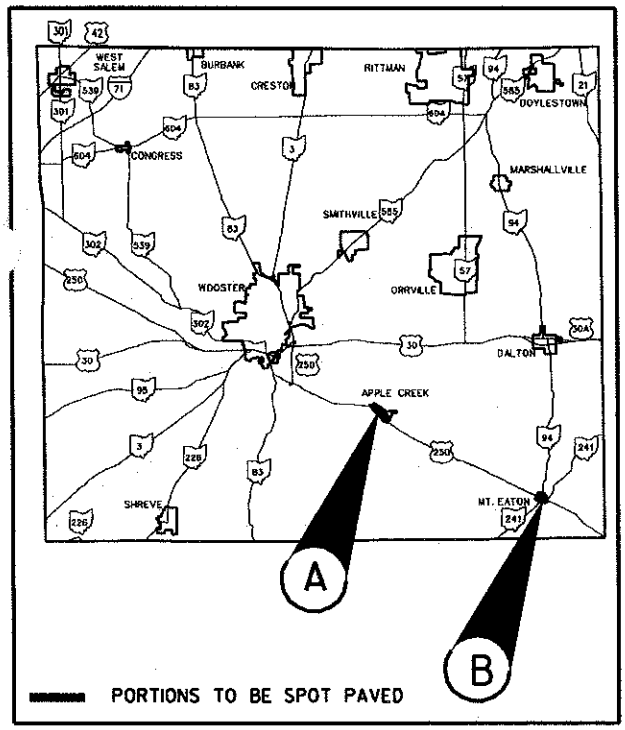
D03 - RM-FY2005(B)/Various Sections
040423 PID - 75671
Dist 3 7/14/2004

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
D03 - RM - FY2005(B)

D03 RM FY2005 (B)
PID NO. 75671
FEDERAL PROJECT NO. NON-FEDERAL
RAILROAD INVOLVEMENT NONE
CONSTRUCTION PROJECT NO.

LOCATION MAP



PROJECT DESCRIPTION:

RESURFACING WITH ULTRA THIN BONDED ASPHALT CONCRETE AND REPLACE PAVEMENT MARKINGS

PROJECT EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)

NOTICE OF INTENT EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)

CONVERSION OF METRIC STANDARD DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02 OF THE 2002 CONSTRUCTION AND MATERIAL SPECIFICATIONS. CONVERSIONS SHALL BE APPROXIMATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

2002 SPECIFICATIONS

THE STANDARD 2002 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 NOT REQUIRE THE CLOSING OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PLAN AND PROPOSAL.

APPROVED Thomas M. O'Leary
DATE 4-14-04 DISTRICT DEPUTY DIRECTOR

APPROVED Gordon Proctor Jr.
DATE 5-7-04 DIRECTOR, DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS:

1 - TITLE SHEET
2 - GENERAL SUMMARY
3 - TYPICAL SECTION
3 - STRAIGHT LINE DIAGRAM
4 - GENERAL NOTES
5 - PAVEMENT DATA
6 - PAVEMENT MARKING DATA

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

DISTRICT THREE PRODUCTION DEPARTMENT

ENGINEERS SEAL:

STATE OF OHIO
MICHAEL JOSEPH SCHAFRATH
57843
REGISTERED PROFESSIONAL ENGINEER

SIGNED: Michael J. Schafrath
DATE: 4/13/04

STANDARD CONSTRUCTION DRAWINGS		STANDARD CONSTRUCTION DRAWINGS	
BP-3.1	07-28-00	MT-97.10	04-19-02
		MT-97.11	04-19-02
DM-4.3	07-19-02	MT-99.20M	01-30-95
DM-4.4	07-19-02	MT-105.10	10-18-02
		MT-105.11	10-18-02
TC-41.20	01-19-01	SUPPLEMENTAL SPECIFICATIONS	
TC-71.10	04-19-02		
TC-73.10	01-19-01	832	02-12-03
		833	02-12-03
		874	07-19-02
		902	04-18-03
		908	04-18-03

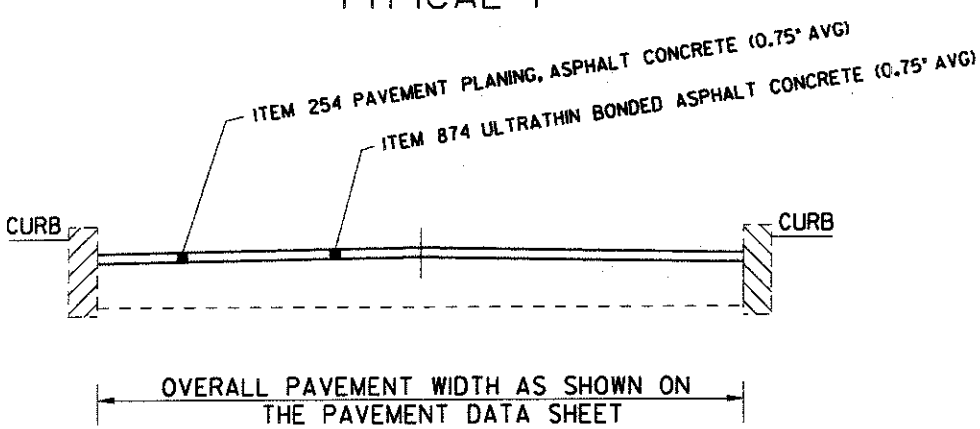
SHEET NUMBER				ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION
	4		5					
	20			253	02000	20	CU YD	PAVEMENT REPAIR
			28354	254	01000	28354	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
			1418	254	01600	1418	SQ YD	PATCHING PLANED SURFACE
	16			614	12460	16	EACH	WORK ZONE MARKING SIGN
			2.94	614	21500	2.94	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT
			1.47	642	00302	1.47	MILE	CENTER LINE, TYPE 2
			145	644	00500	145	FT	STOP LINE
			518	644	00600	518	FT	CROSSWALK LINE
			2	644	01100	2	EACH	SCHOOL SYMBOL MARKING, 72"
			591	874	10000	591	CU YD	ULTRATHIN BONDED ASPHALT CONCRETE
				614	11000	LUMP		MAINTAINING TRAFFIC
				624	10000	LUMP		MOBILIZATION

CALC BY CIVIL
CHK'D By MJS

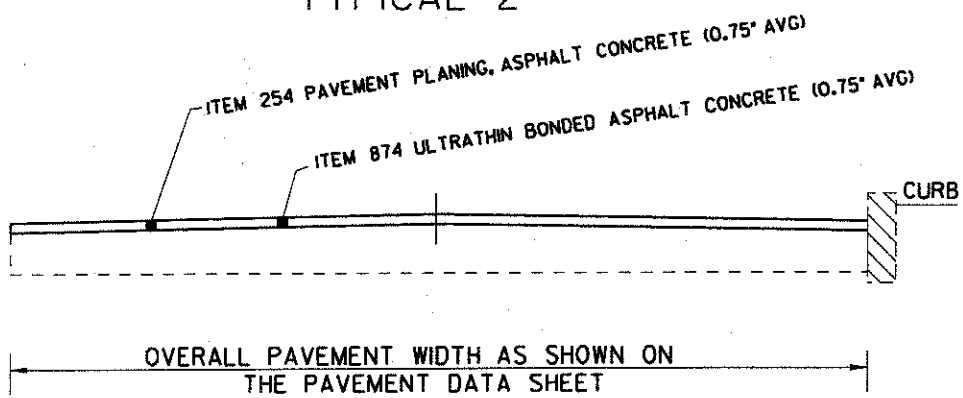
GENERAL SUMMARY

D03 RM FY2005 (B)

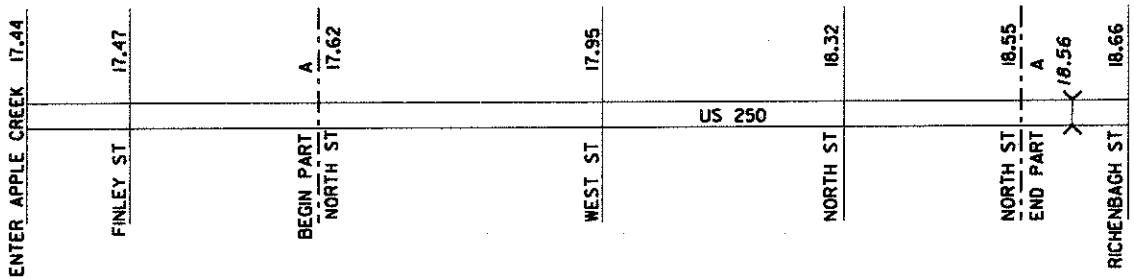
TYPICAL 1



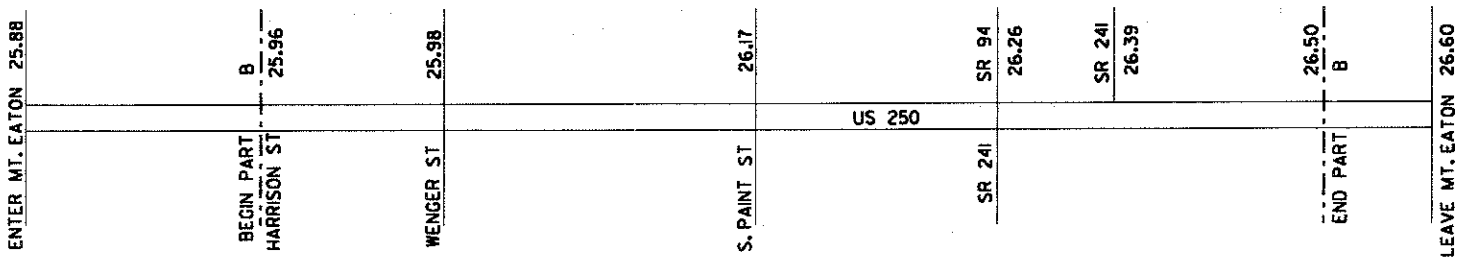
TYPICAL 2



APPLE CREEK



MT. EATON



D03 RM FY2005 (C)	STRAIGHT LINE DIAGRAM/ TYPICAL SECTION	calculated CVH checked MJS

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

PLACEMENT OF ITEM 874

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ULTRA THIN BONDED ASPHALT CONCRETE.

THE CONTRACTOR SHALL AVOID PLACING ITEM 874 ON ANY MONUMENT BOXES, VALVE BOXES, MANHOLES, ETC. THAT EXIST IN THE PAVEMENT SURFACE.

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 CONSTRUCTION AND MATERIALS SPECIFICATIONS, 614.04.

PART A
WORK ZONE MARKING SIGN: (R-33-24) DO NOT PASS = 6 EACH

PART B
WORK ZONE MARKING SIGN: (R-33-24) DO NOT PASS = 10 EACH

TOTAL = 16 EACH

UNDERGROUND UTILITIES

EXTREME CAUTION SHOULD BE EXERCISED IN AREAS WITH UNDERGROUND WATER LINES, DRAINS,CABLES, SEWERS OR OTHER UTILITIES. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ALL DAMAGE INFLICTED ON UNDERGROUND UTILITIES.

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. THE PROPOSED ULTRA THIN BONDED OVERLAY SHALL HAVE A UNIFORM THICKNESS OF ¾ INCH.

PAVEMENT CONTROL

AN AUTOMATIC SCREED CONTROL, HAVING A 20 FT. MINIMUM SKI-ARM, SHALL BE USED FOR PLACING THE INTERMEDIATE COURSE AND SURFACE COURSE ON EXISTING PAVEMENT WIDTHS OF 20 FT. AND OVER.

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE

THE INTENT OF THE PLANING IS TO MILL 0.75 INCHES MINIMUM DEPTH AT THE CENTERLINE AND/OR EDGE OF PAVEMENT AND ¼ INCH MINIMUM DEPTH IN BOTTOM OF WHEEL RUTS. THE PAVEMENT SLOPE MAY VARY BETWEEN 3/16 INCH AND ⅜ INCH PER FOOT, CONTINUOUS FOR PAVEMENT WIDTH. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER LINE OR EDGE OF PAVEMENT, TO PRODUCE THE LEAST AMOUNT OF MILLING IN CONFORMANCE WITH ABOVE LIMITS. 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 30 FT. SKI-ARM SHALL BE USED DURING 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 SEVEN (7) CALENDAR DAYS. THE 7 CALENDAR DAYS SHALL BE CONSIDERED AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE 7 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES AS PER 108.07. PLANED AREAS WHICH CREATE A LONGITUDINAL JOINT BETWEEN TRAVELED LANES SHALL BE COMPLETED IN SUCH A MANNER SO AS TO REMOVE THE JOINT BEFORE THE END OF EACH DAY'S WORK. BEFORE THIS JOINT IS EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL ERECT OW-17I SIGNS (UNEVEN PAVEMENT). THESE SIGNS SHALL REMAIN ONLY WHEN THE CONDITION EXISTS.

ITEM 253, PAVEMENT REPAIR:

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. PAVEMENT REPAIR SHALL BE PERFORMED AFTER PAVEMENT PLANING. THE REPAIR AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE AND CUT OR SAWED TO A NEAT LINE. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE THE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT (ESTIMATED DEPTH MAY VARY FROM 2 INCHES TO 12 INCHES). THE MATERIALS SO REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 105.16 AND 105.17.

REPLACEMENT MATERIAL SHALL BE ITEM 301 OR ITEM 448, TYPE 2 MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. THE REPAIR AREAS SHALL BE PAINTED WITH ASPHALT MATERIAL (SIDES AND BOTTOM) AT AN APPLICATION RATE OF 0.25 GAL. PER SQ. YD. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER. MAXIMUM LIFT THICKNESS SHALL BE 3 INCHES.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD, (BY TICKET WEIGHT CONVERSION), OF ITEM 253, PAVEMENT REPAIR.

PART A - 10 CU. YD.
PART B - 10 CU. YD.

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING
(OTHER HOLIDAY OR EVENT)	

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH (12:00N OR 6:00 AM) MONDAY
MONDAY	12:00N FRIDAY THROUGH (12:00N OR 6:00 AM) TUESDAY
TUESDAY	12:00N MONDAY THROUGH (12:00N OR 6:00 AM) WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH (12:00N OR 6:00 AM) THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH (12:00N OR 6:00 AM) MONDAY
FRIDAY	12:00N THURSDAY THROUGH (12:00N OR 6:00 AM) MONDAY
SATURDAY	12:00N FRIDAY THROUGH (12:00N OR 6:00 AM) MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 108.07.

ITEM 254 PATCHING PLANED SURFACE

AN ESTIMATED QUANTITY OF ITEM 254, PATCHING PLANED SURFACE HAS BEEN SET UP TO BE USED AS DIRECTED BY THE ENGINEER AS DESCRIBED IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS MANUAL 254.04. PATCHING DEPTH IS 0 TO 2 IN.

calculated CVH
checked MJS

GENERAL NOTES

D03 RM FY2005 (C)

* - FOR TYPICALS, SEE SHEET 3

PART	ROUTE	LOG POINT TO LOG POINT (STRAIGHT LINE MILEAGE)		LENGTH MILE	LENGTH FEET	WIDTH FEET AVG.	* TYPICAL	EXISTING PAVEMENT TYPE	PAVEMENT AREA SQ YD	874 ULTRATHIN BONDED ASPHALT CONCRETE THICK AVG. INCH	874 ULTRATHIN BONDED ASPHALT CONCRETE CU.YD.	254 PAVEMENT PLANING, ASPHALT CONCRETE SQ.YD	254 PATCHING PLANED SURFACES SQ.YD
A	US 250	17.62	18.17	0.55	2904	31.0	1	ASPHALT	10003	0.75	208	10003	500
	US 250	18.17	18.29	0.12	633.6	40.0	1	ASPHALT	2816	0.75	59	2816	141
	US 250	18.29	18.55	0.26	1372.8	31.0	1	ASPHALT	4729	0.75	99	4729	236
			TOTAL	0.93	4910				17548		366	17548	877
B	US 250	25.96	25.98	0.02	105.6	31.0	2	ASPHALT	364	0.75	8	364	18
	US 250	25.98	26.26	0.28	1478.4	31.0	1	ASPHALT	5092	0.75	106	5092	255
	US 250	26.26	26.50	0.24	1267.2	38.0	1	ASPHALT	5350	0.75	111	5350	268
			TOTAL	0.54	2851				10806		225	10806	541
			TOTAL	**1.47**	**7762**				**28354**		**591**	**28354**	**1418**

CALC BY: CVH
CHK'D BY: MJS

PAVEMENT DATA

D03 RM FY2005 (B)

AUXILIARY & LONG LINE MARKINGS

				202		642					644				614			
FROM		TO		RPM REMOVED	LANE WIDTH	WHITE EDGE LINE		CENTER LINE		LANE LINE	CHANNELIZING LINE	STOP LINE	CROSSWALK LINE	SCHOOL SYMBOL MARKING, 72"	WORK ZONE CENTER LINE, CLASS I, 642 PAINT			
S.L.M.		S.L.M.				HIGHWAY MILES	TOTAL (PAY QUANT.)	SOLID LINE EQUIVALENT	TOTAL (PAY QUANT.)									
				each	ft	mi	mi	mi	mi	mi	ft	ft			mi			
17.62	NORTH ST.	18.55	BRIDGE					1.39	0.93				62	2	1.86			
25.96	HARRISON ST.	26.50	0.11 MI. SOUTH OF SR 241					1.04	0.54			145	456		1.08			
								2.43	1.47			145	518	2	2.94			

RAISED PAVEMENT MARKERS

LIMITS PART A		DETAIL	621	PRISMATIC RETRO-REFLECTOR TYPES					
s.l.m. SECTION			RPM	ONE - WAY		TWO - WAY			
FROM	TO		each	WHITE	YELLOW	YELLOW/ YELLOW	WHITE/ RED	YELLOW/ RED	REMARKS

DETAIL	
1	MULTILANE UNDIVIDED
1	TYPICAL SPACING
2	TAPERED ACCEL LANE
3	DECELERATION LANE
4	PARALLEL ACEL 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.