### **AGGREGATE DITCH** FOR FLEXIBLE DITCH LINING

BEDDING STONE WILL BE USED IN

OF AGGREGATE DITCH.

ACCORDANCE WITH ARTICLE 281 OF

THE STANDARD SPECIFICATIONS, THE

COST WILL BE INCLUDED IN THE COST

1) Class A3 or A4 can be used for ditch lining. Use A4 for velocities greater than 3.66 m/s (12 fps.) A3 may be used as an alternate to fibermat.

DESIGNER NOTES

2) Include pay item for FILTER FABRIC FOR USE WITH RIPRAP. Note the specification book does not require fabric on A3 but include it when using this standard.

3) Example: Class A4 means A quality and aradation RR 4 See Article 705.01 for size

4) Remember to fill in the dimensions on the ditch section above.

5) Add the class A3 or A4 to the note on the bottom right.

6) Use Pay Item 28300470 Aggregate Ditch 12" or MX283010 Aggregate Ditch, 300 mm

TCH FLOW AGGREGATE DITCH: FILTER FABRIC

> CLASS A4 WILL BE REQUIRED ON THIS PROJECT AT THE LOCATION SHOWN ON THE PLANS.

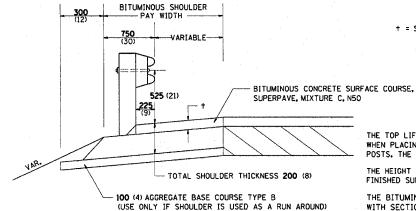
> THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 283. AGGREGATE DITCH WILL BE MEASURED FOR PAYMENT IN PLACE AND THE AREA COMPUTED IN TONS OF ACTUAL SURFACE AREA. AGGREGATE DITCH WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TONS FOR AGGREGATE DITCH. 12" & VARIABLE.

> > ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

> > > REVISED 4-12-01 21.4

### DETAIL OF BITUMINOUS SHOULDER AT GUARD RAIL





+ = SEE TYPICAL SECTIONS

GENERAL NOTES

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED.

THE HEIGHT OF THE GUARD RAIL SHALL BE SET 525 (21) FROM THE FINISHED SURFACE.

THE BITUMINOUS SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50, AND SQUARE METER (SQUARE YARD) FOR BITUMINOUS SHOULDERS SUPERPAVE OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C. N50.

> ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

23.4

## **BITUMINOUS SHOULDER**

# BITUMINOUS SHOULDER PAY WIDTH 8" TOTAL SHOULDER THICKNESS - BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C, N50

t = SEE TYPICAL SECTIONS FOR THICKNESS

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

### GENERAL NOTES

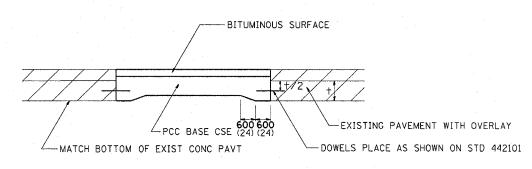
THE BITUMINOUS SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C. N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C. N50. AND SQUARE YARD FOR BITUMINOUS SHOULDERS SUPERPAVE OF THE THICKNESS SPECIFIED.

USE RITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE. MIXTURE C, N50, WHEN RESURFACING EXISTING BITUMINOUS SHOULDERS THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIXTURE C. N50.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE BITUMINOUS SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

\* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

## PORTLAND CEMENT CONCRETE BASE COURSE DETAIL



#### GENERAL NOTES

THE LONGITUDINAL JOINT & BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD 353001.

PAVEMENT FABRIC SHALL BE PLACED IN ACCORDANCE WITH STANDARD 420601.

THE BASE COURSE SHALL BE TIED TO THE EXISTING PAVEMENT AS SHOWN WITH DOWEL BARS AS SHOWN IN STANDARD 442101. THIS COST TO BE INCLUDED IN THE COST OF THE BASE COURSE.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE STATED.

TABLE OF BARS

PAVEMENT	DOWEL BAR	HOLE
THICKNESS	DIAMETER	DIAMETER
200 or greater	38	41
(8)	(1½)	(1 <mark>5%</mark> )
180 thru 199	32	35
(7) (7.99)	(1 <mark>/</mark> 4)	(13%)
Less than 180	25	29
(7)	(j)	(1 <sup>1</sup> / <sub>8</sub> )

10 BARS FOR 12' PAVEMENT 12 BARS FOR 14' PAVEMENT 14 BARS FOR 16' PAVEMENT

REVISED 1-27-00

24.4

23.4a

DATE NAME SCALE ENCE

REV. 5-30-03