Miscellaneous Design Schematics for Compliance with Performance Criteria

Figure K-1: Trash Rack for Low Flow Orifice
Figure K-2: Expanded Trash Rack Protection for Low Flow Orifice
Figure K-3: Internal Control for Orifice Protection
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Figure K-8: Half Round CMP Weir
Figure K-9: Concrete Level Spreader
Figure K-10: Baffle Weir for Cold Climates
Figure K-11: Hooded Outlet with Hood Below Ice Layer
Figure K-12: Shallow Angle Trash Rack to Prevent Icing
NOTES FOR TRASH RACK
1. TRASH RACK TO BE CENTERED OVER OPENING.
2. STEEL TO CONFORM TO ASTM A-36.
3. ALL SURFACES TO BE COATED WITH ZRC COLD GALVANIZING COMPOUND AFTER WELDING.
Figure K.2 Expanded Trash Rack Protection for Low Flow Orifice

EXPANDED STEEL GRATE
3 LBS/FT² WELDED INSIDE ANGLES, TOP AND BOTH SIDES,
#3.0 GRATING (SEE DETAIL)

1/2" DIAMETER HOLE (TYP.)
1" x 1" ANGLES ALONG TOP EDGES
CAST-IN-PLACE TRASH RACK BASE
(3'-8" x 3'-2" x 6")

1 LAYER 6" x 6" 4/4 WOVEN WIRE FABRIC CENTERED IN SLAB

PRE-CAST RISER STRUCTURE

1/4" x 4" STEEL ALL AROUND

2'-10"
2'-6"
3'-8.3/4"
1'-10"
1'-8"
3'-4"
3'-6"
3'-8"
Figure K.3  Internal Control for Orifice Protection
Figure K.4 Observation Well for Infiltration Practices

Each observation well/cleanout shall include the following:

1. For an underground flush mounted observation well/cleanout, provide a tube made of non-corrosive material, schedule 40 or equal, at least three feet long with an inside diameter of at least 6 inches.

2. The tube shall have a factory attached cast iron or high impact plastic collar with ribs to prevent rotation when removing screw top lid. The screw top lid shall be cast iron or high impact plastic that will withstand ultra-violet rays.
Figure K. 6 Isolation Diversion Structure

- TOP OF TRASH GRATING AT OUTLET PIPE INVERT
- STANDARD MANHOLE
- INVERT OF INFLOW PIPE
- INFLOW PIPE
- OUTFLOW PIPE
- MANHOLE CHANNEL
- PRECAST MANHOLE BASE
- BOLT SHELF ANGLE TO MANHOLE WALL PER DETAIL
- "FIRST FLUSH" OUTLET PIPE (TO BMP FACILITY)

NOTE ALUMINUM TRASH GRATE IN TWO SEMICIRCULAR SECTIONS
Figure K.7 Half Round CMP Hood
Figure K.8  Half Round CMP Weir

OPEN TOP

1/2 ROUND CMP PIPE-WEIR

PLATE WELDED TO BOTTOM

CMP DRIVEWAY CULVERT
Figure K.9 Concrete Level Spreader

FLOW ENTERS AS SHEET FLOW OR CONCENTRATED FLOW

LEVEL LIP

6' MINIMUM

PLAN VIEW

CONCRETE LIP PROTECTION

LEVEL LIP 0% GRADE

ORIGINAL GROUND

2:1 OR FLATTER

6" MIN.

3"

PROFILE
Figure K.10  Baffle Weir for Cold Climates
Figure K.11  Hooded Outlet with Hood Below Ice Layer
Figure K.12  Shallow Angle Trash Rack to Prevent Icing
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