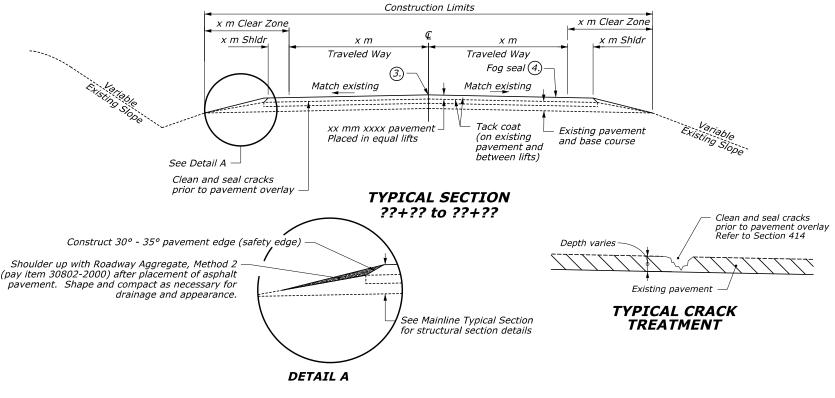
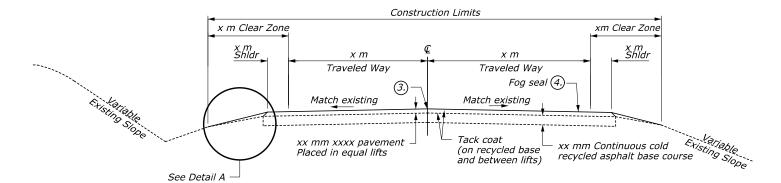
- $\begin{tabular}{ll} \end{tabular} \begin{tabular}{ll} \end{tabular} \begin{tabular}{ll} \end{tabular} Profile grade equals existing ground plus $x$ mm. Match existing horizontal alignment and cross slopes. \\ \end{tabular}$
- (4.) Apply fog seal according to Section 409 and as directed by the CO.



### **OVERLAY**

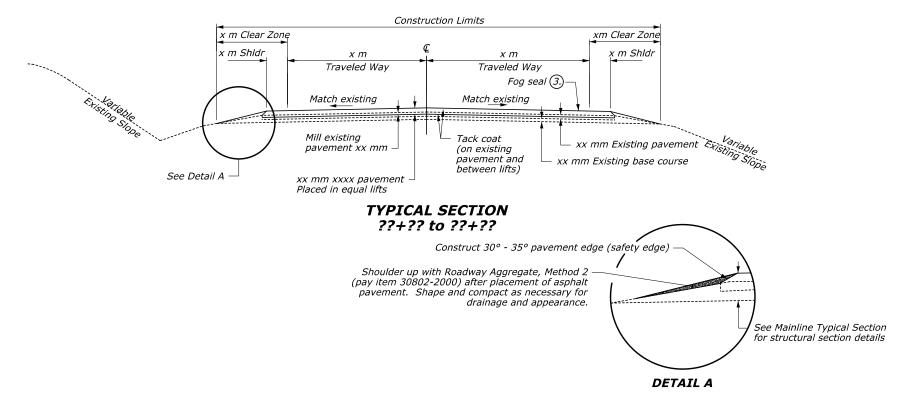
- (3.) Profile grade equals existing ground plus x mm.
- (4) Apply fog seal according to Section 409 and as directed by the CO.



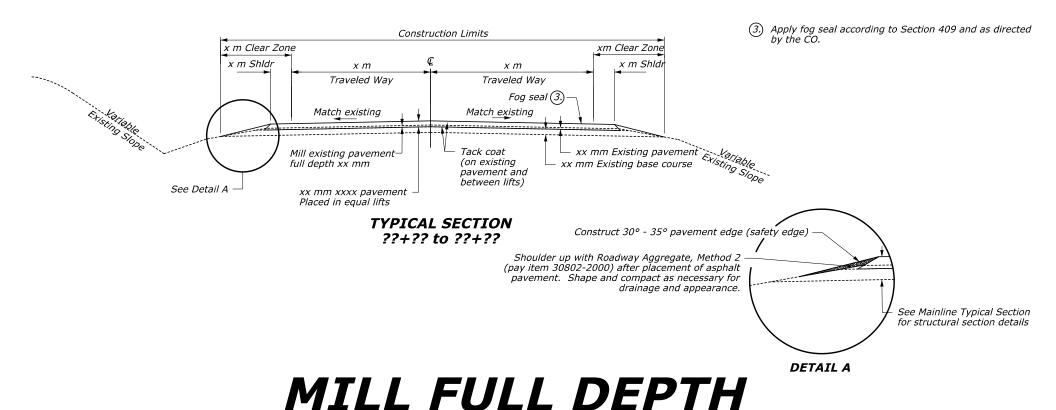
TYPICAL SECTION ??+?? to ??+??

# COLD IN-PLACE RECYCLING (CIPR)

(3) Apply fog seal according to Section 409 and as directed by the CO.



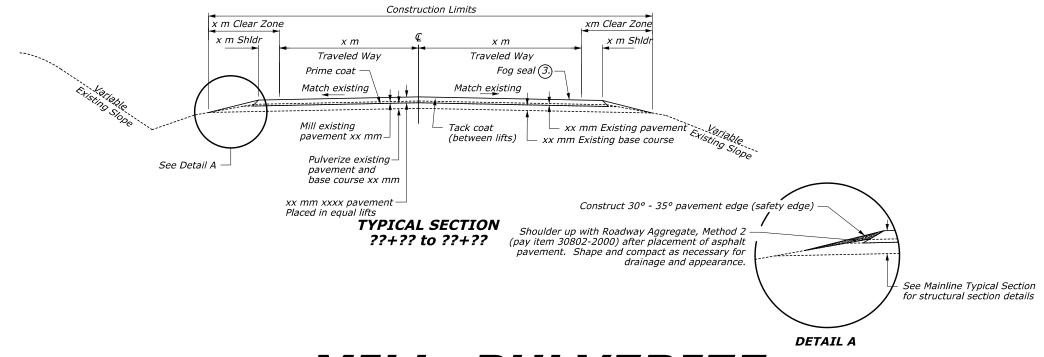
### MILL AND OVERLAY



AND OVERLAY

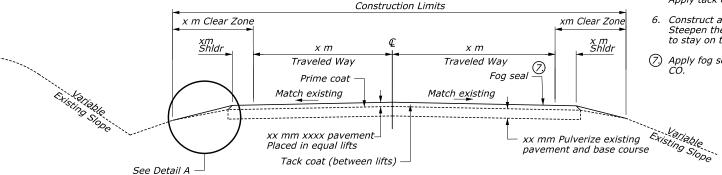
Note to Designer: In this case, it may be possible to change superelevations. However, it may require addition of aggregate base material.

(3.) Apply fog seal according to Section 409 and as directed by the CO.



## MILL, PULVERIZE, AND OVERLAY

Note to Designer: In this case, it may be possible to change superelevations. However, it may require addition of aggregate base material.



- 4. Pulverize the existing paved width or as directed by the CO. Pulverize to a depth of ??mm or ??mm below the full-depth of existing asphalt pavement, whichever is larger.
- Place asphalt concrete pavement in two equal lifts.
   Apply tack coat to the first lift prior to placing the second lift.
- Construct a 1:4 foreslope unless otherwise directed by the CO. Steepen the foreslopes as necessary, but not steeper than 1:2, to stay on the existing bench.
- Apply fog seal according to Section 409 and as directed by the CO.

#### TYPICAL SECTION ??+?? to ??+?? Pulverized Width x m Traveled way Foreslope Shoulder Construct 30° - 35° See mainline typical section for pavement edge structural section details (safety edge) Remove all pulverized asphalt material from this section. Incorporate pulverized material into the mainline base section. Shoulder up with Roadway Aggregate, Method 2

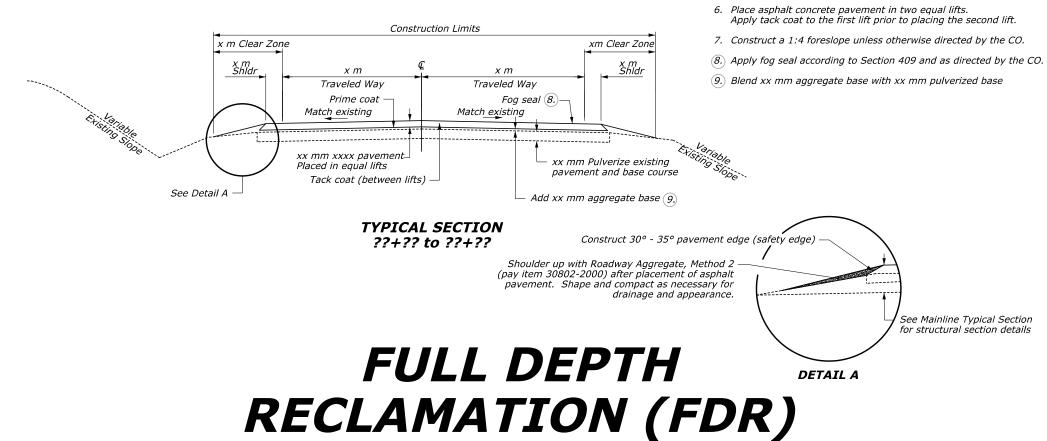
FULL DEPTH RECLAMATION (FDR)

(pulverize existing)

drainage and appearance. **DETAIL A** 

(pay item 30802-2000) after placement of asphalt payement. Shape and compact as necessary for

Note to Designer: In this case, it may be possible to change superelevations. However, it may require addition of aggregate base material.



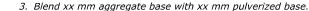
(pulverize existing and add aggregate base)

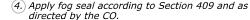
4. Pulverize the existing paved width or as directed by the CO. Pulverize to a depth of xx mm or xx mm below the full-depth

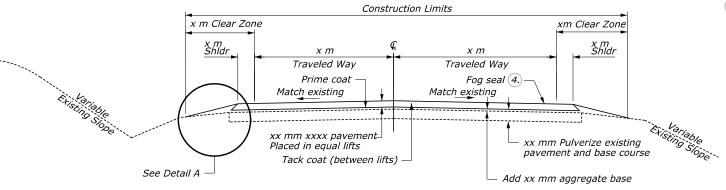
5. Spread pulverized asphalt and pave across the available width

on all curves. Add additional aggregate base if necessary.

of existing asphalt pavement, whichever is larger.

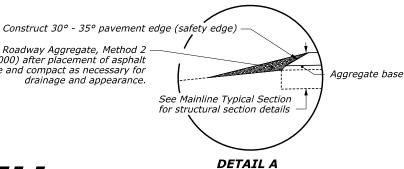






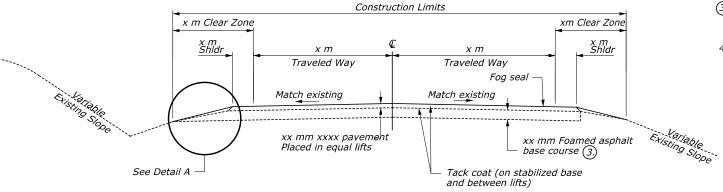
TYPICAL SECTION ??+?? to ??+??

Shoulder up with Roadway Aggregate, Method 2 (pay item 30802-2000) after placement of asphalt pavement. Shape and compact as necessary for drainage and appearance.



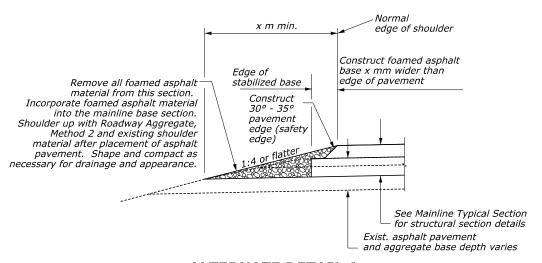
## FULL DEPTH RECLAMATION (FDR)

(add aggregate base and pulverize existing + new aggregate base)



- (3.) Extend depth of foamed asphalt base a minimum of ???mm into existing aggregate base or ???mm, whichever is greater. See Section 418 of the SCRs.
- 4. Blade existing shoulder material away from the roadway prior to recycling operations. Use available subgrade width to provide a maximum recycled width. After placement of asphalt pavement, use existing shouldering material to shoulder up pavement edge. Import additional shouldering material as needed. Additional material will be paid for as Roadway Aggregate, Method 2.

TYPICAL SECTION 22+22 to 22+22

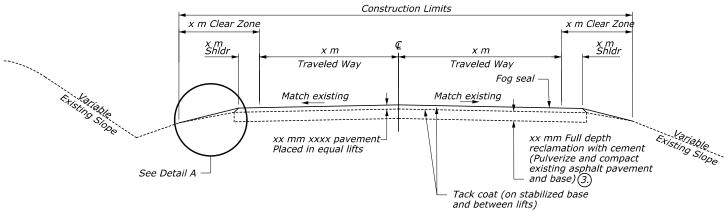


### ALTERNATE DETAIL A

(includes constructing foamed asphalt wider than existing edge of pavement)

## FDR WITH FOAMED ASPHALT

(3) Reclaim to the depth specified in the typical section or the full-depth of the pavement, whichever is larger. See the Pavement Report for more information on existing pavement conditions.



TYPICAL SECTION ??+?? to ??+??

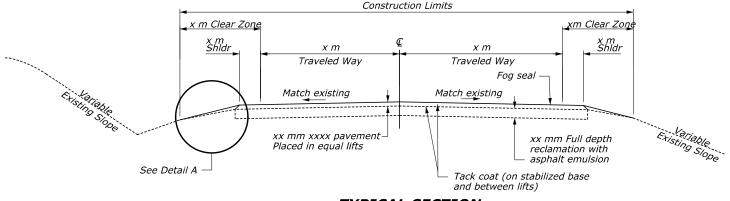
Construct 30° - 35° pavement edge (safety edge)

Remove all pulverized asphalt material from this section. Incorporate pulverized material into the mainline base section. Shoulder up with Roadway Aggregate, Method 2 (pay item 30802-0000) after placement of asphalt pavement. Shape and compact as necessary for drainage and appearance.

See Mainline Typical Section for structural section details

DETAIL A

## FDR WITH CEMENT



TYPICAL SECTION ??+?? to ??+??

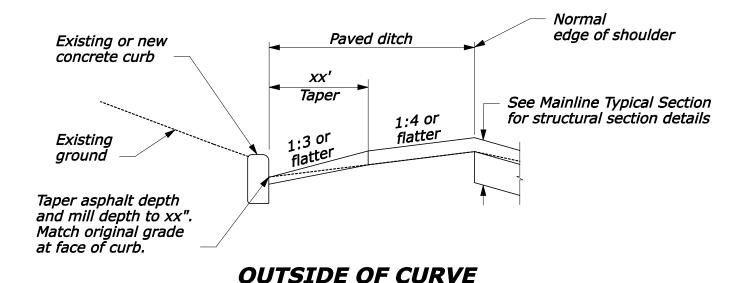


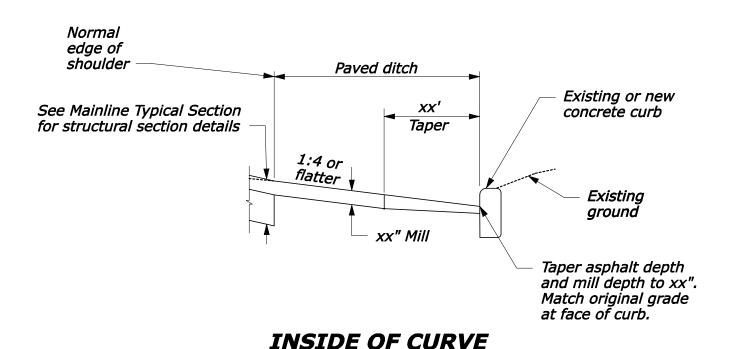
Shoulder up with Roadway Aggregate, Method 2 (pay item 30802-2000) after placement of asphalt pavement. Shape and compact as necessary for drainage and appearance.

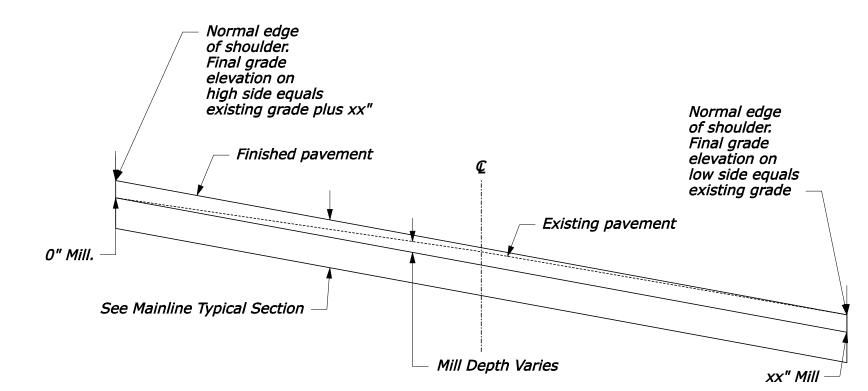
See Mainline Typical Section for structural section details

DETAIL A

## FDR WITH ASPHALT EMULSION

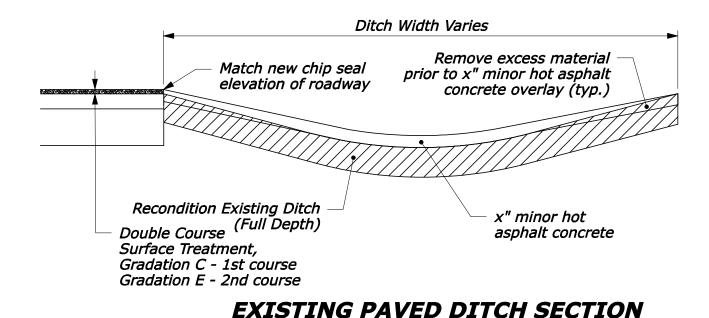




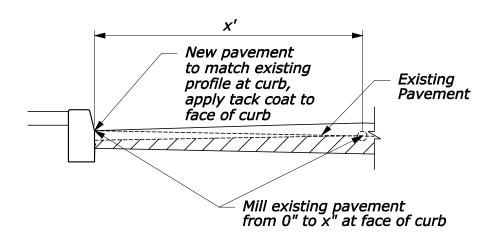


?? ROAD
SUPERELEVATION CORRECTION DETAIL
FOR ALL CURVES

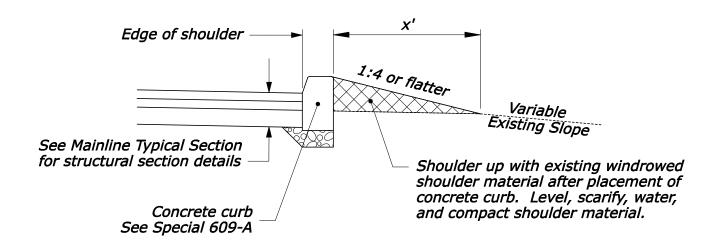
## SUPERELEVATION CORRECTION



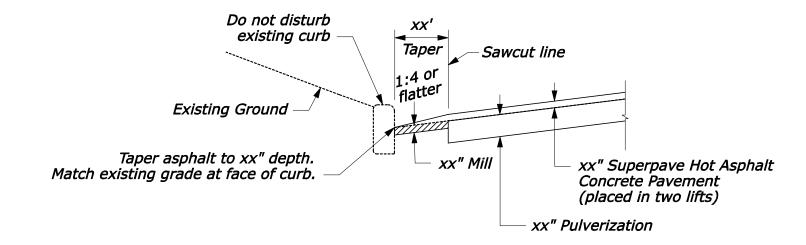
## 3R / PAVED DITCH



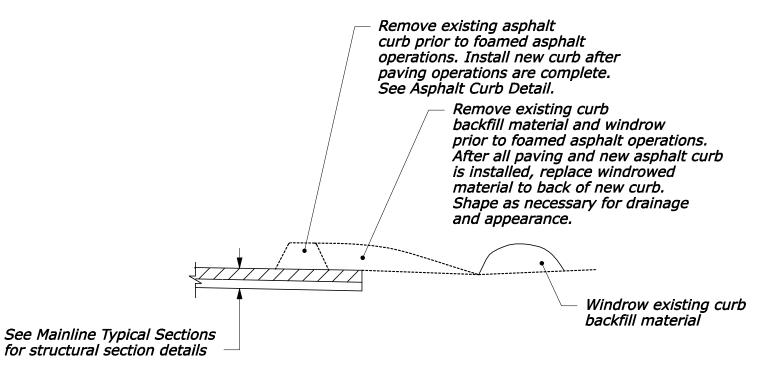
### **EXISTING CURB DETAIL**



**EXISTING CURB DETAIL** 



### EXISTING CURB DETAIL



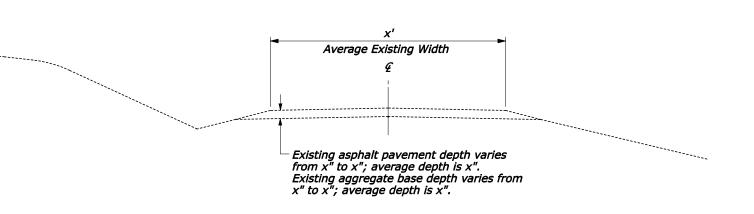
### **EXISTING CURB DETAIL**

See Drainage Summary for Locations

3R / CURB

### NOTE:

- 1. Existing superelevated and widened sections are not shown.
- 2. Dimensions shown are approximate and may be varied by the CO.



EXISTING TYPICAL SECTION ?? to ??

LENGTH OF PROJECT			
Station to Station	Roadway	Bridge	Road Inventory Program
	(ft)	(ft)	Milepost Data (Cycle #)*
??+?? to ??+??	?	?	??+?? to ??+??
??+?? to ??+??	?	?	??+?? to ??+??
??+?? to ??+??	?	?	??+?? to ??+??
TOTALS (ft)	?	?	_
TOTAL (mi)	?		_

<sup>\*</sup> Road Inventory Program data shown for information only

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION

U.S. CUSTOMARY SPECIAL

TYPICAL SECTIONS MAINLINE

NO SCALE

SPECIAL

PMIS NO.: XXXXX DRAWING NO.: XXX-XXXXX



### NOTES TO THE DESIGNER

Last Updated: January 2011

#### **General Information**

- 1. *3R Surfacing Options*. When it comes to 3R surface treatments, there are a wide variety of options available. Some of the more common options are shown in this template drawing. However, you will probably need to adjust the template drawing to fit your project. Select the drawing that most closely fits your pavement recommendations and coordinate with the Pavements Engineer to adjust the template to fit your project.
- 2. Road Inventory Program Milepost data. The NPS uses the Road Inventory Program (RIP) as part of their asset management program. Include the RIP milepost data in the 'Length of Project' table for NPS projects only. To find this information, use VisiData (see the VisiData Route\_GPS Workspace to see mileposts and GPS longitude and latitude) or ask Planning and Programming. Delete the last column in the 'Length of Project' table for all non-NPS projects (e.g. USFS, USFWS, IRR, etc).
- 3. **Safety Edge**. Use the safety edge on all projects with asphalt surfacing with the following exceptions: roadways w/curb and gutter, bridges and other structures, parking areas, projects less than 1000 ft long, such as bridge approaches, pavement preservation projects.

### **Applicable SCRs**

Varies

### Typical Pay Item Used

Varies

### **Updates**

- New Template January 2010
- January 2011 Include safety edge in Detail A