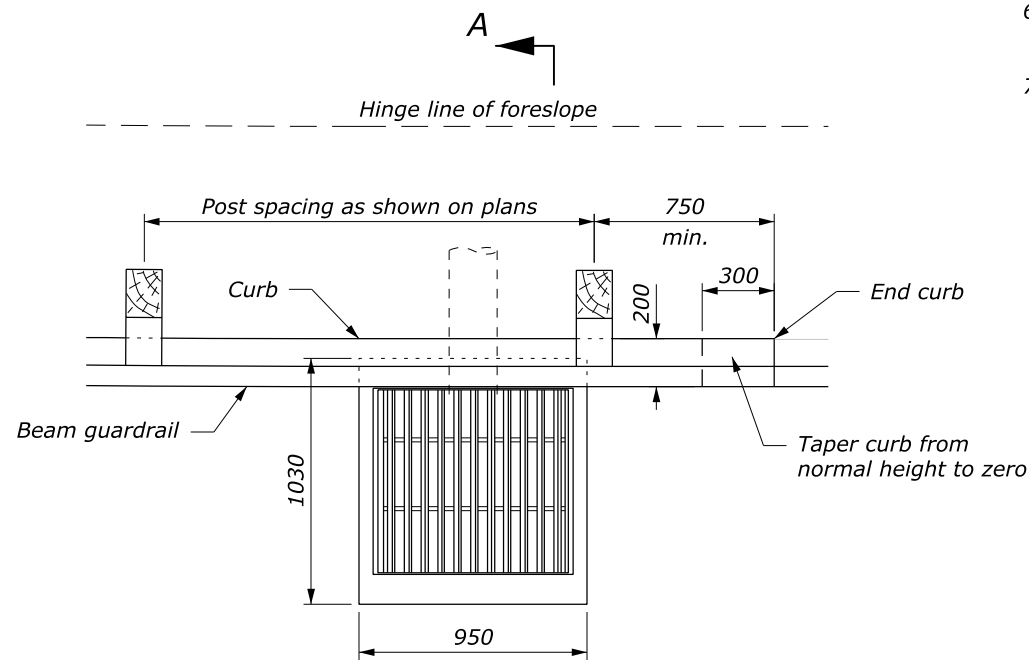


**CATCH BASIN LAYOUT AT BRIDGE ENDS**

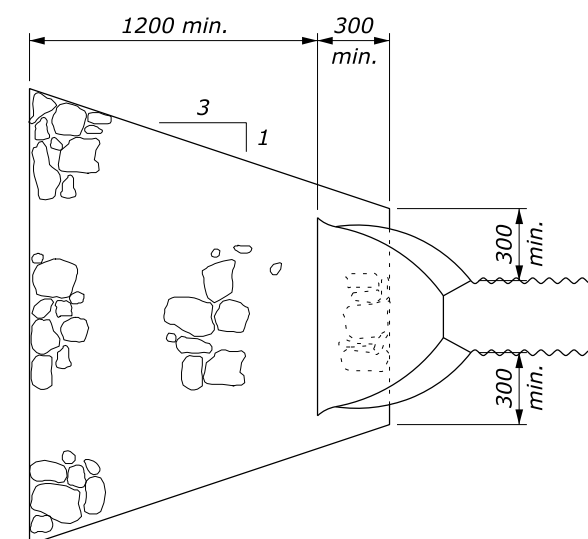
**NOTE:**

1. CONCRETE: Chamfer exposed edges 20 mm unless otherwise shown. Give all concrete surfaces a Class 1 finish.
2. Provide 50 mm minimum concrete cover to the face of any bar unless otherwise shown.
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 mm 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 conforming to Section 251 for protective apron.
7. Dimensions without units are millimeters.

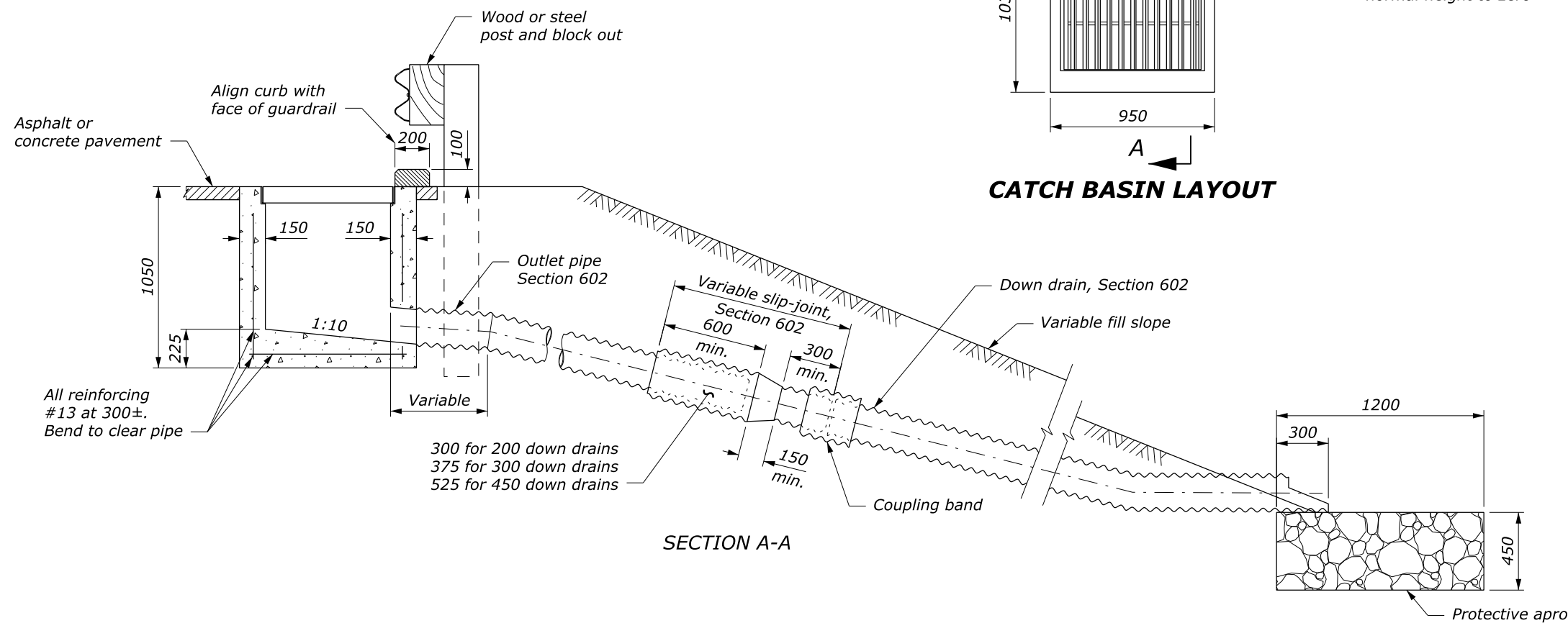
| DESCRIPTION       | FRAME AND GRATE    |                    |
|-------------------|--------------------|--------------------|
|                   | TYPE A             | TYPE B             |
| Reinforcing Steel | 32 kg              | 32 kg              |
| Structural Steel  | 98 kg              | 108 kg             |
| Concrete          | 0.6 m <sup>3</sup> | 0.6 m <sup>3</sup> |



**CATCH BASIN LAYOUT**



**PROTECTIVE APRON**



**SECTION A-A**

NO SCALE

|  |                    |
|--|--------------------|
| U.S. DEPARTMENT OF TRANSPORTATION<br>FEDERAL HIGHWAY ADMINISTRATION<br>FEDERAL LANDS HIGHWAY |                    |
| METRIC STANDARD<br><b>CATCH BASIN<br/>TYPE 2<br/>WITH DOWN DRAIN</b>                         |                    |
| STANDARD APPROVED FOR USE 3/1996<br>REVISED: 5/1997 6/2005                                   | STANDARD<br>M604-4 |