

SHOP DRAWING REVIEW FORM AND TRANSMITTAL

DATE: November 8, 2021

TO: Carl Hendrickson
Project Manager
Veolia Water
825 West Water Street
Taunton, MA 02780

FROM: Michael Andrus, P.E.
Project Manager
BETA Group, Inc.
701 George Washington Hwy
Lincoln, Rhode Island 02865

RE: City of Taunton, MA
WWTF Phase 1 Improvements
Contract S-2021-1

Shop Drawing No. 16080-01 – Precast Electric Manholes, FM Structure, Frames, and Covers

BETA COMMENTS:

<u>Item</u>	<u>Action Code</u>	<u>Description/Comments</u>
1	2	Precast Electric Manholes, FM Structure, Frames, and Covers (Shea, EJ) <ol style="list-style-type: none">See attached comments from SARProvide confirmation that all portions of this shop drawing are in compliance with American Iron and Steel requirements.

Action Codes

- 1 - No Exception Taken
- 2 - Make Corrections Noted
- 3 - Amend and Resubmit
- 4 - Rejected, See Remarks

- a. Installation shall proceed only when Action Code is '1' or '2'.
- b. Submittals action coded '3' shall be resubmitted within time limit set in Contract.
- c. Review does not relieve Contractor from responsibility of compliance with the Contract Documents.



Hart Engineering Corporation

SUBMITTAL:
16080-01

PROJECT: 9900. - Veolia/Taunton WWTF Phase 1 Improvements

DATE: 10/05/2021

SUBMITTAL: 16080-01 - Precast Electrical Manholes, FM Structure, Frames and Covers

REVISION: 0

STATUS: Eng

SPEC #: 16080

TO:
Carl Hendrickson
Veolia North America
125 S. 84th Street, Suite 175
Milwaukee, WI 53214
carl.hendrickson@veolia.com

FROM:
Ryan Murphy
Hart Engineering Corporation
800 Scenic View Drive
Cumberland, RI 02864
rmurphy@hartcompanies.com

Item	Revision	Description	Status	Date Sent	Date Returned
16080-01	Eng	Precast Electrical Manholes, FM Structure, Frames and Covers	Eng	10/05/2021	
Notes:					

SHOP DRAWING REVIEW

1 – Approved 2 – Approved as Noted
 3 – Revise and Resubmit 4 - Rejected
 5 – Record File Only – No Action Taken

(Above Check Designates Action Code – See Review Comments)

IMPORTANT NOTE FOR CONTRACTOR

Review is only for general compliance with the design concept and information provided in Contract Documents. Corrections and comments made on the Shop Drawings during review do not relieve the Contractor from compliance with the requirements of the plans and specifications. Review and/or approval of a specific item shall not include review or approval of an assembly of which the item is a component. No approval or correction of a Shop Drawing shall be construed as an order for extra work. The Contractor is responsible for: all quantities and dimensions to be confirmed and correlated; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work with that of all trades and subcontractors; and performing all Work in a safe and satisfactory manner.

BETA GROUP, INC. Checked By: MC (SAR)

By: MLA Date: 11/8/21

Additional Notes:

Status Codes

- 1-APP – No Exceptions Taken
- 2-ANR – Make Corrections Noted
- 3-R&R – Revise and Resubmit
- 4-REJ – Rejected
- 5-IPO – For Information Purposes Only
- 6-NRR – Not Required for Review
- ENG – Submitted to Engineer

Sincerely,
Hart Engineering Corporation

DATE: 10/05/2021



TO: BETA Group

701 George Washington Highway

Lincoln, RI 02865

Attention: Mike Andrus

Sent by: M. Cotter

Date: November 8, 2021

SAR Job Number: 18009.00

Reference: Taunton WWTF Upgrades – Phase 1

Enclosed Herewith We are sending you the following item(s):

- VIA Print(s) Reproducible(s) Original Drawing(s)
- Mail Diskette(s) Report(s) Sketch (es)
- Messenger Shop Drawing(s) Specification(s) Sample(s)
- Express Copy of Letter Change Order Other _____
- Email: Filename: _____ Time Sent _____ AM

Copies	Date	Description
1		Submittal 16080-01 REV 0 - Precast Electrical Manholes, Frames and Covers

These are transmitted as indicated

- For approval For review and comment As requested For your information

Remarks

Copy to

File(s)

Transmittal Enclosure



Review Comments

JOB: Taunton WWTF Upgrades – Phase 1

DATE: November 8, 2021

SUBMITTAL NO.: Submittal 16080-01 REV 0

SUBJECT: Precast Electrical Manholes, Frames and Covers

<input type="checkbox"/> NO EXCEPTION	<input type="checkbox"/> MAKE CORRECTIONS
<input type="checkbox"/> TAKEN	<input checked="" type="checkbox"/> NOTED
<input type="checkbox"/> REJECTED	<input type="checkbox"/> REVISE AND RESUBMIT

Checking is only for general conformance with the design concept of the project and general compliance with the information given in the contract documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for: Dimensions which shall be confirmed and correlated at the job site fabrications process and techniques of construction; coordination of His work with that all other trades; and the satisfactory performance of his work.

SAR ENGINEERING, INC.

DATE: November 8, 2021 **BY:** M. Cotter

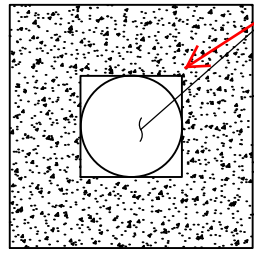
R-2/21/2003

Comments:

1. Coordinate the number of required conduit penetrations with the electrical contractor for both the transformer pad and handholes.

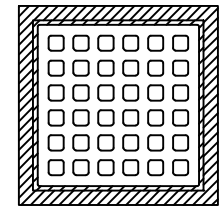
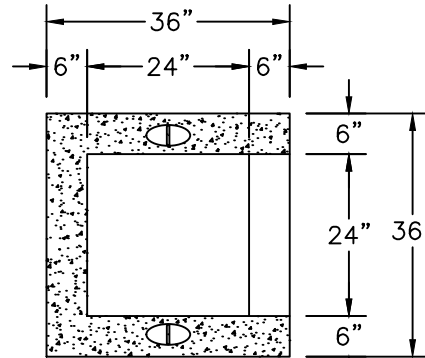
Air Release Riser

24" Round



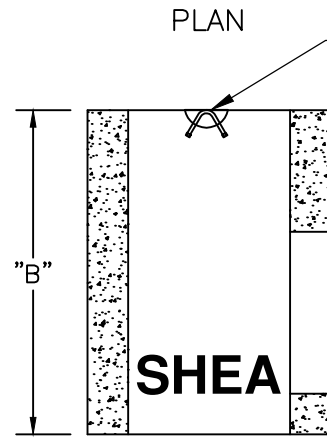
OPENING SIZE AND SHAPE AS SPECIFIED

AVAILABLE TOP SLAB
EST WEIGHT: 660 LBS

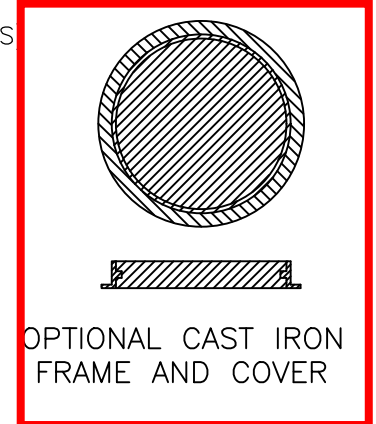


OPTIONAL CAST IRON
FRAME AND GRATE

RISER WEIGHTS		
ITEM CODE	DIM "B"	EST. WEIGHT
	12"	750#
	18"	1,120#
DIRS-24X24	24"	1,500#
	30"	1,850#
DIRS-24X36	36"	2,250#
	42"	2,625#
DIRS-24X48	48"	3,000#
	54"	3,375#
DIRS-24X60	60"	3,750#
	66"	4,125#
	72"	4,500#

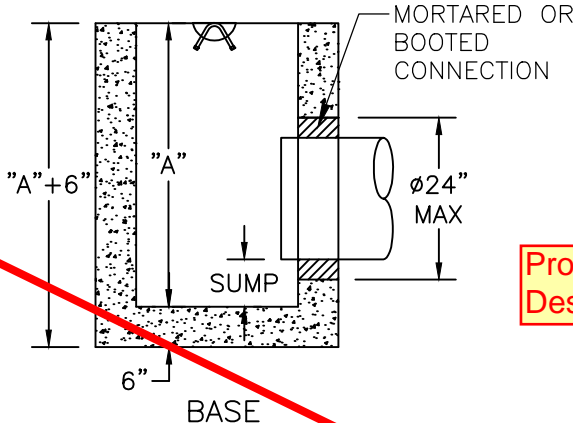


RISER



OPTIONAL CAST IRON
FRAME AND COVER

SUMP WEIGHTS		
ITEM CODE	DIM "A"	EST. WEIGHT
18SSGI	18"	1,780#
24SSGI	24"	2,150#
30SSGI	30"	2,520#
36SSGI	36"	2,910#
42SSGI	42"	3,260#
48SSGI	48"	3,660#
54SSGI	54"	4,000#
60SSGI	60"	4,410#
66SSGI	66"	4,800#
72SSGI	72"	5,170#



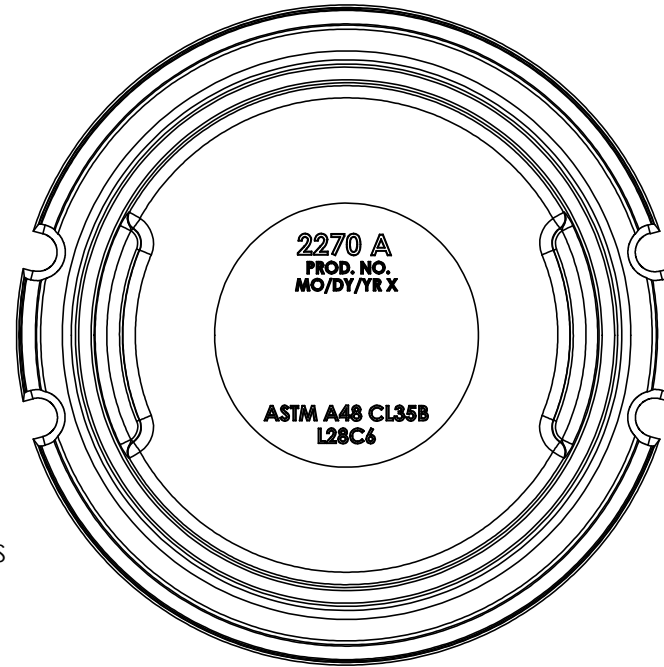
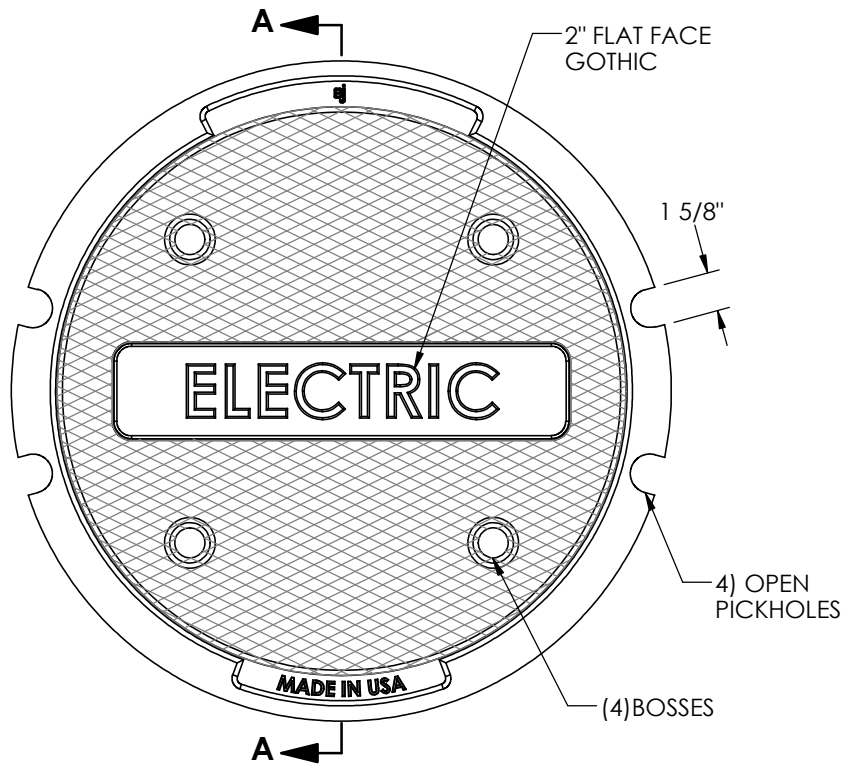
BASE

Provide w/ "Sewer" Designation

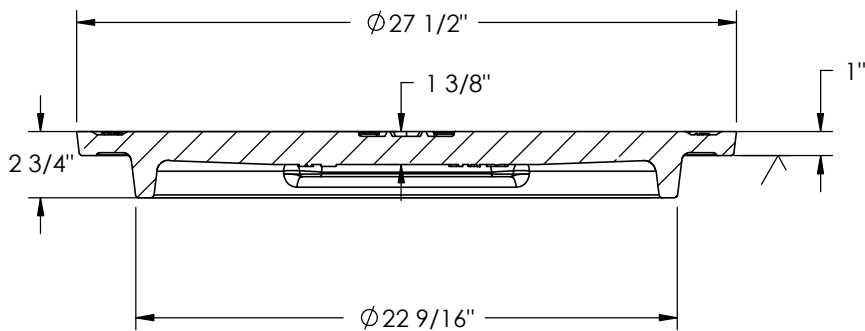
NOTES:

1. CONCRETE: 4,000 PSI MIN. AFTER 28 DAYS
2. DESIGNED FOR AASHTO HS-20 LOADING
3. SUMP AS REQUIRED

2270 Cover



BOTTOM VIEW



SECTION A-A

Product Number

00227029

Design Features

- Materials
Gray Iron (CL35B)
- Design Load
Extra Heavy Duty
- Open Area
n/a
- Coating
Undipped
- √ Designates Machined Surface

Certification

- ASTM A48
-
- Country of Origin: USA

Drawing Revision

3/9/2010 Designer: JIJ
9/10/2013 Revised By: DAE

Disclaimer

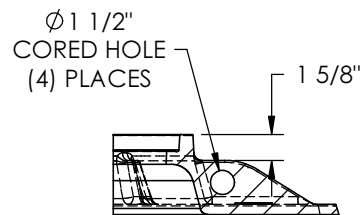
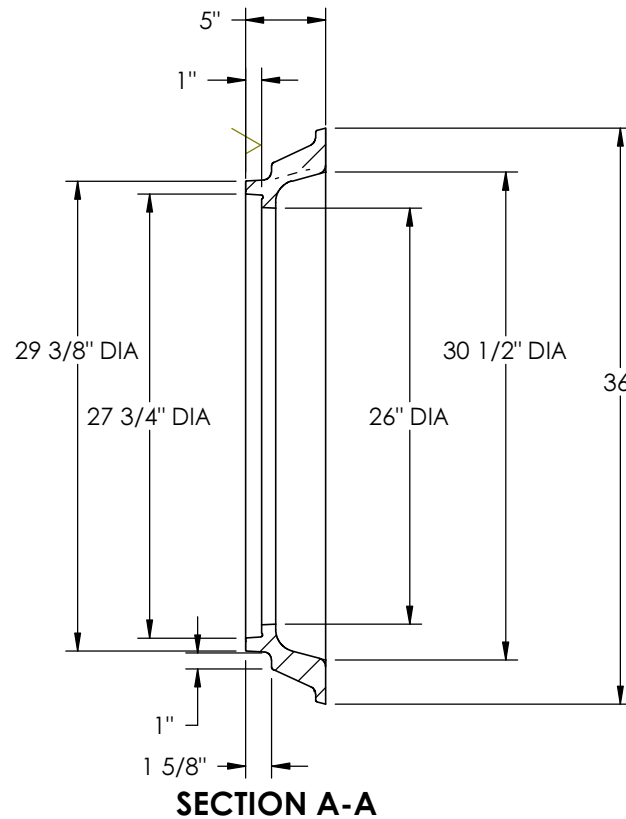
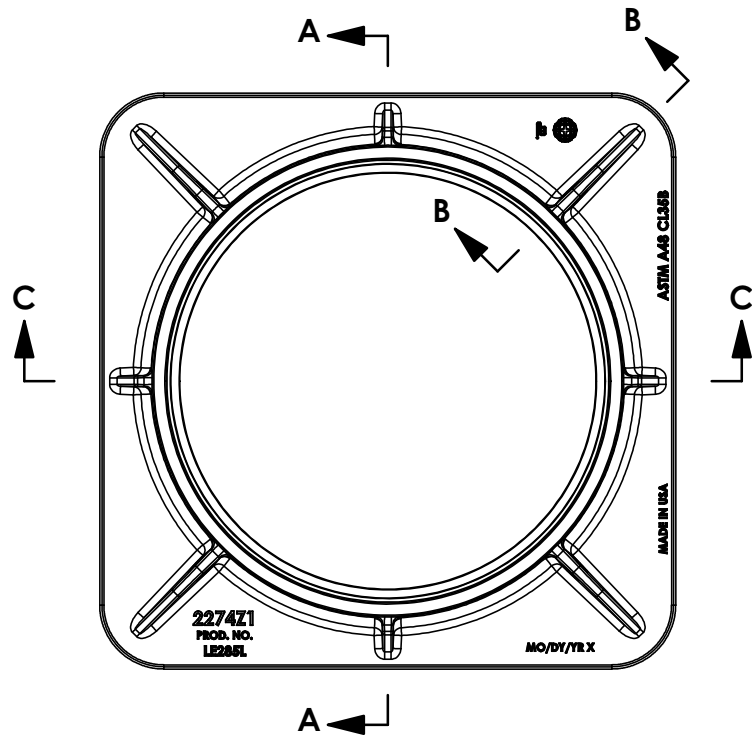
Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

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Contact

800 626 4653
ejco.com

2274Z1 Frame



Product Number

00227415

Design Features

- Materials
Gray Iron (CL35B)
- Design Load
Extra Heavy Duty
- Open Area
n/a
- Coating
Undipped
- √ Designates Machined Surface

Certification

- ASTM A48
-
- Country of Origin: USA

Drawing Revision

10/15/2013 Designer: MAH
5/30/2017 Revised By: CSF

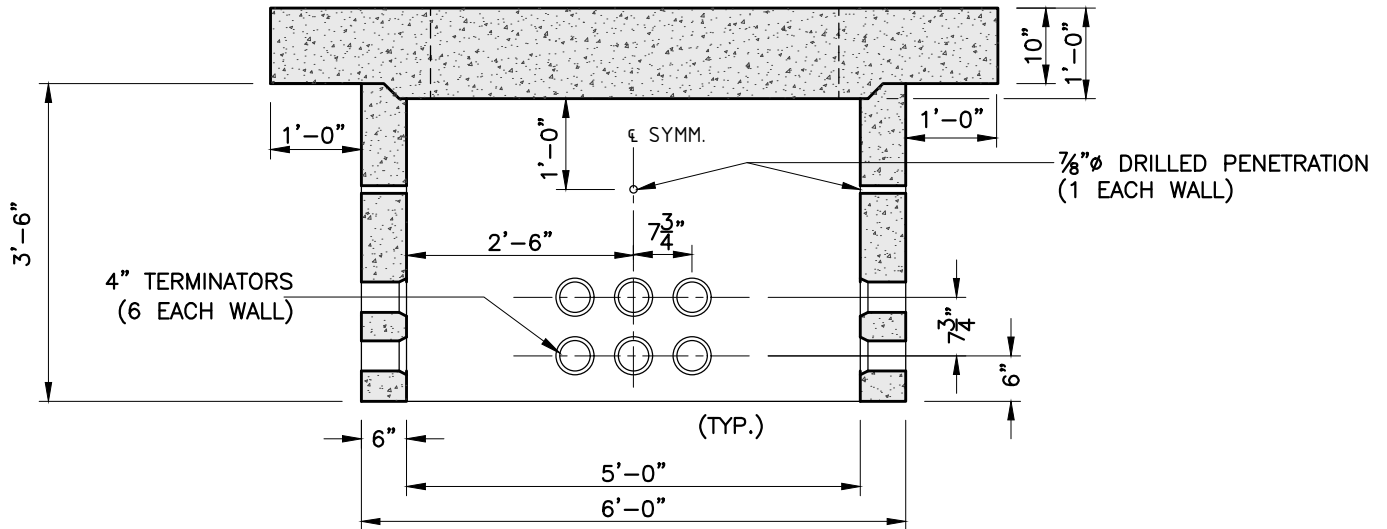
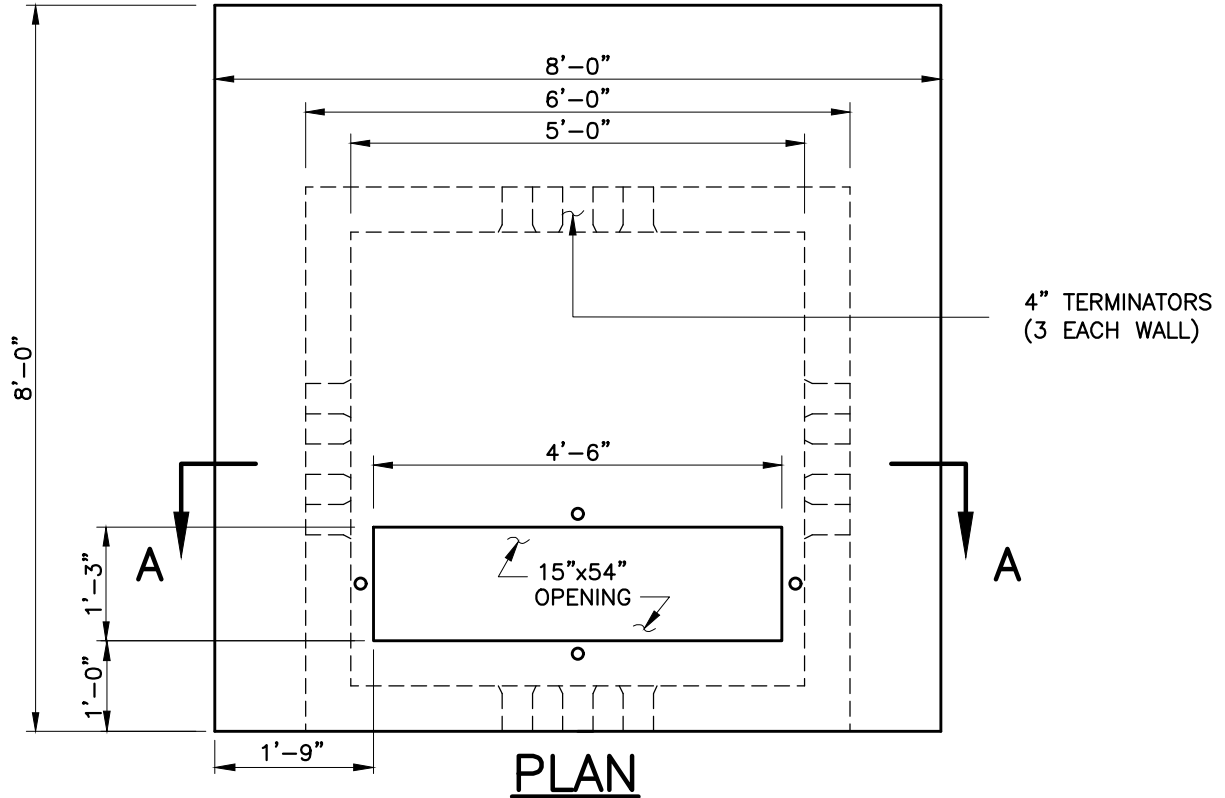
Disclaimer

Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

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Contact

800 626 4653
ejco.com



SECTION A-A
 TYPICAL WALLS ELEVATION

NOTES:

1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGN LOADING: AASHTO HS20-44, 0 TO 5 FEET COVER.
3. DESIGN SPECIFICATIONS - ACI 318 & AASHTO LOAD FACTOR DESIGN METHOD.
4. STEEL REINFORCEMENT CONFORMS TO ASTM A615, GRADE 60. MINIMUM STEEL COVER 1 1/2".
5. ALL TERMINATORS SHALL HAVE BELL ENDS FLUSH WITH THE INSIDE WALL.

SHEA PRODUCT ID: NSM3801-2

FILE NAME: ES-MA 3801-2 XFMR VAULT

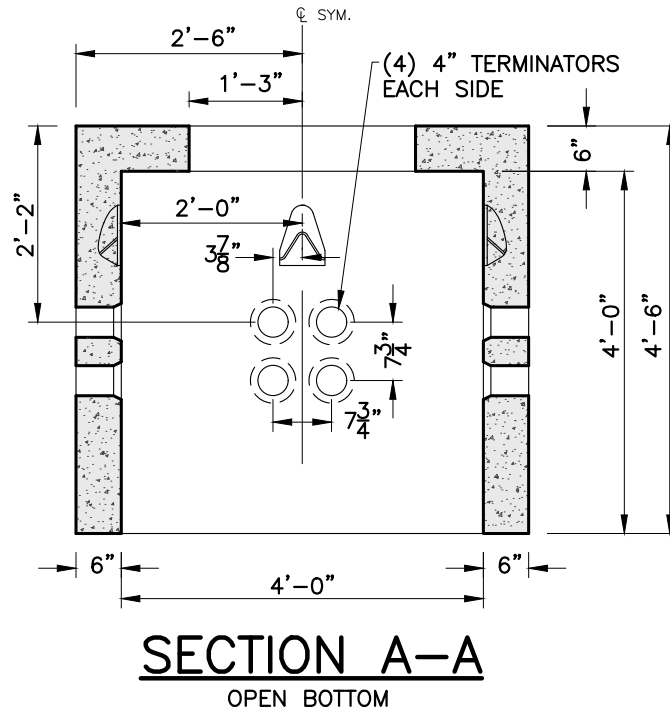
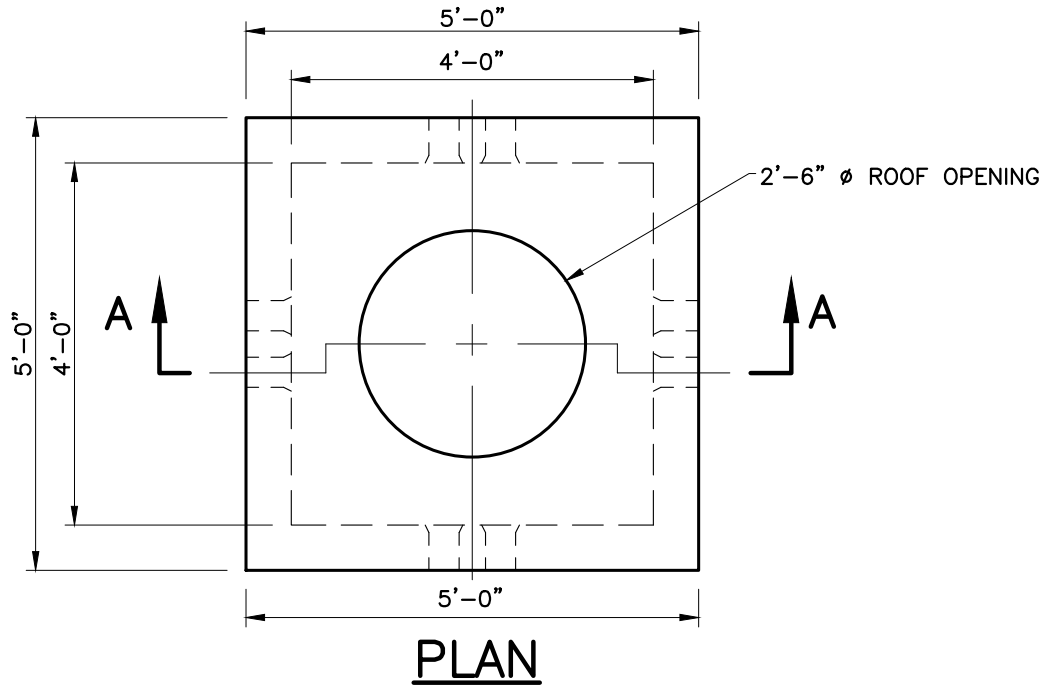
WEIGHT (LBS): 14865

DRAWN BY: L.P.

DATE: 12/19/2017

PAGE: I I.D.5





NOTES:

1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGN LOADING: AASHTO HS-20-44, 0 TO 5 FEET COVER.
3. STEEL REINFORCEMENT CONFORMS TO ASTM A615, GRADE 60.
4. MINIMUM STEEL COVER 1".
5. OPTIONAL OPENINGS AVAILABLE BY SPECIAL ORDER.

SHEA PRODUCT ID:	HH-444	FILE NAME:	HANDHOLE 48X48	
WEIGHT (LBS):	6675	DRAWN BY:	L.P.	DATE: 11/13/2018
				PAGE: I.B.6

