Tollway Standard Drawing Revisions

Section G	Structural	Effective 03/01/2013
	Standard	**Modification Summary**
	All Sheets	**Illinois Tollway Standard Logo Inserted In Title Block.**
	G1	**Limits of Structure Excavation and Embankment Cone Details**
		Deleted-Sheet: Reserved
	G2	**Slopewall Details**
		Revised Slopewall Details
		Deleted Vaulted Abutment Detail
		Added Integral -Semi Integral Abutment Details
		Added Tollway Bridges Over Railroads
	G10	**Approach Slab to JPC Pavement, Mainline**
	Sheets 1-5	Lane 1 (14'-0"), Lane 2 (12'-0"), Lane 3 (13'-0")
		Median (17'-6"), Outside Shoulder (11'-0")

New Sheet

RESERVED

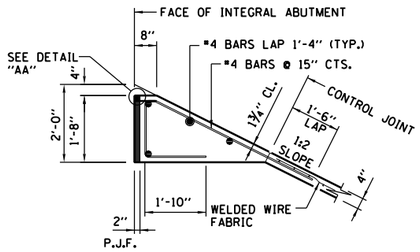
Paul Kovacs
APPROVED . . . . . DATE 6-1-2009
CHIEF ENGINEER

DATE	REVISIONS

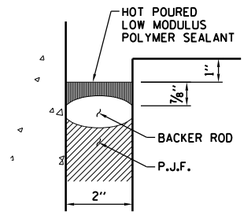
Illinois Tollway

RESERVED

STANDARD G1-00



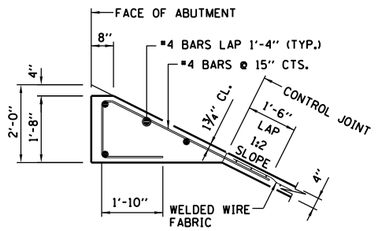
DETAIL "A"



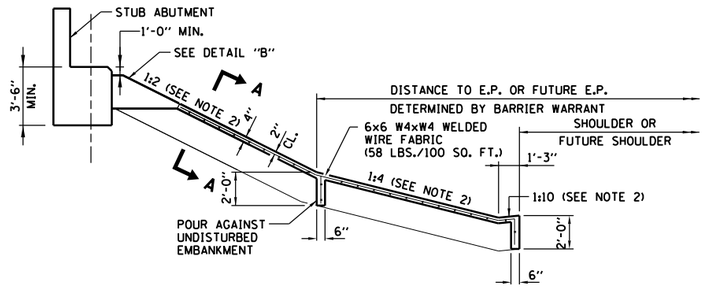
DETAIL "AA"

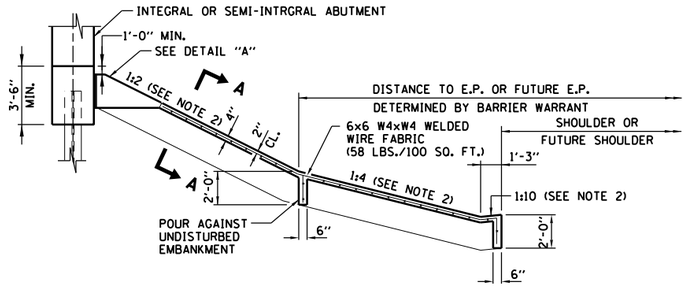
NOTE:

SEALANT, BACKER ROD AND PJF SHALL MEET THE REQUIREMENTS OF SECTIONS 1050 AND 1051 OF THE IDOT STANDARD SPECIFICATIONS.

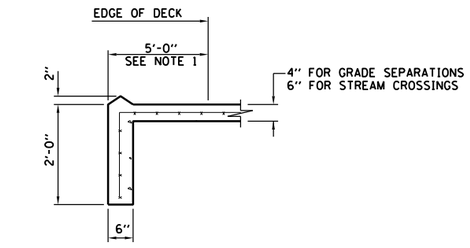


DETAIL "B"

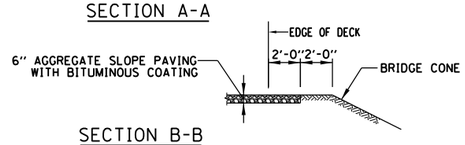




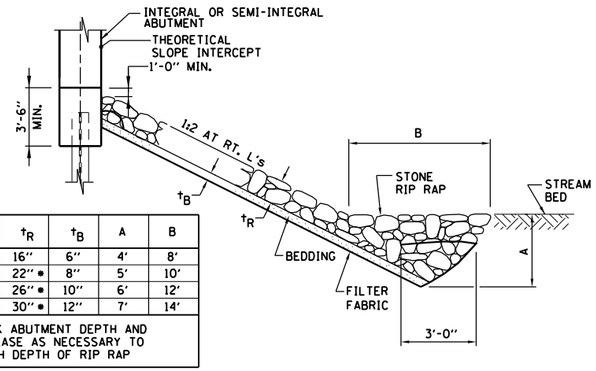
SLOPE WALLS FOR BRIDGES OVER TOLLWAY



SECTION A-A



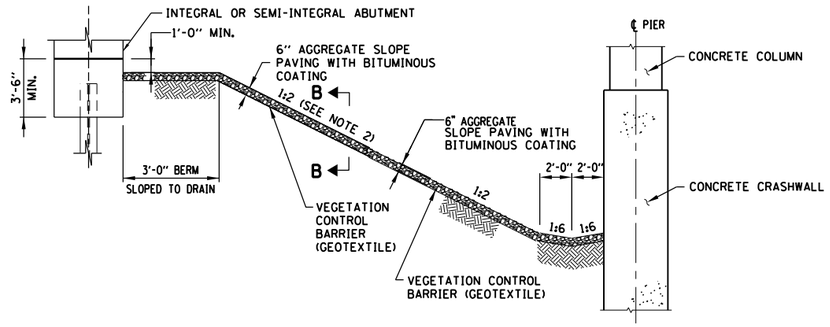
SECTION B-B



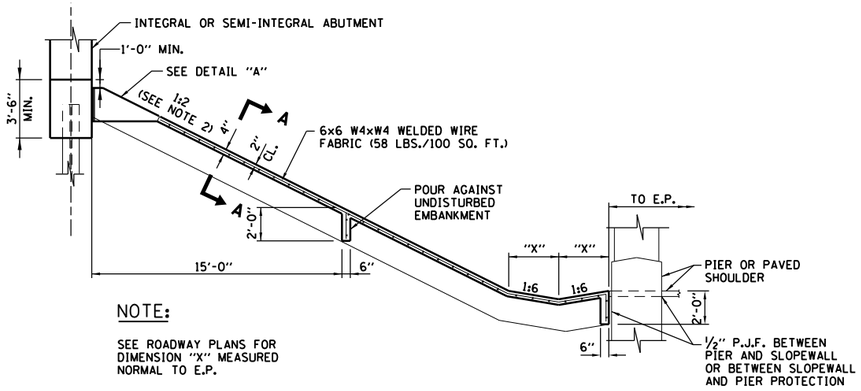
RIP RAP CLASS	t_R	t_B	A	B
A4	16"	6"	4'	8'
A5	22" •	8"	5'	10'
A6	26" •	10"	6'	12'
A7	30" •	12"	7'	14'

• CHECK ABUTMENT DEPTH AND INCREASE AS NECESSARY TO MATCH DEPTH OF RIP RAP

TOLLWAY BRIDGES OVER WATERWAYS



TOLLWAY BRIDGES OVER RAILROADS



NOTE:

SEE ROADWAY PLANS FOR DIMENSION "X" MEASURED NORMAL TO E.P.

TOLLWAY BRIDGES OVER CROSSROADS

NOTES:

1. DIMENSIONS SHALL BE 2'-0" IF DECK DRAINS ARE NOT PROVIDED.
2. DIMENSIONS MARKED THUS ARE MEASURED NORMAL TO E.P.
3. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

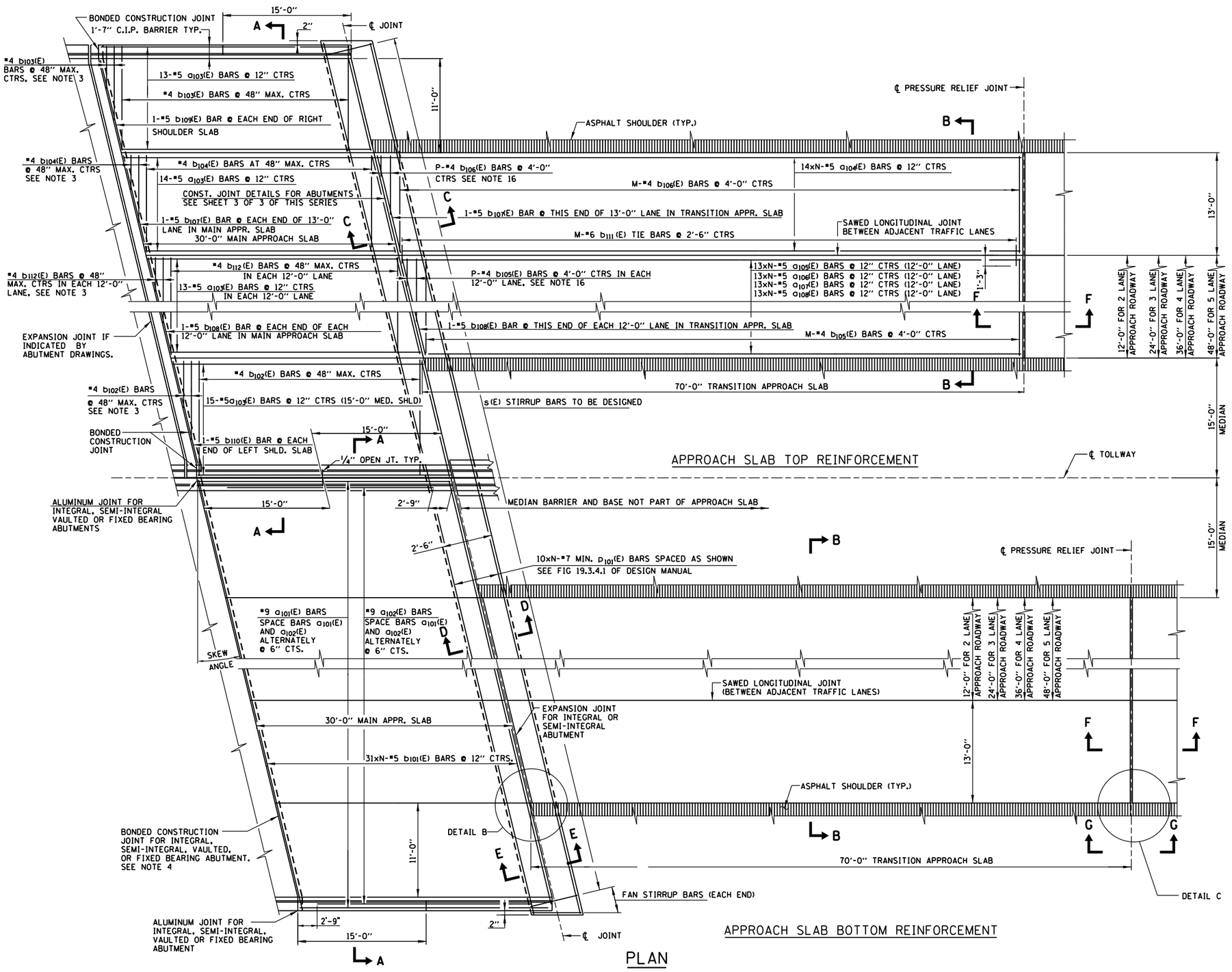
Paul Kovacs
APPROVED ..... DATE 6-1-2009
CHIEF ENGINEER

DATE	REVISIONS
6-1-2009	REVISED NOTES
3-1-2013	REVISED NOTES, REVISED SLOPEWALL DETAILS, ADDED INTREGAL AND SEMI-INTEGRAL ABUTMENT DETAILS

Illinois Tollway

SLOPEWALL DETAILS

STANDARD G2-02



NOTES:

1. TILT HOOK OF #9 BARS FOR MINIMUM 3½" CLEARANCE.
2. USE 1'-4" MIN. LAP FOR #4 BARS. USE 1'-8" MIN. LAP FOR #5 BARS.
3. CUT REINFORCEMENT IN THE FIELD TO FIT THE SKEW AND USE REMAINDER IN OPPOSITE END.
4. SAW CUT ⅜" x 2" DEEP JOINT AND FILL WITH HOT POURED, LOW MODULUS, POLYMER SEALANT MEETING THE REQUIREMENTS OF ASTM D3405.
5. PROTECTIVE COAT SHALL BE APPLIED TO TOP AND TRAFFIC FACES OF MEDIAN AND OUTSIDE BARRIERS.
6. TOOL EDGES OF EXPANSION AND PRESSURE RELIEF JOINTS TO ¼" RADIUS.
7. REINFORCING BARS SHALL MEET THE REQUIREMENTS OF AASHTO M31 (ASTM A615), GRADE 60, AND SHALL CONFORM TO SECTION 508 OF THE IDOT STANDARD SPECIFICATIONS.
8. REINFORCING BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
9. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 315, LATEST EDITION.
10. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
11. EXPOSED CONCRETE EDGES SHALL HAVE ¾" x 45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW GROUND LEVEL.
12. CONCRETE BARRIERS SHALL BE CONSTRUCTED & PAID FOR IN ACCORDANCE WITH SECTIONS 503, 508, AND 587 OF THE IDOT STANDARD SPECIFICATIONS.
13. WORK THIS STANDARD WITH STANDARD G4 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULE FOR 5 LANES) AND STANDARD G5 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULE FOR 4 LANES).
14. THE NOTATION MxN-#4 a FOR REINFORCING BARS IS DEFINED AS M LINES OF BARS WITH N LENGTHS PER LINE. FOR SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS, SEE STANDARD G4 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULE FOR 5 LANES) AND STANDARD G5 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULE FOR 4 LANES).
15. THE NUMBER OF BARS "P" IS GIVEN IN THE SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS ON STANDARD G4 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULE FOR 5 LANES) AND STANDARD G5 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULE FOR 4 LANES).
16. CUT REINFORCEMENT IN THE FIELD TO FIT SKEW AND PLACE REMAINDER IN ADJACENT AREA OR DISCARD OFF SITE.
17. IN THE CORNERS OF THE PILE BENT, THE CONCRETE SHALL BE BLOCKED OUT AND THE REINFORCING STEEL SHALL BE RESPACED (OR CUT) FOR GUARDRAIL POSTS, DRAINAGE STRUCTURES, NOISE ABATEMENT WALLS, ETC. AS NECESSARY AND AS APPROVED BY THE ENGINEER.
18. IN REFERENCE TO LONGITUDINAL CONSTRUCTION JOINTS ON SHEET 2 (OF 3) OF THIS SERIES; THESE BARS SHALL BE CUT TO FIT FROM LENGTHS SHOWN IN THE REINFORCING BAR SCHEDULE FOR THE CONSTRUCTION JOINT. THESE BARS MAY BE REPLACED BY ALTERNATIVE BARS AND LENGTHS AS SHOWN IN THE DESIGN PLANS.
19. EXPANSION ANCHORS AND DRILLED AND GROUTED DOWELS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.
20. AS APPROVED BY THE ENGINEER, THE CONTRACTOR MAY ELECT TO REDUCE THE WIDTHS OF THE POUR BY USE OF THE OPTIONAL LONGITUDINAL CONSTRUCTION JOINT SHOWN. JOINTS SHALL BE LOCATED AT THE EDGE OF A TRAFFIC LANE.

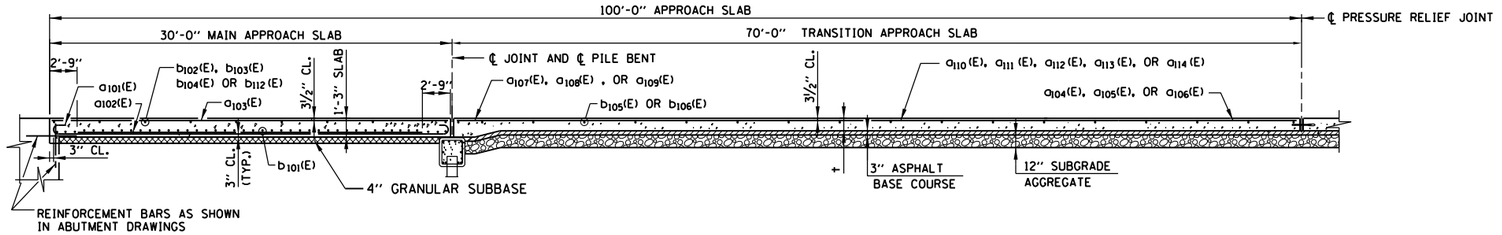
Illinois Tollway

APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE

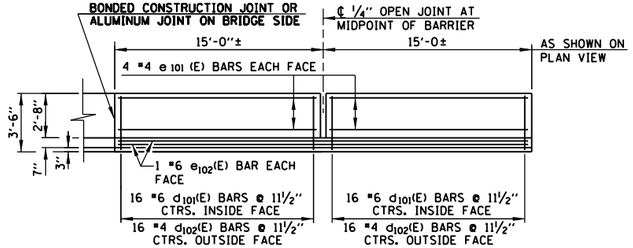
STANDARD G3-02

DATE	REVISIONS
2-28-2008	PILE BENT
6-1-2009	REVISED MEDIAN DIMENSION, ADDED SUBBASE MATERIAL UNDER MAIN APPROACH SLAB
	ADDED BOND BREAKER NOTE SECTION A-A

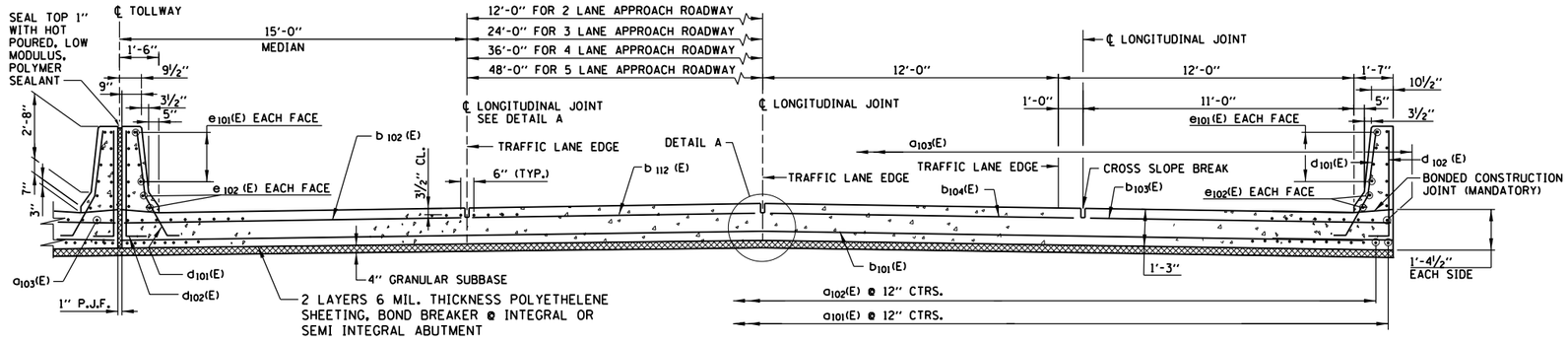
Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008



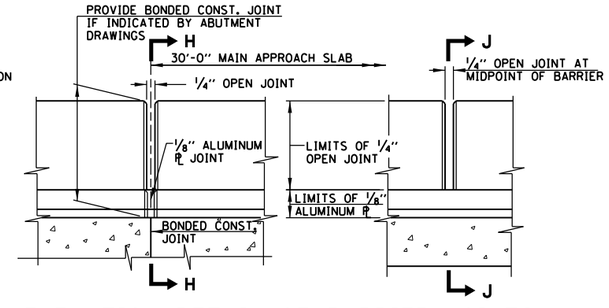
LONGITUDINAL CROSS SECTION



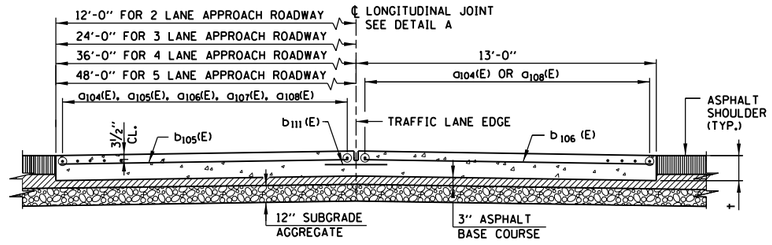
BARRIER ELEVATION



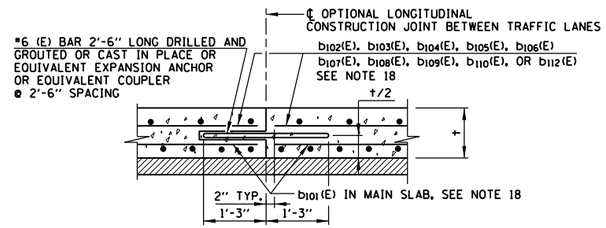
SECTION A-A



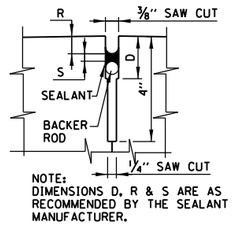
ELEVATION DETAIL OF BARRIER JOINTS



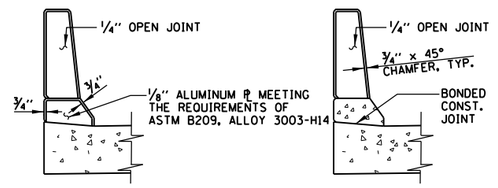
SECTION B-B



CROSS SECTION THRU OPTIONAL LONGITUDINAL CONSTRUCTION JOINT BETWEEN TRAFFIC LANES

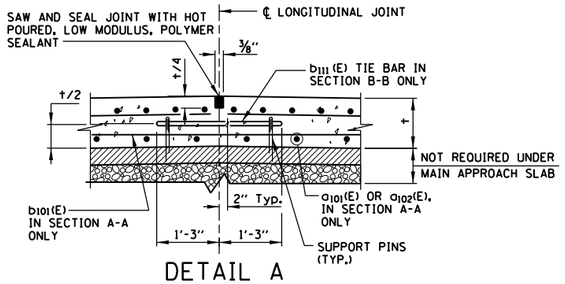


DETAIL E

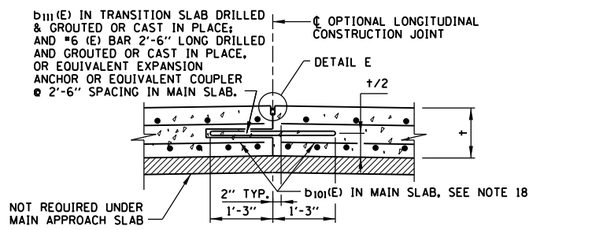


SECTION H-H

SECTION J-J



DETAIL A
TYPICAL LONGITUDINAL JOINT



CROSS SECTION THRU LONGITUDINAL JOINT WITH OPTIONAL CONSTRUCTION JOINT

NOTES:

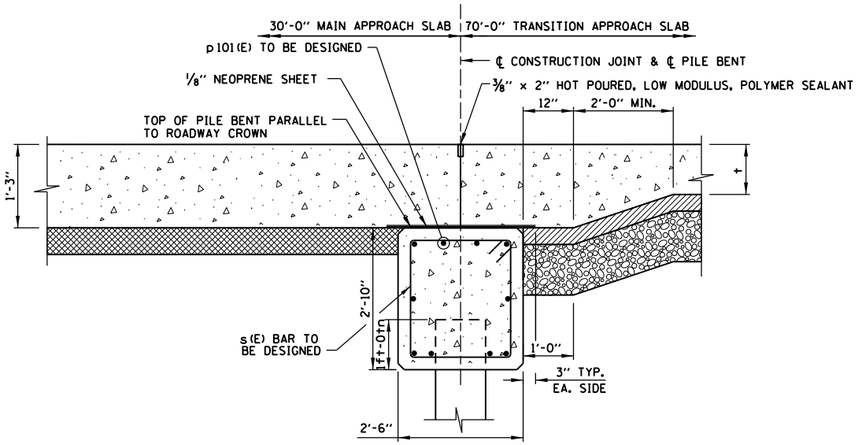
1. SEE SHEET 1 (OF 3) OF THIS SERIES FOR NOTES ON THIS SHEET.
2. THE DIMENSION t IS THE THICKNESS OF THE MAIN APPROACH SLAB (1'-3") OR THE TRANSITION APPROACH SLAB AS DEFINED IN THE DESIGN PLANS.

APPROVED Paul Kovacs CHIEF ENGINEER DATE 2-28-2008

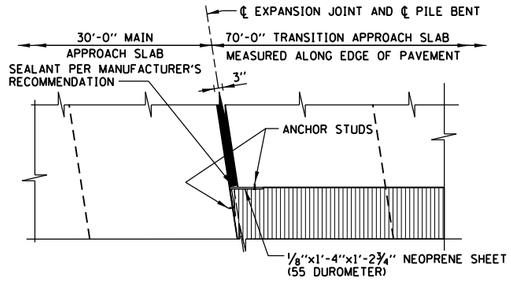
Illinois Tollway

APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE

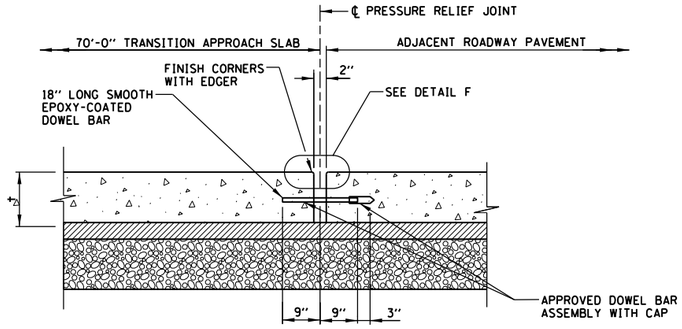
STANDARD G3-02



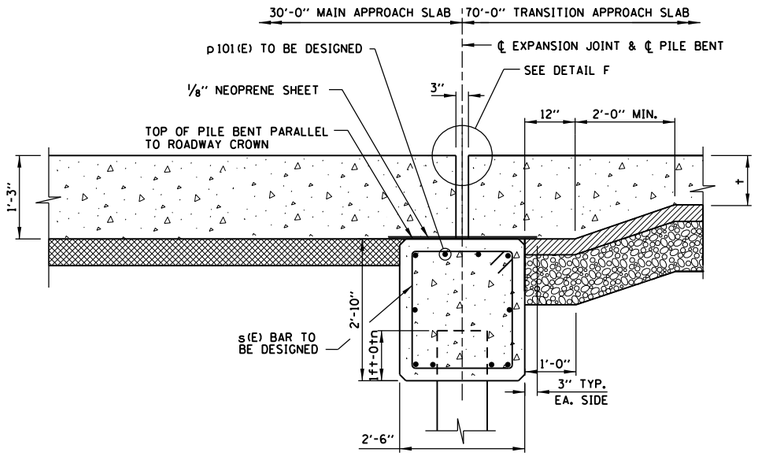
SECTION C-C
FOR NON-INTEGRAL ABUTMENT



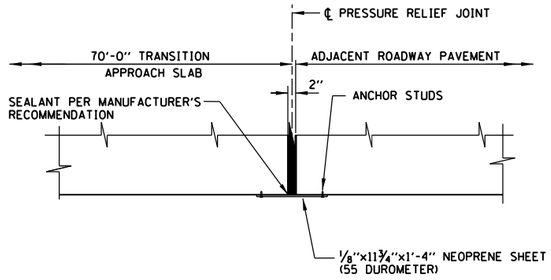
DETAIL B
END PLAN OF EXPANSION JOINT



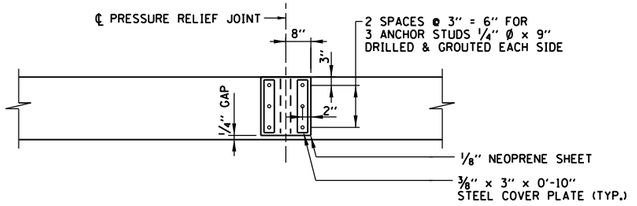
SECTION F-F
PRESSURE RELIEF JOINT



SECTION D-D
FOR INTEGRAL & SEMI-INTEGRAL ABUTMENT



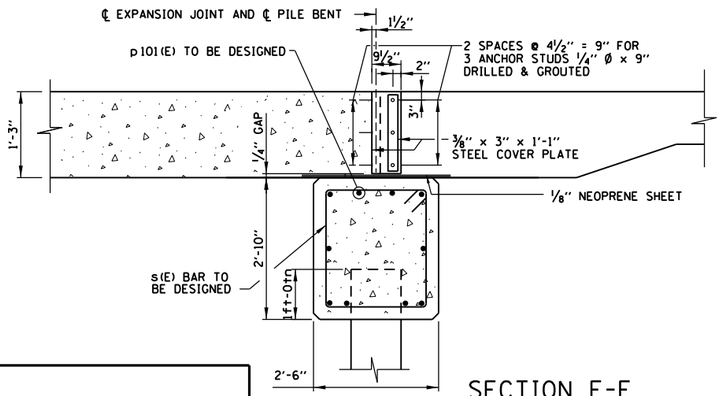
DETAIL C
END PLAN OF PRESSURE RELIEF JOINT



VIEW G-G
END ELEVATION OF PRESSURE RELIEF JOINT

LEGEND

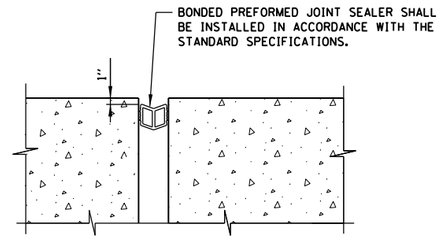
- CONCRETE
- ASPHALT BASE COURSE
- SUBGRADE AGGREGATE
- ASPHALT SHOULDER
- JOINT SEALANT
- GRANULAR SUBBASE



SECTION E-E
END ELEVATION OF EXPANSION JOINT

NOTES:

1. FOR REINFORCEMENT BARS IN APPROACH SLABS, SEE SHEETS 1 & 2 (OF 3) OF THIS SERIES, AND STANDARD G4 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULE FOR 5 LANES) AND STANDARD G5 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULE FOR 4 LANES).
2. IN SECTION E-E AND VIEW G-G, ANCHOR STUDS SHALL BE INSTALLED IN ACCORDANCE WITH SUBSECTION 1006.09 OF THE IDOT STANDARD SPECIFICATIONS. STEEL PLATES, BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.
3. THE THICKNESSES OF ASPHALT BASE COURSE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS THEY ARE FOR THE ADJACENT PAVEMENT SECTIONS.
4. THE DIMENSION t IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE DESIGN PLANS.



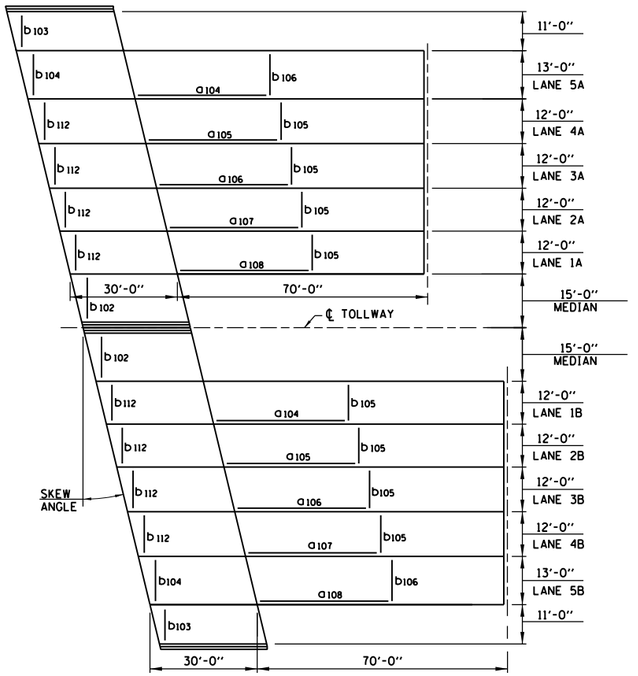
DETAIL F
BONDED PREFORMED JOINT SEALER

Paul Kovacs
APPROVED
CHIEF ENGINEER
DATE 2-28-2008

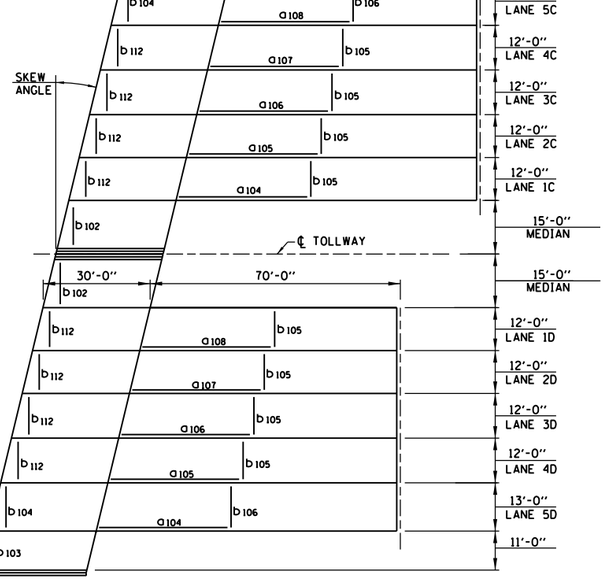
Illinois Tollway

APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE

STANDARD G3-02



APPROACH SLAB PLAN, AHEAD RIGHT SKEW



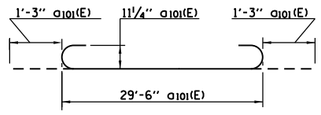
APPROACH SLAB PLAN, AHEAD LEFT SKEW

SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS

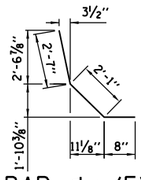
BAR	LANE	0° SKEW			5° SKEW			10° SKEW			15° SKEW			20° SKEW			25° SKEW			30° SKEW			35° SKEW			40° SKEW			45° SKEW			50° SKEW			55° SKEW			60° SKEW		
		M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P
$a_{104}(E)$	5A, 5D	14	2	-	14	2	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	4	-	14	4	-	14	4	-	14	5	-	14	5	-
$a_{104}(E)$	1B, 1C	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	4	-	13	4	-	13	4	-	13	5	-	13	5	-
$a_{105}(E)$	4A, 4D	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	4	-	13	4	-	13	4	-	13	5	-
$a_{105}(E)$	2B, 2C	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	4	-	13	4	-	13	4	-	13	5	-
$a_{106}(E)$	3A, 3B, 3C, 3D	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	4	-	13	4	-
$a_{107}(E)$	2A, 2D	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-
$a_{107}(E)$	4B, 4C	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-
$a_{108}(E)$	1A, 1D	13	2	-	13	2	-	13	2	-	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-
$a_{108}(E)$	5B, 5C	14	2	-	14	2	-	14	2	-	14	2	-	14	2	-	14	2	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-
$b_{101}(E)$	COMBINED	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	4	-	31	4	-	31	4	-	31	5	-	31	5	-
$b_{105}(E)$	1A, 1D	19	-	0	19	-	0	19	-	0	19	-	0	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	2	19	-	2	19	-	2
$b_{105}(E)$	2A, 2D	19	-	0	19	-	0	19	-	0	20	-	0	20	-	1	20	-	1	21	-	1	21	-	1	21	-	1	22	-	1	22	-	2	23	-	2	24	-	2
$b_{105}(E)$	3A, 3D	19	-	0	19	-	0	20	-	0	20	-	0	21	-	1	22	-	1	22	-	1	23	-	1	24	-	1	25	-	1	26	-	2	27	-	2	29	-	2
$b_{105}(E)$	4A, 4D	19	-	0	20	-	0	20	-	0	21	-	0	22	-	1	23	-	1	24	-	1	25	-	1	26	-	1	28	-	1	30	-	2	32	-	2	34	-	2
$b_{105}(E)$	1B, 1C	19	-	0	20	-	0	21	-	0	22	-	0	23	-	1	25	-	1	26	-	1	27	-	1	29	-	1	31	-	1	33	-	2	36	-	2	40	-	2
$b_{105}(E)$	2B, 2C	19	-	0	20	-	0	21	-	0	21	-	0	22	-	1	23	-	1	24	-	1	25	-	1	27	-	1	28	-	1	30	-	2	32	-	2	35	-	2
$b_{105}(E)$	3B, 3C	19	-	0	19	-	0	20	-	0	21	-	0	21	-	1	22	-	1	23	-	1	24	-	1	25	-	1	26	-	2	28	-	2	30	-	2	32	-	2
$b_{105}(E)$	4B, 4C	19	-	0	19	-	0	19	-	0	20	-	0	20	-	1	20	-	1	21	-	1	21	-	1	22	-	1	22	-	1	23	-	2	24	-	2	25	-	2
$b_{106}(E)$	5A, 5D	19	-	0	20	-	0	21	-	0	22	-	0	23	-	1	24	-	1	26	-	1	27	-	1	29	-	1	31	-	2	33	-	2	36	-	2	40	-	3
$b_{106}(E)$	5B, 5C	19	-	0	19	-	0	19	-	0	19	-	0	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	2	19	-	2	19	-	2	19	-	3
$b_{111}(E)$	1A TO 2A, 1D TO 2D	29	-	-	30	-	-	30	-	-	30	-	-	31	-	-	31	-	-	32	-	-	32	-	-	33	-	-	34	-	-	34	-	-	35	-	-	37	-	-
$b_{111}(E)$	2A TO 3A, 2D TO 3D	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	38	-	-	40	-	-	42	-	-	45	-	-
$b_{111}(E)$	3A TO 4A, 3D TO 4D	29	-	-	31	-	-	32	-	-	33	-	-	34	-	-	36	-	-	37	-	-	39	-	-	41	-	-	43	-	-	46	-	-	49	-	-	53	-	-
$b_{111}(E)$	4A TO 5A, 4D TO 5D	29	-	-	31	-	-	33	-	-	34	-	-	36	-	-	38	-	-	40	-	-	42	-	-	45	-	-	48	-	-	52	-	-	56	-	-	62	-	-
$b_{111}(E)$	1B TO 2B, 1C TO 2C	29	-	-	31	-	-	33	-	-	34	-	-	36	-	-	38	-	-	40	-	-	43	-	-	45	-	-	48	-	-	52	-	-	57	-	-	62	-	-
$b_{111}(E)$	2B TO 3B, 2C TO 3C	29	-	-	31	-	-	32	-	-	33	-	-	34	-	-	36	-	-	38	-	-	39	-	-	41	-	-	44	-	-	46	-	-	50	-	-	54	-	-
$b_{111}(E)$	3B TO 4B, 3C TO 4C	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	39	-	-	41	-	-	43	-	-	46	-	-
$b_{111}(E)$	4B TO 5B, 4C TO 5C	29	-	-	30	-	-	30	-	-	31	-	-	31	-	-	31	-	-	32	-	-	33	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-

REINFORCING BAR SCHEDULE FOR APPROACH SLABS

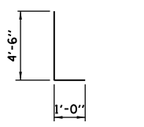
BAR	SIZE	SHAPE	0° SKEW		5° SKEW		10° SKEW		15° SKEW		20° SKEW		25° SKEW		30° SKEW		35° SKEW		40° SKEW		45° SKEW		50° SKEW		55° SKEW		60° SKEW	
			NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LEN GTH	NO.	LENGTH	NO.	LENGTH
$a_{101}(E)$	9	⊂⊃	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"
$a_{102}(E)$	9	——	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"
$a_{103}(E)$	5	——	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"
$a_{104}(E)$	5	——	54	35'-7"	54	38'-3"	81	27'-10"	81	29'-8"	81	31'-8"	81	33'-9"	81	36'-0"	81	38'-5"	108	31'-4"	108	33'-10"	108	36'-9"	135	32'-7"	135	36'-3"
$a_{105}(E)$	5	——	52	35'-7"	52	37'-9"	78	27'-2"	78	28'-8"	78	30'-2"	78	31'-10"	78	33'-8"	78	35'-8"	78	37'-11"	104	30'-10"	104	33'-2"	104	36'-0"	130	32'-1"
$a_{106}(E)$	5	——	52	35'-7"	52	37'-2"	52	38'-10"	78	27'-7"	78	28'-9"	78	30'-0"	78	31'-4"	78	32'-10"	78	34'-7"	78	36'-6"	78	38'-11"	104	31'-9"	104	34'-6"
$a_{107}(E)$	5	——	52	35'-7"	52	36'-8"	52	37'-9"	78	26'-6"	78	27'-3"	78	28'-1"	78	29'-0"	78	30'-1"	78	31'-2"	78	32'-6"	78	34'-1"	78	36'-1"	78	38'-7"
$a_{108}(E)$	5	——	54	35'-7"	54	36'-2"	54	36'-8"	54	37'-3"	54	37'-11"	54	38'-7"	81	26'-9"	81	27'-3"	81	27'-10"	81	28'-6"	81	29'-4"	81	30'-4"	81	31'-8"
$b_{101}(E)$	5	——	186	30'-6"	186	30'-7"	186	30'-11"	186	31'-6"	186	32'-4"	186	33'-6"	186	35'-0"	186	37'-0"	248	30'-0"	248	32'-5"	248	35'-7"	310	32'-1"	310	36'-8"
$b_{102}(E)$	4	——	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"
$b_{103}(E)$	4	——	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"
$b_{104}(E)$	4	——	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"
$b_{105}(E)$	4	——	152	11'-8"	155	11'-8"	159	11'-8"	164	11'-8"	176	11'-8"	182	11'-8"	187	11'-8"	192	11'-8"	200	11'-8"	208	11'-8"	225	11'-8"	237	11'-8"	252	11'-8"
$b_{106}(E)$	4	——	38	12'-8"	39	12'-8"	40	12'-8"	41	12'-8"	44	12'-8"	45	12'-8"	47	12'-8"	48	12'-8"	50	12'-8"	54	12'-8"	56	12'-8"	59	12'-8"	65	12'-8"
$b_{107}(E)$	5	——	0	-	6	12'-8"	6	12'-9"	6	13'-1"	6	13'-5"	6	13'-11"	6	14'-7"	6	15'-5"	6	16'-7"	6	18'-0"	6	19'-10"	6	22'-3"	6	25'-7"
$b_{108}(E)$	5	——	0	-	24	11'-7"	24	11'-8"	24	11'-11"	24	12'-3"	24	12'-9"	24	13'-4"	24	14'-2"	24	15'-2"	24	16'-6"	24	18'-2"	24	20'-5"	24	23'-6"
$b_{109}(E)$	5	——	0	-	4	10'-7"	4	10'-8"	4	10'-11"	4	11'-2"	4	11'-8"	4	12'-2"	4	12'-11"	4	13'-10"	4	15'-1"	4	16'-7"	4	18'-8"	4	21'-6"
$b_{110}(E)$	5	——	0	-	4	13'-1"	4	13'-2"	4	13'-6"	4	13'-10"	4	14'-5"	4	15'-1"	4	16'-0"	4	17'-1"	4	18'-7"	4	20'-6"	4	23'-0"	4	26'-6"
$b_{111}(E)$	5	——	232	2'-6"	244	2'-6"	252	2'-6"	259	2'-6"	268	2'-6"	278	2'-6"	289	2'-6"	300	2'-6"	312	2'-6"	328	2'-6"	346	2'-6"	368	2'-6"	396	2'-6"
$b_{112}(E)$	4	——	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"
BRIDGE APPR. SLAB (SQ. YD.)			1,539.4		1,575.6		1,612.3		1,650.2		1,689.9		1,732.2		1,778.1		1,828.9		1,886.4		1,952.9		2,032.2		2,129.9		2,255.6	
REINF STL. EPOXY CTD (LBS.)			58,667		59,661		60,336		61,079		61,886		62,729		63,741		64,849		66,343		68,016		70,062		72,800		76,218	
APPR. SLAB PILE BENTS CLASS SI CONCRETE (C.Y.)			46.6		46.7		47.3		48.2		49.6		51.4		53.8		56.8		60.8		65.9		72.4		81.2		93.1	



BARS $a_{101}(E)$



BAR $d_{101}(E)$



BAR $d_{102}(E)$

REINFORCING BAR SCHEDULE FOR BARRIERS				
BAR	NO.	SIZE	LENGTH	SHAPE
$d_{101}(E)$	128	6	5'-4"	⌞
$d_{102}(E)$	128	4	5'-6"	⌞
$e_{101}(E)$	64	4	14'-8"	——
$e_{102}(E)$	16	6	29'-6"	——

BILL OF MATERIAL FOR BARRIERS			
IDOT PAY ITEM NO.	DESCRIPTION	UNIT	QUANT'Y
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	16.0
50800205	REINFORCING BARS, EPOXY COATED	LBS.	2,831
50300300	PROTECTIVE COAT	SQ. YD.	60

NOTES:

1. WORK THIS STANDARD WITH STANDARD G3 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, GENERAL PLAN, SECTIONS AND DETAILS).
2. THE REINFORCING BAR SCHEDULES, BILL OF MATERIAL, AND QUANTITIES ARE CALCULATED FOR TWO (OPPOSITE) TRAFFIC DIRECTIONS AT ONE END OF A DUAL BRIDGE.
3. THE AREA OF EACH MAIN APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM THE OUTSIDE FACE OF OUTER BARRIER TO OUTSIDE OF MEDIAN BARRIER BY THE LENGTH OF 30.00 FEET.
4. THE AREA OF EACH TRANSITION APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM LEFT OUTSIDE EDGE OF CONCRETE PAVEMENT TO THE RIGHT OUTSIDE EDGE OF CONCRETE PAVEMENT BY THE MINIMUM LENGTH OF 70.00 FEET PLUS THE ADDITIONAL LENGTH REQUIRED BY THE SKEW ANGLE.
5. THE REINFORCING BAR SCHEDULE FOR APPROACH SLABS IS SHOWN FOR 15'-0" WIDE MEDIAN SHOULDERS. FOR 14'-0" WIDE MEDIAN SHOULDERS, AT EACH SKEW ANGLE IN THIS SCHEDULE:
   - REDUCE THE NUMBER OF $a_{101}(E)$ AND $a_{102}(E)$ BARS FROM 178 TO 176 AND FROM 176 TO 174 RESPECTIVELY.
   - REDUCE THE NUMBER OF $a_{103}(E)$ BARS FROM 188 TO 186.
   - REDUCE THE LENGTH OF $b_{102}(E)$ BARS FROM 14'-7" TO 13'-7".
   - REDUCE THE AREA QUANTITY OF BRIDGE APPROACH SLAB BY 6.7 SQUARE YARDS.
   - REDUCE THE WEIGHT QUANTITY OF APPROACH SLAB REINFORCING STEEL, EPOXY COATED BY 458 POUNDS.

   FURTHERMORE, TRIM THE $b_{110}(E)$ BARS IN THE 14'-0" MEDIAN SHOULDERS AS NECESSARY TO FIT THE SKEW ANGLE.

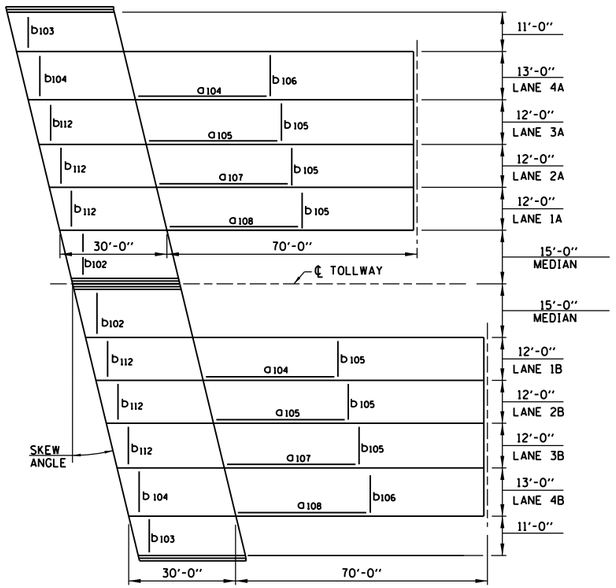
Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

Illinois Tollway

DATE	REVISIONS
2-28-2008	PILE BENT
6-1-2009	REVISED MEDIAN DIMENSION
	CHANGED REINF. BAR QUANTITIES

APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULES FOR 5 LANES

STANDARD G4-02



APPROACH SLAB PLAN, AHEAD RIGHT SKEW

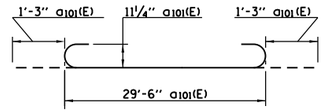
APPROACH SLAB PLAN, AHEAD LEFT SKEW

SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS

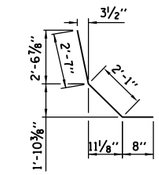
BAR	LANE	0° SKEW			5° SKEW			10° SKEW			15° SKEW			20° SKEW			25° SKEW			30° SKEW			35° SKEW			40° SKEW			45° SKEW			50° SKEW			55° SKEW			60° SKEW		
		M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P
$a_{104}(E)$	4A, 4D	14	2	-	14	2	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	4	-	14	4	-	14	4	-	14	5	-
$a_{104}(E)$	1B, 1C	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	4	-	13	4	-	13	4	-	13	5	-
$a_{105}(E)$	3A, 3D	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	4	-	13	4	-
$a_{105}(E)$	2B, 2C	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	4	-	13	4	-
$a_{107}(E)$	2A, 2D	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-
$a_{107}(E)$	3B, 3C	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-
$a_{108}(E)$	1A, 1D	13	2	-	13	2	-	13	2	-	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-
$a_{108}(E)$	4B, 4C	14	2	-	14	2	-	14	2	-	14	2	-	14	2	-	14	2	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-
$b_{101}(E)$	COMBINED	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	4	-	31	4	-	31	5	-
$b_{105}(E)$	1A, 1D	19	-	0	19	-	0	19	-	0	19	-	0	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	2	19	-	2	19	-	2
$b_{105}(E)$	2A, 2D	19	-	0	19	-	0	19	-	0	20	-	0	20	-	1	20	-	1	21	-	1	21	-	1	21	-	1	22	-	1	22	-	2	23	-	2	24	-	2
$b_{105}(E)$	3A, 3D	19	-	0	19	-	0	20	-	0	20	-	0	21	-	1	22	-	1	22	-	1	23	-	1	24	-	1	25	-	1	26	-	2	27	-	2	29	-	2
$b_{105}(E)$	1B, 1C	19	-	0	20	-	0	21	-	0	21	-	0	22	-	1	23	-	1	24	-	1	25	-	1	27	-	1	28	-	1	30	-	2	32	-	2	35	-	2
$b_{105}(E)$	2B, 2C	19	-	0	19	-	0	20	-	0	21	-	0	21	-	1	22	-	1	22	-	1	23	-	1	24	-	1	25	-	1	26	-	2	28	-	2	30	-	2
$b_{105}(E)$	3B, 3C	19	-	0	19	-	0	19	-	0	20	-	0	20	-	1	20	-	1	21	-	1	21	-	1	22	-	1	22	-	1	23	-	2	24	-	2	25	-	2
$b_{106}(E)$	4A, 4D	19	-	0	20	-	0	20	-	0	21	-	0	22	-	1	23	-	1	24	-	1	25	-	1	26	-	1	28	-	2	30	-	2	32	-	2	34	-	3
$b_{106}(E)$	4B, 4C	19	-	0	19	-	0	19	-	0	19	-	0	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	2	19	-	2	19	-	2	19	-	3
$b_{111}(E)$	1A TO 2A, 1D TO 2D	29	-	-	30	-	-	30	-	-	30	-	-	31	-	-	31	-	-	32	-	-	32	-	-	33	-	-	34	-	-	34	-	-	35	-	-	37	-	-
$b_{111}(E)$	2A TO 3A, 2D TO 3D	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	38	-	-	40	-	-	42	-	-	45	-	-
$b_{111}(E)$	3A TO 4A, 3D TO 4D	29	-	-	31	-	-	32	-	-	33	-	-	34	-	-	36	-	-	37	-	-	39	-	-	41	-	-	43	-	-	46	-	-	49	-	-	53	-	-
$b_{111}(E)$	1B TO 2B, 1C TO 2C	29	-	-	31	-	-	32	-	-	33	-	-	34	-	-	36	-	-	38	-	-	39	-	-	41	-	-	44	-	-	46	-	-	50	-	-	54	-	-
$b_{111}(E)$	2B TO 3B, 2C TO 3C	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	39	-	-	41	-	-	43	-	-	46	-	-
$b_{111}(E)$	3B TO 4B, 3C TO 4C	29	-	-	30	-	-	30	-	-	31	-	-	31	-	-	31	-	-	32	-	-	33	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-

REINFORCING BAR SCHEDULE FOR APPROACH SLABS

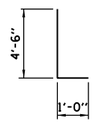
BAR	SIZE	SHAPE	0° SKEW		5° SKEW		10° SKEW		15° SKEW		20° SKEW		25° SKEW		30° SKEW		35° SKEW		40° SKEW		45° SKEW		50° SKEW		55° SKEW		60° SKEW	
			NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENG TH	NO.	LFNGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
$a_{101}(E)$	9	⊂⊃	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"
$a_{102}(E)$	9	——	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"
$a_{103}(E)$	5	——	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"
$a_{104}(E)$	5	——	54	35'-7"	54	37'-9"	81	27'-2"	81	28'-8"	81	30'-2"	81	31'-10"	81	33'-8"	81	35'-8"	81	37'-11"	108	30'-10"	108	33'-2"	108	36'-0"	135	32'-1"
$a_{105}(E)$	5	——	52	35'-7"	52	37'-2"	52	38'-10"	78	27'-7"	78	28'-9"	78	30'-0"	78	31'-4"	78	32'-10"	78	34'-7"	78	36'-6"	78	38'-11"	104	31'-9"	104	34'-6"
$a_{107}(E)$	5	——	52	35'-7"	52	36'-8"	52	37'-9"	78	26'-6"	78	27'-3"	78	28'-1"	78	29'-0"	78	30'-1"	78	31'-2"	78	32'-6"	78	34'-1"	78	36'-1"	78	38'-7"
$a_{108}(E)$	5	——	54	35'-7"	54	36'-2"	54	36'-8"	54	37'-3"	54	37'-11"	54	38'-7"	81	26'-9"	81	27'-3"	81	27'-10"	81	28'-6"	81	29'-4"	81	30'-4"	81	31'-8"
$b_{101}(E)$	5	——	186	26'-6"	186	26'-7"	186	26'-10"	186	27'-4"	186	28'-1"	186	29'-1"	186	30'-5"	186	32'-1"	186	34'-3"	186	37'-1"	248	30'-11"	248	34'-6"	310	31'-10"
$b_{102}(E)$	4	——	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"
$b_{103}(E)$	4	——	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"
$b_{104}(E)$	4	——	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"
$b_{105}(E)$	4	——	114	11'-8"	115	11'-8"	118	11'-8"	121	11'-8"	129	11'-8"	132	11'-8"	135	11'-8"	138	11'-8"	143	11'-8"	147	11'-8"	158	11'-8"	165	11'-8"	174	11'-8"
$b_{106}(E)$	4	——	38	12'-8"	39	12'-8"	39	12'-8"	40	12'-8"	43	12'-8"	44	12'-8"	45	12'-8"	46	12'-8"	47	12'-8"	51	12'-8"	53	12'-8"	55	12'-8"	59	12'-8"
$b_{107}(E)$	5	——	0	-	6	12'-8"	6	12'-9"	6	13'-1"	6	13'-5"	6	13'-11"	6	14'-7"	6	15'-5"	6	16'-7"	6	18'-0"	6	19'-10"	6	22'-3"	6	25'-7"
$b_{108}(E)$	5	——	0	-	24	11'-7"	24	11'-8"	24	11'-11"	24	12'-3"	24	12'-9"	24	13'-4"	24	14'-2"	24	15'-2"	24	16'-6"	24	18'-2"	24	20'-5"	24	23'-6"
$b_{109}(E)$	5	——	0	-	4	10'-7"	4	10'-8"	4	10'-11"	4	11'-2"	4	11'-8"	4	12'-2"	4	12'-11"	4	13'-10"	4	15'-1"	4	16'-7"	4	18'-8"	4	21'-6"
$b_{110}(E)$	5	——	0	-	4	13'-1"	4	13'-2"	4	13'-6"	4	13'-10"	4	14'-5"	4	15'-1"	4	16'-0"	4	17'-1"	4	18'-7"	4	20'-6"	4	23'-0"	4	26'-6"
$b_{111}(E)$	5	——	174	2'-6"	182	2'-6"	186	2'-6"	191	2'-6"	196	2'-6"	202	2'-6"	209	2'-6"	215	2'-6"	222	2'-6"	232	2'-6"	242	2'-6"	255	2'-6"	272	2'-6"
$b_{112}(E)$	4	——	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"
BRIDGE APPR. SLAB (SQ. YD.)			1,272.8		1,296.1		1,319.8		1,344.3		1,369.9		1,397.2		1,426.8		1,459.6		1,496.6		1,539.6		1,590.7		1,653.8		1,734.9	
REINF STL, EPOXY CTD (LBS.)			49,963		50,783		51,229		51,784		52,368		52,977		53,730		54,555		55,553		56,829		58,487		60,462		63,192	
APPR. SLAB PILE BENTS CLASS SI CONCRETE (C.Y.)			40.2		40.4		40.9		41.6		42.9		44.5		46.5		49.2		52.6		56.9		62.6		70.3		80.6	



BARS $a_{101}(E)$



BAR $d_{101}(E)$



BAR $d_{102}(E)$

REINFORCING BAR SCHEDULE FOR BARRIERS				
BAR	NO.	SIZE	LENGTH	SHAPE
$d_{101}(E)$	128	6	5'-4"	⌞
$d_{102}(E)$	128	4	5'-6"	⌞
$e_{101}(E)$	64	4	14'-8"	——
$e_{102}(E)$	16	6	29'-6"	——

BILL OF MATERIAL FOR BARRIERS			
IDOT PAY ITEM NO.	DESCRIPTION	UNIT	QUANT'Y
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	16.0
50800205	REINFORCING BARS, EPOXY COATED	LBS.	2,831
50300300	PROTECTIVE COAT	SQ. YD.	60

NOTES:

1. WORK THIS STANDARD WITH STANDARD G3 (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, GENERAL PLAN, SECTIONS AND DETAILS).
2. THE REINFORCING BARS SCHEDULES, BILL OF MATERIAL, AND QUANTITIES ARE CALCULATED FOR TWO (OPPOSITE) TRAFFIC DIRECTIONS AT ONE END OF A DUAL BRIDGE.
3. THE AREA OF EACH MAIN APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM THE OUTSIDE FACE OF OUTER BARRIER TO OUTSIDE FACE OF MEDIAN BARRIER BY THE LENGTH OF 30.00 FEET.
4. THE AREA OF EACH TRANSITION APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM LEFT OUTSIDE EDGE OF CONCRETE PAVEMENT TO THE RIGHT OUTSIDE EDGE OF CONCRETE PAVEMENT BY THE MINIMUM LENGTH OF 70.00 FEET PLUS THE ADDITIONAL LENGTH REQUIRED BY THE SKEW ANGLE.
5. THE REINFORCING BAR SCHEDULE FOR APPROACH SLABS IS SHOWN FOR 15'-0" WIDE MEDIAN SHOULDERS. FOR 14'-0" WIDE MEDIAN SHOULDERS, AT EACH SKEW ANGLE IN THIS SCHEDULE:
   - REDUCE THE NUMBER OF $a_{101}(E)$ AND $a_{102}(E)$ BARS FROM 154 TO 152 AND FROM 152 TO 150 RESPECTIVELY.
   - REDUCE THE NUMBER OF $a_{103}(E)$ BARS FROM 162 TO 160.
   - REDUCE THE LENGTH OF $b_{102}(E)$ BARS FROM 14'-7" TO 13'-7".
   - REDUCE THE AREA QUANTITY OF BRIDGE APPROACH SLAB BY 6.7 SQUARE YARDS.
   - REDUCE THE WEIGHT QUANTITY OF APPROACH SLAB REINFORCING STEEL, EPOXY COATED BY 458 POUNDS.

   FURTHERMORE, TRIM THE $b_{110}(E)$ BARS IN THE 14'-0" MEDIAN SHOULDERS AS NECESSARY TO FIT THE SKEW ANGLE.

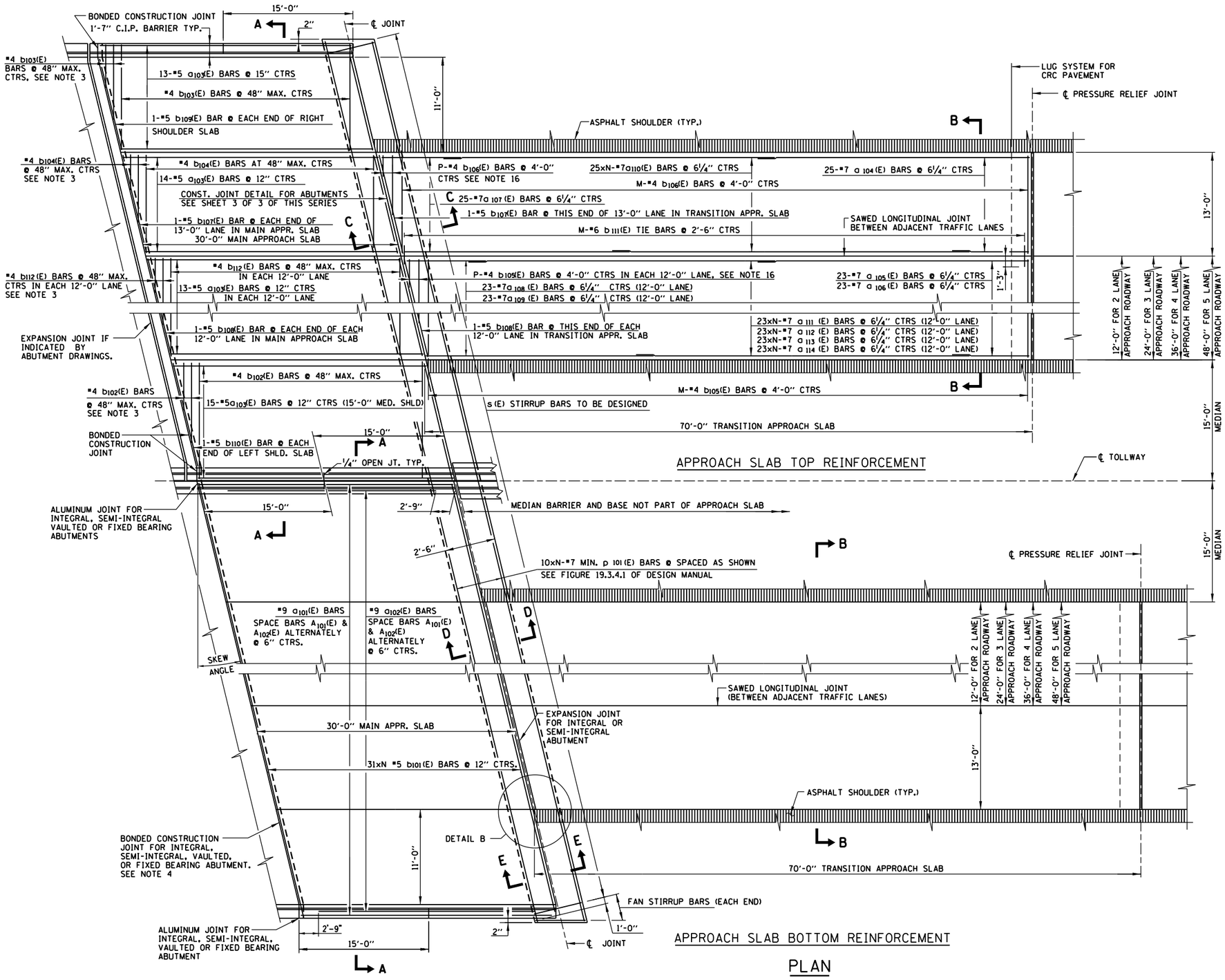
Paul Kovacs
APPROVED
CHIEF ENGINEER
DATE 2-28-2008

DATE	REVISIONS
2-28-2008	PILE BENT
6-1-2009	REVISED MEDIAN DIMENSION
	CHANGED REINF. BAR QUANTITY

Illinois Tollway

APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULES FOR 4 LANES

STANDARD G5-02



APPROACH SLAB BOTTOM REINFORCEMENT

PLAN

NOTES:

1. TILT HOOK OF #9 BARS FOR MINIMUM 3½" CLEARANCE.
2. USE 1'-4" MIN. LAP FOR #4 BARS. USE 1'-8" MIN. LAP FOR #5 BARS. USE 2'-2" MINIMUM LAP FOR #7 BARS
3. CUT REINFORCEMENT IN THE FIELD TO FIT THE SKEW AND USE REMAINDER IN OPPOSITE END.
4. SAW CUT ⅜" x 2" DEEP JOINT AND FILL WITH HOT POURED, LOW MODULUS, POLYMER SEALANT MEETING THE REQUIREMENTS OF ASTM D3405.
5. PROTECTIVE COAT SHALL BE APPLIED TO TOP AND TRAFFIC FACES OF MEDIAN AND OUTSIDE BARRIERS.
6. TOOL EDGES OF EXPANSION AND PRESSURE RELIEF JOINTS TO ¼" RADIUS.
7. REINFORCING BARS SHALL MEET THE REQUIREMENTS OF AASHTO M31 (ASTM A615), GRADE 60, AND SHALL CONFORM TO SECTION 508 OF THE IDOT STANDARD SPECIFICATIONS.
8. REINFORCING BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
9. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 315, LATEST EDITION.
10. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
11. EXPOSED CONCRETE EDGES SHALL HAVE ¾" x 45° CHAMFERS. CHAMFERSON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW GROUND LEVEL.
12. CONCRETE BARRIERS SHALL BE CONSTRUCTED & PAID FOR IN ACCORDANCE WITH SECTIONS 503, 508, AND 587 OF THE IDOT STANDARD SPECIFICATIONS.
13. WORK THIS STANDARD WITH STANDARD G7 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 5 LANES) AND STANDARD G8 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 4 LANES).
14. THE NOTATION MxN-#4 a FOR REINFORCING BARS IS DEFINED AS M LINES OF BARS WITH N LENGTHS PER LINE. FOR SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS, SEE STANDARD G7 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 5 LANES) AND STANDARD G8 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 4 LANES).
15. THE NUMBER OF BARS "P" IS GIVEN IN THE SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS ON STANDARD G7 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 5 LANES) AND STANDARD G8 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 4 LANES).
16. CUT REINFORCEMENT IN THE FIELD TO FIT SKEW AND PLACE REMAINDER IN ADJACENT AREA OR DISCARD OFF SITE.
17. IN THE CORNERS OF THE PILE BENT, THE CONCRETE SHALL BE BLOCKED OUT AND THE REINFORCING STEEL SHALL BE RESPACED (OR CUT) FOR GUARDRAIL POSTS, DRAINAGE STRUCTURES, NOISE ABATEMENT WALLS, ETC. AS NECESSARY AND AS APPROVED BY THE ENGINEER.
18. IN REFERENCE TO LONGITUDINAL CONSTRUCTION JOINTS ON SHEET 2 (OF 3) OF THIS SERIES; THESE BARS SHALL BE CUT TO FIT FROM LENGTHS SHOWN IN THE REINFORCING BAR SCHEDULE FOR THE CONSTRUCTION JOINT. THESE BARS MAY BE REPLACED BY ALTERNATIVE BARS AND LENGTHS AS SHOWN IN THE DESIGN PLANS.
19. EXPANSIONS ANCHORS AND DRILLED AND GROUTED DOWELS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.
20. AS APPROVED BY THE ENGINEER, THE CONTRACTOR MAY ELECT TO REDUCE THE WIDTHS OF THE POUR BY USE OF THE OPTIONAL LONGITUDINAL CONSTRUCTION JOINT SHOWN. JOINTS SHALL BE LOCATED AT THE EDGE OF A TRAFFIC LANE.
21. BARS a104(E) THRU a109(E) ARE VARIABLE LENGTH SERIES BARS. THE NUMBER IN THE BILLING IS THE NUMBER OF BARS AFTER CUTTING.

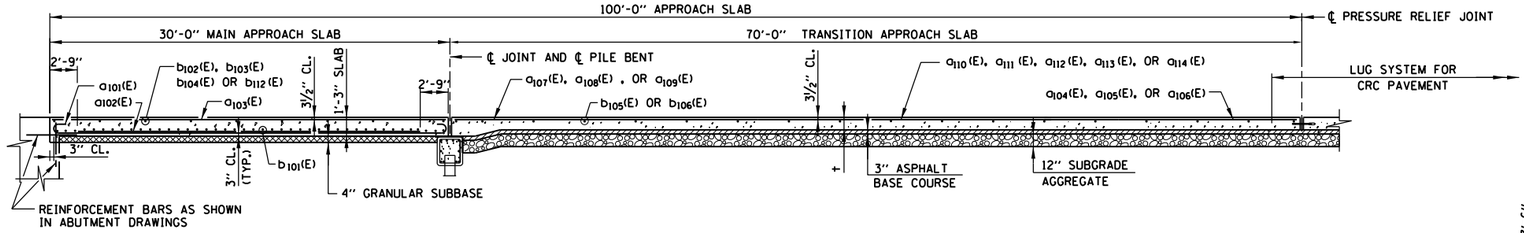
Paul Kovacs
APPROVED CHIEF ENGINEER DATE 2-28-2008

DATE	REVISIONS
2-28-2008	PILE BENT
6-1-2009	REVISED MEDIAN DIMENSION, ADDED SUBBASE
	MATERIAL UNDER MAIN APPROACH SLAB,
	ADDED BOND BREAKER NOTE-SECTION A-A

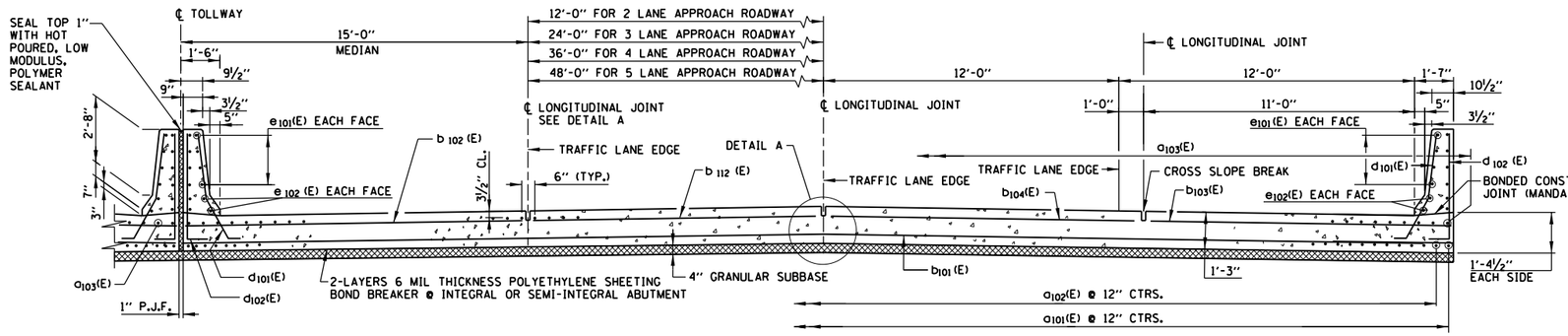
Illinois Tollway

APPROACH SLAB TO CRC PAVEMENT, MAINLINE

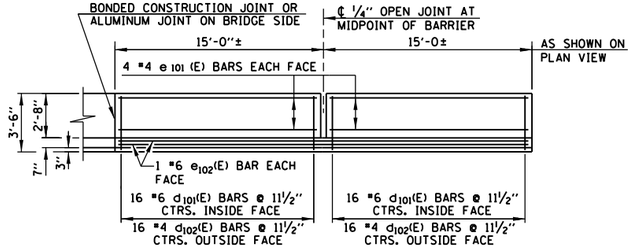
STANDARD G6-02



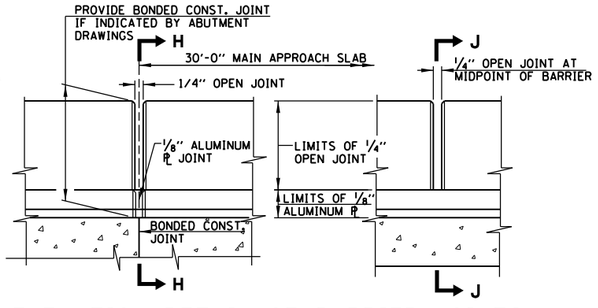
LONGITUDINAL CROSS SECTION



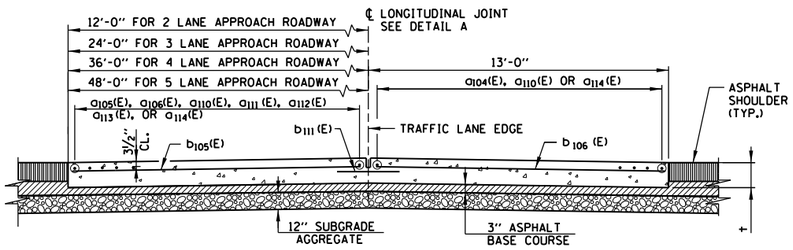
SECTION A-A



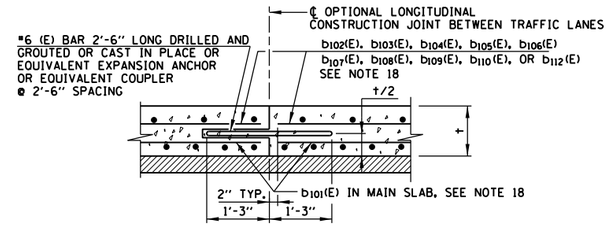
BARRIER ELEVATION



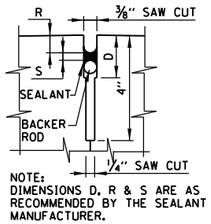
ELEVATION DETAIL OF BARRIER JOINTS



SECTION B-B

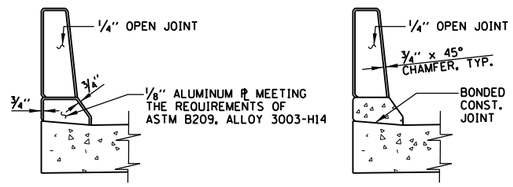


CROSS SECTION THRU OPTIONAL LONGITUDINAL CONSTRUCTION JOINT BETWEEN TRAFFIC LANES



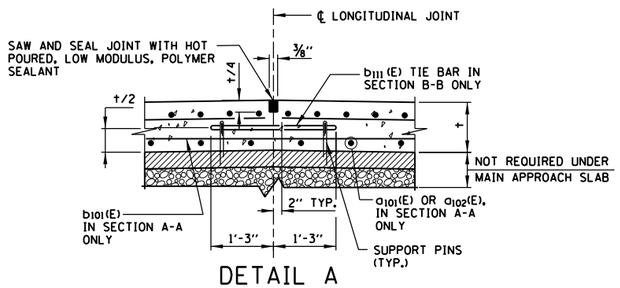
NOTE:
DIMENSIONS D, R & S ARE AS RECOMMENDED BY THE SEALANT MANUFACTURER.

DETAIL E

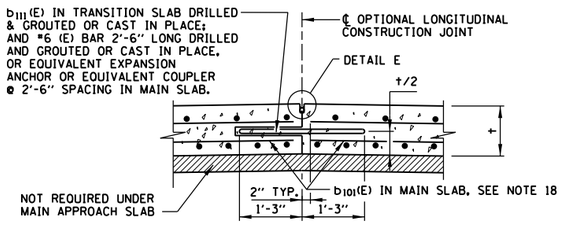


SECTION H-H

SECTION J-J



DETAIL A
TYPICAL LONGITUDINAL JOINT



CROSS SECTION THRU LONGITUDINAL JOINT WITH OPTIONAL CONSTRUCTION JOINT

NOTES:

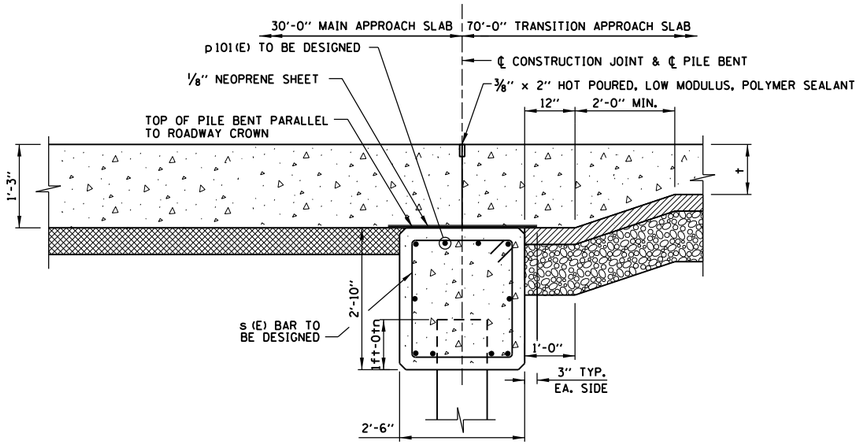
1. SEE SHEET 1 (OF 3) OF THIS SERIES FOR NOTES ON THIS SHEET.
2. THE DIMENSION t IS THE THICKNESS OF THE MAIN APPROACH SLAB (1'-3") OR THE TRANSITION APPROACH SLAB AS DEFINED IN THE DESIGN PLANS.

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

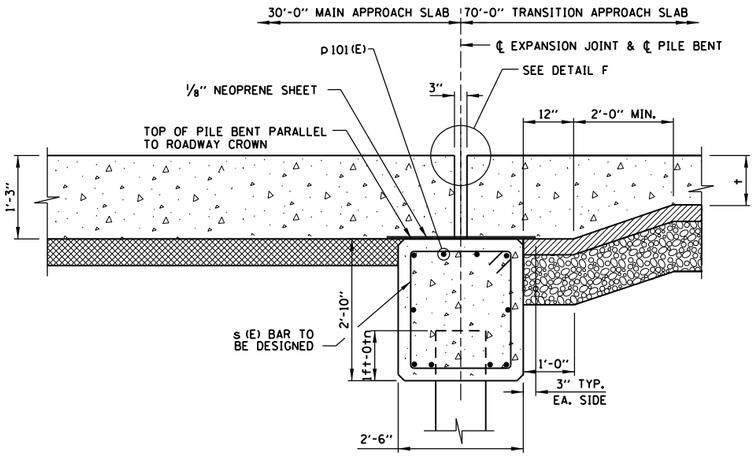
Illinois Tollway

APPROACH SLAB TO CRC PAVEMENT, MAINLINE

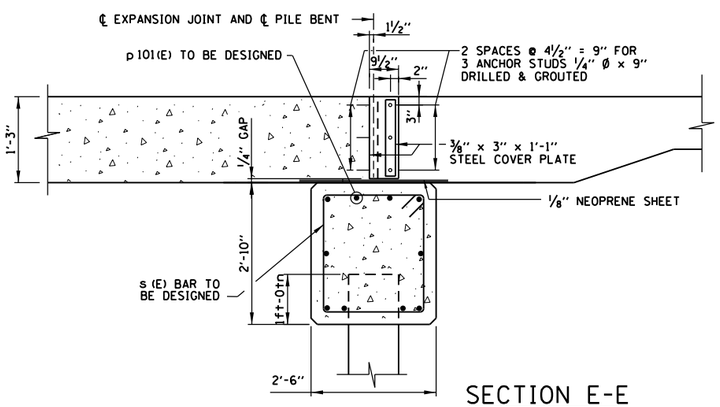
STANDARD G6-02



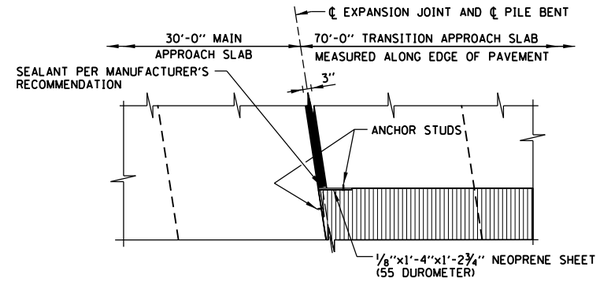
SECTION C-C
FOR NON-INTEGRAL ABUTMENT



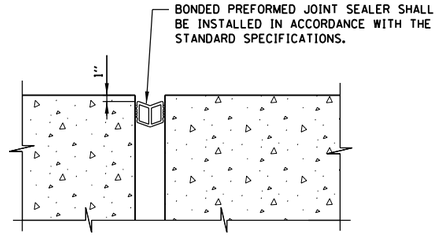
SECTION D-D
FOR INTEGRAL & SEMI-INTEGRAL ABUTMENT



SECTION E-E
END ELEVATION OF EXPANSION JOINT



DETAIL B
END PLAN OF EXPANSION JOINT



DETAIL F
BONDED PREFORMED JOINT SEALER

LEGEND

- CONCRETE
- ASPHALT BASE COURSE
- SUBGRADE AGGREGATE
- ASPHALT SHOULDER
- JOINT SEALANT
- GRANULAR SUBBASE

NOTES:

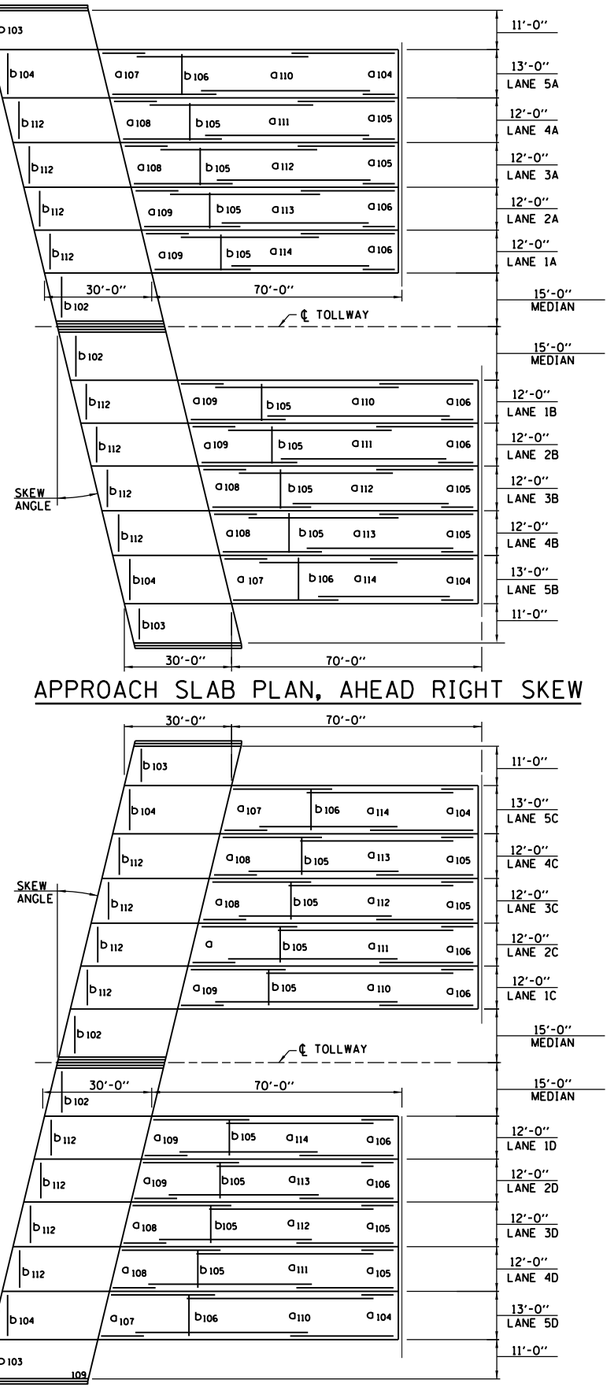
1. FOR REINFORCEMENT BARS IN APPROACH SLABS, SEE SHEETS 1 & 2 AND STANDARD G7 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 5 LANES) AND STANDARD G8 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR DETAILS AND SCHEDULES FOR 4 LANES).
2. IN SECTION E-E ANCHOR STUDS SHALL BE INSTALLED IN ACCORDANCE WITH SUBSECTION 1006.09 OF THE IDOT STANDARD SPECIFICATIONS. STEEL PLATES, BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.
3. THE THICKNESSES OF ASPHALT BASE COURSE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS THEY ARE FOR THE ADJACENT PAVEMENT SECTIONS.
4. THE DIMENSION t IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE DESIGN PLANS.

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

Illinois Tollway

APPROACH SLAB TO CRC PAVEMENT, MAINLINE

STANDARD G6-02



APPROACH SLAB PLAN, AHEAD RIGHT SKEW

APPROACH SLAB PLAN, AHEAD LEFT SKEW

SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS

BAR	LANE	0° SKEW			5° SKEW			10° SKEW			15° SKEW			20° SKEW			25° SKEW			30° SKEW			35° SKEW			40° SKEW			45° SKEW			50° SKEW			55° SKEW			60° SKEW		
		M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P
a_{110} (E)	5A, 5D	25	1	-	25	1	-	25	2	-	25	2	-	25	2	-	25	2	-	25	2	-	25	2	-	25	3	-	25	3	-	25	3	-	25	3	-	25	4	-
a_{110} (E)	1B, 1C	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	3	-	23	3	-	23	3	-	23	3	-	23	4	-
a_{111} (E)	4A, 4D	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	3	-	23	3	-	23	3	-
a_{111} (E)	2B, 2C	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	3	-	23	3	-	23	3	-
a_{112} (E)	3A, 3B, 3C, 3D	23	1	-	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	3	-	23	3	-
a_{113} (E)	2A, 2D	23	1	-	23	1	-	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-
a_{113} (E)	4B, 4C	23	1	-	23	1	-	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-
a_{114} (E)	1A, 1D	23	1	-	23	1	-	23	1	-	23	1	-	23	1	-	23	1	-	23	1	-	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-
a_{114} (E)	5B, 5C	25	1	-	25	1	-	25	1	-	25	1	-	25	1	-	25	1	-	25	1	-	25	1	-	25	1	-	25	2	-	25	2	-	25	2	-	25	2	-
b_{101} (E)	COMBINED	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	4	-	31	4	-	31	4	-	31	5	-	31	5	-
b_{105} (E)	1A, 1D	19	-	0	19	-	0	19	-	0	19	-	0	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	2	19	-	2	19	-	2
b_{105} (E)	2A, 2D	19	-	0	19	-	0	19	-	0	20	-	0	20	-	1	20	-	1	21	-	1	21	-	1	21	-	1	22	-	1	22	-	2	23	-	2	24	-	2
b_{105} (E)	3A, 3D	19	-	0	19	-	0	20	-	0	20	-	0	21	-	1	22	-	1	22	-	1	23	-	1	24	-	1	25	-	1	26	-	2	27	-	2	29	-	2
b_{105} (E)	4A, 4D	19	-	0	20	-	0	20	-	0	21	-	0	22	-	1	23	-	1	24	-	1	25	-	1	26	-	1	28	-	1	30	-	2	32	-	2	34	-	2
b_{105} (E)	1B, 1C	19	-	0	20	-	0	21	-	0	22	-	0	23	-	1	25	-	1	26	-	1	27	-	1	29	-	1	31	-	1	33	-	2	36	-	2	40	-	2
b_{105} (E)	2B, 2C	19	-	0	20	-	0	21	-	0	21	-	0	22	-	1	23	-	1	24	-	1	25	-	1	27	-	1	28	-	1	30	-	2	32	-	2	35	-	2
b_{105} (E)	3B, 3C	19	-	0	19	-	0	20	-	0	21	-	0	21	-	1	22	-	1	22	-	1	23	-	1	24	-	1	25	-	1	26	-	2	28	-	2	30	-	2
b_{105} (E)	4B, 4C	19	-	0	19	-	0	19	-	0	20	-	0	20	-	1	20	-	1	21	-	1	21	-	1	22	-	1	22	-	1	23	-	2	24	-	2	25	-	2
b_{106} (E)	5A, 5D	19	-	0	20	-	0	21	-	0	22	-	0	23	-	1	24	-	1	26	-	1	27	-	1	29	-	1	31	-	2	33	-	2	36	-	2	40	-	3
b_{106} (E)	5B, 5C	19	-	0	19	-	0	19	-	0	19	-	0	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	2	19	-	2	19	-	2	19	-	3
b_{111} (E)	1A TO 2A, 1D TO 2D	29	-	-	30	-	-	30	-	-	30	-	-	31	-	-	31	-	-	32	-	-	32	-	-	33	-	-	34	-	-	34	-	-	35	-	-	37	-	-
b_{111} (E)	2A TO 3A, 2D TO 3D	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	38	-	-	40	-	-	42	-	-	45	-	-
b_{111} (E)	3A TO 4A, 3D TO 4D	29	-	-	31	-	-	32	-	-	33	-	-	34	-	-	36	-	-	37	-	-	39	-	-	41	-	-	43	-	-	46	-	-	49	-	-	53	-	-
b_{111} (E)	4A TO 5A, 4D TO 5D	29	-	-	31	-	-	33	-	-	34	-	-	36	-	-	38	-	-	40	-	-	42	-	-	45	-	-	48	-	-	52	-	-	56	-	-	62	-	-
b_{111} (E)	1B TO 2B, 1C TO 2C	29	-	-	31	-	-	33	-	-	34	-	-	36	-	-	38	-	-	40	-	-	43	-	-	45	-	-	48	-	-	52	-	-	57	-	-	62	-	-
b_{111} (E)	2B TO 3B, 2C TO 3C	29	-	-	31	-	-	32	-	-	33	-	-	34	-	-	36	-	-	38	-	-	39	-	-	41	-	-	44	-	-	46	-	-	50	-	-	54	-	-
b_{111} (E)	3B TO 4B, 3C TO 4C	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	39	-	-	41	-	-	43	-	-	46	-	-
b_{111} (E)	4B TO 5B, 4C TO 5C	29	-	-	30	-	-	30	-	-	31	-	-	31	-	-	31	-	-	32	-	-	33	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-

NOTES:

1. WORK THIS STANDARD WITH STANDARD G6 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, GENERAL PLAN, SECTIONS AND DETAILS) AND SHEET 2 OF 2 OF THIS SERIES.
2. THE REINFORCING BAR SCHEDULES, BILL OF MATERIAL, AND QUANTITIES ARE CALCULATED FOR TWO (OPPOSITE) TRAFFIC DIRECTIONS AT ONE END OF A DUAL BRIDGE.

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

Illinois Tollway

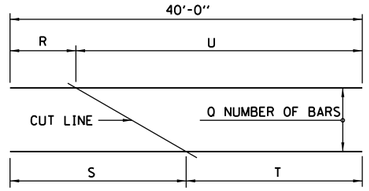
DATE	REVISIONS
2-28-2008	PILE BENT
6-1-2009	REVISED MEDIAN DIMENSION,
	REVISED NOTES
	REVISED REINF. BAR QUANTITY

APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR SCHEDULES FOR 5 LANES

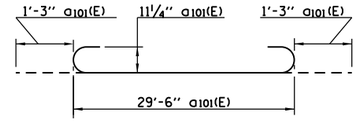
STANDARD G7-02

TABLE OF CUTTING DIAGRAM DIMENSIONS

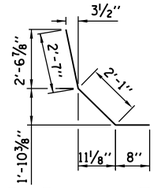
BAR	LANE	O	DIM.	0° SKEW	5° SKEW	10° SKEW	15° SKEW	20° SKEW	25° SKEW	30° SKEW	35° SKEW	40° SKEW	45° SKEW	50° SKEW	55° SKEW	60° SKEW
a_{104}(E)	5A, 5B, 5C, 5D	13	R	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"
			S	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"
			T	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"
			U	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"
*a_{105}(E)	3A,3B,3C,3D 4A,4B,4C,4D	12	R	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			S	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"
*a_{106}(E)	1A,1B,1C,1D 2A,2B,2C,2D		T	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"
			U	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"
a_{107}(E)	5A, 5B, 5C, 5D	13	R	9'-2"	9'-9"	10'-3"	10'-10"	11'-5"	12'-1"	12'-9"	13'-7"	14'-5"	15'-5"	16'-7"	18'-1"	20'-0"
			S	19'-7"	19'-7"	19'-7"	19'-8"	19'-8"	19'-8"	19'-9"	19'-9"	19'-9"	19'-10"	19'-10"	19'-11"	20'-0"
			T	20'-5"	20'-5"	20'-5"	20'-4"	20'-4"	20'-4"	20'-3"	20'-3"	20'-3"	20'-2"	20'-2"	20'-1"	20'-0"
			U	30'-10"	30'-3"	29'-9"	29'-2"	28'-7"	27'-11"	27'-3"	26'-5"	25'-7"	24'-7"	23'-5"	21'-11"	20'-0"
*a_{108}(E)	3A,3B,3C,3D 4A,4B,4C,4D	12	R	10'-0"	10'-7"	11'-1"	11'-7"	12'-2"	12'-9"	13'-4"	14'-1"	14'-10"	15'-9"	16'-11"	18'-3"	20'-0"
			S	19'-7"	19'-7"	19'-7"	19'-8"	19'-8"	19'-8"	19'-9"	19'-9"	19'-9"	19'-10"	19'-10"	19'-11"	20'-0"
*a_{109}(E)	1A,1B,1C,1D 2A,2B,2C,2D		T	20'-5"	20'-5"	20'-5"	20'-4"	20'-4"	20'-4"	20'-3"	20'-3"	20'-3"	20'-2"	20'-2"	20'-1"	20'-0"
			U	30'-0"	29'-5"	28'-11"	28'-5"	27'-10"	27'-3"	26'-8"	25'-11"	25'-2"	24'-3"	23'-1"	21'-9"	20'-0"



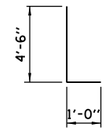
REINFORCEMENT BAR CUTTING DIAGRAM



BARS a_{101}(E)



BAR d_{101}(E)



BAR d_{102}(E)

REINFORCING BAR SCHEDULE FOR BARRIERS

BAR	NO.	SIZE	LENGTH	SHAPE
d_{101}(E)	128	6	5'-4"	⌐
d_{102}(E)	128	4	5'-6"	L
e_{101}(E)	64	4	14'-8"	——
e_{102}(E)	16	6	29'-6"	——

BILL OF MATERIAL FOR BARRIERS

IDOT PAY ITEM NO.	DESCRIPTION	UNIT	QUANT'Y
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	16.0
50800205	REINFORCING BARS, EPOXY COATED	LBS.	2,831
50300300	PROTECTIVE COAT	SQ. YD.	60

REINFORCING BAR SCHEDULE FOR APPROACH SLABS

BAR	SIZE	SHAPE	0° SKEW		5° SKEW		10° SKEW		15° SKEW		20° SKEW		25° SKEW		30° SKEW		35° SKEW		40° SKEW		45° SKEW		50° SKEW		55° SKEW		60° SKEW	
			NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
a_{101}(E)	9	⊂⊃	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"	178	32'-0"
a_{102}(E)	9	——	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"	176	24'-6"
a_{103}(E)	5	——	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"	188	29'-6"
a_{104}(E)	7	— —	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"
a_{105}(E)	7	— —	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"
a_{106}(E)	7	— —	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"
a_{107}(E)	7	— —	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"
a_{108}(E)	7	— —	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"
a_{109}(E)	7	— —	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"
a_{110}(E)	7	——	48	33'-10"	48	38'-7"	96	22'-10"	96	25'-4"	96	27'-11"	96	30'-8"	96	33'-9"	96	37'-1"	144	28'-0"	144	30'-11"	144	34'-4"	144	38'-8"	192	33'-8"
a_{111}(E)	7	——	46	33'-10"	46	37'-6"	92	21'-8"	92	23'-8"	92	25'-8"	92	27'-10"	92	30'-1"	92	32'-8"	92	35'-7"	92	39'-0"	138	29'-5"	138	32'-9"	138	37'-0"
a_{112}(E)	7	——	46	33'-10"	46	36'-5"	46	39'-1"	92	22'-0"	92	23'-6"	92	25'-0"	92	26'-8"	92	28'-6"	92	30'-7"	92	33'-0"	92	35'-11"	138	27'-0"	138	30'-1"
a_{113}(E)	7	——	46	33'-10"	46	35'-5"	46	37'-0"	46	38'-8"	92	21'-3"	92	22'-2"	92	23'-2"	92	24'-4"	92	25'-7"	92	27'-0"	92	28'-9"	92	30'-10"	92	33'-7"
a_{114}(E)	7	——	48	33'-10"	48	34'-4"	48	34'-11"	48	35'-5"	48	36'-0"	48	36'-8"	48	37'-4"	48	38'-0"	48	38'-10"	96	21'-0"	96	21'-7"	96	22'-3"	96	23'-2"
b_{101}(E)	5	——	186	30'-6"	186	30'-7"	186	30'-11"	186	31'-6"	186	32'-4"	186	33'-6"	186	35'-0"	186	37'-0"	248	30'-0"	248	32'-5"	248	35'-7"	310	32'-1"	310	36'-8"
b_{102}(E)	4	——	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"
b_{103}(E)	4	——	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"
b_{104}(E)	4	——	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"
b_{105}(E)	4	——	152	11'-8"	155	11'-8"	159	11'-8"	164	11'-8"	176	11'-8"	182	11'-8"	187	11'-8"	192	11'-8"	200	11'-8"	208	11'-8"	225	11'-8"	237	11'-8"	252	11'-8"
b_{106}(E)	4	——	38	12'-8"	39	12'-8"	40	12'-8"	41	12'-8"	44	12'-8"	45	12'-8"	47	12'-8"	48	12'-8"	50	12'-8"	54	12'-8"	56	12'-8"	59	12'-8"	65	12'-8"
b_{107}(E)	5	——	0	-	6	12'-8"	6	12'-9"	6	13'-1"	6	13'-5"	6	13'-11"	6	14'-7"	6	15'-5"	6	16'-7"	6	18'-0"	6	19'-10"	6	22'-3"	6	25'-7"
b_{108}(E)	5	——	0	-	24	11'-7"	24	11'-8"	24	11'-11"	24	12'-3"	24	12'-9"	24	13'-4"	24	14'-2"	24	15'-2"	24	16'-6"	24	18'-2"	24	20'-5"	24	23'-6"
b_{109}(E)	5	——	0	-	4	10'-7"	4	10'-8"	4	10'-11"	4	11'-2"	4	11'-8"	4	12'-2"	4	12'-11"	4	13'-10"	4	15'-1"	4	16'-7"	4	18'-8"	4	21'-6"
b_{110}(E)	5	——	0	-	4	13'-1"	4	13'-2"	4	13'-6"	4	13'-10"	4	14'-5"	4	15'-1"	4	16'-0"	4	17'-1"	4	18'-7"	4	20'-6"	4	23'-0"	4	26'-6"
b_{111}(E)	5	——	232	2'-6"	244	2'-6"	252	2'-6"	259	2'-6"	268	2'-6"	278	2'-6"	289	2'-6"	300	2'-6"	312	2'-6"	328	2'-6"	346	2'-6"	368	2'-6"	396	2'-6"
b_{112}(E)	4	——	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"	72	11'-8"
BRIDGE APPR. SLAB (SQ. YD.)				1,539.4		1,575.6		1,612.3		1,650.2		1,689.9		1,732.2		1,778.1		1,828.9		1,886.4		1,952.9		2,032.2		2,129.9		2,255.6
REINF. STL., EPOXY CTD. (LBS.)				85,001		86,812		88,640		90,352		92,260		94,059		96,061		98,316		101,273		104,616		108,656		113,713		120,136
APPR. SLAB PILE BENTS CLASS SI CONCRETE (C.Y.)				46.6		46.7		47.3		48.2		49.6		51.4		53.8		56.8		60.8		65.9		72.4		81.2		93.1

NOTES:

* 1. BARS a_{105}(E), a_{106}(E), a_{108}(E), AND a_{109}(E) ARE TO BE USED IN 12'-0" WIDE LANES, AND THE SHORTEST BAR IN THESE SERIES OF BARS (10'-0" FOR BAR a_{106}(E)) IS TO BE DISCARDED TO MAKE EACH SERIES OF BARS CONTAIN ONLY 23 BARS. BARS a_{104}(E) AND a_{107}(E) ARE TO BE USED IN THE 13'-0" WIDE LANE, AND THE SHORTEST BAR IN THESE SERIES OF BARS (9'-2" FOR BAR a_{104}(e)) IS TO BE DISCARDED TO MAKE EACH SERIES OF BARS CONTAIN ONLY 25 BARS.

2. THE REINFORCING BAR SCHEDULE FOR APPROACH SLABS IS SHOWN FOR 15'-0" WIDE MEDIAN SHOULDERS. FOR 14'-0" WIDE MEDIAN SHOULDERS, AT EACH SKEW ANGLE IN THIS SCHEDULE:
   - REDUCE THE NUMBER OF a_{101}(E) AND a_{102}(E) BARS FROM 178 TO 176 AND FROM 176 TO 174 RESPECTIVELY.
   - REDUCE THE NUMBER OF a_{103}(E) BARS FROM 188 TO 186.
   - REDUCE THE LENGTH OF b_{102}(E) BARS FROM 14'-7" TO 13'-7".
   - REDUCE THE AREA QUANTITY OF BRIDGE APPROACH SLAB BY 6.7 SQUARE YARDS.
   - REDUCE THE WEIGHT QUANTITY OF APPROACH SLAB REINFORCING STEEL, EPOXY COATED BY 458 POUNDS.

   FURTHERMORE, TRIM THE b_{110}(E) BARS IN THE 14'-0" MEDIAN SHOULDERS AS NECESSARY TO FIT THE SKEW ANGLE.

3. THE AREA OF EACH MAIN APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM THE OUTSIDE FACE OF OUTER BARRIER TO OUTSIDE OF MEDIAN BARRIER BY THE LENGTH OF 30.00 FEET.

4. THE AREA OF EACH TRANSITION APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM LEFT OUTSIDE EDGE OF CONCRETE PAVEMENT TO THE RIGHT OUTSIDE EDGE OF CONCRETE PAVEMENT BY THE MINIMUM LENGTH OF 70.00 FEET PLUS THE ADDITIONAL LENGTH REQUIRED BY THE SKEW ANGLE.

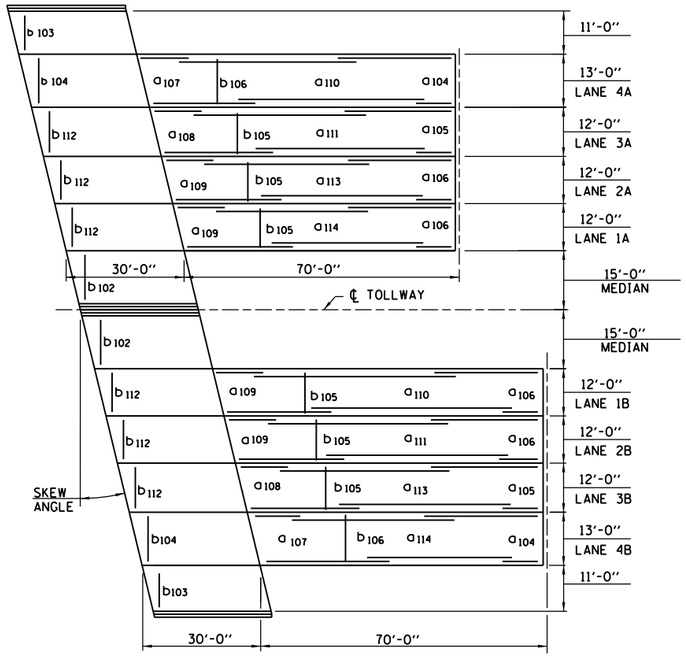
5. WORK THIS STANDARD WITH STANDARD G6 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, GENERAL PLAN, SECTIONS AND DETAILS) AND SHEET 1 OF 1 OF THIS SERIES.

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

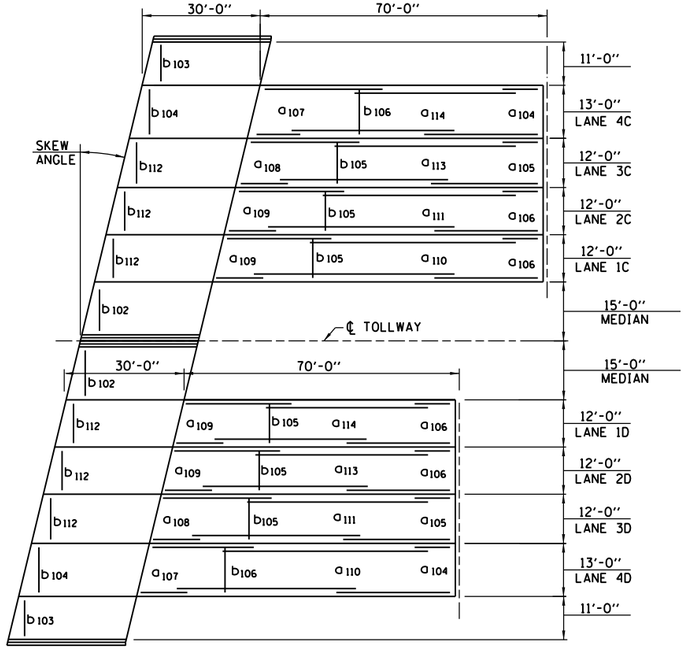
Illinois Tollway

APPROACH SLAB TO CRC PAVEMENT, MAINLINE BAR SCHEDULES FOR 5 LANES

STANDARD G7-02



APPROACH SLAB PLAN, AHEAD RIGHT SKEW



APPROACH SLAB PLAN, AHEAD LEFT SKEW

SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS

BAR	LANE	0° SKEW			5° SKEW			10° SKEW			15° SKEW			20° SKEW			25° SKEW			30° SKEW			35° SKEW			40° SKEW			45° SKEW			50° SKEW			55° SKEW			60° SKEW		
		M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P
a_{110}(E)	4A,4D	25	1	-	25	1	-	25	2	-	25	2	-	25	2	-	25	2	-	25	2	-	25	2	-	25	2	-	25	2	-	25	3	-	25	3	-	25	3	-
a_{110}(E)	1B,1C	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	3	-	23	3	-	23	3	-
a_{111}(E)	3A,3D	23	1	-	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	3	-	23	3	-
a_{111}(E)	2B,2C	23	1	-	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	3	-	23	3	-
a_{113}(E)	2A,2D	23	1	-	23	1	-	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-
a_{113}(E)	3B,3C	23	1	-	23	1	-	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-
a_{114}(E)	1A,1D	23	1	-	23	1	-	23	1	-	23	1	-	23	1	-	23	1	-	23	1	-	23	1	-	23	2	-	23	2	-	23	2	-	23	2	-	23	2	-
a_{114}(E)	4B,4C	25	1	-	25	1	-	25	1	-	25	1	-	25	1	-	25	1	-	25	1	-	25	1	-	25	2	-	25	2	-	25	2	-	25	2	-	25	2	-
b_{101}(E)	COMBINED	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	3	-	31	4	-	31	4	-	31	5	-
b_{105}(E)	1A,1D	19	-	0	19	-	0	19	-	0	19	-	0	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	2	19	-	2	19	-	2
b_{105}(E)	2A,2D	19	-	0	19	-	0	19	-	0	20	-	0	20	-	1	20	-	1	21	-	1	21	-	1	21	-	1	22	-	1	22	-	2	23	-	2	24	-	2
b_{105}(E)	3A,3D	19	-	0	19	-	0	20	-	0	20	-	0	21	-	1	22	-	1	22	-	1	23	-	1	24	-	1	25	-	1	26	-	2	27	-	2	29	-	2
b_{105}(E)	1B,1C	19	-	0	20	-	0	21	-	0	21	-	0	22	-	1	23	-	1	24	-	1	25	-	1	27	-	1	28	-	1	30	-	2	32	-	2	35	-	2
b_{105}(E)	2B,2C	19	-	0	19	-	0	20	-	0	21	-	0	21	-	1	22	-	1	22	-	1	23	-	1	24	-	1	25	-	1	26	-	2	28	-	2	30	-	2
b_{105}(E)	3B,3C	19	-	0	19	-	0	19	-	0	20	-	0	20	-	1	20	-	1	21	-	1	21	-	1	22	-	1	22	-	1	23	-	2	24	-	2	25	-	2
b_{106}(E)	4A,4D	19	-	0	20	-	0	20	-	0	21	-	0	22	-	1	23	-	1	24	-	1	25	-	1	26	-	1	28	-	2	30	-	2	32	-	2	34	-	3
b_{106}(E)	4B,4C	19	-	0	19	-	0	19	-	0	19	-	0	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	2	19	-	2	19	-	2	19	-	3
b_{111}(E)	1A TO 2A, 1D TO 2D	29	-	-	30	-	-	30	-	-	30	-	-	31	-	-	31	-	-	32	-	-	32	-	-	33	-	-	34	-	-	34	-	-	35	-	-	37	-	-
b_{111}(E)	2A TO 3A, 2D TO 3D	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	38	-	-	40	-	-	42	-	-	45	-	-
b_{111}(E)	3A TO 4A, 3D TO 4D	29	-	-	31	-	-	32	-	-	33	-	-	34	-	-	36	-	-	37	-	-	39	-	-	41	-	-	43	-	-	46	-	-	49	-	-	53	-	-
b_{111}(E)	1B TO 2B, 1C TO 2C	29	-	-	31	-	-	32	-	-	33	-	-	34	-	-	36	-	-	38	-	-	39	-	-	41	-	-	44	-	-	46	-	-	50	-	-	54	-	-
b_{111}(E)	2B TO 3B, 2C TO 3C	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	39	-	-	41	-	-	43	-	-	46	-	-
b_{111}(E)	3B TO 4B, 3C TO 4C	29	-	-	30	-	-	30	-	-	31	-	-	31	-	-	31	-	-	32	-	-	33	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-

NOTES:

1. WORK THIS STANDARD WITH STANDARD G6 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, GENERAL PLAN, SECTIONS AND DETAILS) AND SHEET 2 OF 2 OF THIS SERIES.
2. THE REINFORCING BAR SCHEDULES, BILL OF MATERIAL, AND QUANTITIES ARE CALCULATED FOR TWO (OPPOSITE) TRAFFIC DIRECTIONS AT ONE END OF A DUAL BRIDGE.

Paul Kovacs
APPROVED ..... DATE 2-28-2008
CHIEF ENGINEER

Illinois Tollway

DATE	REVISIONS
2-28-2008	PILE BENT
6-1-2009	REVISED MEDIAN DIMENSIONS
	REVISED NOTES
	REVISED REINF. BAR QUANTITY

APPROACH SLAB TO CRC PAVEMENT, MAINLINE, BAR SCHEDULES FOR 4 LANES

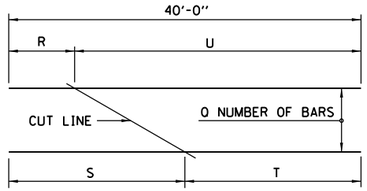
STANDARD G8-02

TABLE OF CUTTING DIAGRAM DIMENSIONS

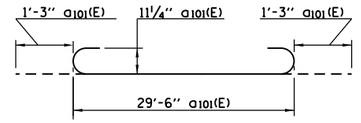
BAR	LANE	O	DIM.	0° SKEW	5° SKEW	10° SKEW	15° SKEW	20° SKEW	25° SKEW	30° SKEW	35° SKEW	40° SKEW	45° SKEW	50° SKEW	55° SKEW	60° SKEW
a_{104}(E)	5A, 5B, 5C, 5D	13	R	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"	9'-2"
			S	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"
			T	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"
			U	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"	30'-10"
*a_{105}(E)	3A,3B,3C,3D 4A,4B,4C,4D	12	R	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
			S	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"	19'-7"
*a_{106}(E)	1A,1B,1C,1D 2A,2B,2C,2D		T	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"	20'-5"
			U	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"	30'-0"
a_{107}(E)	5A, 5B, 5C, 5D	13	R	9'-2"	9'-9"	10'-3"	10'-10"	11'-5"	12'-1"	12'-9"	13'-7"	14'-5"	15'-5"	16'-7"	18'-1"	20'-0"
			S	19'-7"	19'-7"	19'-7"	19'-8"	19'-8"	19'-8"	19'-9"	19'-9"	19'-9"	19'-10"	19'-10"	19'-11"	20'-0"
			T	20'-5"	20'-5"	20'-5"	20'-4"	20'-4"	20'-4"	20'-3"	20'-3"	20'-3"	20'-2"	20'-2"	20'-1"	20'-0"
			U	30'-10"	30'-3"	29'-9"	29'-2"	28'-7"	27'-11"	27'-3"	26'-5"	25'-7"	24'-7"	23'-5"	21'-11"	20'-0"
*a_{108}(E)	3A,3B,3C,3D 4A,4B,4C,4D	12	R	10'-0"	10'-7"	11'-1"	11'-7"	12'-2"	12'-9"	13'-4"	14'-1"	14'-10"	15'-9"	16'-11"	18'-3"	20'-0"
			S	19'-7"	19'-7"	19'-7"	19'-8"	19'-8"	19'-8"	19'-9"	19'-9"	19'-9"	19'-10"	19'-10"	19'-11"	20'-0"
*a_{109}(E)	1A,1B,1C,1D 2A,2B,2C,2D		T	20'-5"	20'-5"	20'-5"	20'-4"	20'-4"	20'-4"	20'-3"	20'-3"	20'-3"	20'-2"	20'-2"	20'-1"	20'-0"
			U	30'-0"	29'-5"	28'-11"	28'-5"	27'-10"	27'-3"	26'-8"	25'-11"	25'-2"	24'-3"	23'-1"	21'-9"	20'-0"

REINFORCING BAR SCHEDULE FOR APPROACH SLABS

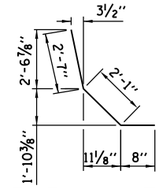
BAR	SIZE	SHAPE	0° SKFW		5° SKFW		10° SKEW		15° SKEW		20° SKEW		25° SKEW		30° SKEW		35° SKEW		40° SKEW		45° SKEW		50° SKEW		55° SKEW		60° SKEW	
			NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH
a_{101}(E)	9	⊂⊃	154	32'- 0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"	154	32'-0"
a_{102}(E)	9	——	152	24'- 6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"	152	24'-6"
a_{103}(E)	7	——	162	29'- 6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"	162	29'-6"
a_{104}(E)	7	— —	26	40'- 0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"
a_{105}(E)	7	— —	24	40'- 0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"
a_{106}(E)	7	— —	48	40'- 0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"
a_{107}(E)	7	— —	26	40'- 0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"	26	40'-0"
a_{108}(E)	7	— —	24	40'- 0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"	24	40'-0"
a_{109}(E)	7	— —	48	40'- 0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"	48	40'-0"
a_{110}(E)	7	——	48	33'-10"	48	37'-7"	96	21'-9"	96	23'-8"	96	25'-9"	96	27'-11"	96	30'-3"	96	32'-11"	96	35'-10"	96	39'-3"	144	29'-7"	144	32'-11"	144	37'-3"
a_{111}(E)	7	——	46	33'-10"	46	36'-5"	46	39'-1"	92	22'-0"	92	23'-6"	92	25'-0"	92	26'-8"	92	28'-6"	92	30'-7"	92	33'-0"	92	35'-11"	138	27'-0"	138	30'-1"
a_{113}(E)	7	——	46	33'-10"	46	35'-5"	46	37'-0"	46	38'-8"	92	21'-3"	92	22'-2"	92	23'-2"	92	24'-4"	92	25'-7"	92	27'-0"	92	28'-9"	92	30'-10"	92	33'-7"
a_{114}(E)	7	——	48	33'-10"	48	34'-4"	48	34'-11"	48	35'-5"	48	36'-0"	48	36'-8"	48	37'-4"	48	38'-0"	96	20'-6"	96	21'-0"	96	21'-7"	96	22'-3"	96	23'-2"
b_{101}(E)	5	——	186	26'- 6"	186	26'-7"	186	26'-10"	186	27'-4"	186	28'-1"	186	29'-1"	186	30'-5"	186	32'-1"	186	34'-3"	186	37'-1"	248	30'-11"	248	34'-6"	310	31'-10"
b_{102}(E)	4	——	18	14'- 7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"	18	14'-7"
b_{103}(E)	4	——	18	12'- 2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"	18	12'-2"
b_{104}(E)	4	——	18	12'- 8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"	18	12'-8"
b_{105}(E)	4	——	114	11'- 8"	115	11'-8"	118	11'-8"	121	11'-8"	129	11'-8"	132	11'-8"	135	11'-8"	138	11'-8"	143	11'-8"	147	11'-8"	158	11'-8"	165	11'-8"	174	11'-8"
b_{106}(E)	4	——	38	12'- 8"	39	12'-8"	39	12'-8"	40	12'-8"	43	12'-8"	44	12'-8"	45	12'-8"	46	12'-8"	47	12'-8"	51	12'-8"	53	12'-8"	55	12'-8"	59	12'-8"
b_{107}(E)	5	——	0	-	6	12'-8"	6	12'-9"	6	13'-1"	6	13'-5"	6	13'-11"	6	14'-7"	6	15'-5"	6	16'-7"	6	18'-0"	6	19'-10"	6	22'-3"	6	25'-7"
b_{108}(E)	5	——	0	-	24	11'-7"	24	11'-8"	24	11'-11"	24	12'-3"	24	12'-9"	24	13'-4"	24	14'-2"	24	15'-2"	24	16'-6"	24	18'-2"	24	20'-5"	24	23'-6"
b_{109}(E)	5	——	0	-	4	10'-7"	4	10'-8"	4	10'-11"	4	11'-2"	4	11'-8"	4	12'-2"	4	12'-11"	4	13'-10"	4	15'-1"	4	16'-7"	4	18'-8"	4	21'-6"
b_{110}(E)	5	——	0	-	4	13'-1"	4	13'-2"	4	13'-6"	4	13'-10"	4	14'-5"	4	15'-1"	4	16'-0"	4	17'-1"	4	18'-7"	4	20'-6"	4	23'-0"	4	26'-6"
b_{111}(E)	5	——	174	2'- 6"	182	2'-6"	186	2'-6"	191	2'-6"	196	2'-6"	202	2'-6"	209	2'-6"	215	2'-6"	222	2'-6"	232	2'-6"	242	2'-6"	255	2'-6"	272	2'-6"
b_{112}(E)	4	——	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"	54	11'-8"
BRIDGE APPR. SLAB (SQ. YD.)			1,272.8		1,296.1		1,319.8		1,344.3		1,369.9		1,397.2		1,426.8		1,459.6		1,496.6		1,539.6		1,590.7		1,653.8		1,734.9	
REINF. STL., EPOXY CTD. (LBS.)			75,905		77,239		78,372		79,578		80,930		82,139		83,498		85,044		87,070		89,244		92,241		95,762		100,230	
APPR. SLAB PILE BENTS CLASS SI CONCRETE (C.Y.)			40.2		40.4		40.9		41.6		42.9		44.5		46.5		49.2		52.6		56.9		62.6		70.3		80.6	



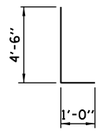
REINFORCEMENT BAR CUTTING DIAGRAM



BARS a_{101}(E)



BAR d_{101}(E)



BAR d_{102}(E)

REINFORCING BAR SCHEDULE FOR BARRIERS				
BAR	NO.	SIZE	LENGTH	SHAPE
d_{101}(E)	128	6	5'-4"	⌞
d_{102}(E)	128	4	5'-6"	L
e_{101}(E)	64	4	14'-8"	——
e_{102}(E)	16	6	29'-6"	——

BILL OF MATERIAL FOR BARRIERS			
IDOT PAY ITEM NO.	DESCRIPTION	UNIT	QUANT'Y
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	16.0
50800205	REINFORCING BARS, EPOXY COATED	LBS.	2,831
50300300	PROTECTIVE COAT	SQ. YD.	60

NOTES:

• 1. BARS a_{105}(E), a_{106}(E), a_{108}(E), AND a_{109}(E) ARE TO BE USED IN 12'-0" WIDE LANES, AND THE SHORTEST BAR IN THESE SERIES OF BARS (10'-0" FOR BAR a_{106}(E)) IS TO BE DISCARDED TO MAKE EACH SERIES OF BARS CONTAIN ONLY 23 BARS. BARS a_{104}(E) AND a_{107}(E) ARE TO BE USED IN THE 13'-0" WIDE LANE AND THE SHORTEST BAR IN THESE SERIES OF BARS (9'-2" FOR BAR a_{104}(e)) IS TO BE DISCARDED TO MAKE EACH SERIES OF BARS CONTAIN ONLY 25 BARS.

2. THE REINFORCING BAR SCHEDULE FOR APPROACH SLABS IS SHOWN FOR 15'-0" WIDE MEDIAN SHOULDERS. FOR 14'-0" WIDE MEDIAN SHOULDERS, AT EACH SKEW ANGLE IN THIS SCHEDULE:
   - REDUCE THE NUMBER OF a_{101}(E) AND a_{102}(E) BARS FROM 154 TO 152 AND FROM 152 TO 150 RESPECTIVELY.
   - REDUCE THE NUMBER OF a_{103}(E) BARS FROM 162 TO 160.
   - REDUCE THE LENGTH OF b_{102}(E) BARS FROM 14'-7" TO 13'-7".
   - REDUCE THE AREA QUANTITY OF BRIDGE APPROACH SLAB BY 6.7 SQUARE YARDS.
   - REDUCE THE WEIGHT QUANTITY OF APPROACH SLAB REINFORCING STEEL, EPOXY COATED BY 517 POUNDS.

   FURTHERMORE, TRIM THE b_{110}(E) BARS IN THE 14'-0" MEDIAN SHOULDERS AS NECESSARY TO FIT THE SKEW ANGLE.

3. THE AREA OF EACH MAIN APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM THE OUTSIDE FACE OF OUTER BARRIER TO OUTSIDE OF MEDIAN BARRIER BY THE LENGTH OF 30.00 FEET.

4. THE AREA OF EACH TRANSITION APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM LEFT OUTSIDE EDGE OF CONCRETE PAVEMENT TO THE RIGHT OUTSIDE EDGE OF CONCRETE PAVEMENT BY THE MINIMUM LENGTH OF 70.00 FEET PLUS THE ADDITIONAL LENGTH REQUIRED BY THE SKEW ANGLE.

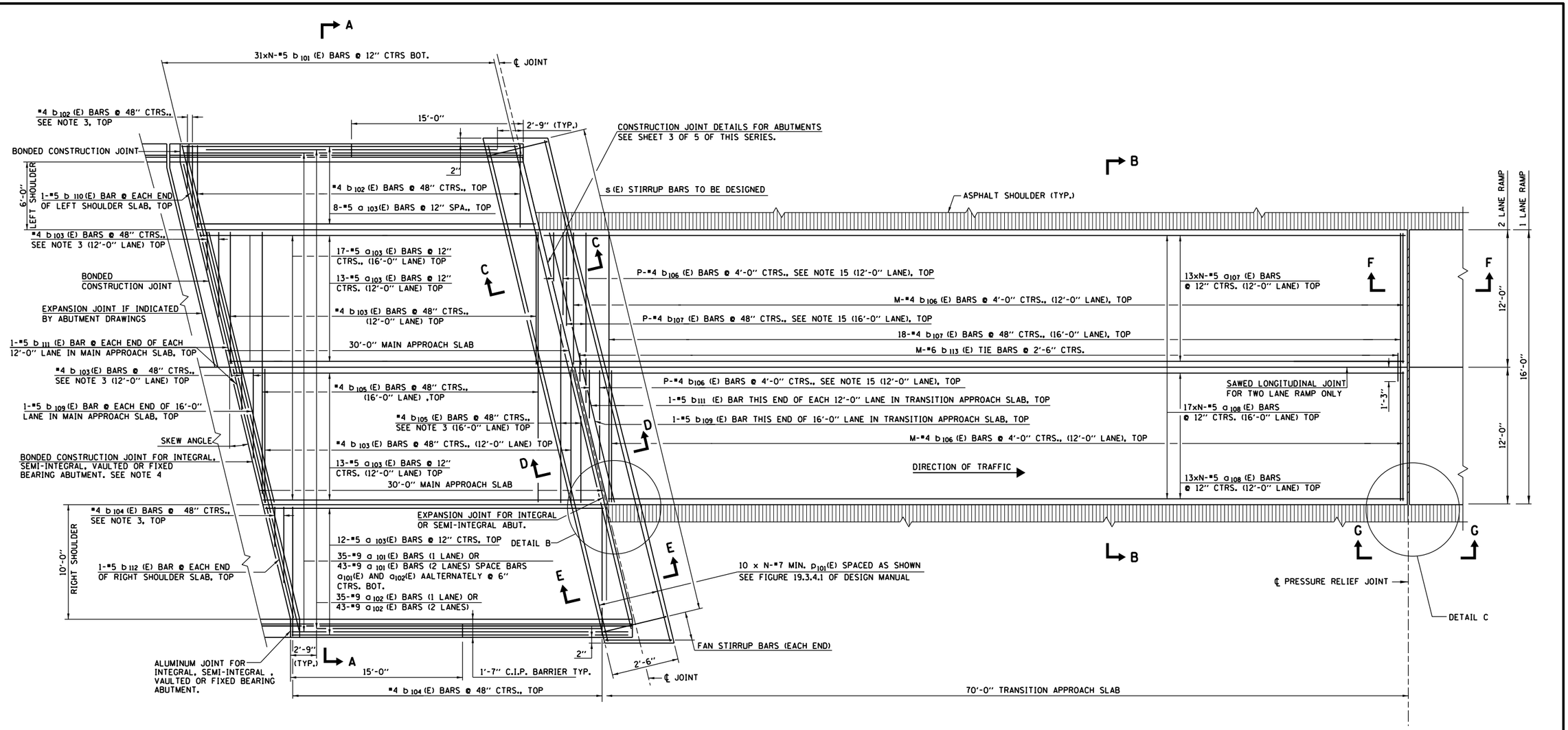
5. WORK THIS STANDARD WITH STANDARD G6 (APPROACH SLAB TO CRC PAVEMENT, MAINLINE, GENERAL PLAN, SECTIONS AND DETAILS) AND SHEET 1 OF 1 OF THIS SERIES.

Paul Kovacs
APPROVED CHIEF ENGINEER DATE 2-28-2008

Illinois Tollway

APPROACH SLAB TO CRC PAVEMENT, MAINLINE
BAR SCHEDULES FOR 4 LANES

STANDARD G8-02



PLAN

NOTES:

1. TILT HOOK OF #9 BARS FOR MINIMUM 3½" CLEARANCE.
2. USE 1'-4" MIN. LAP FOR #4 BARS. USE 1'-8" MIN. LAP FOR #5 BARS.
3. CUT REINFORCEMENT IN THE FIELD TO FIT THE SKEW AND USE REMAINDER IN OPPOSITE END.
4. SAW CUT ⅜" x 2" DEEP JOINT AND FILL WITH HOT POURED, LOW MODULUS, POLYMER SEALANT MEETING THE REQUIREMENTS OF ASTM D3405.
5. PROTECTIVE COAT SHALL BE APPLIED TO TOP AND TRAFFIC FACES OF BARRIERS.
6. TOOL EDGES OF EXPANSION AND PRESSURE RELIEF JOINTS TO ¼" RADIUS.
7. REINFORCING BARS SHALL MEET THE REQUIREMENTS OF AASHTO M31 (ASTM A615), GRADE 60, AND SHALL CONFORM TO SECTION 508 OF THE IDOT STANDARD SPECIFICATIONS.
8. REINFORCING BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
9. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 315, LATEST EDITION.
10. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
11. EXPOSED CONCRETE EDGES SHALL HAVE ¾" x 45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW GROUND LEVEL.
12. CONCRETE BARRIERS SHALL BE CONSTRUCTED & PAID FOR IN ACCORDANCE WITH SECTIONS 503, 508, AND 587 OF THE IDOT STANDARD SPECIFICATIONS.
13. THE NOTATION MXN-#4 a FOR REINFORCING BARS IS DEFINED AS M LINES OF BARS WITH N LENGTHS PER LINE. FOR SCHEDULES OF REINFORCING BAR VARIABLE BILLINGS, SEE SHEETS 4 AND 5 (OF 5) OF THIS SERIES.
14. THE NUMBER OF BARS "P" IS GIVEN IN THE SCHEDULES OF REINFORCING BAR VARIABLE BILLINGS ON SHEETS 4 & 5 (OF 5) OF THIS SERIES.
15. CUT REINFORCEMENT IN THE FIELD TO FIT SKEW AND PLACE REMAINDER IN ADJACENT AREA OR DISCARD OFF SITE.
16. IN THE CORNERS OF THE PILE BENT, THE CONCRETE SHALL BE BLOCKED OUT AND THE REINFORCING STEEL SHALL BE RESPACED (OR CUT) FOR GUARDRAIL POSTS, DRAINAGE STRUCTURES, NOISE ABATEMENT WALLS, ETC. AS NECESSARY AND AS APPROVED BY THE ENGINEER.
17. IN REFERENCE TO LONGITUDINAL CONSTRUCTION JOINTS ON SHEET 2 (OF 5) OF THIS SERIES; THESE BARS SHALL BE CUT TO FIT FROM LENGTHS SHOWN IN THE REINFORCING BAR SCHEDULE FOR THE CONSTRUCTION JOINT. THESE BARS MAY BE REPLACED BY ALTERNATIVE BARS AND LENGTHS AS SHOWN IN THE DESIGN PLANS.
18. EXPANSION ANCHORS AND DRILLED AND GROUTED DOWELS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.
19. AS APPROVED BY THE ENGINEER, THE CONTRACTOR MAY ELECT TO REDUCE THE WIDTHS OF THE POUR BY USE OF THE OPTIONAL LONGITUDINAL CONSTRUCTION JOINT SHOWN. JOINTS SHALL BE LOCATED AT THE EDGE OF A TRAFFIC LANE.

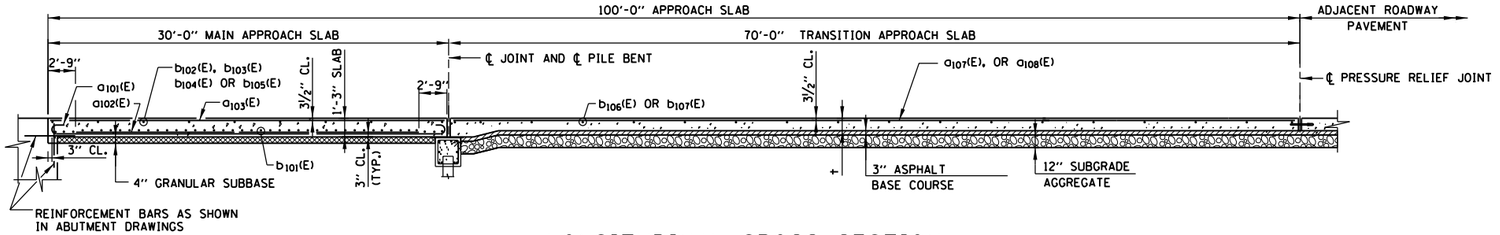
Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

DATE	REVISIONS
2-28-2008	PILE BENT
6-1-2009	REVISED NOTES, ADDED SUBBASE
	MATERIAL UNDER MAIN APPROACH SLAB,
	ADDED BOND BREAKER NOTE-SECTION A-A

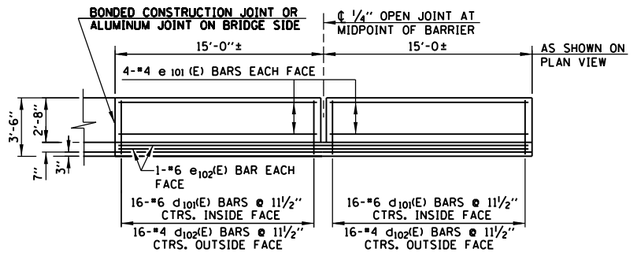
Illinois Tollway

APPROACH SLAB, RAMP

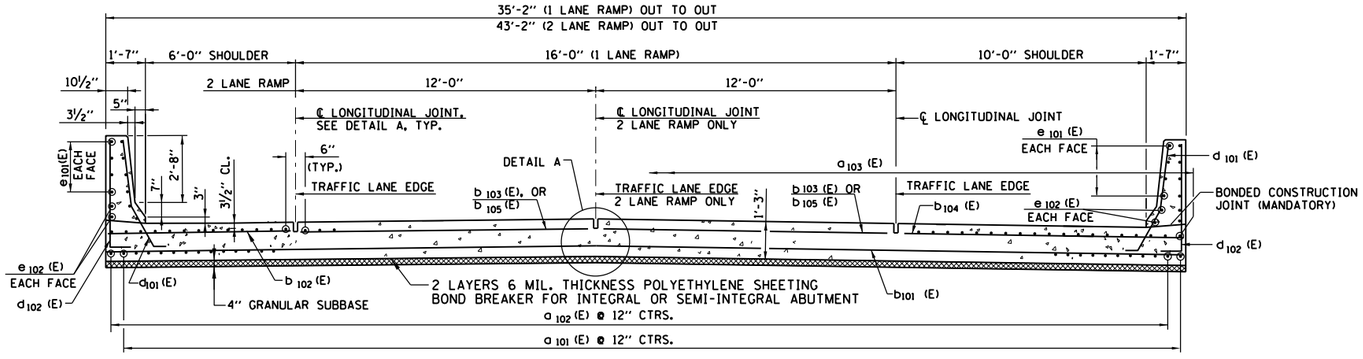
STANDARD G9-02



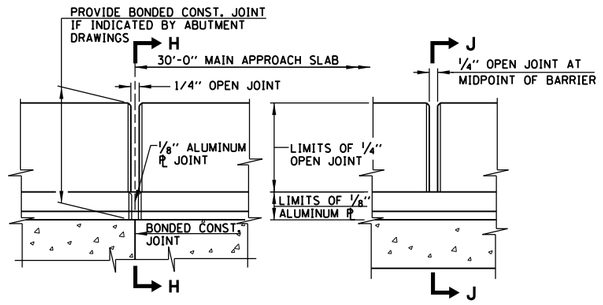
LONGITUDINAL CROSS SECTION



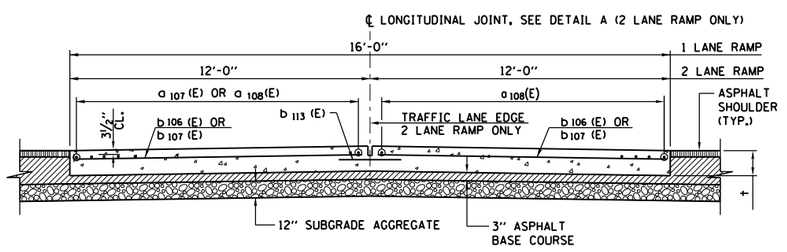
BARRIER ELEVATION



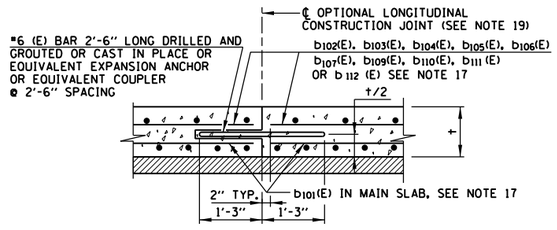
SECTION A-A



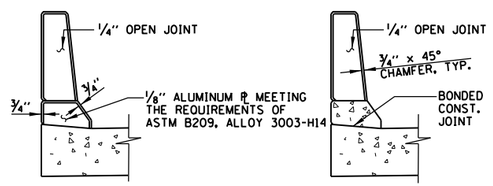
ELEVATION DETAIL OF BARRIER JOINTS



SECTION B-B



CROSS SECTION THRU OPTIONAL LONGITUDINAL CONSTRUCTION JOINT BETWEEN LANE LINES

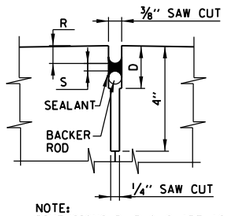


SECTION H-H

SECTION J-J

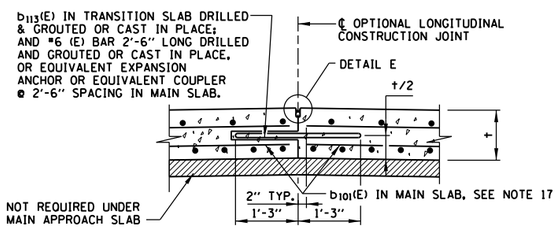
NOTES:

1. SEE SHEET 1 (OF 5) OF THIS SERIES FOR NOTES ON THIS SHEET.
2. THE THICKNESS t IS THE THICKNESS OF THE MAIN APPROACH SLAB (1'-3") OR THE TRANSITION APPROACH SLAB AS DEFINED IN THE DESIGN PLANS.

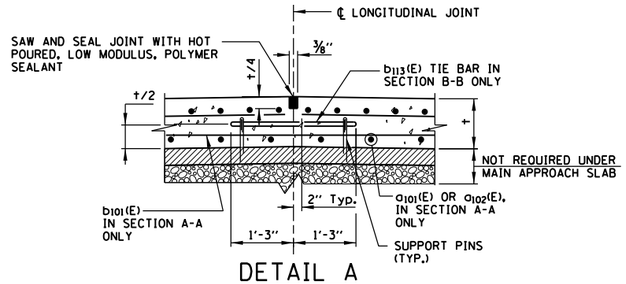


NOTE:
DIMENSIONS D, R & S ARE AS RECOMMENDED BY THE SEALANT MANUFACTURER.

DETAIL E



CROSS SECTION THRU OPTIONAL LONGITUDINAL JOINT WITH CONSTRUCTION JOINT



DETAIL A
TYPICAL LONGITUDINAL JOINT

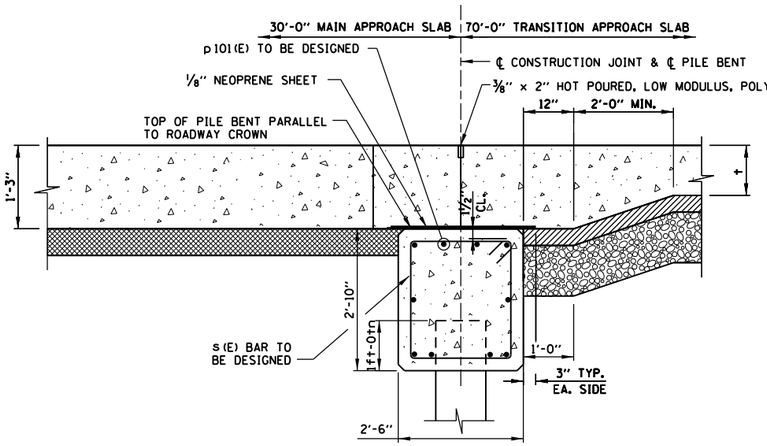
Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

SHEET 2 OF 5

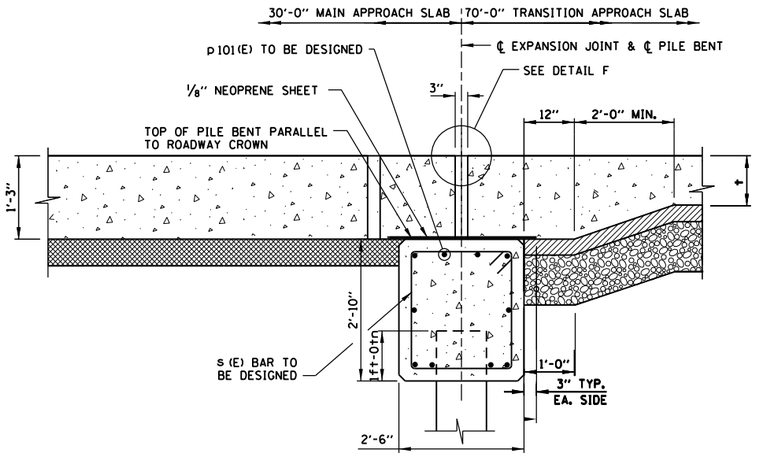
Illinois Tollway

APPROACH SLAB, RAMP

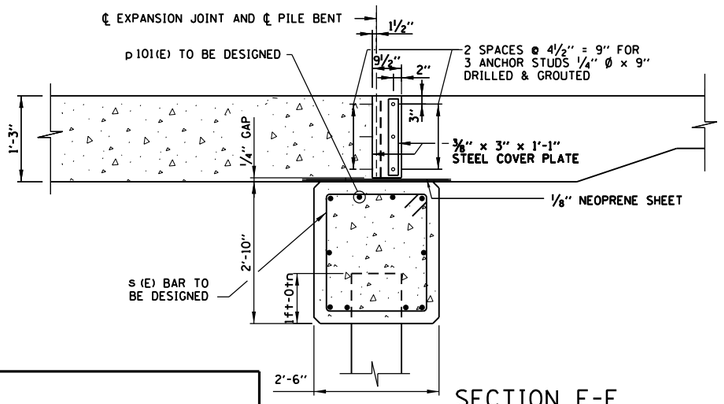
STANDARD G9-02



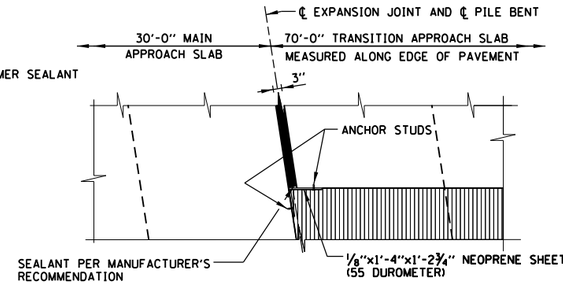
SECTION C-C
FOR NON-INTEGRAL ABUTMENT



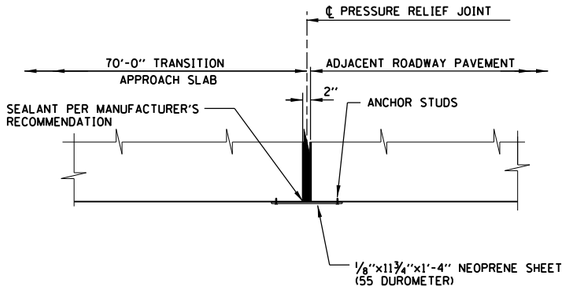
SECTION D-D
FOR INTEGRAL & SEMI-INTEGRAL ABUTMENT



SECTION E-E
END ELEVATION OF EXPANSION JOINT



DETAIL B
END PLAN OF EXPANSION JOINT



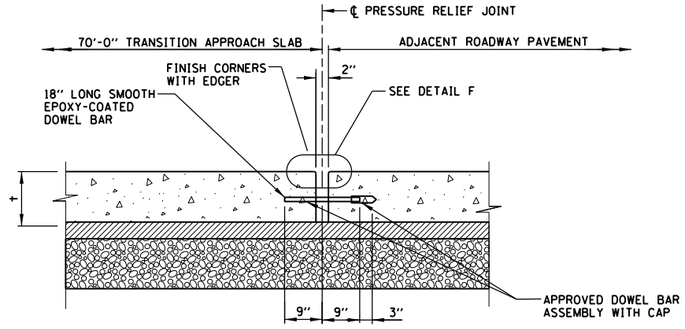
DETAIL C
END PLAN OF PRESSURE RELIEF JOINT

LEGEND

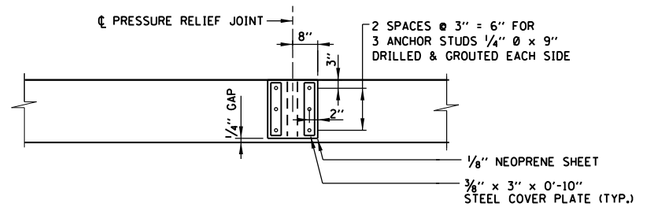
- CONCRETE
- ASPHALT BASE COURSE
- SUBGRADE AGGREGATE
- ASPHALT SHOULDER
- JOINT SEALANT
- GRANULAR SUBBASE

NOTES:

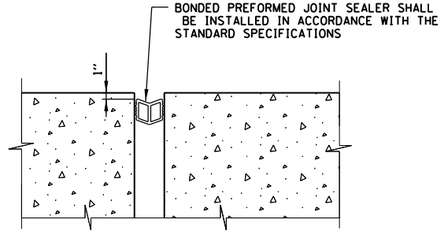
1. FOR REINFORCEMENT BARS IN APPROACH SLABS, SEE SHEETS 1, 2, 4 & 5 (OF 5) OF THIS SERIES.
2. IN SECTION E-E AND VIEW G-G, ANCHOR STUDS SHALL BE INSTALLED IN ACCORDANCE WITH SUBSECTION 1006.09 OF THE IDOT STANDARD SPECIFICATIONS. STEEL PLATES, BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.
3. THE THICKNESSES OF HOT-MIX ASPHALT BASE COURSE, AND SUBGRADE AGGREGATE SHALL BE THE SAME AS THEY ARE FOR THE ADJACENT PAVEMENT SECTIONS.
4. THE DIMENSION t IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE DESIGN PLANS.



SECTION F-F
PRESSURE RELIEF JOINT



VIEW G-G
END ELEVATION OF PRESSURE RELIEF JOINT



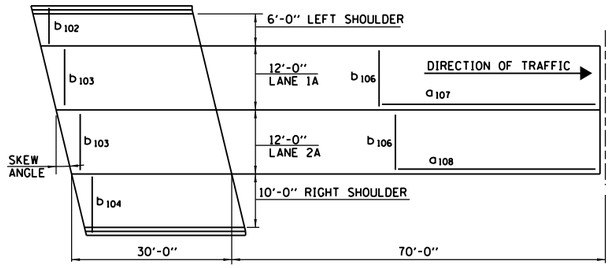
DETAIL F
BONDED PREFORMED JOINT SEALER

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

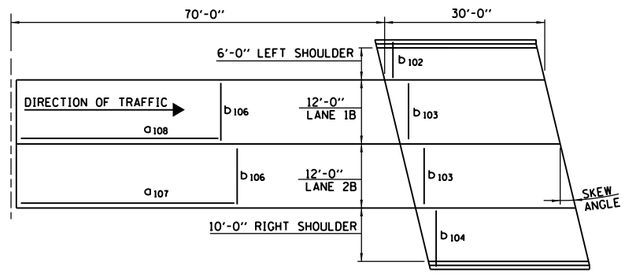
Illinois Tollway

APPROACH SLAB, RAMP

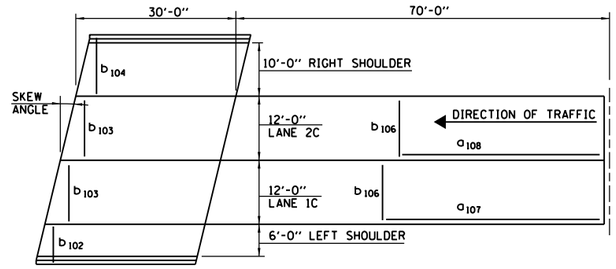
STANDARD G9-02



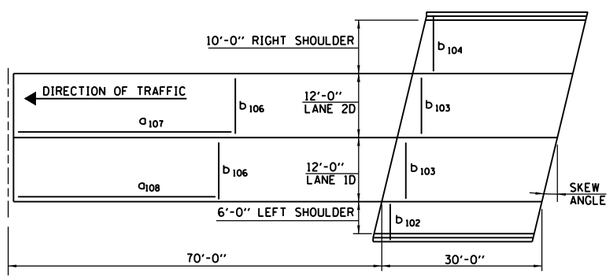
APPROACH SLAB PLAN, AHEAD RIGHT SKEW, LEAVING BRIDGE



APPROACH SLAB PLAN, AHEAD RIGHT SKEW, ENTERING BRIDGE



APPROACH SLAB PLAN, AHEAD LEFT SKEW, ENTERING BRIDGE



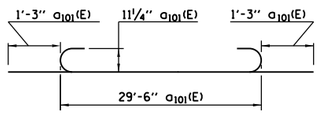
APPROACH SLAB PLAN, AHEAD LEFT SKEW, LEAVING BRIDGE

SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS

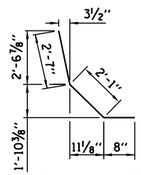
BAR	LANE	0° SKEW			5° SKEW			10° SKEW			15° SKEW			20° SKEW			25° SKEW			30° SKEW			35° SKEW			40° SKEW			45° SKEW			50° SKEW			55° SKEW			60° SKEW		
		M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P
$a_{107}(E)$	1A,2B,1C,2D	13	2	-	13	2	-	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-
$a_{108}(E)$	2A,1B,2C,1D	13	2	-	13	2	-	13	2	-	13	2	-	13	2	-	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-
$b_{101}(E)$	COMBINED	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	3	-
$b_{106}(E)$	1A,2B,1C,2D	19	-	0	19	-	0	19	-	0	20	-	0	20	-	1	20	-	1	21	-	1	21	-	1	21	-	1	22	-	1	22	-	2	23	-	2	24	-	2
$b_{106}(E)$	2A,1B,2C,1D	19	-	0	19	-	0	19	-	0	19	-	0	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	1	19	-	2	19	-	2	19	-	2
$b_{113}(E)$	1 TO 2 (A,B,C & D)	29	-	-	30	-	-	30	-	-	30	-	-	31	-	-	31	-	-	32	-	-	32	-	-	33	-	-	33	-	-	34	-	-	35	-	-	36	-	-

REINFORCING BAR SCHEDULE FOR APPROACH SLABS

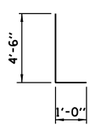
BAR	SIZE	SHAPE	0° SKEW		5° SKEW		10° SKEW		15° SKEW		20° SKEW		25° SKEW		30° SKEW		35° SKEW		40° SKEW		45° SKEW		50° SKEW		55° SKEW		60° SKEW	
			NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
$a_{101}(E)$	9	⊂⊃	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"	43	32'-0"
$a_{102}(E)$	9	——	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"	43	25'-6"
$a_{103}(E)$	5	——	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"	46	29'-6"
$a_{107}(E)$	5	——	26	35'-9"	26	36'-9"	26	37'-10"	26	38'-11"	26	40'-0"	39	28'-10"	39	29'-8"	39	30'-8"	39	31'-9"	39	33'-0"	39	34'-6"	39	36'-4"	39	38'-9"
$a_{108}(E)$	5	——	26	35'-9"	26	36'-3"	26	36'-9"	26	37'-3"	26	37'-10"	26	38'-5"	26	39'-1"	26	39'-9"	39	28'-5"	39	29'-0"	39	29'-9"	39	30'-8"	39	31'-10"
$b_{101}(E)$	5	——	62	22'-3"	62	22'-4"	62	22'-7"	62	23'-0"	62	23'-8"	62	24'-6"	62	25'-7"	62	27'-0"	62	28'-10"	62	31'-2"	62	34'-2"	62	38'-2"	93	29'-8"
$b_{102}(E)$	4	——	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"
$b_{103}(E)$	4	——	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"	18	11'-8"
$b_{104}(E)$	4	——	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"
$b_{106}(E)$	4	——	38	11'-8"	38	11'-8"	38	11'-8"	39	11'-8"	41	11'-8"	41	11'-8"	42	11'-8"	42	11'-8"	42	11'-8"	43	11'-8"	45	11'-8"	46	11'-8"	47	11'-8"
$b_{110}(E)$	5	——	0	-	2	5'-10"	2	5'-11"	2	6'-0"	2	6'-2"	2	6'-5"	2	6'-8"	2	7'-1"	2	7'-7"	2	8'-3"	2	9'-1"	2	10'-2"	2	10'-2"
$b_{111}(E)$	5	——	0	-	6	11'-9"	6	11'-10"	6	12'-1"	6	12'-5"	6	12'-10"	6	13'-6"	6	14'-3"	6	15'-3"	6	16'-6"	6	18'-2"	6	20'-4"	6	23'-4"
$b_{112}(E)$	5	——	0	-	2	9'-10"	2	10'-0"	2	10'-2"	2	10'-5"	2	10'-10"	2	11'-4"	2	12'-0"	2	12'-10"	2	13'-11"	2	15'-3"	2	17'-1"	2	19'-8"
$b_{113}(E)$	6	——	29	2'-6"	30	2'-6"	30	2'-5"	30	2'-6"	31	2'-6"	31	2'-6"	32	2'-6"	32	2'-6"	33	2'-6"	33	2'-6"	34	2'-6"	35	2'-6"	36	2'-6"
BRIDGE APPR. SLAB (SQ. YD.)				330.6		333.4		336.2		339.1		342.2		345.5		349.1		353.0		357.4		362.6		368.7		376.3		386.0
REINF. STL., EPOXY CTD. (LBS.)				13,856		14,013		14,069		14,153		14,264		14,424		14,564		14,721		14,973		15,219		15,539		15,941		16,530
APPR. SLAB PILE BENTS CLASS SI CONCRETE (C.Y.)				21.8		21.8		22.0		22.0		22.7		23.2		23.9		24.8		26.1		27.5		29.5		32.2		35.7



BARS $a_{101}(E)$



BAR $a_{101}(E)$



BAR $a_{102}(E)$

REINFORCING BAR SCHEDULE FOR BARRIERS

BAR	NO.	SIZE	LENGTH	SHAPE
$d_{101}(E)$	64	6	5'-4"	⌞
$d_{102}(E)$	64	4	5'-6"	⌞
$e_{101}(E)$	32	4	14'-8"	——
$e_{102}(E)$	8	6	29'-6"	——

BILL OF MATERIAL FOR BARRIERS

IDOT PAY ITEM NO.	DESCRIPTION	UNIT	QUANT'Y
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	8.0
50800205	REINFORCING BARS, EPOXY COATED	LBS.	1,151
50300300	PROTECTIVE COAT	SQ. YD.	30

NOTES:

1. WORK THIS SHEET WITH SHEETS 1, 2, & 3 (OF 5) OF THIS SERIES.
2. THE REINFORCING BARS SCHEDULES, BILL OF MATERIAL, AND QUANTITIES ARE CALCULATED FOR ONE END OF A BRIDGE.
3. THE AREA OF THE MAIN APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM THE OUTSIDE FACE OF THE BARRIER TO OUTSIDE FACE OF OTHER BARRIER BY THE LENGTH OF 30.00 FEET.
4. THE AREA OF THE TRANSITION APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM LEFT OUTSIDE EDGE OF CONCRETE PAVEMENT TO THE RIGHT OUTSIDE EDGE OF CONCRETE PAVEMENT BY THE MINIMUM LENGTH OF 70.00 FEET PLUS THE ADDITIONAL LENGTH REQUIRED BY THE SKEW ANGLE.

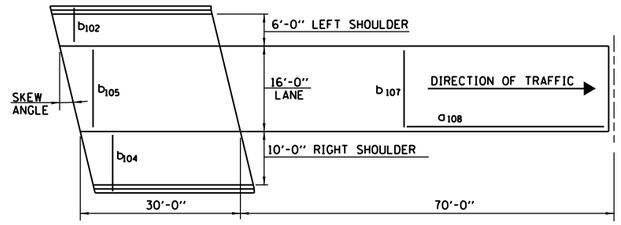
BAR SCHEDULES FOR 2 LANES

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

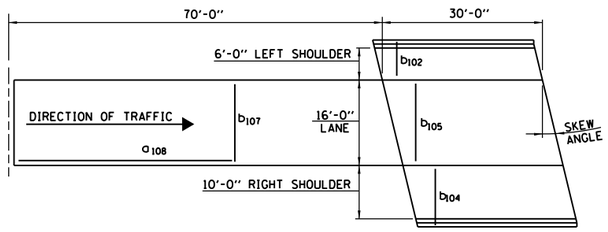
Illinois Tollway

APPROACH SLAB, RAMP

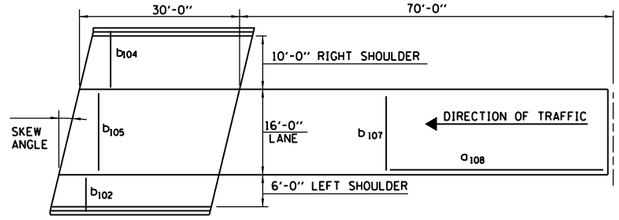
STANDARD G9-02



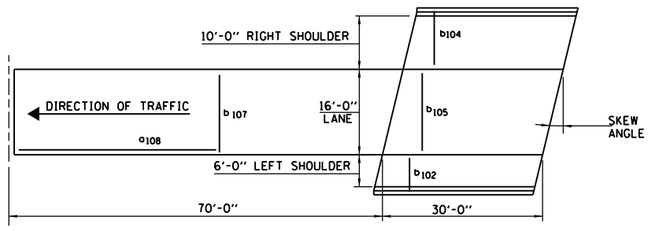
APPROACH SLAB PLAN, AHEAD RIGHT SKEW, LEAVING BRIDGE



APPROACH SLAB PLAN, AHEAD RIGHT SKEW, ENTERING BRIDGE



APPROACH SLAB PLAN, AHEAD LEFT SKEW, ENTERING BRIDGE



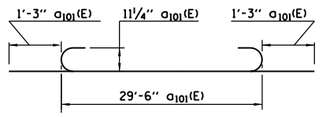
APPROACH SLAB PLAN, AHEAD LEFT SKEW, LEAVING BRIDGE

SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS

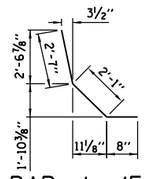
BAR	0° SKEW			5° SKEW			10° SKEW			15° SKEW			20° SKEW			25° SKEW			30° SKEW			35° SKEW			40° SKEW			45° SKEW			50° SKEW			55° SKEW			60° SKEW		
	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P
a_{108}(E)	17	2	-	17	2	-	17	2	-	17	2	-	17	2	-	17	2	-	17	2	-	17	3	-	17	3	-	17	3	-	17	3	-	17	3	-	17	3	-
b_{101}(E)	31	1	-	31	1	-	31	1	-	31	1	-	31	1	-	31	1	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-	31	2	-
b_{107}(E)	-	-	0	-	-	0	-	-	0	20	-	1	20	-	1	20	-	1	21	-	1	21	-	1	21	-	2	22	-	2	22	-	2	23	-	3	24	-	3

REINFORCING BAR SCHEDULE FOR APPROACH SLABS

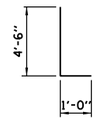
BAR	SIZE	SHAPE	0° SKEW		5° SKEW		10° SKEW		15° SKEW		20° SKEW		25° SKEW		30° SKEW		35° SKEW		40° SKEW		45° SKEW		50° SKEW		55° SKEW		60° SKEW	
			NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
a_{101}(E)	9	⊂⊃	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"	35	32'-0"
a_{102}(E)	9	——	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"	35	25'-6"
a_{103}(E)	5	——	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"	37	29'-6"
a_{108}(E)	5	——	34	35'-9"	34	36'-9"	34	37'-10"	34	38'-11"	34	40'-0"	34	41'-3"	34	42'-6"	51	30'-8"	51	31'-9"	51	33'-0"	51	34'-6"	51	36'-4"	51	38'-9"
b_{101}(E)	5	——	31	34'-10"	31	34'-11"	31	35'-4"	31	36'-0"	31	37'-0"	31	38'-5"	62	21'-0"	62	22'-1"	62	25'-6"	62	25'-6"	62	27'-11"	62	31'-3"	62	35'-8"
b_{102}(E)	4	——	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"	9	7'-3"
b_{104}(E)	4	——	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"	9	11'-3"
b_{105}(E)	4	——	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"	9	15'-8"
b_{107}(E)	4	——	19	15'-8"	19	15'-8"	19	15'-8"	20	15'-8"	20	15'-8"	20	15'-8"	20	15'-8"	20	15'-8"	21	15'-8"	21	15'-8"	21	15'-8"	22	15'-8"	22	15'-8"
b_{109}(E)	5	——	0	-	3	15'-8"	3	15'-10"	3	16'-2"	3	16'-8"	3	17'-3"	3	18'-1"	3	20'-5"	3	22'-1"	3	22'-1"	3	24'-4"	3	27'-3"	3	31'-4"
b_{110}(E)	5	——	0	-	2	5'-10"	2	5'-11"	2	6'-0"	2	6'-2"	2	6'-5"	2	6'-8"	2	7'-7"	2	8'-3"	2	8'-3"	2	9'-1"	2	10'-2"	2	11'-8"
b_{112}(E)	5	——	0	-	2	9'-10"	2	10'-0"	2	10'-2"	2	10'-5"	2	10'-10"	2	11'-4"	2	12'-0"	2	13'-11"	2	13'-11"	2	15'-3"	2	17'-1"	2	19'-8"
BRIDGE APPR. SLAB (SQ. YD.)				241.7		242.9		244.2		245.5		246.8		248.3		249.9		251.6		253.6		255.9		258.6		262.0		266.3
REINF. STL., EPOXY CTD. (LBS.)				10,779		10,900		10,952		11,023		11,098		11,190		11,356		11,559		11,859		11,926		12,174		12,513		12,947
APPR. SLAB PILE BENTS CLASS SI CONCRETE (C.Y.)				16.7		16.9		16.9		17.1		17.4		18.0		18.6		19.3		20.3		21.4		23.1		25.2		28.2



BARS a_{101} (E)



BAR d_{101} (E)



BAR d_{102} (E)

REINFORCING BAR SCHEDULE FOR BARRIERS

BAR	NO.	SIZE	LENGTH	SHAPE
d_{101}(E)	64	6	5'-4"	⌞
d_{102}(E)	64	4	5'-6"	⌞
e_{101}(E)	32	4	14'-8"	——
e_{102}(E)	8	6	29'-6"	——

BILL OF MATERIAL FOR BARRIERS

IDOT PAY ITEM NO.	DESCRIPTION	UNIT	QUANT'Y
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	8.0
50800205	REINFORCING BARS, EPOXY COATED	LBS.	1,151
50300300	PROTECTIVE COAT	SQ. YD.	30

NOTES:

1. WORK THIS SHEET WITH SHEETS 1, 2, & 3 (OF 5) OF THIS SERIES.
2. THE REINFORCING BARS SCHEDULES, BILL OF MATERIAL, AND QUANTITIES ARE CALCULATED FOR ONE END OF A BRIDGE.
3. THE AREA OF THE MAIN APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM THE OUTSIDE FACE OF THE BARRIER TO OUTSIDE FACE OF OTHER BARRIER BY THE LENGTH OF 30.00 FEET.
4. THE AREA OF THE TRANSITION APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM LEFT OUTSIDE EDGE OF CONCRETE PAVEMENT TO THE RIGHT OUTSIDE EDGE OF CONCRETE PAVEMENT BY THE MINIMUM LENGTH OF 70.00 FEET PLUS THE ADDITIONAL LENGTH REQUIRED BY THE SKEW ANGLE.

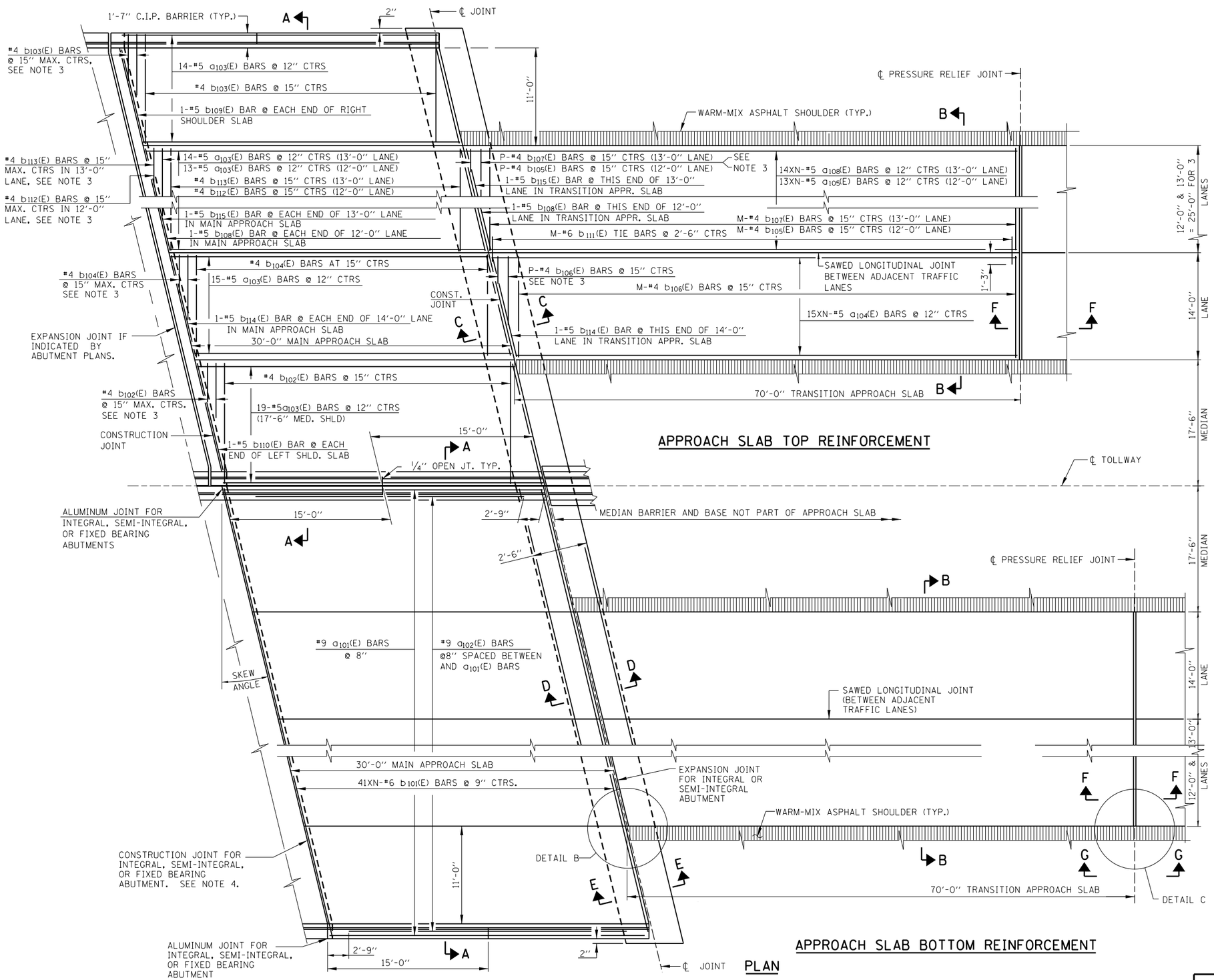
BAR SCHEDULES FOR 1 LANE

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-28-2008

Illinois Tollway

APPROACH SLAB, RAMP

STANDARD G9-02



NOTES:

1. TILT HOOK OF #9 BARS FOR MINIMUM 3 1/2" CLEARANCE.
2. USE 2'-0" MIN. LAP FOR #4 BARS. USE 2'-6" MIN. LAP FOR #5 BARS. USE 3'-0" MIN. LAP FOR #6 BARS.
3. CUT REINFORCEMENT IN THE FIELD TO FIT THE SKEW AND USE REMAINDER IN OPPOSITE END, OR ADJACENT AREAS, OR DISCARD OFF SITE.
4. 1/4" X 3/4" FORMED JOINT WITH HOT POURED, LOW MODULUS, POLYMER SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.
5. PROTECTIVE COAT SHALL BE APPLIED TO TOP AND TRAFFIC FACES OF MEDIAN AND OUTSIDE BARRIERS.
6. TOOL EDGES OF EXPANSION AND PRESSURE RELIEF JOINTS TO 1/4" RADIUS.
7. REINFORCING BARS SHALL MEET THE REQUIREMENTS OF AASHTO M31 (ASTM A615), GRADE 60, AND SHALL CONFORM TO SECTION 508 OF THE IDOT STANDARD SPECIFICATIONS.
8. REINFORCING BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
9. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 315, LATEST EDITION.
10. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
11. EXPOSED CONCRETE EDGES SHALL HAVE 3/4" X 45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW GROUND LEVEL.
12. CONCRETE BARRIERS SHALL BE CONSTRUCTED & PAID FOR IN ACCORDANCE WITH SECTIONS 503 AND 508 OF THE IDOT STANDARD SPECIFICATIONS.
13. WORK SHEETS 1, 2, 3 AND 4 (OF 4) OF THIS SERIES TOGETHER.
14. THE NOTATION MXN-#4 A FOR REINFORCING BARS IS DEFINED AS M LINES OF BARS WITH N LENGTHS PER LINE. FOR SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS, SEE SHEET 4 (OF 4) (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULES FOR 3 LANES).
15. THE NUMBER OF BARS "P" IS GIVEN IN THE SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS ON SHEET 4 (OF 4) (APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE, BAR SCHEDULES FOR 3 LANES).
16. IN THE CORNERS OF THE PILE BENT, THE CONCRETE SHALL BE BLOCKED OUT AND THE REINFORCING STEEL SHALL BE RESPACED (OR CUT) FOR GUARDRAIL POSTS, DRAINAGE STRUCTURES, NOISE ABATEMENT WALLS, ETC. AS NECESSARY AND AS APPROVED BY THE ENGINEER.
17. IN REFERENCE TO LONGITUDINAL CONSTRUCTION JOINTS ON SHEET 2 (OF 4) OF THIS SERIES; THESE BARS SHALL BE CUT TO FIT FROM LENGTHS SHOWN IN THE REINFORCING BAR SCHEDULE FOR THE CONSTRUCTION JOINT. THESE BARS MAY BE REPLACED BY ALTERNATIVE BARS AND LENGTHS AS SHOWN IN THE DESIGN PLANS.
18. EXPANSION ANCHORS AND DRILLED AND GROUTED DOWELS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.
19. AS APPROVED BY THE ENGINEER, THE CONTRACTOR MAY ELECT TO REDUCE THE WIDTHS OF THE POUR BY USE OF THE OPTIONAL LONGITUDINAL CONSTRUCTION JOINT SHOWN. JOINTS SHALL BE LOCATED AT THE EDGE OF A TRAFFIC LANE.
20. SEE SPECIAL PROVISIONS, BRIDGE APPROACH SLAB AND TRANSITION APPROACH SLAB, FOR ITEMS WHERE COST IS INCLUDED IN THE MAIN PAY ITEMS BRIDGE APPROACH SLAB AND TRANSITION APPROACH SLAB.

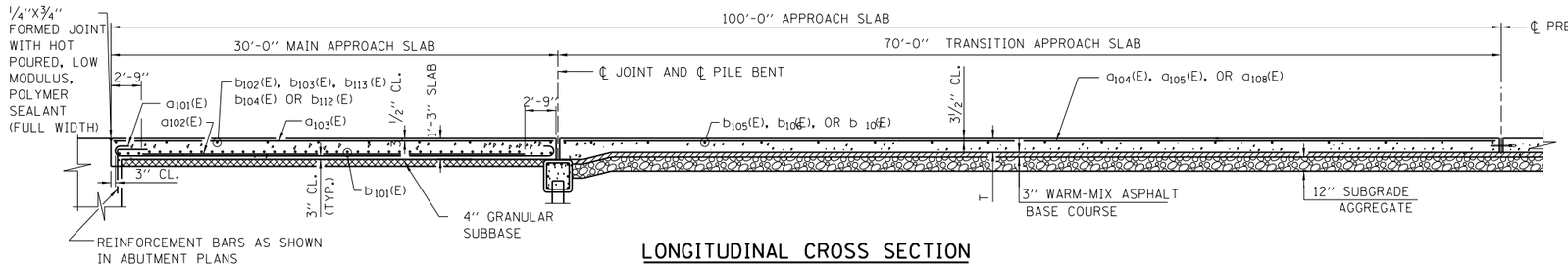
Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 3-1-2013

Illinois Tollway

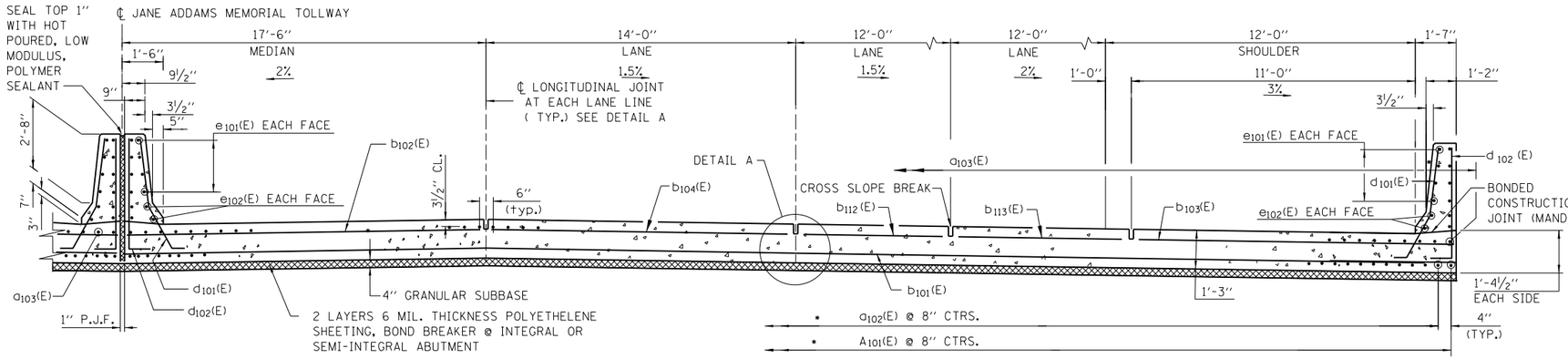
DATE	REVISIONS

APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE 3 LANES

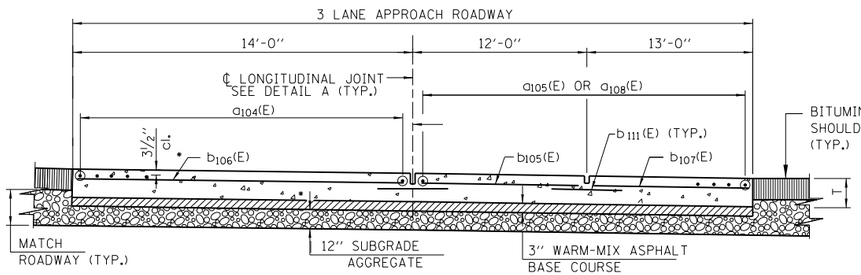
STANDARD G10-00



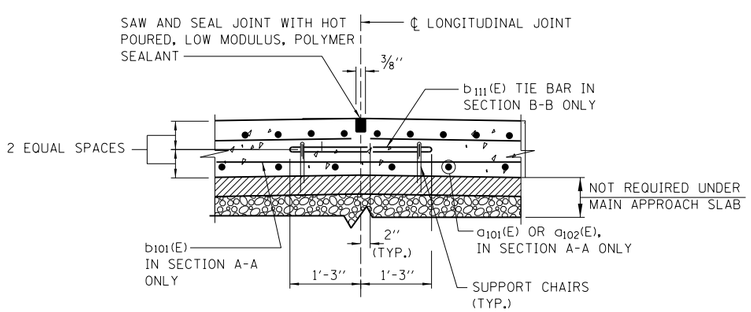
LONGITUDINAL CROSS SECTION



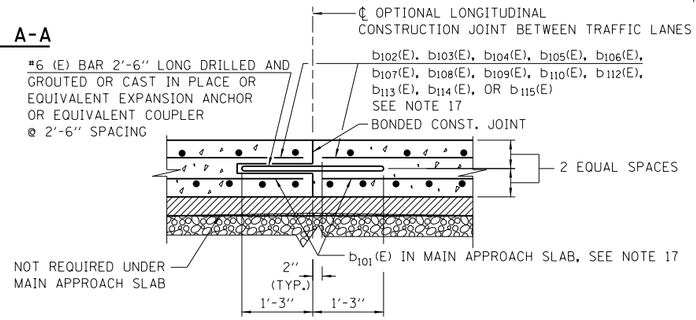
SECTION A-A



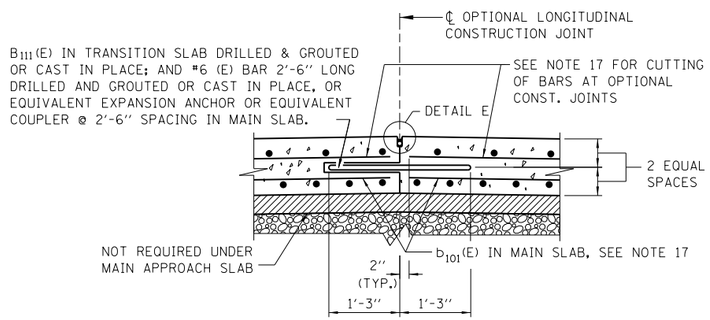
SECTION B-B



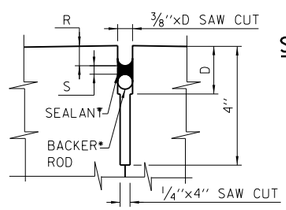
DETAIL A
TYPICAL LONGITUDINAL JOINT



CROSS SECTION THRU OPTIONAL LONGITUDINAL CONSTRUCTION JOINT BETWEEN TRAFFIC LANES



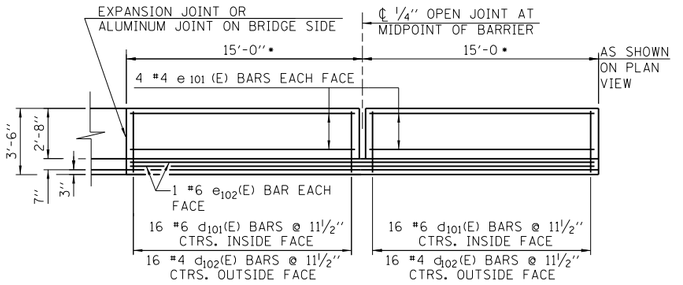
CROSS SECTION THRU LONGITUDINAL JOINT WITH OPTIONAL CONSTRUCTION JOINT



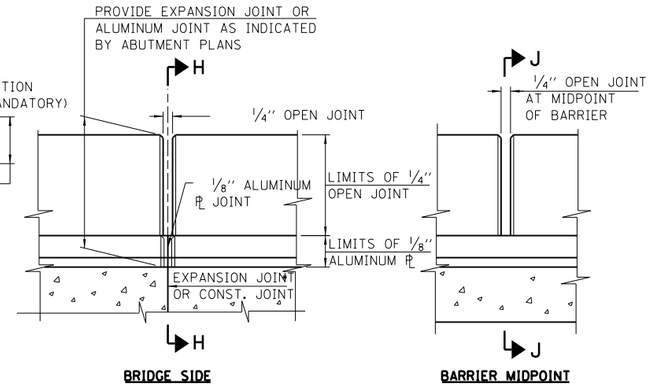
DETAIL E

NOTE:
DIMENSIONS D, R & S ARE AS RECOMMENDED BY THE SEALANT MANUFACTURER.

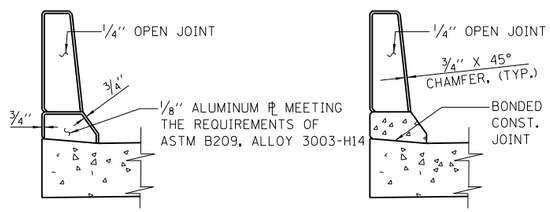
• INCREASE DIMENSION TO EXTEND TO EXPANSION JOINT FOR NON-INTEGRAL ABUTMENTS.



BARRIER ELEVATION



ELEVATION DETAIL OF BARRIER JOINTS



SECTION H-H

SECTION J-J

NOTES:

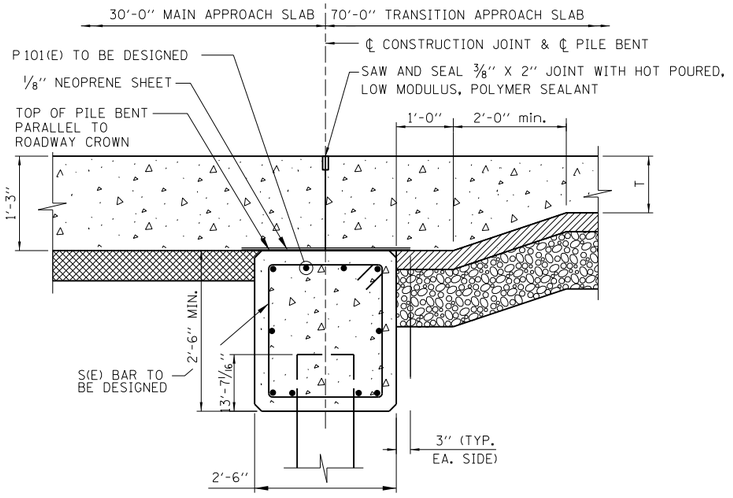
1. SEE SHEET 1 (OF 4) OF THIS SERIES FOR NOTES ON THIS SHEET.
2. THE DIMENSION T IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE DESIGN PLANS.

Paul Kovacs
APPROVED . . . . . CHIEF ENGINEER . . . DATE 3-1-2013 . . . .

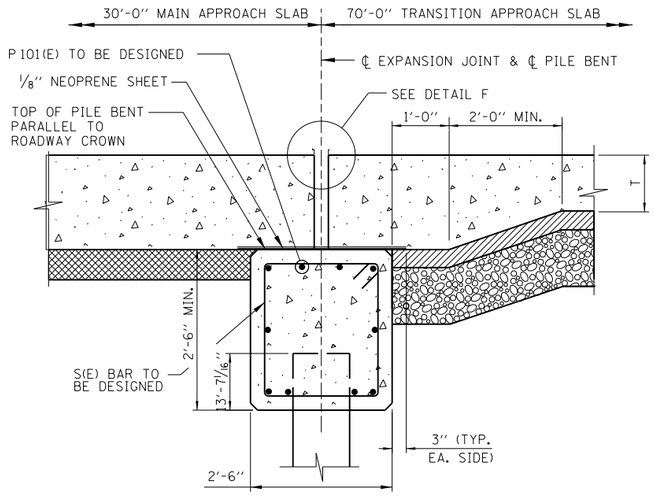
Illinois Tollway

APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE 3 LANES

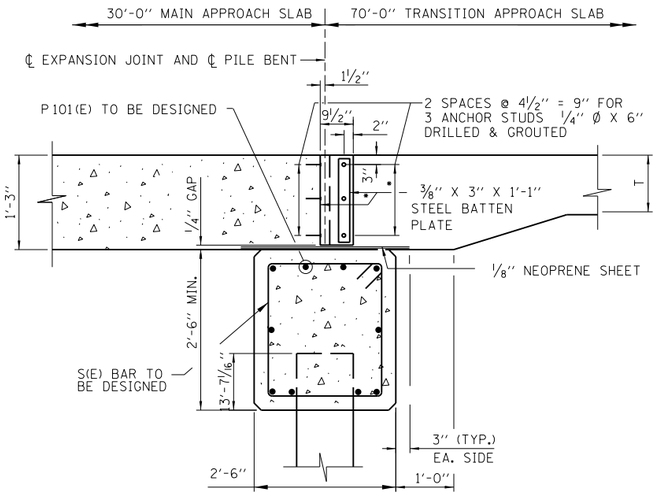
STANDARD G10-00



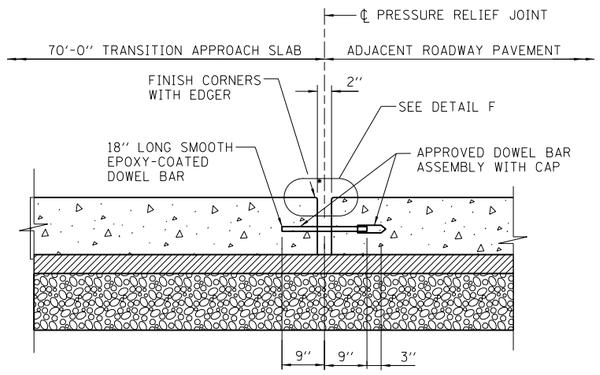
SECTION C-C
FOR NON-INTEGRAL ABUTMENT



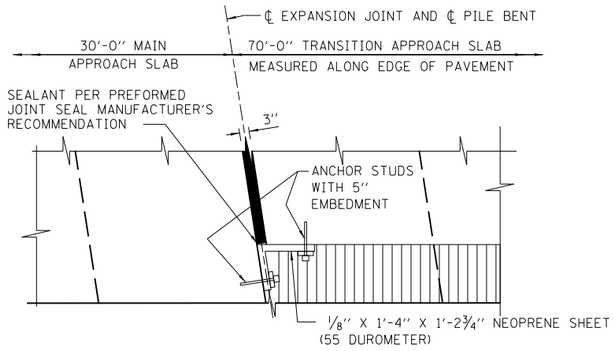
SECTION D-D
FOR INTEGRAL & SEMI-INTEGRAL ABUTMENT



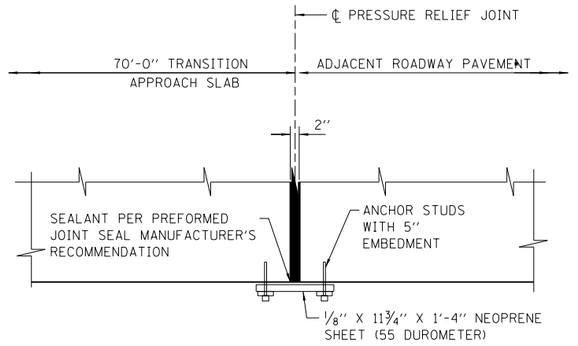
SECTION E-E
END ELEVATION OF EXPANSION JOINT



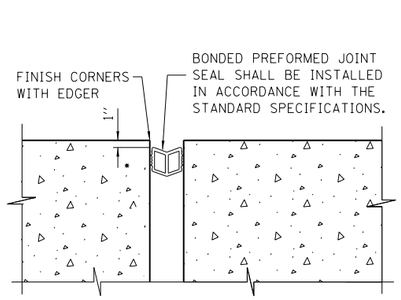
SECTION F-F
PRESSURE RELIEF JOINT



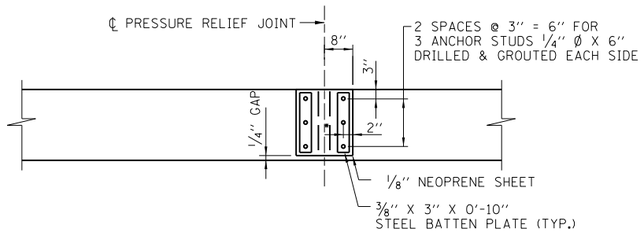
DETAIL B
END PLAN OF EXPANSION JOINT



DETAIL C
END PLAN OF PRESSURE RELIEF JOINT



DETAIL F
BONDED PREFORMED JOINT SEAL



VIEW G-G
END ELEVATION OF PRESSURE RELIEF JOINT

LEGEND:

- CONCRETE
- SUBGRADE AGGREGATE
- WARM-MIX ASPHALT BASE COURSE
- WARM-MIX ASPHALT SHOULDER
- PREFORMED JOINT SEAL
- GRANULAR SUBBASE

NOTES:

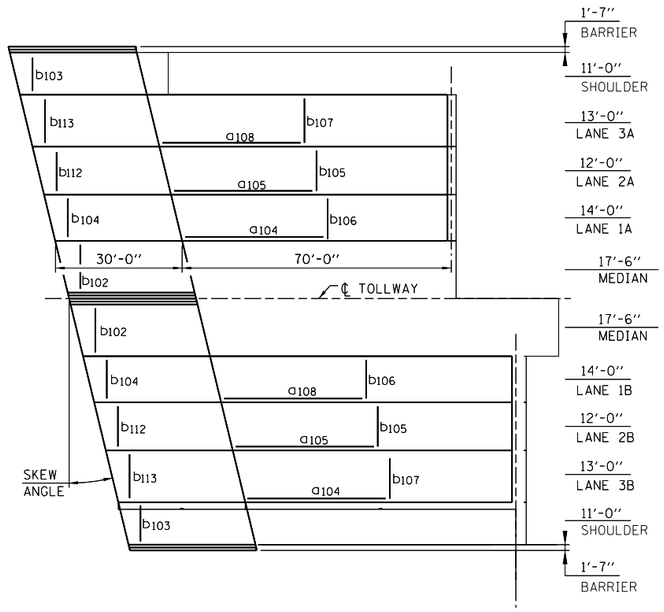
1. FOR REINFORCEMENT BARS IN APPROACH SLABS, SEE SHEETS 1, 2 AND 4 (OF 4) OF THIS SERIES.
2. IN SECTION E-E AND VIEW G-G, ANCHOR STUDS SHALL BE INSTALLED IN ACCORDANCE WITH SUBSECTION 1006.09 OF THE IDOT STANDARD SPECIFICATIONS. STEEL BATTEN PLATES, ANCHOR STUDS, NUTS AND WASHERS SHALL BE GALVANIZED.
3. THE THICKNESSES OF WARM-MIX ASPHALT BASE COURSE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS THEY ARE FOR THE ADJACENT PAVEMENT SECTIONS.
4. THE DIMENSION T IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE DESIGN PLANS.
5. SEE DESIGN PLANS FOR DETAILS AND QUANTITIES FOR PILE BENTS.

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 3-1-2013

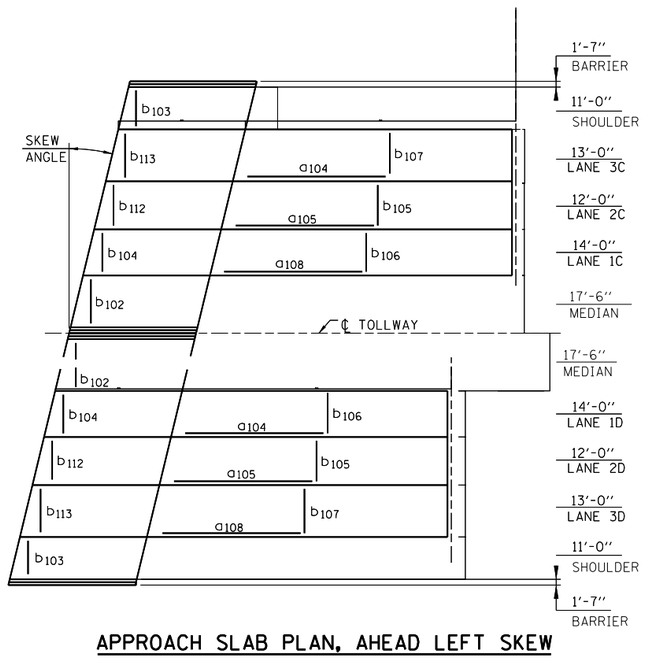
Illinois Tollway

APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE 3 LANES

STANDARD G10-00



APPROACH SLAB PLAN, AHEAD RIGHT SKEW



APPROACH SLAB PLAN, AHEAD LEFT SKEW

SCHEDULE OF REINFORCING BAR VARIABLE BILLINGS

bar	LANE	0° SKEW			5° SKEW			10° SKEW			15° SKEW			20° SKEW			25° SKEW			30° SKEW			35° SKEW			40° SKEW			45° SKEW			50° SKEW			55° SKEW			60° SKEW		
		M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P	M	N	P
$a_{104}(e)$	1A, 1D	15	2	-	15	2	-	15	2	-	15	2	-	15	2	-	15	3	-	15	3	-	15	3	-	15	3	-	15	3	-	15	3	-	15	3	-	15	3	-
$a_{104}(e)$	3B, 3C	14	2	-	14	2	-	14	2	-	14	2	-	14	2	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-
$a_{105}(e)$	2A, 2D	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	4	-
$a_{105}(e)$	2B, 2C	13	2	-	13	2	-	13	2	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	3	-	13	4	-
$a_{108}(e)$	3A, 3D	14	2	-	14	2	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	3	-	14	4	-	14	4	-	14	4	-	14	4	-
$a_{108}(e)$	1B, 1C	15	2	-	15	2	-	15	3	-	15	3	-	15	3	-	15	3	-	15	3	-	15	3	-	15	3	-	15	4	-	15	4	-	15	4	-	15	4	-
$b_{101}(e)$	COMBINED	41	3	-	41	3	-	41	3	-	41	3	-	41	3	-	41	3	-	41	3	-	41	3	-	41	3	-	41	3	-	41	4	-	41	4	-	41	4	-
$b_{105}(e)$	2A, 2D	57	-	0	58	-	0	59	-	1	60	-	1	61	-	2	63	-	2	64	-	3	65	-	3	67	-	4	69	-	5	71	-	6	73	-	7	77	-	8
$b_{105}(e)$	2B, 2C	57	-	0	58	-	0	59	-	1	60	-	1	61	-	2	62	-	2	63	-	3	65	-	3	66	-	4	68	-	5	70	-	6	72	-	7	75	-	8
$b_{106}(e)$	1A, 1D	57	-	0	57	-	0	57	-	1	57	-	1	57	-	2	57	-	3	57	-	3	57	-	4	57	-	5	57	-	6	57	-	7	57	-	8	57	-	10
$b_{106}(e)$	1B, 1C	57	-	0	59	-	0	61	-	1	63	-	1	65	-	2	67	-	3	69	-	3	71	-	4	74	-	5	77	-	6	81	-	7	86	-	8	92	-	10
$b_{107}(e)$	3A, 3D	57	-	0	59	-	0	61	-	1	63	-	1	65	-	2	67	-	2	69	-	3	72	-	4	75	-	4	78	-	5	82	-	6	87	-	7	93	-	9
$b_{107}(e)$	3B, 3C	57	-	0	57	-	0	57	-	1	57	-	1	57	-	2	57	-	2	57	-	3	57	-	4	57	-	4	57	-	5	57	-	6	57	-	7	57	-	9
$b_{111}(e)$	1A TO 2A, 1D TO 2D	29	-	-	30	-	-	30	-	-	31	-	-	31	-	-	32	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	38	-	-
$b_{111}(e)$	2A TO 3A, 2D TO 3D	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	37	-	-	38	-	-	40	-	-	42	-	-	44	-	-	47	-	-
$b_{111}(e)$	1B TO 2B, 1C TO 2C	29	-	-	30	-	-	31	-	-	32	-	-	33	-	-	34	-	-	35	-	-	37	-	-	38	-	-	39	-	-	41	-	-	44	-	-	47	-	-
$b_{111}(e)$	2B TO 3B, 2C TO 3C	29	-	-	30	-	-	30	-	-	31	-	-	31	-	-	32	-	-	32	-	-	33	-	-	34	-	-	35	-	-	36	-	-	37	-	-	38	-	-

REINFORCING BAR SCHEDULE FOR APPROACH SLABS

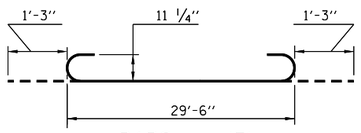
BAR	SIZE	SHAPE	0° SKEW		5° SKEW		10° SKEW		15° SKEW		20° SKEW		25° SKEW		30° SKEW		35° SKEW		40° SKEW		45° SKEW		50° SKEW		55° SKEW		60° SKEW	
			NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
$a_{101}(e)$	# 9	⊂⊃	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"	208	32'-0"
$a_{102}(e)$	# 9	——	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"	206	24'-6"
$a_{103}(e)$	# 5	——	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"	150	29'-6"
$a_{104}(e)$	# 5	——	58	36'-1"	58	36'-9"	58	37'-4"	58	38'-0"	58	38'-8"	87	27'-1"	87	27'-7"	87	28'-2"	87	28'-10"	87	29'-7"	87	30'-6"	87	31'-7"	87	33'-0"
$a_{105}(e)$	# 5	——	52	36'-1"	52	37'-3"	52	38'-5"	78	27'-3"	78	28'-1"	78	29'-0"	78	29'-11"	78	31'-0"	78	32'-2"	78	33'-7"	78	35'-3"	78	37'-4"	104	30'-7"
$a_{108}(e)$	# 5	——	58	36'-1"	58	37'-10"	87	27'-3"	87	28'-5"	87	29'-8"	87	31'-0"	87	32'-5"	87	34'-0"	87	35'-10"	87	37'-11"	116	30'-11"	116	33'-3"	116	36'-3"
$b_{101}(e)$	# 6	——	246	24'-11"	246	25'-0"	246	25'-4"	246	25'-9"	246	26'-5"	246	27'-4"	246	28'-6"	246	30'-0"	246	32'-0"	246	34'-6"	246	37'-9"	328	32'-4"	328	36'-9"
$b_{102}(e)$	# 4	——	50	17'-1"	50	17'-1"	50	17'-1"	50	17'-1"	48	17'-1"	50	17'-1"	48	17'-1"	50	17'-1"	50	17'-1"	48	17'-1"	50	17'-1"	48	17'-1"	52	16'-10"
$b_{103}(e)$	# 4	——	50	12'-2"	50	12'-2"	50	12'-2"	50	12'-2"	50	12'-2"	50	12'-2"	50	12'-2"	48	12'-2"	50	12'-2"	48	12'-2"	48	12'-2"	50	12'-2"	50	12'-2"
$b_{104}(e)$	# 4	——	50	13'-8"	48	13'-8"	48	13'-8"	48	13'-8"	48	13'-8"	50	13'-8"	50	13'-8"	50	13'-8"	50	13'-8"	50	13'-8"	50	13'-8"	48	13'-8"	50	13'-8"
$b_{105}(e)$	# 4	——	114	11'-8"	116	11'-8"	120	11'-8"	122	11'-8"	126	11'-8"	129	11'-8"	133	11'-8"	136	11'-8"	141	11'-8"	147	11'-8"	153	11'-8"	159	11'-8"	168	11'-8"
$b_{106}(e)$	# 4	——	114	13'-8"	116	13'-8"	120	13'-8"	122	13'-8"	126	13'-8"	130	13'-8"	132	13'-8"	136	13'-8"	141	13'-8"	146	13'-8"	152	13'-8"	159	13'-8"	169	13'-8"
$b_{107}(e)$	# 4	——	114	12'-8"	116	12'-8"	120	12'-8"	122	12'-8"	126	12'-8"	128	12'-8"	132	12'-8"	137	12'-8"	140	12'-8"	145	12'-8"	151	12'-8"	158	12'-8"	168	12'-8"
$b_{108}(e)$	# 5	——	0	-	6	11'-8"	6	11'-10"	6	12'-0"	6	12'-4"	6	12'-10"	6	13'-4"	6	14'-2"	6	15'-2"	6	16'-6"	6	18'-1"	6	20'-4"	6	23'-4"
$b_{109}(e)$	# 5	——	0	-	4	10'-7"	4	10'-8"	4	10'-11"	4	11'-3"	4	11'-8"	4	12'-2"	4	12'-11"	4	13'-9"	4	14'-11"	4	16'-5"	4	18'-5"	4	21'-2"
$b_{110}(e)$	# 5	——	0	-	4	17'-1"	4	17'-4"	4	17'-8"	4	18'-2"	4	18'-10"	4	19'-8"	4	20'-10"	4	22'-3"	4	24'-1"	4	26'-6"	4	29'-9"	4	34'-2"
$b_{111}(e)$	# 6	——	116	2'-6"	120	2'-6"	122	2'-6"	126	2'-6"	128	2'-6"	132	2'-6"	134	2'-6"	139	2'-6"	144	2'-6"	149	2'-6"	155	2'-6"	162	2'-6"	171	2'-6"
$b_{112}(e)$	# 4	——	50	11'-8"	50	11'-8"	50	11'-8"	50	11'-8"	50	11'-8"	50	11'-8"	50	11'-8"	50	11'-8"	48	11'-8"	50	11'-8"	50	11'-8"	50	11'-8"	50	11'-8"
$b_{113}(e)$	# 4	——	50	12'-8"	48	12'-8"	50	12'-8"	50	12'-8"	50	12'-8"	50	12'-8"	48	12'-8"	50	12'-8"	50	12'-8"	50	12'-8"	50	12'-8"	50	12'-8"	48	12'-8"
$b_{114}(e)$	# 5	——	0	-	6	13'-8"	6	13'-10"	6	14'-1"	6	14'-6"	6	15'-0"	6	15'-9"	6	16'-8"	6	17'-10"	6	19'-3"	6	21'-3"	6	23'-9"	6	27'-4"
$b_{115}(e)$	# 5	——	0	-	6	12'-8"	6	12'-10"	6	13'-1"	6	13'-5"	6	13'-11"	6	14'-7"	6	15'-5"	6	16'-6"	6	17'-10"	6	19'-8"	6	22'-1"	6	25'-4"
BRIDGE APPROACH SLAB (SQ. YD.)			460.3		460.3		460.3		460.3		460.6		460.3		460.3		460.3		460.3		460.3		460.3		460.3		460.3	
TRANSITION APPROACH SLAB (SQ. YD.)			606.7		621.5		636.5		652.0		668.2		685.5		704.3		725.1		748.5		775.7		808.1		848.1		899.4	
REINFORCEMENT BARS, EPOXY COATED (LBS.)			65,511		66,135		66,671		67,177		67,741		68,541		69,289		70,297		71,516		72,981		74,948		77,717		81,074	
PROTECTIVE COAT (SQ. YD.)			1047.0		1062.0		1077.0		1092.0		1109.0		1126.0		1145.0		1166.0		1189.0		1275.0		1249.0		1289.0		1340.0	

REINFORCING BAR SCHEDULE FOR BARRIERS

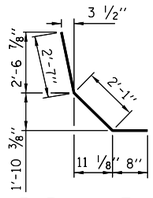
BAR	NO.	SIZE	LENGTH	SHAPE
$d_{101}(e)$	128	6	5'-4"	⌞
$d_{102}(e)$	128	4	5'-6"	⌞
$e_{101}(e)$	64	4	14'-8"	——
$e_{102}(e)$	16	6	29'-6"	——

BILL OF MATERIAL FOR BARRIERS

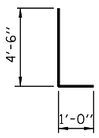
IDOT PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	16.0
50800205	REINFORCING BARS, EPOXY COATED	LBS.	2,831
50300300	PROTECTIVE COAT	SQ. YD.	60



BARS $a_{101}(E)$



BAR $d_{101}(E)$



BAR $d_{102}(E)$

NOTES:

1. WORK THIS SHEET WITH SHEETS 1, 2, AND 3 (OF 4) OF THIS SERIES.
2. THE REINFORCING BARS SCHEDULES, BILL OF MATERIAL, AND QUANTITIES ARE CALCULATED FOR TWO (OPPOSITE) TRAFFIC DIRECTIONS AT ONE END OF A DUAL BRIDGE.
3. THE AREA OF EACH BRIDGE APPROACH SLAB WILL BE MEASURED IN PLACE AND COMPUTED IN SQUARE YARDS. SEE SPECIAL PROVISIONS FOR OTHER WORK THAT IS INCLUDED IN THE COST OF THIS ITEM.
4. THE AREA OF EACH TRANSITION APPROACH SLAB CALCULATED FOR PAYMENT IS THE PLAN AREA CALCULATED FROM THE WIDTH DIMENSION FROM LEFT OUTSIDE EDGE OF CONCRETE PAVEMENT TO THE RIGHT OUTSIDE EDGE OF CONCRETE PAVEMENT BY THE MINIMUM LENGTH OF 70.00 FEET PLUS THE ADDITIONAL AREA REQUIRED BY THE SKEW ANGLE. SEE SPECIAL PROVISIONS FOR OTHER WORK THAT IS INCLUDED IN THE COST OF THIS ITEM.
5. THE REINFORCING BAR SCHEDULE FOR APPROACH SLABS IS SHOWN FOR 17'-6" WIDE MEDIAN SHOULDERS. FOR 14'-0" WIDE MEDIAN SHOULDERS, AT EACH SKEW ANGLE IN THIS SCHEDULE:
   - REDUCE THE NUMBER OF $a_{101}(E)$ AND $a_{102}(E)$ BARS FROM 208 TO 198 AND FROM 206 TO 196 RESPECTIVELY.
   - REDUCE THE NUMBER OF $a_{103}(E)$ BARS FROM 150 TO 142.
   - REDUCE THE LENGTH OF $b_{102}(E)$ BARS FROM 17'-1" TO 13'-7".
   - REDUCE THE AREA QUANTITY OF BRIDGE APPROACH SLAB BY 23.3 SQUARE YARDS.
   - REDUCE THE WEIGHT QUANTITY OF APPROACH SLAB REINFORCING STEEL, EPOXY COATED BY 2,772 POUNDS.

   FURTHERMORE, TRIM THE $b_{110}(E)$ BARS IN THE 14'-0" MEDIAN SHOULDERS AS NECESSARY TO FIT THE SKEW ANGLE.

APPROVED Paul Kovacs CHIEF ENGINEER DATE 3-1-2013

Illinois Tollway

APPROACH SLAB TO J.P.C. PAVEMENT, MAINLINE 3 LANES

STANDARD G10-00