

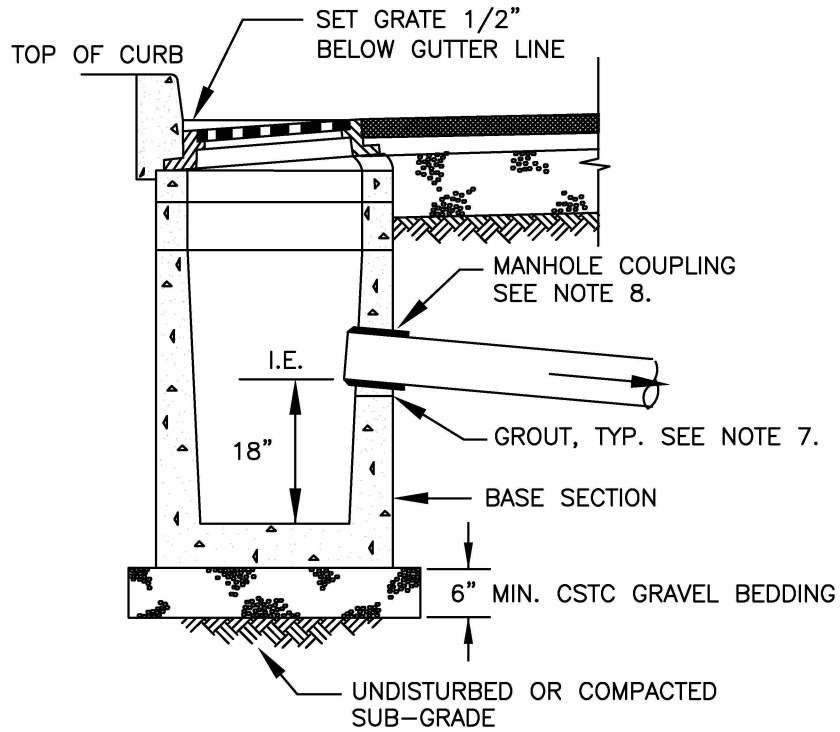
**City of Sumner**  
Public Works Department

# STORM

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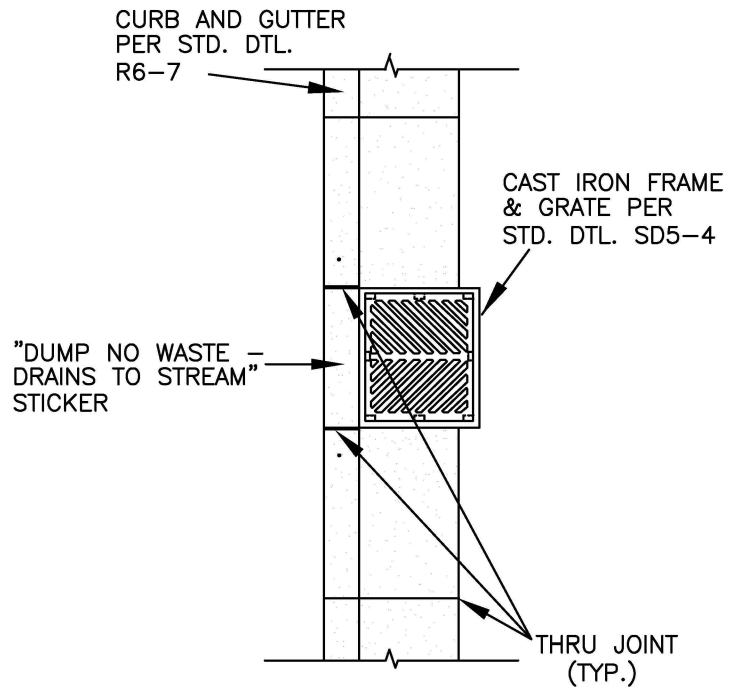




SECTION VIEW

NOTES:

1. MAXIMUM LENGTH OF PIPE BETWEEN CATCH BASINS SHALL BE 400'.
2. MAXIMUM GUTTER LINE FLOW LENGTH SHALL BE 300'.
3. TYPE I CATCH BASIN IS USED FOR DEPTHS LESS THAN 5'-0" FROM TOP OF GRATE TO I.E.(PIPE INVERT).
4. PRECAST BASE SECTION SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MIN. KNOCKOUTS SHALL BE ON 4 SIDES WITH A MAXIMUM DIAMETER OF 20" TO PROVIDE FOR A MINIMUM SUMP DEPTH OF 18".
5. CATCH BASIN SHALL BE ALIGNED WITHIN 6" OF FACE OF CURB MAX.
6. CATCH BASIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C 478 (AASHTO M 199) AND ASTM C 890 UNLESS OTHERWISE NOTED.
7. GROUT SHALL BE PORTLAND CEMENT AND SAND. PER WSDOT 9-04.3. NO CALCIUM ALLOWED. NO JET-SET ALLOWED.
8. SAND COLLAR SHALL BE USED WITH PVC STORM PIPE.
9. GROUT SHALL BE PLACED BETWEEN EACH ADJUSTMENT SECTION AND AT THE TOP OF THE STRUCTURE WITH 100% COVERAGE.
10. CONTRACTOR TO SUPPLY AND INSTALL "DUMP NO WASTE - DRAINS TO STREAM" STICKER ON TOP OF CURB TO ALL GRATED INLETS.
11. IF THERE IS A CONCRETE GUTTER, NO RUBBER REQUIRED. AN OPTION TO INCLUDE IF PART OF HMA ROADWAY SECTION.



PLAN VIEW

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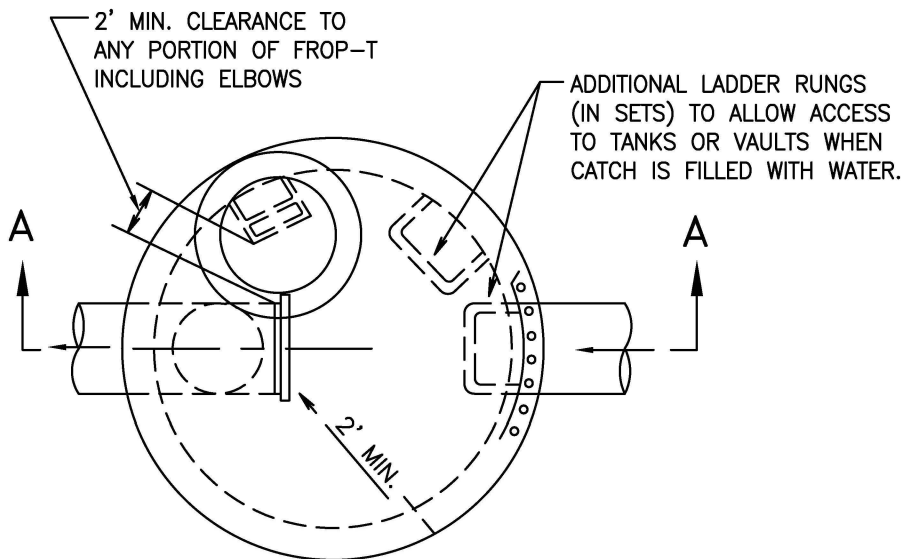
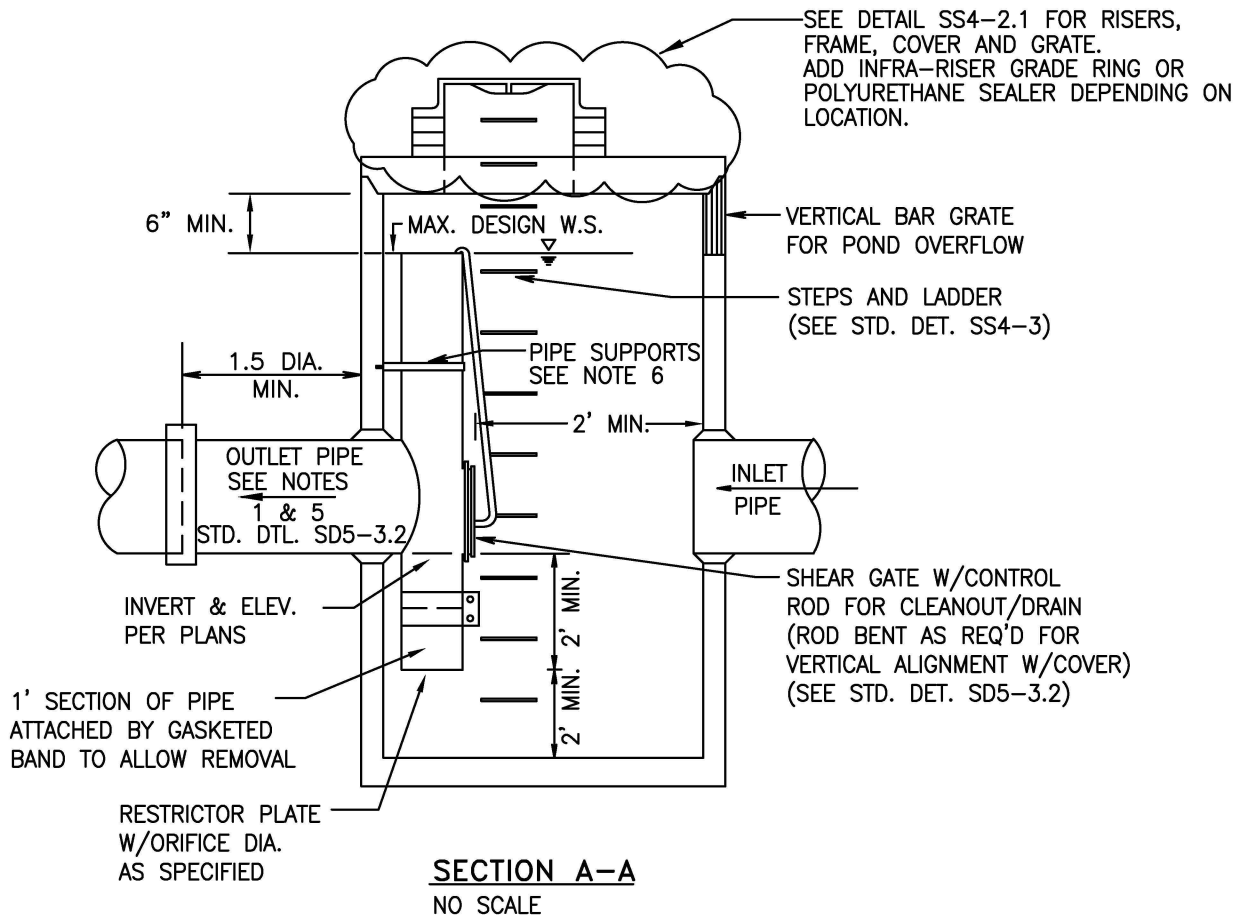


CATCH BASIN  
TYPE I (GUTTER DRAIN)

LAST REVISION: 04/01/26

STORM  
STANDARD DETAIL  
SD5-02

SHEET 1 of 1 N.T.S.



**NOTE:**

THIS FLOW RESTRICTOR SHALL NOT BE USED AS A WATER QUALITY CONTROL FACILITY.

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EXPIRES 01/07/2028

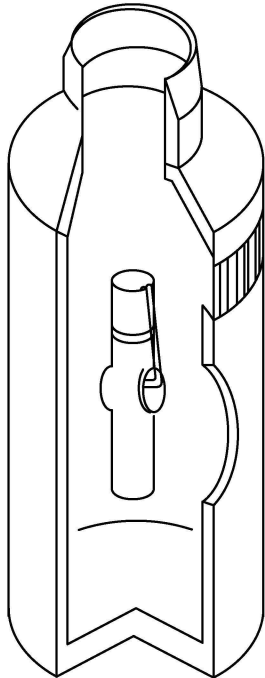


**FLOW CONTROL STRUCTURE**

LAST REVISION: 04/01/26

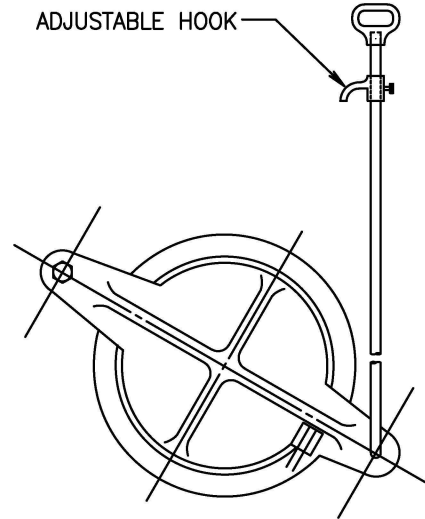
STORM  
STANDARD DETAIL  
SD5-03

SHEET 1 of 2 N.T.S.



**ISOMETRIC**

NO SCALE



**SHEAR GATE**

NO SCALE

**NOTES:**

1. USE MIN. 48" DIA. CATCH BASIN TYPE 2. SEE STANDARD DETAIL SD5-1.
2. OUTLET CAPACITY: DEVELOPED DESIGN FLOW.
3. METAL PARTS: CORROSION RESISTANT.
4. FRAME & LADDER OR STEPS OFFSET SO:
  - A: CLEANOUT GATE IS VISIBLE FROM TOP.
  - B: CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE.
  - C: FRAME IS CLEAR OF CURB.
5. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE: OUTLET PIPE TO HAVE SMOOTH I. D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4".
6. PROVIDE AT LEAST TWO 3" X .090 GAGE SUPPORT BRACKET ANCHORED CONCRETE WALL (MAX. 3'-0" VERTICAL SPACING). ONE BRACKET AT THE TOP AND ONE AT THE BOTTOM.
7. ALL METAL PARTS AND SURFACE MUST BE MADE OF CORROSION RESISTANT MATERIAL.
8. THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION ZG32A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B.
9. GATE SHALL BE 8" DIAMETER UNLESS OTHERWISE SPECIFIED.
10. GATE SHALL BE JOINED TO TEE SECTION BY BOLTING (THROUGH FLANGE), WELDING, OR OTHER SECURE MEANS.
11. LIFT ROD: AS SPECIFIED BY MANUFACTURER WITH HANDLE EXTENDING TO WITHIN ONE FOOT OF COVER AND ADJUSTABLE HOOK LOCK FASTENED TO FRAME OR UPPER HANDHOLD.

\* SEE STD. DET. SD5-3.1

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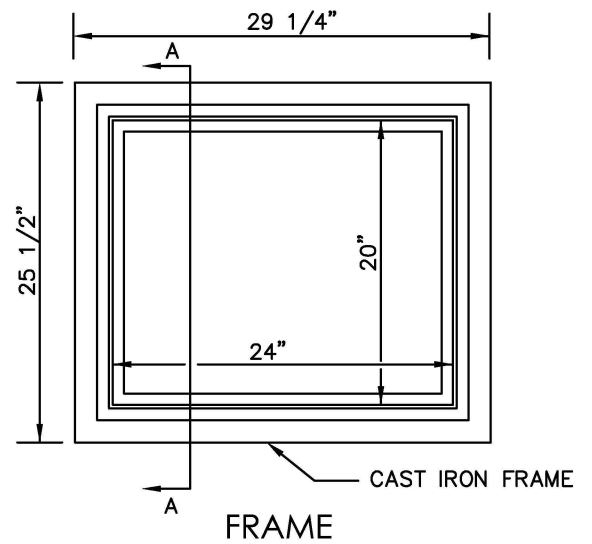
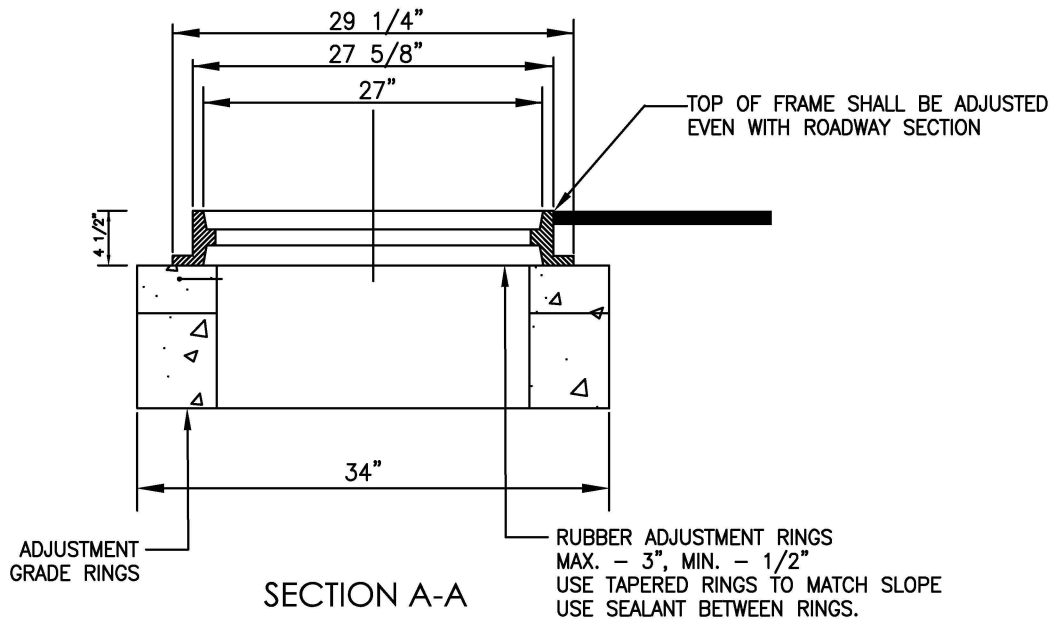


**FLOW CONTROL  
STRUCTURE – NOTES**

LAST REVISION: 04/01/26

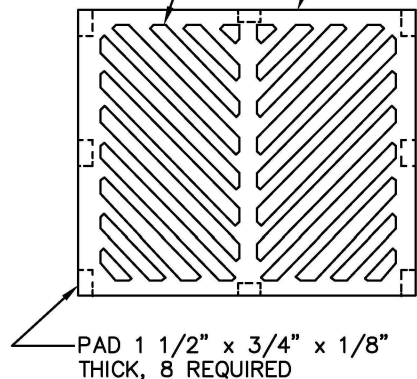
SHEET 2 of 2 N.T.S.

**STORM  
STANDARD DETAIL  
SD5-03**



1" OPENING (TYPICAL)  
11 SLOTS EACH SIDE  
AT 45°

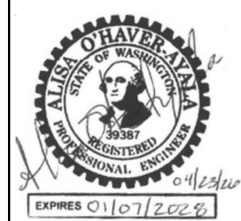
DUCTILE IRON GRATE



**NOTES:**

1. MATERIAL SHALL CONFORM TO SECTION 9-05.15 "METAL CASTINGS" OF THE "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" PUBLISHED BY THE STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER.
2. CATCH BASIN SHALL BE ALIGNED WITHIN 6" OF FACE OF CURB MAX.
3. GROUT SHALL BE PORTLAND CEMENT AND SAND. PER WSDOT 9-04.3. NO CALCIUM ALLOWED. NO JET-SET ALLOWED.
4. SAND COLLAR SHALL BE USED WITH PVC STORM PIPE.
5. GROUT SHALL BE PLACED BETWEEN EACH ADJUSTMENT SECTION AND AT THE TOP OF THE STRUCTURE WITH 100% COVERAGE.
6. CONTRACTOR TO SUPPLY AND INSTALL "DUMP NO WASTE - DRAINS TO STREAM" STICKER ON TOP OF CURB TO ALL GRATED INLETS.
7. IF THERE IS A CONCRETE GUTTER, NO RUBBER RISER REQUIRED. IF FULLY IN HMA ROADWAY SECTION, RUBBER RISER IS REQUIRED.

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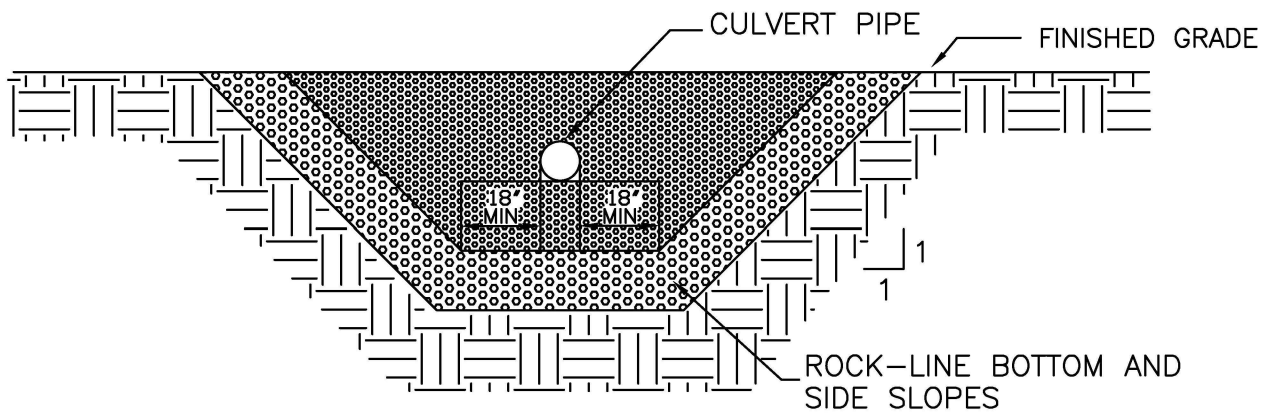
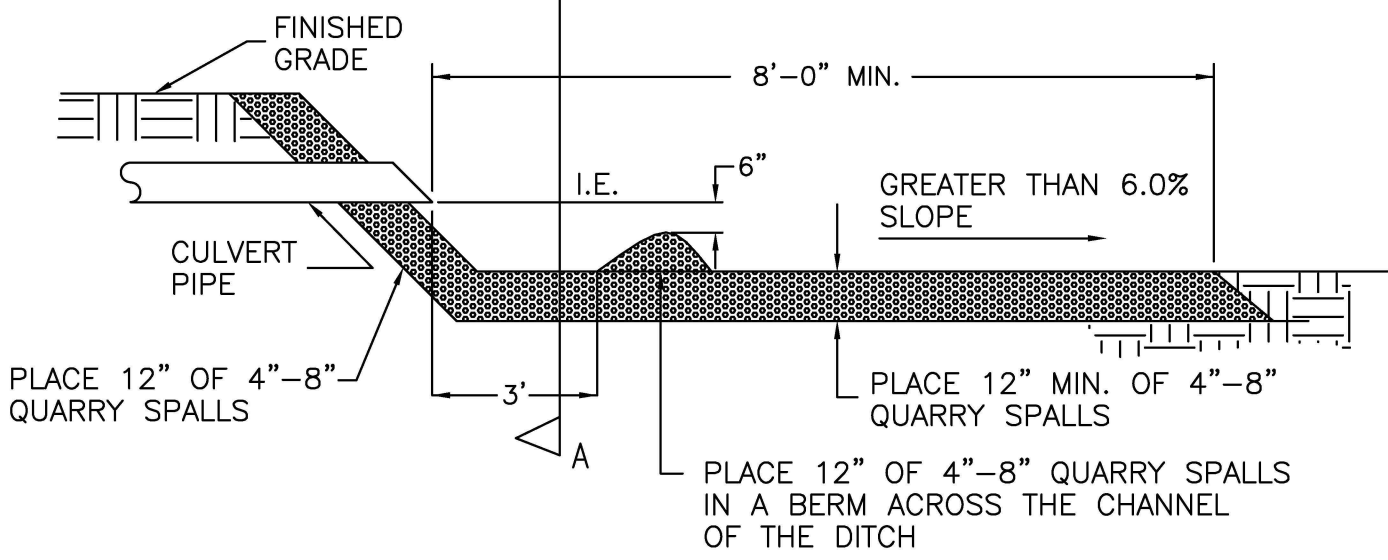
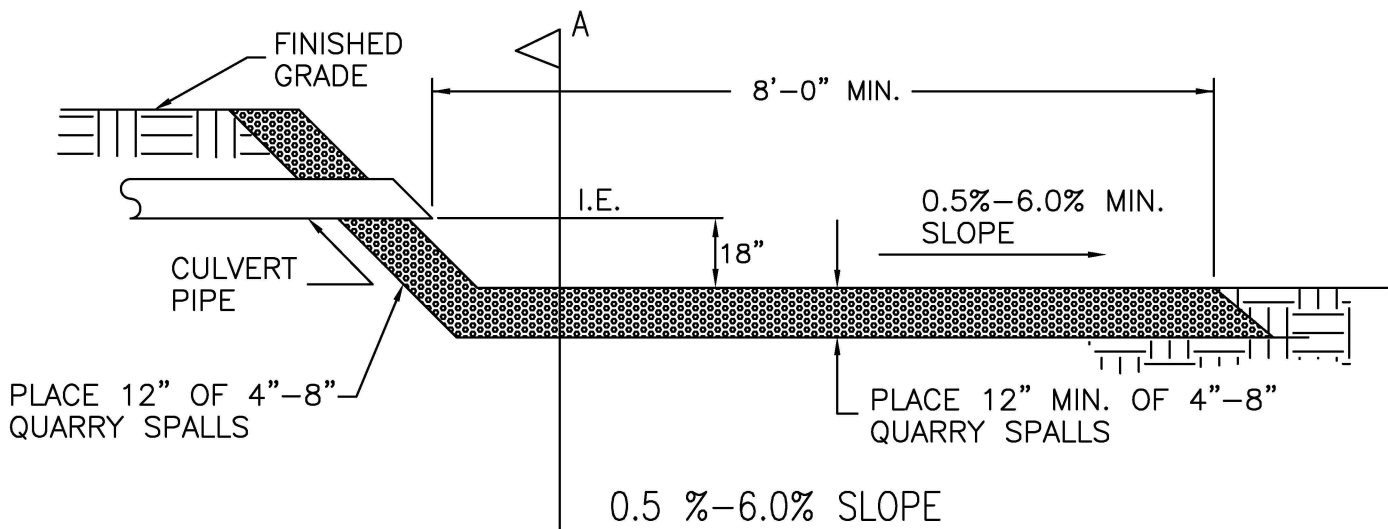
CATCH BASIN  
FRAME AND GRATE

LAST REVISION: 04/01/26

SHEET 1 of 1

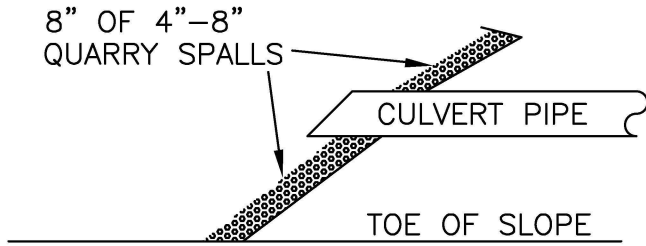
N.T.S.

STORM  
STANDARD DETAIL  
SD5-04

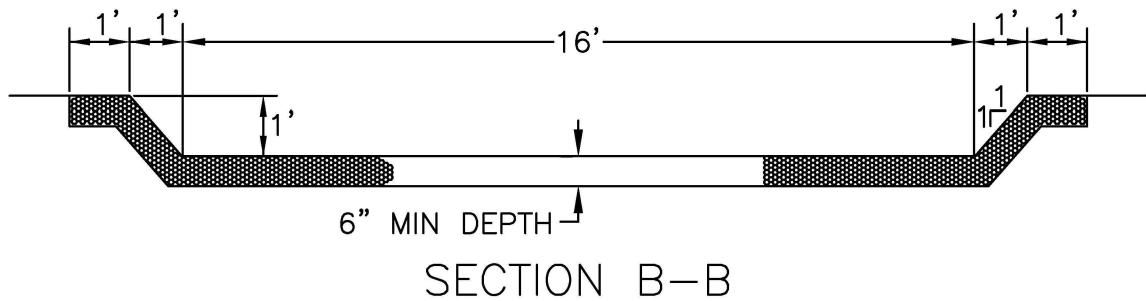
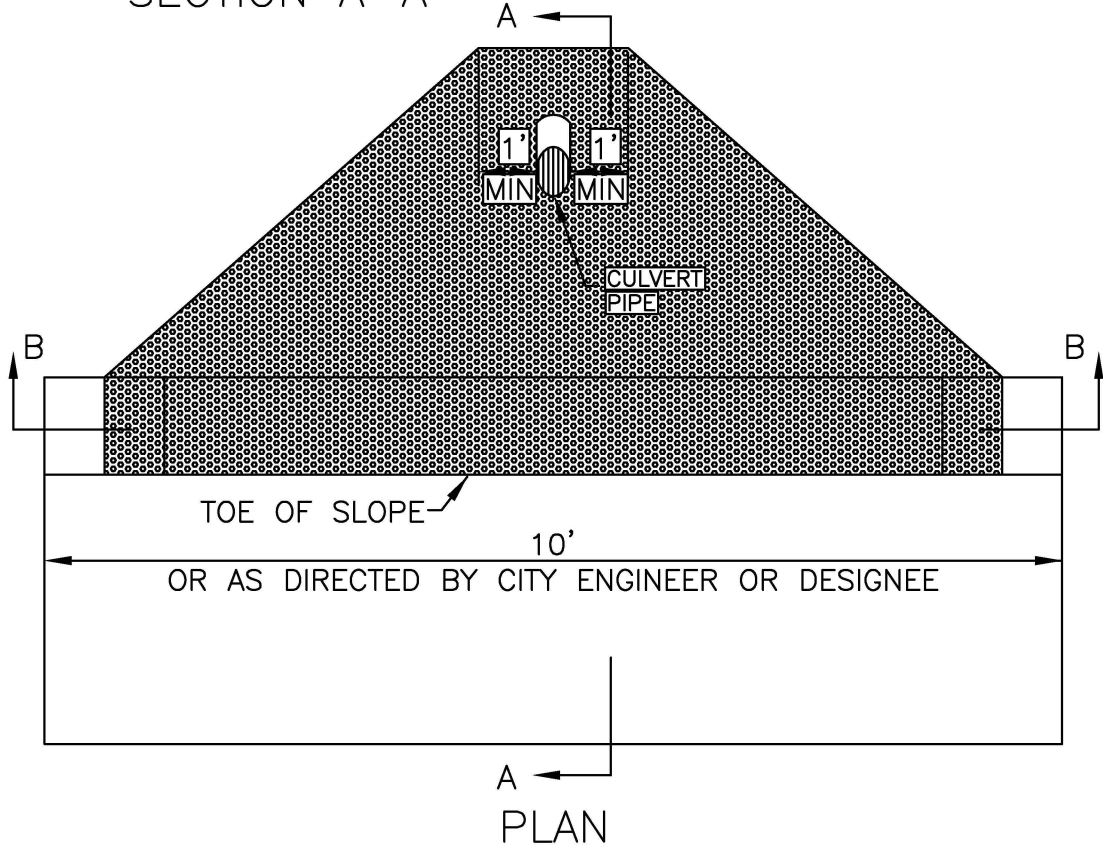


CROSS-SECTION A-A

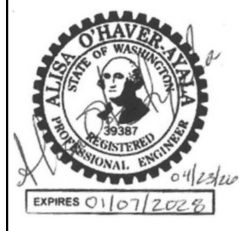
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	OUTFALL	
	LAST REVISION: 04/01/26	STORM STANDARD DETAIL
SHEET 1 of 1	N.T.S.	SD5-05



SECTION A-A



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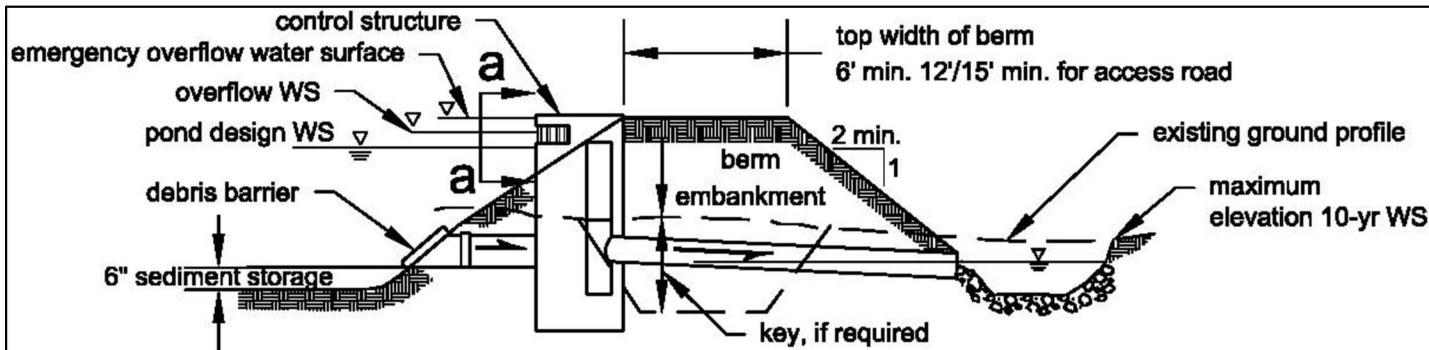


DAYLIGHT CULVERT  
DETENTION CHANNEL

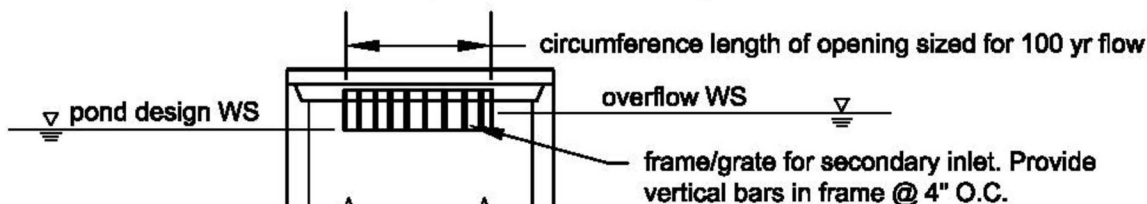
LAST REVISION: 04/01/26

STORM  
STANDARD DETAIL  
SD5-06

SHEET 1 of 1 N.T.S.

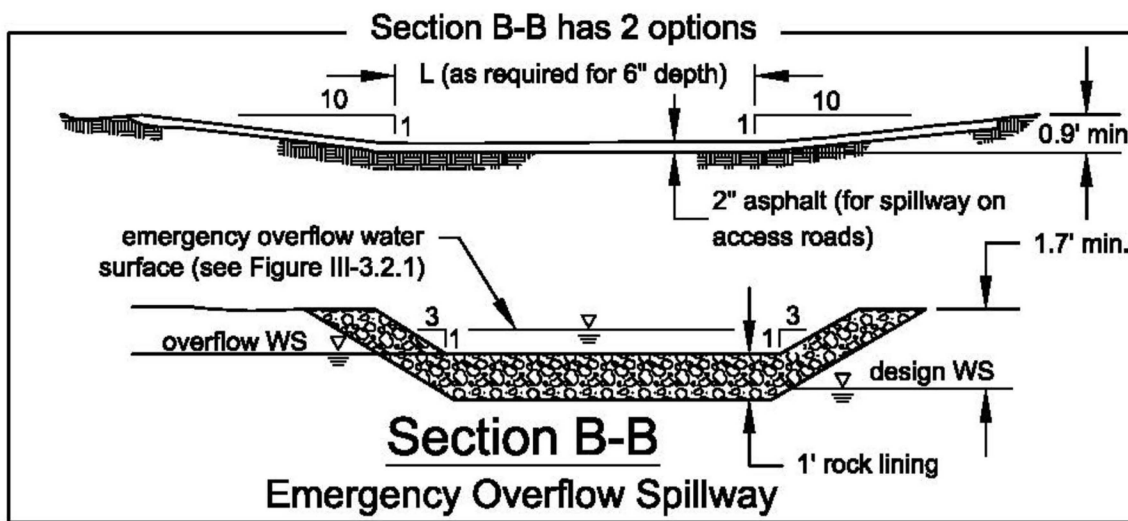


**Section A-A**

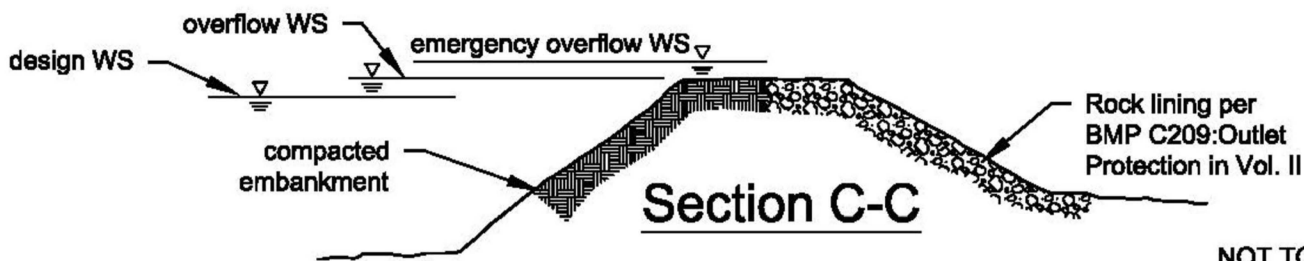


**Section a-a**

See also the separate overflow structure shown in Figure III-3.2.3



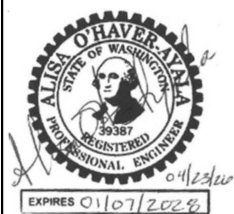
**Section B-B**  
Emergency Overflow Spillway



**Section C-C**

NOT TO SCALE

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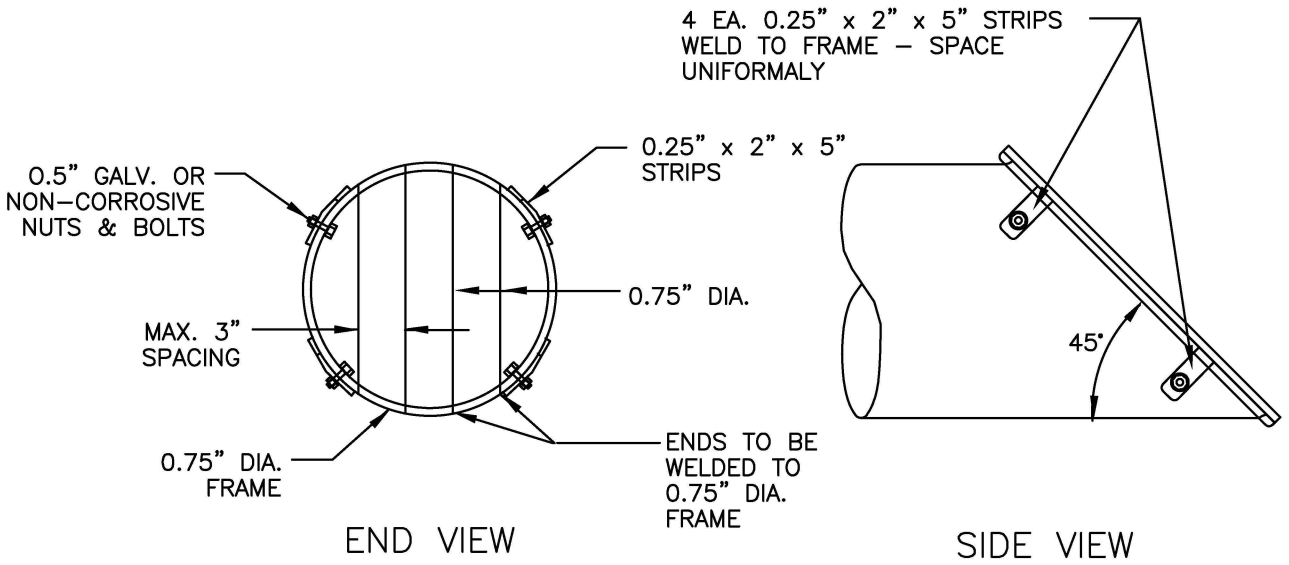
**DETENTION POND  
EMERGENCY OVERFLOW**

LAST REVISION: 04/01/26

STORM  
STANDARD DETAIL



SHEET 1 of 1 N.T.S.

SD5-07

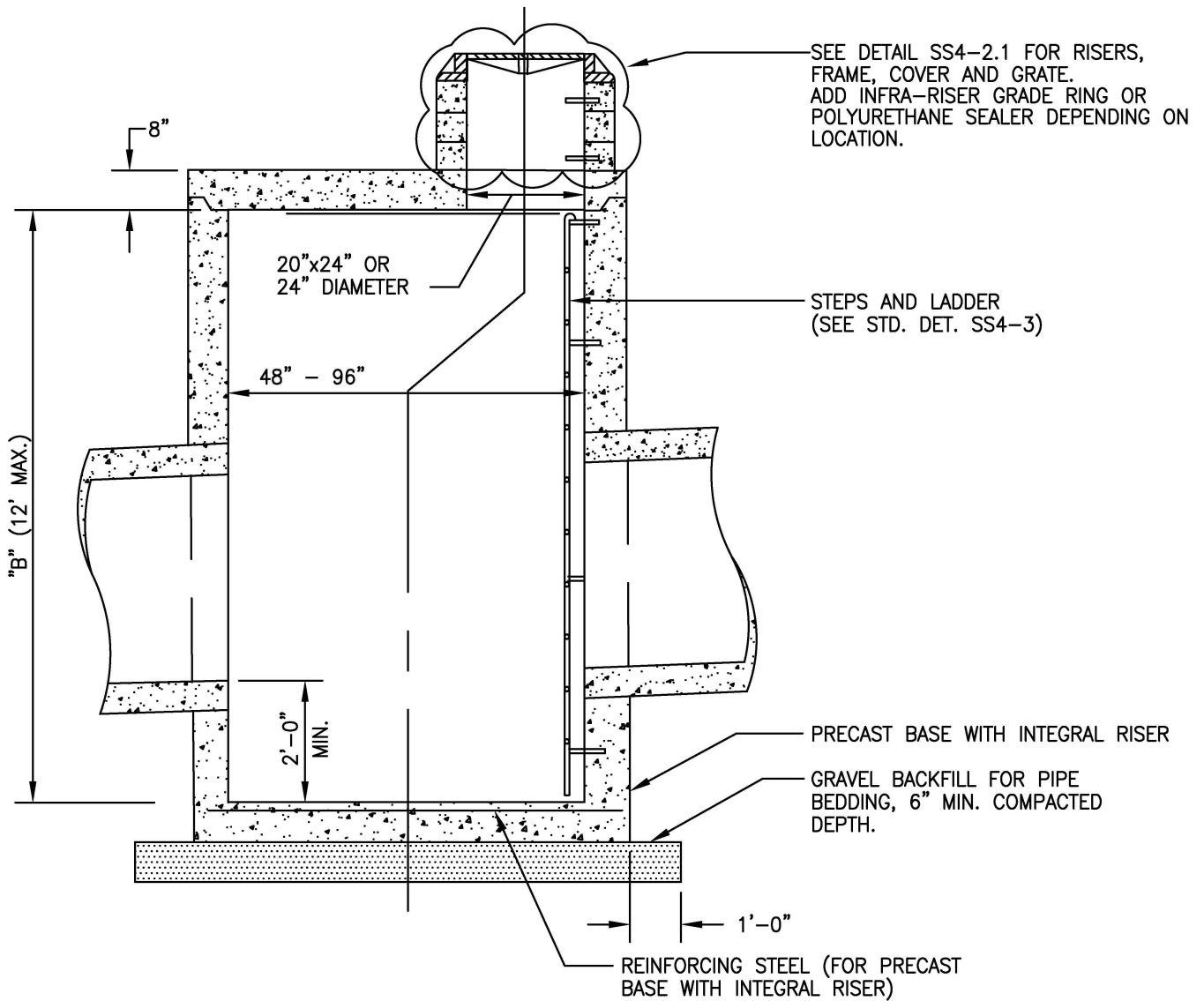


NOTES:

1. ALL STEEL PARTS MUST BE GALVANIZED.
2. TRASH RACKS SHALL BE INSTALLED AT ALL OPEN "UPSTREAM" ENDS OF STORM DRAINAGE PIPE 12" DIA. AND GREATER.

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	<b>TRASH RACK</b>	
LAST REVISION: 04/01/26	<b>STORM STANDARD DETAIL</b> <b>SD5-08</b>	
SHEET 1 of 1	N.T.S.	



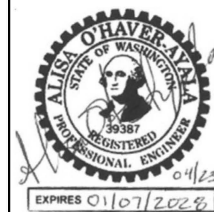


**DESIGN ASSUMPTIONS**  
 SOIL BEARING VALUE EQUALS 3300 #/FT<sup>2</sup> (MIN.)

**NOTES:**

- CATCH BASINS TO BE CONSTRUCTED IN ACCORDANCE W/ ASTM C 478 (AASHTO M 199) & ASTM C 890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STD. SPECS.
- HANDHOLDS IN RISER OR ADJUSTMENT SECTION SHALL HAVE 3" MIN. CLEARANCE. STEPS IN CATCH BASIN SHALL HAVE 6" MIN. CLEARANCE. NO STEPS ARE REQ'D WHEN 'B' IS 4' OR LESS.
- KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAMETER PLUS CATCH BASIN WALL THICKNESS. MAX. HOLE SIZE IS 36" FOR 48" CATCH BASIN, 42" FOR 54" CATCH BASIN MIN. DISTANCE BETWEEN HOLES IS 8".
- ALL BASE REINFORCING STEEL SHALL HAVE A MIN. YIELD STRENGTH OF 60,000 PSI & BE PLACED IN THE UPPER HALF OF THE BASE WITH 1" MIN. CLEARANCE.

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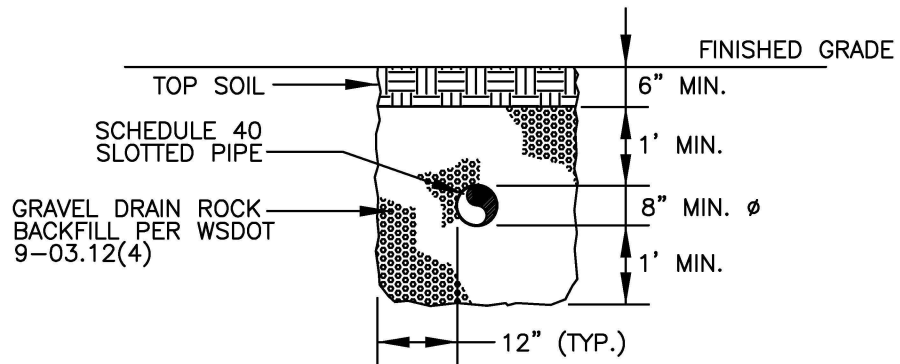


CATCH BASIN  
 TYPE II 48"-96"

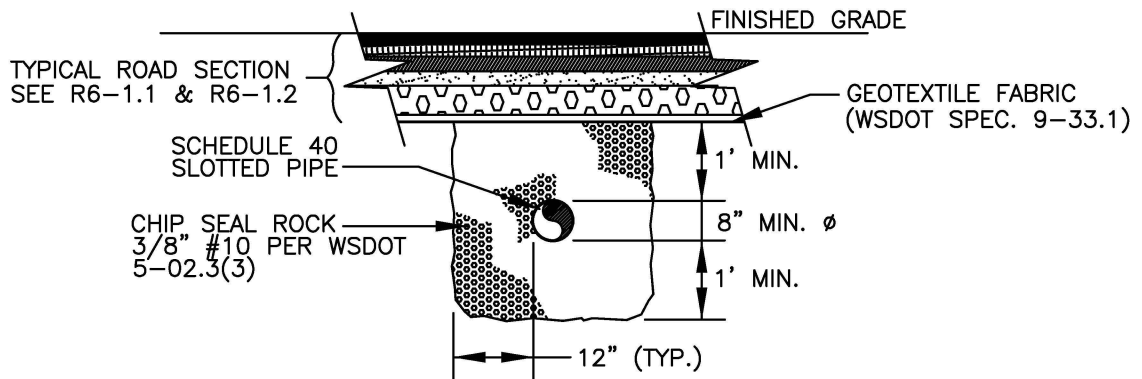
LAST REVISION: 04/01/26

STORM  
 STANDARD DETAIL  
 SD5-10

SHEET 1 of 1 N.T.S.

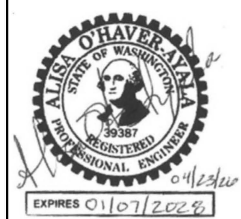


LANDSCAPED/SWALE AREA DETAIL



TRAFFIC AREA DETAIL

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**UNDERDRAIN**

LAST REVISION: 04/01/26

SHEET 1 of 1 N.T.S.

STORM  
STANDARD DETAIL  
SD5-13