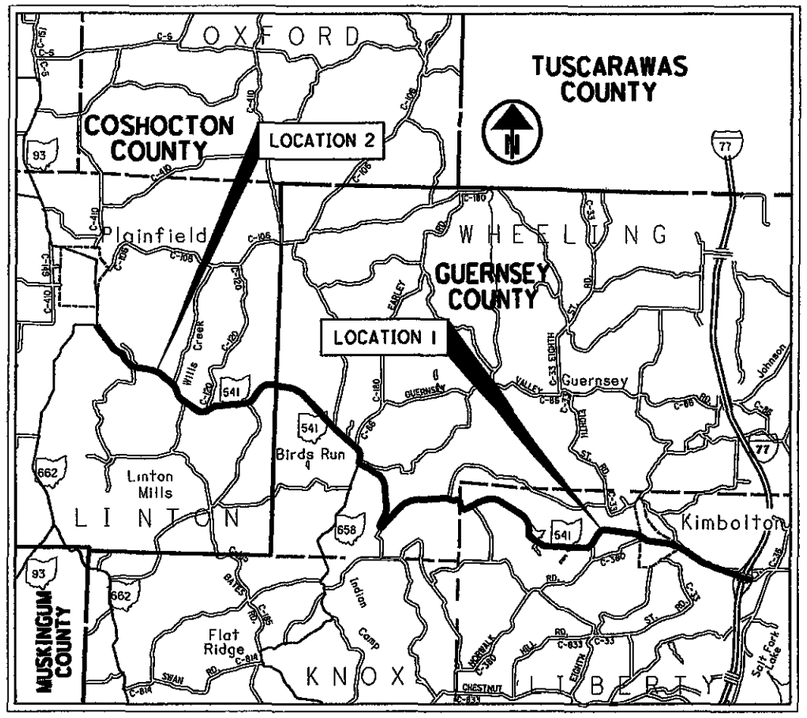
GUE - SR 541-0.00/31.87
060301 PID - 25680
Dist 5 6/21/2006

LOCATION MAP

NOT TO SCALE



PORTION TO BE IMPROVED

LATITUDE: 40° 11' 45"
LONGITUDE: 81° 42' 51"

DESIGN EXCEPTIONS: NONE

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

GUE-541-0.00
COS-541-31.87

WHEELING & LIBERTY TOWNSHIPS, GUERNSEY COUNTY
LINTON TOWNSHIP, COSHOCTON COUNTY

PROJECT DESCRIPTION:
2 LANE ASPHALT CONCRETE RESURFACING, 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	GUE	SR 541	0.00	8.47	8.46
2	COS	SR 541	31.87	34.90	3.03

INDEX OF SHEETS:

2005 SPECIFICATIONS

THE STANDARD 2005 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 Myron S. Pl
DATE 3/07/06 DISTRICT DEPUTY DIRECTOR

APPROVED Gordon Proctor PE
DATE 4-7-06 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

STATE OF OHIO
MARK J. EICHER
E-65010
REGISTERED
PROFESSIONAL ENGINEER
3-7-06

RMC = Rural Major Collector

DESIGN DESIGNATION	SECTIONS			
	COS (31.87-34.90)	GUE (0.00-6.93)	GUE (6.93-7.43)	GUE (7.43-8.49)
Functional Classification	RMC	RMC	RMC	RMC
Current ADT (2006)	810	650	2280	2280
Design Year ADT (2018)	950	980	2830	2830
Design Hourly Volume (2018)	95	100	200	200
Directional Distribution	50%	50%	50%	50%
Trucks (24 Hour B&C)	10%	10%	10%	10%
Design Speed	55mph	55mph	35mph	55mph
Legal Speed	55mph	55mph	35mph	55mph

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7-16-04			800	4-21-06
BP-4.1	7-16-04				
GR-1.1	7-16-04	MT-97.10	4-19-02	832	4-17-04
GR-2.1	1-16-04	MT-97.11	4-19-02	833	2-12-03
GR-3.4	1-20-06	MT-99.20M	1-30-95		
GR-4.1	4-18-03				
GR-4.2	4-15-05	TC-65.10	1-21-05		
		TC-65.11	1-21-05		
		TC-71.10	1-21-05		
		TC-73.10	01-19-01		

PLAN PREPARED BY: District 5 Production

FEDERAL PROJECT NO. NON-FEDERAL
PID NO. 25680
CONSTRUCTION PROJECT NO.
TITLE SHEET
GUE-541-0.00
COS-541-31.87
1/21

C541001 mts 3-06-06

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:

ADELPHIA COMMUNICATIONS
P.O. BOX 1297
351 HIGHLAND AVE.
CAMBRIDGE, OHIO 43725
ATTN: CHUCK GIBSON
740-432-7321

AMERICAN ELECTRIC POWER
1900 LICKING RD.
ZANESVILLE, OHIO 43701
ATTN: TRACY WINTERMUTE
740-348-4030

AMERICAN ELECTRIC POWER CO. TRANSMISSION
825 TECH CENTER DR.
GAHANNA, OHIO 43230-8250
ATTN: TOD WICK
740-552-1899

COLUMBIA GAS TRANSMISSION
301 MAPLE STREET
P.O. BOX 330
SUGAR GROVE, OHIO 43155
ATTN: WALLER WELCH
740-746-2219

EAST OHIO GAS CO.
7015 FREEDOM AVE.
NORTH CANTON, OHIO 44720
ATTN: TIM MCNUTT
216-798-7209

GUERNSEY-MUSKINGUM-ELECTRIC COOP.
17 SOUTH LIBERTY STREET
NEW CONCORD, OHIO 43762
ATTN: JOHN MARSHALL
740-826-7661

GUERNSEY COUNTY WATER
11272 EAST PIKE
CAMBRIDGE, OHIO 43725
ATTN: CLARENCE RIDGLEY
740-439-1269

SBC
3995 NORTH POINTE RD.
ZANESVILLE, OHIO 43701
ATTN: SANDI RANDOLPH
740-454-3455

NATIONAL GAS AND OIL
1500 GRANVILLE RD.
P.O. BOX 4970
NEWARK, OHIO 43058-4970
ATTN: GREG WILSON
740-348-1292

TENNESSEE GAS PIPELINE
3428 CLAY PIKE RD.
CUMBERLAND, OHIO 43732
ATTN: DIANE MASTERSON
740-638-2101

VERIZON
9444 CAMPBELL ST.
CAMBRIDGE, OHIO 43725
ATTN: BEN NOBLE
740-432-7137

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

PROFILE AND ALIGNMENT

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

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.

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.

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.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. THE CONTRACTOR IS ADVISED THAT NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 407 FEET. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, THE CONTRACTOR IS ADVISED THAT COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA) WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRE TO SUBMIT FORM 7460-1 TO THE FAA. A COPY OF THE SUBMISSION AND TWO COPIES OF FORM 7460-1 SHALL BE FORWARDED TO THE ODOT OFFICE OF AVIATION. THE CONTRACTOR IS ADVISED THAT NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

THE FEDERAL AVIATION ADMINISTRATION
GREAT LAKES REGIONAL OFFICE
AIR TRAFFIC DIVISION AGL-530
2300 EAST DEVON AVENUE
DES PLAINES, ILLINOIS 60018
847-294-7566

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
614-793-5046

CALCULATED MJE
CHECKED LME

GENERAL NOTES

GUE-541-0.00
COS-541-31.87

C54100I.mgn 3-06-06

CALCULATED MJE CHECKED LME

GENERAL NOTES

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	2	
OW-167 (NO EDGE LINES)	8	4	
R-33 (DO NOT PASS)	22	3	
R-34 (PASS WITH CARE)	22	3	
OW-128 (BEGIN ROAD CONSTRUCTION AHEAD)	19	6	
OC-8 (END ROAD CONSTRUCTION)	19	6	
TOTAL	90	22	

ITEM 202: RAISED PAVEMENT MARKER 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 RAISED PAVEMENT MARKER REMOVED
LOCATION 1 - 990 EACH
LOCATION 2 - 490 EACH

SPOT LEVELING

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER TO RESTORE ROADWAY CROWN/PROFILE WHERE NO PLANING OCCURS. PLACING OF SPOT LEVELING MATERIAL SHALL TAKE PLACE PRIOR TO PLACING OF THE 1.0" INTERMEDIATE COURSE.

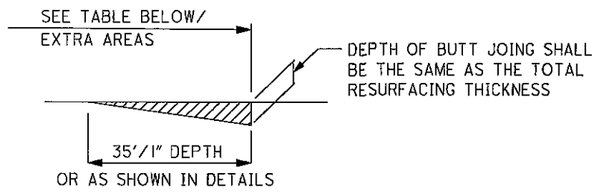
ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 70-22
LOCATION 1 - 400 CU.YD.

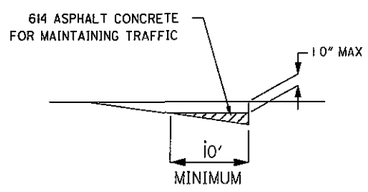
CONVERSION OF METRIC DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) OF THE 2005 CONSTRUCTION AND MATERIALS SPECIFICATIONS. TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02 IEEE/ASTM SI 10 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

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 448 INTERMEDIATE 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	ROUTE	DESCRIPTION	SLM	202 WEARING COURSE REMOVED SQ. YD.	614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU YD.
1	SR 541	BRIDGE GUE-541-0158	1.58	**	1.5
1	SR 541	BRIDGE GUE-541-0373	3.73	**	1.0
1	SR 541	BRIDGE GUE-541-0746	7.46	***	1.0
1	SR 541	BRIDGE GUE-541-0840	8.40	***	1.8
1	SR 541	END WORK		***	
1	SR 541	TOTALS			5.3
2	SR 541	BEGIN WORK @ SR 93	31.85	*	1.0
2	SR 541	BRIDGE COS-541-3363	33.63	***	1.0
2	SR 188	TOTALS			2.0

* QUANTITY SHOWN ON EXTRA AREAS SHEET 11

** QUANTITY SHOWN ON SHEET 13

*** QUANTITY SHOWN ON SHEET 14

FEATHERING

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

C541002.MGN 3-06-06

GUE-541-0.00
COS-541-31.87

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

ITEM 253 PAVEMENT REPAIR, AS PER PLAN

LOCATION 1 - 9000 SQ.YD.

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 - 43,563 FT
LOCATION 2 - 15,998 FT

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 - 7738 GAL.
LOCATION 2 - 2794 GAL.

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 a 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 a 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 70-22.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22
LOCATION 1 - 16 CU.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22
LOCATION 2 - 3 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 INTERMEDIATE COURSE, TYPE 2, PG 70-22 AND ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 70-22
LOCATION 1 - 4 CU.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22
LOCATION 1 - 4 CU.YD.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 70-22
LOCATION 2 - 2 CU.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22
LOCATION 2 - 2 CU.YD.

CALCULATED MJE
DRAWN LME

GENERAL NOTES

GUE-541-0.00
COS-541-31.87

C541003.MGN 3-06-06

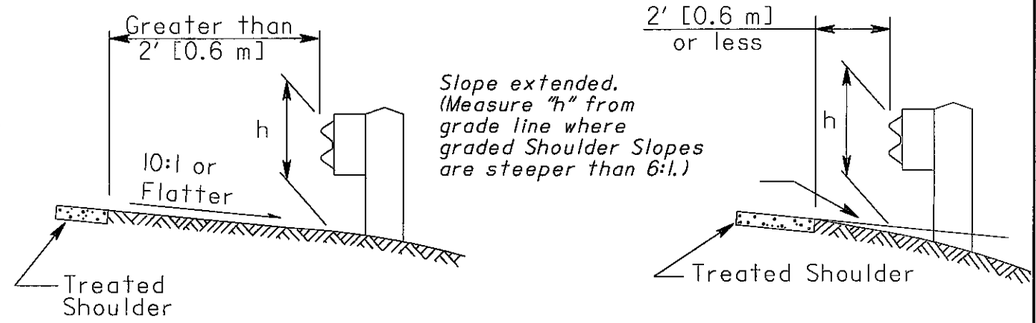
ITEM 606, GUARDRAIL, TYPE 5

THE LOCATIONS SHOWN BELOW ARE APPROXIMATE AND SHALL BE VERIFIED BY THE PROJECT ENGINEER IN THE FIELD BEFORE COMMENCING ANY GUARDRAIL WORK.

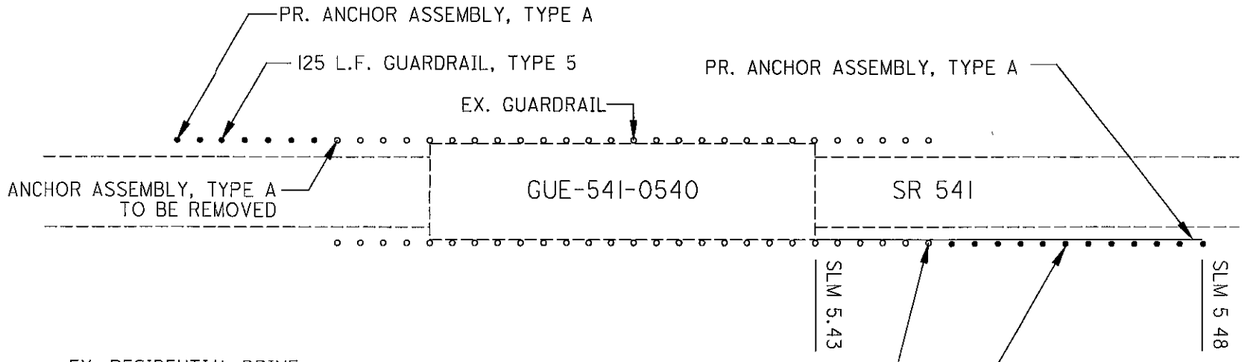
QUANTITIES

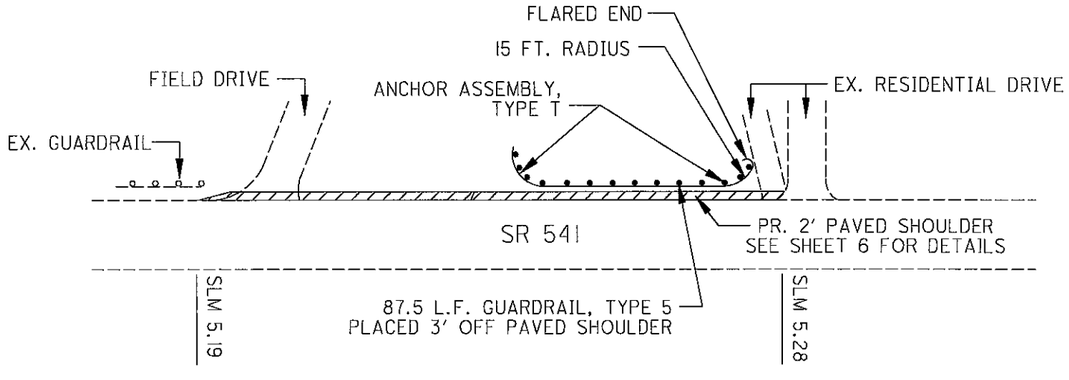
ITEM 202	ANCHOR ASSEMBLY REMOVED, TYPE A
LOCATION 1	2 EACH
ITEM 606	GUARDRAIL, TYPE 5
LOCATION 1	212.5 L.F.
ITEM 606	GUARDRAIL, TYPE 5, USING 9 FOOT POSTS
LOCATION 1	262.5 L.F.
ITEM 606	ANCHOR ASSEMBLY, TYPE A
LOCATION 1	2 EACH
ITEM 606	ANCHOR ASSEMBLY, TYPE T
LOCATION 1	2 EACH

GUARDRAIL HEIGHT: For initial installation, construct the guardrail within ± 1" [25] of the standard height, h, or 27¾" [706] to the top of W-Beam rail. (See MEASURING GUARDRAIL HEIGHT Detail.) When subsequent projects, such as resurfacings, affect the height of existing guardrail, the finished height is to be within ±3" [75] of the standard height.



MEASURING GUARDRAIL HEIGHT





CALCULATED MJE
CHECKED LME

GENERAL NOTES

GUE-541-0.00
COS-541-31.87

5
21

C541004.mgn 3-06-06

ITEM 209 LINEAR GRADING

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.

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. ALL EQUIPMENT, LABOR, OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209 LINEAR GRADING. THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE PURPOSES.

ITEM 209 LINEAR GRADING
LOCATION 1 - 3 MILES

MAINTENANCE OF TRAFFIC

PLACING OF THE ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE SHALL OCCUR AS CLOSE BEHIND THE PLANING OPERATION AS POSSIBLE, WHERE APPLICABLE, SUCH THAT TRAFFIC SHALL NOT BE MAINTAINED ON THE PLANED SURFACE AT THE END OF THE WORK DAY.

ITEM 203 EXCAVATION, AS PER PLAN

THIS WORK SHALL CONSIST OF PREPARING A SUBGRADE FOR THE INSTALLATION OF A PAVED SHOULDER BY EXCAVATING THE EXISTING SHOULDER MATERIAL TO THE DEPTH SHOWN ON THE PLAN, OR AS DIRECTED BY THE ENGINEER TO REMOVE ANY UNSTABLE MATERIAL AND BY SHAPING AND COMPACTING THE SUBGRADE. THE UNSOUND OR BROKEN EDGE OF BITUMINOUS PAVEMENTS SHALL FIRST BE TRIMMED TO A LINE ESTABLISHED BY THE ENGINEER. THE EXISTING SHOULDER THEN SHALL BE EXCAVATED AND THE SUBGRADE SHAPED AND COMPACTED AS DIRECTED BY THE ENGINEER. ANY SOFT OR UNSUITABLE BASE MATERIAL SHALL BE REMOVED TO A DEPTH SPECIFIED BY THE ENGINEER AND REPLACED WITH ITEM 301 ASPHALT CONCRETE BASE. AREAS EXCAVATED IN EXCESS OF DEPTHS SPECIFIED OR DIRECTED BY THE ENGINEER SHALL BE BACKFILLED TO DESIRED GRADE WITH ITEM 304 AGGREGATE BASE AT THE CONTRACTOR'S EXPENSE. EXCAVATION MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS OWN RESPONSIBILITY OUTSIDE THE LIMITS OF THE RIGHT OF WAY. DROPOFF REQUIREMENTS AS SHOWN ON SHT. 8 SHALL APPLY. ITEM 301 SHALL BE PLACED THE SAME DAY THAT THE SHOULDER IS EXCAVATED.

ITEM 604 CATCH BASIN, ADJUSTED TO GRADE

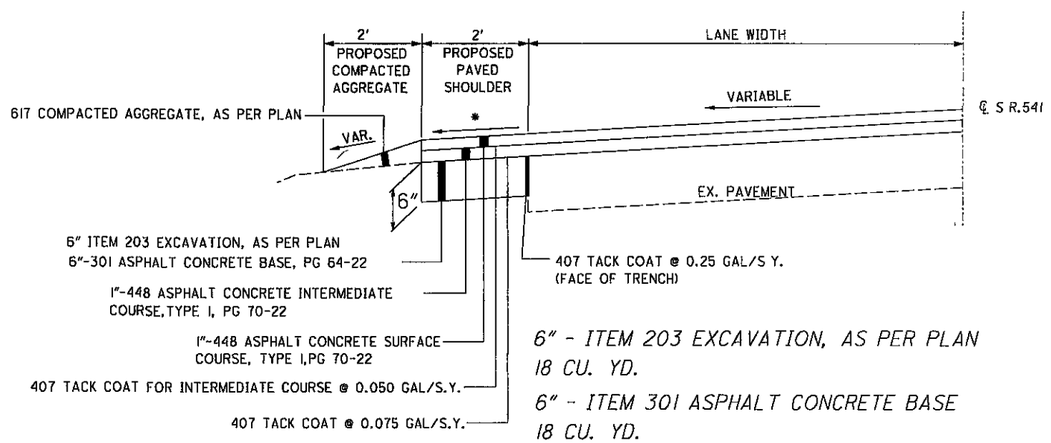
THESE ITEMS SHALL BE USED TO ADJUST MANHOLES, CATCH BASINS, AND VALVE BOXES LOCATED ON SR 541 IN KIMBOLTON TO GRADE. ALL MATERIALS, LABOR EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED SHALL BE INCLUDED FOR PAYMENT WITH THE ABOVE ITEMS.

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

PAVED SHOULDER DETAIL
SLM 5.19 TO SLM 5.28

* MATCH EXISTING GRADE OR AS DIRECTED BY THE ENGINEER



6" - ITEM 203 EXCAVATION, AS PER PLAN
18 CU. YD.

6" - ITEM 301 ASPHALT CONCRETE BASE
18 CU. YD.

ITEM 407 TACK COAT
12 GAL.
ITEM 407 TACK COAT FOR INTERMEDIATE COURSE
8 GAL.

1" - ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG 70-22
3 CU. YD.

1" - ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG 70-22
3 CU. YD.

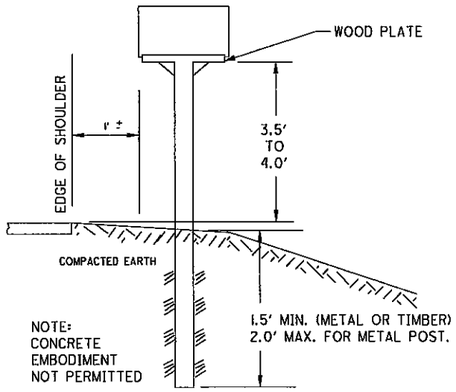
CALCULATED MJE
CHECKED LWE

GENERAL NOTES

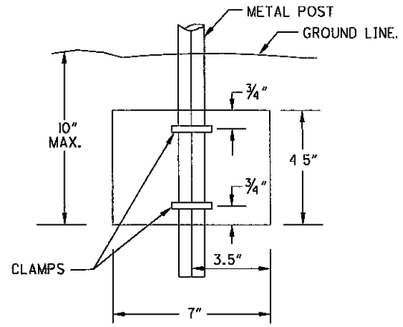
GUE-541-0.00
COS-541-31.87

C541005.mgn 3-06-06

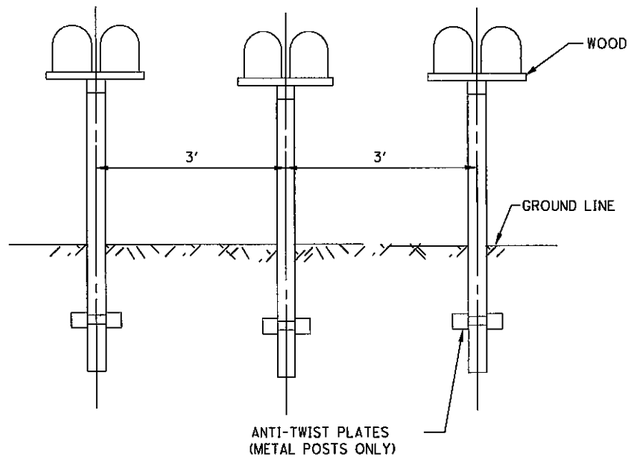
MAILBOX DETAILS



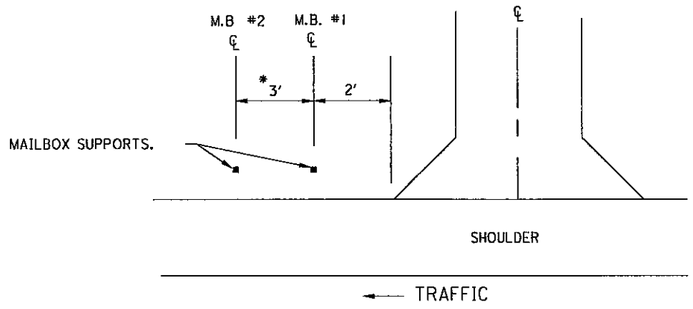
TYPICAL MAILBOX LOCATION



ANTI-TWIST PLATE



GROUP MAILBOX INSTALLATION



* ADD 3' FOR EACH ADDITIONAL MAILBOX

ITEM SPECIAL - MAILBOX SUPPORT

DESCRIPTION

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATION SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING POSTS AND OTHER MATERIAL NOT CONSIDERED SALVAGEABLE AND DISPOSED OF IN ACCORDANCE WITH 202.02.

MATERIALS

WOOD POSTS SHALL BE NOMINAL 4" x 4" SQUARE OR 4" DIAMETER ROUND. ALL WOOD INCLUDING POST AND PLATES SHALL CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2" I.D., AND CONFORM TO AASHTO M 181.

HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

SETTING POSTS

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03 AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

MOUNTING BOXES

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

BASIS OF PAYMENT

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.12. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR THE TYPE SPECIFIED, COMPLETE IN PLACE.

PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	MAILBOX SUPPORT SYSTEM SINGLE

QUANTITY

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE PURPOSE

SPECIAL MAILBOX SUPPORT SYSTEM, SINGLE - LOCATION 1 - 1 EACH

CALCULATED MJE
CHECKED LME

MAILBOX DETAILS AND QUANTITIES

GUE-541-0.00
COS-541-31.87

C541006.MGN 3-06-06

GUE-541-0.00
COS-541-31.87

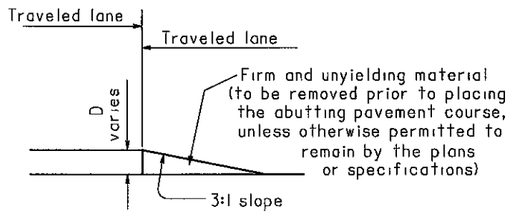
GENERAL NOTES

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-15i (Low Shoulder) signs or OW-17i (Uneven Lanes) and OWP-17i 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-17i and OWP-17i signs required

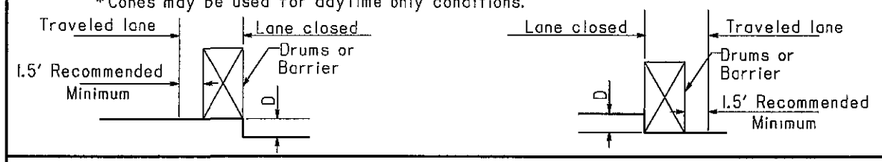


CONDITION I
DROPOFFS BETWEEN TRAVELED LANES

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

D (In.)	Treatment
≤1½	Erect OW-17i and OWP-17i signs.
>1½-3	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.

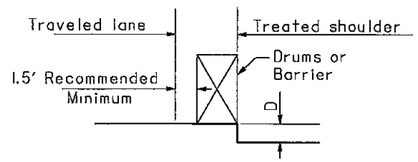


CONDITION II
DROPOFFS WITHIN GRADED SHOULDER AREA

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.

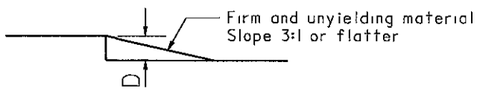
D (In.)	Treatment
≤1½	1) If edgelines are present, no treatment necessary OR 2) Erect OW-17i and OWP-17i signs.
>1½-5	1) If min. lane width *requirements can be met, maintain lanes utilizing drums as shown below OR 2) If min. lane width *requirements cannot be met, close adjacent lane utilizing drums 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-15i signs required.

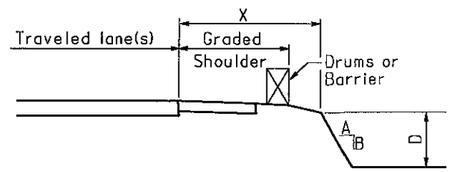


CONDITION III
DROPOFFS BEYOND GRADED SHOULDER OR BACK OF CURB

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

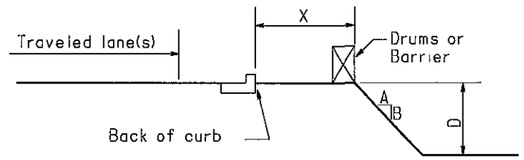


X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-4	Any	Any	(a)	(a)
4-30	Any	3:1 or Flatter	None	None
4-12	≤3	Steeper than 3:1	None	None
4-12	>3-≤12	Steeper than 3:1	Drums	Drums
4-12	>12	Steeper than 3:1	Drums	Barrier
>12-20	≤12	Steeper than 3:1	None	None
>12-20	>12-≤24	Steeper than 3:1	Drums	Drums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

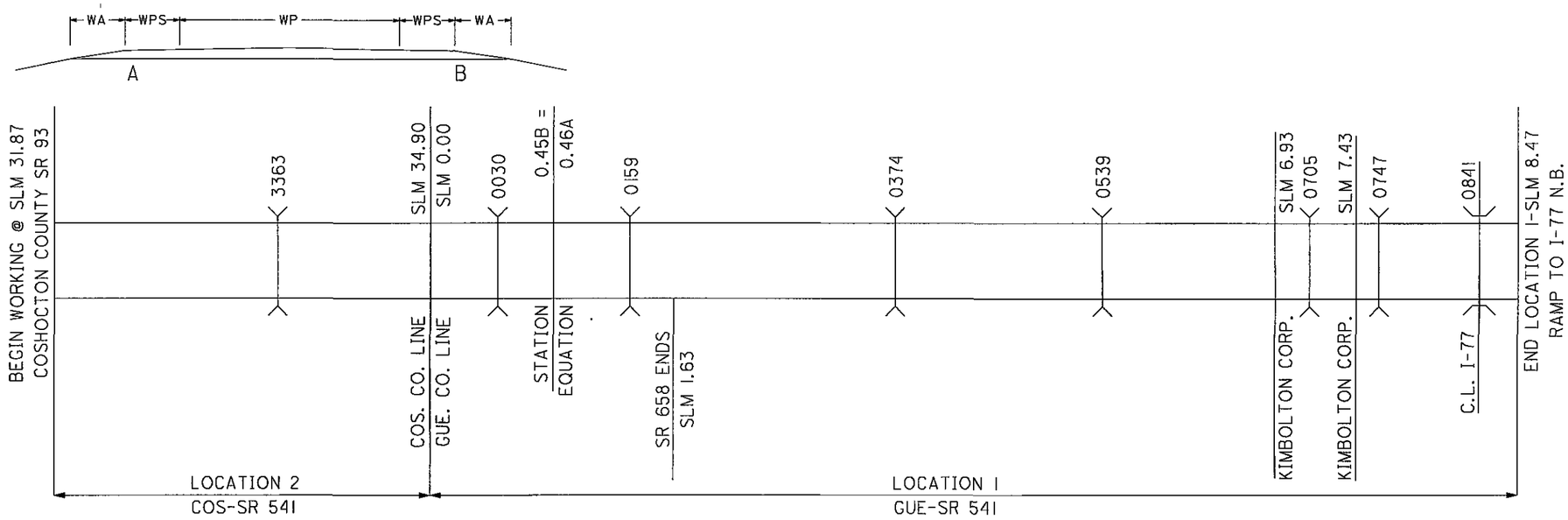
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED

8/21

C541007.mgn 3-06-06

TYPICAL I

ASPHALT CONCRETE



DEDUCT FOR BRIDGES (I) LENGTH X PAVEMENT WIDTH

PAVEMENT DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT	END LOG POINT	LENGTH MILES	LENGTH LIN.FT.	PAVEMENT WIDTH (FEET)	NUMBER OF LANES	TYPICAL	EXISTING PAVEMENT TYPE	PAVEMENT AREA	PROPOSED PAVEMENT 407 TACK COAT @ 0.075 gal /S.Y	PROPOSED PAVEMENT 407 TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s y	PROPOSED PAVEMENT 448 ASPHALT CONCRETE THICKNESS	PROPOSED PAVEMENT 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 70-22	PROPOSED PAVEMENT 448 ASPHALT CONCRETE THICKNESS	PROPOSED PAVEMENT 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22		WORK ZONE CENTERLINE	
											SQ. YARDS	GALS.	- GALS.	INCHES	CU. YARDS	INCHES	CU. YARDS		MILE	
1	GUE	SR 541	0.00	0.45	0.45	2376.0	21	2	1	448	5544	416	277	1	154.0	1	154.0		0.90	
			0.46	8.05	7.59	40075.2	21	2	1	448	93509	7013	4675	1	2597.5	1	2597.5		15 18	
			8.05	8.47	0.42	2217.6	24	2	1	448	5914	444	296	1	164.3	1	164.3		0 84	
DEDUCT FOR BRIDGES											(2723)	(204)	(136)	1	(75.6)	1	(75.6)			
1	GUE	SR 541	TOTALS									7669	5112		2840.2		2840.2		16.92	
2	COS	SR 541	31.87	34.90	3.03	15998.4	21	2	1	448	37330	2800	1867	1	1036.9	1	1036.9		6 06	
											(777)	(58)	(39)	1	(21.6)	1	(21.6)			
2	COS	SR 541	TOTALS									2742	1828		1015 3		1015.3		6.06	

CALCULATED M.JE
CHECKED L.ME

ASPHALT CONCRETE

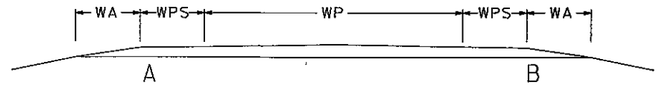
GUE-541-0.00
COS-541-31.87

C541001.MAC 3-06-06

CALCULATED MJE CHECKED LME

SHOULDER TREATMENT

TYPICAL I



DEDUCT FOR BRIDGES (I) LENGTH X SHOULDER WIDTH

SHOULDER DATA

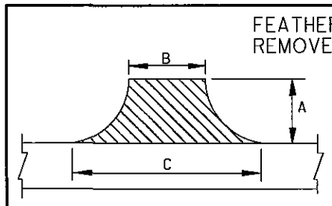
617

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT	END LOG POINT	LENGTH MILES	LENGTH LIN.FT.	TYPICAL	EXISTING TYPE - WIDTH (FT.) A TYPE	A WIDTH	B TYPE	B WIDTH	C TYPE	C WIDTH	D TYPE	D WIDTH	SHOULDER AREA Sq. Yds.			AVERAGE THICKNESS IN.	COMPACTED AGGREGATE, AS PER PLAN CU. YDS.
1	GUE	541	0.00	0.45	0.45	2376.0	1	617	2	617	2					1056.0			2	58.7
			0.46	8.47	8.01	42292.8	1	617	2	617	2					18796.8			2	1044.3
DEDUCTIONS FOR BRIDGES																(519.0)			2	(28.8)
SUBTOTAL LOCATION 1																				1074.2
2	COS	541	31.87	34.9	3.03	15998.4	1	617	2	617	2					7110.4			2	395.0
DEDUCTIONS FOR BRIDGES																(126.0)			2	(7.0)
SUBTOTAL LOCATION 2																				388.0

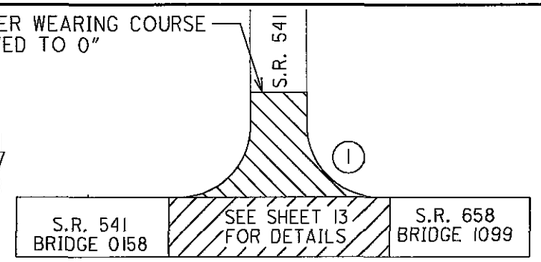
SHOULDER TREATMENT

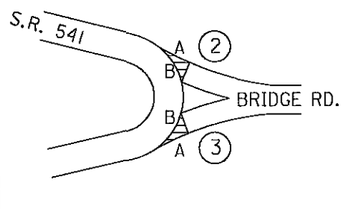
GUE-541-0.00
COS-541-31.87

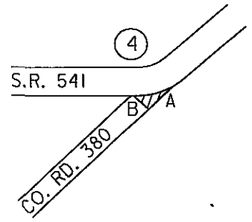
C541001.mst 3-06-06

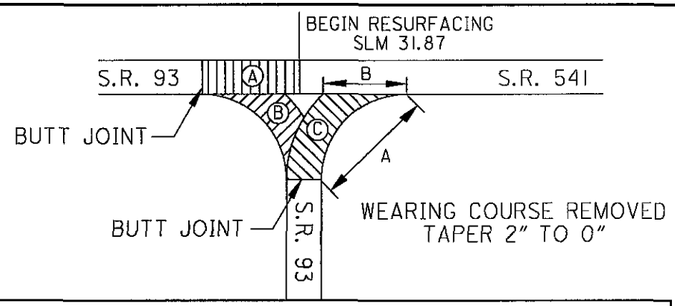


INTERSECTIONS









ALL AREAS TAKEN FROM PREVIOUS PLANS

PAVEMENT DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT	SIDE	DESCRIPTION	INTERSECTIONS A IN FEET	INTERSECTIONS B IN FEET	INTERSECTIONS C IN FEET	AREA SQ. YDS.	407 0 TACK COAT @ 0.075 GAL./SQ. YD. GAL.	407 0 TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ. YD. GAL	448 ASPHALT CONCRETE THICK IN.	448 ASPHALT CONCRETE INTERMEDIATE COURSE TYPE I, PG 70-22 CU. YDS.	448 ASPHALT CONCRETE AVERAGE THICKNESS IN.	448 ASPHALT CONCRETE SURFACE COURSE TYPE I, PG 70-22 CU. YDS.	202 WEARING COURSE REMOVED SQ. YDS	
1	GUE	SR 541		LT	STANDING ROCK RD. (TWP. RD. 187)	35	20	75	185	13.9	9.3	1	5 1	1	5.1		
				LT	GUERNSEY VALLEY RD. (CO. RD. 86)	65	30	135	596	44.7	29.8	1	16.6	1	16.6		
				LT	BIRD RD.	35	20	73	181	13.6	9.1	1	5.0	1	5.0		
				CL	AT SR 658 (1)	75	21	110	546	41.0	27.3	1	15.2	1	15.2	546	
				RT	SLM 5.19 TO SLM 5.28	686	12		457	34.3	22.9	1	12.7	1	12.7		
				RT	BRIDGE RD (TWP. RD. 186) (2)	78	23		100	7.5	5 0	1	2.8	1	2 8		
				RT	BRIDGE RD. (TWP. RD. 186) (3)	88	25		122	9.2	6.1	1	3.4	1	3.4		
				LT	KEATS RD. (TWP. RD. 381)	25	18	60	108	8.1	5.4	1	3.0	1	3.0		
				LT	WINDOW RD. (TWP. RD. 834)	32	12	88	178	13.4	8.9	1	4.9	1	4.9	178	
				RT	RINGER RD. (TWP RD. 3808)	38	18	60	165	12.4	8.3	1	4.6	1	4.6		
				RT	CAIN RD. (TWP. RD. 3826)	48	17	66	221	16.6	11.1	1	6.1	1	6.1		
					KIMBOLTON CORP. LINE												
				RT	NORWALK RD. (CO. RD. 380) (4)	93	28		145	10.9	7.3	1	4.0	1	4.0		
				RT	MAIN ST. (CO. RD. 33)	27	22	50	108	8.1	5.4	1	3.0	1	3.0		
				LT	MAIN ST. (CO. RD 33)	27	22	50	108	8.1	5.4	1	3.0	1	3 0		
				RT	JOHNSON ST.	18	12	37	49	3.7	2.5	1	1.4	1	1.4		
				RT	DEWEY ST.	18	12	37	49	3 7	2.5	1	1.4	1	1.4		
					KIMBOLTON CORP. LINE												
				LT	8TH STREET (CO. RD. 33)	25	20	90	153	11.5	7.7	1	4.3	1	4.3	153	
				LT	BOONE RD. (TWP. RD. 3846)	38	24	104	270	20.3	13.5	1	7 5	1	7 5		
				LT	HAZLETT RD. (TWP. RD. 8361)	40	22	96	262	19.7	13 1	1	7.3	1	7 3		
				RT	S.W RAMP TO I-77 SB	85	22	100	576	43.2	28.8	1	16.0	1	16.0		
				LT	N.W. RAMP FROM I-77 SB	61	22	136	535	40.1	26 8	1	14.9	1	14.9		
				RT	S.E. RAMP FROM I-77 NB	55	22	115	419	31.4	21.0	1	11.6	1	11.6		
				LT	N.E. RAMP TO I-77 NB	70	23	125	576	43.2	28.8	1	16.0	1	16.0		
					TOTALS LOCATION 1					***458.6***	***306.0***		***169.8***		***169.8***	***877***	
2	COS	SR 541		CL	AT SR 93 A	105	22	22	257	19.3	12.9	1	7.1	1	7 1	257	
				CL	AT SR 93 B	80	24	24	213	16.0	10.7	1	5.9	1	5 9	213	
				CL	AT SR 93 C	100	22	22	244	18.3	12.2	1	6.8	1	6.8	244	
				LT	TWP. RD 118	30	16	70	143	10.7	7.2	1	4.0	1	4.0		
				RT	TWP. RD. 118	30	16	70	143	10.7	7.2	1	4.0	1	4.0		
				LT	TWP. RD. 119	35	20	82	198	14.9	9 9	1	5.5	1	5.5		
				RT	TWP. RD. 110	60	22	100	407	30.5	20.4	1	11 3	1	11.3		
				LT	CO. RD. 120	45	26	77	258	19 4	12.9	1	7.2	1	7.2		
				RT	TWP. RD 108	35	16	80	187	14.0	9.4	1	5.2	1	5.2		
					TOTALS LOCATION 2					***153.8***	***102.8***		***57.0***		***57.0***	***714***	

CALCULATED MJE CHECKED LME

EXTRA AREAS

GUE-541-0.00
COS-541-31.87

C541001.MEA 3-06-06

LOCATION 1

GUE-541-0158

MILL AND FILL APPROACH SLAB 1.25", 150' TAPER WEARING COURSE REMOVED FROM 0" TO 1.25" ON NORTH APPROACH SLAB. WEARING COURSE REMOVED FROM SOUTH EXPANSION JOINT ARMOR TO GUE-658-1099 EXPANSION JOINT ARMOR.

GUE-541-0373

MILL AND FILL APPROACH SLAB 1.25", TAPER 150' AT EACH END THROUGH EACH APPROACH SLAB, BUTT JOINT AT EXPANSION JOINT ARMOR .

GUE-541-0540

PAVE OVER BRIDGE AND APPROACH SLABS WITH SURFACE COURSE ONLY.

GUE-541-0704

MILL AND FILL BRIDGE 2", TAPER 150' FROM EACH END OF BRIDGE.

GUE-541-0746

MILL AND FILL APPROACH SLAB 1.75", BUTT JOINT AT THE EXPANSION JOINT ARMOR. TAPER 150' FROM BUTT JOINT AT EACH END OF EXPANSION JOINT ARMOR.

GUE-541-0840

BUTT JOINT AT APPROACH SLAB, 100' TAPER AT EACH END OF APPROACH SLAB.

GUE-658-1099

MILL AND FILL NORTH APPROACH SLAB 2", BUTT JOINT AT EXPANSION JOINT ARMOR. TAPER 150' INTO NORTH APPROACH SLAB.

LOCATION 2

COS-541-3363:

TAPER 150 FT. AT EACH END OF APPROACH SLAB, LEAVE APPROACH SLABS BARE. MILL BRIDGE DECK 1" WITH BUTT JOINT AT EXPANSION JOINT ARMOR, PLACE 1" ASPHALT ON BRIDGE DECK.

BRIDGE DEDUCTIONS

(BRIDGE LENGTH X PAVEMENT WIDTH)

(APPROACH SLABS ADDED FOR CALCULATION PURPOSES)

TOTAL CARRIED TO SHEETS 9 & 10

BRIDGE DECK DATA

LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS) LIN.FT.	WIDTH LIN. FT.	AREA	202	407		448 ASPHALT CONCRETE					
					WEARING COURSE REMOVED DEPTH VAR.	TACK COAT @ 0.075 GAL./SQ. YD.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ. YD.	THICK	INTERMEDIATE COURSE TYPE I, PG 70-22	THICK	SURFACE COURSE TYPE I, PG 70-22		
				SQ. YDS.	SQ. YDS.	GAL.	GAL.	IN.	CU. YDS.	IN.	CU. YDS.		
1	GUE-541-0158 BRIDGE DECK	119	32	423									
	GUE-541-0158 APPROACH SLABS	50	32	178	1089	13	9	1	4.9	1	4.9		
	GUE-658-10.99	38	24	101		8	5	1	2.8	1	2.8		
	GUE-541-0373 BRIDGE DECK	200	28.5	633									
	GUE-541-0373 APPROACH SLABS	50	28 5	158	742	12	8	1	4.4	1	4.4		
	GUE-541-0540 BRIDGE DECK	54	26	156			8			1	4.3		
	GUE-541-0540 APPROACH SLABS	30	26	87	O		4			1	2.4		
	GUE-541-0704 BRIDGE DECK	23	24	61	737		3	1	1.7	1	1.7		
	GUE-541-0746 BRIDGE DECK	273	24	728									
	GUE-541-0746 APPROACH SLABS	40	24	107	713	8	5	1	3.0	1	3.0		
	GUE-541-0840 BRIDGE DECK	240	34.33	915									
	GUE-541-0840 APPROACH SLABS	50	34.33	191	1283								
	SUBTOTAL LOCATION 1				4564	41	42		16.8		23.5		
BRIDGE DEDUCTS FOR PAVED ROADWAY		1167	21	2723									
BRIDGE DEDUCTS FOR SHOULDERS		1167	4	519									
2	COS-541-3363	283	30	943	1643		47			1	26.2		
	COS-541-3363 APRON	50	30	167									
	SUBTOTAL LOCATION 2				1643		47				26 2		
BRIDGE DEDUCTS FOR PAVED ROADWAY		333	21	777									
BRIDGE DEDUCTS FOR SHOULDERS		283	4	126									

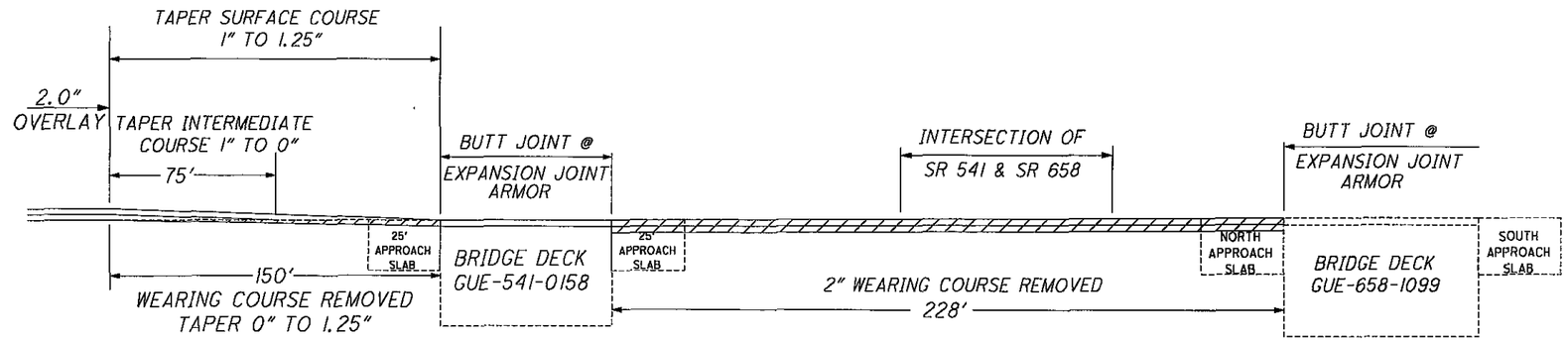
C54100.MBT 3-06-06

CALCULATED MJE
CHECKED LME

BRIDGE DECK TREATMENT

GUE-541-0.00
COS-541-31.87

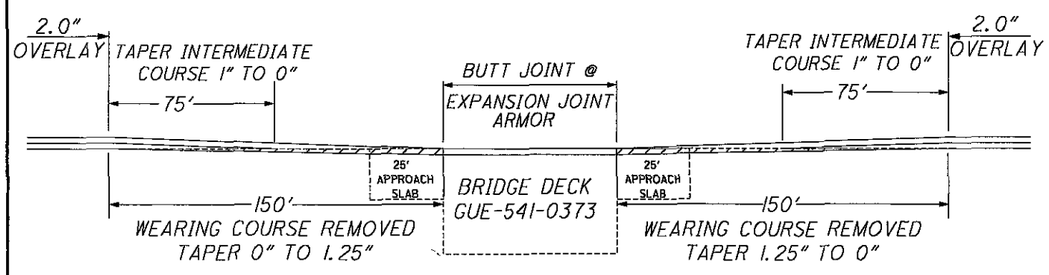
12
21



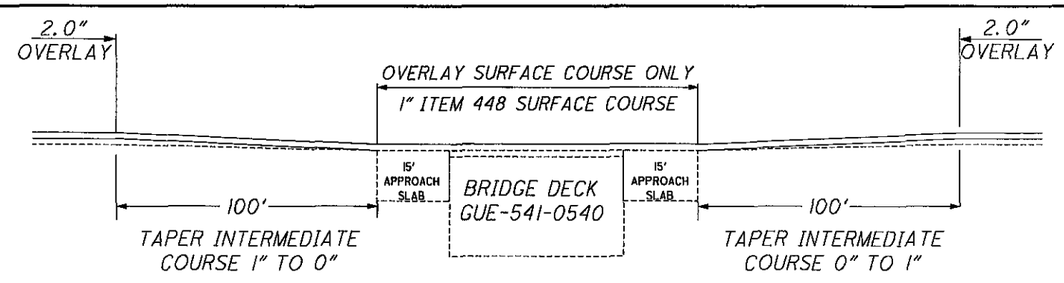
202 WEARING COURSE REMOVED:
LOCATION 1
GUE-541-0158
[(125' X 21') + (25' X 32')] / 9 = 380 SQ. YD.

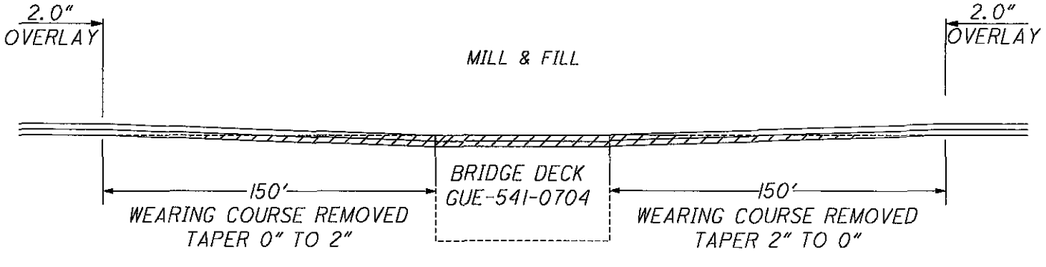
202 WEARING COURSE REMOVED:
LOCATION 1
GUE-541-0158 TO GUE-658-1099
(228' X 28') / 9 = 709 SQ. YD.

TOTAL CARRIED TO SHEET 12



202 WEARING COURSE REMOVED:
LOCATION 1
GUE-541-0373
[(250' X 21') + (50' X 28.5')] / 9 = 742 SQ. YD.





202 WEARING COURSE REMOVED:
LOCATION 1
GUE-541-0704
[(300' X 21') + (14' X 24')] / 9 = 737 SQ. YD.

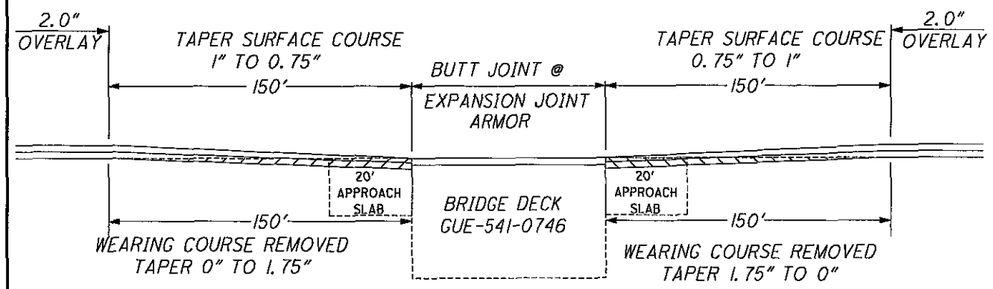
CALCULATED MJE
CHECKED LME

BRIDGE DECK DETAILS

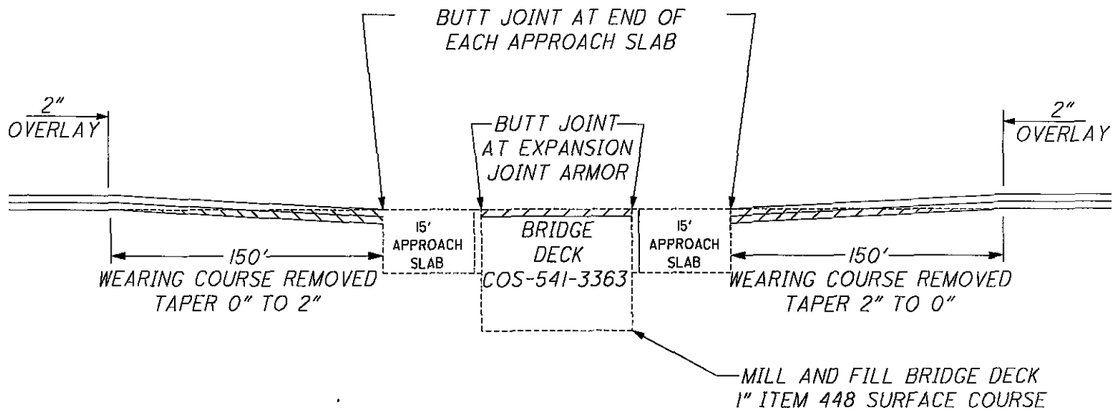
GUE-541-0.00
COS-541-31.87

13
21

C541002.mbt 3-06-06

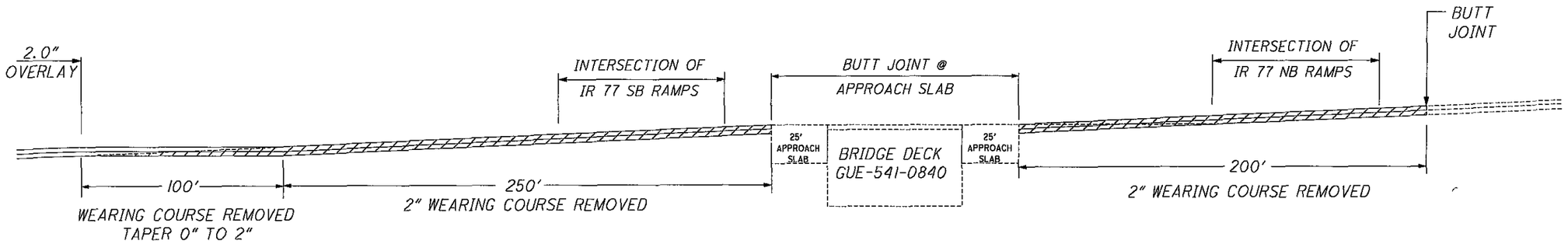


202 WEARING COURSE REMOVED:
LOCATION 1
GUE-541-0746
[(260' X 21') + (40' X 24')] / 9 = 713 SQ. YD.



202 WEARING COURSE REMOVED:
LOCATION 2
COS-541-3363
[2(150' X 21') + (283' X 30')] / 9 = 1643 SQ. YD.

TOTAL CARRIED TO SHEET 12



202 WEARING COURSE REMOVED:
LOCATION 1
GUE-541-0840
[(100' X 21') + (250 X 21') + (200 X 21')] / 9 = 1283 SQ. YD.

CALCULATED M.JE CHECKED L.ME

BRIDGE DECK DETAILS

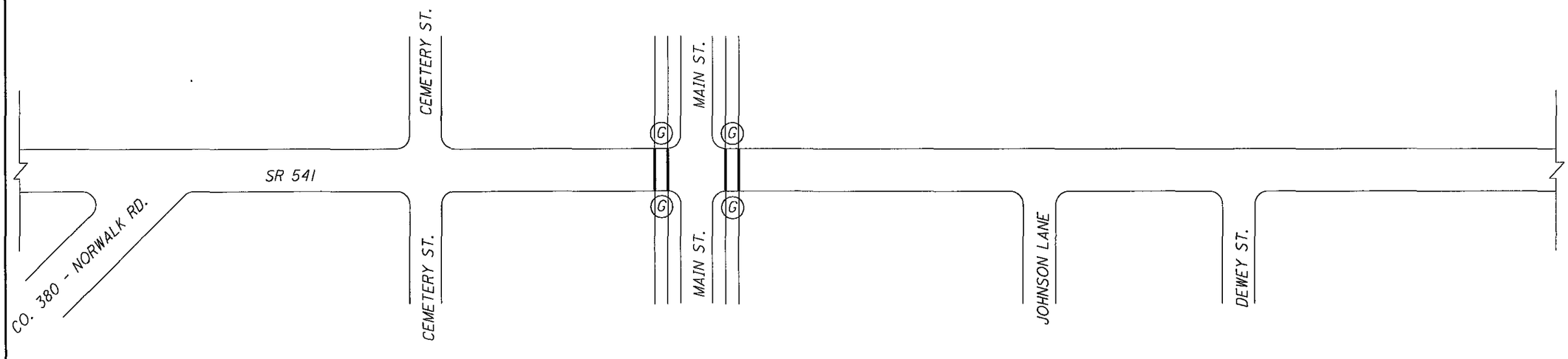
GUE-541-0.00
COS-541-31.87

C541002.mbt 3-06-06

KIMBOLTON

THE FOLLOWING AVERAGE AREAS ARE USED
FOR CALCULATING CURB RAMP QUANTITIES:
TYPE A RAMPS = 108 SQ.FT. , 29 FT. CURB
TYPE D RAMPS = 60 SQ.FT. , 15 FT. CURB
TYPE E RAMPS = 54 SQ.FT. , 14 FT. CURB
TYPE G RAMPS = 24 SQ.FT. , 14 FT. CURB

(G) = CURB RAMP, TYPE G



QUANTITIES

CURB RAMP, TYPE G = 4 EACH - 96 SQ. FT.
ITEM 202 WALK REMOVED - 96 SQ.FT.
ITEM 644 CROSSWALK LINE - 100 FT.

QUANTITIES CARRIED TO LOCATION 1 SUB-SUMMARY

c541001.mpl 3-06-06

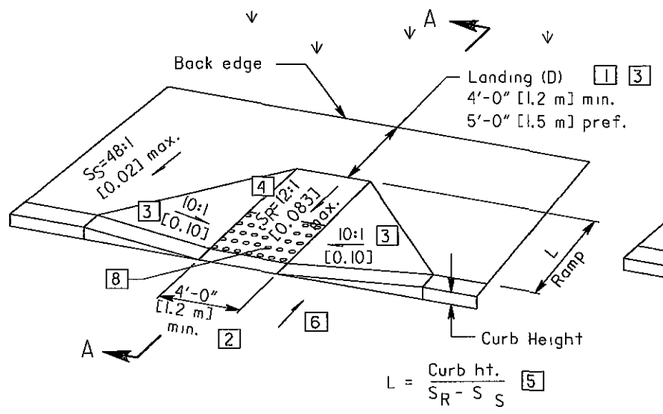
DRAWING NOT TO SCALE

CALCULATED MJE CHECKED LME

PLAN SHEET-KIMBOLTON

GUE-541-0.00
COS-541-31.87

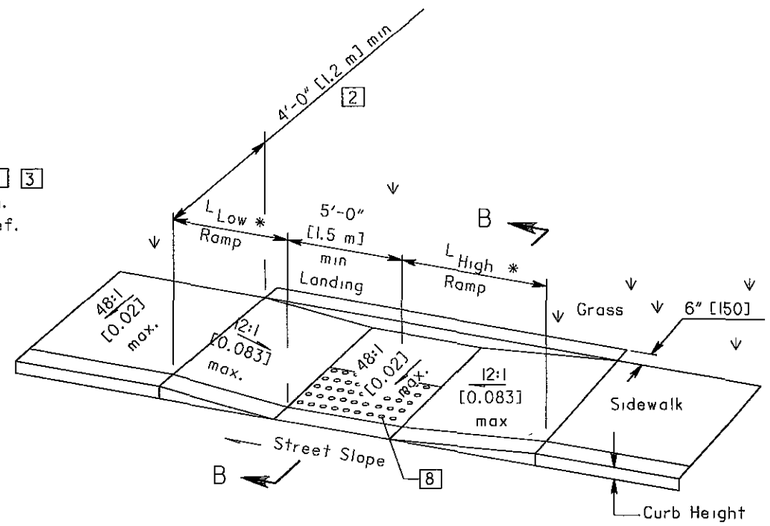
15
21



$$L = \frac{\text{Curb ht.}}{S_R - S_S}$$ 5

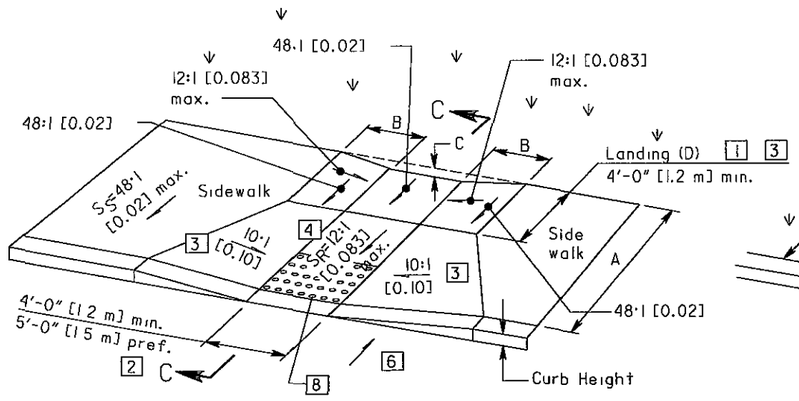
See Sht. 3/3 for SECTION A-A

PERPENDICULAR CURB RAMP DETAIL



See Sht. 3/3 for SECTION B-B

PARALLEL CURB RAMP DETAIL (DOUBLE)

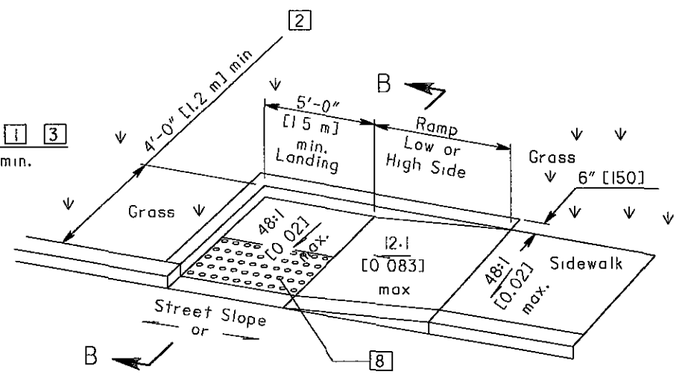


See Sht. 3/3 for SECTION C-C

COMBINED CURB RAMP DETAIL

$B = C / 0.083$

$C = [\text{Curb ht} + A(S_R)] - [(A-D)S_S + D(0.02)]$



See Sht. 3/3 for SECTION B-B

PARALLEL CURB RAMP DETAIL (SINGLE)

Street Slope	Ramp Length @ 1"/ft [0.083]	
	$L_{LOW\ SIDE}$*	$L_{HIGH\ SIDE}$*
0.01	5'-5" [1.6 m]	6'-10" [2.1 m]
0.02	4'-10" [1.5 m]	7'-11" [2.4 m]
0.03	4'-5" [1.3 m]	9'-5" [2.9 m]
0.04	4'-1" [1.2 m]	11'-8" [3.6 m]
0.05	3'-9" [1.1 m]	15'-2" [4.6 m]

* Measured along the back of a 6" [150] high curb.

$$L_{HIGH} = \frac{\text{Curb ht.}}{0.083 - \text{Street Slope}}$$ 7

$$L_{LOW} = \frac{\text{Curb ht}}{0.083 + \text{Street Slope}}$$ 7

LEGEND

1 May be reduced to 3'-0" [915] in existing sidewalks if the landing is unconstrained along the back edge.

2 May be reduced to 3'-4" [1.02 m] in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.

3 Where landing width (D) has been reduced to 3'-0" [915] the flared sides shall have a maximum slope of 12:1 [0.083].

Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheel chair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.

4 The slope of the ramp toward the curb is preferred to be 12:1 [0.083] or flatter related to the horizontal, but the maximum slope shall be 12:1 [0.083] relative to the existing or proposed walk slope.

In existing sidewalks, where the maximum ramp slope (S_R) is not feasible, it may be reduced as follows:

A) 10:1 [0.10] for a max. rise of 6" [150],
B) 8:1 [0.125] for a max. rise of 3" [75],
C) 6:1 [0.167] over a max. run of 2'-0" [610] for historic areas where a flatter slope is not feasible

5 The minimum length of a perpendicular ramp is 6' [2.0 m] from the back of a 6" [150] curb and may be increased where feasible to obtain a flatter ramp slope or to better blend with the walk configuration

6 Gutter counter slopes at the foot of perpendicular curb ramps should not exceed 20:1 [0.05] over a distance of 2'-0" [610] from the curb.

7 Dimensions derived by equation are nominal. Construct ramps to meet required slopes and existing conditions

8 Detectable Warnings (truncated domes) are to be installed in the location shown. Dimensions of the domes are 24" [610] from the back of the curb by the width of the ramp. See NOTES on sheet 3.

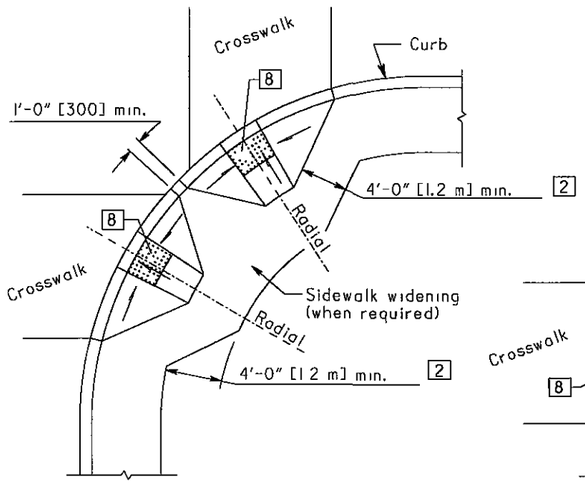
7-12-02

CURB RAMPS WITH TRUNCATED DOMES

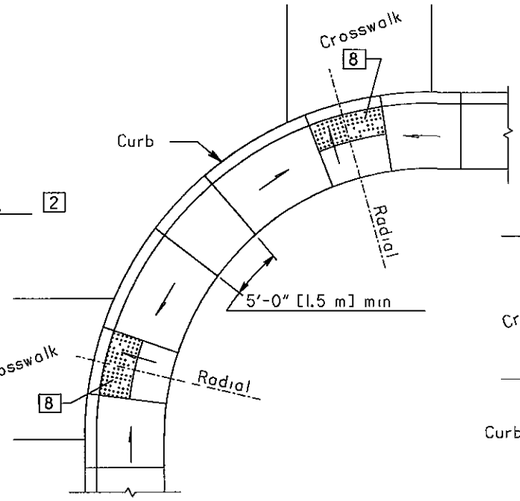
GUE-541-0.00
COS-541-31.87

1 / 3

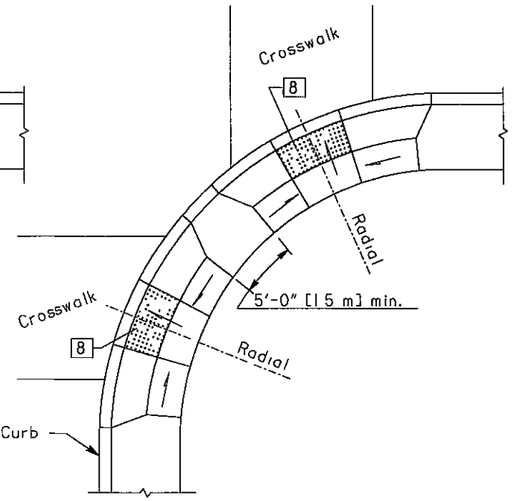
15A
21



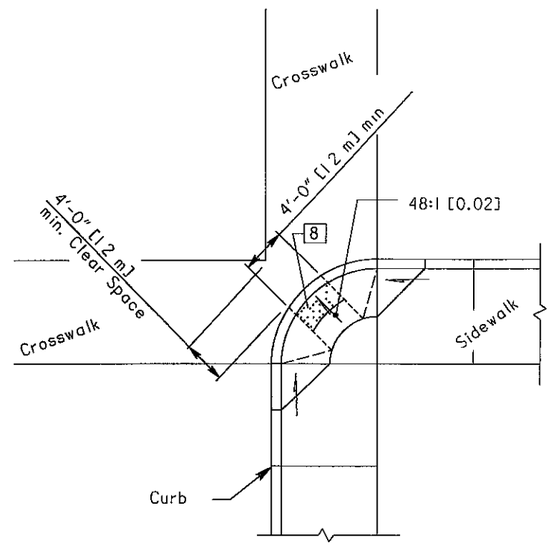
DESIGN A
PERPENDICULAR RAMP



DESIGN B
PARALLEL RAMP



DESIGN C
COMBINATION RAMP



DESIGN D
DIAGONAL RAMP

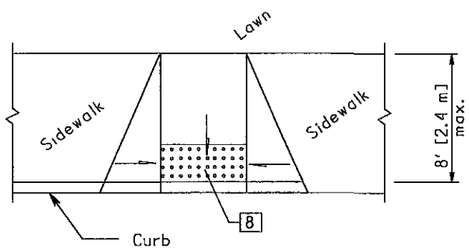
Use in existing walks only and when site constraints prohibit other designs. The diagonal ramp may be perpendcular, parallel or combination.

Avoid using where curb radii are less than 20'-0" [6.0 m]

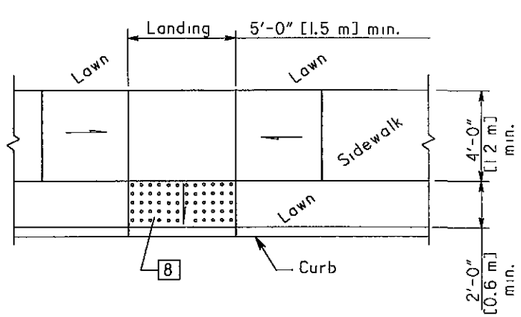
CORNER CURB RAMP DESIGNS

(See Curb Ramp Details on Sht 1/3 for additional requirements.)

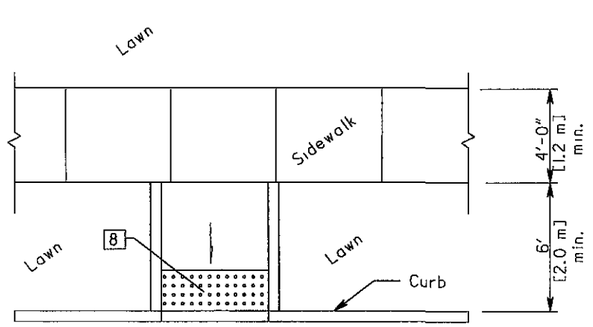
For LEGEND, See sheet 1.



DESIGN E
PERPENDICULAR RAMP



DESIGN F
PARALLEL RAMP



DESIGN G
PERPENDICULAR RAMPS
w/o FLARES

MID BLOCK CURB RAMP DESIGNS

(See Curb Ramp Details on Sht. 1/3 for additional requirements.)

7-12-02

CURB RAMPS WITH TRUNCATED DOMES

GUE-541-0.00
COS-541-31.87

NOTES

SURFACE TEXTURE: Texture of concrete surfaces shall be obtained by coarse brooming transverse to the ramp slopes and shall be rougher than adjacent walk.

TRUNCATED DOMES Install detectable warnings (truncated domes) for a distance of 24" [610] from the back of the curb for the entire width of the ramp opening as shown on details on Sheet 1.

Pavers will meet ASTM C 902 Class SX, Type I, or C 936, or C 1272 Type R.

Acceptable manufacturers and products are:

1) Whitacre-Greer Fireproofing Company,
   1400 S. Mahoning Ave, Alliance, OH, 44601, (800) WG PAVER
   ADA Paver, 4"x8"x2-1/4", Clear Red (Rustic) #30.

2) Hanover Architectural Products,
   240 Bender Rd., Hanover, PA. 17331, (717) 637-0500
   Detectable Warning Paver, 12"x12"x2", or 24"x24"x2",
   Red or Quarry Red.

3) Endicott Clay Products,
   PO Box 17, Fairbury, NE, 68352, (402) 729-5804
   Handicap Detectable Warning Paver,
   4"x8"x2-1/4", Red Blend.

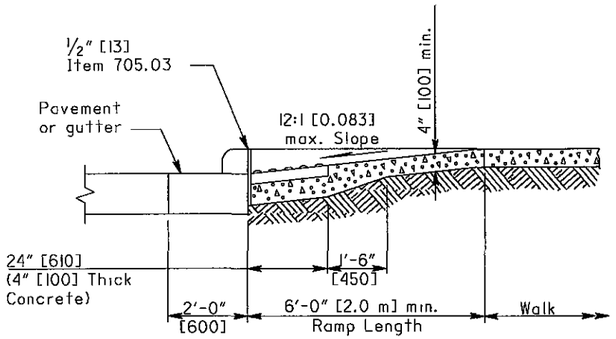
Pavers will laid on top of a 4" [100] unreinforced concrete base. Setting bed and joints to be mortared in accordance with manufacturer's instruction, or with a maximum 1/2" [13] thick bed of latex modified cement mortar. Mortar joints to a width not greater than 5/32" [4] and not less than 1/16" [1.5]. Pavers shall not be directly touching each other unless they have spacing bars.

Mortared joints are to be flush with top surface and struck so as to give a smooth surface Pavers shall be laid such that joints are level with adjoining joints *so as to provide a smooth transition from brick* to brick and brick to concrete surface.

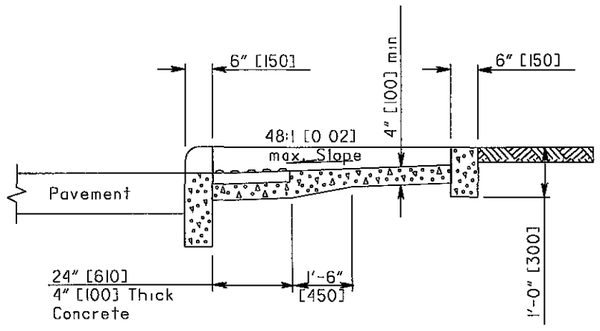
The surface of any two adjacent units should not differ by more than 1/8" [3] in height. Bricks shall be placed in a running bond pattern. Face of all brick shall be clean of cement and protected so as to avoid chipping during constructionn.

EXPANSION JOINTS shall be provided in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. A 1/2" [13] Item 705.03 expansion joint filler shall be provided around the edge of ramps built in existing concrete walk. Lines shown on this drawing indicate the ramp edge and slope changes and are not necessarily joint lines.

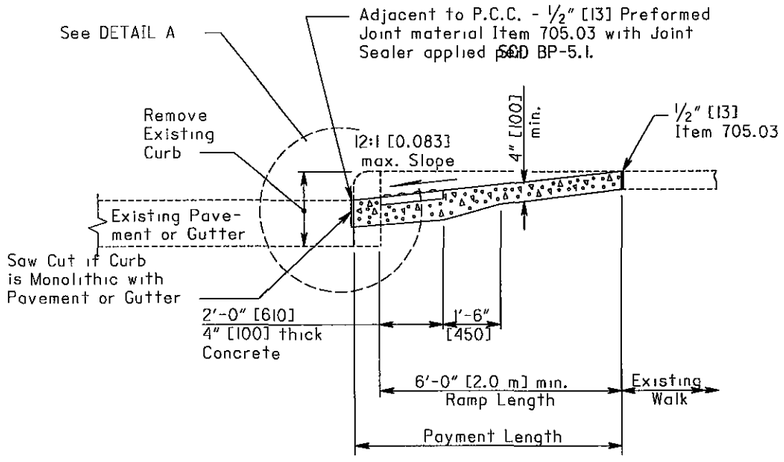
PAYMENT: Walk and curb, Items 608 and 609, shall be measured through the curb ramp area paid for under their respective Items. Item 608 - Curb Ramp, As Per Plan, Each constructed in new curb and walk shall include the cost of any additional materials and installation (including truncated domes), grading, forming and finishing. Item 608 - Curb Ramp. As Per Plan, Square Foot [Meter], constructed in existing curb and walk shall include the cost of furnishing and installing all materials (including truncated domes), grading, forming, and finishing of the curb and walk of the curb ramp Removal of existing curb and walk shall be paid for under Item 202.



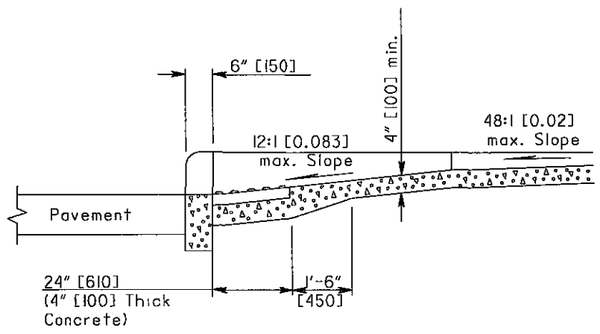
SECTION A-A
NORMAL DETAIL
See Sheet 1 of 3.
(Gutter shown)



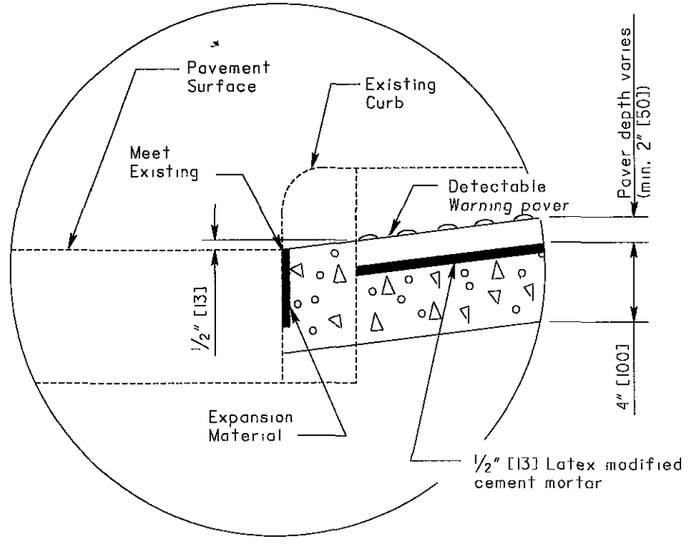
SECTION B-B
See Sheet 1 of 3.



SECTION A-A
EXISTING WALK DETAIL
See Sheet 1 of 3.



SECTION C-C
See Sheet 1 of 3.



DETAIL A

7-12-02

CURB RAMPS WITH TRUNCATED DOMES

GUE-541-0.00
COS-541-31.87

3 / 3

15C
21

ITEM 642 FAST DRY EDGE LINE SUB-SUMMARY

LOCATION	COUNTY	ROUTE	SLM		WHITE EDGE LINE QUANTITIES			YELLOW EDGE LINE QUANTITIES			PARTICIPATION TYPE				EDGE LINE TOTAL	REMARKS
			FROM	TO	TOTAL MILES	HIGH-WAY MILES	RAMP MILES	TOTAL MILES	HIGH-WAY MILES	RAMP MILES	IRG	FG	RSG	NON FED STATE	MILES	
1	GUE	SR 541	0.00	0.45	0.90	0.45									0.90	
			0 46	8.47	16.02	8.01									16.02	
														TOTAL LOCATION 1	16.92	
2	COS	SR 541	31.87	34.90	6.06	3.03									6.06	

ITEM 642 FAST DRY CENTER LINE SUB-SUMMARY

LOCATION	COUNTY	ROUTE	SLM		CENTER LINE QUANTITIES		PARTICIPATION TYPE				CENTER LINE TOTAL	REMARKS
			FROM	TO	TOTAL MILES	EQUIVALENT SOLID LINE	IRG	FG	RSG	NON FED STATE	MILES	
1	GUE	SR 541	0.00	0.45	0.45						0 45	
			0.46	8.47	8.01						8.01	
					TOTAL LOCATION 1	13.70					8.46	
2	COS	SR 541	31.87	34.90	3.03	5.36					3.03	

CALCULATED MJE
CHECKED LME

EDGE / CENTERLINE SUB-SUMMARY

GUE-541-0.00
COS-541-31.87

16
21

C541001.TEL 3-06-06

644 THERMOPLASTIC

LOCATION	COUNTY	ROUTE	DESCRIPTION	SLM	SIDE	24" TRANSVERSE LINES		STOP LINE	12" CROSS WALK LINES	WORD ON PAVEMENT		SCHOOL SYMBOL MARKING		LANE ARROWS					RAILROAD SYMBOL MARKING	8" CHANNEL LINE	REMARKS
						WHITE	YELLOW	24"		ONLY	ONLY	ONLY	ONLY	COMBINATION		TURN					
									WHITE	72"	96"	72"	96"	LT/TH	RT/TH	LT	RT	TH			
						FEET	FEET	FEET	FEET	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FEET	
1	GUE	SR 541																			
			STANDING ROCK RD. (TWP. RD. 187)		LT			25													PLACE 21' FROM CL SR 541
			CO. RD. 86		LT			45													PLACE 18' FROM CL SR 541
			ON SR 541 AT SR 658					22													
			BIRD ST.		LT			20													PLACE 16' FROM CL SR 541
			BRIDGE ST (TWP. RD. 186)		RT			10													PLACE 36' FROM CL SR 541
			BRIDGE RD. (TWP. RD. 186)		RT			10													PLACE 24' FROM CL SR 541
			KEATS RD (TWP RD. 381)		LT			12													PLACE 17' FROM CL SR 541
			WINDOW RD. (TWP. RD. 834)		LT			15													PLACE 27' FROM CL SR 541
			RINGER RD. (TWP. RD. 3808)		RT			19													PLACE 19' FROM CL SR 541
			CAIN RD. (TWP RD 3826)		RT			13													PLACE 20' FROM CL SR 541
			KIMBOLTON CORP. LINE																		
			NORWALK RD. (CO RD 380)		RT			8													PLACE 43' FROM CL SR 541
			MAIN ST. (CO RD 33)		RT			15													PLACE 24' FROM CL SR 541
			MAIN ST. (CO. RD. 33)		LT			15													PLACE 24' FROM CL SR 541
			STREET ON RIGHT		RT			11													PLACE 15' FROM CL SR 541
			KIMBOLTON CORP. LINE																		
			BOONE RD. (TWP. RD 3846)		LT			25													PLACE 22' FROM CL SR 541
			HAZLETT RD. (TWP. RD 8361)		LT			22													PLACE 24' FROM CL SR 541
			N.W RAMP FROM I-77 SB		LT			65													PLACE 22' FROM CL SR 541
			S E. RAMP FROM I-77 NB		RT			52													PLACE 24' FROM CL SR 541
			TOTALS LOCATION 1					***404***													
2	COS	SR 541	ON SR 93 AT SR 541		CL			10													
			ON SR 541 AT SR 93		CL			10													
			ON SR 541 AT SR 93		CL			10													PLACE 30' FROM CL SR 93
			TWP. RD 118		LT			20													PLACE 16' FROM CL SR 541
			TWP. RD. 119		LT			27													PLACE 17' FROM CL SR 541
			TWP. RD. 110		RT			43													PLACE 19' FROM CL SR 541
			CO. RD 120		LT			20													PLACE 18' FROM CL SR 541
			TWP. RD 108		RT			26													PLACE 15' FROM CL SR 541
			TOTALS LOCATION 2					***166***													

CALCULATED MJE CHECKED LME

AUXILARY PAVEMENT MARKING SUB-SUMMARY

GUE-541-0.00
COS-541-31.87

17
21

C54100I.TAS 3-06-06

CALC. BY_____
DATE _____

CHKD. BY_____
DATE _____

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.

RPM LOCATION SUB-SUMMARY

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		DEGREE OF CURVE	DETAIL	621 ITEM QUANTITIES			PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
												ONE-WAY		TWO-WAY			
					MILES	LIN.FT.			RPM	RPM CASTING	PRISMATIC RETRO-	WHITE	YELLOW	YELLOW / YELLOW	WHITE / RED	YELLOW / RED	
1	GUE	541	0	1 42	1.42	7498	GAP	GAP	94					94			
			1.42	1 48	0.06	317	9	11	8					8			
			1.48	1 73	0.25	1320	GAP	GAP/7	33			16		17			STOP APPROACH AT SR 658 IN WB LANE
			1.73	1.94	0.21	1109	13	12	31					31			
			1.94	2 07	0.13	686	5	11	9					9			
			2.07	2.25	0.18	950	GAP	GAP	12					12			
			2.25	2.8	0.55	2904	18	12	121					121			
			2.8	3.11	0.31	1637	GAP	GAP	20					20			
			3.11	3.17	0.06	317	5	11	4					4			
			3.17	3.57	0.4	2112	GAP	GAP	26					26			
			3.57	4 13	0.56	2957	15	12	124					124			
			4.13	4.35	0.22	1162	GAP	GAP	15					15			
			4.35	4.41	0 06	317	6	11	8					8			
			4.41	4.47	0.06	317	GAP	GAP	4					4			
			4.47	4.5	0.03	158	9	11	4					4			
			4.5	4.96	0.46	2429	GAP	GAP	30					30			
			4.96	5.01	0.05	264	8	11	7					7			
			5.01	5.37	0.36	1901	13	12	71					71			
			5.37	5 45	0.08	422	GAP	GAP	5					5			
			5 45	5 54	0.09	475	6	11	12					12			
			5 54	6 01	0.47	2482	GAP	GAP	31					31			
			6 01	6 27	0.26	1373	14	12	45					45			
			6.27	6.58	0.31	1637	11	12	58					58			
			6 58	7.87	1 29	6811	GAP	GAP	85					85			
			7.87	7.89	0.02	106	7	11	3					3			
			7.89	8.49	0.6	3168	GAP	GAP	40					40			
								SUBTOTAL LOCATION 1	***900***			***16***	***0***	***884***	***0***	***0***	
2	COS	541	31.87	32.2	0.33	1742	GAP	GAP	28			6		22			
			32.2	32 42	0.22	1162	10	12	34					34			
			32.42	32.49	0.07	370	GAP	GAP	5					5			
			32.49	32.76	0.27	1426	14	12	47					47			
			32.76	33.23	0.47	2482	GAP	GAP	31					31			
			33 23	33.3	0.07	370	9	11	9					9			
			33 3	33.36	0.06	317	GAP	GAP	4					4			
			33.36	33 47	0.11	581	8	11	15					15			
			33.47	34 9	1.43	7550	GAP	GAP	94					94			
								SUBTOTAL LOCATION 2	***267***			***6***	***0***	***261***	***0***	***0***	

CALCULATED M.J.E.
CHECKED L.M.E.

RPM LOCATION SUB-SUMMARY

GUE-541-0.00
COS-541-31.87

18
21

C54100I.TRM 03-06-06

SHEET TOTALS																	ITEM	ITEM EXT. NO.	GRAND TOTALS	UNIT	DESCRIPTION
3	4	5	6	7	9	10	11	12	15	16	17	18									
							877	4564									202	23500	5441	SQ.YD.	WEARING COURSE REMOVED
									96								202	30000	96	SQ.FT.	WALK REMOVED
		2															202	42000	2	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A
990																	202	54000	990	EACH	RAISED PAVEMENT MARKER REMOVED
			18.0														203	10001	18	CU. YD.	EXCAVATION, AS PER PLAN
			3.00														209	60500	3.00	MILE	LINEAR GRADING
	9000																253	01001	9000	SQ.YD.	PAVEMENT REPAIR, AS PER PLAN
			18 0														301	46000	18.0	CU. YD.	ASPHALT CONCRETE BASE, PG64-22
			12		7669		459	41									407	10000	8181	GALLON	TACK COAT
			8		5112		306	42									407	14000	5468	GALLON	TACK COAT FOR INTERMEDIATE COURSE
	43563																407	98000	43563	FT.	TACK COAT, MISC.: FOR LONGITUDINAL JOINT
	7738																408	10001	7738	GALLON	PRIME COAT, AS PER PLAN
400.0	4.0		3.0		2840.2		169.8	16.8									448	46080	3433.8	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 70-22
	20.0		3.0		2840.2		169.8	23.5									448	46900	3056.5	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22
			2														604	09000	2	EACH	CATCH BASIN ADJUSTED TO GRADE
		212.5															606	13000	212.5	FT.	GUARDRAIL, TYPE 5
		262.5															606	13030	262.5	FT.	GUARDRAIL, TYPE 5, USING 9 FOOT POSTS
		2															606	25000	2	EACH	ANCHOR ASSEMBLY, TYPE A
		2															606	26500	2	EACH	ANCHOR ASSEMBLY, TYPE T
									96								608	52001	96	SQ.FT.	CURB RAMP, AS PER PLAN
90																	614	12460	90	EACH	WORK ZONE MARKING SIGN
5.3																	614	13000	5 3	CU.YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
					16.92												614	21400	16.92	MILE	WORK ZONE CENTER LINE, CLASS II
						1074.2											617	10101	1074.2	CU.YD.	COMPACTED AGGREGATE, AS PER PLAN
												900					621	00100	900	EACH	RPM
										16.92							642	00100	16.92	MILE	EDGE LINE, TYPE 1
										8.46							642	00300	8.46	MILE	CENTER LINE, TYPE 1
											404						644	00500	404	FT.	STOP LINE
									100								644	00600	100	FT	CROSSWALK LINE
				1													SPECIAL	69060100	1	EACH	MAILBOX SUPPORT SYSTEM, SINGLE

CALCULATED MJE
CHECKED LME

LOCATION 1 SUB-SUMMARY

GUE-541-0.00
COS-541-31.87

C541001.mls 3-06-06

SHEET TOTALS																	ITEM	ITEM EXT. NO.	GRAND TOTALS	UNIT	DESCRIPTION
3	4	5	6	7	9	10	11	12	15	16	17	18									
							714	1643									202	23500	2357	SQ.YD.	WEARING COURSE REMOVED
490																	202	54000	490	EACH	RAISED PAVEMENT MARKER REMOVED
					2742		154										407	10000	2896	GALLON	TACK COAT
					1828		103	47									407	14000	1978	GALLON	TACK COAT FOR INTERMEDIATE COURSE
	15998																407	98000	15998	FT.	TACK COAT, MISC.: FOR LONGITUDINAL JOINT
	2794																408	10001	2794	GALLON	PRIME COAT, AS PER PLAN
	2 0				1015.3		57.0										448	46080	1074 3	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 70-22
	5 0				1015.3		57.0	26 2									448	46900	1103.5	CU.YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22
22																	614	12460	22	EACH	WORK ZONE MARKING SIGN
2.0																	614	13000	2.0	CU.YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
					6.06												614	21400	6.06	MILE	WORK ZONE CENTER LINE, CLASS II
						388.0											617	10101	388.0	CU.YD.	COMPACTED AGGREGATE, AS PER PLAN
												267					621	00100	267	EACH	RPM
										6 06							642	00100	6.06	MILE	EDGE LINE, TYPE 1
										3.03							642	00300	3.03	MILE	CENTER LINE, TYPE 1
											166						644	00500	166	FT.	STOP LINE

CALCULATED M.J.E.
CHECKED L.M.E.

LOCATION 2 SUB-SUMMARY

GUE-541-0.00
COS-541-31.87

20
21

C541002.mls 3-06-06

SHEET TOTALS				ITEM	ITEM EXT. NO.	GRAND TOTALS	UNIT	DESCRIPTION
LOCATION 1 SHEET 19	LOCATION 2 SHEET 20							
5441	2357			202	23500	7798	SQ.YD.	WEARING COURSE REMOVED
96				202	30000	96	SQ FT.	WALK REMOVED
2				202	42000	2	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A
990	490			202	54000	1480	EACH	RAISED PAVEMENT MARKER REMOVED
18				203	10001	18	CU. YD.	EXCAVATION, AS PER PLAN
3.00				209	60500	3.00	MILE	LINEAR GRADING
9000				253	01001	9000	SQ.YD.	PAVEMENT REPAIR, AS PER PLAN
18				301	46000	18	CU. YD	ASPHALT CONCRETE BASE, PG64-22
8181	2896			407	10000	11077	GALLON	TACK COAT
5468	1978			407	14000	7446	GALLON	TACK COAT FOR INTERMEDIATE COURSE
43563	15998			407	98000	59561	FT.	TACK COAT, MISC.: FOR LONGITUDINAL JOINT
7738	2794			408	10001	10532	GALLON	PRIME COAT, AS PER PLAN
3434	1075			448	46080	4509	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 70-22
3057	1104			448	46900	4161	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22
2				604	09000	2	EACH	CATCH BASIN ADJUSTED TO GRADE
212.5				606	13000	212.5	FT.	GUARDRAIL, TYPE 5
262.5				606	13030	262.5	FT.	GUARDRAIL, TYPE 5, USING 9 FOOT POSTS
2				606	25000	2	EACH	ANCHOR ASSEMBLY, TYPE A
2				606	26500	2	EACH	ANCHOR ASSEMBLY, TYPE T
96				608	52001	96	SQ.FT.	CURB RAMP, AS PER PLAN
90	22			614	12460	112	EACH	WORK ZONE MARKING SIGN
6	2			614	13000	8	CU YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
16.92	6.06			614	21400	22.98	MILE	WORK ZONE CENTER LINE, CLASS II
1075	388			617	10101	1463	CU.YD.	COMPACTED AGGREGATE, AS PER PLAN
900	267			621	00100	1167	EACH	RPM
16.92	6.06			642	00100	22.98	MILE	EDGE LINE, TYPE 1
8 46	3.03			642	00300	11.49	MILE	CENTER LINE, TYPE 1
404	166			644	00500	570	FT	STOP LINE
100				644	00600	100	FT.	CROSSWALK LINE
1				SPECIAL	69050100	1	EACH	MAILBOX SUPPORT SYSTEM, SINGLE
				614	11000	1	LUMP	MAINTAINING TRAFFIC
				619	16000	3	MONTH	FIELD OFFICE, TYPE A
				623	10000	1	LUMP	CONSTRUCTION LAYOUT STAKES
				624	10000	1	LUMP	MOBILIZATION

CALCULATED MJE
CHECKED LME

GENERAL SUMMARY

GUE-541-0.00
COS-541-31.87

C541001.mgs 3-06-06