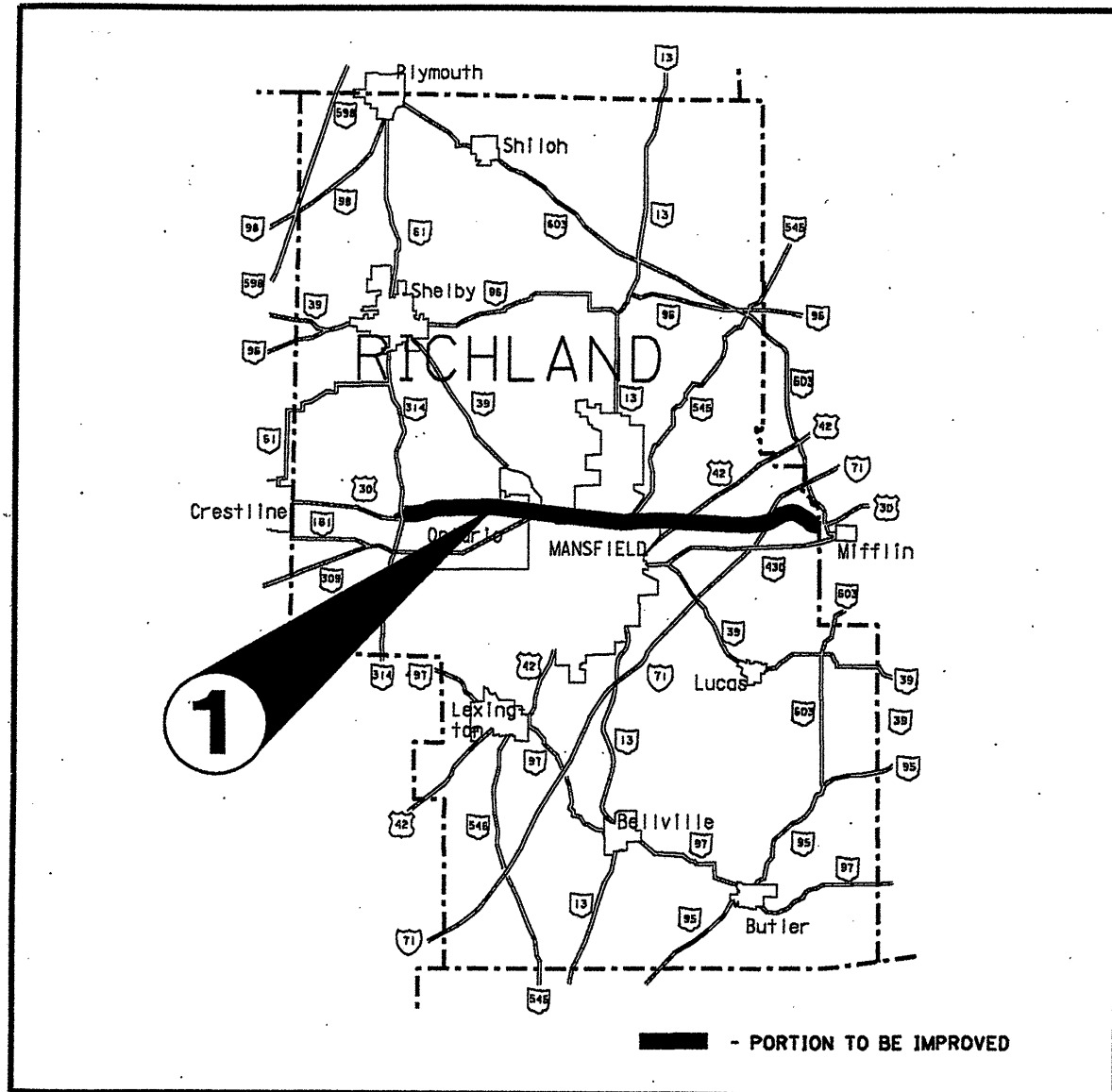


# LOCATION MAP



82° 39' 57" W. LONGITUDE 40° 46' 48" N. LATITUDE

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI straight line kilometer		NET LENGTH kilometer	CITY	VILLAGE
				BEGIN	END			
I	RIC	US30	5.600-19.602	5.600	6.051B	0.451		
				6.019A	14.468B	8.449	MANSFIELD	ONTARIO
				14.838A	30.787	15.949	MANSFIELD	
						24.849		

Straight Line Kilometers have been converted from mileage - (references in the field are in miles)

PROJECT DESCRIPTION: This project will include pavement planing, pavement repair, an intermediate course of asphalt concrete, a surface course of asphalt concrete, and pavement markings as detailed in the plan.

## INDEX OF SHEETS:

- 1 - TITLE SHEET
- 2,3 - GENERAL SUMMARY
- 4,5 - ROADWAY DETAILS
- 6,7 - PAVEMENT DATA
- 8-10 - TYPICAL SECTIONS/SHOULDER DATA
- 11-14 - GENERAL NOTES
- 15 - PLANING DETAILS
- 16 - PAVEMENT REPAIR DETAIL
- 17 - CONCRETE MEDIAN/CATCH BASIN DETAILS
- 18 - RAMP PROFILE CORRECTION
- 19 - MEDIAN CROSSOVER DETAIL
- 20-26 - MEDIAN CROSS-SECTIONS
- 27 - REST AREA PAVEMENT MARKING DETAILS
- 28,29 - PAVEMENT MARKING INFORMATION
- 30 - RAISED PAVEMENT MARKERS
- 31 - PAVEMENT MARKING TYPICAL DETAILS

## 1995 SPECIFICATIONS

THE STANDARD 1995 SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL REQUIRE THE CLOSING OF THE HIGHWAY ON PARTS NO. NONE AND THAT DETOURS WILL BE PROVIDED BY STATE FORCES. THE CLOSING TO TRAFFIC OF THE HIGHWAYS WILL NOT BE REQUIRED ON PART NO. 1 AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

AS FILED

APPROVED DATE 9-4-96

Mary Ellen Knill, PE, PS  
DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION

APPROVED DATE \_\_\_\_\_

DIRECTOR, DEPARTMENT OF TRANSPORTATION

TWO WORKING DAYS BEFORE YOU DIG  
Call 800-362-2764 TOLL FREE  
OHIO UTILITIES PROTECTION SERVICE  
NON-MEMBERS MUST BE CALLED DIRECTLY



STANDARD DRAWINGS		STANDARD DRAWINGS		STANDARD DRAWINGS	
BP-3.IM	10-28-94	TC-71.10M	09-01-93	MT-98.16M	06-24-93
BP-5.IM	10-28-94	TC-72.20M	09-01-93	MT-98.17M	04-25-94
RM-3.IM	06-30-95	MT-35.10M	01-30-95	MT-98.18M	04-25-94
TC-41.20M	07-01-94	MT-35.11M	01-30-95	MT-99.10M	01-30-95
TC-52.10M	07-29-94	MT-95.30M	04-25-94	MT-99.20M	01-30-95
TC-52.20M	07-29-94	MT-98.12M	06-24-93	MT-105.10M	04-25-94
TC-65.10M	11-01-95	MT-98.13M	06-24-93	MT-105.11M	04-25-94
TC-65.11M	11-01-95	MT-98.14M	06-24-93		
TC-65.12M	11-01-95	MT-98.15M	06-24-93		

SUPPLEMENTAL SPECIFICATIONS	
SS-802	03-23-95
SS-924	06-14-95

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
APPROVED:  
\_\_\_\_\_  
DIVISION ADMINISTRATOR DATE

File Name = i:\dgn\ops\1997\1304lane

FEDERAL PROJECT NO. NH-49 (94)  
PID NO. 16257  
CONSTRUCTION PROJECT NO.  
RAILROAD INVOLVEMENT NONE  
RIC-US30-5.600  
1/31

# GENERAL SUMMARY



CALC BY PTS  
CHKD BY MJS

SHEET NUMBER											ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	REF. NO.
7	10	12	13	14	16	17	19	28	29	30						
											<b>ROADWAY ITEMS</b>					
			15								202	30500	15	SQUARE METER	CONCRETE MEDIAN REMOVED	13
			41								202	32000	41	METER	CURB REMOVED	13
										2584	202	54100	2584	EACH	RAISED PAVEMENT MARKER REMOVED FOR STORAGE	
							161				203	12000	161	CUBIC METER	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	
							96				203	20000	96	CUBIC METER	EMBANKMENT	
							343				203	50000	343	SQUARE METER	SUBGRADE COMPACTION	
			13								519	11100	13	SQUARE METER	PATCHING CONCRETE STRUCTURE	13
	70962										617	20000	70962	SQUARE METER	SHOULDER PREPARATION	
	7504						2				617	98300	7506	METRIC TON	SHOULDER RECONDITIONING, MISC.: COMPACTED AGGREGATE	12
		863.0									659	10000	863	SQUARE METER	SEEDING AND MULCHING	12
		86.0									659	20000	86	KILOGRAM	COMMERCIAL FERTILIZER	12
		9.0									659	35000	9	CUBIC METER	WATER	12
											<b>DRAINAGE ITEMS</b>					
16							3				202	58501	3	EACH	CATCH BASIN ABANDONED, AS PER PLAN	
											604	09000	16	EACH	CATCH BASIN ADJUSTED TO GRADE	13
											<b>PAVEMENT ITEMS</b>					
					450						253	02000	450	CUBIC METER	PAVEMENT REPAIR, METHOD A	
					115						253	02000	115	CUBIC METER	PAVEMENT REPAIR, METHOD B	
542954											254	01001	542954	SQUARE METER	PAVEMENT PLANING, BITUMINOUS, AS PER PLAN	12
30000											254	01600	30000	SQUARE METER	PATCHING PLANED SURFACE	
							69				301	10002	69	CUBIC METER	BITUMINOUS AGGREGATE BASE, AC-20 (SEE PROPOSAL NOTE)	
							26				304	20000	26	CUBIC METER	AGGREGATE BASE (SEE PROPOSAL NOTE)	
305110							48				407	10000	305158	LITER	TACK COAT	11
	129677						649				408	10000	130326	LITER	BITUMINOUS PRIME COAT	11
20081											448	15000	20081	CUBIC METER	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, AC-20	13
22022							11				448	16000	22033	CUBIC METER	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AC-20	11
			20								609	14000	20	METER	CURB, TYPE 2-A	13
			21								609	26000	21	METER	CURB, TYPE 6	13
			15								612	42000	15	SQUARE METER	CONCRETE MEDIAN	13

**GENERAL SUMMARY**

**RIC - 30 - 5.600**

# GENERAL SUMMARY



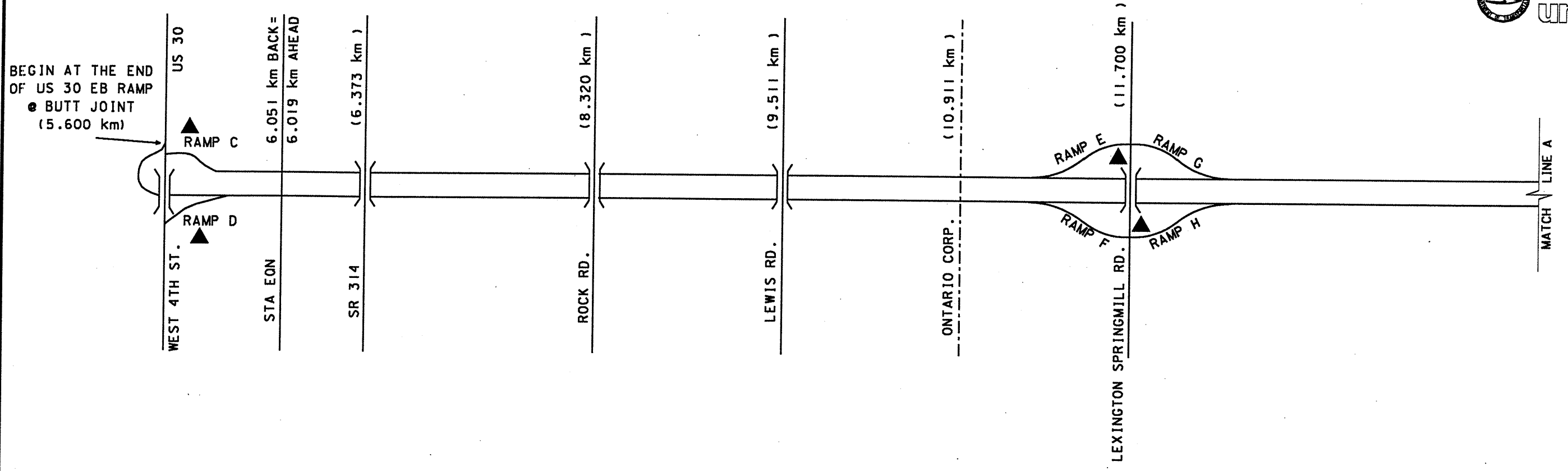
CALC BY: PTS  
CHKD BY: MJS

SHEET NUMBER											ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	REF. NO.
7	10	12	13	14	16	17	19	28	29	30						
<b>MAINTENANCE OF TRAFFIC ITEMS</b>																
				10							404	35000	10	CUBIC METER	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	14
	62										614	12460	62	EACH	WORK ZONE MARKING SIGN	12
				4							614	18601	4	SIGN MONTH	PORTABLE CHANGEABLE MESSAGE SIGN, CLASS II, AS PER PLAN	14
				300							614	11100	300	HOURLY	LAW ENFORCEMENT OFFICER WITH PATROL CAR	14
								37.99	26.29		614	20100	64.28	KILOMETER	TEMPORARY LANE LINE, CLASS I, 642 PAINT	
								68.80			614	20500	68.80	KILOMETER	TEMPORARY LANE LINE, CLASS II, 642 PAINT	
								0.14	0.54		614	21500	0.14	KILOMETER	TEMPORARY CENTER LINE, CLASS II, 642 PAINT	
								78.46	51.76		614	22100	130.22	KILOMETER	TEMPORARY EDGE LINE, CLASS I, 642 PAINT	
								0.32	0.14		614	28200	0.46	KILOMETER	TEMPORARY GORE MARKING, CLASS II, 642 PAINT	
<b>TRAFFIC CONTROL ITEMS</b>																
										2113	621	00300	2113	EACH	PRISMATIC RETROREFLECTOR	
										2113	621	00600	2113	EACH	RAISED PAVEMENT MARKER CASTING, INSTALLATION ONLY	14
			60								622	80000	60	METER	GLARE SCREEN	13
								78.46			642	00102	78.46	KILOMETER	EDGE LINE, TYPE 2	
								37.99			642	00202	37.99	KILOMETER	LANE LINE, TYPE 2	
								0.07			642	00302	0.07	KILOMETER	CENTER LINE, TYPE 2	
									51.76		644	00100	51.76	KILOMETER	EDGE LINE	
									26.29		644	00200	26.29	KILOMETER	LANE LINE	
									0.27		644	00300	0.27	KILOMETER	CENTER LINE	
								3228	3343		644	00400	6571	METER	CHANNELIZING LINE	
								110	105		644	00500	215	METER	STOP LINE	
								818	1182		644	00700	2000	METER	TRANSVERSE LINE	
								920			644	01200	920	METER	PARKING LOT STALL MARKING	
								16	3		644	01300	19	EACH	LANE ARROW	
								4			644	01410	4	EACH	WORD ON PAVEMENT, 2500MM, "ONLY"	
								4			644	01600	4	EACH	HANDICAP SYMBOL MARKING	
								2			SPECIAL	40000	2	EACH	AIR SPEED ZONE MARKING	13
			236								802	00201	236	EACH	BARRIER REFLECTOR, TYPE B, AS PER PLAN	14
											614	11000	LUMP		MAINTAINING TRAFFIC	
											619	15010	LUMP		FIELD OFFICE, TYPE B	
											SPECIAL	25010	LUMP		COMPUTER EQUIPMENT FOR TYPE B OR C OFFICE (SEE PROPOSAL NOTE)	
											624	10000	LUMP		MOBILIZATION	

**GENERAL SUMMARY**

RIC - 30 - 5.600

FILE NAME = I:\dgn\ops\1997\1-304lane

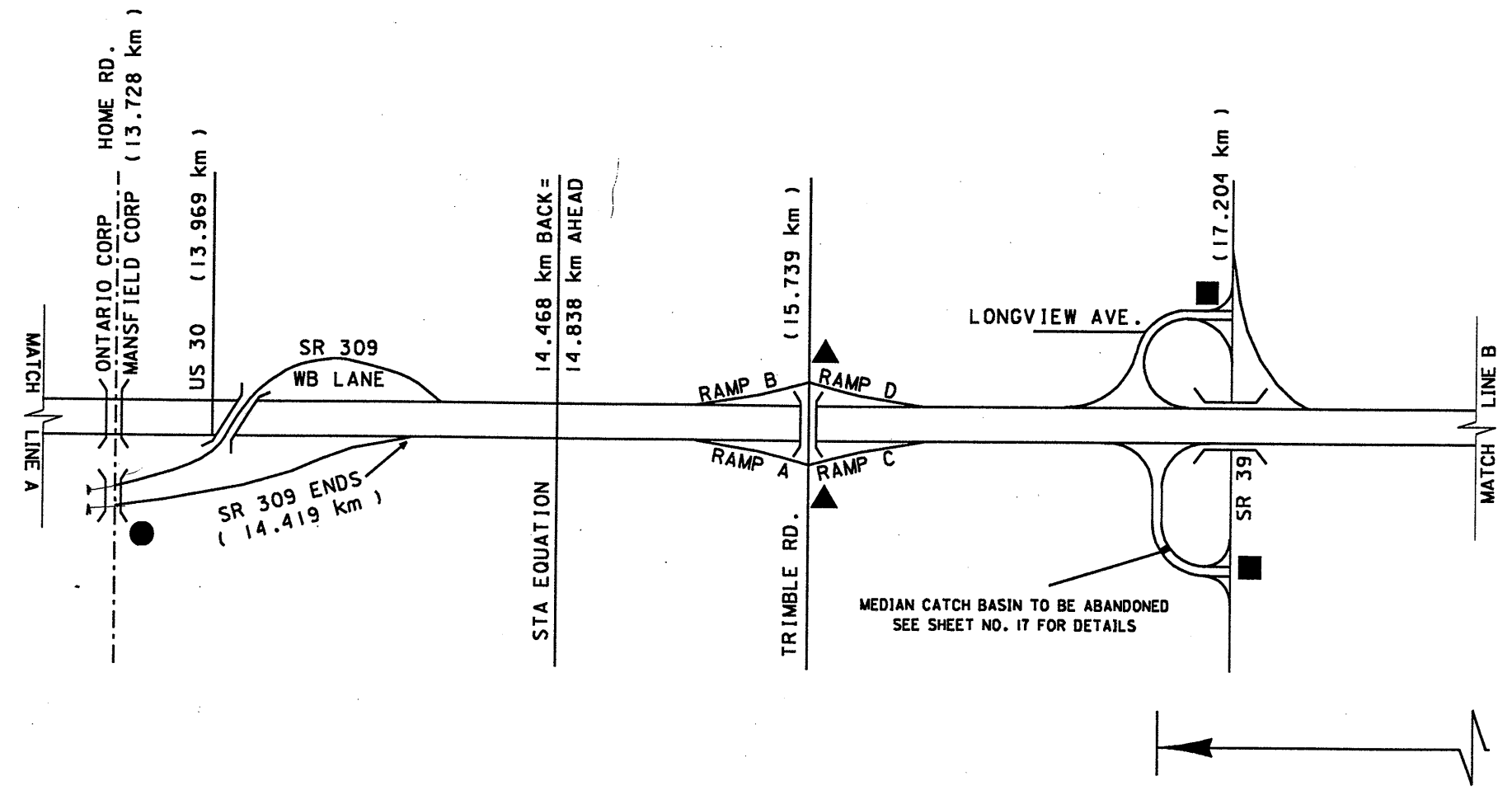


**BRIDGE LENGTH DEDUCTS (DO NOT PAVE)**

STRUCTURE: RIC-30-17204	60m
STRUCTURE: RIC-30-18202	52m
STRUCTURE: RIC-30-18620	504m
STRUCTURE: RIC-30-19441	56m
STRUCTURE: RIC-30-19554	78m
STRUCTURE: RIC-30-19827	60m
STRUCTURE: RIC-30-22595	89m
STRUCTURE: RIC-30-28131	43m
STRUCTURE: RIC-309-13969	87m

**PLANING AND PAVING LIMITS**

- ▲ - PLANE AND PAVE TO THE END OF THE RAMP
- - PLANE AND PAVE TO THE END OF THE RAMP LEG AND THE END OF THE GORE AREA
- - END/BEGIN PLANING AND PAVING ON THE SR 309 RAMP AT THE MANSFIELD/ONTARIO CORPORATION LIMIT

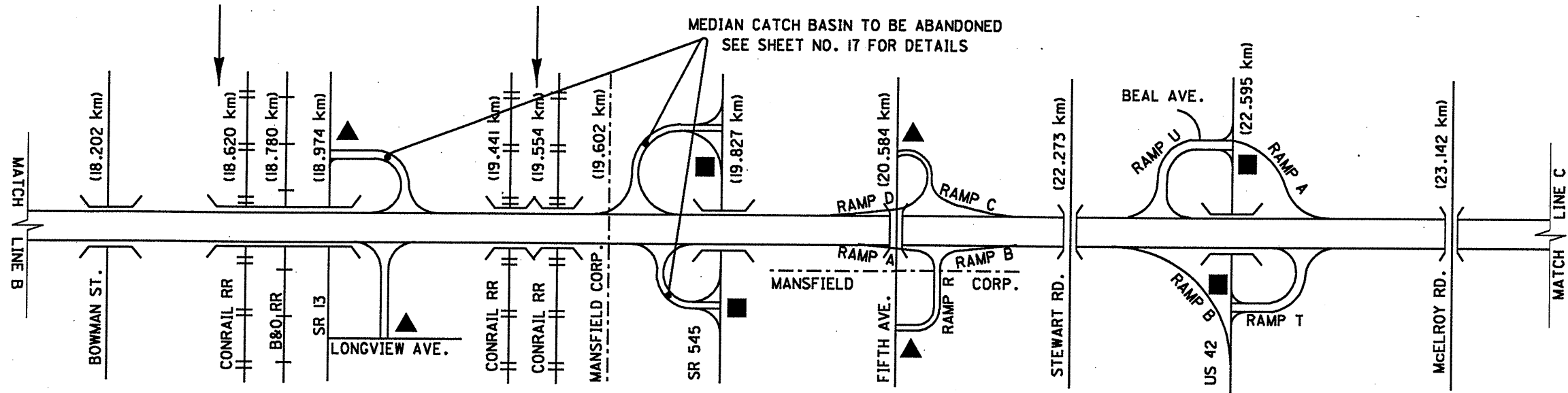


PLAN NO.

**ROADWAY DETAILS**

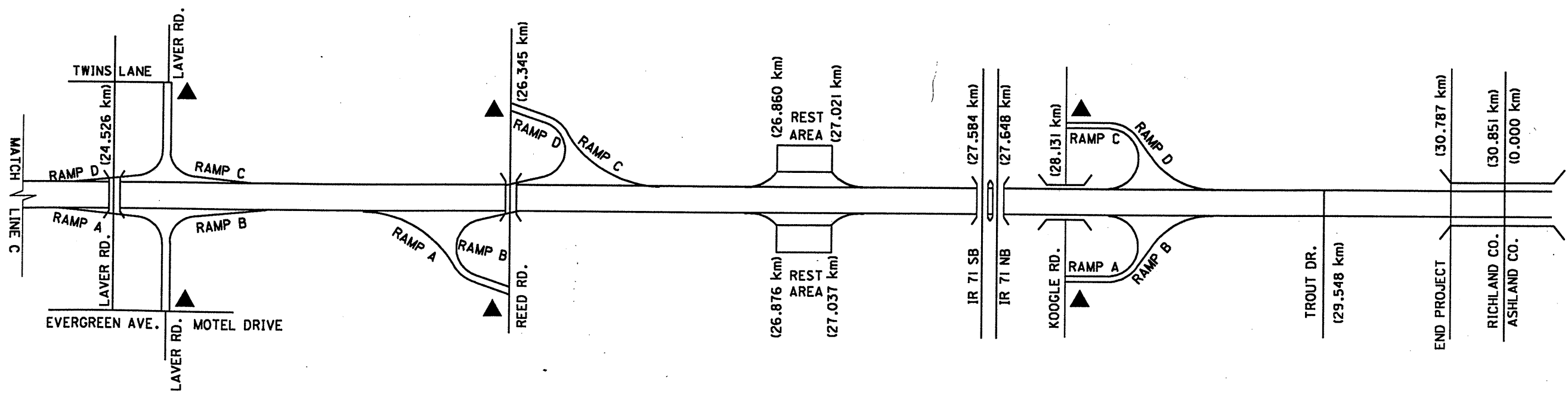
**RIC-US30-5.600**

CORRECT PROFILE WITH PLANING TO HAVE A 0.016 SLOPE FROM THE LANE LINE TO THE EDGE LINE ON THE APPROACH SLAB LOCATED ON WEST END OF THE WB STRUCTURE 19.554 AND ON WEST END OF THE WB STRUCTURE 18.620



AT CONCRETE BRIDGE DECKS IN THIS SECTION (16.608 - 20.133 SLK), BUTT JOINT.

- PLANING AND PAVING LIMITS**
- ▲ - PLANE AND PAVE TO THE END OF THE RAMPS
  - - PLANE AND PAVE TO THE END OF THE RAMP LEG AND THE END OF THE GORE AREA



PLAN NO.

**ROADWAY DETAILS**

**RIC-US30-5.600**

+ - SEE SHEET NO. 4 FOR BRIDGE LENGTH DEDUCTS

# - REDUCED QUANTITY DUE TO NO ITEM 448, INTERMEDIATE, TYPE 2 COURSE AND NO TACK COAT @ 0.14 L/m<sup>3</sup> UNDER STRUCTURES. SEE PLANING DETAILS ON SHEET NO. 15.

\* - SEE TYPICALS ON SHOULDER DATA SHEETS

## - FOR INFORMATION ONLY. REFER TO SHEET NO. 16 FOR TOTAL QUANTITIES OF TYPE A OR TYPE B REPAIRS.

USE BUTT JOINTS THROUGHOUT PROJECT



DATE PREPARED  
MAB  
checked  
MJS

PART	ROUTE	LOG POINT TO LOG POINT Straight Line kilometer	LENGTH		WIDTH METER AVG.	* TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA square meter	254	407	407	448		407	448		254		253	604	
			PATCHING PLANED SURFACE square meter	TACK COAT USING SS-924 @ 0.36 L/m <sup>2</sup> liter					TACK COAT @ 0.36 L/m <sup>2</sup> liter	INTERMEDIATE COURSE, TYPE 2, AC-20		TACK COAT @ 0.14 L/m <sup>2</sup> liter	SURFACE COURSE, TYPE 1, AC-20		PAVEMENT PLANING, BITUMINOUS, AS PER PLAN		## PAVEMENT REPAIR m <sup>3</sup>	CATCH BASIN ADJUSTED TO GRADE each			
			kilometer	meter							THICK AVG. mm	m <sup>3</sup>		THICK AVG. mm	m <sup>3</sup>	DEPTH mm	m <sup>2</sup>				
I	US 30	EB CONNECTOR																			
		5.600 - 5.858	0.258	258	8.53	6	448	2201			792	44	# 97	# 308	32	70	44	2201	2		
		5.858 - 5.954	0.096	96	8.53-10.97	6	448	936			337	44	# 15	# 48	32	30	44	936			
		5.954 - 6.051B	0.097	97	10.97	6	448	1064			383	44	47	149	32	34	44	1064	1		
		6.019A - 6.331	0.312	312	10.97	6	448	3423			1232	44	151	479	32	110	44	3423			
	US 30	WB RAMP C (US 30)		161	12.80-7.01	6	448	1595			574	44	70	223	32	51	44	1595			
				292	6.71	6	448	1959			705	44	86	274	32	63	44	1959	3		
				278	6.71-15.24	6	448	3051			638	44	78	248	32	57	44	1772			
	US 30	6.331 - 14.468B	8.137	8137	10.97/10.97	1	448	178526			64269	44	5671	18045	32	5713	44	128890	211		
		14.838A - 16.608	1.770	1770	10.97/10.97	1	448	38834			13980	44	1234	3925	32	1243	44	28037			
		16.608 - 20.133	3.525	3525	7.92/7.92	2	448	55836			20050	44	2457	7797	32	1787	++ 76	55836	50		
		+ BRIDGE DEDUCTS FOR 16.608-20.133		( 810 )	8.53			( 12830 )			( 4619 )	44	( 565 )	( 1796 )	32	( 411 )	76	( 12830 )			
		20.133 - 30.787	10.654	10654	10.97/10.97	1	448	233749			84150	44	7425	23626	32	7480	44	168759	206		
		+ BRIDGE DEDUCTS FOR 20.133-30.787		( 219 )	9.75			( 4805 )			( 1730 )	44	( 153 )	( 486 )	32	( 154 )	44	( 3469 )			
	US 30	CROSSOVERS					448	1934			696				32	62					
	US 30	EB RAMP D (W 4th ST)		222	6.71	4	448	1490			536				38	57	38	1490			
		ACCEL/DECEL LANES					448	2407			867	44	114	337	32	77	44	2407			
	US 30	LEX.-SPRINGMILL RAMPS		1464	6.71	4	448	9823			3536				38	373	38	9823	1		
		ACCEL/DECEL LANES					448	6210			2236	44	273	870	32	199	44	6210	1		
		LEX-SPRINGMILL STRUCTURE OVER US 30 (TAPERED EDGE-FEATHER EACH END)						448	1608		580				25	40	25	1608			
	US 30	WB & EB SR 309 RAMPS		1456	9.14	6	448	13308			4791	44	586	1863	32	426	44	13308	8		
		ACCEL/DECEL LANES					448	1834			661	44	81	257	32	59	44	1834	8		
		WB SR 309 STRUCTURE OVER US 30						448	742		267				25	19	25	742	1		
	US 30	TRIMBLE RD RAMPS		738	7.62	3,4	448	5624			2025				38	214	38	5624	2		
		ACCEL/DECEL LANES					448	5697			2051	44	251	798	32	182	44	5697	12		
	US 30	SR 39 RAMPS		1283	6.10	3,4,5	448	7826			2817				38	297	38	7826	1		
		ACCEL/DECEL LANES					448	2960			1066	44	130	415	32	95	76	2960	4		

PLAN NO.

PAVEMENT DATA

RIC-US30-5.600

6  
31

QUANTITIES CARRIED TO SHEET NO. 7

++ - IN THIS SECTION PLANE 76mm OR TO THE CONCRETE PAVEMENT, WHICHEVER COMES FIRST

FILE NAME = i:\dgn\ops\1997\r30\lane

\* - SEE TYPICALS ON SHOULDER DATA SHEETS  
USE BUTT JOINTS THROUGHOUT PROJECT

## - FOR INFORMATION ONLY. REFER TO SHEET NO. 16 FOR TOTAL QUANTITIES OF TYPE A OR TYPE B REPAIRS.



checked  
MAB  
checked  
MJS

PART	ROUTE	LOG POINT TO LOG POINT Straight Line kilometer	LENGTH		WIDTH METER AVG.	* TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA square meter	254	407	407	448		407	448		254		253	604
			PATCHING PLANED SURFACE square meter	TACK COAT USING SS-924 @ 0.36 L/m <sup>2</sup> liter					TACK COAT @ 0.36 L/m <sup>2</sup> liter	INTERMEDIATE COURSE, TYPE 2, AC-20	TACK COAT @ 0.14 L/m <sup>2</sup> liter	SURFACE COURSE, TYPE 1, AC-20		PAVEMENT PLANING, BITUMINOUS, AS PER PLAN		## PAVEMENT REPAIR m <sup>3</sup>	CATCH BASIN ADJUSTED TO GRADE each			
			kilometer	meter							THICK AVG. mm	m <sup>3</sup>		THICK AVG. mm	m <sup>3</sup>	DEPTH mm	m <sup>2</sup>			
I	US 30	SR 13 ENT. RAMP WB		323	6.71	7,8	448	2167			780			303	38	82	76	2167		1
		ACCEL LANE TO 30 WB					448	525			189	44	23	74	32	17	76	525		
		SR 13 RAMPS		556	6.71	3,4,5	448	3731			1341				38	142	38	3731	1	
		ACCEL/DECEL LANES					448	2187			787	44	96	306	32	70	76	2187	1	
		RAMP PROFILE CORRECTION									(SEE DETAIL SHEET NO. 18 FOR MORE INFORMATION)						13			
	US 30	SR 545 RAMPS		996	6.71	3,4,5	448	6683			2403				38	254	38	6683	1	3
		ACCEL/DECEL LANES					448	2713			977	44	119	380	32	87	76	2713	1	
	US 30	FIFTH AVE RAMPS		968	6.71	4	448	6495			2338				38	247	38	6495	3	2
		ACCEL/DECEL LANES					448	8350			3006	44	367	1169	32	267	44	8350	7	
	US 30	US 42 RAMPS		2233	7.32	3,4,5	448	16346			5885				38	621	38	16346	5	
		ACCEL/DECEL LANES					448	6235			2245	44	274	873	32	200	44	6235	4	
	US 30	LAVER RD RAMPS		740	6.71	4	448	4965			1787				38	189	38	4965	2	2
		ACCEL/DECEL LANES					448	7650			2754	44	337	1071	32	245	44	7650	8	
	US 30	REED RD RAMPS		851	7.32	3,4,5	448	6229			2242				38	237	38	6229	2	
		ACCEL/DECEL LANES					448	6453			2323	44	284	904	32	206	44	6453	5	
	US 30	EB REST AREA					448	2620			943				38	100	25	2620	1	2
		ACCEL/DECEL LANES & RAMP AREA					448	1291			465	44	57	181	32	42	44	1291	1	
	US 30	WB REST AREA					448	2620			943				38	100			1	3
		ACCEL/DECEL LANES & RAMP AREA					448	1362			490	44	60	191	32	44	44	1362	1	
	US 30	IR71 ACCEL/DECEL LANES (STOP AT GORE AREAS)					448	1676			603	44	74	221	32	54	44	1676		1
		LT. TURN LANE & CROSSOVER AT SLK 27.418					448	1081			389	44	48	151	32	35	44	1081		
	US 30	KOOGLE RD RAMPS		1240	7.92	3,4,5	448	9821			3526				38	373	38	9821	2	2
		ACCEL/DECEL LANES					448	5669			2041	44	250	794	32	182	44	5669	1	
	US 30	TROUT DR - EXTRA AREA FOR MEDIAN					448	306			110				32	10				
		LT. & RT. TURN LANES					448	1003			361	44	44	141	32	32	44	1003		
		ESTIMATED QUANTITY FOR ENTIRE PROJECT							30000											
		<b>TOTAL</b>		37621				673180	30000	847	240971		20081	64139		22022		542954		16

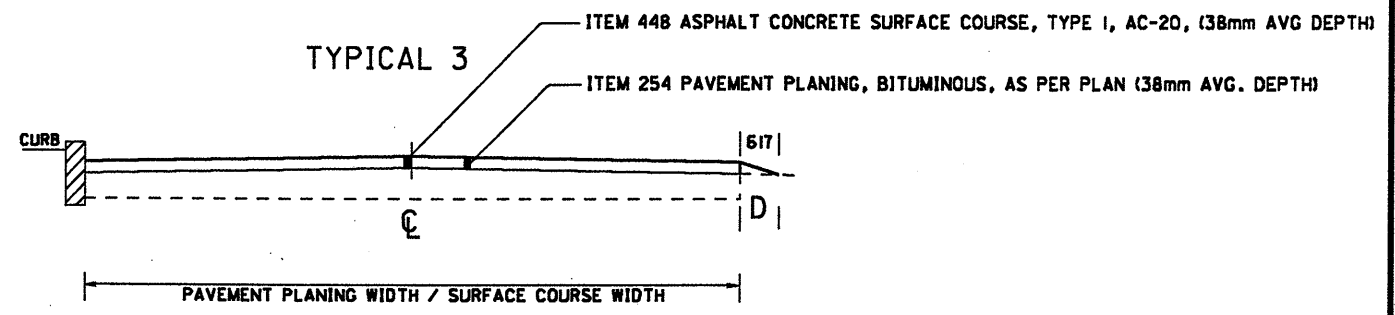
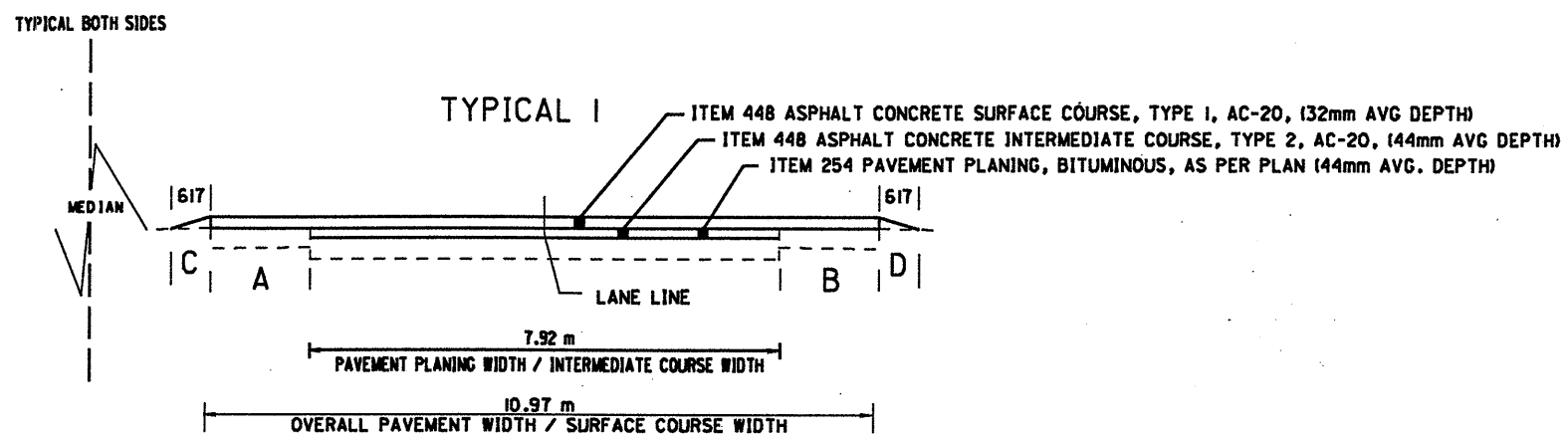
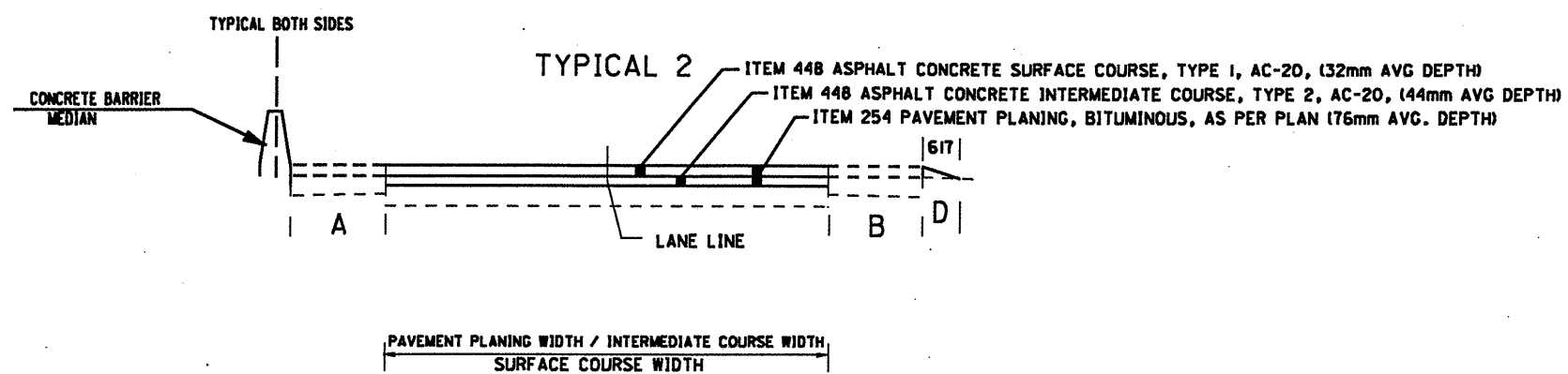
PLAN NO.

PAVEMENT DATA

RIC-US30-5.600

7  
31

FILE NAME = I:\dgn\ops\1997\1r3041one



QUANTITIES CARRIED TO SHEET NO. 10

SHOULDER DATA

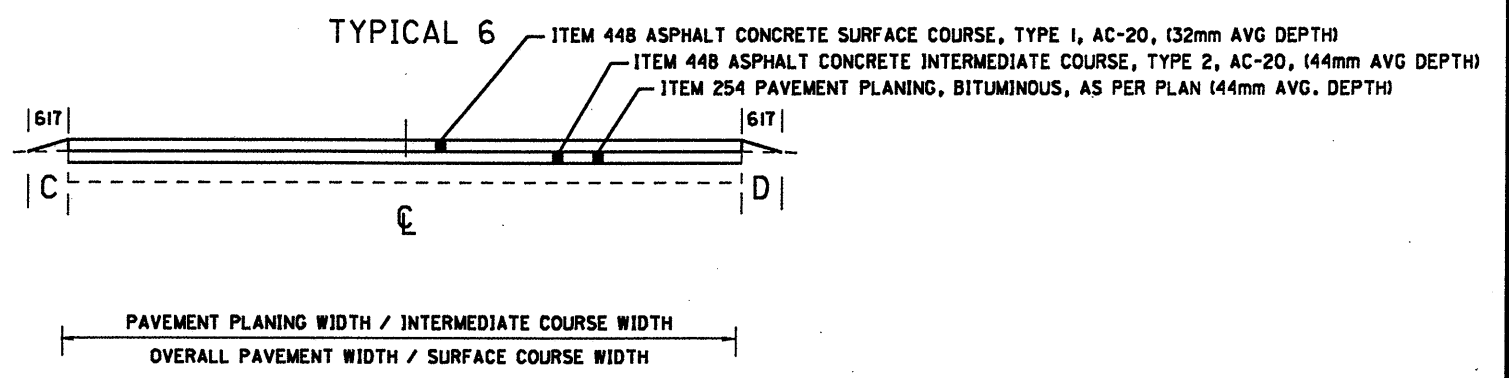
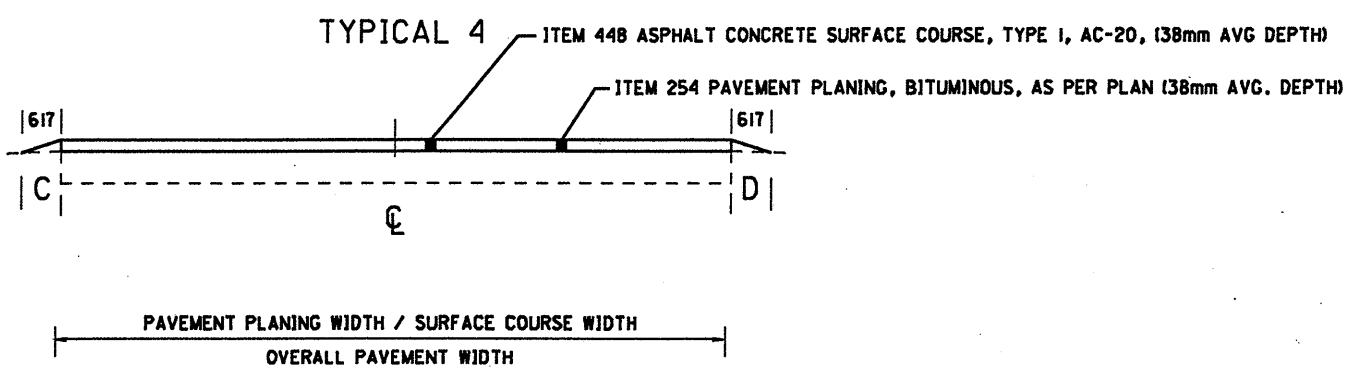
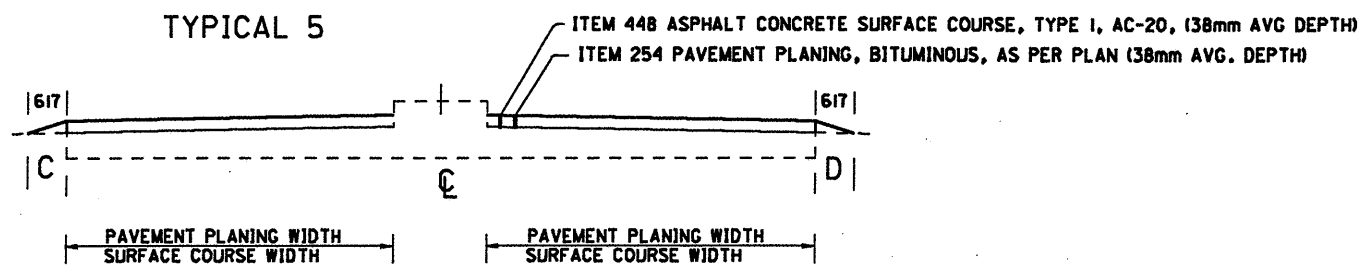
PART	ROUTE	LOG POINT TO LOG POINT (straight line kilometer)	LENGTH		TYPICAL	PAVED SHOULDER		PAVED SHOULDER AREA m <sup>2</sup>	203		402		301		AGGREGATE SHOULDER		AGGREGATE SHOULDER AREA m <sup>2</sup>	617	617	617	408
			km	m		PROPOSED WIDTH m (avg.)	DEPTH mm (avg.)		AVG. THICK mm	AVG. THICK mm	AVG. THICK mm	PROPOSED WIDTH m (avg.)		SHOULDER PREPARATION m <sup>2</sup>	SHOULDER RECONDITIONING MISC.: COMPACTED AGGREGATE 1780kg/m <sup>3</sup>  51 mm AVG. THICKNESS metric ton	SHOULDER RECONDITIONING MISC.: COMPACTED AGGREGATE 1780kg/m <sup>3</sup>  76 mm AVG. THICKNESS metric ton		PRIME Bit. Matl.  1.8 L / m <sup>2</sup> liter			
			A	B								C	D								
I	US 30	EB CONNECTOR																			
		5.600 - 5.954	0.354	354	6										0.61	0.61	434	434	39		781
		5.954 - 6.051B	0.097	97	6										0.61	0.61	119	119	11		214
		6.019A - 6.331	0.312	312	6										0.61	0.61	381	381	35		686
	US 30	WB CONNECTOR RAMP C		161	6										0.61	1.22	295	295	27		531
				292	6										0.61	2.44	891	891	81		1604
				278	6										0.61	0.91	423	423	16	34	762
	US 30	6.331 - 14.468B	8.137	8137	1										0.61	0.91	24737	24737	901	2004	44527
		14.838A - 16.608	1.770	1770	1										0.61	0.61	4320	4320	196	292	7776
		16.608 - 20.133	3.525	3525	2											0.61	4301	4301	390		7742
		20.133 - 30.787	10.654	10654	1										0.61	0.61	25996	25996	2360		46793
		BRIDGE DEDUCTS		( 1074 )													( 1351 )	( 1351 )	( 123 )		( 2432 )

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SHOULDER DATA

RIC-US30-5.600



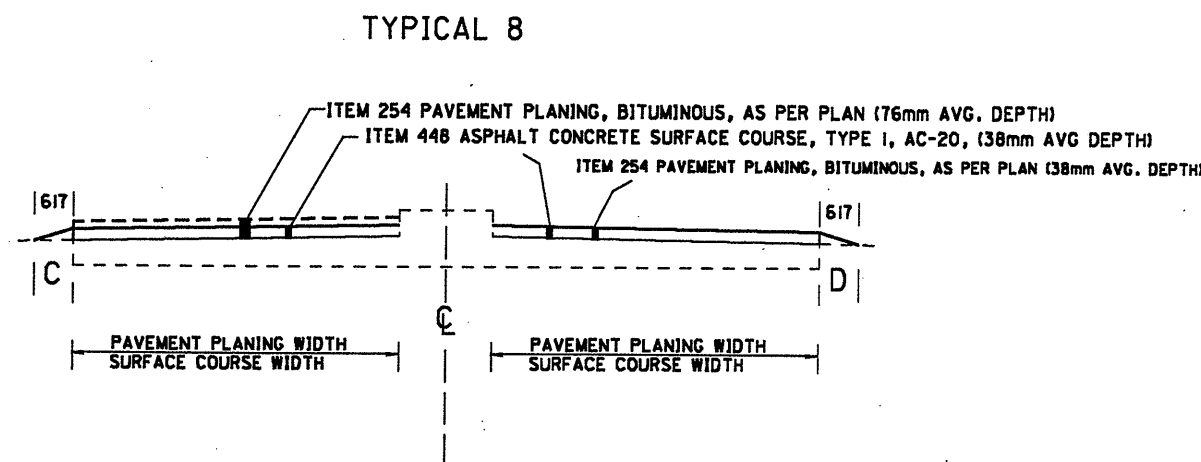
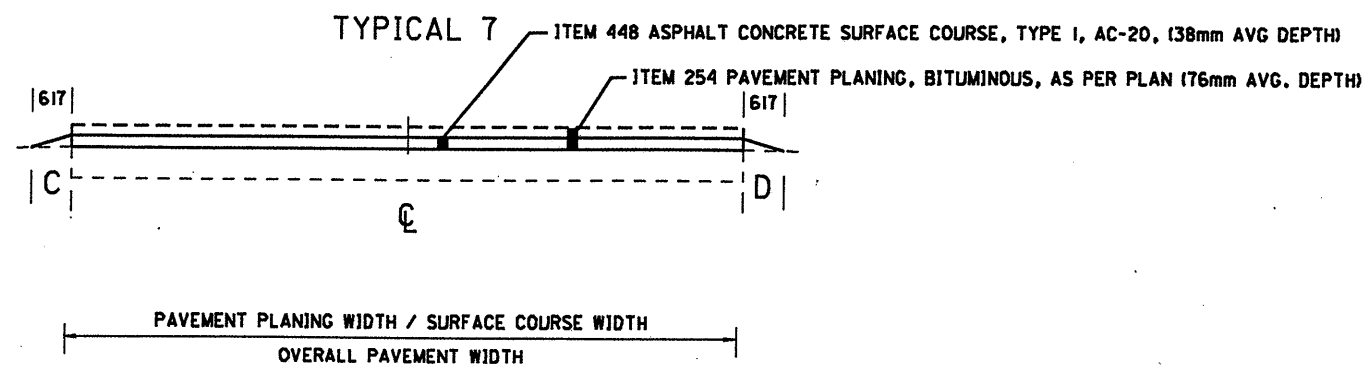


QUANTITIES CARRIED TO SHEET NO. 10

## SHOULDER DATA

PART	ROUTE	LOG POINT TO LOG POINT (straight line kilometer)	LENGTH		TYPICAL	PAVED SHOULDER PROPOSED WIDTH m (avg.)		PAVED SHOULDER AREA m <sup>2</sup>	203 LINEAR GRADING		402 ASPHALT CONCRETE		301 BITUMINOUS AGGREGATE BASE		AGGREGATE SHOULDER PROPOSED WIDTH m (avg.)		AGGREGATE SHOULDER AREA m <sup>2</sup>	617 SHOULDER PREPARATION	617 SHOULDER RECONDITIONING MISC.: COMPACTED AGGREGATE 1780kg/m <sup>3</sup>	617 SHOULDER RECONDITIONING MISC.: COMPACTED AGGREGATE 1780kg/m <sup>3</sup>	408 PRIME Bit. Matl.			
			km	m		A	B		DEPTH mm (avg.)	m	AVG. THICK mm	m <sup>3</sup>	AVG. THICK mm	m <sup>3</sup>	C	D		m <sup>2</sup>	51 mm AVG. THICKNESS	metric ton	76 mm AVG. THICKNESS	metric ton	e 1.8 L / m <sup>2</sup>	liter
I	US 30	CROSSOVERS		117											0.61	0.61	143	143	12		257			
	US 30	EB RAMP D (W 4th ST)		198	4										0.61	0.61	242	242	22		436			
	US 30	RAMPS @ LEX-SPRING		1327	4										0.61	0.61	1619	1619	147		2914			
	US 30	RAMPS @ SR 309		1323	4										0.61	0.61	1614	1614	147		2905			
		BRIDGE DEDUCT		( 87 )													( 106 )	( 106 )	( 10 )		( 191 )			
	US 30	RAMPS @ TRIMBLE RD		749	3,4				ITEM 617 NOT NECESSARY WHERE CURBS ARE LOCATED						0.61	0.61	800	800	73		1440			
	US 30	RAMPS @ SR 39		879	3,4,5				ITEM 617 NOT NECESSARY WHERE CURBS ARE LOCATED						0.61	0.61	800	800	73		1440			
	US 30	RAMPS @ SR 13		841	3,7,8				ITEM 617 NOT NECESSARY WHERE CURBS ARE LOCATED						0.61	0.61	600	600	54		1080			

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## SHOULDER DATA

PART	ROUTE	LOG POINT TO LOG POINT (straight line kilometer)	LENGTH		TYPICAL	PAVED SHOULDER		PAVED SHOULDER AREA m <sup>2</sup>	203		402		301		AGGREGATE SHOULDER		AGGREGATE SHOULDER AREA m <sup>2</sup>	617		617		617		408	
			km	m		PROPOSED WIDTH m (avg.)	DEPTH mm (avg.)		AVG. THICK mm	AVG. THICK mm	PROPOSED WIDTH m (avg.)	SHOULDER PREPARATION	SHOULDER RECONDITIONING MISC.: COMPACTED AGGREGATE 1780kg/m <sup>3</sup>	SHOULDER RECONDITIONING MISC.: COMPACTED AGGREGATE 1780kg/m <sup>3</sup>	PRIME Bit. Matl.										
						A	B				C	D		51 mm AVG. THICKNESS	76 mm AVG. THICKNESS	1.8 L / m <sup>2</sup>									
I	US 30	RAMPS @ SR 545		874	3,4,5	ITEM 617 NOT NECESSARY WHERE CURBS ARE LOCATED								0.61	0.61	500	500	97			900				
	US 30	RAMPS @ FIFTH AVE		846	4									0.61	0.61	1032	1032	94			1858				
	US 30	RAMPS @ US 42		2176	3,4,5	ITEM 617 NOT NECESSARY WHERE CURBS ARE LOCATED								0.61	0.61	1300	1300	241			2340				
	US 30	RAMPS @ LAVER RD		720	4									0.61	0.61	536	536	49			965				
	US 30	RAMPS @ REED RD		864	3,4,5	ITEM 617 NOT NECESSARY WHERE CURBS ARE LOCATED								0.61	0.61	800	800	96			1440				
	US 30	WB REST AREA																213							
	US 30	EB REST AREA																18							
	US 30	RAMPS @ KOOGLE RD		1303	3,4,5	ITEM 617 NOT NECESSARY WHERE CURBS ARE LOCATED								0.61	0.61	1590	279	144			2862				
	US 30	TROUT DR CROSSOVER		21										0.61	0.61	26	26	2			47				
		TOTAL		36657												72042	70962	5174			2330		129677		

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PROGRESSION OF WORK

DUE TO THE NATURE OF THE TERRAIN, TRAFFIC CHARACTERISTICS AND ROADWAY GEOMETRY OF US 30, THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING PROGRESSION OF WORK. THE CONTRACTOR MAY SUBMIT AN ALTERNATE PLAN FOR THE PROGRESSION OF WORK TO THE ENGINEER FOR CONSIDERATION. ANY MODIFICATION OF THIS PROGRESSION SHALL BE IN WRITING.

THE PORTION OF THE PROJECT FROM SLK 5.600 (INTERCHANGE WITH TWO-LANE US 30) TO 16.608 (BEGINNING OF CONCRETE MEDIAN BARRIER EAST OF TRIMBLE ROAD) IS CALLED THE WESTERN PORTION. THE PORTION OF US 30 FROM SLK 16.608 (BEGINNING OF THE CONCRETE MEDIAN BARRIER EAST OF TRIMBLE ROAD) TO SLK 20.133 (END OF CONCRETE MEDIAN BARRIER EAST OF SR 545) IS CALLED THE CENTER PORTION. THE PORTION OF US 30 FROM SLK 20.133 (END OF THE CONCRETE MEDIAN BARRIER EAST OF SR 545) TO SLK 30.787 (WEST END OF BRIDGE OVER CHARLES MILL JUST WEST OF SR 603) IS CALLED THE EASTERN PORTION.

WORK MAY BE PERFORMED IN ONLY ONE PORTION AT A TIME. IT IS THE DEPARTMENT'S INTENT THAT THE CONTRACTOR MAY CHOOSE ANY PORTION IN WHICH TO BEGIN WORK BUT THAT WHEN WORK IS STARTED IN A PORTION, THAT PORTION SHALL BE COMPLETED BEFORE THE CONTRACTOR INITIATES WORK IN ANOTHER PORTION. IT IS THE DEPARTMENT'S INTENT THAT PERMANENT PAVEMENT MARKINGS SHALL BE APPLIED LAST, FOLLOWING THE COMPLETION OF ALL THE PORTIONS OF THE PROJECT AND APPROVED BY THE DIRECTOR PRIOR TO STARTING WORK.

WESTERN AND EASTERN PORTIONS

IN BOTH THE WESTERN AND EASTERN PORTIONS OF THE PROJECT, AT LEAST ONE LANE OF TRAFFIC SHALL BE MAINTAINED IN EACH DIRECTION AT ALL TIMES. WORK MAY BE PERFORMED USING SINGLE LANE CLOSURES. ALL ENTRANCE AND EXIT RAMPS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. REFERENCES TO STANDARD ONLY FIVE KILOMETERS OF LANE CLOSURE PER DIRECTION SHALL BE PERMITTED AT ANY ONE TIME.

CONSTRUCTION DRAWINGS ARE PROVIDED FOR METHODS OF MAINTAINING TRAFFIC. WORK ON RAMPS SHALL USE HALF-WIDTH CONSTRUCTION TO MAINTAIN RAMP TRAFFIC.

THE GENERAL PROGRESSION OF WORK SHALL BE PAVEMENT PLANING, PLACING OF TEMPORARY CLASS II LANE LINES, PAVEMENT REPAIR, PLACING INTERMEDIATE COURSE TYPE II, PLACEMENT OF TEMPORARY CLASS II LANE LINES, AND TEMPORARY GORE MARKINGS, PLACEMENT OF SURFACE COURSE, PLACEMENT OF TEMPORARY CLASS I LANE LINES, TEMPORARY CLASS I EDGE LINES AND TEMPORARY GORE MARKINGS. BERMS SHALL BE BACKED UP IN ACCORDANCE WITH 617.02. PERMANENT PAVEMENT MARKINGS SHALL BE APPLIED AFTER ALL PAVEMENT WORK IS COMPLETED. ALL PAVEMENT MARKING ITEMS SHALL USE 642 PAINT.

CENTER PORTION - PHASE ONE

DUE TO THE RESTRICTED GEOMETRY OF THE CENTER PORTION, THE FOLLOWING PROGRESSION SHALL BE USED. FOR SEVEN CONSECUTIVE CALENDAR DAYS, THE INSIDE LANES NEXT TO THE CONCRETE MEDIAN BARRIER SHALL BE CLOSED TO TRAFFIC. DURING THIS TIME, PLANING, PAVEMENT REPAIR, MEDIAN BARRIER REPAIR, GLARE SCREEN REPAIR, PLACEMENT OF INTERMEDIATE COURSE, PLACEMENT OF SURFACE COURSE AND PLACEMENT OF TEMPORARY CLASS I LANE LINES AND TEMPORARY CLASS I EDGE LINES SHALL BE PERFORMED. ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED IN THE OUTSIDE LANES. ALL ENTRANCE AND EXIT RAMPS SHALL REMAIN OPEN.

AN INTERIM COMPLETION DATE IS HEREBY ESTABLISHED AS SEVEN CONSECUTIVE CALENDAR DAYS INCLUSIVE, FROM THE TIME PHASE ONE IS INITIATED UNTIL IT IS COMPLETED. LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH 108.07 FOR EACH ADDITIONAL CALENDAR DAY THAT THE INSIDE LANES ARE NOT OPEN AND AVAILABLE TO TRAFFIC.

CENTER PORTION - PHASE TWO

THE FOLLOWING PROGRESSION SHALL BE USED TO COMPLETE WORK ON THE OUTSIDE MAIN LINE LANES: FOR SEVEN CONSECUTIVE CALENDAR DAYS, THE OUTSIDE LANES OF US 30 AND RAMP ACCELERATION AND DECELERATION LANES SHALL BE CLOSED TO TRAFFIC, EXCEPT THAT ALL ENTRANCE AND EXIT RAMPS SHALL REMAIN OPEN TO TRAFFIC. REFERENCES TO STANDARD CONSTRUCTION DRAWINGS ARE PROVIDED TO SHOW METHODS FOR MAINTAINING TRAFFIC IN RAMP AREAS.

DURING THIS PERIOD, PLANING, PAVEMENT REPAIR, PLACEMENT OF INTERMEDIATE AND SURFACE COURSES AND PLACEMENT OF TEMPORARY CLASS I EDGE LINES AND LANE LINES, INCLUDING RAMP ACCELERATION/DECELERATION LANES AND TEMPORARY CLASS II GORE MARKINGS SHALL BE PERFORMED.

AN INTERIM COMPLETION DATE IS HEREBY ESTABLISHED AS SEVEN CONSECUTIVE CALENDAR DAYS INCLUSIVE, FROM THE TIME PHASE TWO IS INITIATED UNTIL IT IS COMPLETED. LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH 108.07 FOR EACH ADDITIONAL CALENDAR DAY THAT THE OUTSIDE LANES ARE NOT OPEN AND AVAILABLE TO TRAFFIC.

CENTER PORTION - PHASE THREE

DURING PHASE THREE, THE WORK ON THE REMAINDER OF THE RAMPS SHALL BE PERFORMED USING HALF-WIDTH METHODS. ALL ENTRANCE AND EXIT RAMPS SHALL REMAIN OPEN TO TRAFFIC. IN GENERAL, WORK SHOULD PROGRESS IN THE FOLLOWING ORDER: PLANING, PAVEMENT REPAIR, CATCH BASIN REPAIR, MEDIAN REPAIR, PLACEMENT OF SURFACE COURSE AND PLACEMENT OF TEMPORARY CLASS I EDGE LINES AND LANE LINES.

CARE SHALL BE EXERCISED TO ESTABLISH ADEQUATE TRAFFIC CONTROL AT RAMP INTERSECTIONS WITH SURFACE STREETS. LAW ENFORCEMENT OFFICERS MAY BE USED TO ASSIST WITH TRAFFIC CONTROL IN THESE AREAS.

COORDINATION OF ASPHALT PLANING/PAVING OPERATIONS WITH THE DISTRICT 3 ELECTRICAL LOOP DETECTOR MAINTENANCE CONTRACTOR

DURING THE COURSE OF THE CONTRACT IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE WITH THE LOOP DETECTOR MAINTENANCE (LDM) CONTRACTOR. THE INTENT IS TO REPLACE LOOP DETECTORS DAMAGED OR REMOVED BY ASPHALT PLANING OPERATIONS AT THE FOLLOWING SIGNALIZED INTERSECTION.

RAMPS AT LEXINGTON-SPRINGMILL ROAD, VILLAGE OF ONTARIO

THE CONTRACTOR SHALL NOTIFY THE MAINTAINING AGENCY AND THE LDM CONTRACTOR A MINIMUM OF TWENTY-ONE (21) DAYS PRIOR TO THE COMPLETION OF THE ASPHALT PLANING AT THE ABOVE INTERSECTION.

THE NAME AND TELEPHONE NUMBER OF THE LDM CONTRACTOR WILL BE PROVIDED AT THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL SCHEDULE THE LDM CONTRACTOR THREE (3) CONSECUTIVE WORK DAYS TO PERFORM THE LOOP DETECTOR REPLACEMENT WORK. THE THREE (3) DAY PERIODS BEGIN ON THE NEXT WORKING DAY FOLLOWING THE DAY PAVEMENT PLANING IS COMPLETED FOR THE ABOVE LISTED LOCATION. THE LDM CONTRACTOR SHALL BE ALLOWED THREE (3) CONSECUTIVE NONCONCURRENT WORK DAYS PER EACH LOCATION LISTED TO COMPLETE THE LOOP DETECTOR REPLACEMENT WORK BEFORE RESURFACING AT THE LOCATION CAN BEGIN. THE CONTRACTOR SHALL COOPERATE AS PER 105.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

BUTT JOINTS

BUTT JOINTS SHALL NOT BE CUT AND LEFT OPEN TO TRAFFIC FOR A TIME PERIOD LONGER THAN THREE (3) DAYS. IF CUT IS NOT PAVED WITHIN THREE (3) DAYS, IT SHALL BE FILLED IN WITH A TEMPORARY ASPHALT CONCRETE WEDGE, OF SUFFICIENT LENGTH, AS DIRECTED BY THE ENGINEER.

CONSTRUCTION "BUMP" (OW-62) AND "ADVISORY SPEED" (OW-143) SIGNS SHALL BE ERECTED AND MAINTAINED DURING THE PERIOD THAT THE CUT FOR THE BUTT JOINT IS LEFT OPEN.

ITEM 448. ASPHALT CONCRETE SURFACE COURSE, TYPE I, AC-20

IN ADDITION TO ITEM 401.12, THE FEATHERED JOINTS, BUTT JOINTS, AND LONGITUDINAL JOINTS BETWEEN MAINLINE AND SHOULDERS SHALL BE UNIFORMLY COATED WITH A 150mm WIDE BAND OF A.C.. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THIS ITEM.

ITEM 407. TACK COAT

AS PER 407.05 THE APPLICATION RATE SHALL BE 0.36 l/m<sup>2</sup> PRIOR TO THE INTERMEDIATE COURSE AND SHALL BE 0.14 l/m<sup>2</sup> PRIOR TO THE SURFACE COURSE. TYPICAL I REQUIRES ONLY A SURFACE COURSE OVER THE EXISTING PAVED SHOULDERS AND THEREFORE REQUIRES AN APPLICATION RATE OF 0.36 l/m<sup>2</sup>. A COMPLETE PAVEMENT SURFACE COVERAGE SHALL BE REQUIRED. AREAS OF TACK STRIPPED BY CONSTRUCTION EQUIPMENT OR TRAFFIC SHALL BE RECOATED PRIOR TO PLACING ASPHALT CONCRETE. COVER AGGREGATE AS REQUIRED PER 407.06, SHALL BE CONSIDERED INCIDENTAL AND ALL COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 407, TACK COAT.

ITEM 408. BITUMINOUS PRIME COAT

AFTER THE GRINDINGS FROM ITEM 254 HAVE BEEN PLACED TO CREATE AN AGGREGATE SHOULDER, ITEM 408, BITUMINOUS PRIME COAT SHALL BE APPLIED.

THE SURFACE TO BE PRIMED SHOULD BE PREPARED IN ACCORDANCE WITH 408.06 AND APPLIED IN ACCORDANCE WITH 408.07.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER liter OF ITEM 408, BITUMINOUS PRIME COAT.

**ITEM 254. PAVEMENT PLANING, BITUMINOUS, AS PER PLAN**

THE GRINDINGS PRODUCED FROM THIS ITEM SHALL BE USED FOR THE SHOULDER RECONDITIONING ON THIS PROJECT. NINE HUNDRED metric tons OF THE GRINDINGS SHALL BECOME THE PROPERTY OF THE OHIO DEPARTMENT OF TRANSPORTATION AND SHALL BE HAULED TO THE RICHLAND CO. ODOT GARAGE LOCATED AT 1256 W. FOURTH ST. IN MANSFIELD. THEY SHALL BE STOCKPILED AS DIRECTED BY THE ENGINEER. ALL REMAINING GRINDINGS NOT USED FOR SHOULDER RECONDITIONING SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.05 IN THE CONSTRUCTION AND MATERIALS SPECIFICATION BOOK (1995).

THE INTENT OF THE PAVEMENT PLANING IS TO MILL 44mm MINIMUM DEPTH ON THE MAINLINE AND 38mm MINIMUM ON THE RAMPS, AS SHOWN ON THE TYPICAL SECTIONS. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER LINE OR EDGE OF PAVEMENT. FIELD WORK NECESSARY FOR PROPER CONTROL WITHIN PLAN INTENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

AN AUTOMATIC MILLING HEAD PROFILE CONTROL HAVING A MINIMUM 9m SKI-ARM SHALL BE USED DURING THE PLANING OPERATION.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN TWENTY-ONE (21) CALENDAR DAYS. THE 21 CALENDAR DAYS SHALL BE CONSIDERED AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE 21 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES AS PER 108.07. PLANED AREAS THAT CREATE A LONGITUDINAL JOINT THAT IS BETWEEN TRAVELED LANES SHALL BE COMPLETED IN SUCH A MANNER SO AS TO REMOVE THE JOINT BEFORE THE END OF EACH DAYS WORK. BEFORE THIS JOINT IS EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL ERCT OW-171 (UNEVEN PAVEMENT). THIS SIGN SHALL REMAIN ONLY WHEN THE CONDITION EXISTS.

**ITEM 617. SHOULDER RECONDITIONING, MISC.:  
COMPACTED AGGREGATE**

THIS ITEM OF WORK SHALL CONFORM TO ITEM 617 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS BOOK WITH EXCEPTION OF 617.03 (MATERIALS) AND 617.06 (METHOD OF MEASUREMENT).

THE MATERIAL ON THIS PROJECT SHALL BE THE BITUMINOUS ASPHALT GRINDINGS RESULTING FROM ITEM 254. THE GRINDINGS USED FOR THIS ITEM SHALL BE PLACED AND COMPACTED AS DESCRIBED IN 617.05 WITH SPECIAL CARE TO CREATE PROPER COMPACTION. 100% OF THIS MATERIAL SHALL PASS A 32mm SIEVE AS JUDGED BY THE ENGINEER. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO MEET THE TYPICAL SECTIONS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER.

THE MATERIAL ON THIS PROJECT WILL BE PAID FOR BY THE metric ton. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING THE GROSS, TARE, AND NET WEIGHT OF EACH TRUCK LOAD OF MATERIAL TO THE NEAREST 45 kg IN TRIPLICATE ON PLANT TICKET FORMS APPROVED BY THE DIRECTOR. THE CONTRACTOR SHALL PROVIDE A TARE WEIGHT FOR EACH TRUCK AT THE BEGINNING OF EACH DAY'S OPERATION. ONE COPY OF THE WEIGHT TICKET SHALL ACCOMPANY EACH LOAD DELIVERED TO THE PROJECT AND SHALL BE PRESENTED TO THE ENGINEER.

PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE PRICE BID PER metric ton OF 617 SHOULDER RECONDITIONING, MISC.:COMPACTED AGGREGATE.

**ELEVATION DATUM**

AT STATION 21+988 AT THE CENTER OF THE CROSSOVER THE ELEVATION IS ASSUMED TO BE 30m.

**ITEM 614. WORK ZONE MARKING SIGN**

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR TEMPORARY WORK ZONE MARKING SIGNS PER THE REQUIREMENTS OF THE STANDARD CONSTRUCTION DRAWINGS:

ITEM 614, WORK ZONE MARKING SIGN (OW-167-1200):	58 EACH
ITEM 614, WORK ZONE MARKING SIGN (OW-168-1200):	4 EACH
TOTAL	62 EACH

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR PLAN ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

**ALIGNMENT AND PROFILE**

THE WORK PROPOSED BY THIS PROJECT IS FOR THE RESURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THIS EXISTING PAVEMENT WILL NOT BE CHANGED, AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT EXCEPT THAT IT WILL BE RAISED AN AMOUNT EQUAL TO THE THICKNESS OF THE RESURFACING COURSES SPECIFIED IN THESE PLANS. THE PROFILE WILL CHANGE ON THE EXIT RAMPS AT SR 13. DETAILS ARE PROVIDED ON SHEET NO. 18.

**ROUTINE MAINTENANCE**

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND BERM AND SHOULDER REPAIR. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

**ITEM 659. SEEDING AND MULCHING**

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL AT THE REST AREAS WHERE CURB REMOVAL AND INSTALLATION OCCURS AND AT CONSTRUCTION OF THE MEDIAN CROSSOVER AT SLK 21.988. THE FOLLOWING ARE QUANTITIES THAT HAVE BEEN ESTIMATED FOR THE COMPLETION OF THIS WORK.

ITEM 659 SEEDING AND MULCHING:	863m <sup>2</sup>
ITEM 659 COMMERCIAL FERTILIZER:	86kg
ITEM 659 WATER:	9m <sup>3</sup>

**ITEM 604. CATCH BASINS ADJUSTED TO GRADE**

ANY UNIT OF THIS ITEM MAY BE NONPERFORMED IF SO DIRECTED BY THE ENGINEER AND THE SURFACE SHALL BE FEATHERED TO MEET THE EXISTING CATCH BASIN IN A MANNER ACCEPTABLE TO THE ENGINEER. ALL ADJUSTING RINGS SHALL HAVE THE ENGINEERS APPROVAL BEFORE USING.

UNDER ITEM 604.03, ADJUSTING TO GRADE, PARAGRAPH (A), THE CATCH BASIN TO BE ADJUSTED MAY OR MAY NOT HAVE AN EXISTING FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING GRATE TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIAL REQUIRED TO SATISFACTORILY ADJUST CATCH BASINS.

**ITEM 519. PATCHING CONCRETE STRUCTURES**

THIS ITEM CONSISTS OF THE REMOVAL OF ALL LOOSE AND DISINTEGRATED CONCRETE, THE PREPARATION OF THE SURFACE, THE FURNISHING AND PLACING OF THE REINFORCING STEEL INCLUDING DOWELS, AND THE PLACING AND CURING OF CONCRETE PATCHES TO THE CONCRETE MEDIAN BARRIER. ALL MATERIALS AND METHODS SHALL BE IN COMPLIANCE WITH ITEM 519 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS BOOK (1995). THE FOLLOWING ARE THE SLK LOG POINTS WHERE PATCHING IS NECESSARY.

SLK 17.204	2.9m <sup>2</sup>
SLK 18.186	1.9m <sup>2</sup>
SLK 18.668 - 18.829 (VARIOUS)	3.0m <sup>2</sup>
SLK 19.473	2.5m <sup>2</sup>
SLK 19.795	2.7m <sup>2</sup>
TOTAL	13.0m <sup>2</sup>

THE QUANTITY SHALL BE THE ACTUAL AREA IN square meters OF THE EXPOSED SURFACES OF ALL COMPLETED PATCHES, IRRESPECTIVE OF THE DEPTH OF THE PATCH. IF A PATCH EXTENDS COMPLETELY THROUGH THE CONCRETE BARRIER MEDIAN, BOTH EXPOSED SURFACES SHALL BE MEASURED FOR PAYMENT.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER square meter OF ITEM 519, PATCHING CONCRETE STRUCTURES.

**ITEM SPECIAL. AIR SPEED ZONE MARKING**

SPEED MEASUREMENT MARKINGS SHALL BE WHITE AND 610mm (2ft) WIDE. THE MARKINGS SHALL BE 1220 mm (4ft) IN LENGTH AND BE PLACED ON THE SHOULDER STARTING FROM THE EDGE LINE OF THE PAVED SURFACE AT 0.40km (0.25mile) INTERVALS OVER A 1.61km (1mile) LENGTH OF ROADWAY. THE ZONE SHALL START AT SLK 30.578 (SLM 19.00) WESTBOUND AND SLK 24.140 (SLM 15.00) EASTBOUND. THE MARKINGS SHALL BE LAID OUT BY A REGISTERED SURVEYOR. A RECORD SHALL BE KEPT AND COPIES MADE AVAILABLE TO LAW ENFORCEMENT OFFICERS.

**PAVEMENT CONTROL**

AN AUTOMATIC SCREED CONTROL, HAVING A 9.1m MINIMUM SKI-ARM, SHALL BE USED FOR PLACING THE 448 INTERMEDIATE AND SURFACE COURSE ON EXISTING PAVEMENT WIDTHS OF 6.1m AND OVER. SPECIAL ATTENTION SHALL BE GIVEN TO SUPER-ELEVATED CURVES. THE SUPER-ELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER.

**ITEM 448. ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, AC-20**

THIS ITEM SHALL BE USED FOR CORRECTION OF CROWN, PROFILE AND ANY OTHER IRREGULARITIES. THE AVERAGE THICKNESS SHALL BE 44mm.

ALL LONGITUDINAL PAVEMENT JOINTS SHALL BE CLOSED BEFORE THE END OF EACH WORK DAY AND BEFORE THE JOINT IS EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL ERECT OW-171 (UNEVEN PAVEMENT) SIGN. THIS SIGN SHALL ONLY REMAIN WHILE THE CONDITION EXISTS.

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (OW-62) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN, AS DIRECTED BY THE ENGINEER. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED.

**ITEM 202. CURB REMOVED**

THE FOLLOWING SECTIONS OF CURB ARE TO BE REMOVED DUE TO UNSATISFACTORY CONDITION. THEY ARE TO BE REPLACED WITH ITEM 609, CURB, TYPE 6.

7.6m	CURB REMOVAL IN EB REST AREA
13.4m	CURB REMOVAL IN WB REST AREA
20.0m	CURB REMOVAL IN MEDIAN ON WB EXIT RAMP TO SR 13
41.0m	TOTAL

THE ACCEPTED QUANTITIES OF CURB REMOVED AND DISPOSED OF WILL BE PAID FOR AT THE UNIT PRICE BID PER meter OF ITEM 202, CURB REMOVED.

**ITEM 609. CURB, TYPE 6**

TYPE 6 CURB SHALL BE INSTALLED IN THE FOLLOWING AREAS. REFER TO THE STANDARD CONSTRUCTION DRAWING BP-5.1M FOR DETAILS.

7.6m	CURB IN EB REST AREA
13.4m	CURB IN WB REST AREA
21.0m	TOTAL

PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER meter OF ITEM 609, CURB, TYPE 6.

**ITEM 609. CURB, TYPE 2-A**

TYPE 2-A CURB SHALL BE INSTALLED AT VARIOUS LOCATIONS ALONG THE MEDIAN ON THE WB EXIT RAMP TO SR13. REFER TO STANDARD CONSTRUCTION DRAWING BP-5.1M FOR DETAILS.

20.0m	CURB IN MEDIAN ON WB EXIT RAMP TO SR 13
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PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER meter OF ITEM 609, CURB, TYPE 2-A.

**ITEM 612. CONCRETE MEDIAN**

THE UNSATISFACTORY CONCRETE MEDIAN WILL NEED TO BE REPLACED AT VARIOUS LOCATIONS ON THE WB EXIT RAMP TO SR 13 AS DIRECTED BY THE ENGINEER. NO DOWELS OR MESH ARE REQUIRED FOR THIS MEDIAN. FOR DETAILS ON THE NECESSARY WORK SEE SHEET NO. 17.

15.0m <sup>2</sup>	CONCRETE MEDIAN ON WB EXIT RAMP TO SR 13
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ACCEPTED QUANTITIES WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER square meter OF ITEM 612, CONCRETE MEDIAN.

**ITEM 202. CONCRETE MEDIAN REMOVED**

THE FOLLOWING SECTIONS OF CONCRETE MEDIAN ARE TO BE REMOVED DUE TO UNSATISFACTORY CONDITION. THEY ARE TO BE REPLACED WITH ITEM 612, CONCRETE MEDIAN.

15.0m <sup>2</sup>	CONCRETE MEDIAN REMOVED ON WB EXIT RAMP TO SR 13 (FOR DETAILS ON THE NECESSARY WORK SEE SHEET NO. 17).
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THE ACCEPTED QUANTITIES OF CONCRETE MEDIAN REMOVED AND DISPOSED OF WILL BE PAID FOR AT THE UNIT PRICE BID PER square meter OF ITEM 202, CONCRETE MEDIAN REMOVED.

**ITEM 622. GLARE SCREEN**

THE GLARE SCREENS LOCATED AT THE FOLLOWING SLK LOG POINTS NEED REPLACED. THE GLARE SCREENS ARE LOCATED ALONG THE TOP OF THE CONCRETE BARRIER MEDIAN.

SLK 18.314	6m
SLK 18.330	6m
SLK 19.199	3m
SLK 19.473	3m
SLK 19.554	3m
SLK 19.956	6m
SLK 20.036	21m
CONTINGENCY	12m

TOTAL 60m

THE GLARE SCREEN SHALL BE CONSTRUCTED TO MATCH THE EXISTING CONDITION USING ONE OF THE FOLLOWING COMPANIES OR AN APPROVED EQUAL:

CARSONITE MODULAR GLARE SCREEN  
 CARSONITE INTERNATIONAL  
 2900 LOCKHEED WAY, CARSON CITY, NEVADA 89701  
 702-883-5104 OR 800-648-7974

FORWARD GLARE SCREEN  
 PROVEN PRODUCTS, INC.  
 7560 SW LAVIEW DRIVE, PORTLAND, OREGON 97219  
 503-244-9185

SYRO GLAREFOIL  
 SYRO STEEL COMPANY  
 1170 N. STATE STREET, GIRARD, OHIO 44420  
 330-545-4373

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE CONCRETE BARRIER MEDIAN USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER meter FOR ITEM 622, GLARE SCREEN. LENGTH OF MEASUREMENT SHALL BE THE ACTUAL LENGTH OF CONCRETE BARRIER MEDIAN WHERE THE GLARE SCREEN IS BEING REPLACED.

**COORDINATION OF CONTRACTORS**

THE CONTRACTOR SHOULD BE AWARE THAT THERE MAY BE OTHER WORK BEING PERFORMED BY A SEPARATE CONTRACT. THERE IS A REHABILITATION JOB WHICH MAY BE SOLD DURING THE 1997 CONSTRUCTION SEASON ON ASD-30-0.13. COORDINATION OF WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.

**ITEM 404 - BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC**

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO CONSTRUCT A TEMPORARY WEDGE FROM THE EXISTING PAVEMENT TO THE PROPOSED PAVEMENT AT BUTT JOINTS AND OTHER LOCATIONS THAT RESULT IN A DROP-OFF IN EXCESS 38mm, AS DIRECTED BY THE ENGINEER.

10m <sup>3</sup>	ITEM 404, BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC
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**RAISED PAVEMENT MARKER CASTINGS SUPPLIED BY THE DEPARTMENT**

THE DEPARTMENT SHALL SUPPLY TO THE CONTRACTOR RPM CASTINGS OR RPM CASTINGS WITH TWO WAY YELLOW/YELLOW REFLECTORS IN THE QUANTITIES SHOWN HEREIN. PAY ITEMS FOR THE DEPARTMENT SUPPLIED MATERIALS SHALL BE INDICATED AS "INSTALLATION ONLY." ALL OTHER MATERIALS ARE TO BE CONTRACTOR FURNISHED. THE QUANTITY AND TYPE OF DEPARTMENT SUPPLIED MATERIALS ARE SHOWN ELSEWHERE IN THE PLAN.

THE CONTRACTOR WILL BE INFORMED AT THE PRE-CONSTRUCTION CONFERENCE FOR THE LOCATION OF THE DEPARTMENT SUPPLIED MATERIAL. THE CONTRACTOR SHALL PICK UP DEPARTMENT SUPPLIED RPM MATERIALS AT THE SPECIFIED LOCATION(S) FOR TRANSPORT TO THE WORK SITE OR TO THE CONTRACTOR'S STORAGE FACILITY. AN AUTHORIZATION FOR PICK UP FORM WILL BE FURNISHED BY THE DISTRICT CONSTRUCTION ADMINISTRATOR TO THE CONTRACTOR AT THE PRE-CONSTRUCTION CONFERENCE. THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND/OR THE PARTIES LISTED ON THE AUTHORIZATION FORM (DEPENDENT ON THE STORAGE LOCATIONS OF THE MATERIALS) IN WRITING AT LEAST FIVE (5) CALENDAR DAYS PRIOR TO PICK UP OF DEPARTMENT SUPPLIED MATERIALS. THE CONTRACTOR SHALL STORE THEM WITHOUT DAMAGE OR CONTAMINATION WITH FOREIGN MATTER. A DEDUCTION IN THE AMOUNT OF THE ACTUAL COST TO THE DEPARTMENT SHALL BE MADE FOR MATERIALS DAMAGED BY THE CONTRACTOR OR FOR CASTINGS RECEIVED BY THE CONTRACTOR WHICH WERE NOT INSTALLED AND WERE NOT RETURNED TO THE DEPARTMENT.

**ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN,  
CLASS II, AS PER PLAN**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, PORTABLE CHANGEABLE MESSAGE SIGN, (PCMS) AS CALLED FOR IN PLAN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. THE CLASS II UNITS HAVE A MINIMUM LEGIBILITY DISTANCE OF 259m (850 FT.).

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY.

THE NUMBER, LOCATION, PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE LOCATIONS OF THE PCMS WILL BE MADE KNOWN TO THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 225mm (9-INCH) BY 375mm (15-INCH) MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT AND REVISE SIGN MESSAGE, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHRASES SHALL BE SUPPORTED, BUT NORMALLY, NOT MORE THAN TWO MESSAGE PHRASES SHOULD BE EMPLOYED, ALTHOUGH THREE PHASES MAY BE USED IN UNUSUAL CONDITIONS. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHRASE TO BE READ AT LEAST ONCE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614.03 (c). THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE MORE THAN 12 HOURS INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 104.04.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT BID PRICE PER SIGN-MONTH FOR ALL SIGNS FURNISHED UNDER ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, CLASS II, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE, AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK, INCLUDING RELOCATION IF NECESSARY.

A QUANTITY OF 4\* SIGN-MONTHS HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

\* ESTIMATED 4 LOCATIONS FOR 1 MONTH

**ITEM 802 - BARRIER REFLECTOR, TYPE B,  
AS PER PLAN**

THIS ITEM INCLUDES THE REMOVAL AND DISPOSAL OF ANY EXISTING BARRIER REFLECTORS ALONG WITH THE INSTALLATION OF BARRIER REFLECTORS ON THE CONCRETE MEDIAN BARRIER ACCORDING TO THE SUPPLEMENTAL SPECIFICATION 802.05. CARE SHALL BE TAKEN WHEN REMOVING THE EXISTING REFLECTORS SO AS NOT TO DAMAGE THE CONCRETE MEDIAN BARRIER.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH REFLECTOR OF ITEM 802 - BARRIER REFLECTOR, TYPE B, AS PER PLAN. PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, HARDWARE, DISPOSAL, AND INCIDENTALS REQUIRED TO PERFORM THE WORK.

ITEM 802 - BARRIER REFLECTOR, TYPE B,  
AS PER PLAN 236 EACH

**ITEM 614 - LAW ENFORCEMENT OFFICER WITH  
PATROL CAR**

IN ADDITION TO THE REQUIREMENTS OF ITEM 614, A UNIFORMED SPECIAL DUTY LAW ENFORCEMENT OFFICER AND AN OFFICIAL PATROL CAR WITH EMERGENCY FLASHERS OPERATING SHALL BE USED AS DESCRIBED BELOW.

THE LAW ENFORCEMENT OFFICERS (LEOS) WILL BE REQUIRED DURING INITIAL SETUP PERIODS AND UNTIL TRAFFIC IS STABILIZED, DURING TEAR DOWN PERIODS, AND WHERE SUBSTANTIAL SHIFTS OCCUR BETWEEN DIFFERENT PHASES OF TRAFFIC CONTROL AS OUTLINED IN THE PLANS.

IT IS NOT THE INTENT TO USE LEOS WHERE ADEQUATE TRAFFIC CONTROL AND/OR FLAGGERS WILL DO THE JOB.

THE FOLLOWING CRITERIA SHOULD BE USED FOR SCHEDULING LEOS UNDER THIS PAY ITEM:

1. FOR SHORT TERM CLOSURES (ONE DAY OR LESS WHICH WILL BE REMOVED AT NIGHT) A LEO IS NOT REQUIRED AND WILL NOT BE PAID FOR.
2. FOR LONGER TERM CLOSURES ( MORE THAN ONE DAY) WHERE WORKERS ARE EXPOSED TO TRAFFIC FOR A CONSIDERABLE PERIOD OF TIME FOR SETTING UP DRUMS, PORTABLE CONCRETE BARRIER, REMOVING CONFLICTING PAVEMENT MARKINGS, ETC., A LEO WILL BE REQUIRED AND PAID FOR AS DESCRIBED BELOW.

ARRANGEMENTS AND PAYMENTS FOR THE SERVICES OF THE LEOS WITH PATROL CAR WILL BE MADE BY THE CONTRACTOR. INFORMATION REGARDING THE LEOS MAY BE OBTAINED BY CONTACTING:

THE STATE HIGHWAY PATROL HEADQUARTERS  
660 EAST MAIN STREET  
COLUMBUS, OHIO 43205  
PHONE: (614) 466-2660

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED IN THE GENERAL SUMMARY:

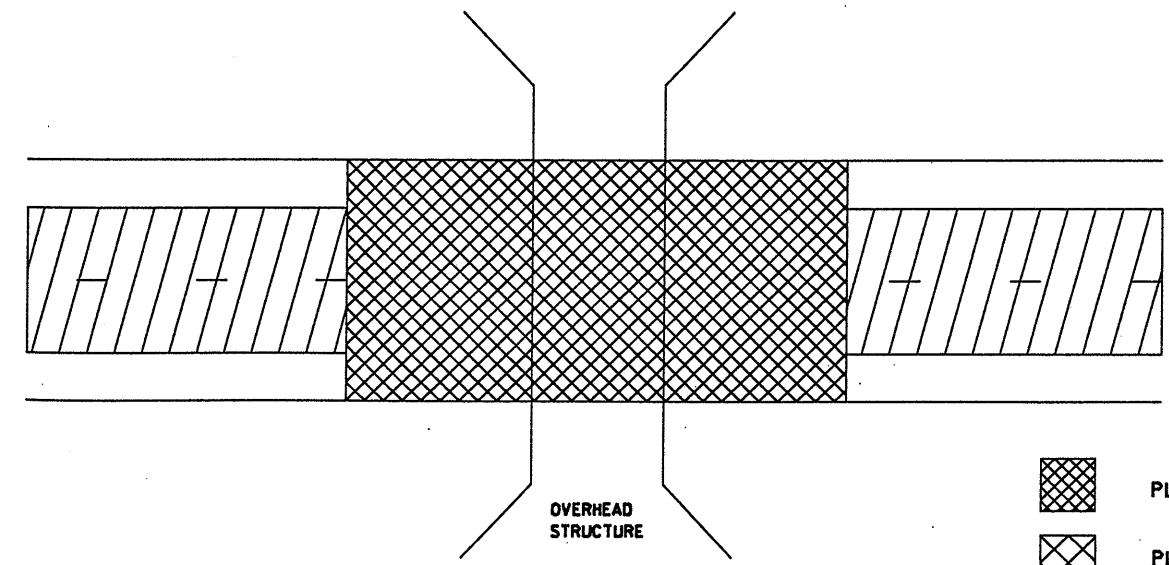
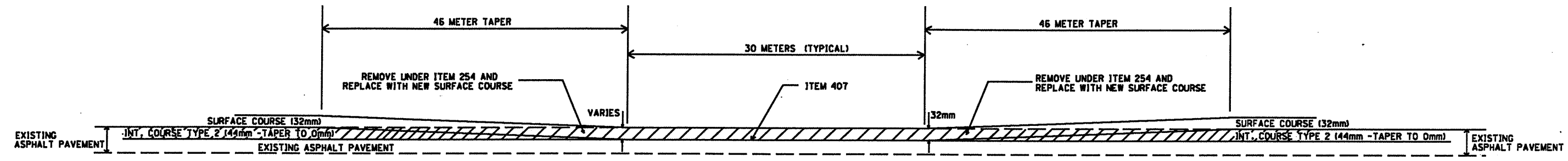
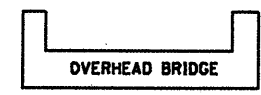
ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR 300 HOURS

NOTE: PLANE MAINLINE UNDER OVERHEAD BRIDGES TO MAINTAIN PROPER CLEARANCE AT

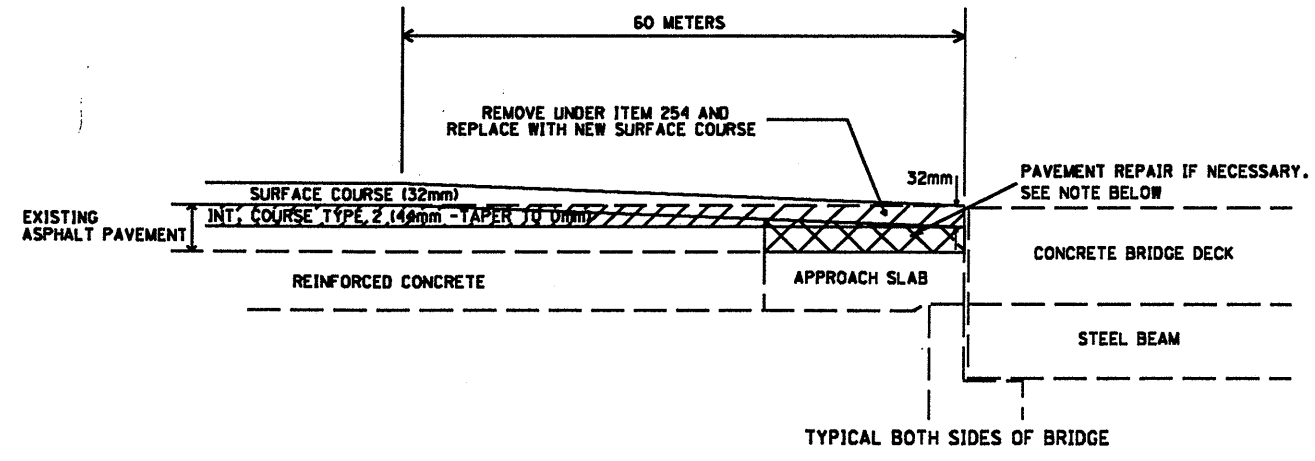
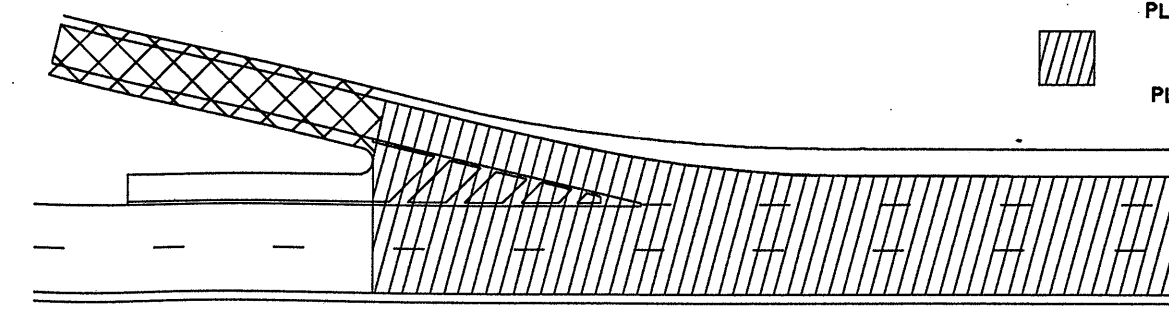
RIC-30-5.858	E.B.
RIC-30-6.373	E.B. & W.B.
RIC-30-8.320	E.B. & W.B.
RIC-30-9.511	E.B. & W.B.
RIC-30-11.700	E.B. & W.B.
RIC-30-13.969	E.B. & W.B.
RIC-30-15.739	E.B. & W.B.
RIC-30-20.584	E.B. & W.B.
RIC-30-22.273	E.B. & W.B.
RIC-30-23.142	E.B. & W.B.
RIC-30-24.526	E.B. & W.B.
RIC-30-26.345	E.B. & W.B.
RIC-30-27.584	E.B. & W.B.
RIC-30-27.648	E.B. & W.B.

ITEM 254 PAVEMENT PLANING, BITUMINOUS, AS PER PLAN

NOTE: WIDTH OF PAVEMENT PLANING SHALL BE EQUAL TO THE WIDTH OF THE EXISTING PAVEMENT. TAPER TO 0mm THE ITEM 448 INTERMEDIATE COURSE, TYPE 2 BEGINNING 6m FROM THE CENTER OF THE STRUCTURE, AS SHOWN ON THIS DETAIL.



- PLANE 32mm AND PAVE 32mm TYPE I
- PLANE 38mm AND PAVE 38mm TYPE I
- PLANE 44mm AND PAVE 44mm TYPE 2, PAVE FULL WIDTH 32mm TYPE I (EASTERN & WESTERN PORTIONS)
- PLANE 76mm AND PAVE 44mm TYPE 2, PAVE 32mm TYPE I (CENTER PORTION)

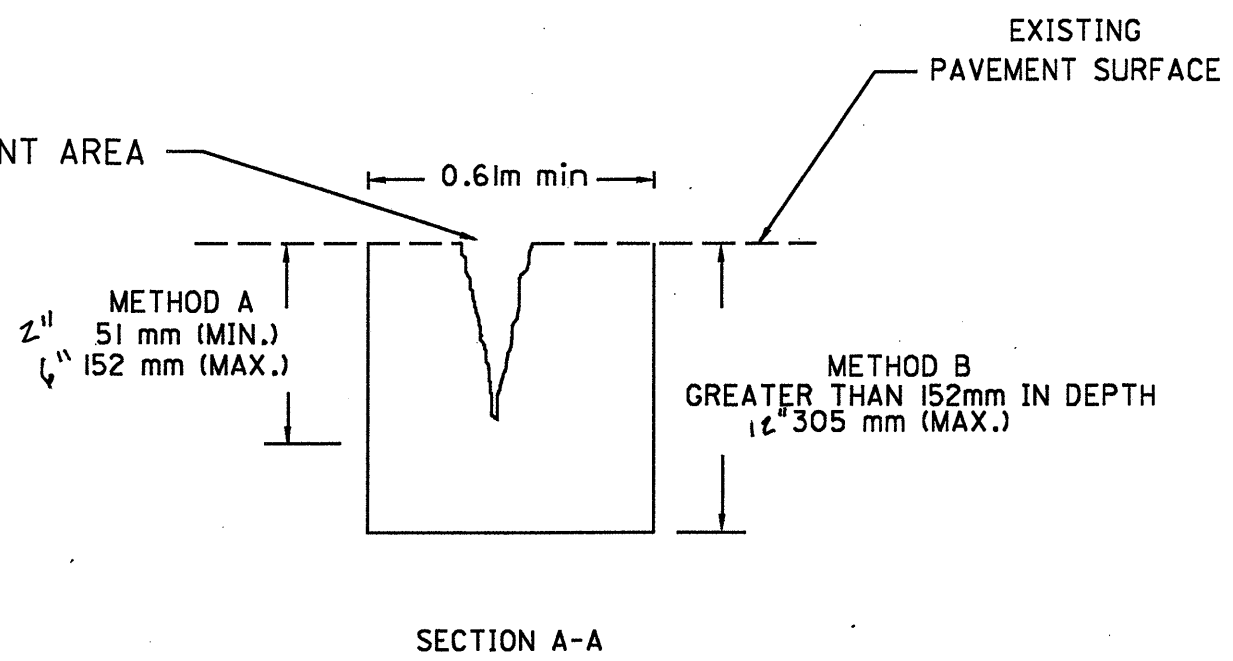
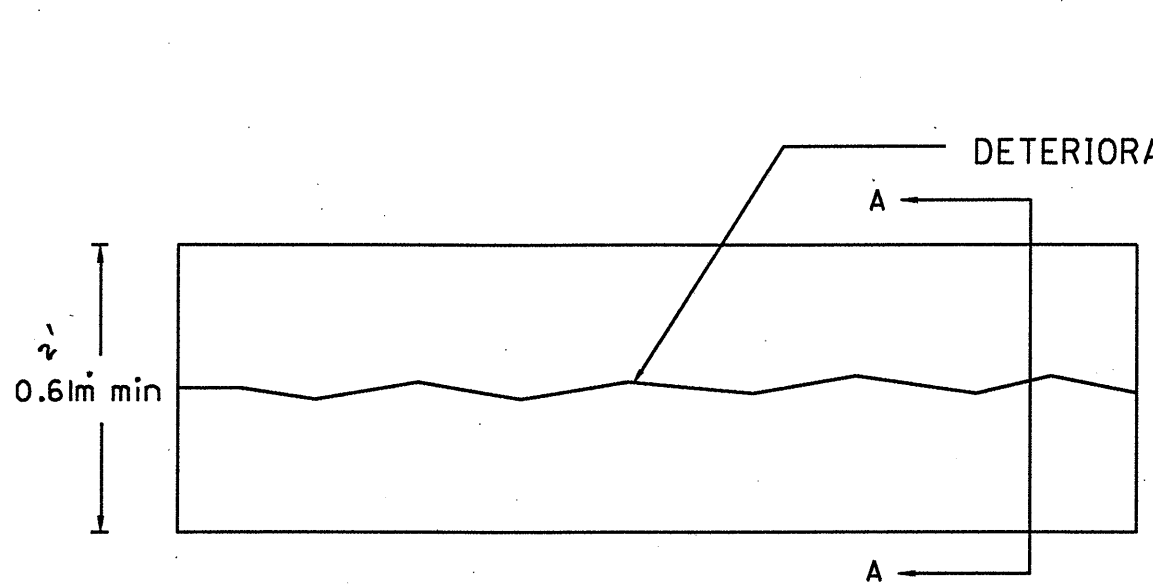


NOTE: ON APPROACH SLABS IF PAVEMENT REPAIR IS NEEDED, PLANE TO THE DESIRED DEPTH OR UNTIL THE CONCRETE APPROACH SLAB IS REACHED. FOR APPROACH SLABS THAT APPEAR TO HAVE SETTLED, USE PAVEMENT REPAIR QUANTITIES TO RESTORE BASE PAVEMENT ON TOP OF THE APPROACH SLAB TO WITHIN 32mm.

NOTE: ON BRIDGES IN SECTION 16.608 - 20.133 (SLK), BUTT JOINT TO BRIDGE WITHOUT FEATHER.

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PAVEMENT REPAIR DETAIL



PLAN NO.

PAVEMENT REPAIR DETAIL

RIC-US30-5.600

THE PAVEMENT REPAIR QUANTITIES ARE TO BE USED FOR JOINT REPAIRS OR OTHER DETERIORATED AREAS THROUGHOUT THE PROJECT THAT MAY VARY IN DEPTH AND SIZE. THE DEPTH AND SIZE SHALL BE AS DIRECTED BY THE ENGINEER. WHEN PERFORMING PAVEMENT REPAIR METHOD B AND WIRE MESH IS ENCOUNTERED THE WIRE MESH SHALL BE REMOVED TO AVOID IT FROM PROTRUDING THROUGH THE ASPHALT.

PAYMENT SHALL BE AS DESCRIBED IN THE PAVEMENT REPAIR GENERAL NOTE WITH EMPHASIS ON ONE TYPE OF PAY FOR EACH LOCATION. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PART 1 - METHOD A = 450 cubic meter  
METHOD B = 115 cubic meter

**ITEM 253. PAVEMENT REPAIR, METHOD A OR METHOD B**

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OR PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE AND CUT OR SAWS TO A NEAT LINE. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHOD A OR METHOD B WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. METHOD A WILL BE USED FOR AREAS THAT ARE AT LEAST 51mm IN DEPTH AND LESS THAN 152mm IN DEPTH. METHOD B WILL BE USED FOR AREAS THAT ARE AT LEAST 152mm IN DEPTH AND LESS THAN 305mm IN DEPTH. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE MATERIALS SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 203.05.

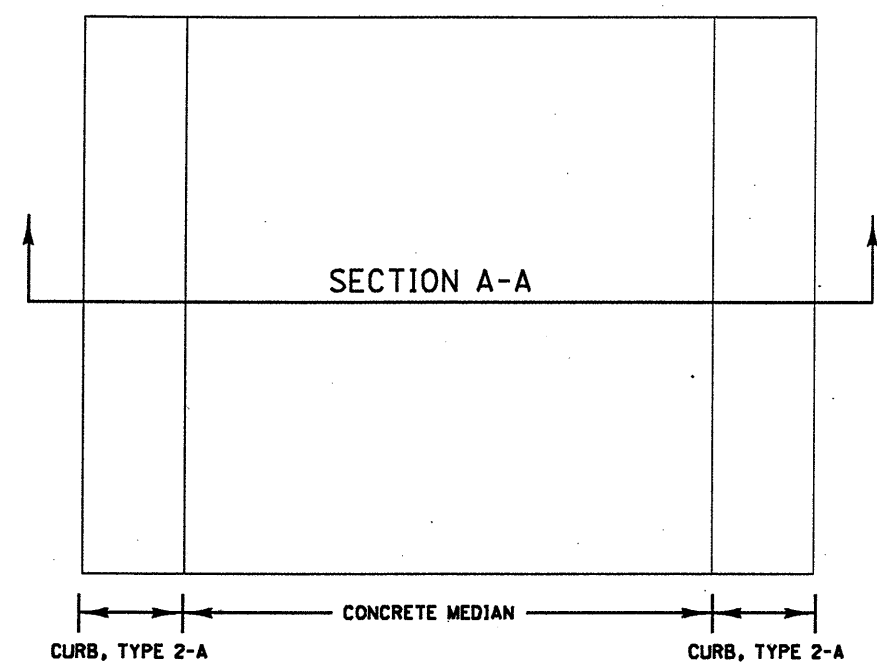
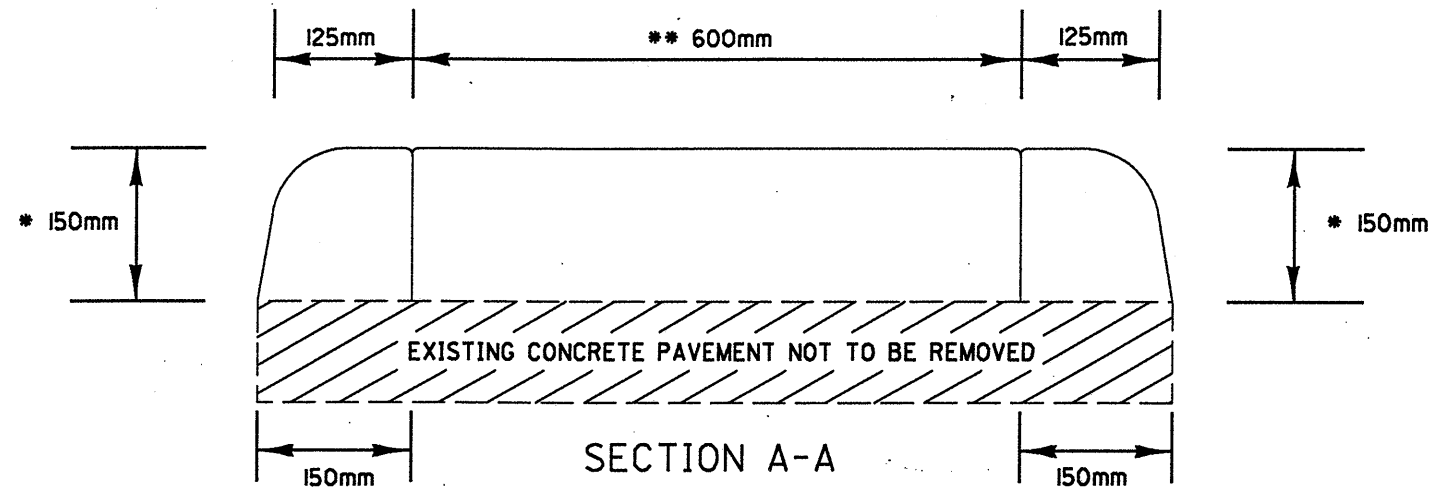
IF THE LANE LINE IS IN NEED OF REPAIR, A 0.6m WIDE RECTANGLE SHOULD BE CUT ABOUT THE LANE LINE. THE DEPTH OF REPAIR SHALL BE SUFFICIENT TO REACH THE CONCRETE PAVEMENT.

THE PAVEMENT REPAIR SHALL BE DETERMINED AND REPAIRED AFTER THE PAVEMENT PLANING HAS BEEN DONE. REPLACEMENT MATERIAL SHALL BE 402 OR 301 MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. THE REPAIR AREAS SHALL BE PAINTED WITH BITUMINOUS MATERIAL (SIDES AND BOTTOM). ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER. MAXIMUM LIFT THICKNESS SHALL BE 76mm.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER cubic meter, (BY TICKET WEIGHT CONVERSION), OF ITEM 253, PAVEMENT REPAIR, METHOD A OR METHOD B. EACH LOCATION SHALL BE PAID AS EITHER METHOD A OR METHOD B. PAYMENT SHALL NOT BE MADE MORE THAN ONCE AT ONE LOCATION.



# CONCRETE MEDIAN LOCATED ON SR13 RAMP



\* CURB THAT IS BEING INSTALLED SHOULD BE TYPE 2-A AND FLUSH WITH THE EXISTING CURB. REFER TO BP-5.IM FOR ADDITIONAL CURB DETAILS.

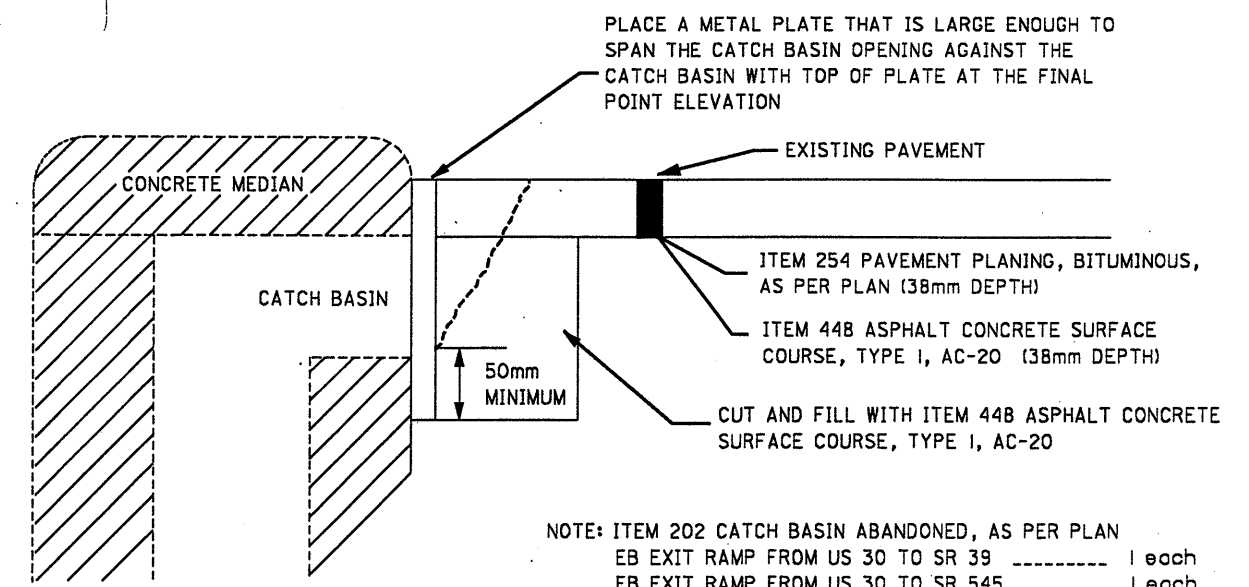
\*\* THE SECTIONS OF MEDIAN THAT ARE BEING INSTALLED SHOULD BE POURED TO A 150mm THICKNESS.

**NOTE:**  
**JOINTS** - 6mm CONTRACTION JOINTS SHALL BE CONSTRUCTED AT 3m INTERVALS IN ACCORDANCE WITH PERTINENT PROVISIONS OF CMS 609.04.  
**METHOD OF INSTALLATION** - WHEN CONCRETE MEDIANS ARE TO BE INSTALLED ON EXISTING PORTLAND CEMENT CONCRETE PAVEMENT THE SURFACE SHALL BE CLEAN, DRY AND FREE OF ANY LOOSE MATERIAL.

## ABANDONED CATCH BASIN, AS PER PLAN

THE FOLLOWING PROCEDURE SHALL BE FOLLOWED WHEN ABANDONING A CATCH BASIN. THE RAMP IS TO BE PLANED A DEPTH OF 38mm THE FULL WIDTH OF THE RAMP. A CUT SHALL BE MADE THE LENGTH AND WIDTH OF THE DEPRESSION AT THE OPENING OF THE CATCH BASIN, DEEP ENOUGH SO THAT THE CUT IS A MINIMUM OF 50mm BELOW THE CATCH BASIN OPENING. CHOOSE A METAL PLATE TO COVER THE INLET OPENING OF THE CATCH BASIN. PLACE THE METAL PLATE AGAINST THE CATCH BASIN OPENING SO THAT THE TOP OF THE PLATE WILL BE AT THE SAME ELEVATION AS THE PROPOSED SURFACE COURSE. PLACE ITEM 407, TACK COAT ON ALL SIDES OF CUT BEFORE FILLING WITH ASPHALT CONCRETE. FILL THE CUT WITH ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE I, AC-20 TO THE RAMP ELEVATION FOLLOWING THE PLANING OF THE RAMP. PAVE THE RAMP WITH ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE I, AC-20 AT A DEPTH OF 38mm. THE TOP OF THE METAL PLATE SHOULD BE FLUSH WITH THE FINAL SURFACE COURSE PAVEMENT ELEVATION.

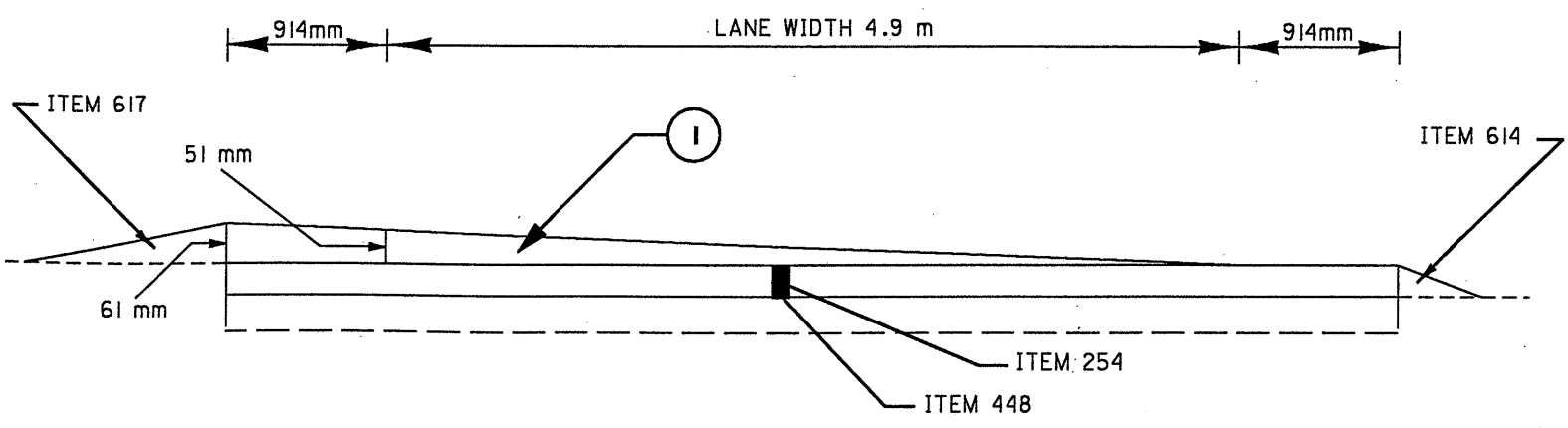
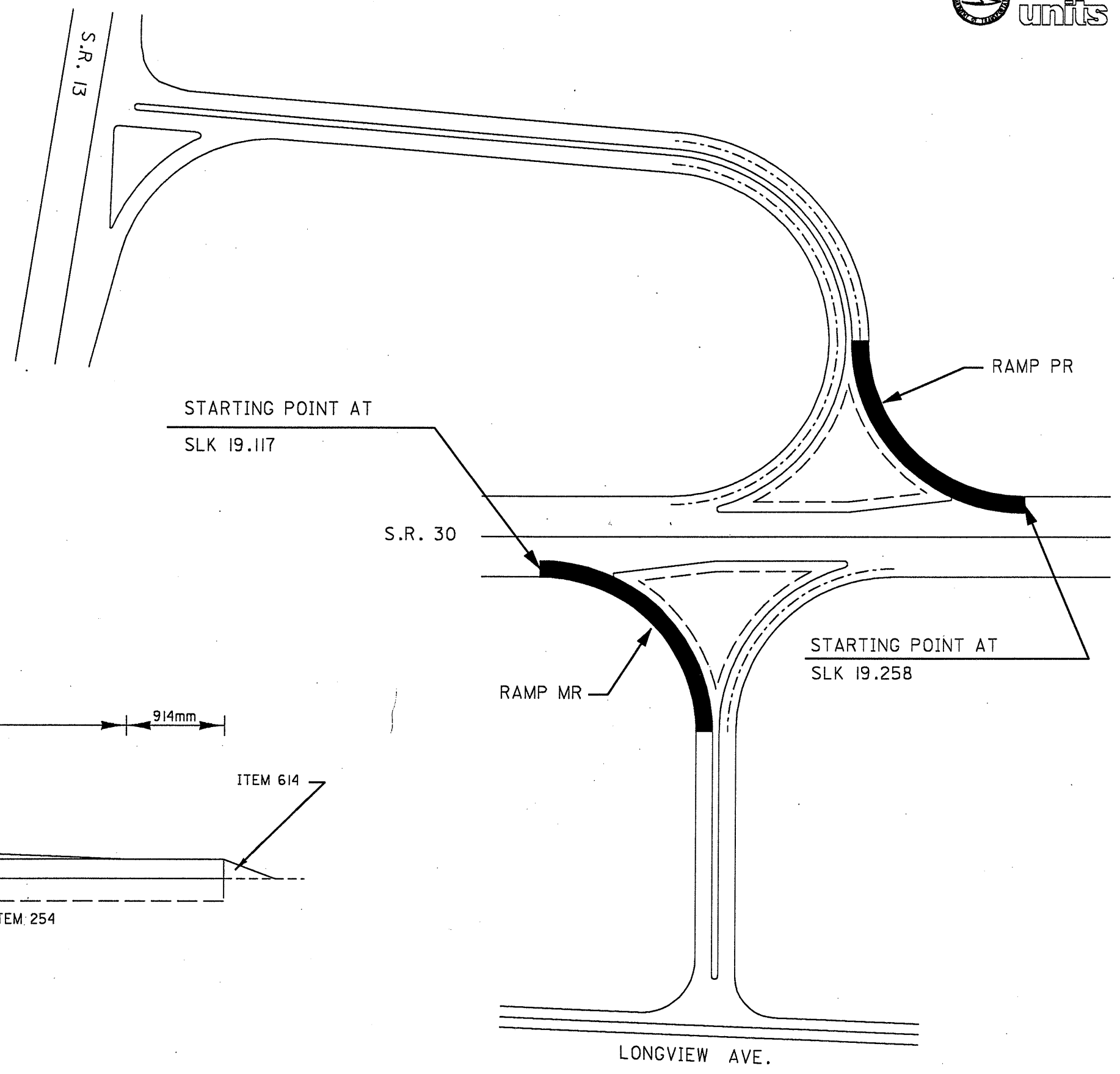
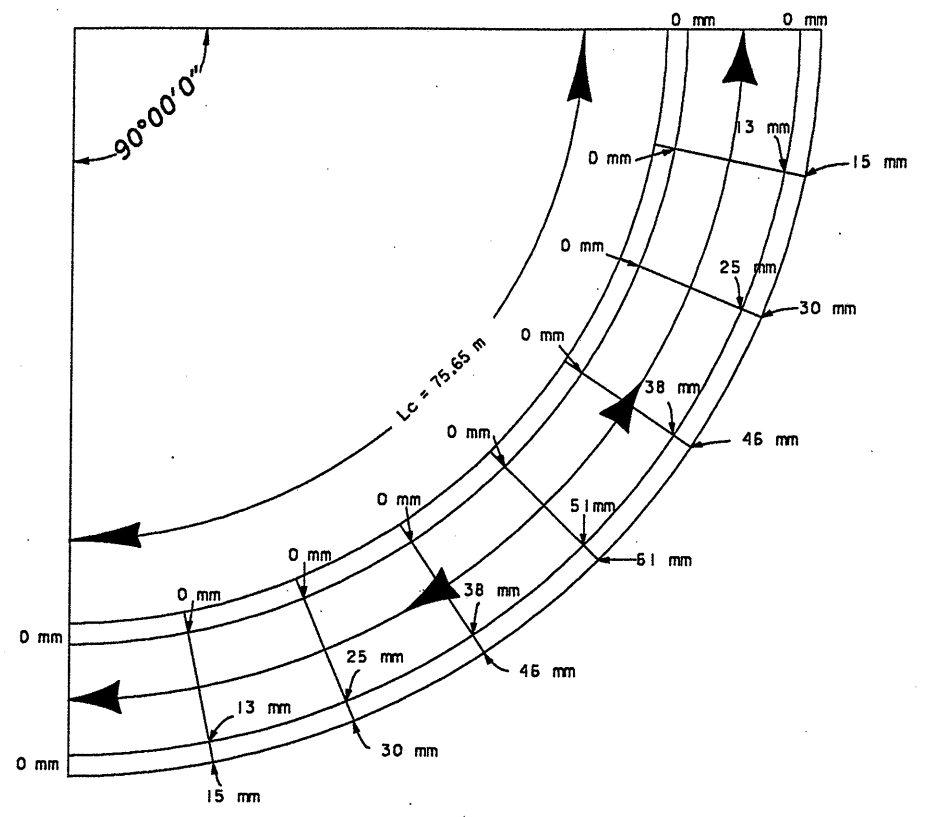
PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AS DETAILED AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER EACH FOR ITEM 202 CATCH BASIN ABANDONED, AS PER PLAN.



**NOTE: ITEM 202 CATCH BASIN ABANDONED, AS PER PLAN**

EB EXIT RAMP FROM US 30 TO SR 39	1 each
EB EXIT RAMP FROM US 30 TO SR 545	1 each
ENTRANCE RAMP FROM SR 545 TO WB US 30	1 each
<b>TOTAL</b>	<b>3 each</b>

TYPICAL FOR BOTH RAMPS



MAXIMUM PROFILE SECTION

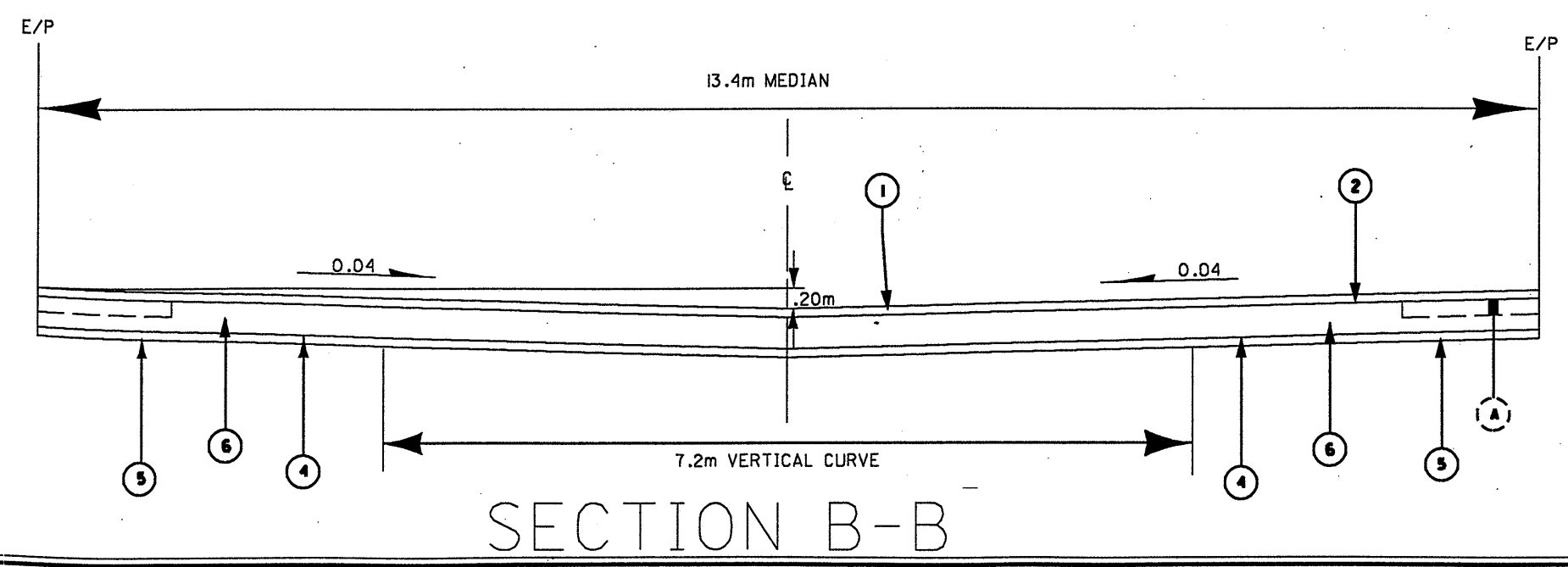
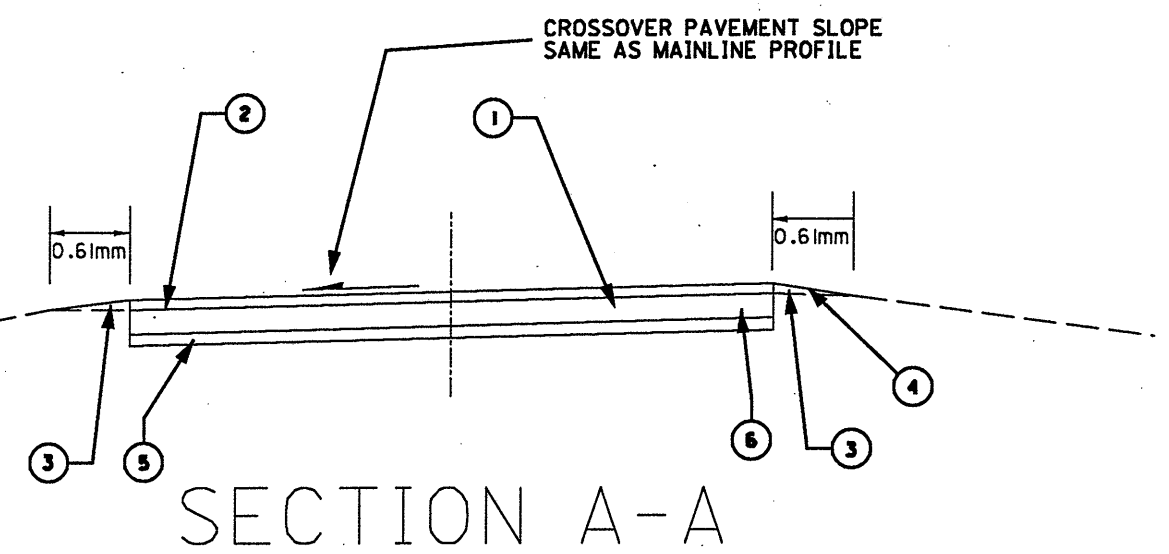
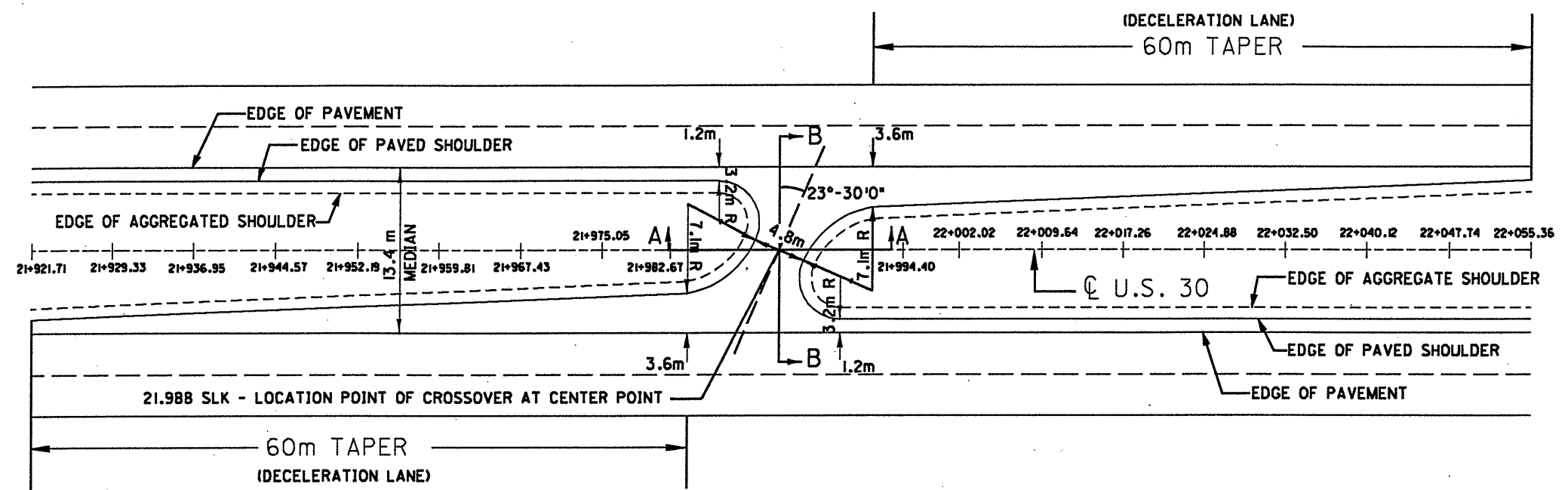
① ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE I, AC-20

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REFER TO SHEET 7 FOR ADDITIONAL ASPHALT QUANTITIES

REFERENCE ELEVATION POINT ASSUMED 30 METERS AT STA. 21+988 = SLK 21.988

- 96 m<sup>3</sup> - ITEM 203, EMBANKMENT
- 343 m<sup>2</sup> - ITEM 203, SUBGRADE COMPACTION
- 161 m<sup>3</sup> - ITEM 203, EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
- 48 L - ITEM 407, TACK COAT
- 649 L - ITEM 408, BITUMINOUS PRIME COAT
- 69 m<sup>3</sup> - ITEM 301, BITUMINOUS AGGREGATE BASE, AC-20
- 11 m<sup>3</sup> - ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE I, AC-20, (32 mm AVG. THICKNESS)
- 2 m. ton - ITEM 617, SHOULDER RECONDITIONING MISC.: COMPACTED AGGREGATE
- 26 m<sup>3</sup> - ITEM 304, AGGREGATE BASE

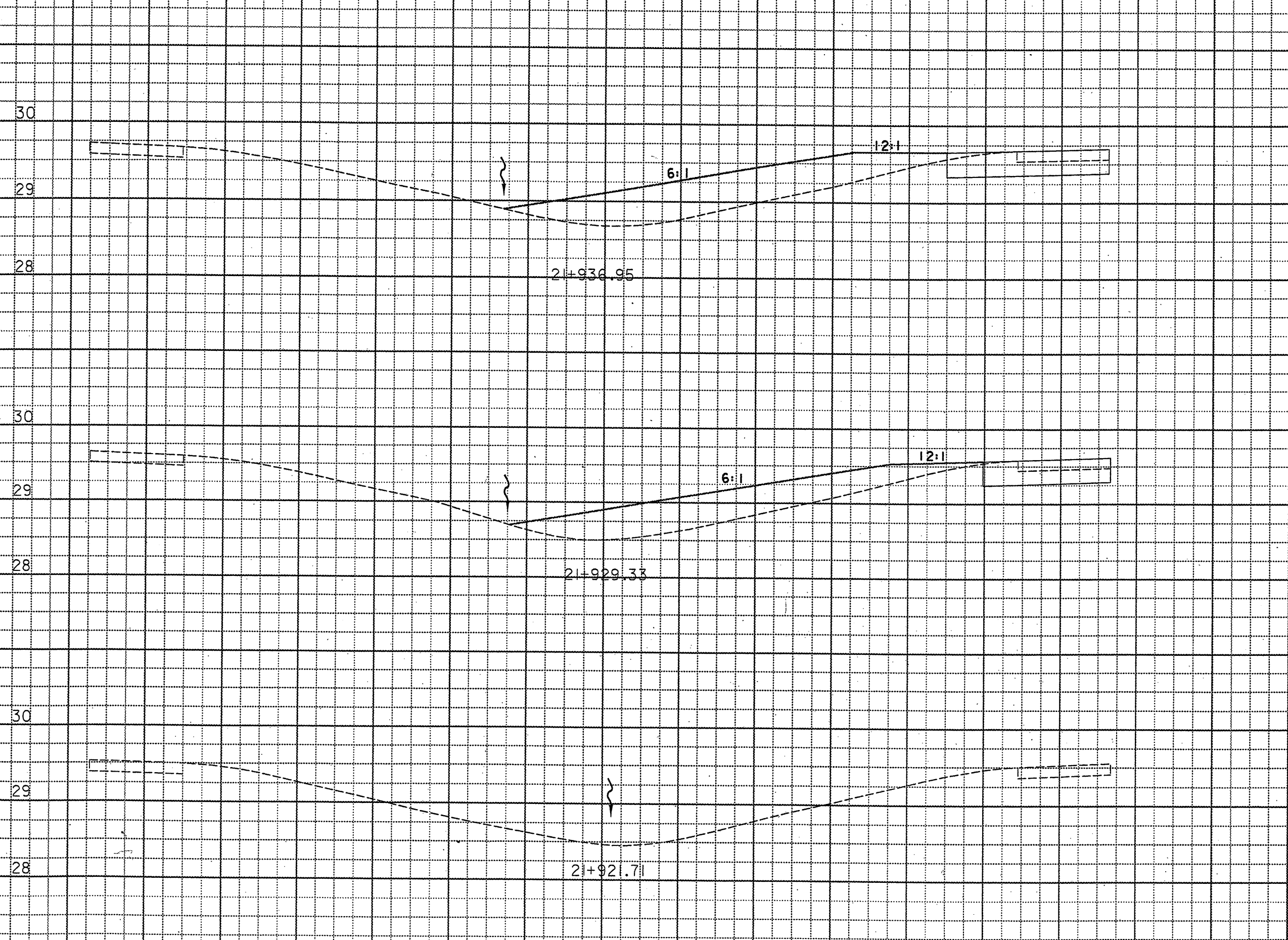


- ① ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE I, AC-20, (32mm)
- ② ITEM 407, TACK COAT APPLIED AFTER 301 COURSE AT .14L/m<sup>2</sup>
- ③ ITEM 617, SHOULDER RECONDITIONING, MISC.: COMPACTED AGGREGATE, (51mm AVERAGE THICKNESS)
- ④ ITEM 408, BITUMINOUS PRIME COAT @ 1.8 L/m<sup>2</sup>
- ⑤ ITEM 304, AGGREGATE BASE, (76mm AVERAGE THICKNESS)
- ⑥ ITEM 301, BITUMINOUS AGGREGATE BASE, AC-20, (200mm AVERAGE THICKNESS)
- (A) EXISTING ASPHALT SHOULDER

FILE NAME = I:\dgn\ops\1997\r304lane

SEEDING  
 500 30.0  
 WIDTH METERS

7.8  
 61  
 8.2  
 31.2  
 0



END AREA		VOLUME	
CUT	FILL	CUT	FILL
.56	2.11	3.89	15.28
.46	1.90	1.75	7.24
0	0	5.64	22.52

PTS  
 CHECKED  
 MUS

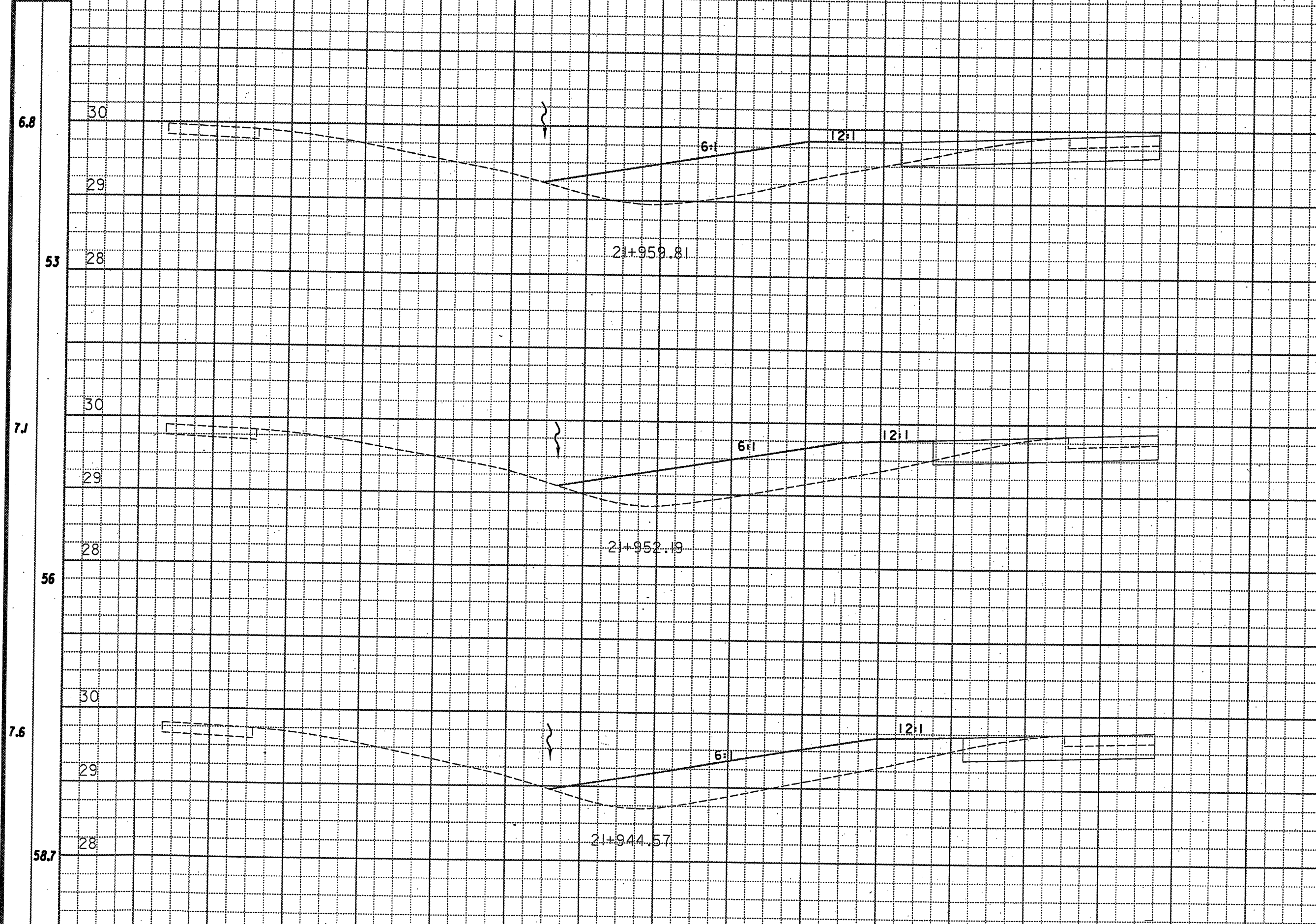
CROSS SECTIONS STA. 21+921.71 TO STA. 21+936.95

RIC-US30-5.600

20  
 31

92.2 SHEET TOTAL 6 5 4 3 2 1 0 1 2 3 4 5 6 7 SHEET TOTAL

SEEDING  
END WIDTH SO. METERS



END AREA	VOLUME	
	CUT	FILL
.72	2.16	
5.30	16.42	
.67	2.15	
4.99	16.08	
.64	2.07	
4.57	15.93	
14.86	22.86	

CROSS SECTIONS STA. 21+944.57 TO STA. 21+959.81  
 RIC-US30-5.600  
 21  
 31

167.7	SHEET TOTAL	6	5	4	3	2	1	0	1	2	3	4	5	6	7	SHEET TOTAL
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SEEDING  
END WIDTH SO. METERS

4.9

30

6:1

12:1

21+982.67

41.5

28

6.0

30

6:1

12:1

21+975.05

47.2

28

6.4

30

6:1

12:1

21+967.43

50.3

28

END AREA		VOLUME		PIS CHECKED	MS
CUT	FILL	CUT	FILL		
.71	.88	5.30	10.9		
.68	1.98	5.14	16.08		
.67	2.24	5.30	16.76		
139.0 SHEET TOTAL		157443.74			

CROSS SECTIONS STA. 21+967.43 TO STA. 21+982.67

RIC-US30-5.600

22  
31

139.0

SHEET TOTAL

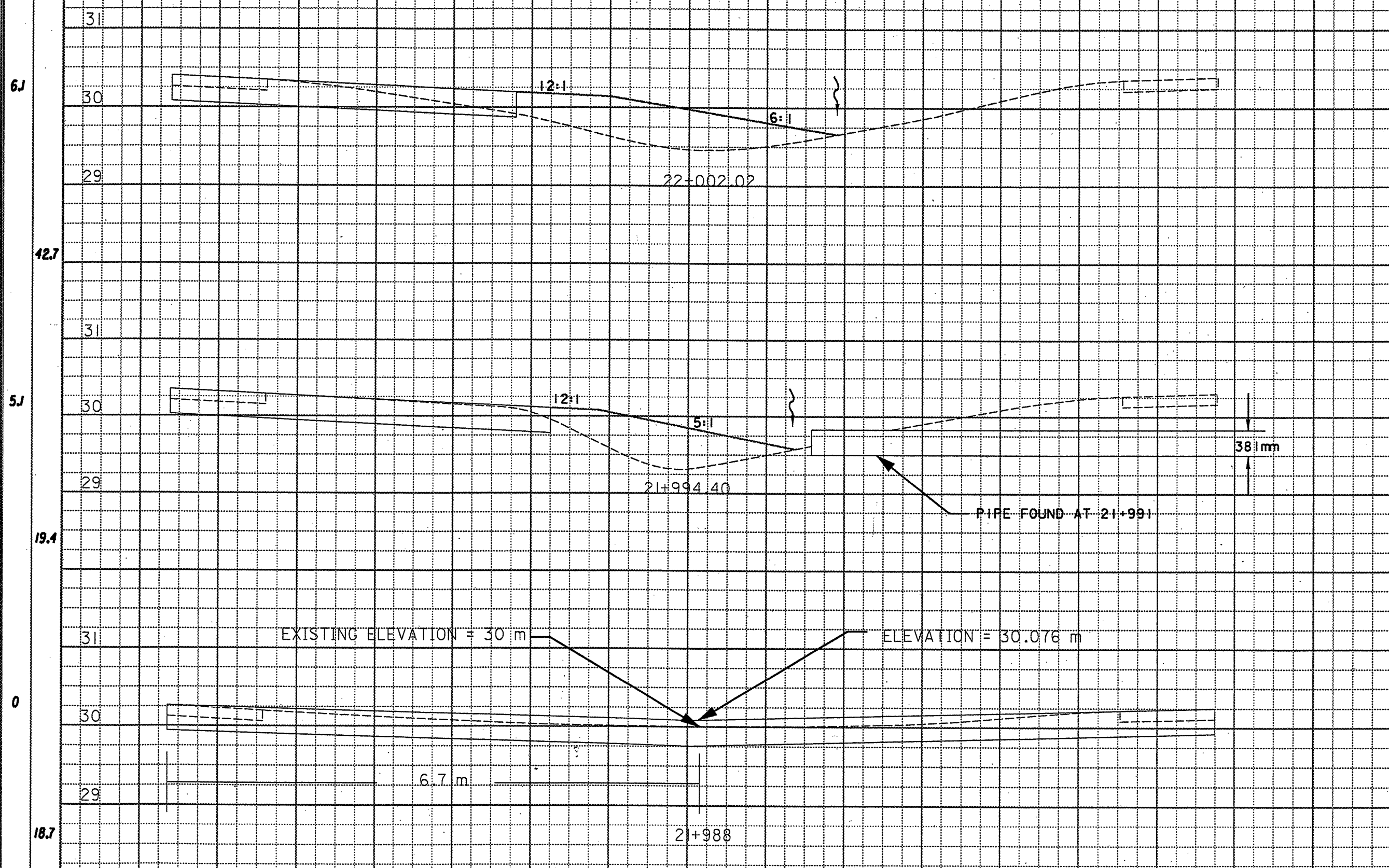
6 5 4 3 2 1 0 1 2 3 4 5 6 7

SHEET TOTAL

157443.74

SEEDING  
END WIDTH SQ. METERS

END AREA VOLUME  
CUT FILL CUT FILL  
PTS. CHECKED  
MJS



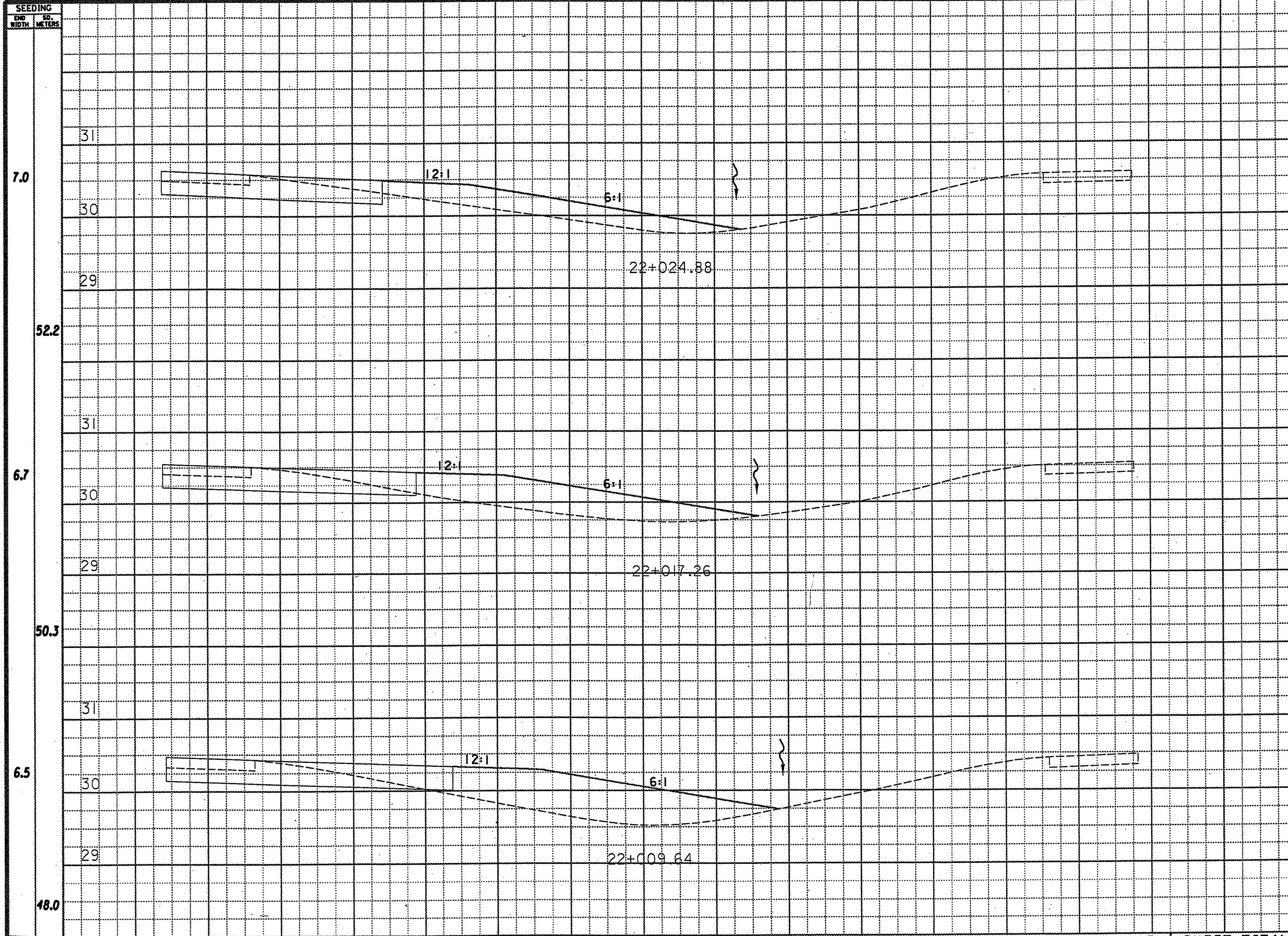
END AREA	VOLUME
CUT	FILL
.79	1.56
7.92	10.36
1.29	1.16
18.06	4.42
3.45	0
15.85	3.35

CROSS SECTIONS STA. 21+988 TO STA. 22+002.02  
 RIC-US30-5.600

80.7	SHEET TOTAL	6	5	4	3	2	1	0	1	2	3	4	5	6	7	SHEET TOTAL	41.83	18.13
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SEEDING  
END WIDTH SO. METERS

END AREA VOLUME  
CUT FILL CUT FILL  
PTS. CALCULATED CUBIC MTS



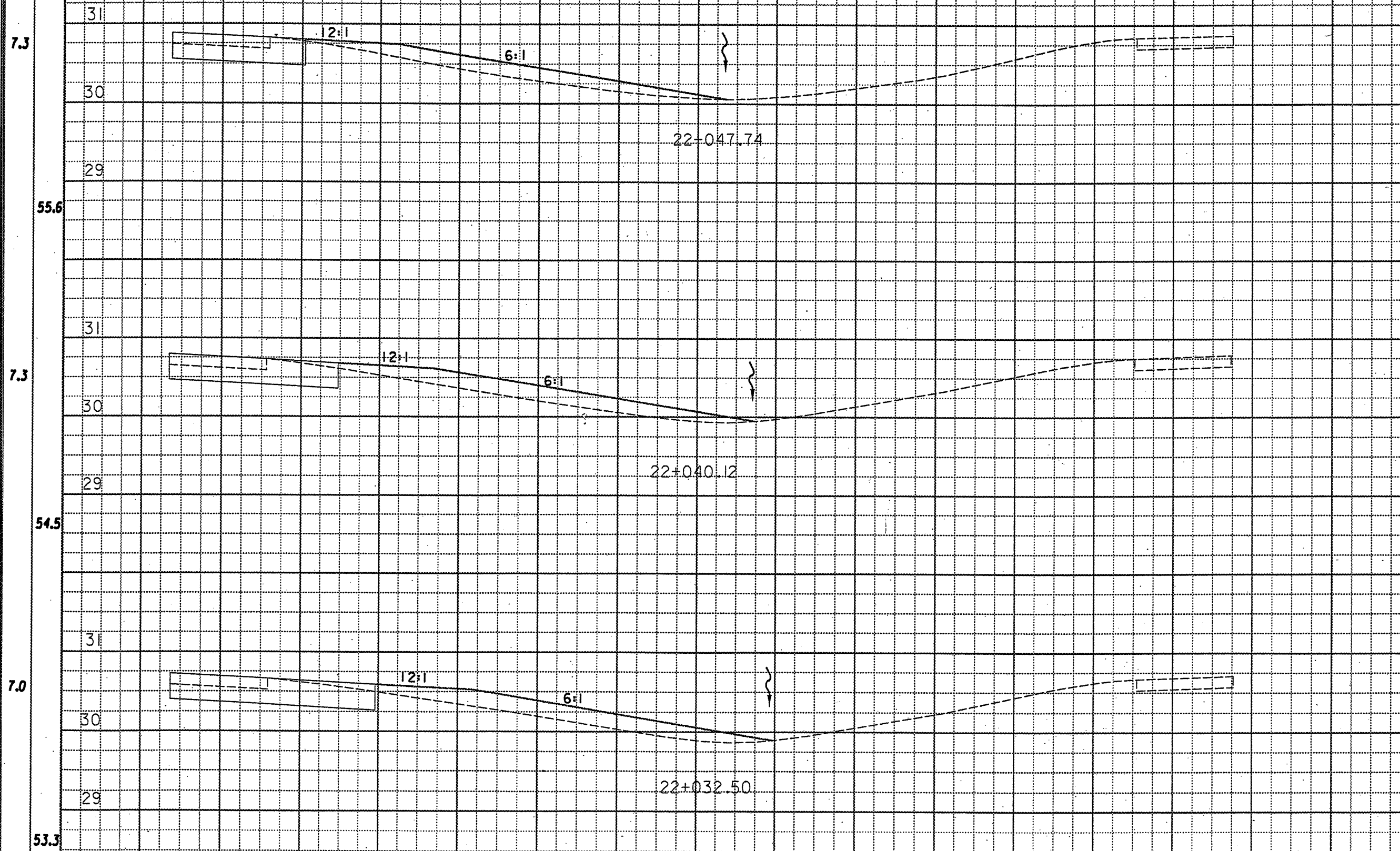
END AREA		VOLUME	
CUT	FILL	CUT	FILL
.69	1.12	5.11	10.13
.65	1.54	4.88	13.34
.63	1.96	5.41	13.41
<b>150.5 SHEET TOTAL</b>		<b>15.40</b>	<b>36.88</b>

CROSS SECTIONS STA. 22+009.64 TO STA. 22+024.88  
RIC-US30-5.600  
24  
31



SEEDING  
END WIDTH SQ. METERS

END AREA VOLUME  
CUT FILL CUT FILL  
PTS. CHECKED M/S



END AREA	VOLUME
CUT	FILL
.46	.67
3.92	5.75
.57	.84
4.69	6.36
.66	.83
5.14	7.43

CROSS SECTIONS STA. 22+032.50 TO STA. 22+047.74

RIC-US30-5.600

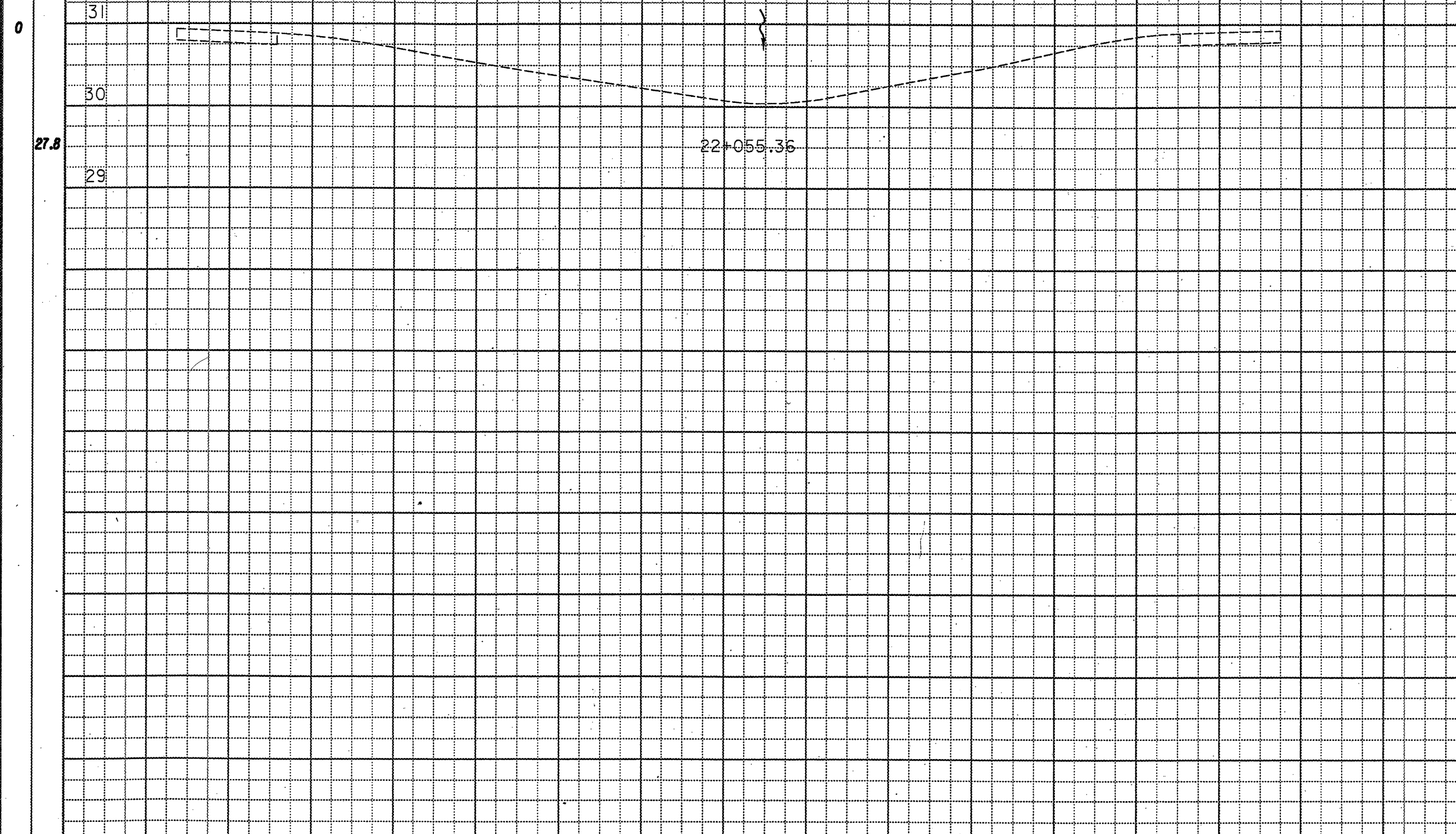
163.4 SHEET TOTAL 6 5 4 3 2 1 0 1 2 3 4 5 6 7 SHEET TOTAL

13.75 19.54

25  
31

SEEDING  
END SO.  
WIDTH METERS

END AREA VOLUME  
CUT FILL CUT FILL  
PTS  
CHECKED  
M/S

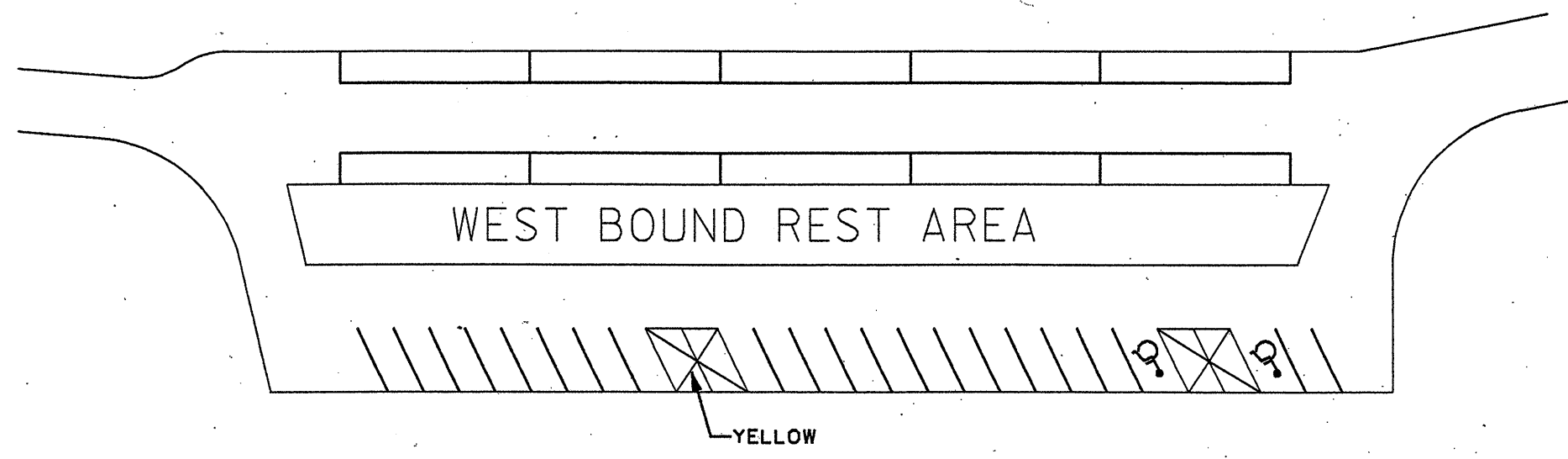
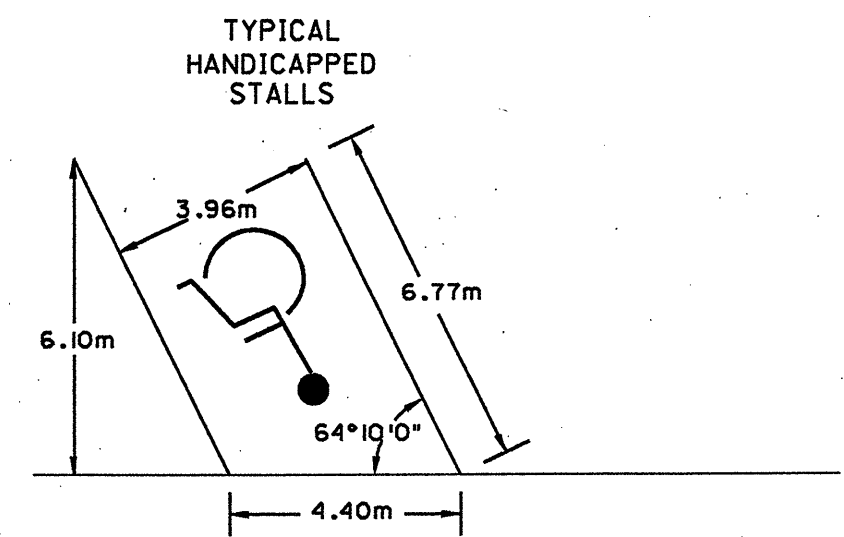
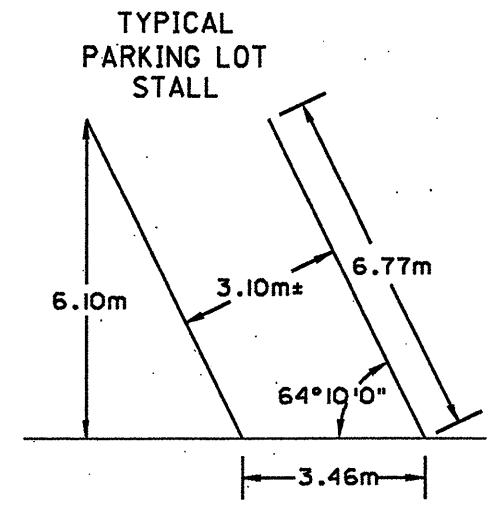
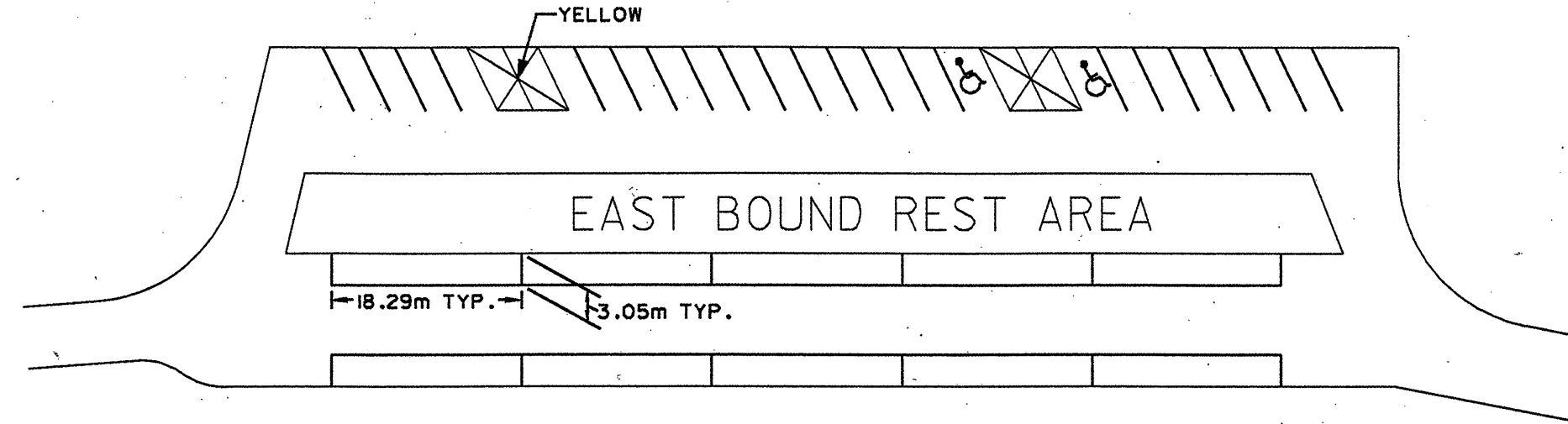


END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0	1.75	2.55
<b>SHEET TOTAL</b>		1.75	2.55

27.8	<b>SHEET TOTAL</b>														<b>SHEET TOTAL</b>																	
821	<b>GRAND TOTAL</b>														6	5	4	3	2	1	0	1	2	3	4	5	6	7	<b>GRAND TOTAL</b>		161	192

CROSS SECTIONS STA. 22+055.36

RIC-US30-5.600



FILE NAME = I:\dgn\ops\ 1997\ r3041ane





# RAISED PAVEMENT MARKERS



calculated by CVH  
 checked by MJS

LOCATION				D E T A I L	202		621			PRISMATIC RETRO-REFLECTOR TYPES					REMARKS
PART	ROUTE	s.l.k. SECTION			RAISED PAVEMENT MARKER REMOVED FOR STORAGE each	RPM	RAISED PAVEMENT MARKER, INSTALLATION ONLY each	RAISED PAVEMENT MARKER CASTING, INSTALLATION ONLY each	PRISMATIC RETRO REFLECTOR each	ONE - WAY		TWO - WAY			
		FROM	TO							WHITE	YELLOW	YELLOW/YELLOW	WHITE/RED	YELLOW/RED	
1	US 30	5.950	6.330	2	30		30	30	30					4 LANE DIVIDED EAST BOUND @ 80' SPACINGS	
		6.309	0.000	2	60		60	60				22	38	RAMP D & C @ W. FOURTH ST.	
		6.330	13.730	5	608		608	608	608					4 LANE DIVIDED @ 80' SPACINGS	
		11.700	0.000	2/3	119		119	119				64	55	INTERCHANGE @ LEXINGTON SPRINGMILL	
		20.841	27.745	5	566		566	566	566					4 LANE DIVIDED @ 80' SPACINGS	
		22.595	0.000	2/3	152		152	152				54	98	INTERCHANGE @ US 42	
		24.526	0.000	2/3	95		95	95				66	29	INTERCHANGE @ LAVER RD.	
		26.345	0.000	2/3	81		81	81				46	35	INTERCHANGE @ REED RD.	
		26.876	0.000	2/3	26		26	26				26		EB & WB REST AREAS	
		27.359	0.000	2/3	29		29	29				29		ACCEL/DECEL LANES & LT LANE @ IR 71	
		27.745	30.851	5	254		254	254				254		4 LANE DIVIDED @ 80' SPACINGS	
		28.131	0.000	2/3	86		86	86				32	54	INTERCHANGE @ KOOGLE RD.	
		29.548	0.000	9	7		7	7				7		TURN LANES @ TROUT DR.	
		<b>TOTAL</b>					<u>2584</u>	<u>2113</u>				<u>1204</u>	<u>600</u>	<u>309</u>	

DETAIL	
1	MULTILANE DIVIDED
1	TYPICAL SPACING
2	TAPERED ACCEL LANE
3	DECELERATION LANE
4	PARALLEL ACCEL LANE
5	MULTILANE DIVIDED/ EXPRESSWAY
6	STOP APPROACH
7	1 LANE APPR. W/LT. TURN LANE
8	THRU APPROACH
9	2 LANE APPR. W/LT TURN LANE
10	4 LANE DIVIDED TO 2 LANE TRANSITION
11	4 LANE UNDIVIDED TO 2 LANE TRANSITION
12	TWO LANE NARROW BRIDGE
13	TWO WAY LEFT TURN LANE
14	ONE LANE BRIDGE
15	HORIZONTAL CURVE
16	HORIZONTAL CURVE ALT.
17	STOP APPROACH ALT.
GAP	CENTERLINE AT 80' TYP.

PLAN NO.

## RAISED PAVEMENT MARKERS

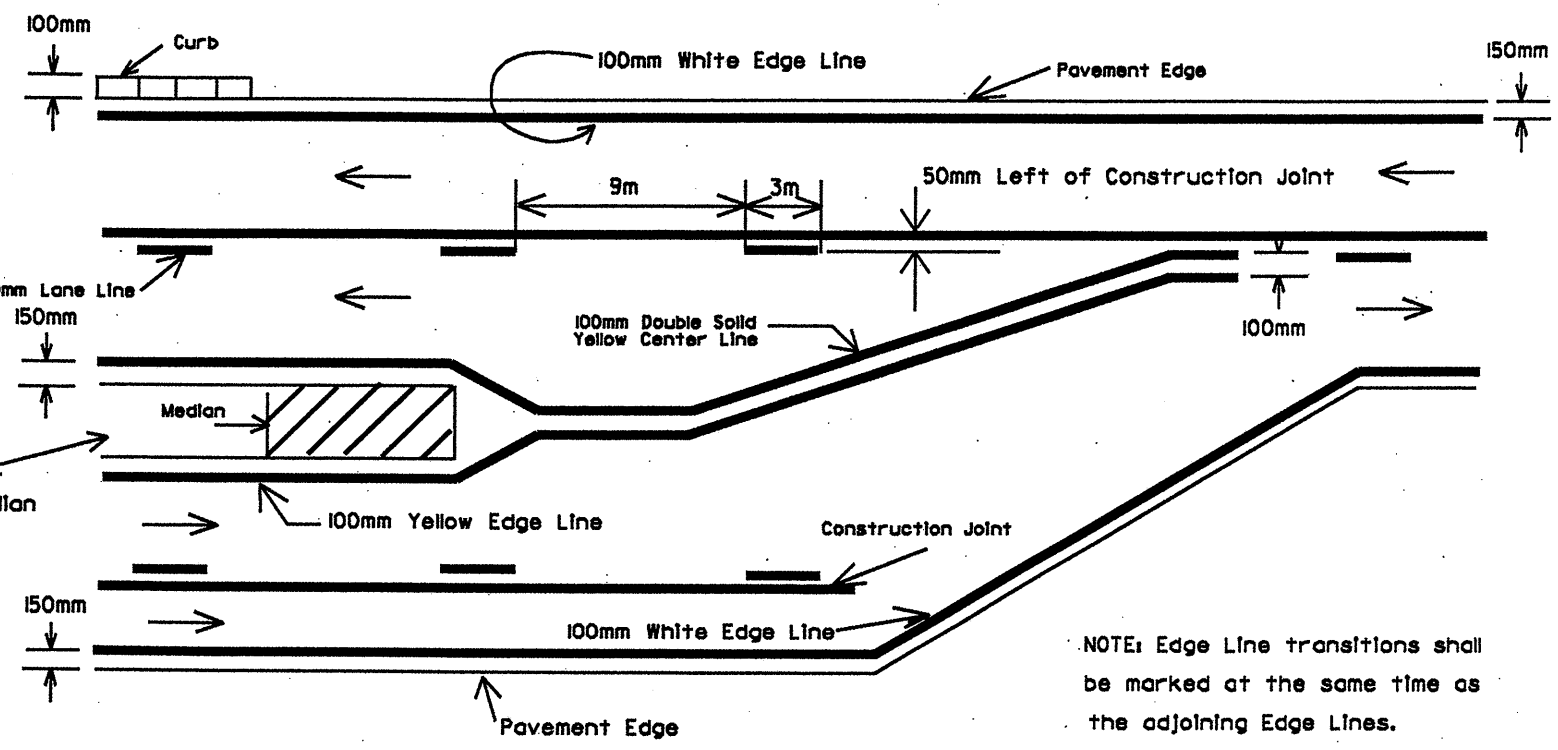
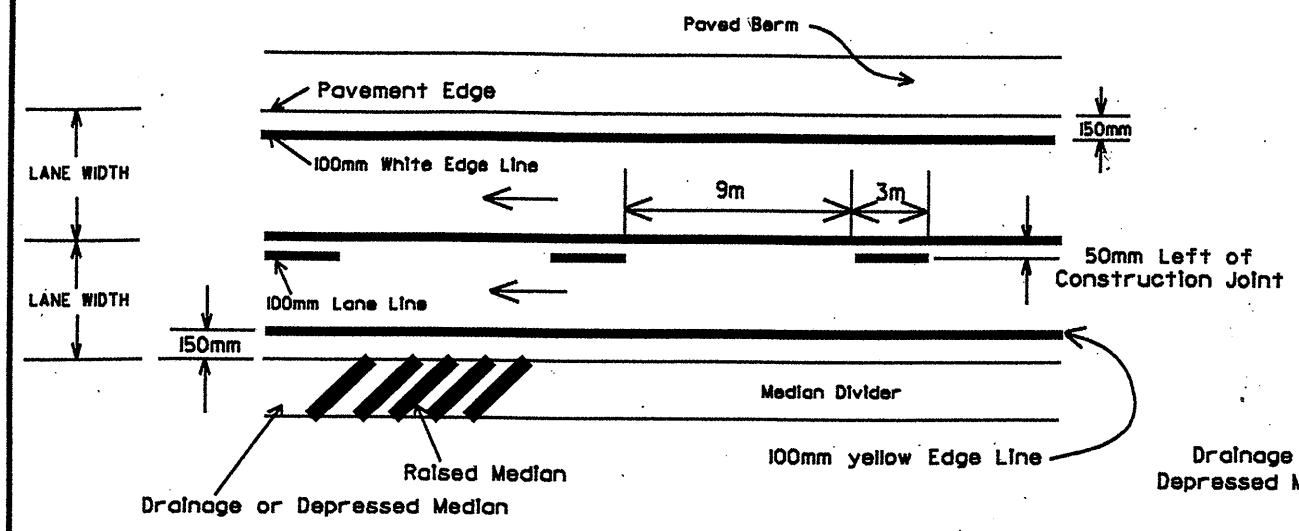
RIC-US30-5.600

30  
31

FILE NAME = I:\dgn\ops\ 997\ 304lane

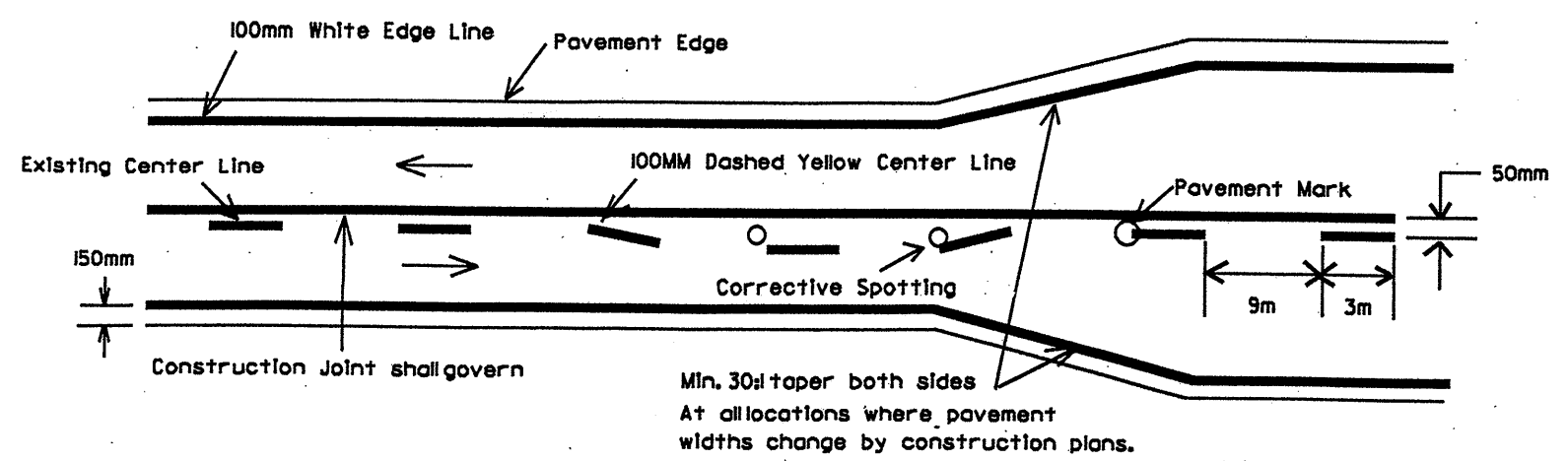
### FREEWAY & EXPRESSWAY MAINLINE MARKINGS

### MULTILANE DIVIDED & UNDIVIDED HIGHWAY MARKINGS



NOTE: Edge Line transitions shall be marked at the same time as the adjoining Edge Lines.

### TWO LANE MARKINGS



Min. 30:1 taper both sides  
At allocations where pavement widths change by construction plans.

### NOTES:

1. The distance from the pavement edge to the nearside edge of the edgeline may be increased with the approval of the Engineer in order to maintain uniform lane width.
2. See TC-72.20M for entrance and exit ramp markings.
3. The cycle length for dashed lines shall be 12 Meters plus or minus 150 mm. The minimum length of dash shall be sufficiently long to maintain a 3:1 ratio between length of gap and length of dash.