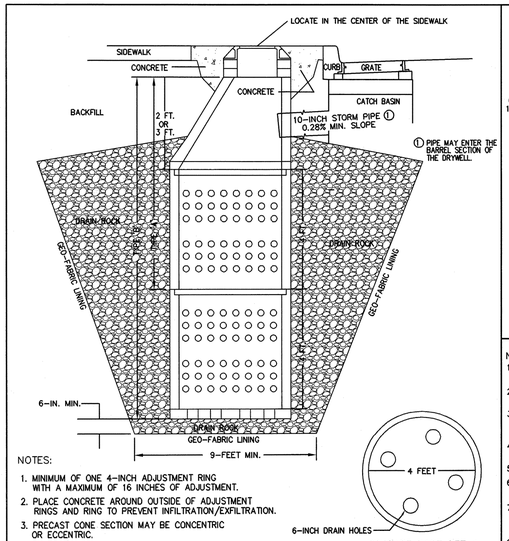
REVISIONS:

A PORTION OF SEC 15, TWP 21, RGE 26, W.M. GRANT COUNTY, WASHINGTON



NOTES:

1. MINIMUM OF ONE 4-INCH ADJUSTMENT RING WITH A MAXIMUM OF 16 INCHES OF ADJUSTMENT.
2. PLACE CONCRETE AROUND OUTSIDE OF ADJUSTMENT RINGS AND RING TO PREVENT INFILTRATION/EXFILTRATION.
3. PRECAST CONE SECTION MAY BE CONCENTRIC OR ECCENTRIC.
4. GROUT SEAL PVC PIPE WHERE THE PIPE PENETRATES THE DRYWELL.
5. DRYWELLS NOT IN SIDEWALK SHALL BE PLACED IN A 6-FT. BY 6-FT. BY 6-IN. CONCRETE PAD AT FINISH GRADE.
6. STORM PIPE SHALL BE A MINIMUM OF 18 FEET IN LENGTH.
7. "DRAIN" SHALL BE CAST IN THE LID.
8. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND BE APPROVED BY THE CITY OF EPHRATA.

PRECAST BASE DETAIL

DATE	REVISION	BY

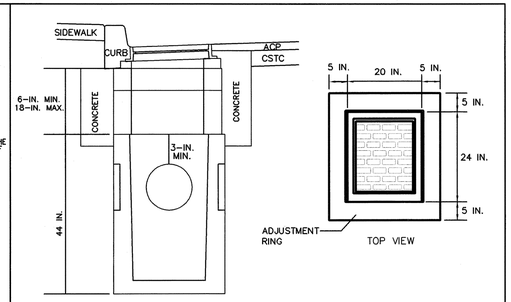
48-INCH PRECAST CONCRETE DRYWELL

EPHRATA PUBLIC WORKS DEPARTMENT

CITY OF EPHRATA

DESIGN —
CHECK
SCALE NONE
DATE 02-17 GRANT COUNTY WASHINGTON

A-11



SIDE VIEW

NOTES:

1. CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C 478 (AASHTO M 199) AND ASTM C 890.
2. PRECAST BASES SHALL BE FURNISHED WITH FOUR CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A MINIMUM WALL THICKNESS OF 2 INCHES.
3. THE CATCH BASIN SHALL BE INSTALLED SO THE LONG SIDE (34 INCHES) IS PARALLEL WITH THE CURB. THE DISTANCE FROM THE CENTER LINE OF THE CATCH BASIN TO THE BACK EDGE OF THE CURB IS 18 INCHES FOR A 30-INCH BY 34-INCH CATCH BASIN.
4. AN ENTRY COUPLING OR SAND COLLAR IS REQUIRED FOR PVC PIPE WHERE THE PIPE PENETRATES THE CATCH BASIN BASE.
5. MAXIMUM DEPTH FROM PIPE INVERT TO FINISH GRADE IS 5 FEET.
6. MINIMUM COVER FROM TOP OF PIPE TO FINISH GRADE UNDER SIDEWALKS IS 2 FEET. MINIMUM COVER FROM TOP OF PIPE TO FINISH GRADE UNDER ROADWAYS IS 3 FOOT FOR PVC PIPE AND 18 INCHES FOR DUCTILE IRON PIPE.
7. ADJUSTMENT RINGS AND THE CATCH BASIN GRATE SHALL BE WITHIN ONE INCH OF THE VERTICAL ALIGNMENT OF THE CATCH BASIN. PLACE CONCRETE AROUND OUTSIDE OF ADJUSTMENT RINGS AND GRATE TO PREVENT INFILTRATION OR EXFILTRATION.
8. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND BE APPROVED BY THE CITY OF EPHRATA.

DATE	REVISION	BY

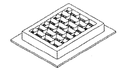
CATCH BASIN TYPE 1

EPHRATA PUBLIC WORKS DEPARTMENT

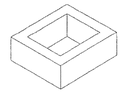
CITY OF EPHRATA

DESIGN —
CHECK
SCALE NONE
DATE 02-17 GRANT COUNTY WASHINGTON

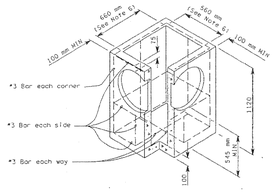
A-10



FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION

NOTES

1. As an acceptable alternate to rebar, wire mesh having a minimum area of 0.25 square cm per cm may be used. Wire mesh shall not be placed in knockouts.
2. The knockout diameter shall not be greater than 500 mm. Knockouts shall have a wall thickness of 50 mm minimum to 65 mm maximum.
3. The maximum depth from the finished grade to the pipe invert shall be 1.5 m.
4. Frame and grate may be installed with flange down or cast into adjustment section.
5. The precast base section may have a rounded floor and the walls may be sloped at a rate of 24:1 or steeper.
6. Opening shall be measured at the top of the precast base unit.

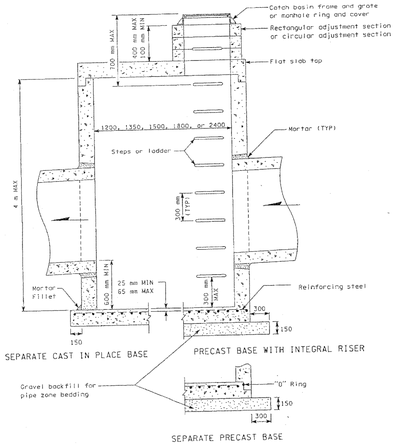
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

CATCH BASIN TYPE 1

EXPIRES JUNE 30, 2007

STANDARD PLAN B-1

APPROVED FOR PUBLICATION
STATE DESIGN ENGINEER — 4/7/07 DATE
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION OLYMPIA, WASHINGTON



NOTES:

1. No steps are required when height is 1.2 m or less.
2. The bottom of the precast catch basin may be rounded.
3. Frame and grate may be installed with flange down or cast into adjustment section.
4. Knockouts shall have a wall thickness of 50 mm minimum to 65 mm maximum.

CATCH BASIN DIMENSION TABLE

DIA	WALL THICKNESS	BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS	BASE REINFORCING STEEL mm^2/mm IN EACH DIRECTION	
					INTEGRAL BASE	SEPARATE BASE
1200	100	150	900	200	0.32	0.49
1350	115	200	1050	200	0.40	0.40
1500	125	200	1200	200	0.53	0.53
1800	150	200	1500	300	0.51	0.74
2400	200	300	2100	300	0.61	0.83

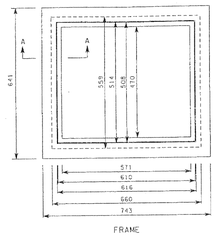
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

CATCH BASIN TYPE 2

EXPIRES MAY 31, 2007

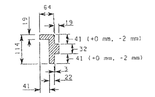
STANDARD PLAN B-1e

APPROVED FOR PUBLICATION
STATE DESIGN ENGINEER — 2/1/07 DATE
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION OLYMPIA, WASHINGTON



FRAME

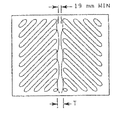
DIMENSIONS	T	R	D	MASS	
Standard Grate	44	660	41	Frame	72 Kg ± 5%
Grate With Optional Rib	38	535	70	Grate	54 Kg ± 5%



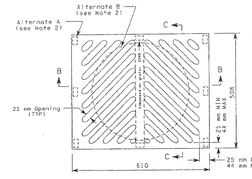
SECTION A-A

NOTES

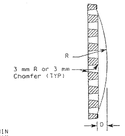
1. 3° to 5° draft permitted as needed.
2. Seating of grate shall be accomplished by one of the following: Alternate A shall be eight pads 38 mm x 19 mm x 3 to 6 mm integrally cast with the grate. Alternate B shall be a machined surface outside a 425 mm circle, bottom only. (See Section B-B).
3. Tolerance on all dimensions shall be ±2 mm unless otherwise noted.



OPTIONAL RIB - BOTTOM VIEW

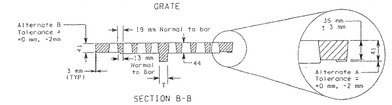


GRATE



SECTION C-C

OPTIONAL DESIGN FOR GRATE OPENING ENDS



SECTION B-B

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED

METAL FRAME AND GRATE FOR CATCH BASIN AND INLET

EXPIRES JUNE 30, 2007

STANDARD PLAN B-2a

APPROVED FOR PUBLICATION
STATE DESIGN ENGINEER — 4/7/07 DATE
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION OLYMPIA, WASHINGTON

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CITY OF EPHRATA, WA

PRAIRIE RIDGE

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PROJECT NO.: **05055**
DRAWN BY: **TLR**
ISSUE DATE: **08-24-05**
SHEET REV.:

STORM DETAILS

05055DTL02-STORM.DWG

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