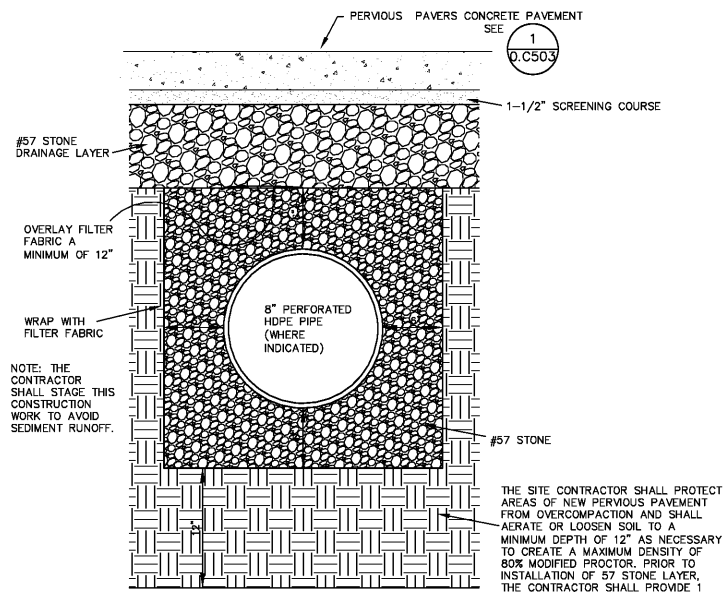
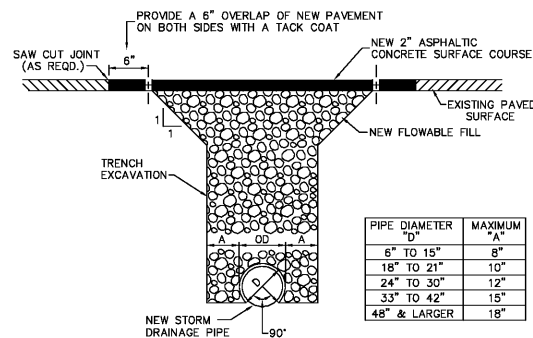


ALL DESIGNS, DRAWINGS AND SPECIFICATIONS DEPICTED ON THIS SHEET ARE PROPERTY OF COAST ARCHITECTS, INC. COPYRIGHT © 2017. ANY UNAUTHORIZED USE OR REPRODUCTION IS SUBJECT TO LEGAL PROSECUTION. POSSESSION IN ANY FORM CONSTITUTES ACCEPTANCE OF THESE CONDITIONS.

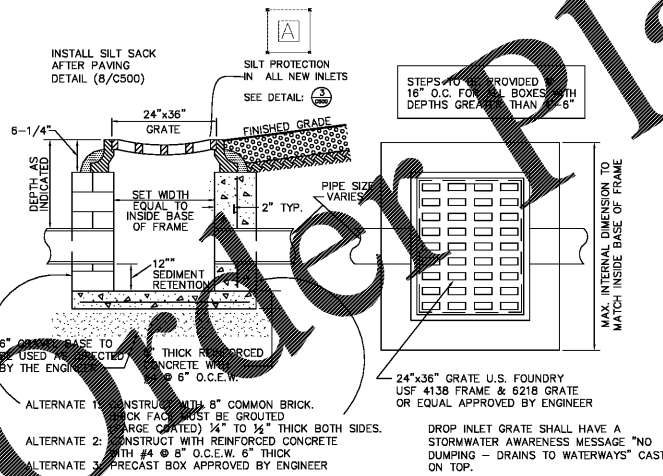


SEE NOTES ON 0.C503

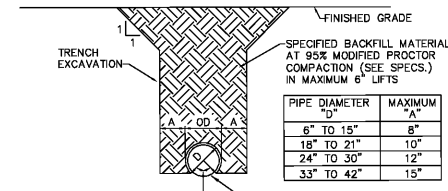
PERVIOUS PAVEMENT UNDERDRAIN DETAIL (1)
NOT TO SCALE



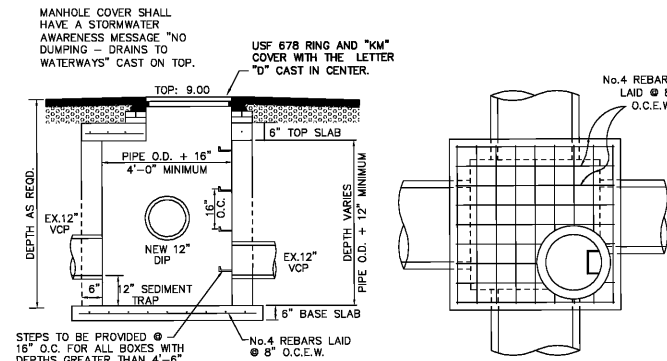
PAVEMENT TRENCHING DETAIL (2)
NOT TO SCALE



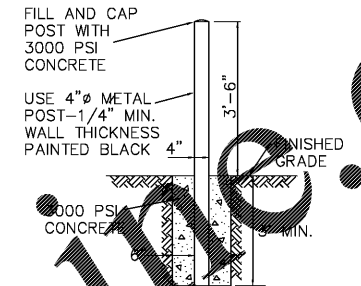
STANDARD DROP INLET DETAIL (3)
NOT TO SCALE



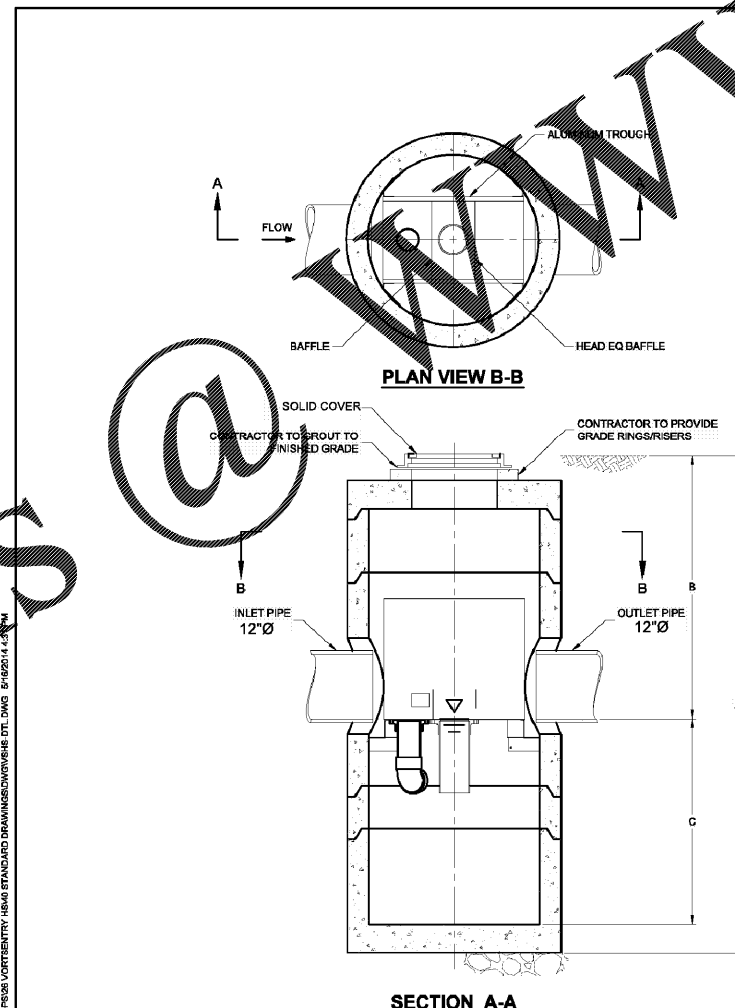
STORM DRAIN TRENCH DETAIL (4)
NOT TO SCALE



JUNCTION BOX (5)
NOT TO SCALE



GUARD POST DETAIL (7)
NOT TO SCALE



SECTION A-A

VortSentry

VORTSENTRY HS DESIGN NOTES

VSI-RATED TREATMENT CAPACITY IS SHOWN IN THE TABLE BELOW, OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY VARIES. CONTACT YOUR CONTECH REPRESENTATIVE FOR ADDITIONAL INFORMATION.

THE STANDARD SOLID COVER CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW.

| CONFIGURATION OPTION DESCRIPTION | |
|----------------------------------|--|
| GRATE INLET (NO INLET PIPE) | |
| GRATE INLET WITH INLET PIPE | |

VORTSENTRY HS GENERAL INFORMATION

| Model | Manhole Diameter (ID) | | Total Treatment Flow Rate | | Typical Total Distance Rim to Outside Bottom | | Typical Distance Rim to Invert | | Typical Depth Below Invert | | Approximate Minimum Distance Rim to Invert | | Maximum Pipe Diameter (ID) | |
|-------|-----------------------|------|---------------------------|-------|--|------|--------------------------------|------|----------------------------|------|--|------|----------------------------|------|
| | FT | mm | CFS | US | FT | m | FT | m | FT | mm | FT | m | IN | mm |
| HS36 | 3 | 900 | 0.55 | 16.6 | 10.16 | 3.10 | 4.08 | 1.24 | 5.58 | 1702 | 3.90 | 0.91 | 18 | 450 |
| HS48 | 4 | 1200 | 1.20 | 34.0 | 13.25 | 4.04 | 6.00 | 1.83 | 6.75 | 2057 | 4.00 | 1.22 | 24 | 600 |
| HS60 | 5 | 1500 | 2.20 | 62.3 | 15.13 | 4.61 | 6.50 | 1.98 | 7.96 | 2426 | 4.82 | 1.47 | 30 | 750 |
| HS72 | 6 | 1800 | 3.70 | 104.8 | 16.56 | 5.05 | 6.75 | 2.06 | 9.15 | 2788 | 5.59 | 1.70 | 36 | 900 |
| HS84 | 7 | 2100 | 5.80 | 158.6 | 18.85 | 5.75 | 7.75 | 2.36 | 10.35 | 3156 | 5.90 | 1.52 | 42 | 1050 |
| HS96 | 8 | 2400 | 8.10 | 229.4 | 20.87 | 6.36 | 8.50 | 2.59 | 11.54 | 3518 | 6.91 | 2.11 | 48 | 1200 |

SITE SPECIFIC DATA REQUIREMENTS

| | |
|----------------------------------|------------------|
| STRUCTURE ID | |
| WATER QUALITY FLOW RATE (CFS) | 0.4 |
| PEAK FLOW RATE (CFS) | 4.0 |
| RETURN PERIOD OF PEAK FLOW (YRS) | 10 |
| PIPE DATA | |
| INLET PIPE 1 | 5.20 RCP 12 |
| OUTLET PIPE | 5.20 RCP 12 |
| RIM ELEVATION | |
| ANTI-FLOTATION BALLAST | WIDTH * HEIGHT * |
| 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 WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
 - VORTSENTRY HS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 - STRUCTURE SHALL MEET AASHTO M500 AND CASTINGS SHALL MEET AASHTO M506 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- 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 VORTSENTRY HS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS 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.

CONTECH
ENGINEERED SOLUTIONS LLC

www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45399
800-338-1122 513-642-7000 513-642-7983 FAX

VORTSENTRY HS STANDARD DETAIL (6)
0.C502

coast architects
671 St. Andrews Blvd., Charleston, SC 29407
Phone: 843.763.7064 Fax: 843.763.7061
www.coastarchitects.net

SOUTH CAROLINA
FORSEBERG ENGINEERING & SURVEYING, INC.
No. C00343
STATE OF AUTHORIZATION

SOUTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
No. 12882
06/01/2018
WAYNE MORGAN LEWIS

FORSEBERG ENGINEERING AND SURVEYING, INC.
1587 SAVANNAH HIGHWAY SUITE B
P.O. BOX 30576
CHARLESTON, SC 29417
(843) 571-2622 FAX (843) 571-8780
CIVIL ENGINEERING, SURVEYING AND LAND PLANNING

BOATING CENTER REDEVELOPMENT SWAN BOATING CENTER H09-9617-PG-C

CITADEL
11 HAMMOND AVENUE
CHARLESTON, SC

Revisions

| Rev. No. | Rev. Date |
|----------|-----------|
|----------|-----------|

DRAWN BY: MSJ
CHECKED BY: DCF
DATE: 06-01-2018

COAST PROJECT NO: 1722.00

CONSTRUCTION DETAILS
0.C502
JOB# 4727-1

BID DOCUMENTS