



Matthew G. Bevin
Governor

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

October 23, 2019

CALL NO. 402
CONTRACT ID NO. 191065
ADDENDUM # 1

Subject: BREATHITT-PERRY COUNTIES, 121GR19D065 - FD04
Letting October 25, 2019

- (1) Revised - General Summary - Pages 37-38 of 272
- (2) Revised - Delete Page 39 of 272
- (3) Revised - Guardrail & Drainage Summary - Page 40 of 272
- (4) Revised - Paving Summary - Page 42 of 272
- (5) Revised - Delete Pages 43-56 of 272
- (6) Revised - Delete Pages 64-65 of 272
- (7) Revised - Standard Drawings Summary - Pages 180-182 of 272
- (8) Revised - Delete Page 183 of 272
- (9) Revised - Special Notes - Page 185 of 272
- (10) Revised - Delete Pages 198-200 of 272
- (11) Added - Guardrail Connector Detail Sheet - Page 1 of 1

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in cursive script that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:mr
Enclosures



An Equal Opportunity Employer M/F/D

GENERAL SUMMARY

ITEM CODE	ITEM	UNIT	Breathitt	Perry	PROJECT TOTAL
461	CULVERT PIPE - 15 IN	L.F.	8		8
462	CULVERT PIPE - 18 IN	L.F.		8	8
981	SLOTTED DRAIN PIPE - 15 IN	L.F.	32		32
982	SLOTTED DRAIN PIPE - 18 IN	L.F.		20	20
1370	METAL END SECTION TYPE 1-15 IN	EACH	2		2
1450	S & F BOX INLET - OUTLET - 18 IN	EACH		2	2
1691	FLUME TYPE 2	EACH		3	3
1897	ASPHALT WEDGE CURB	L.F.		1,000	1,000
1987	DELINEATOR FOR G/R-BI DIR. WHITE (4)	EACH	79	475	554
2014	BARRICADE-TYPE III	EACH	2	4	6
2200	ROADWAY EXCAVATION	CU. YD.	165.5	229.5	395.0
21802EN	GR.-STEEL W BEAM-S FACE (7' POST)	L.F.	8,675	3,925	12,600
2360	GUARDRAIL TERMINAL SECTION NO 1.	EACH	14	7	21
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	2	1	3
2372	REMOVE GUARDRAIL CON TO BR END.	EACH	28		28
2377	GUARDRAIL CON TO BR END TYPE C (8)	EACH	28		28
2381	REMOVE GUARDRAIL (11)	L.F.	8,763	4,050	12,813
2383	REMOVE & RESET GUARDRAIL (1)	L.F.	163	2,000	2,163
2391	GUARDRAIL END TREATMENT TYPE 4A	EACH	1	2	3
2484	CHANNEL LINING CLASS III (2)	TON		200	200
2562	TEMPORARY SIGNS	SQ. FT.	500	1,069	1,569
2565	OBJECT MARKER TYPE 2 (6)	EACH	28		28
20191ED	OBJECT MARKER TYPE 3	EACH	3	3	6
2568	MOBILIZATION	L.S.	1	1	1
2569	DEMOBILIZATION	L.S.	1	1	1
2575	DITCHING & SHOULDERING (1) (9)	L.F.		2,000	2,000
2650	MAINTAIN & CONTROL TRAFFIC	L.S.	1	1	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	2	4	6
2676	MOBILIZATION FOR MILL & TEXT.	L.S.	1	1	2
2696	SHOULDER RUMBLE STRIPS-SAWED	L.F.		86,370	86,370
2726	STAKING	L.S.	1	1	1
2775	ARROW PANEL	EACH	2	4	6
3262	CLEAN PIPE STRUCTURE (12) (1)	EACH		5	5
5950	EROSION CONTROL BLANKET (1)	SQ. YD.	200	300	500
6510	PAVE STRIPING-TEMP PAINT-4 IN	L.F.	500	90,895	91,395
6514	PAVE STRIPING-PERM PAINT-4 IN	L.F.	1,000	182,790	183,790
6568	PAVE MARKING - THERMO STOP BAR - 24 IN	L.F.		68	68
6573	PAVE MARKING - THERMO STR ARROW	EACH		5	5
6574	PAVE MARKING - CURV ARROW	EACH		50	50
6576	PAVE MARKING - THERMO ONLY	EACH		1	1
6578	PAVE MARKING - THERMO MERGE ARROW	EACH		11	11
20458ES403	CENTERLINE RUMBLE STRIPS (10)	L.F.		33,514	33,514
24489EC	INLAID PAVEMENT MARKER (7)	EACH		825	825
10020NS	FUEL ADJUSTMENT	DOLLAR		40,867	40,867

10030NS	ASPHALT ADJUSTMENT	DOLLAR		102,647	102,647
21415ND	EROSION CONTROL (3)	L.S.	1	1	1
20071EC	JOINT ADHESIVE (13)	L.F.		165,400	165,400
SIGNS (SEE SHEET SIGN SUMMARY AND MAPS.)					
6403	FLEXIBLE DELINEATOR POSTS -BW	EACH	118		118
6406	ALUMINUM SHEET. SIGNS 0.080 GAUGE	SQ. FT.	720	295	1015
6407	ALUMINUM SHEET. SIGNS 0.125 GAUGE	SQ. FT.	1,240	409	1649
6410	STEEL POST TYPE 1	L.F.	3,260	1,240	4500
6412	STEEL POST MILE MARKERS	EACH	16	7	23
24631EC	BARCODE LABEL	EACH	339	129	468
(1) AT LOCATIONS AS DIRECTED BY THE ENGINEER					
(2) 200 TONS TO BE PLACED AT LOCATIONS AS DIRECTED BY THE ENGINEER					
(3) SEE EROSION CONTROL SPECIAL NOTE					
(4) ADDITIONAL 300 TO BE USED AT GUARDRAILS WITH MISSING DELINEATOR.					
(5) ADDITIONAL 500 L.F. TO BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER.					
(6) SEE STD. DRAWING RBR-060					
(7) EXISTING PAVE. MARKER REMOVAL SHALL BE INCIDENTAL TO ASPHALT PAVEMENT MILLING & TEX.					
(8) SEE STANDARD DRAWING FOR TYPE C CONNECTOR IN THE PROPOSAL.					
(9) INCLUDES BOTH DIRECTIONS OF ROADWAY AND CLEANING OUT ALL PERFORATED PIPE HEADWALLS.					
(10) STANDARD DRAWING FOR "CENTERLINE RUMBLE STRIPS 6 INCH STRIPING" SHALL BE USED.					
(11) INCLUDED QUANTITIES TO REMOVE EXISTING G.R. END TREATMENTS WITHIN THE CONST. LIMIT.					
(12) THIS BID ITEM IS INTENDED FOR PIPES WITH DIAMETER EQUAL TO OR GREATER THAN 36". CLEANING PIPE STRUCTURES WITH DIAMETER SMALLER THAN 36" ARE INCIDENTAL TO BID ITEM "DITCHING & SHOULDERING".					
(13) SEE SHOULDER JOINT AND CENTERLINE JOINT DRAWINGS.					
NOTES FOR SIGNS - ADDITIONAL NOTES CAN BE FOUND IN SIGNING PLANS.					
*THE EXACT SIGN LOCATIONS SHALL BE FIELD VERIFIED AND DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. MILE POINTS PROVIDED ON THE SIGNING PLANS ARE FOR REFERENCE ONLY.					
*THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROJECT MANAGER/ENGINEER TO DETERMINE IF TEMPORARY CONSTRUCTION SIGNS FOR OTHER PROJECTS NEED TO BE REMOVED OR RELOCATED.					
*CLEARING AND GRUBBING, AND TREE TRIMMING, WHEN REQUIRED FOR CONSTRUCTION OR VISIBILITY OF SIGNS, SHALL BE INCIDENTAL TO THE CONTRACT. LOCATIONS TO BE DETERMINED BY THE ENGINEER.					

GUARDRAIL & DRAINAGE SUMMARY

MILE POINT	TERMINAL SEC. #1	GR. END TREATMENT TYPE 1	GR. END TREAT. TYPE 4A	REMOVE GUARDRAIL	GUARDRAIL (7FT POST)	GUARDRAIL CON TO BR END TYPE C	REMOVE GR. CON. TO BR. END	FLUME TYPE 2	REMOVE AND RESET GUARDRAIL	DELINEATOR FOR GR-BI DIR. WHITE	OBJECT MARKERS TYPE 3	ASPHALT WEDGE CURB	SLOTTED DRAIN PIPE - 15 IN	SLOTTED DRAIN PIPE - 18 IN	CULVERT PIPE 15 IN	CULVERT PIPE 18 IN	METAL END SECT. TYPE 1 - 15 IN	SLOPED & FLARED INLET-OUTLET 18 IN	ASPHALT MILLINGS****
BREATHITT																			
Northbound MP 3.279-3.543	2			1362.5	1362.5					27									
Northbound MP 4.627-4.700	1	1		400	400					8	1								
Southbound MP 2.178-2.566	1	1		2037.5	1987.5					40	1								
Southbound MP 2.816-3.031	2			1175	1175					24									
Southbound MP 4.062-4.476	2			2287.5	2287.5					46									
Southbound MP 4.485	2			75	75					2									
Southbound MP 4.491-4.622	2			700	700					14									
Southbound MP 4.628-4.648	2			125	125					3									
Southbound MP 4.653-4.765	1		1	600	562.5					11	1								
MP 12.0-12.3 (Drainage & Super)								162.5					32		8		2		350
BREATHITT BRIDGE BARRIER RETROFIT																			
BRIDGE NO. 1 (013 B30)						4	4												
BRIDGE NO. 2 (013 B31)						4	4												
BRIDGE NO. 3 (013 B32)						4	4												
BRIDGE NO. 4 (013 B33)						4	4												
BRIDGE NO. 5 (013 B34)						4	4												
BRIDGE NO. 6 (013 B35)						4	4												
BRIDGE NO. 7 (013 B37)						4	4												
PERRY																			
Northbound MP 20.891-20.917	1	1		512.5	462.5					9	1								
Northbound MP 20.982-21.105	2			725	725					15									
Site 2 (Two-way left turn lane)	4		2	1812.5	1737.5					35	2		20		8			2	
Damaged Rails **				1000	1000					20									
Shoulder Wedges Repairs ***								5	2000										880
Shoulder Edge Drop-off Repair																			95
TOTAL	21	3	3	12812.5	12600	28	28	5	2162.5	252	6	1000	32	20	8	2	2	1325	

*QUANTITIES ON THIS SHEET HAVE BEEN CARRIED OVER AND INCLUDED IN THE GENERAL SUMMARY SHEET
 **AT LOCATIONS AS DIRECTED BY THE ENGINEER.
 ***QUANTITIES BASED ON 2000 L.F. OF SHLD REPAIR, SEE TYPICAL SECTION SHEET "O" FOR DETAIL. AT LOCATIONS DIRECTED BY ENG.
 ****USE MILLINGS FROM THIS PROJECT.

PAVING SUMMARY

ITEM CODE	UNIT	BREATHITT	PERRY				PROJECT TOTAL
1	DGA BASE (3) (11)	TON	9	3,357			3,366
78	CRUSHED AGGREGATE SIZE NO. 2 (2)	TON		200			200
100	ASPHALT SEAL AGGREGATE (4) (7)	TON	5.3	38.2			43.5
103	ASPHALT SEAL COAT (5) (7)	TON	0.6	4.6			5.2
194	LEVELING AND WEDGING PG 76-22 (13)	TON	48	1445			1,493
214	CL3 ASPH BASE 1.0D PG 64-22 (14)	TON		5741			5,741
216	CL3 ASPH BASE 1.0D PG 76-22 (10)	TON	484	3,839			4,323
356	ASPHALT MATERIAL FOR TACK (9)	TON		84.7			84.7
387	CL3 ASPH SURF 0.38B PG76-22	TON	327	16,139			16,466
2677	ASPH. PAVE MILL. & TEXTURING (6)	TON	654	24,914			25,568
24878EC	ASPHALT EMUL. FOR FOG SEAL (12)	TON		50.0			50.0
(1) ALL ASPHALT MIXTURES ARE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH							
(2) 200 ADDED FOR REPAIR OF EMBANKMENT WHEREVER NEEDED. USE AS DIRECTED BY THE ENG.							
(3) ESTIMATED AT 115 LBS. PER SQ. YD. PER INCH OF DEPTH							
(4) ESTIMATED AT 20 LBS/SQ YD.							
(5) ESTIMATED AT 2.4 LBS/SQ. YD.							
(6) SEE PROJECT NOTES FOR MILLINGS.							
(7) TO BE PLACED AT OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 3' DOWN THE DITCH OR FILL SLOPE, TWO APPLICATIONS.							
(8) ASPHALT SEAL AGGREGATE AND SEAL COAT TO BE APPLIED AT LOCATIONS WITH NEW GUARDRAIL.							
(9) ESTIMATED AT 0.84 LBS (0.1 GAL) PER SQUARE YARD.							
(10) 500 TONS ADDED FOR LOCATIONS WHERE SHOULDER OR CENTERLINE JOINTS NEED TO BE REPAIRED. SEE TYPICAL SECTION OF SHOULDER AND CENTERLINE JOINTS REPAIRS FOR DETAIL.							
(11) 500 TONS ADDED FOR REPAIR OF SHOULDERS WHEREVER NEEDED. USE AS DIRECTED BY THE ENG.							
(12) TO BE USED ON EXISTING SHOULDERS (OUTER REMAINING) AS DIRECTED BY THE ENGINEER. SEE SPECIAL NOTE FOR FOG SEAL. FOR CALCULATION PURPOSE, ASSUMED 8.4 LBS/GAL							
(13) 500 TONS ADDED. TO BE USED DURING MOT OR AT LOCATIONS AS DIRECTED BY THE ENGINEER.							
(14) INCLUDING 44.8 TONS FOR SHOULDER WIDENING ON PERRY SITE 3.							

STANDARD DRAWINGS APPLICABLE TO PROJECT

RBI-002-07	TYPICAL GUARDRAIL INSTALLATIONS
RBI-004-05	INSTALLATION OF G.R. END TREATMENT TYPE 1
RBR-001-12	STEEL BEAM GUARDRAIL ("W" BEAM)
RBR-005-10	GUARDRAIL RAIL COMPONENTS
RBR-010-05	GUARDRAIL TERMINAL SECTIONS
RBR-015-05	STEEL GUARDRAIL POSTS
RBR-020-06	GUARDRAIL END TREATMENT TYPE 1
RBR-035-11	GUARDRAIL END TREATMENT TYPE 4A
RBR-055	DELINEATORS FOR GUARDRAIL
RBR-060	DELINEATORS AT NARROW SHOULDER BRIDGES
RBR-100-07	STEEL BEAM GUARDRAIL (THRIE BEAM)
RDB-105-06	SLOPED AND FLARED BOX INLET-OUT 18"-36"
RDB-106-05	GRATES FOR SLOPED AND FLARED BOX INLET-OUTLET
RDB-150-02	METAL END SECT. TYPE 1 AND 2 (PARRALLEL STRUCTURES)

RDD-021-07	FLUME INLET TYPE 2
RDX-225	SILT TRAP TYPE B
RDX-101-04	SILT TRAP TYPE C
RDD-040-04	CHANNEL LINING CLASS II AND III
RDI-001-10	CULVERT, ENT, AND S.S. PIPE TYPE AND COVER HEIGHT.
RDI-020-09	PIPE BEDDING FOR CULVERTS, ENTRANCE & S.S. PIPE
RDI-021-01	PIPE BEDDING FOR CULV, ENT & S.S. REINFOR. CONC. PIPE.
RDI-040-01	PIPE BEDDING TRENCH CONDITION
RDI-41-01	PIPE BEDDING TRENCH CONDITION REINFOR. CONC. PIPE.
RDI-035-02	COATINGS, LININGS AND PAVINGS NON-STRUCT. PLAT PIPE.
RGX-060-01	BREAKAWAY SIGN SUPPORT SYSTEM FOR TYPE C BEAM
RDI-200-05	SLOTTED DRAIN PIPE (DETAIL SHEET)
TPM-115-03	PAVE MARKER ARRANGE. TWO-LANE, TWO-WAY RDWY.
TPM-15—02	CENTERLINE RUMBLE STRIPS
TPM-160-02	CENTERLINE RUMBLE STRIPS 6 INCH STRIPING
TPM-165	SHOULDER AND EDGELINE RUMBLE STRIP DETAILS
TPM -170	FLEXIBLE DELINEATOR POST ARRANGEMENTS FOR HORIZONTAL CURVES.
TTC-135-02	SHOULDE CLOSURE
TTC-155-02	TEMPORARY PAVE MARKER ARRANGE. FOR CONST. ZONE.
TTC-160-02	TEMPORARY PAVE MARKER ARRANGE FOR LANE CLOSURES.
TTD-120-01	WORK ZONE SPEED LIMIT AND DOUBLE FINE SIGNS

TTD-125-02

PAVEMENT CONDITION WARNING SIGNS

TTS-100-02

MOBILE OPERATION FOR PAINT STRIPING CASE I

TTS-105-02

MOBILE OPERATION FOR PAINT STRIPING CASE II

RGS-002-05

SUPERELEVATION FOR MULTI-LANE PAVEMENT

RGS-001-06

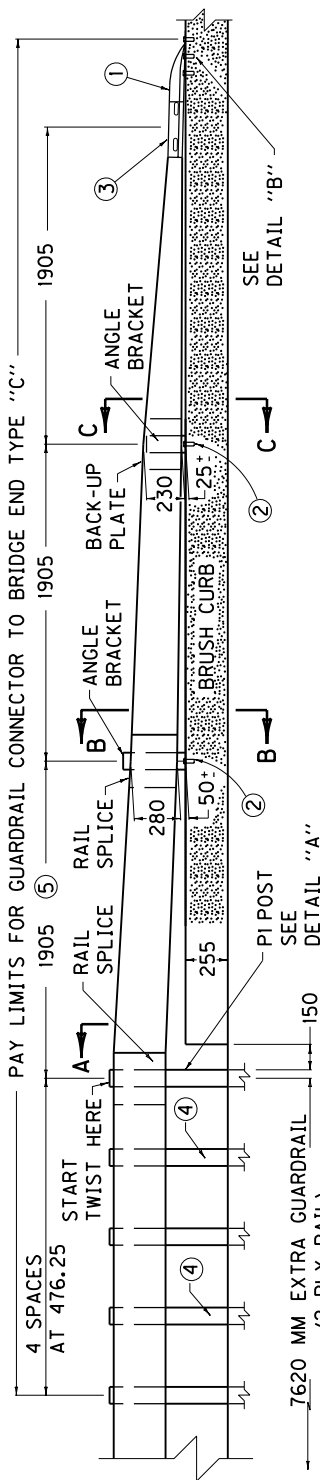
CURVE WIDENING AND SUPERELEVATION TRANSITIONS

SEPIA LIST

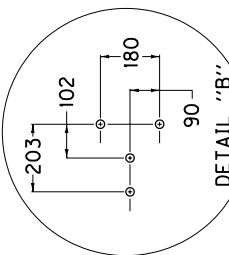
1. SEPIA 002 CENTERLINE RUMBLE STRIPS
2. SEPIA 004 CENTERLINE RUMBLE STRIPS 6 INCH STRIPING
3. SEPIA 005 SHOULDER AND EDGELINE RUMBLE STRIP DETAILS
4. SEPIA 007 SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS.
5. SEPIA 008 RUMBLE STRIP DETAILS MULTI-LANE RDWYS AND RAMPS
6. SEPIA 011 PAVE. MARKER ARRANGEMENTS TWO-WAY LEFT TURN LANE
7. SEPIA 024 TYPICAL GUARDRAIL INSTALLATIONS
8. SEPIA 025 INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1
9. SEPIA 027 STEEL BEAM GUARDRAIL "W" BEAM
10. SEPIA 028 STEEL GUARDRAIL POSTS
11. SEPIA 029 GUARDRAIL END TREATMENT TYPE 1
12. SEPIA 030 GUARDRAIL END TREATMENT TYPE 4A
13. SEPIA 032 DELINEATOR FOR GUARDRAIL
14. SEPIA 033 GUARDRAIL SYSTEM TRANSITION

6. FIXED COMPLETION DATE
7. FOG SEAL
8. CHANGEABLE MESSAGE BOARD
9. WASTE AND BORROW SITE
10. COORDINATION OF WORK

COUNTY OF	FISCAL YEAR	SHEET NO.	TOTAL SHEETS



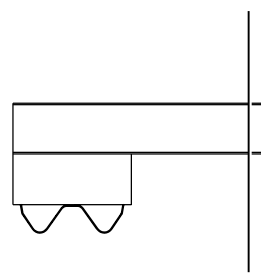
ELEVATION VIEW



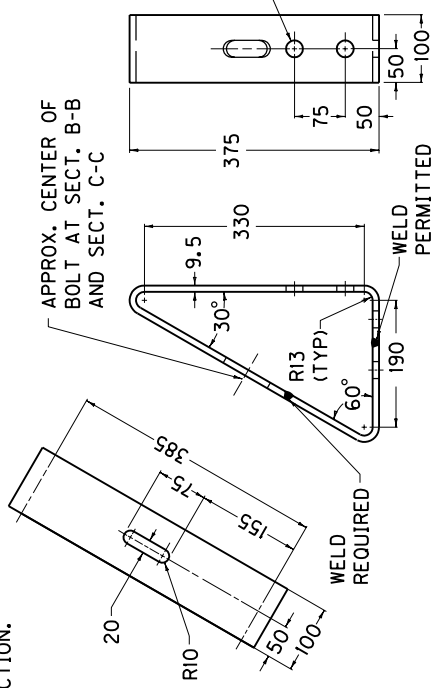
PLAN VIEW OF SELF-DRILL EXPANSION SHIELD LOCATIONS

NOTES:

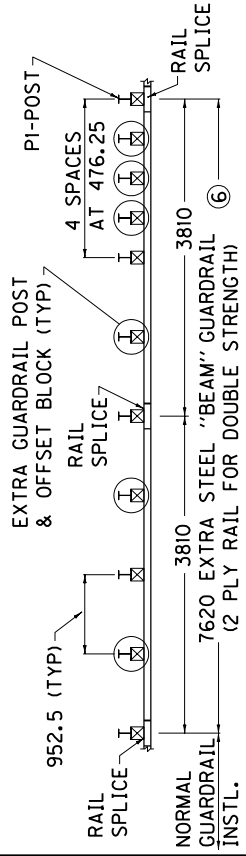
- 1. GUARDRAIL CONNECTOR TO BRIDGE END TYPE "C" SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH. THE UNIT PRICE INCLUDES ALL METAL COMPONENTS WITHIN THE PAY LIMITS AND IN ADDITION SHALL INCLUDE AN EXTRA 7620 MM OF STEEL "W" BEAM GUARDRAIL FOR DOUBLE STRENGTH, EXTRA GUARDRAIL POSTS, EXTRA OFFSET BLOCKS, AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION AS DETAILED.
- 2. GUARDRAIL CONNECTOR TO BRIDGE END TYPE "C" SHALL BE APPLIED ON:
 - A. ALL FOUR CORNERS OF EXISTING STRUCTURES WHICH HAVE TWO DIRECTIONAL TRAFFIC AND CURBS GREATER THAN 230 MM IN WIDTH.
 - B. APPROACH END OF EXISTING STRUCTURES WHICH HAVE ONE DIRECTIONAL TRAFFIC AND CURBS GREATER THAN 230 MM IN WIDTH.
 - C. NO PEDESTRIAN TRAFFIC IS INVOLVED.
- 3. SEE CURRENT STANDARD DRAWINGS RBR SERIES FOR ALL OTHER APPLICABLE MATERIAL AND CONSTRUCTION REQUIREMENTS.
- 4. TERMINAL SECT. NO. 2 SHALL BE ANCHORED TO THE BRIDGE BRUSH CURB WITH 4 CHUCK END TYPE SELF-DRILL EXPANSION SHIELDS M22 DIA. BOLT SIZE AND FOUR - M22x50 HEX HEAD HIGH STRENGTH GALVANIZED CAP SCREWS AND GALVANIZED STANDARD STEEL WASHERS.
- 5. ANGLE BRACKETS SHALL BE ANCHORED TO THE BRIDGE BRUSH CURB WITH TWO CHUCK END TYPE SELF-DRILL EXPANSION SHIELDS M22 DIAMETER BOLT SIZE AND TWO M22x50 HEX HEAD HIGH STRENGTH GALVANIZED CAP SCREWS AND GALVANIZED STANDARD STEEL WASHERS.
- 6. TERMINAL SECTION NO. 2; FOR RECTANGULAR PLATE WASHER REQUIREMENTS AT SPLICE SEE CUR. STD. DWG. RBR-010.
- 7. GUARDRAIL NOT REQUIRED TO BE ATTACHED TO POST AT THESE LOCATIONS.
- 8. A 1905 MM SECTION OF GUARDRAIL FACTORY PUNCHED SHALL BE REQUIRED.
- 9. BACKUP PLATES SHALL NOT BE REQUIRED WITHIN THE 2 PLY GUARDRAIL SECTION.
- 10. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SHOWN OTHERWISE.



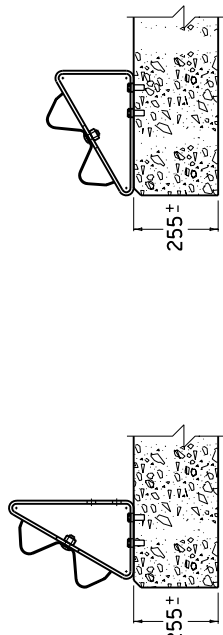
SECTION A-A



ANGLE BRACKET DETAIL



DETAIL "A"



SECTION B-B

SECTION C-C

KENTUCKY DEPARTMENT OF HIGHWAYS
GUARDRAIL CONNECTOR TO BRIDGE END TYPE "C"
SUBMITTED _____ DATE _____