Appendix A
Examples

KENTUCKY TRANSPORTATION CABINET
DIVISION OF HIGHWAY DESIGN
PAVEMENT BRANCH

Pavement Design off the National Highway System

County ___Franklin_____   Item ___XX-XXXX.XX_____

Description _Example Pavement Design_____

_____

Current ADT: _12,000___   Construction Year AADTT: _1,800_____

Existing Type: _Asphalt_   Existing Thickness: _9.25" AC on 13" DGA___

Length _1.00_ Miles   Approx. Ln-Miles _4.50_   Design Speed _55_ M.P.H.

CBR _3.0____

ROADBED PREPARATION:

00008	CEMENT STABILIZED ROADBED	SQ YD
02542	CEMENT (8", CBR=3, 6%, 104 LBS/CF	TON
00358	ASPHALT CURING SEAL (2.0 LB/SY)	TON
02702	SAND FOR BLOTTER (5.0 LB/SY)	TON
00078	CRUSHED AGGREGATE SIZE NO 2 (May also use #3 or #23)	SQ YD

ASPHALT ALTERNATE:

Driving Lanes and TWLTL

00003	CRUSHED STONE BASE	6.00 IN DEPTH
00214	CL3 ASPHALT BASE 1.00D PG64-22	3.50 IN DEPTH
00214	CL3 ASPHALT BASE 1.00D PG64-22	3.50 IN DEPTH
00388	CL3 ASPHALT SURFACE 0.38B PG64-22	1.50 IN DEPTH

Outside Shoulders

00003	CRUSHED STONE BASE	9.50 IN DEPTH
00212	CL2 ASPHALT BASE 1.00D PG64-22	3.50 IN DEPTH
00301	CL2 ASPHALT SURFACE 0.38D PG64-22	1.50 IN DEPTH

CONCRETE ALTERNATE:

Driving Lanes and TWLTL

00003	CRUSHED STONE BASE	4.00 IN DEPTH
02073	JPC PAVEMENT – 9 IN	9.00 IN DEPTH

<u>Outside Shoulders</u>

00003	CRUSHED STONE BASE	7.00 IN DEPTH
02073	JPC PAVEMENT – 6 IN SHLD	6.00 IN DEPTH

PLAN NOTES: 233 (8.5"), 275, 444(A) 447, 455, 555(A)

SPECIAL NOTE FOR: **11N LONGITUDINAL PAVEMENT JOINT ADHESIVE**

                                DOWEL BAR AND TIE BAR PLACEMENT IN JPC PAVEMENT

                                INLAID PAVEMENT MARKERS

                                11J FULL DEPTH CONCRETE PAVEMENT REPAIRS

SPECIAL PROVISION FOR: N/A

COMMMENTS:

1. Provide and use a MTV as specified in Section 403 of the standard specifications.
2. Asphalt Seal is required from outside edge of paved shoulder to a point 2 feet down the ditch or fill slope. Two applications of the following:
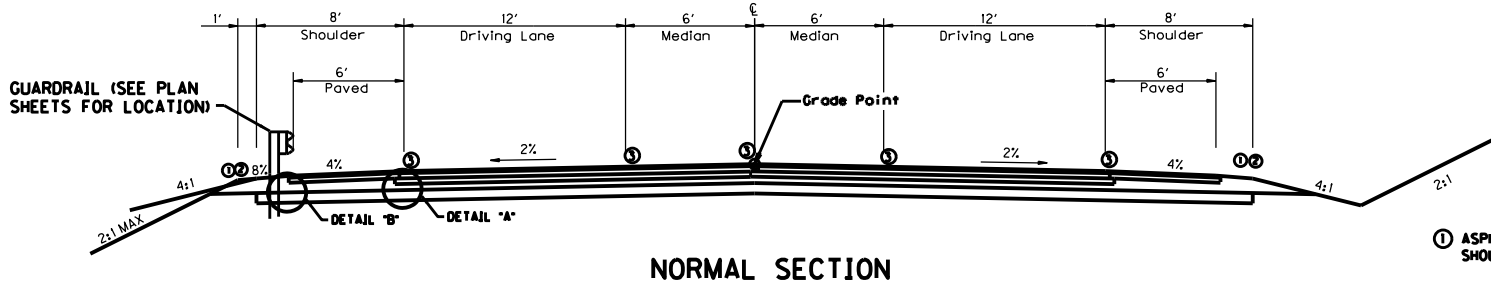
00103	ASPHALT SEAL COAT	2.40 LB/SY
00100	ASPHALT SEAL AGGREGATE	20 LB/SY

SUBMITTED _____ DATE _____ DESIGNER
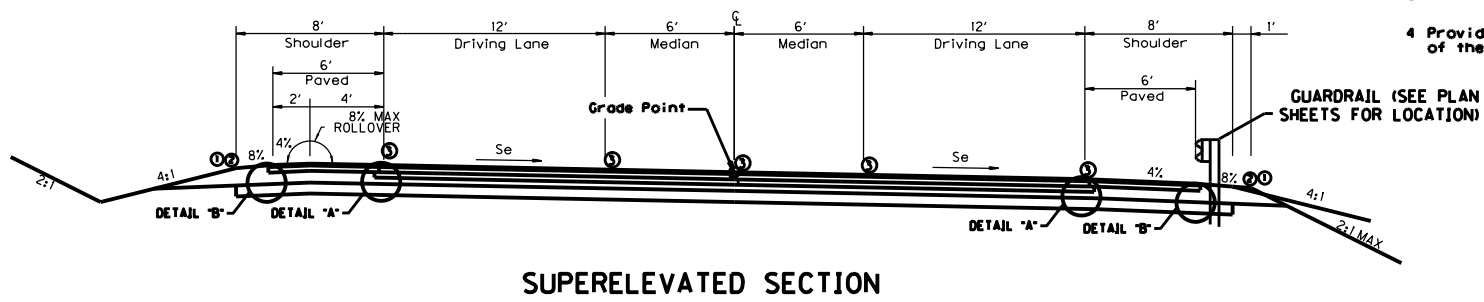
RECOMMENDED _____ DATE _____ PROJECT MANAGER

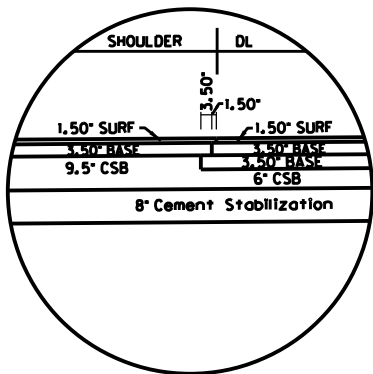RECOMMENDED _____ DATE _____ DISTRICT PDBM

TYPICAL SECTION
ASPHALT ALTERNATE

NORMAL SECTION

GUARDRAIL (SEE PLAN SHEETS FOR LOCATION)

1' | 8' Shoulder | 12' Driving Lane | 6' Median | 6' Median | 12' Driving Lane | 8' Shoulder

6' Paved

Grade Point

2% | 2%

4% | 4%

① ② 8% | 4:1 | 4:1 | ① ②

2:1 MAX | 2:1

DETAIL "B" | DETAIL "A"

SUPERELEVATED SECTION

8' Shoulder | 12' Driving Lane | 6' Median | 6' Median | 12' Driving Lane | 8' Shoulder | 1'

6' Paved

2' | 4'

8% MAX ROLLOVER

4%

Grade Point

Se | Se

① ② 8% | 4:1 | 4:1 | 8% ② ①

2:1 | DETAIL "B" | DETAIL "A" | DETAIL "A" | DETAIL "B" | 2:1 MAX

6' Paved

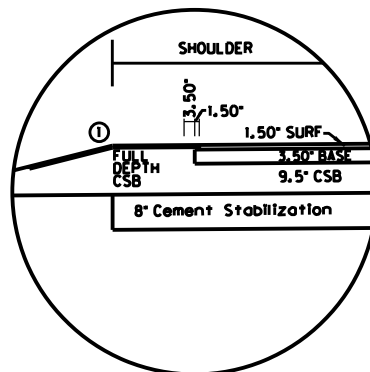GUARDRAIL (SEE PLAN SHEETS FOR LOCATION)

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① ASPHALT SEAL IS REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2' DOWN THE DITCH OR FILL SLOPE.
2.4 LB/SY ASPHALT SEAL COAT (TWO APPLICATIONS)
20 LB/SY ASPHALT SEAL AGGREGATE (TWO APPLICATIONS).

② SUBGRADE STABILIZATION IS REQUIRED FROM SHOULDER BREAK TO SHOULDER BREAK.

③ LONGITUDINAL JOINT ADHESIVE

4 Provide and use a MTV as specified in Section 403 of the standard specifications.
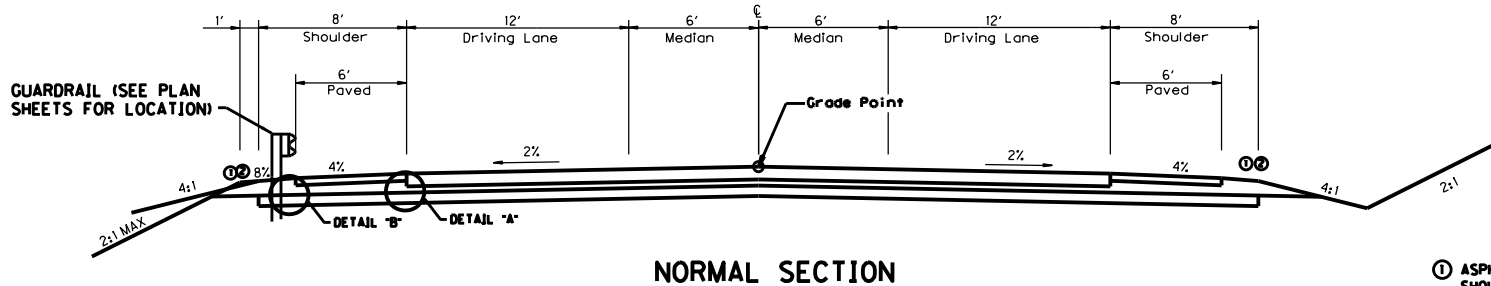

DETAIL "A"

SHOULDER | DL

1.50"
1.50"

1.50" SURF | 1.50" SURF
3.50" BASE | 3.50" BASE
9.5" CSB | 3.50" BASE
6" CSB

8" Cement Stabilization

DETAIL "B"

SHOULDER

1.50"
1.50" SURF

① FULL DEPTH CSB | 3.50" BASE
9.5" CSB

8" Cement Stabilization

DRIVING LANES PAVEMENT DESIGN

1.50" SURFACE ——[1.50" DEPTH CLASS 3 ASPHALT SURFACE 0.38B PG 64-22

13.0" BASE ——[7.00" DEPTH CLASS 3 ASPHALT BASE 1.00D PG 64-22 (3.50"+ 3.50")
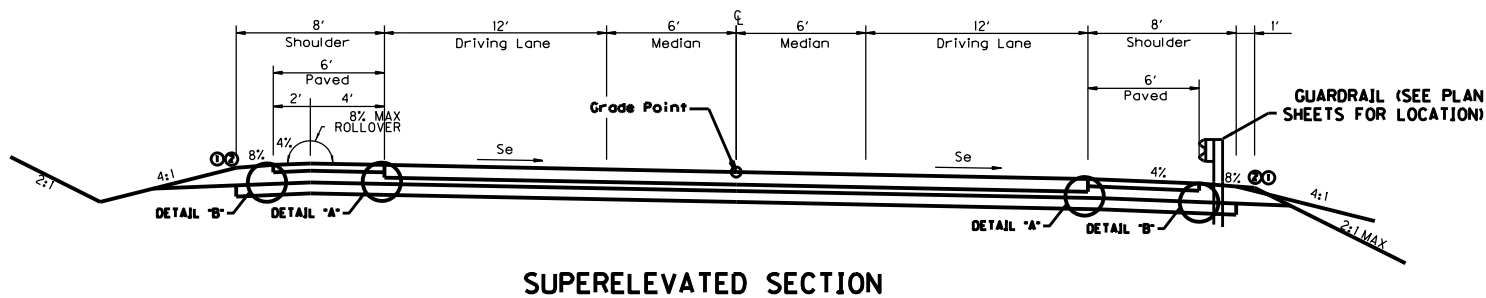6.00" COMPACTED DEPTH CRUSHED STONE BASE

8.00" Cement Stabilization

OUTSIDE SHOULDERS PAVEMENT DESIGN

1.50" SURFACE ——[1.50" DEPTH CLASS 2 ASPHALT SURFACE 0.38D PG 64-22

13.0" BASE ——[3.50" DEPTH CLASS 2 ASPHALT BASE 1.00D PG 64-22
9.50" COMPACTED DEPTH CRUSHED STONE BASE

8.00" Cement Stabilization

TYPICAL SECTION
CONCRETE ALTERNATE

NORMAL SECTION

1'
8' Shoulder
12' Driving Lane
6' Median
6' Median
12' Driving Lane
8' Shoulder

6' Paved
6' Paved

GUARDRAIL (SEE PLAN SHEETS FOR LOCATION)

Grade Point

2%
2%
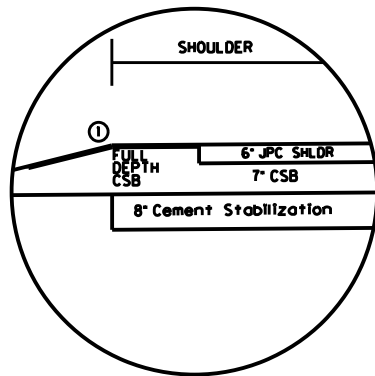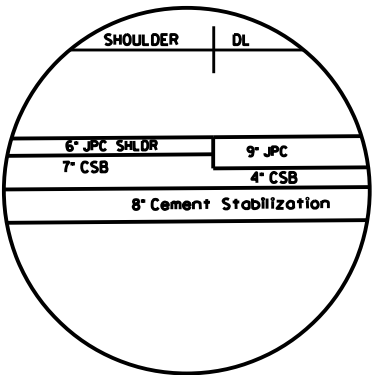
4:1
4:1

8%
8%

4%
4%

2:1 MAX
2:1

DETAIL "B"
DETAIL "A"

① ASPHALT SEAL IS REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2' DOWN THE DITCH OR FILL SLOPE. 2.4 LB/SY ASPHALT SEAL COAT (TWO APPLICATIONS) 20 LB/SY ASPHALT SEAL AGGREGATE (TWO APPLICATIONS).

② SUBGRADE STABILIZATION IS REQUIRED FROM SHOULDER BREAK TO SHOULDER BREAK.

SUPERELEVATED SECTION

8' Shoulder
12' Driving Lane
6' Median
6' Median
12' Driving Lane
8' Shoulder
1'

6' Paved
6' Paved

2' 4'
8% MAX ROLLOVER

GUARDRAIL (SEE PLAN SHEETS FOR LOCATION)

Grade Point

Se
Se

4:1
4:1

8%
8%

4%
4%

2:1
2:1 MAX

DETAIL "B"
DETAIL "A"
DETAIL "A"
DETAIL "B"

DETAIL "A"

SHOULDER | DL
6" JPC SHLDR
7" CSB
9" JPC
4" CSB
8" Cement Stabilization

DETAIL "B"

SHOULDER
FULL DEPTH CSB
6" JPC SHLDR
7" CSB
8" Cement Stabilization

MAINLINE PAVEMENT DESIGN

JPC PAVEMENT — 9.00" JPC PAVEMENT

4" BASE — 4.00" CRUSHED STONE BASE

8.00" CEMENT STABILIZATION

SHOULDER PAVEMENT DESIGN

JPC PAVEMENT — 6.00" JPC PAVEMENT SHLD

7.0" BASE — 7.00" CRUSHED STONE BASE

8.00" CEMENT STABILIZATION