

LEXINGTON AVENUE - C.S.A.H. 51

THE CITY OF SHOREVIEW RAMSEY COUNTY

CONSTRUCTION PLAN FOR GRADING, SURFACING

GEOGRAPHIC DESCRIPTION: C.S.A.H. 51 BETWEEN A POINT 1129 FT. NORTH OF RIDGE CREEK ROAD AND A POINT 382 FT. SOUTH OF COUNTY ROAD "J"

LEGAL DESCRIPTION: FROM A POINT IN THE NORTHWEST QUARTER OF SECTION 3, TOWNSHIP 30 NORTH, RANGE 23 WEST, WITH COORDINATES OF 219,926.588 N, 556,474.459 E, ON LEXINGTON AVENUE, TO A POINT IN THE NORTHWEST QUARTER OF SECTION 3, TOWNSHIP 30 NORTH, RANGE 23 WEST, WITH COORDINATES OF 221,176.265 N, 556,251.626 E, ON LEXINGTON AVENUE.

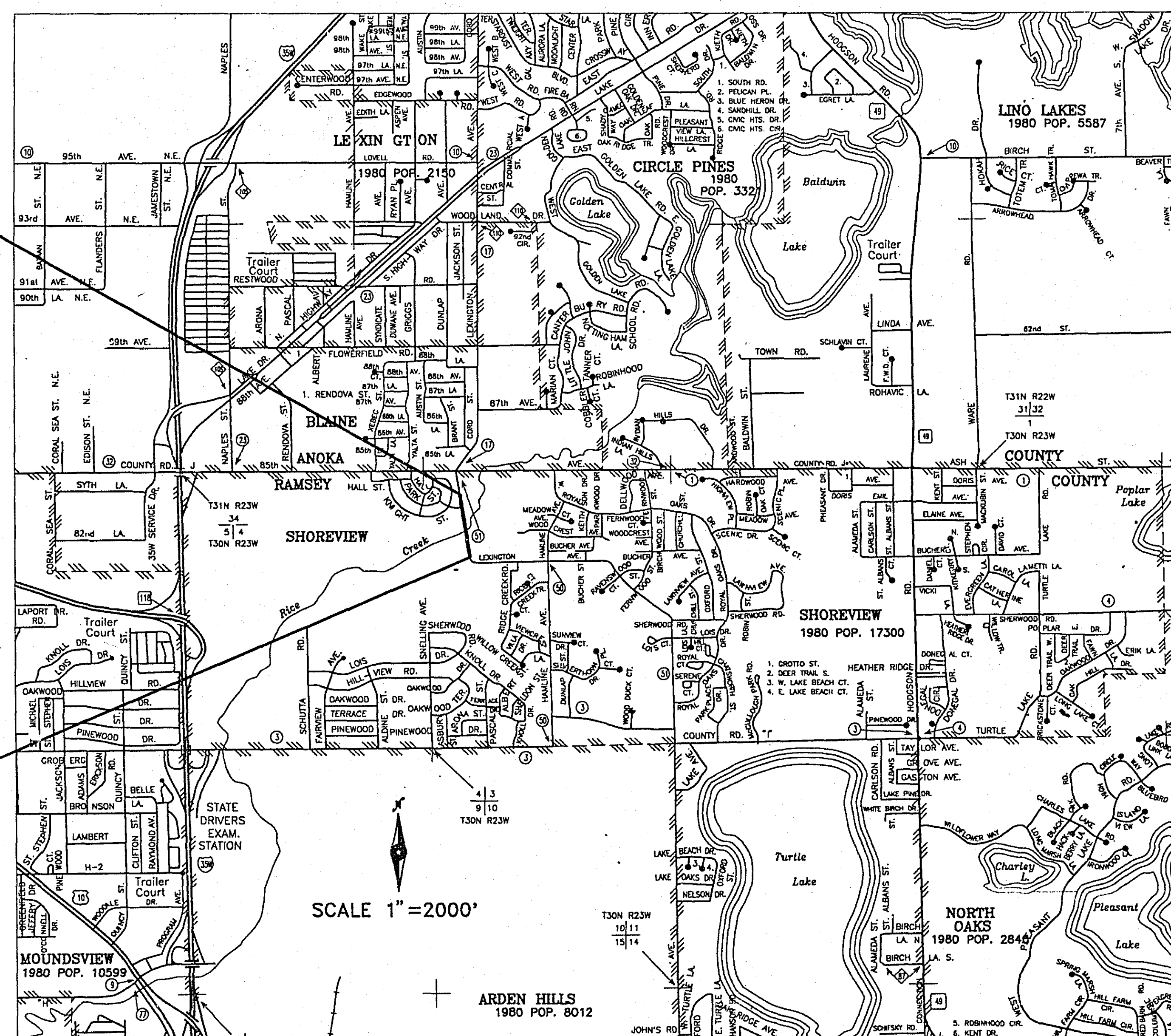
STATE AID PROJ. NO. 62-651-31

GROSSELENGTH 1300 FEET .246 MILES
* EXCEPTIONS-LENGTH 41 FEET .008 MILES
NET LENGTH 1259 FEET .238 MILES

* SEE BRIDGE NO. 62566 PLAN SET

END S.A.P. 62-651-31
STA. 513+00

BEGIN S.A.P. 62-651-31
STA. 500+00



SCALES

PLAN 30
PROFILE 30

DESIGN DESIGNATION

Functional Classification:

No. of Traffic Lanes
ADT (Current Year) 1991
ADT (Future Year) 2011
DHV (Design Hr. Vol.)
D (Directional Distr.)
T (Heavy Commercial)
R-Value 70

■ HIGH DENSITY COLLECTOR
■ 4
■ 4550
■ 9100
■ 910
■ 50 %
■ 5 %
■ 1,358,000
■ 10 TON

No. of Parking Lanes 0

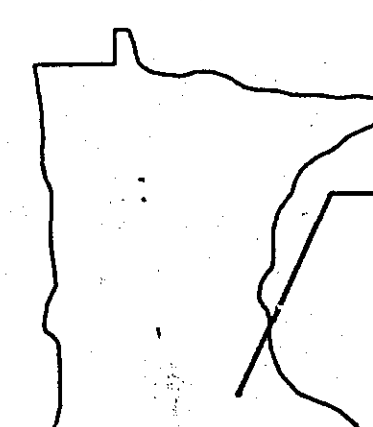
Design Speed 45 MPH

Based on STOPPING Sight Distance

Height of eye 3.5' Height of Object 0.5'

Design Speed not achieved at N.A.

STA. N.A. TO STA. N.A. MPH N.A.



PROJECT LOCATION

RAMSEY COUNTY

METRO

OAKDALE DISTRICT

AS-BUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: [Signature]
DATE: 1-24-95

STATE AID PROJ. NO. 62-651-31

MINN. PROJ. NO. LOCAL FUNDS

MINN. PROJ. NO.

GOVERNING SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND "SUPPLEMENTAL SPECIFICATIONS TO THE 1988 STANDARD SPECIFICATIONS FOR CONSTRUCTION", DATED JANUARY 2, 1991, SHALL GOVERN.

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2	ESTIMATED QUANTITIES
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24A-24B	MITIGATION AREA #3 (FOR INFORMATION ONLY)
24C-24E	GUARDRAIL TRANSITION AND BCT DETAILS
THIS PLAN SET CONTAINS 26 SHEETS	



PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN
(612) 370-0700
BRW INC. 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

BRW, INC.

DATE NOVEMBER 13 1991 REG. NO. 12666

ENGINEER BOYD R PAULU [Signature]

Recommended For Approval [Signature] 2/21/92
TRAFFIC ENGINEER

Recommended For Approval [Signature] 2-21-1992
ENVIRONMENTAL ENGINEER

Recommended For Approval [Signature] 2-24-1992
MAINTENANCE ENGINEER

Recommended For Approval [Signature] 2-21-1992
CONSTRUCTION ENGINEER

Recommended For Approval [Signature] 2-21-1992
DESIGN ENGINEER

Recommended For Approval [Signature] 2-21-1992
RIGHT OF WAY ENGINEER

Recommended For Approval [Signature] 2-21-1992
RAMSEY COUNTY COORDINATING ENGINEER

Recommended For Approval [Signature] 1992
PROJECT ENGINEER

Recommended For Approval [Signature] 2/24/92
RAMSEY COUNTY ENGINEER

Approved 11-3 1992 [Signature]
CHAIR OF THE RAMSEY COUNTY BOARD

Approved 7-12-1992 [Signature]
CITY OF SHOREVIEW

Recommended For Approval [Signature] 3/11/92
DISTRICT STATE AID ENGINEER

Recommended For Approval [Signature] 4-6-1992
STATE AID PLANS AND SPECS ENGINEER

Approved 4/6 1992 [Signature]
STATE AID ENGINEER

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, OF THIS PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ REG. NO. _____

28-124

SHEET NO. 1 OF 24 SHEETS

STATEMENT OF ESTIMATED QUANTITIES

NOTE	CHART NO	ITEM NO	ITEM	UNIT	SP 62-651-28		SP 62-651-28		SP 62-651-28		SP 62-651-28	
					PROJECT TOTAL QUANTITIES		PARTICIPATING QUANTITIES		STORM SEWER QUANTITIES		NON-PARTICIPATING QUANTITIES	
					EST.	FINAL	EST.	FINAL	EST.	FINAL		
		2021.501	MOBILIZATION	LUMP SUM	1		1					
		2102.502	PAVEMENT MARKING REMOVAL-PERMANENT	LIN FT	1860		1860					
	A	2104.501	REMOVE SEWER PIPE (STORM)	LIN FT	48		48					
	E	2104.501	REMOVE CURB AND GUTTER	LIN FT	176		176					
	E	2104.505	REMOVE BITUMINOUS PAVEMENT	SQ YD	4094		4094					
		2104.505	REMOVE AGGREGATE SHOULDER	SQ YD	491		491					
	A	2104.509	REMOVE CONCRETE APRONS	EACH	2		2					
	D	2104.513	SAWING BIT PAVEMENT (FULL DEPTH)	LIN FT	301		301					
		2104.521	SALVAGE GUARDRAIL - PLATE BEAM	LIN FT	420		420					
		2104.521	SALVAGE WOVEN WIRE FENCE	LIN FT	189		189					
		2104.523	SALVAGE TWISTED END TREATMENT	EACH	4		4					
(1)	G	2105.501	COMMON EXCAVATION	CU YD	278		278					
	G	2105.507	SUBGRADE EXCAVATION	CU YD	1419		1419					
	G	2105.522	SELECT GRANULAR BORROW (LV)	CU YD	1956		1956					
	G	2105.522	SELECT GRANULAR BORROW MOD 7% (LV)	CU YD	2147		2147					
	G	2105.523	COMMON BORROW (LV)	CU YD	4880		4880					
	G	2105.525	TOPSOIL BORROW (LV)	CU YD	590		590					
(4)		2130.501	WATER	M GAL	1.5		1.5					
(5) (7)	C	2211.503	AGGREGATE BASE PLACED CLASS 6	CU YD (P)	1340		1156				188	
(3)	F	2301.553	BRIDGE APPROACH PANELS	SQ YD (P)	241		241					
	C	2340.508	TYPE 61A WEARING COURSE MIXTURE	TON	385		385					
(7)	C	2340.508	TYPE 31A WEARING COURSE MIXTURE	TON	131						131	
(7)	C	2340.510	TYPE 31A BINDER COURSE MIXTURE	TON	707		576				131	
	C	2340.514	TYPE 31A BASE COURSE MIXTURE	TON	1153		1153					
(7)	C	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL	737		662				75	
	I	2501.515	15" RC PIPE APRON	EACH	2				2			
	I	0501.602	15" TRASH GUARD FOR PIPE APRON	EACH	2				2			
	I	2503.541	15" RC PIPE SEWER DESIGN 3006	LIN FT	333				333			
	A	0504.602	ADJUST GATE VALVE BOX	EACH	5		5					
	I	2506.507	CONSTRUCT DRAINAGE STRUCTURE SP-2	LIN FT	16.4				16.4			
	I	2506.516	CASTING ASSEMBLY	EACH	4				4			
	I	2506.521	INSTALL CASTING	EACH	4				4			
	A	2506.522	ADJUST FRAME & RING CASTINGS	EACH	4				4			
	I	2511.501	RANDOM RIPRAP CL III	CU YD	7.9				7.9			
		2511.507	GROUTED RIPRAP	CU YD	23		23					
		2531.501	CONCRETE C & G DESIGN B624	LIN FT	2534		2534					
		0531.602	PEDESTRIAN CURB RAMP	EACH	2		2					
		2554.509	TRAFFIC BARRIER DESIGN B8307	LIN FT	150		150					
		0554.602	ECCENTRIC LOADER BCT	EACH	4		4					
		0554.603	GUARDRAIL TRANSITION CONNECTION	LIN FT	100		100					
(2)		2557.529	TEMPORARY FENCE	LIN FT	100		100					
		0557.603	INSTALL WOVEN WIRE FENCE	LIN FT	189		189					
	H	0563.601	TRAFFIC CONTROL	LUMP SUM	1		1					
		0564.603	4" DOUBLE SOLID LINE YELLOW - EPOXY	LIN FT	2620		2620					
		0564.603	4" BROKEN LINE WHITE - EPOXY	LIN FT	2620		2620					
(2)		0564.604	CONSTRUCTION SIGNS-SPECIAL	SQ FT	100		100					
		2573.501	BALE CHECK	EACH	50		50					
(6)		2573.502	SILT FENCE, HEAVY DUTY	LIN FT	300		300					
		2575.501	ROADSIDE SEEDING	ACRE (P)	.95		.95					
		2575.502	SEED MIXTURE 600	POUND	71		71					
		2575.505	SODDING	SQ YD	1270		1270					
		2575.511	MULCH MATERIAL TYPE 5	TON	.71		.71					
		2575.532	COMMERCIAL FERTILIZER ANALYSIS 12-12-12	POUND	190		190					

- (1) COMMON EXCAVATION INCLUDES SALVAGED TOPSOIL QUANTITY
 (2) FOR USE AS DIRECTED BY THE ENGINEER
 (3) EACH SQ YD OF BRIDGE APPROACH PANELS REQUIRE 36.4 POUNDS OF REBARS PLUS 3 EXTRA #5 BARS FOR EXPANSION JOINT IF NEEDED.
 BARS SPACING WILL BE 6" AND 12" (ALONG C) REGARDLESS OF SKEW.
 (4) FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.
 (5) ALL AGGREGATE BASE MATERIALS SUPPLIED FOR THIS PROJECT SHALL BE COMPOSED OF RECYCLED MATERIALS IN ACCORDANCE WITH 3138 OF THE MNDOT STANDARD SPECIFICATIONS.
 (6) TO BE USED IN ALL DISTURBED AREAS, AS DIRECTED BY THE ENGINEER.
 (7) INCLUDES NON-PARTICIPATING QUANTITIES FOR THE 8' WIDE BITUMINOUS PATHS ALONG CSAH 51.

BASIS OF QUANTITIES

TYPE 31 - 115#/SQ YD/INCH
 TYPE 61 - 115#/SQ YD/INCH
 TACK COAT - .05 GAL/SQ YD/LAYER

SEED MIXTURE 600 - 75#/ACRE
 MULCH TYPE 5 - 1500#/ACRE
 FERTILIZER - 200#/ACRE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the State of Minn. Statutes Sections 326.02 to 326.16.

Date _____ Minn. Reg. No. 12666

		PLANNING TRANSPORTATION ENGINEERING URBAN DESIGN
		(612) 370-0700 BRW INC. 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
DESIGN BY: TJG	SURVEY BOOK	
DRAWN BY: BSC		
CHK'D BY:		

ORIGINAL DATE 11/12/91
 REVISIONS 2/14/92 - SPLIT QUANT.

LEXINGTON AVENUE
 C.S.A.H. 51
 RAMSEY COUNTY
 ESTIMATED QUANTITIES
 28-124

S.A.P. NO. 62-651-2831

SHEET 2 OF 24

DESIGN FILE
 No. 09-9003

QUANT-1

INPLACE UTILITY MODIFICATIONS							A		
STATION	LOCATION	ITEM	ADJUST EACH	REMOVE EACH	LIN FT	REMARKS	EXISTING ELEVATION	PROPOSED ELEVATION	OWNERSHIP CONTACT
500+00 - 502+85	12' RT - 12' RT	WATERMAIN				TO REMAIN INPLACE			D
500+00 - 506+28	36' LT - 52' RT	30" SANITARY SEWER				TO REMAIN INPLACE			B
500+00 - 507+00	80' LT - 46' RT	BURIED TELEPHONE				TO REMAIN INPLACE			E
500+00 - 508+95	82' LT - 15' RT	4" GAS MAIN				TO REMAIN INPLACE			D
501+00	32' RT	HYDRANT				TO REMAIN INPLACE			D
501+00	30' RT	GATE VALVE	1			ADJUST			D
501+24	24' LT	SANITARY MH	1			ADJUST	890.30	890.59	D
501+32	88' RT	36" APRON				TO REMAIN INPLACE			D
502+85 - 503+35	12' RT - 45' LT	WATERMAIN				TO REMAIN INPLACE			D
503+35 - 509+08	42' LT - 42' LT	WATERMAIN				TO REMAIN INPLACE			D
503+57 - 504+25	44' RT - 52' RT	48" STEEL CASING				TO REMAIN INPLACE			D
504+50	45' LT	GATE VALVE	1			ADJUST			D
504+50	45' LT	HYDRANT				TO REMAIN INPLACE			D
504+81	58' RT	SANITARY MH				TO REMAIN INPLACE	885.50		D
505+65	40' RT	VAULT	1			ADJUST	888.89	889.41	D
505+98	39' RT	SANITARY MH				TO REMAIN INPLACE	889.10		D
506+20 - 506+28	50' LT - 35' RT	42" SANITARY SEWER				TO REMAIN INPLACE			F
506+28 - 513+00	52' RT - 44' LT	42" SANITARY SEWER				TO REMAIN INPLACE			F
506+25	46' LT	12" GATE VALVE	1			ADJUST			D
506+28	52' RT	SANITARY MH				TO REMAIN INPLACE	886.20		D
506+28	35' RT	SANITARY MH	1			ADJUST	889.00	888.76	F
507+00 - 513+00	46' RT - 40' LT	BURIED TELEPHONE				TO REMAIN INPLACE			E
508+95 - 509+12	15' RT - 50' LT	4" GAS MAIN				TO REMAIN INPLACE			B
508+60	16' RT	APRON		1		REMOVE			D
508+60 - 509+11	16' RT - 5' RT	STORM SEWER			48	REMOVE			D
508+95	50' LT	GATE VALVE	1			ADJUST			D
509+08	42' LT	HYDRANT				TO REMAIN INPLACE			D
509+08	42' LT	GATE VALVE	1			ADJUST			D
509+11	5' RT	APRON		1		REMOVE			D
511+85	29' LT	SANITARY MH	1			ADJUST	885.45	885.31	D

INDEX OF TABULATION CHARTS		
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STANDARD PLATES		B
PLATE NO	DESCRIPTION	
0005A	SPECIFICATION REFERENCE TO STANDARD PLATES	
3000L	REINFORCED CONCRETE PIPE	
3006F	GASKET JOINT FOR R.C. PIPE	
3100G	CONCRETE APRONS FOR R.C. PIPE	
3133B	RIPRAP AT RCP OUTLETS	
3145E	CONCRETE PIPE TIES	
4010G	CONCRETE SHORT CONE & ADJUSTING RING	
4011D	PRECAST CONCRETE BASE	
4020E	MANHOLE OR CATCH BASIN	
7036D	PEDESTRIAN CURB RAMP (FOR THE HANDICAPPED)	
7100F	CONCRETE CURB AND GUTTER (DESIGN B)	
7111G	INSTAL. & REINFORCE. OF CATCH BASIN CASTINGS	
8000I	STANDARD BARRICADES (2 SHEETS)	
8307N	STEEL PLATE BEAM GUARD RAIL	
8318C	GUARDRAIL ANCHORAGE ASSEMBLY FOR BRIDGES AND BCT'S	
8329E	BREAKAWAY CABLE TERMINAL (BCT)	
9102D	TURF ESTABLISHMENT AREAS	
9321E	WOVEN WIRE FENCE (STEEL POST)	

BITUMINOUS SURFACING AND AGGREGATE BASE SUMMARY							C
STATION TO STATION	2211 AGGREGATE CLASS 6	WEAR COURSE TYPE 31	WEAR COURSE TYPE 61	BINDER COURSE TYPE 31	BASE COURSE TYPE 31	2357 BIT MIX TACK COAT	
	CU YD	TON	TON	TON	TON	GAL	
500+00 TO 503+41.48	317		106	158	317	182	
504+22.52 TO 507+00	258		86	129	258	148	
507+00 TO 508+43	133		44	66	133	76	
508+43 TO 509+28	99		34	50	100	58	
509+28 TO 513+00	345		115	173	345	198	
RICE CREEK BIT. PATH							
502+00 TO 507+00	70	50		50		28	
507+00 TO 509+50	24	16		16		10	
RICE CREEK BIT. PATH							
502+00 TO 507+00	75	52		52		30	
507+00 TO 509+50	19	13		13		7	
TOTAL	1340	131	385	707	1153	737	

WARNING: PRIOR TO CONSTRUCTION CONTACT

- A. NORTHERN STATES POWER COMPANY
ERV WESTPHAL (RAMSEY COUNTY)
(612) 779-3114
1700 COUNTY ROAD "E"
WHITE BEAR LAKE, MN. 55110

B. NORTHERN STATES POWER (GAS)
RON MESSETLER
(612) 779-3190
1700 COUNTY ROAD "E"
WHITE BEAR LAKE, MN. 55110

C. NORTH CENTRAL CABLE TV
SCOTT GUNDERSON
(612) 483-3233
934 WOODHILL DRIVE
ROSEVILLE, MN. 55113
- D. CITY OF SHOREVIEW
CHARLES AHL (CITY ENGINEER)
(DIRECTOR OF PUBLIC WORKS)
(612) 490-4650, FAX (612) 490-4699
4600 NORTH VICTORIA STREET
SHOREVIEW, MN. 55126

E. U.S. WEST COMMUNICATIONS
JOAN ANDERSON
(612) 569-2501
5910 SHINGLE CREEK PKWY.
BROOKLYN CENTER, MN. 55430

F. MWCC
KEN BOMBACH
(612) 229-2142
MEARS PARK CENTRE
230 EAST 5TH STREET
ST. PAUL, MN. 55101

ALL CONTRACTORS
MUST CONTACT
GOPHER STATE
ONE CALL
TWIN CITY AREA 454-0002
MN. TOLL FREE 1-800-252-1166
BEFORE CONSTRUCTION BEGINS

WARNING ! !
PETROLEUM PRODUCTS PIPELINE ! !
EXCAVATION AND/OR CONSTRUCTION
PROHIBITED WITHOUT WRITTEN PERMISSION FROM
NORTHERN STATES POWER (GAS)
RON MESSETLER
(612) 779-3190
1700 COUNTY ROAD "E"
WHITE BEAR LAKE, MN. 55110

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the State of Minn. Statutes Sections 326.02 to 326.16.	 BRW INC. 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415 (612) 376-0700	PLANNING TRANSPORTATION ENGINEERING URBAN DESIGN	ORIGINAL DATE 11/12/91 REVISIONS 2/14/92-BIT. PATH	LEXINGTON AVENUE C.S.A.H. 51 RAMSEY COUNTY STANDARD PLATES, CHART INDEX AND INPLACE UTILITIES
		DESIGN BY: JIG DRAWN BY: BSC CHK'D BY:	SURVEY BOOK	
Date: _____ Minn. Reg. No. 12886	S.A.P. NO. 62-651-28 3/1		SHEET 3 OF 24	

SAWING BITUMINOUS PAVEMENT D		
STATION TO STATION	LOCATION	LIN FT
500+00	24'LT - 24'RT	48
503+17 TO 503+75	80'RT - 70'RT	65
504+05 TO 504+53	91'RT - 94'RT	50
504+05 TO 504+53	73'RT - 94'RT	58
508+70 TO 509+01	51'LT	32
513+00	24'LT - 24'RT	48
	TOTAL	301

CONCRETE AND BITUMINOUS REMOVALS E			
STATION TO STATION	LOCATION	BITUMINOUS PAVEMENT	CONC. CURB AND GUTTER
		SQ YD	LIN FT
500+00 TO 503+82	24'LT - 80'RT	1072	
504+02 TO 507+00	73'RT - 80'RT	596	
507+00 TO 508+70	82'RT - 56'RT	468	
508+70 TO 509+02	50'LT - 54'RT	295	
508+70	48'LT - 50'LT		2
508+70	8'LT - 30'LT		22
509+02	8'LT - 30'LT		22
509+02 TO 513+00	52'RT - 24'LT	1663	
512+35 TO 513+00	LT & RT		130
	TOTAL	4094	176

BRIDGE APPROACH PANELS F		
STATION	OUTSIDE DIMENSIONS (1)	AREA SQ YD
503+41.48 TO 503+61.48	20' x 53.8'	120
504+02.52 TO 50+22.52	20' x 54.6'	121
	TOTAL	241

NOTE:
(1) OUTSIDE DIMENSIONS ARE CALCULATED TO THE BACK OF CURB. B624 INTEGRANT CURB SHALL BE INCIDENTAL TO THE BRIDGE APPROACH PANEL AND NO DIRECT PAYMENT SHALL BE MADE.

EARTHWORK SUMMARY G										
LOCATION	EXCAVATION (EV)			EMBANKMENT (CV)			BALANCE			
	TOPSOIL	COMMON	SUBGRADE	TOPSOIL	REGULAR	SELECT GRANULAR	TOPSOIL	REGULAR	SELECT GRANULAR	SELECT GRAN BORROW MOD 7%
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
500+00 - 503+61	-	-	49	121	820	589	121	820	552	374
504+03 - 507+00	74	132	-	191	1266	626	136	1167	626	(1) 1057
507+00 - 513+00	72	-	1367	183	1101	1113	129	1101	88	-
SUB-TOTAL							(CV) 386	(CV) 3088	(CV) 1266	(CV) 1431
TOTAL	146	132	1416	495	3187	2328	(LV) 579	(LV) 4632	(LV) 1899	(LV) 2147

(1) INCLUDES 563 CU.YD. FOR BRIDGE TREATMENT

CONSTRUCTION NOTES

1. THE CONTRACTOR WILL COOPERATE WITH APPROPRIATE CITY AND COUNTY OFFICES AS RELATES TO PERPETUATING MONUMENTATION, INCLUDING ADVANCE NOTICE OF ANY DISTURBANCE OF MONUMENTS.

2. PROVIDE DRAINAGE OUTLETS FOR ALL SUBCUTS DURING CONSTRUCTION DITCHES SHOULD BE DEEPER THAN SUBCUT TO PROVIDE OUTLET DRAINAGE.

3. TAPER ENDS OF SUBCUTS AT A 10:1 SLOPE UNLESS OTHERWISE DIRECTED.

4. WHERE THE PROPOSED SUBCUT IS LOCATED UNDER INPLACE BASE AND BITUMINOUS SURFACING OR CONCRETE PAVEMENT, THE ENDS OF SUBCUT SHALL BE VERTICAL FOR THE DEPTH OF THE BITUMINOUS OR CONCRETE AND 1.5:1 IN AGGREGATE BASE.

5. STRIP TOPSOIL FROM ALL AREAS TO BE DISTURBED BY CONSTRUCTION AND STOCKPILE (IF PRACTICAL) FOR REPLACEMENT LATER AS SLOPE DRESSING.

6. CONCRETE, BITUMINOUS, OR OTHER MISC. ITEMS REMOVED BY THIS CONSTRUCTION SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 2104.3C1.

7. THE CONTRACTOR SHALL PROTECT VEHICULAR AND PEDESTRIAN TRAFFIC FROM OPEN EXCAVATION AS DIRECTED BY THE ENGINEER.

8. THE ORDINARY COMPACTION METHOD SHALL BE USED ON THIS PROJECT FOR EMBANKMENT CONSTRUCTION.

9. THE CONTRACTOR SHALL OBTAIN FROM THE UTILITY COMPANIES THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES WHICH HE MAY ENCOUNTER IN THE PERFORMANCE OF HIS WORK.
10. TOP OF "GRADING GRADE" IS DEFINED AS THE TOP OF THE EMBANKMENT MATERIAL OR THE BOTTOM OF THE AGGREGATE BASE COURSE.

11. BALE CHECKS WILL BE INSTALLED AT ALL AREAS AS DIRECTED BY THE ENGINEER.

12. TOPSOIL SHALL CONSIST OF ORGANIC SOILS ABLE TO SUSTAIN HEALTHY PLANT GROWTH AS APPROVED BY THE ENGINEER. TOPSOIL AND TOPSOIL BORROW BOTH SHALL MEET MN/DOT SPEC. 3877.2A .

13. GRANULAR MATERIAL SHALL CONSIST OF SUITABLE SITE EXCAVATED GRADING MATERIAL AS DETERMINED BY THE ENGINEER AND GRANULAR BORROW SHALL MEET MN/DOT SPEC. 3149.2A .

14. REGULAR EMBANKMENT SHALL CONSIST OF ANY SITE EXCAVATED MATERIAL NOT SUITABLE FOR USE AS GRANULAR BACKFILL.

15. UNLESS OTHERWISE RECOMMENDED, SELECTED GRADING MATERIALS SHALL CONSIST OF GRANULAR SOILS, EXCLUDING TOPSOIL. WHETHER OBTAINED LOCALLY, OR AS "GRANULAR BORROW", THEY SHALL MEET THE REQUIREMENTS OF SPEC. 3149.2A.

GENERAL NOTES:

- (1) SHRINKAGE FACTOR OF 25% USED FOR NORMAL GRADING (EV TO CV).
- (2) ADJUSTMENT FACTOR OF 150% USED FOR BORROW QUANTITIES (CV TO LV).
- (3) SUITABLE SOILS MEETING THE REQUIREMENTS OF GRANULAR BORROW ENCOUNTERED DURING SUBGRADE EXCAVATION SHALL BE USED AS GRANULAR EMBANKMENT, THE REMAINING BALANCE SHALL BE USED AS REGULAR EMBANKMENT.

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the State of Minn. Statutes Sections 326.02 to 326.16.

BRW

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN
(612) 370-0700
BRW INC. 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415

DESIGN BY: TJC
DRAWN BY: RSC
CHK'D BY:

SURVEY BOOK

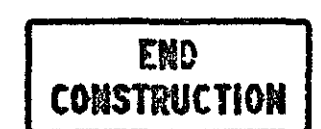
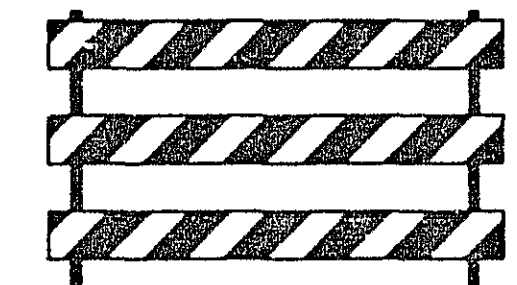
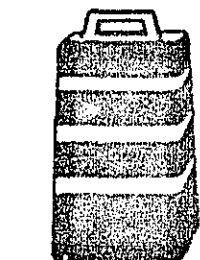
ORIGINAL DATE 11/12/91
REVISIONS

LEXINGTON AVENUE
C.S.A.H. 51
RAMSEY COUNTY
TABULATED QUANTITIES
&
EARTHWORK SUMMARY

DESIGN FILE
No. 09-9003

S.A.P. NO. 62-651-2831

SHEET 4 OF 23

TRAFFIC CONTROL					H
SIGN	SIGN NO.	SIZE	STAGE ONE	STAGE TWO	
	W1-6	48"x 24" BLACK ON ORANGE	3	4	
	W21-X5 RIGHT AND LEFT	48"x 48" BLACK ON ORANGE	1	1	
	W20-1	48"x 48" BLACK ON ORANGE	5 (1)	5 (1)	
	G20-2	60"x 24" BLACK ON ORANGE	1	1	
	TYPE III ORANGE ON WHITE		5 (2)	8 (3)	
	W14-X7	18"x 18" BLACK ON ORANGE	33	40	
	BARREL ORANGE ON WHITE		102	108	
	TUBE DELINEATOR ORANGE ON WHITE		0	42	
	TWO-WAY RAISED PAVEMENT MARKER TEMPORARY		88	205	
	REMOVABLE PREFORMED PLASTIC MARKING		4255 LIN.FT.	5775 LIN.FT.	

- (1) INCLUDES W20-1 WITH FLASHER AT STATION 486+32
(2) INCLUDES BARRICADE WITH FLASHER AT STATION 516+05
(3) INCLUDES BARRICADE WITH FLASHER AT STATION 515+45

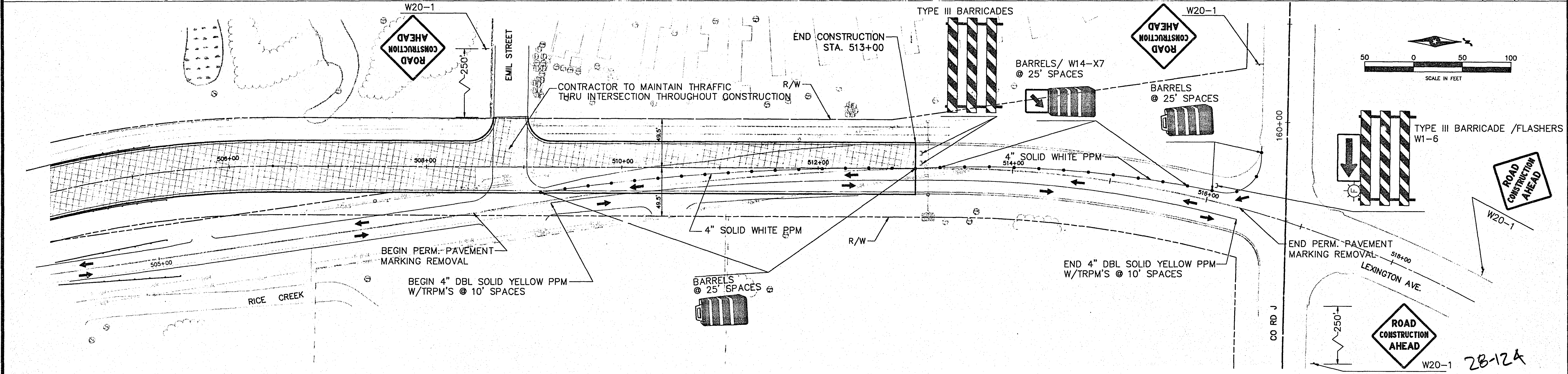
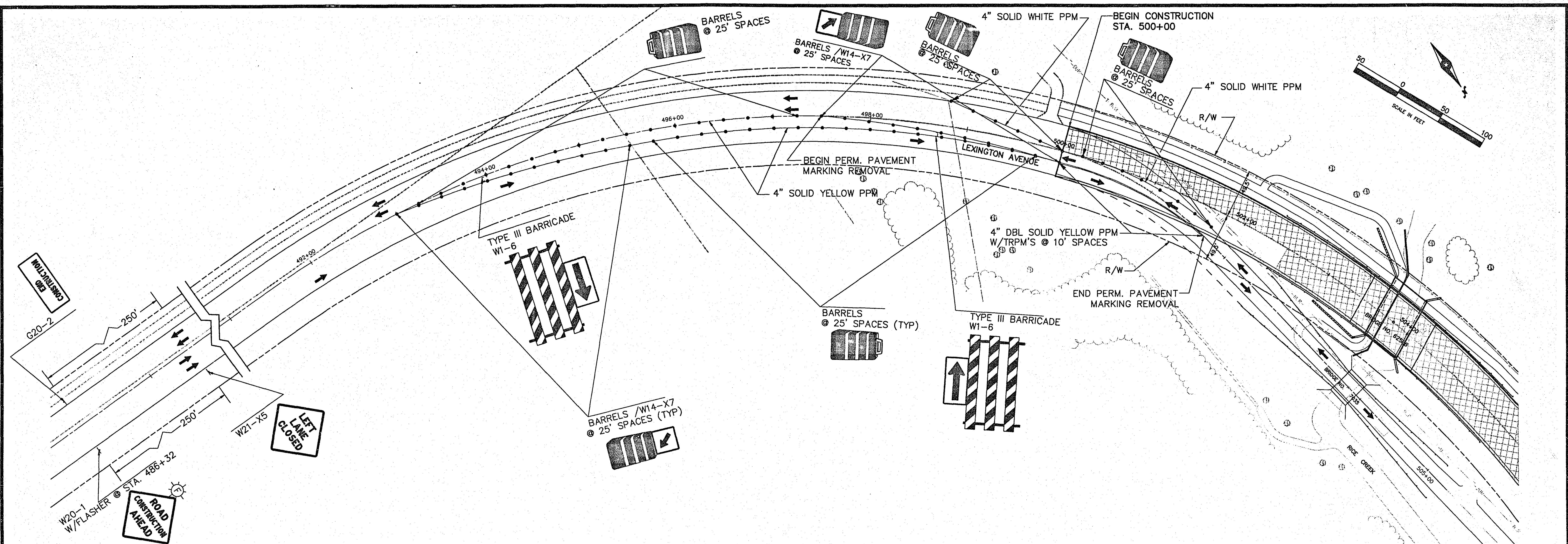
NOTES:

1. FIELD CONDITIONS MAY REQUIRE MODIFICATIONS OF THIS LAYOUT AS DEEMED NECESSARY BY THE ENGINEER.
2. ALL DISTANCES ARE APPROXIMATE.
3. BARRICADES ARE 8' TYPE III UNLESS OTHERWISE INDICATED.
4. OBLITERATE ANY CONFLICTING PAVEMENT MARKINGS.
5. REMOVE OR COVER ANY CONFLICTING SIGNING (INCIDENTAL).
6. *TRPM'S, POLYMER LANE TAPE, ARE INTERCHANGEABLE ACCORDING TO ACTUAL CONDITIONS ENCOUNTERED AS DIRECTED BY THE ENGINEER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXTRA SIGNING NEEDED TO FACILITATE TRAFFIC SWITCHES OR FOR TRANSITIONING TRAFFIC FROM ONE STAGE TO ANOTHER.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ANY WORK AREAS NEAR TRAFFIC IN ACCORDANCE WITH THE *MMUTCD.
9. THE CONTRACTOR SHALL COORDINATE WITH THE FINAL SIGNING PROJECT SO THAT THE INSTALLATION OF THE PERMANENT SIGNS ARE COMPLETED BEFORE THE PERMANENT ROADWAYS ARE OPEN TO TRAFFIC.
10. CONTRACTOR TO MAINTAIN TRAFFIC TO AND FROM EMIL STREET AT ALL TIMES DURING CONSTRUCTION.
11. UNLESS OTHERWISE NOTED, TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH MnMUTCD.
12. ALL PAVEMENT MARKINGS NOT SHOWN SHALL BE IN ACCORDANCE WITH THE PERMANENT STRIPING PLAN.
13. IF THE CONTRACTOR DESIRES TO PERFORM THE WORK IN A SEQUENCE OTHER THAN INDICATED ON THE PLANS, THE CONTRACTOR SHALL SUBMIT THE PROPOSED CHANGES, IN WRITING, TO THE ENGINEER FOR APPROVAL AT LEAST 30 DAYS PRIOR TO COMMENCEMENT OF THE WORK. IF THE SEQUENCE OF CONSTRUCTION CHANGES ARE APPROVED AND THE CHANGES RESULT IN CHANGES TO THE TRAFFIC CONTROL, THE CONTRACTOR SHALL SUBMIT, IN WRITING REVISED TRAFFIC CONTROL PLANS TO THE ENGINEER FOR APPROVAL AT LEAST 14 DAYS PRIOR TO IMPLEMENTING THE TRAFFIC CONTROL.
14. ALL TRAFFIC CONTROL SIGNS WILL BE REQUIRED TO BE POST MOUNTED AT A HEIGHT OF 7' FROM THE BOTTOM OF THE SIGN TO THE EDGE OF THE ROADWAY.
15. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING APPENDIX "B", DATED MARCH, 1990.

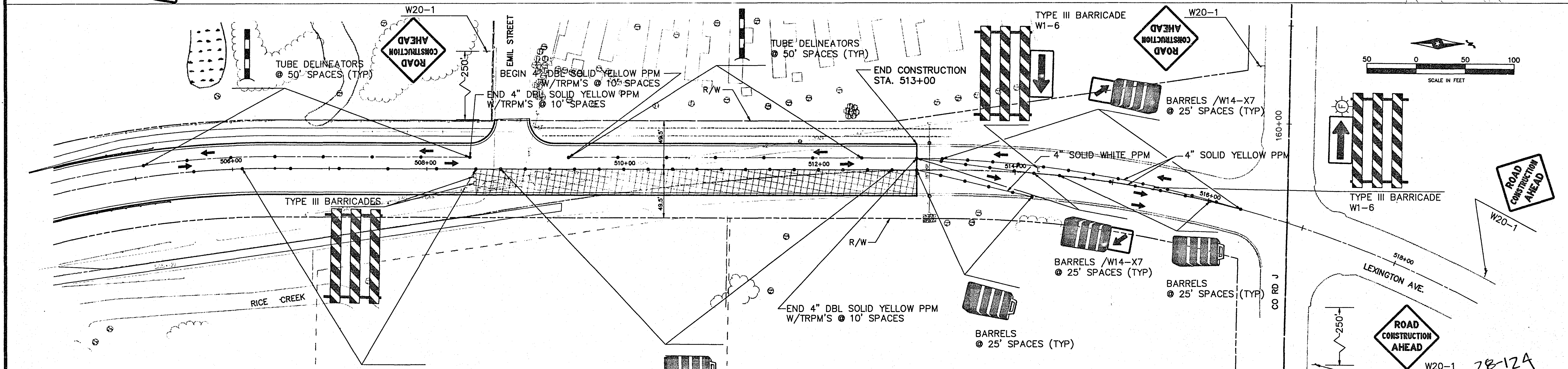
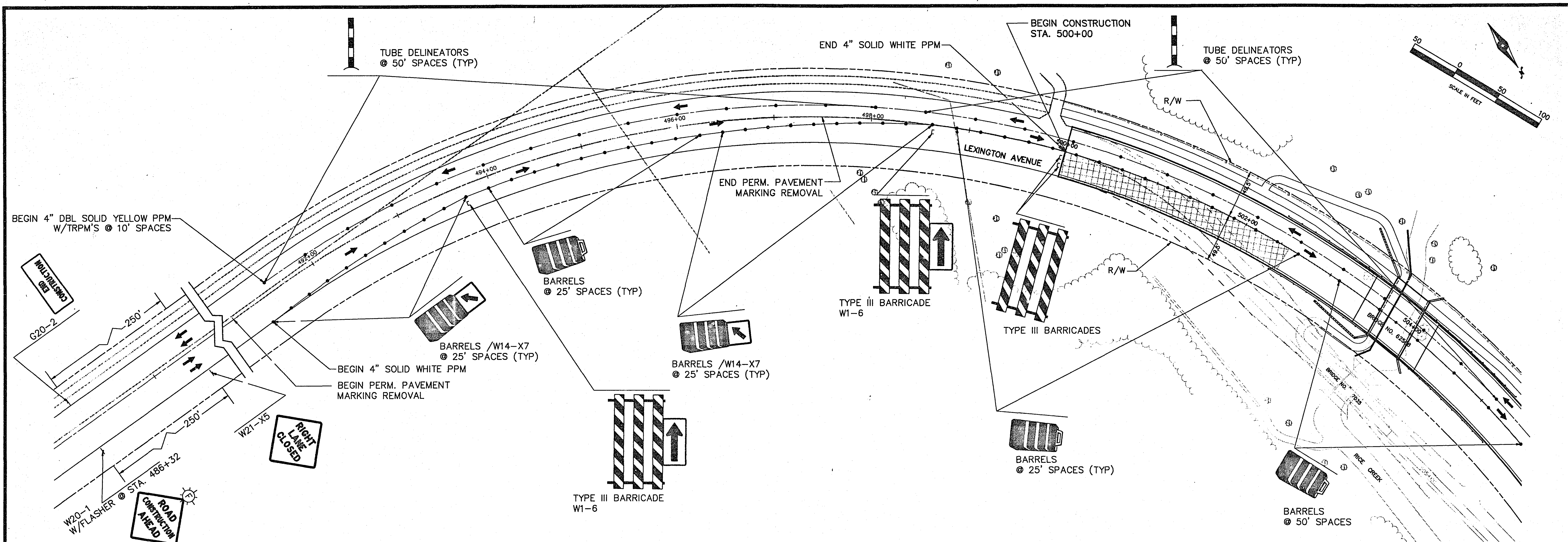
LEGEND:

- *TRPM'S - TEMPORARY RAISED PAVEMENT MARKERS
*MMUTCD-MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
*PPM - PREFORMED PLASTIC MARKING TAPE

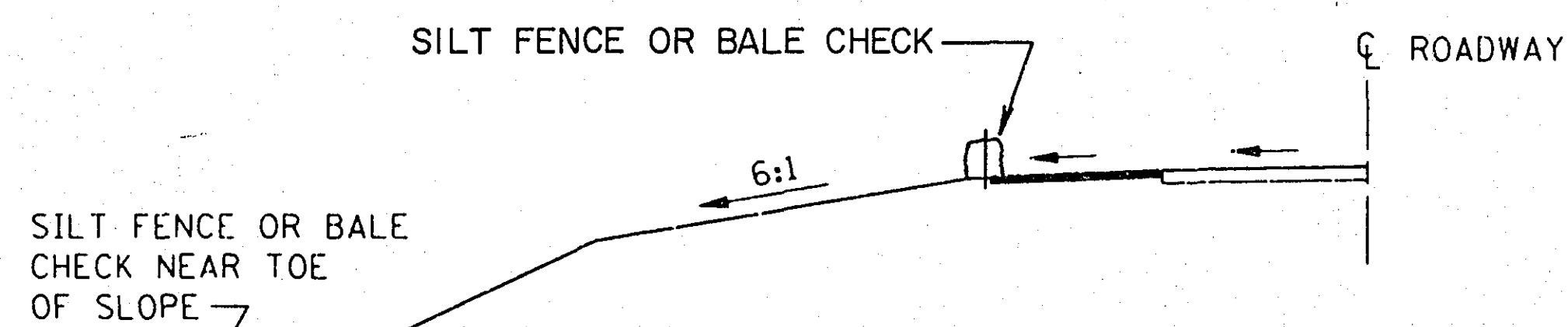
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the State of Minn. Statutes Sections 326.02 to 326.16.	DESIGN BY: TJG DRAWN BY: RSC CH'KED BY:	SURVEY BOOK	28-12A LEXINGTON AVENUE C.S.A.H. 51 RAMSEY COUNTY TRAFFIC CONTROL TABULATION
Date: _____ Minn. Reg. No. 12666	S.A.P. NO. 62-651-31	SHEET 5 OF 24	DESIGN FILE No. 09-9003



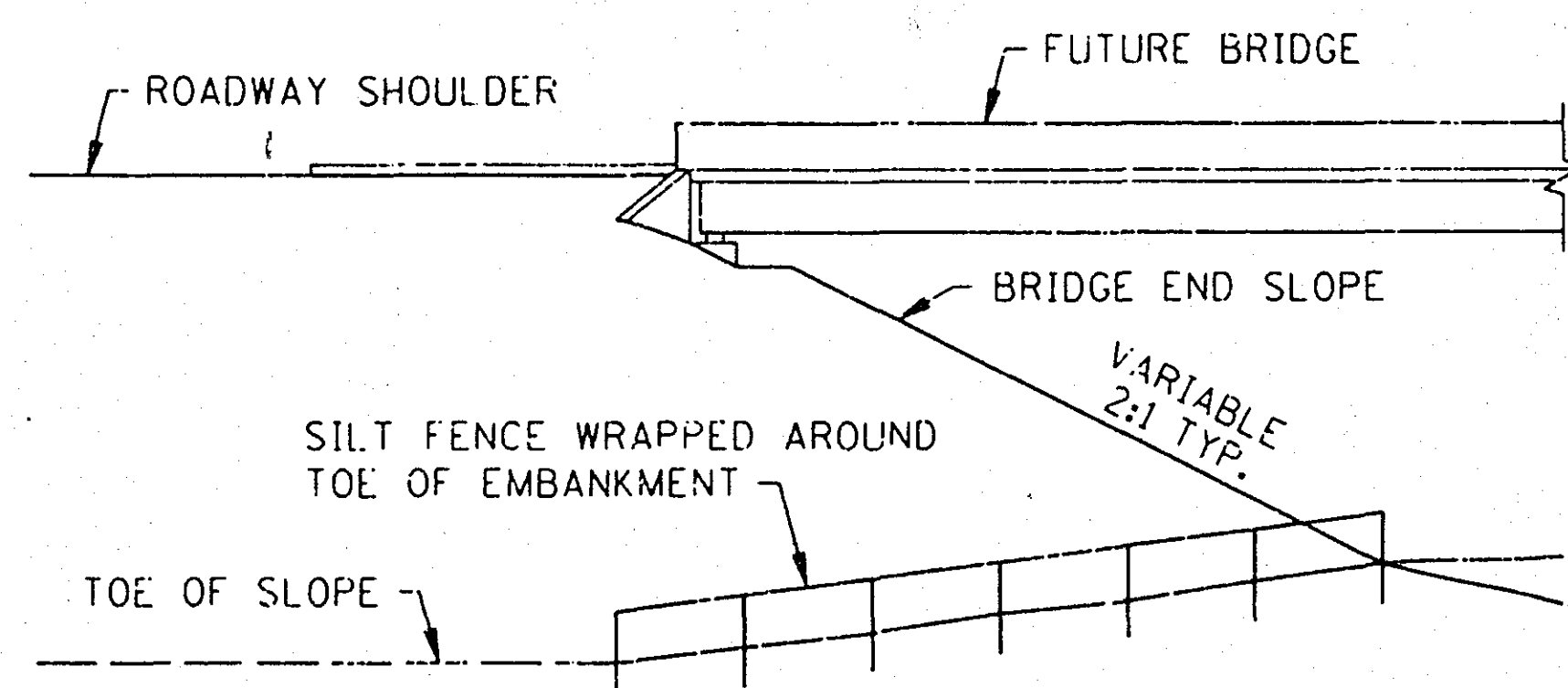
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the State of Minn. Statutes Sections 326.02 to 326.16. Date _____ Minn. Reg. No. 12666	 BRW INC. 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415 (612) 370-0700 DESIGN BY: TJC DRAWN BY: RSC CHECKED BY:	PLANNING TRANSPORTATION ENGINEERING URBAN DESIGN SURVEY BOOK	ORIGINAL DATE 11/12/91 REVISIONS	LEXINGTON AVENUE C.S.A.H. 51 RAMSEY COUNTY PHASING AND TRAFFIC CONTROL PLAN STAGE 1
			S.A.P. NO. 62-651-31	



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the State of Minn. Statutes Sections 326.02 to 326.16. Date: _____ Minn. Reg. No. 12666	 BRW INC. 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415 (612) 370-0700 DESIGN BY: TJC DRAWN BY: BSC CHECKED BY:	PLANNING TRANSPORTATION ENGINEERING URBAN DESIGN SURVEY BOOK	ORIGINAL DATE 11/12/91 REVISIONS:	LEXINGTON AVENUE C.S.A.H. 51 RAMSEY COUNTY PHASING AND TRAFFIC CONTROL PLAN STAGE 2	DESIGN FILE No. 09-9003
			S.A.P. NO. 62-651-31		

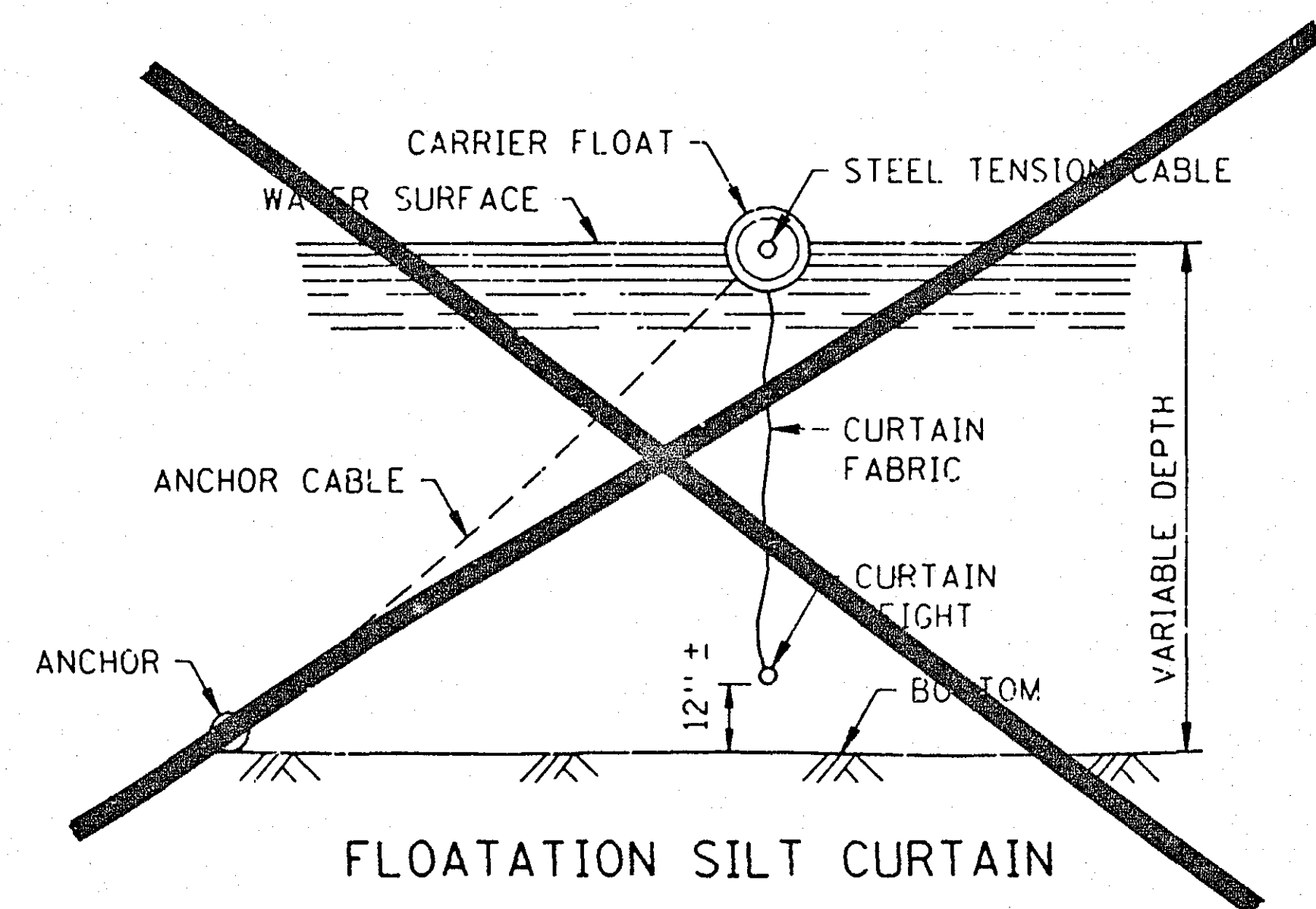


ROADWAY EMBANKMENT

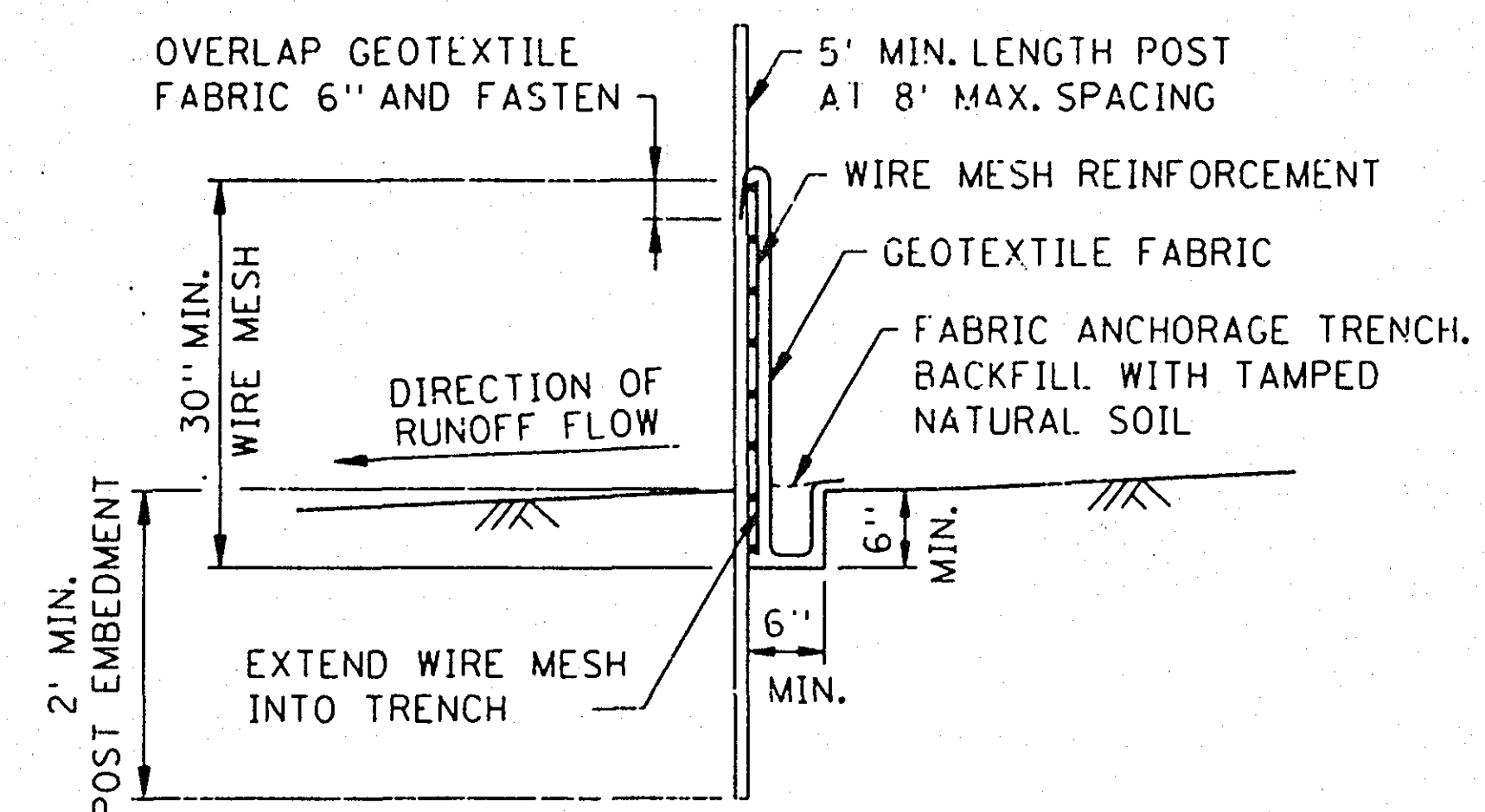


BRIDGE ABUTMENT

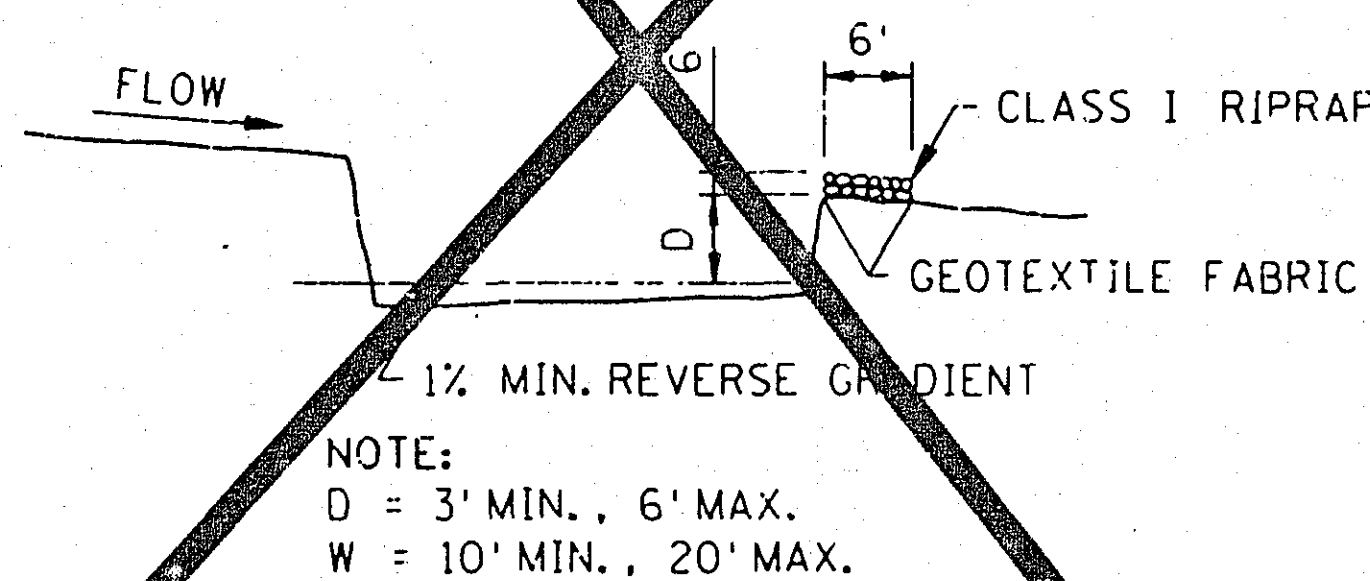
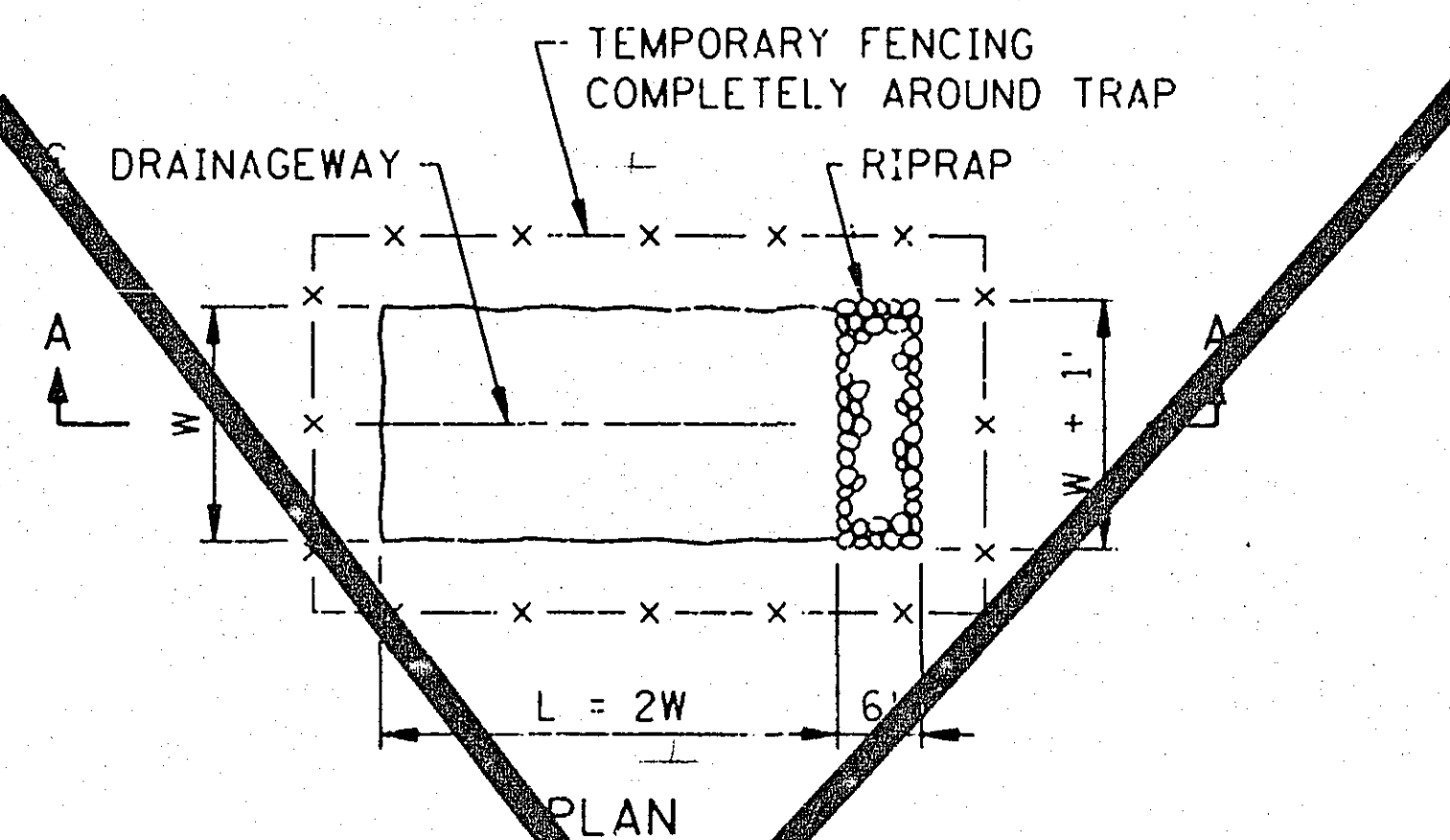
SILT FENCE OR BALE CHECK TO PROTECT ADJACENT CRITICAL AREAS



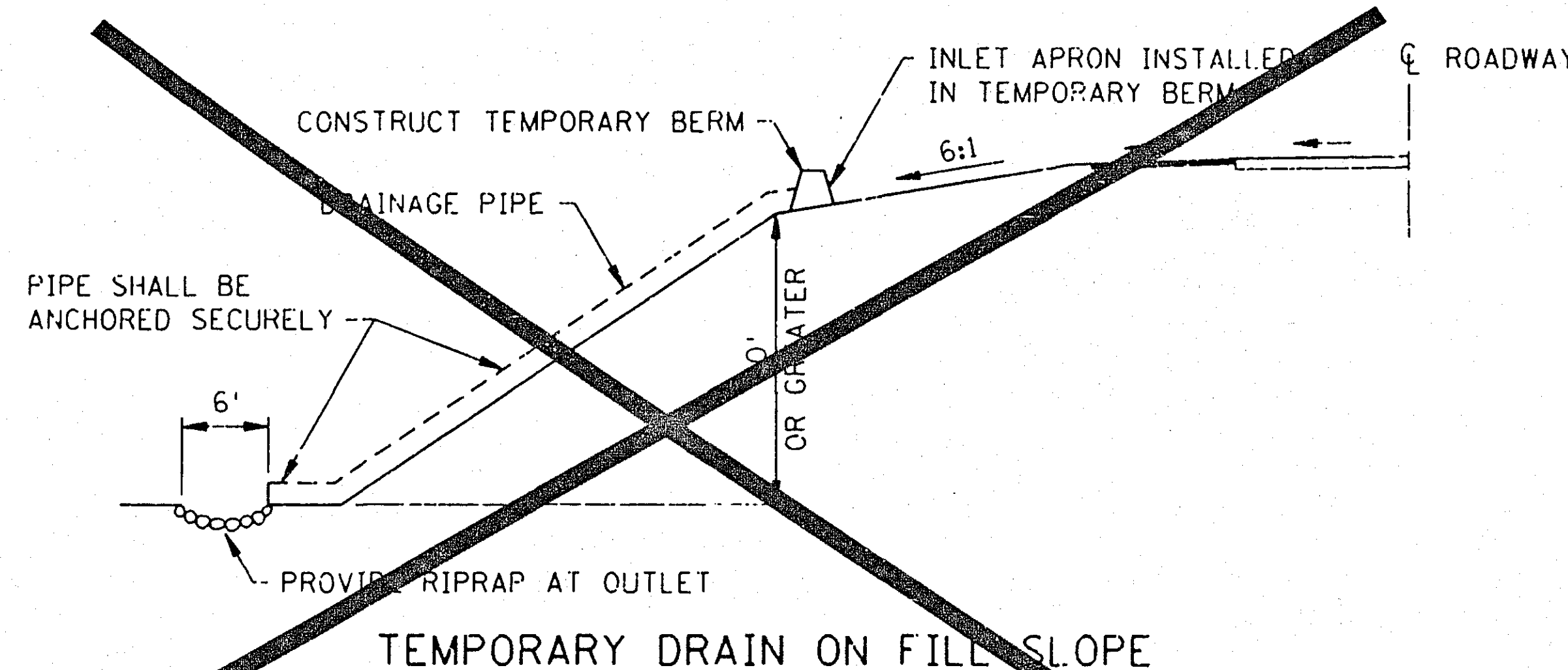
FLOATATION SILT CURTAIN



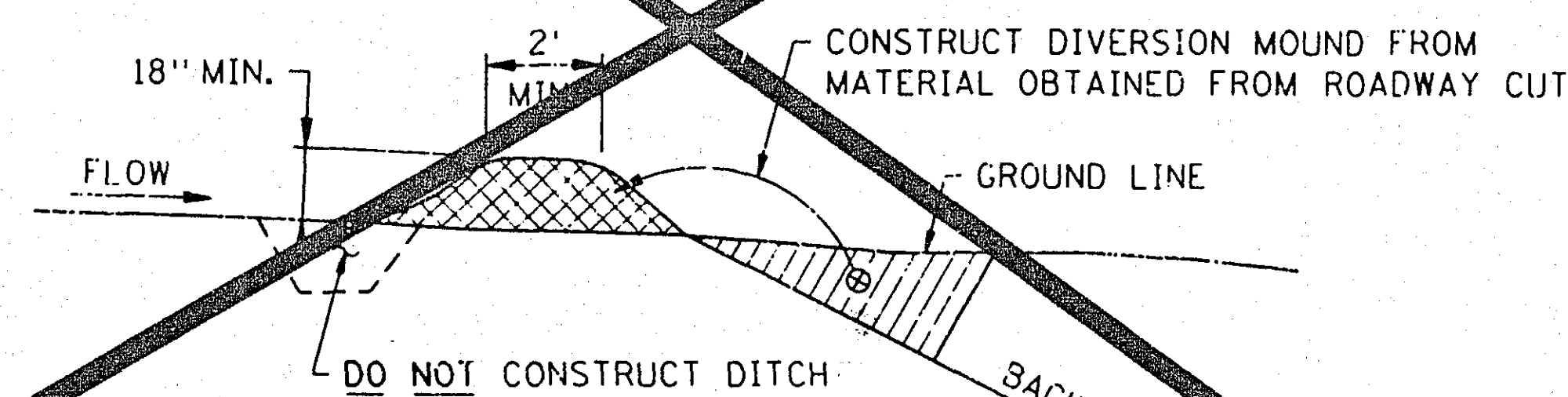
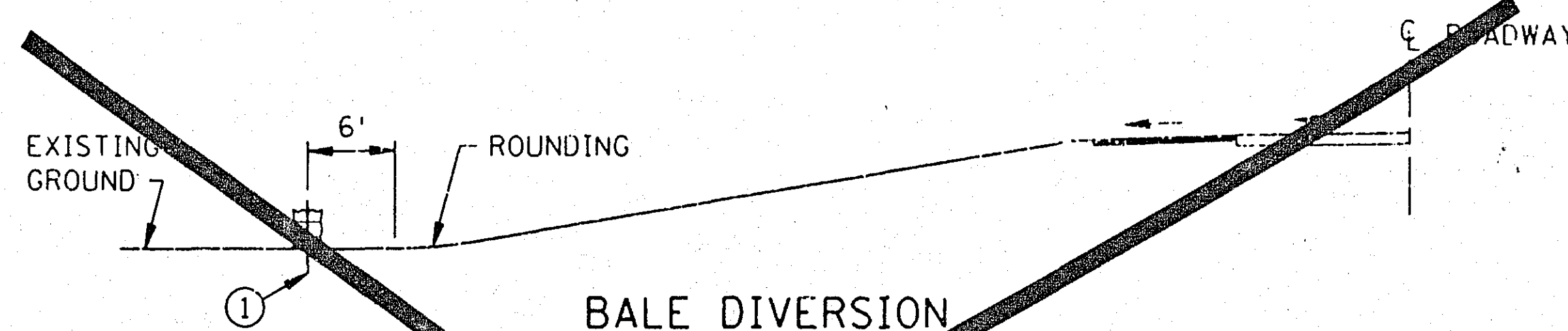
SILT FENCE DETAIL



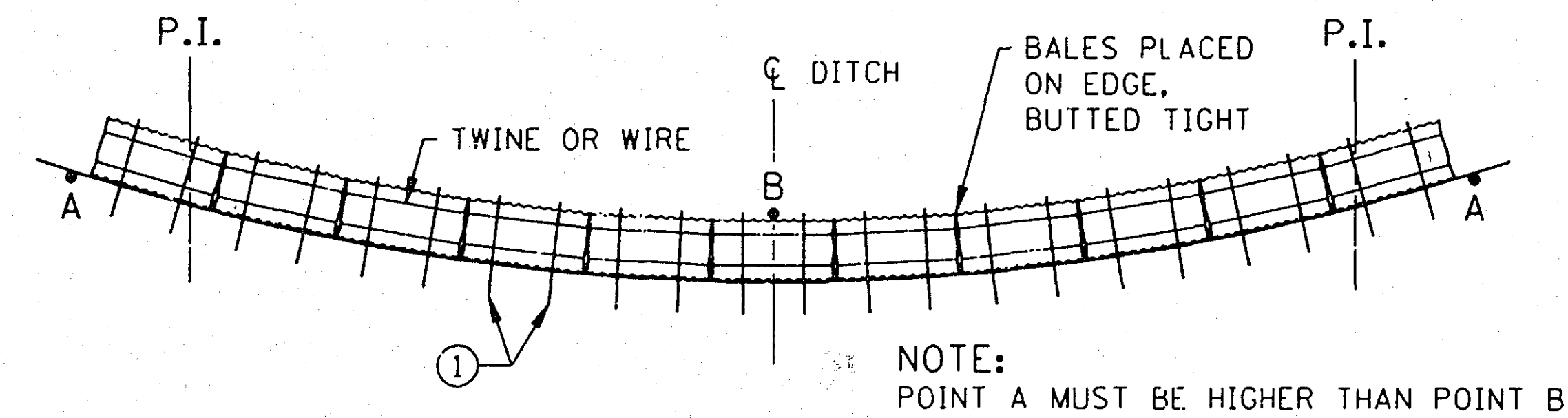
SECTION A-A
TEMPORARY SEDIMENT TRAP



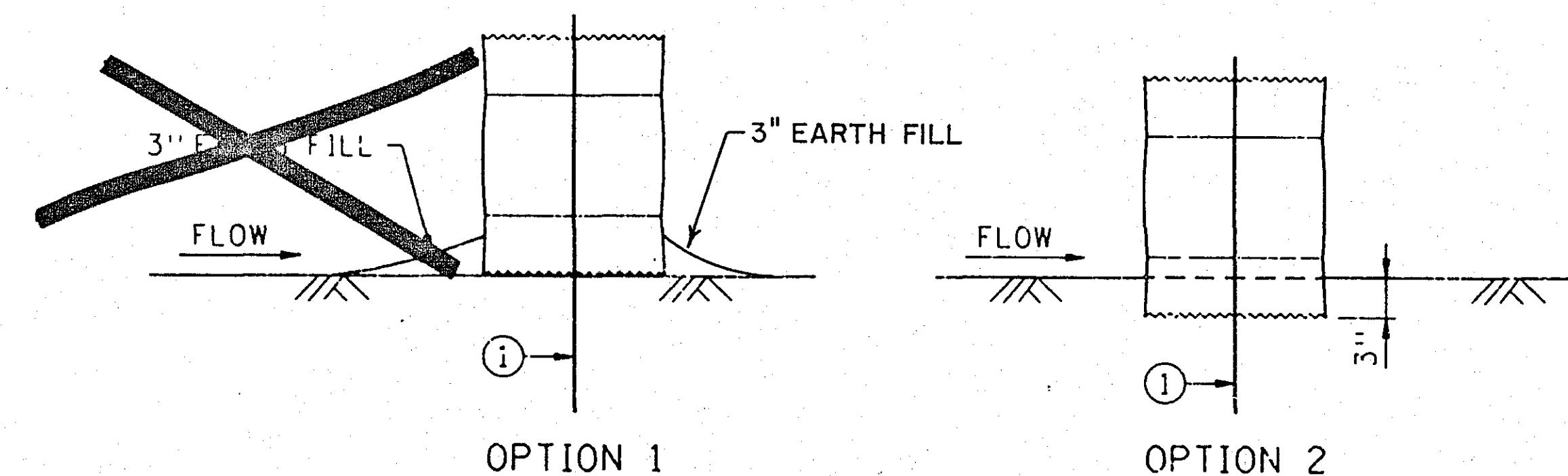
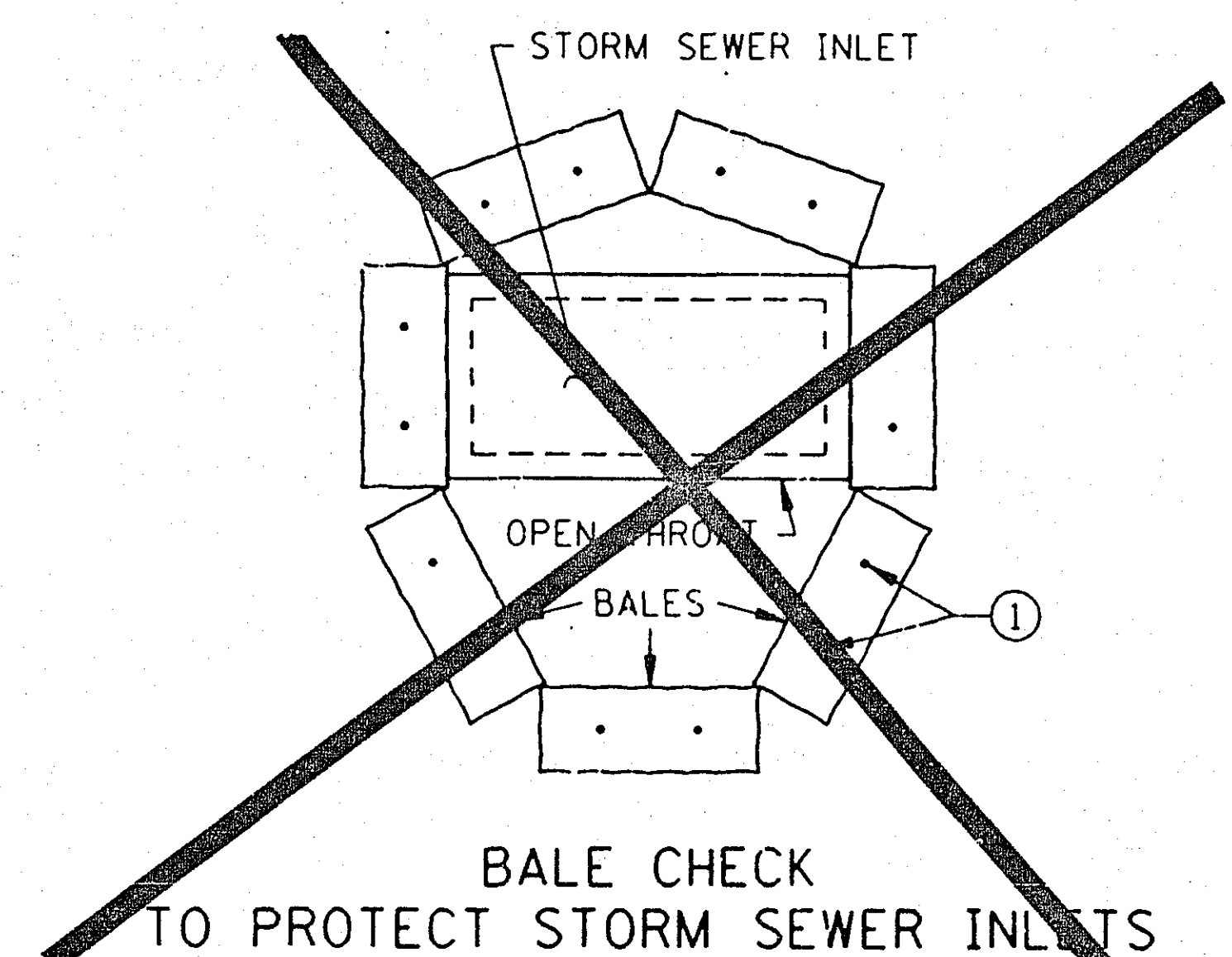
TEMPORARY DRAIN ON FILL SLOPE



DIVERSION MOUND



BALE DITCH CHECK



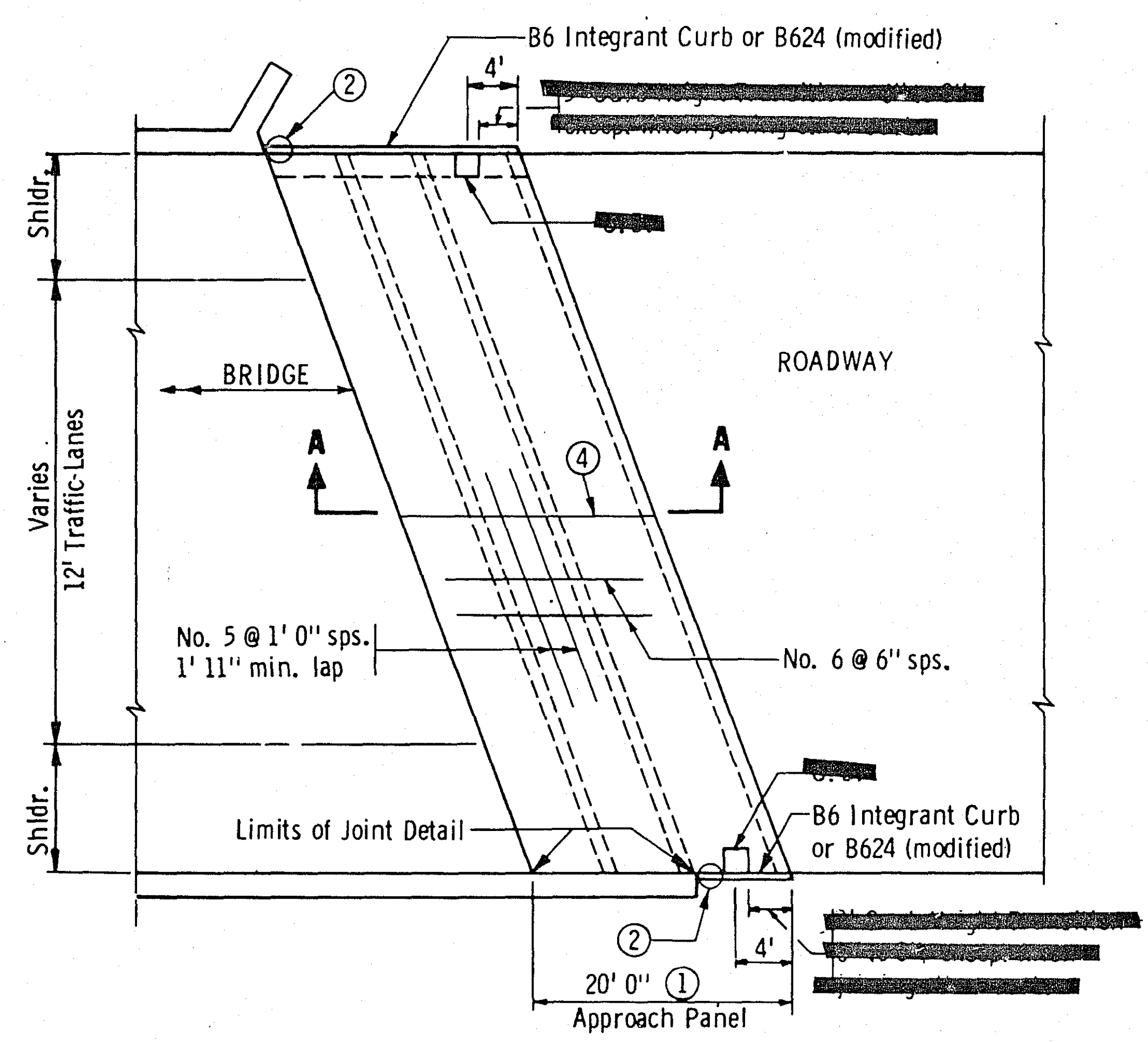
BALE CHECK DETAILS

NOTE:
1 TWO 2" X 2" WOOD STAKES OR REINFORCING BARS IN EACH BALE AND EMBEDDED IN THE GROUND 10" MINIMUM.

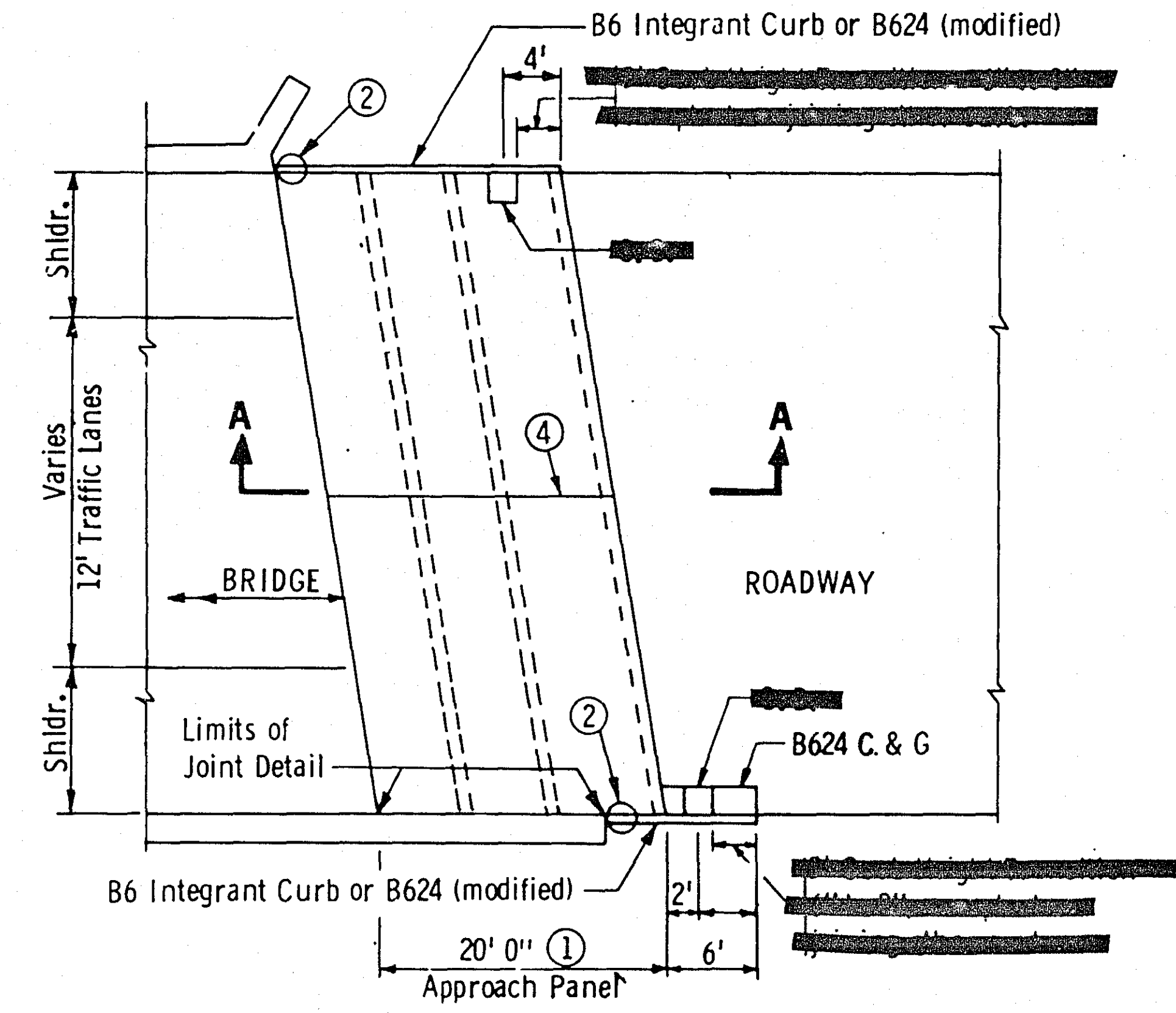
28-124

STANDARD SHEET NO. 5-297.405	TITLE: TEMPORARY EROSION CONTROL
STANDARD APPROVED: DECEMBER 19, 1990	
STATE PROJ. NO. 62-651-31	SHEET NO. 8 OF 24 SHEETS

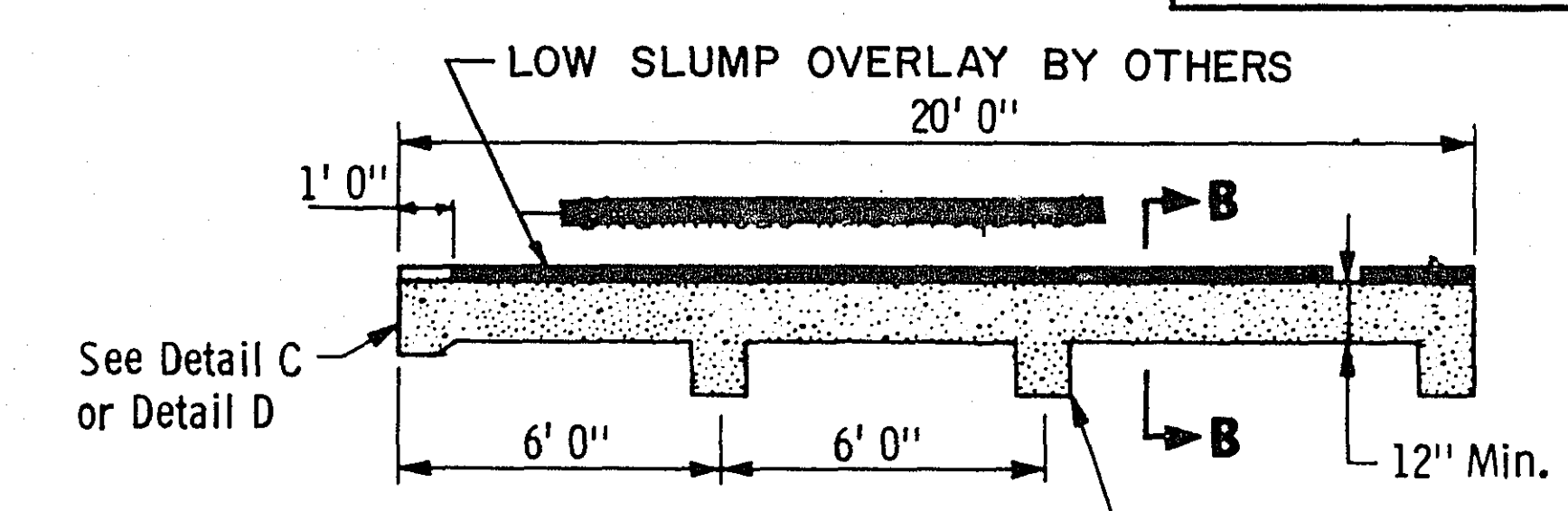
Fed. Proj. No.



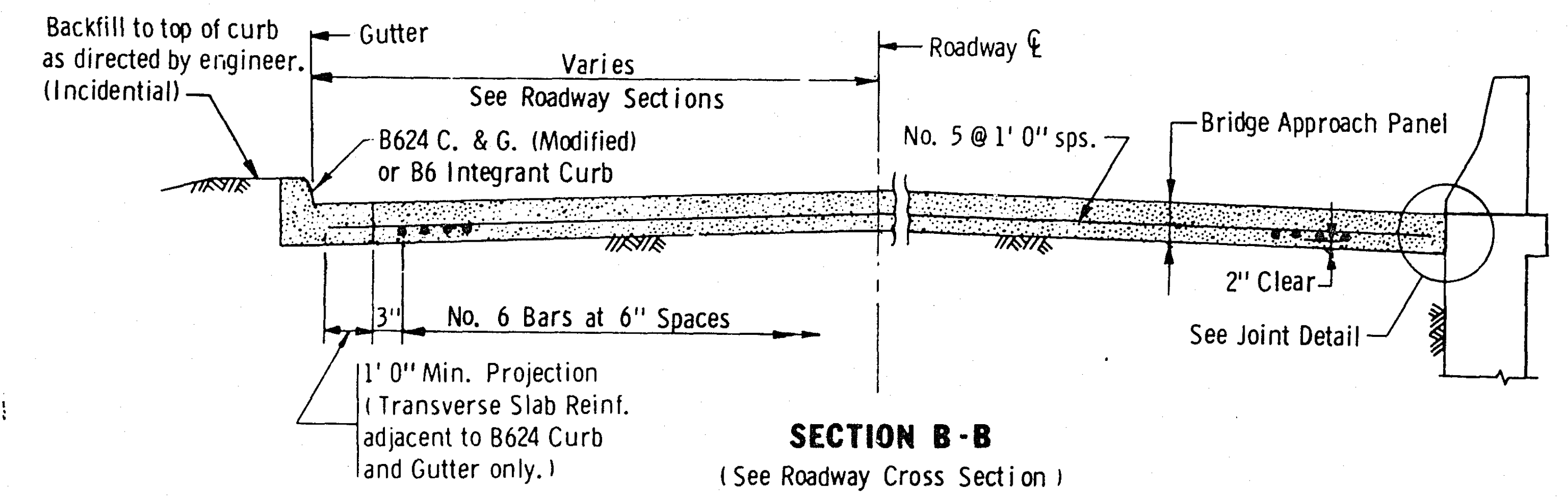
ROADWAY PLAN
PARALLEL & NONPARALLEL WINGWALLS
14 FT. AND LESS IN LENGTH



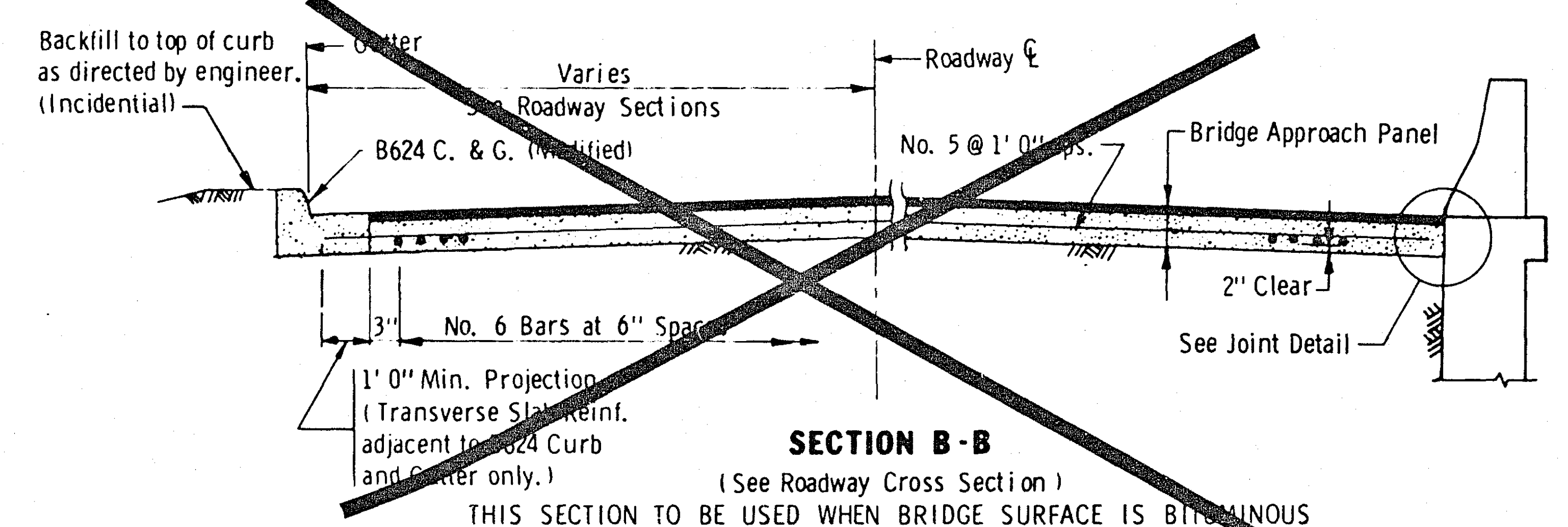
ROADWAY PLAN
PARALLEL & NONPARALLEL WINGWALLS
OVER 14 FT. IN LENGTH



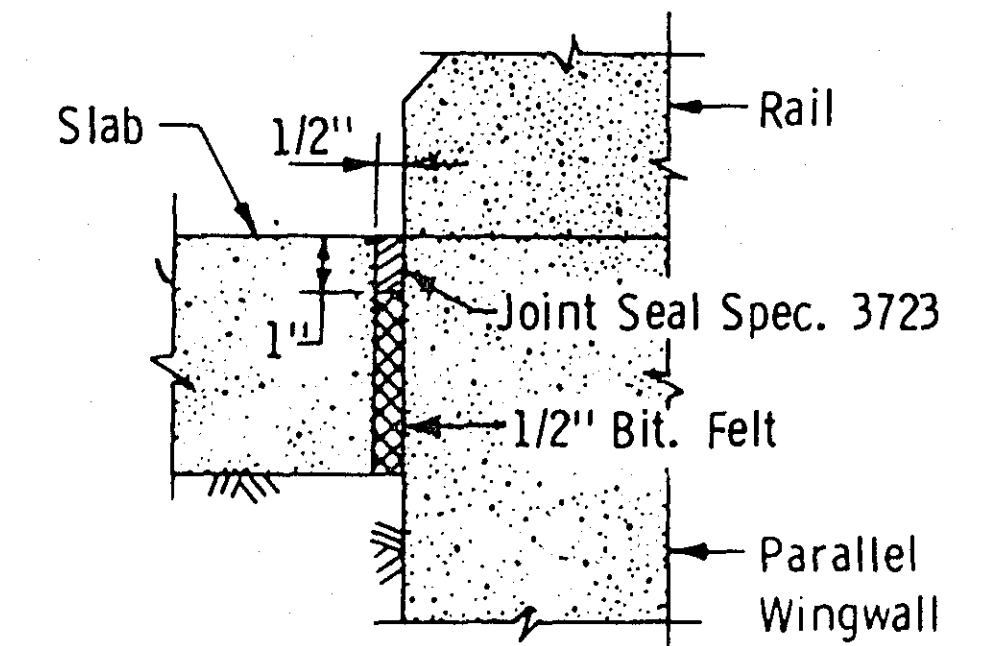
SECTION A-A



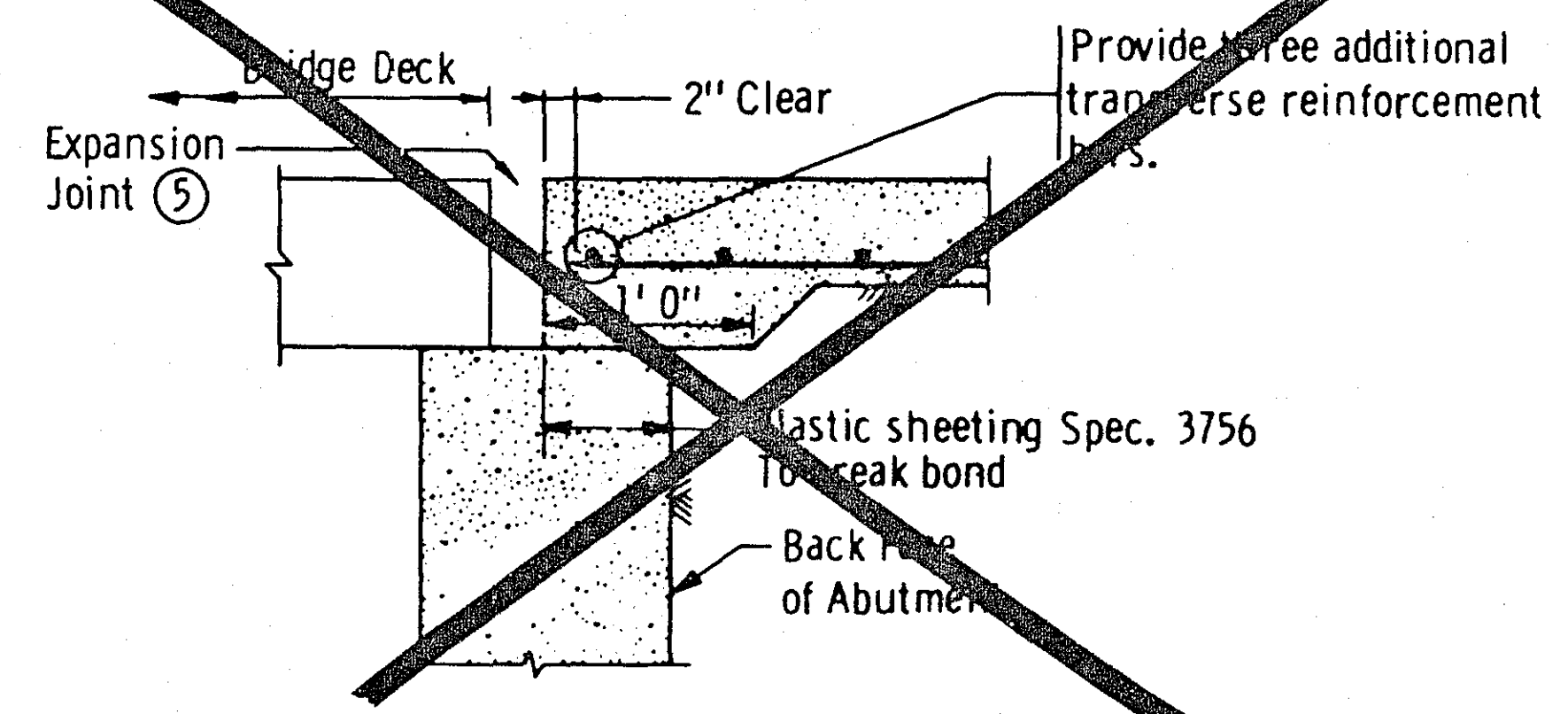
SECTION B-B
(See Roadway Cross Section)
THIS SECTION TO BE USED WHEN BRIDGE SURFACE IS CONCRETE



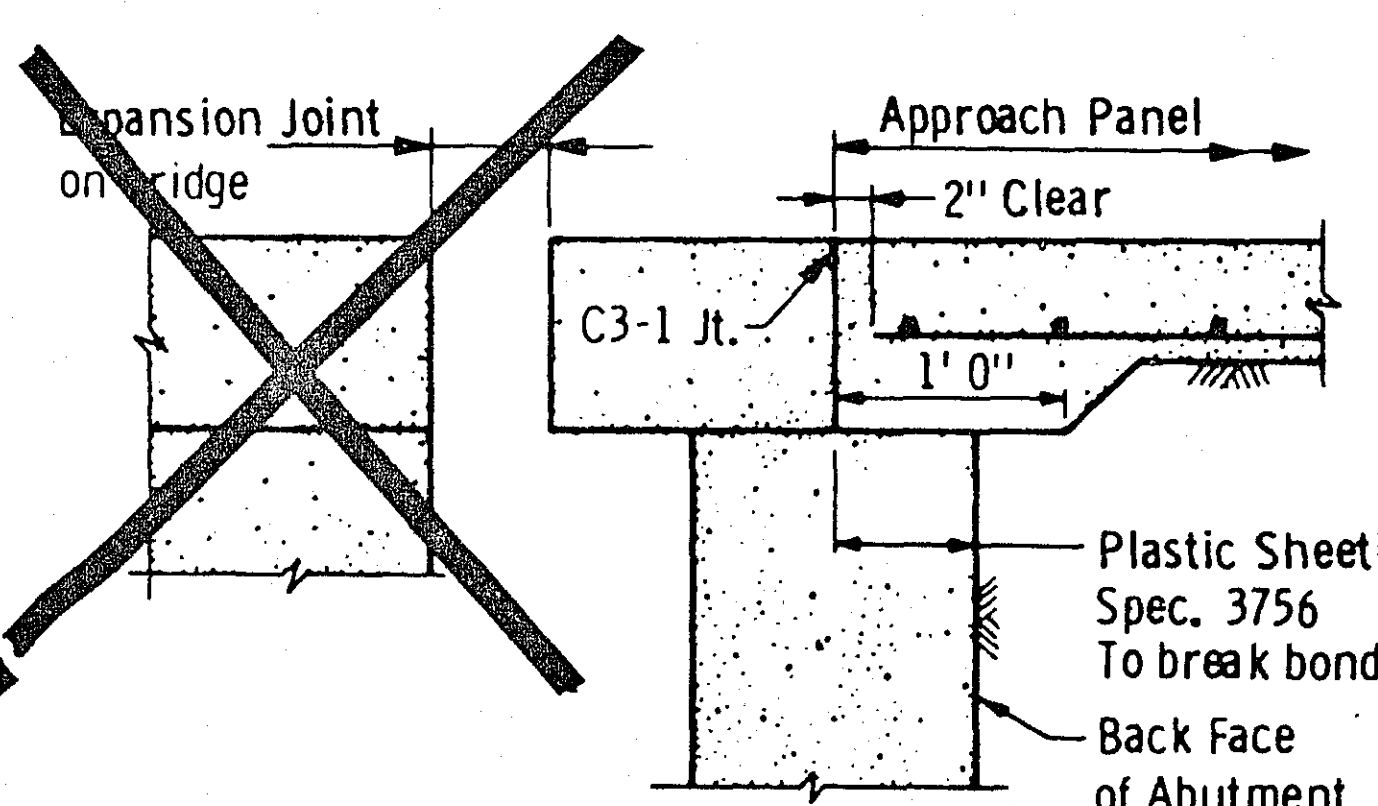
SECTION B-B
(See Roadway Cross Section)
THIS SECTION TO BE USED WHEN BRIDGE SURFACE IS BITUMINOUS



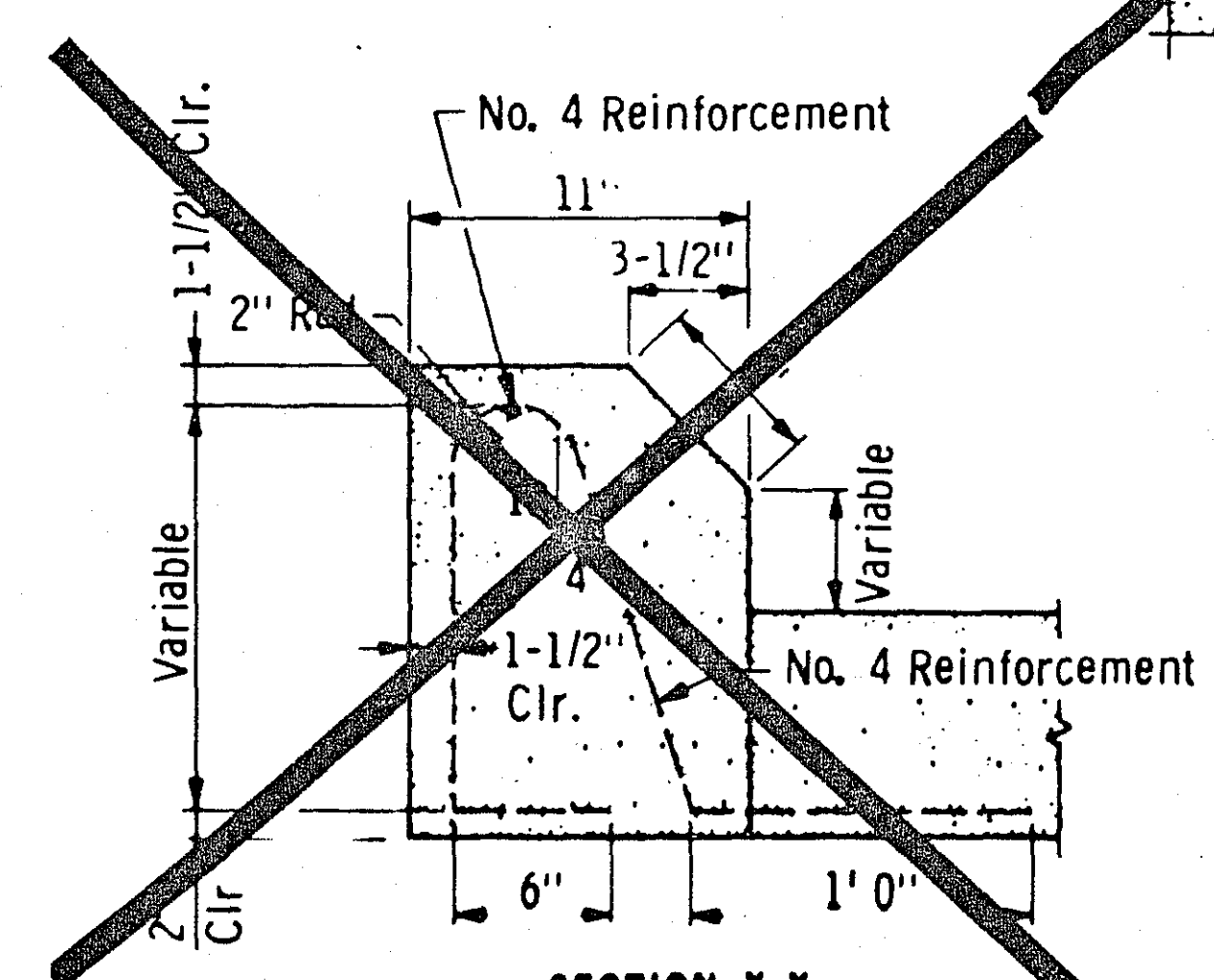
JOINT DETAIL



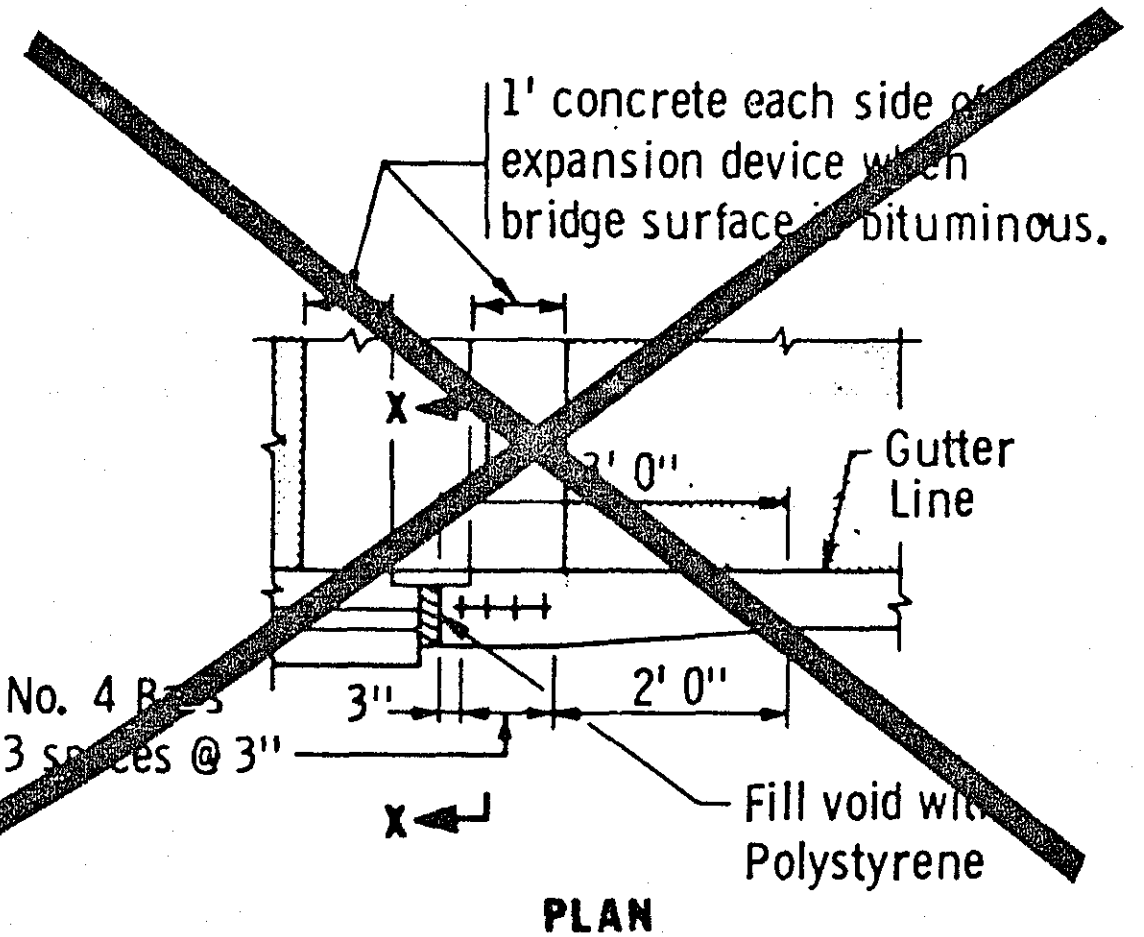
DETAIL C



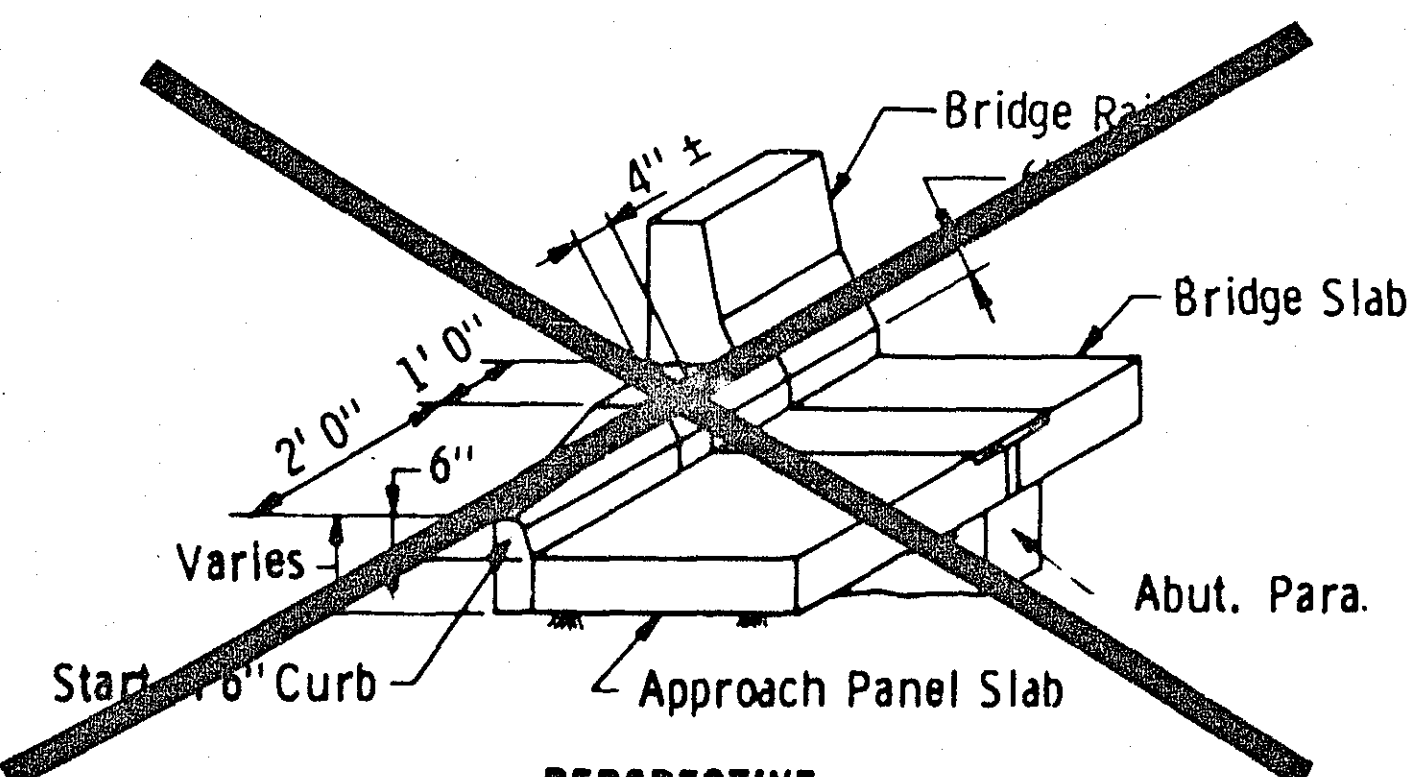
DETAIL D



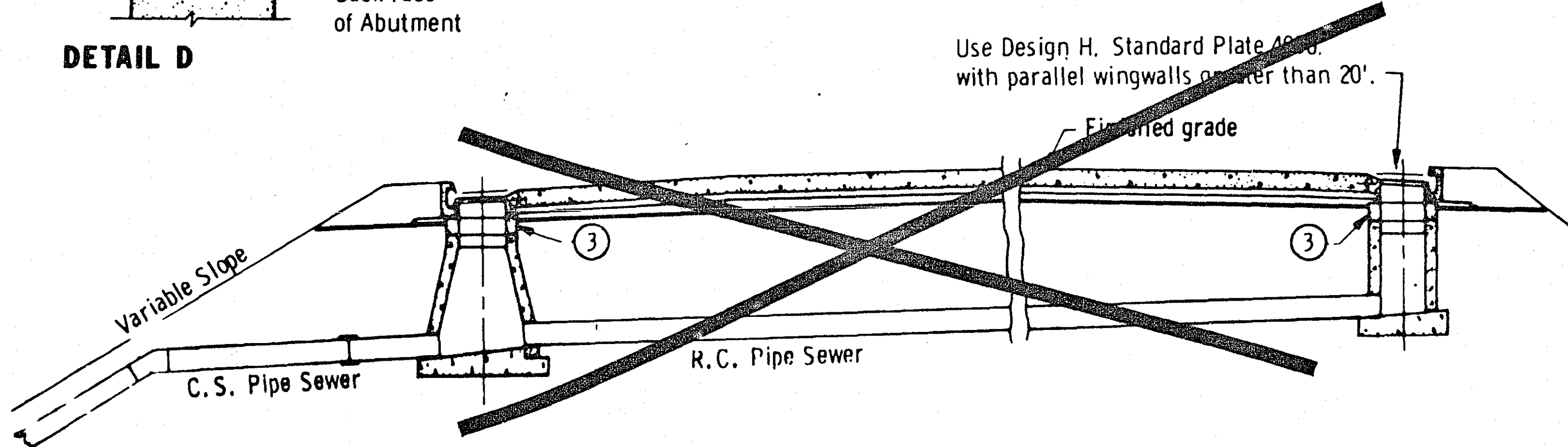
SECTION X-X



PLAN



PERSPECTIVE



CROSS SECTION AT CATCH BASINS

NOTES:

- ① Use No. 6 bars @ 6" longitudinal and No. 5 bars @ 1'-0" transverse reinforcement.
- ② Transition face of 6" curb into profile of bridge railing as necessary.
- ③ Adjust as required as per Spec. 2506 with 2" conc. adjusting rings. See Standard Plate 4010.
- ④ Permissible L2KT longitudinal joint. See Standard Plan Sheet 5-297.221.
- ⑤ Expansion device shall be furnished by bridge contractor. Bridge contractor shall install bridge end of expansion device and paving contractor shall complete expansion joint installation.

28-124

BRIDGE APPROACH TREATMENT

ALL SKEWS (BITUMINOUS PAVEMENT)

CURB TRANSITION DETAILS
FOR USE WHEN BRIDGE EXPANSION
JOINT IS BETWEEN END OF APPROACH
PANEL AND BRIDGE SLAB

APPROVED July 5, 1979
John L. Vannoy
Director
OFFICE OF ENGINEERING STANDARDS



- SECTION A-A

- APPROVED July 5, 1979
Eng. L. Hansen
Director
OFFICE OF ENGINEERING STANDARDS

BRIDGE APPROACH TREATMENT

BRIDGE NO. 62566

PROFILE GRADE
APPROACH PANEL

GRADING GRADE

-0.714%

SELECT GRANULAR BORROW

20:1

SELECT
GRANULAR
BORROW MOD.
7%

1 1/2:1

+0.524%

GRADING GRADE

SELECT GRANULAR BORROW

20:1

PROFILE GRADE
APPROACH PANEL

BRIDGE NO. 62566
-0.714%

SELECT
GRANULAR
BORROW MOD.
7%

1 1/2:1

8" T
PATH
RAIL

28-124

CONSTRUCTION DETAILS

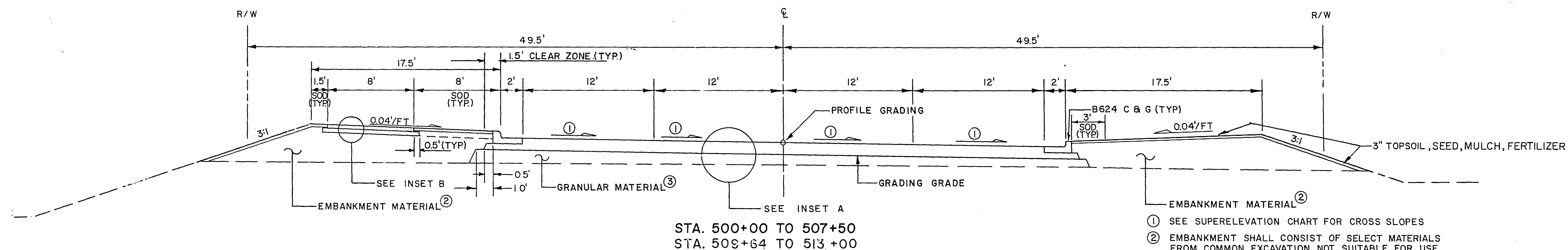
502+50

503+00

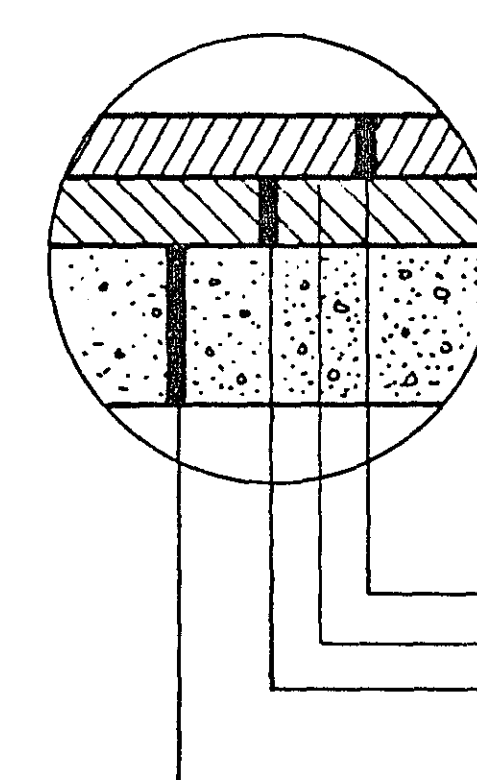
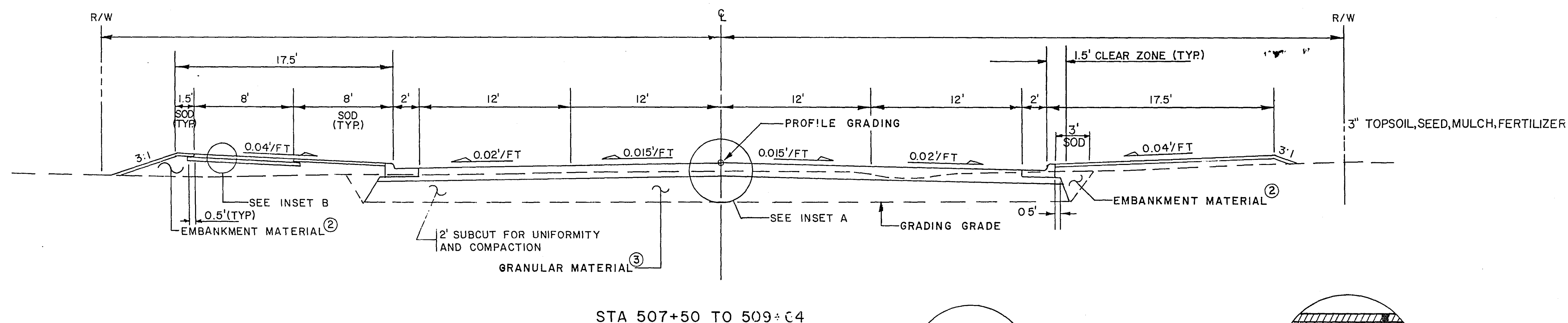
503+50

State Proj. No. 62-651-31

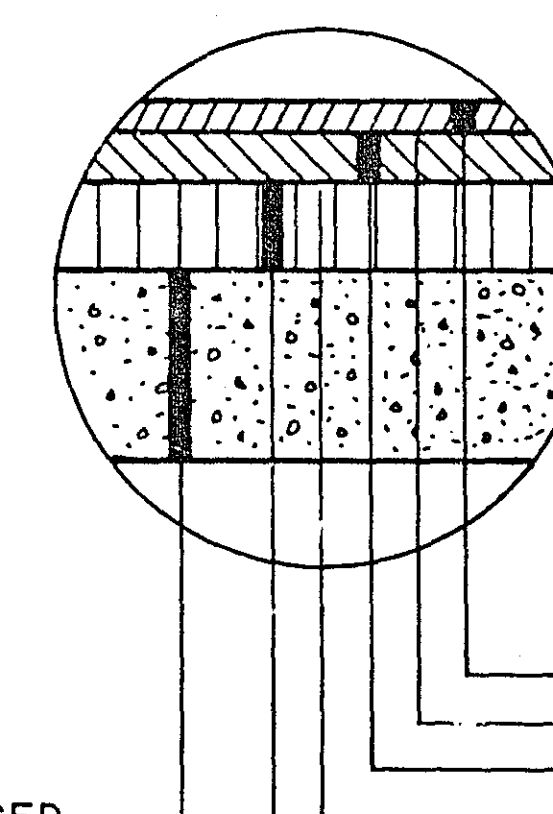
Sheet No. 11 of 24 Sheets



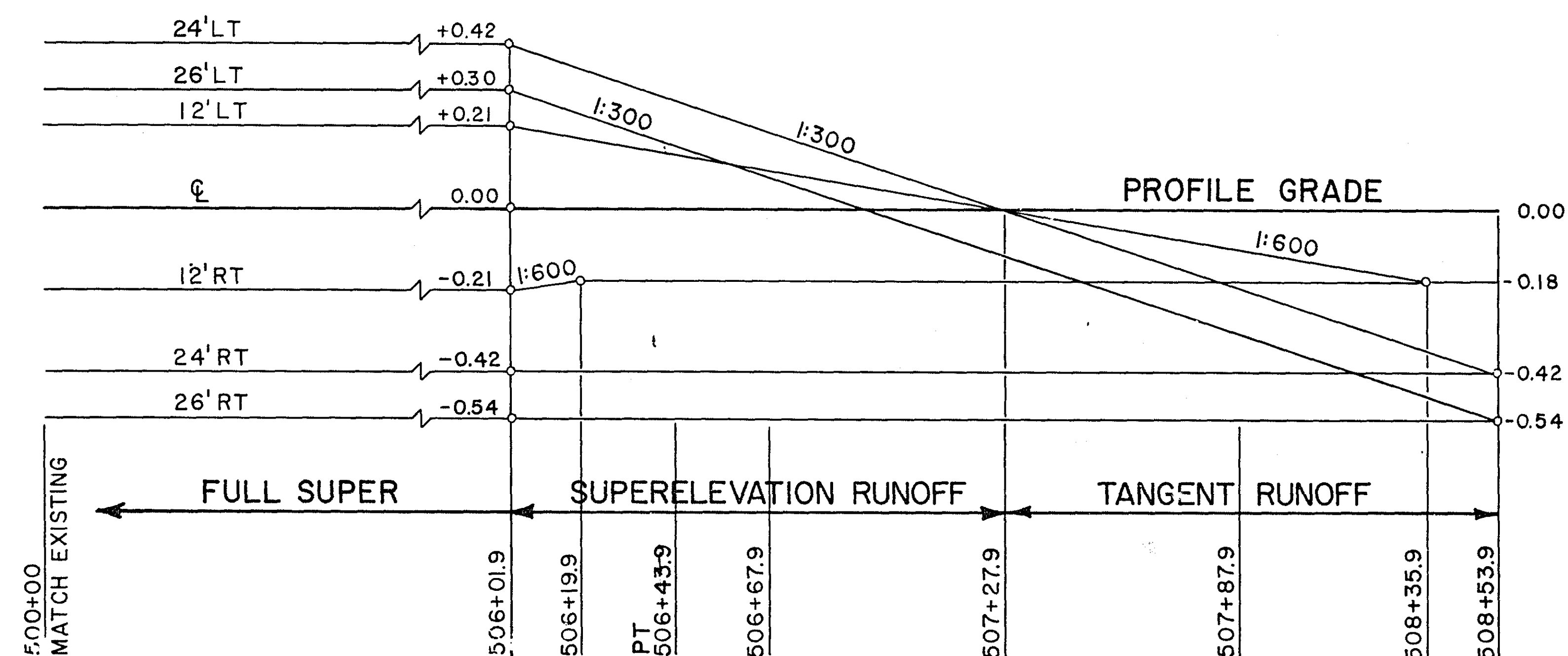
- ① SEE SUPERELEVATION CHART FOR CROSS SLOPES
- ② EMBANKMENT SHALL CONSIST OF SELECT MATERIALS FROM COMMON EXCAVATION NOT SUITABLE FOR USE AS GRANULAR MATERIAL.
- ③ GRANULAR MATERIAL SHALL CONSIST OF SUITABLE SITE EXCAVATED MATERIAL CONFORMING TO THE REQUIREMENTS OF 3149.2A, AND GRANULAR BORROW, AS DETERMINED BY THE ENGINEER



INSET B



INSET A



500

506

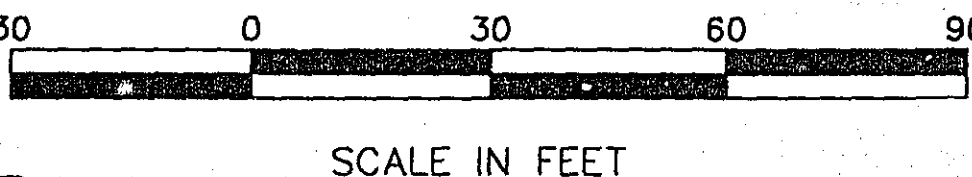
507

508

509

TYPICAL SECTIONS

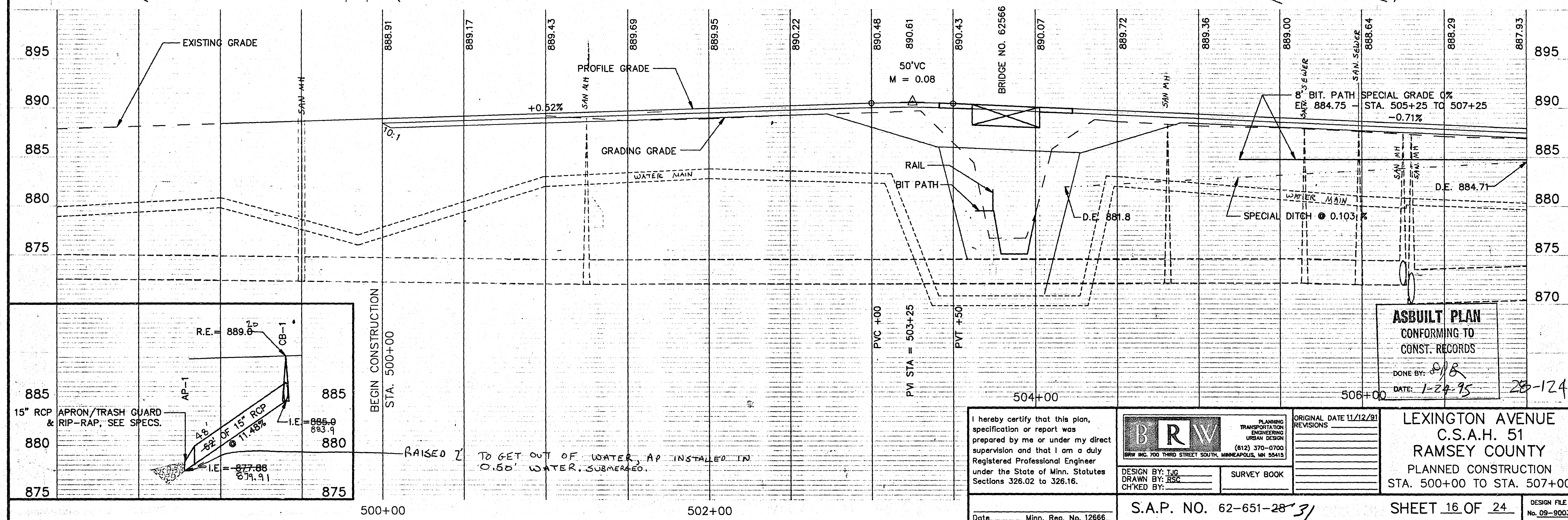
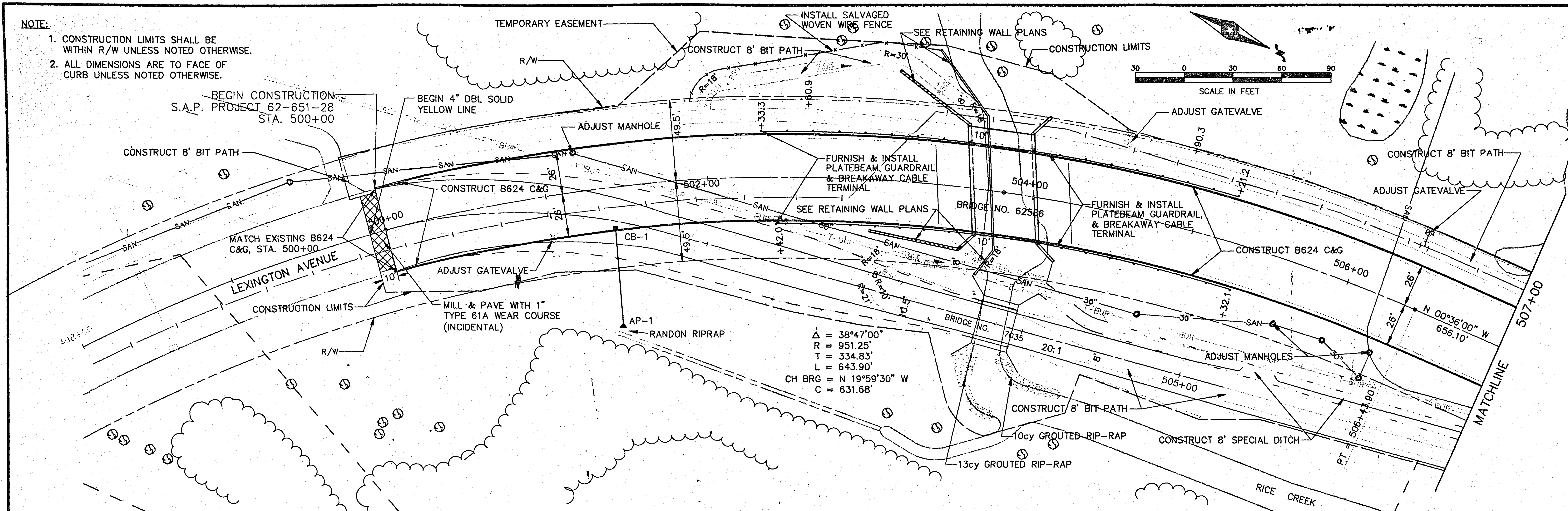
28-124

EXCOND2

NOTE:

1. CONSTRUCTION LIMITS SHALL BE WITHIN R/W UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE.

BEGIN CONSTRUCTION
S.A.P. PROJECT 62-651-28
STA. 500+00



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: *[Signature]*
DATE: 1-24-95 28-124

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the State of Minn. Statutes Sections 326.02 to 326.16.

BRW
PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN
(612) 370-0700
BRW INC. 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415

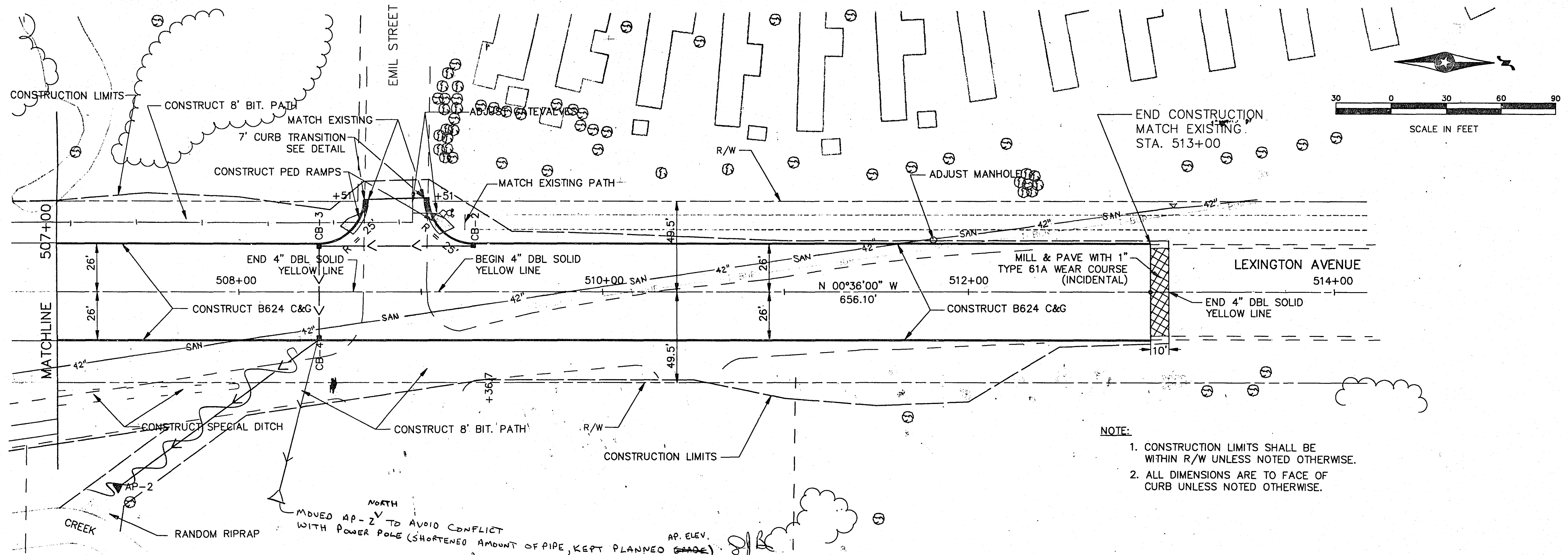
ORIGINAL DATE 11/12/91
REVISIONS

LEXINGTON AVENUE
C.S.A.H. 51
RAMSEY COUNTY
PLANNED CONSTRUCTION
STA. 500+00 TO STA. 507+00

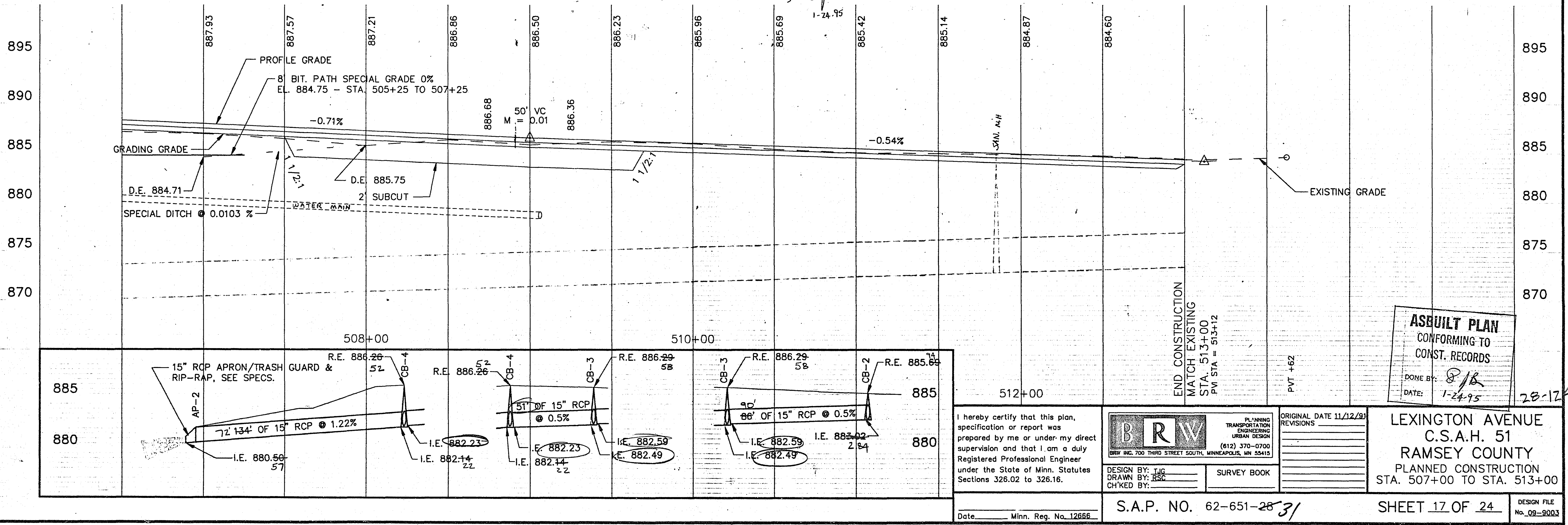
S.A.P. NO. 62-651-28-31

SHEET 16 OF 24

DESIGN FILE
No. 09-9003



- NOTE:
1. CONSTRUCTION LIMITS SHALL BE WITHIN R/W UNLESS NOTED OTHERWISE.
 2. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE.



ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: *[Signature]*
DATE: 1-24-95

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the State of Minn. Statutes Sections 326.02 to 326.16. Date: _____ Minn. Reg. No. 12656	 BRW INC. 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415 DESIGN BY: JWG DRAWN BY: RSC CHECKED BY:	PLANNING TRANSPORTATION ENGINEERING URBAN DESIGN (612) 370-0700	ORIGINAL DATE 11/12/90 REVISIONS:	LEXINGTON AVENUE C.S.A.H. 51 RAMSEY COUNTY PLANNED CONSTRUCTION STA. 507+00 TO STA. 513+00 SHEET 17 OF 24	DESIGN FILE No. 09-9003 LEXP-2
			S.A.P. NO. 62-651-28 <i>31</i>		

EXCAVATION MATERIAL (C.Y.)
TOPSOIL
SUBCUT

EMBANKMENT MATERIAL (C.Y.)
REGULAR
SELECT GRANULAR
SELECT GRANULAR MOD. 7%
TOPSOIL

890

880

870

200

100

100

200

890

880

870

501+50

R/W

E

R/W

889.69

0

11

101

11

0

19

890

880

870

200

100

100

200

890

880

870

501+00

R/W

E

R/W

889.43

0

23

47

0

0

18

EXISTING 36" RCP

890

880

870

200

100

100

200

890

880

870

500+50

R/W

E

R/W

889.17

0

15

56

0

0

15

890

880

870

200

100

100

200

890

880

870

500+00

R/W

E

R/W

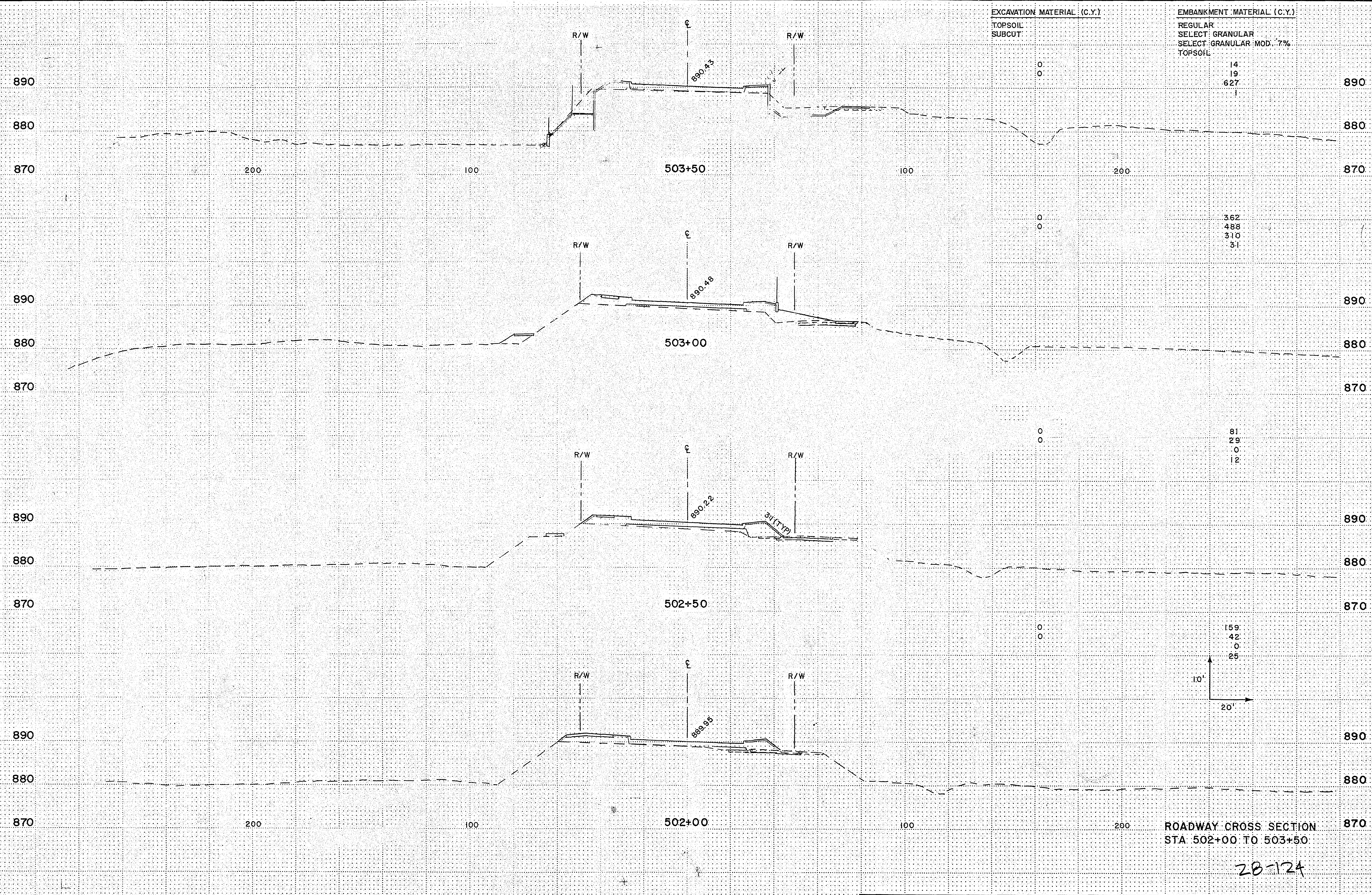
889.91

10'

20'

ROADWAY CROSS SECTIONS
STA. 500+00 TO 501+50

28-124



EXCAVATION MATERIAL (C.Y.)		EMBANKMENT MATERIAL (C.Y.)	
TOPSOIL	SUBCUT	REGULAR	SELECT GRANULAR
0	0	14	627
0	0	19	1

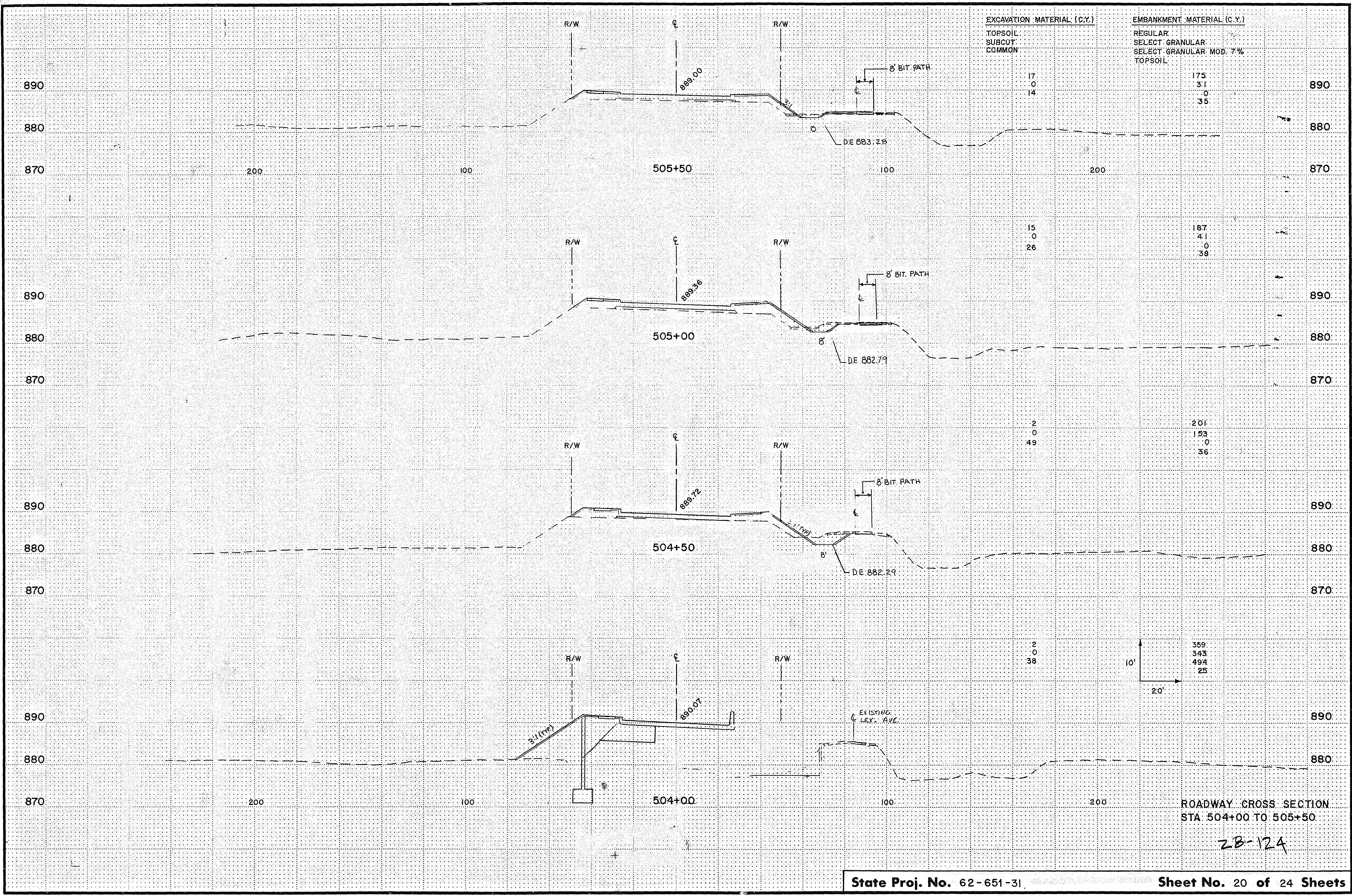
0	362
0	488
0	310
0	31

0	81
0	29
0	0
0	12

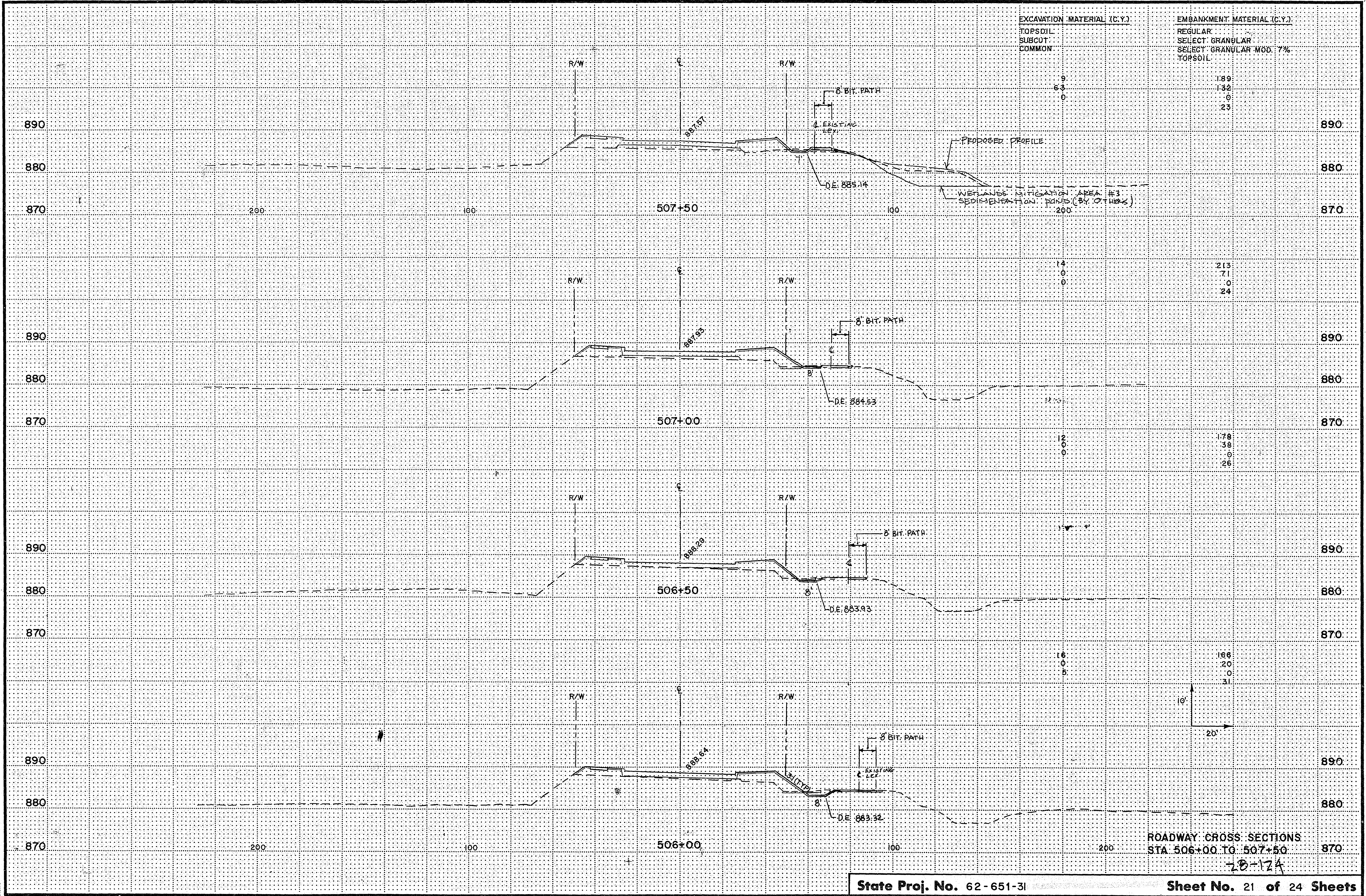
0	159
0	42
0	0
0	25

ROADWAY CROSS SECTION
STA. 502+00 TO 503+50

28-124



28-124



EXCAVATION MATERIAL (C.Y.)

TOPSOIL
SUBCUT
COMMON

9
63
0

EMBANKMENT MATERIAL (C.Y.)

REGULAR
SELECT GRANULAR
SELECT GRANULAR MOD. 7%
TOPSOIL

189
132
0
23

14
0
0

213
71
0
24

2
0
0

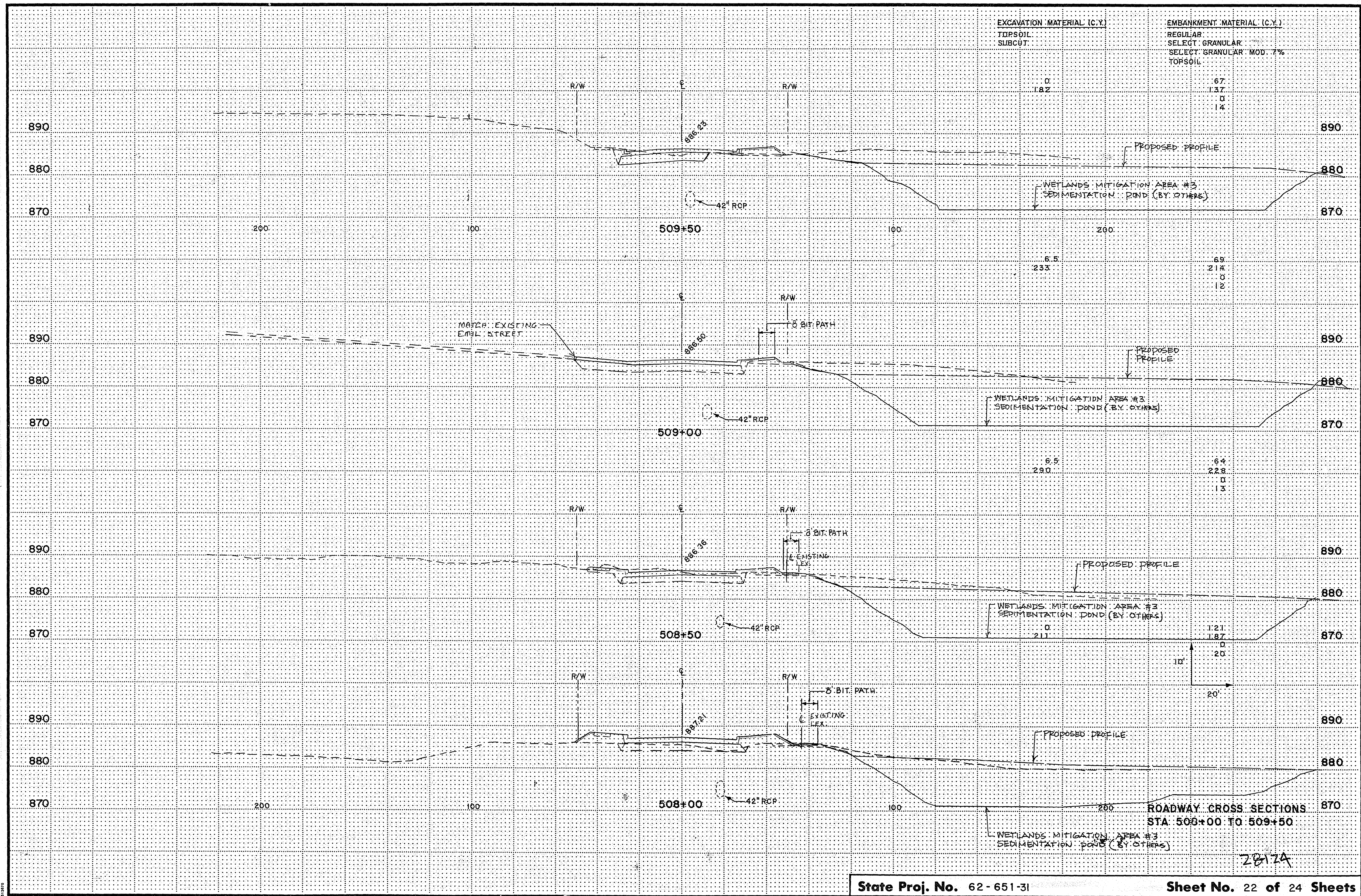
178
38
0
26

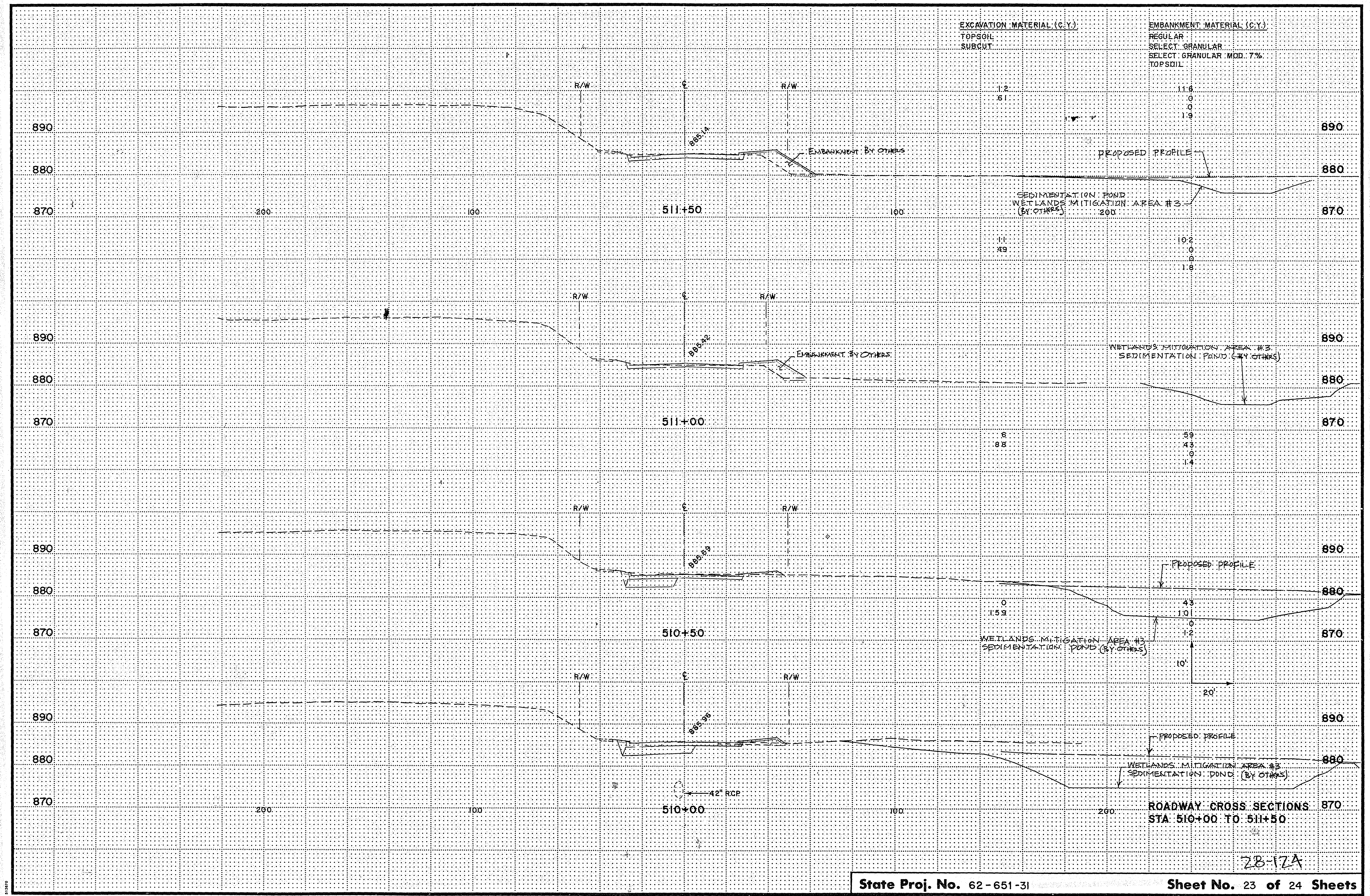
16
0
5

166
20
0
31

ROADWAY CROSS SECTIONS
STA. 506+00 TO 507+50

28-124



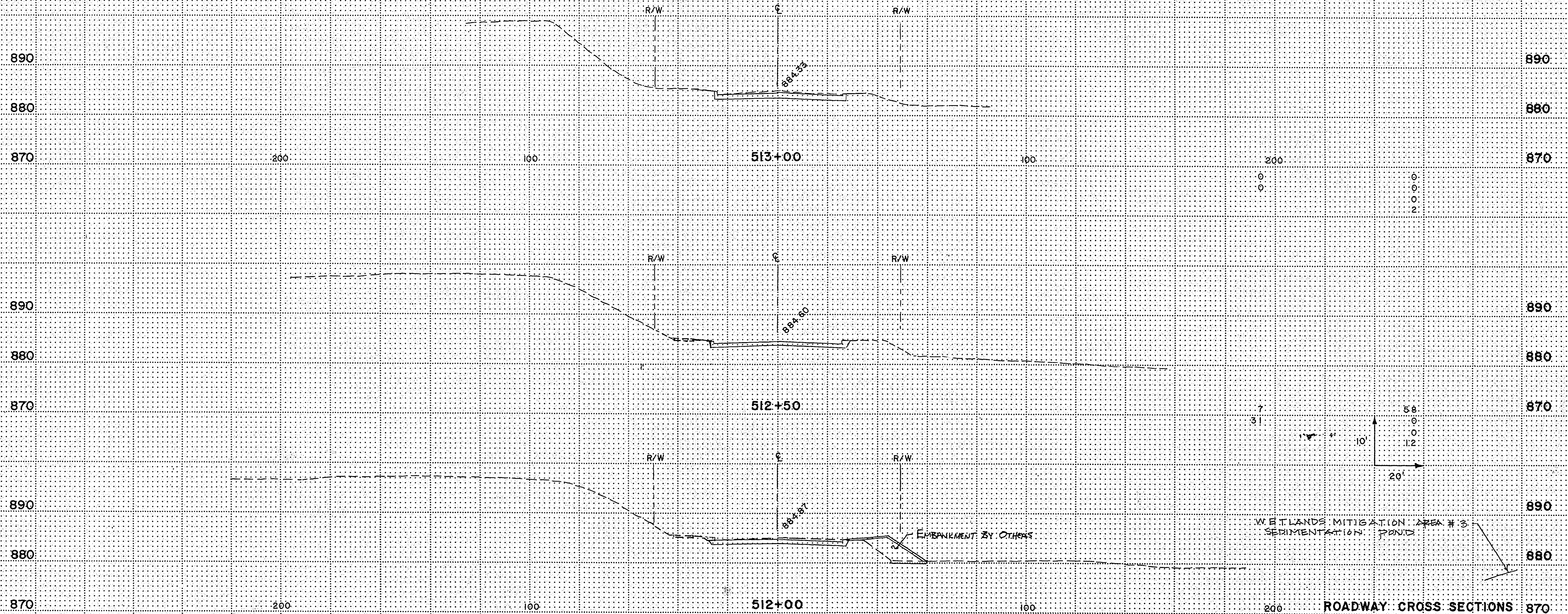


28-17A

ROADWAY CROSS SECTIONS
STA 510+00 TO 511+50

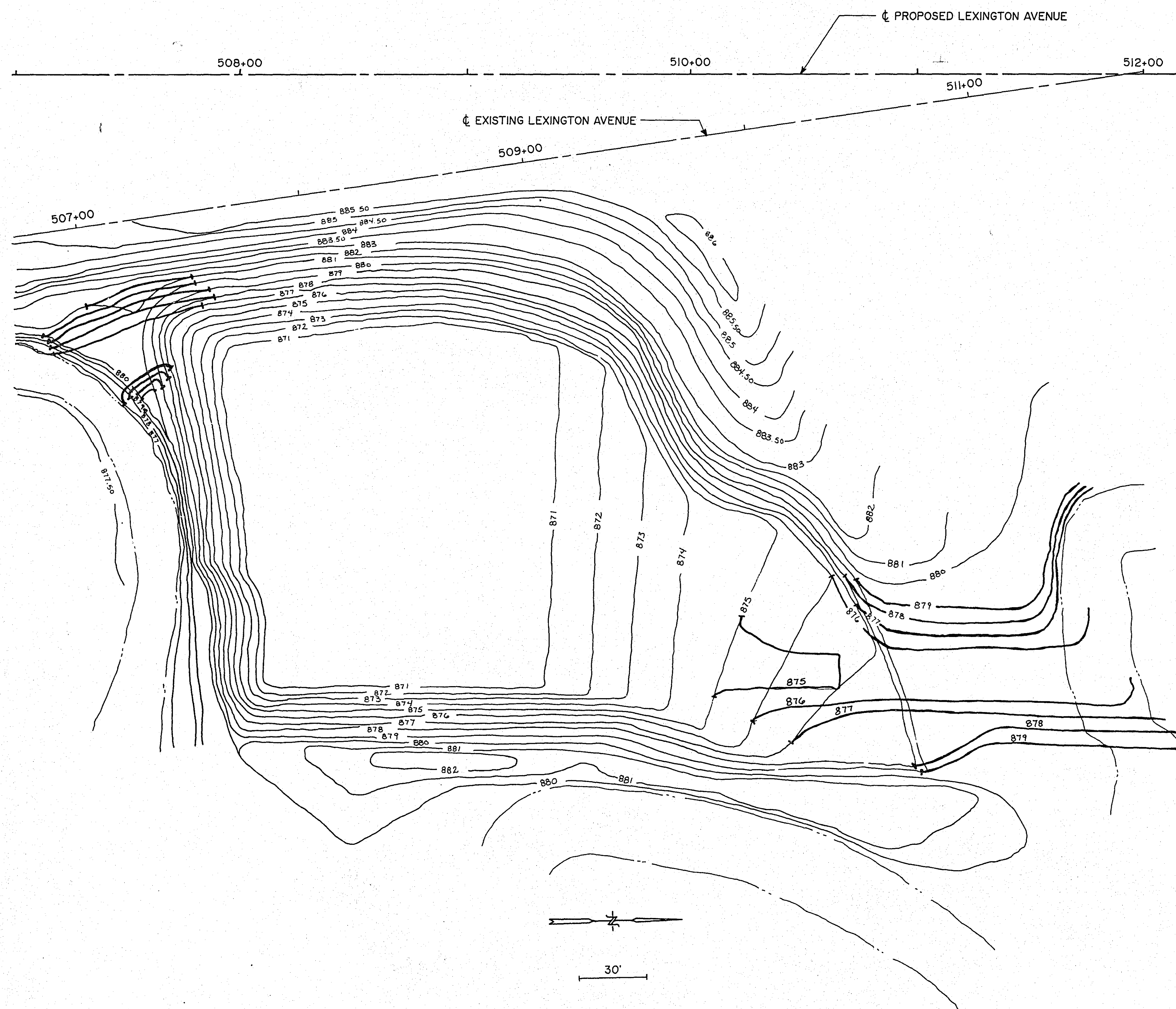
EXCAVATION MATERIAL (C.Y.)
TOPSOIL
SUBCUT

EMBANKMENT MATERIAL (C.Y.)
REGULAR
SELECT GRANULAR
SELECT GRANULAR MOD. 7%
TOPSOIL



ROADWAY CROSS SECTIONS
STA. 512+00 TO 513+00

2B-12A

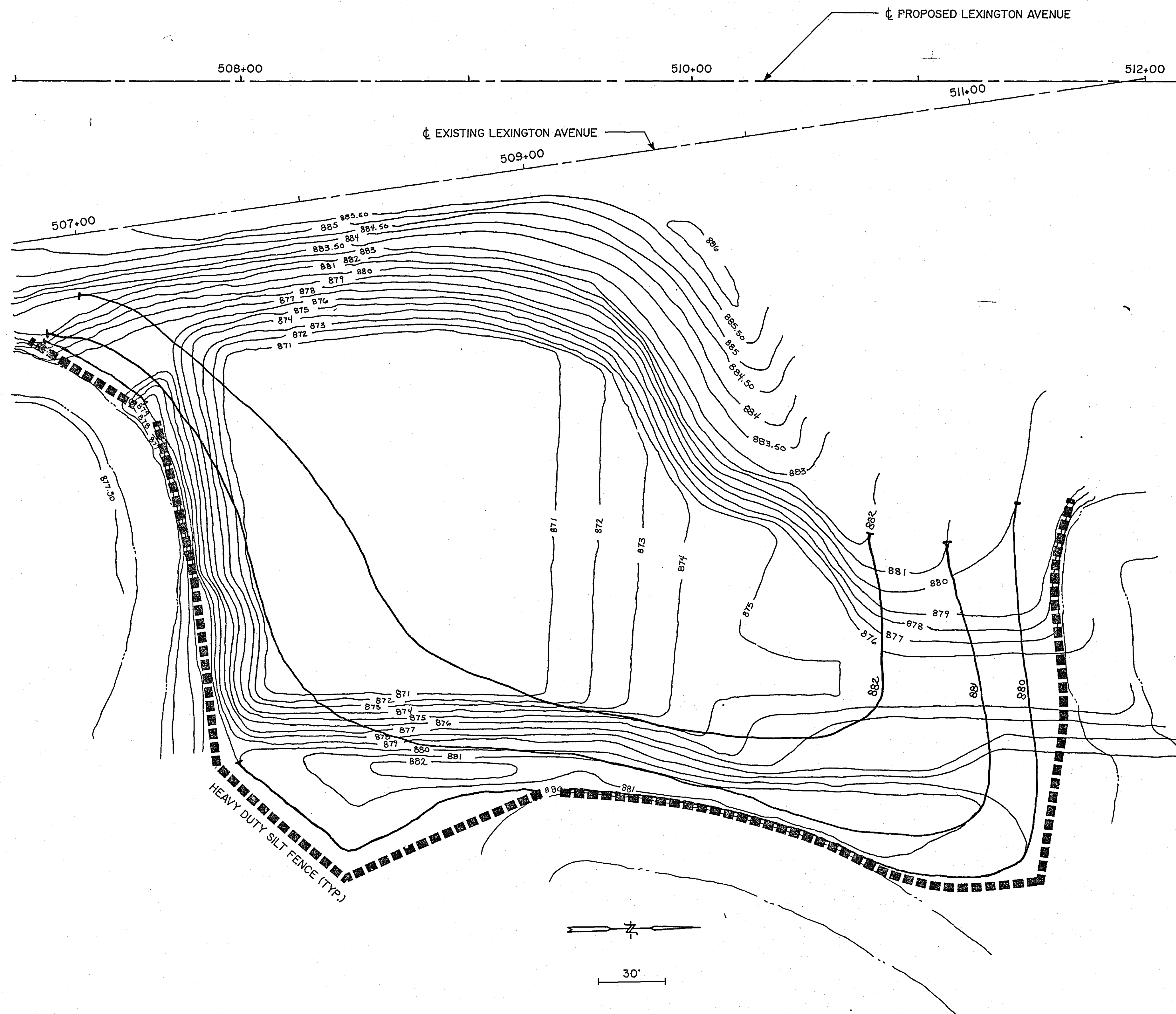


QUANTITIES		TOTAL
CHANNEL EXCAVATION	CU YD	414

28-124

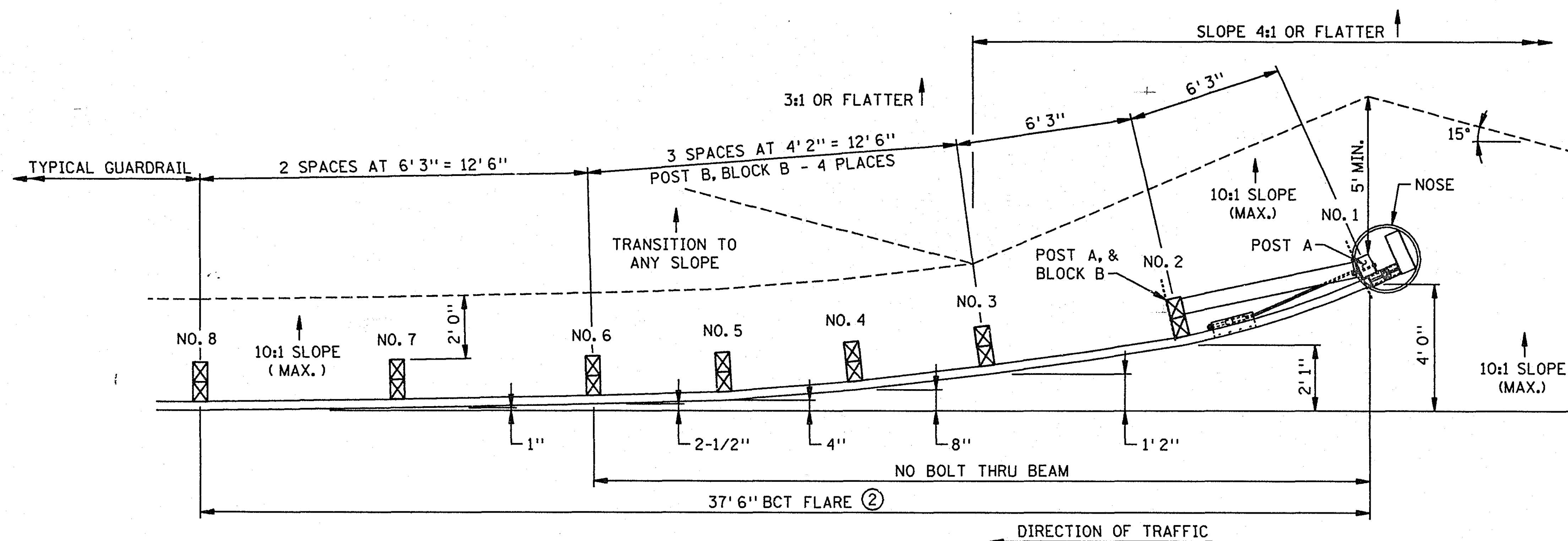
FOR
INFORMATION
ONLY
MITIGATION AREA #3
SEDIMENTATION POND

24A 24

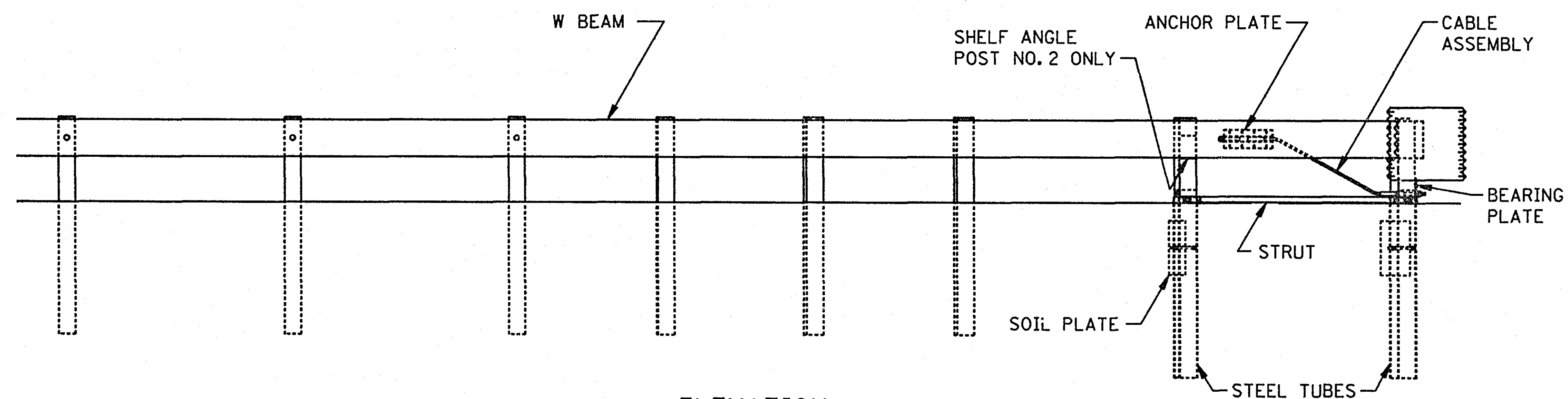


QUANTITIES		TOTAL
COMMON BORROW	CU YD	9824
SILT FENCE-HEAVY DUTY	LIN FT	796
SEED MIXTURE 100	LBS	45
SEED MIXTURE 1200	LBS	27

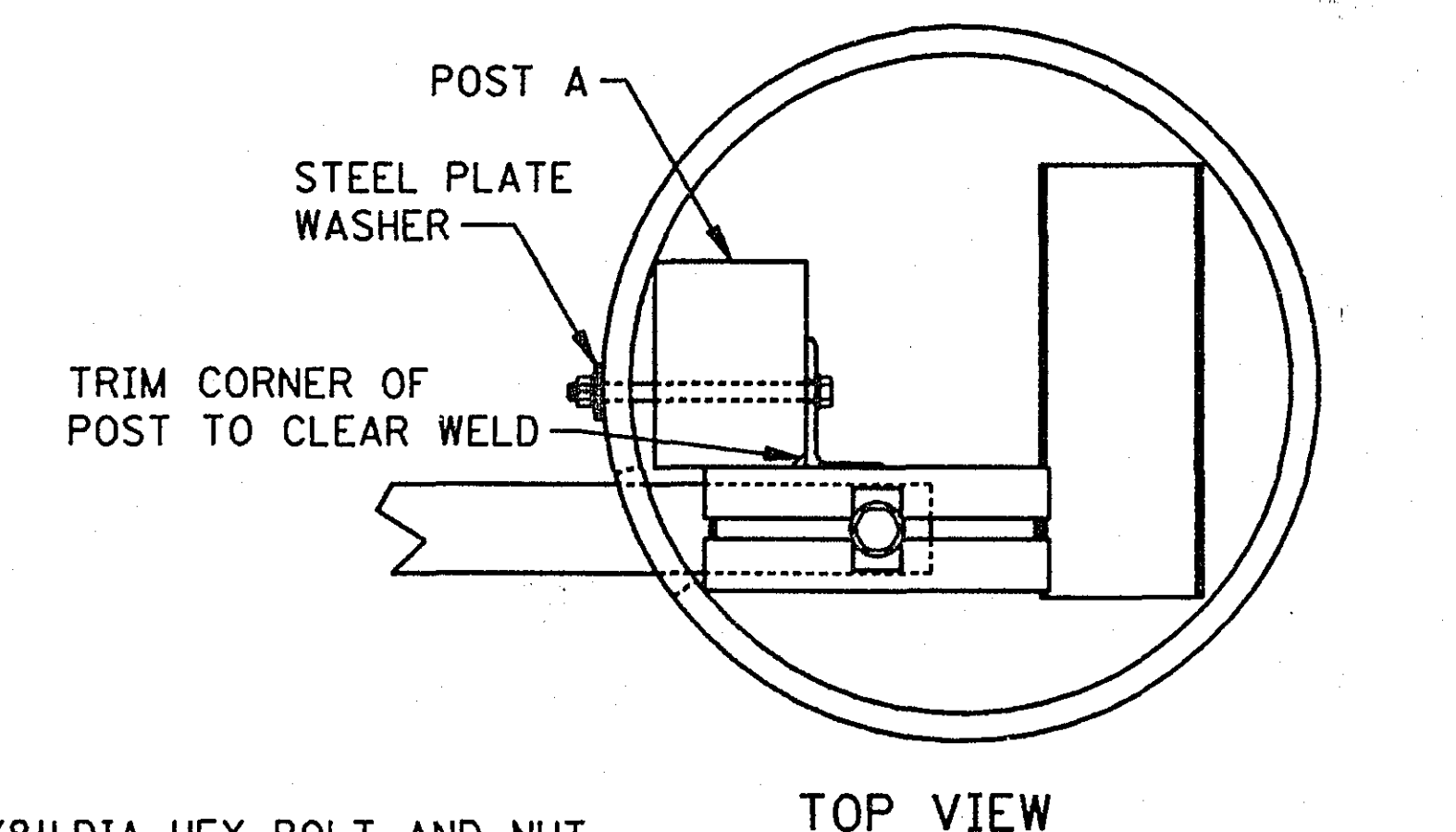
28-124
 For
 INFORMATION
 ONLY
 MITIGATION AREA #3
 SEDIMENTATION POND



PLAN VIEW

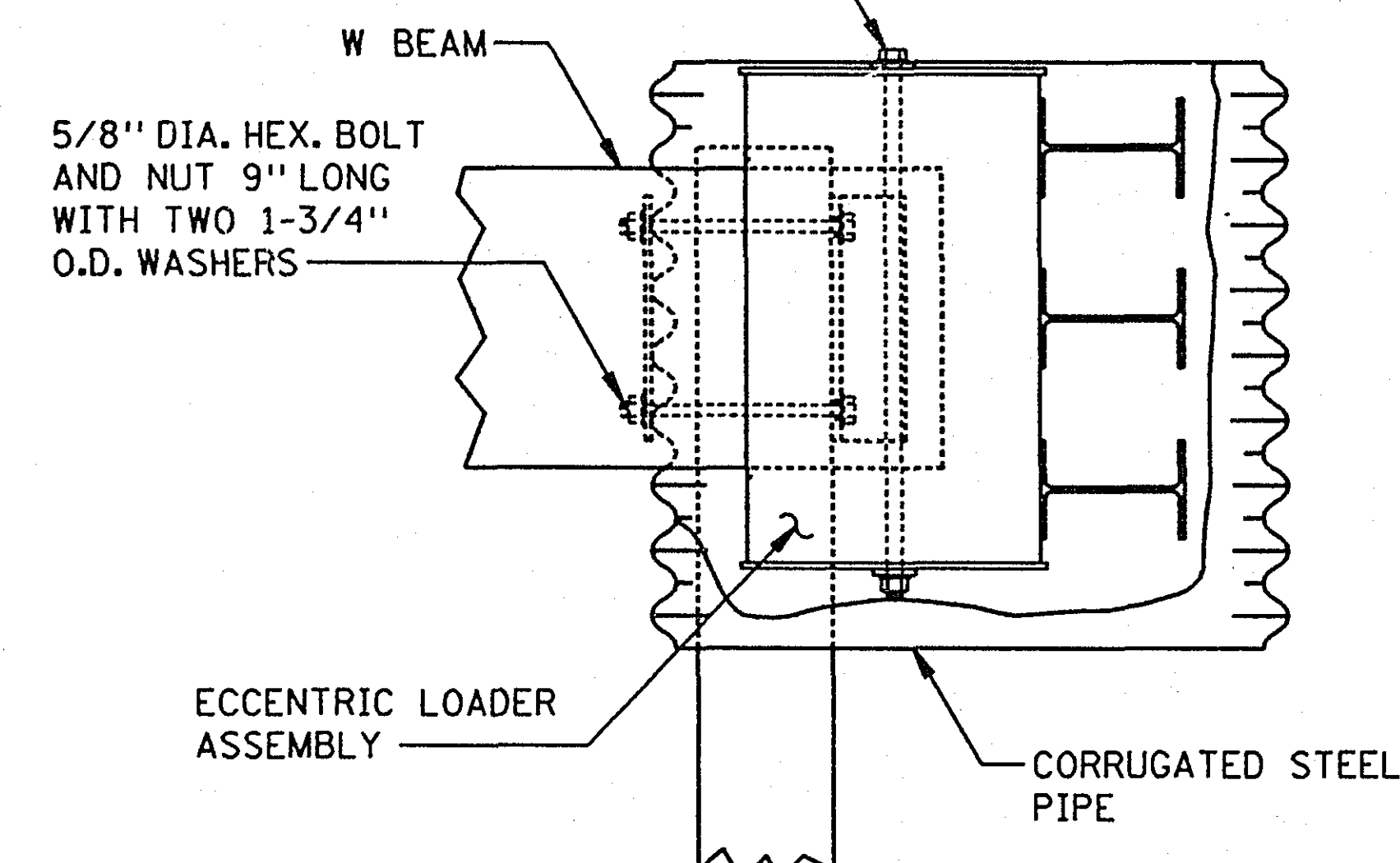


ELEVATION



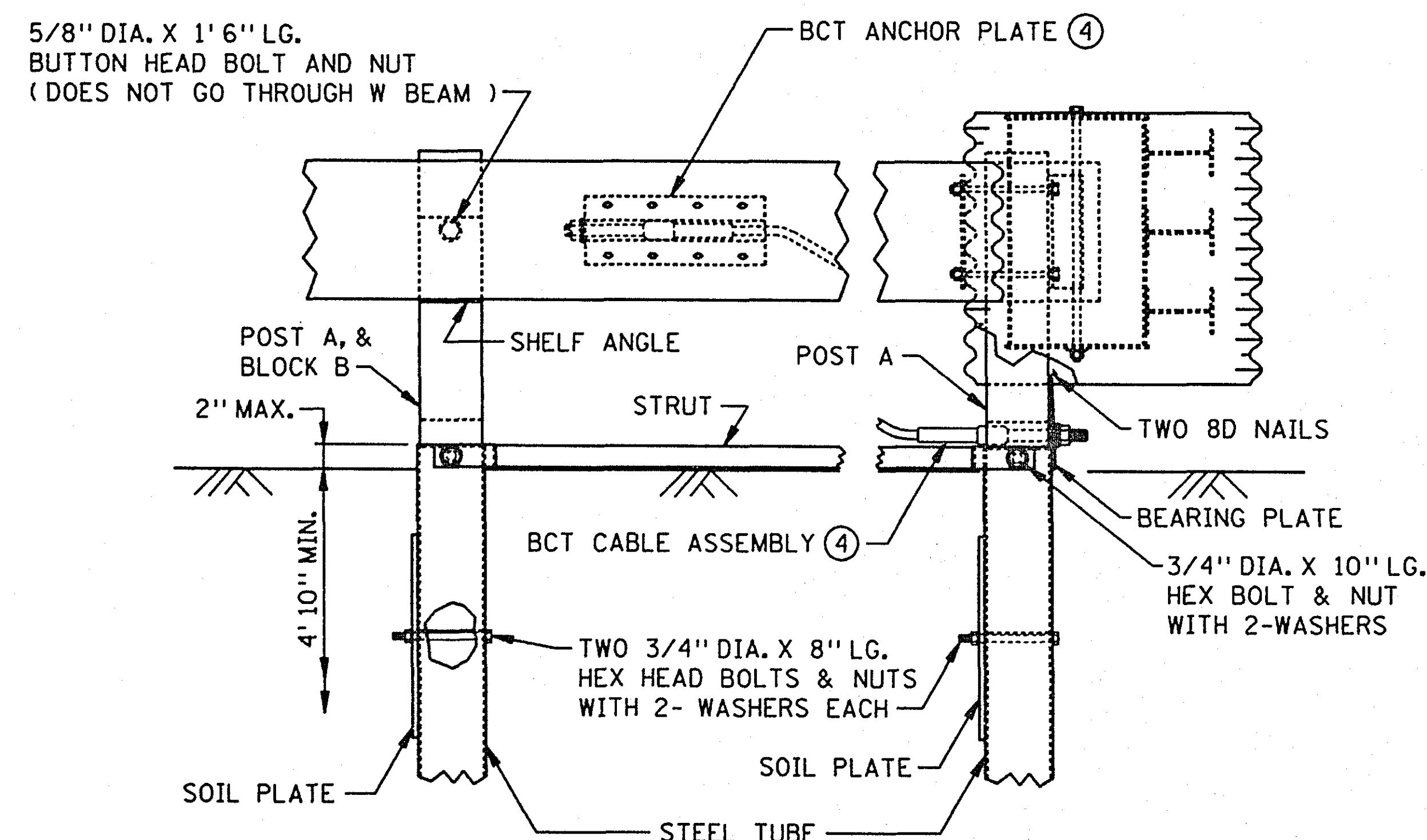
TOP VIEW

5/8" DIA. HEX BOLT AND NUT
22" LONG WHICH PASSES THRU
END SPLICE BOLT SLOTS OF
W-BEAM. 1-3/4" X 3" RECTANGULAR
WASHER AND 1-3/4" O.D. WASHERS
ON TOP AND BOTTOM



SIDE VIEW

NOSE DETAILS



ELEVATION - NOSE ASSEMBLY

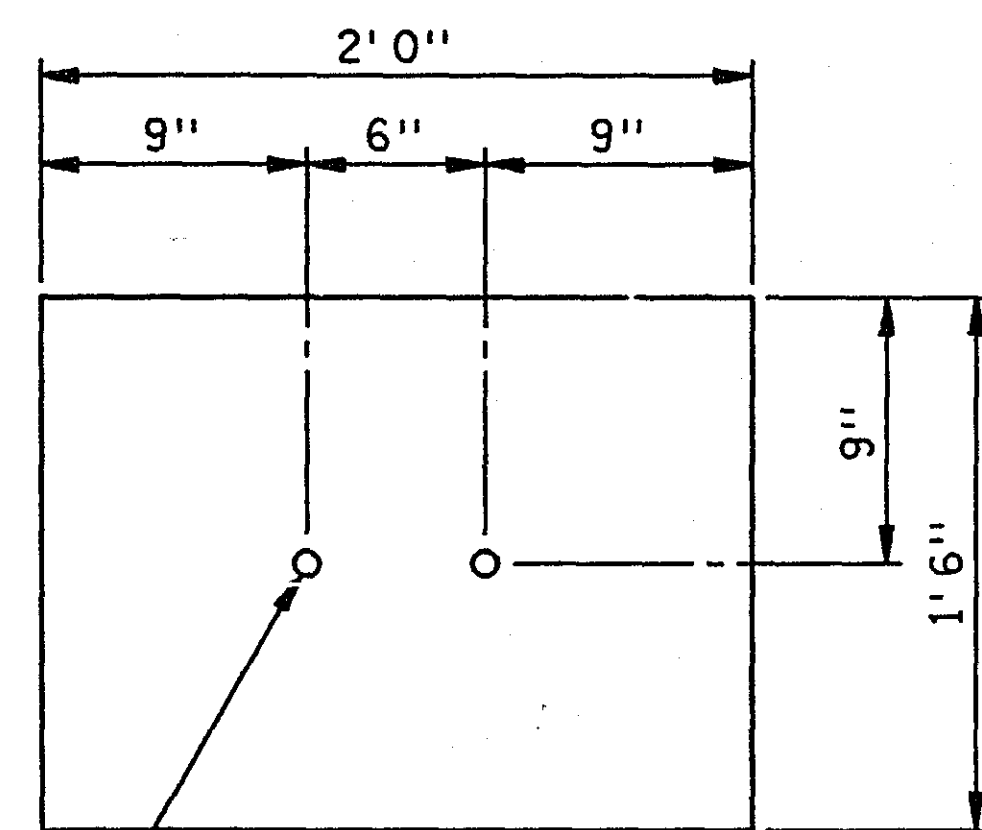
NOTES:

1. SEE "A GUIDE TO STANDARDIZED HIGHWAY BARRIER RAIL HARDWARE", FOR ADDITIONAL HARDWARE INFORMATION. THE MN/DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SHALL GOVERN.
2. ECCENTRIC LOADER BCT - PAY ITEM LENGTH IS 37.5'.
3. TRAFFIC BARRIER AS PER SPEC. 2554.
4. SEE STANDARD PLATE 8329 FOR ADDITIONAL INFORMATION.
5. LENGTH-OF-NEED BEGINS 12.5' FROM BCT NOSE.

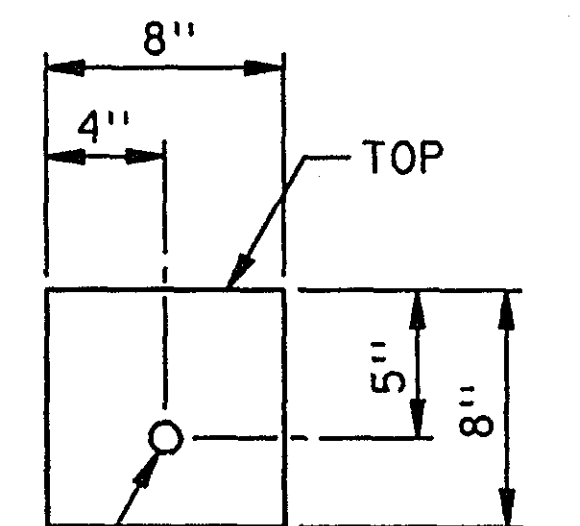
28-124

STANDARD SHEET NO.	TITLE:
STANDARD APPROVED: NOT APPROVED	ECCENTRIC LOADER BCT INSTALLATION DETAILS
STATE PROJ. NO. SAP 62-651-31	SHEET NO. 24 OF 24 SHEETS

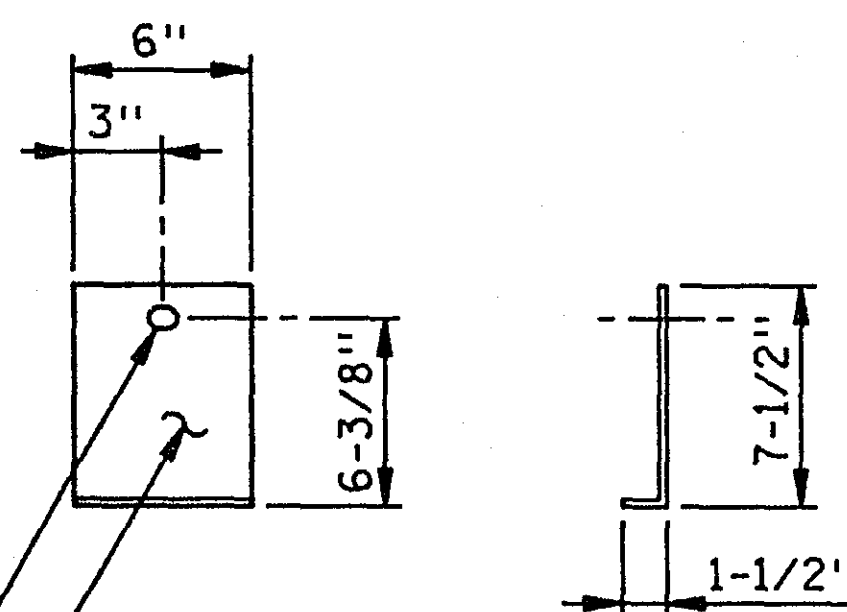
SHEET 1 OF 2
REFERENCE DATE: 8-28-91



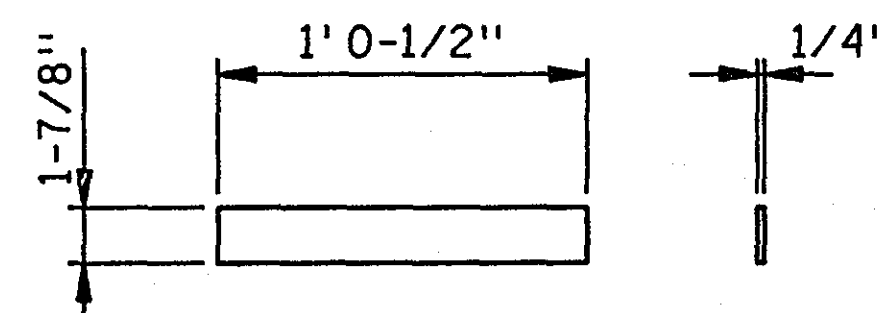
SOIL PLATE (POST A)
(2 REQUIRED)



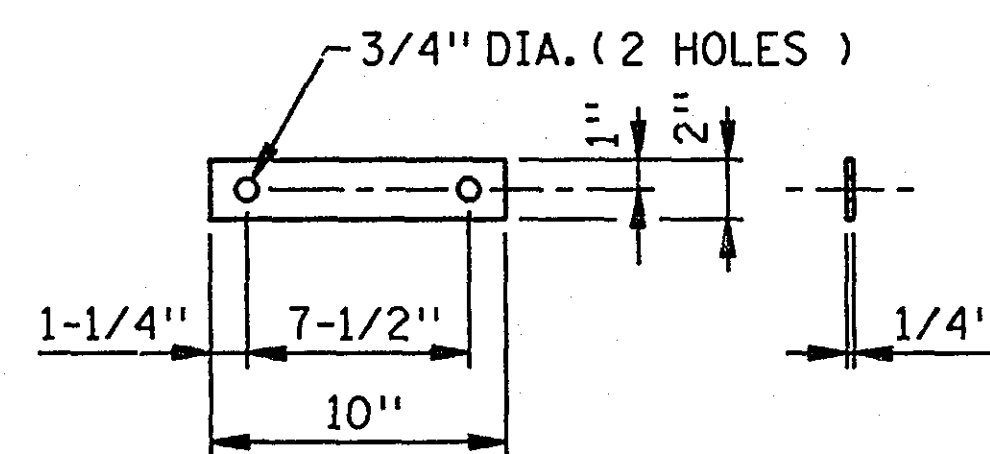
BEARING PLATE



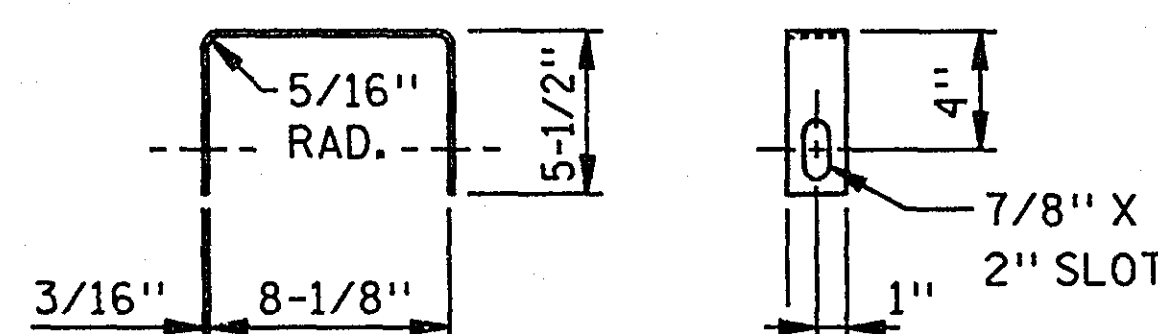
SHELF ANGLE
(ONE REQUIRED)



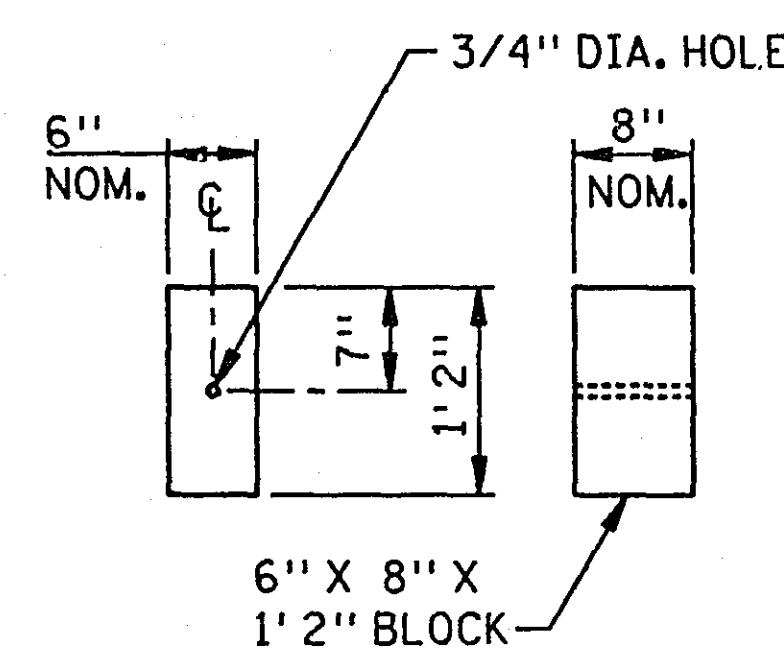
STEEL PLATE
(4 REQUIRED)



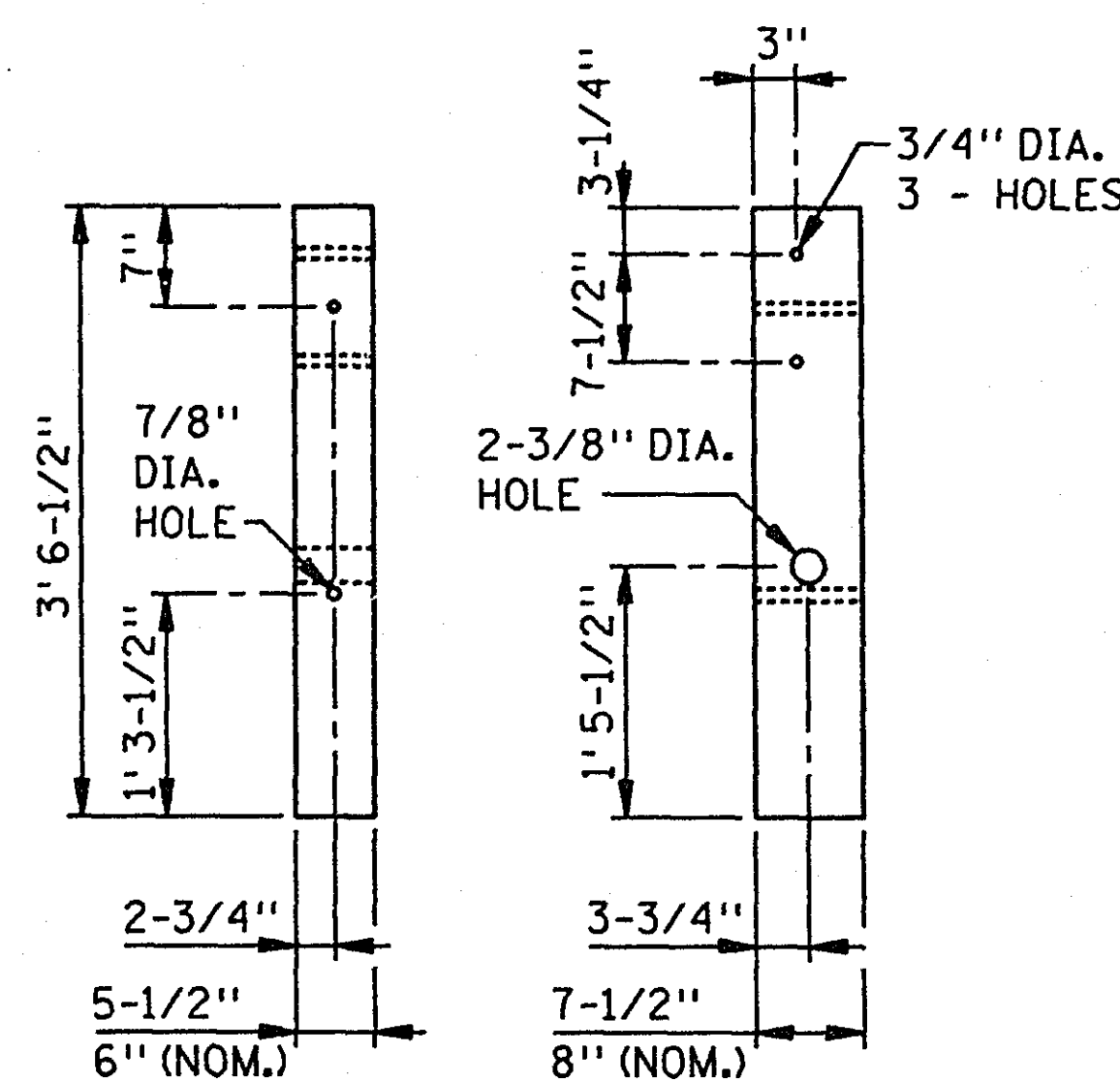
STEEL PLATE WASHER



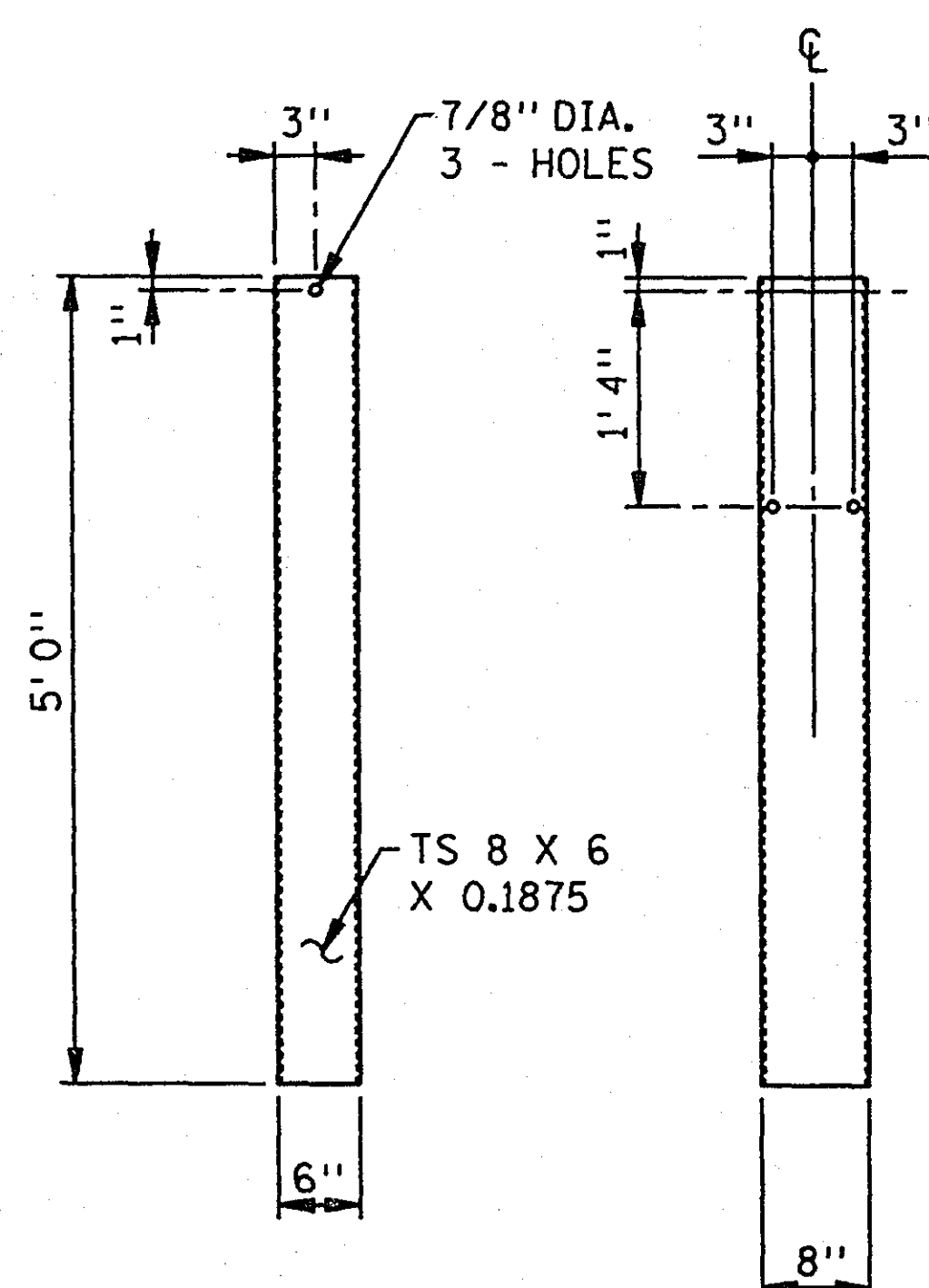
YOKE
(2 REQUIRED)



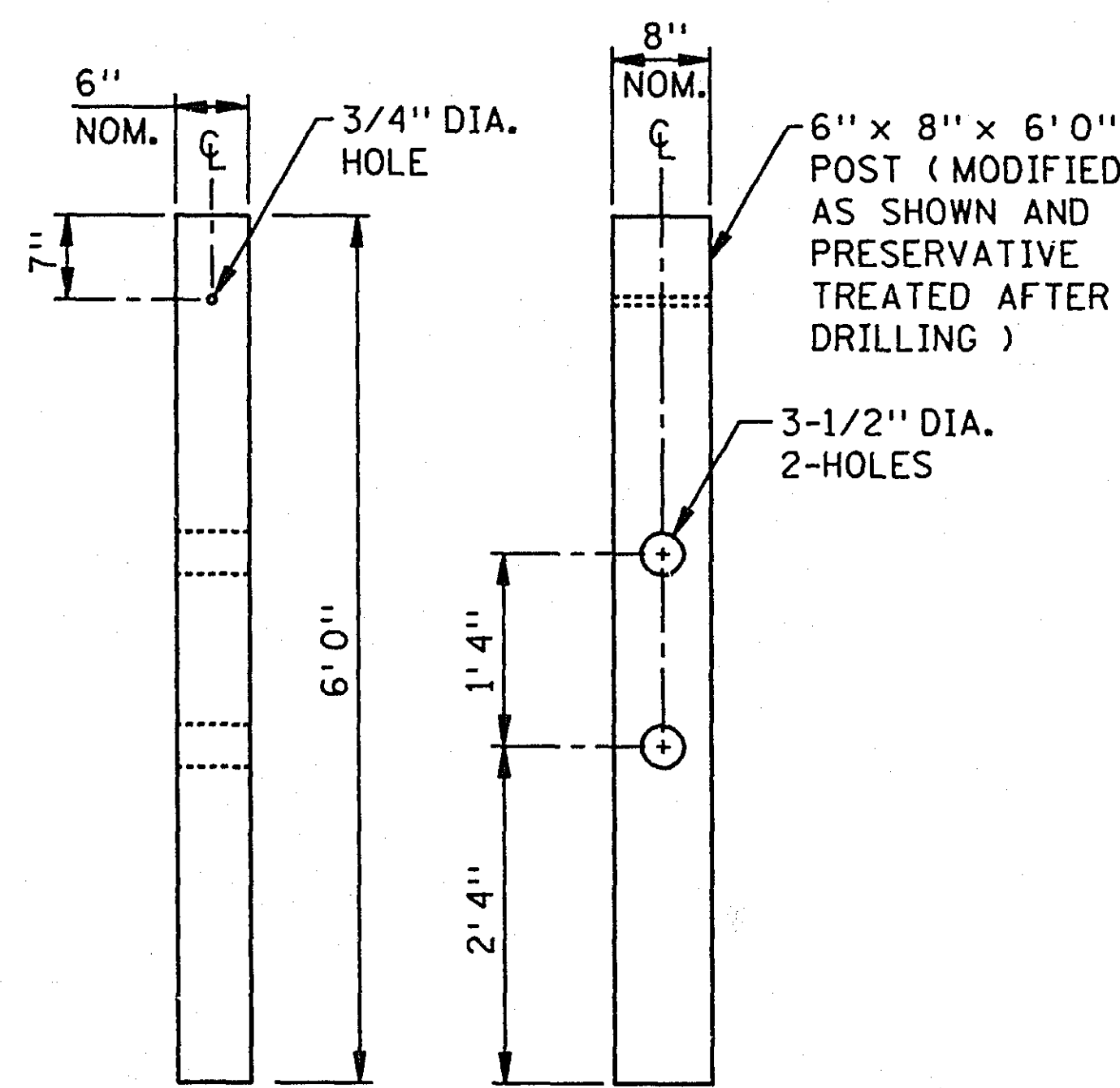
WOOD BLOCK B
(STANDARD BLOCKOUT)



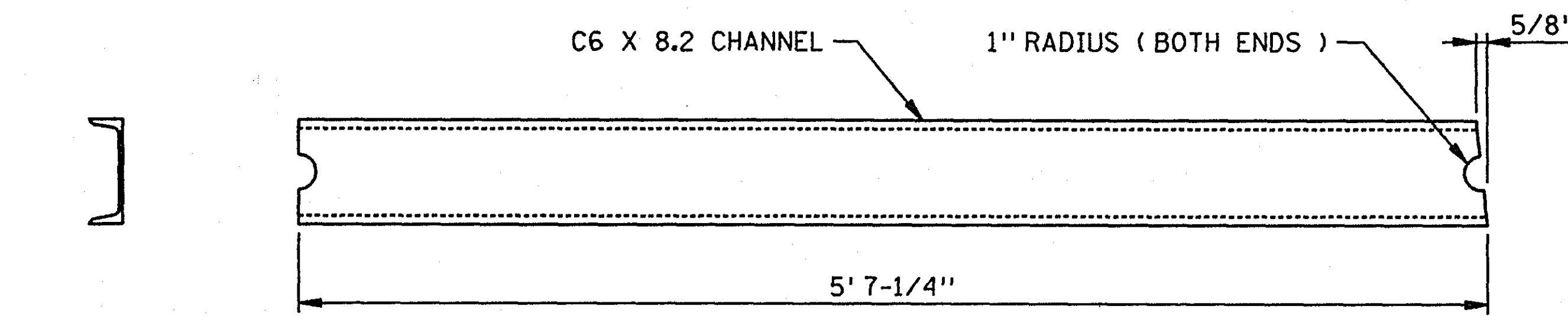
WOOD BREAKAWAY POST A



STEEL TUBE (POST A)



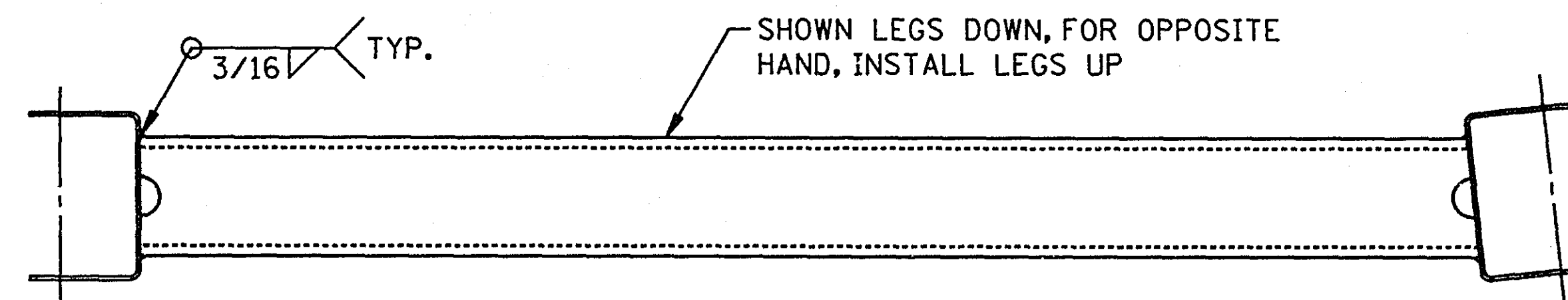
WOOD BREAKAWAY POST B



END VIEW

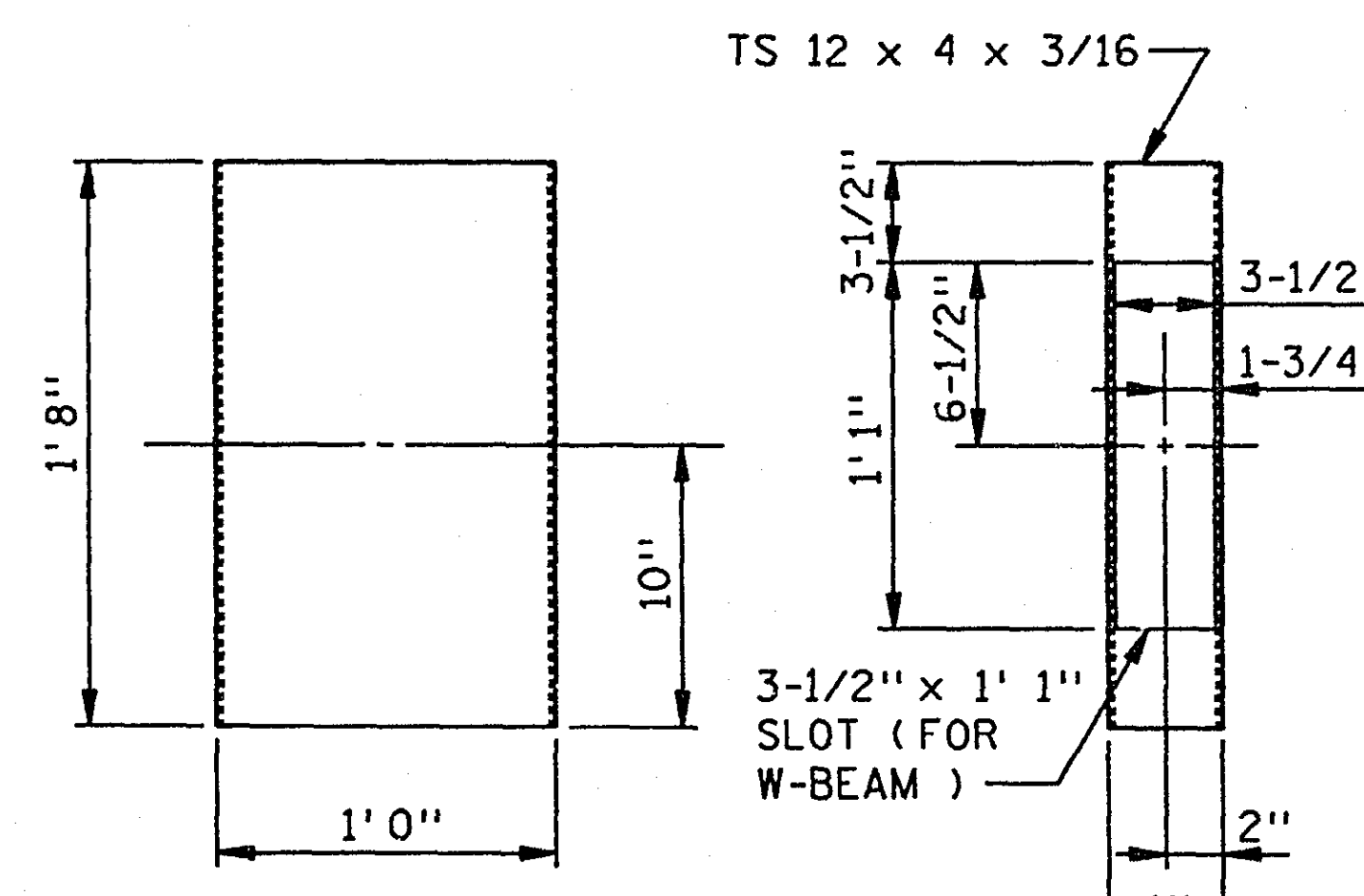
PLAN VIEW

STRUT

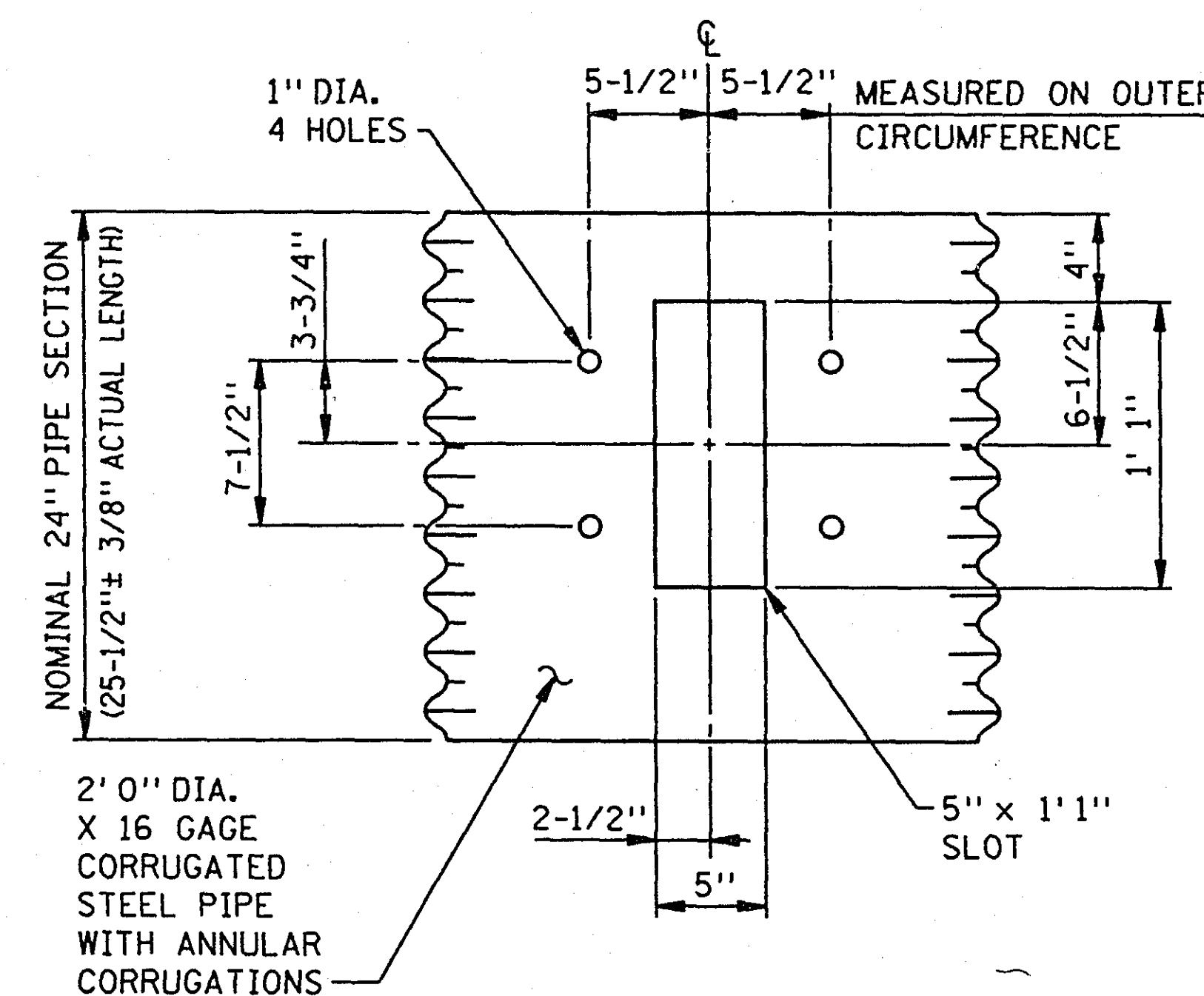


PLAN VIEW

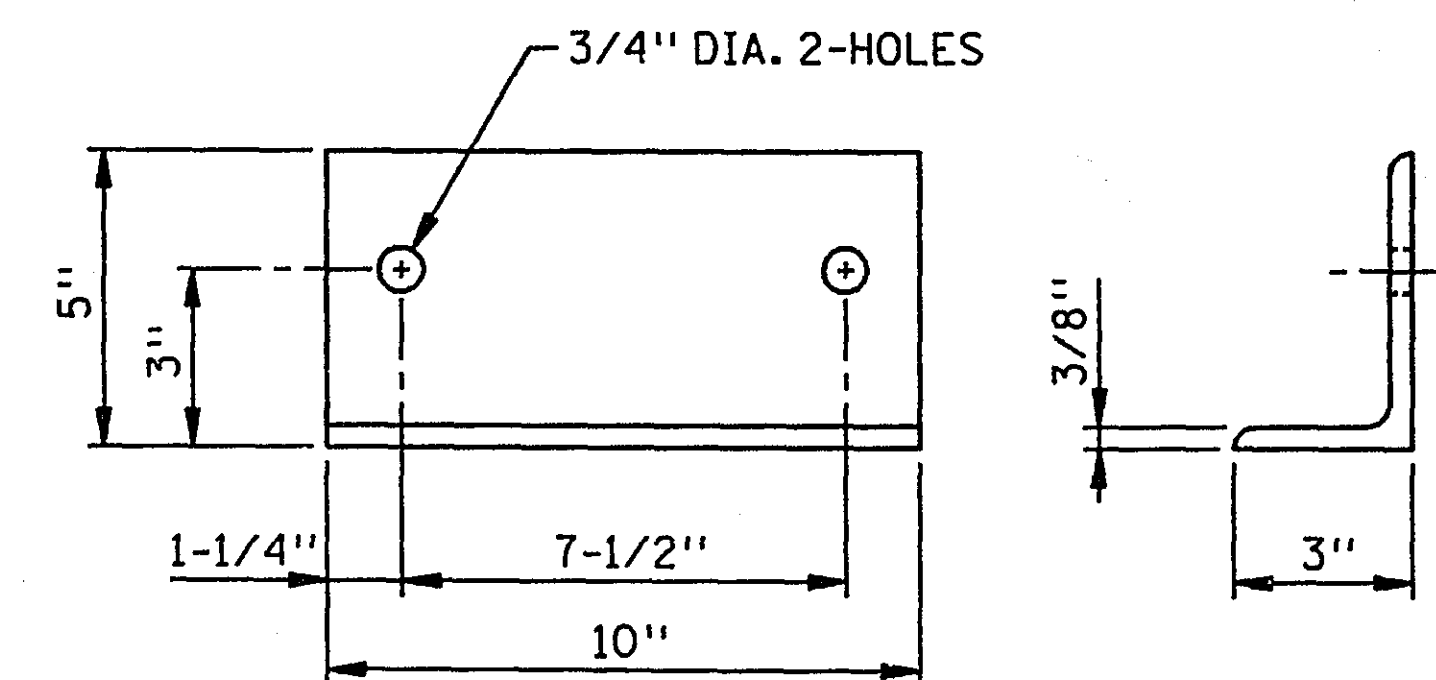
STRUT AND YOKE ASSEMBLY



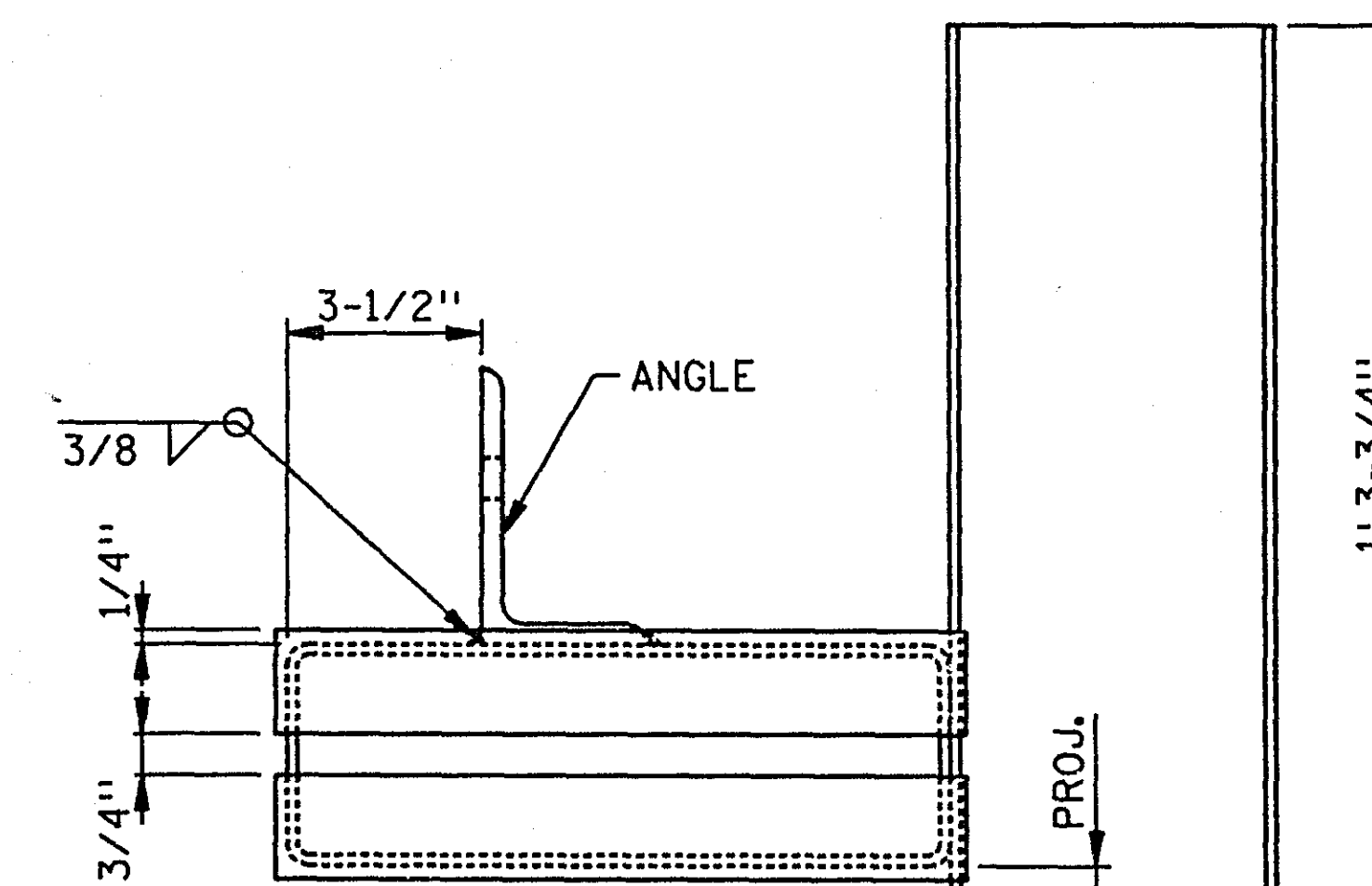
STRUCTURAL TUBE



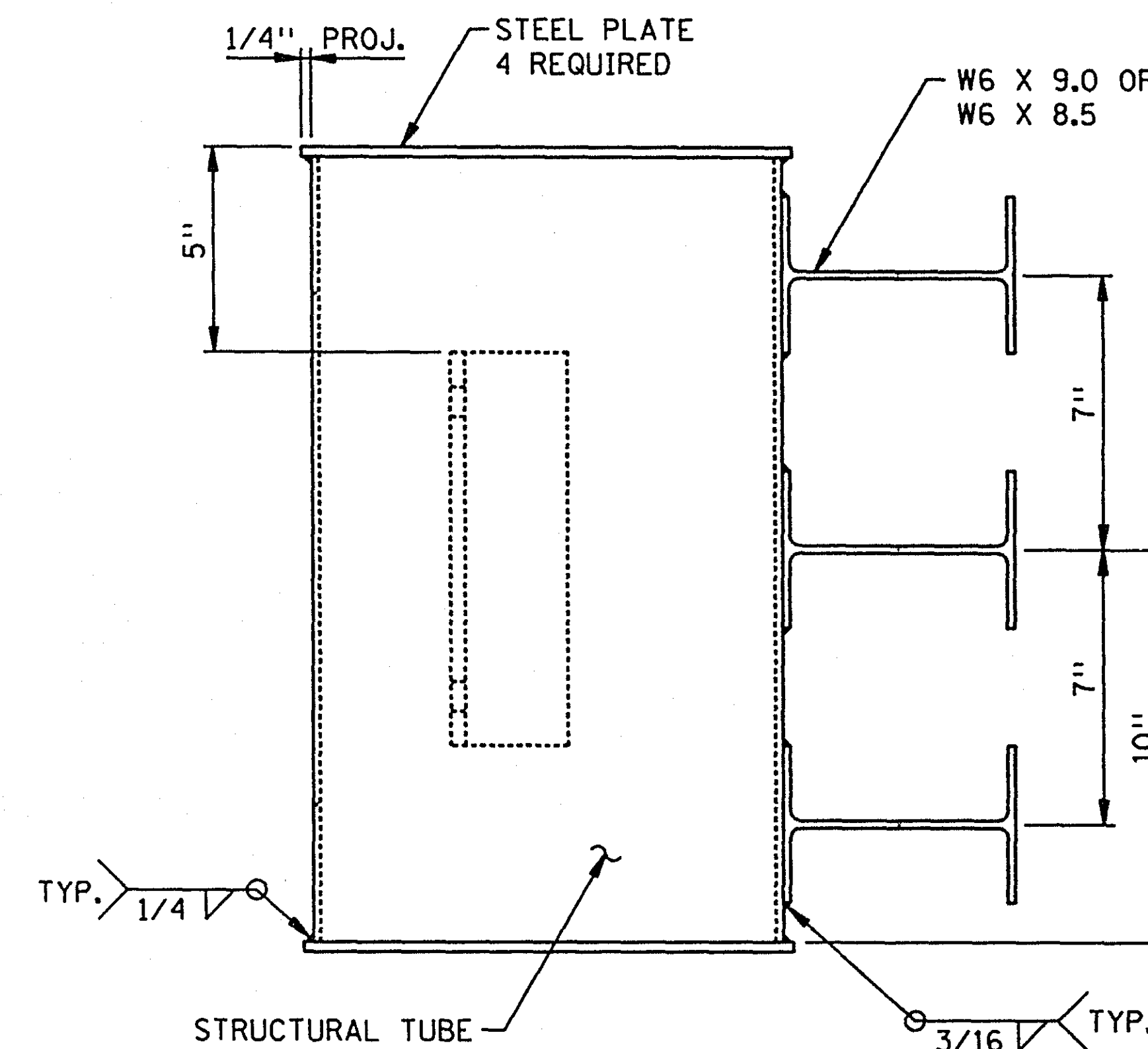
CORRUGATED STEEL PIPE



ANGLE



TOP VIEW



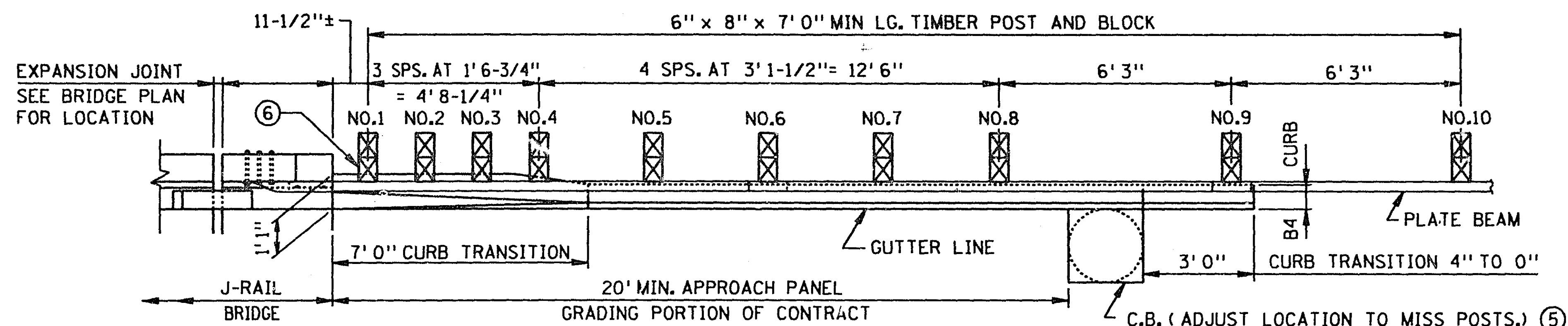
SIDE VIEW

ECCENTRIC LOADER ASSEMBLY

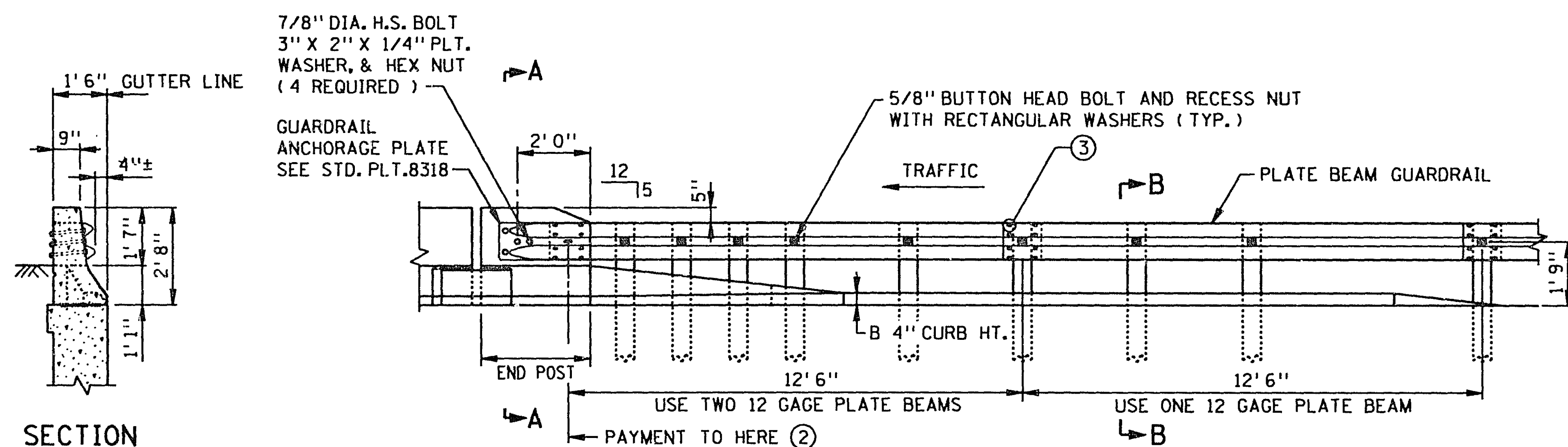
NOTES:
CORRUGATED STEEL PIPE AS PER SPEC. 3226.
STRUCTURAL STEEL AS PER SPEC. 3306, UNLESS OTHERWISE NOTED.
GALVANIZE STRUCTURAL STEEL AS PER SPEC. 3392 & 3394 AFTER FABRICATION, UNLESS OTHERWISE NOTED.

28-124

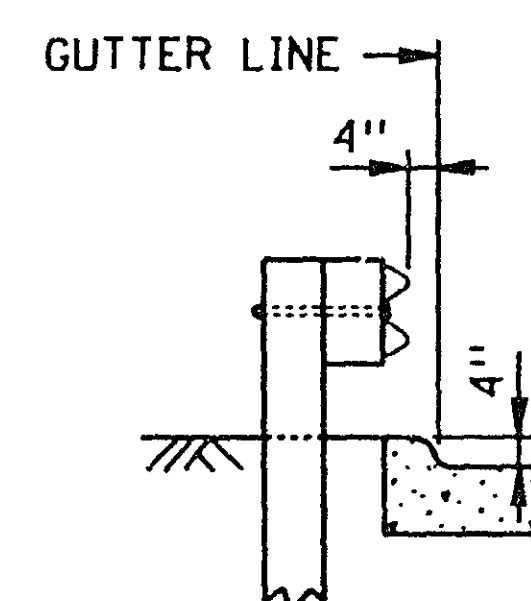
STANDARD SHEET NO.	TITLE:
STANDARD APPROVED: NOT APPROVED	ECCENTRIC LOADER BCT MISCELLANEOUS DETAILS
STATE PROJ. NO.	SAP 62-651-31
SHEET 2 OF 2 REFERENCE DATE: 8-28-91	SHEET NO. 24D OF 24 SHEETS



PLAN

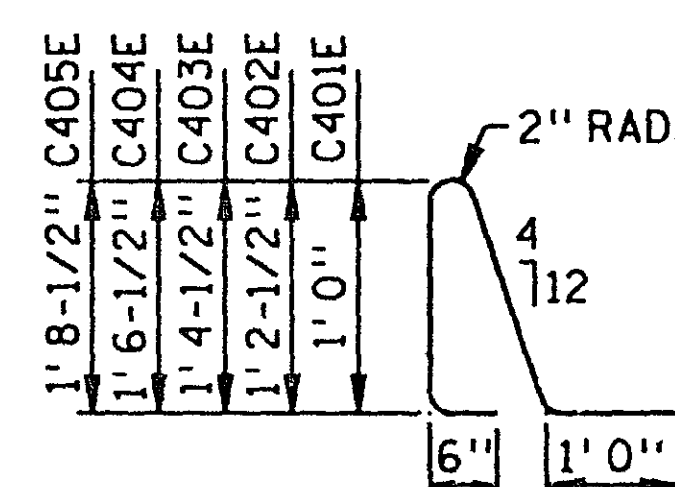
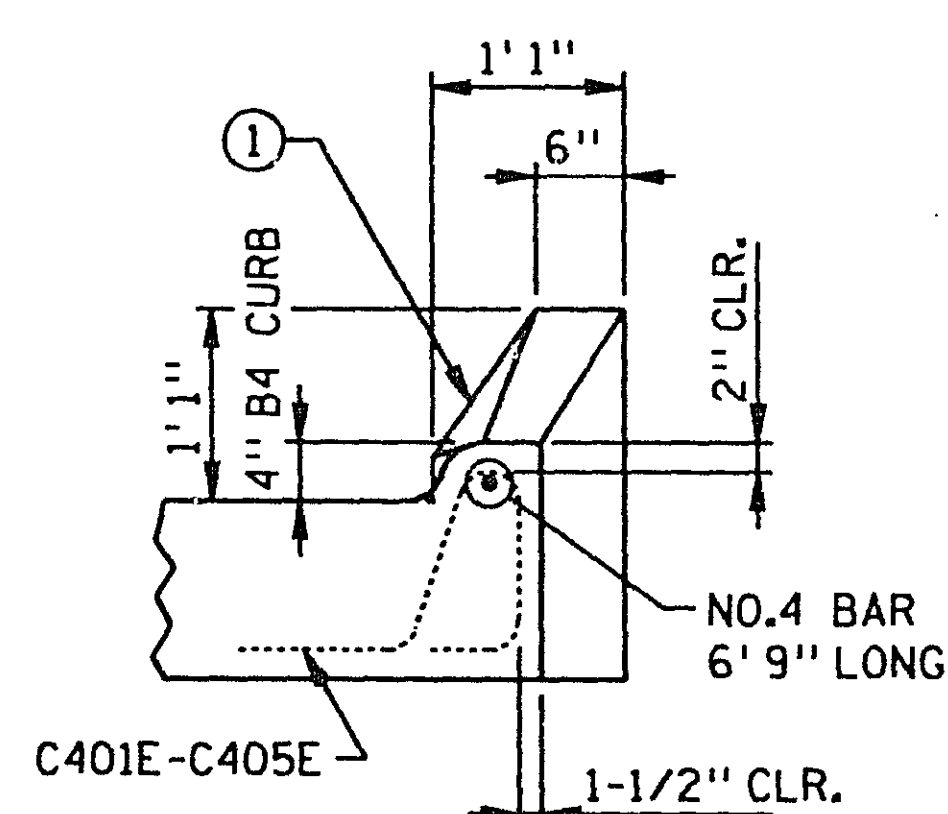
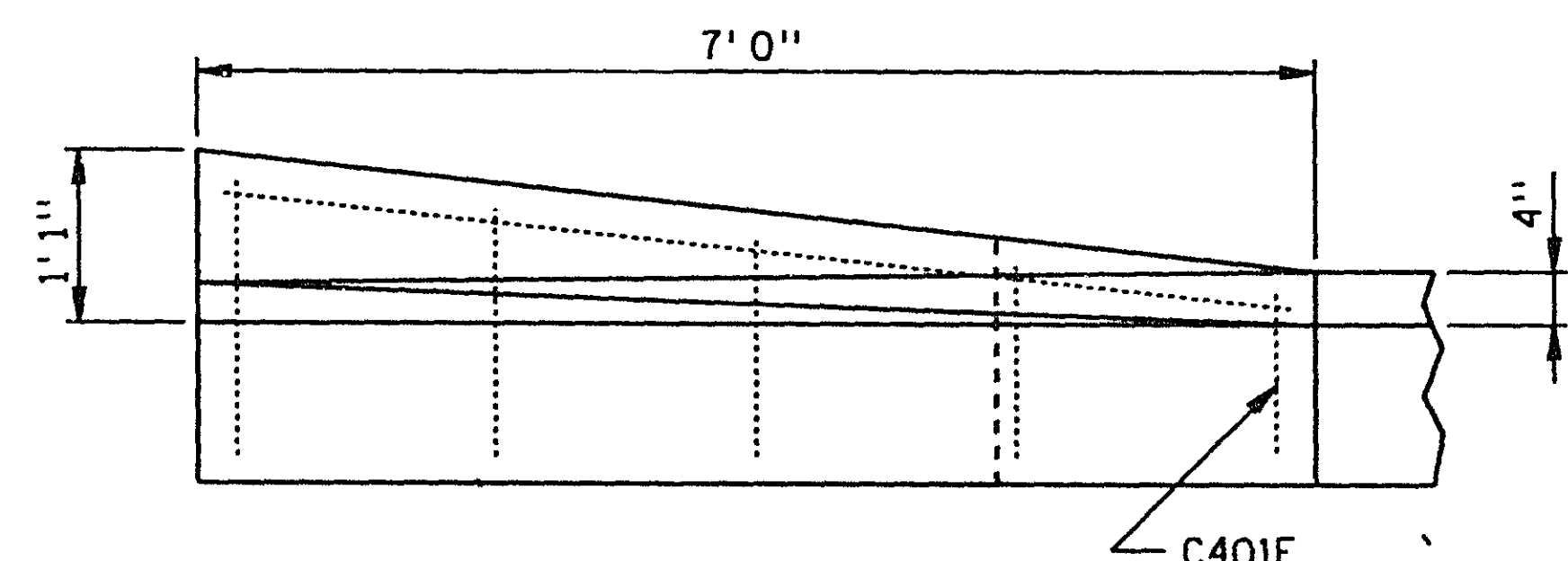
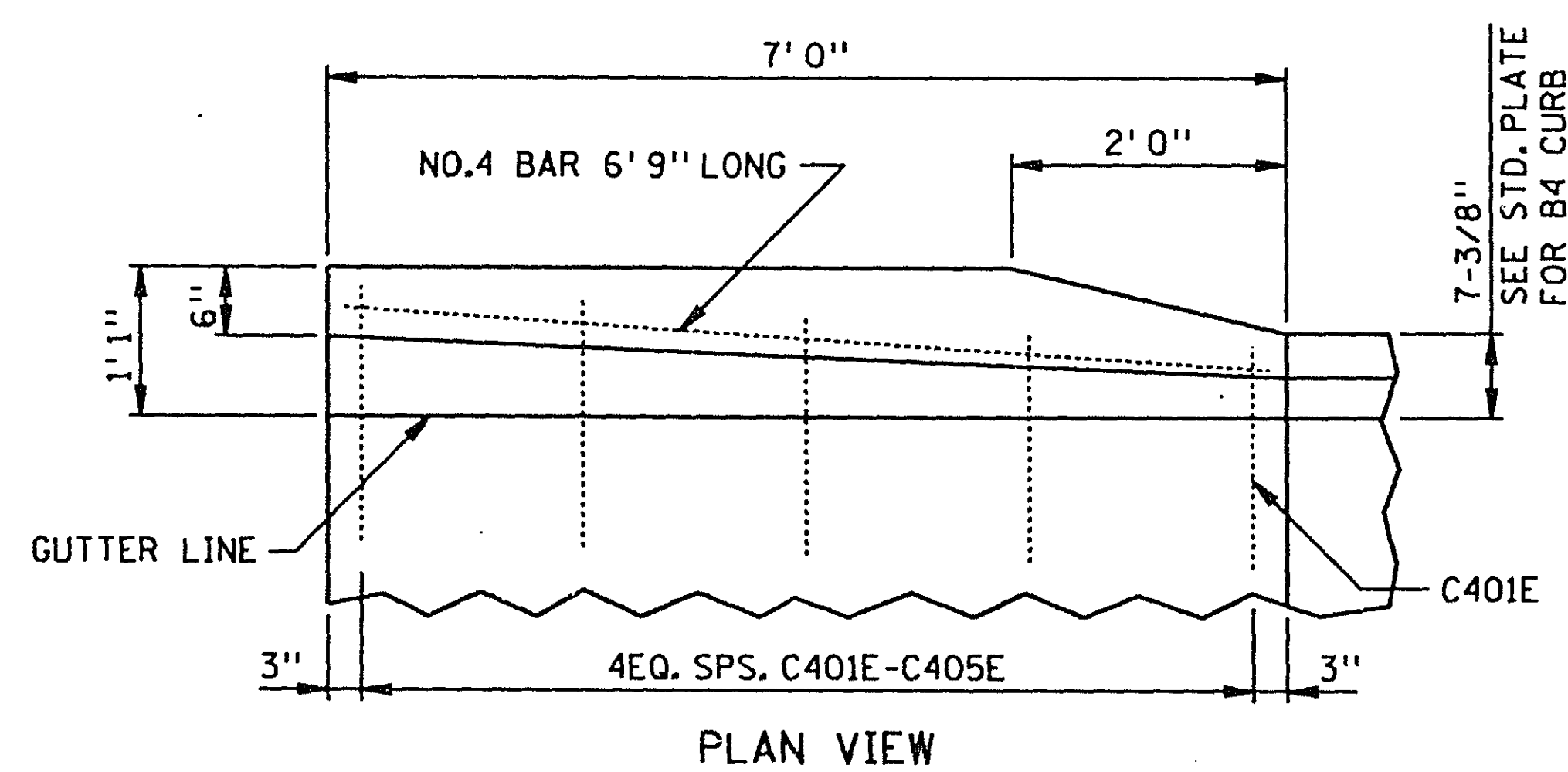


ELEVATION



SECTION B-B

SECTION
A-A
(PARALLEL WINGWALL SHOWN)



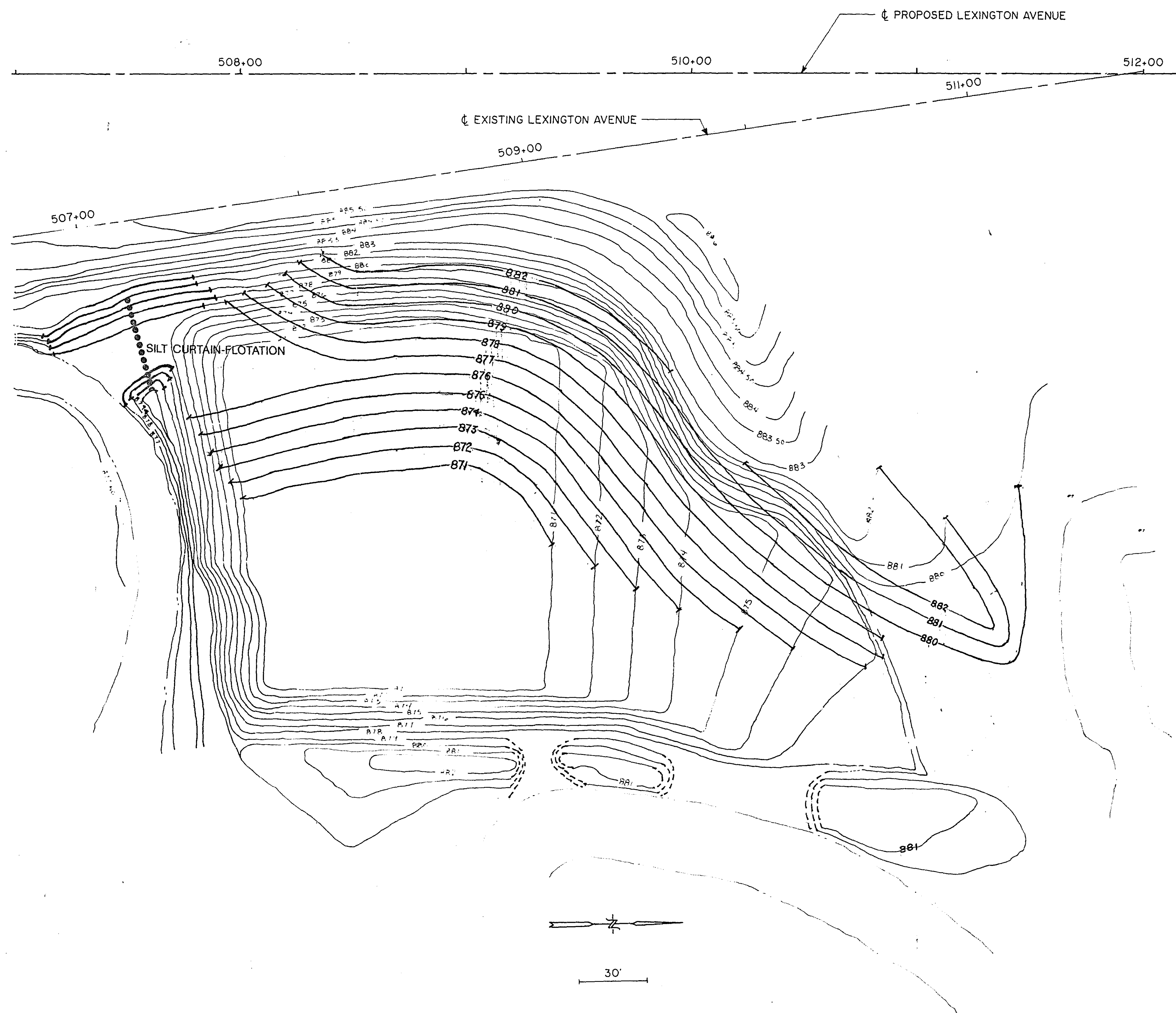
NOTES:

- ① END OF TRANSITION TO MATCH BRIDGE RAIL SURFACE.
- ② PAY LENGTH IS 25 FEET.
- ③ 5/8" DIA. X 1-1/4" LG. BUTTON HEAD BOLTS AND NUTS
TYPICAL AT SPLICES.
- ④ REINFORCEMENT TO BE EPOXY COATED AS PER SPEC. 3301.
- ⑤ SEE ROAD PLANS TO VERIFY ACTUAL DIMENSION AND LOCATION.
- ⑥ ADDITIONAL BLOCKING MAY BE REQUIRED TO CLEAR BRIDGE
STRUCTURE. VERIFY IN FIELD.

CURB TRANSITION DETAILS

STANDARD SHEET NO. 5-297.605	TITLE: GUARDRAIL TRANSITION FOR NEW TYPE J RAILING WITH APPROACH CURB
STANDARD APPROVED: JANUARY 23, 1992	
STATE PROJ. NO. <u>SAP 62-651-31</u> SHEET NO. <u>24E</u> OF <u>24</u> SHEETS	

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QUANTITIES	TOTAL
SILT CURTAIN-FLOTATION SEED MIXTURE 100	50 FEET 60 LBS

ZB-124
 FOR
 INFORMATION
 ONLY
 MITIGATION AREA #3
 SEDIMENTATION POND
 24F
 24