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### CITY OF SPOKANE STANDARD PLANS – SECTION B

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NOTES:

1. THE NAME OF THE MANUFACTURER SHALL BE EMBOSSED ON THE TOP SURFACE OF EACH GRATE. LETTERING TO BE RECESSED 1/16".
2. FRAME SHALL BE GRAY IRON CONFORMING TO A.S.T.M. A48-90, GRADE 30. THE GRATE SHALL BE DUCTILE IRON CONFORMING TO A.S.T.M. A536-84 GRADE 80-55-06.
3. DIMENSIONS SHALL HAVE ±1/16" TOLERANCE, EXCEPT AS NOTED.
4. EDGES SHALL HAVE 1/8" RADIUS, 1/8" CHAMFER OR COMPLETE DEBURRING.
5. WELDING IS NOT PERMITTED.
6. AS AN ALTERNATE, EIGHT PADS 1 1/2" x 3/4" x 1/8", INTEGRALLY CAST WITH THE GRATE MAY BE USED.
7. WHEREVER PRACTICAL & FEASIBLE, USE GRATE SHOWN ON THIS SHEET IN CONTINUOUS GRATE CONDITIONS.
NOTES:

1. THE NAME OF THE MANUFACTURER SHALL BE EMBOSSED ON THE TOP SURFACE OF EACH GRATE. LETTERING TO BE RECESSED 1/16".
2. FRAME SHALL BE GRAY IRON CONFORMING TO A.S.T.M. A48-90, GRADE 30. THE GRATE SHALL BE DUCTILE IRON CONFORMING TO A.S.T.M. A536-84 GRADE 80-55-06.
3. DIMENSIONS SHALL HAVE ±1/16" TOLERANCE, EXCEPT AS NOTED.
4. EDGES SHALL HAVE 1/8" RADIUS, 1/8" CHAMFER OR COMPLETE DEBURRING.
5. WELDING IS NOT PERMITTED.
6. AS AN ALTERNATE, EIGHT PADS 1 1/2" x 3/4" x 1/8", INTEGRALLY CAST WITH THE GRATE MAY BE USED.
7. DIMENSION FOR THE GRATE ASSOCIATED WITH CATCH BASIN TYPE 3. OTHER DIMENSIONS, THE NUMBER & POSITION OF THE VANES WILL ALSO VARY.
8. WHEREVER PRACTICAL & FEASIBLE, USE GRATE SHOWN ON THIS SHEET IN SUMP CONDITIONS.
SECTION A-A

SECTION B-B

(1) DIMENSION FOR FRAME ASSOCIATED WITH CATCH BASIN TYPE 3

(2) NOTCHES (Typ)
NOTES:
1. SEE SECTIONS 9-06.15(1) AND 9-06.15(2)
2. FRAME: GRAY IRON CASTING, SEE SECTION 9-06.9.
4. FOUNDRY NAME, DATE, HEAT NUMBER AND MATERIAL IN RAISED LETTERS ON INTERIOR OF EACH CASTING.
5. TOLERANCES ± 0.0625".
6. GRATE GUARD REQ'D. SEE CITY STD PLAN B-2C.
7. CONTINUOUS LIP ON BOTTOM OF TANGS TO REST GRATE GUARD TAB ON.
8. WHEREVER PRACTICAL & FEASIBLE, USE FRAME & GRATE W/HOOD SHOWN ON THIS SHEET IN SUMP CONDITIONS.
NOTES:
1. SEE SECTIONS 9-05.15(1) AND 9-05.15(2)
2. FRAME: GRAY IRON CASTING, SEE SECTION 9-06.9.
4. Foundry Name, Date, Heat number and Material in Raised Letters ON INTERIOR OF EACH CASTING.
5. Tolerances ± 0.0625”.
6. Grate Guard Req’d. SEE CITY STD PLAN B-2C.
7. Continuous Lip on bottom of TANGS to Rest Grate Guard Tab On.
8. WHEREVER PRACTICAL & FEASIBLE, Use Frame & Grate w/Hood Shown on this Sheet In Sump conditions.
NOTES:

1. SEE SECTIONS 9-05.15(1) AND 9-05.15(2)
2. FRAME: GRAY IRON CASTING, SEE SECTION 9-06.9.
4. FOUNDRY NAME, DATE, HEAT NUMBER AND MATERIAL IN RAISED LETTERS ON INTERIOR OF EACH CASTING.
5. TOLERANCES ± 0.0625".
6. GRATE GUARD REQ'D. SEE CITY STD PLAN B-2C.
7. CONTINUOUS LIP ON BOTTOM OF TANGS TO REST GRATE GUARD TAB ON.
8. USE DIRECTIONAL VANED GRATE (B-2A) IN CONTINUOUS GRADE CONDITIONS & BI-DIRECTIONAL VANED GRATE (B-2B) IN SUMP CONDITIONS
ADJUST THE FRAME & GRATE UNIT SO AS TO BE 1" LOWER THAN THE NORMAL GUTTER GRADE. FINAL FINISHED CURB EXPOSURE TO BE 7'-(0.58').

PLACE FRAME & VANED GRATE & ADJUST TO MATCH PROPOSED OR EXISTING CROSS SLOPE OF ROADWAY. SEE CITY STD. PLANS B–2A & B–3A FOR FRAME AND VANED GRATE DETAILS.

GROUT & SEAL ADJUSTMENT SECTION SEE STANDARD PLAN A–B.

8" MIN. DIA. SEWER PIPE SET PIPE 4" INTO BARREL FOR FUTURE MAINTENANCE (SEE NOTE 6).

ALTERNATE LOCATION (SEE NOTE 8).

SOLID BARREL & BASE (48" I.D.)

NOTES:

1. SEE STD. PLAN B–120 FOR OUTLET TRAP. TRAP REQUIRED WHEN CATCH BASIN CONNECTED TO CITY STORM SYSTEM, DRYWELL, ABSORPTION TRENCH, OR OTHER U/G INJECTION STRUCTURE/FACILITY. TRAP TO REMAIN REMOVABLE FOR MAINTENANCE THEREFORE NO MECHANICAL CONNECTION BETWEEN TRAP & OUTLET ALLOWED. VERTICAL PROJECTION OF TRAP NOT TO EXTEND BEYOND C/L OF ACCESS OPENING.

2. IF AN INLET PIPE IS PRESENT, THE INVERT SHALL BE HIGHER IN ELEVATION THAN THE OUTLET PIPE INVERT. A C.B. WITH AN INLET PIPE IS UTILIZED ONLY WHEN CONNECTING ADDITIONAL C.B.’S AT AN INTERSECTION OR WHEN ADDING GRATE INLET TYPE 3. A C.B. WITH INLET PIPE(S) IS NOT ALLOWED AS A SUBSTITUTE FOR A M.H.

3. SEE SEC. 9–12 FOR PRECAST CONCRETE CATCH BASINS.

4. SEE STD. PLAN Z–118 FOR BASE SLAB & FOUNDATION DETAILS.

5. CONE & BARREL JOINTS MAY BE EITHER TONGUE & GROOVE OR REVERSE TONGUE & GROOVE.

6. ADJUSTMENT SECTION, CONE, BARREL, & PIPE OPENINGS TO BE SEALED PER SECTION 7–05.

7. CONCRETE CURB & GUTTER SHALL BE BLOCKED OUT FOR A 5–FT LENGTH CENTERED @ THE C.B. TO ALLOW FOR LOCATING CB ADJACENT TO CURB.

8. USE ALTERNATE LOCATION FOR INLET/OUTLET PIPES ONLY IF INLET PIPE REQUIRES ADDITIONAL DEPTH FOR SLOPING.

9. SEE STANDARD PLAN A–B FOR ADJUSTMENT SECTION REQUIREMENTS.

10. A DESIGN VARIANCE IS REQUIRED BEFORE A CATCH BASIN – TYPE 0 IS INSTALLED.
NOTES:
1. SEE STD. PLAN B–120 FOR OUTLET TRAP. A TRAP IS REQUIRED ON ANY OUTLET PIPE. TRAP TO REMAIN REMOVABLE FOR MAINTENANCE THEREFORE NO MECHANICAL CONNECTION BETWEEN TRAP & OUTLET ALLOWED. VERTICAL PROJECTION OF TRAP NOT TO EXTEND BEYOND C/L OF ACCESS OPENING.
2. IF AN INLET PIPE IS PRESENT, THE INVERT SHALL BE HIGHER IN ELEVATION THAN THE OUTLET PIPE INVERT. A C.B. WITH AN INLET PIPE IS UTILIZED ONLY WHEN CONNECTING ADDITIONAL C.B.'S AT AN INTERSECTION OR WHEN ADDING GRATE INLET TYPE 3. A C.B. WITH INLET PIPE(S) IS NOT ALLOWED AS A SUBSTITUTE FOR A M.H.
3. SEE SEC. 9–12 FOR PRECAST CONCRETE CATCH BASINS.
4. SEE STD. PLAN Z118 FOR BASE SLAB & FOUNDATION DETAILS.
5. CONE & BARREL JOINTS MAY BE EITHER TONGUE & GROOVE OR REVERSE TONGUE & GROOVE.
6. ADJUSTMENT SECTION, CONE, BARREL, RISER SECTIONS (IF USED), & PIPE OPENINGS TO BE SEALED PER SECTION 7–05.
7. CONCRETE CURB & GUTTER SHALL BE BLOCKED OUT FOR A 5–FT LENGTH CENTERED @ THE C.B. TO ALLOW FOR LOCATING CB ADJACENT TO CURB.
8. USE ALTERNATE LOCATION FOR INLET/OUTLET PIPES ONLY IF INLET PIPE REQUIRES ADDITIONAL DEPTH FOR SLOPING. PROVIDE 4–FT DEPTH UNDER TRAP.
9. SEE STANDARD PLAN A–8 FOR ADJUSTMENT SECTION REQUIREMENTS.
NOTES:

1. SEE SEC 9–12 FOR PRECAST CONCRETE CATCH BASINS.

2. SEE STD PLAN B–114 FOR CATCH BASIN, TYPE 2, FRAME & COVER.

3. SEE STD PLAN B–105 FOR COVER & SILL BLOCK.

4. SEE STD PLAN W–106 FOR GUTTER DETAILS.

5. SEE STD PLAN Z–118 FOR BASE SLAB & FOUNDATION DETAILS.

6. CONE & BARREL JOINTS MAY BE EITHER TONGUE & GROOVE OR REVERSE TONGUE & GROOVE.

7. ADJUSTMENT SECTION, CONE, BARREL JOINTS, RISER SECTIONS (IF USED), & PIPE OPENINGS TO BE SEALED PER SEC 7–05.

8. SEE STD PLAN B–120 FOR OUTLET TRAP. A TRAP IS REQ’D ON ANY OUTLET PIPE. TRAP TO REMAIN REMOVABLE FOR MAINTENANCE THEREFORE, NO MECHANICAL CONNECTION BETWEEN TRAP & OUTLET PIPE IS ALLOWED. VERTICAL PROJECTION OF TRAP NOT TO EXTEND BEYOND C/L OF ACCESS OPENING.

9. SEE STANDARD PLAN A–8 FOR ADJUSTMENT SECTION REQUIREMENTS.

10. C.B.TYPE 2 SHALL BE UTILIZED WHERE GUTTER GRADES ARE ≤ ±0.75% (.0075).

SECTION A–A

CATCH BASIN – TYPE 2

ADOPTED: ____________ 10/2019
REvised: ____________ 01/2017
SUPERSEDES: ____________
CHECKED BY: ____________ JAG
SCALE: ____________ NTS
DWG/REV. BY: ____________ TSS/MLD

ENGINEERING SERVICES
CITY OF SPOKANE, WASHINGTON

STANDARD PLAN No. B–101D
* SEE STANDARD PLAN B-101D FOR CATCH BASIN TYPE 2 REQUIREMENTS

CONC COLLAR, 6" W x 3.5" D, CAST-IN-PLACE ON 3-SIDES OF CONVERSION UNIT. USE HMA IN LIEU OF CONC COLLAR FOR ROAD RESURFACING OR RECONSTRUCTION PROJECTS.

FRAME & DUAL VANED GRATES PER WSDOT STD PLAN B-40.40-00

SECTION A-A

CATCH BASIN - TYPE 2 FRAME & COVER SEE STD PLAN B-114

CATCH BASIN - TYPE 2

FRAME & COVER SEE

STD PLAN B-114

3'-8" 1'-10"

MIN TO 4' MAX

1/2" TAPER ¼" TAPER

PAVEMENT

Pavement

13.5% SLOPE

CSTC

FIELD PLACE 6" MIN THICKNESS OF 3000 LB

CONC COLLAR

zialgiedkground

CONC COLLAR FOR ROAD RESURFACING OR RECONSTRUCTION PROJECTS.

OUTLET TRAP REQUIRED, SEE COS STD PLAN B-120. TRAP TO REMAIN REMOVABLE FOR MAINTENANCE THEREFORE, NO MECHANICAL CONNECTION BETWEEN TRAP & OUTLET PIPE IS ALLOWED. VERTICAL PROJECTION OF TRAP NOT TO EXTEND BEYOND C/L OF ACCESS OPENING.

CATCH BASIN - TYPE 2 W/ CONVERSION UNIT FOR WSDOT VANED GRATES

ENGINEERING SERVICES
CITY OF SPOKANE, WASHINGTON

STANDARD PLAN NO.
B-101D1

APPROVED BY

ADOPTED: 01/2009
REVISED: 01/2017
SUPERSEDES: 04/2012
CHECKED BY: JAG
SCALE: NTS
DWG/REV. BY: TCB/MLD

KRYL THOMAS
CITY ENGINEER
DANIEL ALBERT BILLER, P.E.
NOTES:
1. ANGLE A SHALL BE SET SO THAT THE PREFABRICATED FRAME SHALL HAVE FULL BEARING ON BOTH ENDS. THE FINISHED TOP OF CONCRETE SHALL BE EVEN WITH THE TOP OF STEEL ANGLE.
2. THE CONVERSION UNIT WITH FRAME & GRATE SHALL BE PLACED TO MATCH THE GUTTER SLOPE TO PROVIDE AN UNOBSTRUCTED FLOW LINE.
3. ALL EXPOSED CONCRETE EDGES SHALL BE FINISHED WITH A ½" RADIUS EDGER TOOL.
4. CONSTRUCT CONCRETE LEDGE FOR GRATE FRAME AROUND ALL FOUR SIDES. THE LONG CONCRETE LEDGES ARE RAISED ¾" ABOVE THE SHORT LEDGES SINCE THEY RECEIVE NO ¾" ANGLE.
5. ALL PICKUP HOLES SHALL BE GROUTED FULL AFTER THE BASIN HAS BEEN PLACED.
6. SEE CONTRACT FOR TYPE OF GRATE SPECIFIED. SEE WSDOT STANDARD PLAN B-40.40-00 FOR FRAME & GRATE DETAILS.
7. ALL REBAR SHALL HAVE A MINIMUM OF 2" COVERAGE ON ALL SIDES.

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<td>1</td>
<td>4'-10</td>
<td>3/4&quot;</td>
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BENDING DIAGRAM

(ALL DIMENSIONS ARE OUT TO OUT)

CONVERSION UNIT NOTES
INCLUDING BAR LIST & BENDING DIAGRAM

ENGINEERING SERVICES
CITY OF SPOKANE, WASHINGTON

STANDARD PLAN No. B-101D3
CURB & GUTTER INLET FRAME & BI-DIRECTIONAL GRATE

FOR USE IN SUMP SITUATIONS

1. SEE STD. PLAN 8-120 FOR OUTLET TRAP, A TRAP IS REQUIRED ON ANY OUTLET PIPE, TRAP REMAIN REMOVABLE FOR MAINTENANCE THEREFORE NO MECHANICAL CONNECTION BETWEEN TRAP & OUTLET ALLOWED. VERTICAL PROJECTION OF TRAP NOT TO EXTEND BEYOND C/L OF ACCESS OPENING.

2. IF AN INLET PIPE IS PRESENT, THE INVERT SHALL BE HIGHER IN ELEVATION THAN THE OUTLET PIPE INVERT. A C.B. WITH AN INLET PIPE IS UTILIZED ONLY WHEN CONNECTING ADDITIONAL C.B.'S AT AN INTERSECTION OR WHEN ADDING GRATE INLET TYPE 3. A C.B. WITH INLET PIPE(S) IS NOT ALLOWED AS A SUBSTITUTE FOR A M.H.

3. SEE SEC. 9-12 FOR PRECAST CONCRETE CATCH BASINS.

4. SEE STD. PLAN 2-118 FOR BASE SLAB & FOUNDATION DETAILS.

5. CONE & BARREL JOINTS MAY BE EITHER TONGUE & GROOVE OR REVERSE TONGUE & GROOVE.

6. ADJUSTMENT SECTION, CONE, BARREL, RISER SECTIONS (IF USED), & PIPE OPENINGS TO BE SEALED PER SECTION 7-05.

7. CONCRETE CURB & GUTTER SHALL BE BLOCKED OUT FOR A 5-FT LENGTH CENTERED @ THE C.B. TO ALLOW FOR LOCATING C.B. ADJACENT TO CURB.

8. USE ALTERNATE LOCATION FOR INLET/OUTLET PIPES ONLY IF INLET PIPE REQUIRES ADDITIONAL DEPTH FOR SLOPING. PROVIDE 4-FT DEPTH UNDER TRAP.

9. SEE STANDARD PLAN A-8 FOR ADJUSTMENT SECTION REQUIREMENTS.
TOP SLAB WITH RECTANGULAR OPENING

NOTES:
1. GROUT & SEAL ADJUSTMENT SECTION. ADJUSTMENT SECTION FOR EXISTING STRUCTURES TO MATCH FIELD CONDITIONS AS REQUIRED (3" MIN-12" MAX). SEE STANDARD PLAN A-9 FOR ADJUSTMENT SECTION REQUIREMENTS.
2. SEE STD. PLAN B-120 FOR OUTLET TRAP. A TRAP IS REQUIRED ON ANY OUTLET PIPE. TRAP TO REMAIN REMOVABLE FOR MAINTENANCE THEREFORE NO MECHANICAL CONNECTION BETWEEN TRAP & OUTLET ALLOWED. VERTICAL PROJECTION OF TRAP NOT TO EXTEND BEYOND C.L. OF ACCESS OPENING.
3. IF AN INLET PIPE IS PRESENT, THE INVERT SHALL BE HIGHER IN ELEVATION THAN THE OUTLET PIPE INVERT. A C.B. WITH AN INLET PIPE IS UTILIZED ONLY WHEN CONNECTING ADDITIONAL C.B.'S AT AN INTERSECTION OR WHEN ADDING GRATE INLET TYPE 3. A C.B. WITH INLET PIPE(S) IS NOT ALLOWED AS A SUBSTITUTE FOR A M.H.
4. SEE SEC. 9-12 FOR PRECAST CONCRETE CATCH BASINS.
5. SEE STD. PLAN Z-118 FOR BASE SLAB & FOUNDATION DETAILS.
6. TOP SLAB & BARREL JOINTS MAY BE EITHER TONGUE & GROOVE OR REVERSE TONGUE & GROOVE.
7. ADJUSTMENT SECTION, TOP SLAB, BARREL, RISER SECTIONS (IF USED), & PIPE OPENINGS TO BE SEALED PER SECTION 7-05.
8. CONCRETE CURB & GUTTER SHALL BE BLOCKED OUT FOR A 6'-0" LENGTH CENTERED ON THE C.B. TO ALLOW FOR LOCATING CB ADJACENT TO CURB.

FRAME & VANED GRATES: NORMAL INSTALLATION
FOR USE IN CONTINUOUS GRADE SITUATIONS

FRAME & VANED GRATES: ROTATED INSTALLATION
FOR USE IN CONTINUOUS GRADE SITUATIONS

CATCH BASIN TYPE 4

ADOPTED: 
REVISED: 10/2019
SUPERSEDES: 04/2018
CHECKED BY: JAG, GSN
SCALE: NTS
DWG./REV BY: RJS/MLD

ENGINEERING SERVICES
CITY OF SPOKANE, WASHINGTON
STANDARD PLAN No. B-101F
1. See Sec 9–12 for precast concrete drywells.

2. See Sec 9–03.12(5) for gravel backfill for drywells.


6. Cone & barrel joints may be either tongue & groove or reverse tongue & groove.

7. Adjustment section, cone & barrel joints to be sealed per Sec 7–05.

8. Use alternate pipe location only if pipe requires additional depth for sloping, depth of cover, or other restrictive field condition.


CRUSHED SURFACING BASE COURSE, BACKFILL ABOVE GEOTEXTILE FABRIC TO BTM OF PAVEMENT

MANHOLE FRAME & COVER

MANHOLE FRAME & COVER

GROUT & SEAL ADJUSTMENT SECTION SEE STANDARD PLAN A-8

GROUT & SEAL BOTH INSIDE/OUTSIDE OF CONE

2'-0" MIN.

2'-0" CONC I.D.

1'-6" MIN.

GEOTEXTILE FABRIC

GEOTEXTILE FABRIC

TOP OF PIPE

SLOPE AT:

1

2

ALTERNATE LOCATION (SEE NOTE 8) NO PIPE JOINTS ALLOWED IN GRAVEL BACKFILL ENVELOPE

GEOTEXTILE FABRIC

NOTES:

1. SEE SEC 9-12 FOR PRECAST CONCRETE DRYWELLS.
2. SEE SEC 9-03.12(5) FOR GRAVEL BACKFILL FOR DRYWELLS.
3. SEE SEC 9-33 FOR WOVEN GEOTEXTILE FABRIC (MODERATE SULLIVABILITY, CLASS A). OVERLAP ALL FABRIC JOINTS 1'-6" MIN. WRAP & SECURE FABRIC AROUND PIPE TO PREVENT MIGRATION OF FINES INTO GRAVEL ENVELOPE.
4. SEE STD PLANS A-12 & A-13 FOR MANHOLE FRAME & COVER.
5. SEE STD PLANS B-102C & Z-118 FOR BASE & FOUNDATION DETAILS.
6. CONE & BARREL JOINTS MAY BE EITHER TONGUE & GROOVE OR REVERSE TONGUE & GROOVE.
7. ADJUSTMENT SECTION, CONE & BARREL JOINTS TO BE SEALED PER SEC 7-05.
8. USE ALTERNATE PIPE LOCATION ONLY IF PIPE REQUIRES ADDITIONAL DEPTH FOR SLOPING, DEPTH OF COVER, OR OTHER RESTRICTIVE FIELD CONDITION.
9. SEE STANDARD PLAN A-8 FOR ADJUSTMENT SECTION REQUIREMENTS.
10. SEE STANDARD PLAN W-102 FOR CRUSHED ROCK REQUIREMENTS.

DRYWELL — TYPE 2

ENGINEERING SERVICES
CITY OF SPOKANE, WASHINGTON

STANDARD PLAN No.
B-102D

ADOPTED: 10/2019
SUPERSEDES: 01/2017
CHECKED BY: JAG
SCALE: NTS
DWG/REV. BY: SRM/RDC

APPROVED BY
NOTES:

1. SWALE DESIGN WIDTH & DEPTH WILL VARY AS REQ'D TO PROVIDE ADEQUATE TREATMENT STORAGE FOR THE GIVEN STORM VOLUME.

2. PROVIDE A 1'-0" MIN. FLAT & FLUSH AREA ADJACENT TO SIDEWALK WHEN USING A SIDE-SLOPE NO STEEPER THAN 3:1. IF FLAT AREA IS NOT PROVIDED ADJACENT TO SIDEWALK, THEN USE A SIDE-SLOPE NO STEEPER THAN 4:1. SEE DES. STD. 6.4-2.

3. WHEN SWALE WIDTH IS ADEQUATE, PROVIDE A PRACTICAL FLAT BOTTOM. OTHERWISE, A "V" BOTTOM IS ACCEPTABLE.

4. DRYWELL SHALL BE INSTALLED AT A 10 FT MIN DISTANCE FROM LOWEST INLET TO PREVENT DIRECT INFLOW INTO THE OVERFLOW GRATE. DRYWELL MUST BE LOCATED WITHIN 8' OF ROADWAY FOR ACCESS & MAINTENANCE. PROVIDE A 3" MIN FREEBOARD BETWEEN LOWEST SWALE INLET & TOP OF DRYWELL GRATE OR OVERFLOW BERM.

5. SEE THE SPOKANE REGIONAL STORMWATER MANUAL (SRSRM) INCLUDING TABLE 6-1 FOR INFILTRATION & OTHER DESIGN CRITERIA FOR TREATMENT ZONE & SUBGRADE INFILTRATION LAYER.

6. 2" EXPOSURE BETWEEN TOP OF CURB INLET & SWALE DRAIN PAD TO TOP OF SOD ROOT MASS OR HYDROSEED WITH A DRYLAND GRASS MIX.


TYPICAL SECTION

DRYWELL IN SWALE

SEE STD PLANS B-102C & B-102D FOR DRYWELL REQ'MTS

ADOPTED: 06/1994
REVISED: 04/2012
SUPERSEDES: 09/2010
CHECKED BY: SJS
SCALE: NTS
REVISED BY: DSH
STANDARD PLAN NO. B-102F
PLACE (16) PCS. OF 
#4 EPOXY COATED 
REBAR AS SHOWN 
W/ 1 1/2" MIN. EDGE 
CLR. & CENTERED 
IN 5" SLAB DEPTH.

NOTES:
1. SEE STANDARD 
PLAN B-114 
FOR CATCH 
 BASIN TYPE 2 
FRAME & 
COVER.
2. UTILIZE CLASS 
4000, 
AIR-ENTRAINED 
CONCRETE FOR 
CATCH BASIN 
COVER & SILL 
BLOCK.

SECTION A-A 
CATCH BASIN COVER

PLACE (3) PCS. #4 
EPOXY COATED REBAR 
AS SHOWN W/ 1 1/2" 
MIN. EDGE CLR.

SILL BLOCK

CATCH BASIN COVER TYPE 2 
WITH SILL BLOCK
NOTES:
1. USE ABSORPTION TRENCH WHERE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE
   ENGINEER & IN ACCORDANCE W/ SECTION 7-05.3(101).
2. DRAIN PIPE TO BE LAID ON A -0.5% TO -1.0% GRADE AWAY FROM THE DRYWELL.
3. DRAIN PIPE TO BE SOLID WALL FOR 1ST 20-FT FROM DRYWELL. REMAINDER OF DRAIN
   PIPE TO BE PERFORATED PER SECTION 9-05.
4. OUTLET TRAP PER STANDARD PLAN B-120 TO BE INSTALLED ON DRYWELL EXIT PIPE,
   SEAL PIPE COLLAR TO DRYWELL.
5. OVERLAP FABRIC A MINIMUM OF 1'-6". SEE SECTION 9-33 FOR WOVEN GEOTEXTILE
   FABRIC (MODERATE SURVIVABILITY-CLASS A).
6. SEE STANDARD PLANS B-102C, & D FOR DRYWELL DETAILS.
7. SEE SECTION 9-03.12(5) FOR GRAVEL BACKFILL FOR DRYWELLS.
CAST IRON FRAME MIN. WEIGHT 168 LBS.

SECTION A-A

27 5/8"
26 3/8"
26 3/4"
34 1/8"

SECTION B-B

26 3/16"
8 3/4"
3/4"
1"
1/2"
1"
3/8"
2"
1 7/8"
1 1/8"
1/2"

SECTION C-C

DRAWING NOTES:
1. See Section 9-05.15 (2).
4. Foundry Name, Date, Material and Heat Number In Raised Letters on Interior Face of Each Casting.
5. Fit Tolerance 1/8"(+/-).

APPROVED BY
CITY ENGR.
CH. DESIGN ENGR.

SCALE _ NIS _ ADOPTED _ REVISED _ SUPERSEDES _

CATCH BASIN FRAME & GRATE

DEPT. OF PUBLIC WORKS
ENGR. DIVISION SPOKANE, WA

STANDARD PLAN No. B-113
PICK HOLE-1" DIA, (TYP) 2 PLCS. LOCATE AT 180-DEG OPPOSITE EA OTHER

RAISED DOME, 3/8" DIA X 1/4" HT

GROOVE RINGS 3 EA, 1/4" WIDE X 1/8" DEEP

NOTE:
1. SEE SEC 9-05.15 FOR METAL CASTINGS.
2. ALL MATING SURFACES SHALL BE MACHINE FINISHED TO ENSURE A NON-ROCKING FIT.
NOTES:
1. CONCRETE USED IN CONSTRUCTION OF THIS BOX SHALL BE CLASS 4000 AS SPECIFIED IN SECTION 6–02 OF STANDARD SPECIFICATIONS.
2. GROUT & SEAL ADJUSTMENT SECTION. SEE STANDARD PLAN A–B.
**TYPE 60A TRAP**

1. TRAP TO BE MADE OF
   GALVANIZED SHEET METAL.
   MINIMUM THICKNESS 18 GA.

2. ALL JOINTS TO BE SEAMED,
   SPOT WELDED, AND SOLDERED
   OR CONTINUOUSLY BUTT-WELDED.

3. EXTERIOR WELDS SHALL BE
   GROUND SMOOTH.

**PVC BELL ELBOW TRAP**

1. 6” OR 8” WITH
   GASKETS REMOVED.

**NOTES:**

1. DIMENSION "D" IS NOMINAL DIAMETER OF OUTLET PIPE.