

## **DIVISION 33 - UTILITIES**

### **33 00 00 - Utilities**

#### **PART 1: GENERAL**

##### **1.01 SCOPE OF STANDARD**

- A. Texas State University recognizes that project conditions and requirements vary, thus precluding the absolute adherence to the items identified herein in all cases. However, unless there is adequate written justification, it is expected that these guidelines will govern the design and specifications for Texas State University projects.
- B. All utility connections to the various campus utility distribution systems shall be accurately located by dimensions or coordinates. Depth of piping shall be shown and inverts must be shown at manholes and other critical points.
- C. Record documents are the basis for the University's BIM to FM Program. The BIM program implements the required Construction Operations Building information exchange (COBie). COBie is the required process of data collection by the architect/engineer and the contractor to handoff a data file at project closeout that is consumable by the University's CMMS or CAFM software.
- D. All site utilities shall be included as part of the BIM(s). All site utilities shall be shown accurately in terms of size, depth and location.
- E. Verification of design to ensure the sanitary sewer system is not cross connected to stormwater, rainwater collection or guttering inside and outside of building

##### **1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Section 31 00 00 Earth Work
- B. Section 22 00 00 Plumbing
- C. Section 26 00 00 Electrical

#### **PART 2: SCOPE OF WORK**

##### **2.01 SANITARY SEWER UTILITIES**

- A. Refer to Section 22 00 00 – Plumbing General Systems Design

##### **2.02 WATER UTILITIES**

- A. Refer to Section 22 00 00 – Plumbing General Systems Design

##### **2.03 STORM DRAINAGE UTILITIES**

- A. Refer to Sections 22 00 00 – Plumbing and Section 31 00 00 Earth Work

**2.04 ELECTRICAL DISTRIBUTION (Underground Ductbanks)**

- A. Refer to Section 26 00 00 – Electrical

**2.05 MANHOLE COVERS**

- A. Texas State University has standardized utility manhole covers to be used on all underground utility access on campus. All new manhole cover installations must be heavy duty gray iron as manufactured by East Jordon Iron Work (EJ) or approved equal. Standard thickness is used for pedestrian and non-vehicular application. For manholes in vehicular traffic roadways and drives a DOT rated thickness is required.
- B. Locking system consisting of security driven bolt and spring loaded pistons required.
- C. Refer to the attached specification sheet for MANHOLE COVER MARKING STANDARDS.

**PART 3: EXECUTION****3.01 N/A**

# V1420 V1430 Assembly



## PRELIMINARY

Submittal Number

NPR14-1918A

## Design Features

-Materials

Frame  
Gray Iron (CL35B)

Cover  
Gray Iron (CL35B)

-Design Load  
Heavy Duty

-Open Area  
n/a

-Coating  
Undipped

-√ Designates Machined Surface

## Certification

-ASTM A48

-AASHTO M306

-Country of Origin: USA

## Major Components

41420012

4143000XX

## Drawing Revision

5/12/2014

Designer: MAH

Revised By:

## Disclaimer

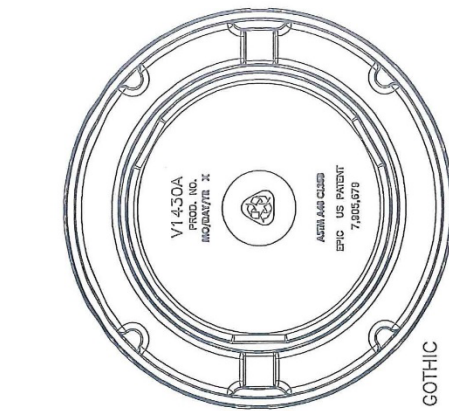
Weights (lbs./sq) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

CONFIDENTIAL: This drawing is the property of EJC GROUP, Inc. and contains confidential information, registered marks, patents, trade secret information, and/or know how that is the property of EJC GROUP, Inc. Copyright © 2012 EJC GROUP, Inc. All rights reserved.

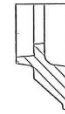
## Contact

800.626.4653

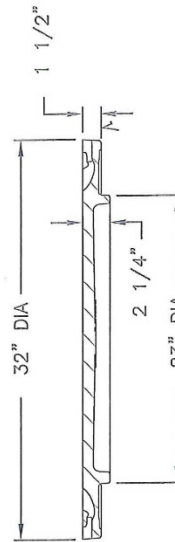
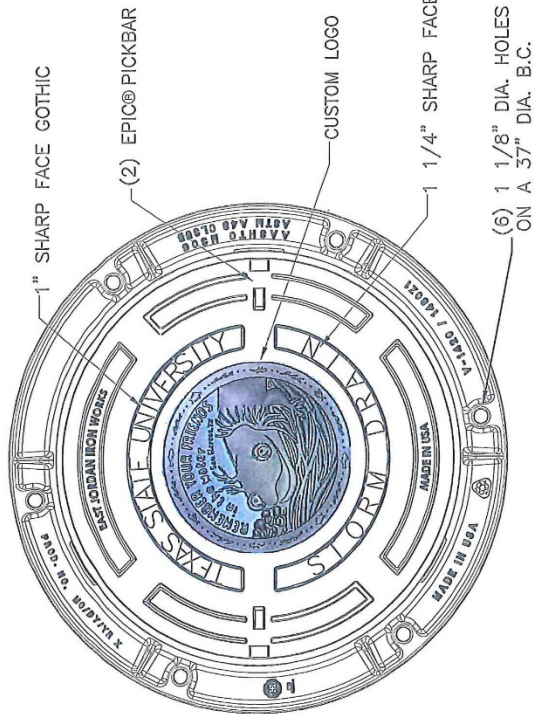
ejco.com



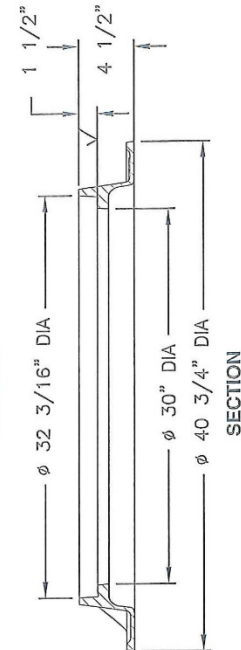
BOTTOM VIEW



SECTION B-B  
TYPICAL RIB



SECTION



SECTION



PRELIMINARY

Submittal Number

NPR14-1918C

Design Features

-Materials

Frame

Gray Iron (CL35B)

Cover

Gray Iron (CL35B)

-Design Load

Heavy Duty

-Open Area

n/a

-Coating

Undipped

~√ Designates Machined Surface

Certification

- ASTM A48

- Country of Origin: USA

Major Components

41420015

4143000XX

Drawing Revision

05/12/2014 Designer: MAH

Revised By:

Disclaimer

Weights (lbs/kg) dimensions (inches/mm) are approximate. We reserve the right to modify specifications without prior notice.

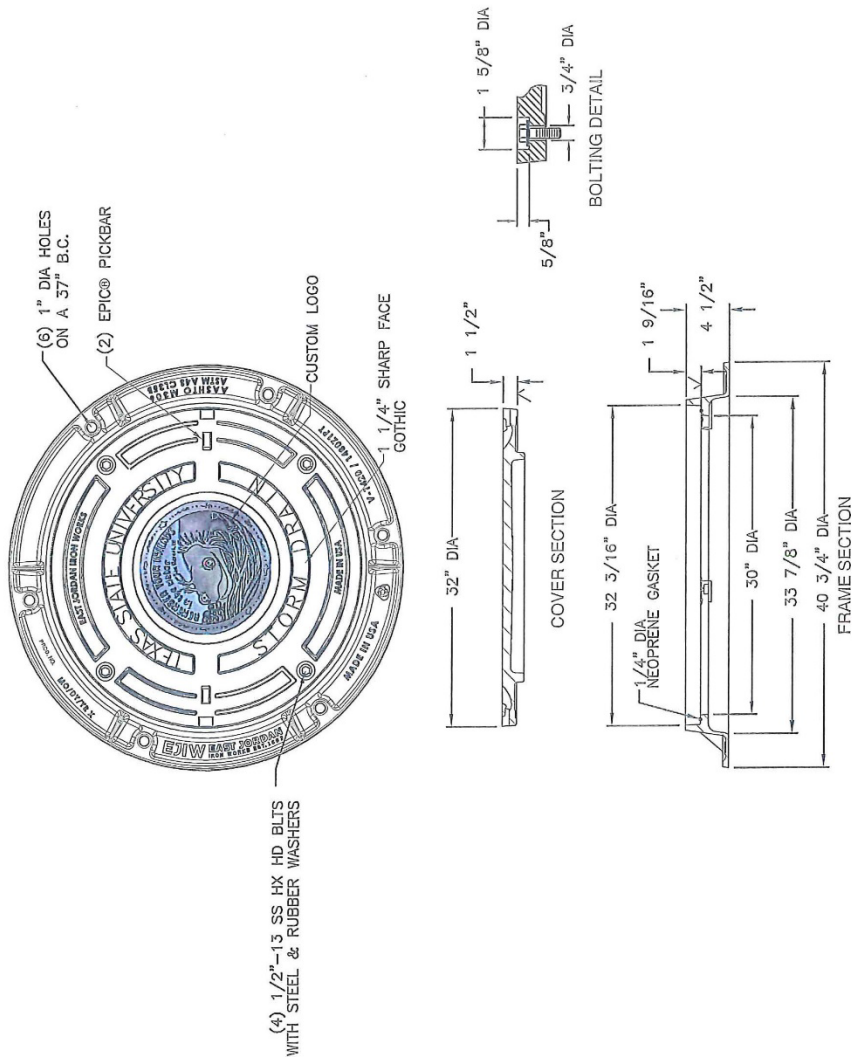
CONFIDENTIAL: This drawing is the property of EJ GROUP, Inc., and embodies confidential information, registered marks, patents, trade secret information, and/or know how that is the property of EJ GROUP, Inc. All rights reserved.

Contact

800 626 4653

ejco.com

V1420Z1PT V1430APT Assembly







## Product Number

41430121A01

## Design Features

-Materials

Frame

Cover

Gray Iron (CL35B)

Gray Iron (CL35B)

-Design Load

Heavy Duty

-Open Area

n/a

-Coating

Undipped

-✓ Designates Machined Surface

## Certification

-ASTM A48

-

-Country of Origin:USA

## Major Components

41420012

41430121

## Drawing Revision

10/19/2011 Designer: JJJ

5/6/2013 Revised By: DJH

## Disclaimer

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

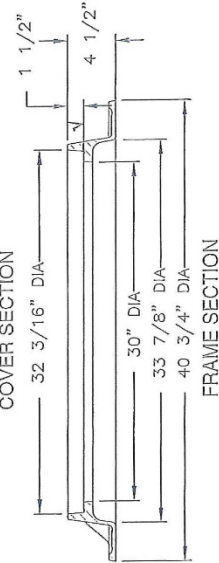
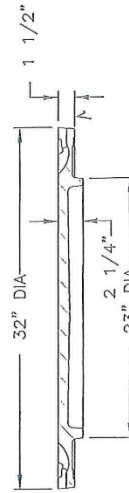
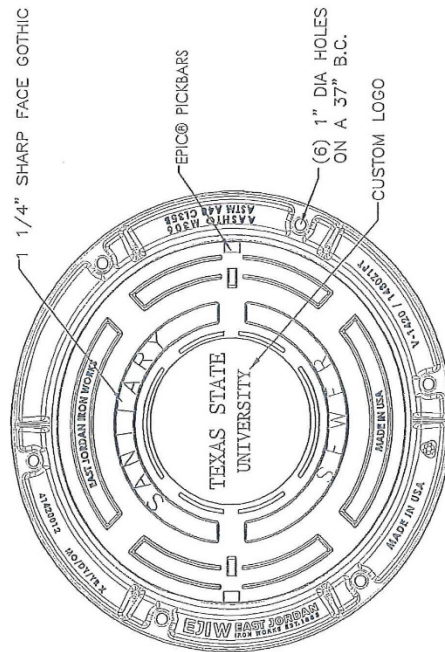
CONFIDENTIAL: This drawing is the property of EJ GROUP, Inc. and embodies confidential information, registered marks, patents, trade secret information, and/or know how that is the property of EJ GROUP, Inc. All rights reserved.

## Contact

800 626 4653

ejco.com

## V1420 V1430 Assembly





## V1420 V1430 Assembly



Product Number  
41430122W01

Design Features

-Materials

Frame  
Gray Iron (CL35B)

Cover  
Gray Iron (CL35B)

-Design Load

Heavy Duty

-Open Area

n/a

-Coating

Undipped

-√ Designates Machined Surface

Certification

-ASTM A48

-Country of Origin: USA

Major Components

41420015

41430122

Drawing Revision

10/19/2011 Designer: JU

5/6/2013 Revised By: DJH

Disclaimer

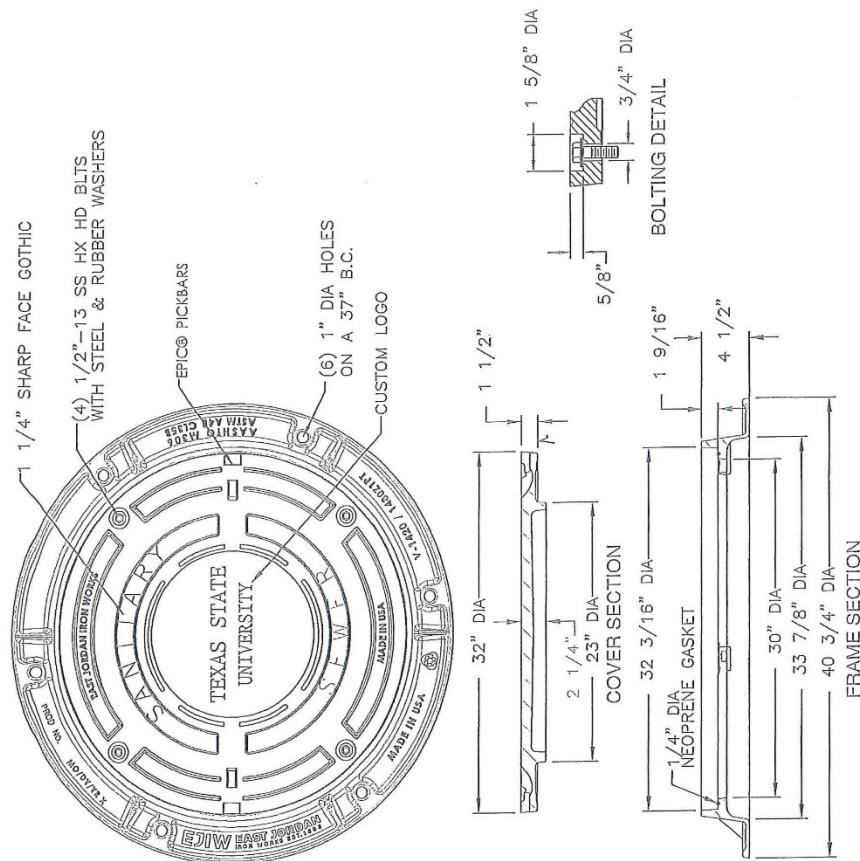
We warrant that the dimensions (inch/mm) and weight (lb/kg) of the product are as shown on the drawing. We reserve the right to modify specifications without prior notice.

CONFIDENTIAL: This drawing is the property of EJ GROUP, Inc. and contains confidential information, including but not limited to, design, engineering, manufacturing, and/or other information. It is to be used for the specific project and purpose for which it was created. It is not to be distributed, copied, or used for any other purpose without the written consent of EJ GROUP, Inc. All rights reserved.

Contact

800 626-4653

ejco.com





Product Number  
00158286/001

Design Features

-Materials  
Frame  
Gray Iron (CL35B)  
Cover  
Gray Iron (CL35B)

-Design Load  
Heavy Duty  
-Open Area  
n/a  
-Coating  
Uncoated  
-✓ Designates Machined Surface

Certification  
-ASTM A48

-Country of Origin: USA

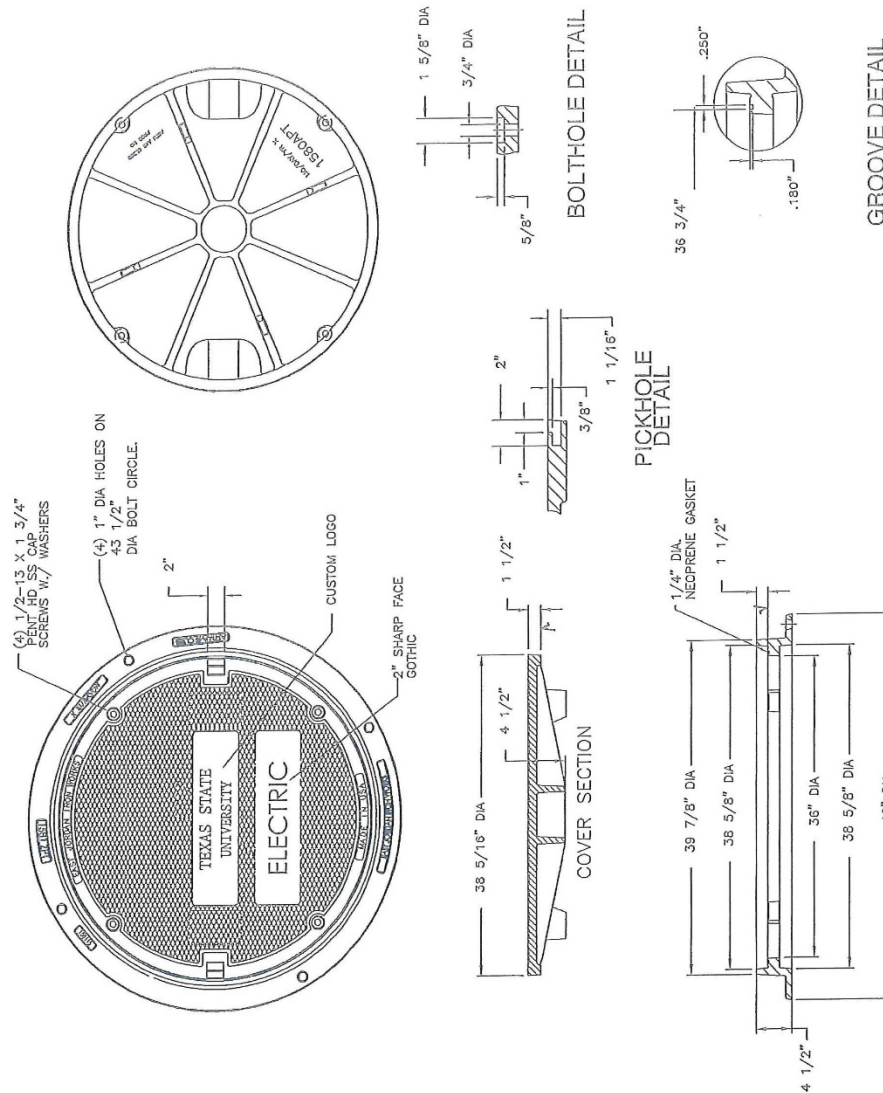
Major Components  
00158115  
00158286

Drawing Revision  
05/21/2012 Designer: SDC  
05/06/2013 Revised By: DJH

Disclaimer  
Weights (lbs/ks) dimensions (inches/mm)  
and drawings provided for your guidance. We  
reserve the right to modify specifications without  
notice.  
CONFIDENTIAL: This drawing is the property  
of EJ GROUP, Inc. and embodies confidential information,  
registered marks, patents, trade secret information,  
and/or know how that is the property of EJ GROUP, Inc.  
All rights reserved.

Contact  
800 626 4655  
ejco.com

# 1581ZPT 1580APT Assembly





1581ZPT 1580APT Assembly

Product Number  
00158287W01

## Design Features

-Materials  
Frame  
Gray Iron (CL35B)  
Cover  
Gray Iron (CL35B)

- Design Load
- Heavy Duty
- Open Area
- n/a
- Coating
- Unclipped
- √ Designates Machined Surface

Certification

-ASTM A45

- Country of Origin: USA

## Major Components

00158115

00158112  
00158287

Drawing Revision  
05/21/2012 Designer: SDC  
05/06/2013 Revised By: DJH

## Disclaimer

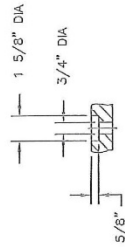
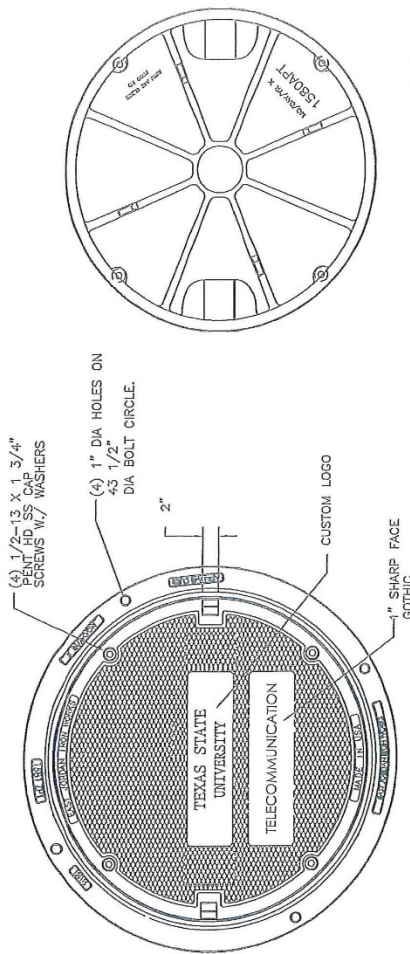
**Disclaimer**  
Weights (lbs./kg) dimensions (inches/mm)  
and drawings provided for your guidance. We  
reserve the right to modify specifications without  
prior notice.

CONFIDENTIAL: This drawing is the property of EJ GROUP, Inc., and embodies confidential information, registered marks, patents, trade secret information, and/or know how that is the property of EJ GROUP, Inc. Copyright © 2012 EJ GROUP, Inc.

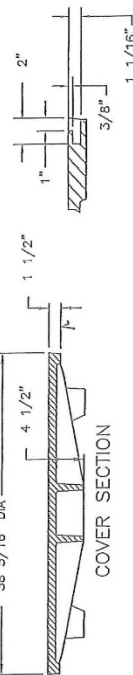
## Contact

800 626 4653

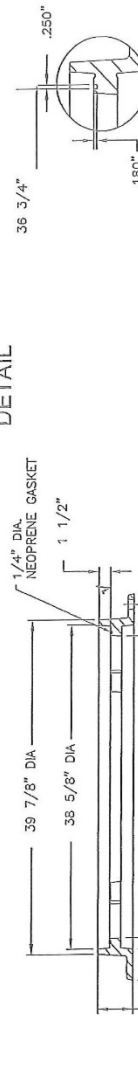
ejco.com



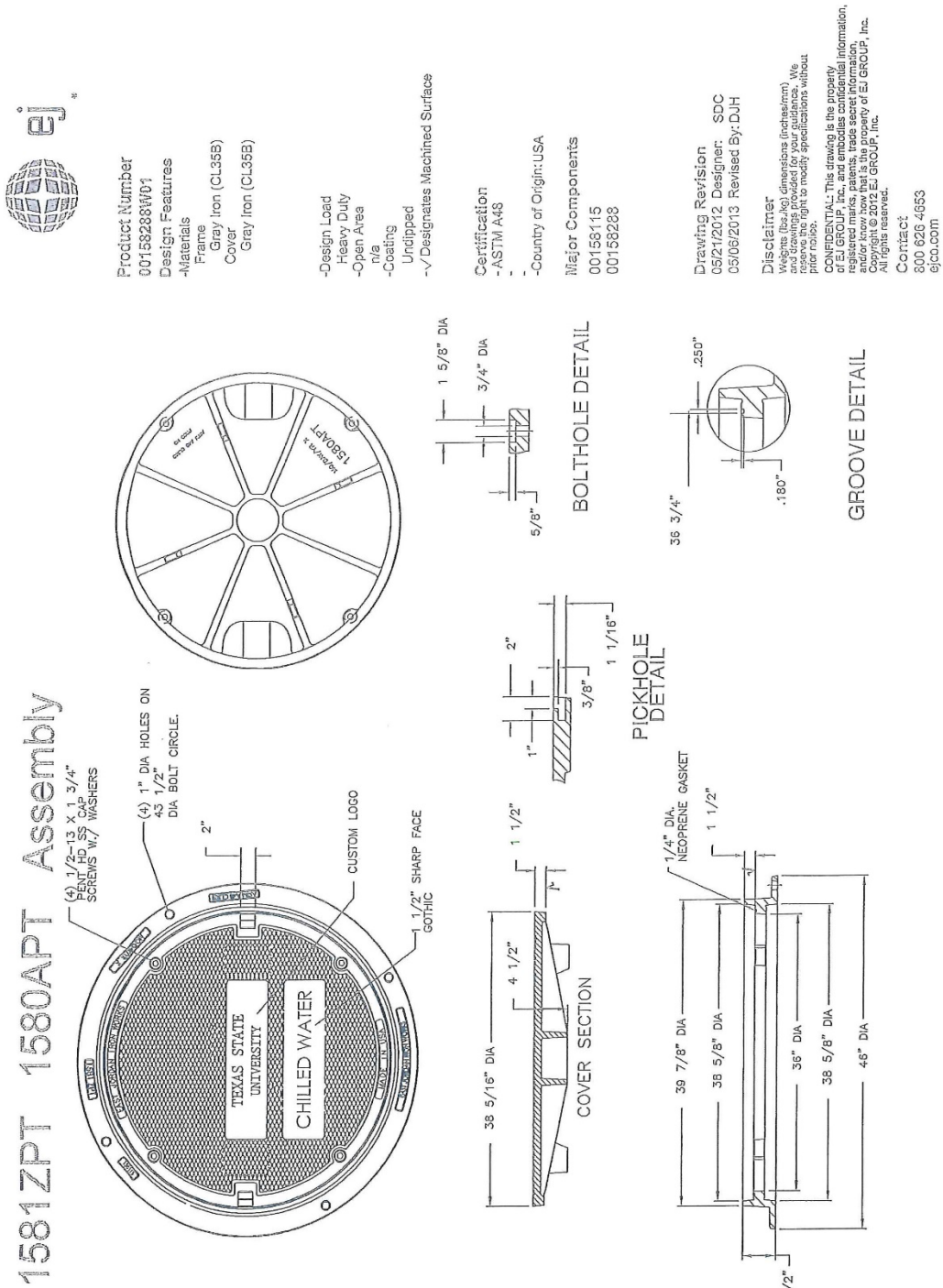
## BOLTHOLE DETAIL

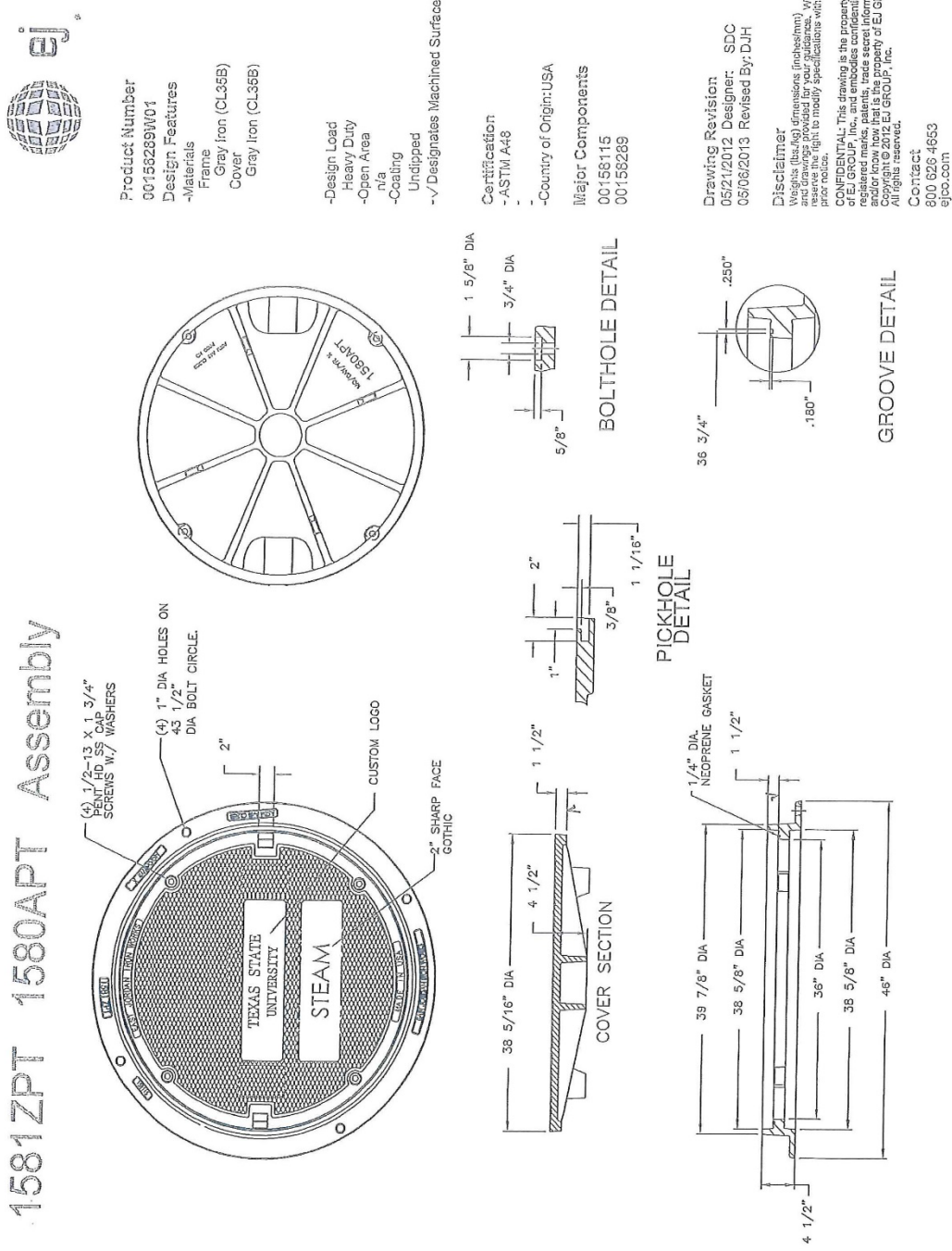


### PICKHOLE DETAIL



## GROOVE DETAIL





END OF SECTION 33 00 00