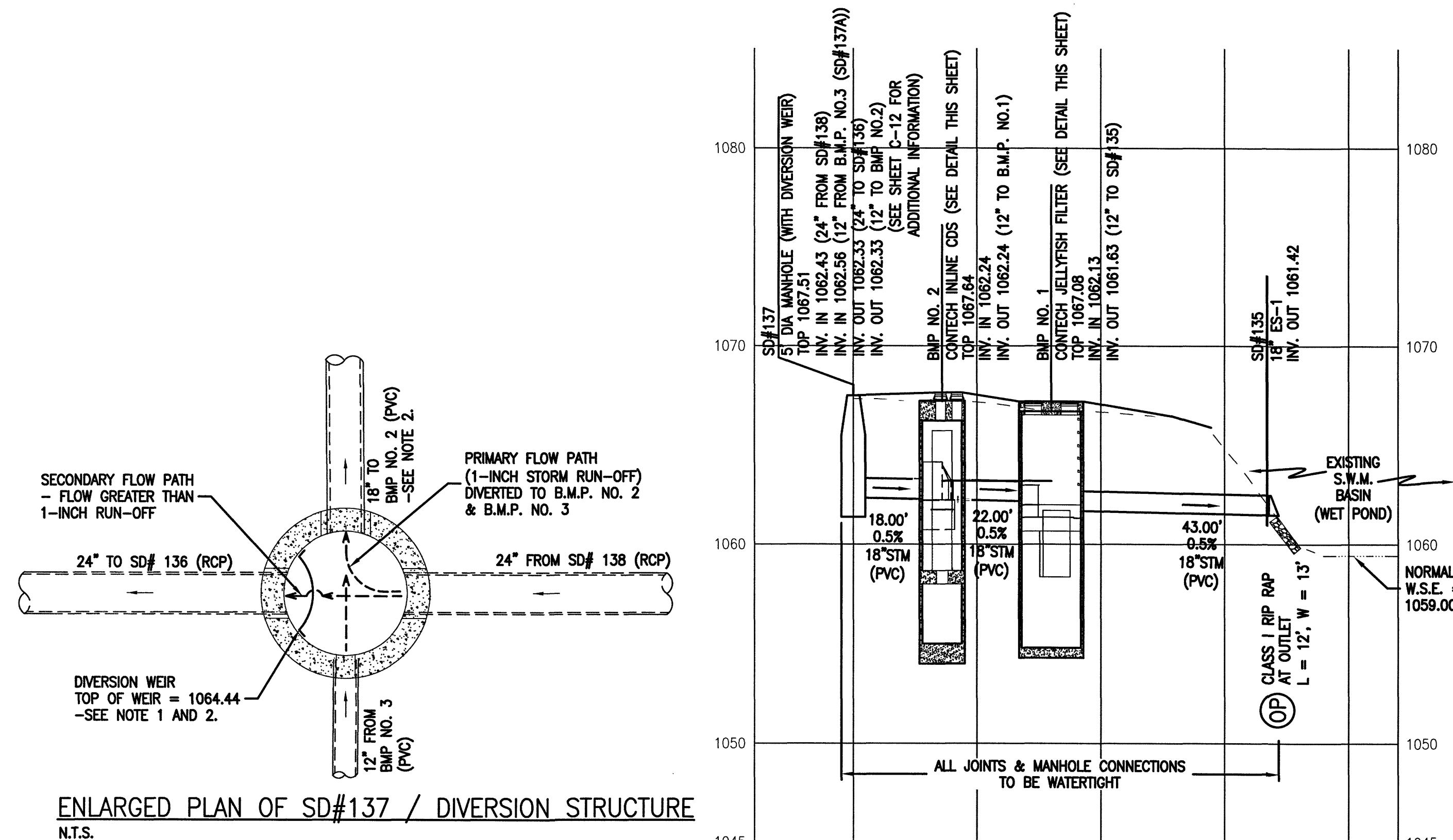
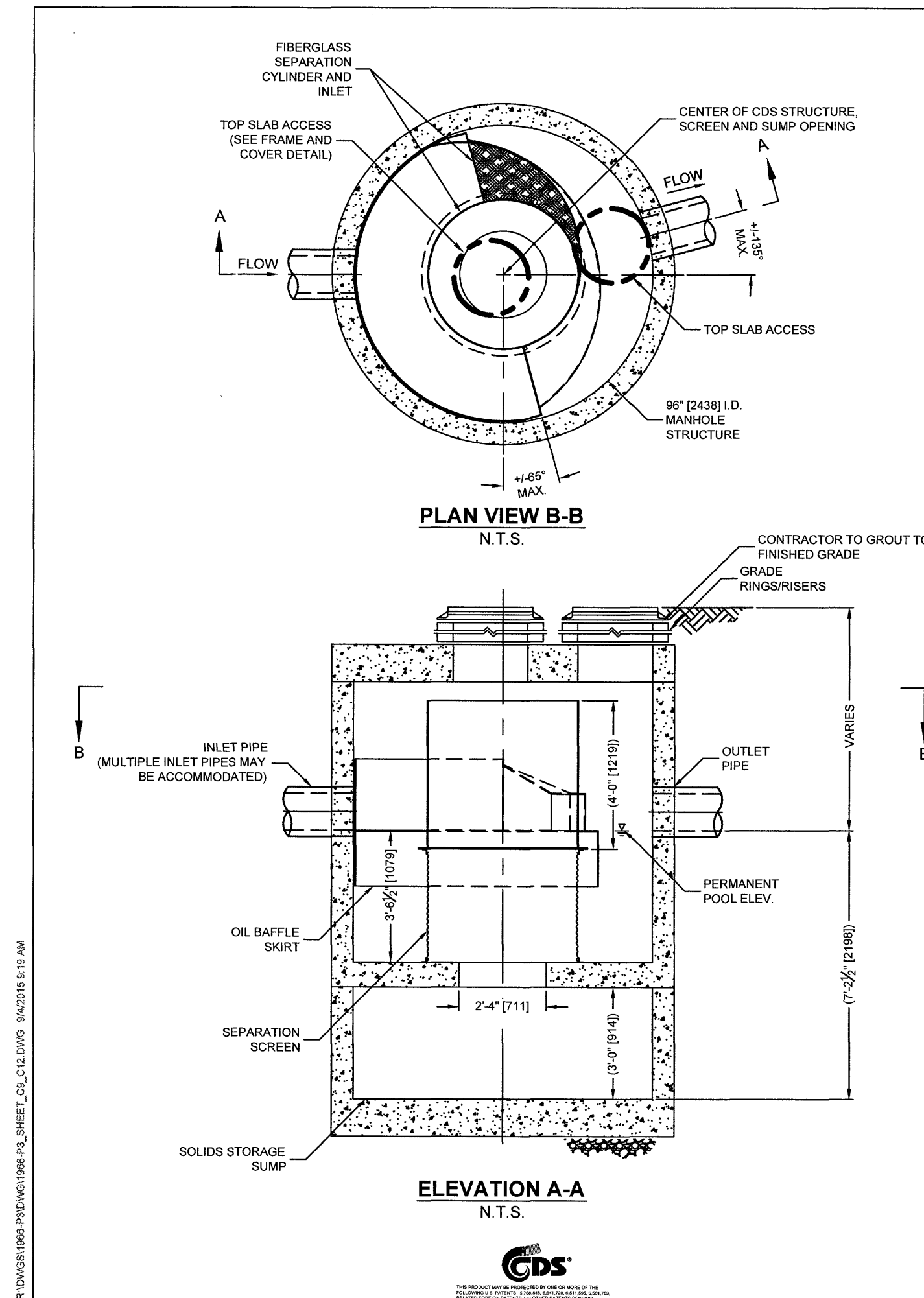


ENLARGED PLAN VIEW SHOWING BMP LOCATION
SCALE: 1" = 20'



SD#137 TO SD#135 PROFILE
SCALE: 1" = 20' HORIZONTAL
1" = 5' VERTICAL



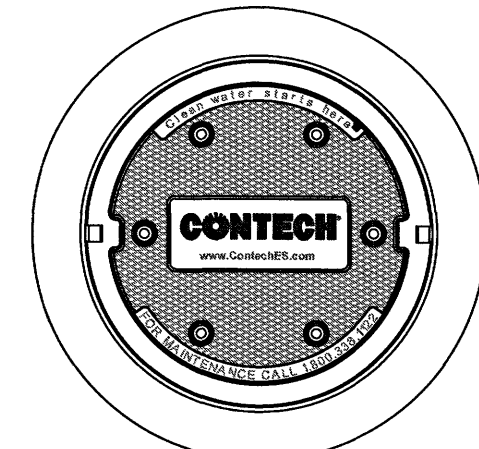
DESIGN NOTES

RATED TREATMENT CAPACITY IS 4.5 CFS (127.4 L/s) OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 30.0 CFS (850 L/s). IF THE SITE CONDITIONS EXCEED 30.0 CFS (850 L/s), AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD ##### CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NUDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	B.M.P. NO. 2
WATER QUALITY FLOW RATE (CFS OR L/s)	2.80
PEAK FLOW RATE (CFS OR L/s)	9.4
RETURN PERIOD OF PEAK FLOW (YRS)	10
SCREEN APERTURE (2400 OR 4700)	-
PIPE DATA	1E MATERIAL DIAMETER
INLET PIPE #1	1062.24 PVC 18"
INLET PIPE #2	- - -
OUTLET PIPE	1062.24 PVC 18"
RIM ELEVATION	1067.64
ANTI-FLOTATION BALLAST	WIDTH HEIGHT
	N/A N/A
NOTES/SPECIAL REQUIREMENTS:	
* PER ENGINEER OF RECORD	

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECHENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO M 200 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

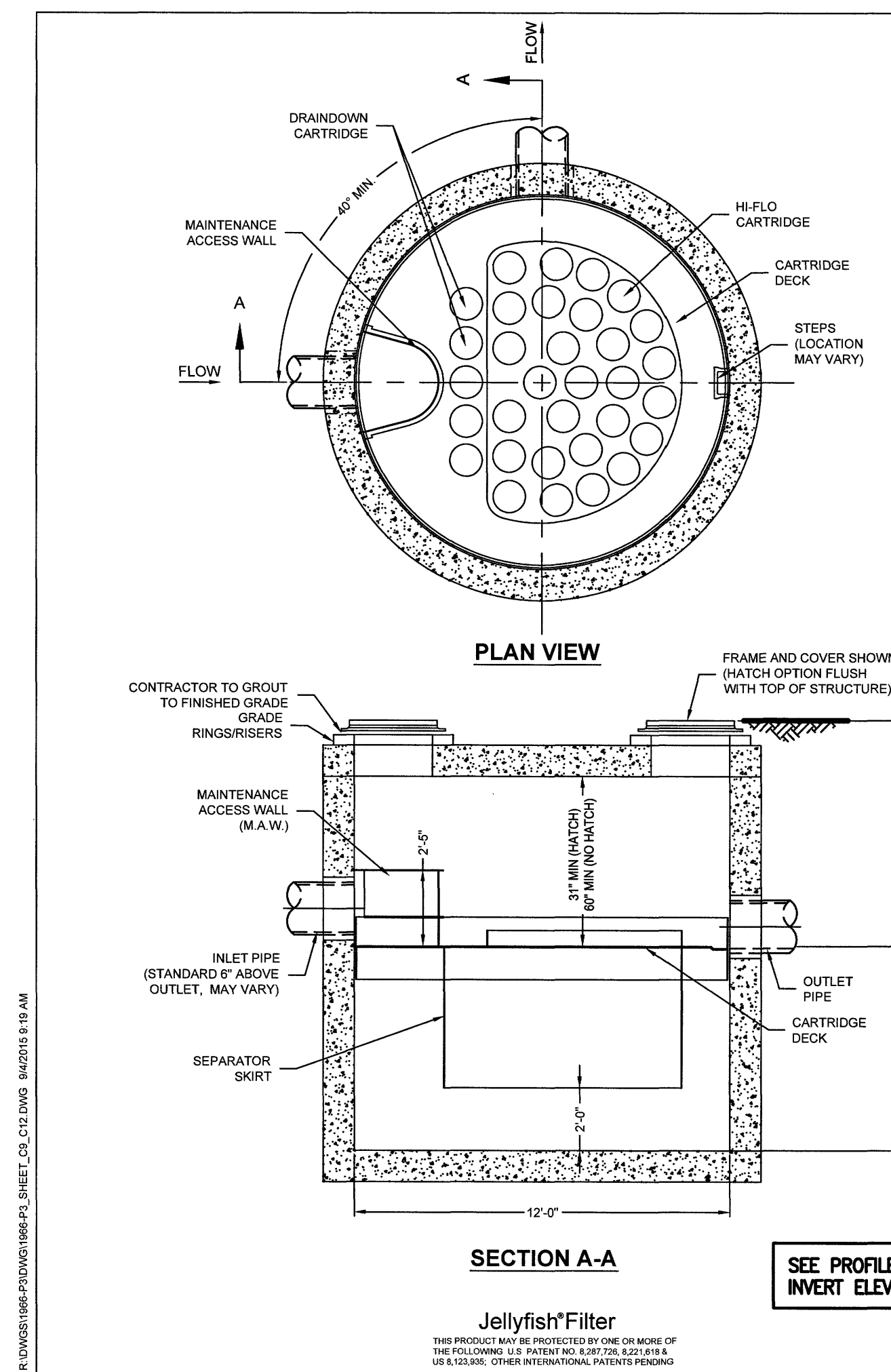
INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

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CDS4030-8-C
INLINE CDS
STANDARD DETAIL

BMP NO. 2



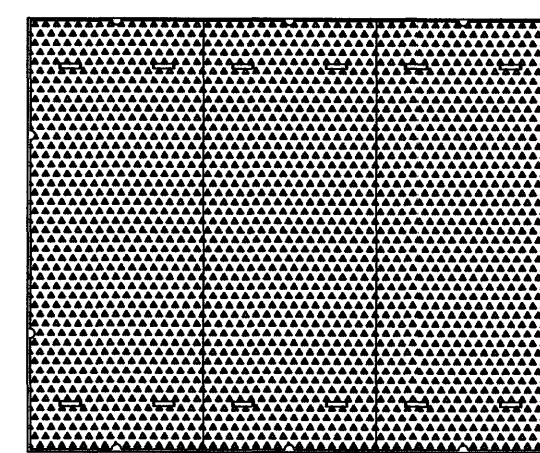
JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN. 60" DIA. MANHOLE. JELLYFISH PEAK HYDRAULIC CAPACITY IS 5.26 CFS. IF THE SITE CONDITIONS EXCEED 5.26 CFS AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION

CARTRIDGE DEPTH	4"	40"	27"	18"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-5"	5'-3"	4'-2"	3'-2"
FLOW RATE HIGH-FLO / DRAINDOWN (cfs) (per cart)	0.18 / 0.09	0.13 / 0.065	0.09 / 0.045	0.05 / 0.025
MAX. CARTS HIGH-FLO / DRAINDOWN	27 / 5			

SELECTED CARTRIDGE



HATCH
(84" x 102" CAST INTO SLAB)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	B.M.P. NO. 1
WATER QUALITY FLOW RATE (cfs)	2.80
PEAK FLOW RATE (cfs)	9.4
RETURN PERIOD OF PEAK FLOW (YRS)	10
# OF CARTRIDGES REQUIRED (HF / DD)	14/4
CARTRIDGE SIZE	54"
PIPE DATA	1E MATERIAL DIAMETER
INLET PIPE #1	1062.13 PVC 18"
INLET PIPE #2	- - -
OUTLET PIPE	1061.63 PVC 18"
RIM ELEVATION	1067.08
ANTI-FLOTATION BALLAST	WIDTH HEIGHT
	N/A N/A
NOTES/SPECIAL REQUIREMENTS:	
* PER ENGINEER OF RECORD	

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED VAULT DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
- JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO M 200 LOAD RATING, ASSUMING EARTH COVER OR 0' - 5' AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M 300 AND BE CAST WITH THE CONTECH LOGO.
- JELLYFISH STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES

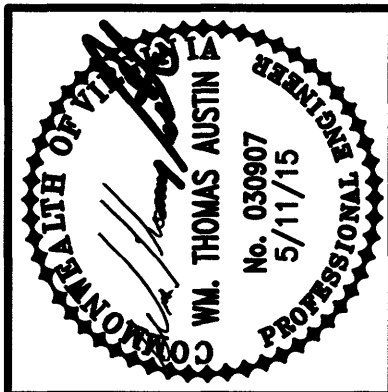
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORM/FILTER STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN ON SITE SPECIFIC DRAWINGS.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW CARTRIDGE DECK ARE GROUTED.
- CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION.

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JELLYFISH JF12
STANDARD DETAIL

BMP NO. 1

APPROVED



Date	Revisions	1ST REVIEW	COMMENTS
7/17/15	1	APPROVED SET	
9/4/15	2		

Issue Date:	MAY 11, 2015
Drawn By:	RWA
Designed By:	RWA
Checked By:	WTA
Date:	5/11/15

Mattern & Craig
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THE VILLAGE AT TINKER CREEK - PHASE IIIA
DETAILS & SECTIONS
ROANOKE COUNTY, VIRGINIA

Vertical Scale:
N/A
Horizontal Scale:
N/A
Commission Number:
1966-P3

Sheet No.:
C-12