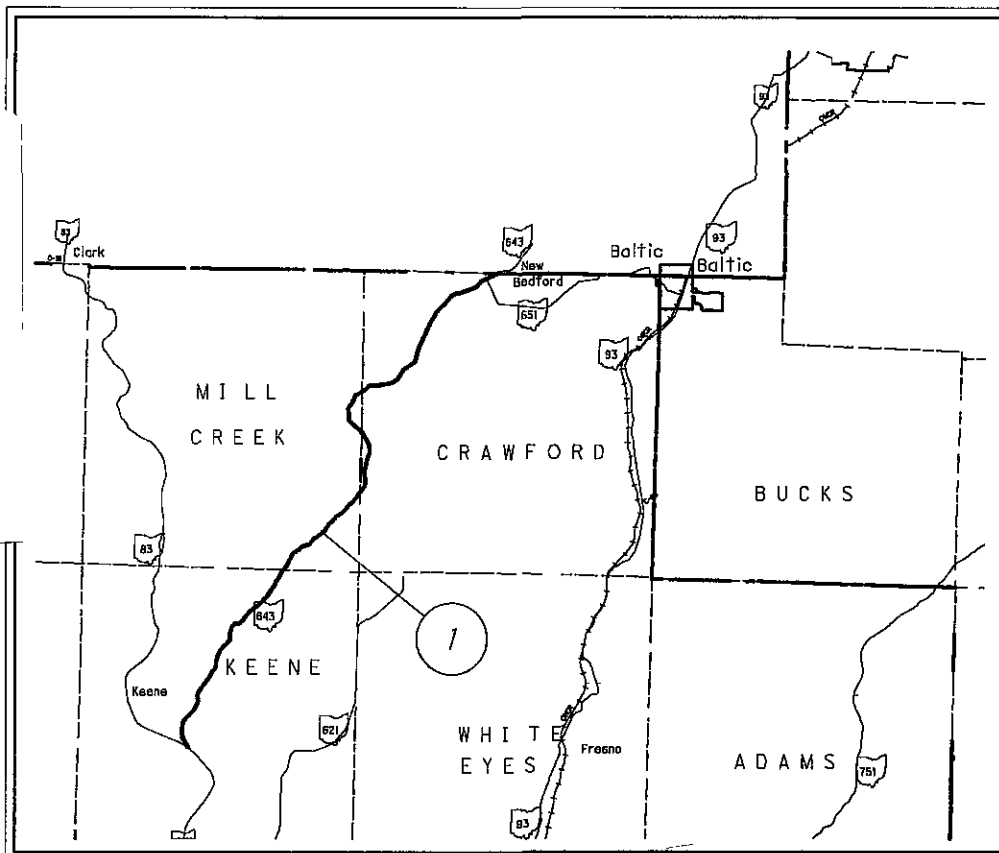


LOCATION MAP

NOT TO SCALE

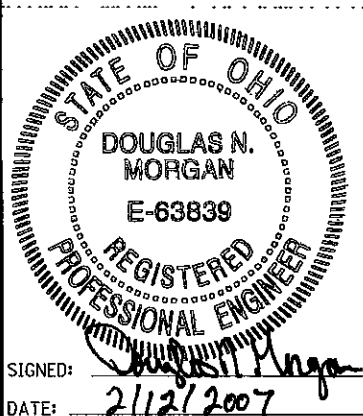


Latitude N40° 23' 49" Longitude W81° 48' 14"

PORTION TO BE IMPROVED

DESIGN EXCEPTIONS: NONE

ENGINEER'S SEAL

SIGNED: Douglas N. Morgan
DATE: 2/12/2007

PLAN PREPARED BY:

District
D5
Production

DESIGN DESIGNATION	LOCATIONS	
	1	
Functional Classification	MINOR	
Current ADT (2007)	900	
Design Year ADT (2019)	1050	
Design Hourly Volume (2019)	100	
Directional Distribution	50%	
Trucks (24 Hour B&C)	11%	
Design Speed	55mph	
Legal Speed	55mph	

MINOR = MINOR COLLECTOR

STATE OF OHIO
DEPARTMENT OF TRANSPORTATIONCOS-643-0.00
COSHOCTON COUNTY
KEENE AND CRAWFORD
TOWNSHIPS

INDEX OF SHEETS:

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UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIGCALL
1-800-362-2764
(TOLL FREE)OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLYOIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-929-0988

PROJECT DESCRIPTION:

PROJECT CONSIST OF NECESSARY FULL DEPTH
REPAIRS THROUGHOUT PROJECT LIMITS, ASPHALT
CONCRETE RESURFACING FROM SLM 5.35 TO SLM
10.87 AND RELATED WORK.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)

LOCATION	COUNTY	ROUTE	PROJECT TERMINI		NET LENGTH MILES
			BEGIN	END	
1	COS	SR 643	0.00	10.87	10.87

2005 SPECIFICATIONS

THE STANDARD 2005 SPECIFICATIONS OF THE STATE OF OHIO DEPART-
MENT 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 PROPOSAL.

APPROVED

Don D. Barber, P.E., P.S.DATE 2/8/2007

DISTRICT DEPUTY DIRECTOR

APPROVED

Keith L. Swearingin, Jr.DATE 3-1-07DIRECTOR, DEPARTMENT OF
TRANSPORTATION

STANDARD CONSTRUCTION DRAWINGS

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7-16-04			800	01-19-07
BP-4.1	7-16-04			832	4-25-06
MT-97.11	9-5-06				
MT-99.20M	1-30-95				
MT-105.10	10-18-02				
MT-105.11	10-18-02				
TC-65.10	1-21-05				
TC-65.11	1-21-05				
TC-71.10	1-19-07				
TC-73.10	1-19-01				

FEDERAL PROJECT NO.

NON-FED

PID NO.

25689

CONSTRUCTION PROJECT NO.

TITLE SHEET

COS-643-0.00

1
12

C643001.mgn.DGN 1-23-07

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

IN ORDER FOR ODOT TO PROPERLY PERMIT OVERSIZE LOADS, PREPARE PROPER SIGNING WHEN REQUIRED AND FURTHER TO NOTIFY THE GENERAL MOTORING PUBLIC, THE CONTRACTOR SHALL NOTIFY (IN WRITING) THE DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR WITH COPIES FOR THE DISTRICT 5 ROADWAY SERVICES MANAGER AND PROJECT ENGINEER NOT LESS THAN 21 DAYS BEFORE SUCH CLOSURE OR LANE RESTRICTIONS.

SEND NOTIFICATION TO:

DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR
P.O. BOX 306
JACKSONSTOWN, OH 43030
PHONE: (740) 323-4400 EXT. 5241

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR 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 FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

FEATHERING

FEATHERING OF THE ASPHALT CONCRETE SHALL BE DONE IN ACCORDANCE WITH SCD DRAWING BP-3.1, 7-16-04

ITEM 617 COMPACTED AGGREGATE, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE PLASTICITY INDEX SHALL BE WAIVED. IF SO DIRECTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING MARKING LOCATIONS (i.e. BY USE OF VIDEO, PICTURES) AND PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER BEFORE COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS.

CONVERSION OF STANDARD CONSTRUCTION DRAWINGS

CONVERT THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

CONVERSIONS WILL BE APPROPRIATELY PRECISE AND REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

GENERAL NOTES

COS-643-0.00

2
12

CALCULATED
LME
CHECKED
DMM

C643002.MGN.DGN 1-11-07

ITEM 614 WORK ZONE MARKING SIGNS

A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

WORK ZONE MARKING SIGNS	LOCATIONS		
	1		
W8-H12a (NO EDGE LINES)	8		
R4-1 (DO NOT PASS)	10		
R4-2 (PASS WITH CARE)			
W20-1 (ROAD WORK AHEAD)	9		
G20-2 (END ROAD WORK)	9		
TOTAL	36		

ITEM 202 RPM REMOVED

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS TO REMOVE RAISED PAVEMENT MARKERS FOR DISPOSAL BY THE CONTRACTOR. RPM REMOVAL SHALL NOT OCCUR SOONER THAN 10 DAYS PRIOR TO RESURFACING OF THE ROADWAY. ALL RPM'S REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

ITEM 202 RPM REMOVED
LOCATION 1 - 630 EACH

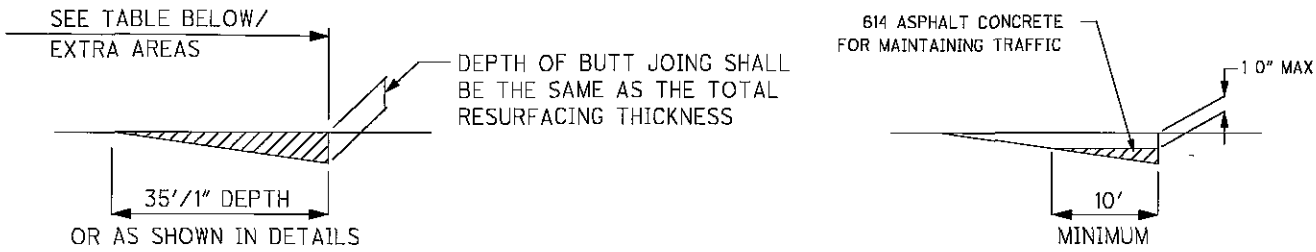
ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT

IN ORDER TO ASSURE A GOOD BOND AT THE LONGITUDINAL JOINT, A RUBBERIZED ASPHALT EMULSION (ITEM 407 TACK COAT AS PER 702.13) SHALL BE APPLIED TO THE FACE OF THE SURFACE COURSE OF ASPHALT PAVEMENT IMMEDIATELY BEFORE PLACING THE ADJACENT PAVEMENT. RUBBERIZED TACK SHALL HAVE 100% COVERAGE ON THE FACE OF THE TOP COURSE AND BE APPLIED AT THE RATE OF 0.25 GALLONS PER SQUARE YARD, AS DIRECTED BY THE ENGINEER. CARE SHALL BE TAKEN (AS PER SECTION 407.07) IN THE APPLICATION OF THE TACK SO AS TO AVOID PLACING EMULSION ON THE TOP SURFACE OF THE PAVEMENT. THE FOLLOWING QUANTITY OF ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIAL TO PERFORM THE ABOVE WORK.

ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT
LOCATION 1 - 29146 FT

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT EXTRA AREAS WITH WEARING COURSE REMOVED. AFTER THE JOINT IS CONSTRUCTED, THE DROP OFF CREATED SHALL BE MINIMIZED BY IMMEDIATELY PLACING THE PROPOSED SURFACE COURSE TO WITHIN 1.0" OF EXISTING ROADWAY SURFACE OR BY PLACING WEDGE AS SHOWN. BUTT JOINTS SHALL BE AS PER SCD BP-3.1, 7-16-04.



LOCATION	COUNTY	ROUTE	DESCRIPTION	SLM	614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU.YD.	202 WEARING COURSE REMOVED SQ.YD.
1	COS	SR 643	BEGIN RESURFACING	5.35	0.5	III
1	COS	SR 643	SR 651 ON RIGHT	10.65	0.5	*
1	COS	SR 643	END WORK	10.87	0.5	III
1	COS	SR 643	TOTALS		1.5	222

* QUANTITY SHOWN ON EXTRA AREA SHEET 8/12

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

FROM SLM 8.65 TO SLM 10.87 THE ROADWAY SHALL BE PLANED EASTBOUND AND WESTBOUND 4 FEET WIDE AND 1.75" IN DEPTH TO REMOVE A RUTTED AREA WHICH STARTS APPROXIMATELY 2 FEET INSIDE EACH EDGE LINE. AFTER PLANING, ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 70-22 SHALL BE PLACED AND COMPACTED TO BE FLUSH WITH EXISTING ROADWAY PAVEMENT.

500 TONS OF GRINDINGS (RACP) SHALL BE DELIVERED TO THE O.D.O.T. - COSHOCTON COUNTY GARAGE LOCATED AT 233 RIVERCREST DR. - (CANAL LEWISVILLE) COSHOCTON, OHIO 43812. THIS WORK SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 254.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED.

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
10.87-8.65 = 2.22 MILE = 11722 FEET X 4' X 2 / 9 = 10420 SQ.YD.

ITEM 407 TACK COAT
10420 SQ.YD. X 0.075 GAL/SQ.YD. = 782 GAL.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 70-22
10420 SQ.YD. X 1.75" / 36 = 507 CU.YD.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. FROM SLM 0.00 TO SLM 5.35, WHERE THE ROADWAY IS NOT BEING OVERLAYED, REMOVAL AND REPLACEMENT SHALL BE AS DESCRIBED BELOW EXCEPT THAT THE TOP 1.25" OF MATERIAL SHALL BE 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M (AN ESTIMATED QUANTITY IS SHOWN BELOW FOR THIS PURPOSE). THE PERIMETER OF THE REPAIR AREA SHALL BE SEALED USING AC-20.

FROM SLM 5.35 TO SLM 10.87, REPAIRS SHALL TAKE PLACE PRIOR TO THE PAVING OPERATIONS.

THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUB-BASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 7". AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG 64-22 (PLACED AND COMPACTED IN 2 LIFTS AS DIRECTED). ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN. THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN
LOCATION 1 - 1000 SQ.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 - 500 SQ.YD. X 1.25"/36 = 17.4 CU.YD.

ITEM 604 CATCH BASIN ADJUSTED TO GRADE

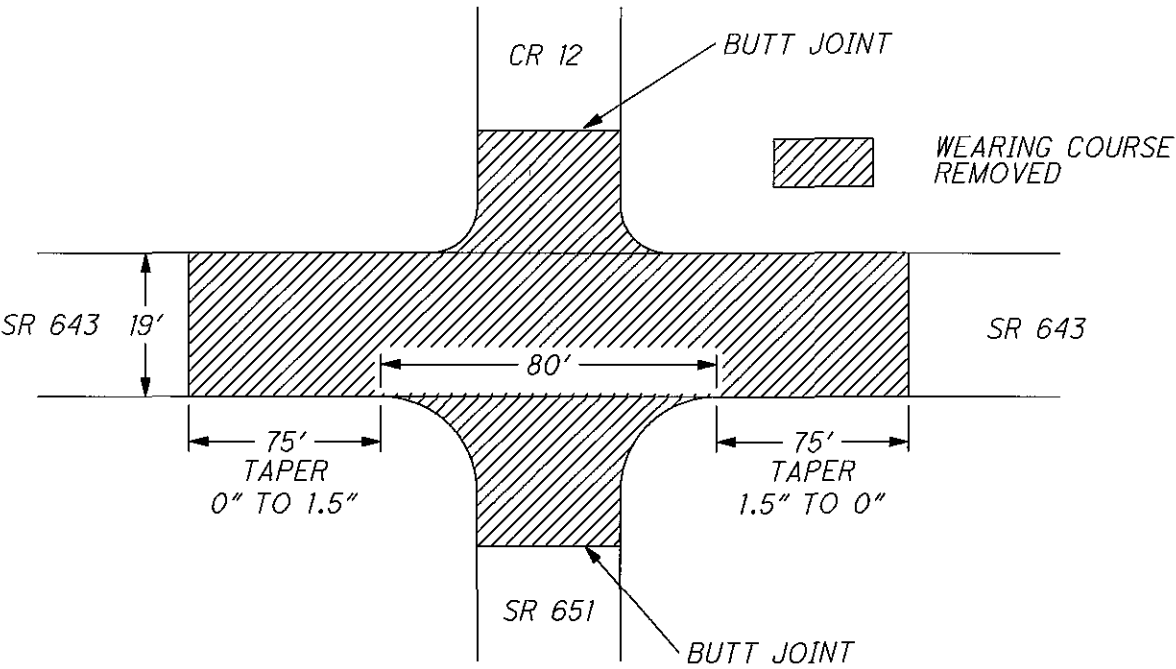
THIS ITEM SHALL BE USED TO ADJUST CATCH BASINS LOCATED IN NEW BEDFORD AS DIRECTED BY THE ENGINEER. ALL MATERIALS, LABOR EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DECRIBED SHALL BE INCLUDED FOR PAYMENT WITH THE ITEM LISTED BELOW.

ANY GAS VALVE BOXES AND TELEPHONE COMPANY MANHOLES ON THIS PROJECT SHALL BE ADJUSTED TO GRADE BY THE RESPECTIVE OWNERS.

ITEM 604 CATCH BASIN ADJUSTED TO GRADE.
LOCATION 1 - 2 EACH

NEW BEDFORD INTERSECTION DETAIL

THE DETAIL BELOW IS FOR WEARING COURSE REMOVED IN NEW BEDFORD. SEE EXTRA AREA SHEET FOR QUANTITIES ON CR 12 AND SR 651. THE QUANTITY FOR SR 643 IS SHOWN BELOW.



ITEM 202 WEARING COURSE REMOVED
LOCATION 1 - 230' X 19' / 9 = 486 SQ.YD.

ITEM 408 PRIME COAT, AS PER PLAN

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GALLON PER SQUARE YARD TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS. THE FOLLOWING QUANTITY OF PRIME COAT, AS PER PLAN SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

ITEM 408 PRIME COAT, AS PER PLAN
LOCATION 1 - 5182 GAL.

CALCULATED
LIVE
CHECKED
DNN

GENERAL NOTES

COS-643-0.00

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12

RESIDENCE AND COMMERCIAL DRIVES

An estimated quantity of Item 448 Asphalt Concrete has been included in the plan to be used as directed by the Engineer to pave approach areas to existing driveways. Paving shall typically extend 4' into the driveway (measured from the edge of pavement or paved shoulder if present).

There are 5 types of drives: concrete, asphalt, gravel, gravel with asphalt apron, and field/oil well drives. Field drives and oil well drives shall not be paved. Gravel drives shall be paved back 4' into the driveway unless otherwise directed by the engineer. Concrete and asphalt drives shall have butt joints or as short an asphalt taper as possible (preferred 4') as directed by the Engineer so as to provide a smooth transition. Gravel drives with asphalt aprons shall also have butt joints or as short an asphalt taper as possible (preferred 4') but only if the existing asphalt apron is in an acceptable condition to be paved over as directed by the Engineer. If the asphalt apron cannot be paved over (for example, broken into small pieces) as determined by the Engineer, it shall be removed before being paved back 4' into the driveway. All grading, prime or tack coat, materials, labor, equipment tools and incidentals necessary to complete the drives shall be included in the unit price bid for Item 448 Asphalt Concrete Surface Course, Type 1, PG 70-22M.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 - 15 CU.YD.

MAIL BOX TURN OUTS

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN OUTS. TURN OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-4.1, 7-16-04.

ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 - 29 CU.YD.

CALCULATED
LIVE
CHECKED
DMM

GENERAL NOTES

COS-643-0.00

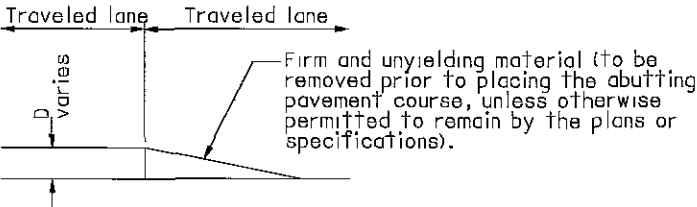
5
12

GENERAL NOTES

1. It is intended that this drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. The suggested treatments are intended for high volume projects that will last at least seven days and have an active work zone 1 mile [1.6 km] or less in length. For guidance on the use of this sheet, see L&D Manual Volume One, Section 500. Where the plans do not provide specific items for labor, equipment, or materials to implement the drop-off treatments specified hereon, they shall be included for payment in the lump sum bid for item 614 - Maintaining Traffic.
2. While the need for certain advisory signing is noted hereon, it is not intended that this be indicative of all signing that may be required to advise or warn motorists, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.
3. In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown hereon may be required.
4. The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
5. Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing RM-4.2 and Item 622.
6. When drums are specified for a drop-off condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.
7. When W8-9 (Low Shoulder) signs or W8-9a (Shoulder Drop-Off) signs or W8-11 (Uneven Lanes) signs are required, they shall be placed 750 feet [230 m] in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all intersecting roadways within the limits of the condition. When the drop-off condition extends more than 0.5 mile [800 m], additional signs should be erected at intervals of 1.0 mile [1600 m] or less.
8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate a difference in elevation between pavements, a 3:1 slope treatment similar to the Optional Wedge Treatment shall be provided.
9. Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10 feet [3.0 m], drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 5 inches [125] and approval is granted by the Project Engineer.
10. Pavement Repairs (or similar work):
- a. Lengths greater than 60 feet [18 m] - utilize appropriate treatment from Condition I.
- b. Lengths of 60 feet [18 m] or less - repairs shall be effected in accordance with CMS 255.08. Drums may be used as a separator adjacent to the traveled lane.

OPTIONAL WEDGE TREATMENT
(MILLING OR RESURFACING)

1. This treatment may be used when permitted for Condition I only.
2. W8-11 sign required.



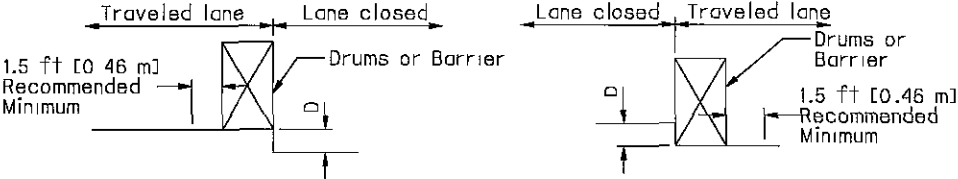
CONDITION I

DROP-OFFS BETWEEN TRAVELED LANES

1. These treatments are to be used for resurfacing, pavement planing, excavation, etc. between or within traveled lanes.

D - inches (mm)	Treatment
< 1-1/2 [≤ 40]	Erect W8-11 sign.
1-1/2 - 3 [40-75]	1) Lane closure utilizing drums* as shown below OR 2) Optional Wedge Treatment
> 3 - 5 [$> 75-125$]	Lane closure utilizing drums as shown below
> 5 [> 125]	Lane closure utilizing portable concrete barrier as shown below.

* Cones may be used for daytime only conditions



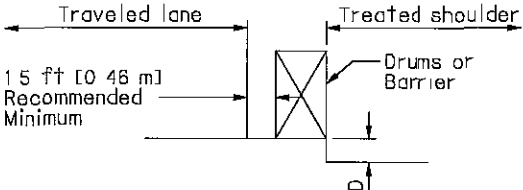
CONDITION II

DROP-OFFS WITHIN GRADED SHOULDER AREA

1. The treatments indicated below are for use in conjunction with resurfacing, planing, or excavations within the graded shoulder area.
2. The graded shoulder area is that flat or gradually sloping area between the edge of a normally traveled lane and the more steeply sloping ditch foreslope or embankment slope. Its surface may be soil or turf, and/or it may be inclusive of a "treated" area (improved with aggregates, asphaltic materials or concrete). For the purpose herein, its maximum width shall be considered to be 12 feet [3.6 m].

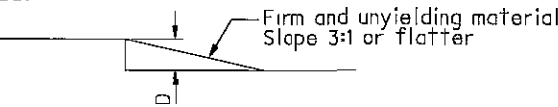
D - inches (mm)	Treatment
< 1-1/2 [≤ 40]	1) Erect W8-9a signs
> 1-1/2 - 5 [$> 40-125$]	1) If minimum lane width* requirements can be met, maintain lanes utilizing drums as shown below OR 2) If minimum lane width* requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment
> 5 - 12 [125-305] Daylight only	If minimum lane width* requirements can be met, maintain lanes utilizing drums as shown below
> 5 - 24 [$> 125-610$]	1) If minimum lane width* requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If minimum lane width* requirements cannot be met, close adjacent lane utilizing drums
> 24 [> 610]	Lane closure utilizing portable concrete barrier as shown below.

* Minimum lane widths shall be 10 ft [3.0 m] unless otherwise specified in the plans.



OPTIONAL SHOULDER TREATMENT

1. This treatment may not be used within a bituminous shoulder where a hot longitudinal joint per CMS 401.15 is required.
2. W8-9 signs required.



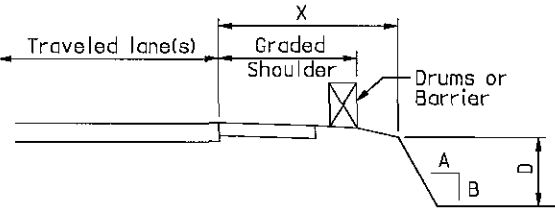
CONDITION III

DROP-OFFS BEYOND GRADED SHOULDER OR BACK OF CURB

1. See Note 2 under Condition II.
2. Use Chart A or B below, as applicable

CHART A

USE FOR: 1. Uncurbed Facilities
2. Curbed Facilities, where:
a. Curbs are less than 6 inch [150] in height
b. Curbs are 6 inch [150] or greater in height and the legal speed is greater than 40 mph [70 km/hr]

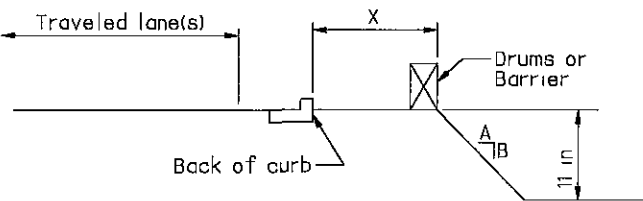


X feet (m)	D inch (mm)	A/B	Treatment Required	
			Day	Night
0 - 4 [0 - 1.2]	Any	Any	(a)	(a)
4 - 30 [1.2 - 9.1]	Any	3:1 or Flatter	None	None
4 - 12 [1.2 - 3.6]	< 3 [≤ 75]	Steeper than 3:1	None	None
4 - 12 [1.2 - 3.6]	> 3 - < 12 [$> 75 - < 305$]	Steeper than 3:1	Drums	Drums
4 - 12 [1.2 - 3.6]	> 12 [> 305]	Steeper than 3:1	Drums	Barrier
> 12 - 20 [$> 3.6 - 6.1$]	< 12 [≤ 305]	Steeper than 3:1	None	None
> 12 - 20 [$> 3.6 - 6.1$]	> 12 - 24 [$> 305 - < 610$]	Steeper than 3:1	Drums	Drums
> 12 - 20 [$> 3.6 - 6.1$]	> 24 [> 610]	Steeper than 3:1	Drums	Barrier
> 20 - 30 [$> 6.1 - 9.1$]	< 24 [≤ 610]	Steeper than 3:1	None	None
> 20 - 30 [$> 6.1 - 9.1$]	> 24 [> 610]	Steeper than 3:1	Drums	Barrier
> 30 [> 9.1 m]	Any	Any	None	None

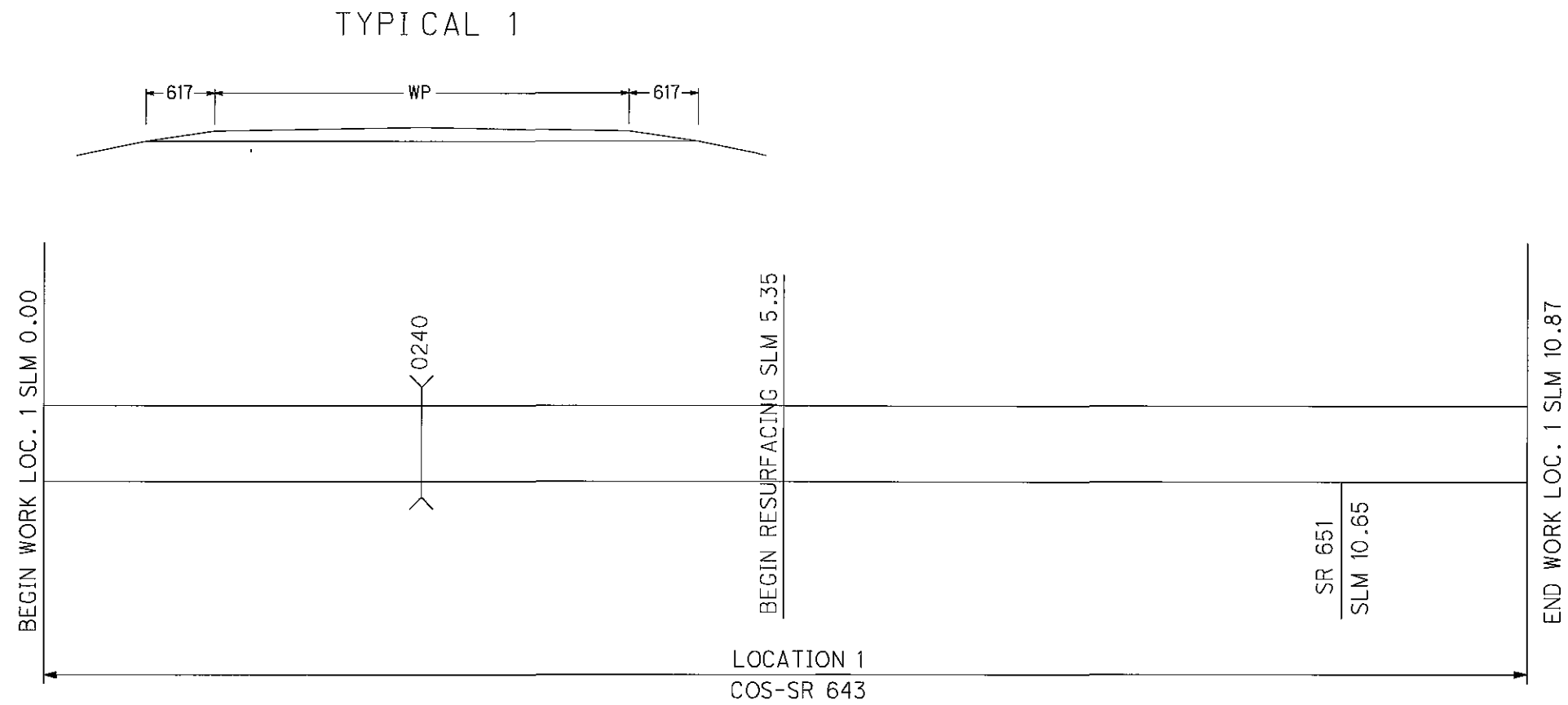
(a) Use treatment specified under Condition II.

CHART B

USE FOR: Curbed facilities, where the curb is 6 inches [150 mm] or greater in height and the legal speed is 40 mph [70 km/h] or less.

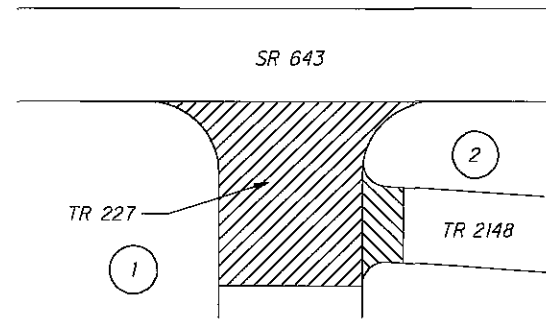
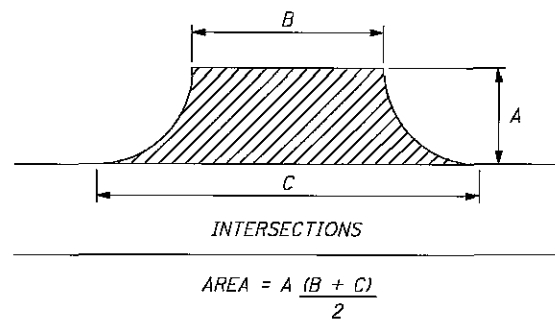


X feet (m)	D inch (mm)	A/B	Treatment Required	
			Day	Night
0 - 10 [0-3.0 m]	< 12 [≤ 305]	Any	None	Drums
0 - 10 [0-3.0 m]	> 12 [> 305]	Any	Drums	Drums
> 10 [> 3.0 m]	Any	Any	None	None



DEDUCT FOR BRIDGES (1) LENGTH X PAVEMENT WIDTH

[illegible]

[illegible]

[illegible][illegible]

[illegible]

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DETAIL	
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

DETAIL	
4	4 LANE DIVIDED TO 2 LANE TRANSITION
5	4 LANE UNDIVIDED TO 2 LANE TRANSITION
6	ONE LANE BRIDGE
7	STOP APPROACH
8	THRU APPROACH
9	TWO WAY LEFT TURN LANE

DETAIL	
10	APPROACH W/LT. TURN LANE
11	HORIZONTAL CURVE 40' *
12	HORIZONTAL CURVE ALT. *
GAP	CENTERLINE AT 80' TYP.

* SEE NOTE 5, SCD TC-65.11 SHEET 2/2

RPM LOCATION SUB-SUMMARY																		
L O C A T I O N	C O U N T Y	R O U T E	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		D E G R E E	D E T A I L	621 ITEM QUANTITIES			PRISMATIC RETRO-REFLECTOR COLORS					REMARKS	
					MILES	LIN.FT.			RPM	RPM CASTING	PRISMATIC RETRO-	ONE-WAY		TWO-WAY				
												WHITE	YELLOW	YELLOW / YELLOW	WHITE / RED			YELLOW / RED
1	COS	SR 643	5 35	5.64	0 29	1531		GAP	19					19				
			5.64	5 81	0 17	898	13	12	27					27				PC 5 73 PT 5 76 L=158' DEG 13
			5 81	5 89	0.08	422	8	11	10					10				PC 5 81 PT 5 89 L=422' DEG 8
			5 89	6.12	0.23	1214		GAP	15					15				
			6 12	6.26	0 14	739	14	12	21					21				PC 6 21 PT 6 23 L=106' DEG 14
			6 26	6 38	0.12	634	13	12	20					20				PC 6 26 PT 6.29 L= 158' DEG 13
			6.38	6 50	0 12	634	6	11	16					16				PC 6 38 PT 6 50 L= 634' DEG 6
			6 50	6 58	0 08	422		GAP	5					5				
			6.58	6 60	0 02	106	9	11	3					3				PC 6.58 PT 6.60 L=106' DEG 9
			6 60	6 91	0.31	1637		GAP	20					20				
			6 91	7 11	0 20	1056	28	12	31					31				PC 7.00 PT 7 03 L=158' DEG 28
			7 11	7 32	0 21	1109	25	12	32					32				PC 7.20 PT 7.23 L=158' DEG 25
			7 32	7 35	0 03	158		GAP	2					2				
			7 35	7 57	0 22	1162	14	12	35					35				PC 7 44 PT 7 48 L=211' DEG 14
			7 57	7 64	0 07	370		GAP	5					5				
			7 64	7 89	0 25	1320	14	12	42					42				PC 7 73 PT 7 80 L=370' DEG 14
			7 89	8 07	0 18	950		GAP	12					12				
			8 07	8 15	0 08	422	6	11	11					11				PC 8 07 PT 8 15 L=422' DEG 6
			8 15	8 18	0 03	158		GAP	2					2				
			8 18	8 38	0 20	1056	19	12	29					29				PC 8 27 PT 8 29 L=106' DEG 19
			8 38	8 51	0 13	686	21	12	23					23				PC 8 44 PT 8 48 L=211' DEG 21
			8 51	8 62	0 11	581	14	12	17					17				PC 8 51 PT 8 53 L=106' DEG 14
			8 62	8 80	0 18	950	15	12	30					30				PC 8 66 PT 8 71 L=264' DEG 15
			8 80	9 75	0 95	5016		GAP	63					63				
			9 75	9 77	0 02	106	9	11	3					3				PC 9 75 PT 9 77 L=106' DEG 9
			9 77	10 02	0 25	1320		GAP	17					17				
			10.02	10 22	0 20	1056	14	12	29					29				PC 10 11 PT 10.13 L=106' DEG 14
			10 22	10 39	0 17	898		GAP	11					11				
			10 39	10 42	0.03	158	9	11	4					4				PC 10 39 PT 10 42 L=158' DEG 9
			10 42	10 56	0 14	739		GAP	5					5				
			10 56	10 65	0 09	475		7	27			16		11				STOP AT SR 651
			10 65	10 81	0 16	845		7	27			16		11				STOP AT SR 651
			10 81	10.87	0.06	317		GAP	4					4				
1	COS	SR 643	TOTALS						617			32		585				

RPM LOCATION SUB-SUMMARY

COS-643-0.00

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CALCULATED
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SHEET TOTALS								ITEM	ITEM EXT. NO.	GRAND TOTALS	UNIT	DESCRIPTION
3	4	5	7	8	9	10	11					
222	486			307				202	23500	1015	SQ.YD	WEARING COURSE REMOVED
630								202	54000	630	EACH	RAISED PAVEMENT MARKER REMOVED
	1000							253	01001	1000	SQ.YD	PAVEMENT REPAIR, AS PER PLAN (SHEET 4)
10420								254	01001	10420	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (SHEET 3)
782			4615	155				407	10000	5552	GALLON	TACK COAT
29146								407	98000	29146	FT.	TACK COAT, MISC FOR LONGITUDINAL JOINT
	5182							408	10001	5182	GALLON	PRIME COAT. AS PER PLAN (SHEET 4)
507								448	46054	507	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2. PG 70-22
	18	44	2564	86				448	46904	2712	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
	2							604	09000	2	EACH	CATCH BASIN ADJUSTED TO GRADE
36								614	12460	36	EACH	WORK ZONE MARKING SIGN
2								614	13000	2	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
			5 52					614	21000	5 52	MILE	WORK ZONE CENTER LINE, CLASS I
			540					617	10101	540	CU YD	COMPACTED AGGREGATE, AS PER PLAN (SHEET 2)
							617	621	00100	617	EACH	RPM
					11 04			642	00100	11 04	MILE	EDGE LINE, TYPE 1
					5 52			642	00300	5 52	MILE	CENTER LINE, TYPE 1
						136		644	00500	136	FT	STOP LINE
								614	11000	LUMP		MAINTAINING TRAFFIC
								619	16000	1	MONTH	FIELD OFFICE, TYPE A
								623	10000	LUMP		CONSTRUCTION LAYOUT STAKES
								624	10000	LUMP		MOBILIZATION

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GENERAL SUMMARY

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