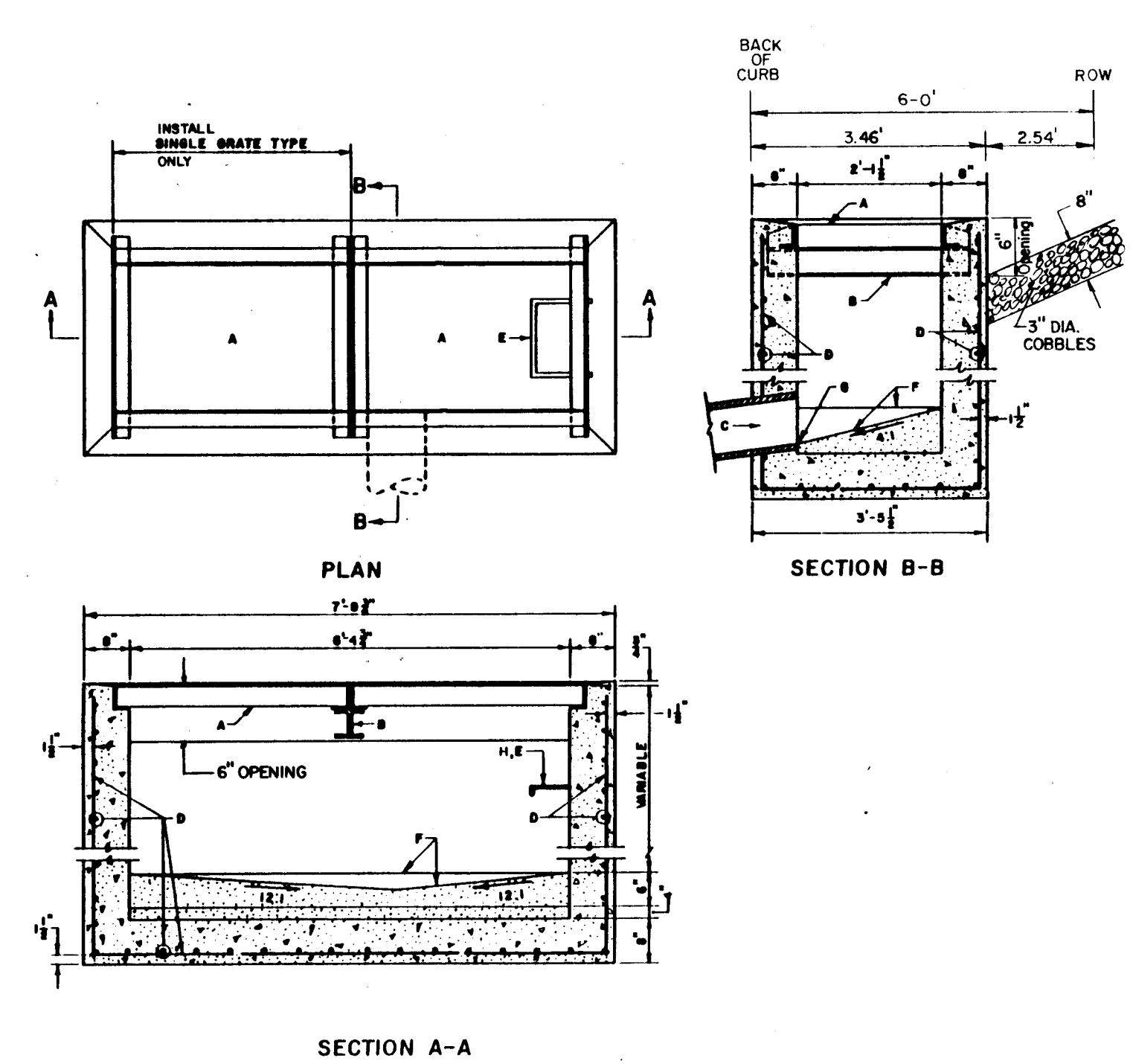
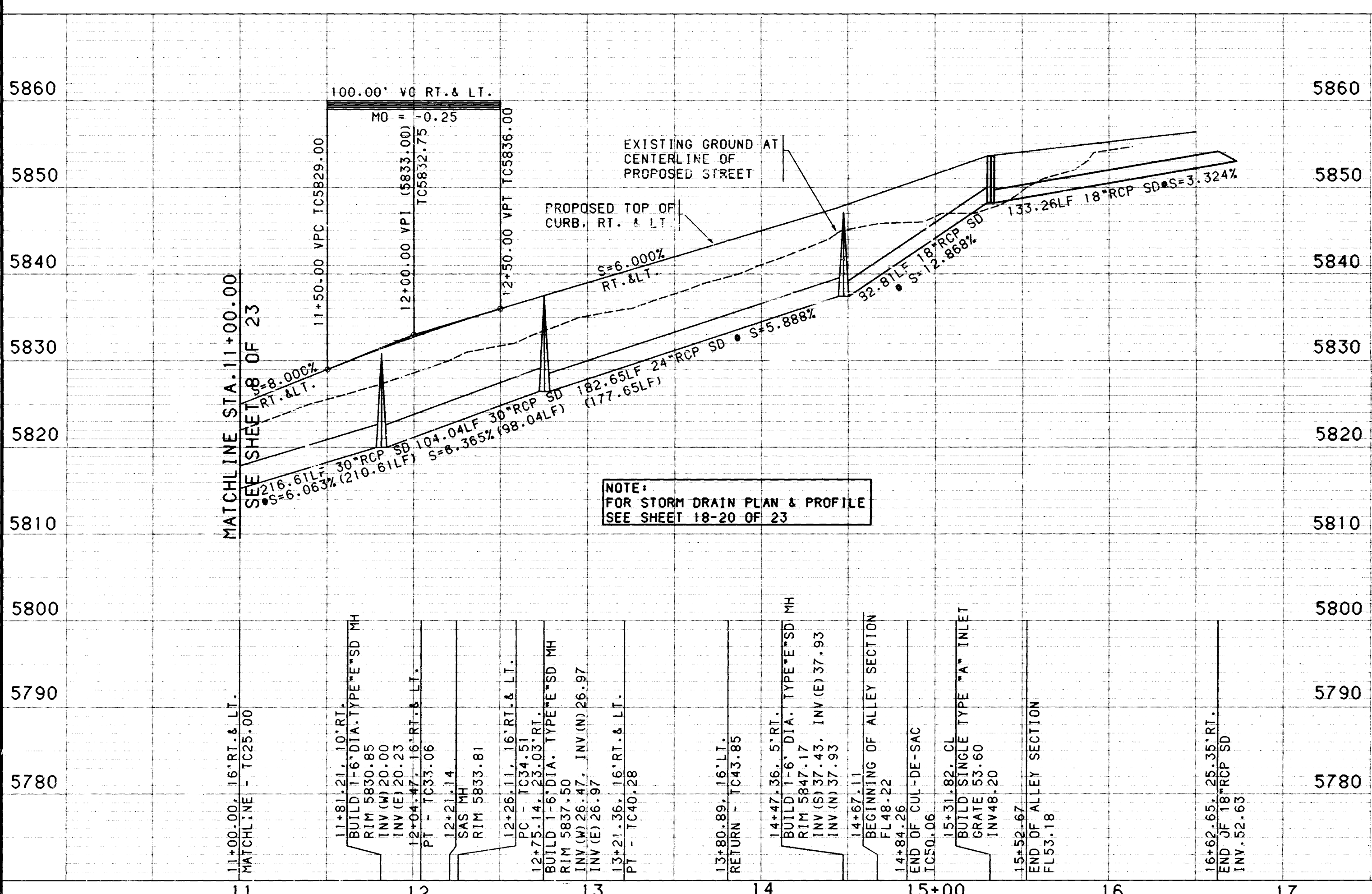
DETAIL B






SECTION B-B

CUL-DE-SAC CURB DATA						
PT	TC	FL	STATION & OFFSET ALONG LINE "B"	STATION & OFFSET ALONG SAN ANTONIO		
1	49.56	48.89	14+72.67, 12.94' LT.	-----		
2	-----	48.22	14+67.11, 1C.	-----		
3	48.16	47.33	14+55.27, 11.60' RT.	-----		
4	49.70	49.03	14+77.73, 10.00' RT.	-----		
5	-----	48.60	14+77.73, 1C.	-----		
6	49.19	48.36	14+66.22, 10.00' RT.	-----		
7	55.17	54.50	16+22.00, 30.72' RT.	8+07.07, 14.00' RT.		
8	54.98	54.31	15+90.79, 25.65' RT.	7+82.58, 34.00' RT.		
9	54.88	54.21	15+71.83, 30.99' RT.	7+50.81, 31.19' RT.		
10	54.77	54.10	15+52.62, 26.64' RT.	7+58.01, 63.23' RT.		
11	-----	53.69	15+31.82, 1C.	7+24.28, 61.14' RT.		
12	53.06	52.39	15+20.00, 10.00' RT.	-----		
13	52.86	52.19	15+16.53, 1C.	-----		
14	53.06	52.39	15+18.00, 10.00' LT.	-----		
15	54.77	54.10	15+42.21, 36.97' LT.	7+03.49, 28.85' RT.		
16	-----	55.15	15+56.43, 46.33' LT.	7+05.92, 12.00' RT.		
17	-----	55.74	15+78.83, 48.18' LT.	7+19.39, 6.00' LT.		
18	55.89	55.22	16+00.73, 35.52' LT.	7+43.39, 14.00' LT.		

SCALE: 1" = 50'  
(HORIZ.)



SCANNED BY  
BY LASON

<div>NOTES</div> <div>1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.</div> <div>2. ALL CURB RETURN RADII SHALL BE 25' TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.</div> <div>3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.</div> <div>4. GRADE ELEVATIONS, WHERE NOTED, ARE FOR TOP OF STANDARD CURB UNLESS OTHERWISE SPECIFIED.</div> <div>5. CONTRACTOR IS TO INSTALL A 4"x4"x5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.</div> <div>6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.</div> <div>7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.</div> <div>8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.</div> <div>9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.</div> <div>10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB AND GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.</div> <div>11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER CDA STD. DWG. 2415 (SAWCUT ONLY).</div> <div>12. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.</div>										<div>AS-BUILT INFORMATION</div> <div>CONTRACTOR CCM</div> <div>INSPECTOR'S NAME AL5</div> <div>DATE 7-23-93</div> <div>VERIFICATION BY AL5</div> <div>DATE 7-23-93</div> <div>CHECKED BY AL5</div> <div>DATE 7-23-93</div> <div>MICRO-FILM INFORMATION</div> <div>RECORDED BY</div> <div>NO.</div>																													
<div>BENCH MARKS</div> <div>STATION IS A STANDARD USCGS BRASS TABLET</div> <div>STAMPED "TUMBLE 1969" SET IN CONCRETE</div> <div>PROJECTING 0.2 FEET ABOVE GROUND, LOCATED</div> <div>489 FEET WEST OF THE INTERSECTION OF SAN ANTONIO DRIVE AND TENNYSON STREET, AND 35 FEET NORTH OF RIGHT-OF-WAY LINE OF SAN ANTONIO DRIVE.</div> <div>ELEVATION = 6009.155'</div>										<div>SURVEY INFORMATION</div> <div>FIELD NOTES</div> <div>DATE 10-86</div> <div>BY 10-86</div> <div>BOOK 63750</div> <div>PAGE 10-13-26</div>																													
<div>ENGINEER'S SEAL</div> <div></div>										<div>REVISIONS</div> <div>DESIGN</div>																													
<div>DESIGNED BY GJK/MD</div> <div>DRAWN BY TSG/PL</div> <div>CHECKED BY GJO</div> <div>DATE 7/92</div> <div>DATE 7/92</div>										<div>NO. DATE</div> <div>REMARKS</div> <div>BY</div>																													
<div>26 4328.913194</div>										<div>26 4328.913194</div>																													
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<div>ENCLAVE AT TANOAN COSTA DEL SOL PAVING &amp; STORM DRAIN REDESIGN</div>																																							
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HYDROLOGY					<i>[Signature]</i>					2-22-93																													
DRAWING NO.					4328.91					MAP NO.					5-22					SHEET					31					OF					31				