MOT-IR-75-0.00 25010
110051 PID - 25010
Dist 7 1/27/2011

State Job No. 476140
Project No.

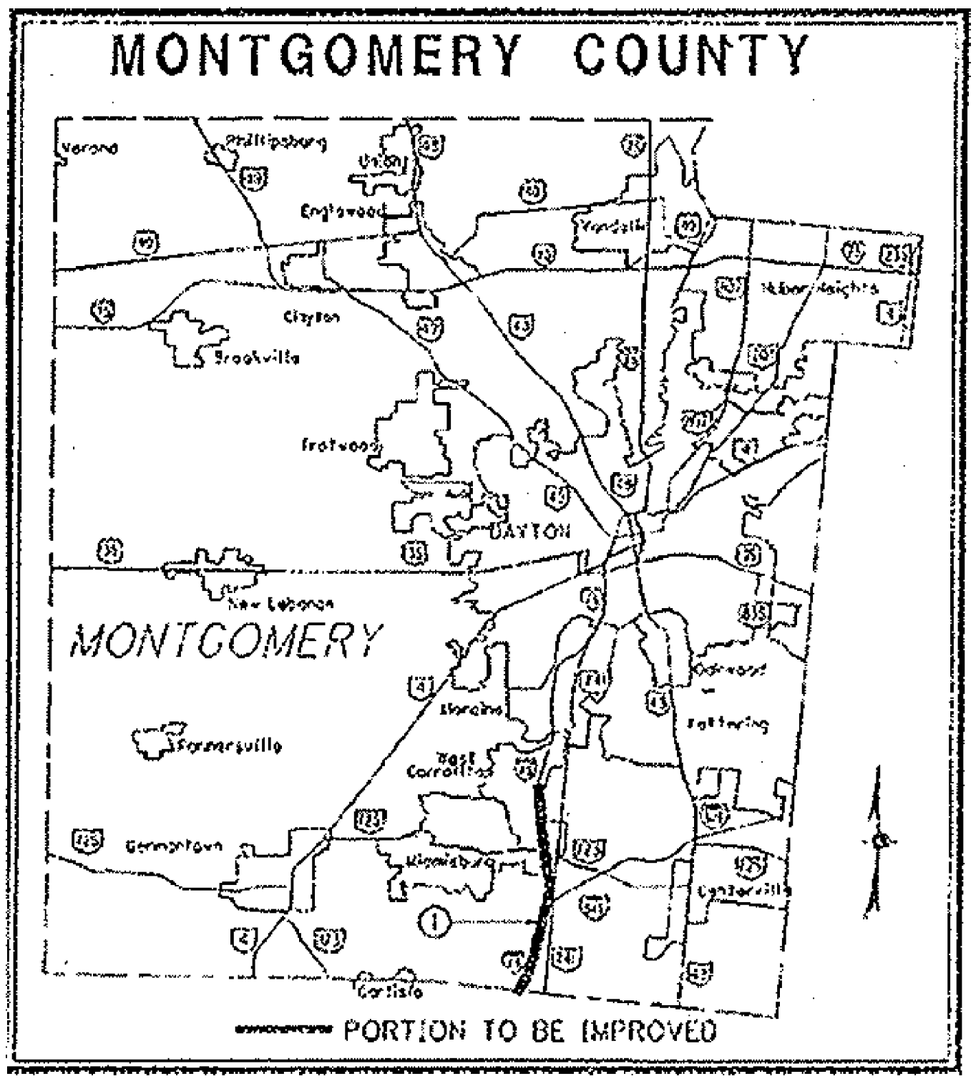
PID No. 25010
FEDERAL NO. E034(329)

PLAN PREPARED BY:
District 7

STATE OF OHIO
OHIO DEPARTMENT OF TRANSPORTATION
MOT-75-0.00

Latitude: N 39° 37' 47"
Longitude: W 84° 13' 48"

LOCATION MAP



MAINTENANCE
FOUR-LANE RESURFACING

Project Earth Disturbed Area = 0.00 Acres
Estimated Contractor Earth Disturbed Area = N/A
Notice of Intent Earth Disturbed Area = N/A

2010 SPECIFICATIONS

The Standard 2010 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 this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth in the plans and estimates.

10-26-10 — Date Approved
Rex Dickey, P.E., P.S. / PRN — District Deputy Director

11-8-10 — Date Approved
Director, Department of Transportation

PROJECT DESCRIPTION: Work proposed by this project consists of Pavement Planing and resurfacing the existing roadway with Asphalt Concrete, including minor bridge repair as set forth in these plans.

1 MOT-75-0.00, from the Montgomery County line to the rear abutment of Br. No. MOT-75-0614 L & R.

ENGINEER'S SEAL

STATE OF OHIO
SHERRY SUSAN WAMPLER-LEY
No. 62199
REGISTERED PROFESSIONAL ENGINEER

Signed Sherry S. Wampler-Ley
Date 10/26/10

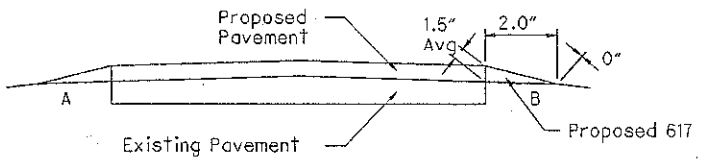
UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST BE CALLED DIRECTLY

STANDARD DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	10/19/07	TC-73.10	1/19/01	MT-98.20	7/17/09		
BP-9.1	4/15/05			MT-98.22	7/17/09	800	11/8/10
		MT-35.10	4/20/01	MT-98.28	7/17/09	832	5/5/09
TC-65.10	1/21/05	MT-95.30	7/17/09	MT-99.20	1/16/09	842	1/19/07
TC-65.11	1/21/05	MT-95.50	4/17/09	MT-105.10	1/16/09		
TC-71.10	1/15/10	MT-98.10	7/17/09				
TC-72.20	10/16/09	MT-98.11	7/17/09				

TYPICAL 1

Work Summary: The work shall consist of constructing Item 442, Asphalt Concrete Surface, on Mainline Interstate 75 including the Ramps at Interstate 675 and State Route 725.

PLAN NO.



TYPICAL - COMPACTED AGGREGATE

PAVEMENT DATA - MAINLINE

PART	ROUTE	LOG POINT TO LOG POINT SLM	LENGTH MILE	LENGTH FEET	PAVEMENT WIDTH FEET	TYPICAL	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT 407 TACK COAT @0.075 gal./sq. yard GALLONS	ASPHALT CONCRETE 442 SURFACE THICK INCH	ASPHALT CONCRETE 442 SURFACE CUBIC YARD	254 PAVEMENT PLANING THICK INCH	254 PAVEMENT PLANING SQUARE YARD	617 COMPACTED AGGREGATE THICK INCH AVG.	617 COMPACTED AGGREGATE CUBIC YARD
1	I-75													
		0.00 - 3.74 NB	3.74	19747	52.0	1	114094	8557	1.75	5546	1.5	114094	1.5	182
	BR. No. MOT-75-0373 R													
		3.77 - 6.14 NB	2.37	12514	52.0	1	72303	5423	1.75	3515	1.25	72303	1.5	116
		0.00 - 3.74 SB	3.74	19747	52.0	1	114094	8557	1.75	5546	1.5	114094	1.5	182
	BR. No. MOT-75-0373 L													
		3.77 - 6.14 SB	2.37	12514	52.0	1	72303	5423	1.75	3515	1.25	72303	1.5	116
	Mainline Total - Part 1		12.18	64312				27960		18122		372794		596
	Note: At begin and end project, pavement shall be butt joint type													

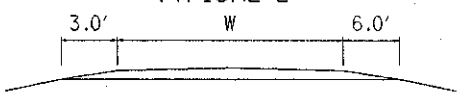
CALCULATED BY

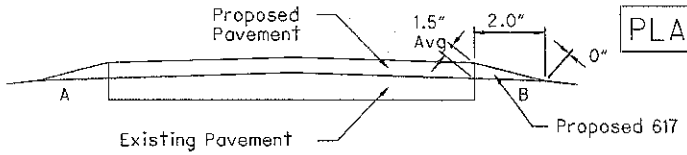
CHECKED BY

MONTGOMERY COUNTY
MOT-75-0.00

PAVEMENT DATA

TYPICAL 2





PLAN NO.

Note: Ramp Areas include area between Mainline and Ramp.

TYPICAL - COMPACTED AGGREGATE

PAVEMENT DATA - EXTRA AREAS

PART	ROUTE	LOCATION	LENGTH		AVG. PAVEMENT WIDTH (W)	TYPICAL	PAVEMENT AREA	PROPOSED PAVEMENT					254		617	
								407	ASPHALT CONCRETE				PAVEMENT PLANING		COMPACTED AGGREGATE	
									442							
			MILE	FEET	FEET		SQ. YD.	TACK COAT @0.075 gal./ sq. yard GALLONS	THICK INCH	CUBIC YARD			THICK INCH	SQUARE YARD	THICK INCH AVG.	CUBIC YARD
1	I-75	IR 675 INTERCHANGE														
		Ramp S		841	6.0		561	42	1.75	27			1.5	561		
		Ramp S		2598	12.0		3464	260	1.75	168			1.5	3464		
		Ramp S		1680	26.0		4853	364	1.75	236			1.5	4853		
		Ramp V		100	6.0		67	5	1.75	3			1.5	67		
		Ramp V		1596	12.0		2128	160	1.75	103			1.5	2128		
		Ramp V		1004	34.0		3793	284	1.75	184			1.5	3793		
		Ramp U		389	23.5		1016	76	1.75	49			1.5	1016		
		Ramp U		313	10.0		348	26	1.75	117			1.5	348		
		Ramp U		100	5.0		56	4	1.75	3			1.5	56		
		Ramp U		1546	22.0		3779	283	1.75	184			1.5	3779	1.5	14
		Ramp U		635	22.0		1552	116	1.75	75			1.5	1552	1.5	6
		Ramp U		1621	22.0		3962	297	1.75	193			1.5	3962	1.5	16
		Ramp Y		1306	25.0		3628	272	1.75	176			1.5	3628	1.5	12
		Ramp Y		282	30.0		940	71	1.75	46			1.5	940		
		Ramp Y		1187	11.5		1517	114	1.75	74			1.5	1517		
		SHEET TOTAL						2375		1539				31663		48

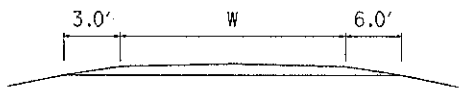
CALCULATED BY

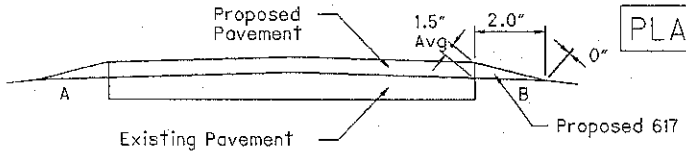
CHECKED BY

MONTGOMERY COUNTY
MOT-75-0.00

PAVEMENT DATA

TYPICAL 2





PLAN NO.

Note: Ramp Areas include area between Mainline and Ramp.

TYPICAL - COMPACTED AGGREGATE

PAVEMENT DATA - EXTRA AREAS

PART	ROUTE	LOCATION	LENGTH		AVG. PAVEMENT WIDTH	TYPICAL	PAVEMENT AREA	PROPOSED PAVEMENT					254		617	
								407	ASPHALT CONCRETE				PAVEMENT PLANING		COMPACTED AGGREGATE	
									442							
			MILE	FEET	FEET		SQ. YD.	TACK COAT @0.075 gal./ sq. yard GALLONS	THICK INCH	CUBIC YARD			THICK INCH	SQUARE YARD	THICK INCH AVG.	CUBIC YARD
1	I-75	SR 725 INTERCHANGE														
		Ramp A		1149	11.5		1468	110	1.75	71			1.5	1468		
		Ramp A		449	29.0		1447	109	1.75	70			1.5	1447		
		Ramp A		1398	27.0		4194	315	1.75	204			1.5	4194	1.5	12
		Ramp B		697	49.0		3795	285	1.75	184			1.25	3795	1.5	6
		Ramp B		225	43.0		1075	81	1.75	52			1.25	1075	1.5	2
		Ramp B		160	37.0		658	49	1.75	32			1.25	658	1.5	2
		Ramp B		531	37.0		2183	164	1.75	106			1.25	2183	1.5	4
		Ramp B		161	13.5		242	18	1.75	12			1.25	242		
		Ramp B		1382	12.0		1843	138	1.75	90			1.25	1843		
		Ramp B		375	6.0		250	19	1.75	12			1.25	250		
		Ramp C		100	5.0		56	4	1.75	3			1.5	56		
		Ramp C		638	10.0		709	53	1.75	34			1.5	709		
		Ramp C		455	19.5		986	74	1.75	48			1.5	986		
		Ramp C		524	27.0		1572	118	1.75	76			1.5	1572	1.5	4
		SHEET TOTAL						1536		995				20476		30

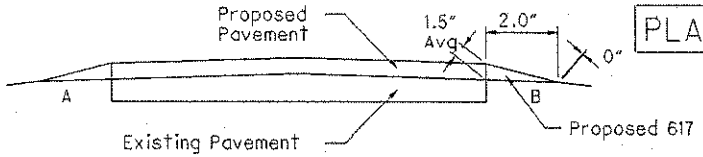
CALCULATED BY

CHECKED BY

MONTGOMERY COUNTY
MOT-75-0.00

PAVEMENT DATA

TYPICAL 2



PLAN NO.

Note: Ramp Areas include area between Mainline and Ramp.

TYPICAL - COMPACTED AGGREGATE

PAVEMENT DATA - EXTRA AREAS

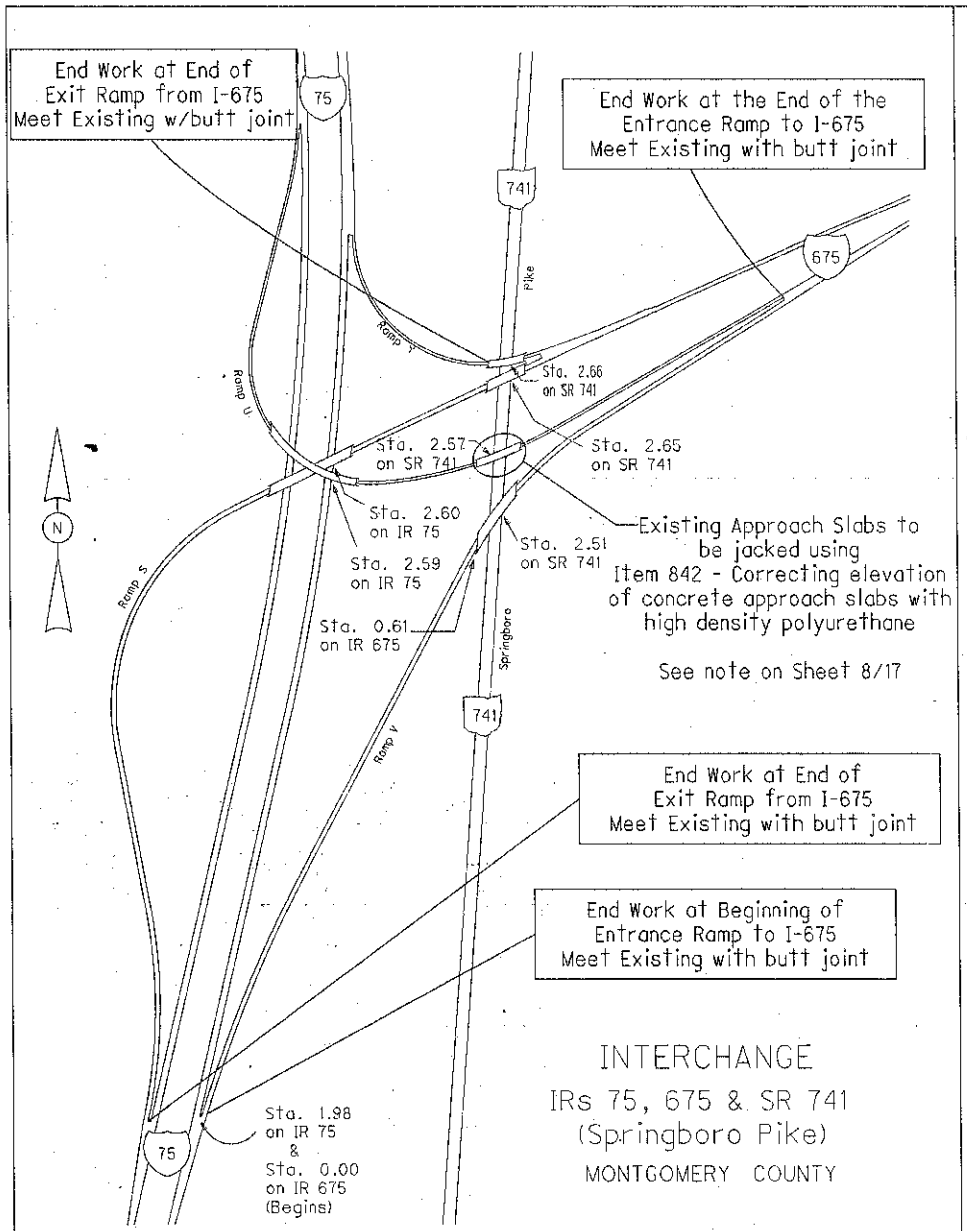
PART	ROUTE	LOCATION	LENGTH		AVG. PAVEMENT WIDTH	TYPICAL	PAVEMENT AREA	PROPOSED PAVEMENT					254		617	
								407	ASPHALT CONCRETE				PAVEMENT PLANING		COMPACTED AGGREGATE	
								TACK COAT @0.075 gal./ sq. yard GALLONS	442							
			MILE	FEET	FEET		SQ. YD.		THICK INCH	CUBIC YARD			THICK INCH	SQUARE YARD	THICK INCH AVG.	CUBIC YARD
1	I-75	SR 725 INTERCHANGE														
		Ramp D		151	35.0		587	44	1.75	29			1.25	587	1.5	2
		Ramp D		294	51.0		1666	125	1.75	81			1.25	1666	1.5	2
		Ramp D		360	41.0		1640	123	1.75	80			1.25	1640	1.5	4
		Ramp D		97	35.0		377	28	1.75	18			1.25	377	1.5	2
		Ramp D		200	36.5		811	61	1.75	39			1.25	811	1.5	2
		Ramp D		150	45.0		750	56	1.75	36			1.25	750	1.5	2
		Ramp D		300	40.0		1333	100	1.75	65			1.25	1333	1.5	2
		Ramp D		1200	25.5		3400	255	1.75	165			1.25	3400		
		Ramp D		144	11.5		184	14	1.75	9			1.25	184		
		Ramp D		1500	10.0		1667	125	1.75	81			1.25	1667		
		Ramp D		500	5.0		278	21	1.75	14			1.25	278		
		Ramp D-2		222	27.0		666	50	1.75	32			1.25	666	1.5	2
		SHEET TOTAL						1002		649				13359		18
		SHEET 4 TOTAL						1536		995				20476		48
		SHEET 3 TOTAL						2375		1539				31663		30
		RAMP TOTALS						4913		3183				65498		96

CALCULATED BY

CHECKED BY

MONTGOMERY COUNTY
MOT-75-0.00

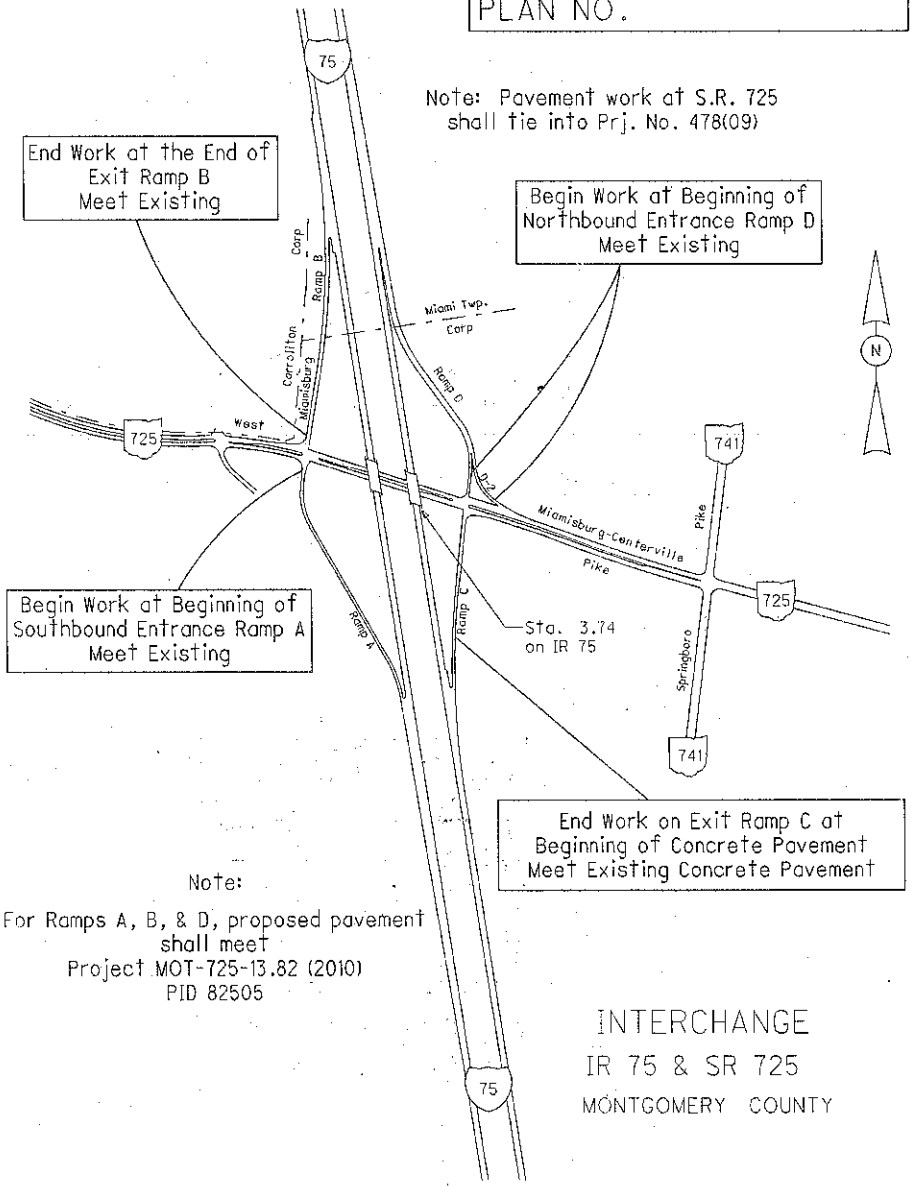
PAVEMENT DATA



INTERCHANGE
IRs 75, 675 & SR 741
(Springboro Pike)
MONTGOMERY COUNTY

PLAN NO.

Note: Pavement work at S.R. 725 shall tie into Prj. No. 478(09)



Note:
For Ramps A, B, & D, proposed pavement shall meet
Project MOT-725-13.82 (2010)
PID 82505

INTERCHANGE
IR 75 & SR 725
MONTGOMERY COUNTY

I:/STD/DGN/SLD/

CALCULATED BY
CHECKED BY

MONTGOMERY COUNTY
MOT-75-0.00

PLAN SHEET

GENERAL NOTES

PLAN NO.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE

No areas of Pavement Planing on the Mainline shall be left open to the traveling public. The pavement planing and resurfacing with Item 442 - asphalt concrete, surface course shall be performed in one (1) operation. All planed cuttings shall become the property of the Contractor and shall be removed from the limits of the project.

ITEM 442 - ASPALT CONCRETE SURFACE COURSE, 12.5 mm, TYPE A (446), AS PER PLAN

The material used for the resurfacing shall consist of one and one-half inches (1.5") and one and three-quarter inches (1.75") of Item 442 - Asphalt Concrete Surface Course, 12.5 mm, Type A (446), As Per Plan. The 442.04 binder shall be PG 76-22M for the Surface Course.

The Contractor shall use a material transfer vehicle for the mainline surface course. This vehicle shall be a non-contact vehicle and shall be capable of transferring and remixing the asphalt concrete from the truck to the paver. All costs associated with this equipment shall be included in Item 442, Asphalt Concrete Surface Course.

Total ADT = 93,730 Total Trucks = 15,380

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN (6.0" Depth)

Pavement Repair shall be in accordance with Item 253 - Pavement Repair, with the following additions.

The areas of Item 253 - Pavement Repair, As Per Plan (6.0" Depth) are located throughout the project limits.

The Engineer shall designate the locations and limits of the areas to be repaired. The repair areas shall be roughly rectangular in shape and sawed or milled 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 sufficent to remove all deteriorated pavement (six inch (6.0") average for Item 253 - Pavement Repair).

The estimated pavement repair areas shall be four feet by twelve feet (4.0' x 12.0') in width.

The entire area and all vertical faces of the repair area shall be tacked prior to placing the Item 448 - Asphalt Concrete Intermediate Course, Type 2, PG 70-22M for Item 253 - Pavement Repair, As Per Plan. The asphalt shall be placed and compacted to finish flush with the adjacent existing pavement surface. Compaction shall be achieved by mechanical methods to the satisfaction of the Engineer.

Payment shall include all labor, equipment and materials necessary to complete the pavement repair. An estimated quantity is provided in the General Summary to be used as directed by the Engineer. Payment will be made at the unit price bid per square yard of Item 253 - Pavement Repair, As Per Plan.

Item 253 - Pavement Repair, As Per Plan = 1727.0 square yards

GENERAL NOTES

PLAN NO.

ITEM 617 - COMPACTED AGGREGATE

Item 617 - Compacted Aggregate has been included in the plans to be used to back up the edge of the new asphalt concrete.

ITEM 632 - DETECTOR LOOP

During the course of this contract, it may be necessary for the Contractor to coordinate loop detector work with the District Roadway Services Manager and other Contractors involved with asphalt planing and resurfacing projects.

The Contractor shall be responsible for documenting the existing loops and contacting the Asphalt Planing/Paving Contractor(s) to coordinate all necessary work. The Contractor shall complete the loop replacements within three (3) days following the completion of the surface course paving operations in the area of the loop replacement.

The Contractor shall coordinate and corroborate the layout of all loop detectors with the Ohio Department of Transportation (Craig Eley).

Contact Craig Eley at 937-497-6832 one week prior to milling ramps with loop detectors.

Loop locations are as follows:

Southbound Exit to State Route 725 - 3 each - 6' x 6' Typical Design

ITEM 632 - LOOP DETECTOR TIE-IN, AS PER PLAN

This work shall consist of making connections to existing loop detector lead-in wire, whether that wire is underground or aerial. Included in this item is an approved poured epoxy splice kit (conforming to 725.15) that must be used in making these connections.

This item is needed only when a tie-in situation exists. When all new lead-in wire is specified in the plan, this item of work is not required.

Payment for this item will include all necessary labor, miscellaneous hardware and equipment required to provide for the loop detector tie-in and operation. Basis of payment will be at the contract bid price per each.

ITEM 644 - PAVEMENT MARKINGS

The Contractor shall document the layout of existing pavement markings to be replaced in kind. There shall be No "Transverse Lines" in gore areas at the S.R. 725 interchange. Transverse lines shall be placed in the gore areas at the I.R. 675 interchange. Words on Pavement "ONLY" shall be replaced with Lane Arrows.

ITEM 644 - PAVEMENT MARKINGS

Dotted lines shall be placed at all the Acceleration and Deceleration Lanes of the following interchanges:

I-75 & State Route 725 Interchange

UNDERGROUND UTILITIES

The locations of the underground utilities listed on the plans are as obtained from the owners of the utility as required by Section 153.64 ORC. Ohio Utility Protection Service at 1-800-362-2764.

The underground utility companies with buried services within the project limits are as follows:

Ohio Department of Transportation/Roadway Services Manager
1001 St. Marys Avenue
Sidney, Ohio. 45365-0969
Phone: (937) 497-6834

TRAFFIC

Traffic shall be maintained at all times. The length of restricted traffic zones shall be kept to a minimum consistent with the specification requirements for protection of completed courses.

ITEM 842 - CORRECTING ELEVATION OF CONCRETE APPROACH SLABS WITH HIGH DENSITY POLYURETHANE

This work shall consist of correcting the elevation of the existing concrete approach slabs for the Ramp U structure over S.R. 741. The work shall be performed according to Supplemental Specification 842, and an average depth of 2.5" shall be used.

The following quantities have been carried to the General Summary:

Item	Total	Unit	Description
842	2625	Pounds	Correcting Elevation of Concrete Approach Slabs with High Density Polyurethane

GENERAL NOTES

PLAN NO.

ITEM 407 - TACK COAT, TRACKLESS TACK

The Tack Coat application shall be in accordance with Item 407 - Tack Coat with the following additions. The material shall be NTSS-IHM.

The NTSS-IHM Tack Coat material shall be composed of a Polymer Modified Asphalt Emulsion. A known supplier in the State of Ohio is Meredith Brothers, Inc., Columbus, Ohio.

The Contractor shall furnish the manufacturer's certification that the material used is in compliance with the following specifications.

BITUMINOUS MATERIAL GRADE	NTSS-IHM
	Specification
	Minimum / Maximum
Solubility, %	97.5 Minimum
Penetration at 77° F	5 / 15
Ductility at 77° F, Cm	
Emulsion Residue by Distillation, %	40 Minimum
Distillate, %	
Naptha, % by Volume	1.0 Maximum
Oil Portion, % by Volume	
One Day Storage Stability, %	1.0 Maximum
Sieve Test, %	0.1 Maximum *
Cement Mixing, %	
Demulsibility, %	
Furol Viscosity, Seconds, 77° F	30 Minimum
Furol Viscosity, Seconds, 122° F	
R & B Softening Point Range, deg C	60 / 70
Original Bind DSR, G* / Sind @ 82C, kpa	

** The Sieve result is tested for reporting purposes only. If the product pumps well, the sieve specification is waived.*

NTSS-IHM Trackless Tack Coat is subject to damage if frozen. It is not compatible with cationic emulsion (CRS, CQS, CMS, CSS, etc.). All equipment must be thoroughly cleaned if it previously contained cationic emulsion. Diluting of NTSS-IHM Trackless Tack Coat is prohibited. Do not apply if rain is expected.

For application, conventional emulsion distributors are suitable. NTSS-IHM Trackless Tack Coat should be applied at a rate of 0.03 to 0.10 gallons per square yard. The recommended application temperature is seventy-four degrees to eighty degrees Celcius (74° - 80° C) or one hundred sixty-five degrees to one hundred seventy-five degrees Fahrenheit (165° - 175° F).

MAINTENANCE OF TRAFFIC

PLAN NO.

In addition to the requirements as indicated in the "Ohio Manual of Uniform Traffic Control for Streets and Highways", and pertinent items of the Construction and Materials Specifications, the following requirements shall apply.

Due to traffic congestion on this project, the Contractor shall be required to expedite his work to meet the time detour or lane closure time limitations as detailed in the plans. The Contractor shall meet these dates using whatever measures are necessary including, but not limited to, performing work by multiple crews, multiple shifts, overtime, etc.

Work can be performed simultaneously in the Northbound and Southbound lanes. One lane of directional traffic on I-75 will be permitted while the Contractor is actively working on or immediately adjacent to the pavement, and then only for minimum periods of time consistent with the actual requirements of the specific type of work being performed. It is intended that the roadway not be subjected to any work closures unless active work is being performed within or immediately adjacent to the closed lane. The roadway shall not be restricted to one lane directional traffic during periods of intermettent or irregular work, nor closed solely for the convenience of the Contractor. The Engineer shall make the final determination as to what constitutes active work and whether or not the actual work being performed warants the lane closure. If the lane closure is not justified, the Engineer may order all or part of the closed lane re-opened to traffic until such time that this condition is corrected. The duration and length of all lane closures shall at all times be commensurate with the actual work being performed. Maximum lane closure shall be three (3.0) miles.

All construction work on I-75 shall be completed within sixty (60) consecutive calendar days.

All ramps shall remain open to traffic.

Should the Contractor fail to meet any of these requirements, the Contractor shall be subject to disincentives per Specification 108.07.

It is the intention to perform the required work with the least inconvenience to and the maximum safety of the Contractor and the traveling public. Any variances from these Maintenance of Traffic Notes must be approved in advance in writing by the Director.

The Contractor's operations shall be arranged to prevent any interference to the continuous flow of traffic. All vehicles, equipment, workers and their activities are restricted at all times to one side of the pavement unless otherwise approved by the Engineer.

During all hours when traffic is restricted to less than two (2) lanes in the same direction of flow, the Contractor shall employ at least one (1) qualified person to continuously patrol, twenty-four (24) hours a day, the restricted areas. The Contractor shall maintain all lights, barricades, signs, cones, drums, etc. in order to provide a safe facility for the traveling public. The Contractor shall have available all tools and materials necessary to perform this function at all times. This will be in addition to the required Law Enforcement Officers with Patrol Cars.

A minimum lane width of ten feet (10.0') shall be provided at all times. A fourteen (14) day advance notice is required when the lane width is to be reduced to ten feet (10.0').

Before work begins, the Contractor shall submit to the Engineer, names and telephone numbers of a person or persons who can be contacted twenty-four (24) hours a day by the Ohio Department of Transportation and all interested police agencies. This person or persons shall be responsible for placing or replacing necessary traffic control devices to maintain the traveled pavement safely.

The Contractor shall be required to provide, erect, maintain (in proper position, clean, legible and good working condition) and remove all lights, signs, barricades, cones and all other traffic control devices necessary for the maintenance of traffic, including pavement markings.

The Contractor shall furnish and install two (2) "Watch for Stopped Traffic" signs (W3-H7) one thousand feet (1000.0') downstream from the "Road Work Ahead" sign (W20-1). If traffic backups reach the "Watch for Stopped Traffic" signs, the Contractor shall install two (2) additional "Watch for Stopped Traffic" signs every two thousand feet (2000.0') upstream from the "Road Work Ahead" signs. The necessity for these signs shall be constantly monitored by the Contractor.

MAINTENANCE OF TRAFFIC

PLAN NO.

HOLIDAYS AND SPECIAL EVENTS

No work shall be performed and existing lanes shall be open to traffic during the following designated holidays or events:

Christmas, New Years, Memorial Day, July 4th, Labor Day and Thanksgiving.

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	12:00 Noon on Friday thru 6:00 a.m. on Monday
Monday	12:00 Noon on Friday thru 6:00 a.m. on Tuesday
Tuesday	12:00 Noon on Monday thru 6:00 a.m. on Wednesday
Wednesday	12:00 Noon on Tueday thru 6:00 a.m. on Thursday
Thursday	12:00 Noon on Wednesday thru 6:00 a.m. on Monday
Friday	12:00 Noon on Thursday thru 6:00 a.m. on Monday
Saturday	12:00 Noon on Friday thru 6:00 a.m. on Monday

Should the Contractor fail to meet any of these requirements, the Contractor shall be assessed disincentives in accordance with 108.07 of the Construction and Material Specifications.

ITEM 614 - MAINTAINING TRAFFIC

Traffic shall be maintained at all times. The length of restricted traffic zones shall be kept to a minimum consistent with the specification requirements for protection of completed courses.

ITEM 614 - REPLACEMENT DRUM

Drums furnished by the Contractor in accordance with the requirements of the plans, specifications and proposal which become damaged by traffic for reasons beyond the control of the Contractor shall be replaced in kind when ordered by the Engineer. Replacement Drums shall be new.

Payment for the new drums shall be made at the contract price per each for Item 614 - Replacement Drum and shall include the cost of removing and disposing of the damaged drum and providing and maintaining the Replacement Drum in accordance with the contract requirements for the original drum.

An estimated quantity of 50 each has been provided in the General Summary.

PAYMENT

Payment for all of the above are to be included in the lump sum bid for Item 614 - Maintaining Traffic with the following exceptions: Item 614 - Law Enforcement Officer with Patrol Car, and Item 614 - Work Zone Marking Sign (only those in addition to standard drawings).

WORK HOURS

Lane closures shall only be implemented at the times listed on the Ohio Department of Transportation's Permitted Lane Closure Web Site which is located at:

http://plcm.dot.state.oh.us

The permitted closure times listed on the website, fourteen (14) calendar days prior to the Bid Letting Date, shall be in effect for this project.

No work within active travel lanes or work which will slow traffic is permitted at any other time.

NOTIFICATION

The Contractor shall notify the Ohio Department of Transportation District Seven Construction Engineer two (2) weeks prior to beginning any work. Phone: (937) 497-6722.

ALIGNMENT AND PROFILE

The work proposed by this project consists of pavement planing and resurfacing of the existing pavement. The alignment of the existing pavement will not be changed and the profile of the proposed surface will be similar to that of the existing pavement.

MAINTENANCE OF TRAFFIC

PLAN NO.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

The Contractor shall furnish, install, maintain and remove, when no longer needed, a Changeable Message Sign, on site, for the duration of the project. The sign shall be of a type shown on a list of approved Portable Changeable Message Sign units maintained by the Director (Office of Materials Management). This list is available on the Ohio Department of Transportation website at:

http://www.dot.state.oh.us/Divisions/ConstructionMgt/Materials/Pages/PORTABLE-CHANGEABLE.aspx

The list currently contains Class I, II and III units with minimum legibility distances of 1250 feet, 850 feet and 650 feet, respectively..

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. Portable Changeable Message Sign trailers should be delineated on a permanent basis by affixing retroreflective material in a continuous line on the face of the trailer as seen by oncoming road users.

Placement, operation, maintenance and all activation of the signs by the Contractor shall be as directed by the Engineer. The Portable Changeable Message Signs shall be located in a highly visible position yet protected from traffic. The Contractor shall, at the direction of the Engineer, relocate the Portable Changeable Message Signs to improve visibility or accommodate changed conditions. When not in use, the Portable Changeable Message Sign shall be turned off. Additionally, when not in use for extended periods of time, the Portable Changeable Message Sign shall be turned, facing away from all traffic, and shall disply one or more high-intensity yellow reflective sheeting surfaces of nine inch by fifteen inch (9.0" x 15.0") 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 Ohio Department of Transportation personnel to operate and troubleshoot the unit and to revise sign messages, if necessary.

The Contractor shall implement a system whereby changeable messages will be implemented within a short time following telephone notification from the Project Engineer to a designated phone.

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 Meeting. The sign shall have the capability to store up to ninety-nine (99) messages. Message memory or pre-programmed displays shall not be lost as a result of power failures on the on-board computer. The sign legend shall be capable of being changed in the field. Three-line presentation formats with up to six (6) message phases shall be supported. The Portable Changeable Message Sign format shall permit the complete message for each phase to be rad at least once.

The Portable Changeable Message Sign 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 Portable Changeable Message Sign shall contain a cellular telephone data link which will (in active cellular phone areas) allow remote sign activation, message changes, message additions and revisions to time of day programs. The system shall also permit verification of current and programmed messages. One (1) remote data input device (laptop computer plus modem or equivalent) shall be furnished for use by the District Traffic Engineer, or equivalent, and shall be insured against theft.

The Portable Changeable Message Sign unit shall be maintained in good working order by the Contractor in accordance with the provisions of CMS 614.07. The Contractor shall, prior to activating the unit, make arrangements with an authorized service agent for the Portable Changeable Message Sign, to assure prompt service in the event of failure. Any failure shall not result in the sign being out of service for more than twelve (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 due to the Contractor's noncompliance, will be deducted from moneys due, or to become due the Contractor on his contract.

The Contractor shall be responsible for twenty-four (24) hour per day operation and maintenance of these signs on the project for the duration of the phases when the plan requires their use.

Payment for the above described item shall bew at the contract unit price. Payment shall include all labor, materials, equipment, lubricating oils, fuels, software, hardware and incidentals to perform the above described work.

Item 614 - Portable Changeable Message Sign, As Per Plan = 2 months

MAINTENANCE OF TRAFFIC

PLAN NO.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PER- MITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP- MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCE- MENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP- MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG- TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITION- ED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/ DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSI- BILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CON- SIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COM- MUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RE- TURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINT- ENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 400 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) IN- CURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

TRAFFIC CONTROL

PLAN NO.

LOCATION					EDGE LINE (WHITE)	EDGE LINE (YELLOW)	LANE LINE	CHANN-ELIZING LINE	LANE ARROW	4" DOTTED LINE			
ROUTE	SLM SECTION FROM	SLM SECTION TO			MILE	MILE	MILE	FEET	EACH	FEET			
I-75 NB	0.00	6.14			4.39	6.14	12.28	1938					
I-75 SB	0.00	6.14			4.23	6.14	12.28	1751					
I-675 INTERCHANGE													
	RAMP S		2		0.97		0.67	715		843			
	RAMP U		3		1.03	0.88	0.14	190					
	RAMP V		3		0.51		0.20	509					
	RAMP Y		2		0.53	0.25	0.07	466		636			
S.R. 725 INTERCHANGE													
	RAMP A		2		0.57	0.26	0.05	600		708			
	RAMP B		3		0.67	0.21	0.14	518	8				
	RAMP C		3		0.32	0.10	0.09	197					
	RAMP D		2		1.00	0.25	1.30	761		500			
TOTAL					14.22	14.23	27.22	7645	8	2687			

1	Multilane Divided	5	Multilane Divided / Expressway	10	4 Lane Divided to 2 Lane Transition	15	Horizontal Curve
1	Typical Spacing	6	Stop Approach	11	4 Lane Undivided to 2 Lane Transition	16	Horizontal Curve Alt.
2	Tapered Acceleration Lane	7	1 Lane Approach w/Left Turn Lane	12	Two Lane Narrow Bridge	17	Stop Approach Alt.
3	Deceleration Lane	8	Thru Approach	13	Two Way Left Turn Lane	GAP	Centerline at 80 feet Typical
4	Parallel Acceleration Lane	9	2 Lane Approach w/Left Turn Lane	14	One Lane Bridge		

CALCULATED BY

CHECKED BY

MONTGOMERY COUNTY
MOT-75-0.00

TRAFFIC CONTROL

RAISED PAVEMENT MARKERS

PLAN NO.

LOCATION			DETAIL	RPM	PRISMATIC RETRO-REFLECTOR TYPES					REMARKS
					ONE-WAY		TWO-WAY			
ROUTE	SLM SECTION FROM	SLM SECTION TO			WHITE	YELLOW	WHITE/ WHITE	WHITE/ RED	YELLOW/ RED	
I-75 NB	0.00	6.14	5	540	540					Lane Line
I-75 SB	0.00	6.14	5	540	540					Lane Line
I-675 INTERCHANGE										
	RAMP S		2	18				18		CHANNELIZING LINE
	RAMP U		3	73				14	59	CHANNELIZING LINE/EDGE LINE
	RAMP V		3	25				25		CHANNELIZING LINE
	RAMP Y		2	29				12	17	CHANNELIZING LINE/EDGE LINE
S.R. 725 INTERCHANGE										
	RAMP A		2	25				15	10	CHANNELIZING LINE/EDGE LINE
	RAMP B		3	34				20	14	CHANNELIZING LINE/EDGE LINE
	RAMP C		3	21				10	11	CHANNELIZING LINE/EDGE LINE
	RAMP D		2	37				19	18	CHANNELIZING LINE/EDGE LINE
TOTAL				1342						

1	Multilane Divided	5	Multilane Divided / Expressway	10	4 Lane Divided to 2 Lane Transition	15	Horizontal Curve
1·	Typical Spacing	6	Stop Approach	11	4 Lane Undivided to 2 Lane Transition	16	Horizontal Curve Alt.
2	Tapered Acceleration Lane	7	1 Lane Approach w/Left Turn Lane	12	Two Lane Narrow Bridge	17	Stop Approach Alt.
3	Deceleration Lane	8	Thru Approach	13	Two Way Left Turn Lane	GAP	Centerline at 80 feet Typical
4	Parallel Acceleration Lane	9	2 Lane Approach w/Left Turn Lane	14	One Lane Bridge		

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MOT-75-0.00

RAISED PAVEMENT MARKERS

GENERAL SUMMARY

PLAN NO.

I-75		ITEM	ITEM EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION
1727		253	01001	1727	SQ. YD.	Pavement Repair, As Per Plan
438292		254	01000	438292	SQ. YD.	Pavement Planing, Asphalt Concrete
32873		407	20200	32873	GALLON	Tack Coat, Trackless Tack
21305		442	10001	21305	CU. YD.	Asphalt Concrete Surface Course 12.5mm, Type A (446), As Per Plan
2625		842	10000	2625	POUND	Correcting Elevation of Concrete Approach Slabs with High
						Density Polyurethane
400		614	11100	400	HOUR	Law Enforcement Officer with Patrol Car
16		614	12460	16	EACH	Work Zone Marking Sign
50		614	12600	50	EACH	Replacement Drum
2		614	18511	2	MONTH	Portable Changeable Message Sign, As Per Plan
27.50		614	20000	27.50	MILE	Work Zone Lane Line, Class I
28.50		614	22000	28.50	MILE	Work Zone Edge Line, Class I
7645		614	23000	7645	FEET	Work Zone Channelizing Line, Class I

GENERAL SUMMARY

PLAN NO.

I-75		ITEM	ITEM EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION
692		617	10100	692	CU. YD.	Compacted Aggregate
25		618	40600	25	MILE	Rumble Strips (Asphalt Concrete)
1342		621	00100	1342	EACH	RPM
1280		621	54000	1280	EACH	Raised Pavement Marker Removed
3		632	26500	3	EACH	Detector Loop
3		632	27201	3	EACH	Loop Detector Tie-In, As Per Plan
28.45		644	00100	28.45	MILE	Edge Line
27.22		644	00200	27.22	MILE	Lane Line
7645		644	00400	7645	FEET	Channelizing Line
962		644	00700	962	FEET	Transverse/Diagonal Line
8		644	01300	8	EACH	Lane Arrow
2687		644	01500	2687	FEET	Dotted Line, 4"
1000		832	30000	1000	EACH	Erosion Control
LUMP		614	11000	LUMP		Maintaining Traffic
LUMP		624	10000	LUMP		Mobilization

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MOT-75-0.00

GENERAL SUMMARY

17
17