

CATCH BASIN LAYOUT AT BRIDGE ENDS

		A
		-

	TABLE OF QUANTITIES				
	DESCRIPTION	FRAME AND GRATE			
		TYPE A	TYPE B		
Ī	Reinforcing Steel	70 lbs	70 lbs		
	Structural Steel	215 lbs	238 lbs		
	Concrete	0.85 cuyd	0.85 cuyd		

Align curb with

face of guardrail

6"

1:10

Variable

Asphalt or

3'-6"

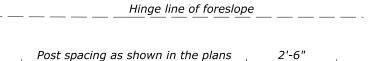
All reinforcing steel

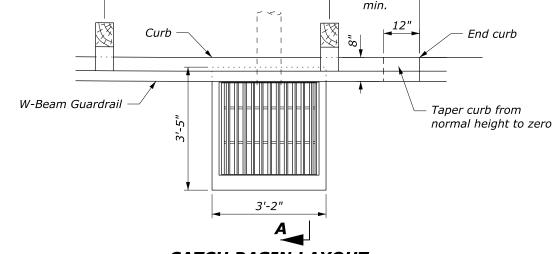
#4 at 12"±. Bend to clear pipe

concrete pavement Wood or steel post and blockout

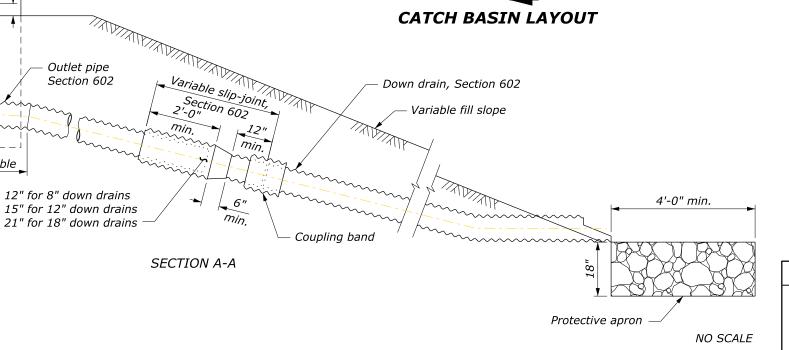
Outlet pipe

Section 602





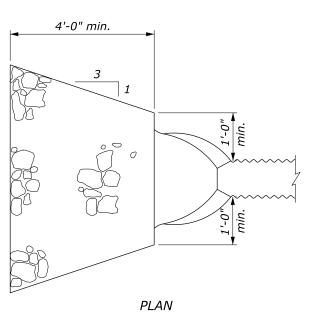
CATCH BASIN LAYOUT



Down drain, Section 602

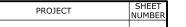
NOTE:

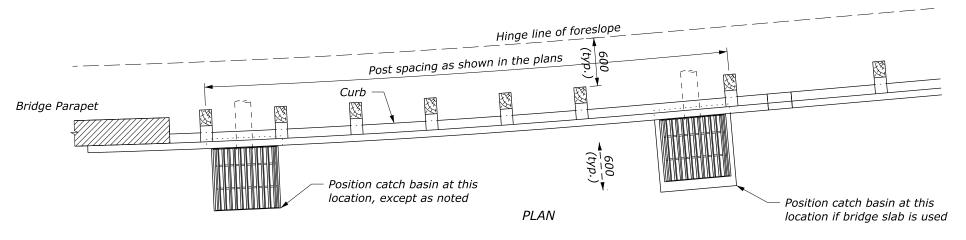
- 1. Chamfer all exposed edges 3/4 inch and finish all exposed surfaces with a Class 1 ordinary finish.
- 2. The minimum concrete cover to the face of any bar is $1\frac{1}{2}$ inches unless otherwise shown.
- 3. See Standard 604-2 for Type A Frame and Grate and Standard 604-3 for Type B Frame and Grate.
- 4. Make all coupling band connections watertight by placing 3/16-inch bead of approved caulking under each half of the bands before tightening.
- 5. Fabricate tapered portion of slip-joint from either flat or corrugated sheets.
- 6. Place Class 2 riprap according to Section 251 for protective



PROTECTIVE APRON

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	FLH STANDARD 604-4
CATCH BASIN	SPECIFICATION FP-14, FP-24
TYPE 2	APPROVED FOR USE
WITH DOWN DRAIN	1/2024





CATCH BASIN LAYOUT AT BRIDGE ENDS

Section 602

150

min.

min.

SECTION A-A

A
-

	TABLE	OF QUANTITI	ES	
	DESCRIPTION	FRAME AND GRATE		
		TYPE A	TYPE B	
-	Reinforcing Steel	32 kg	32 kg	
	Structural Steel	98 kg	108 kg	
	Concrete	0.6 m³	0.6 m³	

Align curb with

face of guardrail

150

150

Variable

1:10

Asphalt or

1050

concrete pavement

All reinforcing

#13 at 300±. Bend to clear pipe Wood or steel post and blockout

Outlet pipe

Section 602

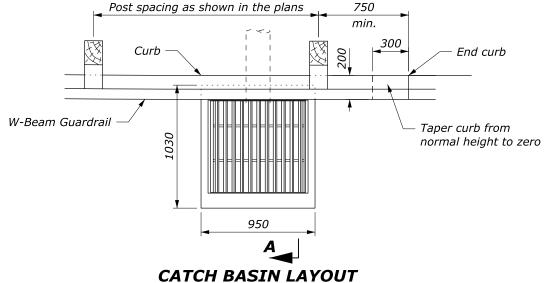
300 for 200 down drains

375 for 300 down drains

525 for 450 down drains

Hinge line of foreslope

Down drain, Section 602



Variable fill slope

1200 min.

Protective apron

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY

CATCH BASIN TYPE 2 WITH DOWN DRAIN

FLH STANDARD
M604-4

SPECIFICATION FP-24, FP-14 APPROVED FOR USE 1/2024

PROTECTIVE APRON

This drawing contains **Metric** units of measure.

Dimensions without units are millimeters.

PLAN

400

min.

NO SCALE

NOTE:

ordinary finish.

1. Chamfer all exposed edges 20 mm

50 mm unless otherwise shown.

1200 min.

bands before tightening.

corrugated sheets.

and finish all exposed surfaces with a Class 1

2. The minimum concrete cover to the face of any bar is

3. See Standard M604-2 for Type A Frame and Grate and Standard M604-3 for Type B Frame and Grate.

4. Make all coupling band connections watertight by placing

5. Fabricate tapered portion of slip-joint from either flat or

6. Place Class 2 riprap according to Section 251 for protective

5 mm bead of approved caulking under each half of the