Typical Components

Typical
Components

Typical Components - Backbones

Name	Date	Title
		Ramps
1LH_	04-19-11	1 Lane HMA Loop
1LP_	04-19-11	1 Lane PCC Loop
1RH_	04-19-11	1 Lane HMA Ramp
1RP_	10-19-10	1 Lane PCC Ramp
2RP_	04-16-13	2 Lane PCC Ramp
		2 Lane
2E_	10-19-10	2 Lane Existing Pavement
2H_	10-19-10	2 Lane HMA
2P_	10-19-10	2 Lane PCC
2E_TWLTL_	10-19-10	2 Lane Existing Pavement with Two Way Left Turn Lane
2H_TWLTL_	10-19-10	2 Lane HMA with Two Way Left Turn Lane
2P_TWLTL_	10-19-10	2 Lane PCC with Two Way Left Turn Lane
		4 Lane
4DH_Dprs_	04-19-11	4 Lane Divided HMA
4DP_	10-19-10	4 Lane Divided PCC
4DP_Raised_Crowned_	04-21-15	4 Lane Divided PCC with Raised Median - Crowned
4DP_Raised_Out_	04-21-15	4 Lane Divided PCC with Raised Median - Sloped Out
4E_	10-19-10	4 Lane Existing Pavement
4UP_	10-16-12	4 Lane Undivided PCC
		6 Lane
6DP_Closed_	04-17-12	6 Lane PCC Closed Median
6DP_Dprs_	04-19-11	6 Lane PCC Depressed Median

Typical Components - Backbones

Name	Date	Title
		8 Lane
8DP_Closed_	04-17-12	8 Lane PCC Closed Median
		3R
3R_MillingOverlay_	04-19-11	HMA Overlay with Milling
3R_Overlay_	04-19-11	HMA Overlay
3R_WidenOverlay_	04-19-11	HMA Overlay with Base Widening

Typical Components - Shoulders

Name	Date	Title
		Ramps
1L_P_ALT_	10-21-14	Loop Paved Shoulder Alternates
1L_P_HMA_	10-19-10	Loop HMA Shoulder
1R_Curb_	04-19-11	Ramp Curbed Shoulder
1R_G_	10-19-10	Ramp Granular Shoulder
1R_P_ALT_	10-21-14	Ramp Paved Shoulder Alternates
1R_P_HMA_	10-19-10	Ramp HMA Shoulder
		2 Lane
2_C_	10-15-13	Combination Shoulder
2_Curb_	04-19-11	Curbed Shoulder
2_E_	10-18-11	Earth Shoulder
2_G_	10-21-14	Granular Shoulder with Safety Edge
2_G_SR_	10-19-10	Granular Shoulder for Side Roads
2_P_ALT_	10-21-14	Paved Shoulder Alternates
2_P_HMA_	10-19-10	HMA Shoulder
2_P_FullHMA_	10-19-10	Full Depth HMA Shoulder
2_P_FullPCC_	10-19-10	Full Depth PCC Shoulder
2_P_Guard_	10-21-14	Paved Shoulder at Guardrail

Typical Components - Shoulders

Name	Date	Title
		4 Lane
4_C_	10-15-13	Combination Shoulder
4_P_ALT_	10-21-14	Paved Shoulder Alternates
4_P_FullHMA_	10-19-10	Full Depth HMA Shoulder
4_P_FullPCC_	10-19-10	Full Depth PCC Shoulder
4_P_Guard_	10-21-14	Paved Shoulder at Guardrail
4_P_HMA_	04-16-13	HMA Shoulder
		6 Lane
6D_Closed_P_FullPCC_	04-19-11	Urban Full Depth PCC Shoulder
6D_Dprs_P_FullPCC_	04-19-11	Rural Full Depth PCC Shoulder
		3R
3R_Shldr_C_Milling_	04-19-11	Combination Shoulder - Milling
3R_Shldr_C_Overlay_	04-19-11	Combination Shoulder - Overlay
3R_Shldr_G_Milling_	04-19-11	Granular Shoulder - Milling
3R_Shldr_G_Overlay_	04-19-11	Granular Shoulder - Overlay
3R_Shldr_G_Overlay_A_	10-18-11	Granular Shoulder - Overlay using Type 'A'
3R_Shldr_P_Milling_	04-19-11	Paved Shoulder - Milling
3R_Shldr_P_Overlay_	04-19-11	Paved Shoulder - Overlay
3R_Shldr_Paved_	04-19-11	Retrofit Combination Shoulder
		Soils
Soils_1_	04-19-11	Granular Shoulder for Slide Repair
Soils_2_	04-19-11	Combination Shoulder for Slide Repair
Soils_3_	04-19-11	Foreslope Construction for Slide Repair

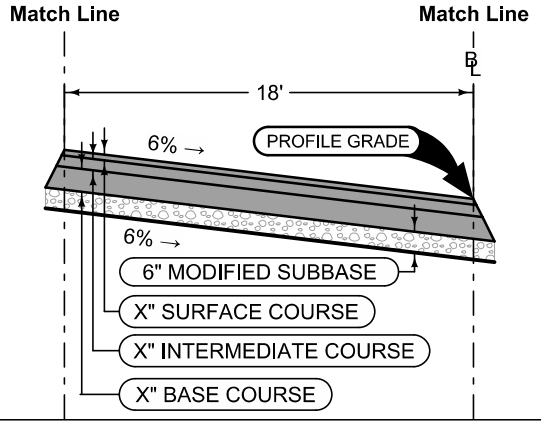
Typical Components - Auxiliary Lanes

Name	Date	Title
		2 Lane
2_AuxLane_HMA_	10-18-16	HMA Auxiliary Lane
2_AuxLane_PCC_	10-18-16	PCC Auxiliary Lane
		4 Lane
4_AuxLane_HMA_	10-18-16	HMA Auxiliary Lane
4_AuxLane_PCC_	10-18-16	PCC Auxiliary Lane

Typical Components - Auxiliary Lane Shoulders

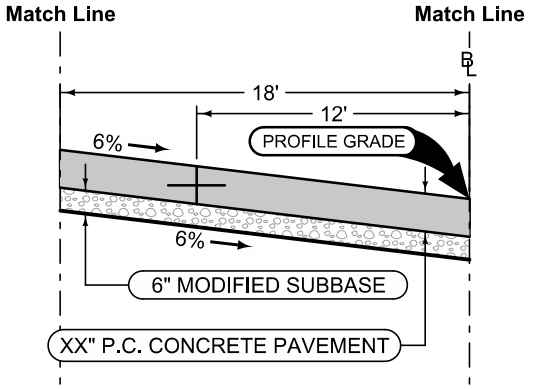
Name	Date	Title
		2 Lane
2_AL_Shldr_ALT_	10-21-14	Paved Shoulder Alternates
2_AL_Shldr_C_	04-15-14	Combination Shoulder
2_AL_Shldr_FullPCC_	10-19-10	Full Depth PCC Shoulder
2_AL_Shldr_G_	10-19-10	Granular Shoulder
2_AL_Shldr_HMA_	10-19-10	HMA Shoulder
		4 Lane
4_AL_Shldr_ALT_	10-21-14	Paved Shoulder Alternates
4_AL_Shldr_C_	04-15-14	Combination Shoulder
4_AL_Shldr_FullPCC_	10-19-10	Full Depth PCC Shoulder
4_AL_Shldr_G_	10-19-10	Granular Shoulder
4_AL_Shldr_HMA_	10-19-10	HMA Shoulder

BACKBONES
LOOPS



Section shown in direction of traffic.

	1LH_ 04-19-11
BEGIN STATION	END STATION

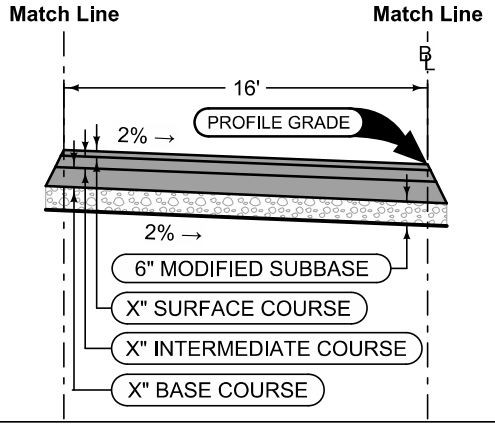


Section shown in the direction of traffic.

Loop Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

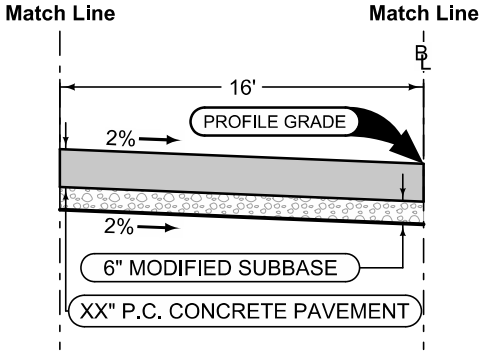
	1LP_ 04-19-11
BEGIN STATION	END STATION

BACKBONES
RAMPS



Section shown in direction of traffic.

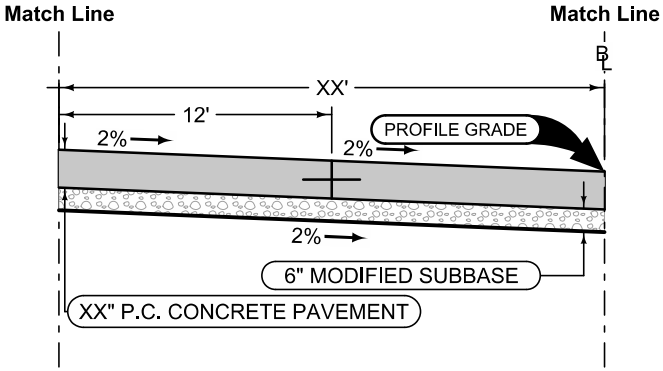
	1RH_ 04-19-11
BEGIN STATION	END STATION



Section shown in the direction of traffic.

Ramp Jointing:
Transverse joints: CD at 20' spacing.

	1RP_ 10-19-10
BEGIN STATION	END STATION



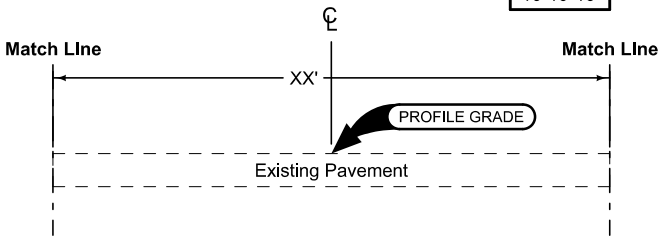
Section shown in the direction of traffic.

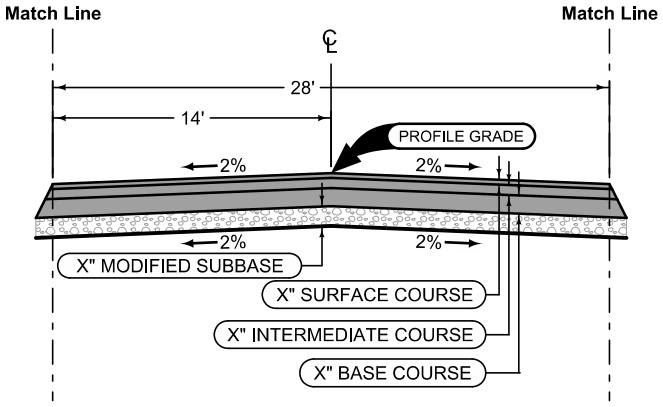
Ramp Jointing:
Transverse joints: CD at 20' spacing.
Longitudinal joint: L-2

	2RP_ 04-16-13
BEGIN STATION	END STATION

BACKBONES
2 LANE

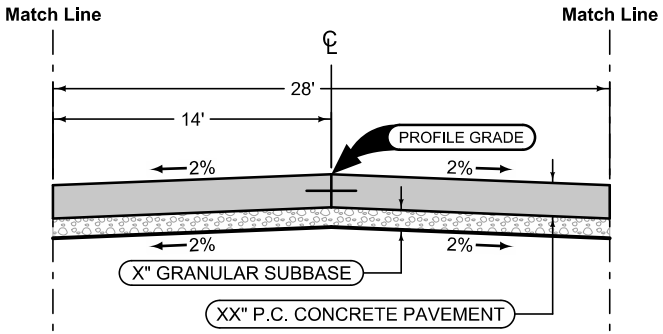
2E_
10-19-10





2H_
10-19-10

STATION TO STATION	



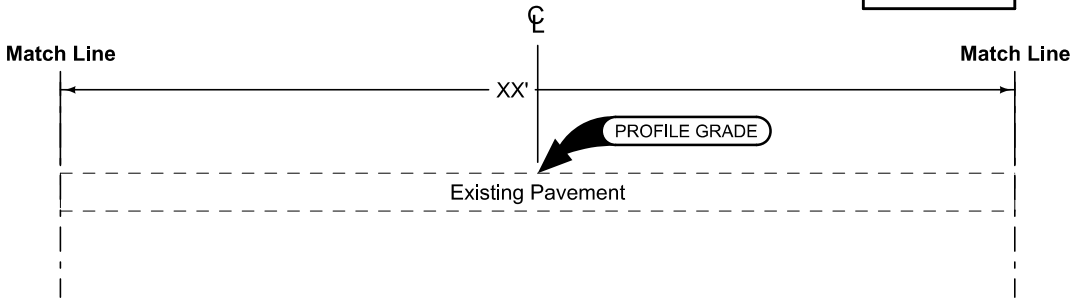
Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

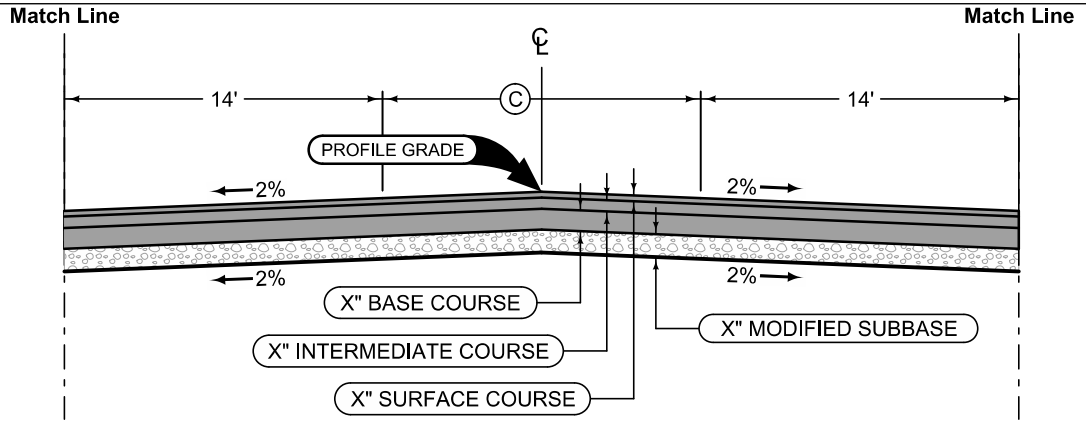
2P_
10-19-10

STATION TO STATION	

BACKBONES
2 LANE

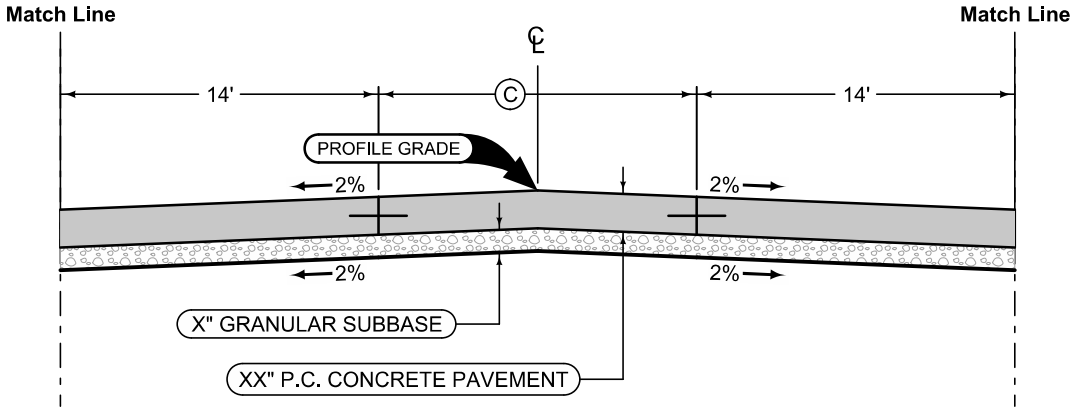
2E_TWLTL_
10-19-10





2H_TWLTL_
10-19-10

STATION TO STATION		C Feet

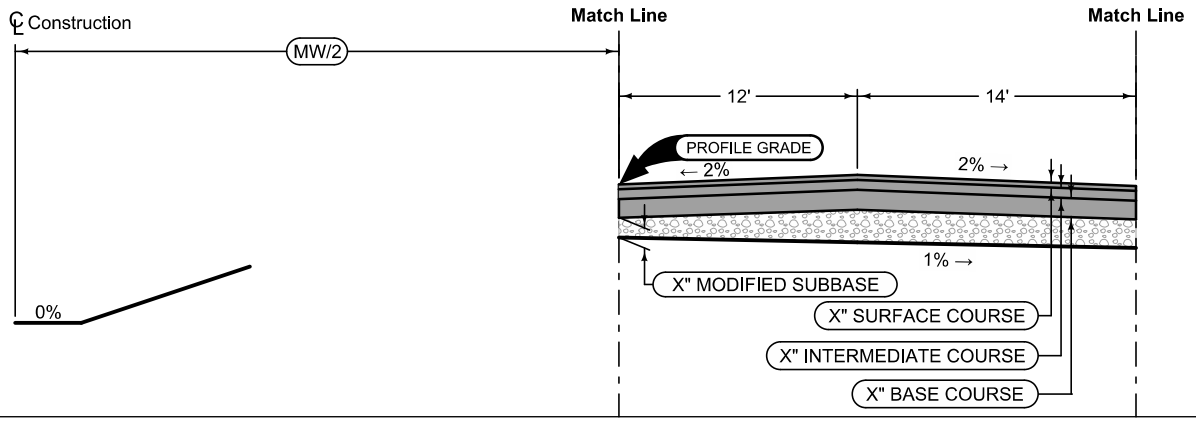


Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

2P_TWLTL_
10-19-10

STATION TO STATION		C Feet

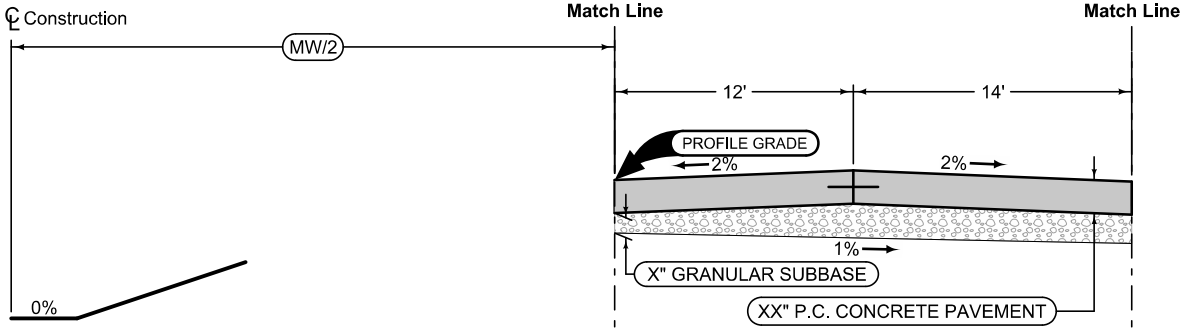
BACKBONES
4 LANE



Section shown in the direction of traffic.

4DH_Dprs_
04-19-11

Direction of Travel	BEGIN STATION	END STATION	(MW) Feet



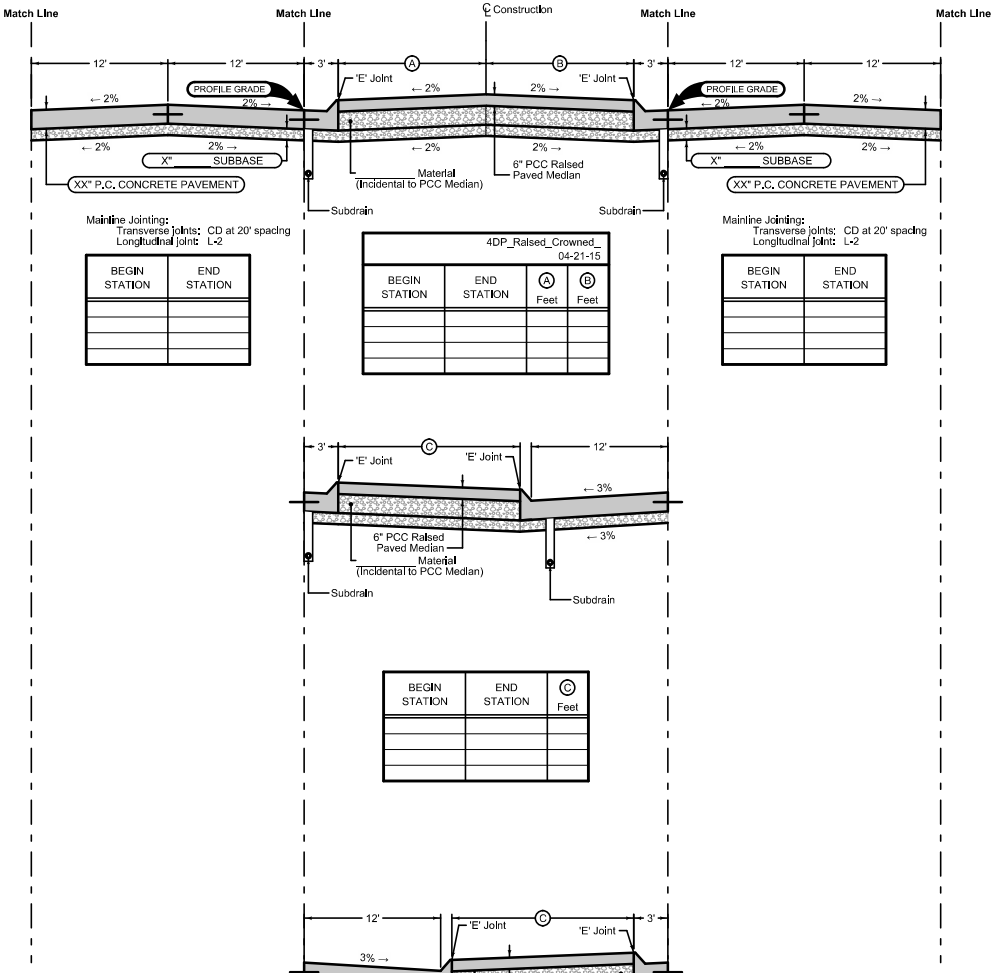
Section shown in the direction of traffic.

Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

4DP_
10-19-10

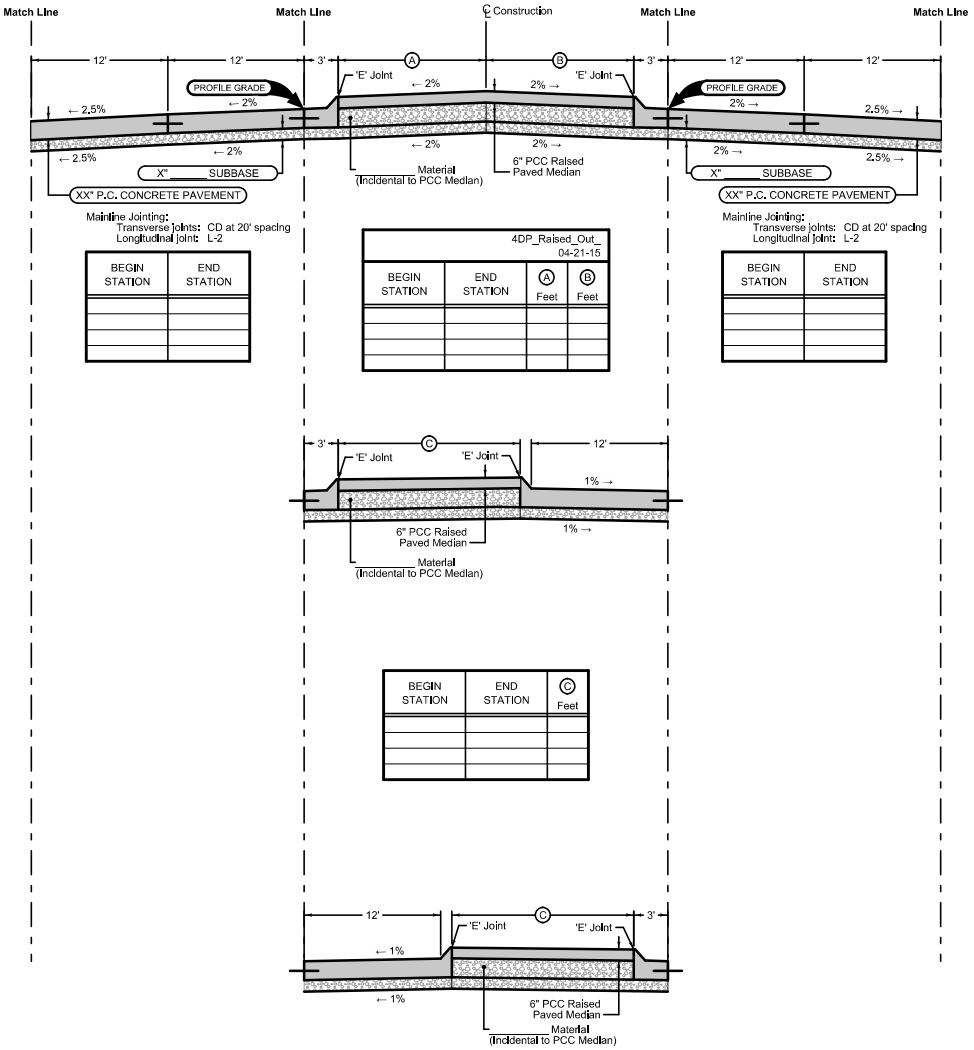
Direction of Travel	BEGIN STATION	END STATION	(MW) Feet

BACKBONES
4 LANE



DESIGNER INFO

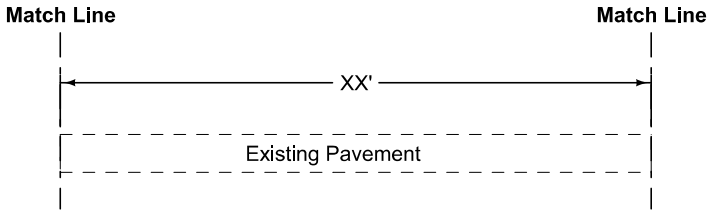
BACKBONES
4 LANE

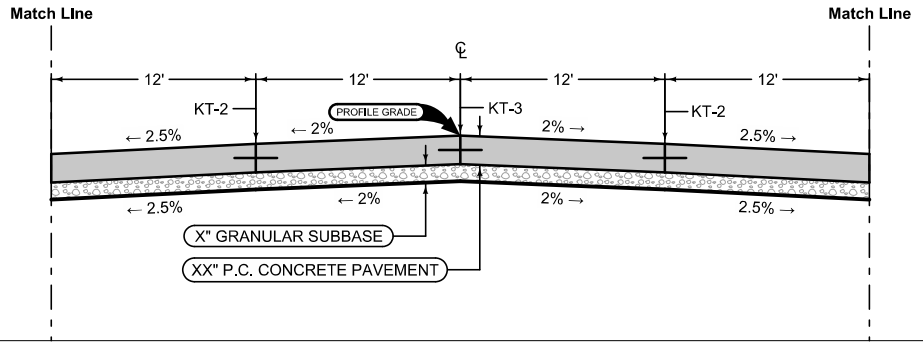


DESIGNER INFO

BACKBONES
4 LANE

4E_
10-19-10



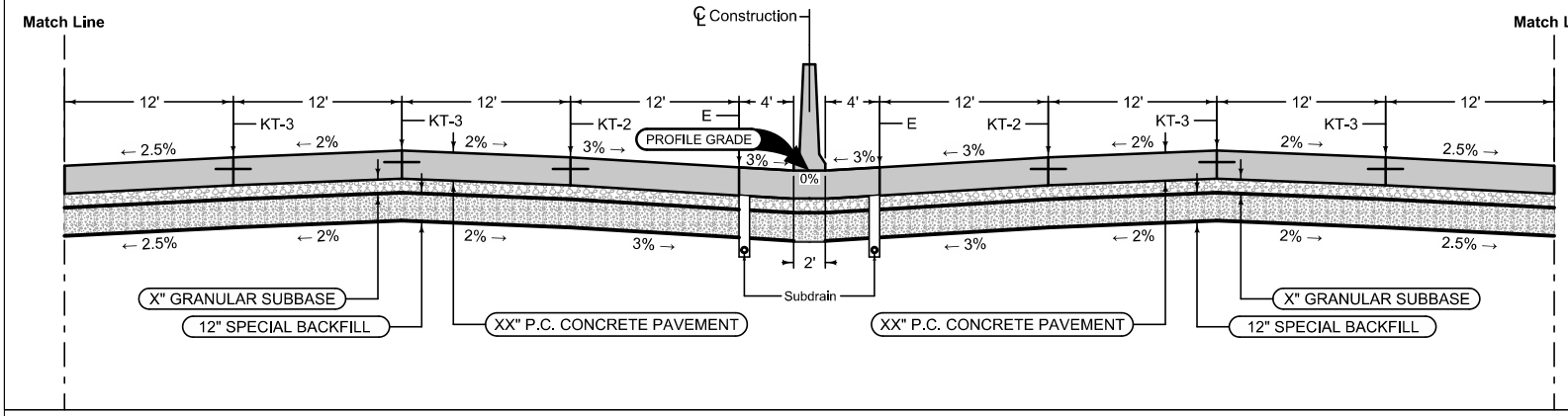


Mainline Jointing:
Transverse joints: CD at 20' spacing

4UP_
10-16-12

STATION TO STATION	

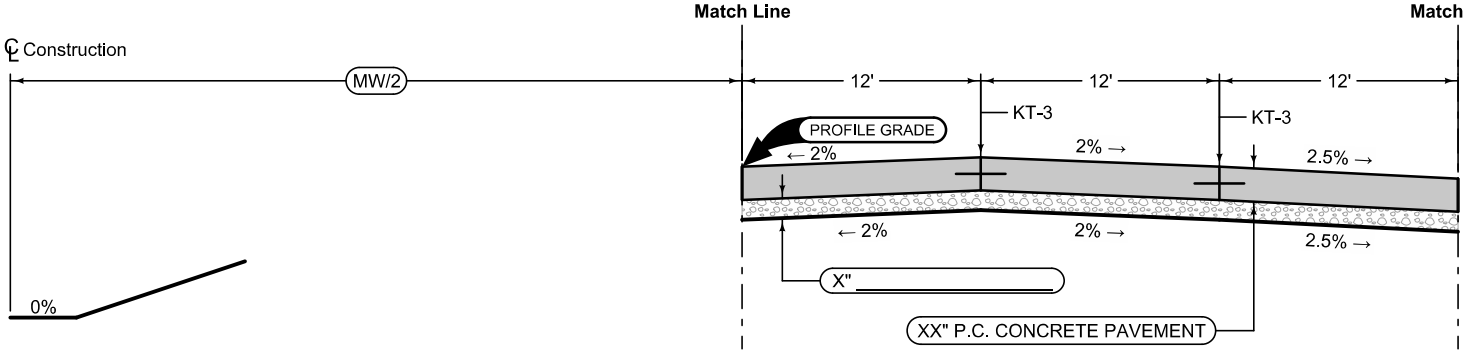
BACKBONES
6 LANE



Mainline Jointing:
Transverse joints: CD at 20' spacing

6DP_Closed_
04-17-12

BEGIN STATION	END STATION



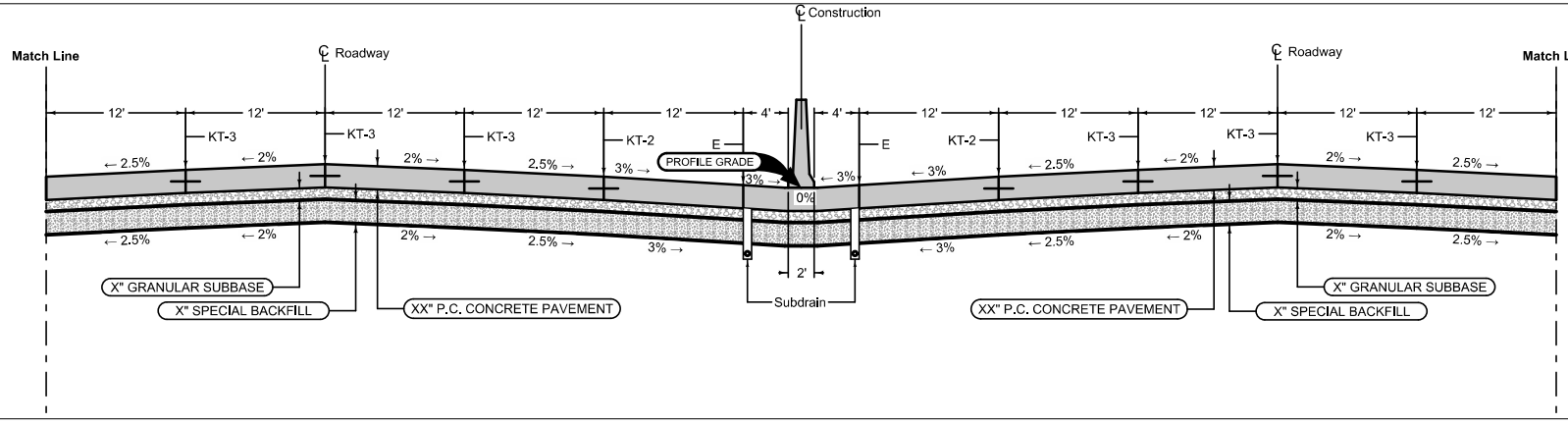
Section shown In the direction of traffic.

Mainline Jointing:
Transverse joints: CD at 20' spacing

6DP_Dprs_
04-19-11

Direction of Travel	BEGIN STATION	END STATION	(MW) Feet

BACKBONES
8 LANE

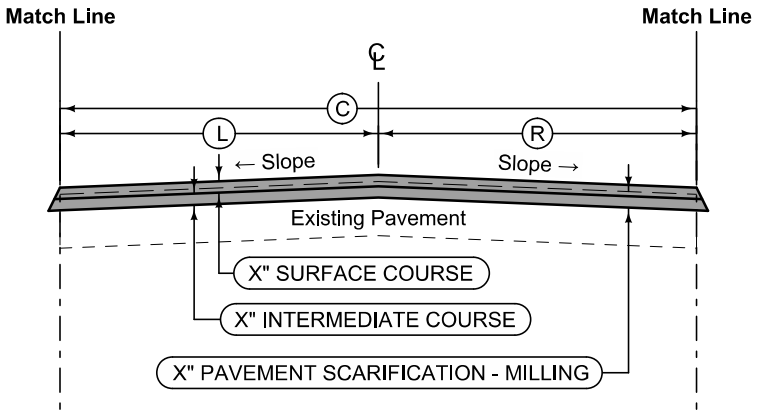


Mainline Jointing:
Transverse joints: CD at 20' spacing

	8DP_Closed_ 04-17-12
BEGIN STATION	END STATION

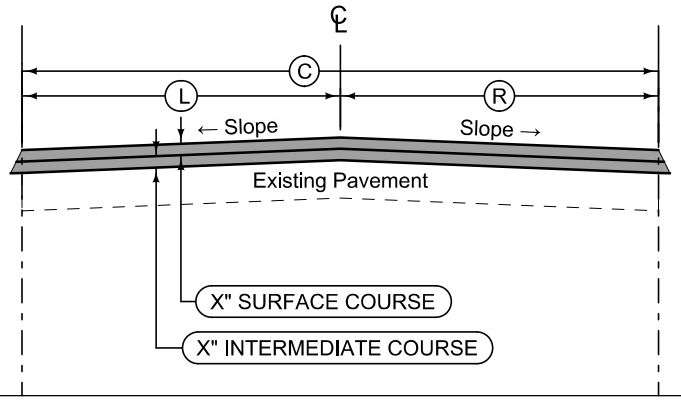
BACKBONES

3R



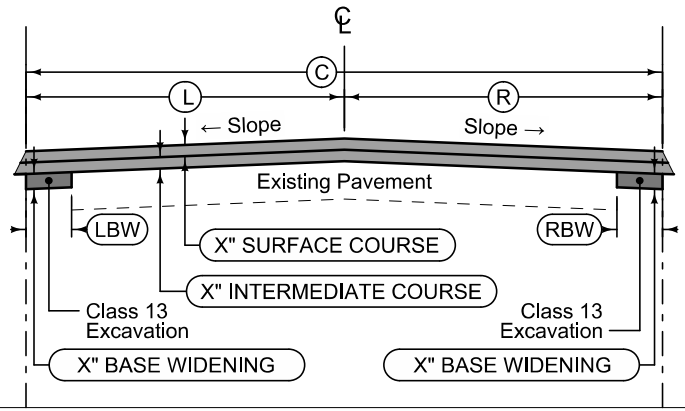
3R_MillingOverlay_
04-19-11

STATION TO STATION		C Feet	L Feet	R Feet	Pavement Scarification SY



3R_Overlay_
04-19-11

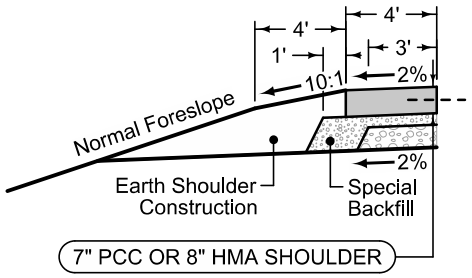
STATION TO STATION		C Feet	L Feet	R Feet

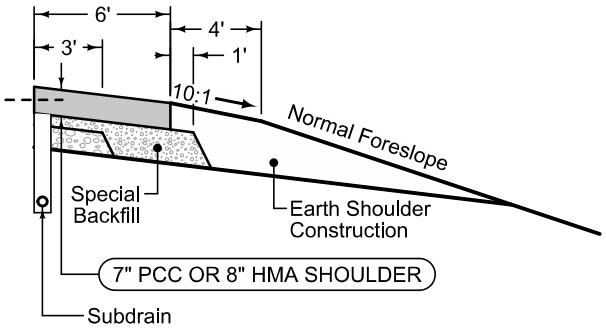


3R_WidenOverlay_
04-19-11

STATION TO STATION		C Feet	L Feet	R Feet	LBW Feet	RBW Feet

SHOULDERS
RAMPS

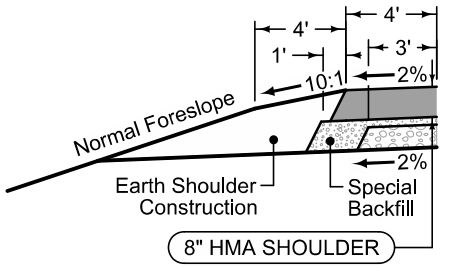


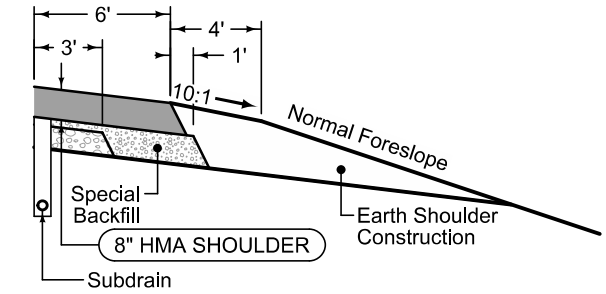


Paved Shoulder Alternates

PCC Shoulder Jointing:
Longitudinal joint: BT-1 or BT-5
Transverse joints: C at 20' spacing
HMA Shoulder Jointing:
Longitudinal joint: B

1L_P_ALT_ 10-21-14	
BEGIN STATION	END STATION

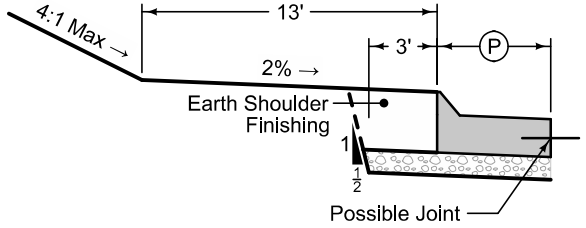


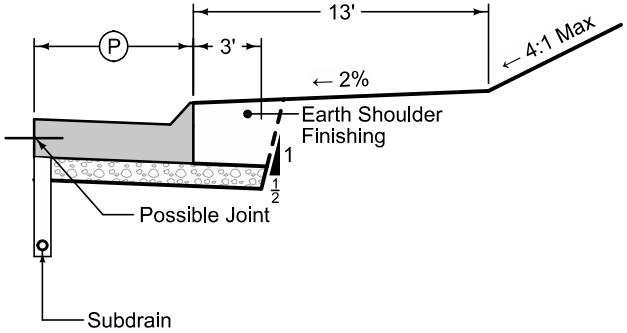


HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1L_P_HMA_ 10-19-10	
BEGIN STATION	END STATION





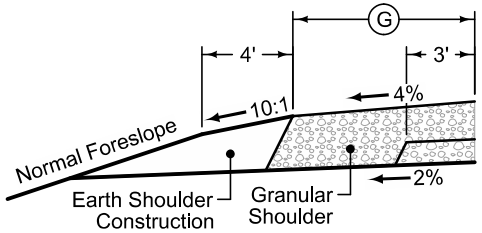
Curbed Shoulder

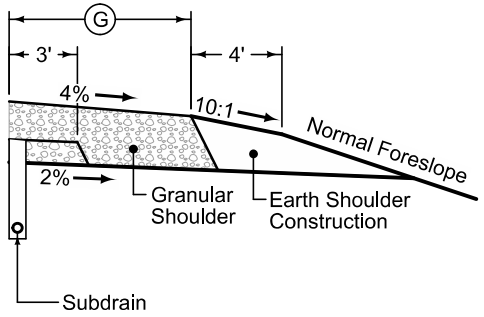
Shoulder jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 16':

Transverse: C at 20' spacing
SIngle pour: L-2
Staged : KT-2

1R_Curb 04-19-11			
BEGIN STATION	END STATION	(P) Feet	Curb Type See PV-102

SHOULDERS
RAMPS

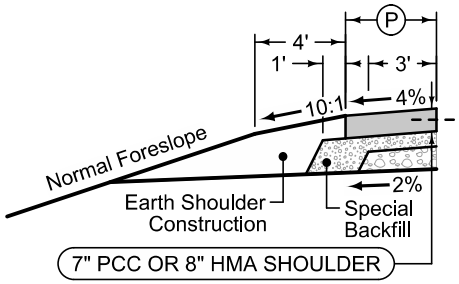


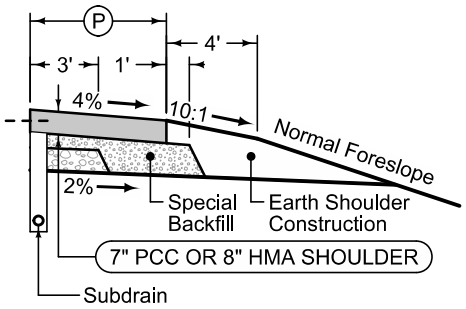


Granular Shoulder

1R_G_
10-19-10

BEGIN STATION	END STATION	(G) Feet



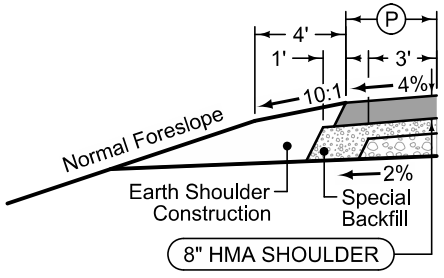


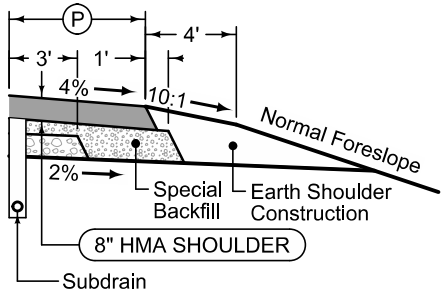
Paved Shoulder Alternates

PCC Shoulder Jointing:
Longitudinal joint: BT-1 or BT-5
Transverse joints: C at 20' spacing
HMA Shoulder Jointing:
Longitudinal joint: B

1R_P_ALT_
10-21-14

BEGIN STATION	END STATION	(P) Feet





HMA Shoulder

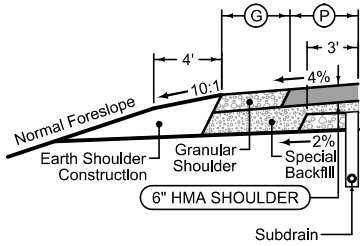
Shoulder Jointing:
Longitudinal joint: B

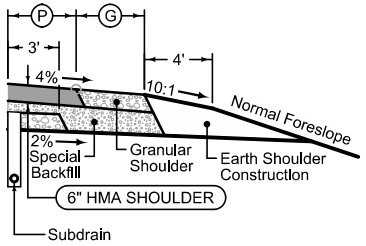
1R_P_HMA_
10-19-10

BEGIN STATION	END STATION	(P) Feet

SHOULDERS
2 LANE

Combination Shoulder



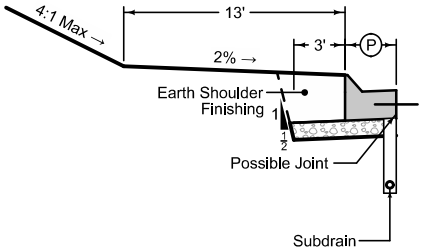


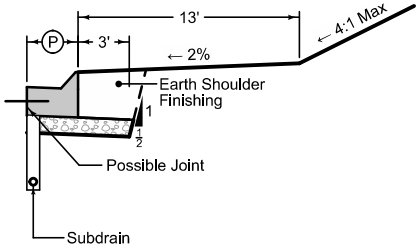
Shoulder Jointing:
Longitudinal joint: B

STATION TO STATION		(P) Feet	(G) Feet

2_C_
10-15-13

Curbed Shoulder





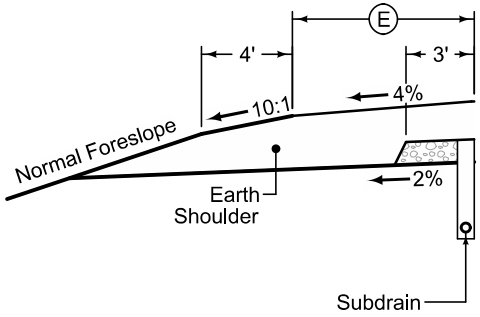
Shoulder Jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

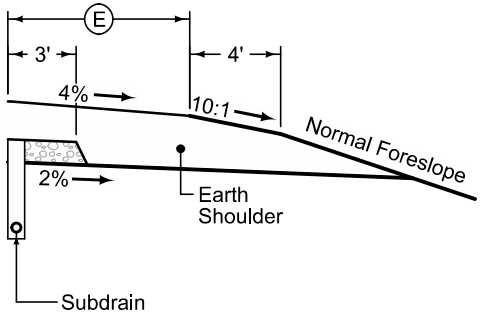
Single pour: L-2
Staged : KT-2
Transverse:C at 20' spacing

STATION TO STATION		(P) Feet	Curb Type See PV-102

2_Curb_
04-19-11

Earth Shoulder



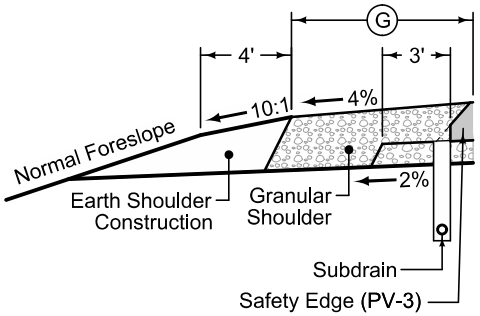


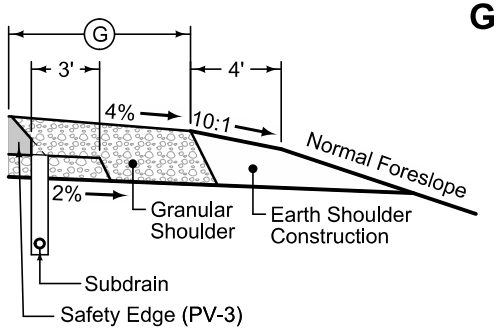
STATION TO STATION		(E) Feet

2_E_
10-18-11

SHOULDERS
2 LANE

Granular Shoulder with Safety Edge

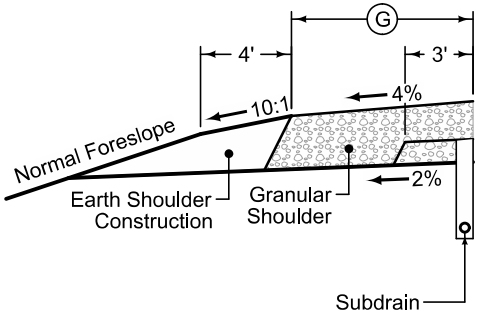


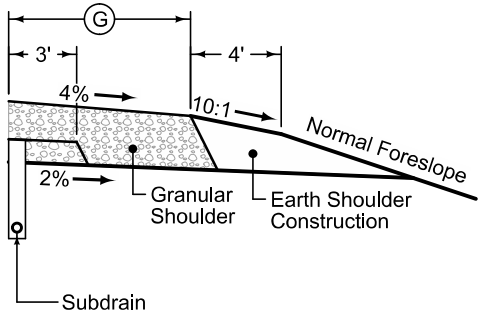


2_G_
10-21-14

STATION TO STATION		Ⓖ Feet

Granular Shoulder

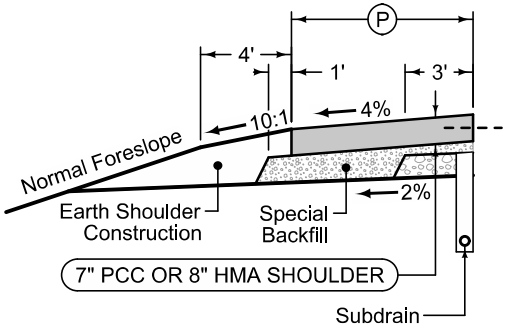


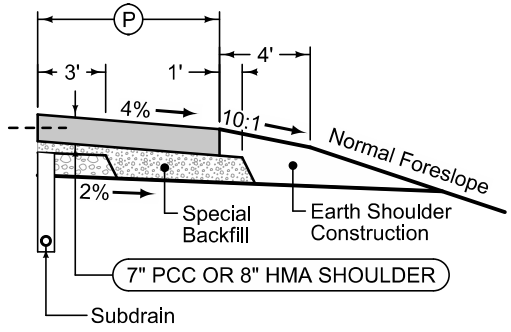


2_G_SR_
10-19-10

STATION TO STATION		Ⓖ Feet

Paved Shoulder Alternates



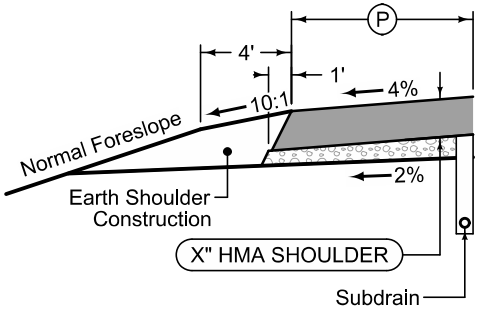


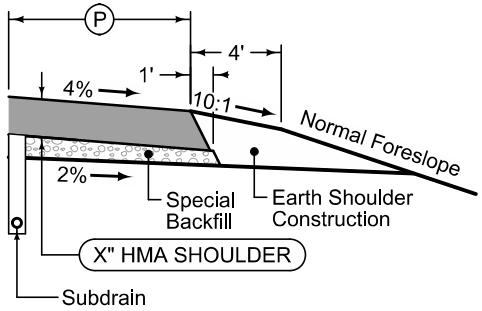
PCC Shoulder Jointing:
Longitudinal joint: BT-1 or BT-5
Transverse joints: C at 20' spacing
HMA Shoulder Jointing:
Longitudinal joint: B

2_P_ALT_
10-21-14

STATION TO STATION		Ⓟ Feet

SHOULDERS
2 LANE

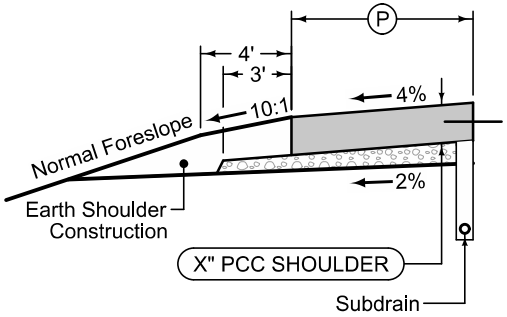


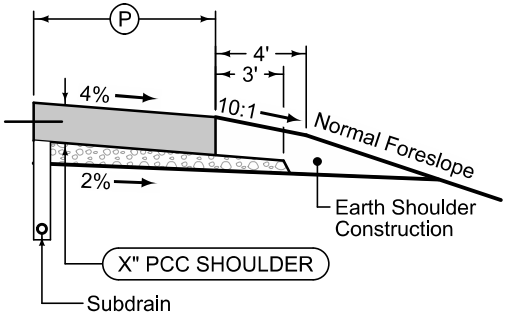


Full Depth HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_P_FullHMA_ 10-19-10		
STATION TO STATION		(P) Feet

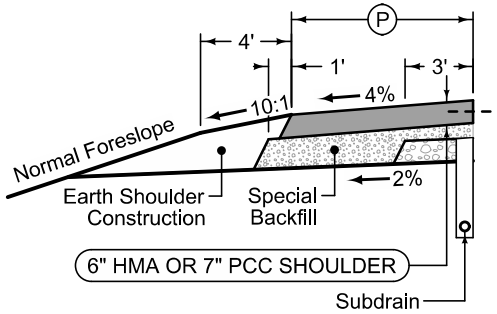


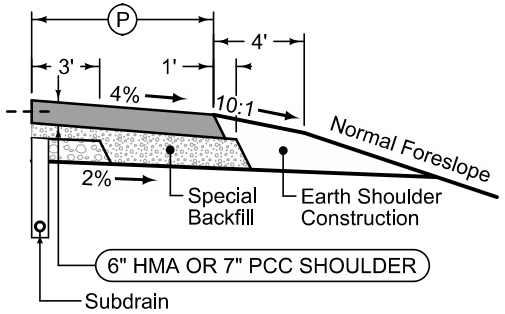


Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

2_P_FullPCC_ 10-19-10		
STATION TO STATION		(P) Feet



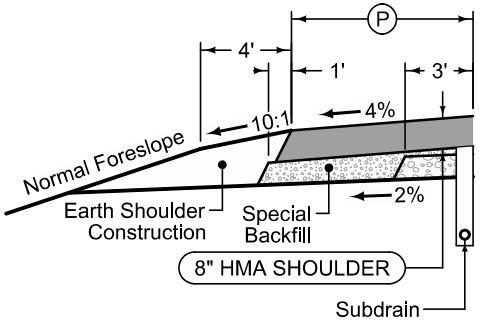


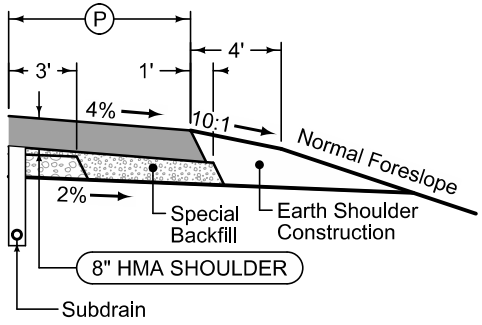
Paved Shoulder at Guardrail

PCC Shoulder Jointing:
Longitudinal joint: BT-1 or BT-5
Transverse joints: C at 20' spacing
HMA Shoulder Jointing:
Longitudinal joint: B

2_P_Guard_ 10-21-14		
STATION TO STATION		(P) Feet

SHOULDERS
2 LANE



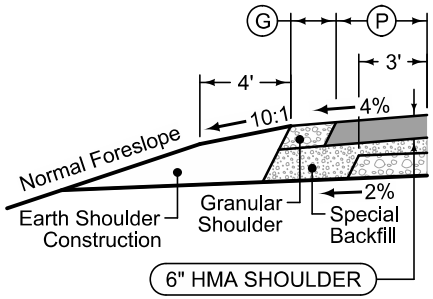


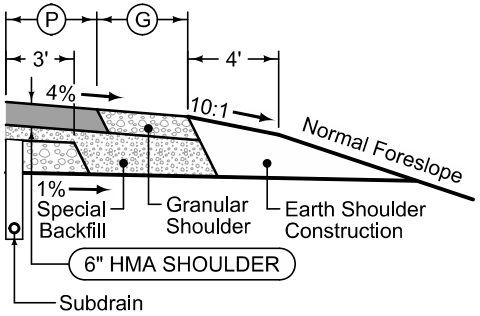
HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_P_HMA_ 10-19-10		
STATION TO STATION		(P) Feet

SHOULDERS
4 LANE



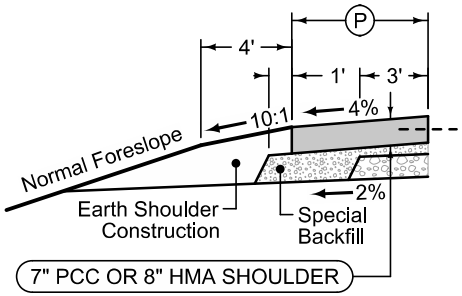


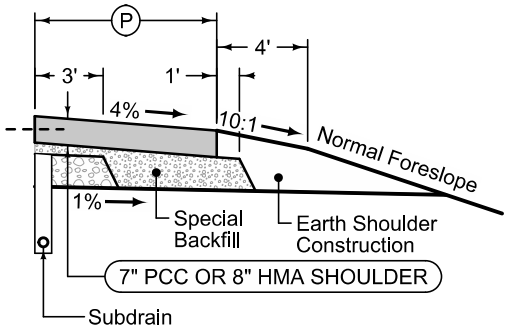
Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

4_C_
10-15-13

Direction of Travel	BEGIN STATION	END STATION	(P) Feet	(G) Feet



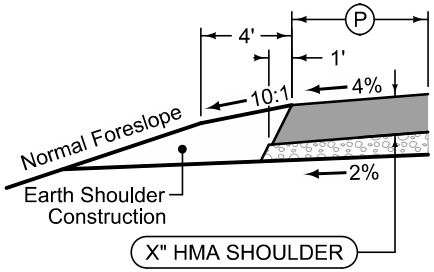


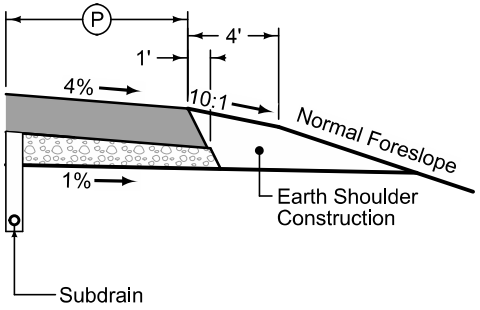
Paved Shoulder Alternates

PCC Shoulder Jointing:
Longitudinal joint: BT-1 or BT-5
Transverse joints: C at 20' spacing
HMA Shoulder Jointing:
Longitudinal joint: B

4_P_ALT_
10-21-14

Direction of Travel	BEGIN STATION	END STATION	(P) Feet





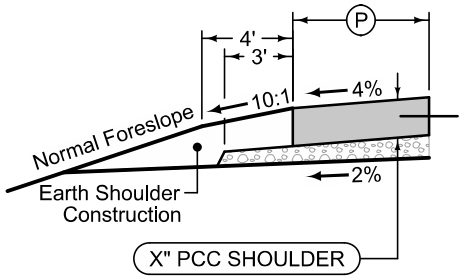
Full Depth HMA Shoulder

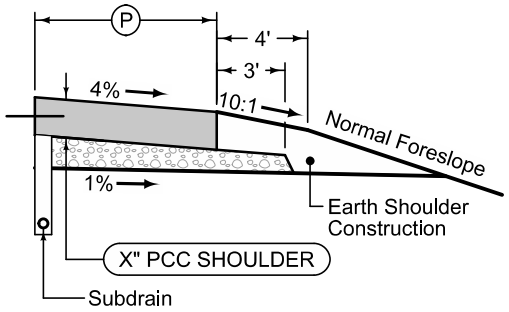
Shoulder Jointing:
Longitudinal joint: B

4_P_FullHMA_
10-19-10

Direction of Travel	BEGIN STATION	END STATION	(P) Feet

SHOULDERS
4 LANE



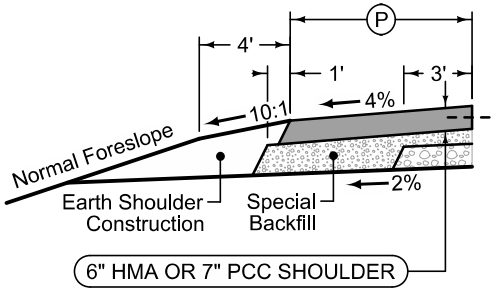


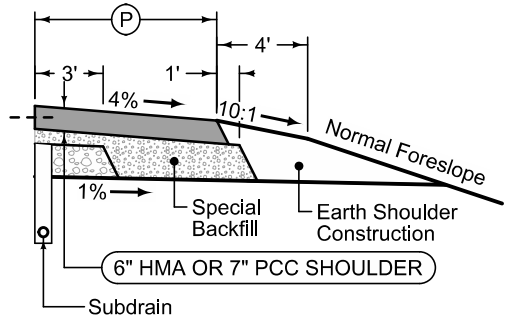
Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

4_P_FullPCC_
10-19-10

Direction of Travel	BEGIN STATION	END STATION	(P) Feet



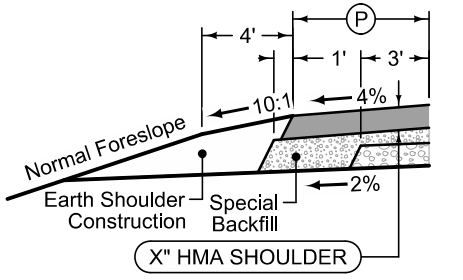


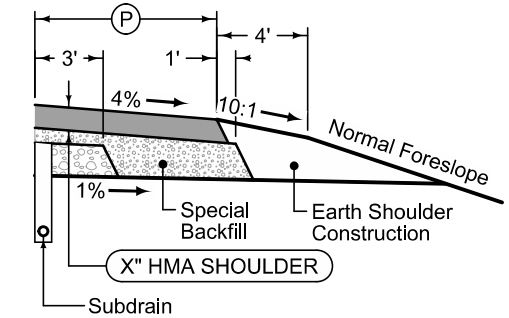
Paved Shoulder at Guardrail

PCC Shoulder Jointing:
Longitudinal joint: BT-1 or BT-5
Transverse joints: C at 20' spacing
HMA Shoulder Jointing
Longitudinal joint: B

4_P_Guard_
10-21-14

Direction of Travel	BEGIN STATION	END STATION	(P) Feet





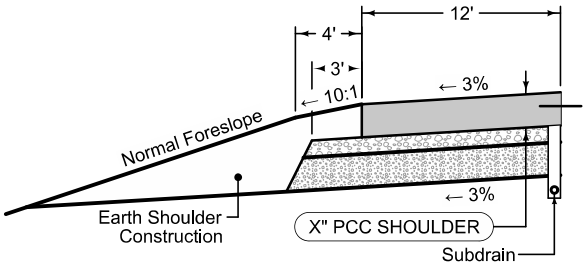
HMA Shoulder

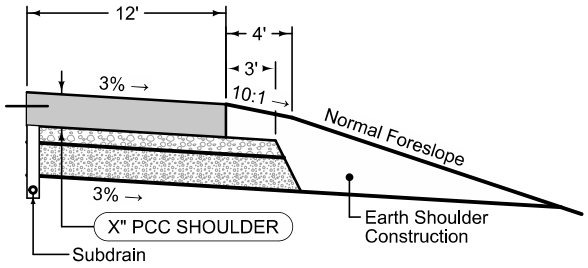
Shoulder Jointing:
Longitudinal joint: B

4_P_HMA_
04-16-13

Direction of Travel	BEGIN STATION	END STATION	(P) Feet

SHOULDERS
6 LANE

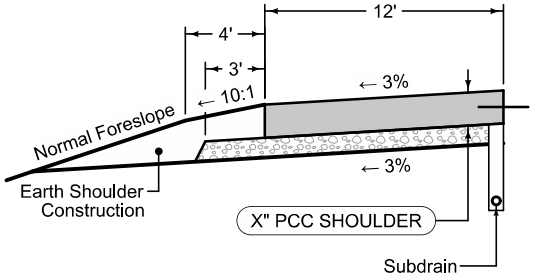


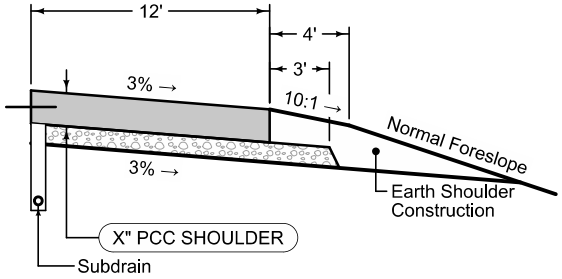


Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

6D_Closed_P_FullPCC_ 04-19-11	
BEGIN STATION	END STATION





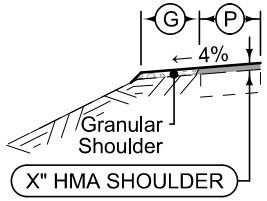
Full Depth PCC Shoulder

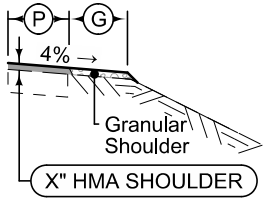
Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

	6D_Dprs_P_FullPCC_ 04-19-11	
Direction of Travel	BEGIN STATION	END STATION

SHOULDERS
3R

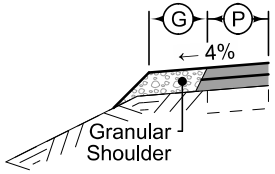
Combination Shoulder

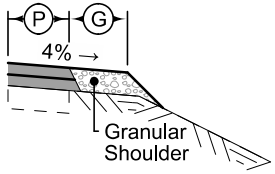




3R_Shldr_C_Milling_ 04-19-11			
STATION TO STATION		(P) Feet	(G) Feet

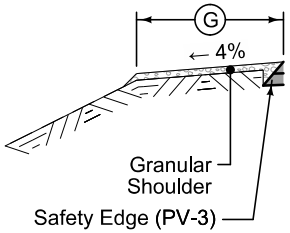
Combination Shoulder

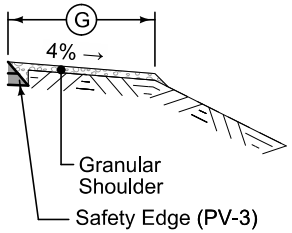




3R_Shldr_C_Overlay_ 04-19-11			
STATION TO STATION		(P) Feet	(G) Feet

Granular Shoulder

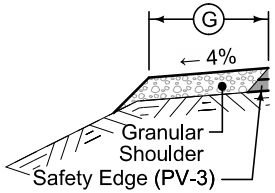


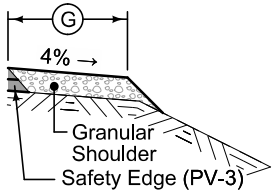


3R_Shldr_G_Milling_ 04-19-11		
STATION TO STATION		(G) Feet

SHOULDERS
3R

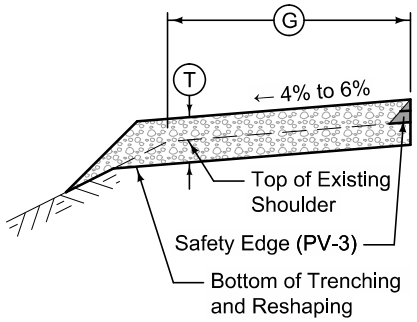
Granular Shoulder

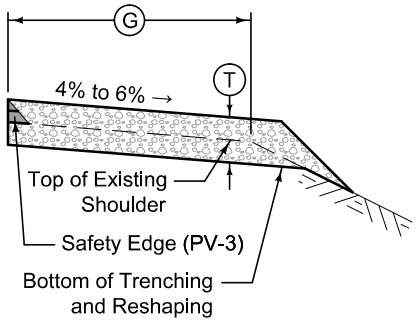




3R_Shldr_G_Overlay_ 04-19-11		
STATION TO STATION		(G) Feet

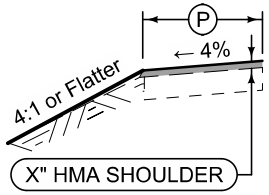
Type 'A' Granular Shoulder

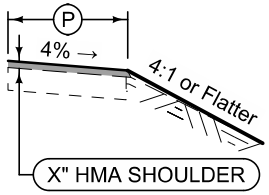




3R_Shldr_G_Overlay_A_ 10-18-11				
STATION TO STATION		TONS PER STA.	(T) Feet	(G) Feet

HMA Shoulder

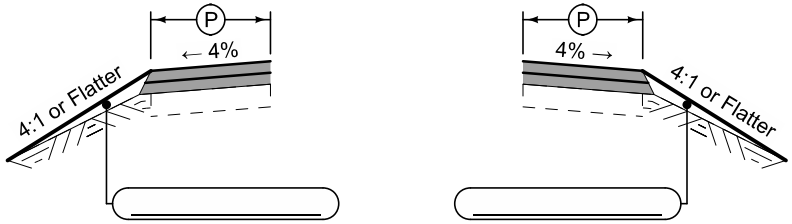




3R_Shldr_P_Milling_ 04-19-11		
STATION TO STATION		(P) Feet

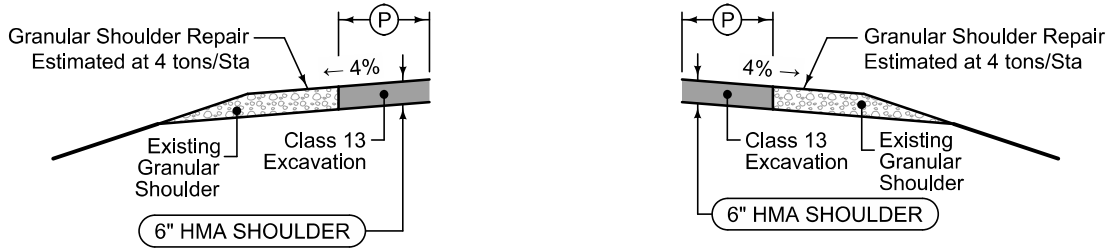
SHOULDERS
3R

HMA Shoulder



3R_Shldr_P_Overlay_ 04-19-11		
STATION TO STATION		(P) Feet

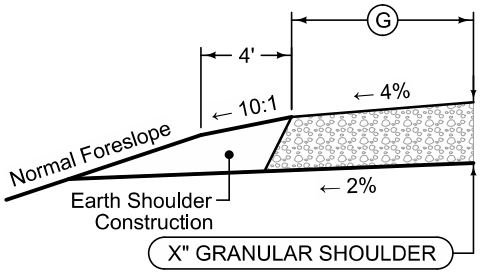
HMA Shoulder

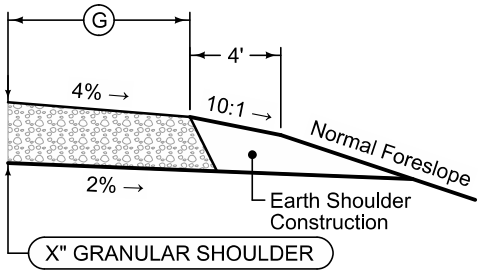


Shoulder Jointing:
Longitudinal joint: B

3R_Shldr_Paved_ 04-19-11		
STATION TO STATION		(P) Feet

SHOULDERS
SOILS

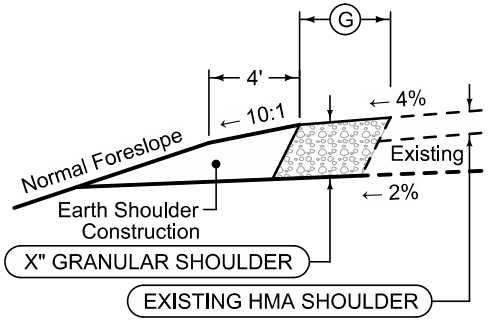


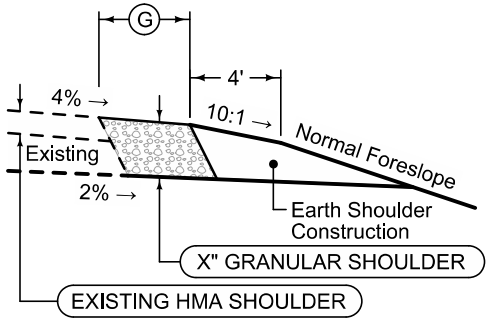


Granular Shoulder for Slide Repair

Soils_1_
04-19-11

STATION TO STATION		G Feet	Remarks

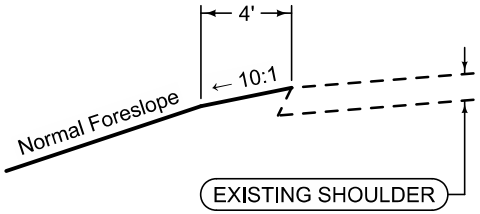


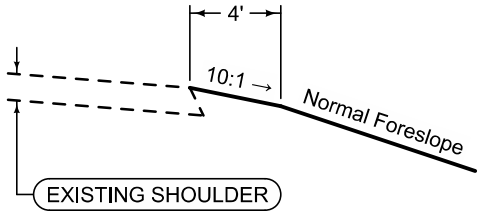


Combination Shoulder for Slide Repair

Soils_2_
04-19-11

STATION TO STATION		G Feet	Remarks



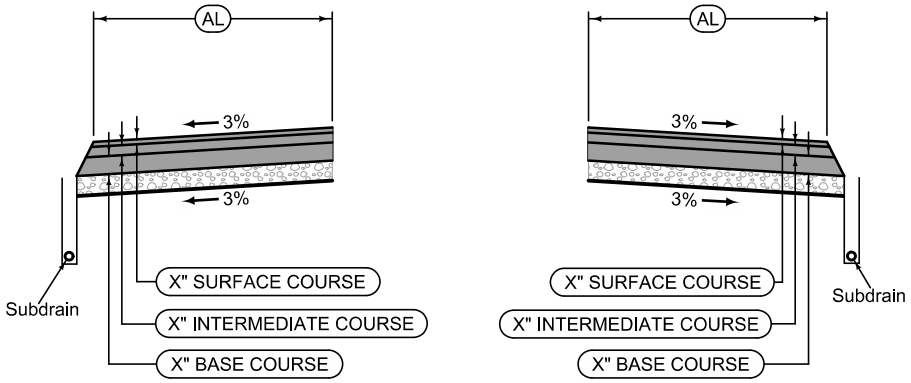


Foreslope Construction for Slide Repair

Soils_3_
04-19-11

STATION TO STATION		Remarks

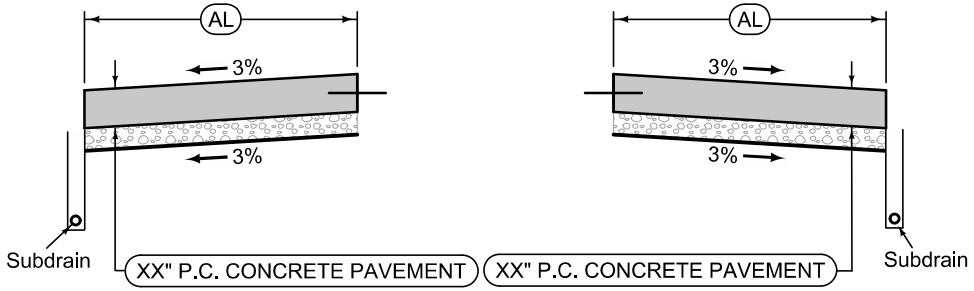
AUXILIARY LANES
2 LANE



Auxiliary Lane

Longitudinal joint: B

2_AuxLane_HMA_ 10-18-16		
STATION TO STATION		(AL) Feet

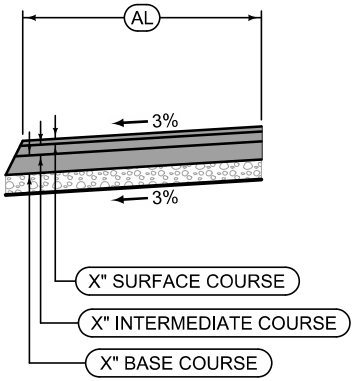


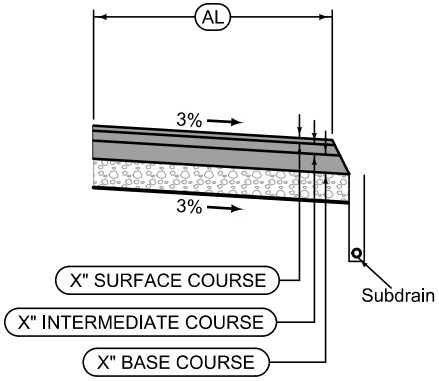
Auxiliary Lane

Longitudinal joint: L or KT
Transverse joint: Match Mainline

2_AuxLane_PCC_ 10-18-16		
STATION TO STATION		(AL) Feet

AUXILIARY LANES
4 LANE



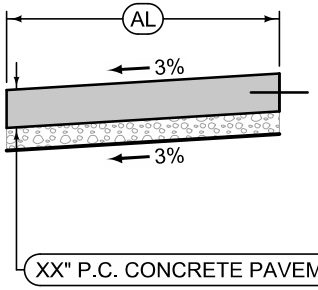


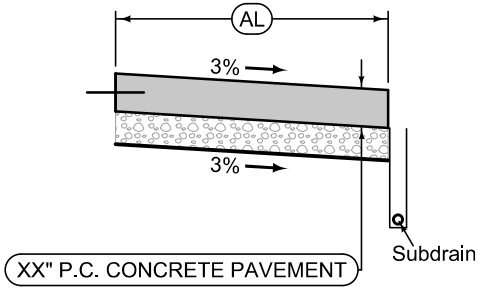
Auxiliary Lane

Longitudinal joint: B

4_AuxLane_HMA_
10-18-16

Direction of Travel	BEGIN STATION	END STATION	(AL) Feet





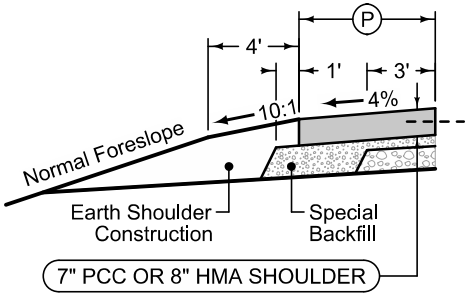
Auxiliary Lane

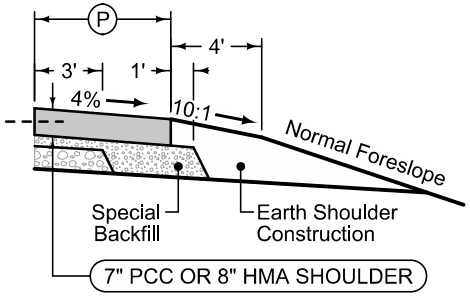
Longitudinal joint: L or KT
Transverse joint: Match Mainline

4_AuxLane_PCC_
10-18-16

Direction of Travel	BEGIN STATION	END STATION	(AL) Feet

AUXILIARY LANE SHOULDERS
2 LANE



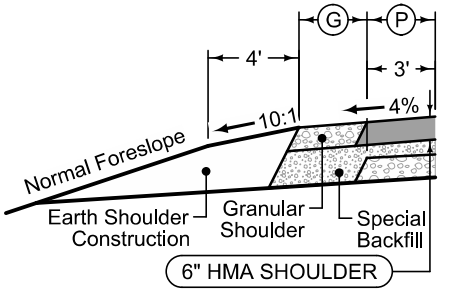


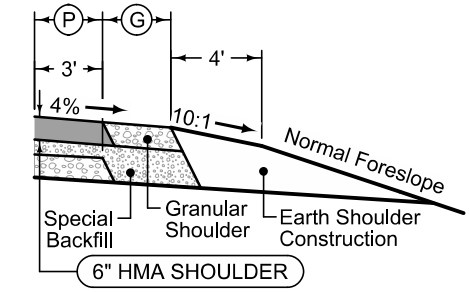
Auxiliary Lane

Paved Shoulder Alternates

PCC Shoulder Jointing:
Longitudinal joint: BT-1 or BT-5
Transverse joints: C at 20' spacing
HMA Shoulder Jointing:
Longitudinal joint: B

2_AL_Shldr_ALT_ 10-21-14
P Feet



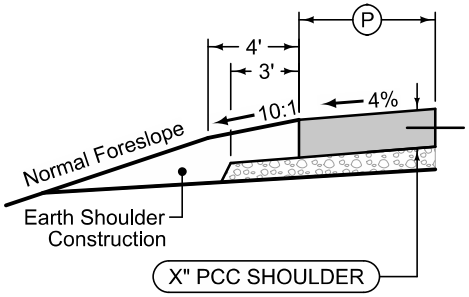


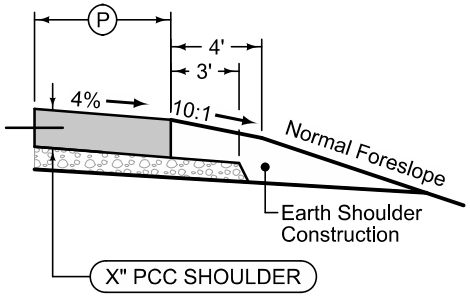
Auxiliary Lane

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_AL_Shldr_C_ 04-15-14	
P Feet	G Feet





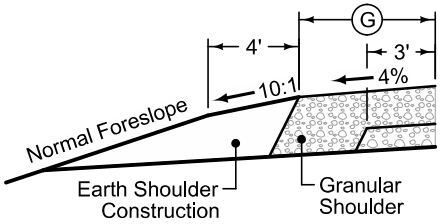
Auxiliary Lane

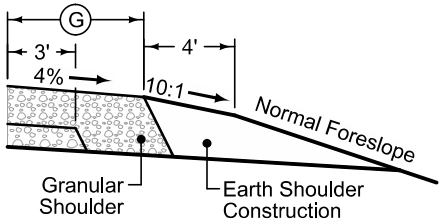
Full Depth Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

2_AL_Shldr_FullPCC_ 10-19-10
P Feet

AUXILIARY LANE SHOULDERS
2 LANE

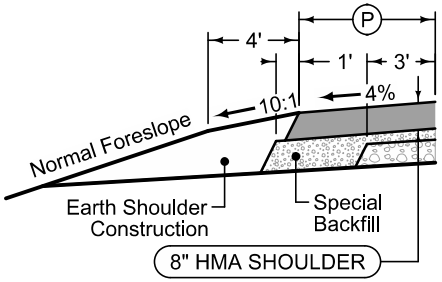


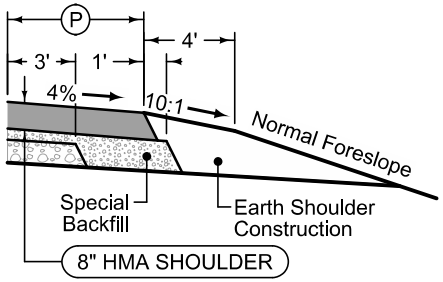


Auxiliary Lane
Granular Shoulder

2_AL_Shldr_G_
10-19-10

G
Feet





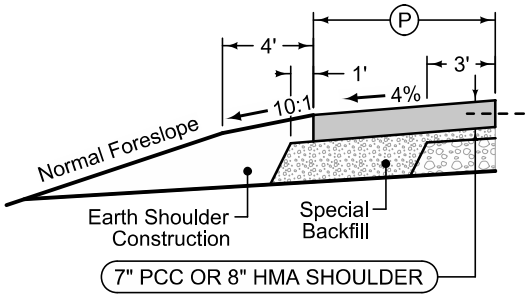
Auxiliary Lane
HMA Shoulder

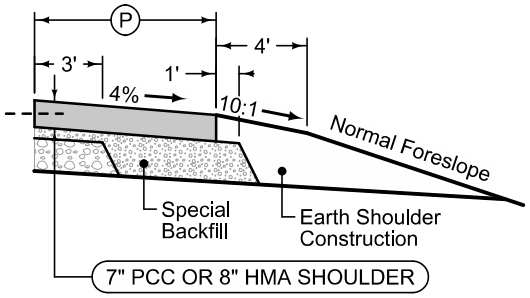
Shoulder Jointing:
Longitudinal joint: B

2_AL_Shldr_HMA_
10-19-10

P
Feet

AUXILIARY LANE SHOULDERS
4 LANE



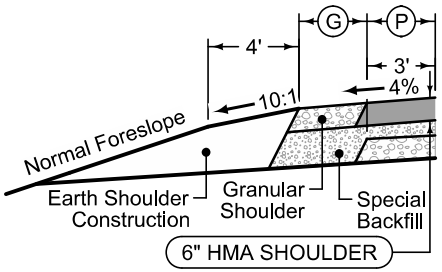


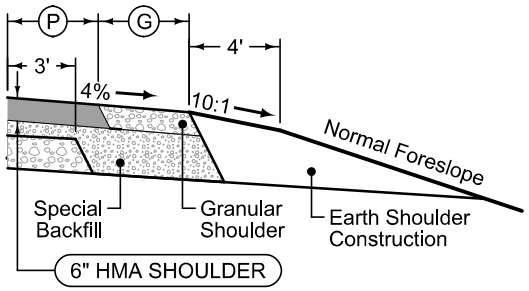
Auxiliary Lane

Paved Shoulder Alternates

PCC Shoulder Jointing:
Longitudinal joint: BT-1 or BT-5
Transverse joints: C at 20' spacing
HMA Shoulder Jointing:
Longitudinal joint: B

4_AL_Shldr_ALT_ 10-21-14
(P) Feet



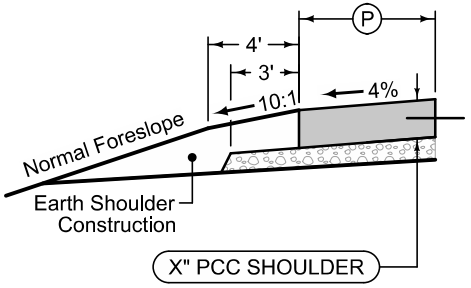


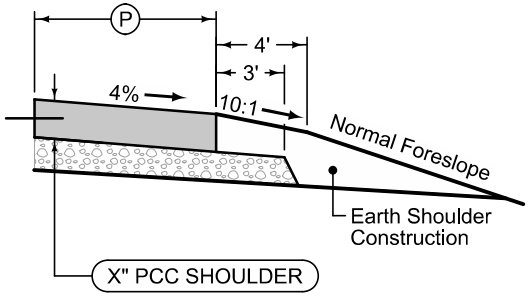
Auxiliary Lane

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

4_AL_Shldr_C_ 04-15-14	
(P) Feet	(G) Feet





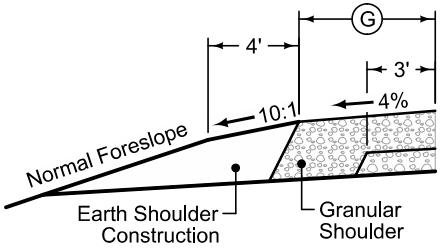
Auxiliary Lane

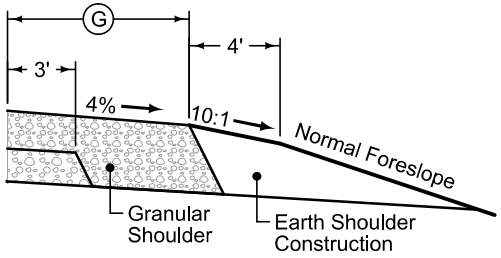
Full Depth Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

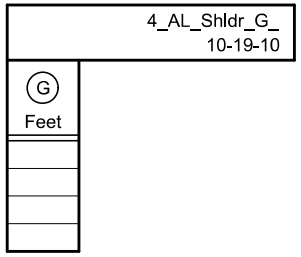
4_AL_Shldr_FullPCC_ 10-19-10
(P) Feet

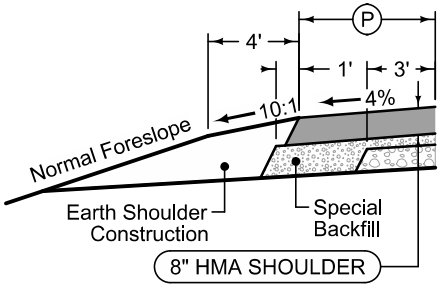
AUXILIARY LANE SHOULDERS
4 LANE

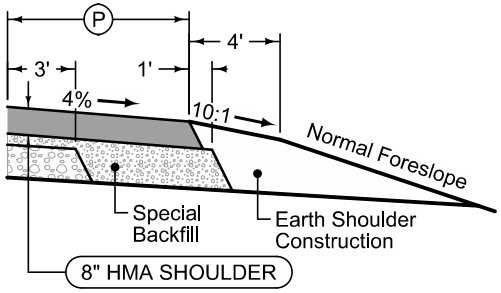


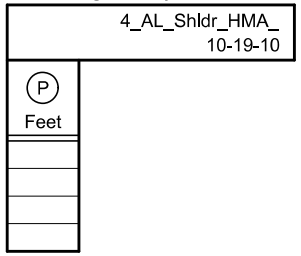


Auxiliary Lane
Granular Shoulder







Auxiliary Lane
HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B