As BUILT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1560-03-72	MAP 011 (26)	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C.T.H. "E" – S.T.H. 118

U.S.H. 63
BAYFIELD COUNTY

INDEX OF SHEETS

TOTAL SHEETS = 76

STATE PROJECT NUMBER
1560-03-72

10 FT. PLAN & PROFILE 100 FT. 0

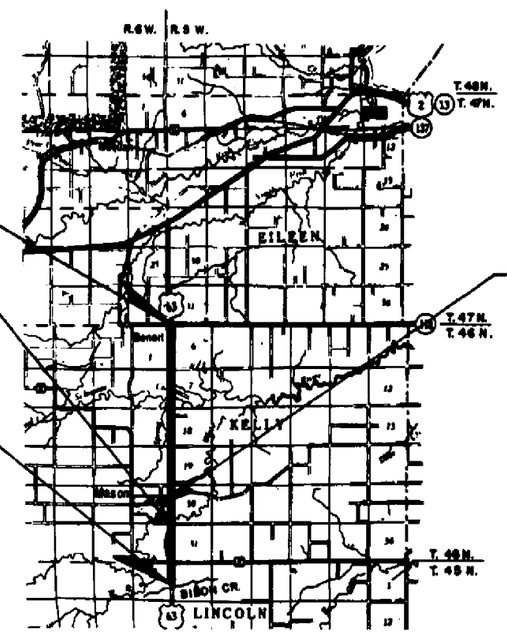
10 FT. CROSS-SECTIONS 10 FT. 0

END PROJECT 1560-03-72
STA. 552+01.78

EXCEPTION TO NET ℄ LENGTH
STA. 732+90-742+50

BEGIN PROJECT 1560-03-72
STA. 646+16.54

EQ. STA. 766+01.67 BK. = 316+00 AHD.



LAYOUT
SCALE 0 1 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 6.550 MI.

DESIGN DESIGNATION

A.D.T.	1988	=	1860
A.D.T.	2008	=	2580
D.H.V.		=	15.5%
D.		=	60-40
T.		=	8%
V.		=	55 M.P.H.

CONVENTIONAL SIGNS

COUNTY LINE
CORPORATE LIMITS
PROPERTY LINE
LOT LINE
LIMITED HIGHWAY EASEMENT
EXISTING RIGHT OF WAY
NEW RIGHT OF WAY
REFERENCE LINE
SLOPE INTERCEPT
ORIGINAL GROUND
MARSH OR ROCK PROFILE
CULVERT IN PLACE
CULVERT REQUIRED
CULVERT REQUIRED (Profile)

COMBUSTIBLE FLUIDS (UNDER PRESSURE)
UNDERGROUND UTILITIES
GAS — G —
ELECTRIC — E —
TELEPHONE — T —
SERVICE PEDESTAL
CABLE MARKER
POWER POLE
TELEPHONE POLE
RAILROADS
MARSH
WOODED AREA

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Surveyor R.O.L. District Checker D.E.M.
Designer R.L.L. C.O. Checker
District Supervisor W.J.G. C.O. Coordinator

APPROVED:
DATE: 12/2/87 Del A. Langlois
DISTRICT TRANSPORTATION DIRECTOR (ACTING)

APPROVED:
DATE: 1/8/88 R. W. Berry
for STATE DESIGN ENGINEER FOR HWYS.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 5 WISCONSIN DIVISION

APPROVED:
DATE: _____ DIVISION ADMINISTRATOR

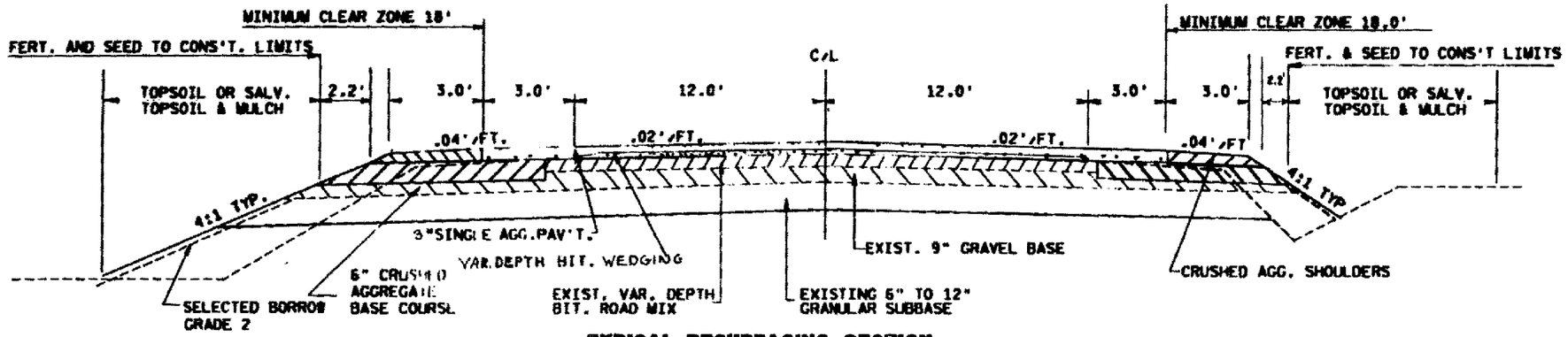
BAYFIELD

NET. 1560-3-72

WISDOT/VEHICLE NO. 10

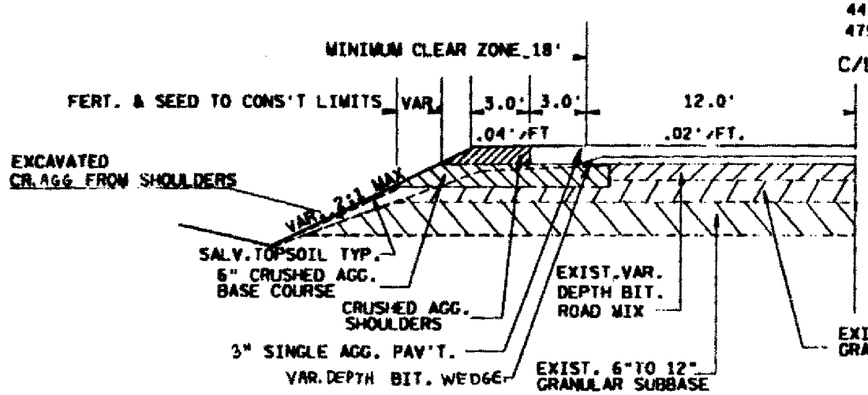
STATE PROJECT NUMBER	SHEET NO.
1560-03-72	2.0

C.T.H. "E" - S.T.H. 13
TYPICAL SECTIONS
U.S.H. 63 BAYFIELD COUNTY



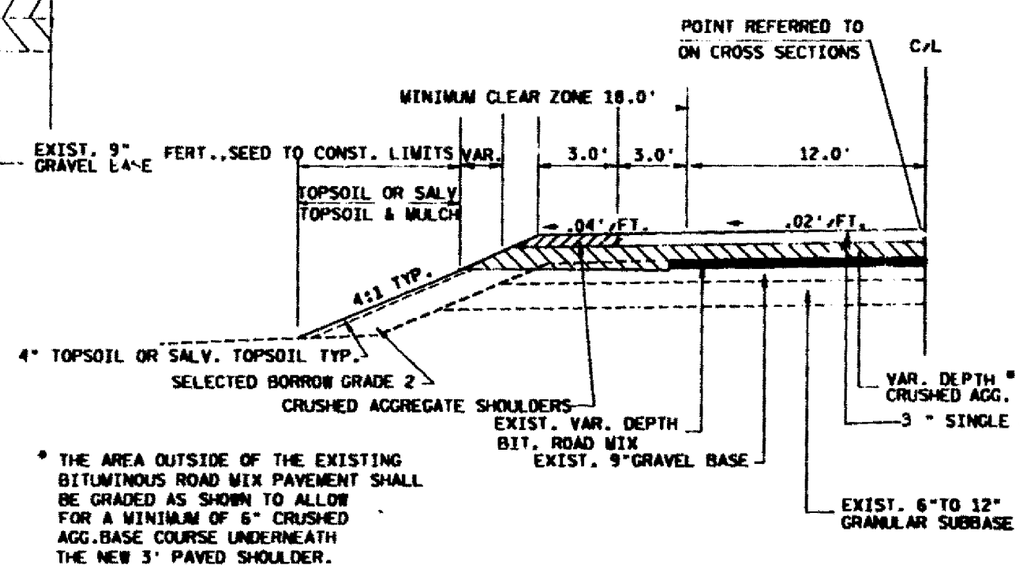
TYPICAL RESURFACING SECTION

STATION TO STATION
667+00 - 674+00
692+00 - 732+90
742+50 - 766+01.67
365+00 - 410+00
416+00 - 434+00
443+00 - 455+00
475+00 - 547+76.87



TYPICAL HALF SECTION
(CR. AGG. WIDENING)

STATION TO STATION
679+00 - 692+00
316+00 - 365+00
455+00 - 475+00



* THE AREA OUTSIDE OF THE EXISTING BITUMINOUS ROAD MIX PAVEMENT SHALL BE GRADED AS SHOWN TO ALLOW FOR A MINIMUM OF 6" CRUSHED AGG.BASE COURSE UNDERNEATH THE NEW 3' PAVED SHOULDER.

TYPICAL CRUSHED AGG. BASE COURSE LIFT HALF SECTION

STATION TO STATION
646+16.54 - 667+00
674+00 - 679+00
410+00 - 416+00

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER IN THE FIELD.

WHEN THE QUANTITY OF CRUSHED AGGREGRATE BASE COURSE & BIT. SURF. IS MEAS. FOR PAYMENT BY THE TON. THE THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

ALL DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS BETWEEN THE SUBGRADE SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE UTILITIES WILL ADJUST THEIR FACILITIES TO FIT THE NEW HIGHWAY CONSTRUCTION.

SEED QUANTITIES ARE BASED ON SEED MIXTURE NO. 3
CUT AND FILL SLOPES SHALL BE ROUNDED 5 FEET BEYOND THE INTERCEPT POINT OR TO THE RIGHT OF WAY LIMITS WHICHEVER [illegible] FIRST.

CLEAR ZONE CLEARING & [illegible] SHALL [illegible] NG, MULCHING AND FERTILIZING.

TOPSOIL IS TO BE STRIPPED TO A MINIMUM WIDTH OF 10' FROM THE SUBGRADE SHOULDER POINT.

UTILITIES

CHEQUAMEGON TELE. COOP., INC.
P.O. BOX 67
CABLE, WI. 54821
ALAN OLSON
TELE. (715) 798-3303

NORTHERN STATES POWER CO.
101 WEST SECOND STREET
P.O. BOX 470
ASHLAND, WI. 54806
BOB METZAGAR, GENERAL MANAGER
TELE. (715) 682-5221

STANDARD DETAIL DRAWINGS

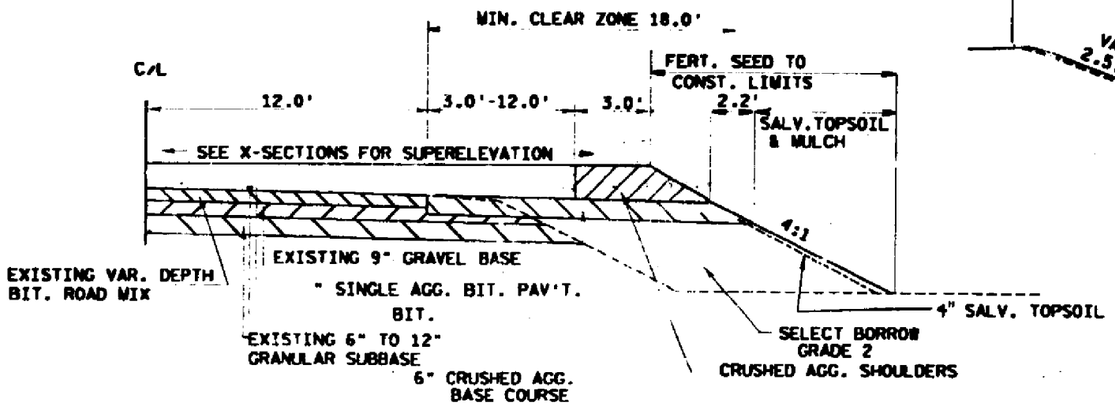
EROSION MAT	8E7-1
APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCHES	8F1-9
AT-GRADE SIDE ROAD INTERSECTIONS, TYPES "B" AND "C"	9A1-6a
PAVEMENT MARKING	15C8-1
CLASS "A" STEEL PLATE BEAM GUARD (two sheets)	14B2-8a & b
CONSTRUCTION BARRICADES AND STANDARD SIGNS	15C1-7
CURB AND GUTTER	8D1-11
SILT FENCE	8E9-2

STATE PROJECT NUMBER	SHEET NO.
1560-03-71	2.1

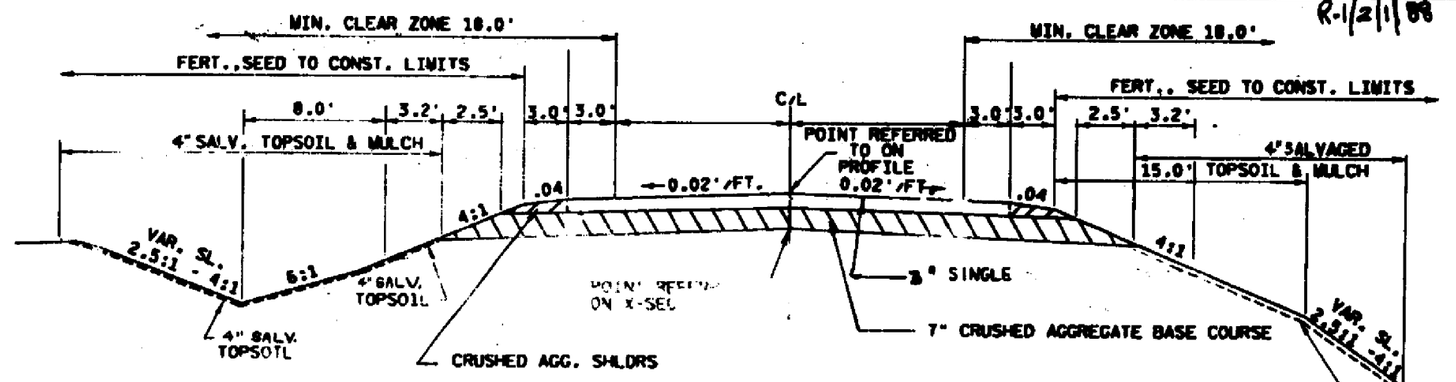
C.T.H. "E" TO S.T.H. 199

U.S.H. 63 — BAYFIELD COUNTY

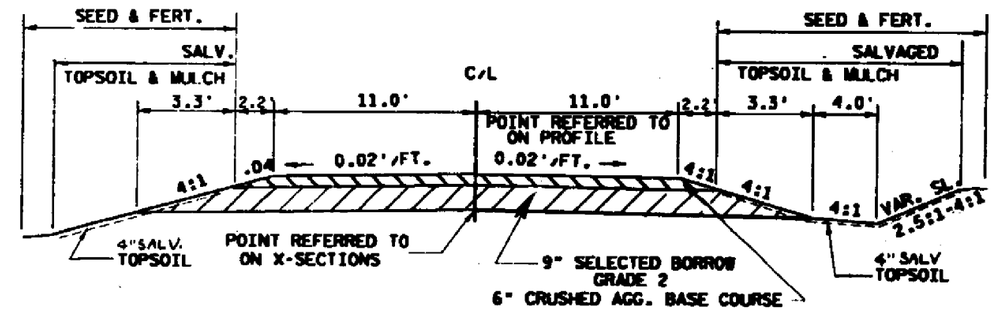
R-1/2/1/88



TYPICAL FINISHED SUPERELEVATED SECTION
(SHOWING BIT. TAPER)
STA. 547+76.87 TO 550+00

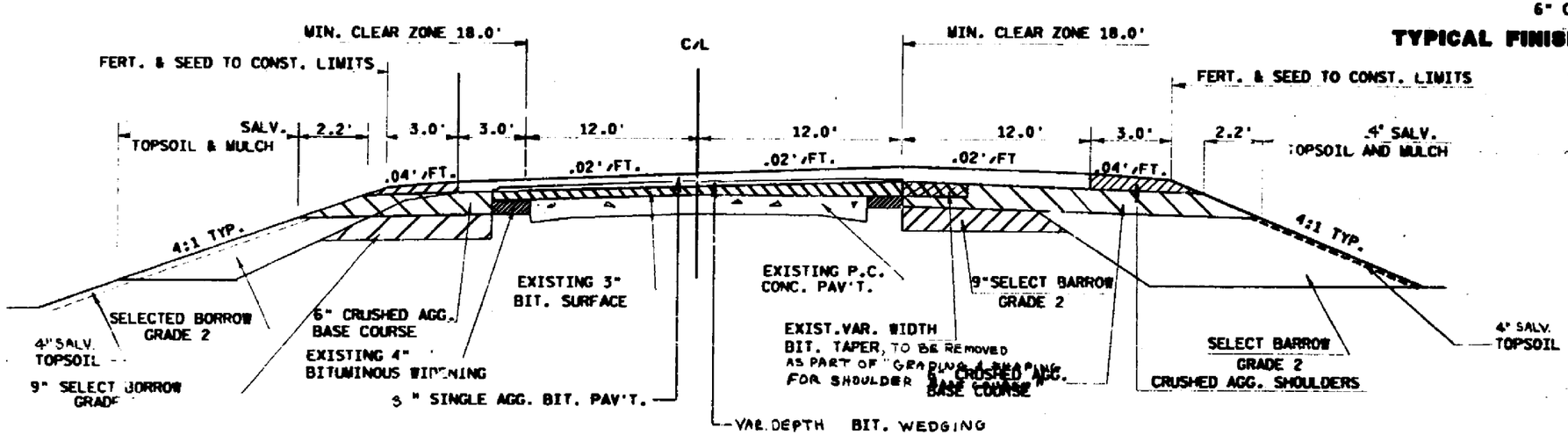


TYPICAL GRADING SECTION
STATION TO STATION
434+00 - 443+00



TYPICAL FINISHED SECTION FOR S.R.

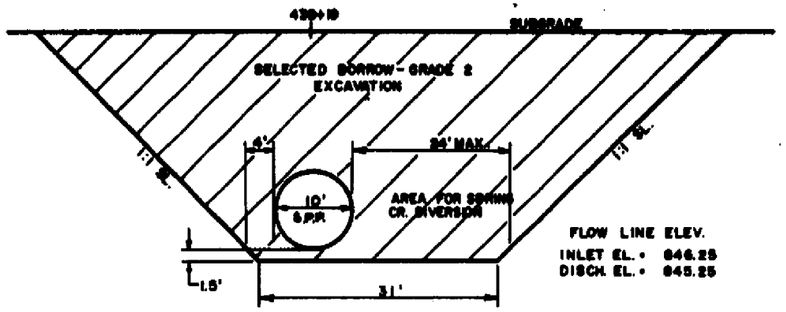
STA. 681+25 LT.
STA. 730+60 LT.



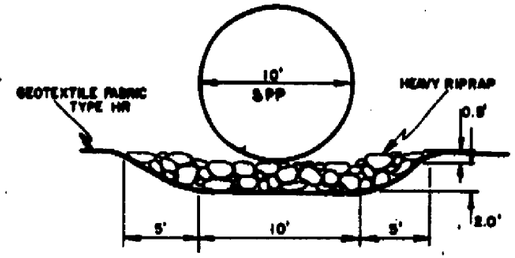
TYPICAL RESURFACING SECTION WITH EXIST. P.C. CONC. PAV'T.
(ALSO SHOWS DECELERATION LANE)
STA. 550+00 TO 552+01.78

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17, & 9,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

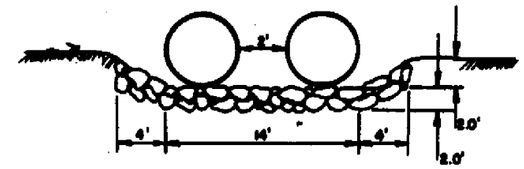
STATE PROJECT NUMBER	SHEET NO.
1560-03-72	2.2



CULVERT PIPE REPLACEMENT DETAIL
STA. 439+19

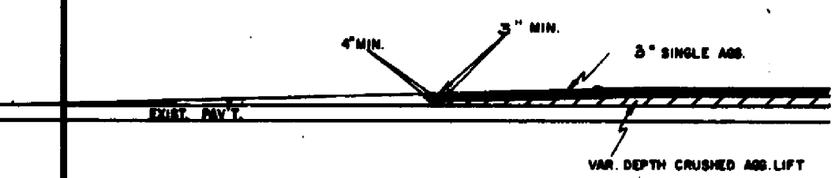


DETAIL FOR HEAVY RIPRAP & GEOTEXTILE FABRIC, TYPE HR
STA. 439+19 LT. & RT.
NOTE: LENGTH H. RIPRAP SECTION IS APPROX. 20'.

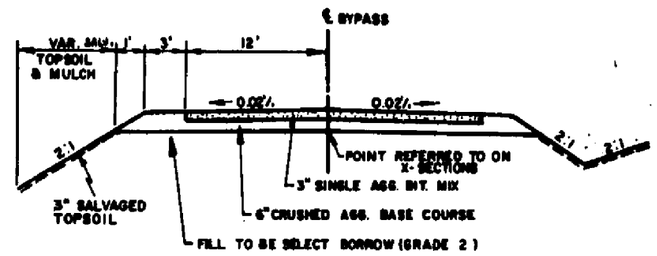


DETAIL FOR HEAVY RIPRAP
STA. 15+85 LT. & RT. (TEMP. BYPASS)

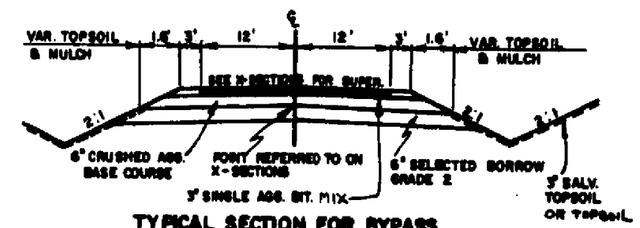
NOTE: H. RIPRAP USED FOR THE TEMPORARY BYPASS MAY BE SALVAGED FOR MAINLINE STA. 439+19, IF FEASIBLE. LENGTH H. RIPRAP SECTION IS APPROX. 20'.



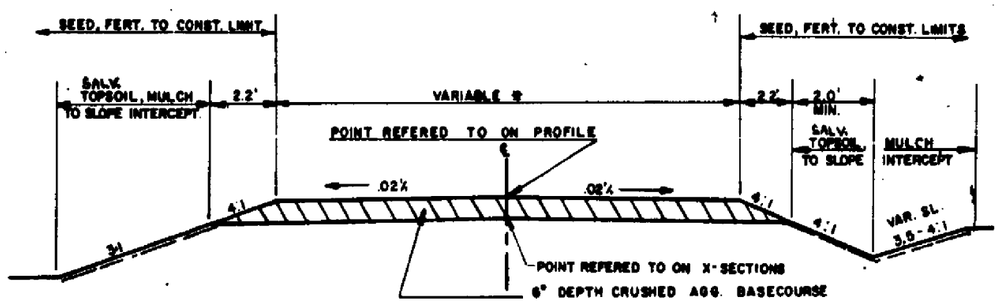
DETAIL FOR CRUSHED AGG. LIFT TRANSITION



TYPICAL SECTION FOR TEMPORARY BYPASS
STA. 10+00 - 21+69.26 (FILL AREAS ONLY)

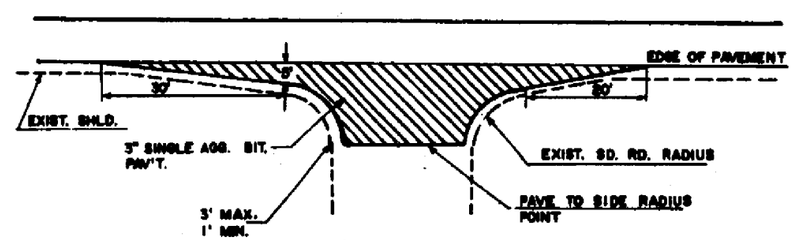


TYPICAL SECTION FOR BYPASS
(CUT AREAS ONLY)
STA. 10+00-21+69.26

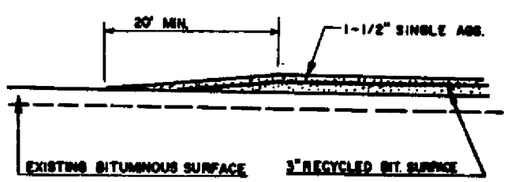


TYPICAL SECTION FOR COMMERCIAL OR PRIVATE ENTRANCE

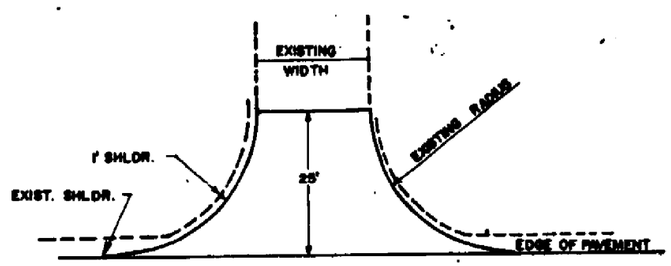
* WIDTH OF PRIVATE ENTRANCES 16' MIN. - 24' MAX.
WIDTH OF COMERCIAL ENTRACES - 35' MAX.



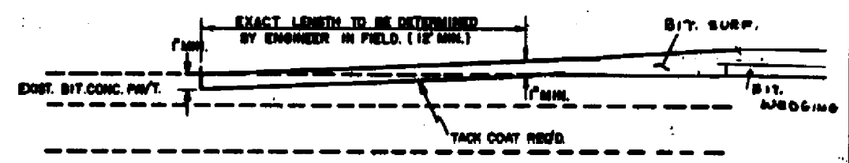
CRUSHED AGGREGATE SIDE ROAD RESURFACING



FEATHER JOINT DETAIL
USE AT STA.
732+90
742+50

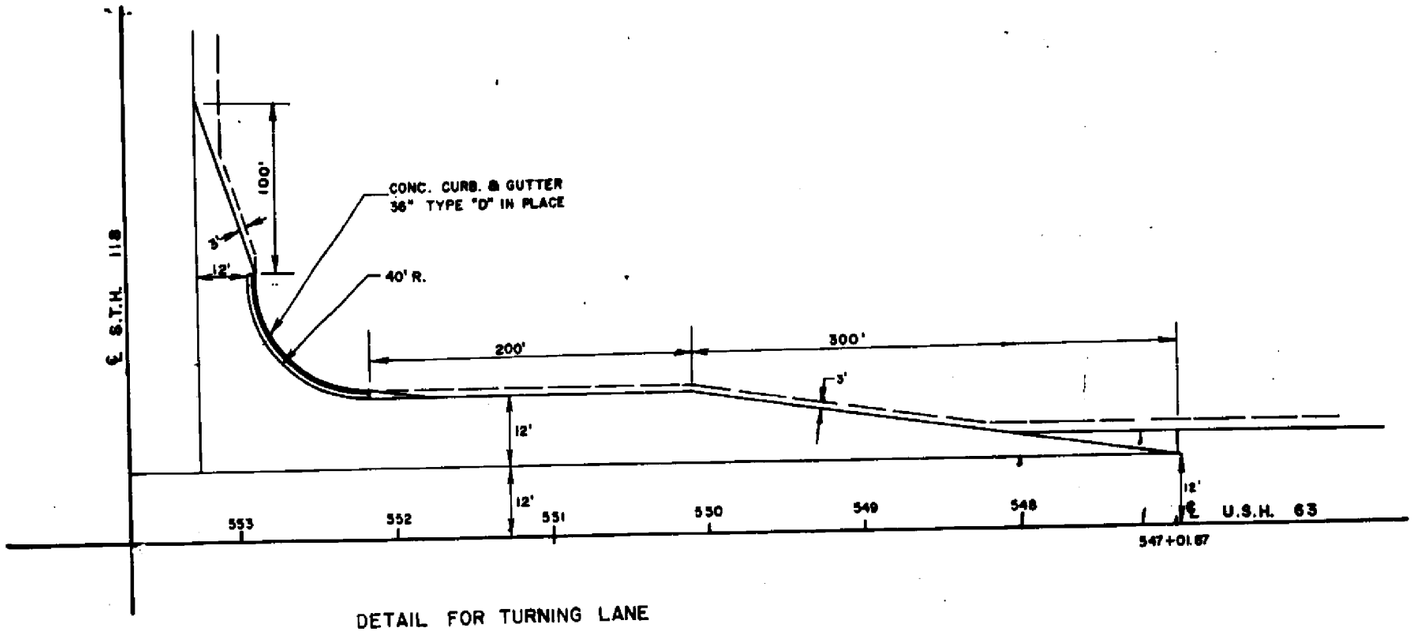


SIDE ROAD BITUMINOUS PAVING DETAIL

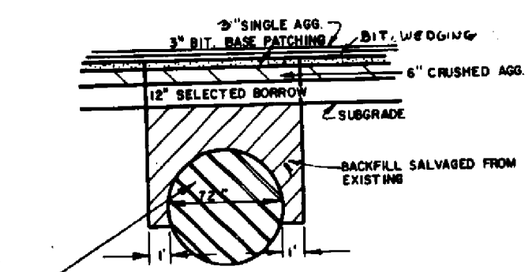


DETAIL OF BUTT JOINT
USE AT STA. 646+00
552+00

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	2,3



DETAIL FOR TURNING LANE

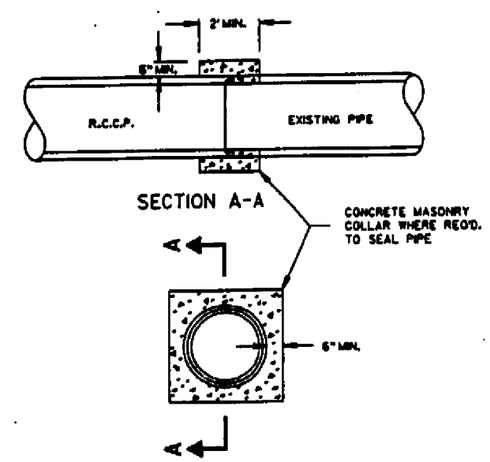


BACKFILL SHALL BE SURPLUS CLAY MATERIAL DESIGNATED AS WASTE FROM BYPASS AND SHALL BE CONSIDERED INCIDENTAL TO UNCLASSIFIED EXCAVATION.

BACKFILL VOLUMES CONSIDER ONLY VOL. DISPLACED BY EXISTING PIPE. FILL SLOPES OUTSIDE OF THIS PIPE SHALL BE FILLED WITH SELECTED BORROW.

DETAIL FOR BITUMINOUS BASE PATCHING AND CULVERT PIPE BACKFILL

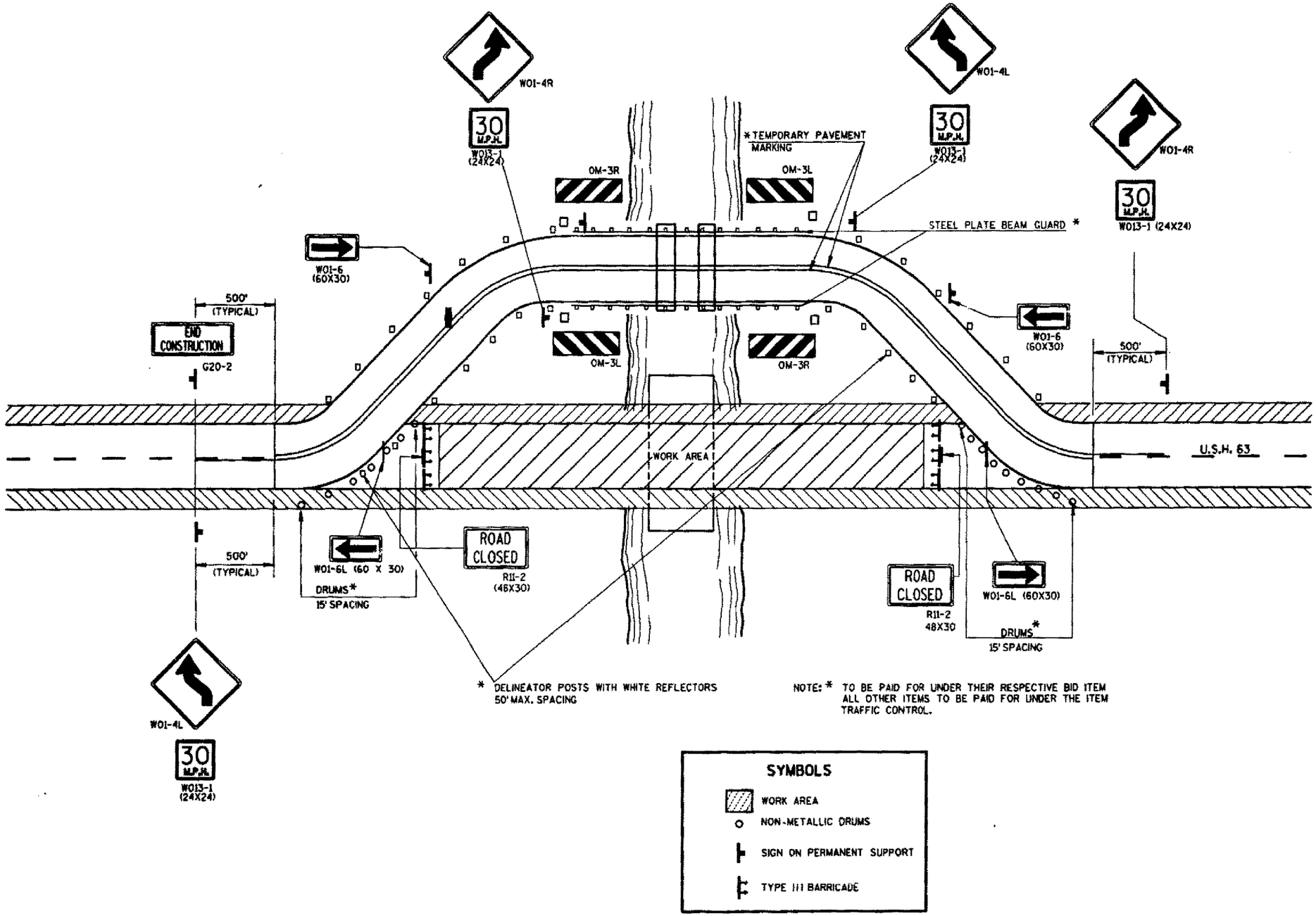
USE AT STA. 724+84



CONNECTION DETAIL - R.C.C.P. TO EXISTING PIPE

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	2.4

TRAFFIC CONTROL DEVICES
2-LANE HIGHWAY WITH ON-SITE BYPASS



* DELINEATOR POSTS WITH WHITE REFLECTORS 50' MAX. SPACING

NOTE: * TO BE PAID FOR UNDER THEIR RESPECTIVE BID ITEM ALL OTHER ITEMS TO BE PAID FOR UNDER THE ITEM TRAFFIC CONTROL.

SYMBOLS

- WORK AREA
- NON-METALLIC DRUMS
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE

GENERAL NOTES

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS, OR AS DIRECTED BY THE ENGINEER.

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW-INTENSITY FLASHING) LIGHTS AND DEVICES USED TO DELINEATE A TRAVEL PATH SHALL BE EQUIPPED WITH TYPE "C" (STEADY BURN) LIGHTS.

DISPOSAL OF ALL REMOVED BEAM GUARD IS THE RESPONSIBILITY OF THE CONTRACTOR.

SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

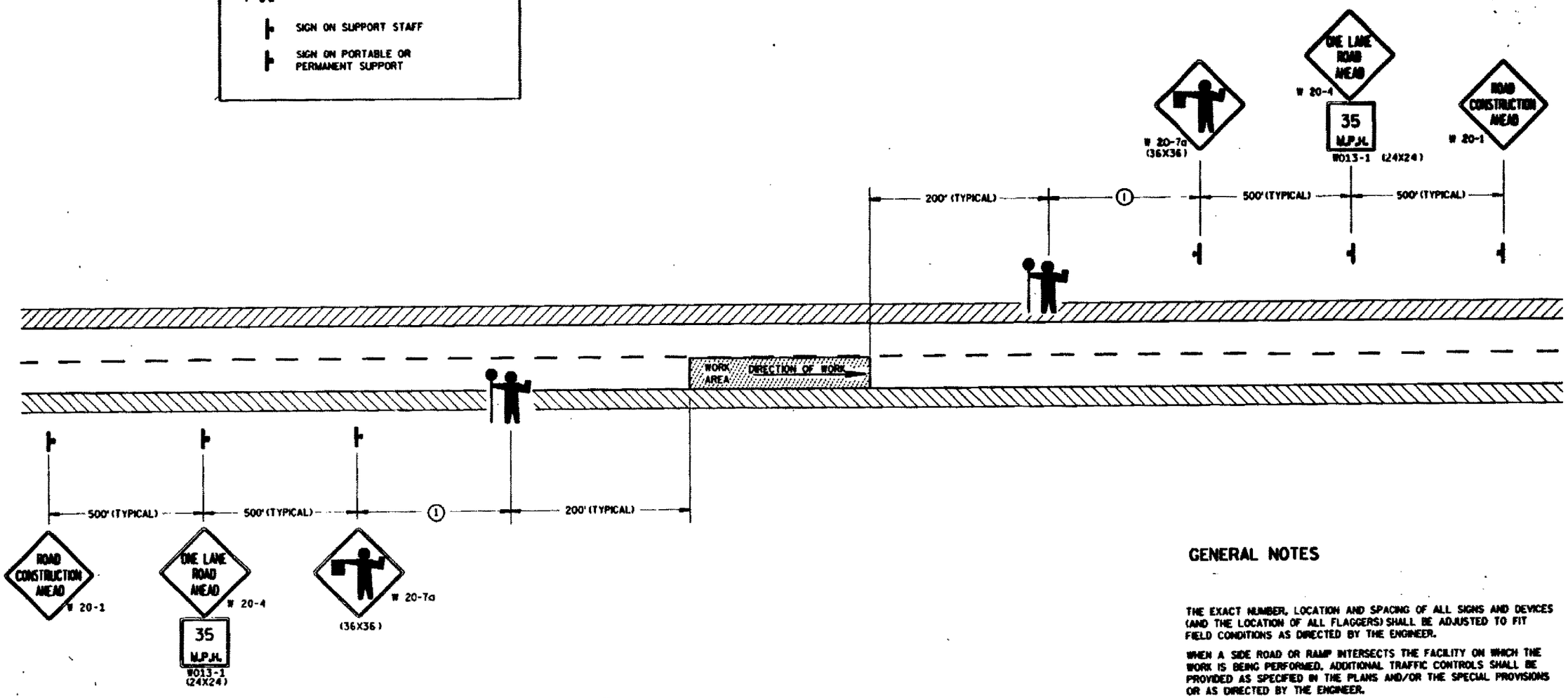
ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	2.5

TRAFFIC CONTROL
MOVING WORK OPERATIONS

SYMBOLS

- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- SIGN ON SUPPORT STAFF
- SIGN ON PORTABLE OR PERMANENT SUPPORT



(1) W020-1, W020-4 AND W020-7a SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS DIRECTED BY THE ENGINEER.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

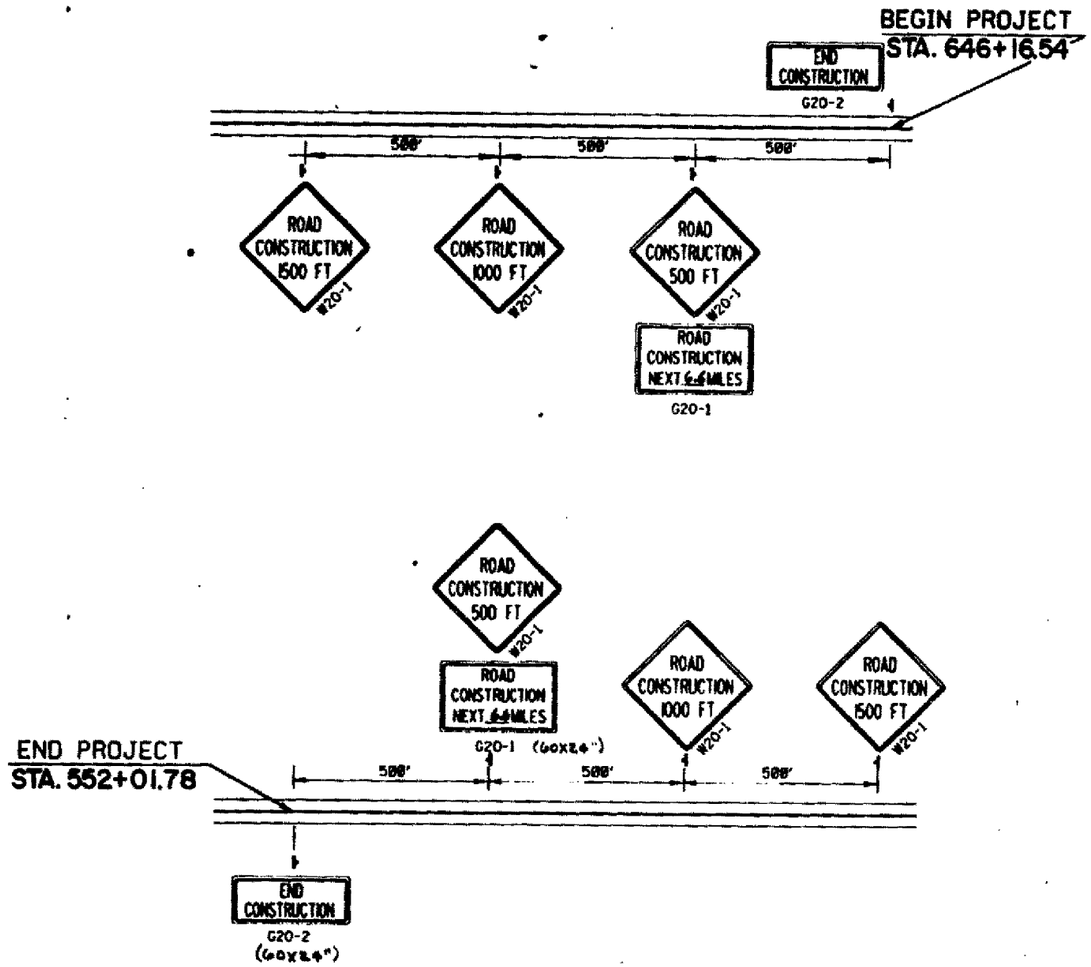
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD CONSTRUCTION AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE FACILITY RESTORED TO NORMAL OPERATION.

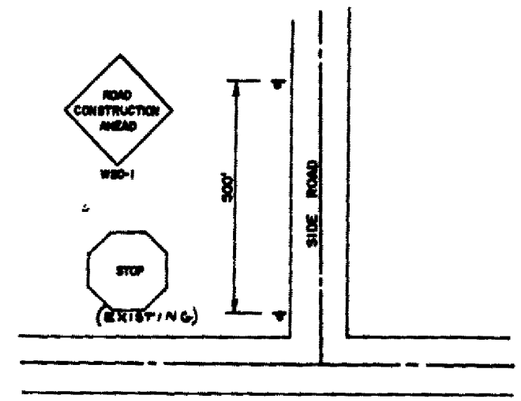
SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS.

"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

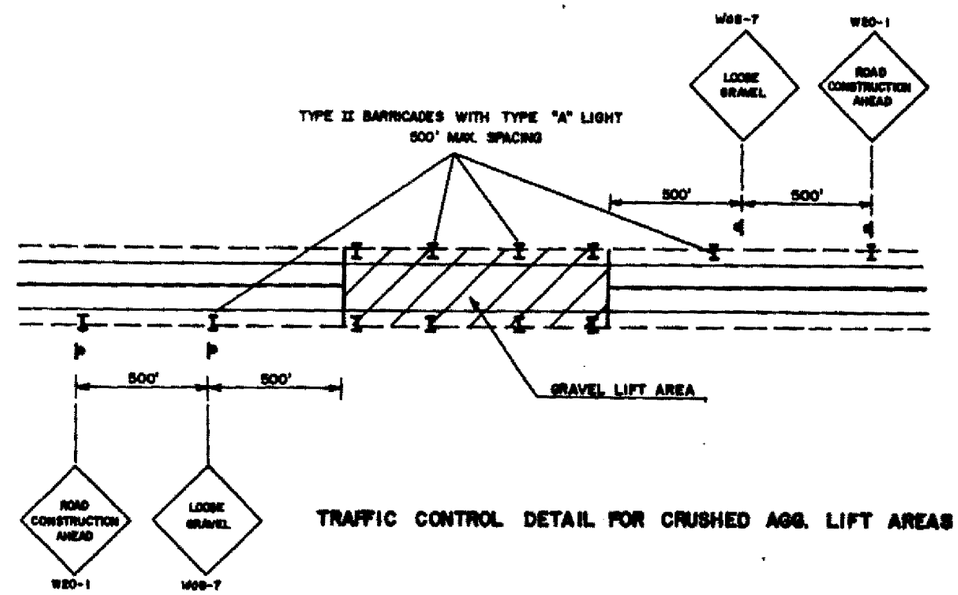
ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	2.6





TYPICAL SIDE ROAD DETAIL



TRAFFIC CONTROL DETAIL FOR CRUSHED AGG. LIFT AREAS

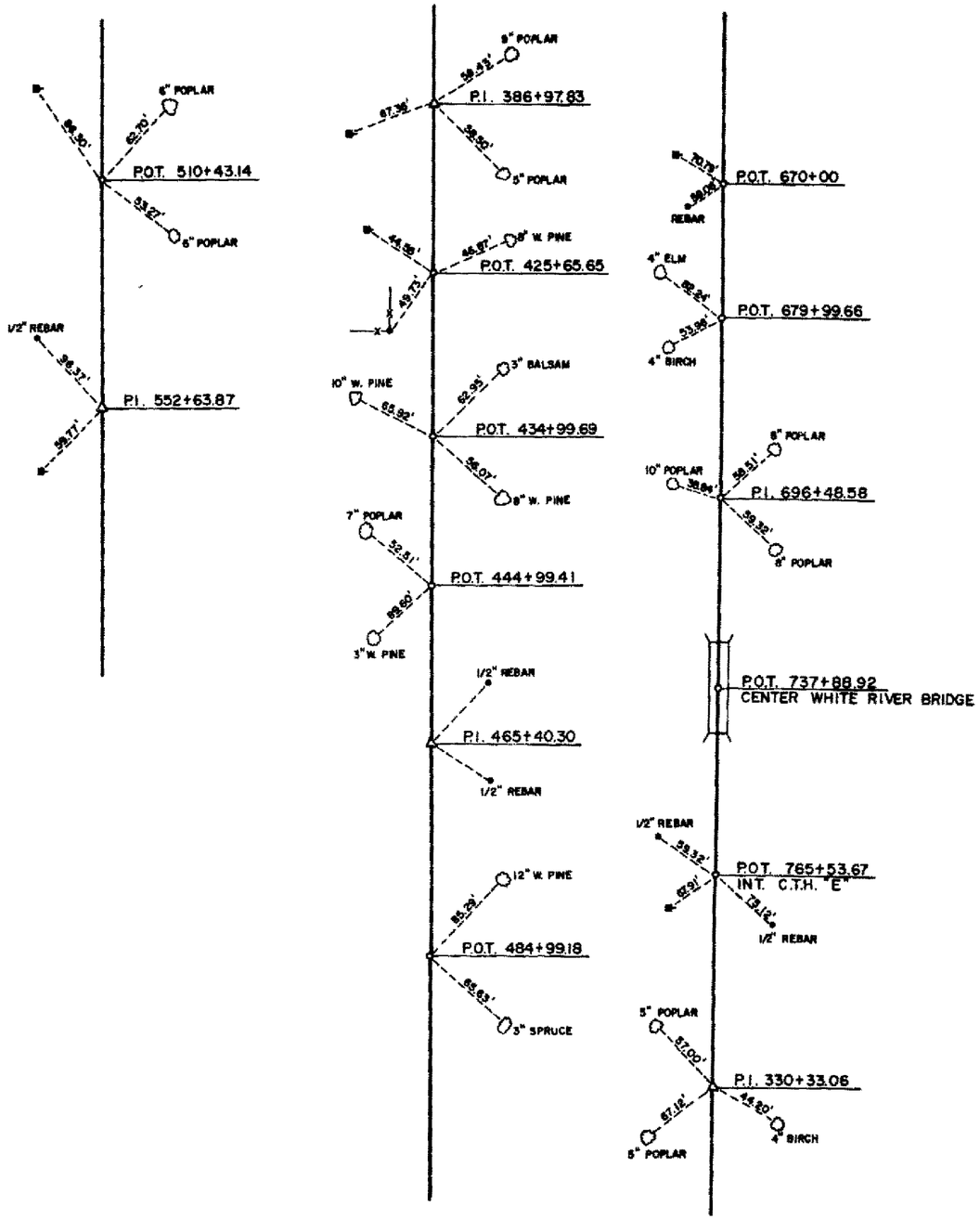
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS.

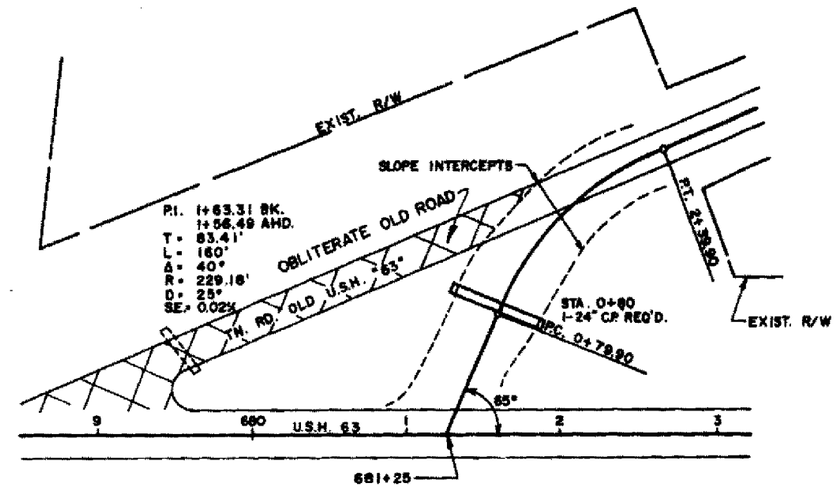
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED

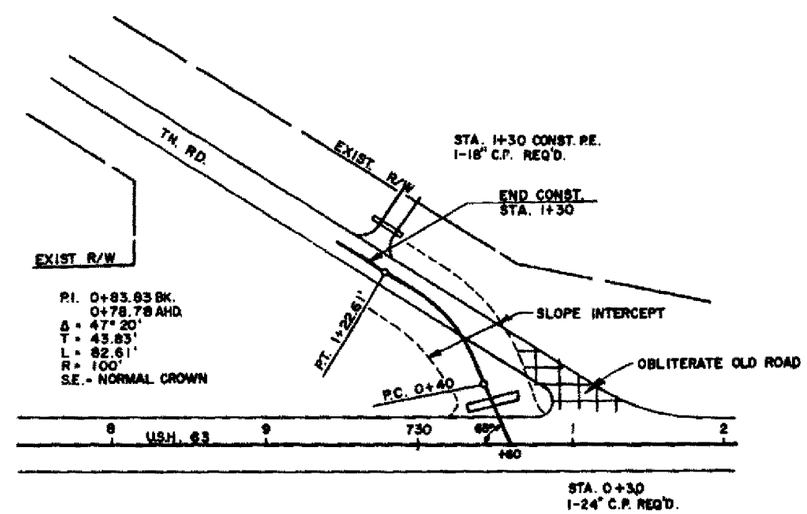
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	2.7





DETAIL FOR TN. RD. CONNECTION
USE AT: STA. 681+25



DETAIL FOR TN. RD. CONNECTION
USE AT STA. 730+60 LT.

E S T I M A T E O F Q U A N T I T I E S

DATE 01/15/88

PROJECT ID: 1560-03-72
BAYFIELD COUNTY
C.T.H. E - S.T.H. 11B
U.S.H. 63

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1560-03-72 QUANTITY
20101	CLEARING	STA.	54.00	54.00
20104	GRUBBING	STA.	54.00	54.00
20301	REMOVING OLD CULVERT, STATION 724+84	L.S.	1.00	1.00
20302	REMOVING OLD CULVERT, STATION 439+19	L.S.	1.00	1.00
20411	REMOVING GUARDRAIL	L.F.	644.00	644.00
20503	UNCLASSIFIED EXCAVATION	C.Y.	16,525.00	16,525.00
20640	EXCAVATION FOR STRUCTURES, STRUCTURAL PLATE PIPE OR PIPE ARCHES, STATION 439+19	L.S.	1.00	1.00
20811	SELECTED BORROW EXCAVATION	C.Y.	37,530.00	37,530.00
21301	FINISHING ROADWAY	L.S.	1.00	1.00
21401	OBLITERATING OLD ROAD	STA.	2.70	2.70
30404	CRUSHED AGGREGATE BASE COURSE	TON	33,688.00	33,688.00
30810	BASE PATCHING, BITUMINOUS	S.Y.	24.00	24.00
40204	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	1,731.00	1,731.00
40501	BITUMINOUS MATERIAL FOR PLANT MIXES	TON	1,441.00	1,441.00
40607	SINGLE AGGREGATE BITUMINOUS PAVEMENT	TON	24,011.00	24,011.00
50409	CONCRETE MASONRY, ENDWALLS	C.Y.	38.00	38.00
52003	CULVERT PIPE, CLASS III, 18-INCH	L.F.	26.00	26.00
52005	CULVERT PIPE, CLASS III, 24-INCH	L.F.	86.00	86.00
52061	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	2.00	2.00
52063	APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	4.00	4.00
52205	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 24-INCH	L.F.	38.00	38.00
52207	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 30-INCH	L.F.	22.00	22.00
52264	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	13.00	13.00

SHEET 3

DATE 01/15/88

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1560-03-72 QUANTITY
52266	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 30-INCH	EACH	7.00	7.00
52267	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 36-INCH	EACH	2.00	2.00
52407	SALVAGED CULVERT PIPE, 24-INCH	L.F.	60.00	60.00
52409	SALVAGED CULVERT PIPE, 30-INCH	L.F.	52.00	52.00
52411	SALVAGED CULVERT PIPE, 36-INCH	L.F.	56.00	56.00
52706	STRUCTURAL PLATE PIPE, 120-INCH	L.F.	144.00	144.00
60170	CONCRETE CURB AND GUTTER, 36-INCH, TYPE D	L.F.	320.00	320.00
60602	HEAVY RIPRAP	C.Y.	128.00	128.00
61406	ANCHORAGES FOR STEEL PLATE BEAM GUARD	EACH	4.00	4.00
61408	STEEL PLATE BEAM GUARD, CLASS A	L.F.	644.00	644.00
61801	MAINTENANCE AND REPAIR OF HAUL ROADS	L.S.	1.00	1.00
61910	MOBILIZATION	L.S.	1.00	1.00
62501	TOPSOIL	S.Y.	4,197.00	4,197.00
62505	SALVAGED TOPSOIL	S.Y.	101,644.00	101,644.00
62702	MULCHING	S.Y.	105,841.00	105,841.00
62905	FERTILIZER, TYPE B	CWT.	93.70	93.70
63002	SEEDING	LB.	4,016.70	4,016.70
63301	DELINEATOR POSTS	EACH	48.00	48.00
63305	DELINEATORS	EACH	48.00	48.00
64202	FIELD OFFICE, TYPE B	L.S.	1.00	1.00
64210	FIELD LABORATORY	L.S.	1.00	1.00
64301	TRAFFIC CONTROL	L.S.	1.00	1.00
64406	PAVEMENT MARKING, EPOXY, 4-INCH	L.F.	92,693.00	92,693.00
64414	PAVEMENT MARKING, CHANNELIZING, EPOXY, 8-INCH	L.F.	200.00	200.00
64484	TEMPORARY PAVEMENT MARKING	L.F.	8,880.00	8,880.00
90001	TEMPORARY CULVERT PIPE	L.S.	1.00	1.00
90002	EXCAVATION FOR STRUCTURES ENDWALL	L.S.	1.00	1.00
90003	HIGH STRENGTH BAR STEEL REINFORCEMENT, ENDWALLS	LB.	2,100.00	2,100.00
90004	GRADING AND SHAPING FOR SHOULDER BASE COURSE	STA.	615.00	615.00

SHEET 3.1

DATE 01/15/88

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1560-03-72 QUANTITY
90312	REMOVING BITUMINOUS SURFACE BUTT JOINTS	S.Y.	72.00	72.00
90379	SINGLE AGGREGATE BITUMINOUS MIX	TON	515.00	515.00
90545	CONCRETE COLLARS	EACH	10.00	10.00
90582	GEOTEXTILE FABRIC, TYPE HR	S.Y.	130.00	130.00
90644	EROSION MAT, DELIVERED	S.Y.	1,956.00	1,956.00
90645	EROSION MAT, INSTALLED	S.Y.	1,956.00	1,956.00
90646	SILT FENCE, DELIVERED	L.F.	2,500.00	2,500.00
90647	SILT FENCE, INSTALLED	L.F.	2,500.00	2,500.00
90648	SILT FENCE MAINTENANCE	L.F.	2,500.00	2,500.00
90714	TRAFFIC CONTROL, NON-METALLIC DRUMS	DAYS	800.00	800.00
90999	ON THE JOB TRAINING	HRS.	250.00	250.00

SHEET 3.2

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	34

UNCLASSIFIED EXCAVATION

STATION	LOCATION	C.Y.
681+25	TN. RD. LT.	24
784+84	MAINLINE	80
730+65	TN. RD. LT.	206
434+00-443+00	MAINLINE (WASTE)	731
547+76.87-552+01.78	TURN LANE & TAPER	549
10+00-21+69.26	BYPASS-(WASTE)	7192
	BYPASS-(RESTORE CUT AREAS)	7359

SALVAGED (& RESET) CULVERT PIPES

STATION	TYPE	DIA.	LENGTH TO RESET LT.	LENGTH TO RESET RT.	END WALLS
712+37	RCCP	36"	28'	28'	2
724+32	"	30"	20'	12'	2
382+75	"	30"	20'		1
399+96	"	24"	12'		1
431+29	"	24"	12'	20'	2
489+44	"	24"	8'	8'	2

CULVERT PIPE EXTENSIONS

STATION	TYPE	DIA.	LENGTH LT.	LENGTH RT.	ENDWALLS EACH
724+32	RCCP	30"	4'	4'	2
382+75	"	30"	10'	4'	2
417+32	"	24"	-	6'	1
489+44	"	24"	4'	4'	2
499+62	"	24"	4'	6'	2
516+24	"	24"	4'	-	1
533+34	"	24"	6'	4'	2

TEMPORARY PAVEMENT MARKING

MAINLINE		4200 L.F.
BYPASS	WHITE	2340
"	YELLOW	2340

PAVEMENT MARKING EPOXY, 4-INCH

MAINLINE	WHITE	69,250 L.F.
	YELLOW	23,443

DETAIL SUMMARY OF EARTHWORK QUANTITIES

STATION	MAINLINE SELECTED BORROW (C.Y.) LT.	MAINLINE SELECTED BORROW (C.Y.) RT.
646+16.54		
647+00	29	22
648+00	90	85
649+00	119	114
650+00	110	108
651+00	84	93
652+00	89	104
653+00	105	118
654+00	104	127
655+00	117	147
656+00	113	149
657+00	111	132
658+00	111	94
659+00	99	90
660+00	103	106
661+00	100	112
662+00	102	124
663+00	85	109
664+00	70	82
665+00	79	68
666+00	49	41
667+00	15	13
673+00	26	91
680+00	20	45
692+00		
732+90	1809	2181
742+50		
766+01.67	542	322
365+00		
410+00	1234	766
411+00	24	30
412+00	30	37
413+00	27	44
414+00	15	34
415+00	26	29
416+00	14	21
434+00	122	158

STATION	FILL LT. & RT.	SELECTED BORROW UNCLASS.	SELECTED BORROW LT. & RT.	WASTE
434+00				
435+00	22	127	28	127
436+00	10	183	12	183
437+00	21	146	26	146
438+00	146	75	183	75
439+00	1410	40	1762	40
440+00	3135	40	3919	40
441+00	1410	40	1762	40
442+00	413	40	516	40
443+00	59	40	74	40
455+00	106 99		132 124	
475+00				
547+76.87	840 798		1050 998	
552+01.78	98 151	549	123 189	549
SIDE ROADS				
681+25LT.	1045	24	1276	-
730+60LT.	125	206	-	50
BYPASS				
10+00		7576	8252	7576
21+69.26	6601			
REMOVE BYPASS				
10+00		7359		
21+69.26				
PIPE BACKFILL (FILL TO ORIGINAL GROUND)				
724+84	149	80	57	
439+19	4383	(4550)**	5478	

FILL VOLUMES ARE NOT ADJUSTED FOR SHRINKAGE
25% SHRINKAGE FACTOR APPLIED TO SELECT BORROW VOLUMES.

** THIS YARDAGE IS PAID AS "EXCAV. FOR STRUCTURES, PLATE PIPE."

MAINLINE CULVERTS

STATION	DIA. (IN.)	LENGTH LIN.FT.	TYPE	SHAPE	THICKNESS	CONC. MASONRY ENDWALLS C.Y.
439+19	120	144	SPP	SQ.ENDS	.168"	38

TOPSOIL, SALVAGED TOPSOIL, MULCH, FERT. & SEED

STATION TO STATION	TOPSOIL S.Y.	SALV. TOPSOIL S.Y.	MULCH S.Y.	FERTILIZER CWT.	SEED LB.
646+16.54 - 672+00	151	6693	6844	7.8	334.8
672+00 - 692+00	-	4444	4444	4.2	180.0
674+00 - 692+00		2889	2889	2.7	117.0
692+00 - 732+90	1316	11316	12632	10.8	464.1
742+50 - 766+00	588	5056	5644	5.2	221.4
316+00 - 365+00	-	10889	10889	10.3	441.0
365+00 - 434+00	720	15528	16248	15.0	642.7
434+00 - 443+00	-	4845	4845	4.3	184.8
443+00 - 455+00	-	2756	2756	2.6	110.4
455+00 - 475+00	-	4444	4444	4.2	180.0
475+00 - 547+76.87	182	16657	16839	15.6	670.7
547+76.87 - 552+01.78	-	944	944	0.9	38.3
10+00 - 21+69.26 (BYPASS FOR TEMP. SLOPES)	-	3652	3652		
10+00 - 21+69.26 BYPASS	1240	11144	12384	9.4	400.9
681+25 TN RD. LT.	-	362	362	0.7	29.6
730+60 - TN RD. LT.	-	25	25	0.02	1.0

GRADING & SHAPING FOR SHOULDER BASE COURSE

STATION TO STATION	STA.
667+00-732+90	132
742+50-766+01.67	47
316+00-410+00	188
416+00-435+00	38
443+00-547+76.87	210

ANCHORAGES FOR STEEL PLATE BEAM GUARD

LOCATION	STATION	SIDE	EACH
BYPASS	14+66	LT. & RT.	2
BYPASS	17+88	LT. & RT.	2

OLD ROAD OBLITERATION

STATION	LOCATION	AMT. (STA.)
681+25	TN. RD. LT.	2.2
730+60	TN. RD. LT.	0.5

HEAVY RIPRAP & GEOTEXTILE FABRIC, TYPE HR

STATION	LOCATION	LENGTH (L.F.)	HEAVY RIPRAP (C.Y.)	GEOTEXTILE FABRIC (S.Y.)
*439+19	LT. & RT.	20	64	130
*15+85 BYPASS	LT. & RT.	20	64	

* HEAVY RIPRAP FROM THE TEMPORARY BYPASS MAY BE USED FOR MAINLINE CULVERT STATION 439+19 IF FEASIBLE.

CONCRETE CURB & GUTTER, 36", TYPE "D"

STATION	LOCATION	L.F.
676+53	CTH "E" RT.	167
765+80	CTH "E" LT.	153

SIDE ROAD CULVERTS

STATION	LOCATION	DIA. (IN.)	LENGTH	THICKNESS STEEL	THICKNESS ALUM.	RCCP CLASS	A.E.W.
681+25	TN. RD. LT.	24	46	.064	.075	III	2
730+60	TN. RD. LT.	24	40	.064	.075	III	2
730+60	TN. RD. LT.	18	26	.064	.060	III	2

PAVEMENT MARKING, EPOXY CHANNELIZING, 8-INCH

STATION TO STATION	LENGTH (L.F.)
550+01.78 - 552+01.78	200

CONCRETE COLLARS (UNDISTRIBUTED)

DIA. INCHES	EACH
24	6
30	3
36	1

CRUSHED AGGREGATE, BIT. SURFACE, ETC.

STATION TO STATION	LOCATION	BASE COURSE (TONS)	SHOULDER (TON)	SINGLE AGG. BIT. PAV'T. (TON)	SINGLE AGG. BIT. MIX (TON)
646+16.54-667+00	MAINLINE	5620	260	1146	
667+00-674+00	"	430	85	985	
674+00-679+00	"	1066	63	275	
679+00-692+00	"	676	152	718	
692+00-732+90	"	2511	511	2250	
742+50-766+01.67	"	1444	294	1293	
316+00-365+00	"	2548	573	2695	
365+00-410+00	"	2763	843	2475	
410+00-416+00	"	654	75	330	
416+00-434+00	"	1165	225	990	
434+00-443+00	"	1392	113	495	
443+00-455+00	"	739	150	660	
455+00-475+00	"	1040	235	1100	
475+00-547+76.87	"	4467	910	4002	
547+76.87-552+01.78	"	363	83	285	
10+00-21+69.26	BYPASS	1329	155		515
676+53	CTH"E" RT.	323		101	
681+25	TN. RD. LT.	133			
724+84	MAINLINE	15			
730+80	TN. RD. LT.	92		99	
765+80	CTH"E" LT.	100			
TN. RD. INTERSECTIONS UNDIST.		400		250	
UNDIST. BIT. WIDENING				4465	

CLEARING & GRUBBING

STATION TO STATION	CLEARING STA.	GRUBBING STA.
646+16 - 667+00	9	9
667+00 - 674+00	0	0
674+00 - 680+00	0	0
692+00 - 732+90	18	18
742+00 - 766+00	2	2
365+00 - 410+00	11	11
410+00 - 416+00	0	0
416+00 - 434+00	6	6
434+00 - 443+00	8	8
443+00 - 455+00	0	0
475+00 - 547+76.87	0	0
547+86.87 - 552+01.78	0	0

STEEL PLATE BEAM GUARD, CLASS A & ANCHORAGES

LOCATION	STATION TO STATION	SIDE	LENGTH(L.F.)	EACH
BYPASS	14+66 - 17+88	LT.,RT.	644	4

REMOVING OLD CULVERTS

LOCATION	DESCRIPTION	EACH
724+84 MAINLINE	72"X 84' R.C.C.P.	1
439+19 MAINLINE	8'X8'X07' R.C. BOX	1

BITUMINOUS BASE PATCHING

STATION	LOCATION	AMOUNT(S.Y.)
724+84	MAINLINE	24

REMOVING GUARDRAIL

LOCATION	STATION TO STATION	SIDE	LENGTH(L.F.)
BYPASS	14+66 - 17+88	LT.,RT.	644

CONCRETE MASONRY, ENDWALLS

STATION	LOCATION	C.Y.
439+19	LT. & RT.	38

SILT FENCE; DELIVERED, INSTALLED & MAINTAINED

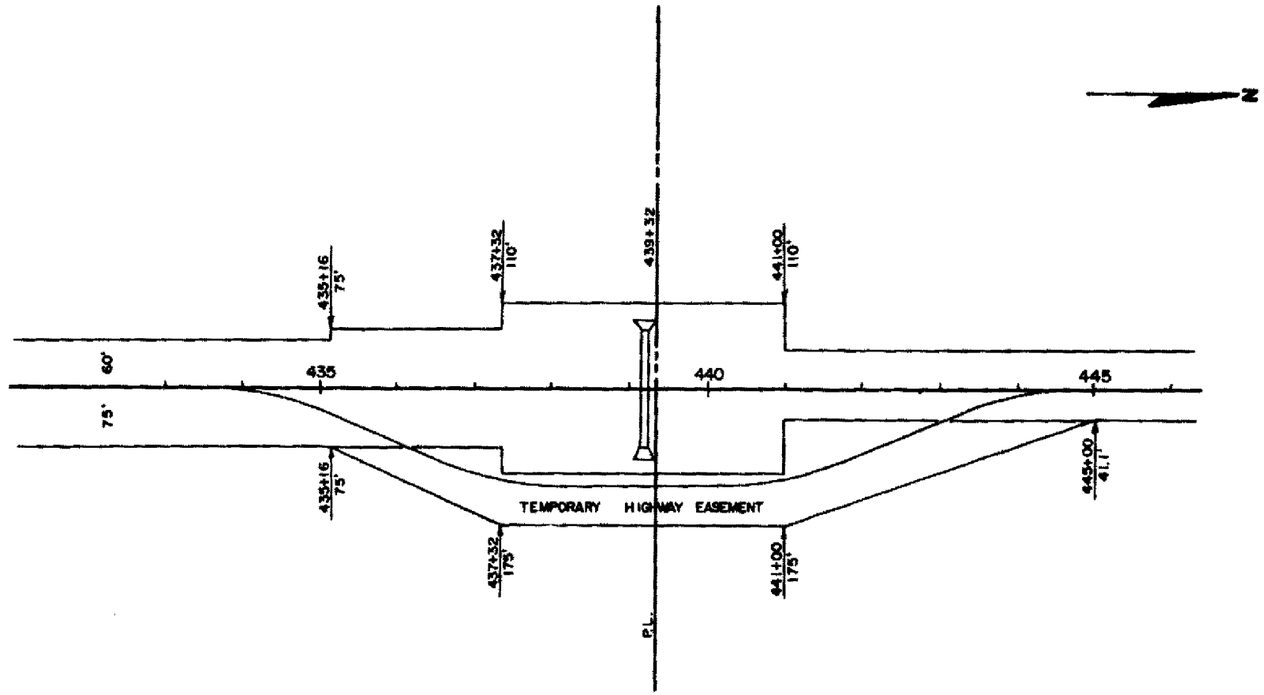
STATION TO STATION	LOCATION	L.F.
436+00 - 443+00	UNDISTRIBUTED	2500

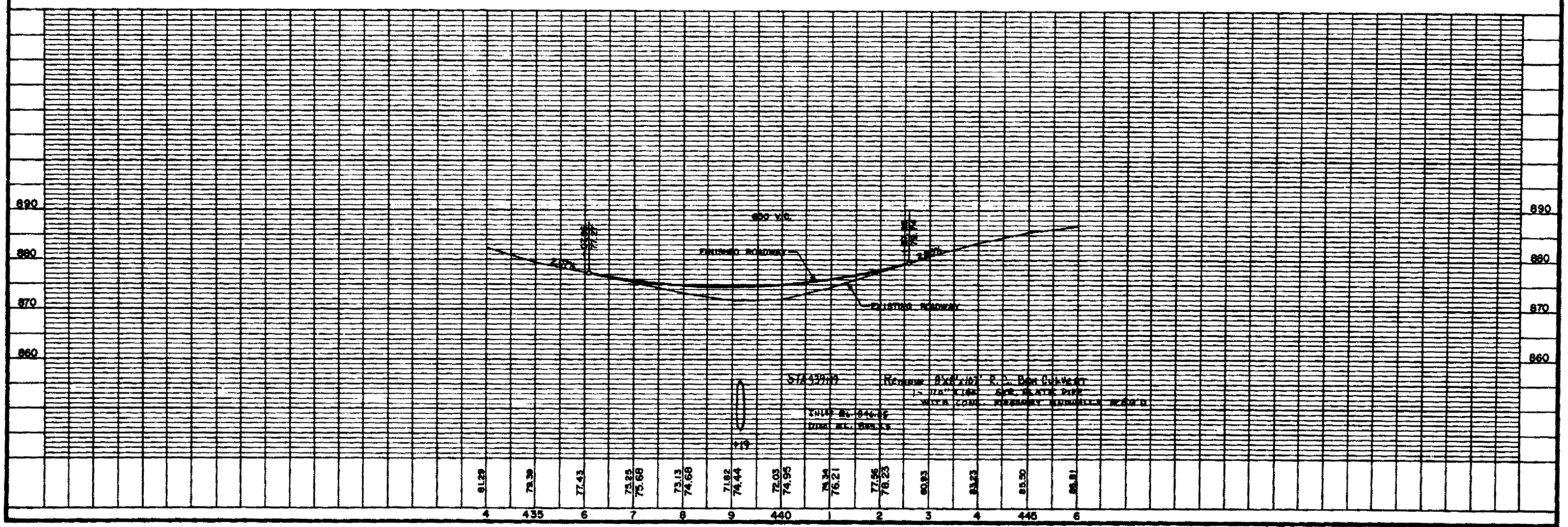
EROSION MAT, DELIVERED & INSTALLED

STATION TO STATION	LOCATION	S.Y.
433+00 - 445+00	LT.	978
433+00 - 445+00	RT.	978

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	5,D

MAIN LINE

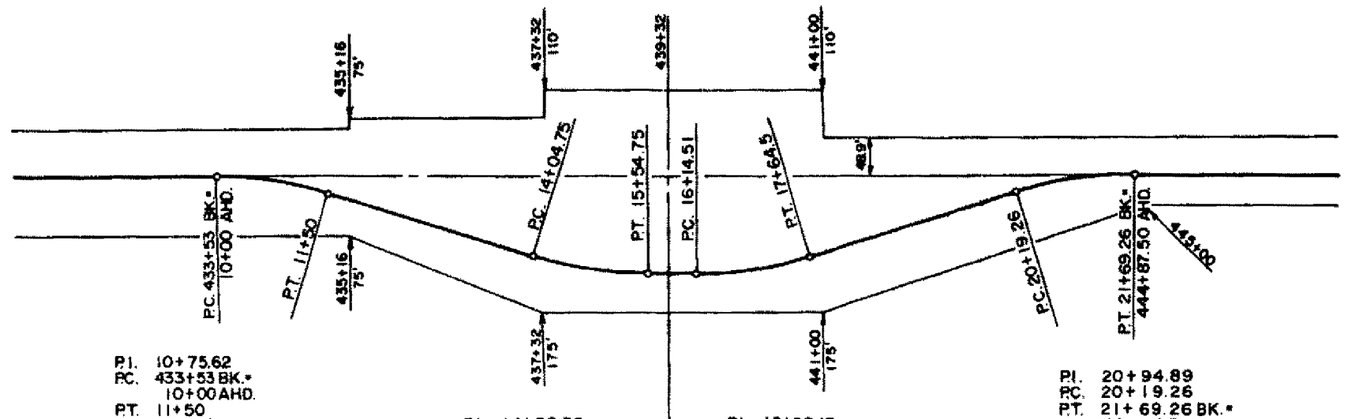




Cat. No. 2130 - 0140

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	B1

TEMP. ROADWAY



P.I. 10+75.62
P.C. 433+53 BK.=
10+00 AHD.
P.T. 11+50
Δ = 18°00'
D = 12°00'
T = 75.62'
L = 150.00'
R = 477.47'
S.E.= 0.03%

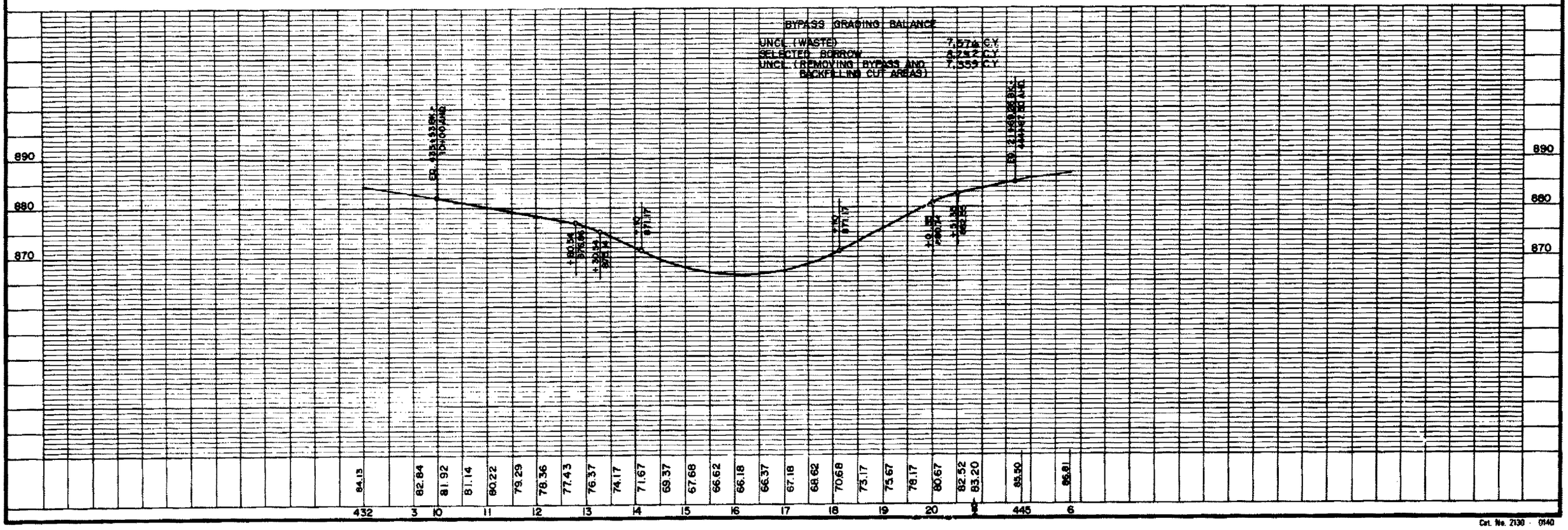
P.I. 14+80.38
P.C. 14+04.75
P.T. 15+54.75
Δ = 18°00'
D = 12°00'
T = 75.62'
L = 150.00'
R = 477.47'
S.E.= 0.03%

P.I. 16+90.13
P.C. 16+14.51
P.T. 17+64.51
Δ = 18°00'
D = 12°00'
T = 75.62'
L = 150.00'
R = 477.47'
S.E.= 0.03%

P.I. 20+94.89
P.C. 20+19.26
P.T. 21+69.26 BK.=
444+87.50 AHD.
Δ = 18°00'
D = 12°00'
T = 75.62'
L = 150.00'
R = 477.47'
S.E.= 0.03%

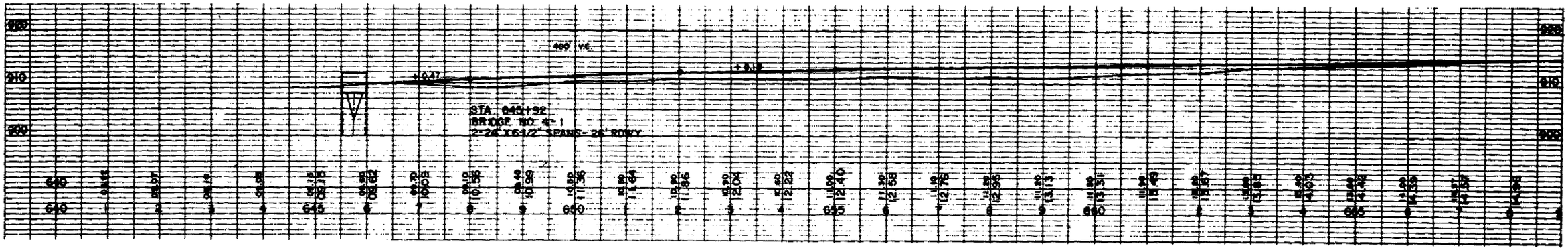
BYPASS GRADING BALANCE

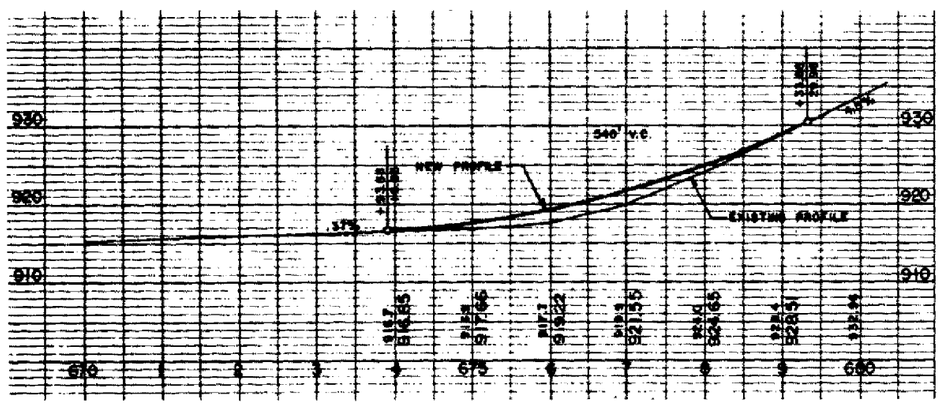
UNCL. (WASTE)	7,576 C.Y.
SELECTED BORROW	8,242 C.Y.
UNCL. (REMOVING BYPASS AND BACKFILLING CUT AREAS)	7,559 C.Y.

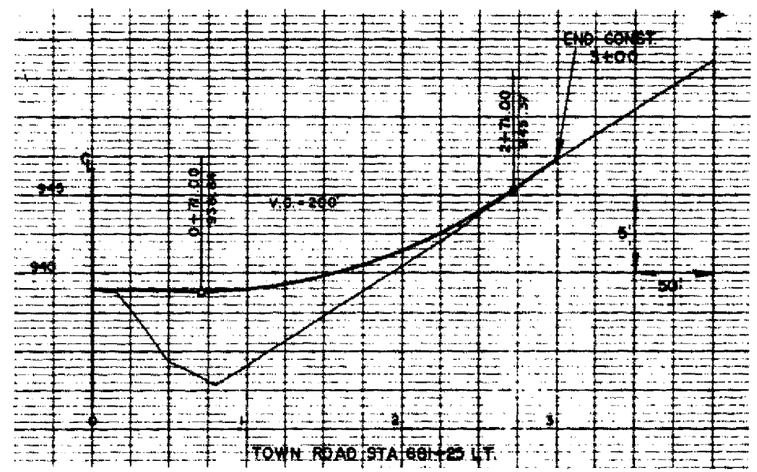


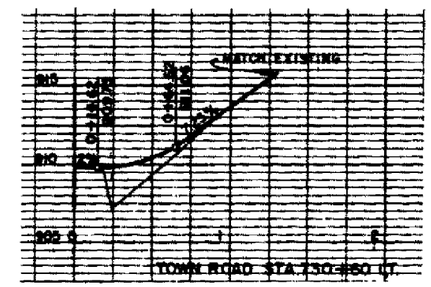
STATE PROJECT NUMBER	SHEET NO.
1560-03-72	5.2

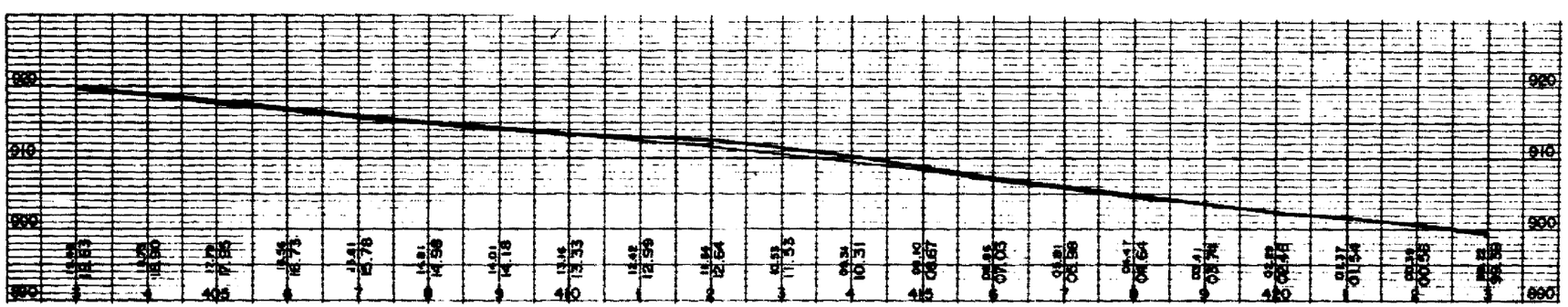
VERTICAL PROFILE AREAS









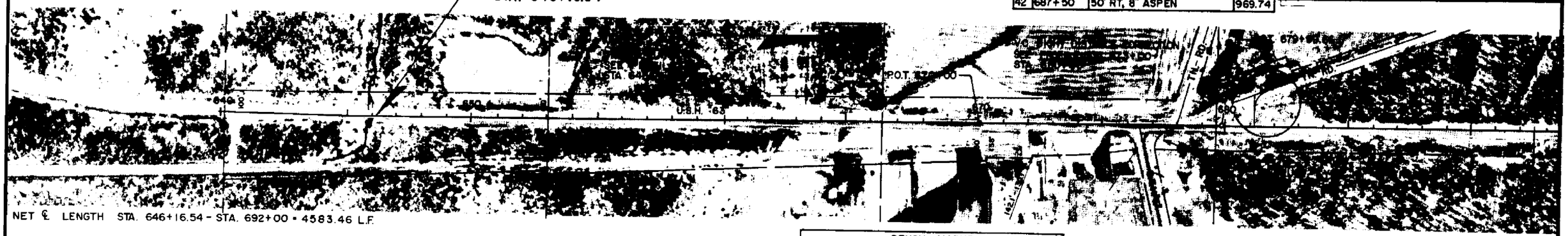


ORIGIN OF LEVELS
B.M.
USGS DATUM ELEV. 967.941
STAMPED K-42
2 MI. NORTH OF BIBBON, 1 POLE
SOUTH OF MILEPOST 145, 40' EAST OF TRACK.

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
39		S. END OF E. CURB, BIBBON CK. BR.	910.30
40	656+70	60' RT, 12" ASPEN	908.43
41	673+95	100' RT, SW. COR. PUMP ISL.	915.87
42	687+50	50' RT, 8" ASPEN	969.74

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	53

BEGIN PROJECT 1560-03-72
STA. 646+16.54

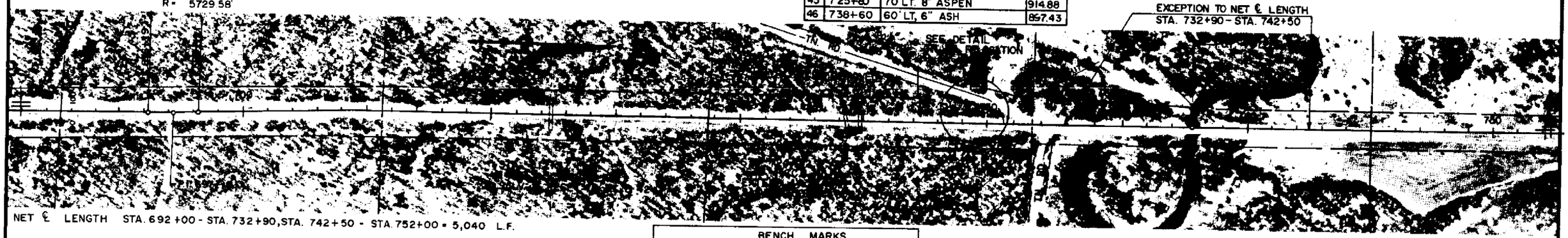


NET ℄ LENGTH STA. 646+16.54 - STA. 692+00 = 4583.46 L.F.

P.I. 697+19.1
Δ = 2°-00' LT.
D = 1° 00'
T = 100.01'
L = 200.00'
R = 5729.58'

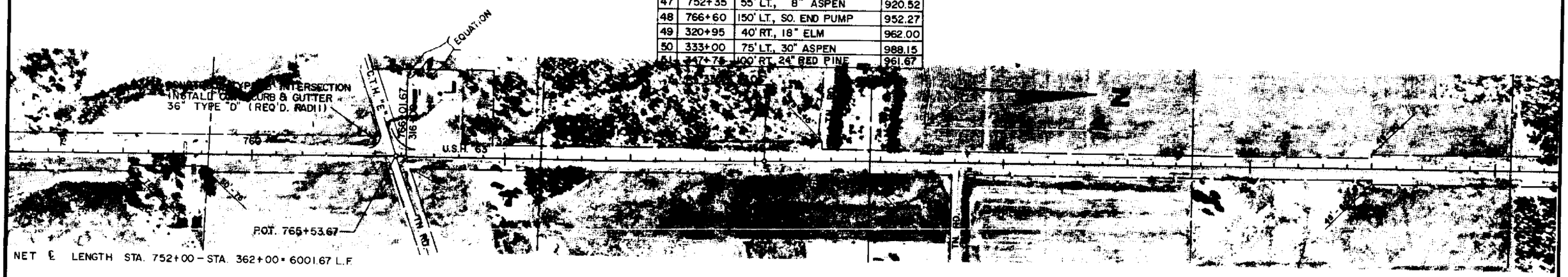
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
43	700+95	50' RT, 18" WHITE BIRCH	969.57
44	710+60	75' RT, 12" ASPEN	940.66
45	725+80	70' LT. 8" ASPEN	914.88
46	738+60	60' LT, 6" ASH	897.43

EXCEPTION TO NET ℄ LENGTH
STA. 732+90 - STA. 742+50



NET ℄ LENGTH STA. 692+00 - STA. 732+90, STA. 742+50 - STA. 752+00 = 5,040 L.F.

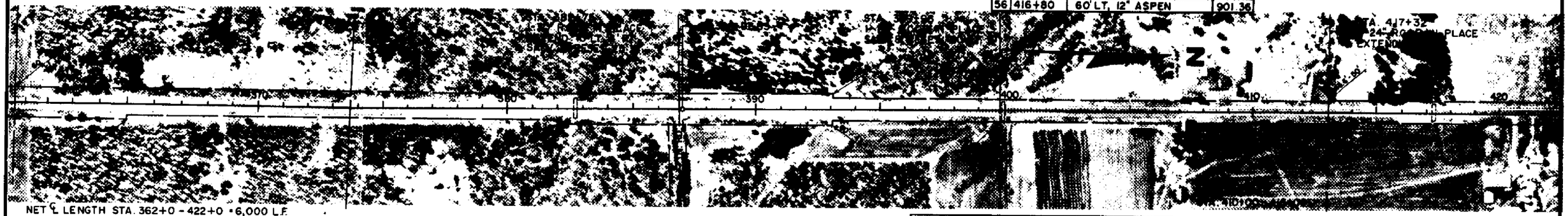
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
47	752+35	55' LT., 8" ASPEN	920.52
48	766+60	150' LT., SO. END PUMP	952.27
49	320+95	40' RT., 18" ELM	962.00
50	333+00	75' LT., 30" ASPEN	988.15
51	347+75	100' RT. 24" RED PINE	961.67



NET ℄ LENGTH STA. 752+00 - STA. 362+00 = 6001.67 L.F.

STATE PROJECT NUMBER	SHEET NO
1560-03-72	5.4

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
52	365+40	90' RT, 15" ASPEN	962.03
53	378+15	75' RT, 8" ASPEN	961.42
54	386+70	55' LT, 10" ASPEN	959.21
55	398+60	40' LT, 8" ASPEN	926.00
56	416+80	60' LT, 12" ASPEN	901.36



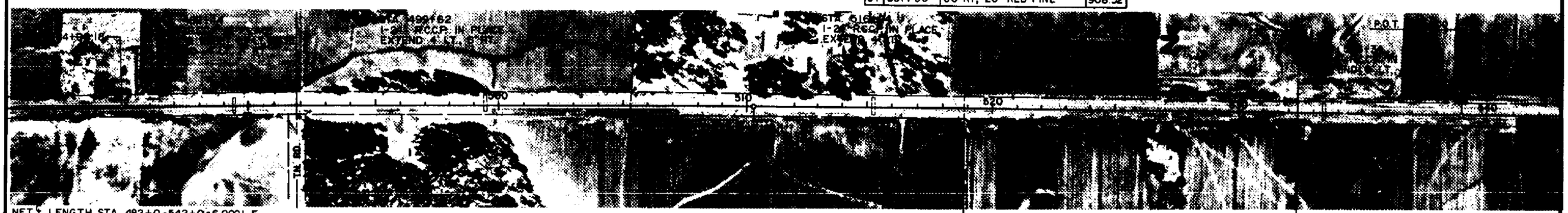
NET ℄ LENGTH STA. 362+0 - 422+0 = 6,000 L.F.

STA. 439+19
1-8' X 8' BOX CULVERT TO
BE REMOVED
1-120" S.P.P. TO
BE PLACED

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
57	437+60	60' LT, 5" ASPEN	875.89
58	455+65	60' RT, 5" ASPEN	874.35
59	466+25	100' RT, POWER POLE	878.41
60	474+80	60' LT, 24" WILLOW	882.16

NET ℄ LENGTH STA. 422+0 - 482+0 = 6,000 L.F.

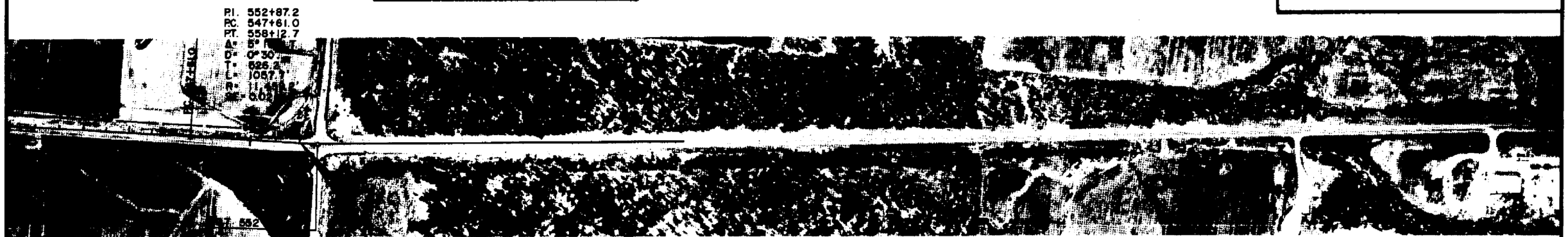
BENCH MARKS			
NO	STATION	DESCRIPTION	ELEV.
61	492+75	70' RT, 20" WHITE PINE	891.04
62	506+65	65' LT, 18" ASPEN	901.32
63	517+35	55' LT, 10" BLACK ASH	901.64
64	531+90	60' RT, 20" RED PINE	908.32



NET ℄ LENGTH STA. 482+0 - 542+0 = 6,000 L.F.

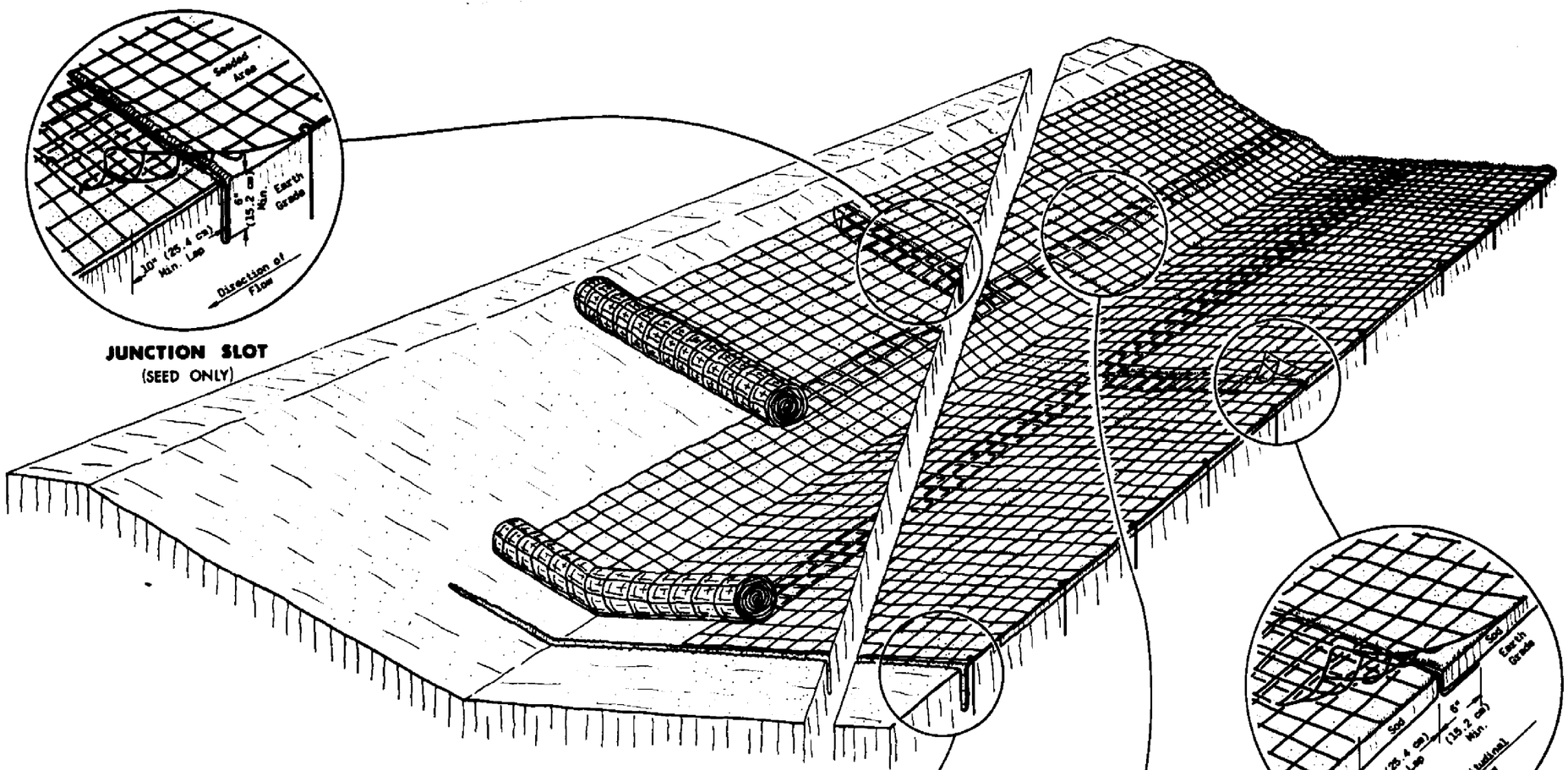
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
65	551+85	135' LT., 8" ASPEN	900.50

STATE PROJECT NUMBER	SHEET NO.
1560-03-72	5.5



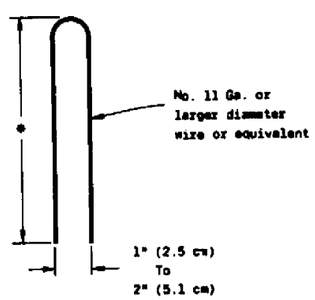
NET ℄ LENGTH STA. 542+00-552+01.78 = 1001.78 L.F.

END PROJECT 1560-03-72
STA. 552+01.78



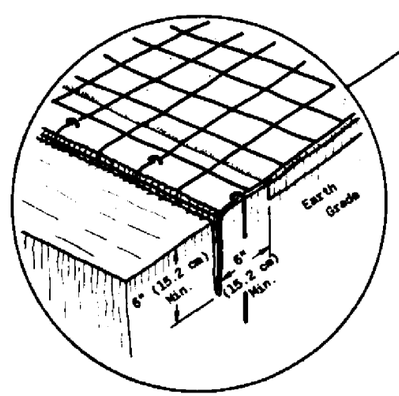
JUNCTION SLOT
(SEED ONLY)

JUNCTION SLOT
(SOD ONLY)

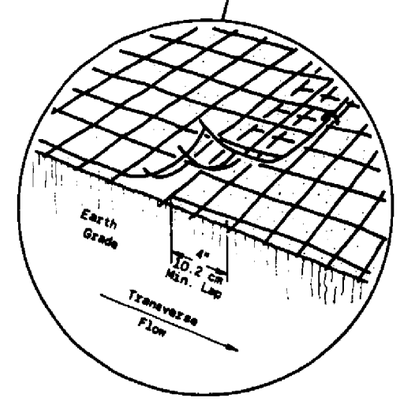


DETAIL OF TYPICAL STAPLE

*6" (15.2 cm) Min. for firm soils
12" (30.5 cm) Min. for loose soils
8" (20.3 cm) Min. where both sod and mats are being used.



ANCHOR SLOT
AT BEGINNING AND END OF EROSION MAT
(SEED AND SOD)



LAP JOINT
(SEED AND SOD)

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Variations in the dimensions or materials shown hereon shall be permitted if they provide equivalent protection and material strength and if prior approval of the Engineer is obtained.

Lap Joints shall not be placed in the bottom of V-shaped ditches.

Junction Slots on adjacent strips of Matting shall be staggered a minimum of 4 feet (1.219 m) apart.

Edges of the Erosion Mat shall be impressed in the soil.

Erosion Mat shall be measured and payed for in accordance with the Standard Specifications.

EROSION MAT OVER SOD

a. Only Jute Fabric will be permitted over sod.

b. Wood Stakes for Sod may be omitted by the Engineer if the existing slope and soil conditions so warrant.

c. The width of Erosion Mat shall always equal the Sod width.

d. Sod strips may be placed either longitudinally or transversely to the flow line of the Ditch.

EROSION MAT OVER SEEDING

Junction or Anchor Slots shall be at minimum intervals of 100 feet (30.48 m) on grades up to and including 3 percent, and 50 feet (15.24 m) on grades exceeding 3 percent.

METHOD OF DIMENSIONING
1'-0" (30.5 cm)
1'-0" (30.5 cm)
BASIS: 1 in. = EXACTLY 25.4 mm

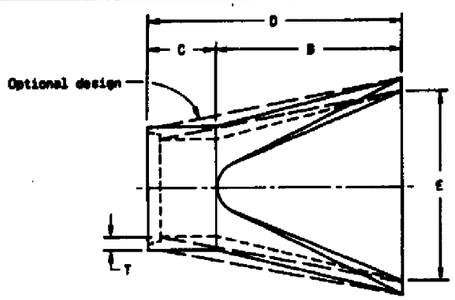
EROSION MAT

State of Wisconsin
Department of Transportation
Division of Highways

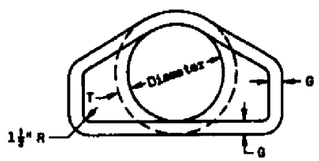
RECOMMENDED FOR APPROVAL:
12-3-73 — DATE — CHIEF of FACILITIES DEVELOPMENT
APPROVED
1-15-74 — DATE — STATE HIGHWAY ENGINEER

S.D.D. 8E7-1

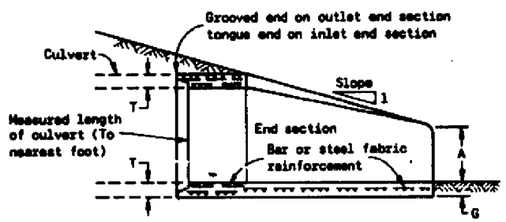
S.D.D. 8E7-1



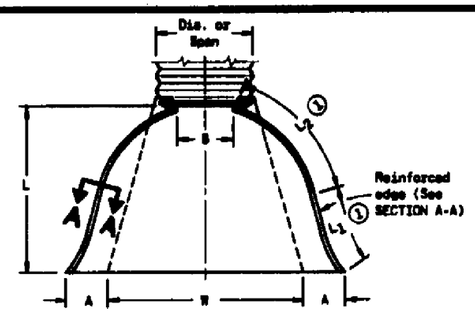
PLAN



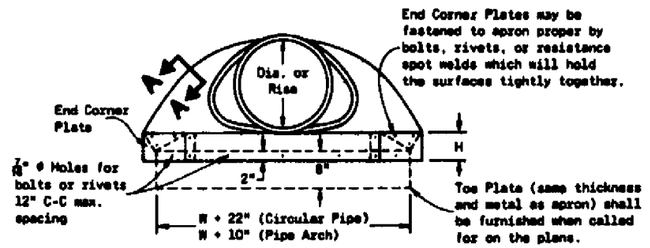
END VIEW



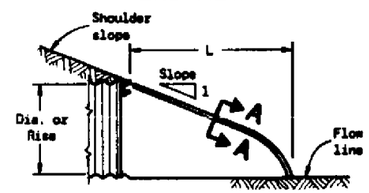
LONGITUDINAL SECTION



PLAN

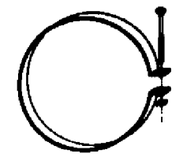


END VIEW

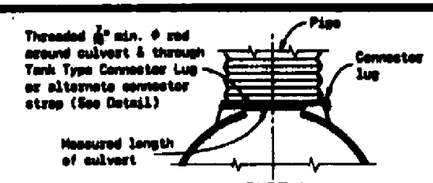


SIDE ELEVATION

1" Wide, 12 Ga. (0.108" thick) galvanized strap with standard 6" x ½" band bolt and nut.

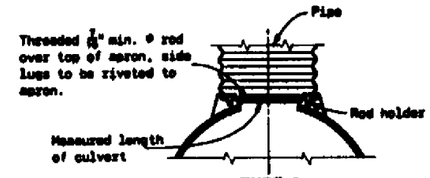


Alternate for Type 1 Connection
END SECTION CONNECTOR STRAP



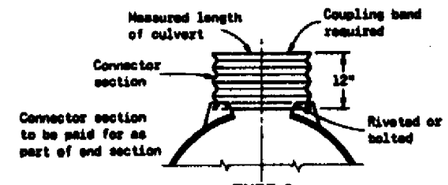
TYPE 1

For 12" thru 24" only (Circular pipe)



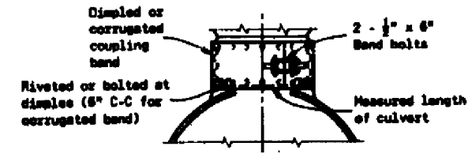
TYPE 2

For 30" & 36" only (Circular pipe)
For 17"x13" thru 57"x38" only (Pipe arch)



TYPE 3

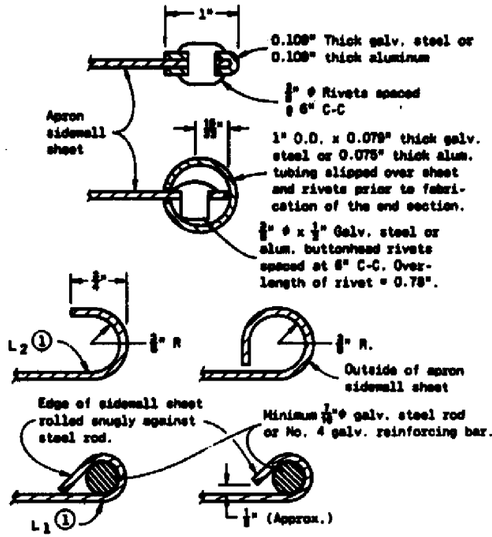
For 42" thru 84" only (Circular pipe)
For 64"x43" & 71"x47" (Pipe arch)



TYPE 5

Alternate for:
All sizes corrugated circular pipe & pipe arches

NOTE: Dimpled band fits over outside of endwall, and corrugated band fits inside endwall. Dimpled band may be used with helically corrugated pipe.



SECTION A-A

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Variations of the dimensions and designs shown hereon will be permitted providing equivalent capacity and structural integrity are attained, and prior approval of the Engineer is obtained.

Concrete culvert endwalls may not be used with galvanized steel or aluminum culvert pipe or vice versa.

Galvanized steel or aluminum endwalls shall normally be installed on culvert pipe of the same metal. The use of galvanized steel endwalls on aluminum pipes is permitted, provided the two metals at the joint interface are kept separated by a suitable insulating material approximately 1/16" thick or greater. Such material would be an asphalt impregnated fabric, a sheet plastic, a rubber gasket or other non-degradable material of substantial strength.

When two or more pipe arches with apron endwalls are to be laid adjacent to each other, they shall be separated by the following amount:

PIPES: Total width of apron endwall less the diameter of pipe plus 6 inches.

PIPE ARCHES: Total width of apron endwall less the span dimension of the pipe arch plus 6 inches.

① A combination of steel rod rolled into edge sidewall (L_1), and 180° roll on edge of sidewall (L_2), is permitted for metal apron endwalls up to 60" diameter for circular pipe, and 77" x 52" for pipe arches.

CONNECTION DETAILS

CIRCULAR PIPE

For circumferentially corrugated pipe use Endwall Connection Details 1, 2, 3 or 5 as applicable.

For helically corrugated pipe use Endwall Connection Details 1, 2 or 5.

For helically corrugated pipes with two circumferential corrugations at each end use Endwall Connection Details 1, 2 or 3.

PIPE ARCH

Use Endwall Connection Details 2, 3 or 5 as applicable.

PIPE DIA. (in.)	APPROX. WEIGHT PER SECTION	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	530	2	4	24	48 7/8	72 7/8	24	2	3 to 1
15	740	2½	6	27	46	73	30	2½	↑
18	990	2½	9	27	46	73	36	2½	↑
21	1,280	2¾	9	36	37½	73½	42	2¾	↑
24	1,520	3	9½	43½	30	73½	48	3	↑
27	1,930	3¼	10½	49½	24	73½	54	3¼	↑
30	2,190	3½	12	54	19¾	73¾	60	3½	↑
36	4,100	4	15	63	34¾	97¾	72	4	↑
42	5,380	4½	21	63	35	98	78	4½	↑
48	6,550	5	24	72	26	98	84	5	3 to 1
54	8,040	5½	27	65	* 33½ - 35 **	* 98½ - 100 **	90	5	2½ to 1
60	8,730	6	* 30 - 35 **	60	39	99	96	5	2 to 1
66	10,630	6½	* 24 - 30 **	* 72 - 78 **	* 21 - 27 **	↑	102	5½	↑
72	12,520	7	* 24 - 36 **	78	21	↑	108	6	↑
78	14,430	7½	* 24 - 36 **	78	21	99	114	6½	2 to 1
84	18,160	8	36	90½	21	111½	120	6½	1½ to 1

* Minimum ** Maximum

REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (in.)	MIN. THICKNESS (Inches) STEEL	ALUM.	DIMENSIONS (Inches) A ±1"	B MAX.	H ±1"	L ±1½"	L_1 ①	L_2 ①	W ±2"	APPROX. SLOPE
12	0.064	0.060	6	6	6	21	12	17½	24	2½ to 1
15	↑	↑	7	8	↑	26	14	21¾	30	↑
18	↓	↓	8	10	↑	31	15	26¼	36	↑
21	↑	0.060	9	12	↑	36	18	29⅝	42	↑
24	0.064	0.075	10	13	6	41	18	37¼	48	↑
30	0.079	0.075	12	16	8	51	18	52¼	60	↑
36	0.079	0.105	14	19	9	60	24	59¾	72	↑
42	0.109	0.105	16	22	11	69	24	76⅝	84	2½ to 1
48	↑	0.135	18	27	12	78	24	81	90	2¼ to 1
54	↑	0.135	↑	30	↑	84	30	85½	102	2 to 1
60	↑	0.164	↑	33	↑	87	–	–	114	1¾ to 1
66	↑	↑	↑	36	↑	87	–	–	120	1½ to 1
72	↑	↑	↑	39	↑	87	–	–	126	1½ to 1
78	↑	↑	↑	42	↑	87	–	–	132	1¼ to 1
84	0.109	0.164	18	45	12	87	–	–	138	1¼ to 1

NOTE: All splices to be lap riveted or bolted.

METAL APRON ENDWALLS
FOR CIRCULAR PIPE

PIPE-ARCH DIMENSIONS (Inches) SPAN	RISE	MIN. THICK. (Inches) STEEL	ALUM.	DIMENSIONS (Inches) A ±1"	B MAX.	H ±1"	L ±1½"	L_1 ①	L_2 ①	W ±2"	APPROX. SLOPE
17	13	0.064	0.060	7	9	6	19	14	18	30	2½ to 1
21	15	↑	0.060	7	10	↑	23	14	19⅝	36	↑
24	18	↑	0.060	8	12	↑	28	18	21⅝	42	↑
28	20	0.064	0.075	9	14	↑	32	18	27½	48	↑
35	24	0.079	0.075	10	16	6	39	18	37⅝	60	↑
42	29	0.079	0.105	12	18	8	46	24	45⅝	75	↑
49	33	0.109	0.105	13	21	9	53	↑	54¾	85	↑
57	38	↑	0.135	18	26	12	63	↑	68	90	2½ to 1
64	43	↑	0.135	↑	30	↑	70	24	72¾	102	2¼ to 1
71	47	↑	0.164	↑	33	↑	77	30	82½	114	2¼ to 1
77	52	↑	0.164	↑	36	↑	77	–	–	126	2 to 1
83	57	0.109	0.164	18	39	12	77	–	–	138	2 to 1

NOTE: All splices to be lap riveted or bolted.

METAL APRON ENDWALLS
FOR PIPE ARCHES

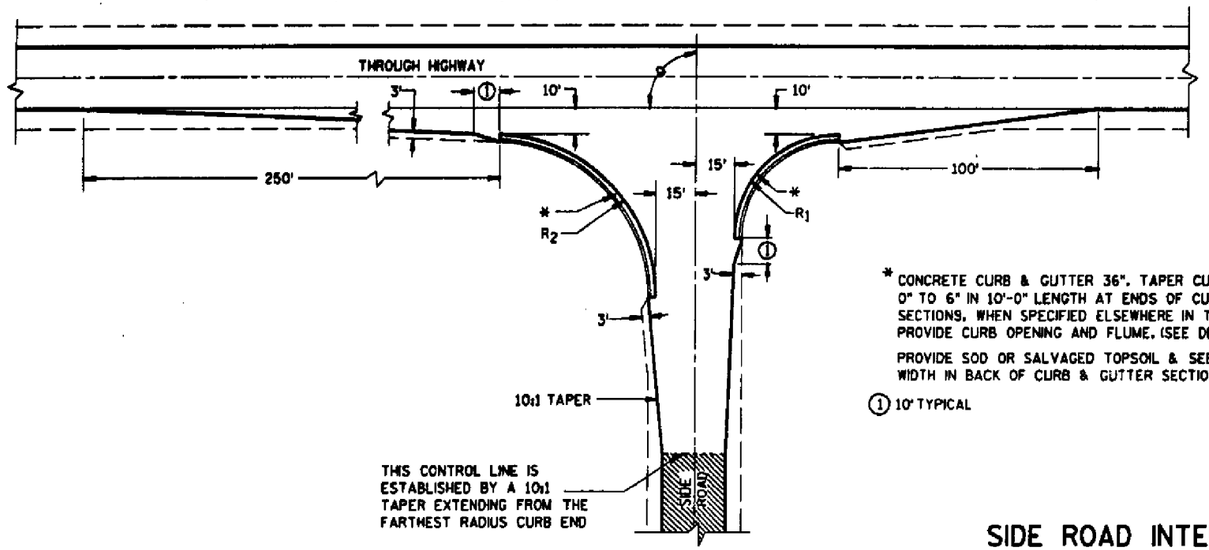
APRON ENDWALLS FOR
CULVERT PIPE AND PIPE ARCHES

State of Wisconsin
Department of Transportation

APPROVED 2-15-82 DATE — CHIEF DESIGN ENGINEER

S.D.D. 8 F 1-9

S.D.D. 8 F 1-9



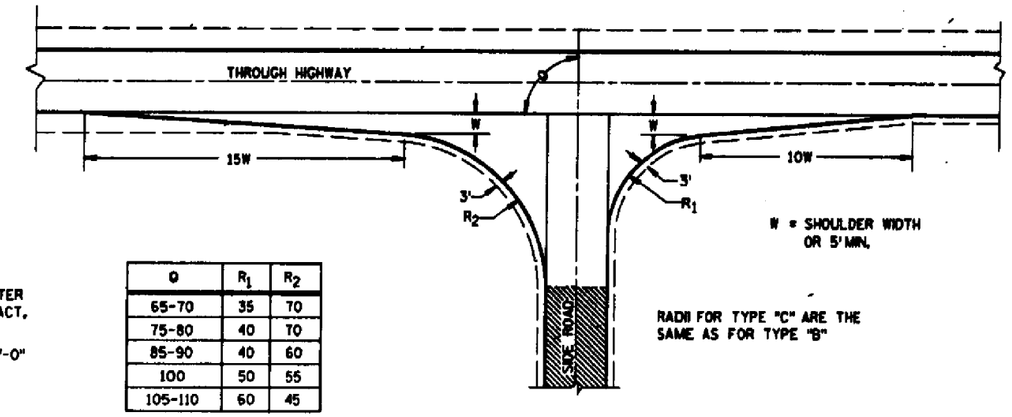
TYPE "B"

* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME. (SEE DETAIL).

PROVIDE SOD OR SALVAGED TOPSOIL & SEED TO A 3'-0" WIDTH IN BACK OF CURB & GUTTER SECTIONS.

(1) 10' TYPICAL

Φ	R_1	R_2
65-70	35	70
75-80	40	70
85-90	40	60
100	50	55
105-110	60	45



TYPE "C"

SIDE ROAD INTERSECTIONS DETAILS

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

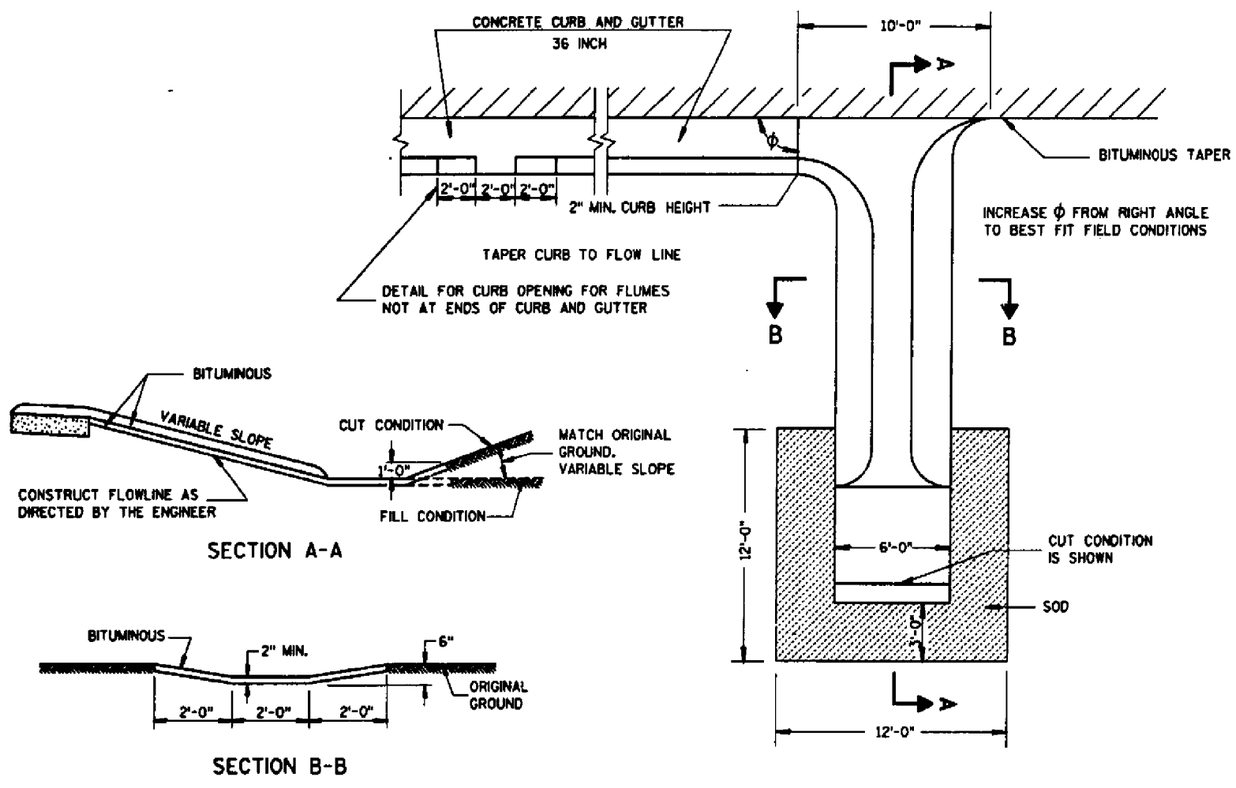
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING SURFACE



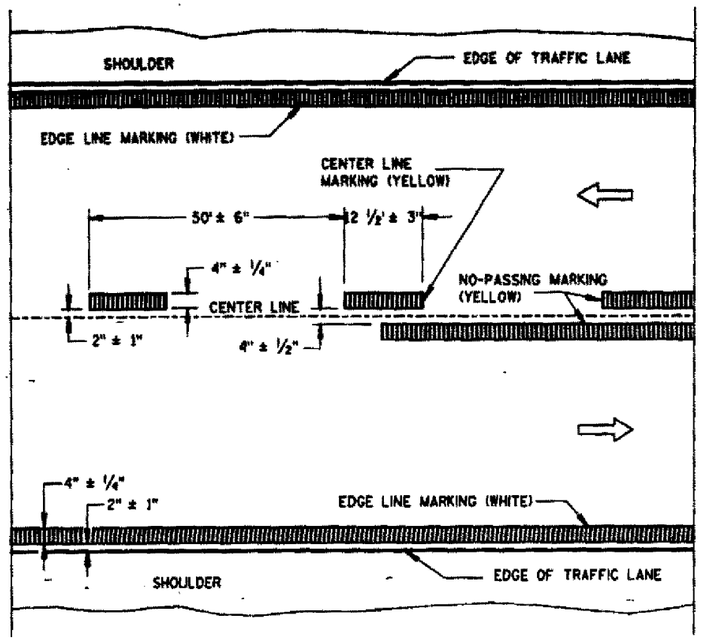
DETAIL OF BITUMINOUS FLUME AT TERMINAL END OF CURB AND GUTTER

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B" AND "C"

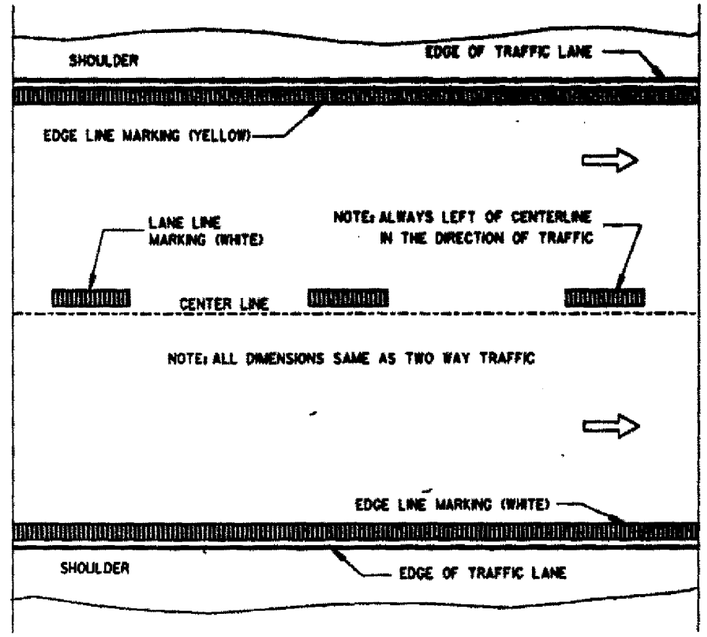
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-29-86
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 9 A 1-6a

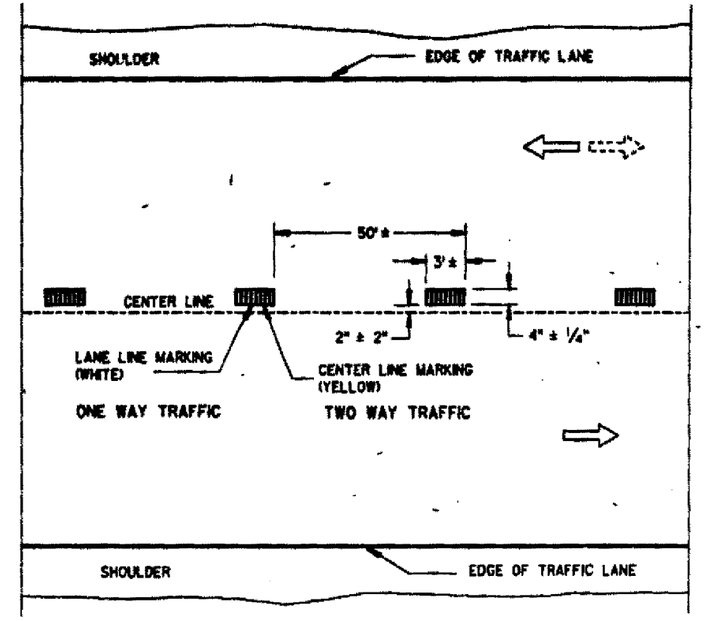


TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TEMPORARY PAVEMENT MARKING

GENERAL NOTES

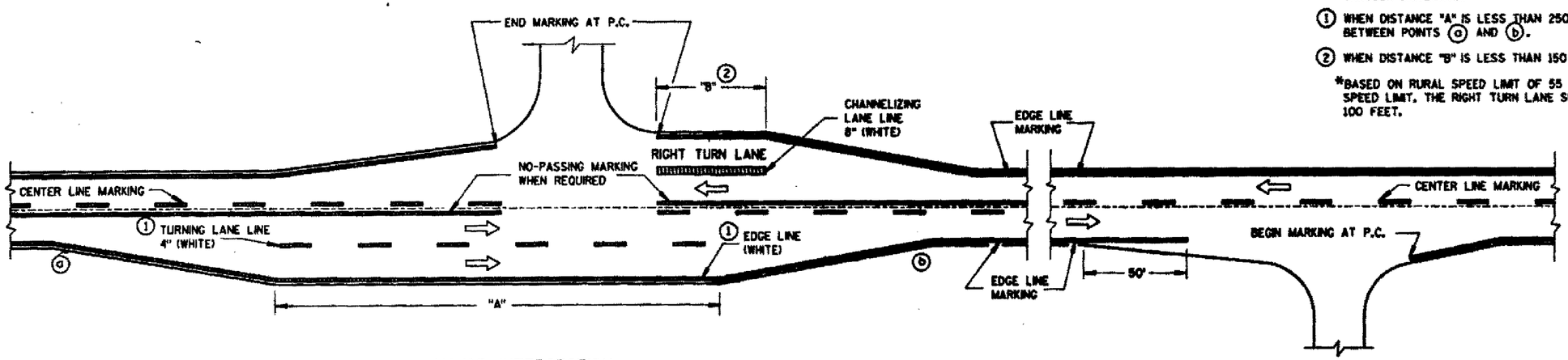
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 * FEET, OMIT TURNING LANE MARKING AND EDGE LINE BETWEEN POINTS (a) AND (b).

(2) WHEN DISTANCE "B" IS LESS THAN 150 * FEET, OMIT CHANNELIZING LANE LINE.

*BASED ON RURAL SPEED LIMIT OF 55 MPH. REDUCE VALUES IN PROPORTION TO POSTED SPEED LIMIT. THE RIGHT TURN LANE SHOULD HAVE A DESIRABLE MINIMUM LENGTH OF 100 FEET.



MAJOR INTERSECTION

MINOR INTERSECTION

TYPICAL PAVEMENT MARKING FOR RURAL INTERSECTIONS

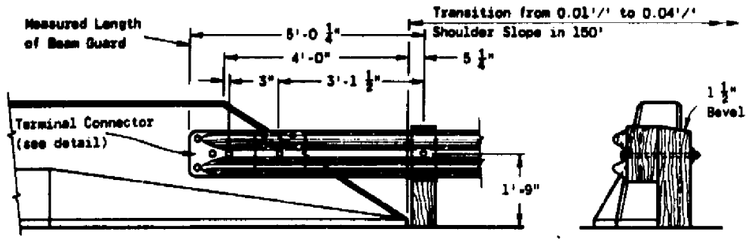
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-23-96
DATE
STATE TRAFFIC ENGINEER FOR HWYS

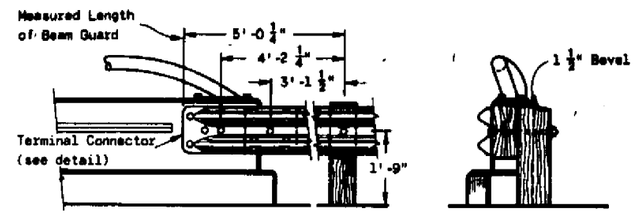
FHWA

S.D.D. 15 C 8-1



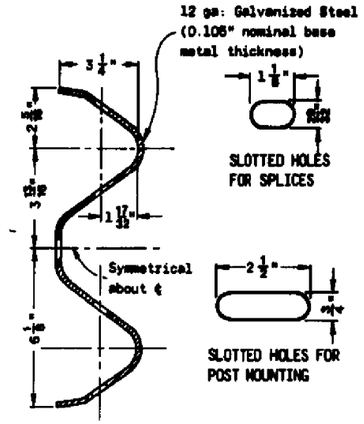
FRONT VIEW END VIEW

SLOPED FACE PARAPET



FRONT VIEW END VIEW

VERTICAL FACE PARAPET



SECTION THRU RAIL ELEMENT

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications, the applicable Special Provisions

The type of anchorage and the exact location of the beginning and end of each beam guard installation shall be as shown on the plans or as directed by the Engineer.

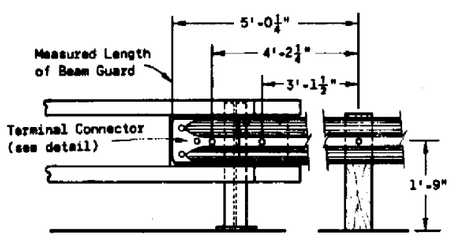
Shoulder widening to accommodate the anchored end of the beam guard shall be accomplished at a rate of widening not to exceed 5 to 1.

Standard Anchorages - Upon approval of the Engineer, the 6 foot offset may be reduced to nothing where existing conditions will not permit the desirable offset. However, when no offset greater than or equal to 3 feet can be provided, the minimum length of guardrail in advance of an obstacle (obstacle to anchor) shall be 150 feet.

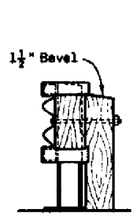
The "Post Footing Details at Piers" shall be used when beam guard posts are over structure footings and less than 3 feet-6 inches of earth is provided over the top of the footing.

(1) The minimum clearance from the front face of beam guard to obstacle shall be 4 feet unless otherwise shown on contract plans. When clearance is less than 4 feet, post spacing shall be reduced to 3 feet-1 1/2 inches C-C.

(2) This section shall include at least one 12'-6" Rail Element and a Terminal Connector or W-Thrie Beam Transition Section as required for structure mounting.

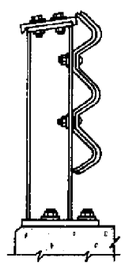


FRONT VIEW

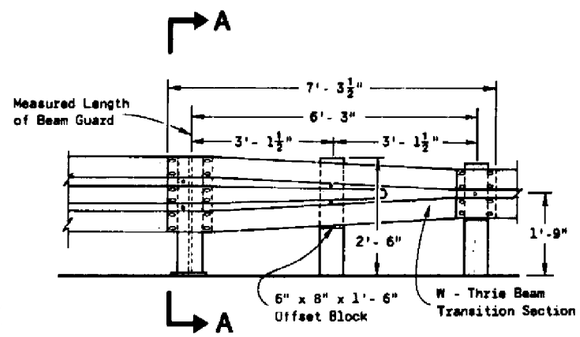


END VIEW

RAILING TYPE "F"



SECTION A-A



FRONT VIEW

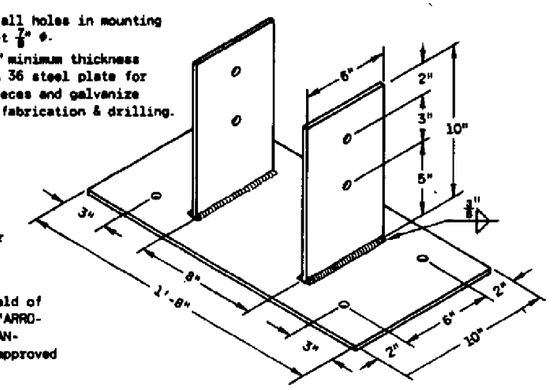
RAILING TYPE "W"

STRUCTURE MOUNTING DETAILS

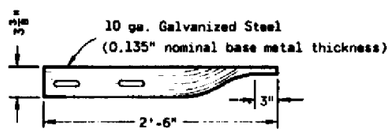
NOTE:

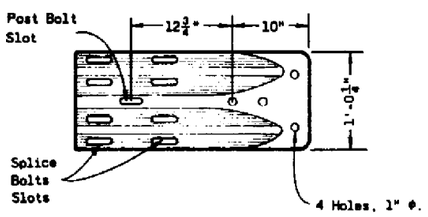
Drill all holes in mounting bracket 7/8" ϕ.

Use 3/8" minimum thickness ASTM A 36 steel plate for all pieces and galvanize after fabrication & drilling.



POST MOUNTING BRACKET

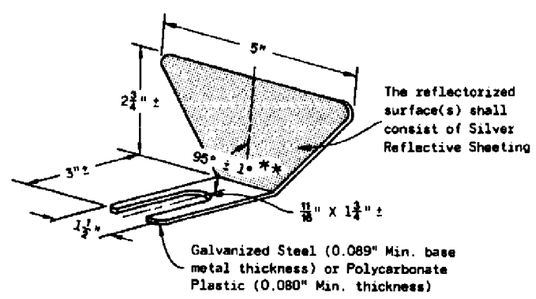




NOTE:

1" I.D., 2" O.D. (0.134" Nominal thickness) galvanized metal washer required under the head of splice bolts used in the Terminal Connector only.

TERMINAL CONNECTOR



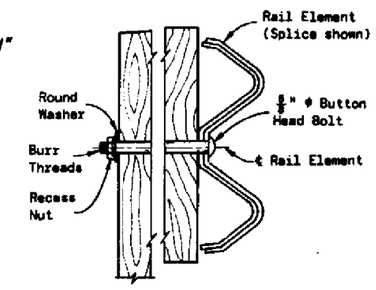
REFLECTOR SPACING

	Beam Guard Length	Reflector Spacing	No. Surfaces Reflectorized	Min. No. Reflectors
One Way Traffic	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
Two Way Traffic	< 200' *	25' C-C	1 *	6
	> 200' *	50' C-C	1 *	
Two Way Traffic	< 200'	50' C-C	2 **	3
	> 200'	100' C-C	2 **	

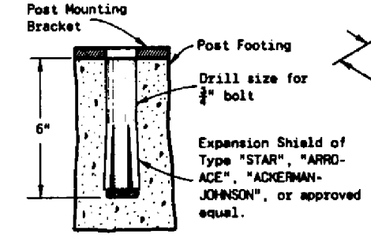
* Every other reflector reversed for 2-way visibility. Contractor may furnish two-sided reflectors in lieu of one-sided reflectors.

** Angle of band to be 90° ± 1° for two-sided reflectors.

REFLECTOR DETAIL

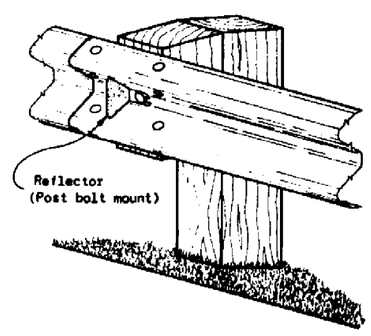


BUTTON HEAD BOLT DETAIL

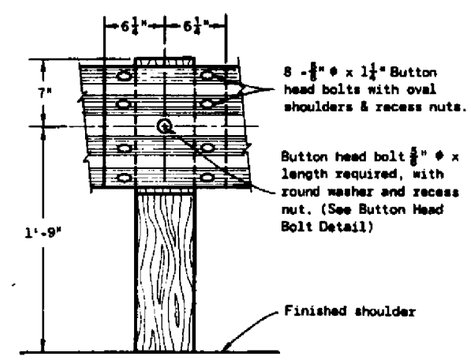


EXPANSION SHIELD DETAIL

POST FOOTING DETAIL AT PIERS



TYPICAL INSTALLATION



RAIL ELEMENT SPLICING AND POST MOUNTING DETAIL

NOTE:

THIS STANDARD DETAIL DRAWING CONSISTS OF TWO SHEETS AND BOTH SHEETS ARE REQUIRED WHEN THIS DRAWING IS CALLED FOR IN CONTRACT PLANS.

CAUTION: WHEN SPECIAL ANCHORAGES ARE SPECIFIED, SHEET 8c IS ALSO REQUIRED

CLASS "A"
STEEL PLATE BEAM GUARD

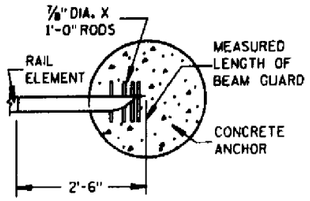
State of Wisconsin
Department of Transportation

APPROVED 1-31-85
DATE

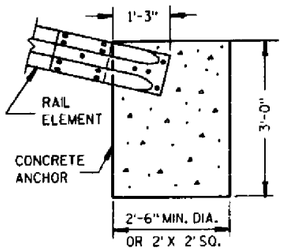
CHIEF DESIGN ENGINEER

FHWA

S.D.D. 14 B 2-8a



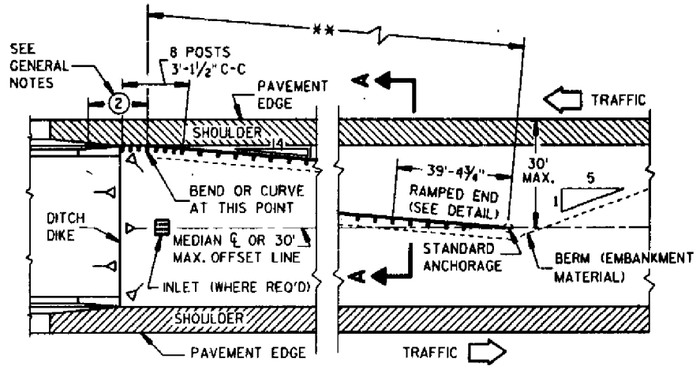
PLAN VIEW IN SECTION



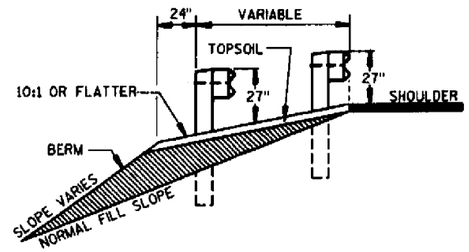
FRONT VIEW IN SECTION

STANDARD ANCHORAGE DETAIL

(STANDARD SPECIFICATION ITEM "ANCHORAGE FOR STEEL PLATE BEAM GUARD")

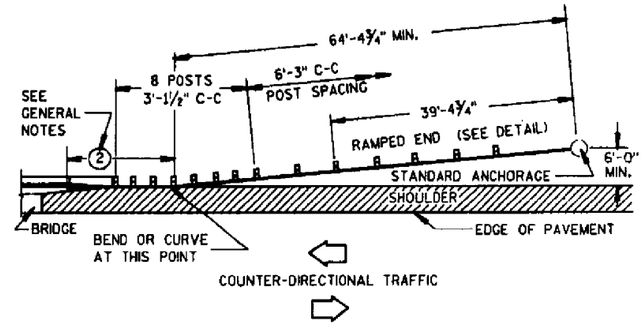


PLAN VIEW



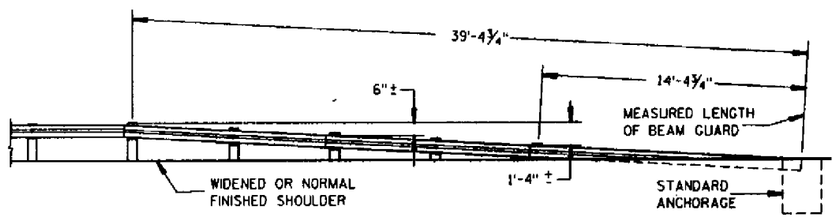
SECTION A-A

TYPICAL MEDIAN INSTALLATION AT STRUCTURES



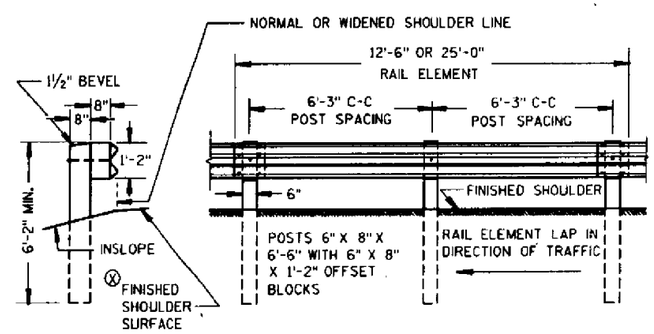
PLAN VIEW

TYPICAL INSTALLATION AT FULL WIDTH STRUCTURES



FRONT VIEW

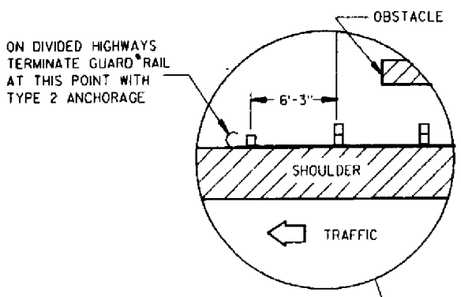
TYPICAL RAMPED END

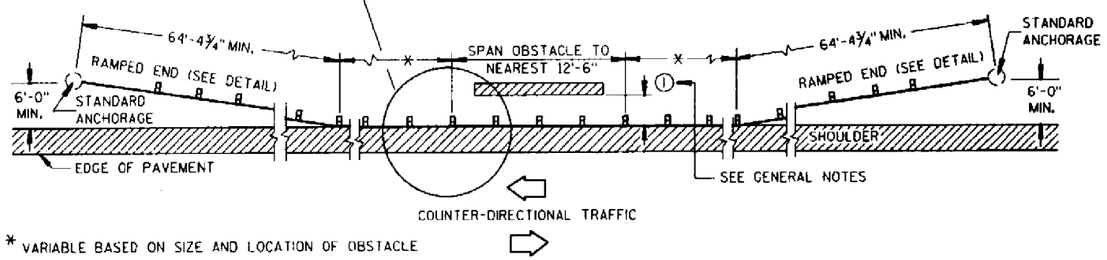


END VIEW FRONT VIEW

TYPICAL STEEL PLATE BEAM GUARD INSTALLATION

(X) SHOULDER OR EMBANKMENT SLOPE IN FRONT OF BEAM GUARD SHALL BE 10:1 OR FLATTER

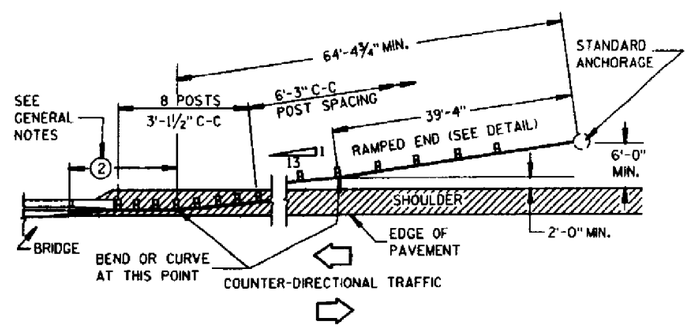




* VARIABLE BASED ON SIZE AND LOCATION OF OBSTACLE

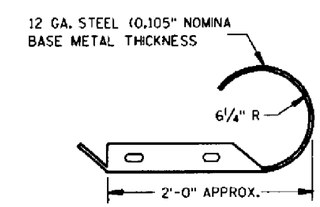
PLAN VIEW

TYPICAL INSTALLATION AT OBSTACLES



PLAN VIEW

TYPICAL INSTALLATION AT NARROW STRUCTURES



PLAN VIEW

END SECTION (ROUNDED)

CLASS "A"
STEEL PLATE BEAM GUARD

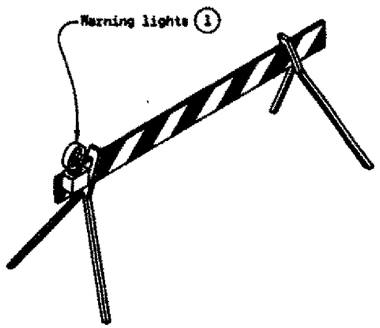
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14B 2-8b

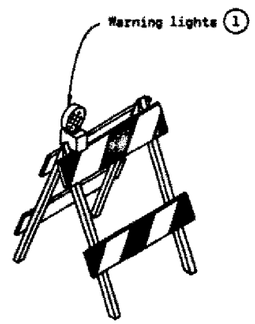
TABLE OF BARRICADE CHARACTERISTICS

BARRICADE TYPE	I	II	III
Height	3' Minimum		5' Minimum
*Rail Width	8" Minimum to 12" Maximum		
Rail Length	2' Minimum		4' Minimum
**Stripe Width	6" at 45° Angle		
Stripe Colors	Reflectorized Orange & White		

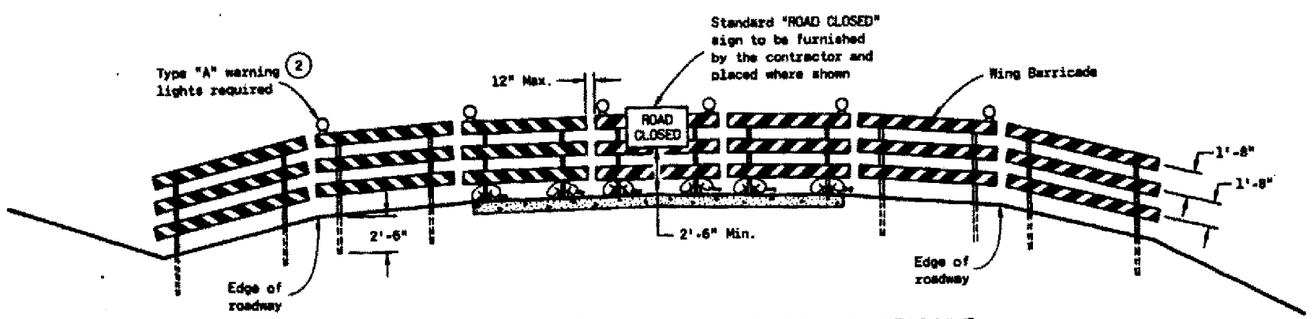
*Nominal dimensions when barricade is constructed of lumber.
**Shall be 4" for rail lengths less than 3'.



TYPICAL TYPE I BARRICADE



TYPICAL TYPE II BARRICADE



TYPICAL INSTALLATION SHOWING TYPE III BARRICADE

CONSTRUCTION BARRICADES

R11-2

48" x 30"

Black Lettering on Reflective White Background

Letter Series "D"
Letter height 8"

W20-3

48" x 48"

Black Lettering on Reflective Orange Background

Letter Series "D"
Letter height 7"

STANDARD SIGNS – TYPE II

GENERAL NOTES

The contractor shall furnish, erect and maintain barricades and signs. Details regarding location, spacing, dimensions, fabrication, material, sign lettering, lighting devices and color of barricades and signs shall conform to this drawing, the Manual On Uniform Traffic Control Devices, the Standard Specifications, Special Provisions and/or plans.

Type III Barricades and Signs shall be erected at the termini of projects and at other road or street locations where it is necessary to control or eliminate public access to the construction area.

Type I and II Barricades shall be used on projects when traffic is to be maintained through the construction area.

The actual field location of barricade installations and advance signs shall be as directed by the Engineer.

Each barricade shall have the name and telephone number of a person responsible for 24 hour emergency service printed in letters at least ¾ inch in height on the barricade rails. Prior to May 1, 1983, such information may be shown on either front or back faces of the barricade rails. After May 1, 1983, all printed information or identification markings shall be shown only on the back side of barricade rails.

Type I Barricades may include other unstriped horizontal panels necessary to provide stability.

On high speed expressways or in other situations where barricades may be susceptible to overturning in the wind, sandbags should be used for ballasting. Sandbags may be placed on lower parts of the frame or stays to provide the required ballast but shall not be placed on top of any striped rail.

(1) Unless otherwise provided elsewhere in the contract, warning lights are required on all barricades which will be located near traffic operations during periods of inclement weather or hours of darkness. Barricades used to shield isolated hazards shall be equipped with Type "A" (low intensity - flashing) lights unless Type "B" (high intensity)- flashing) lights are specified elsewhere in the contract documents. Barricades used for channelization or delineation of the travel path shall be equipped with Type "C" (steady burn) lights except for the initial barricade(s) in sequence, which shall be equipped with Type "A" or "B" lights as previously noted.

(2) Two warning lights shall be provided on the center barricade and at least one warning light shall be provided on each of the other barricades within the roadway limits. Spacing of the warning lights shall be uniform to the edge of roadway as shown.

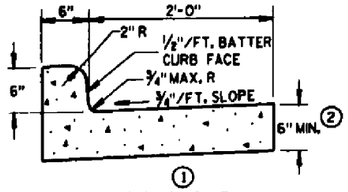
CONSTRUCTION BARRICADES & STANDARD SIGNS

State of Wisconsin
Department of Transportation

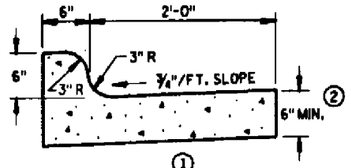
APPROVED 9-14-81
DATE

CHIEF DESIGN ENGINEER

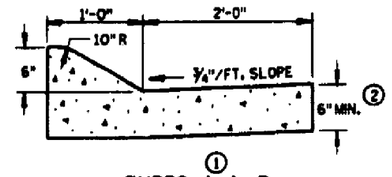
S.D.D. 15 C 1-7



① TYPES A & D

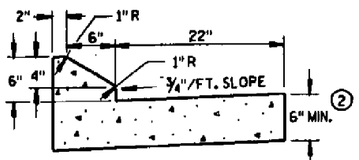


① TYPES K & L

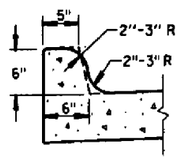


① TYPES A & D

CONCRETE CURB & GUTTER 36"

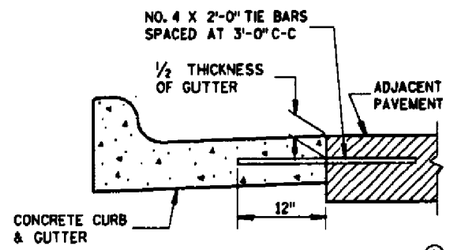


① TYPES G & J



OPTIONAL CURB SHAPE FOR TYPES K ① & L

CONCRETE CURB & GUTTER 30"



TYPICAL TIE BAR LOCATION ①

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEALANT IS NOT REQUIRED IN THE JOINTS OF CONCRETE CURB OR CONCRETE CURB & GUTTER EXCEPT AS REQUIRED FOR INTEGRAL GUTTER.

PAVEMENT TIES ARE REQUIRED, WHEN INCLUDED IN THE CONTRACT, WHERE CONCRETE CURB, CONCRETE CURB AND GUTTER OR CONCRETE PAVEMENT IS PLACED ADJACENT TO EXISTING CONCRETE.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. TIE BARS AND A LONGITUDINAL CONSTRUCTION JOINT ARE NOT REQUIRED WITH THIS ALTERNATE.

PAVEMENT JOINTS SHALL BE EXTENDED THROUGH INTEGRAL CURB & GUTTER. JOINTS IN INTEGRAL GUTTER SHALL HAVE THE SAME DIMENSIONS AS THE JOINTS IN THE ADJACENT PAVEMENT. JOINTS IN INTEGRAL CURB SHALL BE 1/8" WIDE.

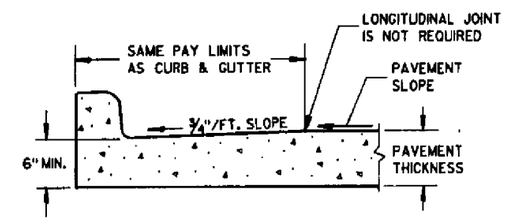
JOINTS IN INTEGRAL CURB & GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME SEALANT SPECIFIED FOR THE PAVEMENT JOINT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB & GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE TWO FEET BEHIND THE BACK OF CURBS.

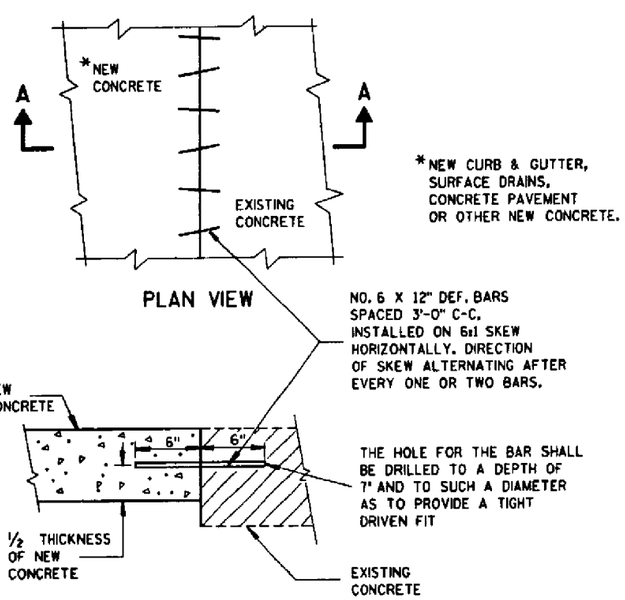
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATIONS WILL BE SHOWN ELSEWHERE IN THE PLAN.

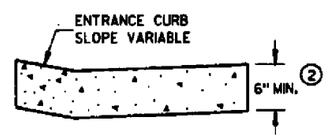


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

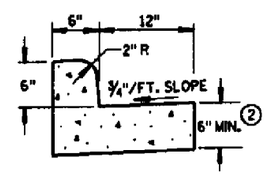


PLAN VIEW

SECTION A-A
PAVEMENT TIES

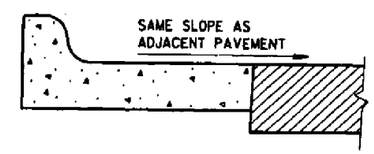


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

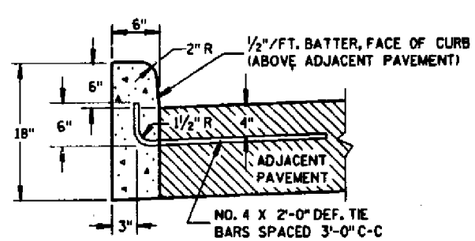


① TYPES A & D

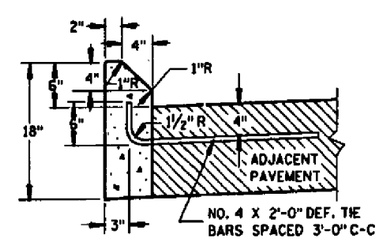
CONCRETE CURB & GUTTER 18"



REVERSE SLOPE GUTTER ③
(TYPICAL FOR ALL CURB & GUTTER TYPES)



① TYPES A & D



① TYPES G & J

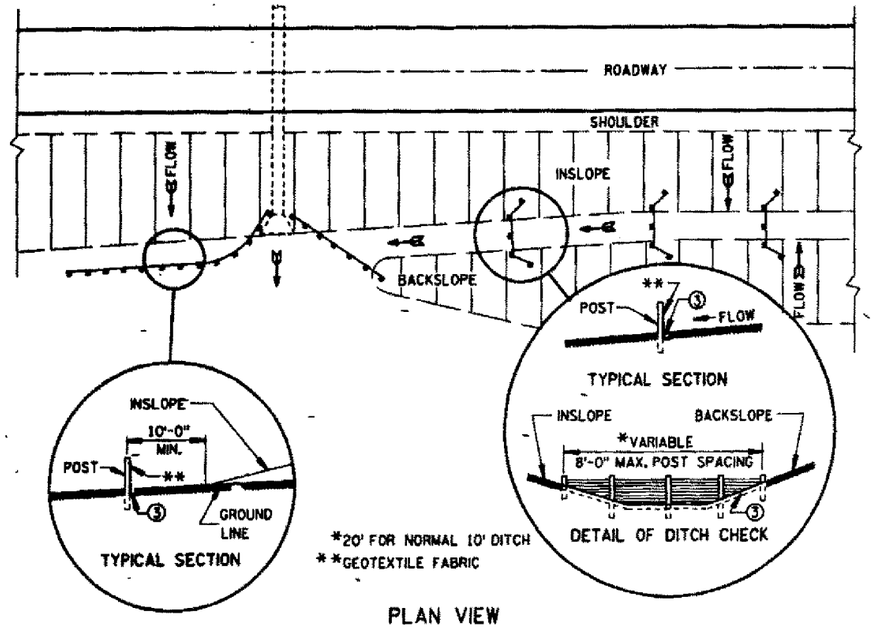
CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

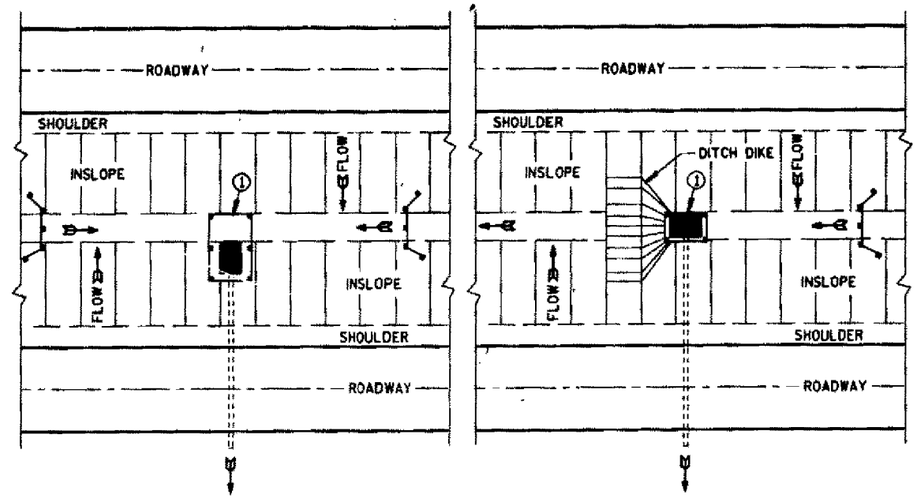
APPROVED 10-23-86 DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 8 D 1-11



PLAN VIEW

TYPICAL APPLICATIONS OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

① CROSS BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.

② MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.

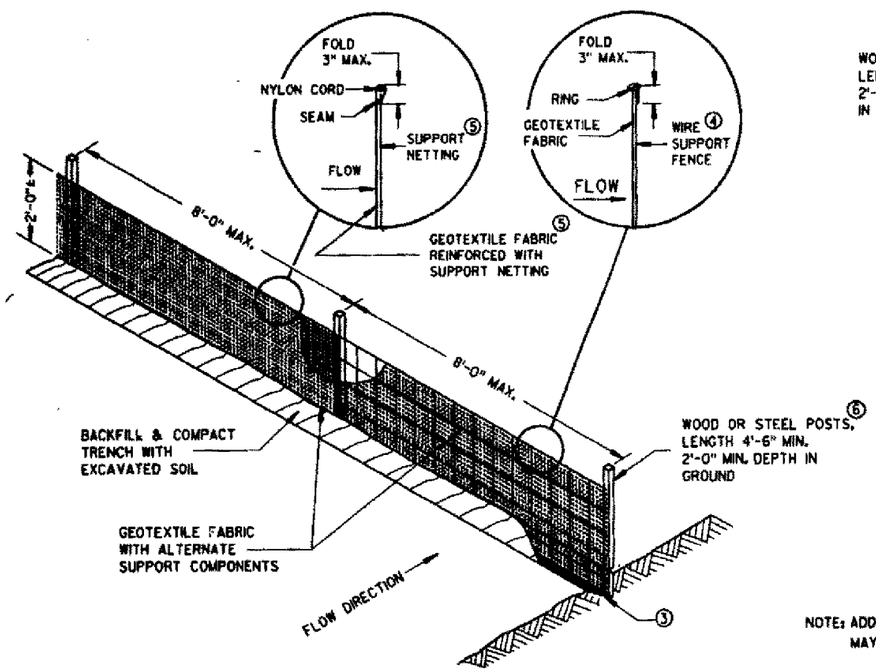
③ EXCAVATE A TRENCH A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

④ WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.

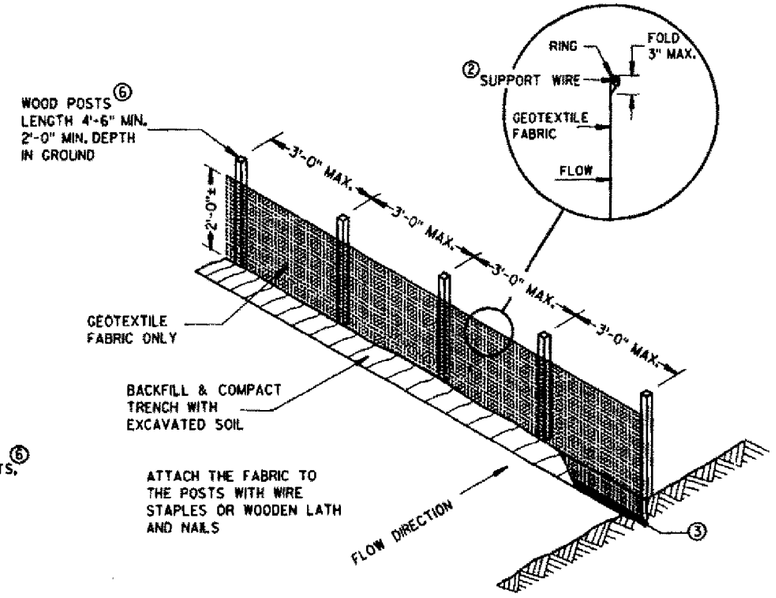
⑤ GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF ¾" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.

⑥ STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM WEIGHT OF 1.28 LBS/LINEAL FOOT (WITHOUT ANCHOR). FIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1½" X 3½" EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OAK OR HICKORY.

ALTERNATES A & B ARE EQUAL AND EITHER MAY BE USED.

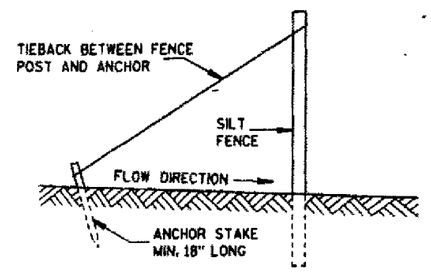


ALTERNATE "A"



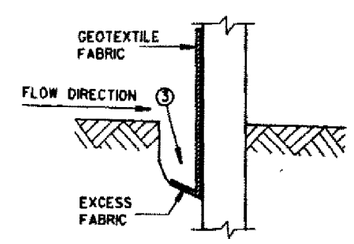
ALTERNATE "B"

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)



TRENCH DETAIL

SILT FENCE

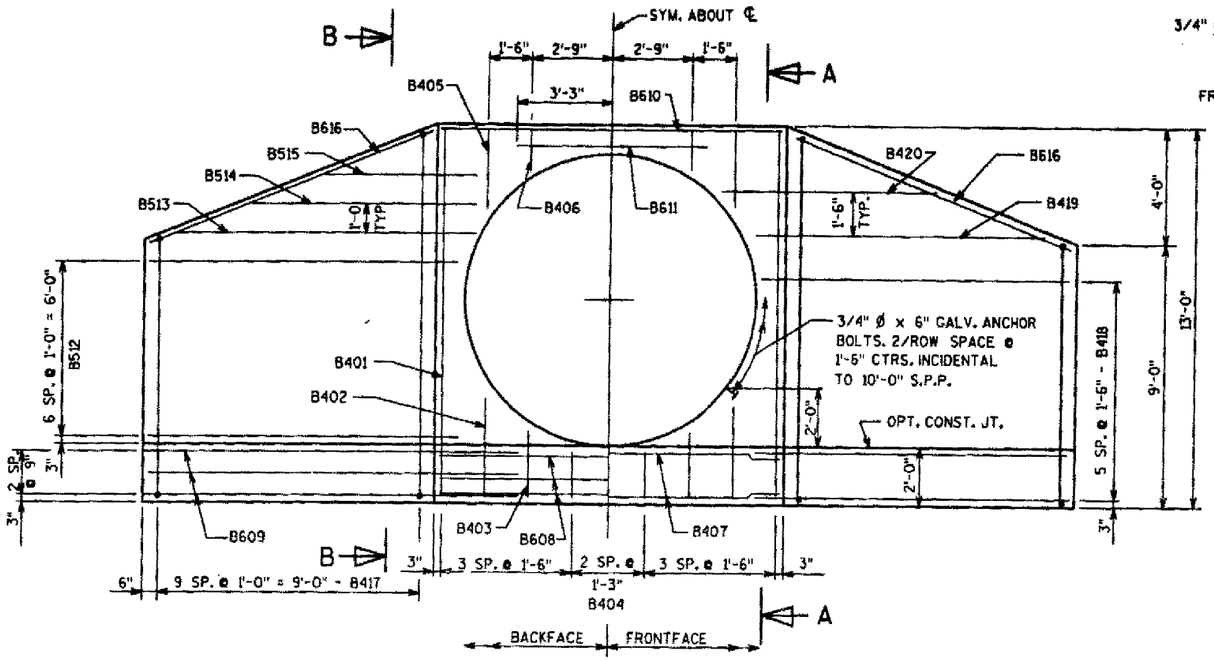
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-2-88
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

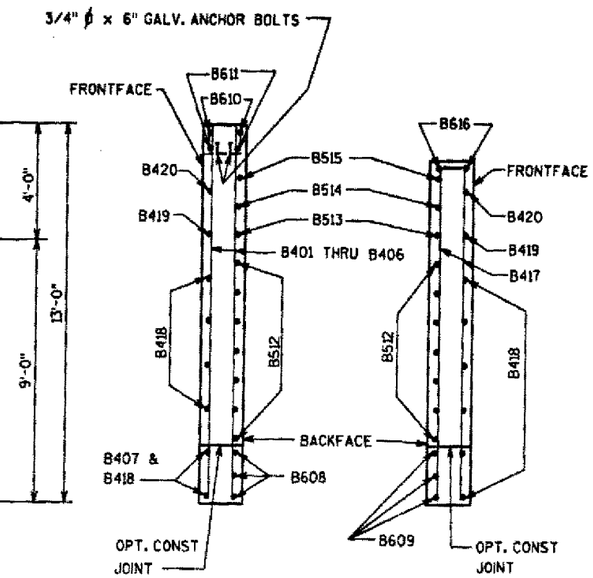
S.D.D. 8 E 9-2

S.D.D. 8 E 9-2

STATE PROJECT NUMBER	SHEET NO.
1560-3-72	8.0



ELEVATION



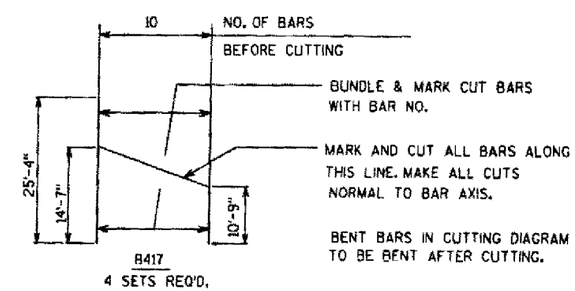
SECTION A SECTION B

BILL OF BARS

2,100 LBS.

BAR MARK	NO. REQ'D.	LENGTH	BENT	CUT. DIAG.	LOCATION
B401	8	12-7			WALL - VERT.-FF.&BF.
B402	8	3-6			WALL - VERT.-FF.&BF.
B403	8	2-3			WALL - VERT.-FF.&BF.
B404	12	1-8			WALL - VERT.-FF.&BF.
B405	8	2-9			WALL - VERT.-FF.&BF.
B406	8	1-3			WALL - VERT.-FF.&BF.
B407	4	11-8			WALL - BOTTOM - FF.
B608	5	11-8			WALL - BOTTOM - BF.
B609	12	13-4	X		WINGS - BOTTOM - BF.
B610	4	11-8			WALL - TOP
B611	4	6-6			WALL - TOP
B512	28	11-8	X		WINGS - BF.
B513	4	11-6	X		WINGS - BF.
B514	4	9-7	X		WINGS - BF.
B515	4	8-0	X		WINGS - BF.
B616	8	10-2			WINGS - TOP
B417	40	25-4	X	X	WINGS - BF.&FF. - VERT.
B418	24	10-8	X		WINGS - FF.
B419	4	10-0	X		WINGS - FF.
B420	4	7-6	X		WINGS - FF.

NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.



CUTTING DIAGRAM

TOTAL ESTIMATED QUANTITIES

BID ITEMS

EXCAVATION FOR STRUCTURES, ENDWALL	1 L.S.
CONCRETE MASONRY, ENDWALL	38 C.Y.
HIGH STRENGTH BAR STEEL REINFORCEMENT	2,100 LBS.

DESIGN DATA

ALLOWABLE DESIGN STRESSES :

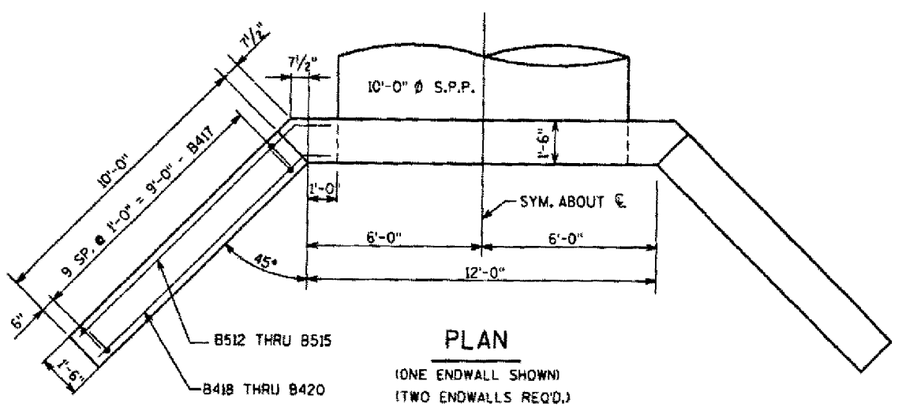
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 P.S.I.
CONCRETE MASONRY	fc' = 3,500 P.S.I.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

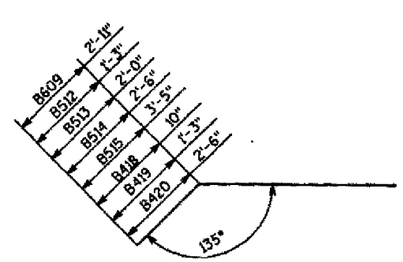
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

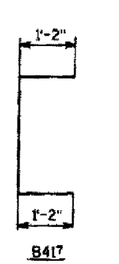
THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES SHALL BE THE EXISTING GROUNDLINE.

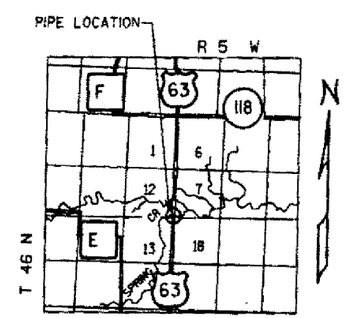


PLAN

(ONE ENDWALL SHOWN)
(TWO ENDWALLS REQ'D.)







LAYOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE

U.S.H. 63 OVER SPRING CREEK

COUNTY BAYFIELD		TOWN/~~CITY/VILLAGE~~ MASON/KELLY	
DESIGN SPEC. AASHTO 1985		LOAD	CONST. SPEC. 1981
DESIGNED BY HEA	DESIGN CK'D. HEA	DRAWN BY BJ	PLANS CK'D. HEA

APPROVED Stanley W. Walsh STATE BRIDGE ENGINEER DATE 12-14-87

ENDWALL DETAILS

SHEET 1 OF 1

X 81743

I.D. 1560-03-00

PRF = BAYFIELD SCALE = 2.667

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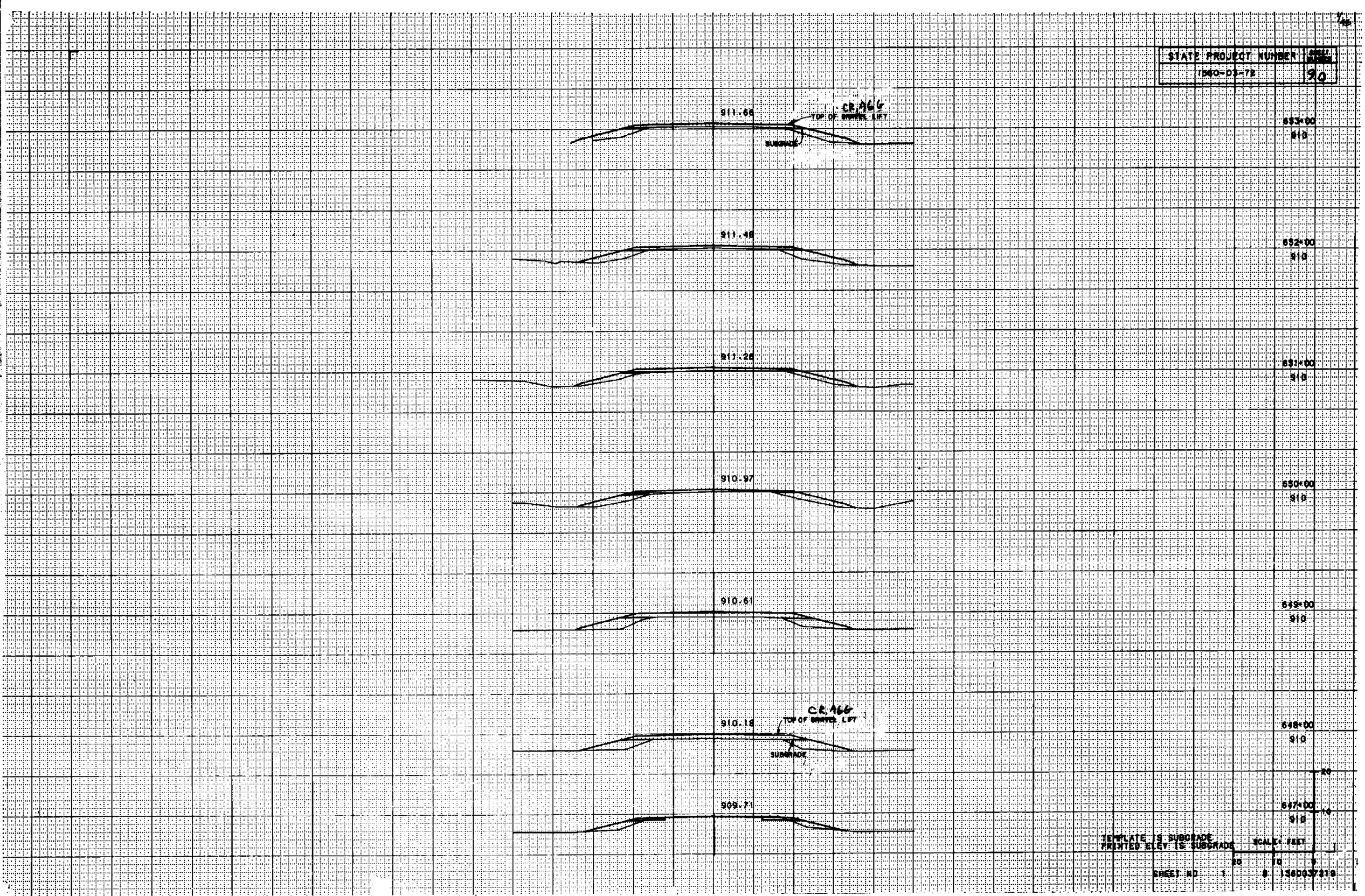

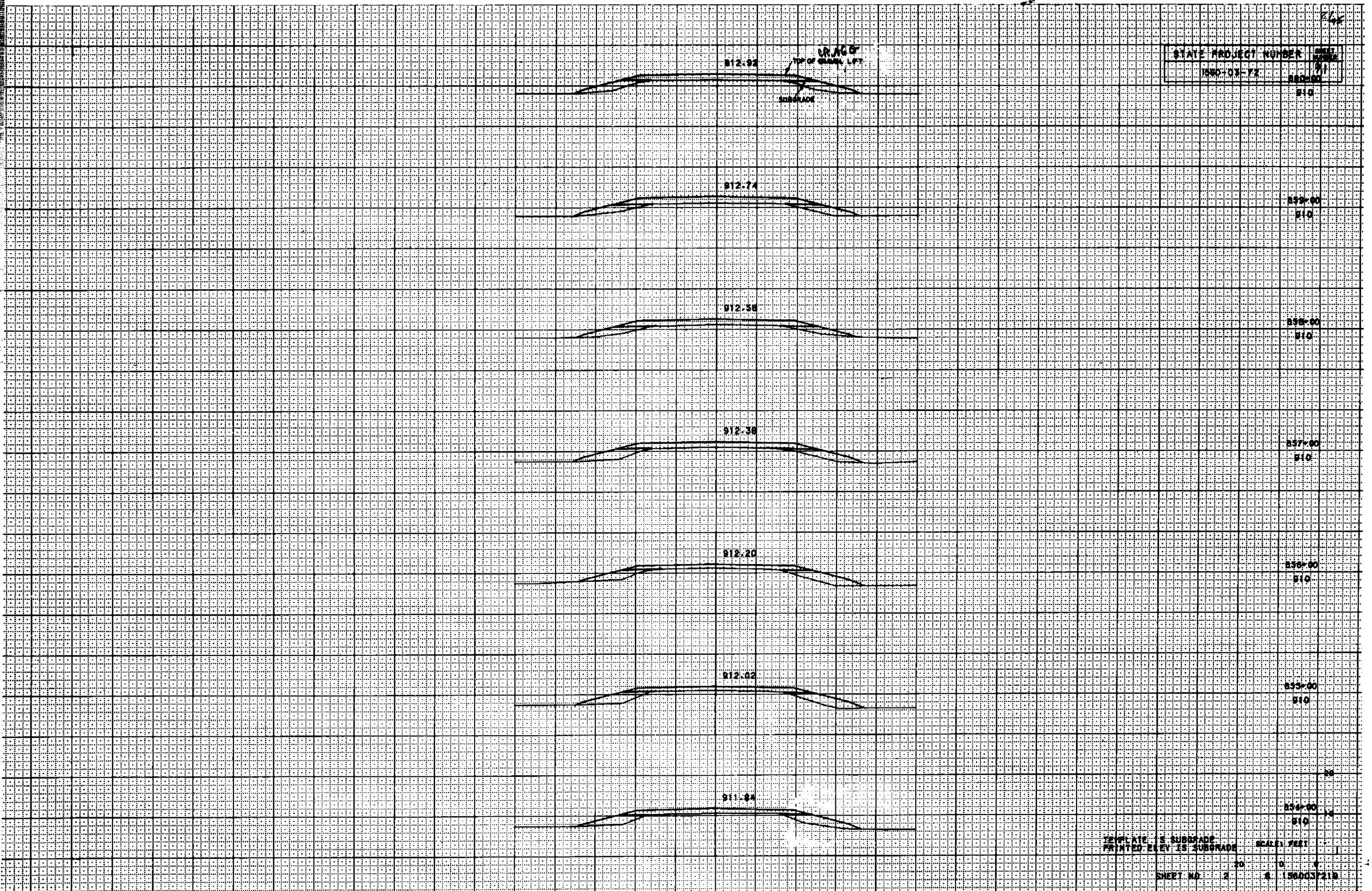
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LEAGE OF TOP OF GRAVEL LIFT
SUBGRADE
880+00
910
912.74
859+00
910
912.56
858+00
910
912.38
857+00
910
912.20
856+00
910
912.02
855+00
910
911.84
854+00
910
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PRINTED ELEV IS SUBGRADE
SCALE: FEET
20 0
SHEET NO. 2 OF 6 1560037218

STATE PROJECT NUMBER 1560-03-72

914.29

914.00

913.82

913.64

913.46

913.28

913.10

CR 1166

TOP OF GRAVEL LIFT

SUBGRADE

867+00
920

866+00
920

865+00
910

864+00
910

863+00
910

862+00
910

861+00
910

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SCALE: FEET

SHEET NO. 3 1560037218

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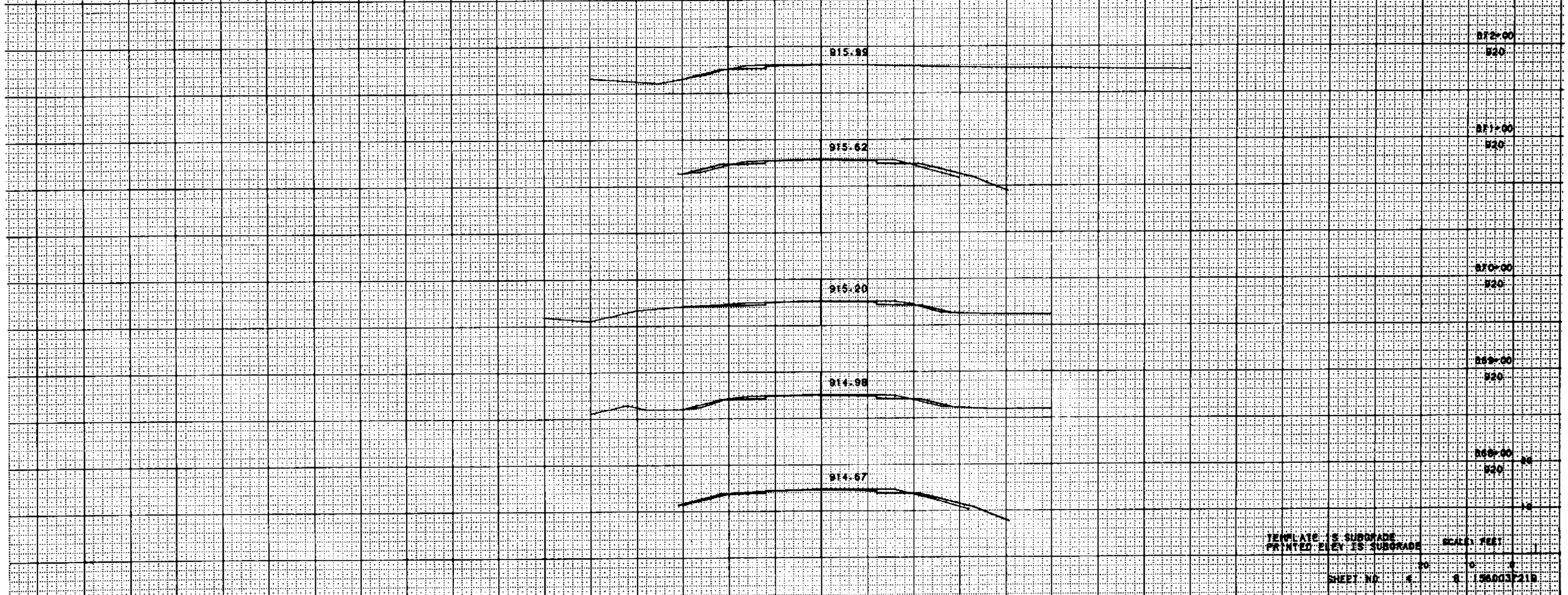

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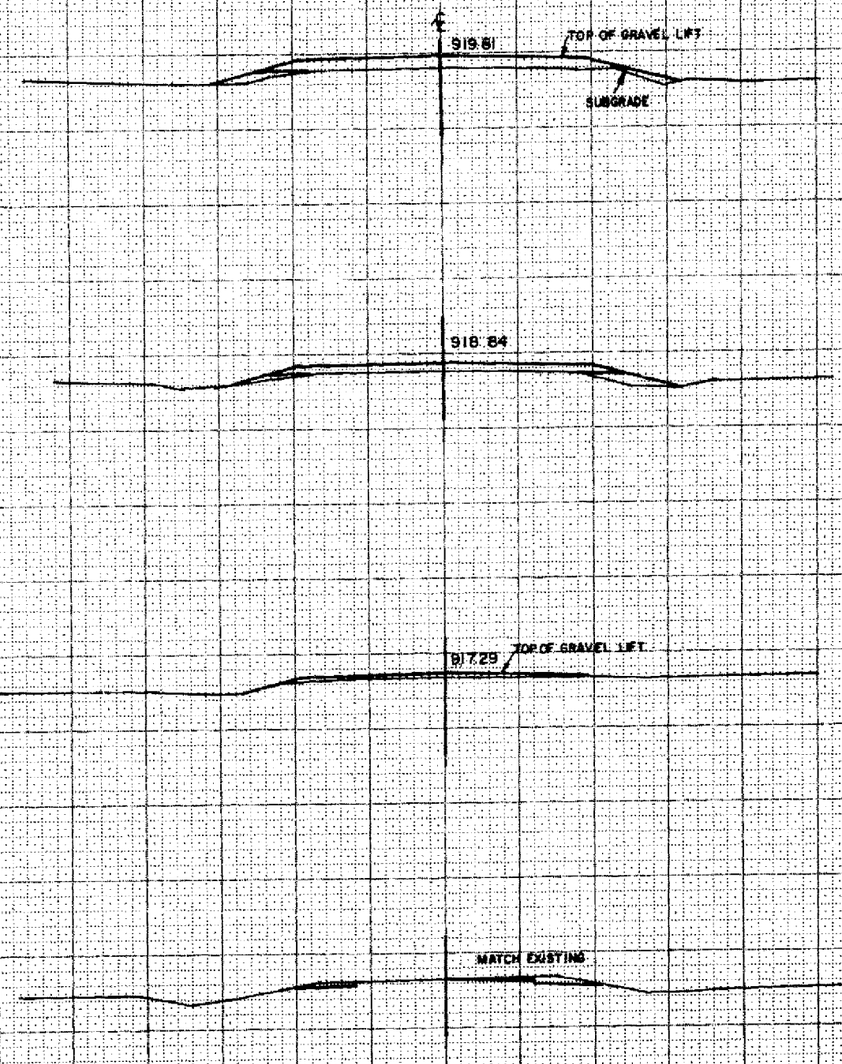
STATION	DISTANCE	VARDAGE EXCAVATION	FILL



676+23
910

676+0
910

675+0
910

674+0
910

10'

10'

SHEET TOTAL

Catalog No. 2130-C121

STATE PROJECT NUMBER	SHEET NUMBER
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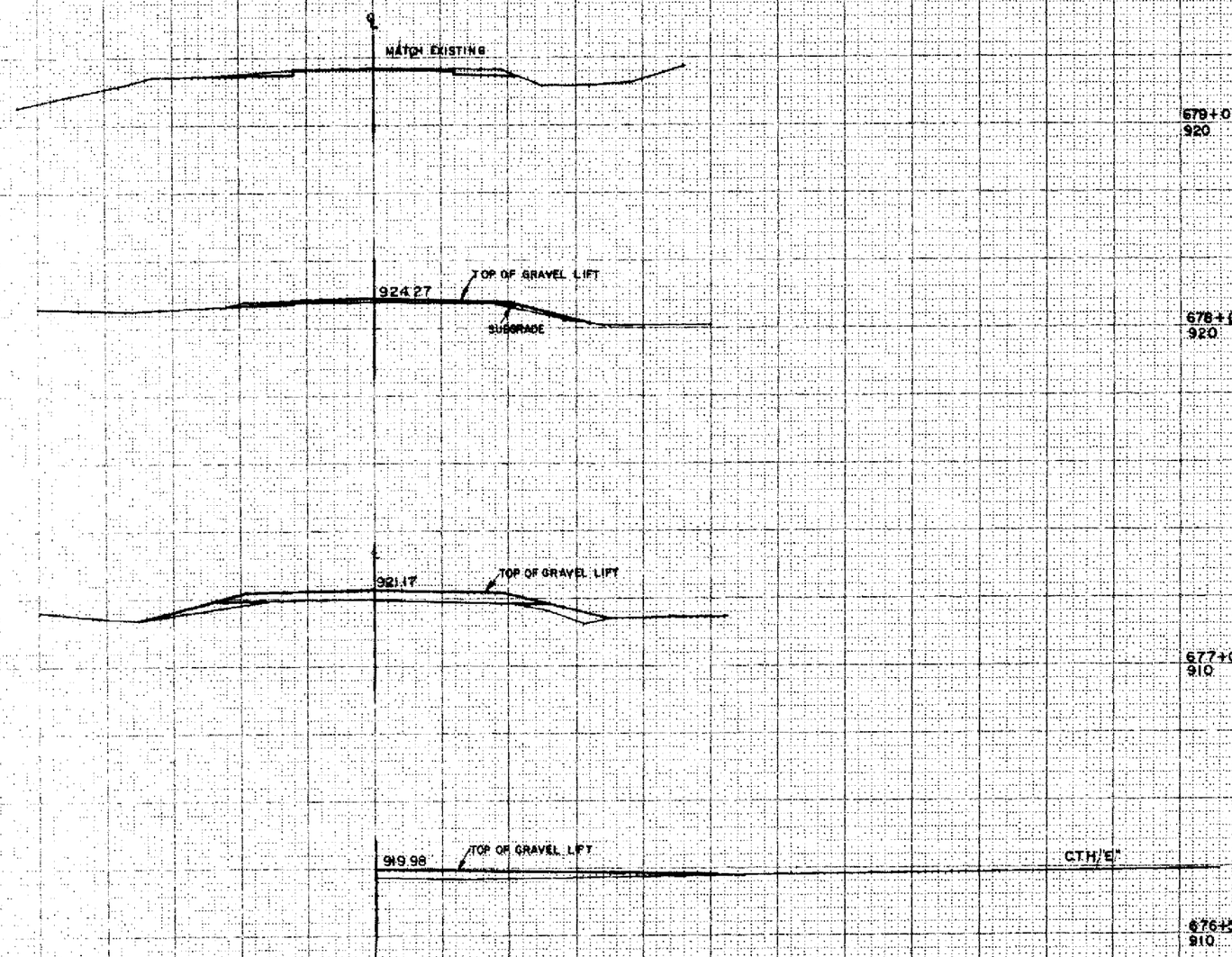
STATION	DISTANCE	YARDAGE EXCAVATION	FILL



SHEET TOTAL

STATE PROJECT NUMBER	SHEET NO.
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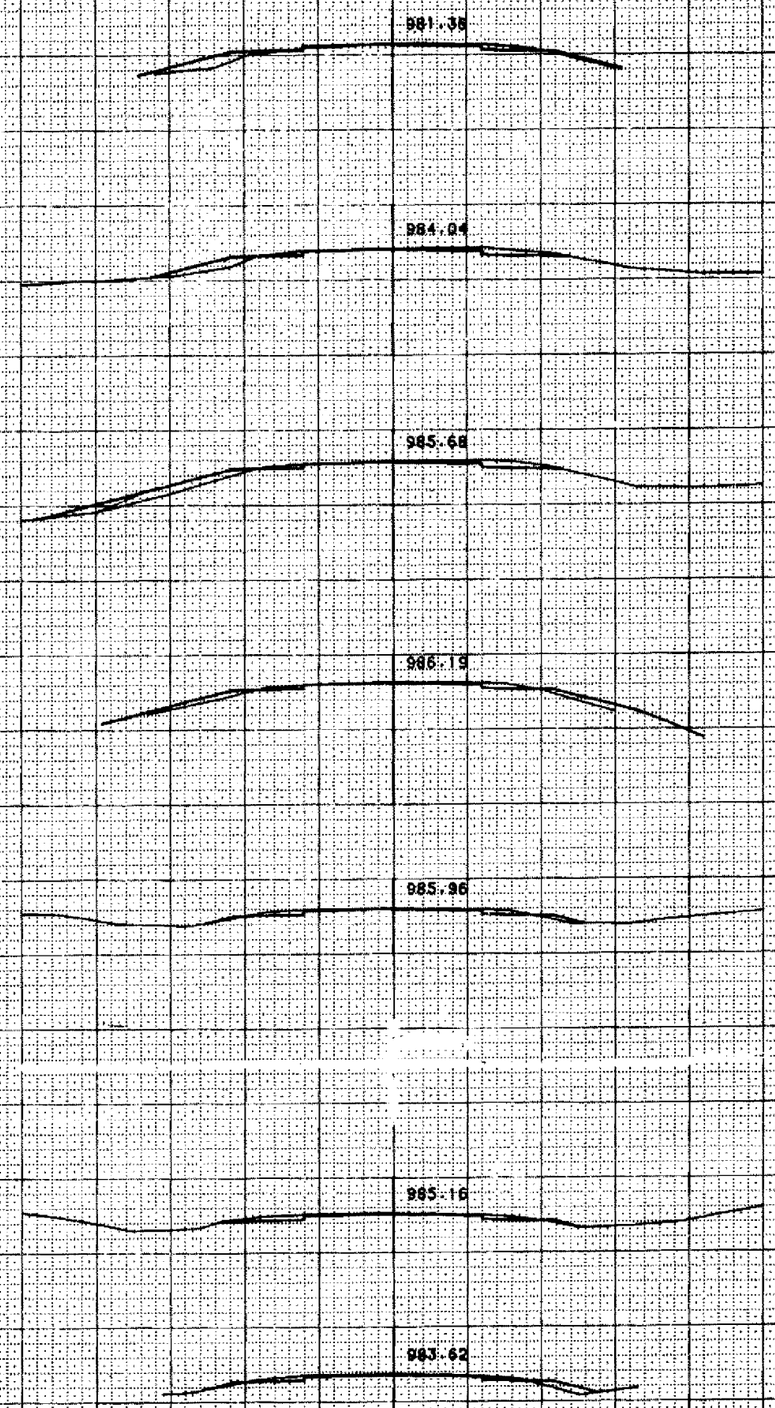

990

997+00
990

996+00
990

995+00
990

994+00
990

993+00
990

992+00
990

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PRINTED ELEV IS SUBGRADE

SCALE: FEET

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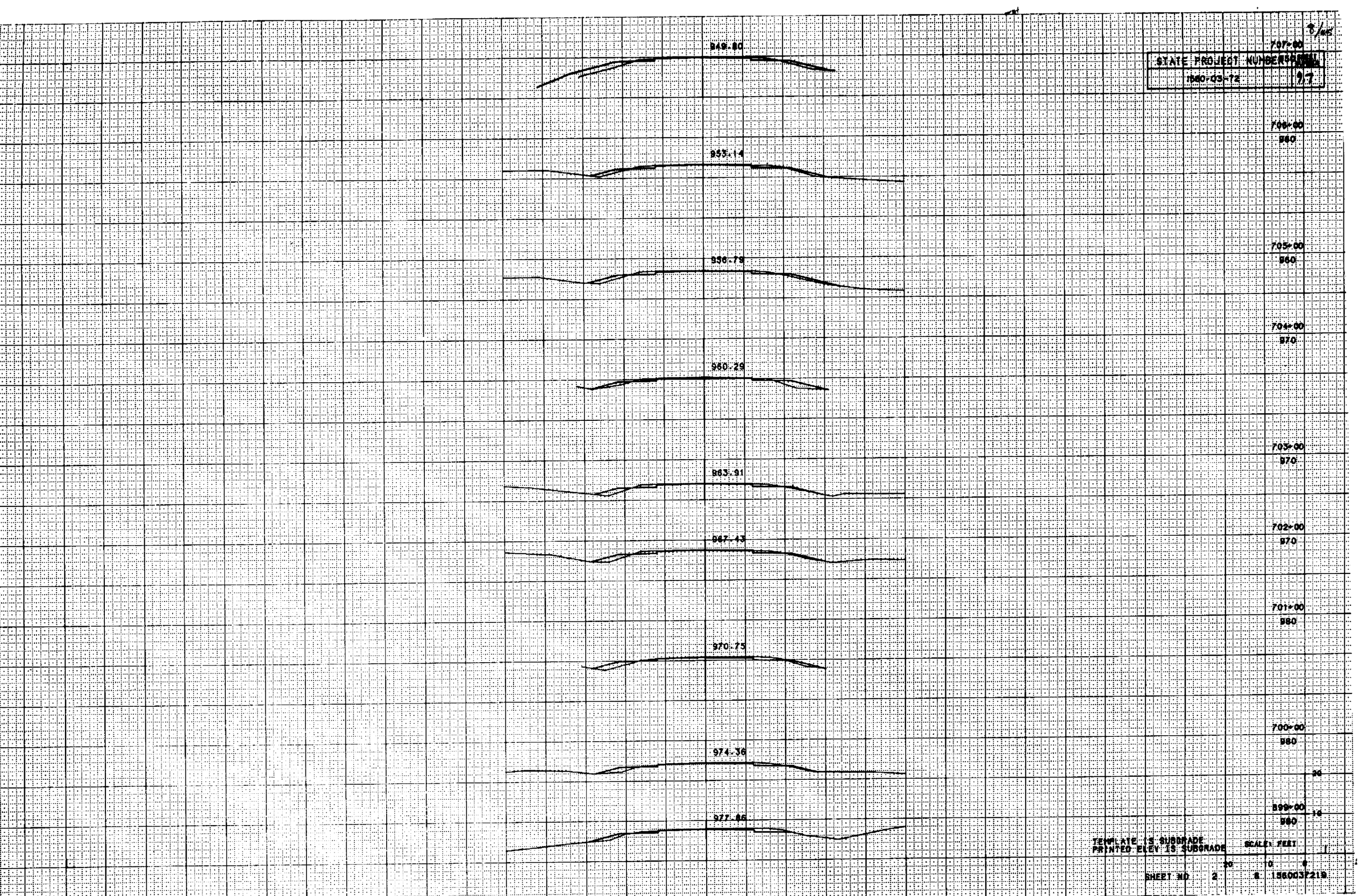
SHEET NO 1 8 1560037219


3/45
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960
953.14
706+00
960
956.79
705+00
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960.29
704+00
970
963.91
703+00
970
967.43
702+00
970
970.75
701+00
980
974.36
700+00
980
977.86
699+00
980
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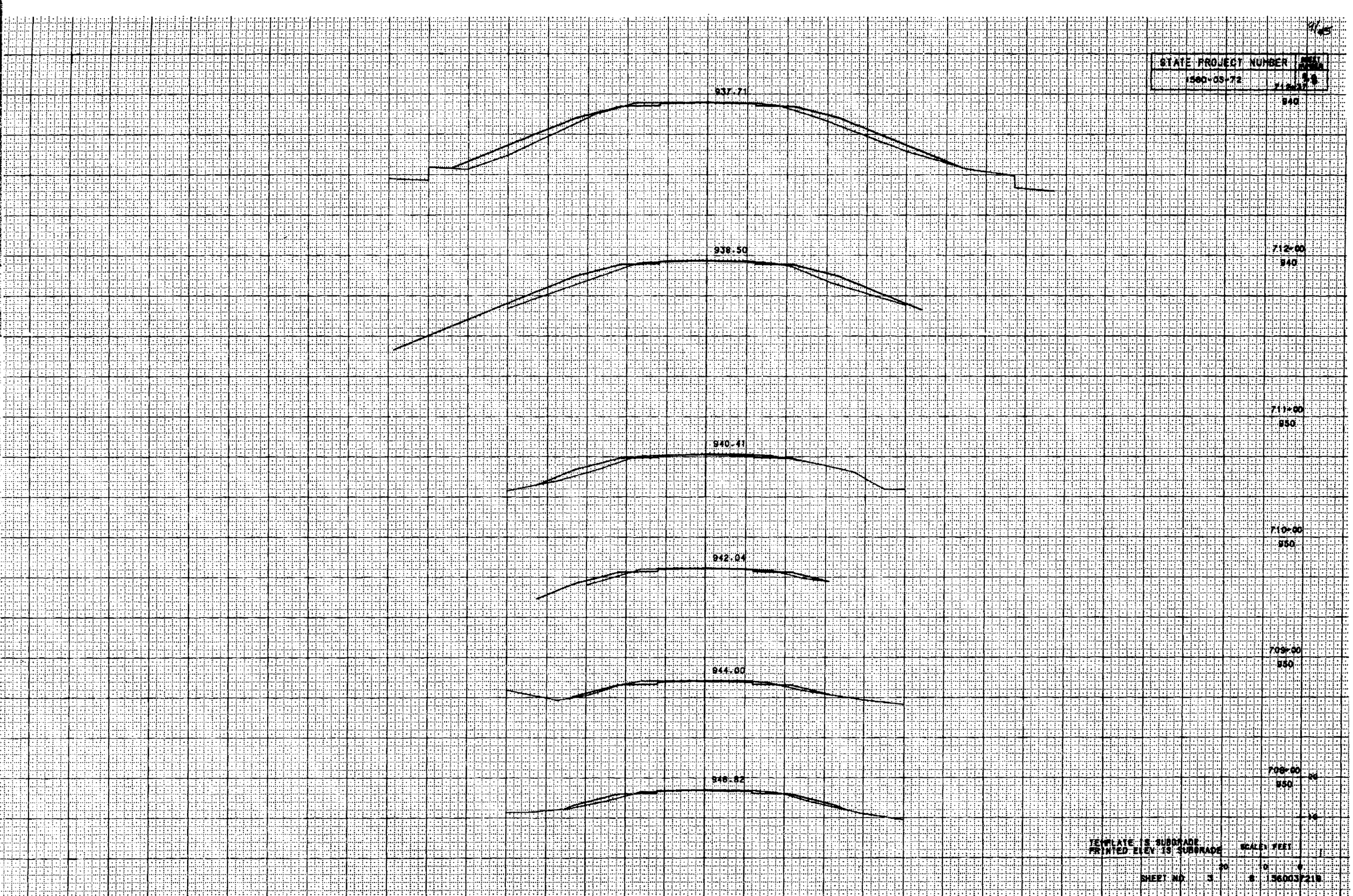
B. 1560037213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712+00
940
938.50
712+00
940
711+00
950
940.41
710+00
950
942.04
709+00
950
944.00
708+00
950
946.82
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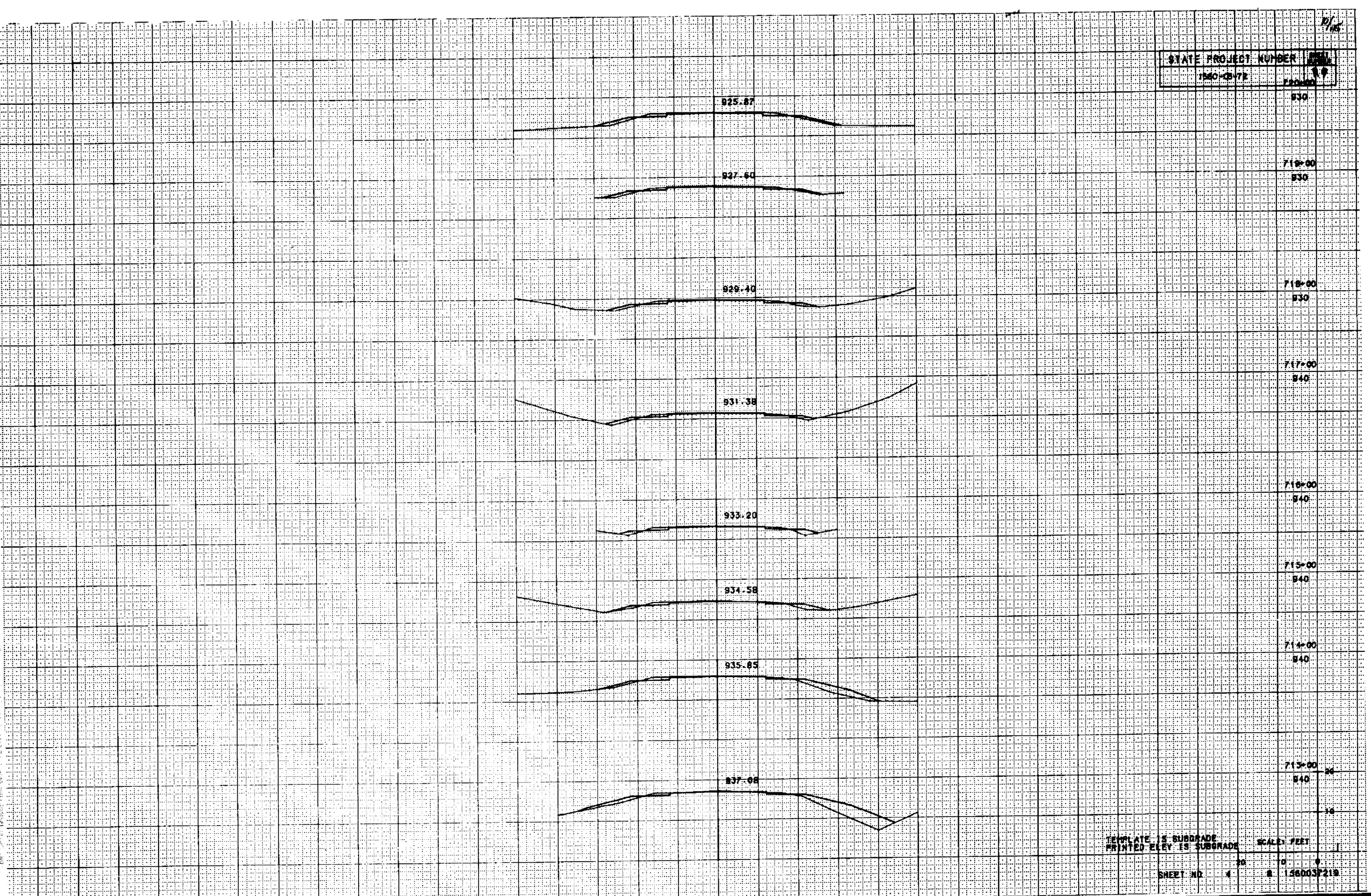
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931.38
933.20
934.58
935.85
937.08
720+00
930
719+00
930
718+00
930
717+00
940
716+00
940
715+00
940
714+00
940
713+00
940
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE
SCALE: FEET
SHEET NO. 4
B. 1560037219

STATE PROJECT NUMBER | SHEET NO. 9-10
1560-03-72 | 724+00
920

918.65

724+86
920

918.75

REMOVE EXISTING 72" R.C.C.P.

724+92
920

919.26

EXTEND 30" R.C.C.P. 4'LT. & 4'RT.

724+00
920

919.58

723+00
930

921.17

722+00
930

922.79

721+00
930

924.27

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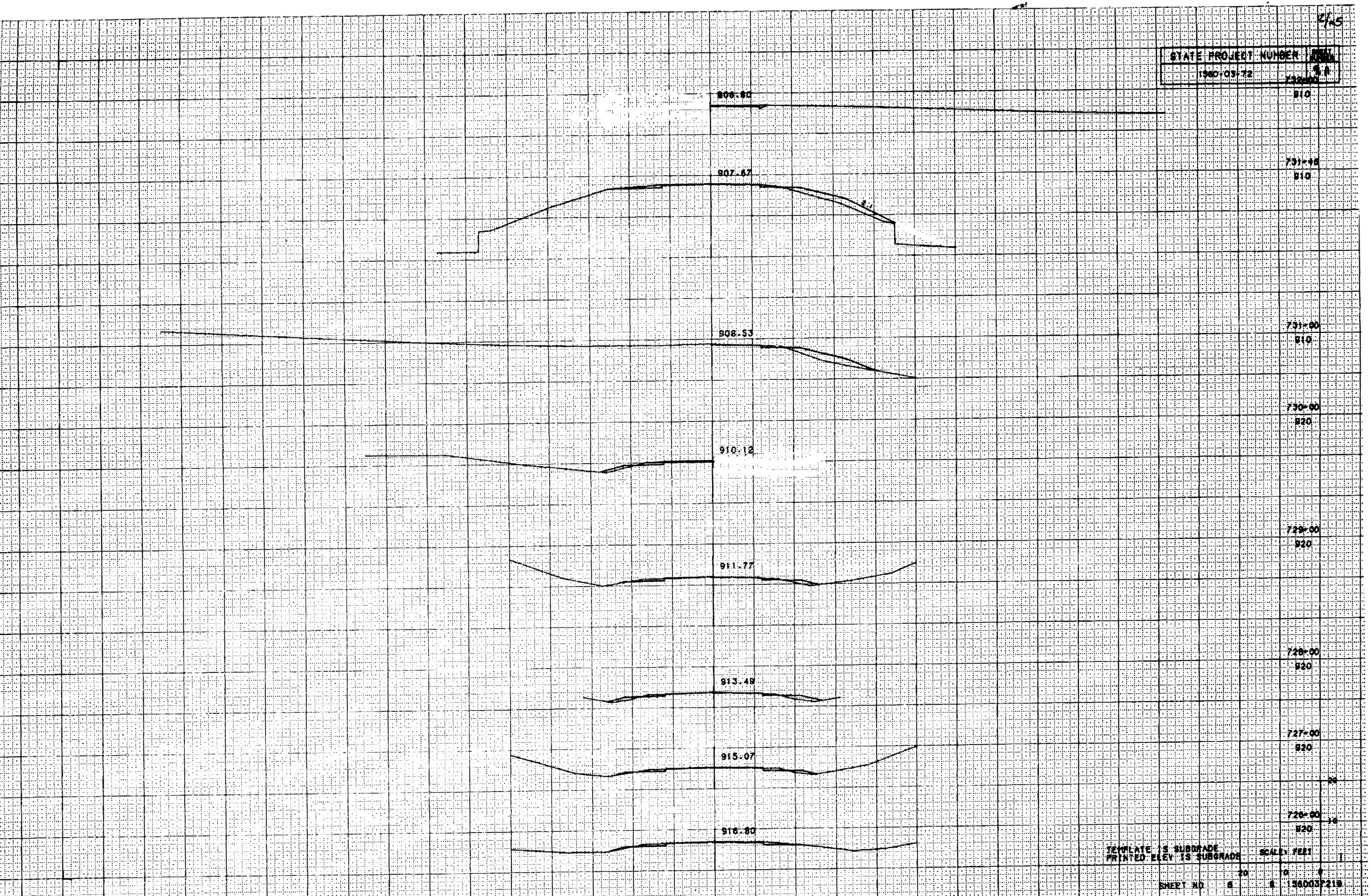
SHEET NO. 5 B. 1560037219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911.77
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910
731+46
910
731+00
910
730+00
920
729+00
920
728+00
920
727+00
920
726+00
920
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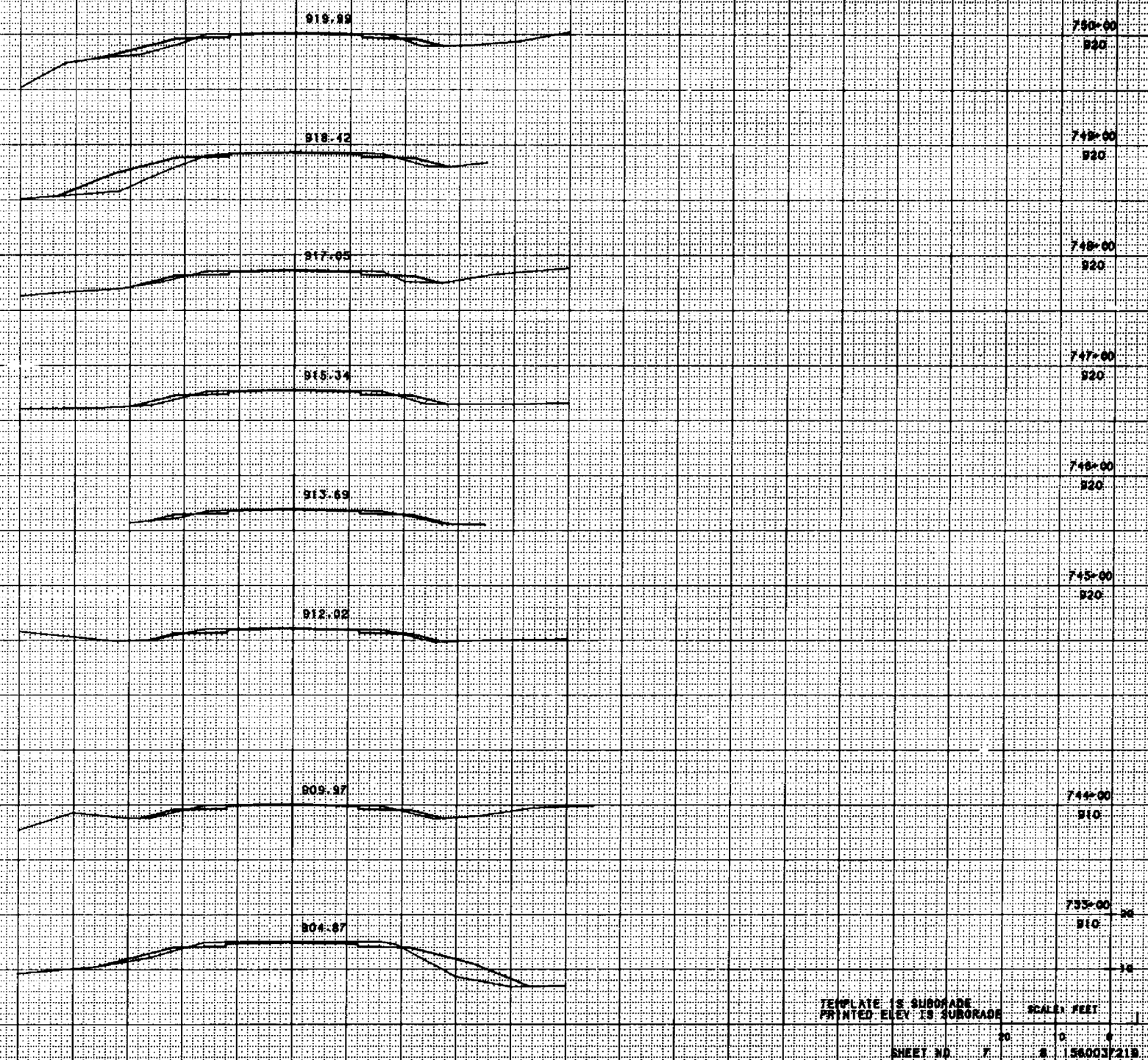

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SHEET NO. 7 S. 1560037219

STATE PROJECT NUMBER	SHEET NO.
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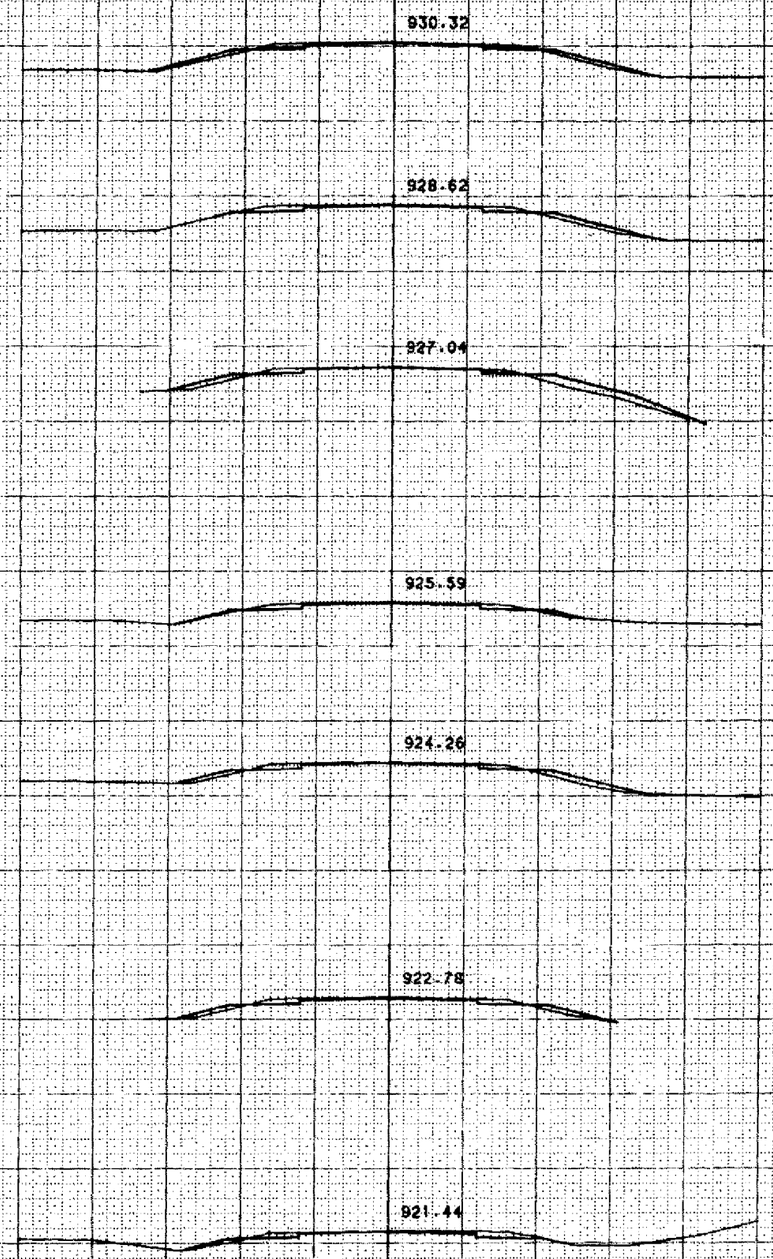

757+00
940

756+00
930

755+00
930

754+00
930

753+00
930

752+00
930

751+00
930

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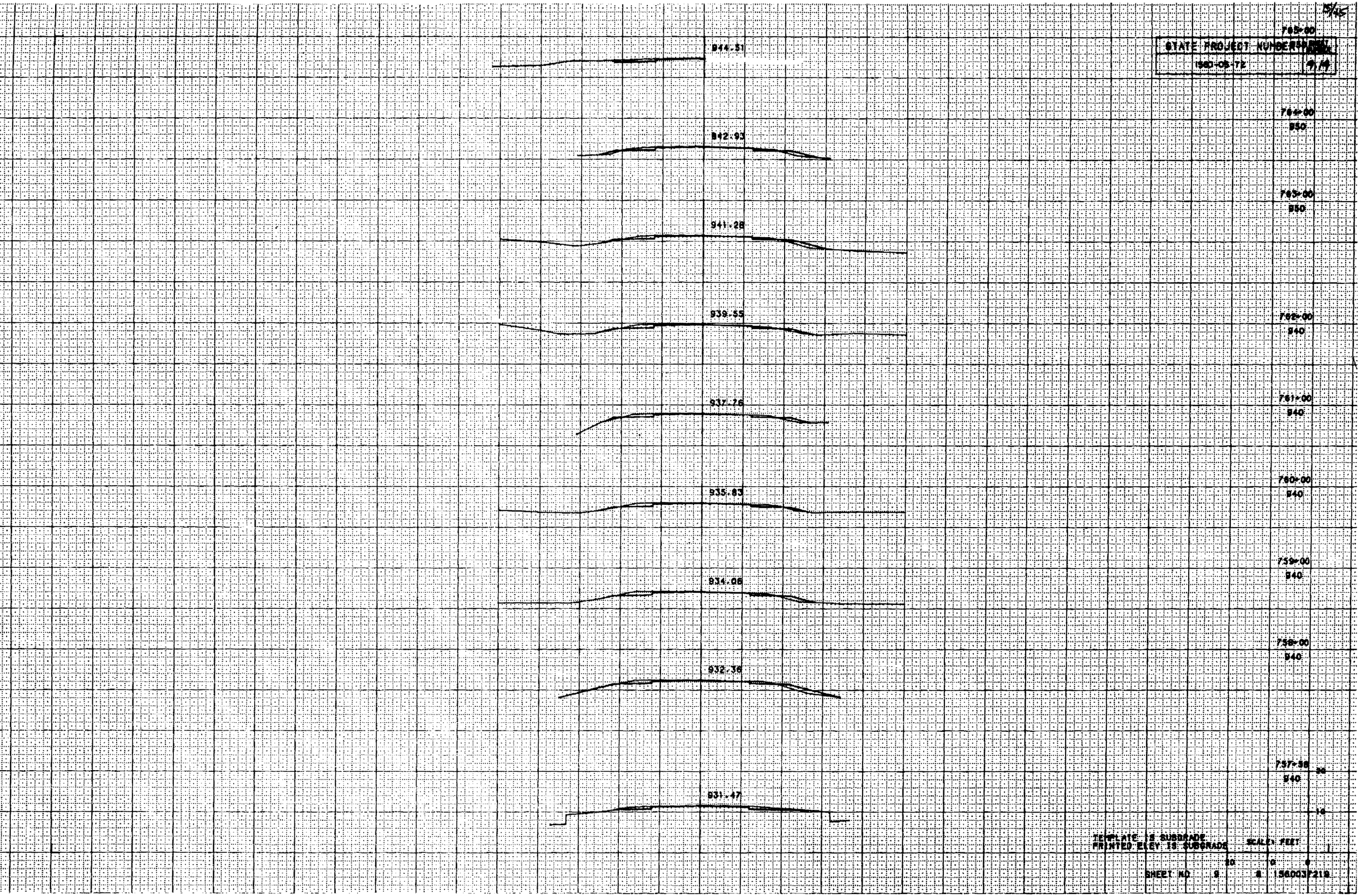
PRINTED ELEV IS SUBGRADE

SCALE: FEET

20 0 8

SHEET NO 8 8 1560037219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937.76
935.83
934.08
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765+00
764+00
950
763+00
950
762+00
940
761+00
940
760+00
940
759+00
940
758+00
940
757+58
940
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SCALE: FEET
SHEET NO. 5 OF 15600372119

STATE PROJECT NUMBER
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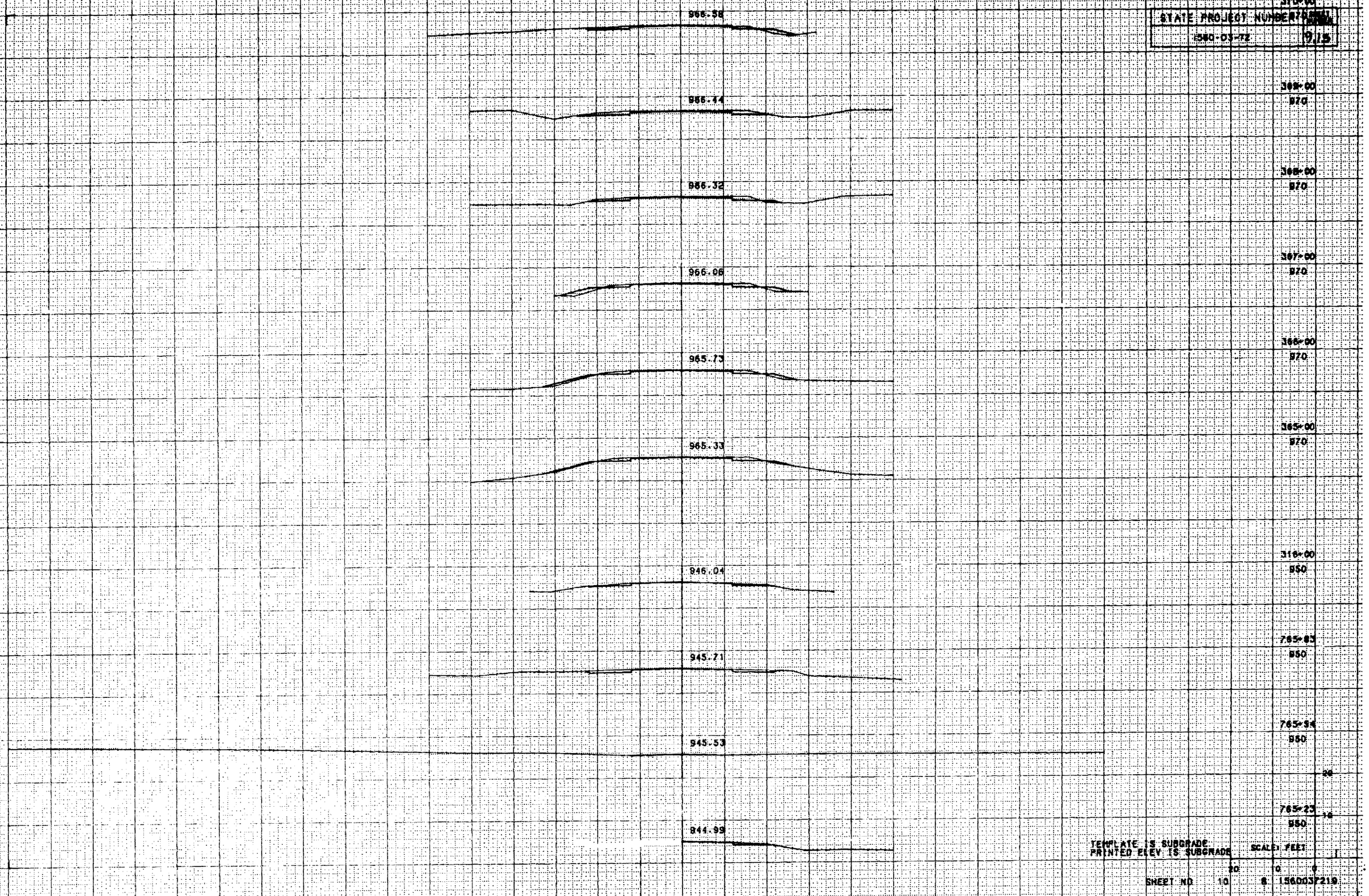

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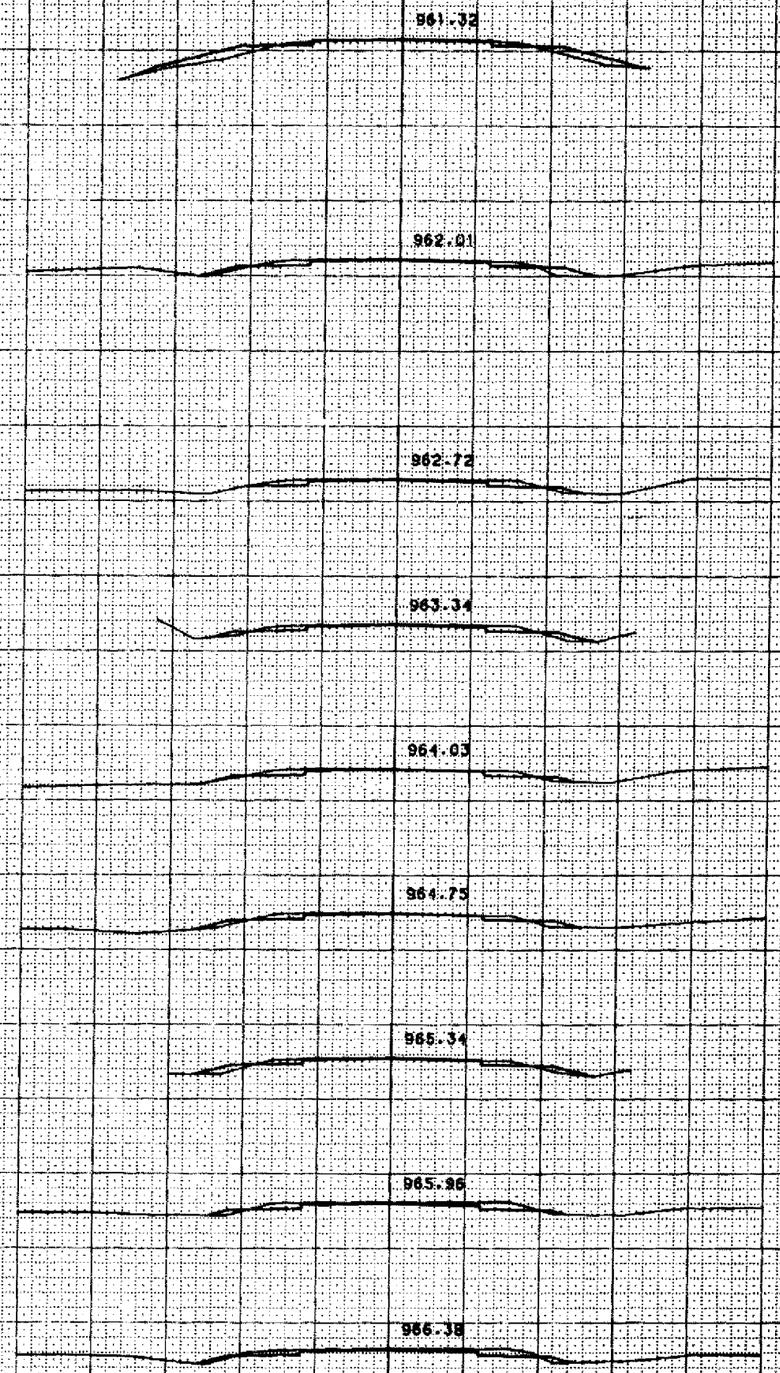

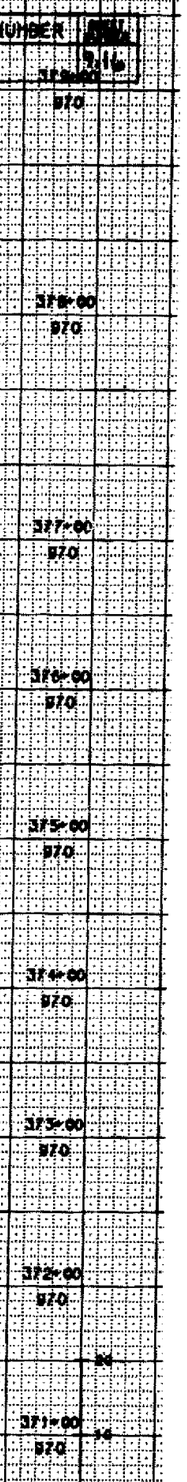

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SCALE: FEET

SHEET NO. 11 8 1560037218

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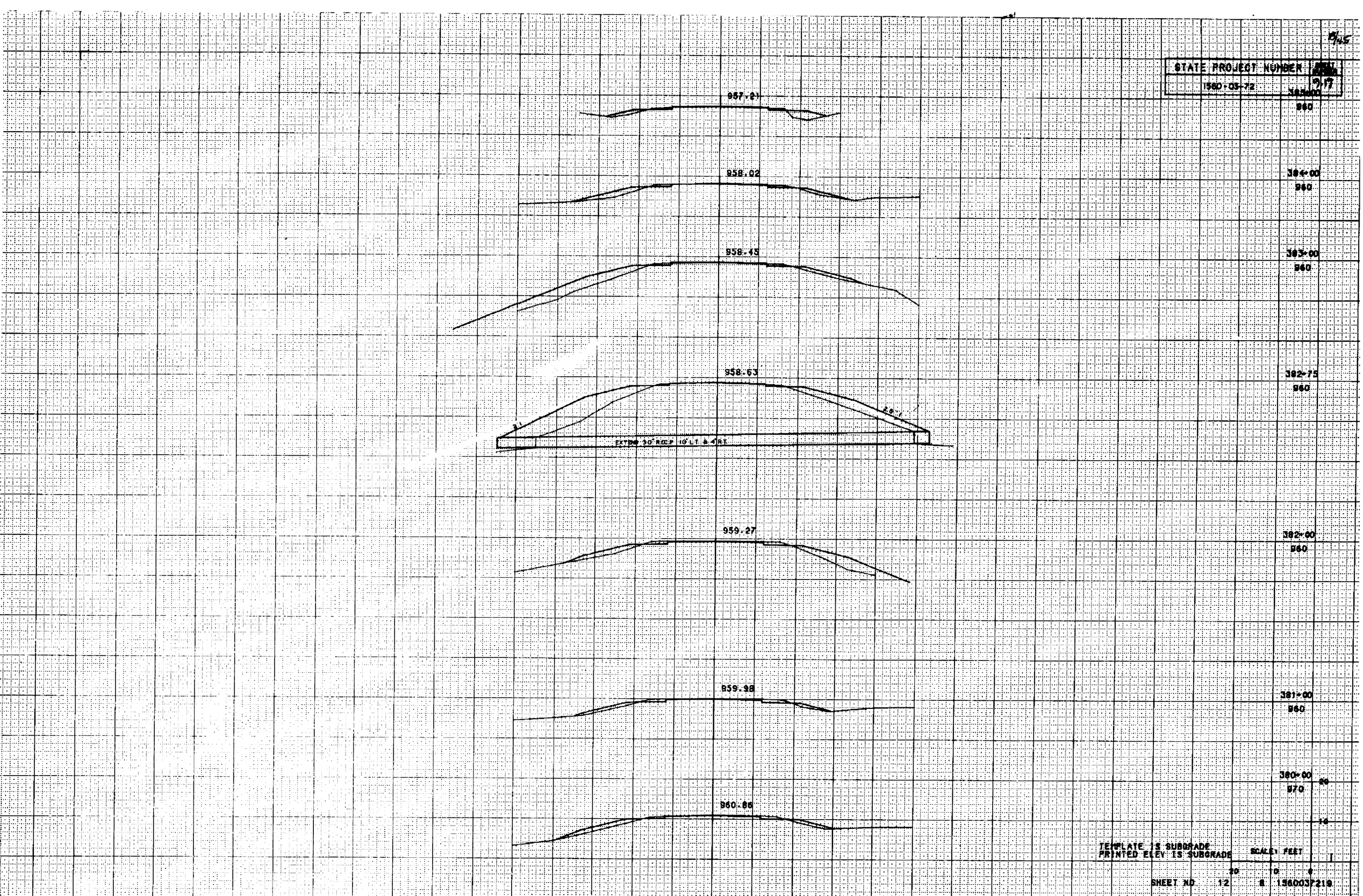

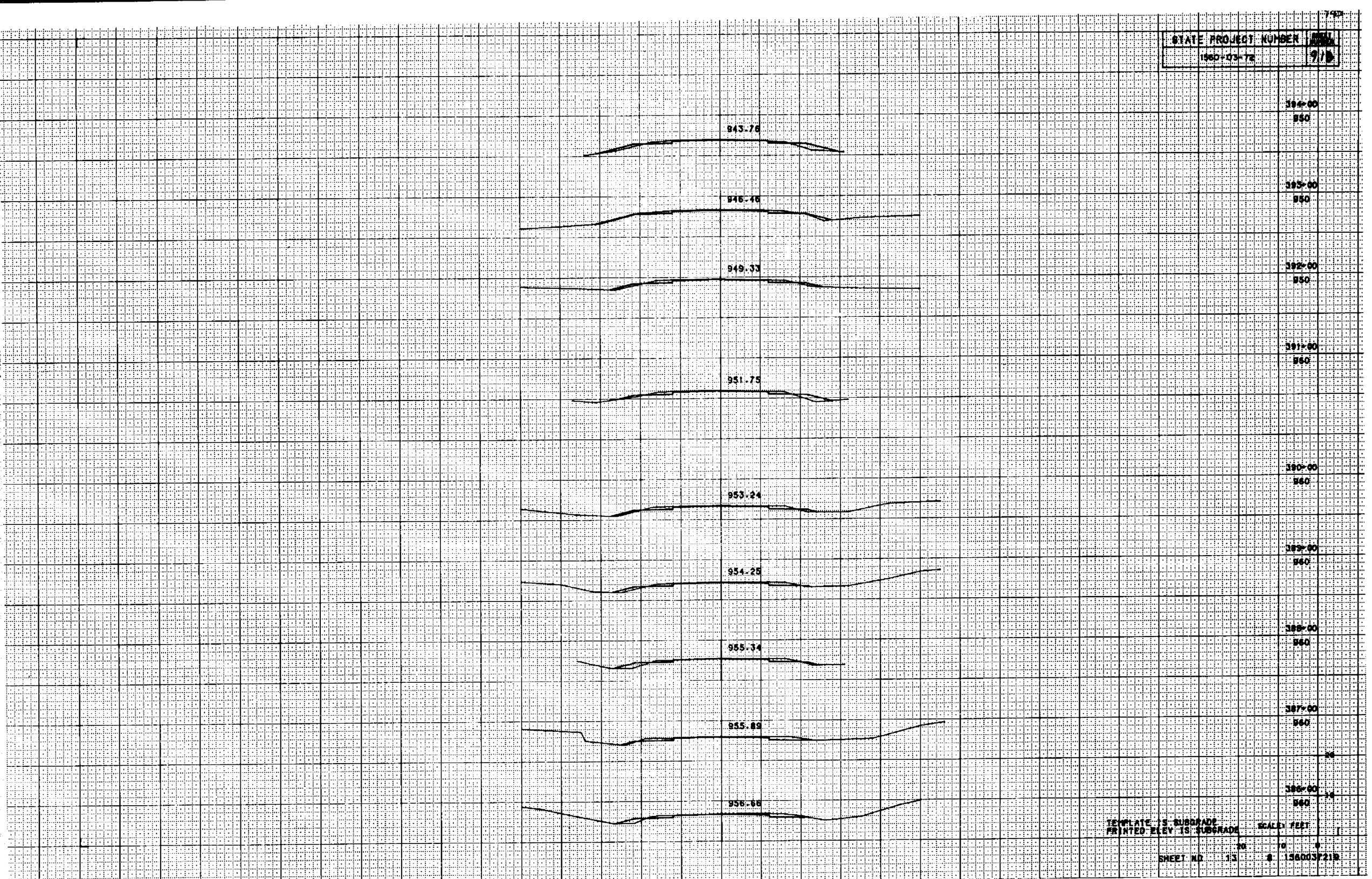
394+00
950
943.76
395+00
950
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392+00
950
949.33
391+00
950
951.75
390+00
960
953.24
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960
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955.34
387+00
960
955.89
386+00
960
956.66
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE
SCALES: FEET
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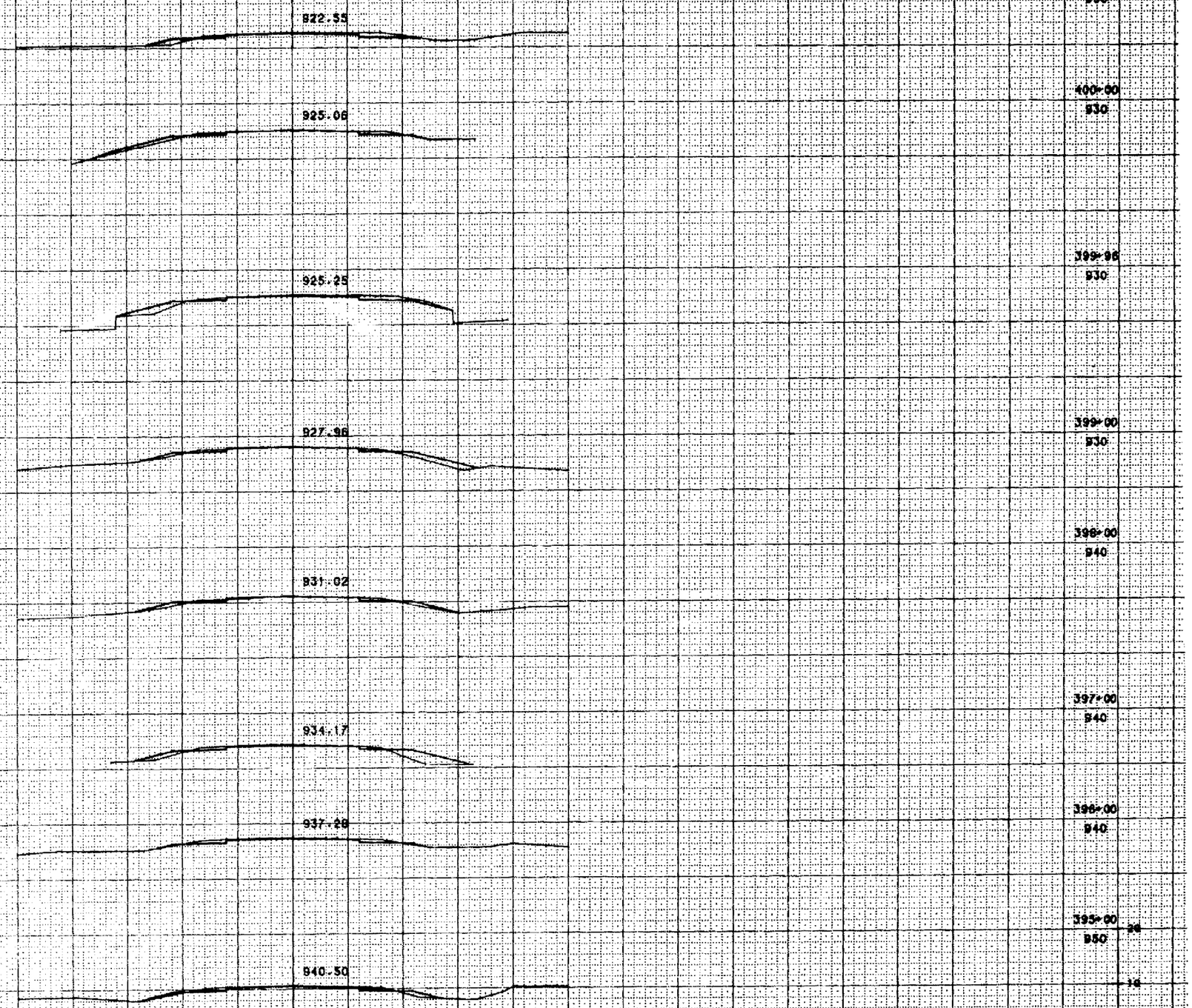
SHEET NO 13 B 136003F219

STATE PROJECT NUMBER	SHEET
1560-03-72	9 of 19



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SCALES: FEET

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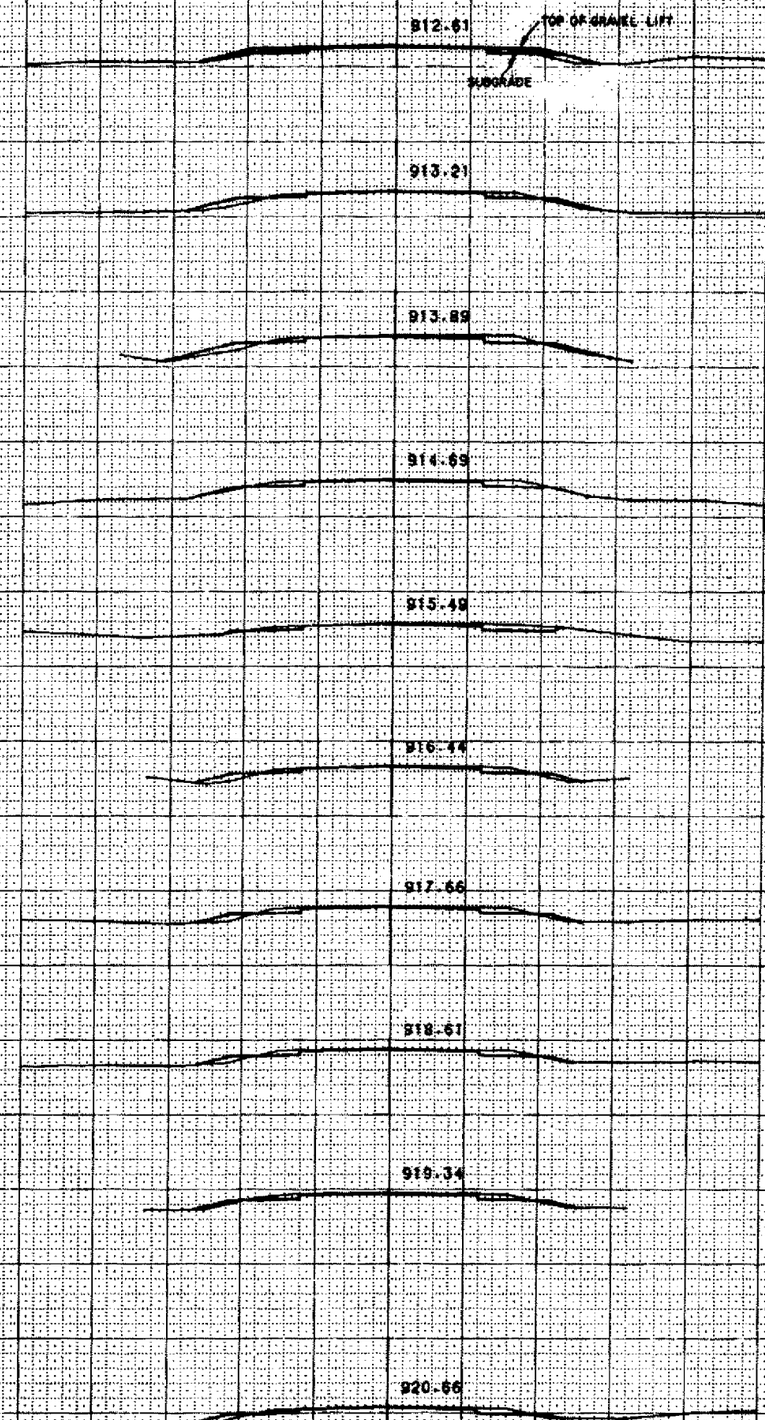
SHEET NO 14 B 1560037219

STATE PROJECT NUMBER	SHEET NO.
1580-03-72	20



411+00
910

410+00
910

409+00
920

408+00
920

407+00
920

406+00
920

405+00
920

404+00
920

403+00
920

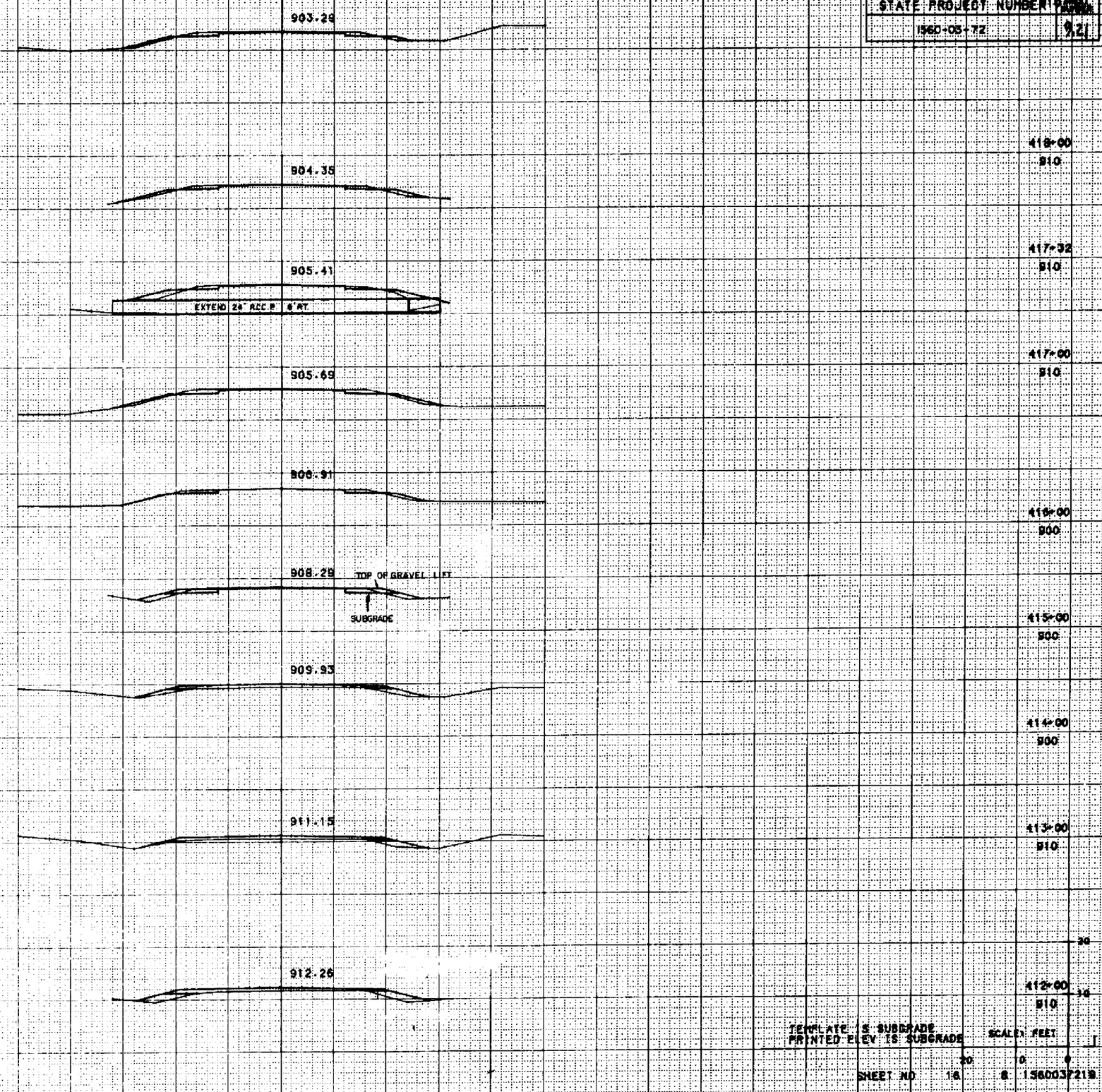
402+00
930

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

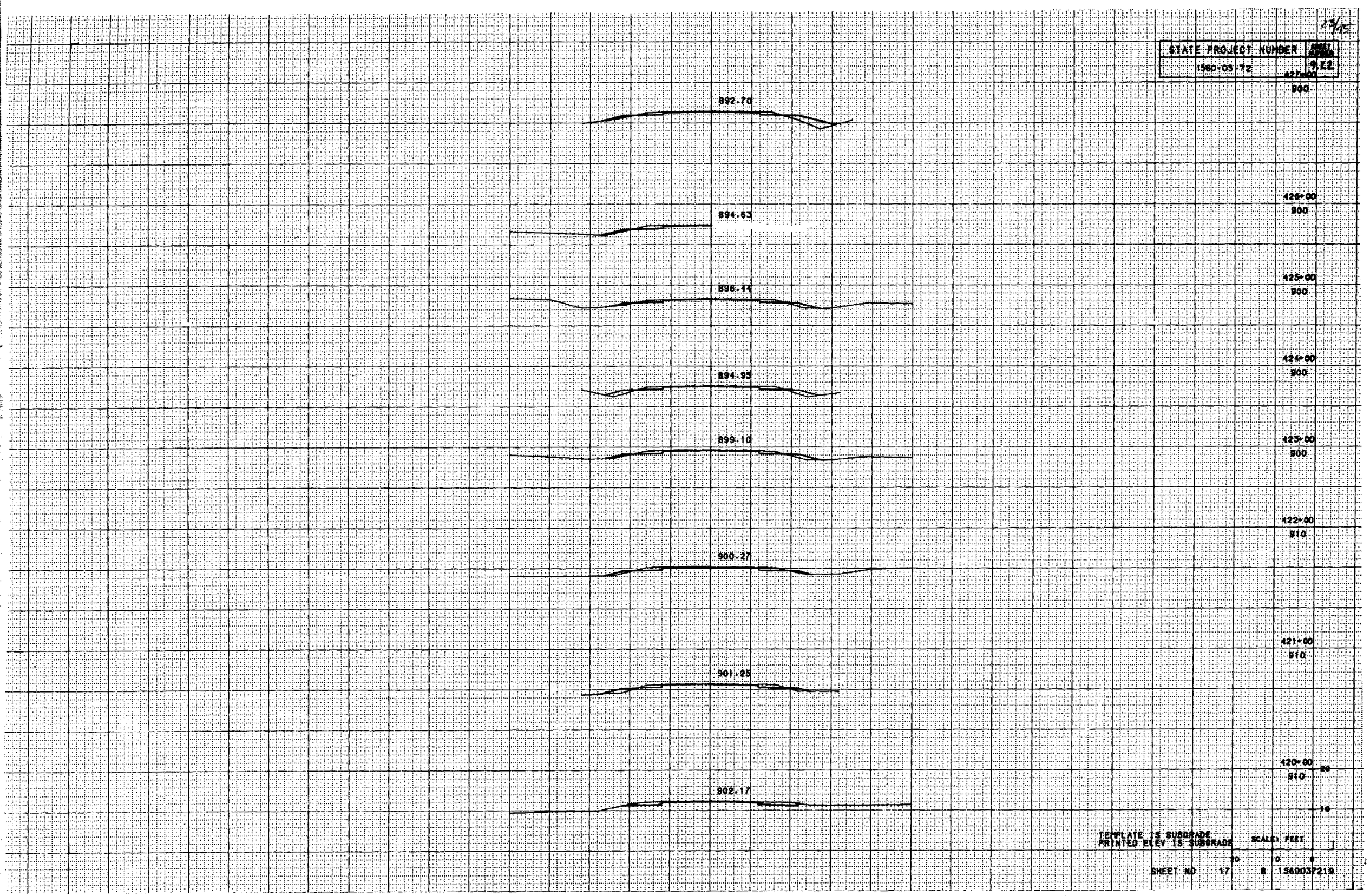
SCALE: FEET
20 10 0 4

SHEET NO 15 B 156003F21B

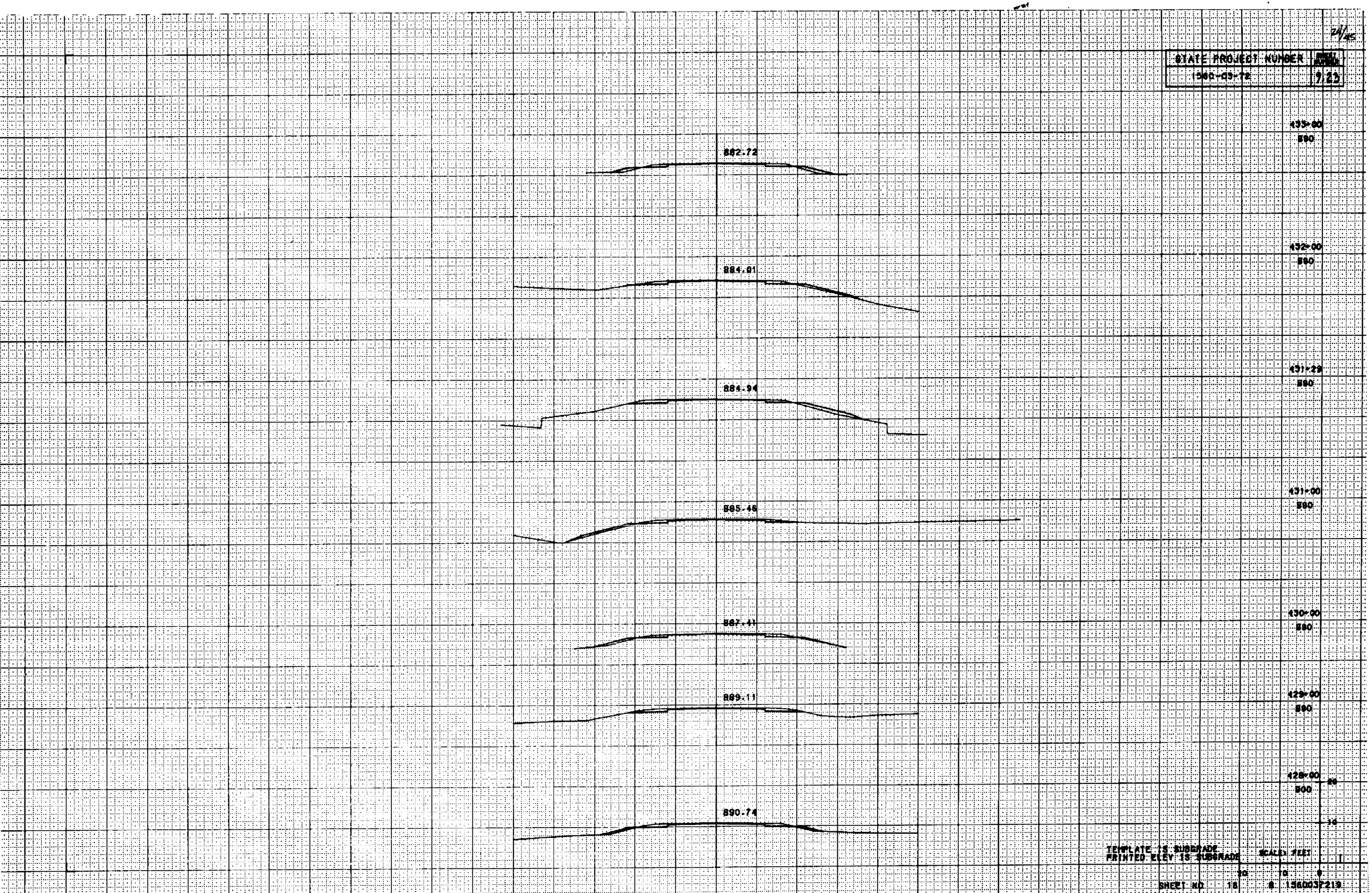
STATE PROJECT NUMBER	
1560-05-72	9.2



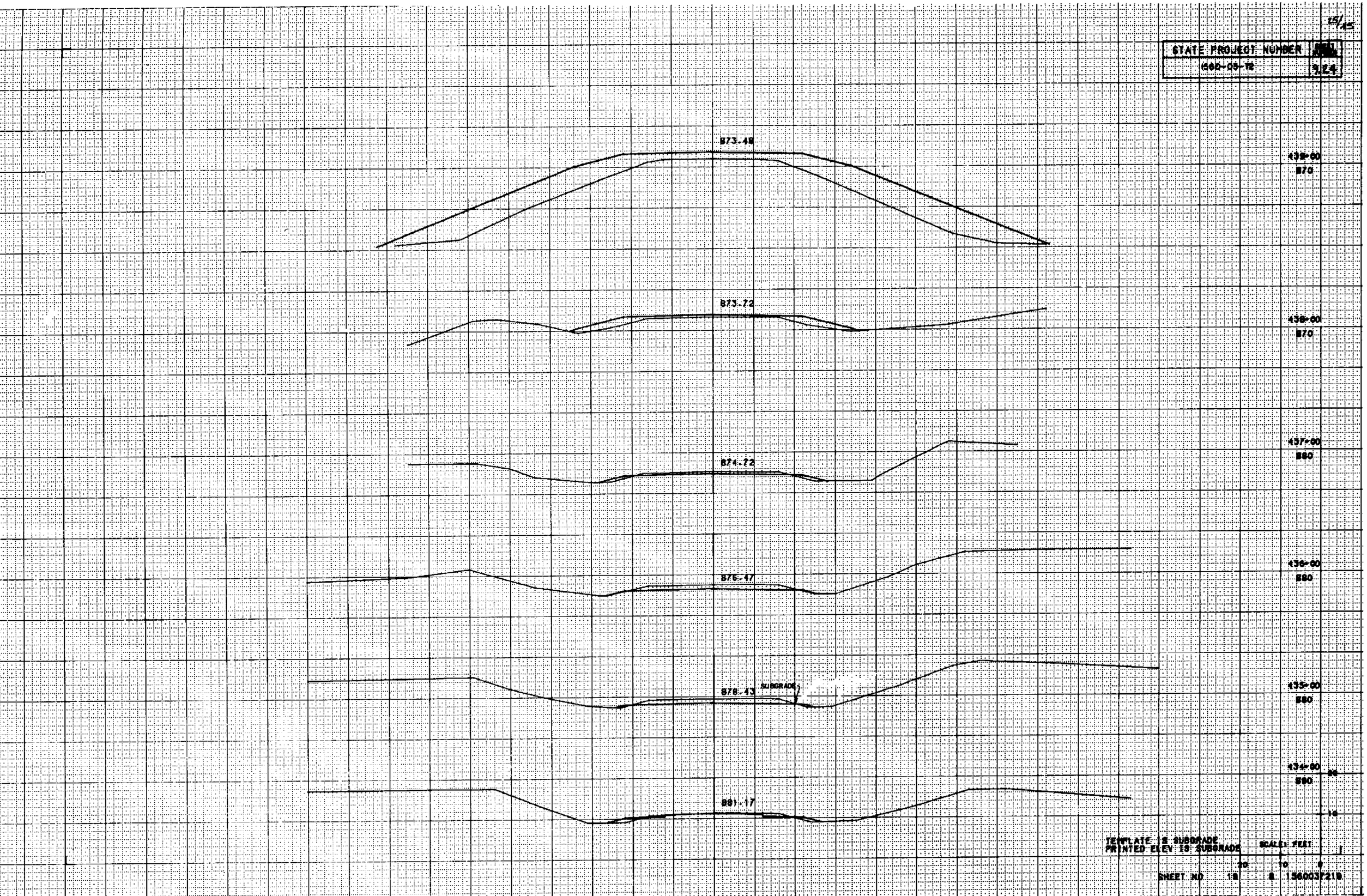
STATE PROJECT NUMBER	SHEET NUMBER
1560-03-72	9 E2

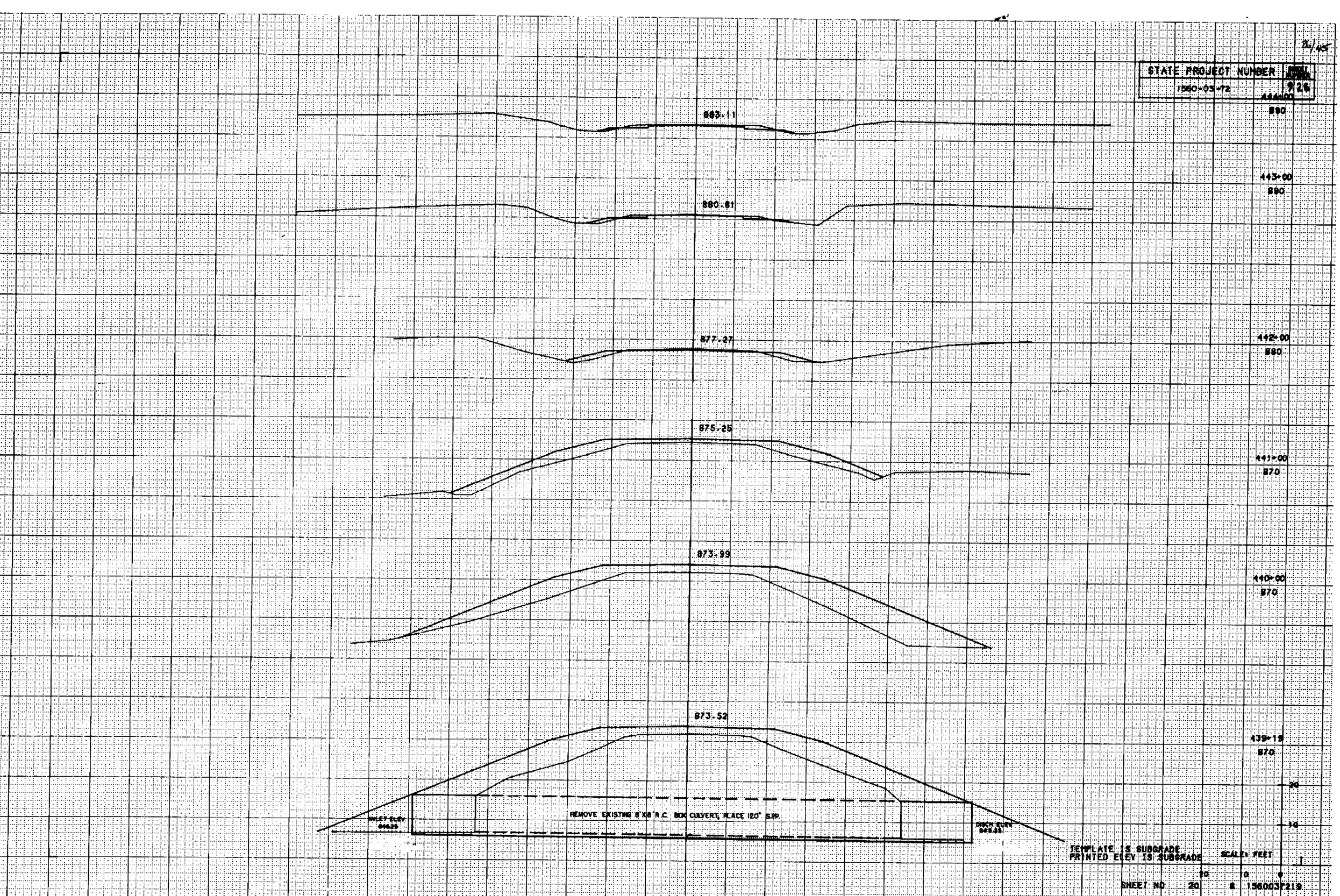


STATE PROJECT NUMBER	[illegible]
1560-05-72	9.25

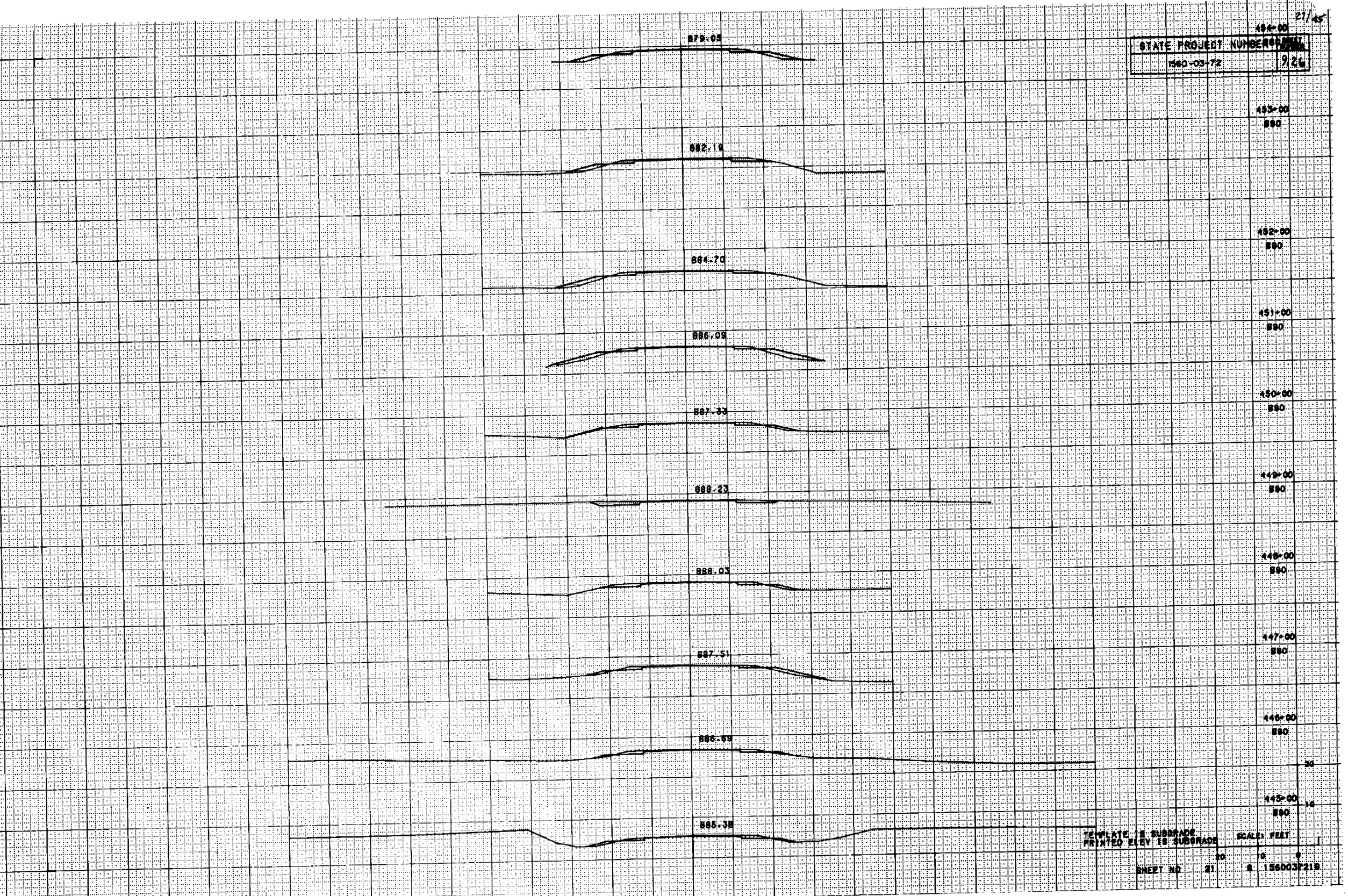


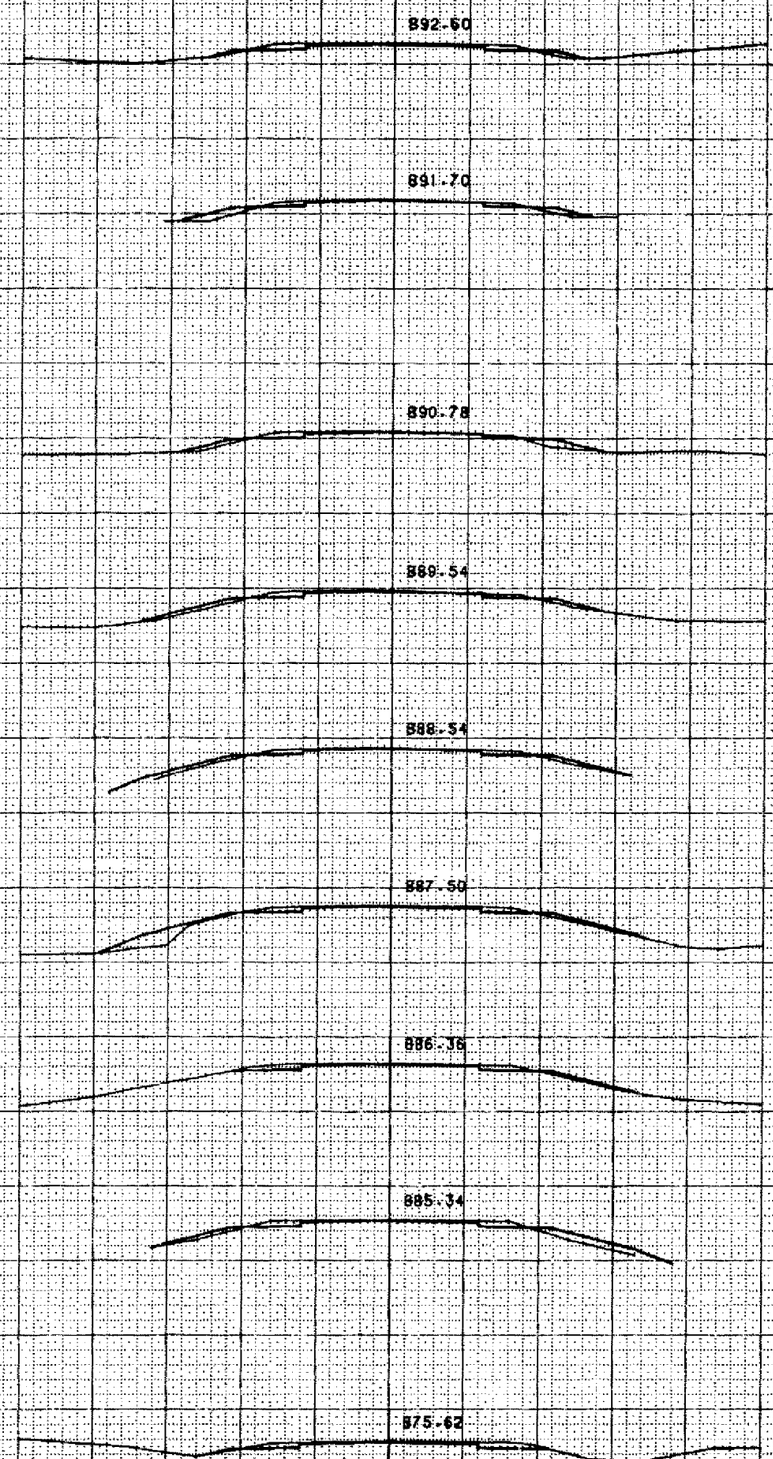
STATE PROJECT NUMBER	
6600-05-72	9.24




STATE PROJECT NUMBER
1560-03-72
883.11
880.81
877.27
875.25
873.99
873.52
444+00
890
443+00
890
442+00
880
441+00
870
440+00
870
439+19
870
REMOVE EXISTING 8'X8' R.C. BOX CULVERT, PLACE 120" SLPP.
INLET ELEV
846.25
DITCH ELEV
845.35
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE
SCALE: FEET
20
10
0
SHEET NO. 20
1560037219

STATE PROJECT NUMBER
1560-03-72





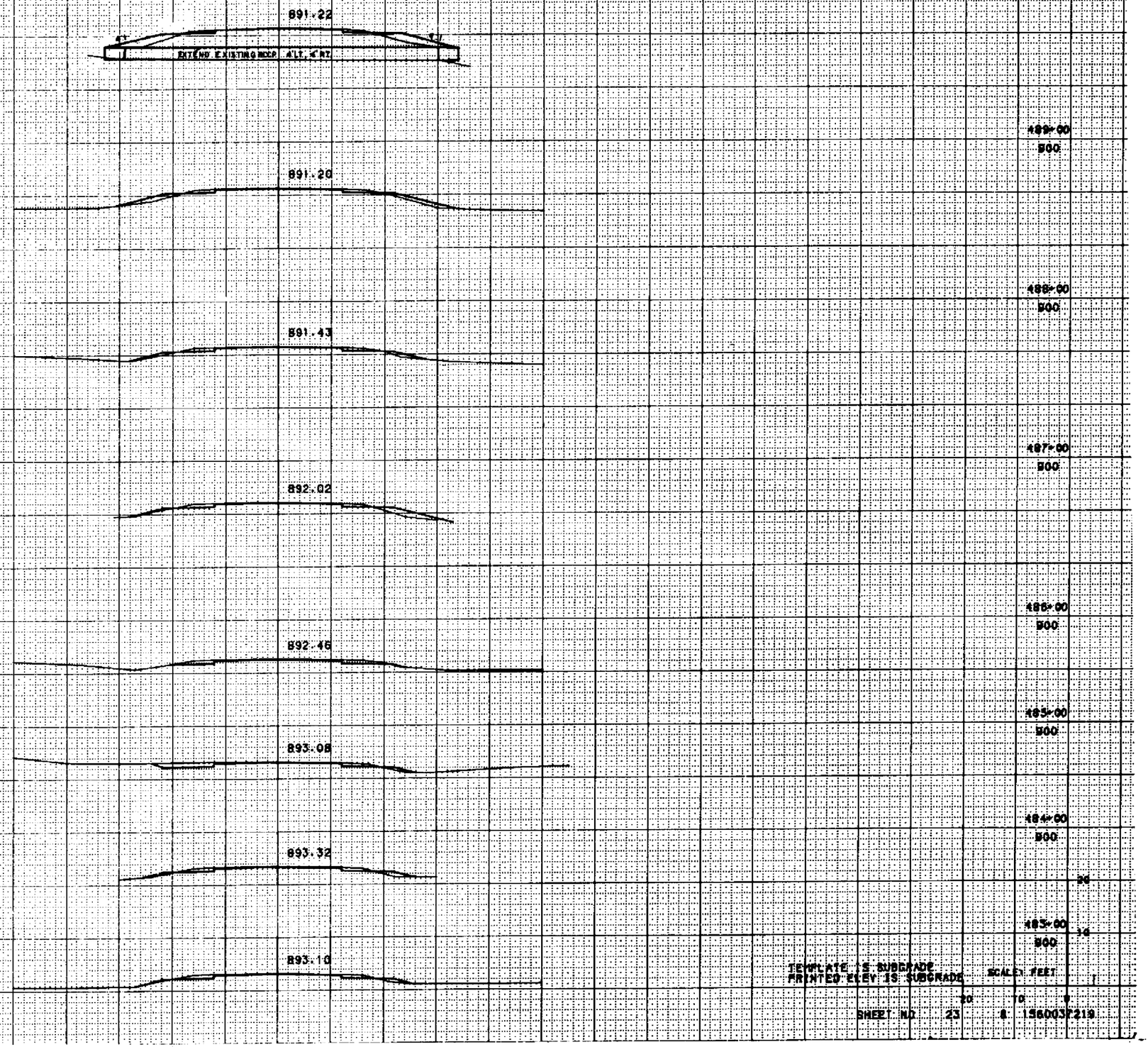
STATE PROJECT NUMBER
1560-03-72 9.27

482+00
481+00
500
480+00
500
479+00
590
478+00
590
477+00
590
476+00
590
475+00
590
455+00
880

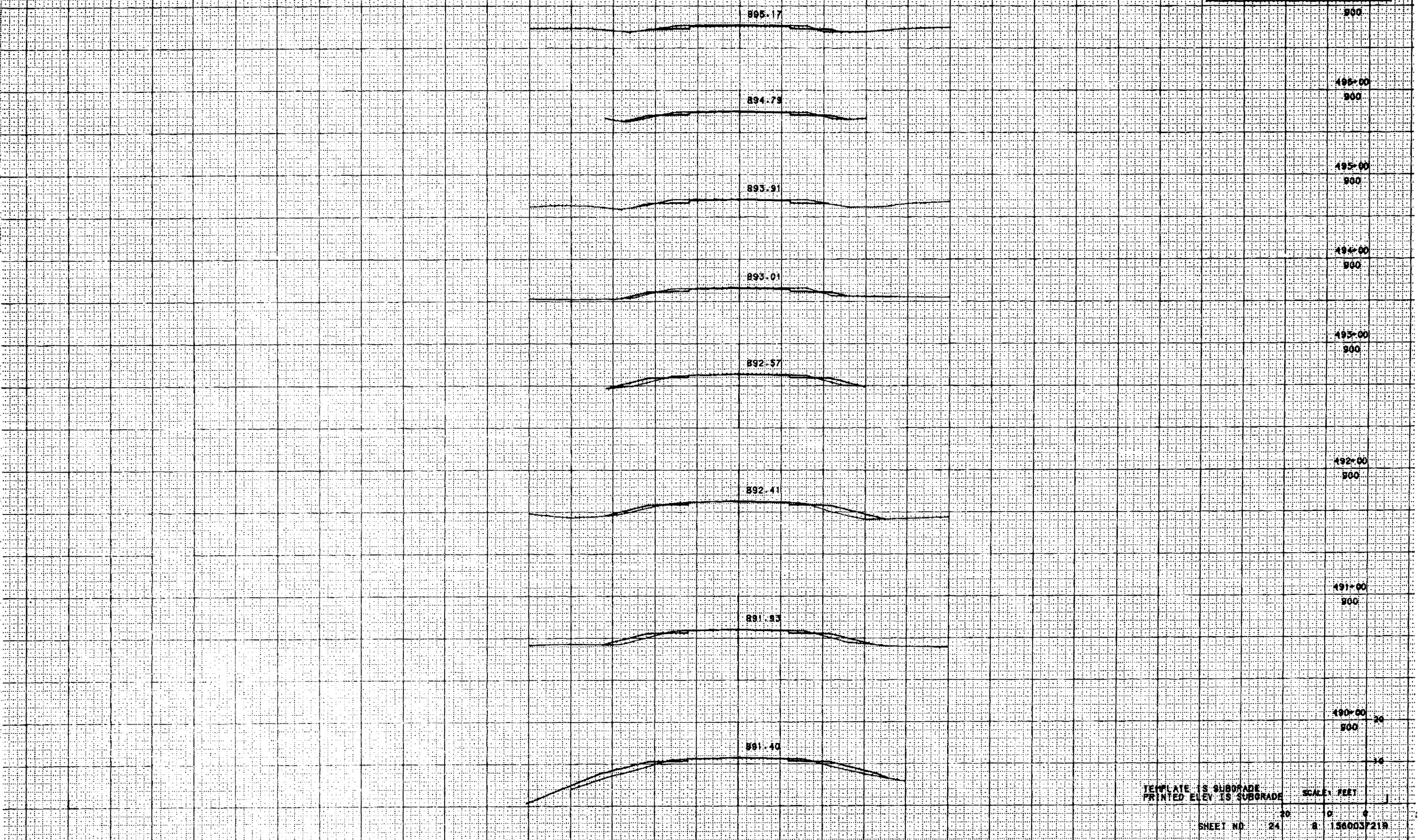
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 10 0 0

STATE PROJECT NUMBER	TOTAL SHEETS
1560-03-72	228

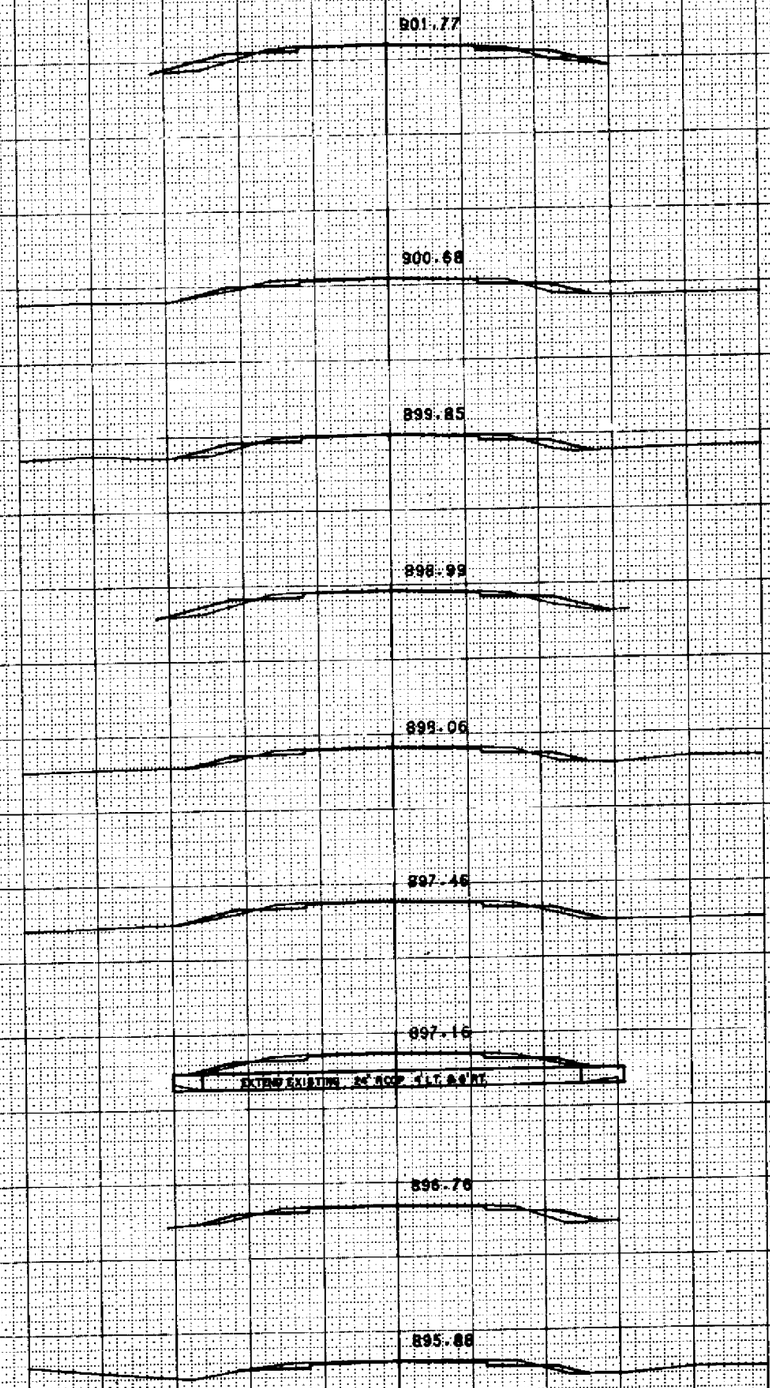


STATE PROJECT NUMBER	
1560-03-72	329



SHEET NO 24 B 1560037219

STATE PROJECT NUMBER
1560-03-72



505+00
910

504+00
910

503+00
900

502+00
900

501+00
900

500+00
900

499+92
900

499+00
900

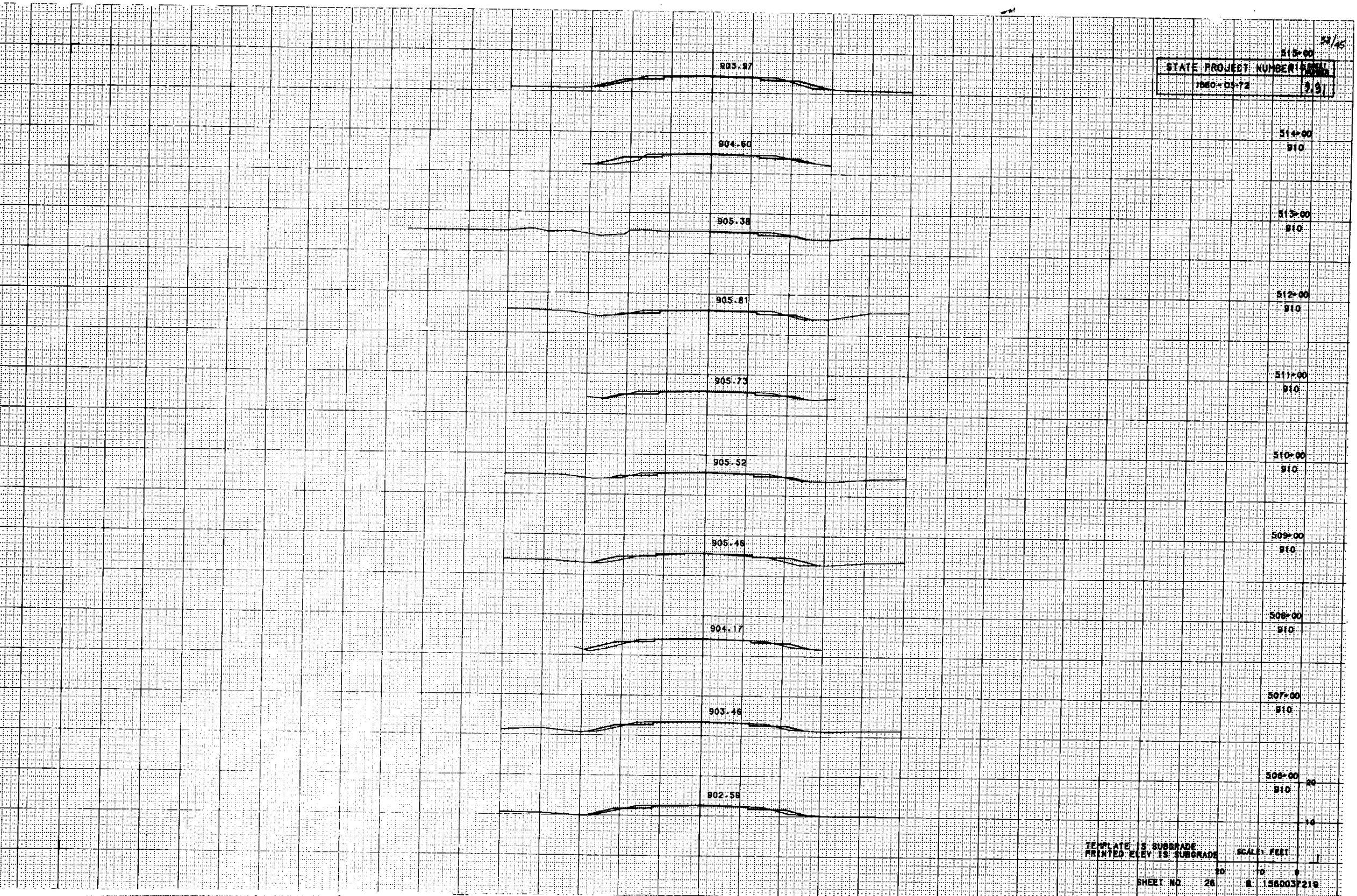
498+00
900

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

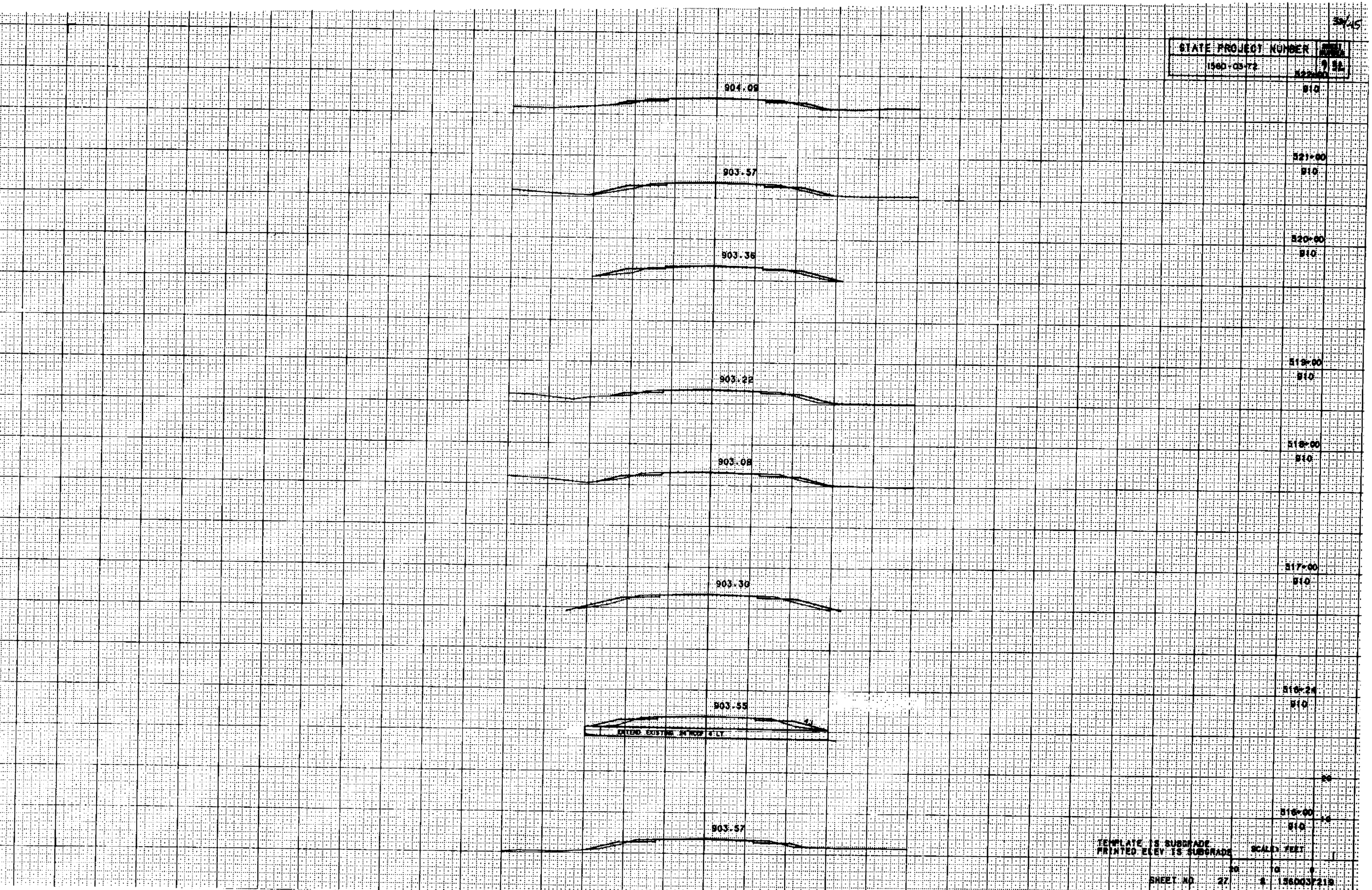
SCALE: FEET

SHEET NO 25 A 156003 219

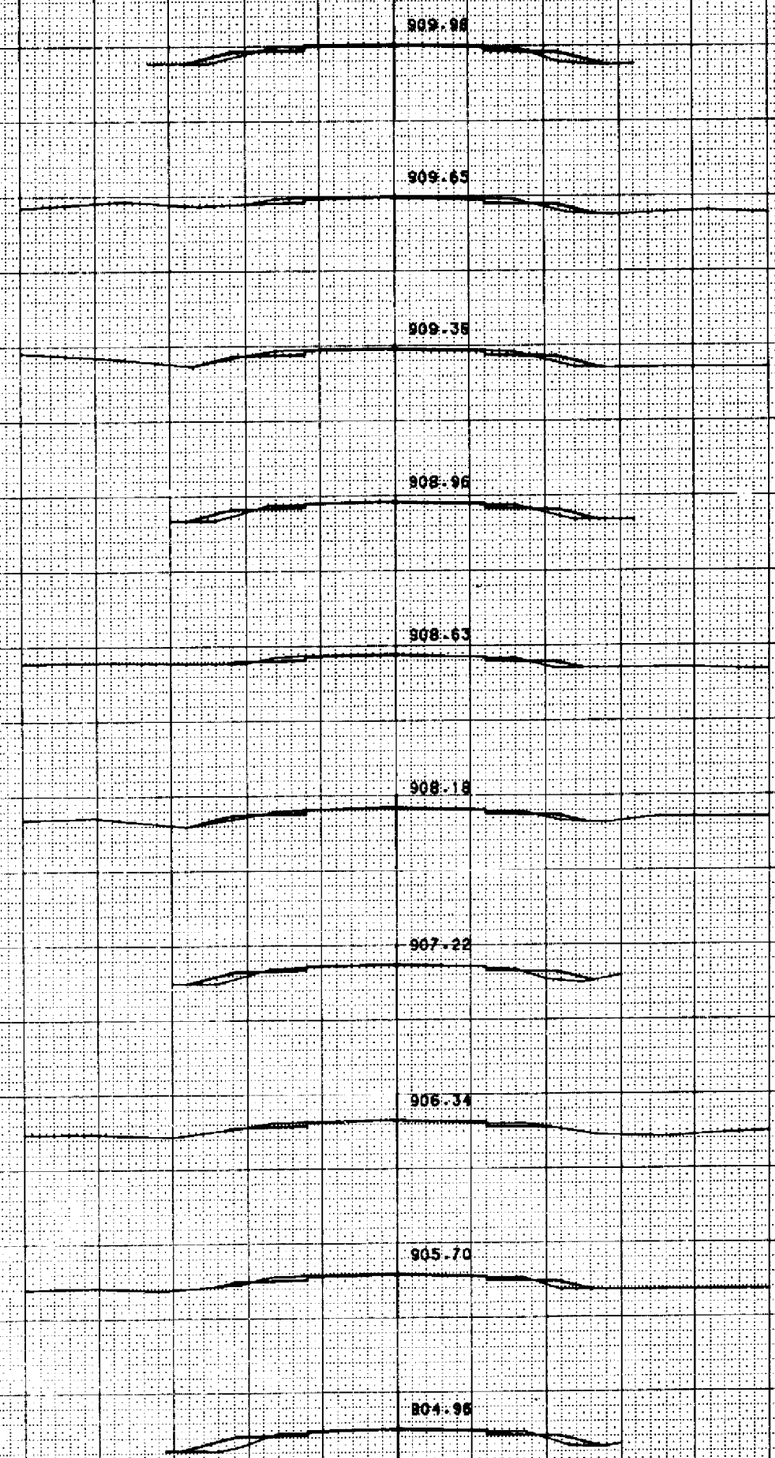
STATE PROJECT NUMBER
1060-05-72



STATE PROJECT NUMBER	SHEET NO.
1560-03-72	9 SA



STATE PROJECT NUMBER
1560-03-72



532+00
910
531+00
910
530+00
910
529+00
910
528+00
910
527+00
910
526+00
910
525+00
910
524+00
910
523+00
910

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 10 0

SHEET NO. 28 B 1560037219

STATE PROJECT NUMBER
1560-03-72

538+00

911.36

537+00
920

911.07

536+00
920

910.83

535+00
920

910.57

534+00
920

910.36

533+34
920

910.38

EXTEND EXISTING 24" RCP 6'L.4' RT.

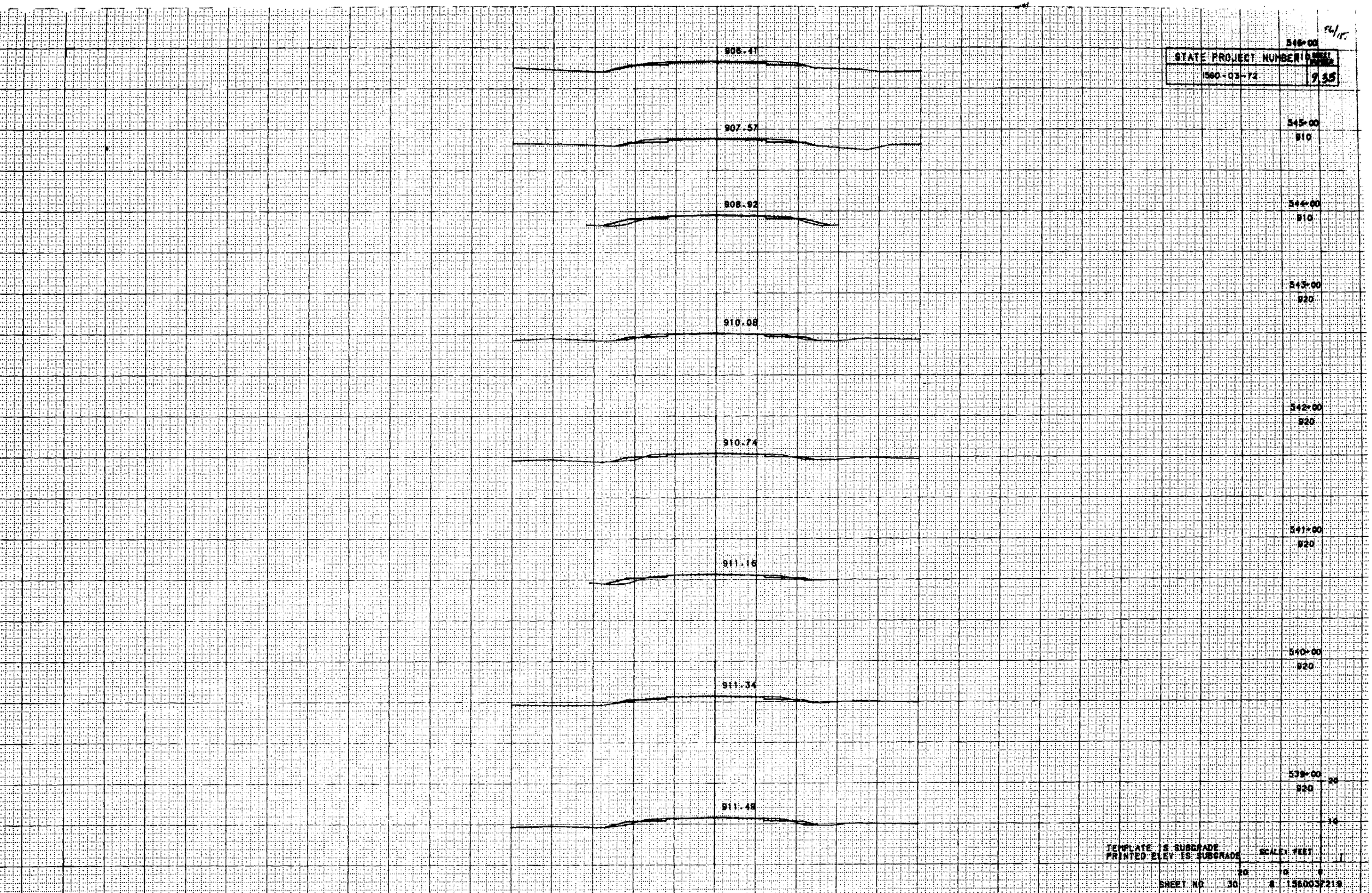
533+00
920

910.29

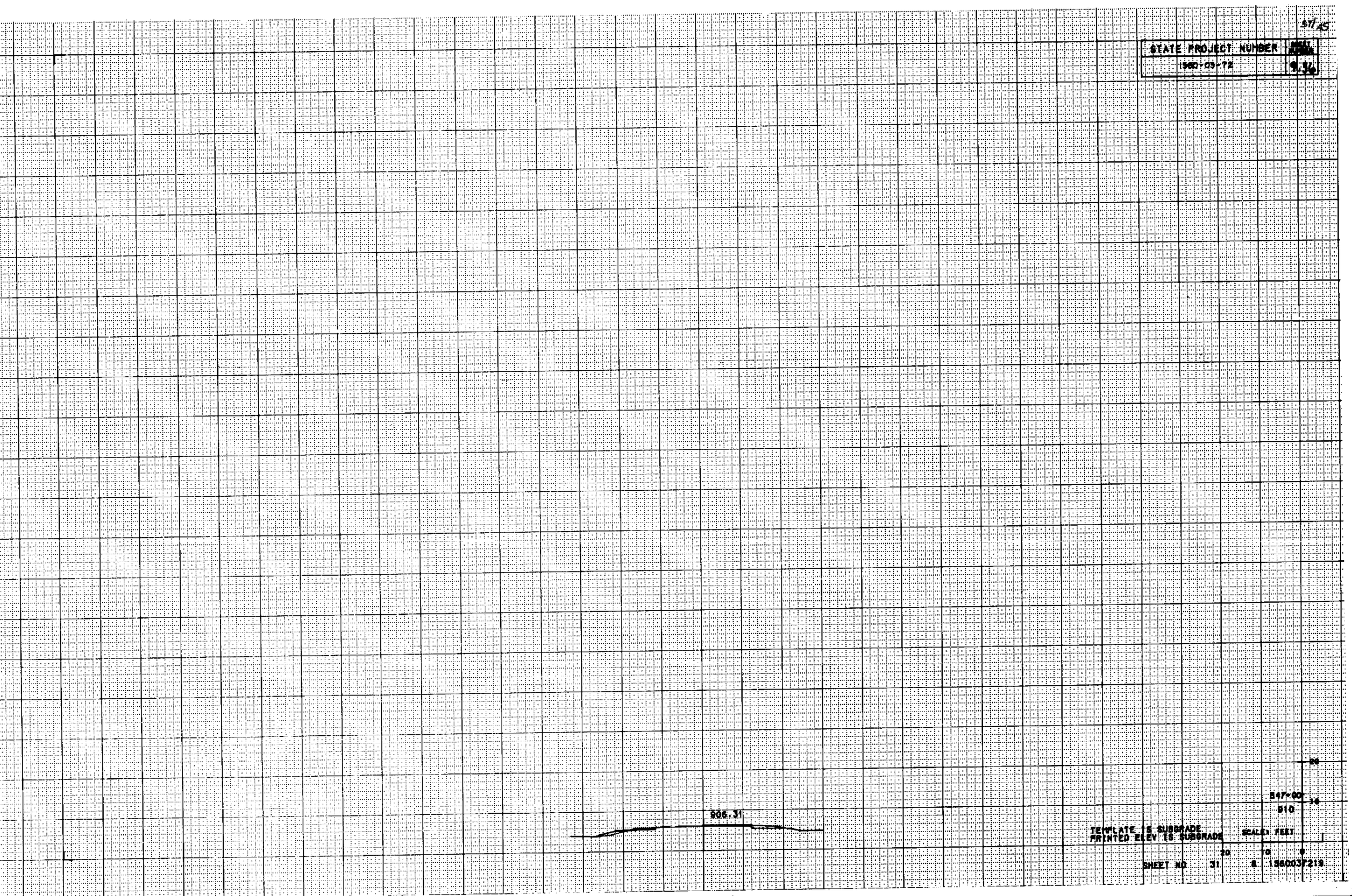
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET

SHEET NO 28 B 156003F219

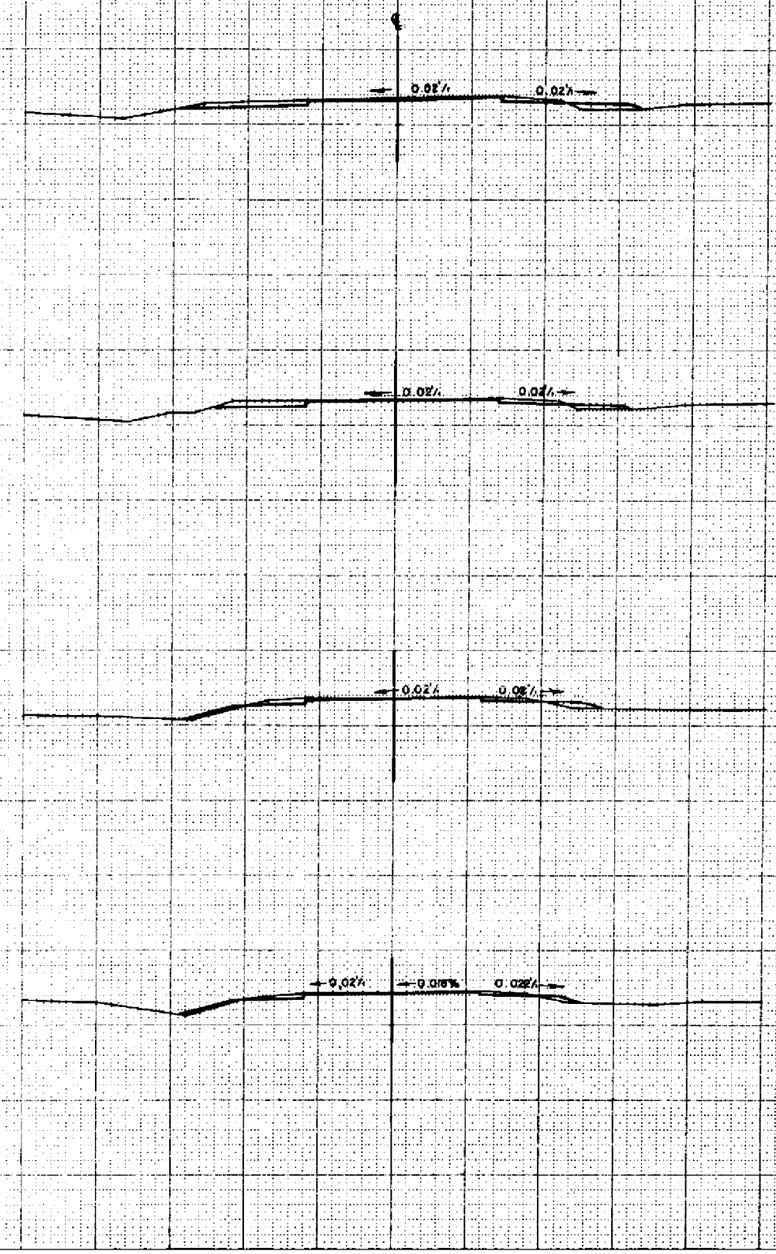

STATE PROJECT NUMBER
1560-03-72
9 35
546+00
545+00
910
544+00
910
543+00
920
542+00
920
541+00
920
540+00
920
539+00
920
905.41
907.57
908.92
910.08
910.74
911.16
911.34
911.48
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE
SCALE: FEET
20
10
0
SHEET NO
30
8
1560032119

STATE PROJECT NUMBER	
560-03-72	9.36



STATE PROJECT NUMBER	SHEET NUMBER
1580-03-74	9.97

STATION	DISTANCE	VARDAGE EXCAVATION	FILL



551+00
900

550+00
900

549+00
900

548+00
900

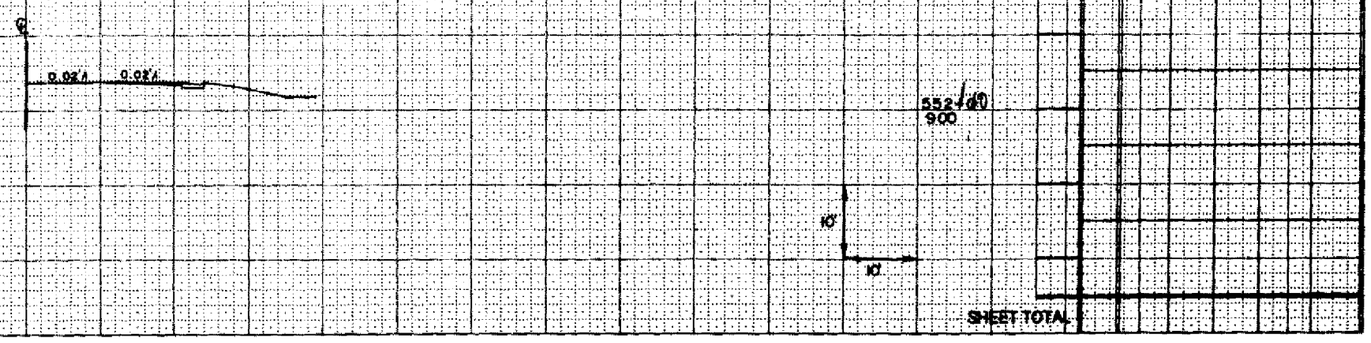
10'

10'

SHEET TOTAL

STATE PROJECT NUMBER	SHEET NUMBER
1560-03-72	9.38

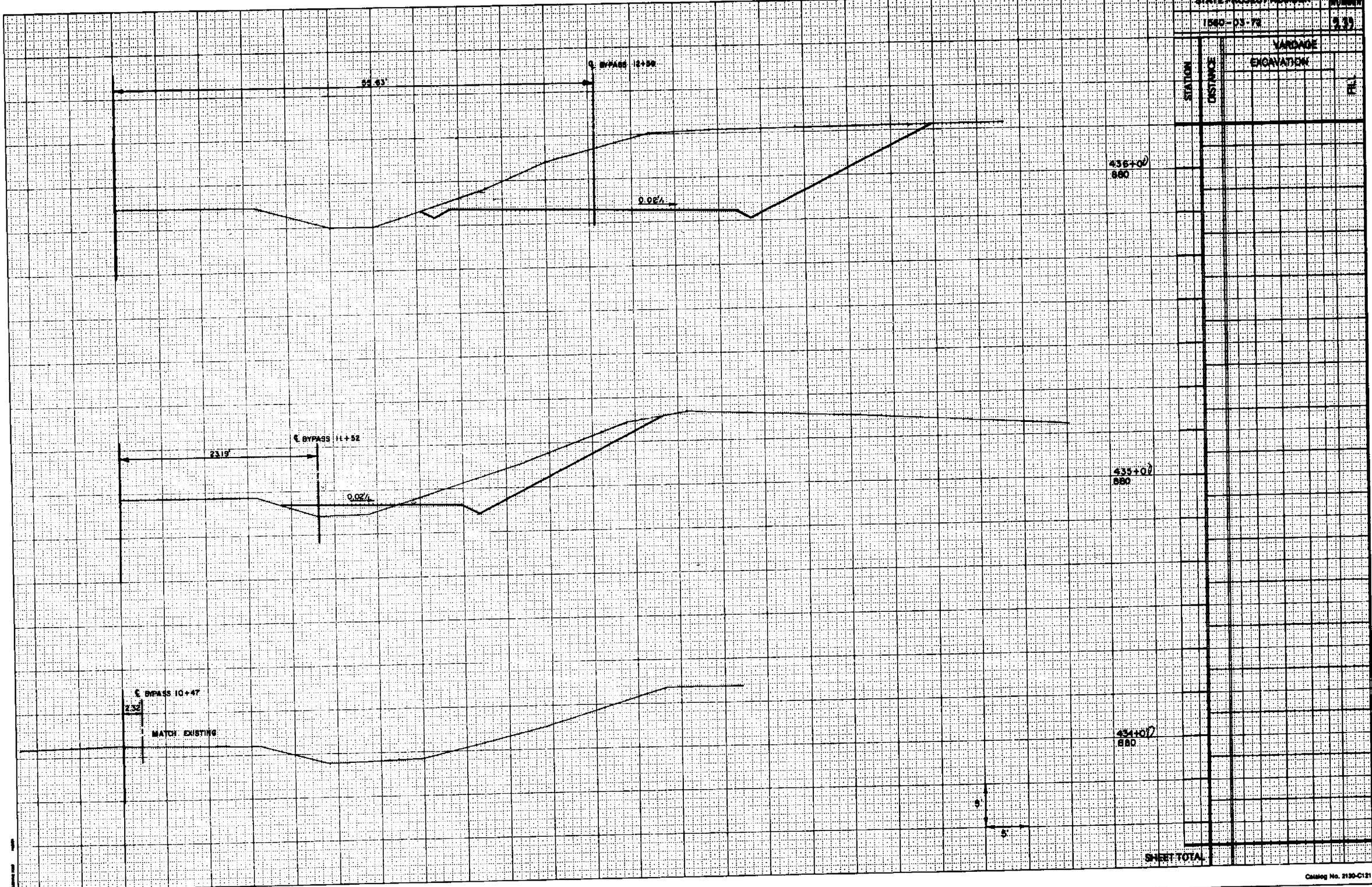
STATION	DISTANCE	YARDAGE EXCAVATION	FILL



SHEET TOTAL

STATE PROJECT NUMBER	SHEET NUMBER
1540-03-72	23

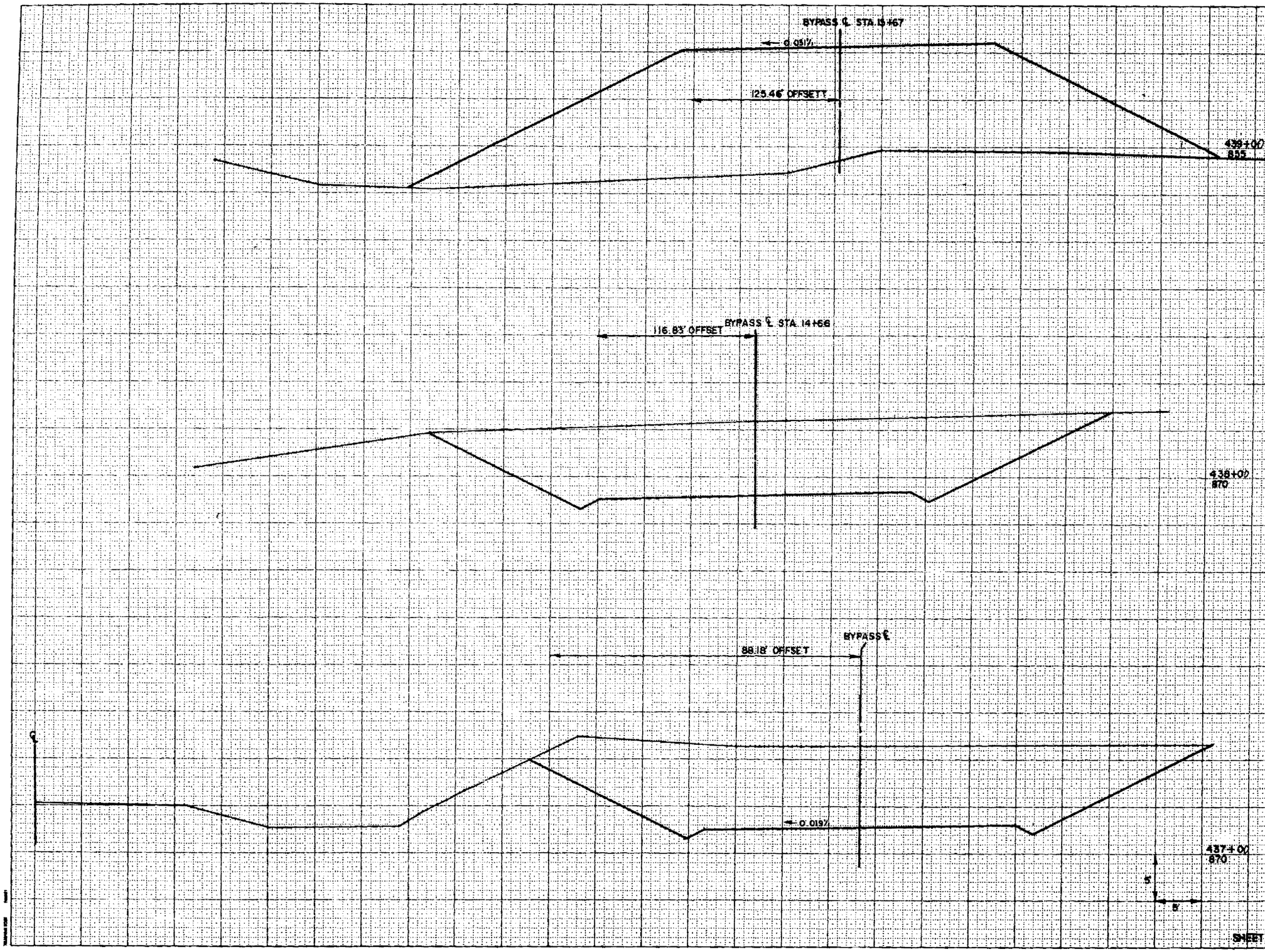
STATION	DISTANCE	VARIANCE EXCAVATION	FILL



SHEET TOTAL

STATE PROJECT NUMBER	SHEET NUMBER
1580-03-72	7.44

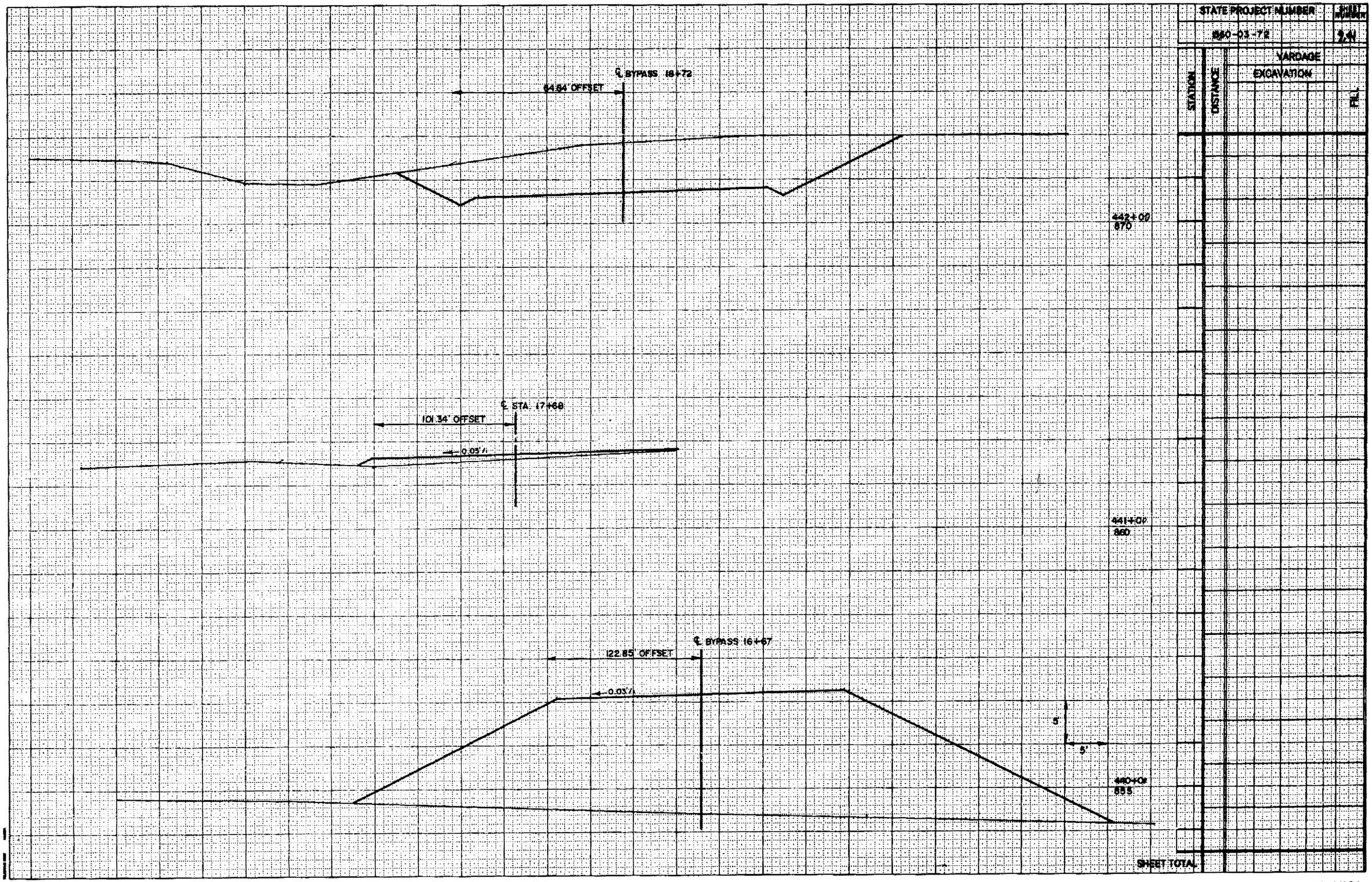
STATION	DISTANCE	VARDAGE EXCAVATION	FILL



SHEET TOTAL

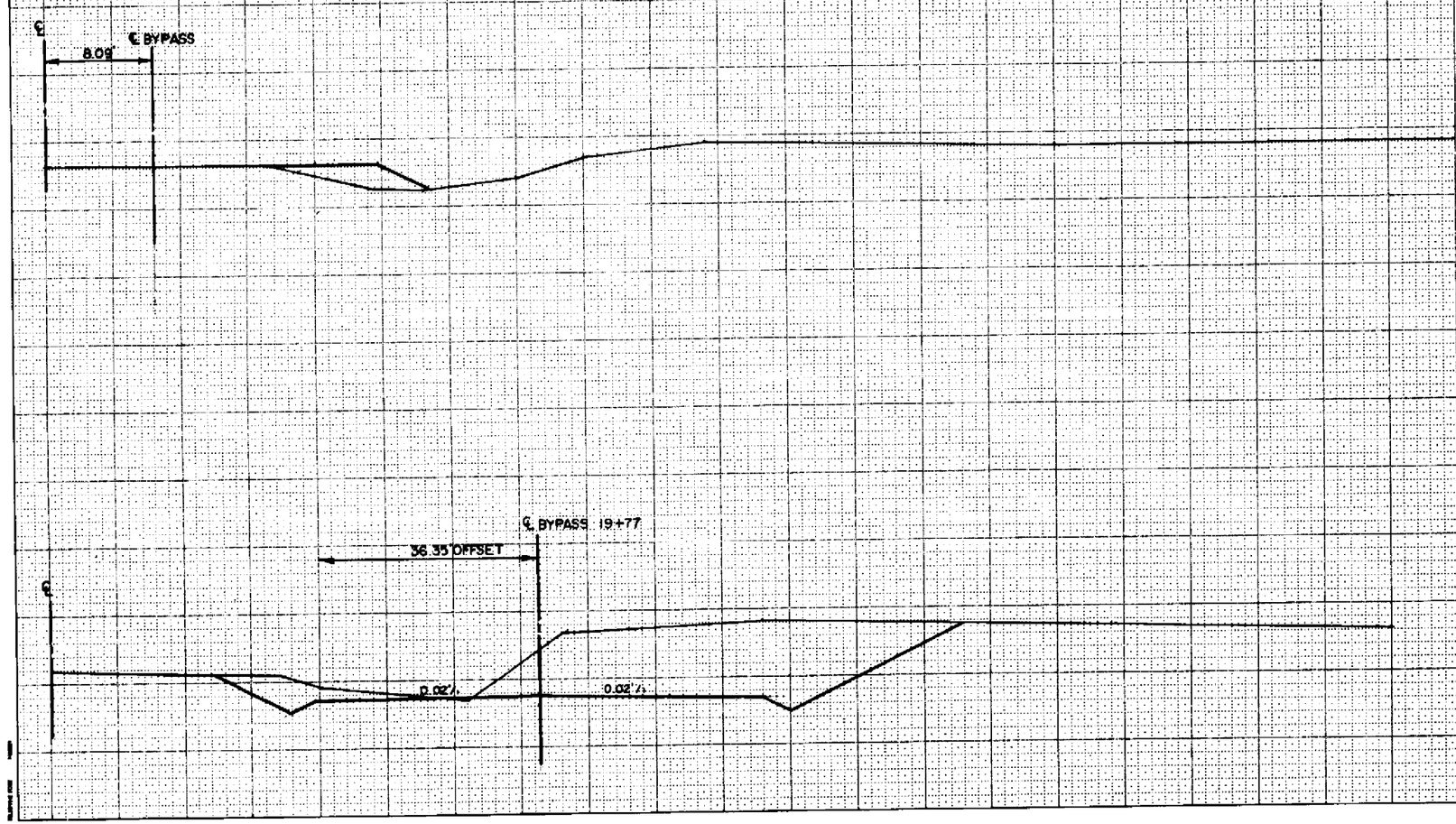
STATE PROJECT NUMBER	SHEET NUMBER
1880-03-72	2,41

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL



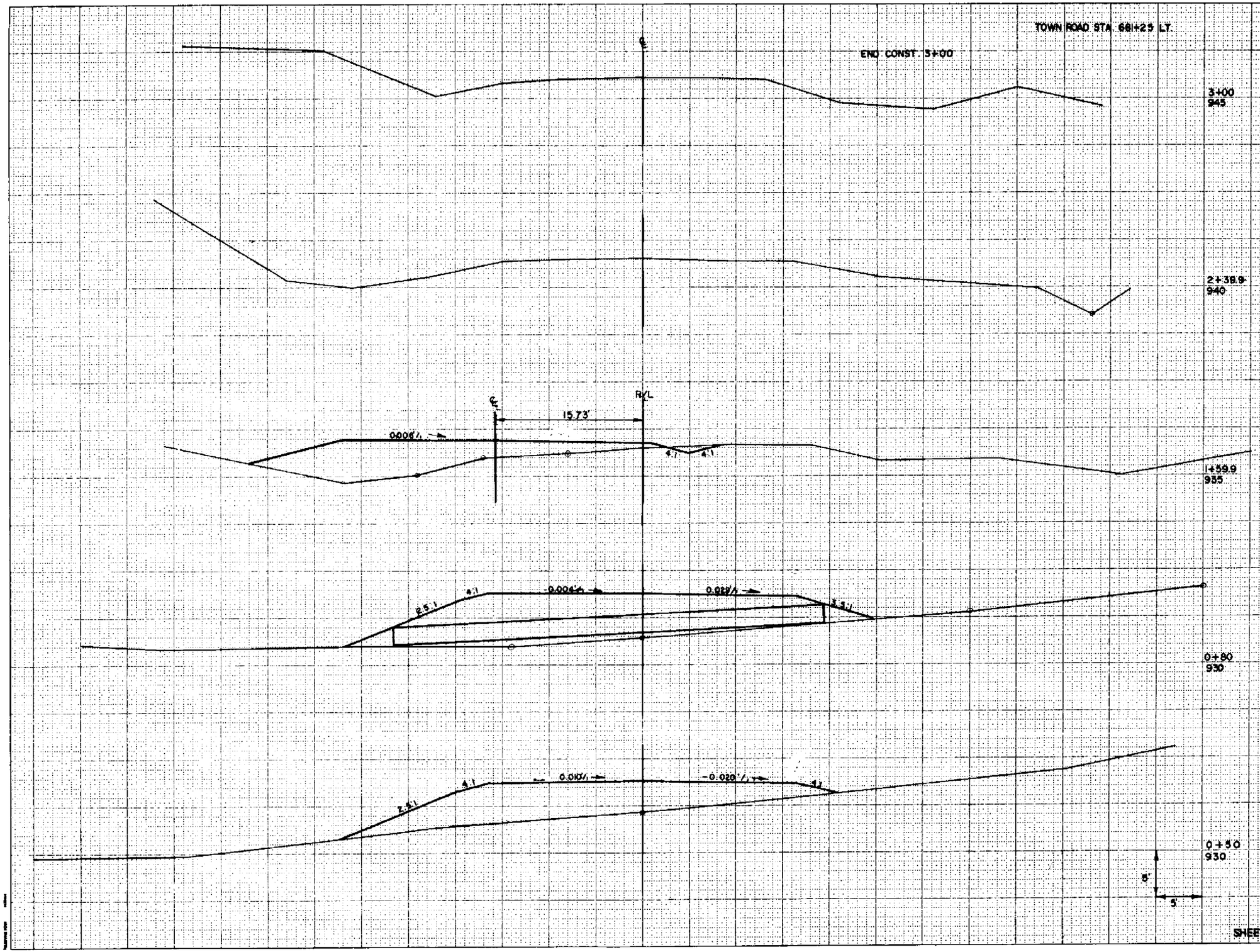
STATE PROJECT NUMBER	SHEET NUMBER
1560-05-72	9.4b

STATION	DISTANCE	YARDAGE EXCAVATION	FILL



SHEET TOTAL

STATE PROJECT NUMBER	SHEET NUMBER
1960-03-72	9 of 13



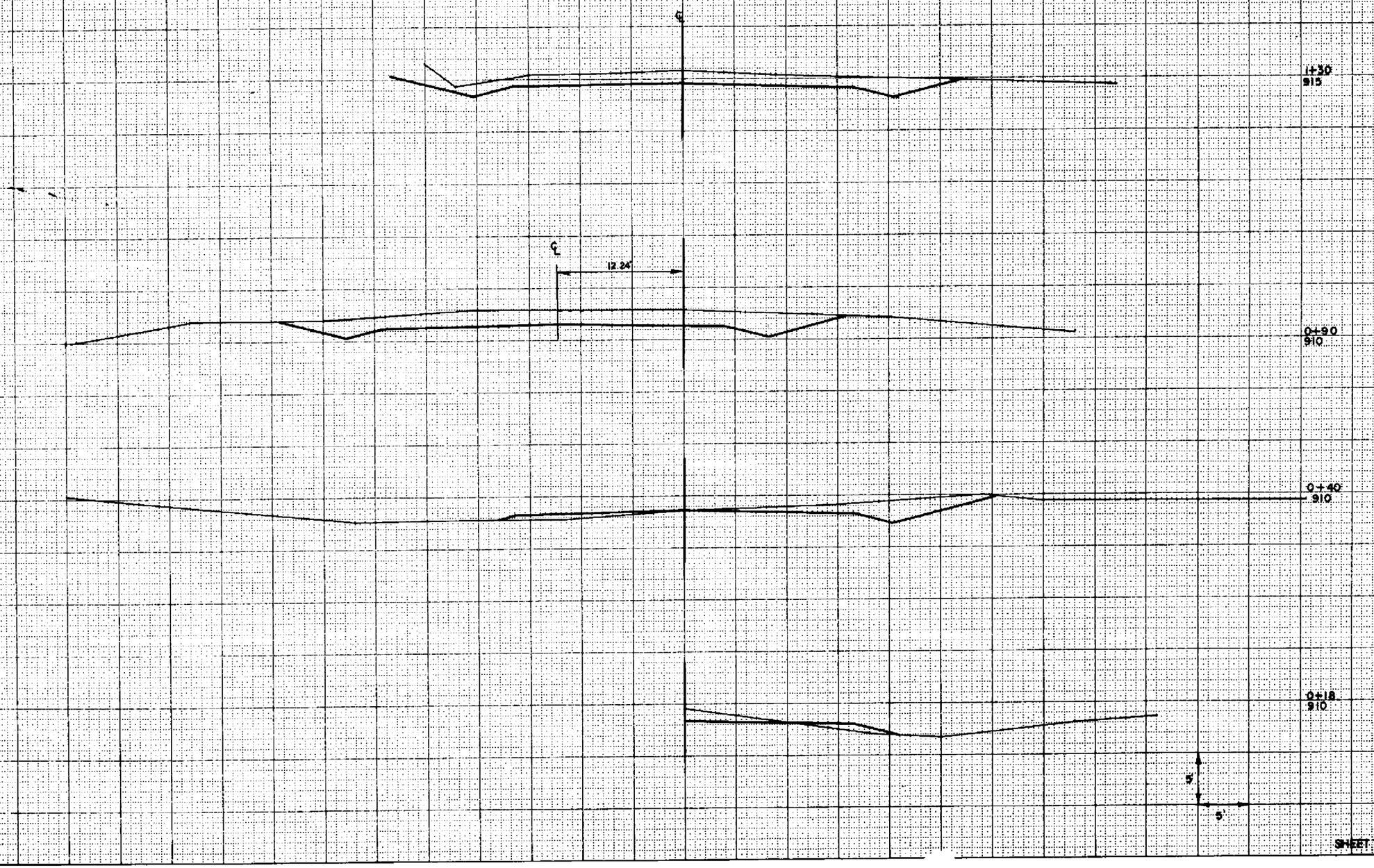
STATION	DISTANCE	VARDAGE EXCAVATION	FILL

atalog

TN. RD. STA 730+60 LT.

STATE PROJECT NUMBER	SHEET NUMBER
1560-03-72	9.44

STATION	DISTANCE	YARDAGE EXCAVATION	FILL



SHEET TOTAL