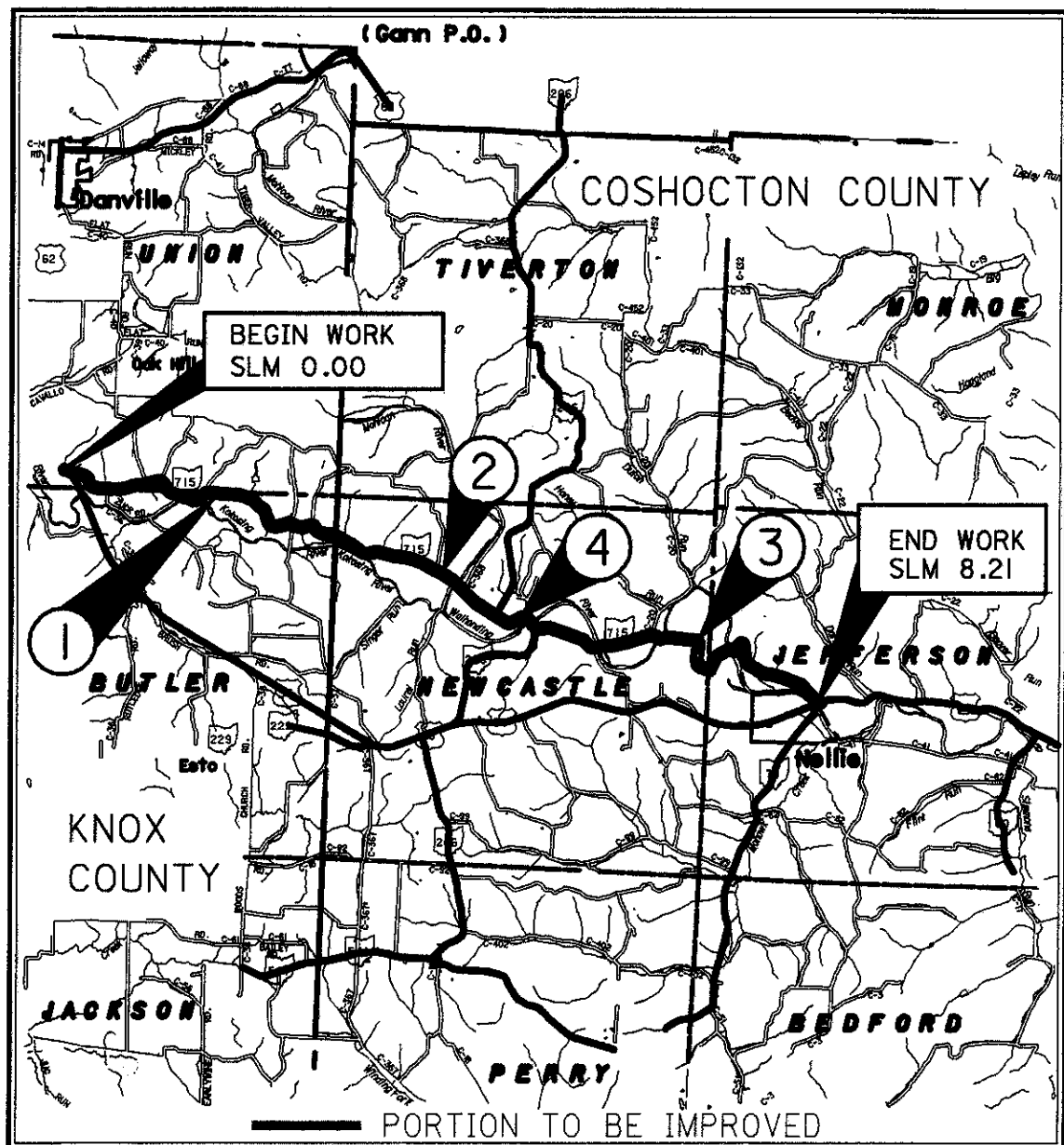


STATE OF OHIO
 OHIO DEPARTMENT OF TRANSPORTATION
 KNO-715-0.00 BUTLER & UNION TOWNSHIP KNOX COUNTY
 COS-715-0.00 NEW CASTLE & JEFFERSON TOWNSHIP COSHOCTON COUNTY
 COS-206-5.98 NEW CASTLE TOWNSHIP COSHOCTON COUNTY

PROJECT DESCRIPTION

2-LANE RESURFACING AND RELATED WORK

LOCATION	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI		NET LENGTH MILES	VILLAGE
				BEGIN	END		
1	KNO.	SR 715	(0.00-4.26)	0.00	4.26	4.26	
2	COS.	SR 715	(0.00-2.54)	0.00	2.54	2.54	
3	COS.	SR 715	(3.19-8.21)	3.19	8.21	5.02	NELLIE
4	COS.	SR 206	(5.98-6.63)	5.98	6.63	0.65	



INDEX OF SHEETS:

TITLE SHEET	1
GENERAL NOTES	2-7
ASPHALT CONCRETE DATA	8
EXTRA AREAS DATA	9
BRIDGE DECK TREATMENT	10
RPM LOCATION SUB-SUMMARY	11-14
EDGE/CENTER LINE SUB-SUMMARY	15
PAVEMENT MARKING SUB-SUMMARY	16
PAVEMENT MARKING TYPICAL DETAIL	17
GENERAL SUMMARY	18

1997 SPECIFICATIONS

THE STANDARD 1997 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 PROPOSAL.

APPROVED *Michael D. Cooper*
 DATE 3/10/99 DISTRICT DEPUTY DIRECTOR

APPROVED *Gordon Proctor*
 DATE 3-16-99 DIRECTOR, DEPARTMENT OF TRANSPORTATION

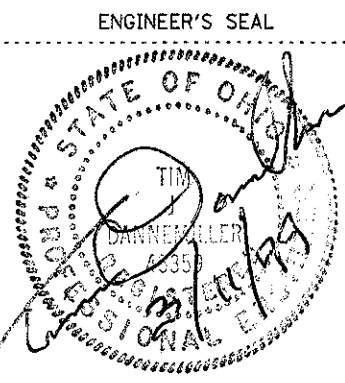
UNDERGROUND UTILITIES
 TWO WORKING DAYS
BEFORE YOU DIG
 CALL 1-800-362-2764 (TOLL FREE)
 OHIO UTILITIES PROTECTION SERVICE
 NON-MEMBERS MUST BE CALLED DIRECTLY

LOCATION MAP

40 16 45 81 40

DESIGN DESIGNATION	
Current ADT (1999)	330
Design Year ADT (2011)	430
Design Hourly Volume (2011)	10%
Directional Distribution	55%
Trucks (24 Hour B&C)	10%
Design Speed	55 mph
Legal Speed	55 mph

STANDARD DRAWINGS		STANDARD DRAWINGS		STANDARD DRAWINGS	
BP-3.1	10-28-94	TC-65.11	11-1-95	GR-1.2	10-30-92
BP-4.1	10-28-94	TC-65.12	11-1-95	GR-1.3	02-21-92
MT-95.30	4-25-94	TC-71.10	9-1-93	GR-4.1	05-06-91
MT-95.31	4-25-94	TC-105.10	07-01-92	GR-4.2	05-06-91
MT-95.32	4-25-94	TC-105.11	07-01-92		
MT-97.11	1-30-95	GR-2.4M	10-21-97	SUPPLEMENTAL SPECIFICATIONS	
MT-99.20	1-30-95	GR-2.1	05-06-91	806	9-9-97
TC-65.10	11-1-95	GR-1.1	05-06-91		



PLAN PREPARED BY:
D5 District
 Production

KNO-715/206-0.00-4.26
 990514
 DIST. 05
 06-09-99
 PID # 19439

715001.MTS 3-9-99

FEDERAL PROJECT NO. NON-FEDERAL
 PID NO. 19439
 CONSTRUCTION PROJECT NO.
 TITLE SHEET
 KNO-715-0.00
 COS-715-0.00
 COS-206-5.98
 18

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT SHOULD NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA. BELOW IS A LIST OF UTILITIES LOCATED WITHIN THE WORK AREA AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT OWNERS AND VERIFY LOCATIONS

WAYNE-HOLMES ELECTRIC COOPERATIVE
P.O. BOX 112
MILLERSBURG, OHIO 44654
ATTN: DAVE LINGENFELTER
330-674-1055

SPRINT UNITED TELEPHONE
15 EAST GAMBIER STREET
MT. VERNON, OH 43050
ATTN: BRENDA COON
740-397-3609

FRONTIER POWER COMPANY
770 S. SECOND STREET
P. O. BOX 270
COSHOCTON, OH 43812
ATTN: DAVE ENDLICH, LINE SUPRV.
740-622-6755

GTE NORTH, INCORPORATED
1121 TUSCARAWAS AVENUE, NW
NEW PHILADELPHIA, OH 44663
ATTN: PHIL RODEBUSH
330-364-0588

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
JACKSONTOWN, OH. 43030
PHONE: (740) 323-4400 EXT. 5241

KOKOSING STATE SCENIC RIVER SCENIC RIVER CONDITIONS IN ACCORDANCE WITH OHIO REVISED CODE SECTION (O.R.C.) 1597.16.

1. NO EARTHWORK OF ANY TYPE, GRUBBING, EXCAVATING OR FILLING WILL BE PERMITTED WITHIN ONE-THOUSAND (1,000) FEET OF THE KOKOSING STATE SCENIC RIVER.
NO IN STREAM WORK, BANK SHAPING OR CHANNEL MODIFICATION OF ANY TYPE WILL BE PERMITTED WITHIN THE KOSOSING RIVER OR WITHIN 1,000 FEET UPSTREAM OF ANY TRIBUTARY WATERCOURSE.
2. IF ANY EARTHWORK IS CONDUCTED WITHIN THE PROJECT AREA, A SEDIMENT AND EROSION CONTROL PLAN SHALL BE DEVELOPED AND IMPLEMENTED BEFORE EARTHWORK COMMENCES. ALL CONTROLS SHALL BE PROPERLY MAINTAINED UNTIL FINAL SITE STABILIZATION IS ACHIEVED. ALL DENUTED AREAS SHALL IMMEDIATELY BE SEEDED AND MULCHED UPON COMPLETION OF EARTHWORK.
PROPERLY INSTALLED (FRAMED and ENTRENCHED) SEDIMENT FENCE SHALL BE UTILIZED AROUND ANY STORM SEWER INLETS. APPROPRIATELY DESIGN ROCK CHECK DAMS AND OTHER EROSION CONTROLS SHALL BE UTILIZED IN DITCHES AND CULVERTS. ANY DENUDED DITCHES AND CULVERTS SHALL IMMEDIATELY BE SEEDED AND PROTECTED WITH EROSION CONTROL MATTING OR SOD UPON COMPLETION OF EARTHWORK.
3. NO CUTTING OR CLEARING OF ANY RIPARIAN VEGETATION WITHIN 1000 FEET OF THE KOKOSING RIVER SHALL BE PERMITTED.
4. NO TOXIC OR HAZARDOUS MATERIALS (ASPHALT, SEALANTS, PAINT, ETC.) EARTHEN MATERIAL, WASTE WATER OR DEBRIS OF ANY SORT SHALL BE DISCHARGED TO THE KOKOSING RIVER OR ANY TRIBUTARY WATER COURSES.
ALL ASPHALT GRINDINGS, EXCESS ASPHALTIC MATERIAL OR ANY OTHER DEBRIS GENERATED DURING RESURFACING SHALL BE REMOVED FROM WITHIN 1,000 FEET OF THE KOKOSING RIVER AND DISPOSED OF AT AN APPROPRIATE FACILITY ABOVE THE 100 YEAR FLOOD ELEVATION OF THE KOKOSING RIVER.
5. BOB GABLE, CENTRAL OHIO SCENIC RIVER COORDINATOR SHALL BE INVITED TO A PRECONSTRUCTION MEETING WITH THE CONTRACTOR PRESENT. PLEASE PROVIDE SUFFICIENT ADVANCE NOTICE TO ALLOW FOR CONFLICTS IN HIS SCHEDULE.
THESE CONDITIONS MUST BE ATTACHED TO THE CONSTRUCTION ON DRAWINGS ON SITE AND AVAILABLE TO ALL CONSTRUCTION PERSONNEL THROUGHOUT THE DURATION OF THE PROJECT.

BOB GABLE
OHIO DEPARTMENT OF NATURAL RESOURCES
1889 FOUNTAIN SQ. CT., BLDG. F-1
COLUMBUS, OH 43224
PHONE: (614) 265-6814

GENERAL NOTES

KNO-715-0-00
COS-715-0-00
COS-206-5.98



ITEM 254 PAVEMENT PLANING, BITUMINOUS, AS PER PLAN

PLANING SHALL BE PERFORMED SUCH THAT THE PAVEMENT SURFACE IS SLOPED AT A RATE OF 0.0156 FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT TO RESTORE THE SLOPE TO THE ROADWAY, SLM 6.16 TO SLM 6.55 (MOHAWK DAM). AFTER PLANING, THE ROADWAY SHALL BE RESURFACED WITH 1.75" ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 AND 1.25" ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22. THE ENGINEER MAY ADJUST PLANING DEPTHS AT ANY TIME TO MEET EXISTING CONDITIONS AT THE TIME OF CONSTRUCTION.

ITEM 254 PAVEMENT PLANING BITUMINOUS, AS PER PLAN
QUANTITIES SHOWN ON SHEET 8.

ITEM 254 PATCHING PLANED SURFACE

A QUANTITY OF SURFACE PATCHING HAS BEEN INCLUDED IN THE PLAN TO REPLACE UNSOUND PAVEMENT RESULTING FROM PLANING. THE ENGINEER WILL DETERMINE WHERE THIS WORK WILL BE PERFORMED. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

- ITEM 254 - PATCHING PLANED SURFACE
- LOCATION 1,
- LOCATION 2,
- LOCATION 3, 600 SQ. YD.
- LOCATION 4,
- QUANTITY CARRIED TO GENERAL SUMMARY

SHOULDER RESTORATION

IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE GRADING AND SHAPING WORK, INCLUDING LABOR AND INCIDENTALS, SHALL BE THE UNIT PRICE BID FOR ITEM SPECIAL - GRADER RENTAL, AND SHALL BE PAID FOR THE ACTUAL NUMBER OF GRADER HOURS WORKED. ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PAYMENT FOR ALL OF THE ABOVE REMOVAL WORK SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - LOADER RENTAL, AND SHALL BE FOR THE ACTUAL NUMBER OF LOADER HOURS WORKED. ANY OTHER EQUIPMENT, LABOR OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED THEREIN FOR PAYMENT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE PURPOSES.

ITEM SPECIAL	LOCATION 1	LOCATION 2	LOCATION 3	LOCATION 4
GRADER RENTAL (HOURS)	3	2	4	1
LOADER RENTAL (HOURS)	6	4	7	1

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	LOC. 1	LOC. 2	LOC. 3	LOC. 4
OW-167 (NO EDGE LINES)	5	3	5	1
R-33 (DO NOT PASS)	6	2	8	2
R-34 (PASS WITH CARE)	2	0	2	0
OW-128 (BEGIN ROAD CONSTRUCTION AHEAD)	6	3	5	2
OC-8 (END ROAD CONSTRUCTION)	6	2	4	1
TOTAL	25	10	24	6

LIQUIDATED DAMAGES FOR EXCESSIVE TIME BETWEEN PLANING AND PAVING

NO MORE THAN 21 CALENDAR DAYS SHALL ELAPSE BETWEEN THE TIME THE PAVEMENT PLANING OPERATION COMMENCES AND THE APPLICATION OF THE ITEM 448, ASPHALT CONCRETE-LIQUIDATED DAMAGES, AS DESCRIBED IN SECTION 108.07 OF THE STATE OF OHIO, CONSTRUCTION AND MATERIAL SPECIFICATIONS WILL BE DEDUCTED FROM ANY MONEY DUE THE CONTRACTOR FOR ALL DAYS IN EXCESS OF THE TIME LIMITS DESCRIBED ABOVE.

FEATHERING

FEATHERING OF THE ASPHALT CONCRETE WHERE REQUIRED SHALL BE ACCORDING TO DRAWING BP-3.1, 2-21-92.

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, TURN ARROWS, ETC., SHOWN ON THE PLAN ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DESIGNATED BY THE ENGINEER.

ITEM 617, COMPACTED AGGREGATE, TYPE A, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE PLASTICITY INDEX SHALL BE WAIVED. IF SO DESIRED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.03) IN LIEU OF CRUSHED LIMESTONE.

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 EXTEND 10 FEET INTO THE DRIVEWAY, MEASURED FROM THE EDGE OF THE PAVEMENT, OR PAVED BERM. FIELD DRIVES AND OIL WELL DRIVES WILL NOT BE PAVED.

ANY GRADING OF EXISTING DRIVES, TACK OR PRIME COAT, ALL MATERIAL, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE WORK ON DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE ASPHALT ITEM SHOWN BELOW. BECAUSE OF PAVEMENT PLANING, AN ESTIMATED QUANTITY OF SURFACE COURSE ONLY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR FEATHERING AT DRIVES.

PAVING OF THE MAINLINE SHALL BE COMPLETED BEFORE THE WORK DESCRIBED ABOVE SHALL BEGIN ON DRIVES.

THE QUANTITIES SHOWN IN THE BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE PURPOSE DESCRIBED ABOVE.

QUANTITIES CARRIED TO GENERAL SUMMARY

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22 (1.75" THICK) [DRIVEWAYS], 34.6 CU.YD. TOTAL.

LOCATION 1	5.5	CU.YD.	LOCATION 3	9.7	CU.YD.
LOCATION 2	15.9	CU.YD.	LOCATION 4	3.5	CU.YD.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 (1.75" THICK) [DRIVEWAYS], 48.6 CU.YD. TOTAL.

LOCATION 1	7.8	CU.YD.	LOCATION 3	13.6	CU.YD.
LOCATION 2	22.3	CU.YD.	LOCATION 4	4.9	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.I, 2-21-92.

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 INTERMEDIATE COURSE, TYPE 1, PG 64-22 AND ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22

QUANTITIES CARRIED TO GENERAL SUMMARY

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22 (1.75" THICK) [DRIVEWAYS], 15.5 CU.YD. TOTAL.

LOCATION 1	1.9	CU.YD.	LOCATION 3	5.8	CU.YD.
LOCATION 2	3.9	CU.YD.	LOCATION 4	3.9	CU.YD.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 (1.75" THICK) [DRIVEWAYS], 21.8 CU.YD. TOTAL

LOCATION 1	2.7	CU.YD.	LOCATION 3	8.2	CU.YD.
LOCATION 2	5.4	CU.YD.	LOCATION 4	5.4	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 WHERE THE EXISTING PAVEMENT HAS DETERIORATED. FINAL LOCATIONS OF PAVEMENT REPAIR SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 5". AFTER PLANING HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH ITEM 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 5" OF ITEM 301 BITUMINOUS AGGREGATE BASE, PG 64-22 (PLACED AND COMPACTED AS DIRECTED BY THE ENGINEER). ALL EXCAVATION NEEDED TO ACHIEVE THE PROPER SLOPES FOR DRAINAGE ON BERMS AND ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN. AFTER ALL PAVEMENT REPAIR HAS BEEN ACCOMPLISHED, THE ENTIRE SURFACE WILL BE OVERLAID WITH 1.75" OF ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 AND 1.25" OF ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN 500 SQ.YD.

PAVED SHOULDERS

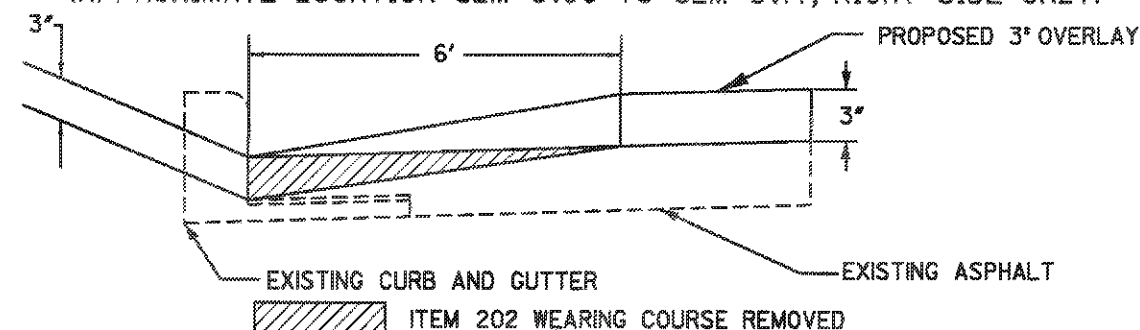
THE PAVED SHOULDER SHALL BE APPLIED IN TWO COURSES. THE FIRST BEING 1.75" OF ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 AND IT SHALL BE APPLIED AT THE TIME AS THE FIRST COURSE ON THE ROADWAY. THE SECOND COURSE SHALL BE 1.25" OF ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22 TO BE APPLIED AT THE SAME TIME AS THE FINAL COURSE ON THE ROADWAY AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITIES FOR THE LOCATION 3 APPROACH PAVEMENT AT COS-715-4.95 STRUCTURE, EXCLUDING CURBED SECTION, AS DIRECTED BY ENGINEER HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS PURPOSE.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 60 CU.YDS.
 ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22 43 CU.YDS.
 ITEM 407 TACK COAT FOR INTERMEDIATE COURSE 62 GAL.
 ITEM 407 TACK COAT 93 GAL.

ITEM 202 WEARING COURSE REMOVED, AS PER PLAN

AREAS OF CURB AND GUTTER WILL REQUIRE ITEM 202 WEARING COURSE REMOVED, AS PER PLAN, AS SHOWN IN THE DETAIL BELOW. IN ADDITION, ASPHALT FEATHERING AS PER STD DWG BP-3.1 (2-21-92) SHALL BE PERFORMED IN THESE AREAS. THE QUANTITY LISTED BELOW HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS PURPOSE.

(APPROXIMATE LOCATION SLM 5.08 TO SLM 5.14, RIGHT SIDE ONLY)



THIS ITEM SHALL ALSO BE USED TO REMOVE SOME GRADER PATCHES THROUGHOUT THE LIMITS OF THE PROJECT, AS DIRECTED BY THE ENGINEER. IT ALSO SHALL BE USED AT LOCATIONS SPECIFIED BY THE ENGINEER TO RESTORE THE CROWN TO THE ROADWAY. AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE PURPOSES DESCRIBED ABOVE.

ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN 2500 SQ. YDS.

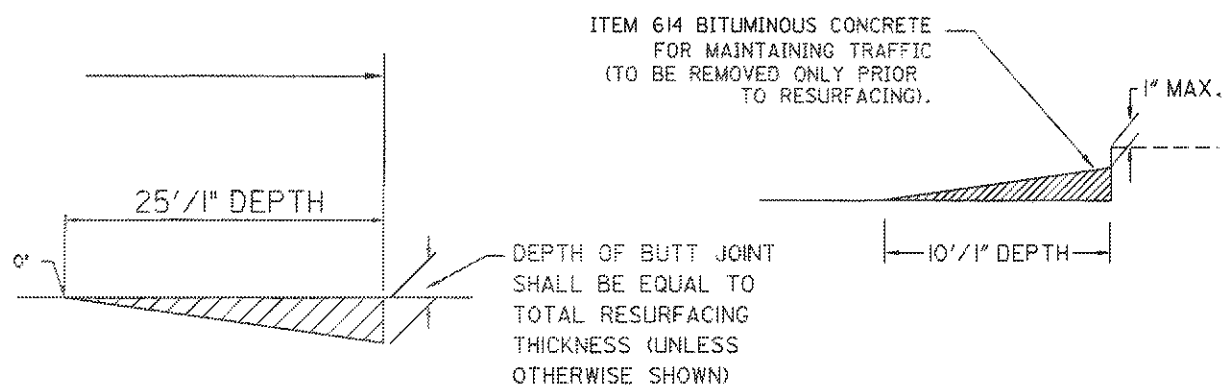
K7150003.MGN 3-8-99

GENERAL NOTES

KNO-715-0.00
 COS-715-0.00
 COS-206-5.98

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 TEMPORARILY FILLING THE VOID TO WITHIN AT LEAST 1" OF THE EXISTING ROADWAY SURFACE (SEE DETAIL BELOW). PLACEMENT AND REMOVAL OF TEMPORARY WEDGE SHALL BE INCLUDED FOR PAYMENT IN THE UNIT BID PRICE FOR THE APPROPRIATE ASPHALT REMOVAL ITEM (PAVEMENT PLANING OR WEARING COURSE REMOVED).



	ITEM 202 WEARING COURSE REMOVED SQ. YD.	ITEM 407 TACK COAT GAL.	ITEM 614 BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC CU. YD.	LOCATION
	200	3	1.5	@ SLM 0.00 LOCATION 1
TOTAL	200	3	1.5	LOCATION 1
	300	6	2.3	BRIDGE @ COS-715-1.82
TOTAL	300	6	2.3	LOCATION 2
	300	6	2.3	BRIDGE @ COS-715-4.13
	300	8	2.8	BRIDGE @ COS-715-4.95
	200	3	1.5	@ SLM 8.21
TOTAL	800	17	6.6	LOCATION 3
	300	3	1.5	BRIDGE @ COS-206-6.04
TOTAL	300	3	1.5	LOCATION 4

TOTALS CARRIED TO GENERAL SUMMARY

GUARDRAIL ITEMS

AT FOLLOWING LOCATIONS NEW GUARDRAIL ITEMS WILL BE INSTALLED AT THE EXISTING DRAINAGE HEADWALL STRUCTURE AS DIRECTED BY THE ENGINEER. MAINTAIN A MINIMUM OF 2' FROM THE EDGE OF PAVEMENT TO THE FACE OF GUARDRAIL OR AS DIRECTED BY THE ENGINEER.
LOCATION 1:

KNO-715-2.10 RT SIDE
PROVIDE 25' ITEM 606, GUARDRAIL, TYPE 5 WITH DOUBLE RAILS (STD DWG. GR 2.4M) CENTERED AT THE STRUCTURE, EXTENDING THE RUN ON EACH END 12.5' WITH GUARDRAIL TYPE 5 ON A 5' RADIUS, ENDING THE RUN WITH TYPE T ANCHOR ASSEMBLIES AT BOTH ENDS

KNO-715-1.42 RT SIDE.
PROVIDE 50' ITEM 606, GUARDRAIL, TYPE 5 (40' APPROACH END AND 10' TRAILING END FROM CENTER OF CULVERT.) WITH TYPE A ANCHOR ASSEMBLY AT BOTH ENDS, FLARED AS PER STD. DWG. GR-4.1

LOCATION 3:

COS-715-7.70 RT SIDE
PROVIDE 25' ITEM 606, GUARDRAIL, TYPE 5 CENTERED AT THE STRUCTURE, EXTENDING THE RUN ON EACH SIDE WITH 12.5' OF GUARDRAIL TYPE 5 ON A 5' RADIUS, ENDING THE RUN WITH TYPE T ANCHOR ASSEMBLIES AT BOTH ENDS.

ITEM EXT.	DESCRIPTION	LOC. 1	LOC. 3
606 13020	GUARDRAIL TYPE 5 WITH DOUBLE RAILS	25 L.F.	-
606 13000	GUARDRAIL, TYPE 5	75 L.F.	25 L.F.
606 25000	ANCHOR ASSEMBLY, TYPE A	2 EA.	--
606 26500	ANCHOR ASSEMBLY, TYPE T	2 EA.	2 EA.
TOTALS CARRIED TO GENERAL SUMMARY			

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.

GENERAL NOTES

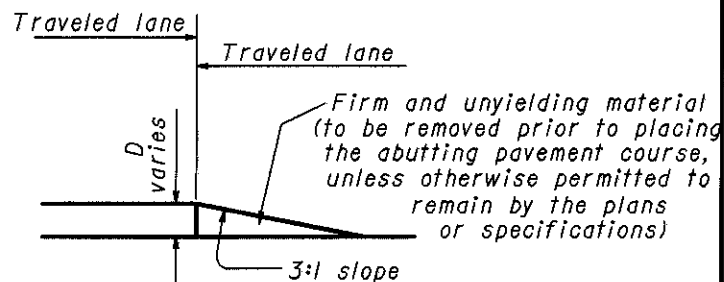
KNO-715-0.00
COS-715-0.00
COS-206-5.98

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. 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 MC-9.2 and Item 622.
6. When drums are specified for a dropoff 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 OW-151 (Low Shoulder) signs or OW-171 (Uneven Lanes) and OWP-171 signs are required, they shall be placed 750' 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 dropoff condition extends more than one-half mile, additional signs should be erected at intervals of one mile or less.
8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any 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', drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 5" and approval is granted by the Project Engineer.
10. Pavement Repairs (or similar work):
 - a. Lengths greater than 60 feet - utilize appropriate treatment from Condition I.
 - b. Lengths of 60 feet or less - repairs shall be effected in accordance with 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. OW-171 and OWP-171 signs required.

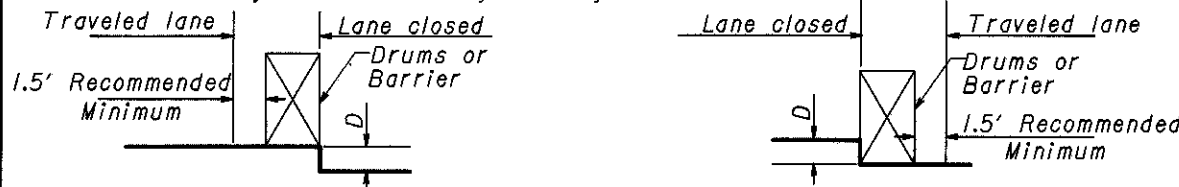


**CONDITION I
DROPOFFS BETWEEN TRAVELED LANES**

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

D (In.)	Treatment
≤ 1/2	Erect OW-171 and OWP-171 signs.
> 1/2 - 3	1) Lane closure utilizing drums* as shown below OR 2) Optional Wedge Treatment
> 3 - 5	Lane closure utilizing drums as shown below.
> 5	Lane closure utilizing portable concrete barrier as shown below.

*Cones may be used for daytime only conditions.

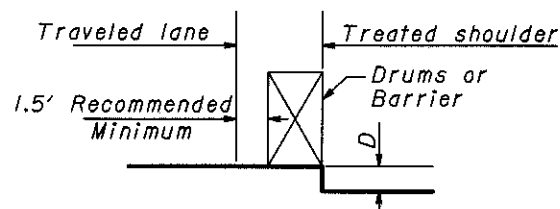


**CONDITION II
DROPOFFS WITHIN GRADED SHOULDER AREA**

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 purposes herein, its maximum width shall be considered to be twelve (12) feet.

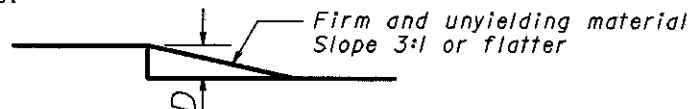
D (In.)	Treatment
≤ 1/2	1) If edgelines are present, no treatment necessary OR 2) Erect OW-171 and OWP-171 signs.
> 1/2 - 5	1) If min. lane width requirements can be met, maintain lanes utilizing drums as shown below OR 2) If min. lane width requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
> 5 - 12 Daylight only	If min. lane width requirements can be met, maintain lanes utilizing drums as shown below.
> 5 - 24	1) If min. lane width requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If min. lane width requirements cannot be met, close adjacent lane utilizing drums.
> 24	Lane closure utilizing portable concrete barrier as shown below.

*Minimum lane widths shall be 10' 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 401.15 is required.
2. OW-151 signs required.



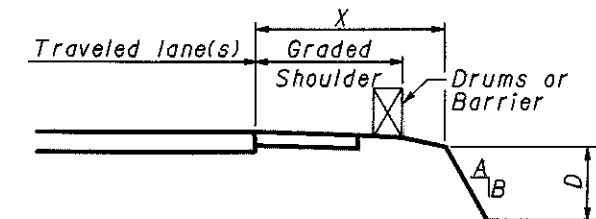
KNO-715-0.00
COS-715-0.00
COS-206-5.98

**CONDITION III
DROPOFFS 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" in height.
 - b. Curbs are 6" or greater in height and the legal speed is greater than 40 mph.

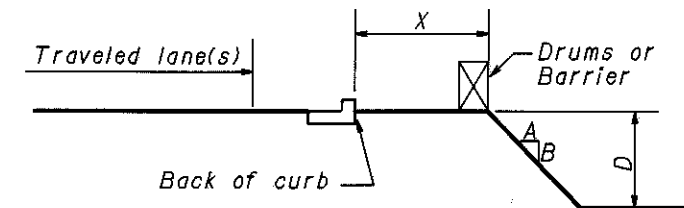


X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-4	Any	Any	(a)	(a)
4-30	Any	3:1 or Flatter	None	None
4-12	< 3	Steeper than 3:1	None	None
4-12	> 3 - < 12	Steeper than 3:1	Drums	Drums
4-12	> 12	Steeper than 3:1	Drums	Barrier
> 12 - 20	< 12	Steeper than 3:1	None	None
> 12 - 20	> 12 - < 24	Steeper than 3:1	Drums	Drums
> 12 - 20	> 24	Steeper than 3:1	Drums	Barrier
> 20 - 30	< 24	Steeper than 3:1	None	Drums
> 20 - 30	> 24	Steeper than 3:1	Drums	Barrier
> 30	Any	Any	None	None

(a) Use treatment specified under Condition II.

CHART B

- USE FOR: Curbed facilities, where the curb is 6" or greater in height and the legal speed is 40 mph or less.



X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-10	< 12	Any	None	Drums
0-10	> 12	Any	Drums	Drums
> 10	Any	Any	None	None

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF LOCATION AND DESIGN

**DROPOFFS IN
WORK ZONES**

DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED

RPM General Notes

Materials Supplied by The Department

All materials are to be Contractor furnished, except that the Department shall supply RPM materials in the quantities shown herein to the Contractor. Pay items for the Department supplied materials shall be indicated as "Installation Only". The quantity and type of Department supplied materials are shown on sheets 11, 12, 13 & 14 of this plan.

The Contractor shall pick up the department supplied RPM materials at the direction of the Project Engineer.

For some projects having quantities of less than 20 RPMs, the contractor may pick up RPM materials at the District Offices. Quantities over 20 RPMs will be picked up at the Recycler's Warehouse or as arranged with the District. 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. The Recycled Raised Pavement Marker (RPM) Authorization Form is to be signed by the District Construction Engineer prior to pick up of the RPMs. The Contractor shall notify the District and / or the parties listed on the authorization form in writing at least five (5) calendar days prior to pick up of the department supplied materials. The contractor shall store the RPMs 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.

Return of Non-performed Raised Pavement Marker Materials Supplied by the Department

Raised Pavement Marker Materials Supplied by the Department, that are non-performed shall be carefully repacked or packed in the boxes in the same style and quantity as originally received from the Department. Casting styles shall not be mixed within any one container. The Contractor shall clearly mark on the outside of each container, the color of the prismatic retro-reflector, the style of casting. Boxes shall be placed on skids or pallets in the same style (Low Profile or Conventional, reflectorised or non reflectorised) and no more than 420 RPMs (or 21 Boxes) on one skid.

Only use the boxes supplied by the Raised Pavement Marker Recycler. Boxes must be marked with the recycler's part or catalog number and the project number. The recycler's catalog or part numbers may be obtained from the Office of Traffic Engineering in Columbus, Ohio or from the recycler. Boxes not marked with the proper recycler's catalog or part numbers, and the department's project number will not be accepted at the recycler's warehouse. Non Performed Materials will be returned to the location as specified by the District Construction Engineer within 30 Days of the completion of the project.

The above work including all labor, equipment and material needed to perform the work, shall be considered incidental to the respective pay item.

If the department has to repackage the RPMs correctly, the Contractor will be assessed the actual cost for repackaging the Materials by the Department's Forces.

Loading of Materials Supplied by the Department at the Recycler's Warehouse

Trucks shall have a loading height of 48 inches and be able to back up flush to the loading dock.

Trucks shall not have any obstructions or protrusions that prevent the loading by a standard forklift or lift truck.

Semi trucks or 20 foot commercial trucks are the most appropriate trucks for loads in excess of 4 pallets (one pallet = 21 boxes = 2000 LBS).

Stake body trucks are appropriate to load less than 4 pallets, provided the truck is rated for the load and the load can be safely secured for transport by chaining or strapping down as needed.

Pickup trucks are appropriate for loads of approximately one pallet, provided the pickup truck is rated for the load and the load can be safely secured for transport.

Dump trucks, tilt bed trucks, and non commercial moving vans will not be loaded by the recyclers warehouse.

The warehouse supervisor will refuse to load any truck that is unsafe to load or unsuitable for the load being placed on the truck.

K715RPM.MGN 3-10-99

GENERAL NOTES

KND-715-0.00
COS-715-0.00
COS-206-5.98

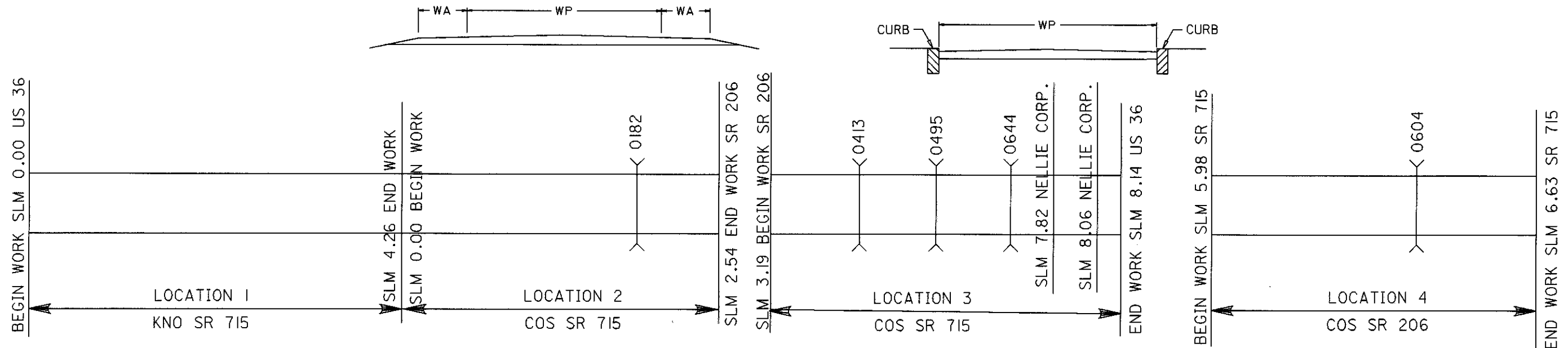
7
18

CALCULATED
LME
CHECKED
TJD

ASPHALT CONCRETE

TYPICAL 1

TYPICAL 2



* PAVEMENT PLANING BETWEEN SLM 6.16± AND 6.55 L± FROM CONCRETE BARRIER TO RIGHT EDGE OF PAVEMENT PROVIDING POSITIVE DRAINAGE SLOPE OF 3/16" / FT TOWARDS GUARDRAIL SIDE. AVERAGE PLANING THICKNESS TO BE 2".

TACK COAT @ 0.25 GAL/SQ.YD.

LOCATION	ROUTE	CO.	LOG POINT TO LOG POINT	(I) BRIDGE LENGTH X PAVEMENT WIDTH		WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YDS.	PAVEMENT DATA						PAVEMENT PLANING, BITUMINOUS, AS PER PLAN	TEMPORARY CENTER LINE, CLASS II MILE	COMPACTED AGGREGATE AS PER PLAN 2'X3.5" AVER. THICKNESS CU.YDS.	SHOULDER PREPARATION SQ.YDS.	LIN. FT.		
				LENGTH MILES	LENGTH LIN. FT.					PROPOSED PAVEMENT				THICK INCHES	INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU.YDS.						THICK INCHES	SURFACE COURSE, TYPE 1, PG 64-22 CU.YDS.
										TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	407	448 ASPHALT CONCRETE									
1	SR 715	KNO	0.00-4.26	4.26	22,493	18	I	405 OR 406	44,986	3374	2249	1.75	2186.8	1.25	1562.0		4.26	972	9997	22,493		
EXTRA TACK COAT FOR LONGITUDINAL JOINT										156												
TOTALS TO GENERAL SUMMARY LOCATION 1										3530	2249		2187		1562		4.26	972	9997			
2	SR 715	COS	0.00-2.54	2.54	13,411	18	I	405 OR 406	26,822	2012	1341	1.75	1303.8	1.25	931.3		2.54	579	5960	13,411		
EXTRA TACK COAT FOR LONGITUDINAL JOINT										93												
BRIDGE DEDUCTIONS										(48)	(32)		(31.3)		(22.3)				(14)	(142)		
TOTALS TO GENERAL SUMMARY LOCATION 2										2057	1309		1273		909.0		2.54	565	5818			
3	SR 715	COS	3.19-4.80	1.61	8501	18	I	405 OR 406	17002	1275	850	1.75	826.5	1.25	590.3		5.02	367	3778	8501		
3	SR 715	COS	4.80-5.14	0.34	1,795	22	I	404	4,388	329	219	1.75	213.3	1.25	152.4			78	798	1,795		
	SR 715	COS	5.14-6.16	1.02	5,386	18	I	405 OR 406	10,772	808	539	1.75	523.6	1.25	374.0			233	2394	5,386		
	SR 715	COS	6.16-6.55	0.39	2059	22 #	I	404	5,033	377	252	1.75	244.6	1.25	174.8	#5033		40	444	2059		
	SR 715	COS	6.55-8.21	1.66	8765	20	I	404	19,478	1461	974	1.75	946.8	1.25	676.3			379	3896	8765		
EXTRA TACK COAT FOR LONGITUDINAL JOINT										188												
BRIDGE DEDUCTIONS										(144)	(96)		(93.9)		(67.1)				(37)	(378)		
TOTALS TO GENERAL SUMMARY LOCATION 3										4294	2738		2661		1901		5.02	1060	10932			
4	SR 206	COS	5.98-6.50	0.52	2,746	20	I	404	6,102	458	305	1.75	296.6	1.25	211.9		0.65	119	1220	2,746		
4	SR 206	COS	6.50-6.63	0.13	686	18	I	405 OR 406	1,372	103	69	1.75	66.7	1.25	47.6			30	305	686		
EXTRA TACK COAT FOR LONGITUDINAL JOINT										24												
BRIDGE DEDUCTIONS										(46)	(31)		(29.9)		(21.4)				(13)	(137)		
TOTALS TO GENERAL SUMMARY LOCATION 4										539	343		333		238		0.65	136	1388			

K715001.MAC 3-8-99

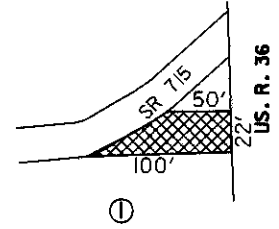
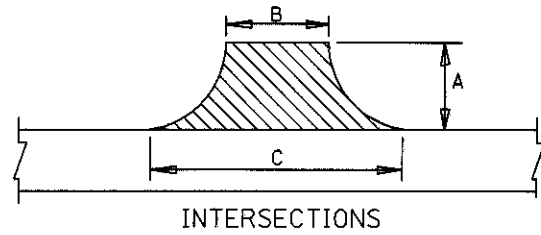
CALCULATED
LME
CHECKED
TJD

ASPHALT CONCRETE

KNO-715-0.00
COS-715-0.00
COS-206-5.98

8
18

EXTRA AREAS



LOCATION	ROUTE	LOG POINT TO LOG POINT	SIDE	DESCRIPTION	INTERSECTIONS			AREA IN SQ.YD.	407		448 ASPHALT CONCRETE				EXISTING SURFACE	202 WEARING COURSE REMOVED SQ.YD.	304 AGGREGATE BASE CU.YD.	203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION CU.YD.	408 PRIME COAT @ 0.40 gal./s.y. GAL.		
					A IN FEET	B IN FEET	C IN FEET		TACK COAT @ 0.075 gal./s.y. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y. GAL.	THICK INCH	INTERMEDIATE COURSE, TYPE 2, PG 64-22 (DRIVEWAYS) CU.YD.	THICK INCH	SURFACE COURSE, TYPE 1, PG 64-22 (DRIVEWAYS) CU.YD.							
1	SR 715	KNO	LT	@ US 36	--																
			CL	US 36																	
			RT	CO. RD. 036	44	16	64	196	15	10	1.75	9.5	1.25	6.8	asphalt	196					
			LT	TWP. RD. 208	15	15	43	48		2	1.75	2.3	1.25	1.7	gravel				19.2		
			LT	TWP. RD. 209	43	18	120	330		16	1.75	16	1.25	11.4	gravel				132		
			LT	TWP. RD. 616																	
			RT	TWP. RD. 201	66	16	150	609		30	1.75	29.6	1.25	21.1	gravel				243.6		
			LT	TWP. RD. 211	25	16	55	99		5	1.75	4.8	1.25	3.4	gravel				39.6		
			CL	TWP. RD. 203 LT.	30	16	104	200		10	1.75	9.7	1.25	6.9	gravel				80		
	TWP. RD. 203 RT.	45	16	60	190		10	1.75	9.2	1.25	6.6	gravel				76					
	TWP. RD. 202	40	12	60	160		8	1.75	7.8	1.25	5.6	gravel				64					
TOTALS LOCATION 1 CARRIED TO GENERAL SUMMARY									15	91		88.9		63.5		196	60	60	654		
2	SR 715	COS	LT	TWP. RD. 366	22	18	90	132		7	1.75	6.4	1.25	4.6	gravel				52.8		
			RT	TWP. RD. 423	27	16	70	129		6	1.75	6.3	1.25	4.5	gravel				51.6		
			LT	CO. RD. 368	35	20	67	169		13	1.75	8.2	1.25	5.9	asphalt	169					
			LT	ST. RD. 206	35	18	70	171		13	1.75	8.3	1.25	5.9	asphalt	171					
TOTALS LOCATION 2 CARRIED TO GENERAL SUMMARY									26	30		29.2		20.9		340	36	36	104		
3	SR 715	COS	RT	ST. RD. 206	57	20	108	405	30	20	1.75	19.7	1.25	14.1	asphalt	405					
			LT	CO. RD. 20	48	18	63	216		11	1.75	10.5	1.25	7.5	gravel				86.4		
				@ US 36				367		28	1.75	17.8	1.25	12.7	asphalt						
TOTALS LOCATION 3 CARRIED TO GENERAL SUMMARY									58	49		48		34.3		405	6	6	86		
4	SR 206	COS	RT	TWP. RD. 518	26	18	50	98	7	5	1.75	4.8	1.25	3.4	asphalt	98					
			RT	TWP. RD. 487	44	18	75	227		11	1.75	11.1	1.25	7.9	gravel				90.8		
			RT	TWP. RD. 517	12	12	25	25		2	1.75	1.2	1.25	0.9	asphalt	25					
			RT	TWP. RD. 516	70	32	110	552		41	1.75	26.8	1.25	19.2	asphalt	110					
TOTALS LOCATION 4 CARRIED TO GENERAL SUMMARY									50	45		43.9		31.4		233	4	4	91		

K715001.MEA 3-8-99

CALCULATED
LME
CHECKED
T.J.D.

EXTRA AREAS & DEDUCTIONS

KNO-715-0.00
COS-715-0.00
COS-206-5.98

LENGTH OF APPROACH SLAB IN FEET	BRIDGE LENGTH IN FEET	LENGTH OF APPROACH SLAB IN FEET	ACTION
25	COS-715-1.82 ———-269	— 25 —	SKIP & BUTT JOINT@APPROACH
25	COS-715-4.13 ———-255	— 25 —	SKIP & BUTT JOINT@APPROACH
25	COS-715-4.95 ———-435	— 25 —	SKIP & BUTT JOINT@APPROACH
—	COS-715-6.44 ———-60	— —	PAVE OVER
20	COS-206-6.04 ———-268	— 20 —	SKIP & BUTT JOINT@APPROACH

BRIDGE DECK DATA

LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS) LIN.FT.	WIDTH LIN.FT.	BRIDGE DECK AREA SQ.YDS.	WEARING COURSE REMOVED DEPTH VAR." SQ.YDS.	DEDUCT AREA PAVEMENT WIDTH X BRIDGE LENGTH INCLUDING APPROACH SLABS = SQ. YDS.	BRIDGE DEDUCT QUANTITIES INCLUDING APPROACH SLABS													
							202		407		448 ASPHALT CONCRETE				407		448 ASPHALT CONCRETE			
							TACK COAT @ 0.075 GAL./S.Y. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y. GAL.	THICK INCH	INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU.YDS.	THICK INCH	SURFACE COURSE, TYPE 1, PG 64-22 CU.YDS.	TACK COAT @ 0.075 GAL./S.Y. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y. GAL.	THICK INCH	INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU.YDS.	THICK INCH	SURFACE COURSE, TYPE 1, PG 64-22 CU.YDS.		
2	SR715 COS-715-1.82	269	26			18 X (269 + 50) / 9 = 638			1.75		1.25			48	32	1.75	31.3	1.25	22.3	
3	SR715 COS-715-4.13	255	26			18 X (255 + 50) / 9 = 610			1.75		1.25			46	31	1.75	29.9	1.25	21.4	
	SR715 COS-715-4.95	435	26			22 X (435 + 50) / 9 = 1186			1.75		1.25			89	59	1.75	57.6	1.25	41.5	
	SR715 COS-715-6.44	60	26	173.33		18 X (60) / 9 = 120	13	9	1.75	8.5	1.25	6.1	9	6	1.75	5.9	1.25	4.2		
4	SR206 COS-206-6.04	268	26			18 X (268 + 40) / 9 = 616			1.75		1.25			46	31	1.75	29.9	1.25	21.4	
TOTALS TO GENERAL SUMMARY LOCATION 3							13	9		8.5		6.1								
TOTALS TO ASPHALT CONCRETE SHEET 8 LOCATION 1																				
TOTALS TO ASPHALT CONCRETE SHEET 8 LOCATION 2														48	32		31.3		22.3	
TOTALS TO ASPHALT CONCRETE SHEET 8 LOCATION 3														144	96		93.9		67.1	
TOTALS TO ASPHALT CONCRETE SHEET 8 LOCATION 4														46	31		29.9		21.4	

K715001.MBT 3-8-99

BRIDGE DECK TREATMENT

KNO-715-0.00
COS-715-0.00
COS-206-5.98

CALC. BY SAB
DATE 2-15-99

CHKD. BY _____
DATE _____

LOCATION SUB-SUMMARY

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' (NOTE 2)
12	HORIZONTAL CURVE ALT. (NOTE 3)
GAP	CENTERLINE AT 80' TYP.

LOCATION	LOCATION				DETAIL	RPM	ITEM QUANTITIES			PRISMATIC RETRO-REFLECTOR	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
	COUNTY	ROUTE	S.L.M. MILES				INSTALLATION ONLY				ONE-WAY		TWO-WAY			
			FROM	TO			RPM	RPM CASTING	PRISMATIC RETRO-REFLECTOR		WHITE	YELLOW	YELLOW/YELLOW	WHITE/RED	YELLOW/RED	
I	KNO	SR 715	0.00	0.16	7		38				16		22			STOP @ US 36 CL @ 40'
I	KNO	SR 715	0.16	0.32	11		21						21			PC 0.16 PT 0.32 L = 845' DEG 7
I	KNO	SR 715	0.32	0.59	12		46						46			PC 0.42 PT 0.50 L = 422' DEG 12
I	KNO	SR 715	0.59	1.30	GAP		47						47			
I	KNO	SR 715	1.30	1.51	12		38						38			PC 1.39 PT 1.46 L = 370' DEG 18
I	KNO	SR 715	1.51	1.63	11		16						16			PC 1.51 PT 1.63 L = 634' DEG 6
I	KNO	SR 715	1.63	1.93	GAP		20						20			
I	KNO	SR 715	1.93	1.96	11		4						4			PC 1.93 PT 1.96 L = 158' DEG 8
I	KNO	SR 715	1.96	2.10	12		27						27			PC 1.96 PT 2.02 L = 317' DEG 18
I	KNO	SR 715	2.10	2.12	11		3						3			PC 2.10 PT 2.12 L = 106' DEG 9
I	KNO	SR 715	2.12	2.29	12		23						23			PC 2.16 PT 2.20 L = 211' DEG 20
I	KNO	SR 715	2.29	2.32	11		4						4			PC 2.29 PT 2.32 L = 158' DEG 6
I	KNO	SR 715	2.32	2.65	GAP		22						22			
I	KNO	SR 715	2.65	2.68	11		4						4			PC 2.65 PT 2.68 L = 158' DEG 9
I	KNO	SR 715	2.68	2.76	GAP		5						5			
I	KNO	SR 715	2.76	2.98	12		36						36			PC 2.85 PT 2.89 L = 211' DEG 15
I	KNO	SR 715	2.98	3.00	GAP		1						1			
I	KNO	SR 715	3.00	3.03	11		4						4			PC 3.00 PT 3.03 L = 158' DEG 9
I	KNO	SR 715	3.03	3.16	12		21						21			PC 3.04 PT 3.07 L = 158' DEG 26
I	KNO	SR 715	3.16	3.45	GAP		19						19			
I	KNO	SR 715	3.45	3.48	11		4						4			PC 3.45 PT 3.48 L = 158' DEG 6
I	KNO	SR 715	3.48	3.63	12		30						30			PC 3.51 PT 3.59 L = 422' DEG 13
I	KNO	SR 715	3.63	3.74	12		20						20			PC 3.63 PT 3.67 L = 211' DEG 13
I	KNO	SR 715	3.74	3.79	11		7						7			PC 3.74 PT 3.79 L = 264' DEG 9
I	KNO	SR 715	3.79	3.95	12		31						31			PC 3.83 PT 3.90 L = 370' DEG 16
TOTALS LOCATION I CARRIED TO SHEET 14							491									

CALCULATED
SAB
CHECKED
LME

RPM LOCATION SUB-SUMMARY

K715001.TRM 3-10-99

KNO-715-0.00
COS-715-0.00
COS-206-5.98

CALC. BY SAB
DATE 2-15-99
CHKD. BY _____
DATE _____

LOCATION SUB-SUMMARY

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' (NOTE 2)
12	HORIZONTAL CURVE ALT. (NOTE 3)
GAP	CENTERLINE AT 80' TYP.

LOCATION	LOCATION				DETAIL	RPM	ITEM QUANTITIES			PRISMATIC RETRO-REFLECTOR	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS	
	COUNTY	ROUTE	S.L.M. MILES				INSTALLATION ONLY				ONE-WAY		TWO-WAY				
			FROM	TO			RPM	RPM CASTING	PRISMATIC RETRO-REFLECTOR		WHITE	YELLOW	YELLOW/YELLOW	WHITE/RED	YELLOW/RED		
I	KNO	SR 715	3.95	4.01	11		8						8			PC 3.95 PT 4.01 L = 317' DEG 8	
I	KNO	SR 715	4.01	4.05	GAP		3						3				
I	KNO	SR 715	4.05	4.09	11		5						5			PC 4.05 PT 4.09 L = 211' DEG 7	
I	KNO	SR 715	4.09	4.19	GAP		7						7				
I	KNO	SR 715	4.19	4.24	11		7						7			PC 4.19 PT 4.24 L = 264' DEG 7	
I	KNO	SR 715	4.24	4.26	GAP		1						1				
TOTALS LOCATION 1 CARRIED TO SHEET 14							31										
2	COS	SR 715	0.00	0.06	12		12						12			PC 0.00 PT 0.03 L = 158' DEG 11	
2	COS	SR 715	0.06	0.17	12		17						17			PC 0.06 PT 0.08 L = 106' DEG 11	
2	COS	SR 715	0.17	0.34	GAP		11						11				
2	COS	SR 715	0.34	0.18	11		19						19			PC 0.34 PT 0.48 L = 739' DEG 7	
2	COS	SR 715	0.48	0.58	GAP		7						7				
2	COS	SR 715	0.58	0.62	11		11						11			PC 0.58 PT 0.62 L = 422' DEG 7	
2	COS	SR 715	0.62	2.54	GAP		127						127				
TOTALS LOCATION 2 CARRIED TO SHEET 14							204										
3	COS	SR 715	3.19	3.32	12		23						23			PC 3.19 PT 3.23 L = 211' DEG 12	
3	COS	SR 715	3.32	3.35	11		4						4			PC 3.32 PT 3.35 L = 158' DEG 9	
3	COS	SR 715	3.35	3.49	12		23						23			PC 3.37 PT 3.40 L = 158' DEG 13	
3	COS	SR 715	3.49	3.87	GAP		25						25				
TOTALS LOCATION 3 CARRIED TO SHEET 14							75										

K715002.TRM 3-10-99

CALCULATED BY SAB CHECKED BY LME
RPM LOCATION SUB-SUMMARY
KNO-715-0.00
COS-715-0.00
COS-206-5.98
12/18

CALC. BY SAB
DATE 2-15-99
CHKD. BY _____
DATE _____

LOCATION SUB-SUMMARY

CALCULATED
SAB
CHECKED
LWE

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' (NOTE 2)
12	HORIZONTAL CURVE ALT. (NOTE 3)
GAP	CENTERLINE AT 80' TYP.

LOCATION	LOCATION				DETAIL	RPM	ITEM QUANTITIES			PRISMATIC RETRO-REFLECTOR	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
	COUNTY	ROUTE	S.L.M. MILES				INSTALLATION ONLY				ONE-WAY		TWO-WAY			
			FROM	TO			RPM	RPM CASTING	PRISMATIC RETRO-REFLECTOR		WHITE	YELLOW	YELLOW/YELLOW	WHITE/RED	YELLOW/RED	
3	COS	SR 715	3.87	4.15	12		50						50			PC 3.96 PT 4.06 L = 528' DEG 11
3	COS	SR 715	4.15	4.25	12		22						22			PC 4.18 PT 4.20 L = 211' DEG 14
3	COS	SR 715	4.25	4.36	12		23						23			PC 4.25 PT 4.27 L = 211' DEG 12
3	COS	SR 715	4.36	4.82	GAP		30						30			
3	COS	SR 715	4.82	5.02	12		29						29			PC 4.91 PT 4.93 L = 106' DEG 28
3	COS	SR 715	5.02	5.18	12		28						28			PC 5.04 PT 5.09 L = 264' DEG 13
3	COS	SR 715	5.18	5.33	GAP		10						10			
3	COS	SR 715	5.33	5.63	12		56						56			PC 5.42 PT 5.54 L = 634' DEG 15
3	COS	SR 715	5.63	5.76	GAP		9						9			
3	COS	SR 715	5.76	5.90	11		18						18			PC 5.76 PT 5.90 L = 739' DEG 9
3	COS	SR 715	5.90	6.12	GAP		15						15			
3	COS	SR 715	6.12	6.36	12		40						40			PC 6.21 PT 6.27 L = 317' DEG 12
3	COS	SR 715	6.36	6.41	GAP		3						3			
3	COS	SR 715	6.41	6.67	12		45						45			PC 6.50 PT 6.58 L = 422' DEG 25
3	COS	SR 715	6.67	6.88	GAP		14						14			
3	COS	SR 715	6.88	7.02	11		18						18			PC 6.88 PT 7.02 L = 739' DEG 7
3	COS	SR 715	7.02	7.25	GAP		15						15			
3	COS	SR 715	7.25	7.31	11		8						8			PC 7.25 PT 7.31 L = 317' DEG 8
3	COS	SR 715	7.31	7.76	GAP		30						30			
3	COS	SR 715	7.76	7.83	11		9						9			PC 7.76 PT 7.83 L = 370' DEG 8
3	COS	SR 715	7.83	8.05	GAP		15						15			
3	COS	SR 715	8.05	8.21	7		39						26		13	STOP @ US 36 INCLUDES EXTRA AREA , CENTER LINE & EDGE LINE
TOTALS LOCATION 3 CARRIED TO SHEET 14							526									

RPM LOCATION SUB-SUMMARY

KNC-715-0.00
COS-715-0.00
COS-206-5.98

K7150003TRM 3-10-99

CALC. BY SAB
DATE 2-15-99
CHKD. BY _____
DATE _____

LOCATION SUB-SUMMARY

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' (NOTE 2)
12	HORIZONTAL CURVE ALT. (NOTE 3)
GAP	CENTERLINE AT 80' TYP.

LOCATION	LOCATION				DETAIL	RPM	ITEM QUANTITIES			PRISMATIC RETRO-REFLECTOR	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS	
	COUNTY	ROUTE	S.L.M. MILES				INSTALLATION ONLY				ONE-WAY		TWO-WAY				
			FROM	TO			RPM	RPM CASTING	PRISMATIC RETRO-REFLECTOR		WHITE	YELLOW	YELLOW/YELLOW	WHITE/RED	YELLOW/RED		
4	COS	SR 206	5.98	6.26	12		52					52				PC 6.06 PT 6.17 L = 581' DEG 13	
4	COS	SR 206	6.26	6.42	12		27					27				PC 6.29 PT 6.33 L = 211' DEG 26	
4	COS	SR 206	6.42	6.49	GAP		5					5					
4	COS	SR 206	6.49	6.63	12		25					25				PC 6.58 PT 6.63 L = 264' DEG 12	
TOTALS LOCATION 4							109										
LOCATION 1 TOTAL FROM SHEET 11							491										
LOCATION 1 TOTAL FROM SHEET 12							31										
LOCATION 1 TOTAL CARRIED TO GENERAL SUMMARY							522										
LOCATION 2 TOTAL FROM SHEET 12							204										
LOCATION 2 TOTAL CARRIED TO GENERAL SUMMARY							204										
LOCATION 3 TOTAL FROM SHEET 12							75										
LOCATION 3 TOTAL FROM SHEET 13							526										
LOCATION 3 TOTAL CARRIED TO GENERAL SUMMARY							601										
LOCATION 4 TOTAL THIS SHEET							109										
LOCATION 4 TOTAL CARRIED TO GENERAL SUMMARY							109										

CALCULATED BY SAB
 CHECKED LME
 RPM LOCATION SUB-SUMMARY
 KNO-715-0.00
 COS-715-0.00
 COS-206-5.98
 14/8

K751004.TRM 3-10-99

CENTER LINE SUB-SUMMARY

PLAN NO.

QUANTITIES INCLUDE CL AROUND OUTSIDE OF PAINTED ISLAND

LOCATION	CO.	ROUTE	S.L.M.		CENTER LINES QUANTITIES		PARTICIPATION TYPE				TOTAL CENTER LINE	REMARKS
			FROM	TO	TOTAL MILES	EQUIVALENT SOLID LINE	IRG	FG	RSG	NON FED STATE		
1	KNO	715	0.00	4.26	*4.26	7.986					4.26	S.L.M. 0.00 TO COSHOCTON COUNTY
2	COS	715	0.00	2.54	*2.54	2.540					2.54	S.L.M. 0.00 TO S.L.M. 2.54 @ S.R. 206
3	COS	715	3.19	8.21	*5.02	11.391					5.02	S.L.M. 3.19 TO S.L.M. 8.21
4	COS	206	5.98	6.63	*0.65	1.310					0.65	S.L.M. 5.98 @ S.R. 206 TO S.L.M. 6.63 @ S.R. 715
	* TOTAL TO GENERAL SUMMARY											

EDGE LINE SUB-SUMMARY

LOCATION	CO.	ROUTE	S.L.M.		WHITE EDGE LINE QU.			YELLOW EDGE LINE QU.			PARTICIPATION TYPE				EDGE LINE TOTAL MILES	REMARKS
			FROM	TO	TOTAL MILES	HIGHWAY	RAMP	TOTAL MILES	HIGHWAY	RAMP	IRG	FG	RSG	NON FED STATE		
1	KNO	715	0.00	4.26	*8.52	8.52								8.52	S.L.M. 0.00 TO COSHOCTON COUNTY	
2	COS	715	0.00	2.54	*5.08	5.08								5.08	S.L.M. 0.00 TO S.L.M. 2.54 @ S.R. 206	
3	COS	715	3.19	8.21	*16.42	16.42								16.42	S.L.M. 3.19 TO S.L.M. 8.21	
4	COS	206	5.98	6.63	*1.30	1.30								1.30	S.L.M. 5.98 @ S.R. 206 TO S.L.M. 6.63 @ S.R. 715	
	* TOTAL TO GENERAL SUMMARY															

K715001.TCL 3-8-99

CALCULATED LIME CHECKED TJD
 CENTER/EDGE LINE SUB-SUMMARY
 KNO-715-0.00
 COS-715-0.00
 COS-206-5.98
15

PAVEMENT MARKING SUB-SUMMARY

CALCULATED
LIME
CHECKED
TJD

L O C A T I O N	644 THERMOPLASTIC																REMARKS			
	LOCATION	SIDE OR S.L.M.	24" TRANSVERSE LINES		STOP LINE 24" LIN.FT.	12" CROSSWALK LINES		8" CROSSWALK LINES		WORD ON PAVEMENT				LANE ARROWS				DOTTED LINES		8" CHANNEL LINE LIN.FT.
			WHITE	YELLOW		WHITE	WHITE	ONLY		SCHOOL		LEFT	RIGHT	THRU	WHITE	YELLOW				
			LIN.FT.	LIN.FT.		LIN.FT.	LIN.FT.	72" EACH	96" EACH	72" EACH	96" EACH				LIN.FT.	LIN.FT.				
1	SR 715																			
KNO	@ US 36	LT			26														PLACE AS DIRECTED BY ENGINEER	
	CO. RD. 036	RT			18														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 208	LT			17														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 209	LT			20														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 616	LT			18														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 201	RT			18														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 211	LT			18														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 203	☐			18														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 202	LT			14														PLACE AS DIRECTED BY ENGINEER	
TOTALS LOCATION 1 CARRIED TO GENERAL SUMMARY					167															
2	SR 715																			
COS	TWP. RD. 366	LT			23														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 423	RT			18														PLACE AS DIRECTED BY ENGINEER	
	CO. RD. 368	LT			23														PLACE AS DIRECTED BY ENGINEER	
	ST. RD. 206	LT			20														PLACE AS DIRECTED BY ENGINEER	
TOTALS LOCATION 2 CARRIED TO GENERAL SUMMARY					84															
3	SR 715																			
COS	ST. RD. 206	RT			22														PLACE AS DIRECTED BY ENGINEER	
	CO. RD. 20	LT			20														PLACE AS DIRECTED BY ENGINEER	
	US 36	RT			26														PLACE AS DIRECTED BY ENGINEER	
	@ US 36	RT			26														PLACE AS DIRECTED BY ENGINEER	
TOTALS LOCATION 3 CARRIED TO GENERAL SUMMARY					94															
4	SR 206																			
COS	TWP. RD. 518	RT			22														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 487	RT			20														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 517	RT			14														PLACE AS DIRECTED BY ENGINEER	
	TWP. RD. 516	RT			36														PLACE AS DIRECTED BY ENGINEER	
TOTALS LOCATION 4 CARRIED TO GENERAL SUMMARY					92															

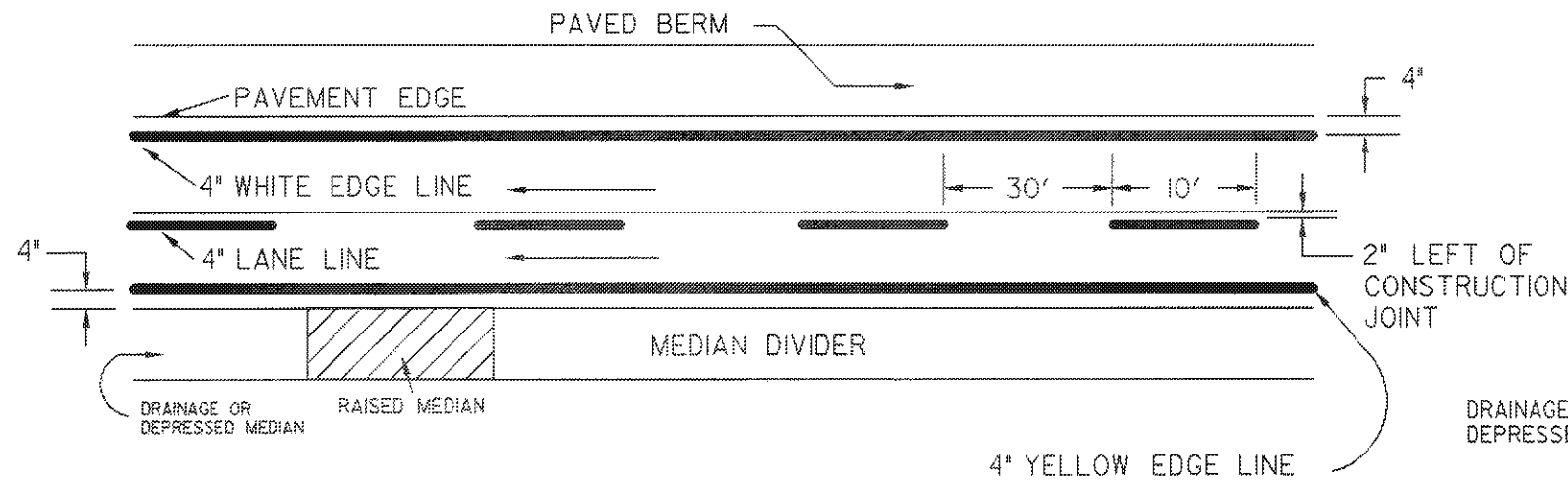
PAVEMENT MARKING

K715001.TAS 3-8-99

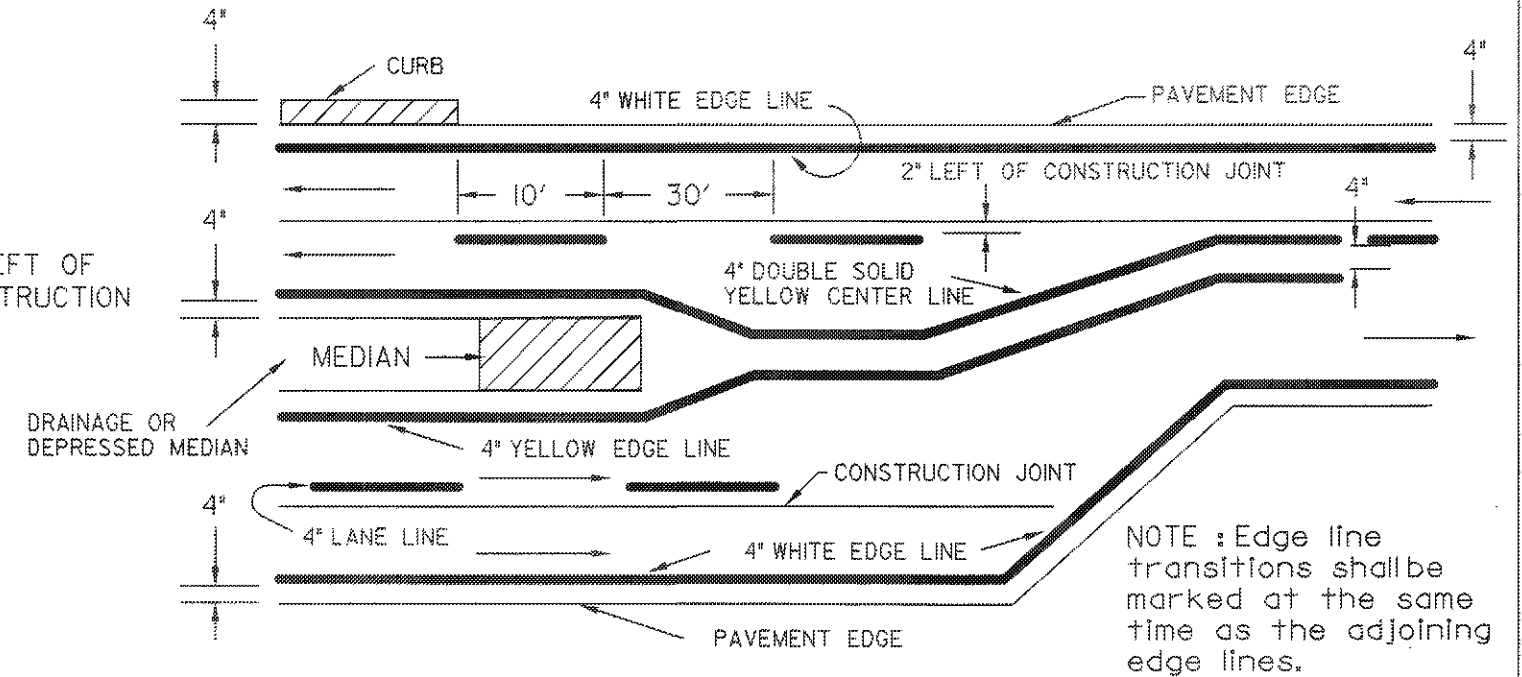
KNO-715-0.00
COS-715-0.00
COS-206-5.98

16
18

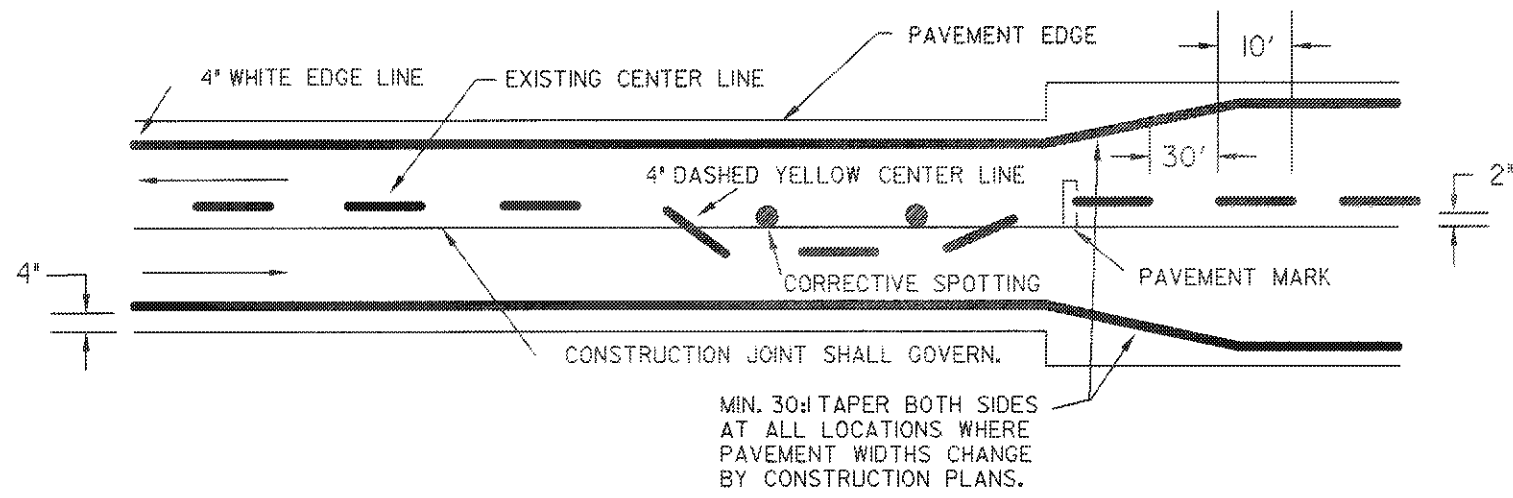
FREEWAY & EXPRESSWAY MAINLINE MARKINGS



MULTILANE DIVIDED & UNDIVIDED HIGHWAY MARKINGS



TWO LANE MARKINGS



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-72.20 for entrance and exit ramp markings.
3. The cycle length for dashed lines shall be 40 feet plus or minus 6 inches. The minimum length of dash shall be sufficiently long to maintain a 3:1 ratio between length of gap and length of dash.

Ohio Department of Transportation

Pavement Marking
Typical Details

DATE
8-80
9-86
9-98

KNO-715-0.00
COS-715-0.00
COS-206-5.98

PAVEMENT MARKING TYPICALS

LOCATION 1 (SHEET TOTALS)						LOCATION 2 (SHEET TOTALS)						LOCATION 3 (SHEET TOTALS)						LOCATION 4 (SHEET TOTALS)						ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	
3	4	5	8	9	10	3	4	5	8	9	10	3	4	5	8	9	10	3	4	5	8	9	10						
		200		196				300		340				800		405				300		233		202	23500	2774	SQ YD	WEARING COURSE REMOVED	
																								202	23501	2500	SQ YD	WEARING COURSE REMOVED, AS PER PLAN	
				60						36						6						4		203	12000	106	CU YD	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION,	
3						2						4						1						SPECIAL	20363000	10	HOUR	GRADER RENTAL	
6						4						7						1						SPECIAL	20363500	18	HOUR	LOADER RENTAL	
																								253	01001	500	SQ YD	PAVEMENT REPAIR, AS PER PLAN	
																								254	01001	5033	SQ YD	PAVEMENT PLANING, BITUMINOUS, AS PER PLAN	
												600												254	01600	600	SQ YD	PATCHING PLANED SURFACE	
				60						36						6						4		304	20000	106	CU YD	AGGREGATE BASE	
		3	3530	15				6	2057	26			93	17	4294	58	13		3	539	50			407	10000	10704	GALLON	TACK COAT	
			2249	91					1309	30			62		2738	49	9			343	45			407	14000	6925	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
				654						104						86						91		408	10000	935	GALLON	BITUMINOUS PRIME COAT	
	10.5			88.9			27.7			29.2			21.8			48	8.5		10.3			43.9		448	46024	289	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 (DRIVEWAYS)	
			2187						1273				60		2661					333				448	46050	6514	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	
			1562						909				43		1901		6			238				448	47020	4659	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	
	7.4			63.5			19.8			20.9			15.5			34.3			7.4			31.4		448	48020	200	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)	
														25										606	13000	100	LIN.FT.	GUARDRAIL, TYPE 5	
																								606	13020	25	LIN.FT.	GUARDRAIL, TYPE 5 WITH DOUBLE RAILS	
																								606	25000	2	EACH	ANCHOR ASSEMBLY, TYPE A	
													2											606	26500	4	EACH	ANCHOR ASSEMBLY, TYPE T	
LOCATION 1 (SHEET TOTALS)						LOCATION 2 (SHEET TOTALS)						LOCATION 3 (SHEET TOTALS)						LOCATION 4 (SHEET TOTALS)											
3	5	8	14	15	16	3	5	8	14	15	16	3	5	8	14	15	16	3	5	8	14	15	16						
25						10						24						6						614	12460	65	EACH	WORK ZONE MARKING SIGN	
	1.5						2.3						6.6						1.5					614	13000	12	CU YD	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	
		4.26						2.54						5.02						0.65				614	21400	12.47	MILE	TEMPORARY CENTER LINE, CLASS II	
			972						565						1060						136			617	10101	2733	CU YD	COMPACTED AGGREGATE, TYPE A, AS PER PLAN	
			9997						5818						10932						1388			617	20000	28135	SQ YD	SHOULDER PREPARATION	
				109						522						601						109		621	00200	1341	EACH	RAISED PAVEMENT MARKER, INSTALLATION ONLY	
					8.52						5.08					16.42							1.30	642	00100	31.32	MILE	EDGE LINE, TYPE I	
					4.26						2.54					5.02							0.65	642	00300	12.47	MILE	CENTER LINE, TYPE I	
						167											84							92	642	00490	437	LIN FT	STOP LINE
																								614	11000	LUMP		MAINTAINING TRAFFIC	
																								623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
																								624	10000	LUMP		MOBILIZATION	
																								806	16000	2	MONTH	FIELD OFFICE, TYPE A	

GENERAL SUMMARY

KNO-715-0.00
COS-715-0.00
COS-206-5.98