

Paving and Reconstruction

7000s

PAVING

NO.	DATE	TITLE
7101	10-19-10	Typical Details of PCC Pavement Header
7102	04-21-15	HMA Pavement Header
7117	10-02-01	Granular Shoulder Construction Thru Entrances
7130	07-21-87	Beginning or Ending Transition for Detour Pavement
7131	10-18-22	Ramp Transition - 18' Loop to Tangent 16' Ramp
7134	10-15-13	Typical Fillet Section for Type 'B' Granular Surfaced Shoulder (Adjacent to HMA Resurfacing)
7135	10-15-13	Typical Section for Type 'B' Granular Shoulder (Adjacent to HMA Resurfacing)
7137	10-15-13	HMA Shoulder Resurfacing
7145	04-15-03	Aggregate for Paved Shoulder Fillet
7146	04-15-03	Earth for Paved Shoulder Fillet
7148	10-21-14	Fillet for Non-Paved Entrances or Side Roads
7149	04-15-14	Fillet Extension for Non-Paved Side Roads
7151	10-15-13	Typical Section Retrofit Paved Shoulder
7152	10-15-13	Typical Section Retrofit HMA Paved Shoulders
7154	04-20-10	Paved Shoulder Detail at Ramp Tapers (Non-Interstate)
7154A	10-20-09	Paved Shoulder Detail at Turn Lanes
7154B	10-19-21	Paved Shoulder Detail at Returns
7155	10-21-03	Paved Shoulder Detail at Climbing/Passing Lanes
7156	10-21-25	Paved Shoulder at Guardrail (Granular Shoulder Adjacent to Mainline)
7157	10-21-25	Paved Shoulder at Guardrail (Adjacent to Partial Width Paved Shoulder)
7158	10-21-25	Paved Shoulder at Guardrail (Adjacent to Full Width Paved Shoulder)

SECTION

MISCELLANEOUS DETAILS RECONSTRUCTION WORK**7200**

NO.	DATE	TITLE

SECTION

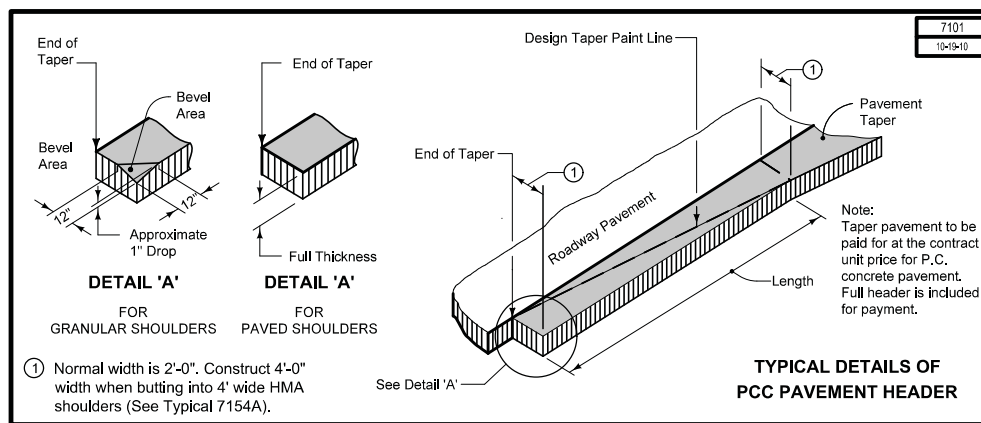
MISCELLANEOUS RESURFACING DETAILS**7300**

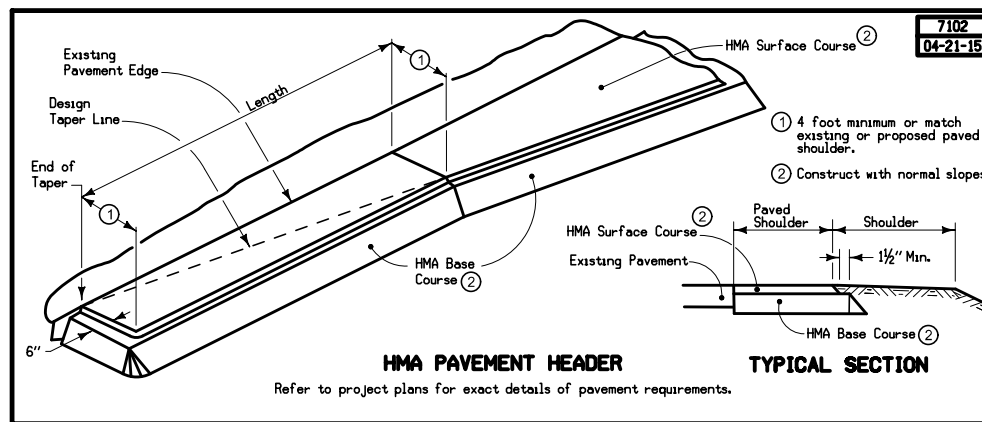
NO.	DATE	TITLE
7315	10-20-09	Longitudinal HMA Notched Wedge Joint

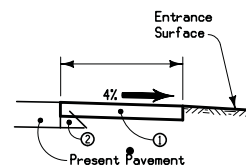
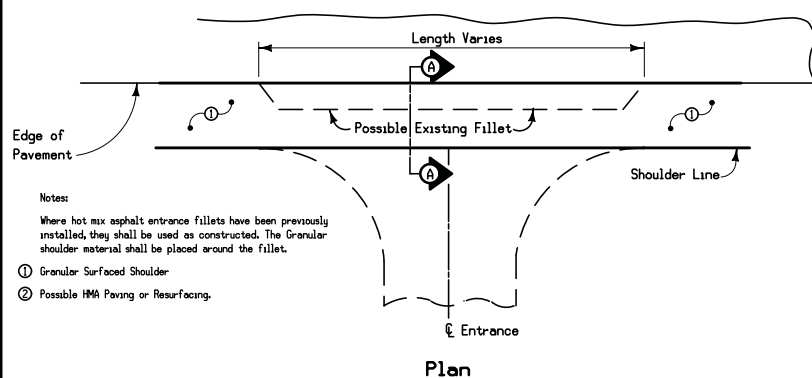
SECTION

PEDESTRIAN AND BICYCLE FACILITIES**7400**

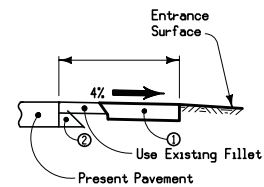
NO.	DATE	TITLE
7402	04-17-12	Typical Cross Section Recreation Trail Paved Surface



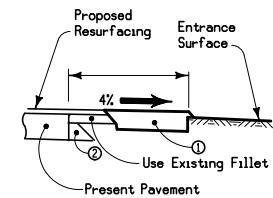




Section A-A
Without Fillet

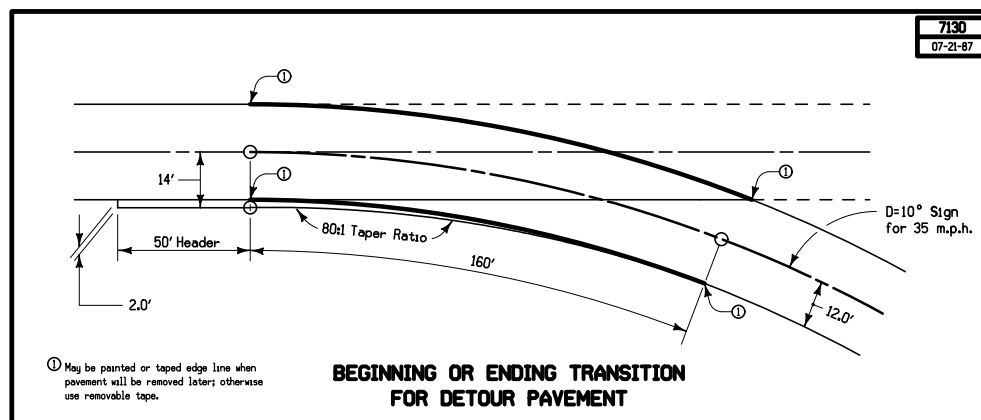


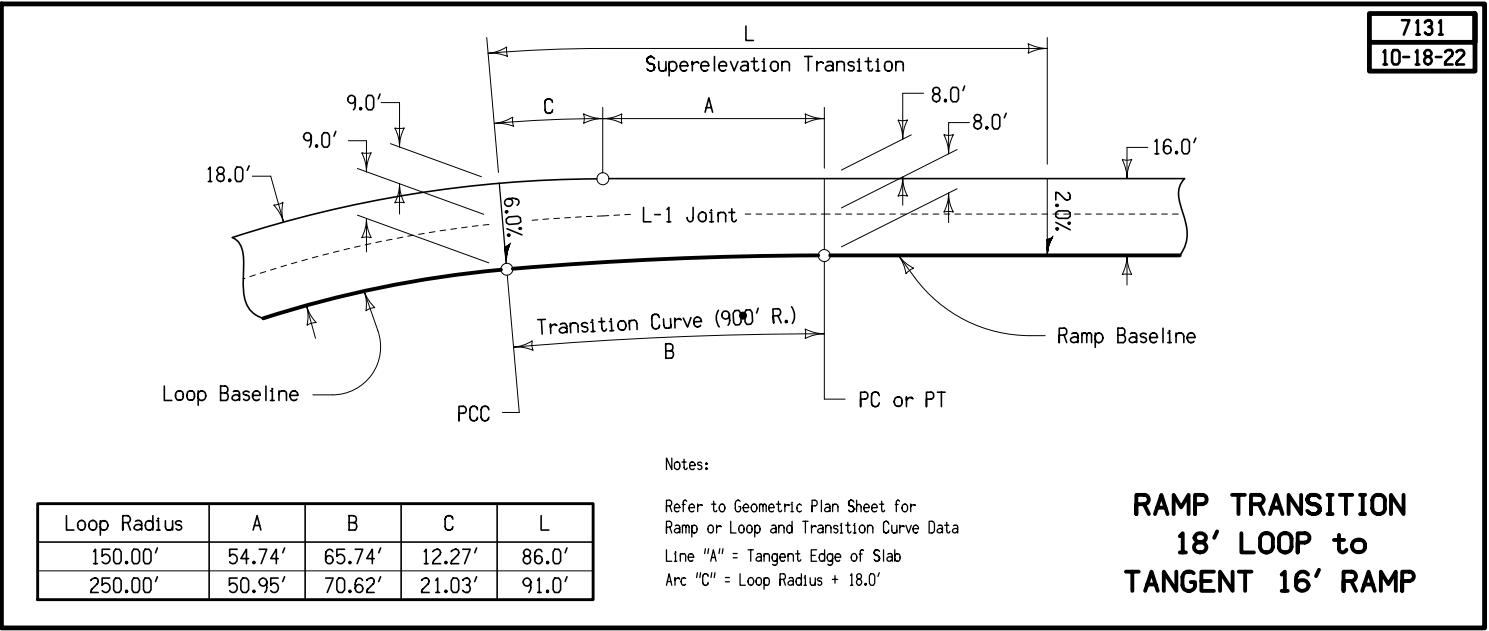
Section A-A
With Previous Fillet

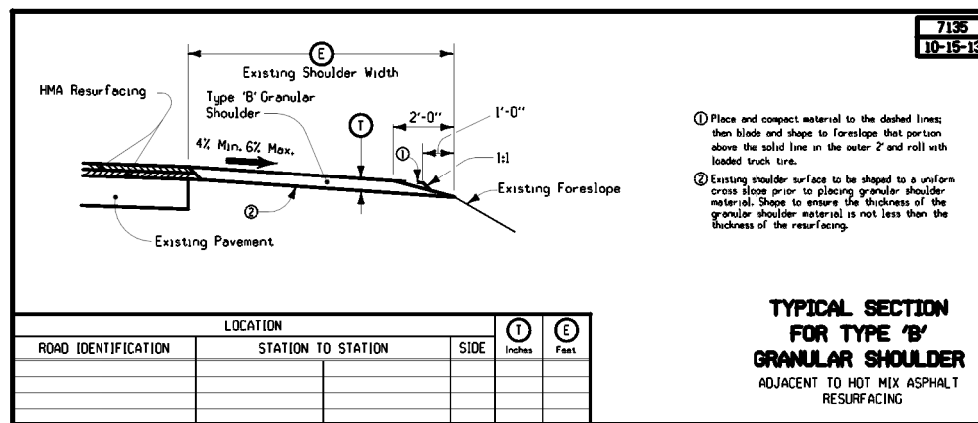


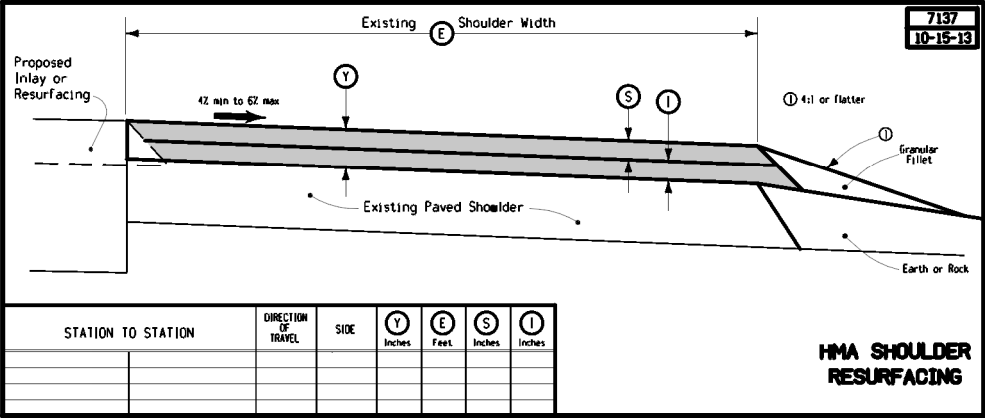
Section A-A
With Previous Fillet
And Resurfacing Less than 1½"

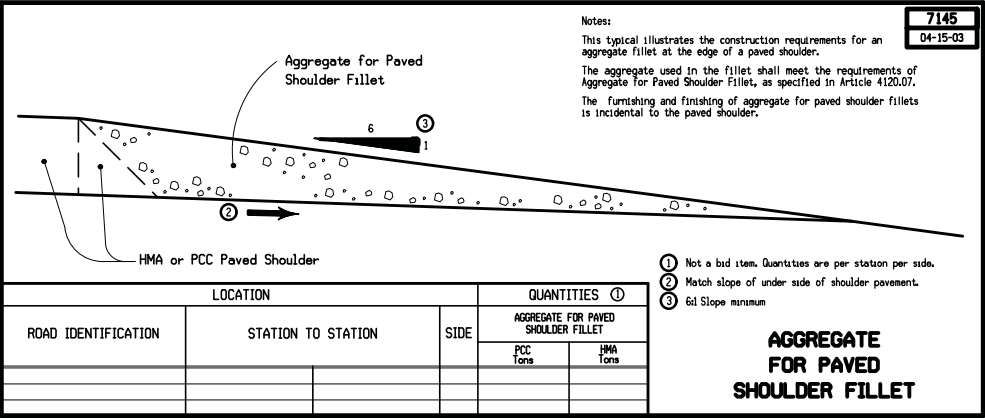
GRANULAR SHOULDER CONSTRUCTION THRU ENTRANCES

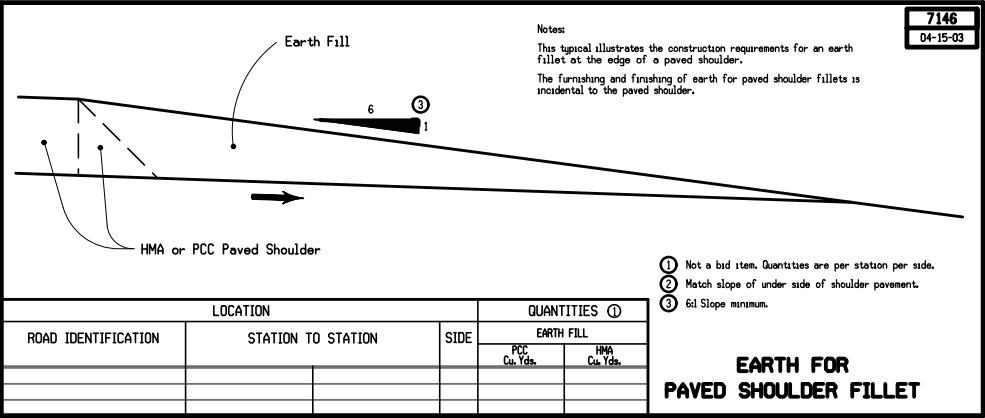


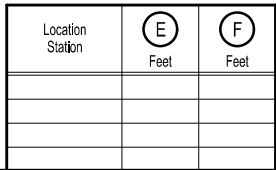




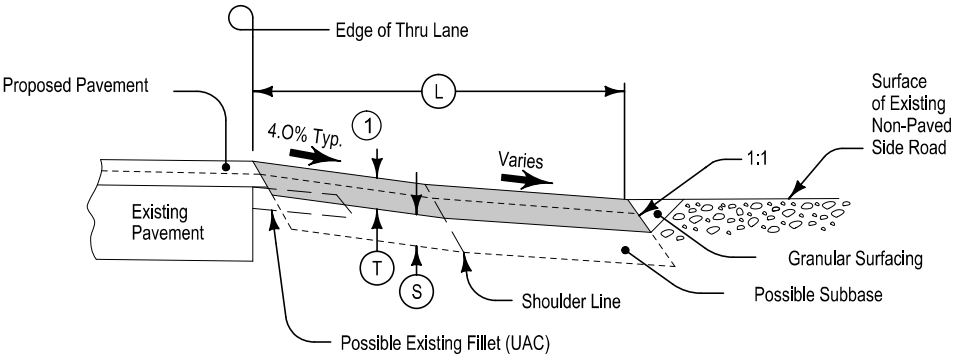
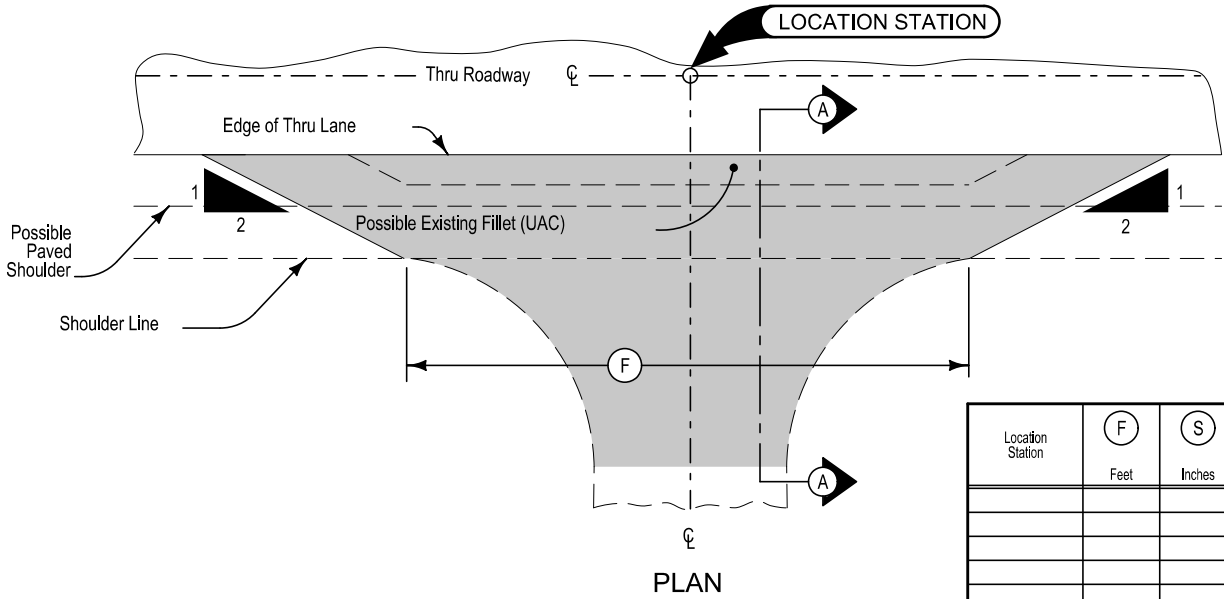








Quantities included with mainline quantities.



SECTION A-A

Special shaping of existing surface prior to placement of fillet or fillet extension may be required by the Engineer and is incidental to other work on the project.

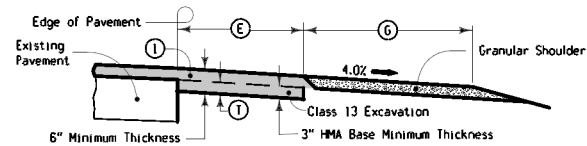
Pavement quantities included with mainline quantities.

① Match existing slope.

Location Station	(F) Feet	(S) Inches	(T) Inches	(L) (50' min.) Feet	Remarks

FILLET EXTENSION FOR NON-PAVED SIDE ROADS

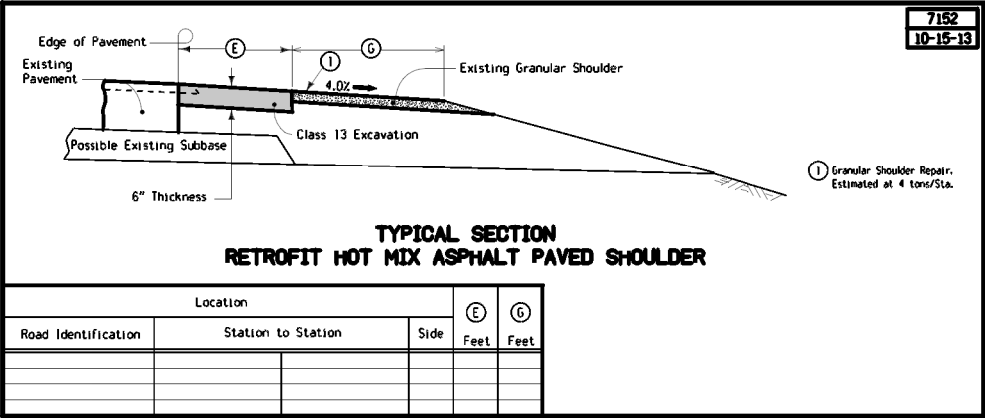
7151
10-15-13

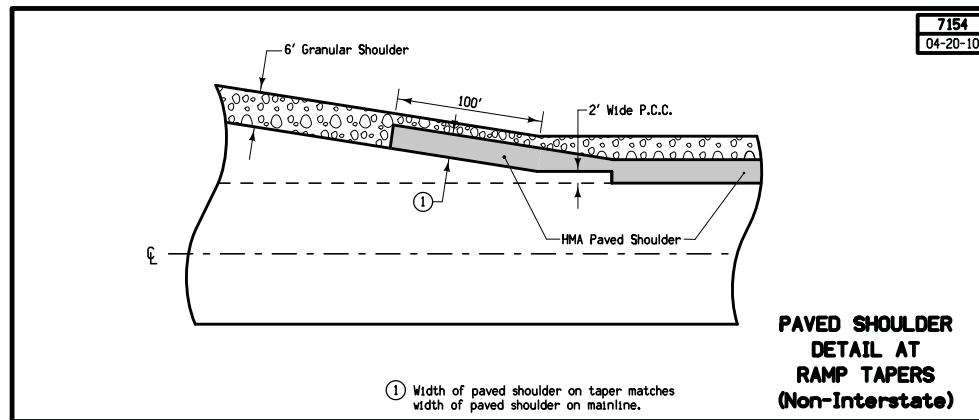


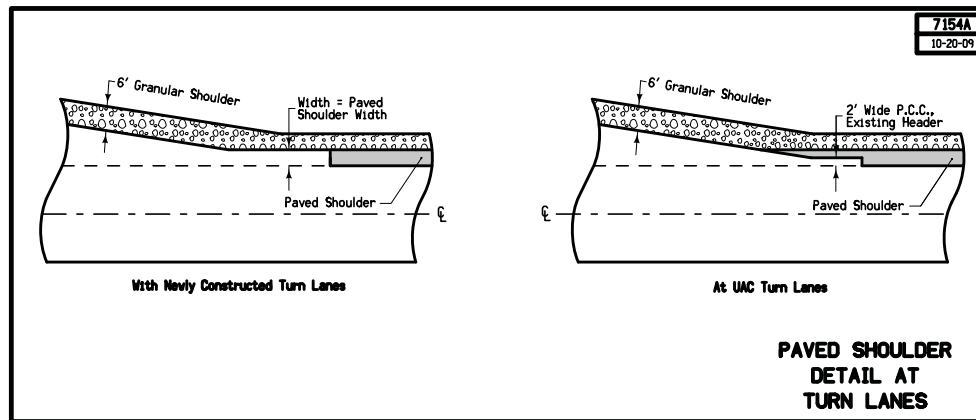
**TYPICAL SECTION
RETROFIT PAVED SHOULDER**

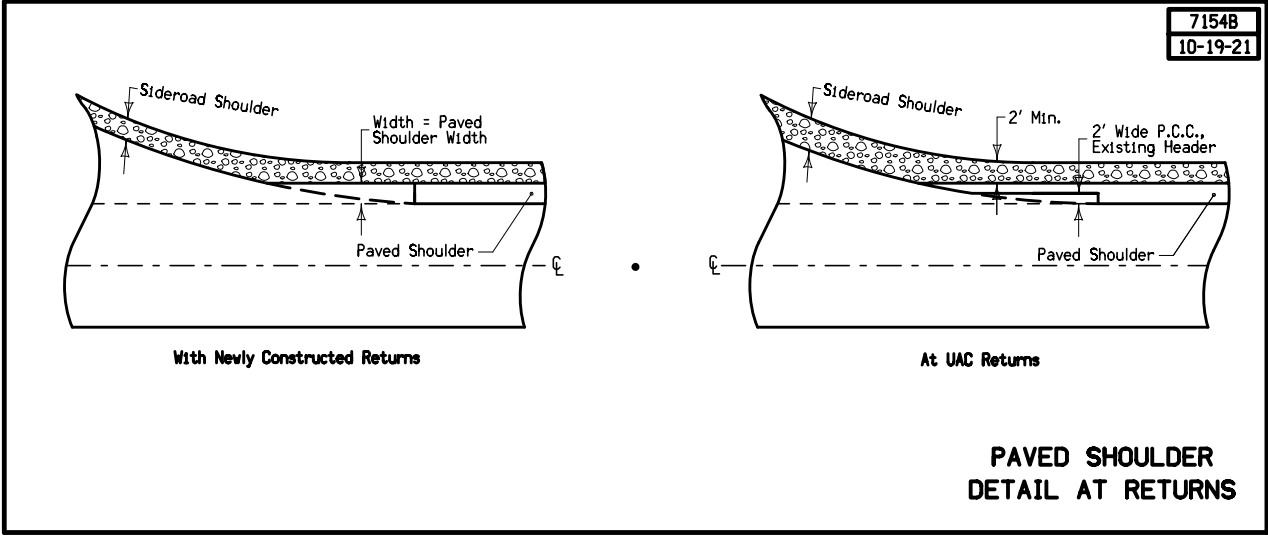
① HMA and tack coat quantities above the HMA base are included with mainline quantities.

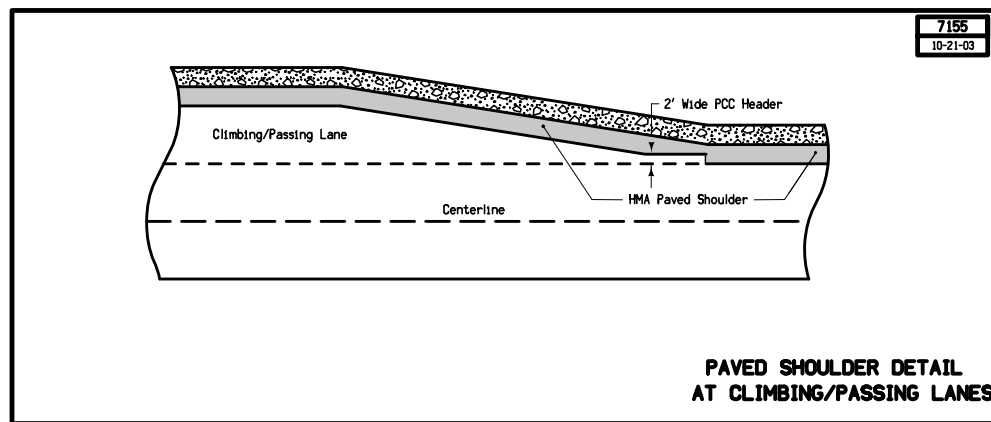
Location			⑤	①	⑥
Road Identification	Station To Station	Side	Feet	Inches	Feet

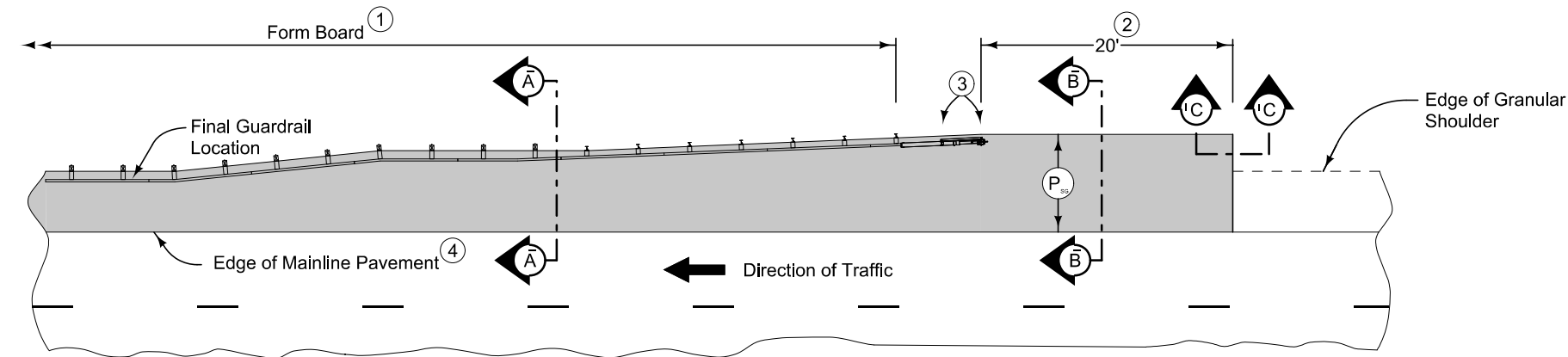




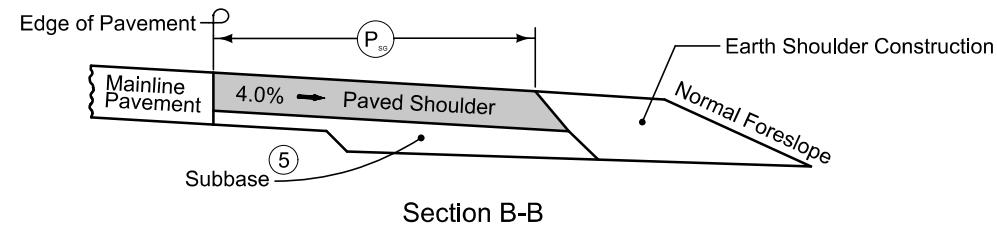
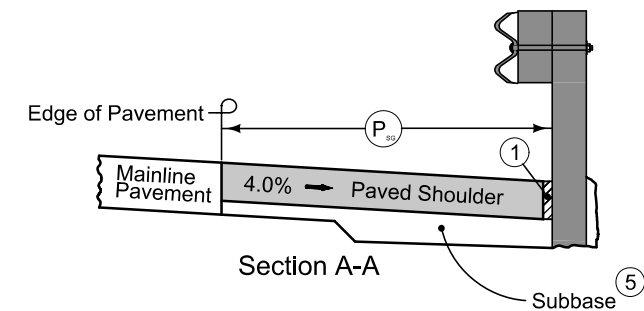




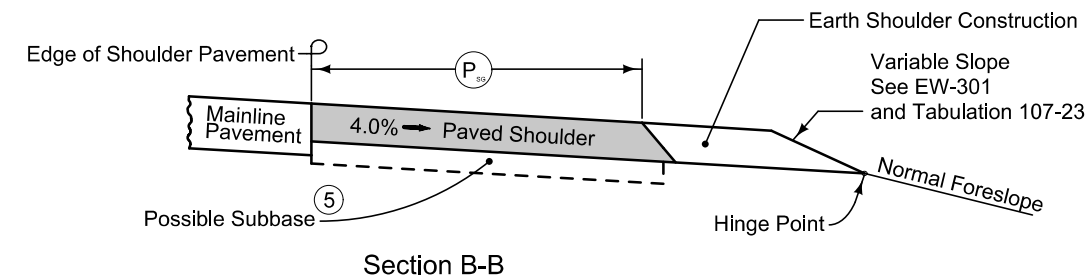
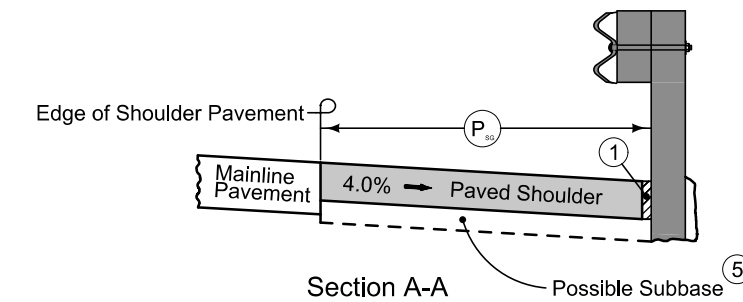




PLAN VIEW



NEW CONSTRUCTION



EXISTING SHOULDER

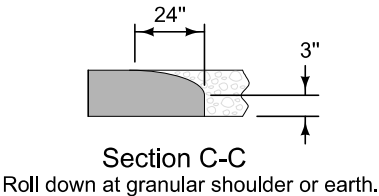
9" HMA Paved Shoulder at guardrail. 8" PCC may be substituted with the following jointing layout:

Match mainline pavement joint spacing. When mainline pavement is 8" or greater in thickness, place additional transverse 'C' joints in shoulder at mid-panel of the mainline pavement. Place longitudinal 'C' joint at P/2 from edge of mainline pavement when P is greater than 10' wide. Terminate longitudinal joint at transverse joint less than 10' in length.

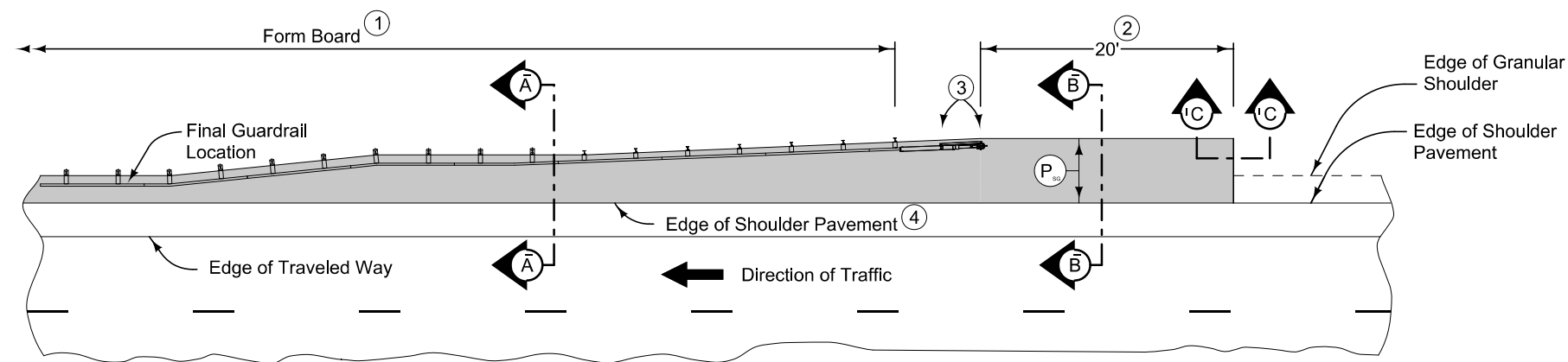
Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal and reinstallation of guardrail will be allowed with no additional payment.

Refer to Tabulation 112-9 for shoulder quantities.

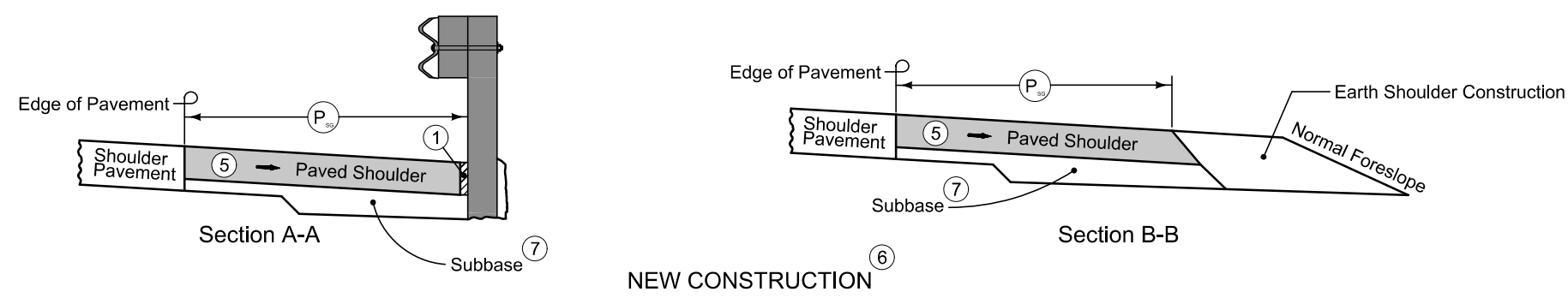
- ① PCC option only: When guardrail posts are installed prior to construction of PCC paved shoulder, fasten form board to the face of guardrail posts for the length shown.
- ② Continue paved shoulder 20 feet beyond the center of the first post.
- ③ Shoulder may be notched for first 2 posts or post sleeves may be installed through pavement. Do not drive posts through pavement.
- ④ 'BT' joint (per PV-101) for PCC shoulder.
'B' joint (per PV-101) for HMA shoulder.
- ⑤ Refer to other details in the plan.



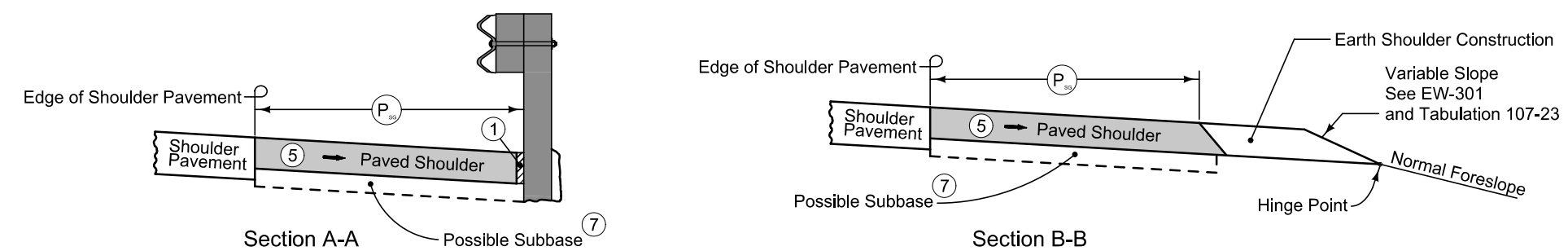
PAVED SHOULDER AT GUARDRAIL
(GRANULAR SHOULDER ADJACENT TO MAINLINE)



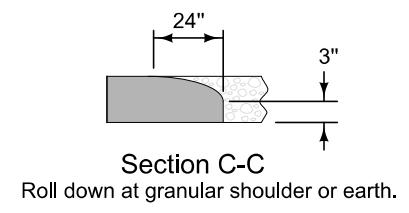
PLAN VIEW



NEW CONSTRUCTION



EXISTING SHOULDER



PAVED SHOULDER AT GUARDRAIL
(ADJACENT TO PARTIAL WIDTH PAVED SHOULDER)

9" HMA Paved Shoulder at guardrail. 8" PCC may be substituted with the following jointing layout:

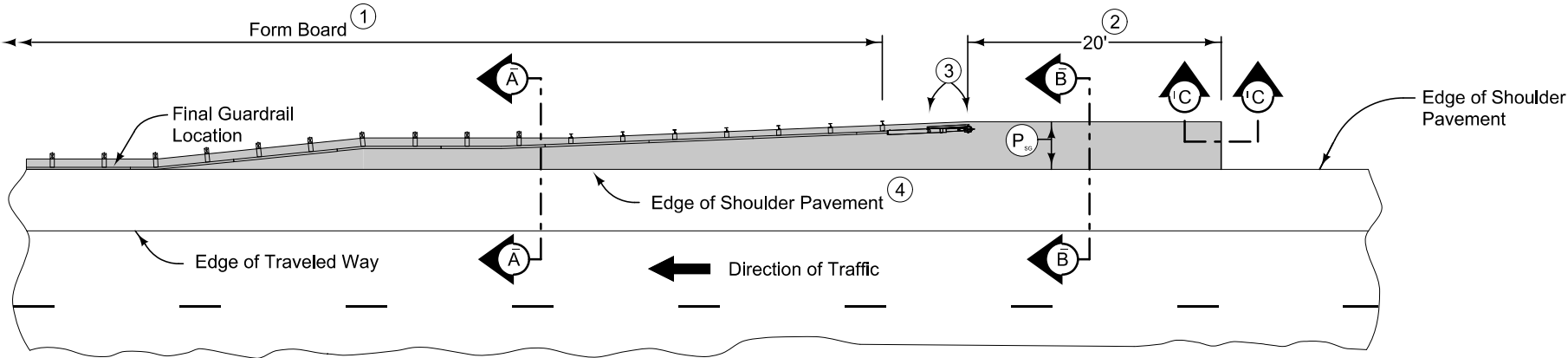
Match mainline pavement joint spacing. When mainline pavement is 8" or greater in thickness, place additional transverse 'C' joints in shoulder at mid-panel of the mainline pavement. Place longitudinal 'C' joint at P/2 from edge of mainline pavement when P is greater than 10' wide. Terminate longitudinal joint at transverse joint less than 10' in length.

Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal and reinstallation of guardrail will be allowed with no additional payment.

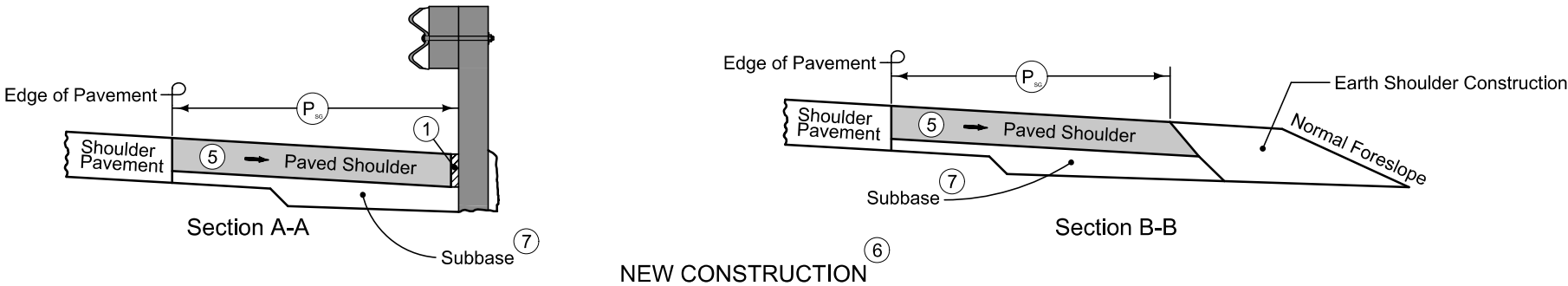
Refer to Tabulation 112-9 for shoulder quantities.

- ① PCC option only: When guardrail posts are installed prior to construction of PCC paved shoulder, fasten form board to the face of guardrail posts for the length shown.
- ② Continue paved shoulder 20 feet beyond the center of the first post.
- ③ Shoulder may be notched for first 2 posts or post sleeves may be installed through pavement. Do not drive posts through pavement.
- ④ 'BT' (per PV-101) joint for PCC shoulder.
'B' (per PV-101) joint for HMA shoulder.
- ⑤ Match shoulder slope.
- ⑥ The Contractor has the option to pave the paved shoulder at guardrail and the partial width paved shoulder as one operation.
- ⑦ Refer to other details in the plan.

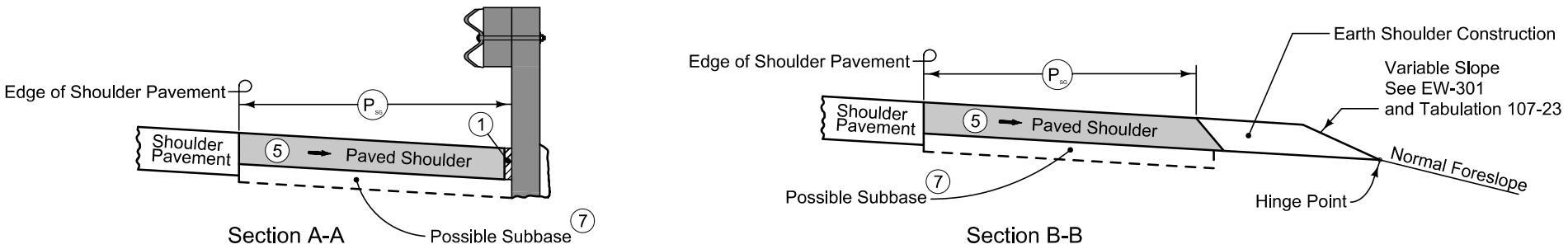
7158
10-21-25



PLAN VIEW



NEW CONSTRUCTION



EXISTING SHOULDER

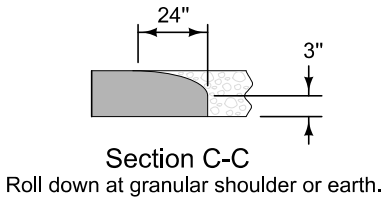
9" HMA Paved Shoulder at guardrail. 8" PCC may be substituted with the following jointing layout:

Match mainline pavement joint spacing. When mainline pavement is 8" or greater in thickness, place additional transverse 'C' joints in shoulder at mid-panel of the mainline pavement. Place longitudinal 'C' joint at P/2 from edge of mainline pavement when P is greater than 10' wide. Terminate longitudinal joint at transverse joint less than 10' in length.

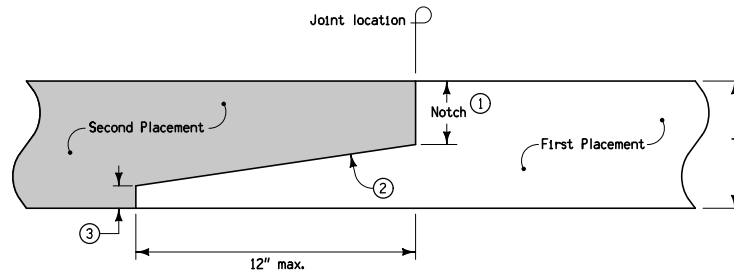
Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal and reinstallation of guardrail will be allowed with no additional payment.

Refer to Tabulation 112-9 for shoulder quantities.

- ① PCC option only: When guardrail posts are installed prior to construction of PCC paved shoulder, fasten form board to the face of guardrail posts for the length shown.
- ② Continue paved shoulder 20 feet beyond the center of the first post.
- ③ Shoulder may be notched for first 2 posts or post sleeves may be installed through pavement. Do not drive posts through pavement.
- ④ 'BT' (per PV-101) joint for PCC shoulder. 'B' (per PV-101) joint for HMA shoulder.
- ⑤ Match shoulder slope.
- ⑥ The Contractor has the option to pave the paved shoulder at guardrail and the full width paved shoulder as one operation.
- ⑦ Refer to other details in the plan.



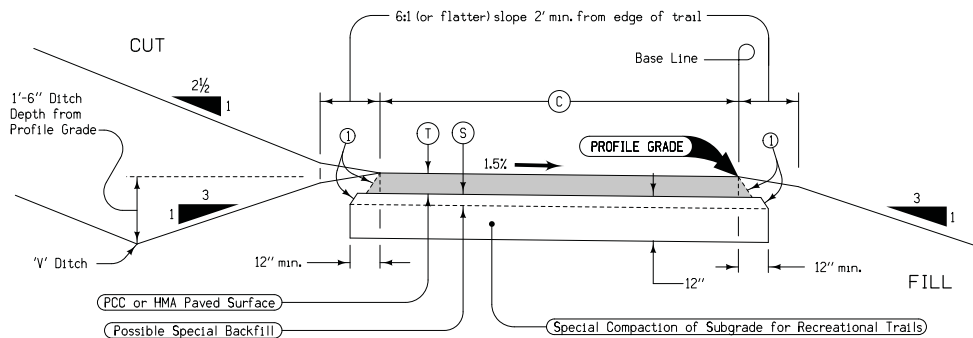
PAVED SHOULDER AT GUARDRAIL
(ADJACENT TO FULL WIDTH PAVED SHOULDER)



Notes:

- ① Notch: Min = nominal maximum aggregate size + $\frac{1}{4}$ ". Max = $T/2$.
- ② 12:1 Slope
- ③ Optional step at toe of slope: Max = 1".

**LONGITUDINAL HMA
NOTCHED WEDGE JOINT
T = 2" OR GREATER**



PAVEMENT THICKNESS		
Pavement Type	Trail Width	
	(C)	(T)
PCC	8'	4"
	10' or greater	5"
HMA	8'	5"
	10' or greater	6"

Notes:
 Bid item is "Recreational Trail".
 ① Nominal 1:1 slope (HMA only)

STATION TO STATION		PAVEMENT TYPE PCC, HMA, or option	(C) Feet	(S) Inches	V' DITCH	
					Left	Right

TYPICAL CROSS SECTION
 RECREATIONAL TRAIL
 PAVED SURFACE