

THE STORMWATER MANAGEMENT StormFilter®
 U.S. PATENT No. 5,322,629,
 No. 5,707,527, No. 6,027,639
 No. 6,649,040, No. 5,624,576,
 AND OTHER U.S. AND FOREIGN
 PATENTS PENDING

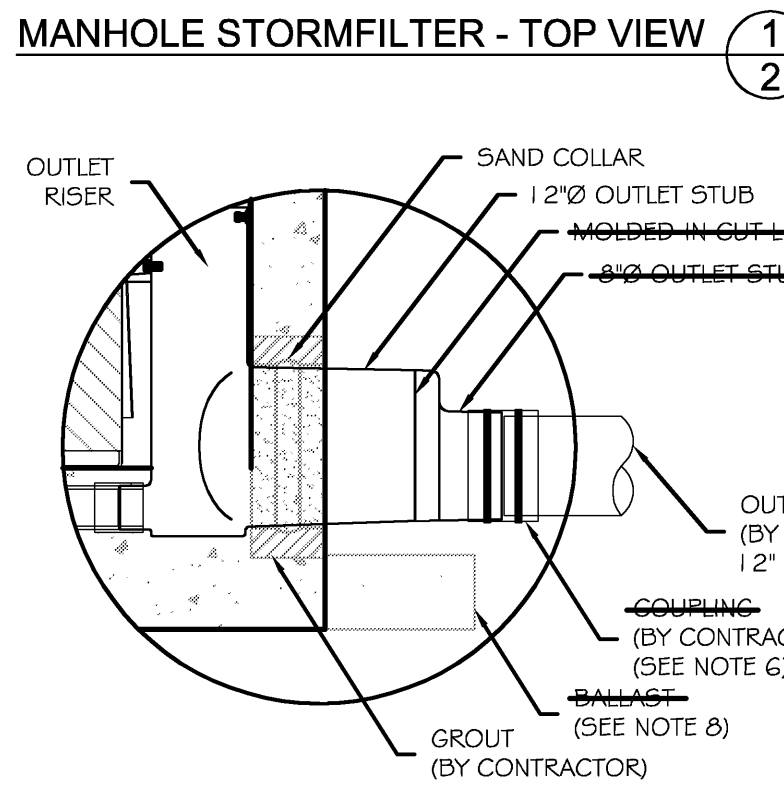
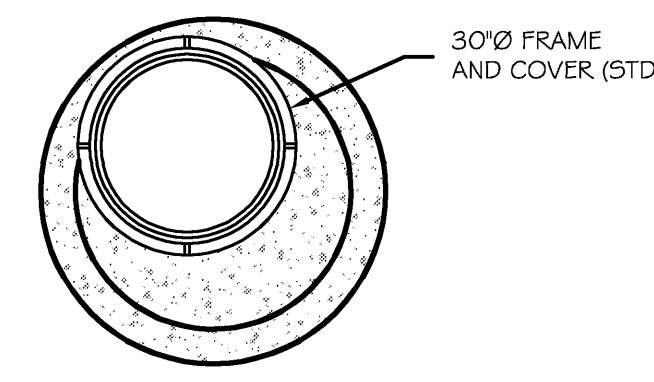
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PRECAST 48" MANHOLE STORMFILTER
 PLAN AND SECTION VIEWS
 STANDARD DETAIL

DATE: 09/26/05	SCALE: NONE	FILE NAME: MHSF3-48PC-DTL	DRAWN: MJW	CHECKED: ARG
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GENERAL NOTES

- 1) STORMFILTER BY CONTECH STORMWATER SOLUTIONS; PORTLAND, OR (800) 548-4667; SCARBOROUGH, ME (877) 907-8676; ELK RIDGE, MD (866) 740-3318.
- 2) FILTER CARTRIDGE(S) TO BE SIPHON-ACTUATED AND SELF-CLEANING. STANDARD DETAIL SHOWS MAXIMUM NUMBER OF CARTRIDGES. ACTUAL NUMBER REQUIRED TO BE SPECIFIED ON SITE PLANS OR IN DATA TABLE BELOW.
- 3) PRECAST MANHOLE STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478. DETAIL REFLECTS DESIGN INTENT ONLY. ACTUAL DIMENSIONS AND CONFIGURATION OF STRUCTURE WILL BE SHOWN ON PRODUCTION SHOP DRAWING.
- 4) STRUCTURE AND ACCESS COVERS TO MEET AASHTO H-20 LOAD RATING.
- 5) STORMFILTER REQUIRES 2.3 FEET OF DROP FROM INLET TO OUTLET. IF LESS DROP IS AVAILABLE, CONTACT CONTECH STORMWATER SOLUTIONS. MINIMUM ANGLE BETWEEN INLET AND OUTLET IS 45°.
- 6) INLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR. PRECAST MANHOLE STORMFILTER EQUIPPED WITH A DUAL DIAMETER HDPE OUTLET STUB AND SAND COLLAR. EIGHT INCH DIAMETER OUTLET SECTION MAY BE SEPARATED FROM OUTLET STUB AT MOLDED-IN CUT LINE TO ACCOMMODATE A 12 INCH OUTLET PIPE. CONNECTION TO DOWNSTREAM PIPING TO BE MADE USING A FLEXIBLE COUPLING OR ECCENTRIC REDUCER, AS REQUIRED. COUPLING BY FERCO OR EQUAL AND PROVIDED BY CONTRACTOR.
- 7) PROVIDE MINIMUM CLEARANCE FOR MAINTENANCE ACCESS. IF A SHALLOWER SYSTEM IS REQUIRED, CONTACT CONTECH STORMWATER SOLUTIONS FOR OTHER OPTIONS.
- 8) ANTI-FLOTATION BALLAST TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR, IF REQUIRED. BALLAST TO BE SET AROUND THE PERIMETER OF THE STRUCTURE.
- 9) ALL STORMFILTERS REQUIRE REGULAR MAINTENANCE. REFER TO OPERATION AND MAINTENANCE GUIDELINES FOR MORE INFORMATION.



PRECAST MANHOLE STORMFILTER DATA

STRUCTURE ID	CB 1-2
WATER QUALITY FLOW RATE (cfs)	0.04
PEAK FLOW RATE (<1 cfs)	0.08
RETURN PERIOD OF PEAK FLOW (yrs)	1.00
# OF CARTRIDGES REQUIRED	3
CARTRIDGE FLOW RATE (15 or 7.5 gpm)	15
MEDIA TYPE	PERLITE
RIM ELEVATION	264.53

PIPE DATA:	I.E.	ORIENTATION	MATERIAL	DIAMETER
INLET PIPE #1	254.20	90°	HDPE	12"
INLET PIPE #2				
OUTLET STUB	251.90	0°	HDPE	12"

ECCENTRIC REDUCER (BY CONTRACTOR)	YES/NO	SIZE
ANTI-FLOTATION BALLAST	NONE	WIDTH HEIGHT

NOTES/SPECIAL REQUIREMENTS:

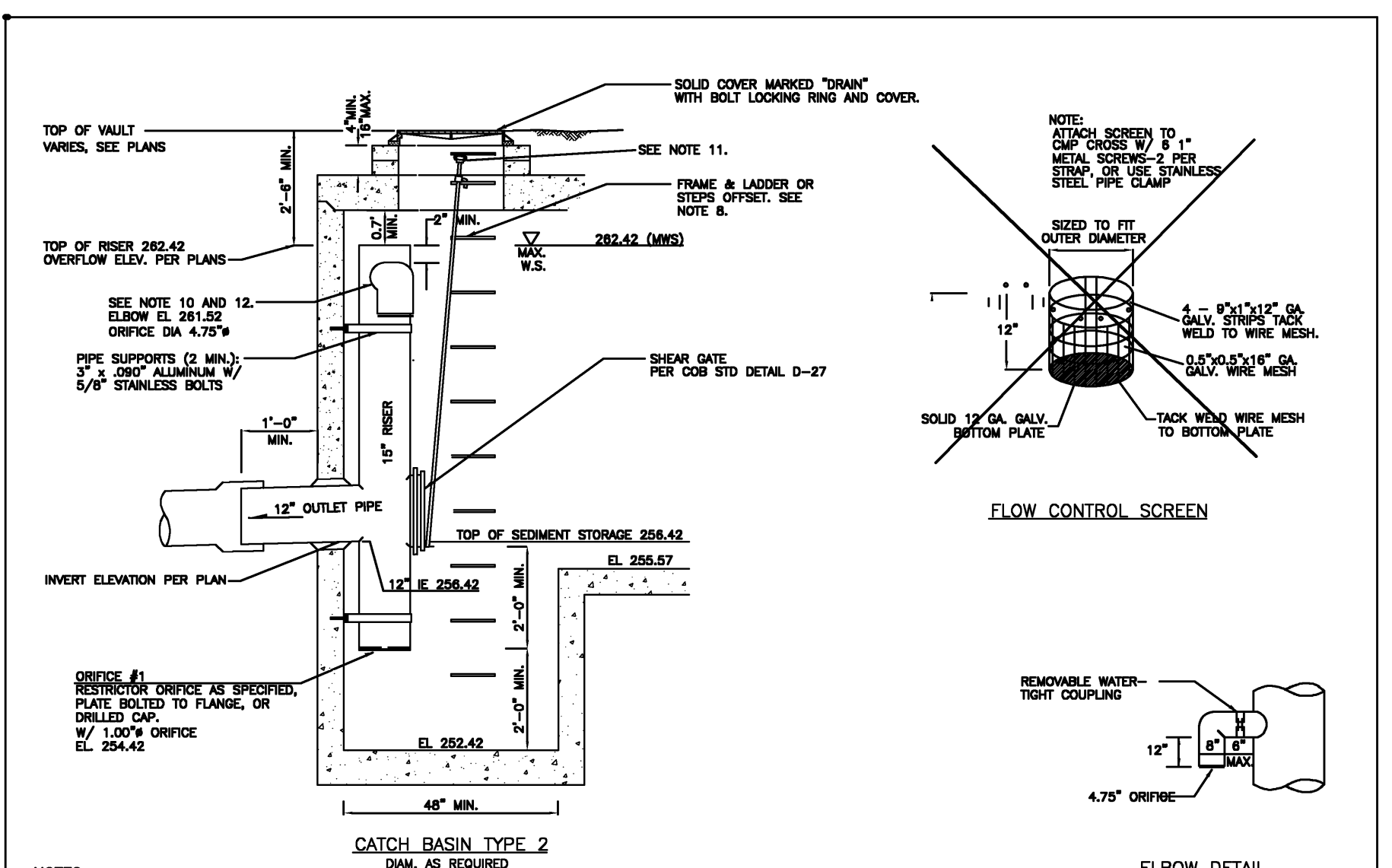
PIPE ORIENTATION KEY:

90°	0°
180°	270°

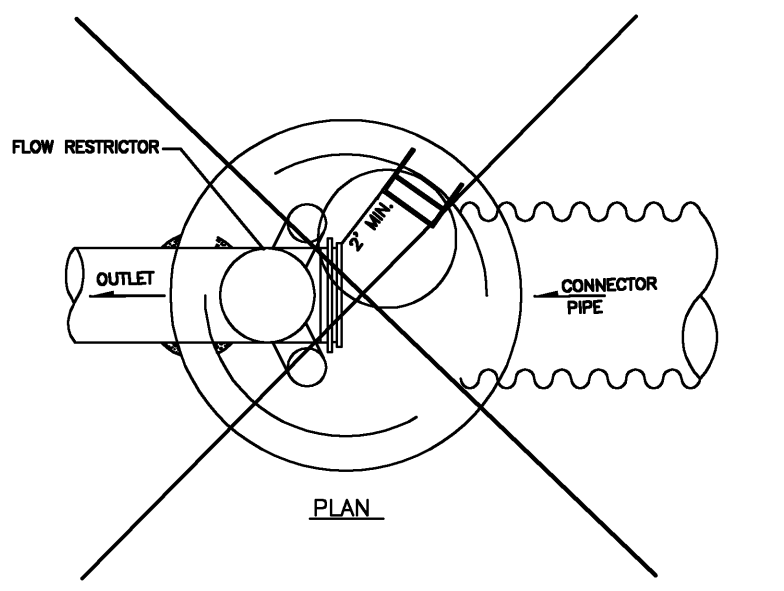
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PRECAST 48" MANHOLE STORMFILTER
 TOP AND SECTION VIEWS, NOTES AND DATA
 STANDARD DETAIL

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- NOTES:
1. PIPE SIZES, INVERT ELEVATIONS, ORIFICE SIZES, OVERFLOW ELEVATIONS AND SLOPES; PER PLANS.
 2. OUTLET CAPACITY: NOT LESS THAN COMBINED INLETS.
 3. EXCEPT AS SHOWN OR NOTED, UNITS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS FOR CATCH BASIN TYPE 2, 54" MIN. DIAM.
 4. PIPE SUPPORTS AND RESTRICTOR SHALL BE OF SAME MATERIAL, AND BE ANCHORED AT 3' MAX. SPACING BY 5/8" DIAM. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED 2" IN WALL.
 5. THE RESTRICTOR SHALL BE FABRICATED FROM .060" ALUMINUM, PVC, CPE, OR HDPE PIPE PER THESE ENGINEERING STANDARDS.
 6. OUTLET SHALL BE CONNECTED TO CULVERT OR SEWER PIPE WITH SUITABLE COUPLER OR GROUTED INTO THE BELL OF CONCRETE PIPE.
 7. THE VERTICAL RISER STEM OF THE RESTRICTOR SHALL BE THE SAME DIAM. AS THE HORIZONTAL OUTLET PIPE, WITH AN 8" MIN. DIAM.
 8. FRAME AND LADDER OR STEPS OFFSET SO THAT:
 - A. SHEAR GATE IS VISIBLE FROM TOP.
 - B. CLIMB DOWN SPACE IS CLEAR OF RISER AND SHEAR GATE.
 - C. FRAME IS CLEAR OF CURB.
 9. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4".
 10. MULTI-ORIFICE ELBOWS MAY BE LOCATED AS SHOWN OR ALL ON ONE SIDE OF RISER TO ASSURE LADDER CLEARANCE.
 11. SHEAR GATE HANDLE SHALL BE ATTACHED TO LADDER/STEP LOCATED WITHIN 24" ACCESS SECTION.
 12. IF NOTCHED WIRE IS USED IN LIEU OF ELBOW, BAFFLE SHALL NOT OBSTRUCT ACCESS TO THE STRUCTURE.



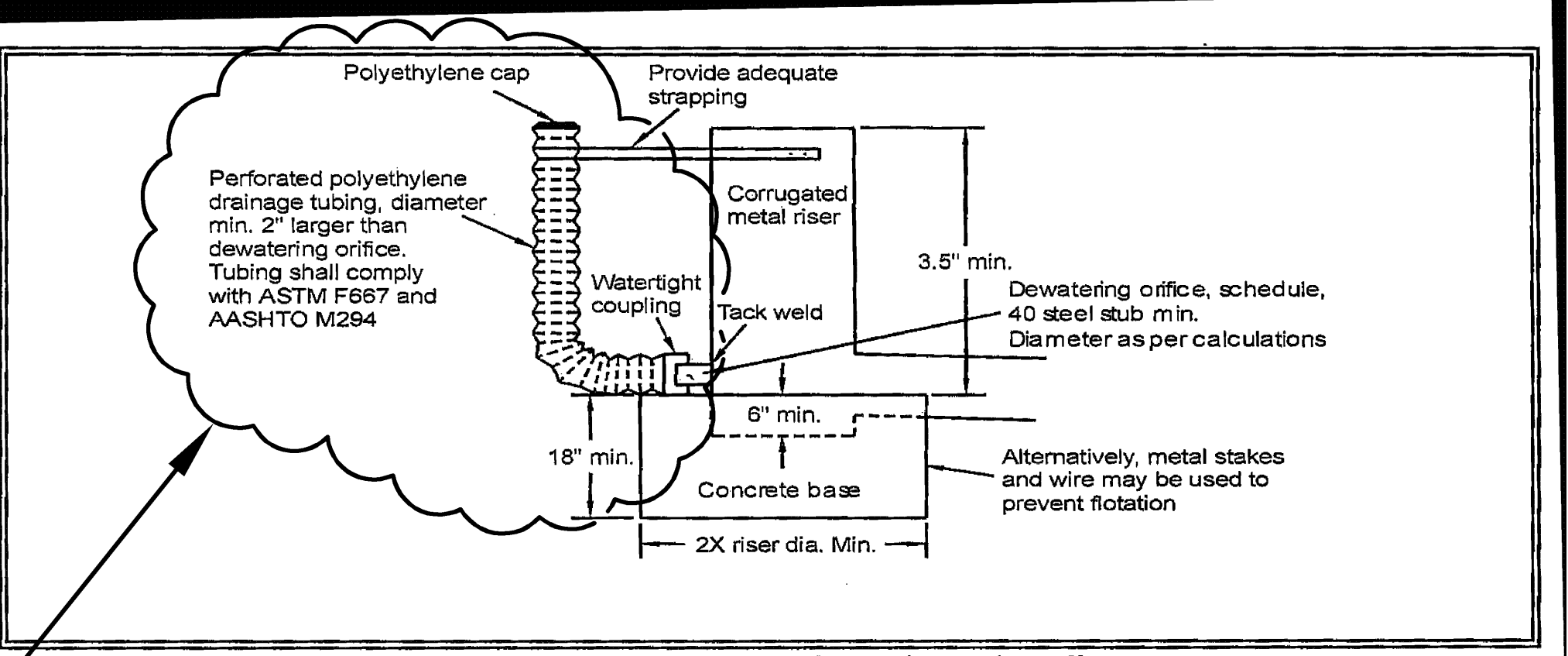
JULY 14, 1998 NO SCALE

City of Bellevue SURFACE WATER UTILITY

FLOW RESTRICTOR TEE TYPE

NO. D-26 MODIFIED

DEWATERING ORIFICE NOTE
 DETENTION VAULT WILL BE USED AS TEMPORARY SEDIMENT TRAP DURING CONSTRUCTION. PROVIDE 1-5/8" DIAMETER STUB WELDED TO FLOW RESTRICTOR RISER ON SIDE OPPOSITE OF ELBOW (MATCH INVERT ELEVATION OF OUTLET). THIS WILL SERVE AS DEWATERING ORIFICE DURING CONSTRUCTION. TO THE STUB, ATTACH 4" DIAMETER PERFORATED POLYETHYLENE TUBING, USING WATERTIGHT COUPLING, AND EXTEND TO FULL HEIGHT OF RISER, SIMILAR TO DETAIL, TO RIGHT. ALSO INSTALL TEMPORARY (REMOVABLE) CAP AT BOTTOM OF RISER, COVERING ORIFICE #1. UPON COMPLETION OF CONSTRUCTION, AFTER THE SITE HAS BEEN STABILIZED AND CAPTURED SEDIMENTS HAVE BEEN REMOVED FROM THE VAULT, REMOVE TUBING AND PERMANENTLY CAP OR PLUG DEWATERING ORIFICE STUB. REMOVE TEMPORARY CAP TO EXPOSE ORIFICE #1.



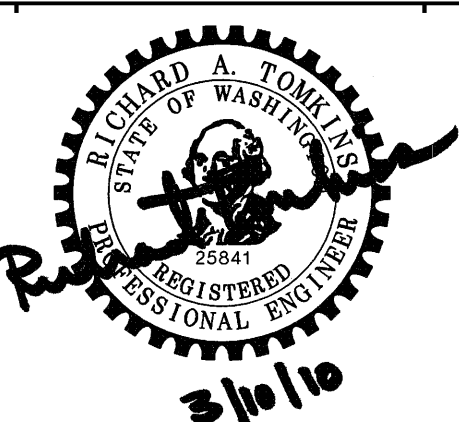
February 2005 Volume II - Construction Stormwater Pollution Prevention 4-107

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REVIEWED BY:	DATE:			
NO	DATE	BY	APPR	REVISIONS
1	11/17/09	DAM	RAT	PER CITY COMMENTS
2	3/20/10	DAM	RAT	PER CITY COMMENTS

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 PROJECT ENGINEER
 JEFFREY L. COX, ASLA 6/5/09
 LANDSCAPE ARCH DATE
 SCALE:
 HORIZ: N/A VERT: N/A

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 09-114657 UE

CITY OF BELLEVUE, WASHINGTON

UTILITY GRID #	GRID J-6
VAULT DETAILS	
JOB NUMBER:	05-289
SEC 27 TWP 25 RGE 5	SHT 9 OF 9