



November 13th, 2018

RE: **RIVERBEND APARTMENTS**
GLOUCESTER COUNTY, VIRGINIA

J.S.G. Corporation
5701 Centerville Rd
Williamsburg, VA 23188

Gentlemen:

The following catalog cut sheets and drawings shall be used for submittal data on the above referenced project. Please contact us with any questions or concerns.

- Manhole Assembly Diagram (Storm)
- Manhole Assembly Diagram (Sanitary)
- 48" Manhole Assembly Detail
- DI-1 Drop Inlet Assembly Detail
- DI-3 Curb Drop Inlet Assembly Detail
- DI-3 Curb Drop Inlet Assembly Detail on Box
- VDOT Approved Shallow DI-3 Curb Inlet on Box
- Typical Manhole Step Detail
- Round Series Trash Rack (for BMP structure)

Sincerely,

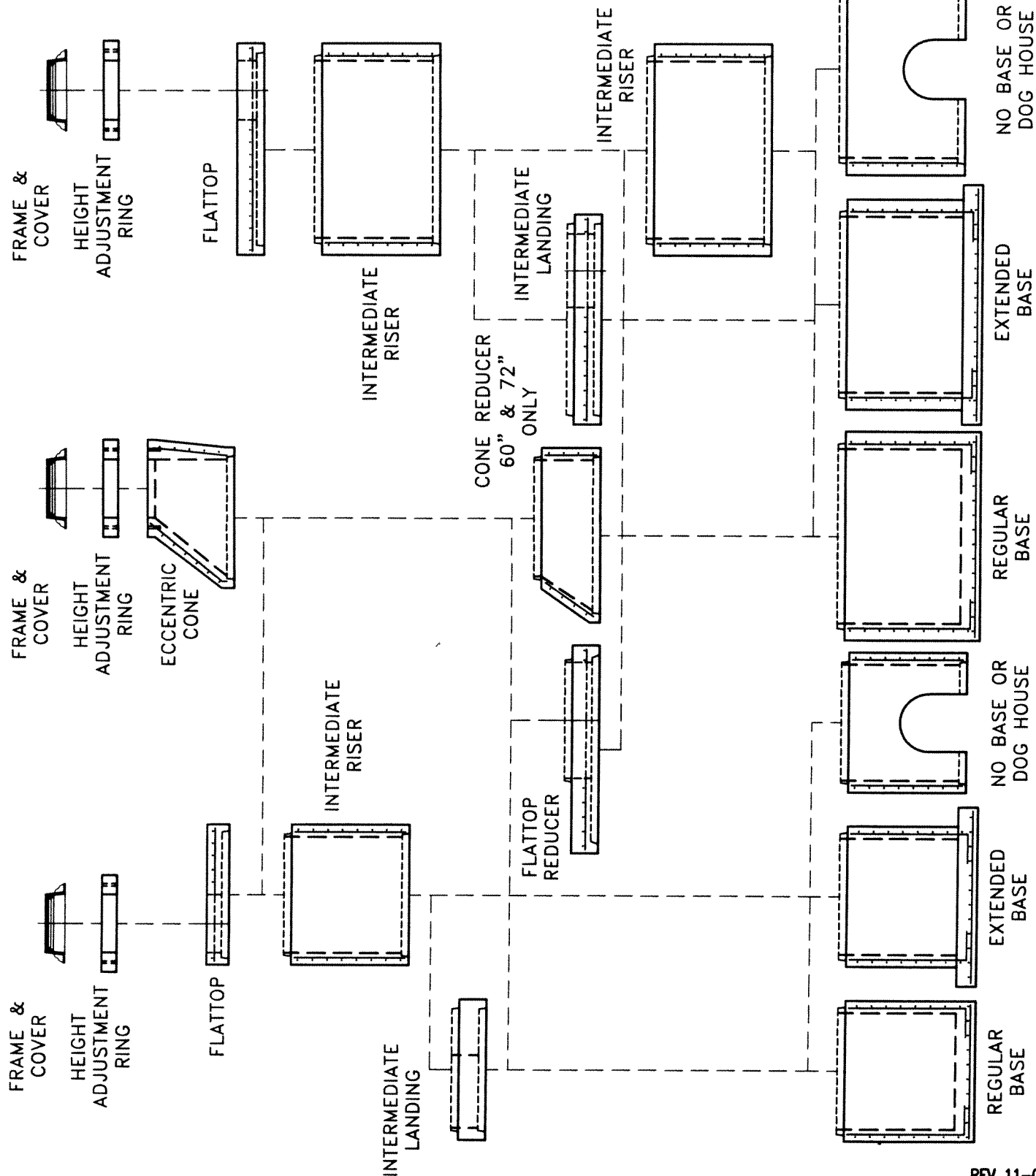
A handwritten signature in blue ink, appearing to read "mjwms", is positioned above the printed name of the sender.

Michael J. Williams
Sales Representative, South Mid-Atlantic Region
Concrete Pipe and Precast, LLC
757.617.2333

48" DIAMETER COMPONENTS

ACCOUNT NO:	N/A	 Ashland Plant 11352 Virginia Precast Road Ashland, VA 23005 1-804-798-6068	FOR:		
CONTRACT NO:			JOB: STORM MANHOLE ASSEMBLY CHART		
DESIGNED BY:			STRUCTURE NO: 48-96 DIAMETER		
DRAWN BY:	CJWJR		SCALE:	N/A	DATE: 11-03-08
CHECKED BY:					
SHEET 1 OF 1	FILE NAME:	COMPONENTS-LAYOUT-BLOCKS			

SANITARY MANHOLE ASSEMBLY CHART



REV 11-03-08

ACCOUNT NO: N/A
 CONTRACT NO:
 DESIGNED BY:
 DRAWN BY: CJWJR
 CHECKED BY:
 SHEET 1 OF 1



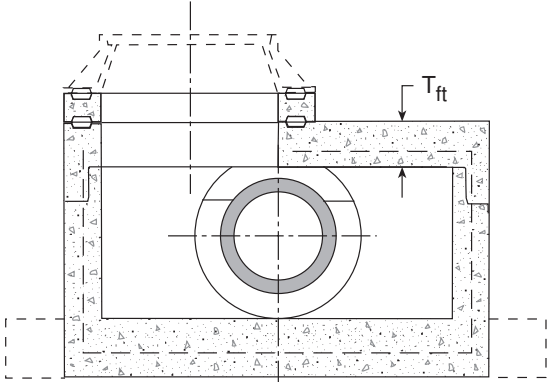
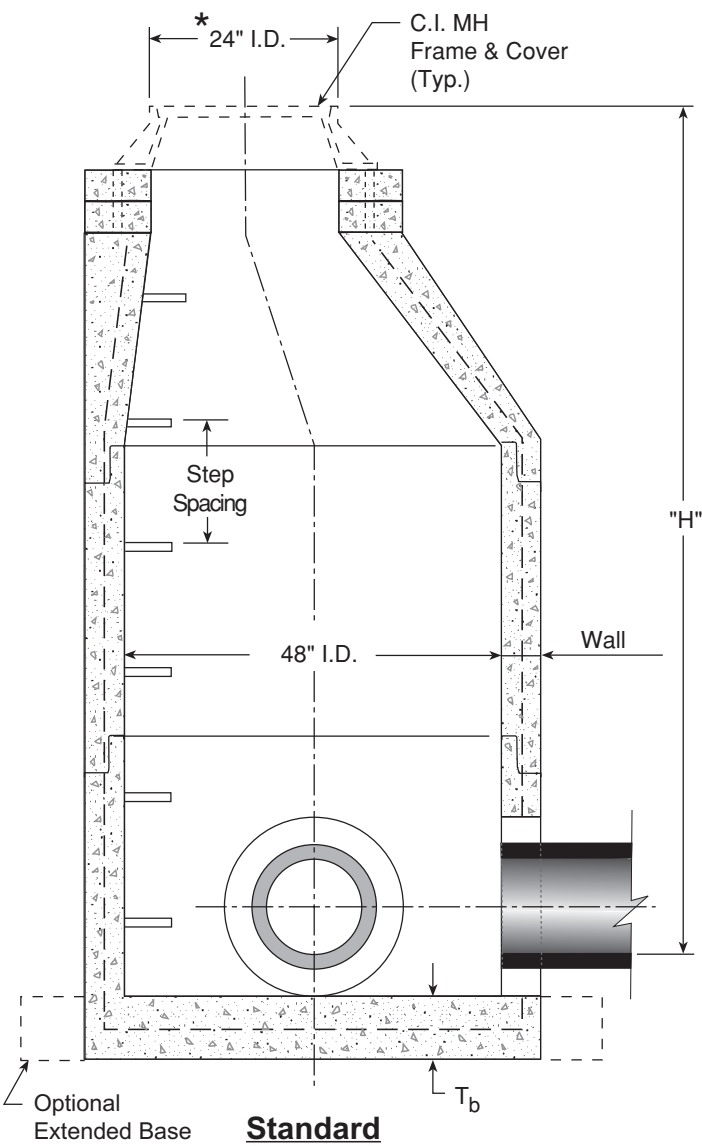
Ashland Plant
 11352 Virginia Precast Road
 Ashland, VA 23005
 1-804-798-6068

FILE NAME: COMPONENTS-LAYOUT-BLOCKS

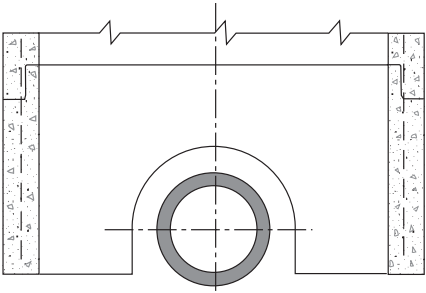
FOR:
 JOB: SANITARY MANHOLE ASSEMBLY CHART
 STRUCTURE NO: 48-96 DIAMETER
 SCALE: N/A
 DATE: 11-03-08

48" DIAMETER COMPONENTS 60", 72", 84", & 96" DIAMETER COMPONENTS

Circular Manholes/Vertical Structures



Shallow



Isometric View

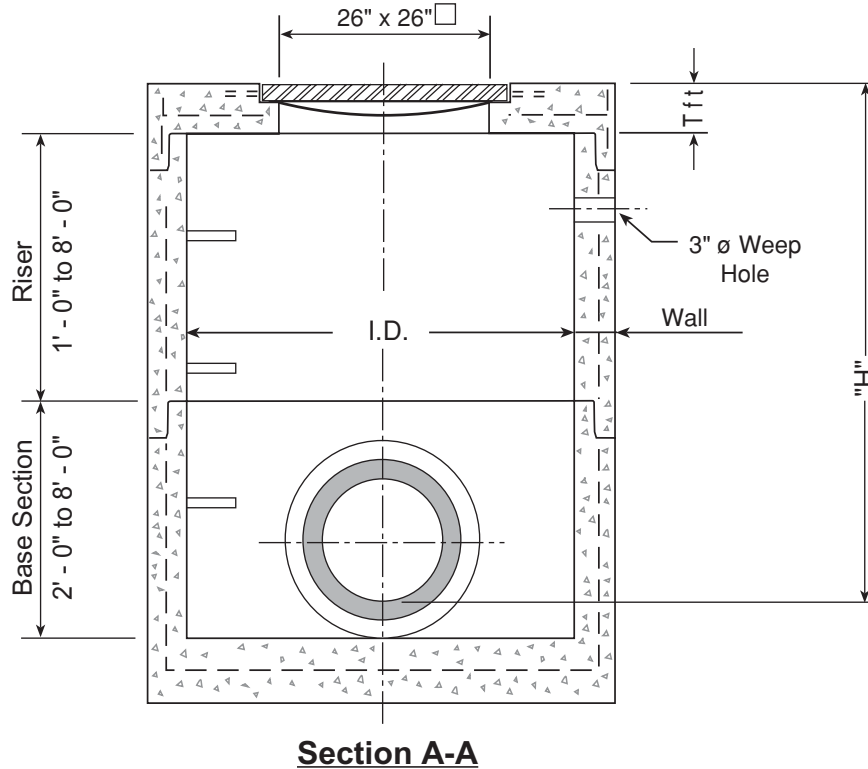
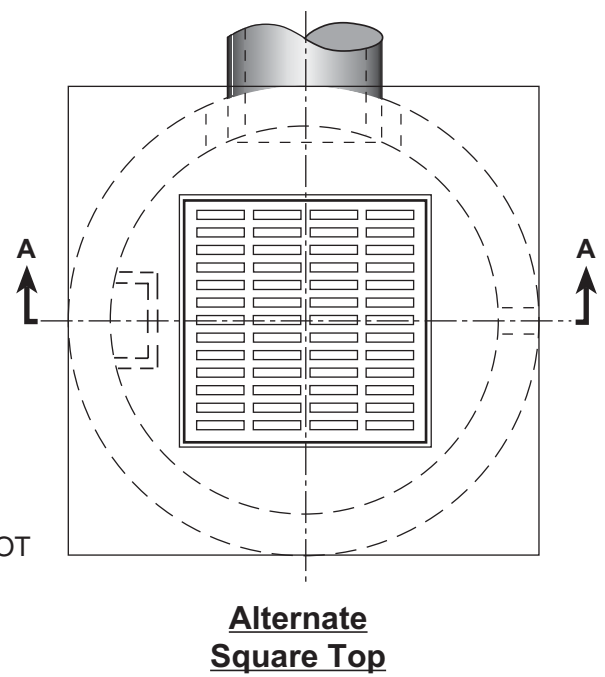
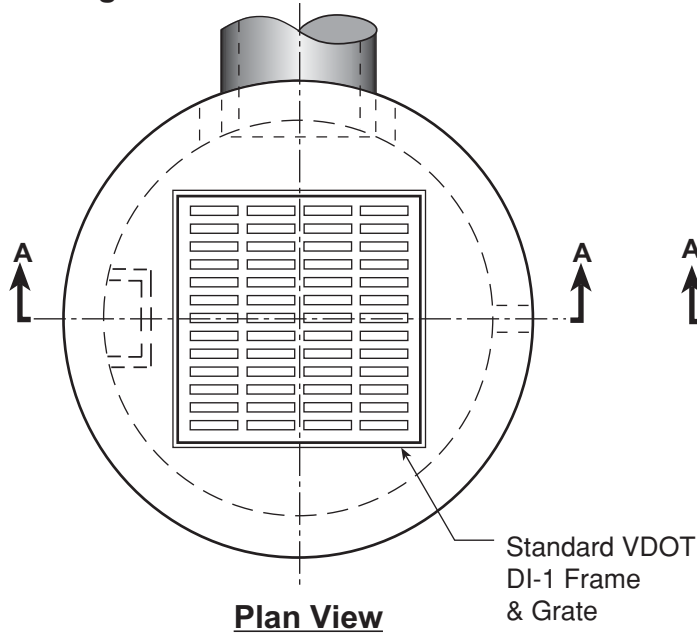
Note:

- (1.) Manhole sections meet ASTM C478 / AASHTO M199.
- * (2.) 30" I.D. cone available in some areas.

-No Scale-
All dimensions subject to allowable specification tolerances.

TITLE	PLANT LOC.	SECTION,PAGE	DATE	
Precast 48" Manhole Assembly Detail		6.03	04-01-13	 CONCRETE PIPE & PRECAST, LLC

Virginia Drainage Inlets



Manhole I.D.	Wall	T ft (Min)
48"	5"	6"
60"	6"	8"
72"	7"	8"
84"	8"	8"
96"	9"	8"
108"	10"	8"
126"	10 1/2"	8"

Note:

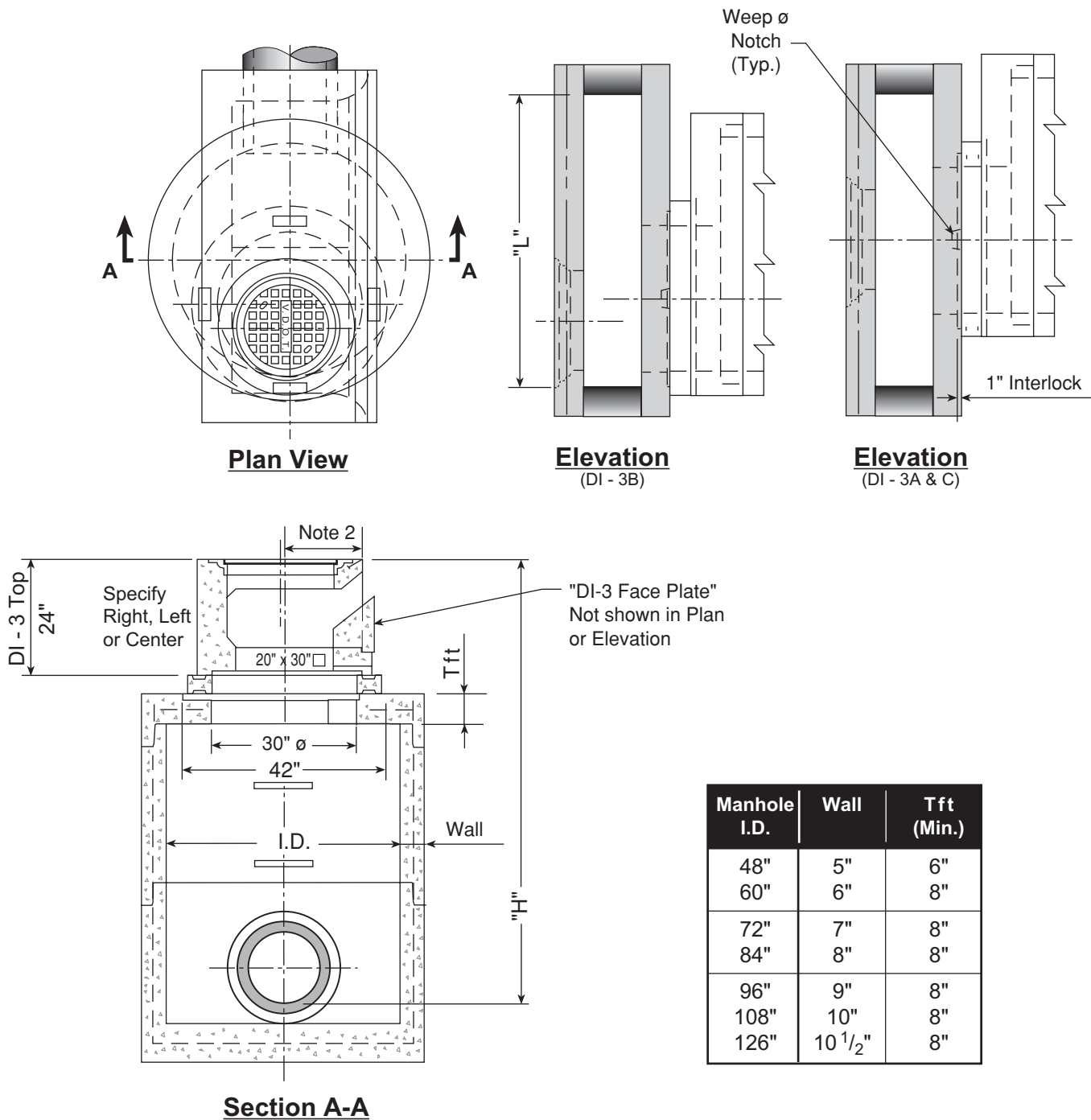
- (1.) Manhole sections manufactured according to ASTM C478. Manhole steps to be polypropylene encapsulated steel.
- (2.) Material properties: $f'_c = 4,000$ p.s.i., $f_y = 60,000$ p.s.i.

-No Scale-

All dimensions subject to allowable specification tolerances.

TITLE	PLANT LOC.	SECTION.PAGE	DATE	 CONCRETE PIPE & PRECAST, LLC
Precast VDOT DI - 1 & DI-1A Drop Inlet Assembly Detail	VA	7.02	04-01-13	

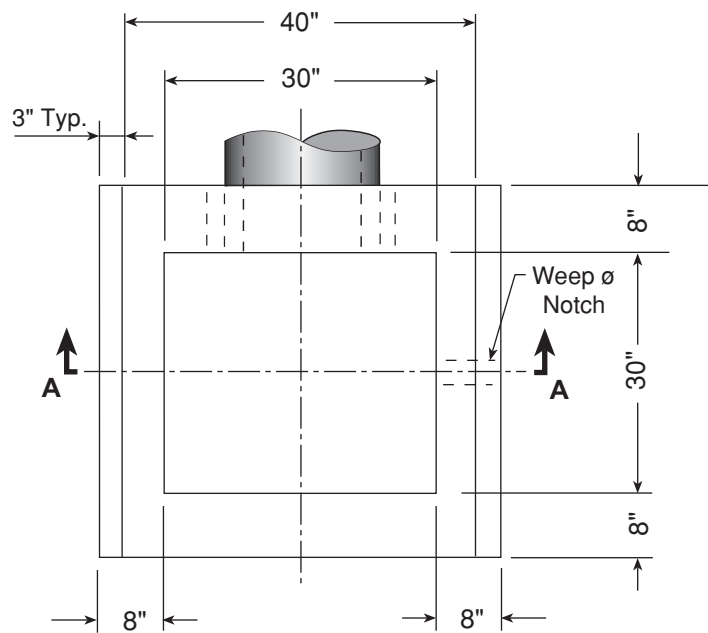
Virginia Drainage Inlets



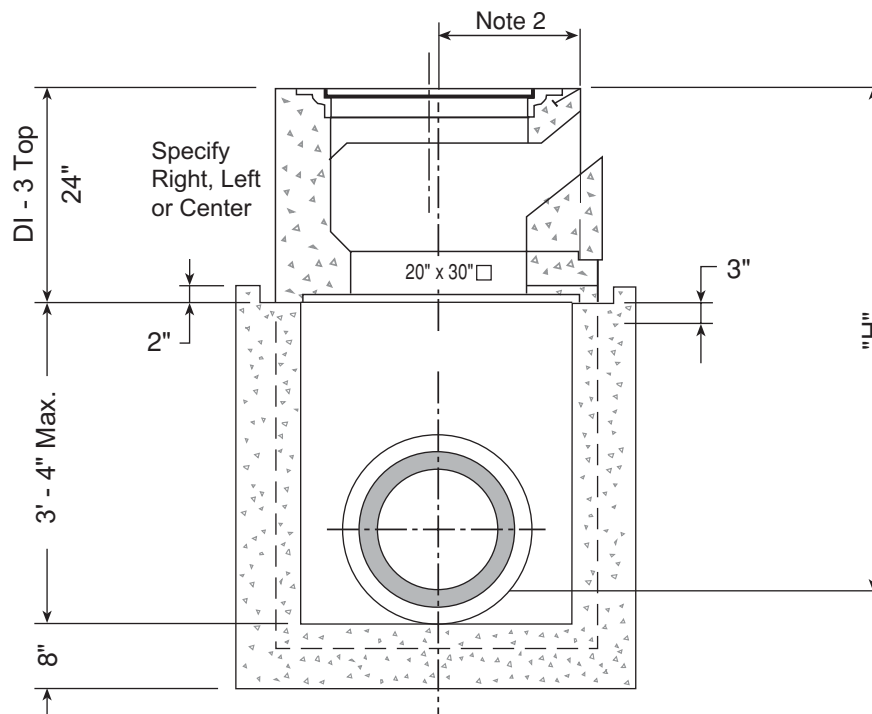
- Note:**
- (1.) Manhole sections manufactured according to ASTM C478. Manhole steps to be polypropylene encapsulated steel.
 - (2.) Manhole C to top face of curb = 16", 18" to bottom face. At step location shown.
 - (3.) Material properties: $f'_c = 4,000$ p.s.i., $f_y = 60,000$ p.s.i.

-No Scale-
All dimensions subject to allowable specification tolerances.

Virginia Drainage Inlets



Plan View (Top Removed)



Section A-A

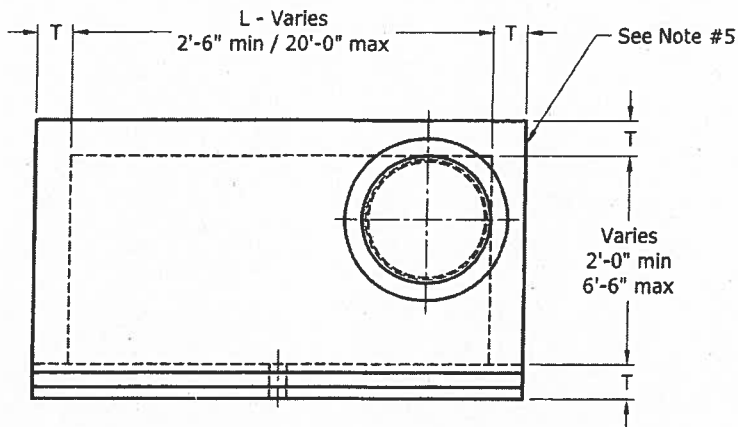
Note:

- (1.) Maximum pipe size to be 24".
- (2.) Manhole ϕ to top face of curb = 16", 18" to bottom face.
- (3.) Material properties: $f'_c = 4,000$ p.s.i., $f_y = 60,000$ p.s.i.

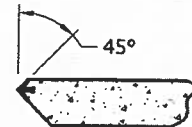
-No Scale-

All dimensions subject to allowable specification tolerances.

TITLE	PLANT LOC.	SECTION/PAGE	DATE	
VDOT DI - 3 Curb Drop Inlet On Mono-Box Assembly Detail	VA	7.11	04-01-13	

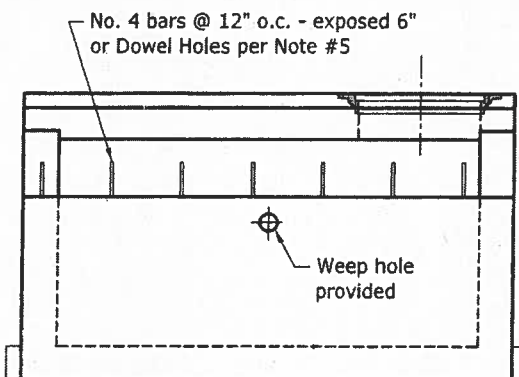


L	T
2'-6" to 12'	6" min
> 12'	8"

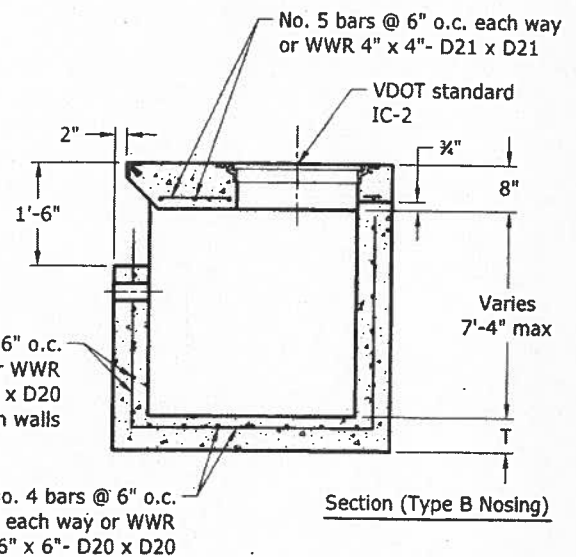


Alternate Nosing (Type A)

Plan



Front Elevation



Section (Type B Nosing)

Notes

1. This design is intended for precast structures produced by CP&P only, not for cast-in-place construction.
2. Concrete compressive strength: 4,000 psi minimum.
3. Bar reinforcement conforms to ASTM A615 or A706, Grade 60 minimum. Other reinforcement conforms to ASTM A1064, Grade 65 minimum. Cover c_c of $1\frac{1}{2}$ " minimum unless otherwise noted.
4. Throat and gutter pan to be poured in field by others.
5. $\frac{3}{8}$ " Diameter x 4" Deep Dowel Holes provided @ 12" Centers to prevent settlement of adjacent concrete.
6. Steps provided when height is 4'-0" or greater.
7. 2 $\frac{1}{2}$ " Extended Base may be provided at producer's option to facilitate form-work.
8. Reinforcing may be increased as necessary for handling considerations.
9. Non-Traffic loading only.

VDOT Shallow DI-3,4 Curb Inlet

Precast - DI-3 or 4, A, B, C, D, E, or F

Sheet 1 of 1

Dwg: VDOT-DI-3,4-Shallow

Orig: 11/12/2015 Rev: 11/13/2015

UID: 20151112HJG03

CP&P
CONCRETE PIPE & PRECAST, LLC

VIRGINIA DEPARTMENT OF TRANSPORTATION REVIEW OF WORKING DRAWINGS

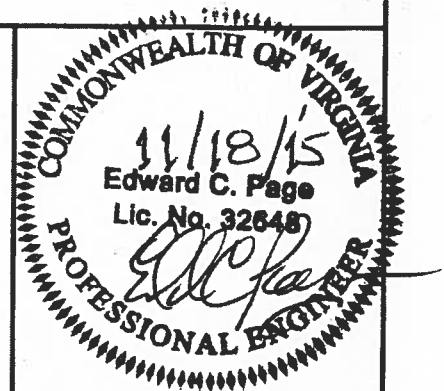
Working drawings have been reviewed in accordance with Section 105.10 of the Specifications with the following comments:

☒ Review Complete. C.C. L & D
(Division or District)

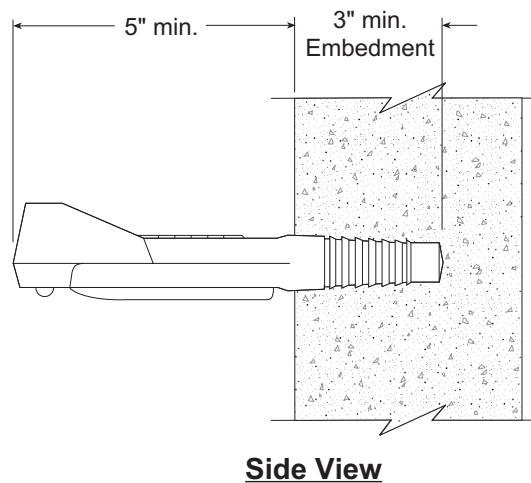
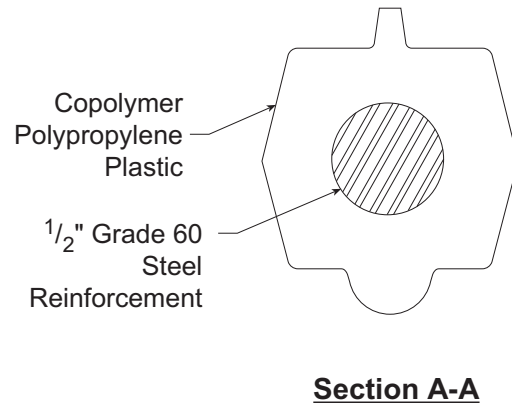
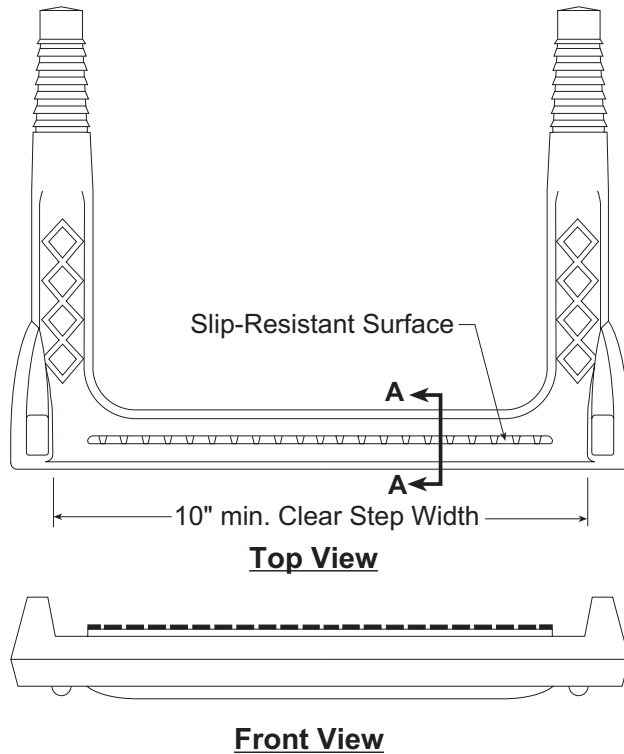
☐ Correct and Resubmit.

☐ Rejected - See Remarks.

Reviewed by C. PATTERSON Date 5/24/16



Circular Manholes / Vertical Structures



Materials & Features:

- (1.) Step design, installation, and material shall meet the requirements of ASTM C478.
- (2.) Plastic material consists of super high impact resistant copolymer polypropylene and conform to specific requirements as detailed in ASTM D4101.
- (3.) Reinforcing steel shall be 1/2" rebar, grade 60 and meet the requirements of ASTM A615.
- (4.) Step width and spacing are consistent with the latest requirements of OSHA.
- (5.) Manufacturer's literature available upon request.

-No Scale-

All dimensions subject to allowable specification tolerances.

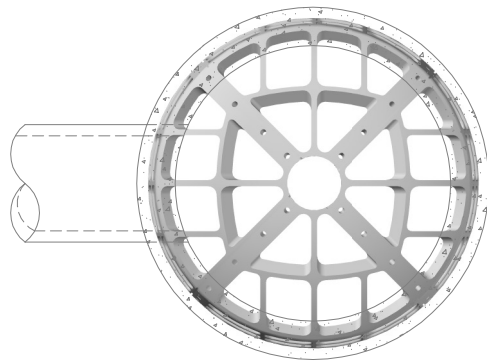
TITLE	PLANT LOC.	SECTION/PAGE	DATE	 CONCRETE PIPE & PRECAST, LLC
Typical Manhole Step Detail		6.10	04-01-13	

StormRax™ ROUND SERIES TRASH RACK

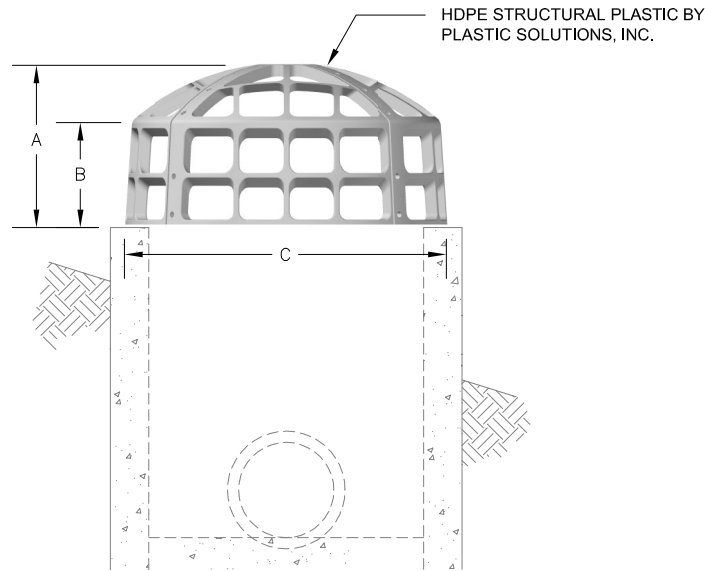
CONCRETE MANHOLE
STANDARD 48 INCH RACK SHOWN

DIMENSIONS IN INCHES

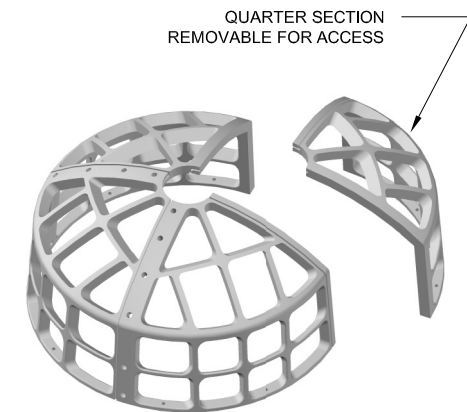
For BMP Structure # 37



PLAN



SIDE VIEW



ISOMETRIC

StormRax™ Round Series for Concrete Manhole

Part No.	Dim A	Dim B	Dim C	Min ID	Min OD
RS-24	17 1/4	14 1/4	28	24	30
RS-36	21 1/4	14 3/8	40 7/8	36	43
RS-48	27 3/4	18	54	48	57
RS-60	27 1/2	18 1/4	66 1/2	60	70

CONCRETE STRUCTURE DIMENSIONS

INSIDE STRUCTURE DIMENSION	
OUTSIDE STRUCTURE DIMENSION	

AVAILABLE OPTIONS

CROSS BRACING FOR OVERHANG	
HDPE ANTI-VORTEX PLATE	



Plastic Solutions, Inc.

PO Box 4386, Winchester, VA 22604
238 McGhee Rd, Winchester, VA 22603
(877) 877-5727 phone
(540) 722-2219 fax
<http://www.plastic-solution.com>

CUSTOMER:

PROJECT:

DATE:

DRAWN BY:

APP'D BY:

DETAIL: