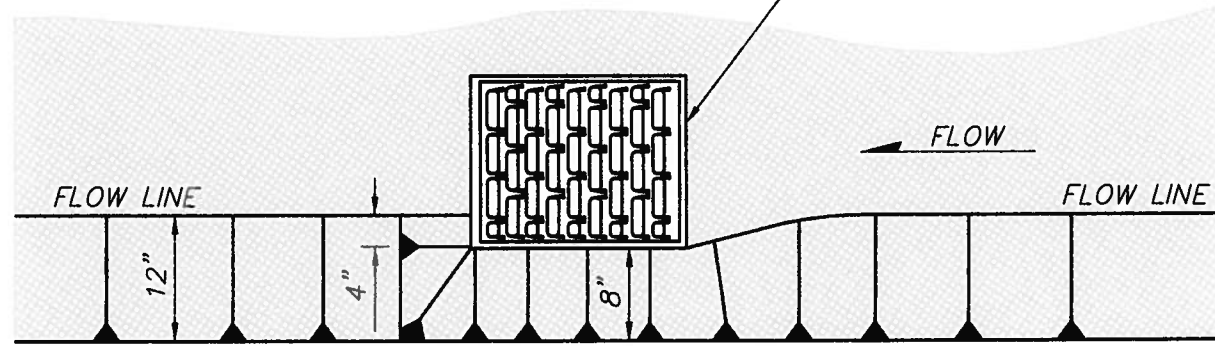
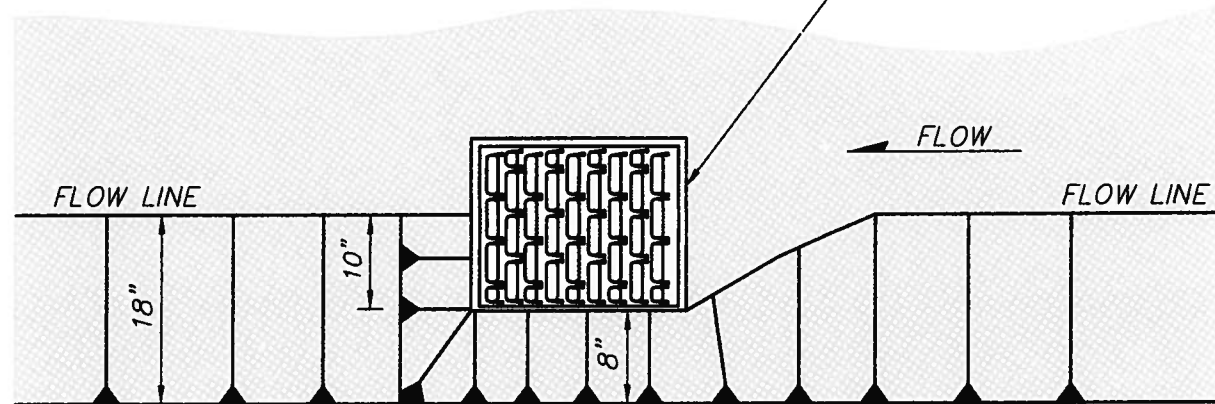


RECTANGULAR VANED GRATE, CURRENT WSDOT  
STANDARD PLAN B-30.30-XX



**ASPHALT CONCRETE BARRIER CURB**

RECTANGULAR VANED GRATE, CURRENT WSDOT  
STANDARD PLAN B-30.30-XX

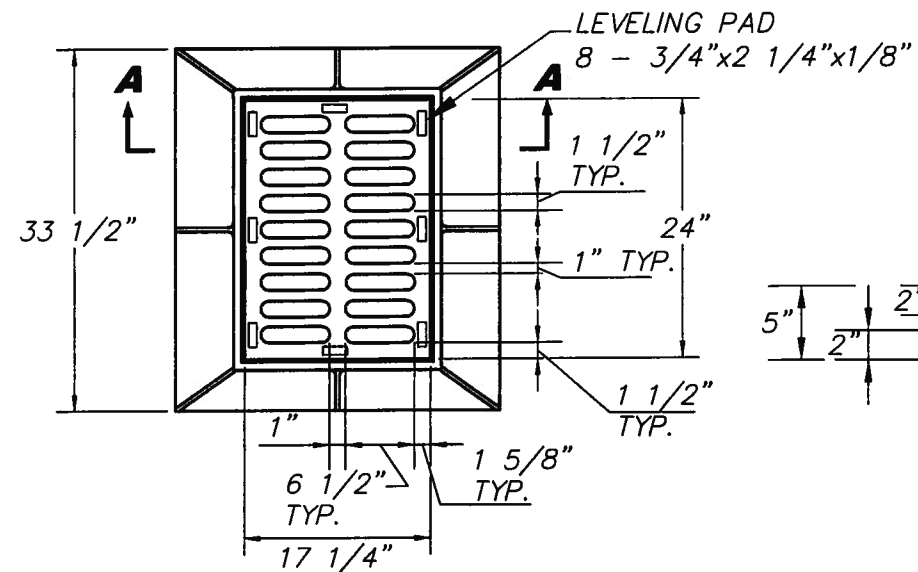


**ASPHALT CONCRETE RAISED EDGE**

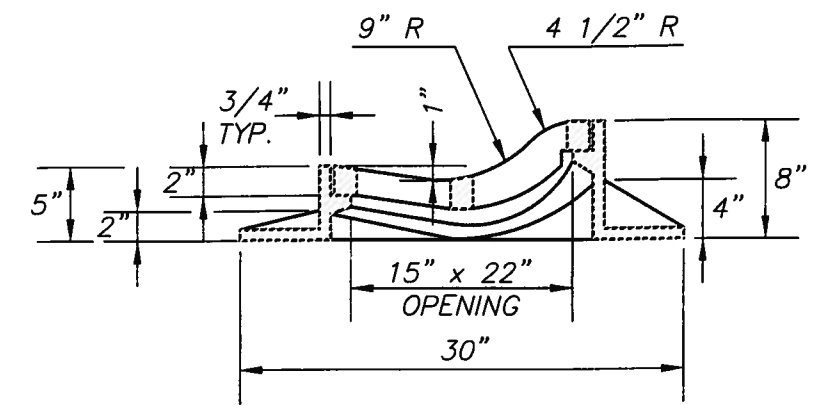
**NOTES:**

- 1) RECTANGULAR BI-DIRECTIONAL VANED GRATE, CURRENT WSDOT STANDARD PLAN B-30.40-XX, SHALL BE PROVIDED FOR ALL CATCH BASINS LOCATED AT LOW POINTS OF VERTICAL CURVES OR GRADE BREAKS, EXCEPT WHEN CEMENT CONCRETE ROLLED CURB IS USED.
- 2) MATERIAL IS GREY IRON ASTM A48 CLASS 30.

(NOT TO SCALE)

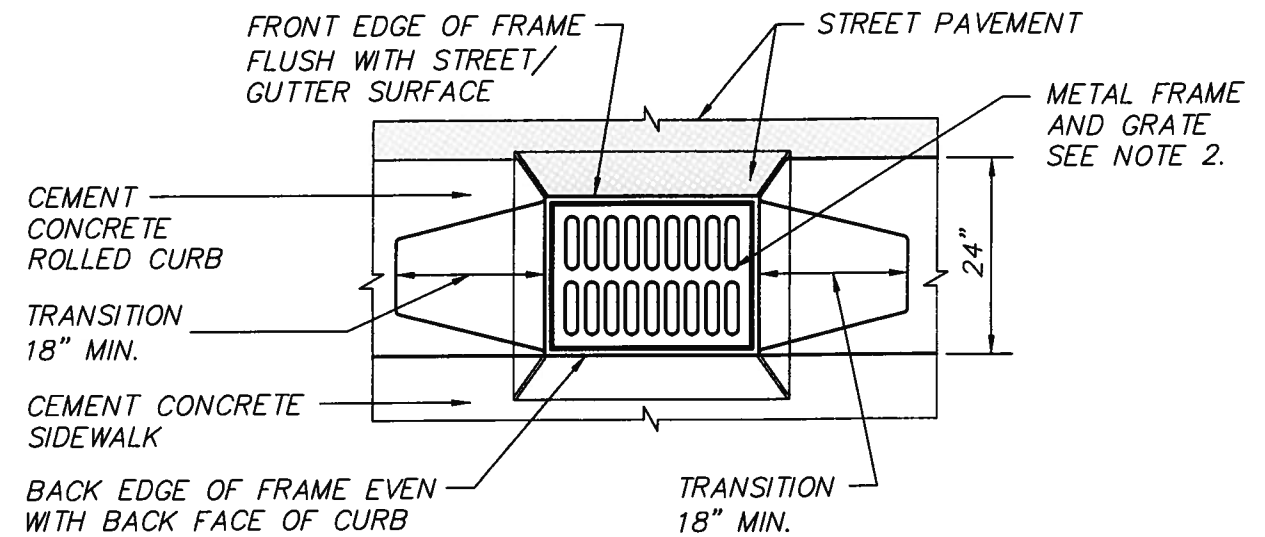


**PLAN**



**SECTION A-A**

**ROLLED CURB FRAME AND GRATE**



**CEMENT CONCRETE ROLLED CURB**



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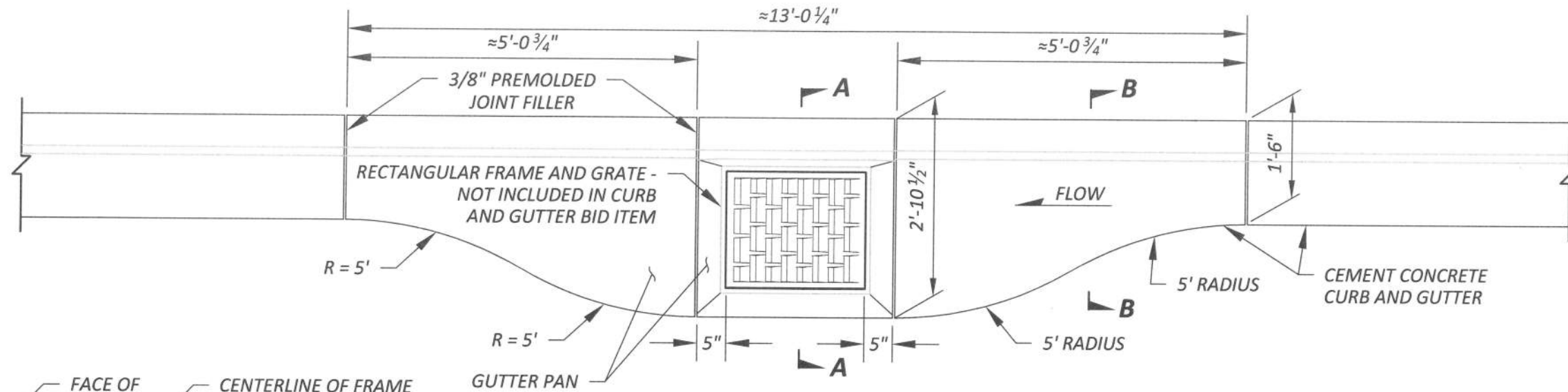


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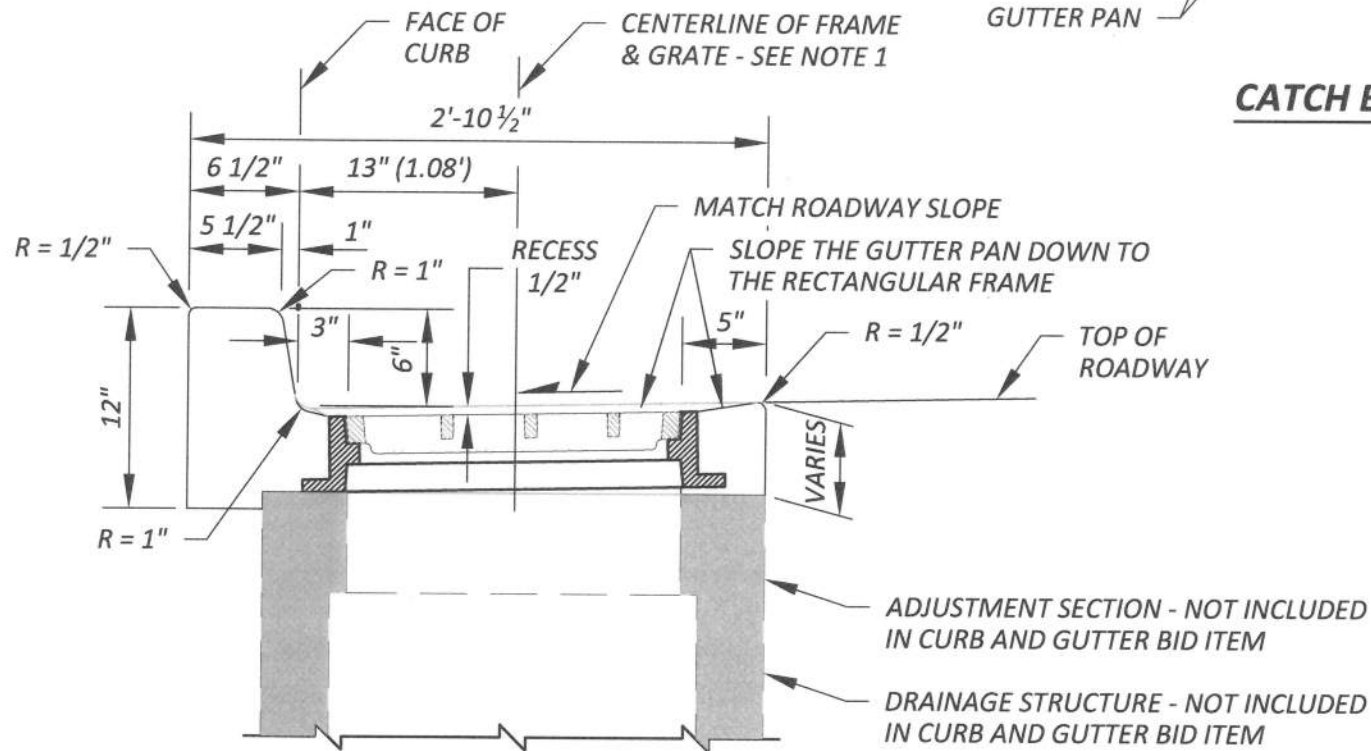
Office of the County Engineer

**CATCH BASIN AND  
INLET INSTALLATION  
FOR CURBS**

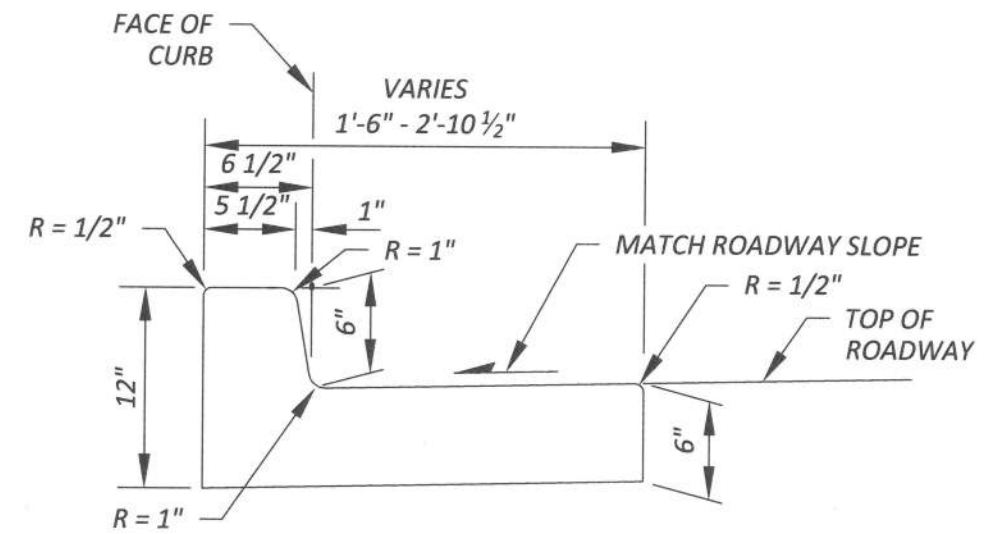
**PC.B1.1**



**CATCH BASIN GUTTER PAN**



**SECTION A-A**



**SECTION B-B**

**NOTE:**

1) THE CENTERLINE OF THE DRAINAGE STRUCTURE MAY DIFFER FROM THE CENTERLINE OF THE FRAME AND GRATE.

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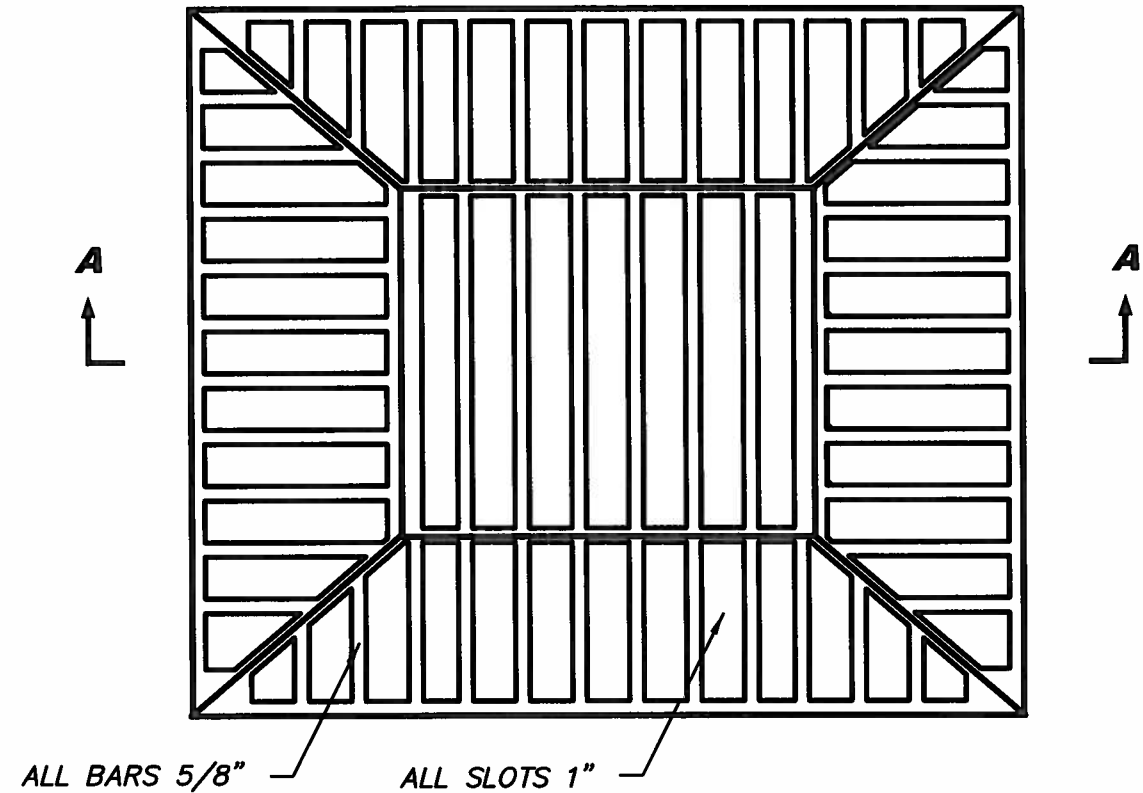


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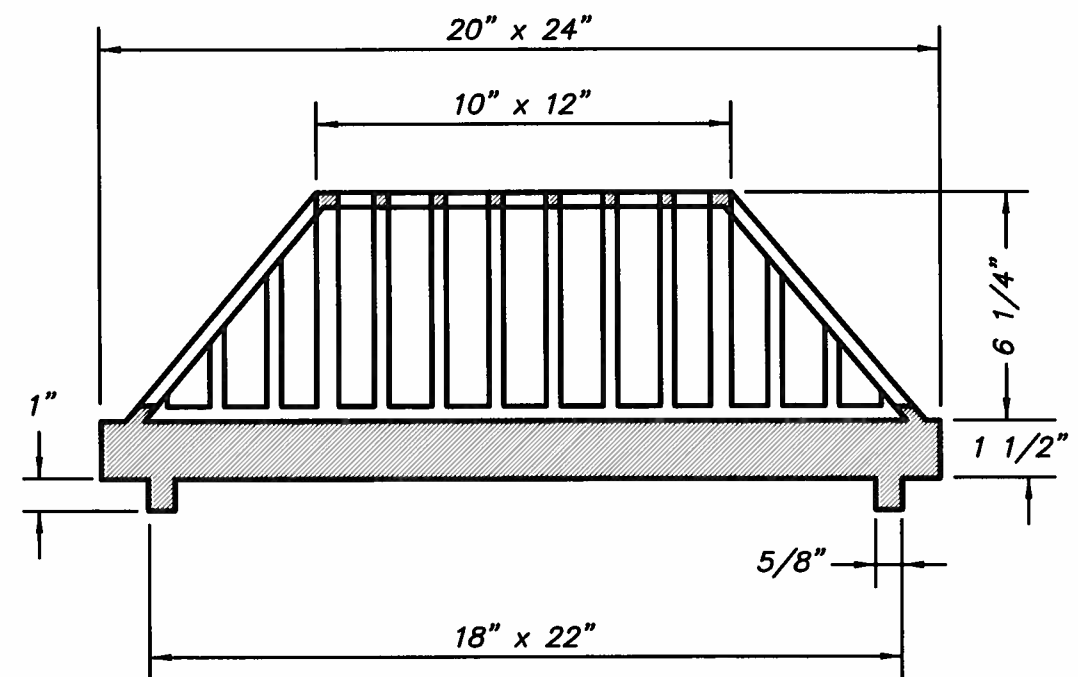
Office of the County Engineer

**CEMENT CONCRETE  
CURB & GUTTER PAN**

PC.B1.2



**PLAN**



**SECTION A-A**

**NOTES:**

- 1) USE WITH WSDOT STANDARD PLAN B-30.10-XX RECTANGULAR FRAME (REVERSIBLE).
- 2) MATERIAL TO CONFORM TO WSDOT STANDARD SPECIFICATIONS 9-05.15(2).

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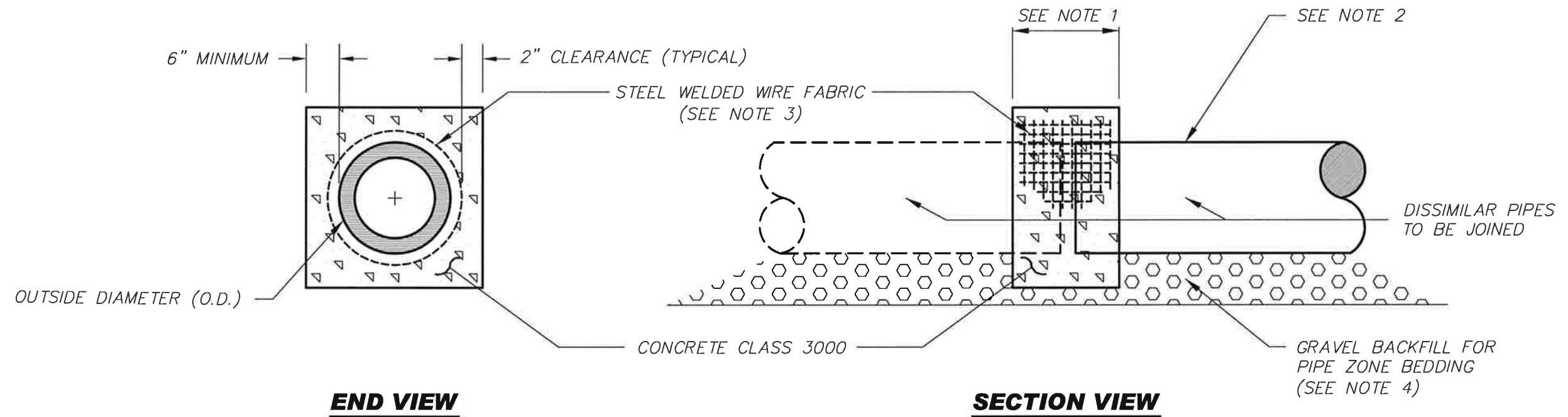


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**BEEHIVE  
 GRATE**

**PC.B1.3**



**NOTES:**

- 1) CONCRETE COLLAR WIDTH SHALL BE ONE HALF OF THE OUTSIDE PIPE DIAMETER OF THE LARGEST PIPE. THE MINIMUM COLLAR WIDTH SHALL BE 12". THE CONCRETE COLLAR SHALL ONLY BE USED TO EXTEND EXISTING PIPES.
- 2) WHEN A COUPLING BAND CONNECTION REQUIRES ATTACHING A BELL END OF A CONCRETE PIPE, THE BELL END OF THE PIPE SHALL BE REMOVED BEFORE THE CONNECTION IS INSTALLED.
- 3) STEEL WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS SECTION 9-07.7. INSTALL TWO WRAPS FOR SIZE 6 X 6 W1.4 X W1.4 (10 GAGE) STEEL WELDED WIRE FABRIC OR ONE WRAP FOR ANY OF THE FOLLOWING SIZES:

- 6 X 6 W2.1 X W2.1 (8 GAGE)
- 6 X 6 W2.9 X W2.9 (6 GAGE)
- 4 X 4 W2.9 X W2.9 (6 GAGE)
- 4 X 4 W4.0 X W4.0 (4 GAGE)

- 4) GRAVEL BACKFILL FOR PIPE ZONE BEDDING SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS SECTION 9-03.12(3).

(NOT TO SCALE)



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DATE	REVISION	APPROVED	DRAWN

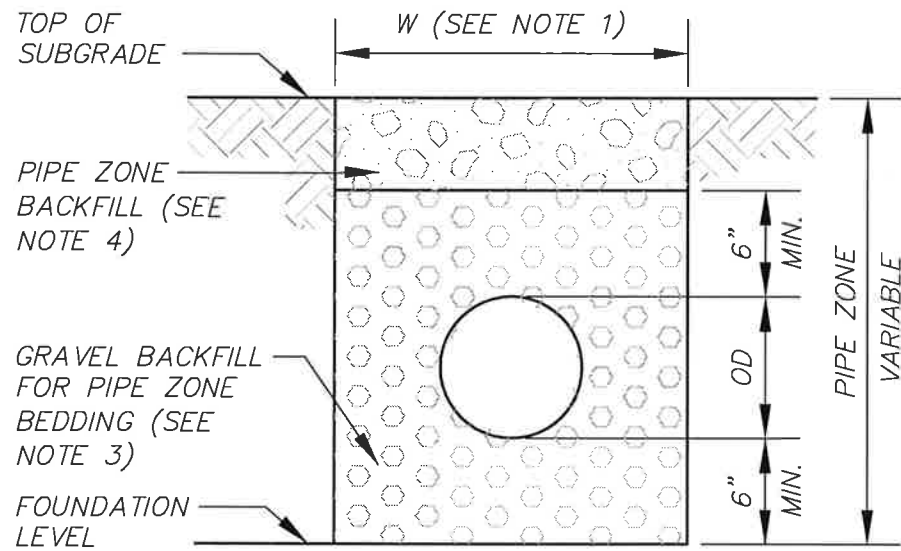
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*7-14-09*

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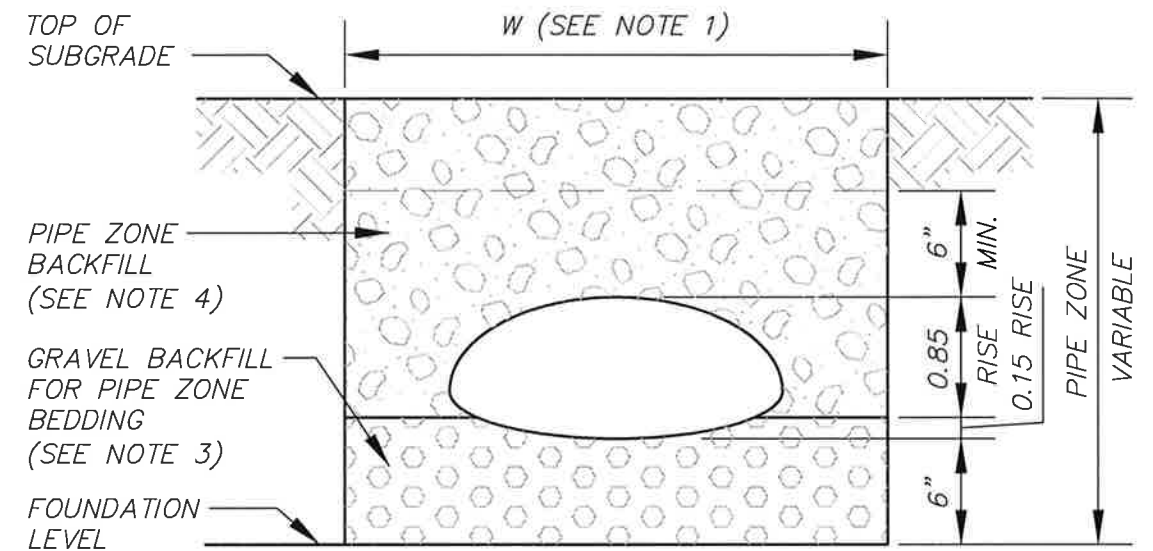
**CONCRETE PIPE COLLAR**

**PC.B5**

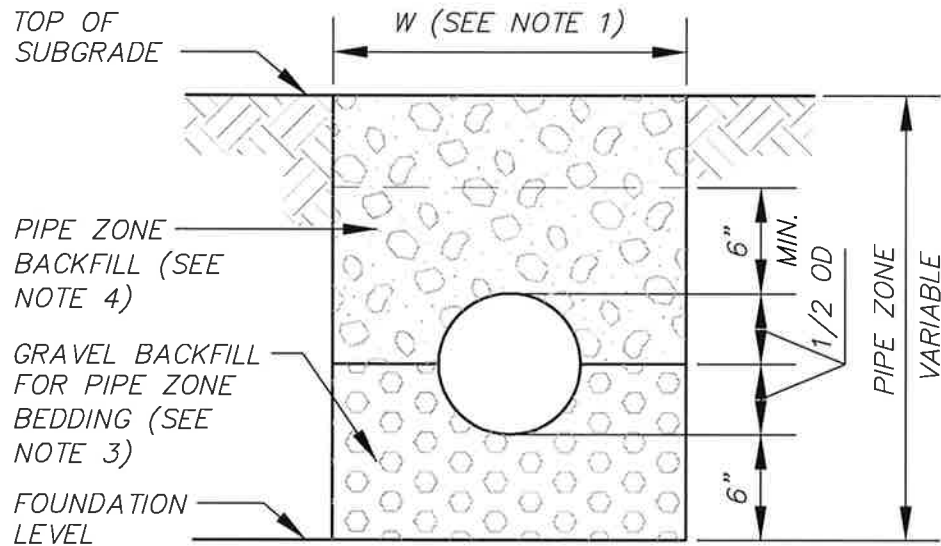


**THERMOPLASTIC PIPE**

CLEARANCE BETWEEN PIPES FOR MULTIPLE INSTALLATIONS		
PIPE	SIZE	MINIMUM DISTANCE BETWEEN BARRELS
CIRCULAR PIPE (DIAMETER)	12" TO 24"	12"
	30" TO 96"	DIAMETER / 2
PIPE ARCH METAL ONLY (SPAN)	102" TO 180"	48"
	18" TO 36"	12"
	43" TO 142"	SPAN / 3
	148" TO 200"	48"



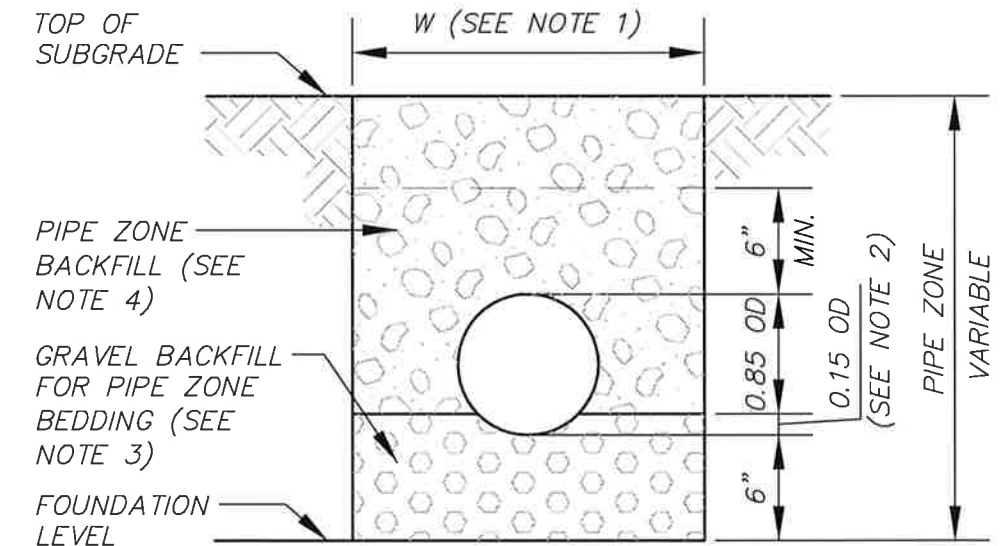
**PIPE ARCHES**



**METAL PIPE**

**NOTES:**

- 1) TRENCH WIDTH SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS SECTION 2-09.4.
- 2) FOR SANITARY SEWER INSTALLATION, CONCRETE PIPE SHALL BE BEDDED TO SPRING LINE.
- 3) GRAVEL BACKFILL FOR PIPE ZONE BEDDING SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS SECTION 9-03.12(3).
- 4) PIPE ZONE BACKFILL SHALL BE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS SECTION 7.08.3(3).



**CONCRETE AND DUCTILE IRON PIPE**

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**PIPE ZONE BEDDING  
AND BACKFILL**

**PC.B9**