



**SPECIFICATIONS & CONTRACT DOCUMENTS  
“B” ELEVATION BURNER CORE REPLACEMENTS  
FOR  
WHELAN ENERGY CENTER, UNIT II  
PUBLIC POWER GENERATION AGENCY  
PPGA Formal Contract No. PPGA 2024-29**

**Sealed Bids must be received no later than  
Wednesday, December 18th, 2024**

**(Bids will be opened and read aloud at 1:30 p.m. on the same day)**

**Submitted By:** \_\_\_\_\_

**Date Submitted:** \_\_\_\_\_

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AT WHELAN ENERGY CENTER, UNIT 2  
PUBLIC POWER GENERATION AGENCY  
HASTINGS, NEBRASKA  
PPGA Formal Contract No. PPGA 2024-29

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**NOTICE TO BIDDERS**  
**“B” ELEVATION BURNER CORE REPLACEMENTS**  
**FOR WHELAN ENERGY CENTER, UNIT 2**  
**PUBLIC POWER GENERATION AGENCY**  
**HASTINGS, NEBRASKA**  
**Contract No. PPGA 2024-29**

Sealed Proposals will be received by the Public Power Generation Agency (PPGA), 1228 North Denver Avenue, PO Box 398, Hastings, Nebraska 68902 until Wednesday, December 18th, 2024, at 1:30pm, at which time they will be opened and read aloud for the “B” Elevation Burner Core Replacements at Whelan Energy Center, Unit 2, Public Power Generation Agency, Hastings, Nebraska.

Proposals received after the above time and date will be returned unopened to the party submitting the proposal.

Each proposal shall be accompanied by a cashier's check, certified check on a solvent U.S. commercial bank, or a **bid bond in an amount of not less than five percent (5%) of the total bid**. Such check or bid bond shall be contained in a separate envelope attached to bidder's proposal. All proposals and bid bonds shall have original signatures.

The successful bidder will be required to furnish a Performance Bond in the sum of the full amount of the Contract within ten (10) days of the date of award. No additional time will be allowed the Contractor for providing the Performance Bond.

Proposals will be considered only from those bidders who are qualified by previous experience in performing work of this type, scope and complexity specified.

Bidders without previous successful work history with PPGA will be required to pre-qualify by submitting information concerning their organization, experience, and financial status as requested in the bidding instructions.

The PPGA reserves the right to accept the bid which best suits its needs whether the price is the lowest or not, to reject any or all bids, and to waive any informalities.

No proposal may be altered, withdrawn or resubmitted within 60 days after the date set for the opening of proposals.

Prospective bidders may secure a copy of the Proposal Form, including Plans and Specifications, at the office of the PPGA Project Operating Agent, 1228 North Denver Avenue, PO Box 398, Hastings, Nebraska 68902.

FOR THE PUBLIC POWER  
GENERATION AGENCY

**LEGAL NOTICES:**

**Notice to Bidders**

**Tuesday, November 26, 2024**

**Tuesday, December 3, 2024**

**Tuesday, December 10, 2024**

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Shane Stone  
PPGA Project Operating Agent

# INSTRUCTIONS TO BIDDERS

All proposal information, including any unit price fill in sheets or other required information, shall be submitted on the proposal forms hereto attached. Copies of addenda, if any, shall be signed and attached to the bound volume submitted. PPGA does NOT accept faxed or emailed bid returns.

Bidders shall inform themselves of all relevant matters, and, if awarded the contract, shall not be allowed any extra compensation by reason of any matter or thing concerning which such Bidder might not have fully informed himself, prior to the bidding.

The Bidder bidding on the Specifications herein, who has exceptions to those called for in the Specifications, must so state in the space provided below and/or attach a letter explaining in detail the exceptions taken to those required in the Specifications. This letter of explanation shall become a part of the bid and shall be attached hereto. Failure by the Bidder to outline his exceptions will require the successful Bidder to comply with these Specifications.

## EXCEPTIONS TO SPECIFICATIONS:

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The Purchaser will not assume obligations resulting from losses or damages until acceptance of the equipment.

Checks of unsuccessful Bidders will be returned when their bids have been rejected and they will not be retained in excess of sixty (60) days from the date bids are opened. The check of the successful Bidder will be retained until the contract is awarded. Should the successful Bidder fail to perform as the Proposal and Specifications indicate, the City may use the check as liquidated damages within fifteen (15) days after written notice is given to the party who submitted the successful bid.

If any person contemplating submitting a bid for this contract is in doubt as to the true meaning of any part of the Specifications or other proposed contract documents, he may submit to

**BID DOCUMENT MUST BE SUBMITTED WITH BID**

## INSTRUCTIONS TO BIDDERS

Purchaser a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by addendum duly issued or delivered to each person receiving a set of such documents. The Purchaser will not be responsible for any other explanation or interpretation of the proposed documents.

All addendums must be signed and attached to bid documents or proposal will not be accepted.

**Bidder Qualifications:** In order for their proposals to be considered, bidders without previous successful work history with PPGA must demonstrate before the bid opening that they are qualified to perform the work satisfactorily. Each prospective bidder shall submit written evidence of his qualifications to the Owner and the Engineer, in duplicate, not less than five (5) days before the date of bid opening. Such evidence shall certify that the bidder:

1. Maintains a permanent place of business;
2. Has available the plant and equipment to do the work;
3. Can supply and manage the necessary labor force;
4. Has technical knowledge and practical experience in work of the type specified;
5. Has available the organization and qualified manpower to do the work;
6. Has adequate financial status to meet the financial obligations incident to the work;
7. Has no just or proper claims pending against him or his work; and
8. Has constructed other facilities of similar type and of equal or greater size and complexity. The evidence shall consist of a listing of the facilities indicating the owner's name, location, approximate dollar value, type of facilities, date of completion, and the size and operating conditions of major equipment.



FORMAL CONTRACT NO. PPGA 2024-29  
“B” ELEVATION BURNER CORE REPLACEMENT  
AT WHELAN ENERGY CENTER, UNIT 2  
FOR PUBLIC POWER GENERATION AGENCY  
HASTINGS, NEBRASKA

**PLEASE CONTACT:**

Derek Pfeifer  
Production Engineer  
Direct Line: 402-462-3673  
Email: [dpfeifer@cityofhastings.org](mailto:dpfeifer@cityofhastings.org)

Bruce Perry  
Maintenance and Fuel Handling Supervisor  
Direct Line: 402-462-3573  
Email: [bperry@cityofhastings.org](mailto:bperry@cityofhastings.org)

Renaë Griess  
PPGA Administrative Assistant  
Direct Line: 402-462-3665  
Fax: 402-462-3666  
Email: [rgriess@cityofhastings.org](mailto:rgriess@cityofhastings.org)

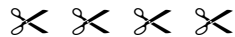
# IMPORTANT MAILING INSTRUCTIONS

**PLEASE ADDRESS YOUR RETURN ENVELOPE  
AS SHOWN IN THE EXAMPLE BELOW  
ALL BIDS MUST BE SEALED IN A  
PROPERLY MARKED ENVELOPE**

Your Return Address

PPGA  
Attn: Renae Griess  
PPGA Administrative Assistant  
1228 N. Denver Avenue  
PO Box 398  
Hastings, NE 68902-0398

**This Information MUST BE typed or written in the lower left hand corner of return envelope  
OR SIMPLY CUT OUT AND TAPE ON YOUR RETURN ENVELOPE**



**BID DOCUMENTS ENCLOSED  
ATTN: Renae Griess, PPGA Administrative Assistant  
Contract No. PPGA 2024-29  
WEC2 "B" Elevation Burner Core Replacement  
Bid Opens: Wednesday, December 18th, 2024**

**If returning overnight or next day air, please enclose your bid in an  
"inner" envelope which is sealed and properly marked on the outside  
of BOTH envelopes as shown by the example above.**

**BIDDER'S CHECKLIST**  
**BURNER CORE REPLACEMENT**  
**WHELAN ENERGY CENTER UNIT 2**  
**FOR**  
**PPGA**  
**Contract No. PPGA 2024-29**

- One signed cover sheet with your company's name filled in
- One signed original Proposal
- Exceptions listed on Instruction To Bidders sheet, if exceptions are being made
- Written evidence of Contractor qualifications as outlined in Instructions to Bidders sheet, if no successful project history with PPGA
- Acknowledgement of Addenda. All addendums received must be acknowledged and signed, if applicable.
- Firm unit pricing; or the lump sum pricing as applicable (see Proposal).
- A certified check, cashier's check, or bid bond payable to the City of Hastings in an amount no less than five percent (5%) of the bid price included with the sealed bid envelope addressed in accordance with the Mailing or Hand Delivery Instructions.

# AGREEMENT

**THIS AGREEMENT**, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the Public Power Generation Agency (PPGA) of Hastings, Nebraska, acting through its Board, Part of the First Part, hereinafter called the "Purchaser" or "PPGA", and

\_\_\_\_\_

a \_\_\_\_\_ of (town) \_\_\_\_\_ in the State of \_\_\_\_\_, Party of the Second Part, hereinafter called the "Supplier".

**WITNESSETH: THAT,**

**WHEREAS:** The Purchaser has caused the necessary contract documents to be prepared for defining material, equipment, and/or labor to be supplied to the Public Power Generation Agency of Hastings, Nebraska and delivered complete as specified in the accompanying contract documents.

**WHEREAS:** The Purchaser has advertised for bids from Suppliers, has received said bids, analyzed same and duly awarded a contract to the "Supplier", "Party of the Second Part", for material, equipment, and/or labor as hereinafter set forth and as stated more in detail in the Proposal and related contract documents to wit; Notice to Bidders, Instructions to Bidders, Specifications; all of which documents are attached hereto and made a part of this Contract.

**NOW, THEREFORE:** It is hereby agreed that for the sum of \_\_\_\_\_  
\_\_\_\_\_ (\$ \_\_\_\_\_)

to be paid by the Purchaser, within Thirty (30) days after the acceptance of material, equipment, and/or labor by the Purchaser, to the Supplier, the Supplier agrees to furnish all materials, equipment, and/or labor as required by the accompanying specifications, and the aforesaid contract documents, for **Whelan Energy Center Unit 2 Burner Core Replacement Project, PPGA 2024-29.**

All materials, equipment, and/or labor shall be in accordance with the accompanying contract documents and specifications which are as much a part of this Agreement as if repeated verbatim herein.

# AGREEMENT

It is further agreed that the Supplier will start work promptly, furnish the necessary drawings promptly and complete the work in the number of days set forth in the Proposal.

**IN WITNESS WHEREOF:** The Parties of the First and Second Parts have hereto set their hands and seals on the day and year above written.

PUBLIC POWER GENERATION AGENCY  
OF HASTINGS, NEBRASKA  
Party of the First Part

By \_\_\_\_\_

Date: \_\_\_\_\_

SUPPLIER  
Party of the Second Part

BY: \_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Type or Print Name:*

TITLE: \_\_\_\_\_  
*Title:*

DATE: \_\_\_\_\_

Note: If executed by one other than President, Partner or the individual Owner, a Power-of-Attorney authorizing execution should accompany this Contract.

**FORMAL PROPOSAL  
FOR "B" ELEVATION BURNER CORE REPLACEMENT  
AT WHELAN ENERGY CENTER, UNIT 2  
PUBLIC POWER GENERATION AGENCY  
HASTINGS, NEBRASKA  
Formal Contract No. PPGA 2024-29**

Public Power Generation Agency  
1228 N. Denver Ave. (68901)  
PO Box 398  
Hastings, NE 68902

**Issue Date: 11/21/24      Return Date on or Before: 12/18/24      Wednesday @ 1:30 p.m.**

The undersigned bidder, having read and examined the specifications and associated contract documents for the above designated equipment, does hereby propose to furnish the equipment and provide the services set forth in this Proposal.

We, the undersigned, being familiar with all parts of this document, do hereby agree to complete the WEC Unit 2 "B" Elevation Burner Core Replacement for the Public Power Generation Agency, Hastings, Nebraska as specified to purchaser for the following firm prices.

**BID SECTION I: WEC UNIT II BURNER CORE REPLACEMENT**

<b>Item No.</b>	<b>Description</b>	<b>Unit Price</b>	<b>Total Price</b>
1	Base Price - Provide labor, equipment, and supervision to remove and replace six (6) WEC Unit 2 burner cores without oil atomizing guns, including coal elbows, per Section 3 and 4 of the specifications.	<u>LUMP SUM</u>	\$
<b>TOTAL PRICE</b>			
_____			\$ _____
<i>(Price In Words)</i>			

Work Start date: 4/9/25

Work Completion date: 5/9/25

Liquidated Damages: The Contractor shall pay a fee of \$1,000.00 per working day for failure to perform work within either the specified project period or the contract completion date in accordance with Paragraph GC.36 of the general conditions.

For purposes of sales/use tax, this project falls under Nebraska Sales and Use Tax Regulation 1-017 for Contractors. By definition, a contractor is “any person who repairs property annexed to, or who annexes property to, real estate, including leased property, by attaching building materials to the annexed property or improvement being built or repaired, or who arranges for annexation of property.” Please refer to [www.revenue.nebraska.gov/salestax.html](http://www.revenue.nebraska.gov/salestax.html) for additional information.

For calculating this proposal:

- All contractors are to include sales/use tax on materials in the bidder’s prices.
- All contractors are to include the price of freight of materials delivered to site.
- **Option 1 contractors must separately state materials, sales tax, labor, and other charges on all invoices for the project. Any invoices submitted that do not include this required breakdown of the charges will not be accepted for payment. (This requirement does not apply to Option 2 or 3 contractors.)**
- The sales/use tax rate for this project will be 5.5%.
- Contractor labor charges for this proposal are not subject to sales/use tax per the Nebraska Department of Revenue Notice to Contractors effective October 1, 2007.
- In submitting this bid, the bidder certifies that he will comply with all applicable laws, ordinances, and codes of the City of Hastings and the State of Nebraska.

What contractor option have you registered with the Nebraska Department of Labor (must select one)? Please refer to <https://dol.nebraska.gov> for additional information.

Option 1 \_\_\_\_\_  
Option 2 \_\_\_\_\_  
Option 3 \_\_\_\_\_

Is Nebraska Sales/Use Tax included in the above prices (must select one)?

No       Yes

Exceptions: (must select one)

No       Yes  (If yes, list on “*Instructions to Bidders*” page)

In submitting this proposal, it is understood that the right is reserved by the PPGA to reject any or all proposals and it is further understood that this proposal may not be withdrawn for a period of sixty (60) days after proposals are opened. It is further understood that the PPGA reserves the right to select any or all of the items above, as they deem appropriate.

**All bid documents, including proposals, etc., must be submitted with original signatures. No copies will be accepted.**

**OFFICIAL NAME & ADDRESS**

_____	_____
Firm Name	Signature
_____	_____
Address	Typed or Printed Name
_____	_____
City, State, Zip	Title
_____	_____
Phone No.	Date
_____	_____
Fax No.	Email Address

# PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we, \_\_\_\_\_

hereinafter referred to as "Principal", and

a \_\_\_\_\_ of the State of \_\_\_\_\_

hereinafter called the Surety, are held and firmly bound unto the PUBLIC POWER GENERATION AGENCY (PPGA), County of Adams, State of Nebraska, hereinafter called the Owner, in the full and just sum of: \$

\_\_\_\_\_ Dollars, lawful money of the United States, for the payment of which, well and truly to be made, we bind ourselves, our heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

The condition of the above obligation is such that,

WHEREAS: The above bounden principal has heretofore on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, entered into a certain Contract with the PPGA of Hastings, Nebraska, a copy of which Contract together with its terms, covenants, conditions, and stipulations, is incorporated herein and made a part hereof as fully and amply as if said Contract were recited as length herein.

NOW, THEREFORE, If the above bounden Principal shall well, truly, and faithfully perform said Contract and comply with all the terms and provisions thereof and satisfy all of the obligations of said Principal arising thereunder (including the matter of infringement, if any, of patents and covenant for replacement of defective materials and workmanship for the guaranteed period of one year), and comply with all the covenants therein contained and contained in the specifications and other documents constituting a part of said Contract required to be performed by said Principal in the manner within the time provided in said Contract, and shall fully indemnify and save harmless said PPGA of Hastings, Nebraska, from all costs and damages which said PPGA may suffer by reason of failure so to do, and shall fully reimburse and repay said PPGA all outlay and expense which said PPGA may incur in making good any such default and shall pay all persons who have Contracts directly with the Principal for labor and materials, if any, included in said Contract, then this obligation to be null and void; otherwise to remain in full force and effect.

That the said Surety for value received hereby stipulates and agrees that no change, extension of time, alliteration or addition to the terms of the Contract or to the work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligations on this bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, or to the work or to the specifications.

**PERFORMANCE BOND**

IN WITNESS WHEREOF, the above named Principal and Surety, have executed these presents  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_

\_\_\_\_\_  
Principal

\_\_\_\_\_

\_\_\_\_\_  
Its Attorney-in-Fact (Surety)

\_\_\_\_\_

\_\_\_\_\_  
Resident Agent of Surety

## INSURANCE COVERAGE

The undersigned hereby certifies that Workmen's Compensation, Public Liability and Property Damage, and Automobile Liability and Property Damage Insurance is in force and effect in accordance with the requirements contained in "Instruction To Bidders" which is a part of this document "Bid Proposal And Specifications". We further agree to give ten (10) days notice to the Public Power Generation Agency before effective date of cancellation or reduction of any of the above coverage.

This Insurance Coverage applies only to \_\_\_\_\_

Dated \_\_\_\_\_

\_\_\_\_\_  
SUPPLIER

By \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

\_\_\_\_\_  
INSURANCE COMPANY

By \_\_\_\_\_

Title \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_



## SECTION 1 - GENERAL CONDITIONS

### GENERAL CONDITIONS

#### **GC.1 Contract Documents**

It is understood and agreed that the Notice to Bidders, Instructions to Bidders, Proposal, Proposal Data, Contract Agreement, Performance Bond, Payment Bond, General Conditions, Special Conditions, Specifications, Drawings, Addenda, and Change Orders issued by the Purchaser or the Engineer, and specifications and engineering data furnished by the Contractor and accepted by the Purchaser, are each included in this Contract and the work shall be done in accordance therewith.

#### **GC.2 Definitions**

Words, phrases, or other expressions used in these contract documents shall have meanings as follows.

1. "Contract" or "contract documents" shall include the items enumerated above under CONTRACT DOCUMENTS.
2. "Purchaser" shall mean the Public Power Generation Agency named and designated in the Contract Agreement as "Party of the First Part," and their duly authorized agents. All notices, letters, and other communication directed to the Purchaser shall be addressed and delivered to:  

Public Power Generation Agency  
1228 North Denver Avenue  
P.O. Box 398  
Hastings, Nebraska 68902-0289  
Attention: Mr. Derek Pfeifer, Production Engineer  
Or by email to [dpfeifer@cityofhastings.org](mailto:dpfeifer@cityofhastings.org)
3. "Contractor" shall mean the corporation, company, partnership, firm or individual named and designated in the Contract Agreement as the "Party of the Second Part," who has entered into this Contract for the performance of the work covered thereby, and its, his, or their duly authorized representatives.
4. "Subcontractor" shall mean and refer only to a corporation, partnership, or individual having a direct contract with the Contractor for performing work covered by these contract documents.
5. "Engineer" shall also refer to Public Power Generation Agency as the purchaser.
6. "Date of contract," or equivalent words, shall mean the date written in the first paragraph of the Contract Agreement.
7. "Day" or "days," unless herein otherwise expressly defined, shall mean a calendar day or days of 24 hours each.
8. "The work" shall mean the equipment, supplies, materials, labor, and services to be furnished under the contract and the carrying out of all obligations imposed by the contract documents.

## SECTION 1 - GENERAL CONDITIONS

9. "Drawings" or "plans" shall mean all (a) drawings furnished by the Purchaser as a basis for proposals, (b) supplementary drawings furnished by the Purchaser to clarify and to define in greater detail the intent of the contract drawings and specifications, (c) drawings submitted by the successful bidder with his proposal, provided such drawings are acceptable to the Purchaser, (d) drawings furnished by the Purchaser to the Contractor during the progress of the work, and (e) engineering data and drawings submitted by the Contractor during the progress of the work, provided such drawings are acceptable to the Engineer.
10. Whenever in these contract documents the words "as ordered," "as directed," "as required," "as permitted," "as allowed," or words or phrases of like import are used, it shall be understood that the order, direction, requirement, permission, or allowance of the Purchaser or Engineer is intended only to the extent of judging compliance with the terms of the contract; none of these terms shall imply that the Purchaser or the Engineer has any authority or responsibility for supervision of the Contractor's forces or construction operations, such supervision and the sole responsibility therefor being strictly reserved for the Contractor.
11. Similarly the words "approved," "reasonable," "suitable," "acceptable," "proper," "satisfactory," or words of like effect and import, unless otherwise particularly specified herein, shall mean approved, reasonable, suitable, acceptable, proper, or satisfactory in the judgment of the Purchaser or Engineer, to the extent provided in (10) above.
12. Whenever in these contract documents the expression "it is understood and agreed" or an expression of like import is used, such expression means the mutual understanding and agreement of the parties executing the Contract Agreement.
13. "Official acceptance" shall mean the Purchaser's written acceptance of all work performed under this Contract, based on the Engineer's final inspection and issuance of a final payment certificate.
14. "Project completion" shall mean that the burners are installed and accepted by PPGA. The project completion date is at the end of day, May 9<sup>th</sup>, 2025.
15. "Final Acceptance" shall mean that all work has been completed in accordance with these specifications, the project has been walked down, punch list items have been completed, and Purchaser is ready to accept the Work as complete.
16. "Stop Work Order" shall mean that the Purchaser will provide a written order to the Contractor requiring the Contractor to stop all, or any part of, the work called for by this Contract, for a time defined by the order. The order shall specify the reasoning for the suspended work, which may include, but are not limited to, engineering considerations, changes to the project scope, safety or environmental concerns, or other issues detrimental to the project. Upon receipt of the order, the Contractor shall

## **SECTION 1 - GENERAL CONDITIONS**

immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order. As soon as practical, the Purchaser and Contractor shall discuss the impacted activities, schedule, materials, labor, and equipment. If applicable, Purchaser and Contractor will seek to negotiate an equitable adjustment in the schedule, Contract price, or both, and the contract shall be modified, or a change order issued, as necessary. Upon any agreement and finalization of commercial conditions, Purchaser to provide written order to cancel the stop work order.

### **GC.3 Execution of the Contract**

Once the bids have been evaluated, the Purchaser will electronically submit the Contract Agreement to the Contractor. The Contractor shall sign the Contract Agreement and return to Purchaser for the final approval process. Upon final approvals, the Contract Agreement will be signed by the Purchaser and electronically returned to the Contractor. Contractor shall then mail one hardcopy of required bonds, one electronic or hardcopy of insurance documents, and one electronic or hardcopy of power of attorney forms to the Purchaser. The date of contract on the bond forms and power of attorney forms shall match the date provided on the Contract Agreement by the Purchaser.

The Purchaser will review the final documents and electronically send a final conformed contract to the Contractor.

### **GC.4 Legal Addresses**

The business address of the Contractor listed in the Proposal is hereby designated as the place to which all notices, letters, and other communication to the Contractor will be mailed or delivered. The address of the Purchaser appearing in section GC.2 is hereby designated as the place to which all notices, letters, and other communication to the Purchaser shall be mailed or delivered. Either party may change his address at any time by an instrument in writing delivered to the Engineer and to the other party.

### **GC.5 Scope and Intent of Contract Documents**

The various parts of the contract documents are intended to supplement but not necessarily duplicate each other. Any work exhibited in one part and not in another shall be executed as if it had been set forth in all parts, so that the work will be performed according to the complete design as determined by the Engineer.

Should anything necessary for a clear understanding of the work be omitted from the contract documents, or should the requirements appear to be in conflict, the Contractor shall secure written instructions from the Engineer before proceeding with the work affected thereby. It is understood and agreed that the work shall be performed according to the true intent of the contract documents.

### **GC.6 Independent Contractor**

The relationship of the Contractor to the Purchaser shall be that of an independent contractor.

### **GC.7 Assignment**

## **SECTION 1 - GENERAL CONDITIONS**

The Contractor shall not assign the work, or any part thereof, without the previous written consent of the Purchaser, nor shall he assign, by power of attorney or otherwise, any of the money payable under this Contract unless written consent of the Purchaser has been obtained. No right under this Contract, nor claim for any money due or to become due hereunder shall be asserted against the Purchaser, or persons acting for the Purchaser, by reason of any so-called assignment of this Contract or any part thereof, unless such assignment has been authorized by the written consent of the Purchaser. In case the Contractor is permitted to assign moneys due or to become due under this Contract, the instrument of assignment shall contain a clause subordinating the claim of the assignee to all prior liens for services rendered or materials supplied for the performance of the work.

### **GC.8 Oral Statements**

It is understood and agreed that the written terms and provisions of this agreement shall supersede all oral statements of representatives of the Purchaser, and oral statements shall not be effective or be construed as being a part of this Contract.

### **GC.9 Reference Standards**

Reference to the standards of any technical society, organization, or association, or to codes of local or state authorities, shall mean the latest standard, code, specification, or tentative standard adopted and published at the date of taking bids, unless specifically stated otherwise.

### **GC.10 Source of Materials**

To the extent possible, materials, and equipment (including components thereof) furnished under these specifications shall be produced, processed, manufactured, and assembled within the United States of America. Substitution of foreign materials for domestic materials will not be permitted unless such substitution is clearly stated in the Proposal and accepted by the Purchaser.

### **GC.11 Contractor to Check Drawings and Lists**

The Contractor shall check all dimensions, elevations, and quantities indicated on the drawings and lists furnished to him by the Engineer. The Contractor shall notify the Engineer of any discrepancy between the drawings and the conditions at the site, or any error or omission in the drawings, or in the layout as given by stakes, points, or instructions, which he may discover in the course of the work. The Contractor will not be allowed to take advantage of any error or omission in the drawings or other contract documents that a reasonable inspection of them by Contractor would reveal. Full instructions will be furnished by the Engineer should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

### **GC.12 Figured Dimensions to Govern**

Dimensions and elevations indicated on the drawings shall be accurately followed even though different from scaled measurements. No work indicated on the drawings, the dimensions of which are not indicated, shall be executed until necessary dimensions have been obtained from the Engineer.

### **GC.13 No Waiver of Rights**

## **SECTION 1 - GENERAL CONDITIONS**

Neither the inspection by the Purchaser or Engineer or any of their officials, employees, or agents, nor any order by the Purchaser or Engineer for payment of money, or any payment for, or acceptance of, the whole or any part of the work by the Purchaser or Engineer, nor any extension of time, nor any possession taken by the Purchaser or its employees, shall operate as a waiver of any provision of this Contract, or of any power herein reserved to the Purchaser, or any right to damages herein provided, nor shall any waiver of any breach in this Contract be held to be a waiver of any other or subsequent breach.

### **GC.14 Authority of the Engineer**

To prevent delays and disputes, and to discourage litigation, it is agreed by the parties to this Contract that the Engineer shall determine the quantities of work which are to be paid for under the contract and shall resolve all questions in relation to the work.

If, in the opinion of the Contractor or the Purchaser, a decision made by the Engineer is not in accordance with the meaning and intent of the contract, either party may file with the Engineer and the other party to the contract, within 30 days after receipt of the decision, a written objection to the decision. Failure to file an objection within the allotted time will be considered acceptance of the Engineer's decision and the decision shall become final and conclusive.

The Engineer's decision and the filing of the written objection thereto shall be a condition precedent to the right to request arbitration or to start action in court.

It is the intent of this agreement that there shall be no delay in the execution of the work and the decision of the Engineer as rendered shall be promptly observed.

### **GC.15 Engineering Inspection**

The Purchaser may appoint (either directly or through the Engineer) such inspectors as the Purchaser deems proper to inspect the work for compliance with the contract documents. The Contractor shall furnish all reasonable assistance required by the Engineer, or inspectors, for the proper inspection of the work. Should the Contractor object to any interpretation of the contract by an inspector, the Contractor may make written appeal to the Engineer for a decision.

Inspectors shall have the authority to reject work which is unsatisfactory, faulty, or defective or does not conform to the requirements of the contract documents. Inspection shall not relieve the Contractor from any obligation to construct the work strictly in accordance with the contract documents.

Upon the failure of the Contractor or its Subcontractors to comply with any of the requirements of this Contract (but not limited to quality or safety), the Purchaser shall have the authority to stop any portion of the work affected by such failure until such failure is remedied. If the Purchaser issues a Stop Work Order, the Purchaser shall not be liable for any costs or expenses claimed by Contractor arising out of such issuance. The construction schedule shall not be delayed or extended as a result of the Purchaser's issuance of a Stop Work Order.

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### **GC.16 Contractor Default**

If the work to be done under this Contract is abandoned by the Contractor; or if this Contract is assigned by him without the written consent of the Purchaser; or if the Contractor is adjudged bankrupt; or if a general assignment of his assets is made for the benefit of his creditors; or if a receiver is appointed for the Contractor or any of his property; or if at any time the Engineer certifies in writing to the Purchaser that the performance of the work under this Contract is being unnecessarily delayed, that the Contractor is violating any of the conditions of this Contract, or that he is executing the same in bad faith or otherwise not in accordance with the terms of said contract; or if the work is not substantially completed within the time named for its completion or within the time to which such completion date may be extended; then the Purchaser may serve written notice upon the Contractor and his surety of the Purchaser's intention to terminate this Contract. Unless within 5 days after the serving of such notice, a satisfactory arrangement is made for continuance, this Contract shall terminate. In the event of such termination, the surety shall have the right to take over and complete the work, provided that if the surety does not commence performance within 30 days, the Purchaser may take over and prosecute the work to completion, by contract or otherwise. The Contractor and his surety shall be liable to the Purchaser for all excess cost sustained by the Purchaser by reason of such prosecution and completion. The Purchaser may take possession of, and utilize in completing the work, all materials, equipment, tools, and plant on the site of the work.

### **GC.17 Beginning, Progress, and Completion of the Work**

The time of completion is a basic consideration of this Contract. Unless otherwise specified in these contract documents or advised by written order of the Purchaser, the Contractor shall begin work within 10 days after the date of contract. The work shall be prosecuted to completion in accordance with the specified schedule, subject to adjustment as provided in these contract documents.

A detailed construction schedule shall be prepared by the Contractor and submitted to the Purchaser for review. The schedule shall contain the various activities required to perform the work and the dates the activities will be started and completed in order to complete the work in accordance with the specified schedule requirements. The Contractor is responsible for determining the sequence and time estimates of the detailed construction activities. However, the Purchaser reserves the right to require the Contractor to modify any portion of the schedule the Purchaser determines to be impracticable or unreasonable; as required to coordinate the Contractor's activities with those of other contractors, if any, engaged in work for the Purchaser on the site; to avoid undue interference with the Purchaser's operations; and to assure completion of the work by the date or dates stipulated. Upon acceptance by the Purchaser of the Contractor's detailed construction schedule, the Contractor will be responsible for maintaining such schedule.

If at any time the Contractor's work is behind schedule, he shall immediately put into effect definite procedures for getting the work back on schedule. The procedures shall be subject to review and modification by the Purchaser.

### **GC.18 Hindrances and Delays**

## **SECTION 1 - GENERAL CONDITIONS**

The Contractor expressly agrees that in undertaking to complete the work within the time specified, he has made allowances for all hindrances and delays which might usually be expected to occur in performing the work. No claims shall be made by the Contractor for such hindrances and delays.

If the Contractor experiences hindrances and delays which, in his opinion, are not usually to be expected in the performance of the work and which affect the performance of the work, he may request a change in the contract. Such hindrances and delays may include, but not be limited to, acts or failure to act by the Purchaser or other contractors employed by the Purchaser, fires, floods, labor disputes, epidemics, or acts of God. Such hindrances and delays shall not include rain, snow, or other non-severe inclement weather. Claims by the Contractor for any change in the contract due to such hindrances and delays shall be made in accordance with the requirements of Article GC.22, CHANGES TO THE CONTRACT. The Contractor shall use all reasonable means to minimize the extent of the delay.

### **GC.19 Suspension of Work**

The Purchaser reserves the right to suspend and reinstate execution of the whole or any part of the work without invalidating the provisions of the contract. Suspension or reinstatement of the work will be by written notice to the Contractor from the Purchaser.

Suspension of work shall not automatically entitle the Contractor to additional compensation or a change in the contract time; however, the Contractor will be reimbursed for real and unavoidable direct costs incurred by him as a result of such suspension and/or the contract will be extended as required to compensate for any delay due to such suspension. Claims by the Contractor for change of contract time or an adjustment of the contract price, due to work suspensions ordered by the Purchaser shall be made in accordance with the requirements of Article GC.22, CHANGES TO THE CONTRACT. The Contractor shall use all reasonable means to minimize the consequences of such suspension.

### **GC.20 Cancellation of Work**

The Purchaser reserves the right to cancel the unshipped portion of the work by giving written notice to the Contractor. In the event of cancellation, the Purchaser will pay the Contractor reasonable and proper cancellation costs.

Cancellation of the work shall not constitute the basis for a claim for damages or loss of anticipated profits.

The Contractor shall, after consultation with the Purchaser, take all reasonable steps to minimize the costs related to cancellation. The Contractor shall provide the Purchaser with an accounting of costs claimed, including adequate supporting information, and the Purchaser may, at its expense, audit the claimed costs and supporting information.

### **GC.21 Modifications**

The Contractor shall modify the work whenever so ordered by the Purchaser and such modifications shall not affect the validity of the contract. Modifications may involve changes in the amount of the work to be performed or changes in the contract time for which appropriate changes to the contract will be made.

## **SECTION 1 - GENERAL CONDITIONS**

Contract changes due to modifications shall be made in accordance with the requirements of Article GC.22, CHANGES TO THE CONTRACT.

### **GC.22 Changes to the Contract**

The contract may be changed only by duly executed change orders issued by the Purchaser.

If, in the opinion of the Purchaser or the Contractor, any event or action by the other party justifies a change in the contract, either party shall initiate with the other party, within 5 days after such event or action, a request for a change to the contract. All documentation required to substantiate the proposed change shall be submitted within a minimum reasonable time after initiating the request for change. Upon the parties reaching agreement regarding the proposed change, the Purchaser will issue a written change order therefor.

Notwithstanding the foregoing provisions requiring duly authorized change orders, in the event agreement has been reached between authorized representatives of the parties regarding the change in the contract pending processing of such change order, the Contractor shall proceed with the work on the basis of written interim authorization from the Purchaser.

If the Contractor claims that any instruction, request, drawing, specifications, or other directive or action of the Purchaser or the Engineer constitutes a change in the contract but has not been authorized as such by a change order in writing by the Purchaser, the Contractor shall immediately request a written interim authorization and proceed without delay to perform the work in accordance with such authorization. The Contractor shall provide written notice of the claim or dispute to the Engineer and the Purchaser within 5 days of the request for interim authorization. The Contractor's failure to give said written notice within the 5 day period shall constitute a waiver and relinquishment of any such claim or dispute. The Purchaser's written interim authorization shall not constitute approval of the claim for increased or decreased work, but shall be a condition precedent to the Contractor's right to receive payment for such work and to the Contractor's right to prosecute or maintain any proceeding to recover for such work.

#### **GC.22.1 Contract Price Changes**

The contract price may be changed due to modifications which involve extra work or decreased work; or due to work suspensions, hindrances, and delays over which the Contractor has no control. Claims for changes in the contract price shall conform to the requirements specified herein.

##### **GC.22.1.1 Increased Price**

If a change in the contract is required due to work suspensions or hindrances and delays, the contract price will be increased according to agreed lump sums, agreed acceleration costs, or other demonstrable costs submitted by the Contractor and substantiated to the satisfaction of the Purchaser.

If a change in the contract price is required due to a modification which increases the amount of the work, and the added work or any part thereof is of a type and character which can properly and fairly be classified under one or more unit price items of the contract, then the

## SECTION 1 - GENERAL CONDITIONS

contract price will be increased according to the amount actually done and at the applicable unit price. Otherwise, such work shall be paid for as herein-after provided.

Contract price changes for modifications involving extra work will be based on agreed lump sums or on agreed unit prices whenever the Purchaser and the Contractor agree upon such prices before the extra work is started; otherwise, payments for extra work will be based on actual direct cost plus the specified percentage allowance.

For the purpose of determining whether proposed extra work will be authorized, or for determining the payment method for extra work, the Contractor shall submit to the Engineer, upon request, a detailed cost estimate for proposed extra work. The estimate shall indicate itemized quantities and charges for all elements of direct cost. Charges for the Contractor's and subcontractor's extra profit, extra general superintendence, extra field office expense, and extra overheads shall be indicated as a percentage addition to the total estimated direct cost. Unless otherwise agreed upon by the Contractor and the Purchaser, such percentage additions shall be 15 percent for the extra work performed by the Contractor's own forces or 20 percent for extra work performed by a subcontractor.

When payment for extra work is based on actual direct cost, the Contractor will be paid the actual direct cost plus an allowance of 15 percent if the extra work is performed by the Contractor's own forces or 20 percent if the extra work is performed by a subcontractor. The allowance will be paid as full compensation for the Contractor's and sub-contractor's extra profit, extra general superintendence, extra field office expense, extra overheads, and all other elements of extra cost not defined herein as actual direct cost.

The actual direct cost shall include only those extra costs for labor and material expended in direct performance of the extra work and may include the following.

- a. The actual payroll cost of all workmen such as laborers, mechanics, craftsmen, and foremen.
- b. The Contractor's or subcontractor's net cost for materials and supplies.
- c. The rental charge for vehicles and construction equipment.
- d. The transportation charges for equipment.
- e. The charges for extra power, fuel, lubricants, water, and special services.
- f. The charges for extra payroll taxes, bond premiums, and insurance premiums.

The form in which actual direct cost records are kept, the construction methods, and the type and quantity of equipment used shall be acceptable to the Engineer.

Construction equipment which the Contractor has on the jobsite and which is of a type and size suitable for use in performing the extra work shall be used. The hourly rental charges for equipment shall not exceed 1/2 percent of the latest applicable monthly rental rates as published by Dataquest Incorporated in its "Rental Rate Blue Book" and shall apply to only the actual time the equipment is used in performing the extra work.

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When extra work requires the use of equipment which the Contractor does not have on the jobsite, the Contractor shall obtain the concurrence of the Engineer before renting or otherwise acquiring additional equipment. The rental charges for the additional equipment shall not exceed the latest applicable "Rental Rate Blue Book" published rental rates.

### **GC.22.1.2 Decreased Price**

If a change in the contract price is required due to a modification which decreases the amount of work, such decrease shall not constitute the basis for a claim for damages or anticipated profits on work affected by such decrease. Where the value of omitted work is not covered by applicable unit prices, the Engineer shall determine, on an equitable basis, the amount of:

- a. Credit due the Purchaser for contract work deleted as a result of an authorized change,
- b. Allowance to the Contractor for any actual loss incurred in connection with the purchase, delivery, and subsequent disposal of materials or equipment required for use on the work as planned and which could not be used in any part of the work as actually built, and
- c. Any other adjustment of the contract amount where the method to be used in making such adjustment is not clearly defined in the contract documents.

Unless otherwise agreed upon by the Purchaser and the Contractor, the credit due the Purchaser for reductions in the amount of work to be done shall be the estimated direct cost of the deleted work plus an overhead allowance of the following.

- 10 percent of the estimated direct cost if the work was to have been done by the Contractor's own forces, or
- 15 percent of the estimated direct cost if the work was to have been done by a subcontractor.

Direct cost referred to above shall include the category of costs listed as actual direct costs, Items (a) to (f) inclusive of the article entitled Increased Price.

### **GC.22.2 Contract Time Changes**

The contract time may be changed due to work modifications, hindrances and delays, and work suspensions over which the Contractor has no control.

Contract time will not be changed for delays caused by unfavorable weather or unsuitable ground conditions normally incident to the work, inadequate construction force, failure to place timely orders for equipment and materials, or other causes within the control of the Contractor.

### **GC.23 Step Dispute Resolution**

In the event of any controversy, claim or dispute between the Parties arising out of or relating to this Agreement, including its enforcement, such controversy, claim or dispute, including disputes regarded as such by only one of the Parties, the Parties shall negotiate in good faith to resolve such dispute, including third party mediation, if the Parties so agree.

## **SECTION 1 - GENERAL CONDITIONS**

If no settlement is achieved, either Party may pursue a claim in a federal or state court with competent jurisdiction.

### **GC.24 Laws and Regulations**

The Contractor shall observe and comply with all ordinances, laws, and regulations, and shall protect and indemnify the Purchaser and the Purchaser's officers and agents, including the Engineer, against any claim or liability arising from or based on any violation of the same.

### **GC.25 Taxes, Permits, and Licenses**

The Contractor shall pay all sales, use, and other taxes that are lawfully assessed against the Purchaser or Contractor in connection with the work and shall obtain and pay for all required licenses, permits, and inspections.

The Contractor will be compensated for any increase in tax rates, license fees, and permit fees or any new taxes, licenses, or permits imposed after the date of the Proposal; provided, however, that this provision shall be limited to sales, use, and excise taxes assessed against the completed work and to licenses and permits required specifically for the proposed work.

### **GC.26 Patents**

Royalties and fees for patents covering materials, articles, apparatus, devices, equipment, or processes used in the work shall be included in the contract amount. The Contractor shall satisfy all demands that may be made at any time for such royalties or fees and he shall be liable for any damages or claims for patent infringements. The Contractor shall, at his own cost and expense, defend all suits or proceedings that may be instituted against the Purchaser for alleged infringement of any patents involved in the work and, in case of an award of damages, the Contractor shall pay such award. Final payment to the Contractor by the Purchaser will not be made while any such suit or claim remains unsettled.

### **GC.27 Materials and Equipment**

Unless specifically provided otherwise in each case, all materials and equipment furnished for permanent installation in the work shall conform to applicable standard specifications and shall be new, unused, and undamaged when installed or otherwise incorporated in the work. No such material or equipment shall be used by the Contractor for any purpose other than that intended or specified, unless such use is specifically authorized by the Purchaser in each case.

All required tests in connection with acceptance of source of materials shall be made at the Contractor's expense by a properly equipped laboratory of established reputation whose work and testing facilities are acceptable to the Purchaser. Any change in origin or method of preparation or manufacture of a material being routinely tested will require new tests. Reports of all tests shall be furnished to the Engineer or Purchaser in as many copies as required.

### **GC.28 Guarantee**

The Contractor guarantees that the work herein contracted will be as specified and will be free from defects in design, workmanship, and materials. Contractor does not guarantee or warrant parts subject to normal wear and tear during operation. If within the guarantee period the work fails to meet the provisions of this guarantee, the Contractor shall promptly

## **SECTION 1 - GENERAL CONDITIONS**

correct any defects, including nonconformance with the contract documents by adjustment, repair, or replacement of all defective parts or materials at the Contractor's option and expense, after consulting with the Purchaser on the proposed remedy plans.

Except as otherwise prescribed by the terms of any special guarantees required by the contract documents, the guarantee period shall begin on the date of final payment and shall end 12 months later.

The cost of all materials, parts, labor, transportation, supervision, special tools, and supplies required for replacement or repair of parts and for correction of defects shall be paid by the Contractor or by the surety.

This guarantee shall be extended to cover all repairs and replacements furnished under the guarantee and the period of the guarantee for each such repair or replacement shall be 1 year after correction of the defect except as otherwise prescribed by the terms of any special guarantees required by the contract documents.

The Contractor will be given an opportunity to confirm the existence of the defect, but he shall not delay the correction while making such determination.

If within 10 days after the Purchaser has notified the Contractor of a defect, failure, or abnormality in the work, the Contractor has not started to make the necessary repairs or adjustments, the Purchaser is hereby authorized to make the repairs or adjustments or to order the work to be done by a third party; the cost of the work to be paid by the Contractor.

In the event of an emergency where, in the judgment of the Purchaser, delay would cause serious loss or damage, repairs or adjustments may be made by the Purchaser or a third party chosen by the Purchaser without advance notice to the Contractor and the cost of the work shall be paid by the Contractor or by the surety.

### **GC.29 Contractor's Insurance Coverage**

The Contractor shall not commence work under this Contract until Contractor has obtained all the insurance required under this article. Furthermore, the Contractor shall not allow any sub-contractor to commence work under this Contract until the sub-contractor has obtained the same insurance as is required of the Contractor. The sub-contractor alone shall be responsible for the sufficiency of its own insurance program.

#### **GC.29.1 Certificates of Insurance**

Certificates of Insurance acceptable to the Purchaser shall be filed with the Purchaser prior to commencement of the work. All insurance carried shall conform to the relevant provisions of the respective Project Documents and be with insurance companies which are rated "A, X" or better by Best's Insurance Guide, or other insurance companies of recognized responsibility satisfactory to the Purchaser.

**GC.29.2 Proof of Carriage of Insurance.** Satisfactory certificates of insurance shall be filed with the Purchaser prior to starting any construction work on this contract. The parties agree

## SECTION 1 - GENERAL CONDITIONS

that the requirements with respect to requirements to procure and maintain insurance under this Section is a material part of this Agreement.

### **GC.29.3 Additional Insureds**

Insurance coverages furnished under this Contract, with the exception of Workers' Compensation and Employer's Liability, shall include the City of Hastings and PPGA and their members, directors, officers, agents, and employees as named Additional Insureds on a primary and noncontributory basis, and shall include Products and completed operations with respect to the activities of the Contractor and shall be maintained for the full duration of the project including for a period after completion to include the statute of repose.

Notwithstanding any other provision of these policies, the insurance afforded shall apply separately to each insured, with respect to any claim, suit, or judgment made or brought by or for any other insured, as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount or amounts for which the insurer would have been liable had only one insured been named.

The Purchaser shall not by reason of their inclusion under these policies incur liability to the insurance carrier for payment of premium for these policies.

### **GC.29.4 Waiver of Subrogation**

To the extent permitted by applicable law, the Contractor and their sub-contractor shall require their insurance carriers, with respect to all insurance policies, to waive all rights of subrogation against the Purchaser their partners, directors, officers, agents, and employees.

### **GC.29.5 Workers' Compensation and Employer's Liability Insurance**

The Contractor shall procure, and shall maintain during the life of this Contract, Workers' Compensation Insurance as required by workers' compensation laws of the State of Nebraska and also of the state in which the sub-contractor is domiciled.

The Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a workers' compensation law. The Employer's Liability Insurance shall contain the following limits of liability:

Bodily Injury by Accident	\$500,000 each accident
Bodily Injury by Disease	\$500,000 each employee
Bodily Injury by Disease	\$500,000 policy limit

### **GC.29.6 General Liability Insurance**

This insurance shall be written per project on an "occurrence" policy form, including coverage for premises/operations, products/completed operations, blanket contractual liability, independent contractors and personal injury, with no exclusions for explosion, sudden and accidental pollution or an absolute or total pollution exclusion, collapse and underground perils. The commercial general liability policy shall also include a severability of interest clause and a cross liability clause in the event more than one entity is "named insured" or "named additional insured" under the liability policy.

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Limits of Insurance shall be as follows:

Each Occurrence Limit	\$1,000,000
Products/Completed Operations	\$2,000,000
General Aggregate Limit	\$2,000,000
Personal and Advertising Injury	\$1,000,000

### **GC.29.7 Automobile Liability Insurance**

This insurance shall be written under a Business Auto Policy and shall protect the Contractor and Additional Insureds against claims arising from injuries to members of the public or damage to property of others arising from the use of automobiles whether such automobiles are owned, non-owned, or hired. Automobile insurance shall include Motor Carrier Endorsement Act MCS 90 and transportation pollution coverage if applicable. If work is being done near a railroad track, the 50' railroad right of way exclusion must be deleted.

Limit of Liability	\$1,000,000 each accident
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### **GC.29.8 Umbrella Liability Policy**

This insurance shall protect the Contractor and the Additional Insureds against all claims in excess of the limits provided under the employer's liability, automobile liability, and general liability policies. The liability limits of the umbrella liability policy shall be not less than \$5,000,000 per occurrence. This policy shall be an "occurrence" type policy. However, Purchaser reserves the right to require higher limits with respect to each project.

### **GC.29.9 Pollution Liability** – Not Applicable

### **GC.29.10 Riggers Liability**

Should work involve the moving, lifting, lowering, rigging or hoisting of property or equipment Contractor shall carry Rigger's Liability Insurance to insure against physical loss or damage to the property or equipment on a Replacement Cost Basis.

### **GC.29.11 Railroad Protective Liability** – Not Applicable

### **GC.29.12 Professional Liability** – Not Applicable

### **GC.29.13 Transportation Insurance** – Not Applicable

### **GC.29.14 Property Insurance A.K.A. Builder's Risk** - Not Applicable

### **GC.30 Indemnification**

To the fullest extent permitted by laws and regulations, the Contractor shall defend, indemnify, and hold harmless the Purchaser, their officers, directors, members, consultants, agents, and employees from and against all claims, damages, losses, and expenses, direct, indirect, or consequential (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising out of or resulting from the negligent, wrongful, or defective performance of the work by the

## **SECTION 1 - GENERAL CONDITIONS**

Contractor, any sub-contractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the work, or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder or arises by or is imposed by law and regulations regardless of the negligence of any such party.

In any and all claims against the Purchaser, or of any of their officers, directors, members, consultants, agents, or employees by any employee of the Contractor, any sub-contractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the work or anyone for whose acts any of them may be liable, this indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any such sub-contractor or other person or organization under workers' or workmen's compensation acts, disability benefit acts, or other employee benefit acts, nor shall this indemnification obligation be limited in any way by any limitation on the amount or type of insurance coverage provided by the Purchaser, the Contractor, or any of their sub-contractors.

### **GC.31 Release of Liability**

Acceptance by the Contractor of the last payment shall be a release to the Purchaser and every officer and agent thereof, from all claims and liability hereunder for anything done or furnished for, or relating to the work, or for any act or neglect of the Purchaser or of any person relating to or affecting the work.

### **GC.32 Claims for Labor and Materials**

The Contractor shall indemnify and save harmless the Purchaser from all claims for labor and materials furnished under this Contract. When requested by the Purchaser, the Contractor shall submit satisfactory evidence that all persons, firms, or corporations who have done work or furnished materials under this Contract, for which the Purchaser may become legally liable, have been fully paid or satisfactorily secured. In case such evidence is not furnished or is not satisfactory, an amount will be retained from money due the Contractor which, in addition to any other sums that may be retained, will be sufficient, in the opinion of the Purchaser, to liquidate all such claims. Such sum will be retained until the claims as aforesaid are fully settled or satisfactorily secured.

Before final acceptance of the work by the Purchaser, the Contractor shall submit to the Engineer in duplicate a notarized affidavit stating that all subcontractors, vendors, persons, or firms who have furnished labor or materials for the work have been fully paid and that all taxes have been paid. If a performance bond has been executed, a statement from the surety shall also be submitted consenting to the making of the final payment.

### **GC.33 Final Inspection**

When the work has been substantially completed and at a time mutually agreeable to the Purchaser and Contractor, the Purchaser will make a final inspection of the work as to the acceptability and completeness of the work.

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### **GC.34 Payments**

Payment will be based on the Contractor's progress payment which he will submit to the Purchaser for approval. The Purchaser will retain 10% of the total contract amount for all work. The Purchaser will reduce the retainage to 5% after the project is 50% complete.

### **GC.35 Hazardous Materials**

As required under Federal Hazardous Communications Standards and certain state and local laws, the Contractor shall provide Material Safety Data Sheets covering all hazardous materials furnished under or otherwise associated with the work under this Contract. The Contractor shall provide the Purchaser with either copies of the applicable Material Safety Data Sheets or copies of a document certifying that no Material Safety Data Sheets are required under any federal, state, or local law, regulation, statute, or ordinance in effect at the jobsite.

Hazardous materials are defined in the applicable statute which may use the terminology "toxic substances" instead of "hazardous materials." The Contractor is responsible for determining if any substance or material furnished, used, applied, or stored under this Contract is within the provisions of any applicable statute.

If the work under this Contract includes onsite construction or erection, the Contractor shall provide written notice of the presence of hazardous materials to local fire, medical, and law enforcement agencies as required with a copy of such notice to the Purchaser.

The Contractor shall provide labeling of hazardous materials and training of employees in the safe usage of such materials as required under any applicable federal, state, or local law, regulation, statute, or ordinance.

### **GC.36 Liquidated Damages**

Time is a material provision of this Agreement. If the Contractor is unable to meet the agreed upon completion dates, the Contractor shall immediately notify the Purchaser and confirm the notice in writing within ten (10) business days of the delaying event. The notice shall contain detailed information of the delay including Contractor's estimate of the duration of the delay, Contractor's estimate of the delay's impact to Contractor's schedule and Contractor's plan to mitigate the effects of the delay.

Contractor shall be excused for delays in completion of the work only in accordance with GC.18. In the event of any such delay, Contractor shall only be allowed an extension of the date of completion for a period of time reasonably necessary to overcome the effect of the delay. Contractor shall not be entitled to any extra compensation for such delay. Contractor shall promptly notify the Purchaser in writing, with confirmation receipt of notification,

The liquidated damages amount per calendar day specified in the proposal form will be assessed, not as a penalty but as predetermined and agreed liquidated damages. The Purchaser and Contractor specifically agree the per calendar day amount to be assessed as liquidated damages is fair and reasonable and not excessive. The parties further agree that said per calendar day amount accurately reflect the anticipated loss and inconvenience to the

## **SECTION 1 - GENERAL CONDITIONS**

public and lost revenue to or use by the Purchaser due to the project not being completed by the end of the project period or the end of the contract completion date.

The Purchaser shall have the right to deduct liquidated damages from any money in its hands, otherwise due, or to become due, to the Contractor; to submit invoice for payment; or to sue for and recover compensation for damages for nonperformance of this Contract within the time stipulated.

The Liquidated Damages for this project will be \$1,000.00 per calendar day past the project completion date.

### **GC.37 Consequential Damages**

Except for Supplier's third party obligations arising out of or liability for breach of Articles GC.26 and/or GC.30, Purchaser and Supplier will not be liable to each other for loss of profits, loss of use, loss of contracts, or consequential damages arising out of this Contract. This Section will not relieve Supplier of any obligation under GC.36.

### **GC.38 Limitation of Liability**

With the exception of (a) indemnification stated in Article GC.30 and (b) the insurance coverages and limits set forth in Article GC.29, Supplier's total limit of liability on any claim, whether for breach of Contract, breach of warranty, tort, negligence, strict liability, or any other legal theory, for any loss or damage arising out of or connected to, or resulting from this Contract, shall be limited to the purchase price to be paid by Purchaser.

### **GC.39 Confidentiality**

"Confidential Information" means the confidential or proprietary designs, know-how, processes, trade secrets, and other information owned or controlled by Purchaser, Engineer, or Supplier respectively. Supplier agrees to hold any Confidential Information received in the strictest confidence, shall only use the Confidential Information as necessary to perform the work. Purchaser agrees to hold any Confidential Information received in the strictest confidence and shall only use the confidential information as necessary for engineering, construction, start-up, commissioning, maintenance, or other purposes related to the project. Each party shall use the same degree of care as is used for its own information of similar importance, but no less than reasonable care.

### **GC.40 Work Eligibility Status**

The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee.

### **GC.41 Fair Labor Standards**

## SECTION 1 - GENERAL CONDITIONS

The Contractor agrees to comply with all current applicable State, Federal, and City fair labor standards in the execution of the contract. Pursuant to the Title VI Non-Discrimination Program of the City of Hastings, Contractor agrees to comply with the provisions set forth by CITY's Title VI Non-discrimination Program, if applicable. A copy of said provisions are as follows:

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- (1) **Compliance with Regulations:** The contractor shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter "FHWA") Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- (2) **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin, sex, age, and disability/handicap in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- (3) **Solicitations for Subcontractors, Including Procurements of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin, sex, age, and disability/handicap.
- (4) **Information and Reports:** The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the (Recipient) or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the (Recipient), or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.
- (5) **Sanctions for Noncompliance:** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the (Recipient) shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
  - (a.) Withholding of payments to the contractor under the contract until the contractor complies, and/or

## SECTION 1 - GENERAL CONDITIONS

- (b.) Cancellation, termination or suspension of the contract, in whole or in part.
- (6) Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The contractor shall take such action with respect to any subcontract or procurement as the (Recipient) or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the (Recipient) to enter into such litigation to protect the interests of the (Recipient), and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

## **SECTION 2 - SPECIAL CONDITIONS**

### SPECIAL CONDITIONS

#### **SC.1 General**

These Special Conditions are nontechnical in nature and shall supplement the General Conditions in the administration and regulation of field construction work performed under these specifications.

#### **SC.2 Engineer's Drawings and Specifications**

After contract award, the Contractor will be furnished two sets of all drawings including revisions thereto and two working copies of the specifications without charge. Additional sets of drawings and revisions thereto and additional copies of specifications may be obtained by payment of printing, handling, and mailing costs. All drawings and specifications shall be returned to the Purchaser upon completion of the work.

#### **SC.3 Project Management**

The coordination of all field construction will be under the direction of the Purchaser, who will be responsible for coordinating work between various contractors and for resolving any conflicts between contractors regarding scheduling or coordination.

The time of completion is a basic consideration of this Contract and the Contractor shall be responsible for performing his work in accordance with the specified construction schedule. If at any time the Contractor's work is behind schedule, the Contractor shall increase his forces, work overtime, or otherwise accelerate his operations to comply with the schedule, and shall put into effect definite procedures for getting the work back on schedule. The proposed procedures shall be subject to the Purchaser's acceptance or modification. The procedures adopted shall be put into effect immediately.

The Purchaser will not be responsible for the assignment of personnel, or for obtaining materials or supplies, or for any other services to the Contractor except the coordination of work between contractors and as specifically set forth in the contract documents.

#### **SC.4 Contractor's Office at Site of Work**

Not used.

#### **SC.5 Field Records**

The Contractor shall maintain at the project site an orderly and adequate file of up-to-date copies of all Engineer's drawings and specifications, manufacturer's prints and specifications, and other contract documents and supplementary data.

In addition, the Contractor shall maintain a continuous record of all field changes by means of a set of drawings marked to indicate current "as-built" conditions. This "as-built" set of drawings shall be available for check by the Purchaser in order for him to ascertain that it is being kept current. At the conclusion of the work, the "as-built" drawings and other engineering data, accurately and neatly marked with field changes, shall be submitted to the

## **SECTION 2 - SPECIAL CONDITIONS**

Purchaser in the required number of copies. The "as-built" drawings and data shall include all revisions to the work made under this Contract, including those made by subcontractors.

### **SC.6 Contractor's Supervision at the Site**

The Contractor shall furnish adequate management, supervisory, and technical personnel on the site to ensure expeditious and competent handling of the work.

A superintendent experienced in construction of the type specified, knowledgeable in the pertinent industry codes and standards, and who is a permanent member of the Contractor's organization, shall be a resident at the project throughout the construction. The superintendent shall be fully authorized to act for the Contractor and to receive whatever orders or notices may be given for the proper prosecution of the work. Contractor shall provide superintendents resume for approval by Owner.

The Contractor's field organization shall include an experienced staff of qualified technical personnel to handle onsite engineering, planning, and direction of all field work.

The Contractor shall be responsible for complete supervision and control of his subcontractors as though they were his own forces. Notice to the Contractor shall be considered notice to any affected subcontractor.

### **SC.7 Subcontracts**

The Contractor shall perform the majority of the work with his own forces and under the management of his own organization. Specific portions of the work may be subcontracted only by subcontractors who have been listed in the Proposal and who are accepted by the Purchaser as provided in the General Conditions. All subcontractors shall be directly responsible to the Contractor and shall be under his general supervision. All work performed under subcontracts shall be subject to the same contract provisions as the work performed by the Contractor's own forces.

### **SC.8 Relations with other Contractors**

The Contractor shall cooperate with all other contractors who may be performing work in behalf of the Purchaser, and with workmen who may be employed by the Purchaser in the vicinity of the work under this Contract, and he shall conduct his operations to minimize interference with the work of such contractors or workmen. The Contractor shall promptly make good, at his own expense, any injury or damage that may be sustained by other contractors or employees of the Purchaser due to activities associated with this Contract. Any difference or conflict which may arise between the Contractor and other contractor's, or between the Contractor and workmen of the Purchaser, in regard to their work shall be resolved as determined by the Purchaser.

### **SC.9 Acceptance of Work by Others**

If any part of the Contractor's work is dependent upon the quality and completeness of work performed under another contract, the Contractor shall inspect the other contractor's work and promptly report defects therein which render such work unsuitable for the proper execution of the work under this Contract. Failure to report such defects to the Purchaser shall constitute the

## **SECTION 2 - SPECIAL CONDITIONS**

Contractor's acceptance of such work as suitable to receive the Contractor's work; provided, however, that the Contractor shall not be responsible for defects which develop after his inspection and which could not have been reasonably detected or foreseen.

### **SC.10 Methods of Field Operation**

The Contractor shall inform the Purchaser in advance concerning his plans for carrying out each part of the field work. Review by the Purchaser of any plan or method of work proposed by the Contractor shall not relieve the Contractor of any responsibility therefor, and such review shall not be considered as an assumption of any risk or liability by the Purchaser or any officer, agent, or employee thereof. The Contractor shall have no claim because of the failure or inefficiency of any plan or method so reviewed.

Any method of work suggested by the Purchaser, but not specified, shall be used at the risk and responsibility of the Contractor, and the Purchaser will assume no responsibility therefor. The Contractor alone shall be responsible for the safety, adequacy, and efficiency of his construction plant, equipment, and methods.

The Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. The Purchaser's construction review of the Contractor's performance is intended to include review of the adequacy of the Contractor's safety measures in, on, or near the construction site.

Shutdown of valves or equipment will be made only by Owner's personnel. In the event that an emergency condition warrants, the Contractor shall take direct action to make shutdown, but must notify Owner immediately and remain on worksite to demonstrate what has taken place to Owner's personnel.

### **SC.11 Safety, Health, and Accident Prevention**

The Contractor shall conduct all operations under this Contract in a manner to prevent bodily harm and damage to property. The Contractor shall continuously inspect all operations, work, materials, and equipment; shall conduct health surveys of all work areas; and shall be solely responsible for the discovery, determination, and correction of conditions which constitute a risk of bodily harm or property damage.

The Purchaser will resolve conflicts regarding safety and health measures and practices. The Purchaser will monitor the Contractor's safety and health measures, and may require changes in the Contractor's Safety, Health, and Accident Prevention Program during the performance of the work.

The Contractor shall implement and maintain a written Safety, Health, and Accident Prevention Program specifically applicable to the work. The Contractor's program shall meet the requirements of the codes and regulations of federal, state, local, and other authorities having jurisdiction over this work. The Contractor's Safety, Health, and Accident Prevention Program shall include disciplinary procedures and safety orientation training procedures applicable to Contractor and subcontractor personnel.

## SECTION 2 - SPECIAL CONDITIONS

The Contractor's Safety, Health, and Accident Prevention Program shall include equipment to be used, sampling strategy and calculations, methods of compliance, and personnel protective equipment. The calibration, sampling, and analytical laboratory procedures used shall be in conformance with OSHA's Industrial Hygiene Field Operations Manual.

The Contractor's Safety, Health, and Accident Prevention Program shall be submitted for review by the Purchaser 30 days prior to the start of the work at the project site. This review will not relieve the Contractor of his responsibility for safety and health, nor shall such review be construed as limiting in any manner the Contractor's obligation to undertake any action which may be necessary or required to establish and maintain safe working conditions respecting his work at the project site. The Purchaser reserves the right to require the Contractor to modify any portion of his Safety, Health, and Accident Prevention Program.

The Contractor shall immediately correct any unsafe conditions identified by the Purchaser. In the event the Contractor fails to immediately correct such unsafe conditions, the Purchaser may either have the unsafe conditions corrected by others at the Contractor's expense, or direct that the work be stopped in the area of the unsafe condition; however, this right to stop the work shall not give rise to any duty on the part of the Purchaser to exercise this right.

The Contractor shall appoint a qualified Safety and Health Representative. The Safety and Health Representative shall attend all project safety and health meetings. The Contractor's Safety and Health Representative shall have the authority to have unsafe conditions corrected and direct that the work be stopped in the area of the unsafe condition, if deemed necessary.

The Contractor shall maintain accurate accident and injury reports.

The Contractor shall hold regular scheduled meetings to instruct his personnel and his subcontractors' personnel in safety and health practices. The Contractor shall furnish safety and health equipment and enforce the use of such equipment by his employees and the employees of his subcontractors.

The Contractor waives the right to bring claim for damages against the Purchaser or Engineer for any cause whatsoever because of any action taken or not taken including but not limited to the correction of unsafe conditions or work stoppages in connection with the Contractor's Safety, Health, and Accident Prevention Program or such program of another contractor. If such a claim against the Purchaser or Engineer is brought by a third party, the Contractor shall indemnify and defend the Purchaser or Engineer against such claim in accordance with the General Conditions article entitled INDEMNIFICATION.

### **SC.12 Fall Protection**

The OSHA Fall Protection Standard 29 CFR 1926 Subpart M shall be strictly adhered to by the Contractor. Fall protection is required for all of Contractor's Work operations one hundred percent of the time, whether climbing, traveling, or working. **No Work operation is exempt from the six (6) foot fall protection requirement.**

## **SECTION 2 - SPECIAL CONDITIONS**

Fall protection body harnesses, lanyards, and lifelines shall be used in accordance with OSHA Standard 1926 Subpart 502D, with the following exceptions:

- Full body harnesses shall be used in lieu of safety belts.
- Only lanyards with shock absorbers and locking type snap hooks shall be used.
- At least two lanyards shall be used to provide one hundred percent fall protection when moving around obstructions, connection points, or other similar items.

Fall protection guardrail systems shall comply with OSHA Standard 1926 Subpart 502(b) except manila, plastic, or synthetic rope shall not be used as guardrails.

Contractor shall provide his own confined space equipment, monitors, and personnel for hole watches.

### **SC.13 Lines and Grades**

Not used

### **SC.14 Preservation of Monuments and Stakes**

Not used

### **SC.15 Protection of Property and Public Liability**

The Contractor shall be accountable for any damages resulting from his operations. He shall be fully responsible for the protection of all persons including members of the public, employees of the Purchaser, employees of the Engineer, and employees of other contractors or subcontractors, and all public and private property including structures, sewers, and utilities above and below ground.

The Contractor shall furnish and maintain all necessary safety equipment, such as barriers, signs, warning lights, and guards, to provide adequate protection of persons and property.

The Contractor shall give reasonable notice to the owners of public or private property and utilities when such property and utilities are liable to injury or damage through the performance of the work and shall make all necessary arrangements with such owners relative to the removal and replacement or protection of such property or utilities.

### **SC.16 Emergency Protection**

Whenever, in the opinion of the Purchaser, the Contractor has not taken sufficient precaution for the safety of the public or the protection of the work to be constructed under this Contract or of adjacent structures or property, and whenever, in the opinion of the Purchaser, an emergency has arisen and immediate action is considered necessary, then the Purchaser, with or without notice to the Contractor, may provide suitable protection by causing work to be done and material to be furnished and placed. The cost of such work and material shall be borne by the Contractor, and if the same is not paid on presentation of the bills therefor, such costs may be deducted from any amounts due or to become due the Contractor. The performance of such emergency work shall not relieve the Contractor of responsibility for any damage which may occur.

## **SECTION 2 - SPECIAL CONDITIONS**

### **SC.17 Losses from Natural Causes**

All loss or damage arising out of the nature of the work, or from the action of the elements, or from floods or overflows, or from ground water, or from any unusual obstruction or difficulty, or any other natural or existing circumstance either known or unforeseen which may be encountered in the prosecution of the work, shall be sustained and borne by the Contractor at his own cost and expense.

### **SC.18 Qualification of Workers**

The Contractor shall employ only workers who are competent to perform the work assigned to them and, in the case of skilled labor, who are adequately trained and experienced in their respective trades and who do satisfactory work.

### **SC.19 Sunday, Holiday, and Night Work**

Working hours will be determined by the contractor to meet the time requirements of the contract. Working hours must be approved by PPGA.

### **SC.20 Unfavorable Construction Conditions**

During periods of unfavorable weather, wet grounds, or other unsuitable construction conditions, the Contractor shall confine his operations to work which will not be adversely affected thereby. No portion of the work shall be constructed under conditions which would adversely affect the quality or efficiency thereof, unless special means or precautions are taken by the Contractor to perform the work in a proper and satisfactory manner.

### **SC.21 Rejected Work and Materials**

The Contractor, upon written notice from the Purchaser, shall remove from the premises all work and materials rejected as defective, unsound, improper, or in any way failing to conform to the requirements of the contract documents. The Contractor shall at his sole expense make good all work damaged by such removal and shall promptly replace materials damaged or improperly worked by him and re-execute his own work in accordance with the contract. This includes re-executing or replacing the work of any other contractor that is in any way affected by the removal of the defective work. The obligations of the Contractor under this article shall not extend to defective materials or equipment supplied by the Purchaser, if any.

If the Contractor does not remove his rejected work and materials within 10 days after written notice, the Purchaser may remove and replace such work and materials at the expense of the Contractor.

### **SC.22 Placing Work in Service.**

If desired by the Purchaser, portions of the work may be placed in service when completed and the Contractor shall provide proper access for this purpose. Such use and operation shall not constitute an acceptance of the work, and the Contractor shall be liable for defects due to faulty construction throughout the duration of this Contract and thereafter as provided under the "Guarantee" provisions of the General Conditions.

## **SECTION 2 - SPECIAL CONDITIONS**

### **SC.23 Cleanliness**

The Contractor shall give special attention to keeping the worksite clean and free from trash and debris.

Trash, debris, and waste materials shall not be allowed to accumulate, but shall be removed from the site and disposed of by and at the Contractor's expense. No on site burning shall be allowed.

Promptly upon completion of the construction work, all Contractor-owned facilities, materials, and construction plant shall be removed from the site. All surfaces damaged by deposits of foreign materials such as oil, grease, weld spatter, and paint shall be restored to their original conditions.

### **SC.24 Purchase Orders**

Submittal of purchase orders shall not be required.

### **SC.25 Fire Protection**

Only work procedures which minimize fire hazards to the extent practicable shall be used. Combustible debris and waste materials shall be collected and removed from the site each day, as provided under CLEANLINESS. Fuels, solvents, and other volatile or flammable materials shall be stored away from the construction and storage areas in well marked, safe containers. Good housekeeping is essential to fire prevention and shall be practiced by the Contractor throughout the construction period. The Contractor shall follow the recommendations of the AGC "Manual of Accident Prevention in Construction" regarding fire hazards and prevention.

The Contractor alone shall be responsible for providing adequate fire protection. Failure of the Contractor to comply with or the Purchaser to enforce, the above requirements shall not relieve the Contractor from any responsibility or obligation under this Contract.

The Contractor shall use and abide by Purchaser's hot work permit procedures.

### **SC.26 Security**

The Contractor shall be responsible for all materials and equipment in his custody or placed in construction by him. Security methods shall be employed as required to ensure the protection of all materials, equipment, and construction work from theft, vandalism, fire, and all other damage and loss.

The Contractor shall cooperate with the Purchaser regarding all security measures instituted at the jobsite.

### **SC.27 Protection of Work**

The Contractor shall be solely responsible for the protection of his work until its final acceptance by the Purchaser.

## **SECTION 2 - SPECIAL CONDITIONS**

The Contractor shall have no claim against the Purchaser or the Engineer because of any damage or loss to the Contractor's work and shall be responsible for the complete restoration of damaged work to its original condition complying with the contract documents.

In the event the Contractor's work is damaged by another party not under his supervision or control, the Contractor shall make his claim directly with the party involved. If a conflict or disagreement develops between the Contractor and one of the other contractors concerning the responsibility for damage or loss to the Contractor's work, the conflict shall be resolved as provided under RELATIONS WITH OTHER CONTRACTORS. Such conflict shall not be cause for delay in the restoration of the damaged work. The Contractor shall restore the work immediately and the cost thereof will be assigned pending the resolution of the conflict.

### **SC.28 Protection of Concrete Surfaces**

Concrete floors and other concrete surfaces shall be protected from chipping, gouging, scratching, staining, and other damage. Damaged sections shall be repaired or removed and replaced subject to the Purchaser's discretion and acceptance.

Heavy planks and mats shall be placed under equipment and materials being stored, moved, assembled, or installed on or above concrete floor surfaces. Nonflammable, oil-resistant coverings shall be used to protect concrete surfaces from staining.

### **SC.29 Protection of Electrical Raceway, Cable, and Lighting Fixtures**

The Contractor shall protect electrical raceway, cable, lighting fixtures, and associated support systems against damage from movement of equipment and materials, welding, flame cutting, and other construction damage. Raceway and supporting structures for raceway and lighting fixtures shall not be used as access scaffolding at any time. Whenever welding or flame cutting operations occur above or near raceways, cables, or lighting fixtures not shielded from such operations by protective covers, the Contractor shall protect the raceways, cables, and lighting fixtures from damage by means of fire-resistant boards or blankets. Damaged materials shall be repaired or replaced subject to the Purchaser's discretion and acceptance.

Where concrete is removed, or holes are filled, the surrounding equipment shall be protected from concrete, water and dust. Where concrete is removed, dust shall be collected.

### **SC.30 Repair of Damages**

The Contractor shall immediately repair any damage which results from this construction or abnormal use, including damage done to the existing facilities. All such repair work shall be acceptable to the Purchaser.

### **SC.31 Independent Testing Laboratory**

Not Used

### **SC.32 Cooperation with the Purchaser**

The performance of construction work which affects the operation of the Purchaser's system facilities shall be scheduled to be performed only at times acceptable to the Purchaser.

## **SECTION 2 - SPECIAL CONDITIONS**

In the event that it is necessary to interrupt the Purchaser's operations or the power supply or to impose abnormal operating conditions on the Purchaser's utility system, such procedure must be acceptable to the Purchaser and a complete understanding and agreement must be reached by all parties concerned well in advance of the time scheduled for such operation, and such understanding shall be definite as to date, time of day, and length of time required. All work shall be scheduled to suit the Purchaser's convenience, taking into consideration the facilities and requirements at all times during construction. The Contractor shall perform work which affects the Purchaser's system facilities at times other than regular working hours if required.

### **SC.33 Minor Defects**

The Contractor shall readjust, straighten, and repair minor defects and fabrication errors which are normally encountered in the Purchaser-furnished equipment and materials. No claims for extra compensation in connection with such work will be considered unless the claim is made in accordance with the applicable provisions in the General Conditions.

When field labor is needed to correct significant errors in the Purchaser-furnished equipment and materials, the Contractor shall furnish such labor when so requested by the manufacturer or by the Purchaser with the consent of the manufacturer. Such labor shall not be included in this Contract, and the Contractor shall obtain payment for the labor from the manufacturer.

### **SC.34 Checkout and Initial Operation**

The Contractor shall render all services and do all work required to place each item of equipment installed by him, including all auxiliaries, piping, and wiring, in operating condition to the satisfaction of the Purchaser. Individual systems and items of equipment shall be completed in a sequence that will permit systematic checkout and trial operation of each such component before it is incorporated in the initial operation.

The Purchaser will furnish operating personnel during checkout and initial operation.

It is anticipated that the startup testing and initial operation will be in progress over extended periods of time.

All regular and overtime payrolls and all other contingencies in connection with the checkout and initial operation of equipment shall be included as a part of the lump sum contract price.

### **SC.35 Construction Plant and Temporary Facilities**

Temporary facilities are defined in Section 3 General Description and Scope of Work

### **SC.36 Receiving, Handling, and Storage**

The Contractor shall receive from carriers at the site, check, unload, handle, and store all materials and equipment which are to be incorporated in the construction under these specifications.

The Contractor shall be responsible for the prompt unloading of materials and equipment and shall pay any demurrage.

## **SECTION 2 - SPECIAL CONDITIONS**

Storage areas on the site shall be limited to those areas so designated by the Purchaser.

### **SC.37 Equivalent Materials and Equipment**

Whenever a material or article is specified or described by using the name of a proprietary product or the name of a particular manufacturer or vendor, the specific item mentioned shall be understood as establishing the type, function, and quality desired. Other manufacturers' products will be accepted provided sufficient information is submitted to allow the Engineer to determine that the products proposed are equivalent to those named.

Requests for review of equivalency will not be accepted from anyone except the Contractor and such requests will not be considered until after the contract has been awarded.

### **SC.38 Rights of Way**

Not used.

### **SC.38.1 On Private Property**

Not used.

### **SC.39 Fences**

Not used.

### **SC.40 Protection of Public and Private Property**

Not used.

### **SC.41 Maintenance of Traffic**

Not used.

### **SC.42 Barricades and Lights**

Not used.

### **SC.43 Underground Installations**

Not used.

### **SC.44 Land for Construction Purposes**

Not used.

### **SC.45 Energized Facilities**

Existing transmission lines, substations, distribution lines, utility lines, telephone lines and other power and signal service lines will be encountered on the site of the work. These service systems will remain energized and functional during construction.

Temporary outages required by the Contractor to perform certain construction activities will be provided by the Purchaser. The Contractor shall give written notice to the Purchaser a minimum of seven days in advance of any requested outages. The Contractor shall recognize that certain outage restrictions may apply that will not allow for an outage, as requested. The

## **SECTION 2 - SPECIAL CONDITIONS**

Contractor's proposed schedule shall account for these outage restrictions. No extension of time or any additional compensation will be given for these outage restrictions.

The Contractor shall be completely responsible for the safety and protection of his personnel and the public on the site of the work and shall employ all methods necessary to achieve such safety and also assure continuity of all service systems encountered. These methods shall include, but not be limited to, providing barriers, guard structures, insulating guards and sleeves, warning signs, and prevention of unauthorized access to substations.

### **SC.46 Artifacts**

Not used.

### **SC.47 Final Cleanup and Grading**

Not used.

### **SC.48 Dust Control**

Not used.

## SECTION 3 - GENERAL DESCRIPTION AND SCOPE OF WORK

### SECTION 3-0 GENERAL DESCRIPTION AND SCOPE OF WORK

**3.001 General.** Public Power Generation Agency is accepting bids for labor to install replacement burner cores for Unit 2 at Whelan Energy Center, 4520 East South Street in Hastings, Nebraska.

The bidder is strongly encouraged to visit the site prior to submitting a bid. The Bidder shall inform himself of all conditions and factors which would affect the execution of the work. No claims for financial compensation or time extension, based on the lack of such prior information (or its effect on the cost of the work) will be permitted by the Owner. Please contact Derek Pfeifer, Production Engineer, at 402-462-3673 if you have any questions about this project or would like to set up a site visit.

**3.002 Schedule.** This shall include the completion of various activities in accordance with the milestone time periods and dates listed.

Activity	Schedule
Bid Opening	December 18, 2024
Contract Award Date	January 16, 2024
Outage Dates	April 7, 2025 to May 13, 2025
Begin Installation	April 9, 2025
Complete Installation	May 9, 2025

**3.003 Scope.** The Contractor will provide labor and equipment to remove and replace the existing six burner cores and coal elbows on “B” elevation.

Contractor will be responsible for ensuring the safety of the burner cores and existing plant equipment during the removal and installation processes. It will be the contractor’s responsibility to make sure the installation of all burners and related equipment are installed properly.

Contractor will provide all necessary tools and equipment needed to complete project. All work shall be coordinated with PPGA as to not interfere with other activities on site.

Contractor is responsible to determine the crew makeup to finish the project on time, however two crews working concurrently on separate burners is recommended.

**3.004 Work included under these specifications.**

All work as specified under Section 4 – Base Scope of Services.

## SECTION 3 - GENERAL DESCRIPTION AND SCOPE OF WORK

### 3.005 Work not included under these specifications.

The following work will be completed by PPGA:

1. LOTO of all components to perform a proper and safe disassembly and installation of burner cores.
2. Station services including water, air, and electrical power.
3. Sanitary services in the form of portable toilets.
4. Removal and installation all lagging and insulation on burners.
5. Removal and installation of all electrical and instrumentation.
6. Supply of six new burner cores, coal nozzle mounting plates, and scab plates, including all fasteners, gaskets, and associated materials.

### 3.006 Attachments. The following attachments are included:

- Drawing #B0644019-1 – Field Alteration Coal Nozzle & Core Air Sleeve
- Drawing #B0653124J – Field Alteration Coal Nozzle & Core Air Sleeve
- Drawing #B0012050 – Erection Arrangement Thermocouples
- Drawing #B0634347 – Field Weld & NDE Schedule
- Drawing #93306J – General Arrangement Airejet Burners Front Wall
- Drawing #93307J – General Arrangement Airejet Burners Rear Wall
- Drawing #B0012048J – Erection Arrangement Sections 1
- Drawing #B0012049D – Erection Arrangement Sections 2
- Drawing #B0012057J– Erection Arrangement Sections 3
- Drawing #B0012054 – Field Weld and NDE Schedule
- Drawing #B0012055C– Erection Arrangement Notes 1
- Drawing #B0012056C– Erection Arrangement Notes 2
- Drawing #145300-2BSA-G2015 – General Arrangement – Boiler Area Platform EL 1967’ -3” – B Elevation

## SECTION 4 – BASE SCOPE OF SERVICES

### SECTION 4-0 SCOPE OF SERVICES

#### **4.1 Existing Coal Nozzle and Core Air Sleeve Removal (without Oil Atomizers) Three Burners:**

Note: The following boiler work will be provided by the Contractor unless noted.

##### **4.1.1 Existing Coal Nozzle and Core Air Sleeve Removal.**

- 4.1.1.1 Disconnect all electrical and instrumentation. (Plant Scope)
- 4.1.1.2 Document pertinent information including dimension to core air box dampers and insertion depth of burners.
- 4.1.1.3 Remove two air lines
- 4.1.1.4 Unbolt coal elbow and lay aside.
- 4.1.1.5 Unbolt ceramic deflector and lay aside.
- 4.1.1.6 Cut damper shaft. Unbolt core air inlet assembly. Remove core air inlet damper box from inside the wind box.
- 4.1.1.7 Remove weld around coal nozzle mounting plates to cover plate.
- 4.1.1.8 Remove bottom mounting bracket for thermocouple box. Save for reinstallation.
- 4.1.1.9 Remove plate mounting the Jordan Drive. Save for reinstallation.
- 4.1.1.10 Grind any weld residue from burner cover plate.
- 4.1.1.11 Remove weld all around the core air inlet to carrier sleeve. Remove welds of scab plate to carrier sleeve.
- 4.1.1.12 Remove additional carrier sleeve on boiler side of core air inlet to accommodate longer length of core air box.
- 4.1.1.13 Remove old coal nozzle and core air sleeve assembly.

##### **4.1.2 New Coal Nozzle and Core Air Sleeve Installation.**

- 4.1.2.1 Install new coal nozzle and core air assembly in appropriate burner. See general arrangement drawing to see what rotation to set coal nozzle and core air assembly for burner it is being installed in. Set dimension to coal nozzle inlet flange as shown on drawing B0644019.
- 4.1.2.2 Verify burners are square, level, and inserted properly.
- 4.1.2.3 Reattach core air inlet damper assembly, using new plant provided 7/16” hex bolt, washer, and nuts.
- 4.1.2.4 Install the new scab plate back over the opening between the burner cover plate and core air inlet and weld ends to carrier sleeve.
- 4.1.2.5 Install the new scab plates along on the sides of the core air box and boiler side of the core air box.
- 4.1.2.6 Seal weld mounting plates to cover plate and coal nozzle. Notch as required to clear ignitors.
- 4.1.2.7 Install deflector using retainer bar, washer, and assembly support pipe.
- 4.1.2.8 Apply a liberal amount of RTV seal to top side of deflector, leading edge of deflector, and coal nozzle. Fill holes in the coal nozzle for deflector retainer bars.
- 4.1.2.9 Reattach coal elbow using existing 1” bolts and nuts.
- 4.1.2.10 Weld thermocouple sleeves to burner. Add 1” hole to damper box for EIC to pull wires through.
- 4.1.2.11 Reconnect all instrumentation and install thermocouple wires (Plant Scope)

## **SECTION 4 – BASE SCOPE OF SERVICES**

### **4.2 Welding and Inspection:**

- 4.2.1** Contractor to review material types stated on Drawing B0634347
- 4.2.2** Contractor to provide qualified welding procedures and welder qualifications to Owner prior to work commencing. Procedures and qualifications to be in accordance with ASME Section IX and Section I.
- 4.2.3** Owner to provide visual inspection

# **APPENDIX A**

## **ATTACHMENTS**

**FOR**

**FORMAL CONTRACT NO. PPGA 2024-29**

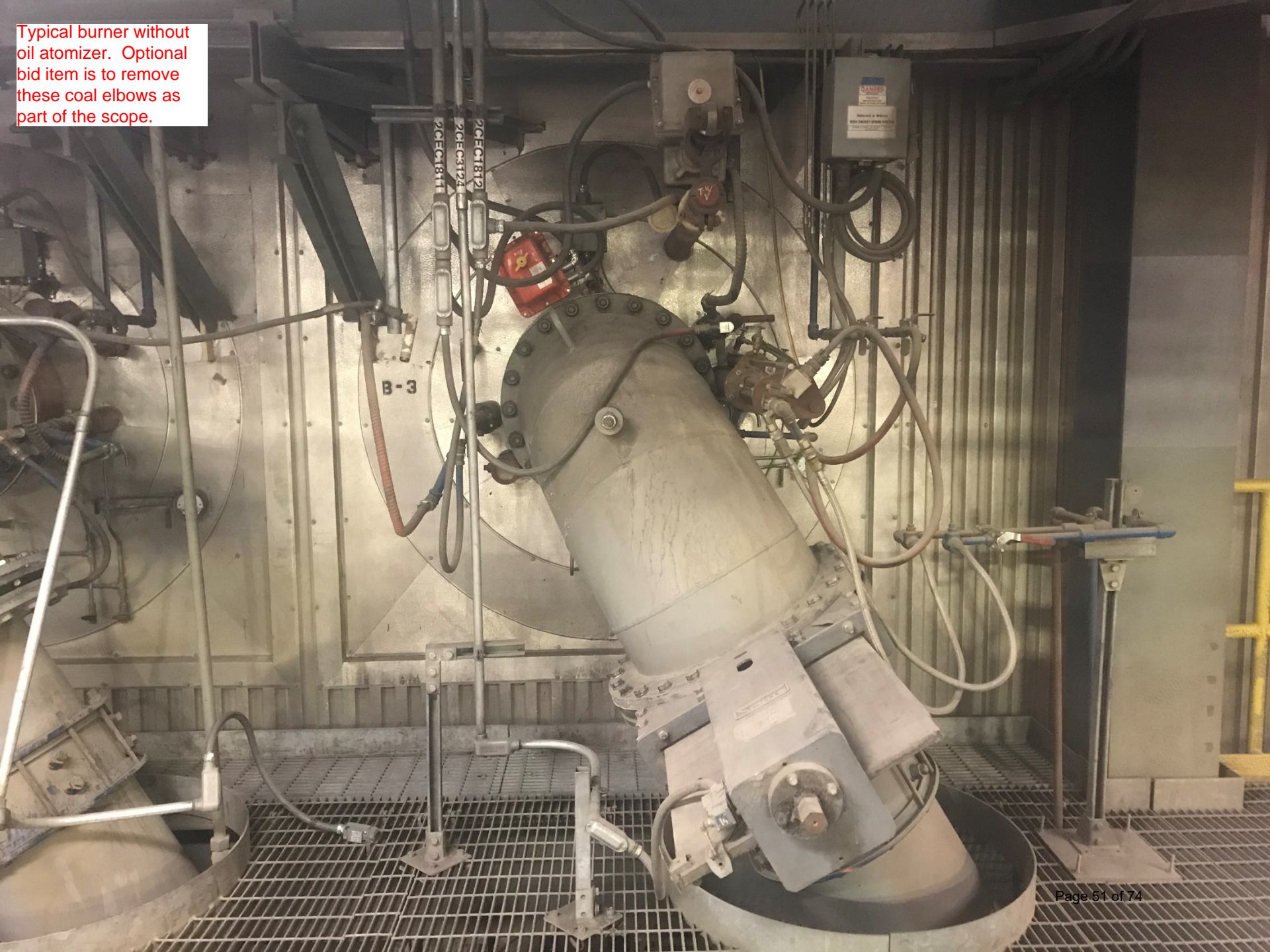
**BURNER CORE REPLACEMENT**

**FOR**

**WHELAN ENERGY CENTER, UNIT II**

**PUBLIC POWER GENERATION AGENCY**

Typical burner without oil atomizer. Optional bid item is to remove these coal elbows as part of the scope.



Typical burner cores both with and without oil atomizers.

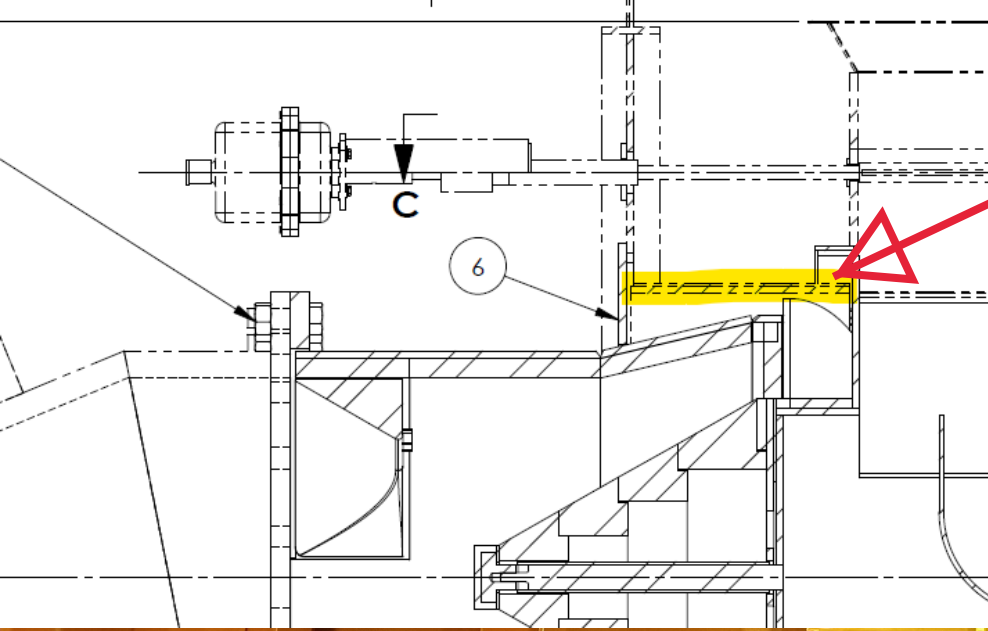


Typical core air box.  
Box to be unbolted  
inside the windbox and  
damper remains.

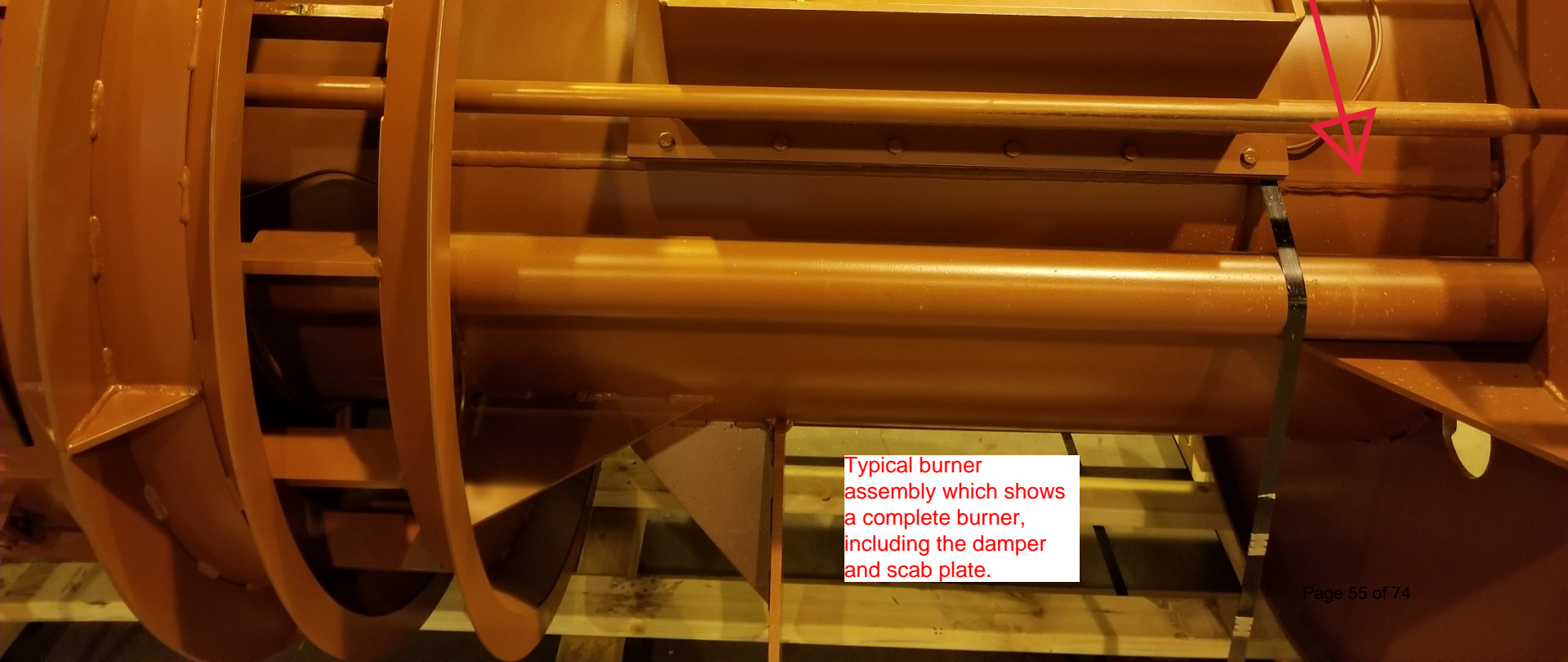
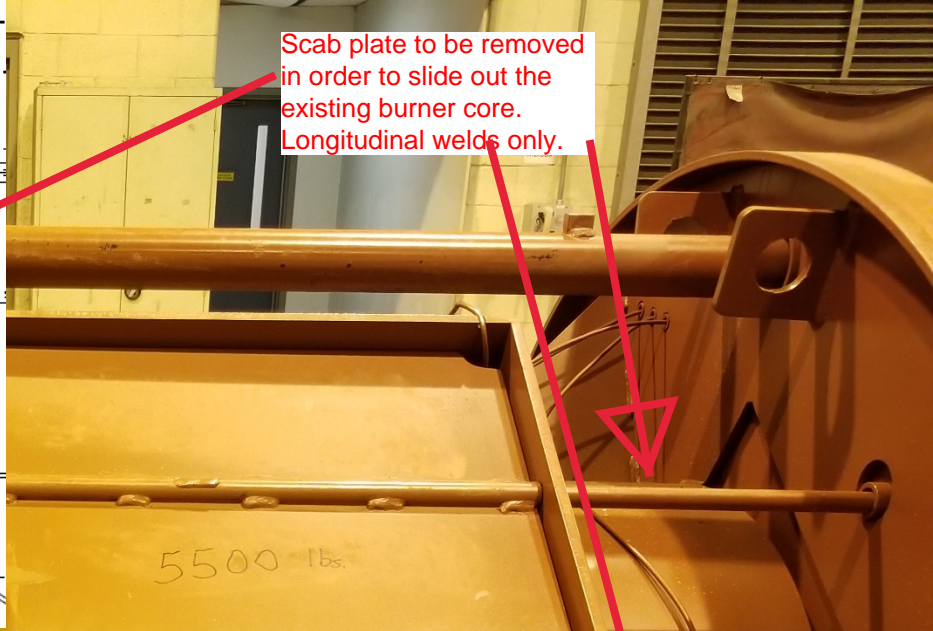


Typical burner core  
after removal.





Scab plate to be removed  
in order to slide out the  
existing burner core.  
Longitudinal welds only.



Typical burner  
assembly which shows  
a complete burner,  
including the damper  
and scab plate.

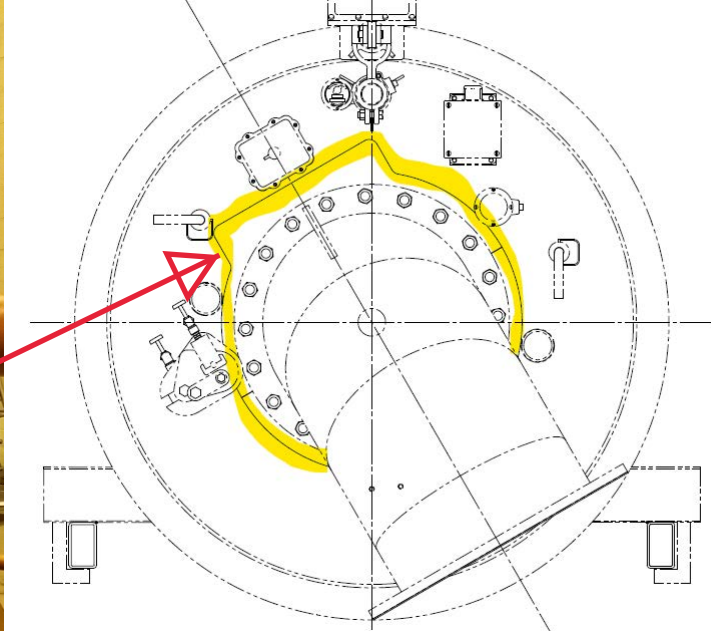
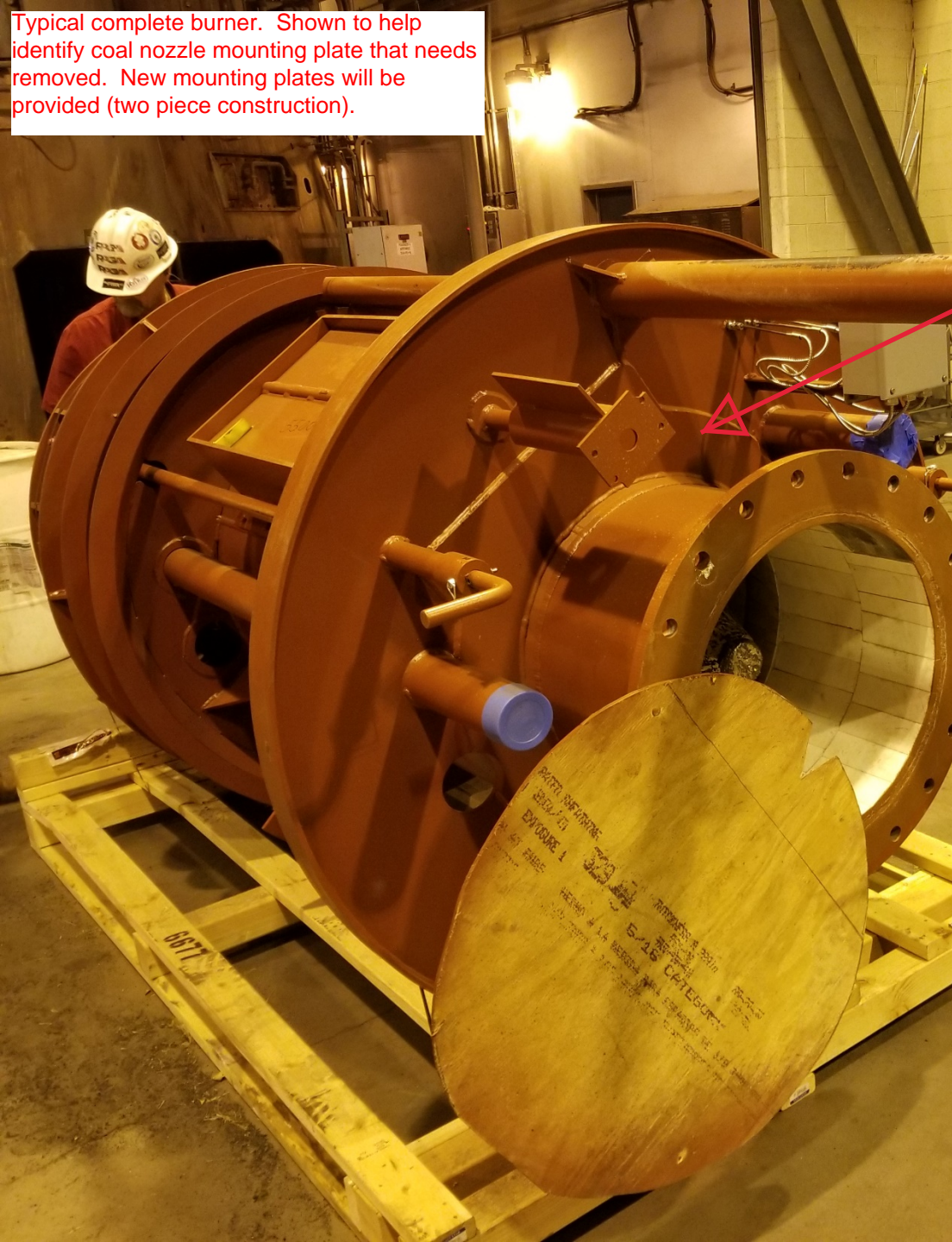
Typical Burner inside the windbox.

Bolted connection between core air box and damper

Scab Plate Removed



Typical complete burner. Shown to help identify coal nozzle mounting plate that needs removed. New mounting plates will be provided (two piece construction).



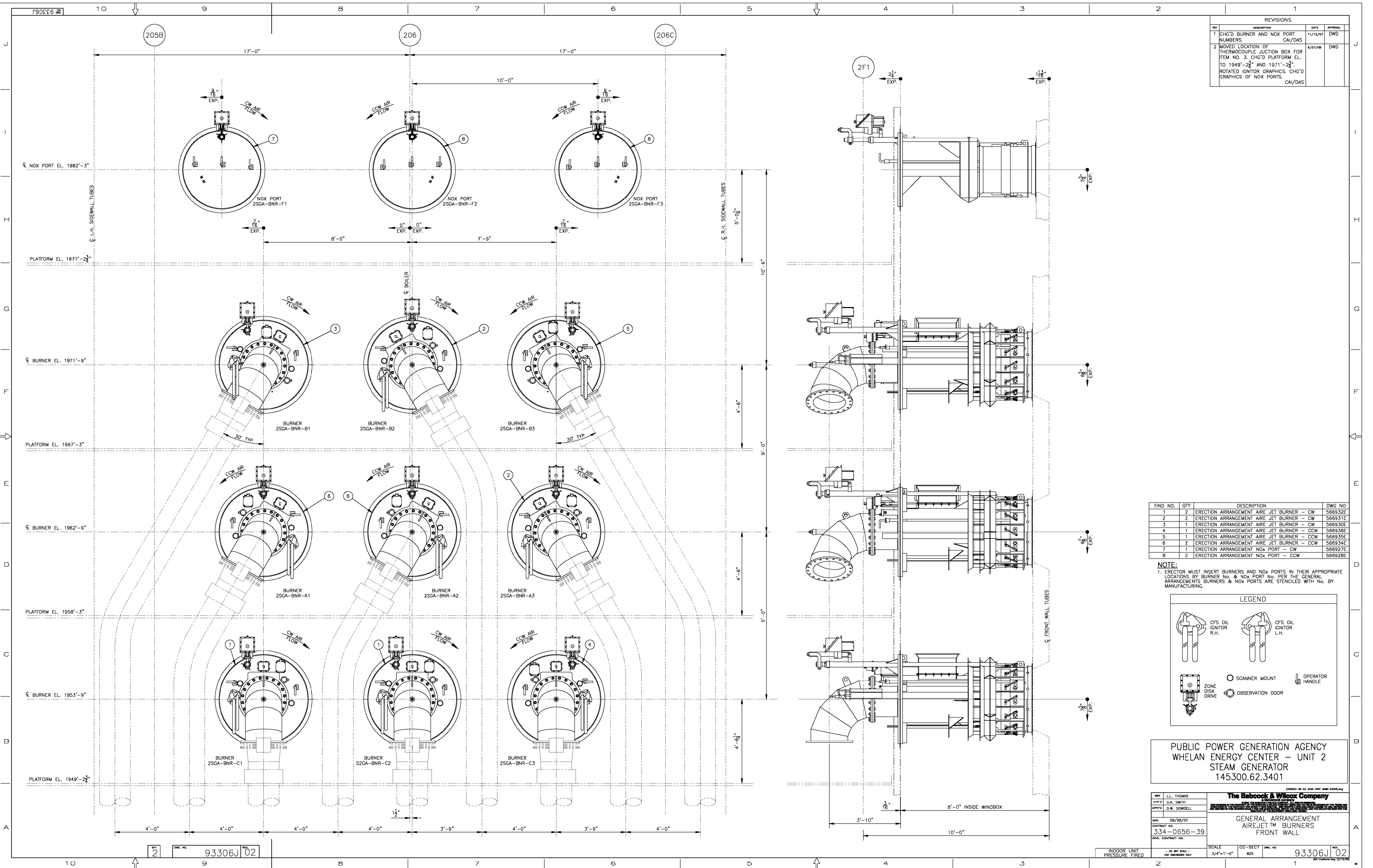
Typical burner core  
after reinstallation.  
Welding up the top  
piece of the coal nozzle  
mounting plate.  
Additional holes for pipe



Typical burner core after reinstallation. About to install bottom coal nozzle mounting plate. The mounting plates will require modifications. Burner and coal elbow need to be square and fitted before plates can be finalized.



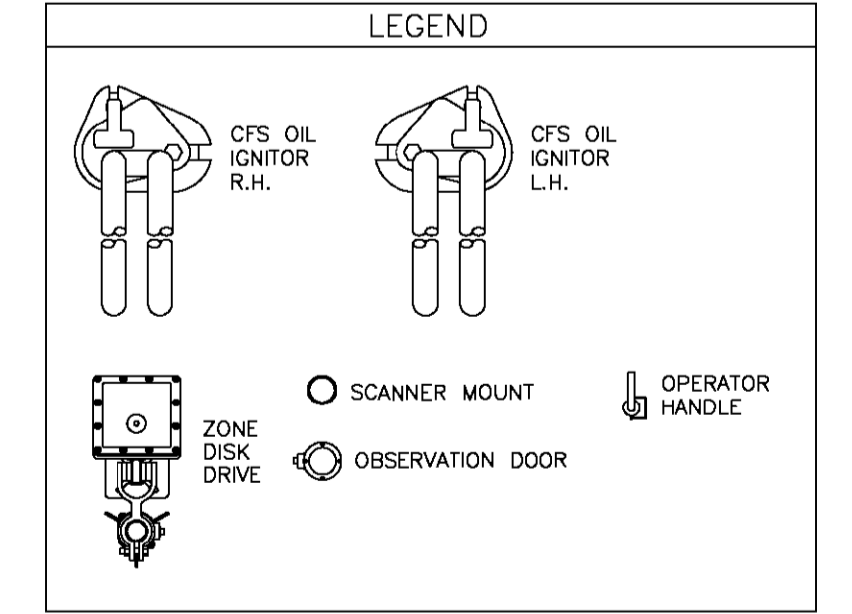




REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL
1	CHG'D BURNER AND NOX PORT NUMBERS.	11/12/07	CAI/DAS
2	MOVED LOCATION OF THERMOCOUPLE JUNCTION BOX FOR ITEM NO. 3. CHG'D PLATFORM EL. TO 1949'-2 1/2" AND 1971'-2 1/2". ROTATED IGNITOR GRAPHICS. CHG'D GRAPHICS OF NOX PORTS.	6/27/08	CAI/DAS

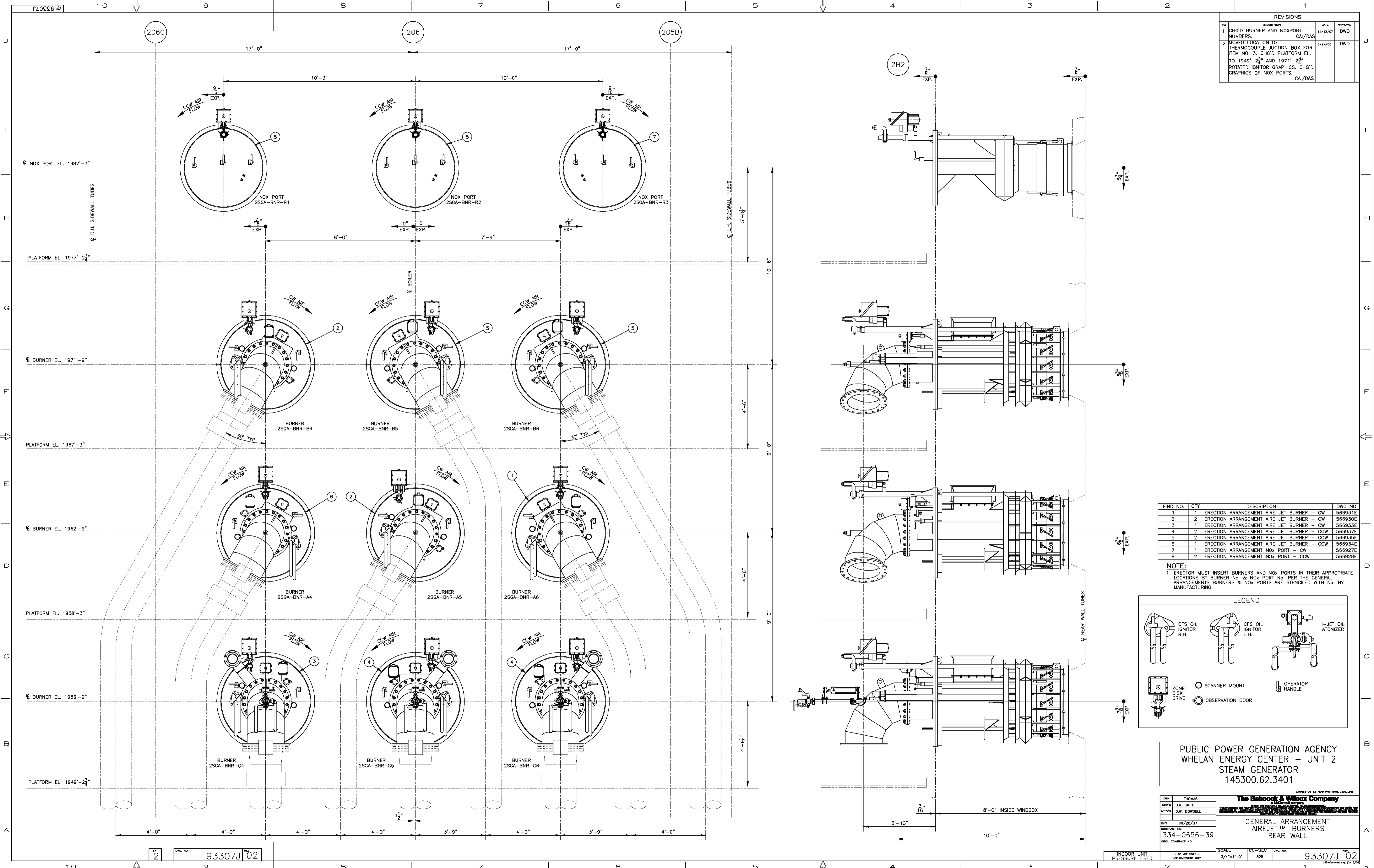
FIND NO.	QTY	DESCRIPTION	DWG NO
1	2	ERECTION ARRANGEMENT AIRE JET BURNER - CW	566932E
2	2	ERECTION ARRANGEMENT AIRE JET BURNER - CW	566931E
3	1	ERECTION ARRANGEMENT AIRE JET BURNER - CW	566930E
4	1	ERECTION ARRANGEMENT AIRE JET BURNER - CCW	566936E
5	1	ERECTION ARRANGEMENT AIRE JET BURNER - CCW	566935E
6	2	ERECTION ARRANGEMENT AIRE JET BURNER - CCW	566934E
7	1	ERECTION ARRANGEMENT NOx PORT - CW	566927E
8	2	ERECTION ARRANGEMENT NOx PORT - CCW	566928E

**NOTE:**  
 1. ERECTOR MUST INSERT BURNERS AND NOx PORTS IN THEIR APPROPRIATE LOCATIONS BY BURNER No. & NOx PORT No. PER THE GENERAL ARRANGEMENTS BURNERS & NOx PORTS ARE STENCILED WITH No. BY MANUFACTURING.



PUBLIC POWER GENERATION AGENCY  
 WHELAN ENERGY CENTER - UNIT 2  
 STEAM GENERATOR  
 145300.62.3401

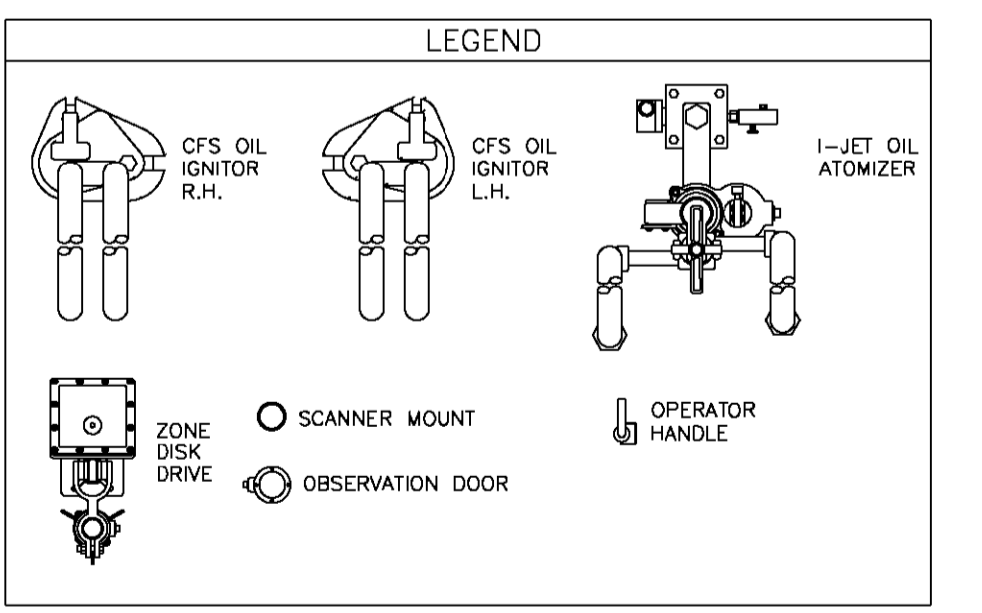
DWG: L.L. THOMAS CHK'D: E.A. SMITH APP'D: D.W. DOWDELL DATE: 09/28/07 CONTRACT NO.: 334-0656-39 DRG. CONTRACT NO.:	<b>The Babcock &amp; Wilcox Company</b> GENERAL ARRANGEMENT AIREJET™ BURNERS FRONT WALL	SCALE: 3/4"=1'-0" CC-SECT: 825 DWG. NO.: 93306J 02 INDOOR UNIT PRESSURE FIRED
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL
1	CHG'D BURNER AND NOXPORT NUMBERS.	11/12/07	DWD
2	MOVED LOCATION OF THERMOCOUPLE JUNCTION BOX FOR ITEM NO. 3. CHG'D PLATFORM EL. TO 1949'-2 1/2" AND 1971'-2 1/2". ROTATED IGNITOR GRAPHICS. CHG'D GRAPHICS OF NOX PORTS.	6/27/08	DWD

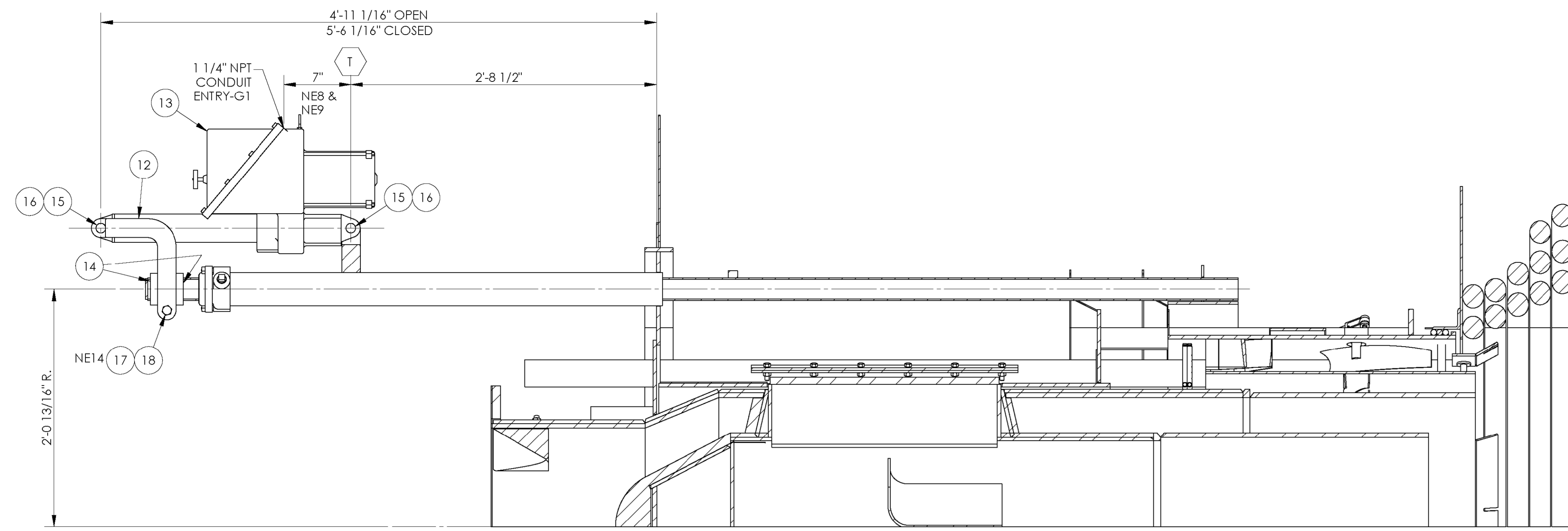
FIND NO.	QTY	DESCRIPTION	DWG NO
1	1	ERECTION ARRANGEMENT AIRE JET BURNER - CW	566931E
2	2	ERECTION ARRANGEMENT AIRE JET BURNER - CW	566930E
3	1	ERECTION ARRANGEMENT AIRE JET BURNER - CW	566933E
4	2	ERECTION ARRANGEMENT AIRE JET BURNER - CCW	566937E
5	2	ERECTION ARRANGEMENT AIRE JET BURNER - CCW	566935E
6	1	ERECTION ARRANGEMENT AIRE JET BURNER - CCW	566934E
7	1	ERECTION ARRANGEMENT NOX PORT - CW	566927E
8	2	ERECTION ARRANGEMENT NOX PORT - CW	566928E

**NOTE:**  
 1. ERECTOR MUST INSERT BURNERS AND NOX PORTS IN THEIR APPROPRIATE LOCATIONS BY BURNER No. & NOX PORT No. PER THE GENERAL ARRANGEMENTS BURNERS & NOX PORTS ARE STENCILED WITH No. BY MANUFACTURING.

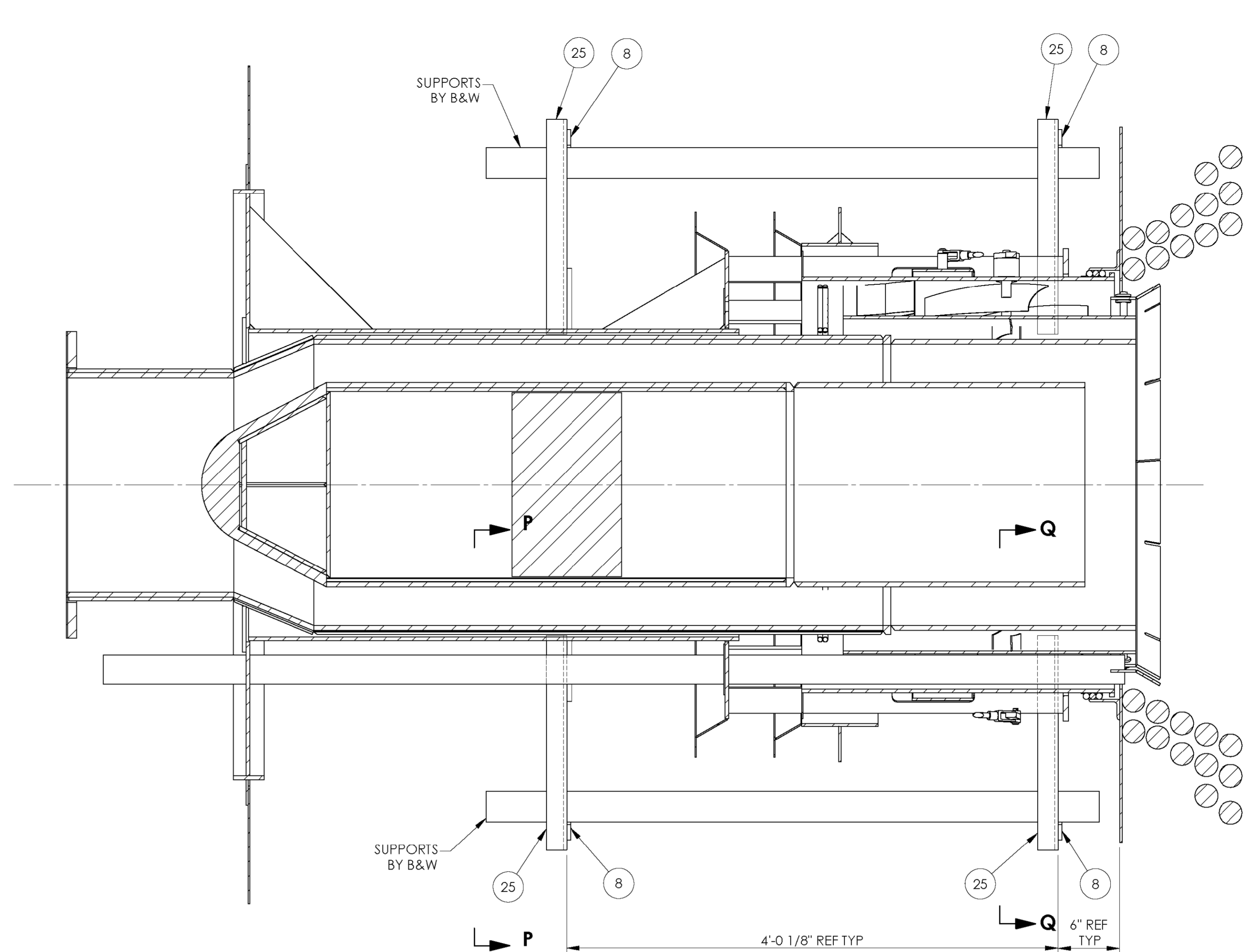


PUBLIC POWER GENERATION AGENCY  
 WHELAN ENERGY CENTER - UNIT 2  
 STEAM GENERATOR  
 145300.62.3401

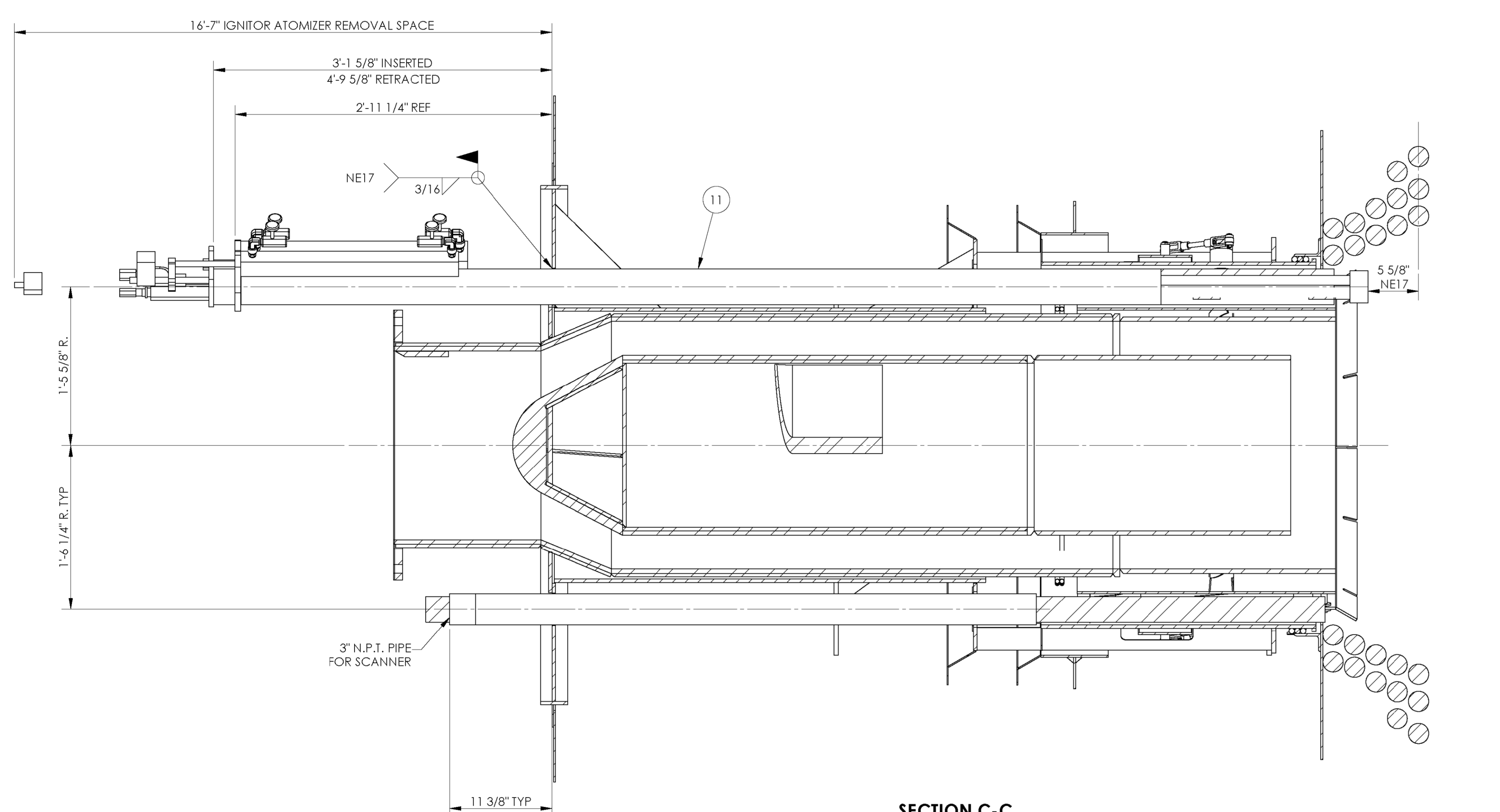
DWG: L.L. THOMAS CHG'D: D.A. SMITH APP'D: D.W. DOWELL DATE: 09/28/07 CONTRACT NO: 334-0656-39 PROJ. CONTRACT NO:	<b>The Babcock &amp; Wilcox Company</b> GENERAL ARRANGEMENT AIREJET™ BURNERS REAR WALL	SCALE: 3/4"=1'-0" CC-SECT: 825 DWG. NO: 93307J-02 REV: 02
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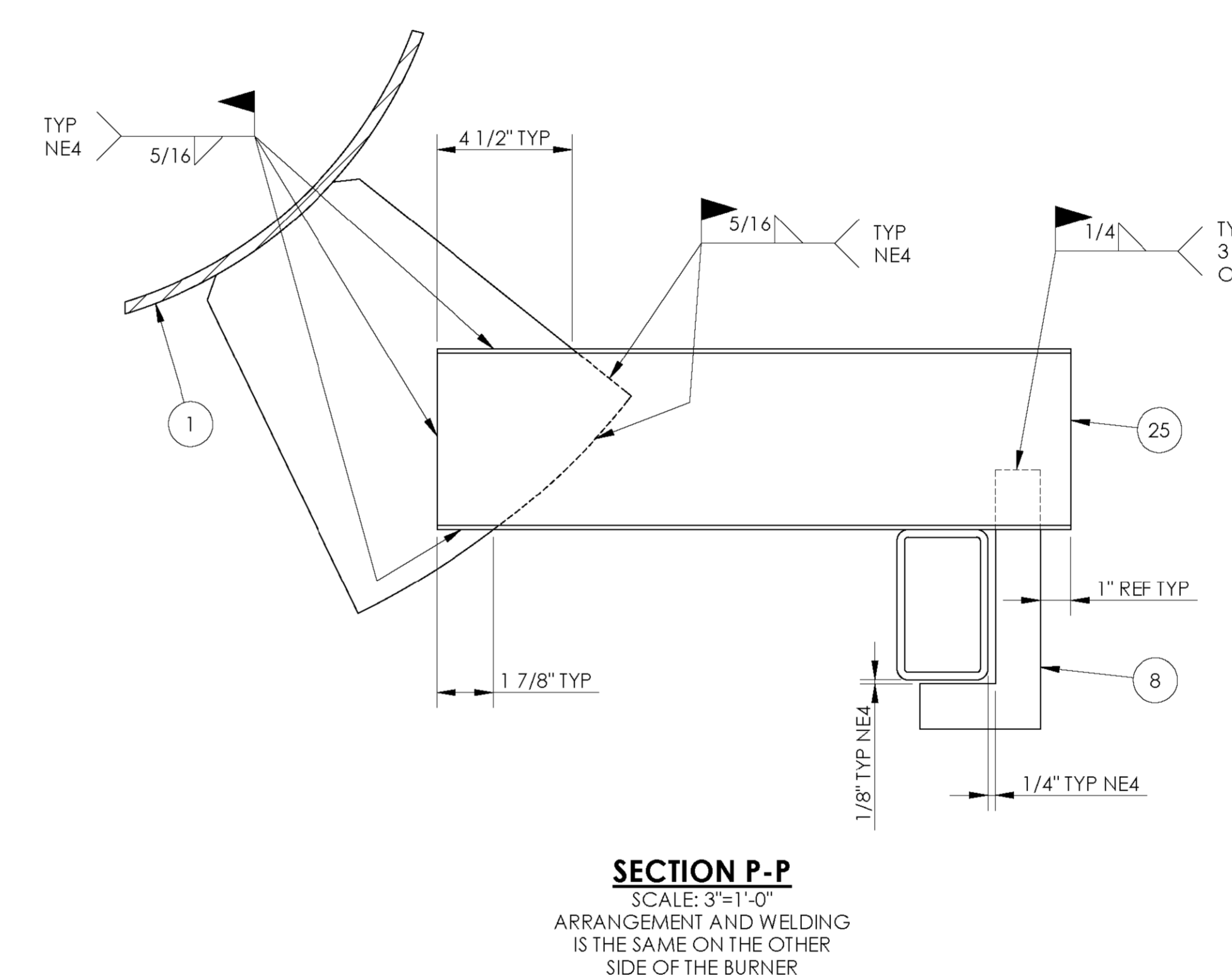
**SECTION B-B**



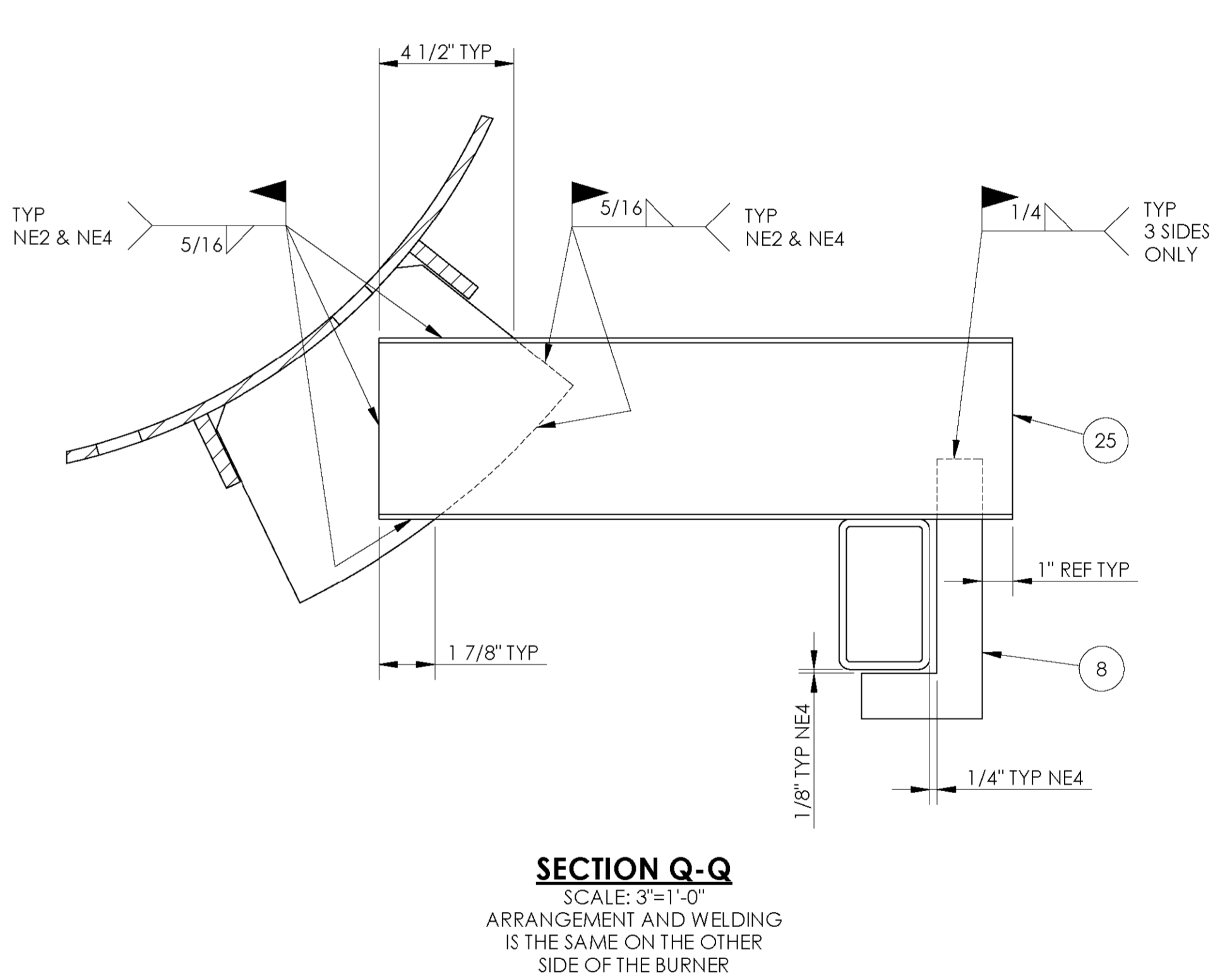
**SECTION E-E**



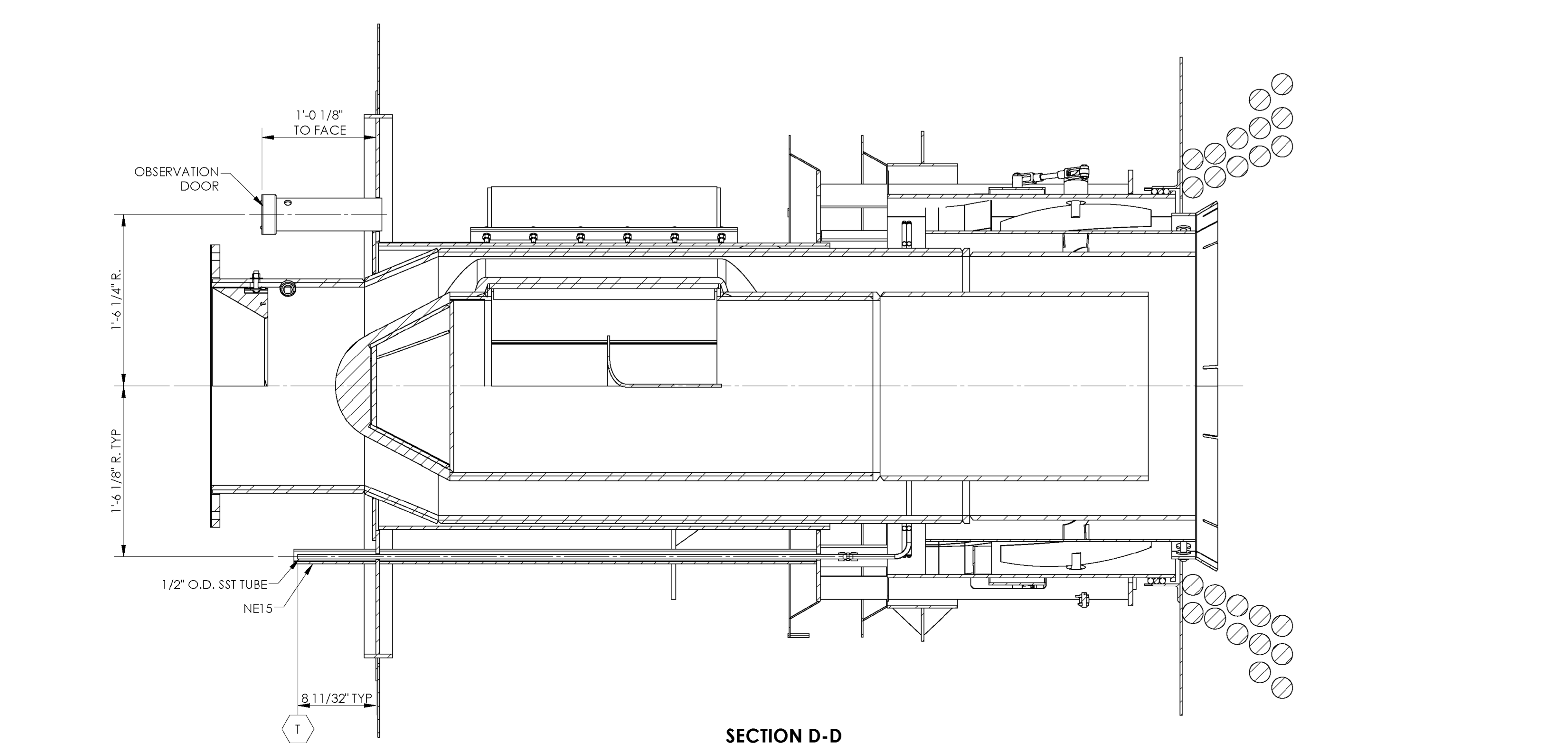
**SECTION C-C**



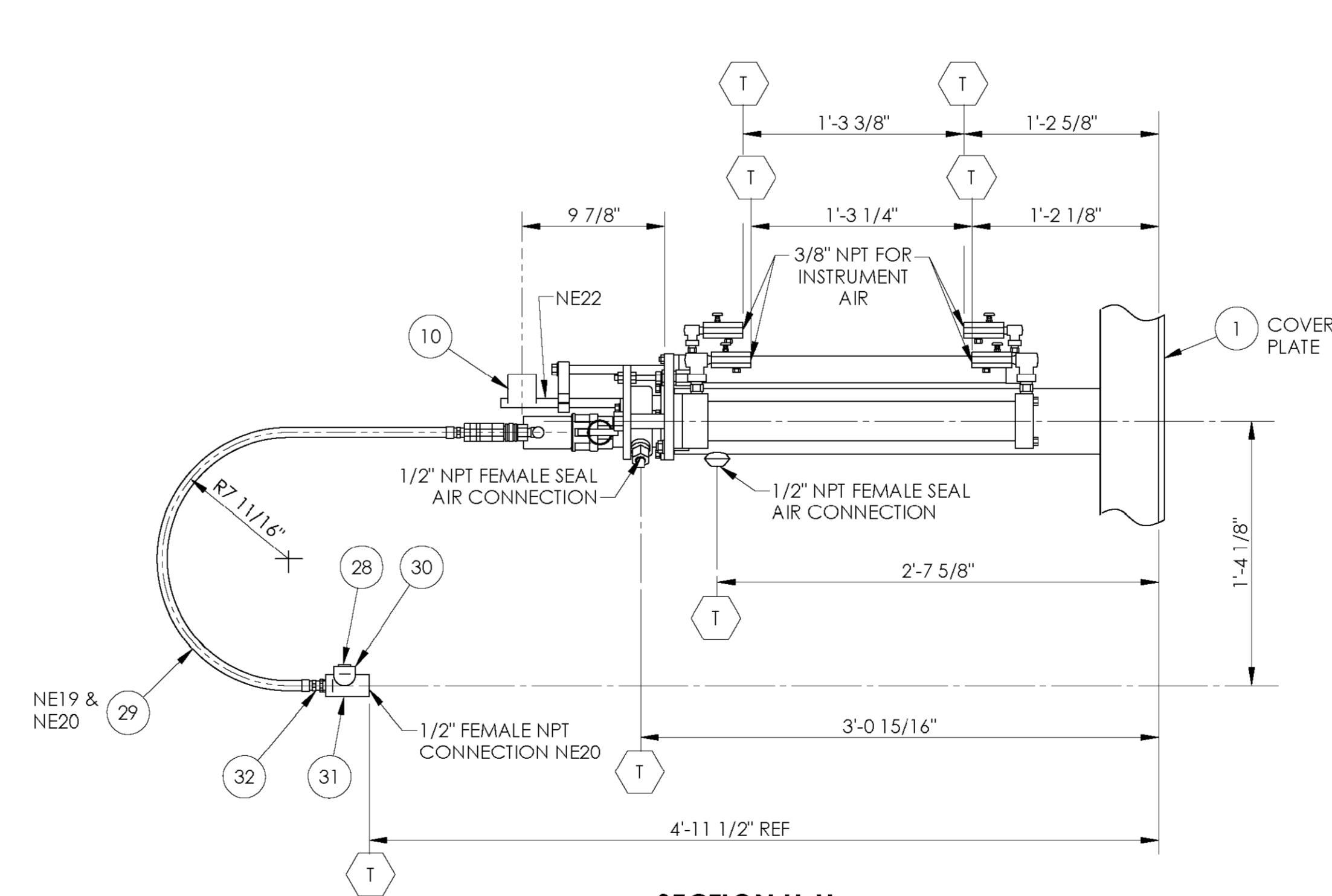
**SECTION P-P**  
SCALE: 3"=1'-0"  
ARRANGEMENT AND WELDING IS THE SAME ON THE OTHER SIDE OF THE BURNER



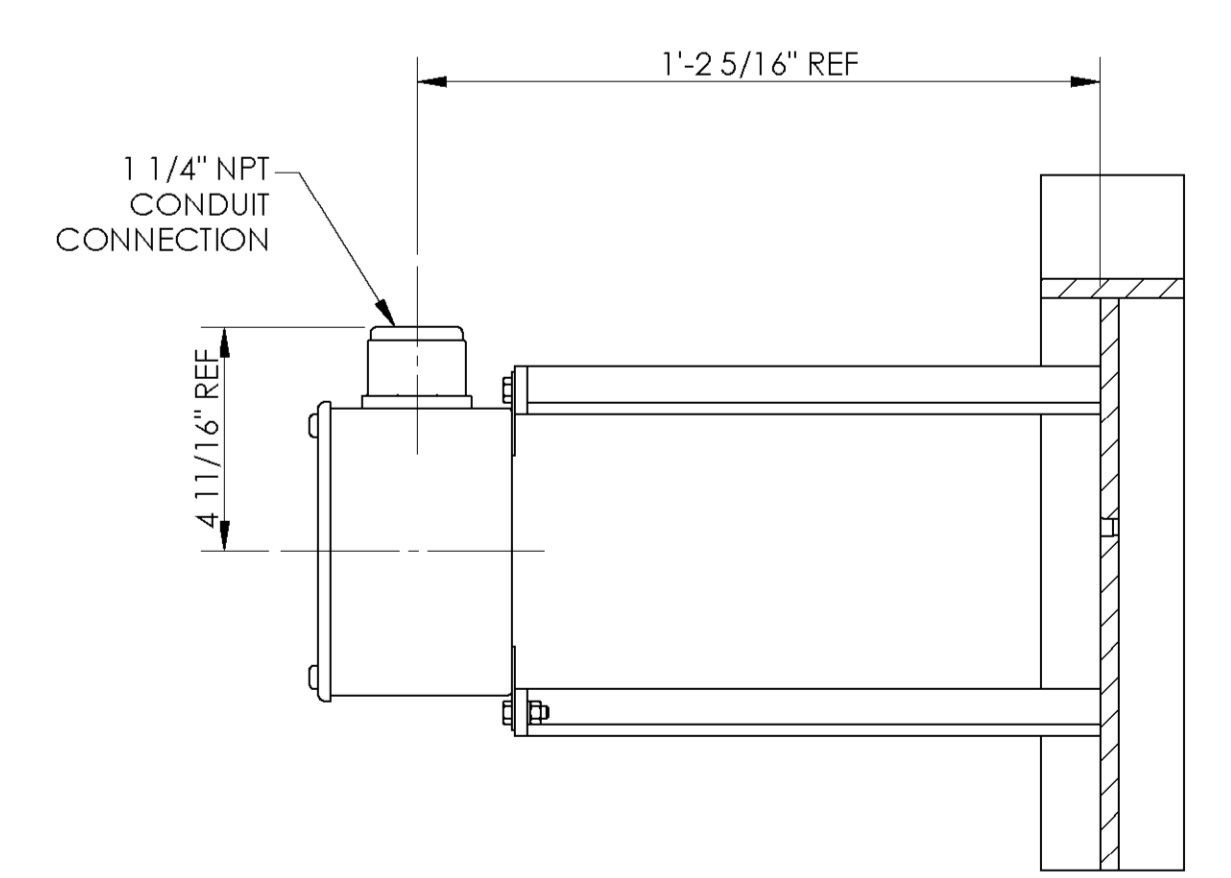
**SECTION Q-Q**  
SCALE: 3"=1'-0"  
ARRANGEMENT AND WELDING IS THE SAME ON THE OTHER SIDE OF THE BURNER



**SECTION D-D**



**SECTION H-H**



**SECTION F-F**

**SYMBOL:**  
① INDICATES BURNER TERMINAL

**REFERENCE DRAWINGS:**

GENERAL ARRANGEMENT FRONT WALL	93306J
GENERAL ARRANGEMENT REAR WALL	93307J
ERECTOR ARRANGEMENT CW	566930E
ERECTOR ARRANGEMENT CCW	566931E
ERECTOR ARRANGEMENT CW	566932E
ERECTOR ARRANGEMENT CW	566933E
ERECTOR ARRANGEMENT CCW	566934E
ERECTOR ARRANGEMENT CCW	566935E
ERECTOR ARRANGEMENT CCW	566936E
ERECTOR ARRANGEMENT CCW	566937E
ERECTOR ARRANGEMENT SECTIONS & VIEWS 2	80012049
ERECTOR AND GENERAL NOTES	80012055
FIELD WELD SCHEDULE	80012054

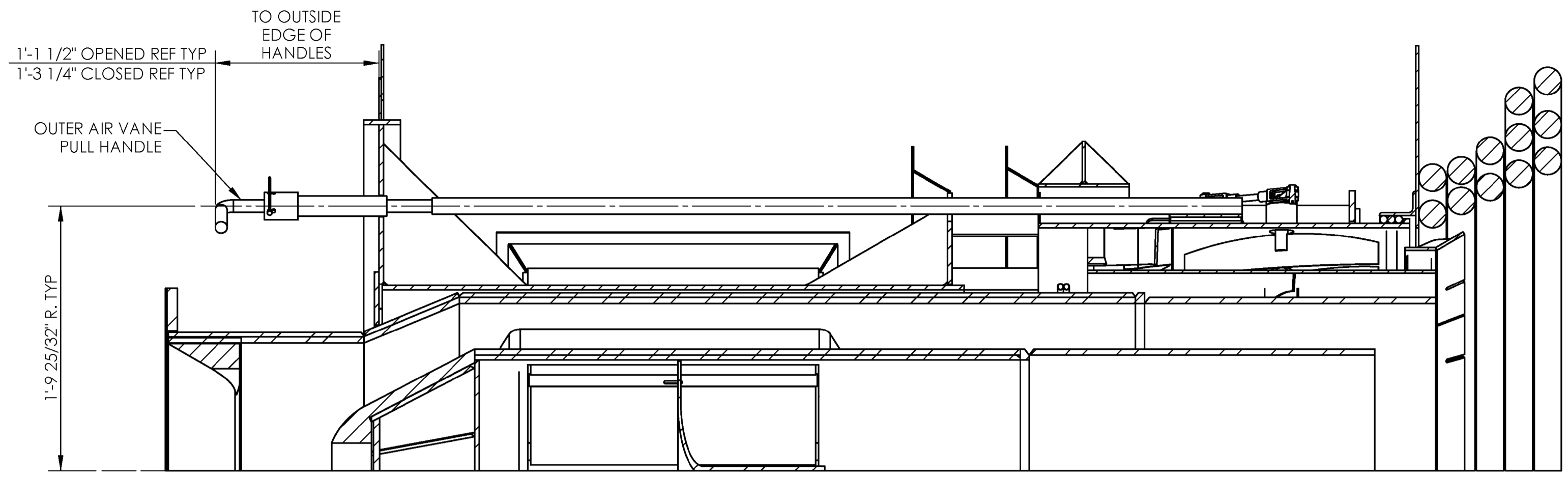
USER DEFINED FIELD	SCALE	1 1/2"=1'-0"
334-0456-39-53	TYPE	PROJECT
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	DEF ERIC	YES
	DEF MFG	NO

**PUBLIC POWER GENERATION AGENCY  
WHELAN ENERGY CENTER-UNIT 2  
STEAM GENERATOR  
145300.62.3401**

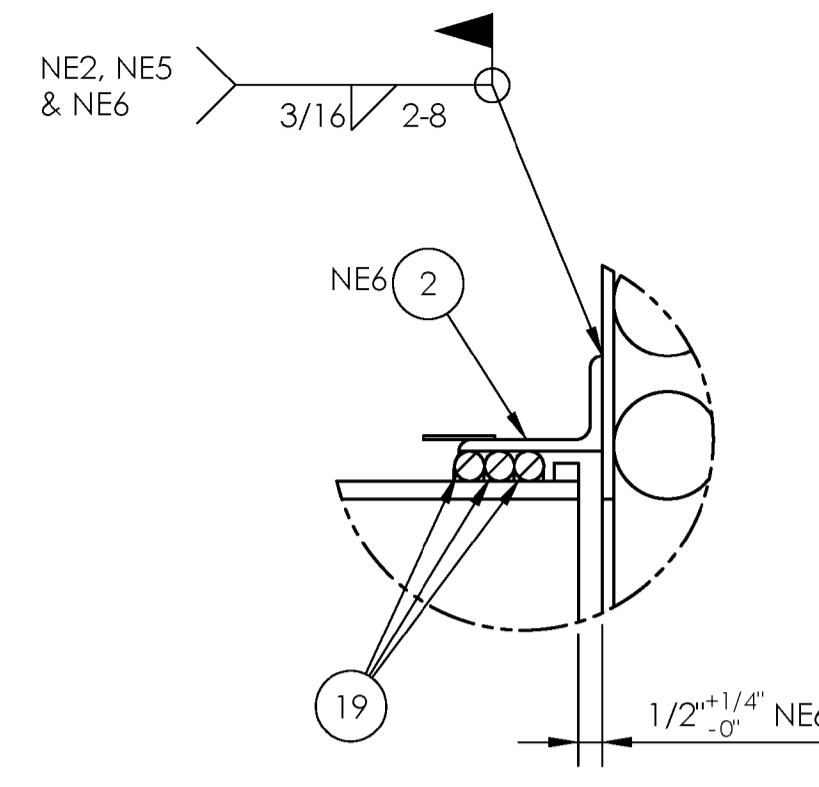
**The Babcock & Wilcox Company**  
ERECTOR ARRANGEMENT  
SECTIONS & VIEWS 1  
AIREJET™ PC FIRED  
BURNERS

PROJECT NO	199A	DCR	AC5100	DRWG NO	B0012048	REV	J 0
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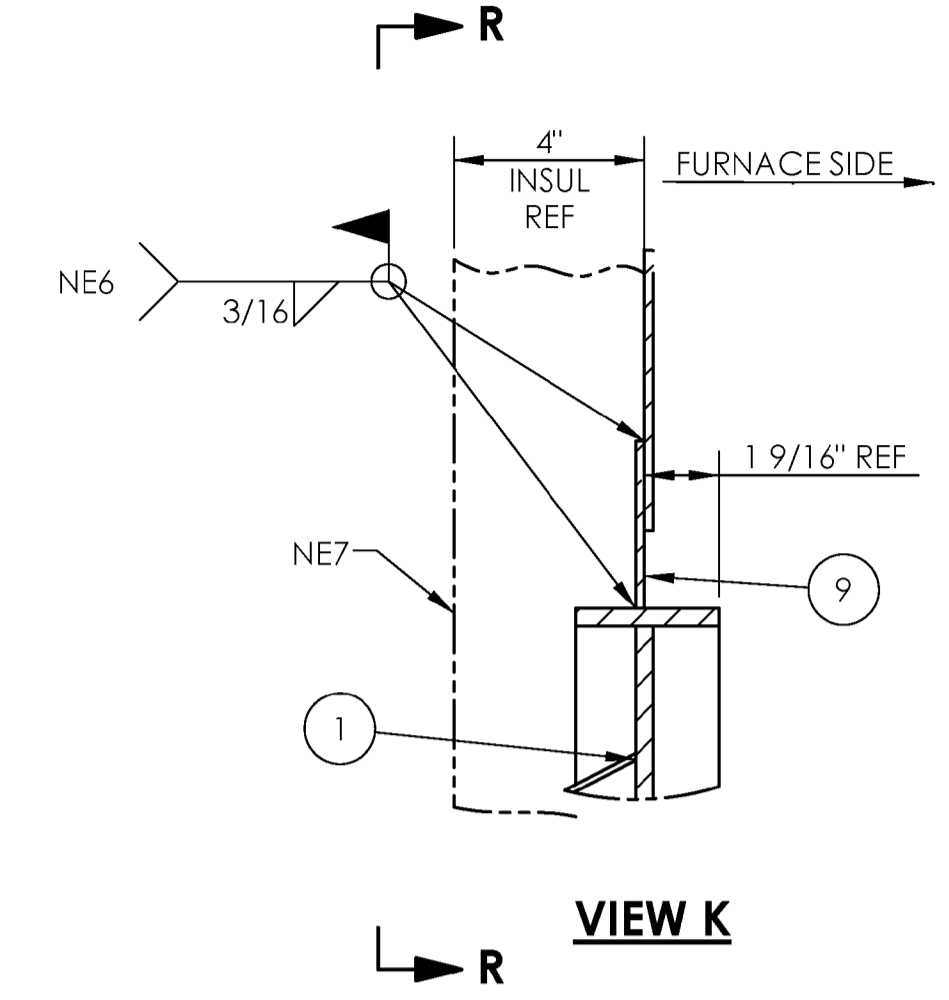
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	REMOVED VIEW M.	CAI/DAS 9/10/2008	DWD
2	CHANGED ITEM 9 TO 9 IN VIEW K. CHANGED ITEM 27 TO 26 IN SECTION S-S.	LLT/DAS 7/13/2009	DWD



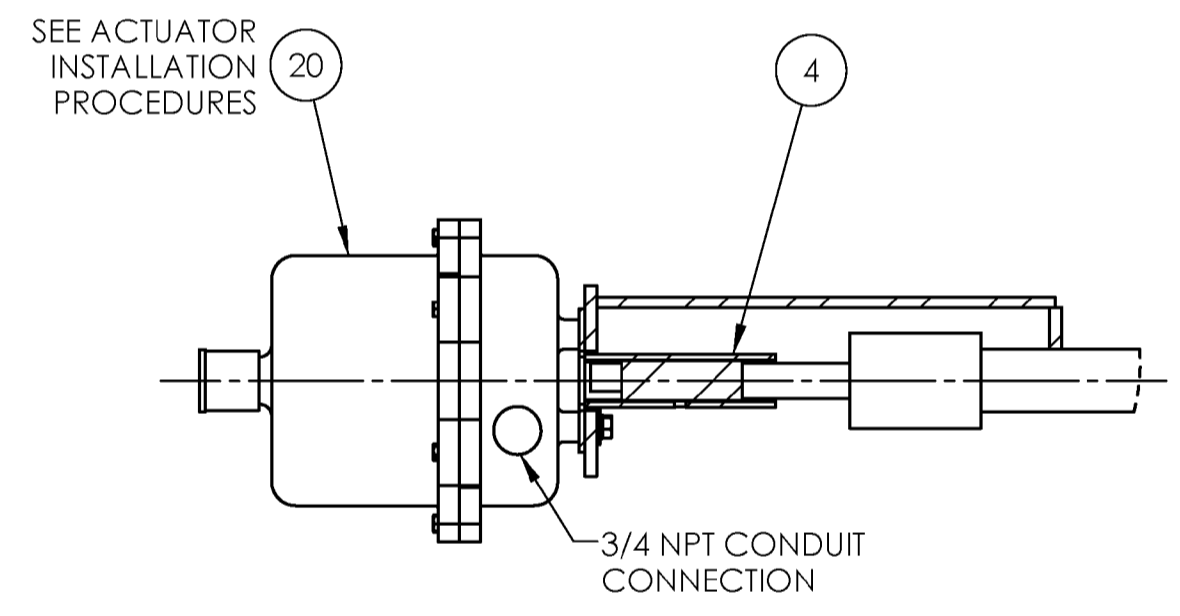
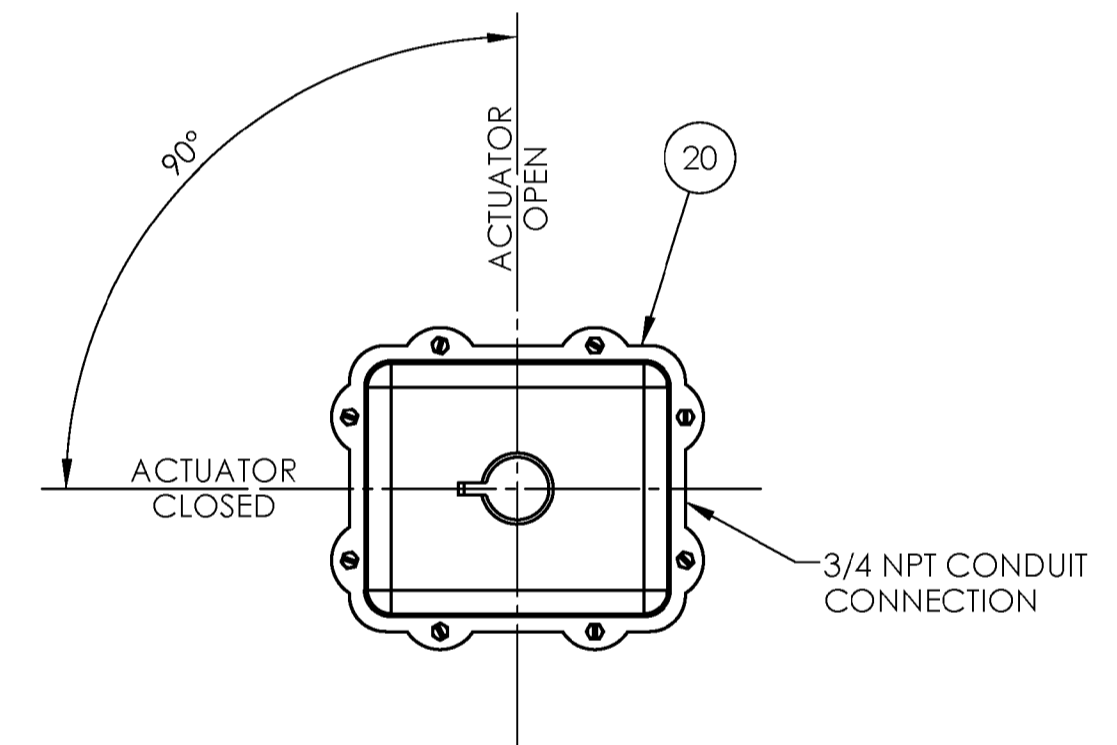
**SECTION G-G**



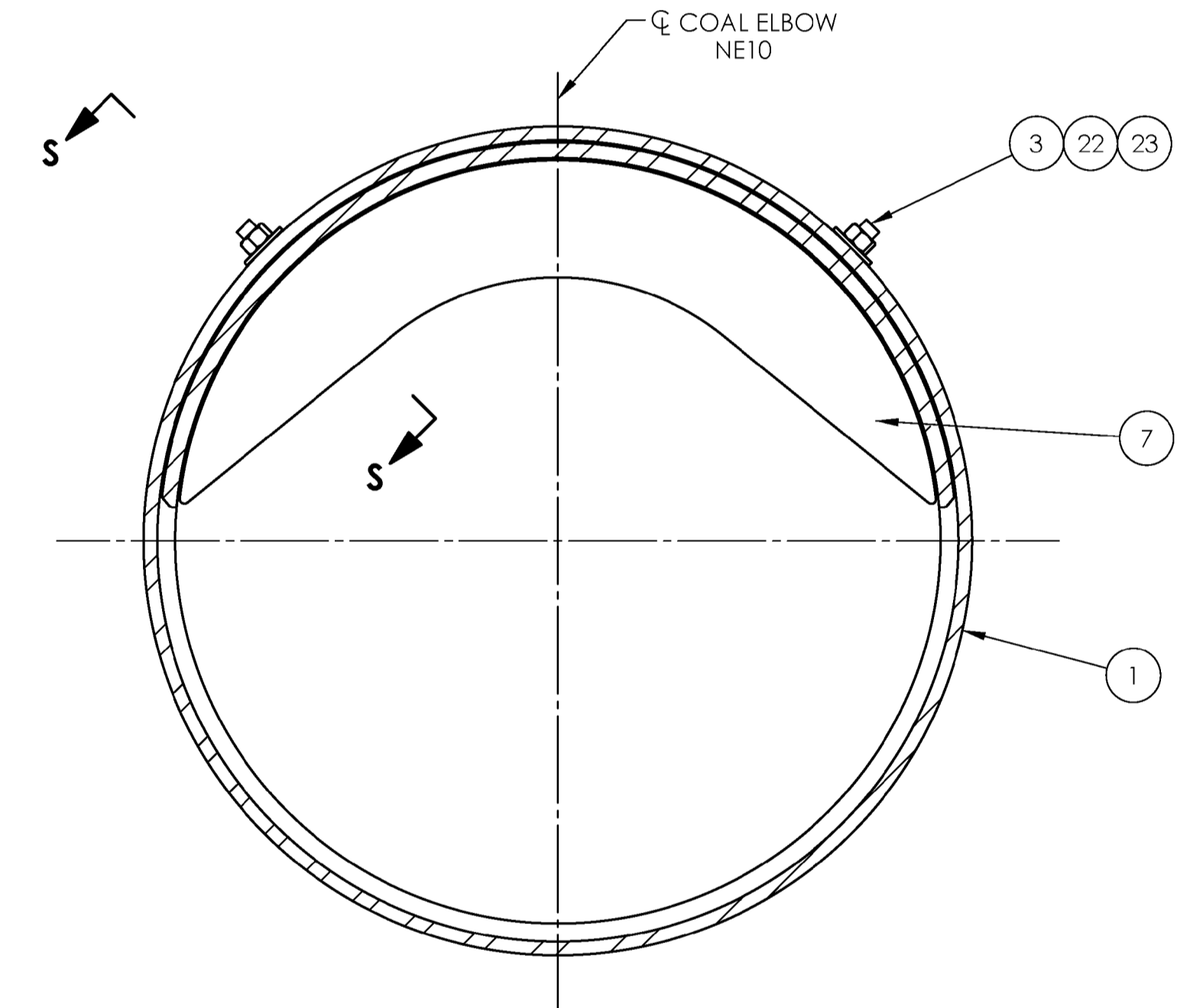
**VIEW J**



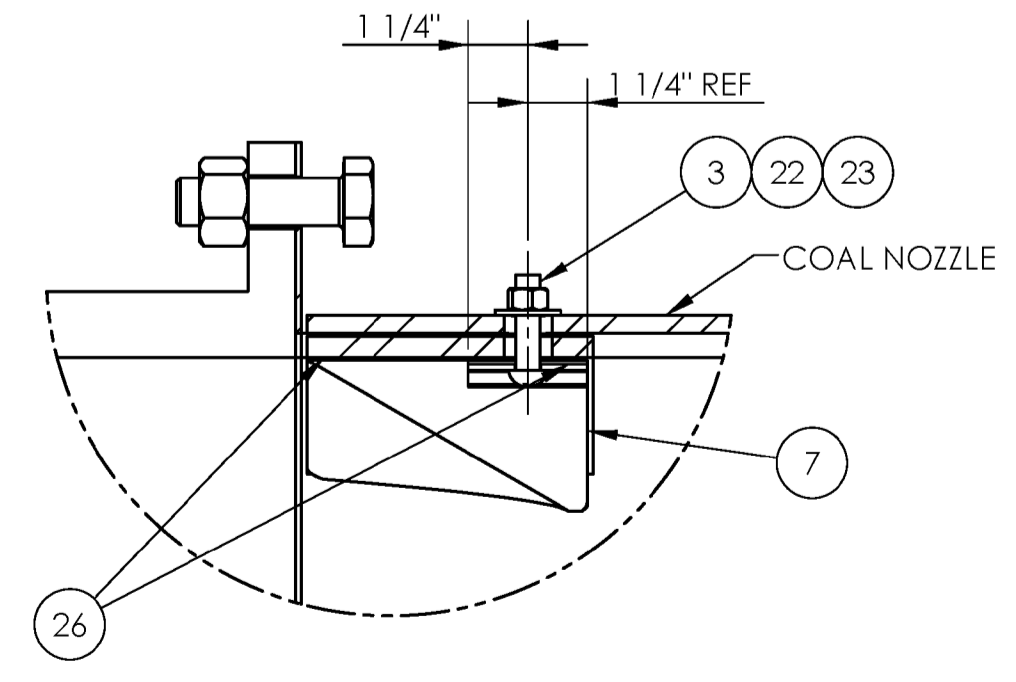
**VIEW K**



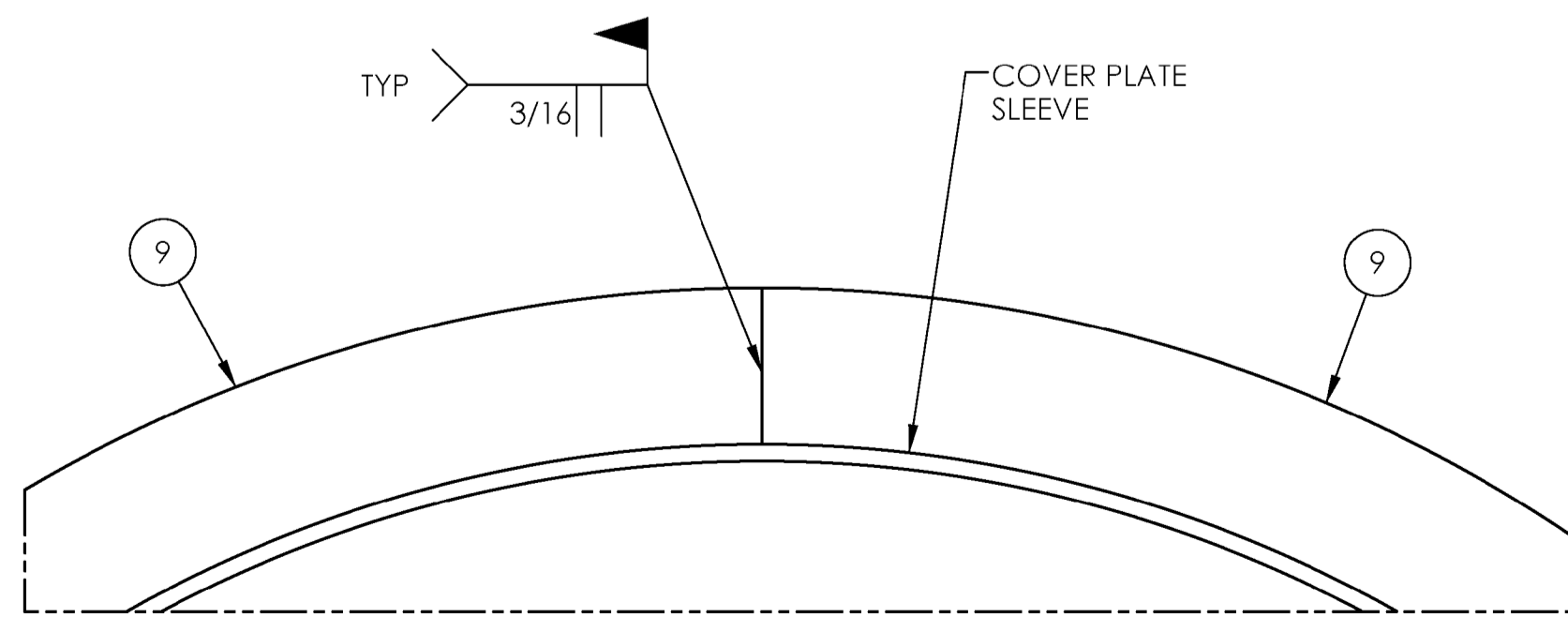
**VIEW L**  
SCALE: 6"=1'-0"



**SECTION N-N**



**SECTION S-S**



**SECTION R-R**

**SYMBOL:**

(T) INDICATES BURNER TERMINAL

**REFERENCE DRAWINGS:**

GENERAL ARRANGEMENT FRONT WALL	93306J
GENERAL ARRANGEMENT REAR WALL	93307J
ERECTION ARRANGEMENT CW	566930E
ERECTION ARRANGEMENT CW	566931E
ERECTION ARRANGEMENT CW	566932E
ERECTION ARRANGEMENT CW	566933E
ERECTION ARRANGEMENT CCW	566934E
ERECTION ARRANGEMENT CCW	566935E
ERECTION ARRANGEMENT CCW	566936E
ERECTION ARRANGEMENT CCW	566937E
ERECTION ARRANGEMENT SECTIONS & VIEWS 1	80012048
ERECTION AND GENERAL NOTES	80012055
FIELD WELD SCHEDULE	80012054

USER DEFINED FIELD	SCALE
334-0456-39-53	1 1/2"=1'-0"
ORIG CONTRACT NO	TYPE PROJECT
	DIST CUST YES
	DIST EREC YES
	DIST MFG NO
- DO NOT SCALE - USE DIMENSIONS ONLY	

DWN C.A. IAFANO CHKD D.A. SMITH APPVD D.W. DOWDELL DATE 06/27/08		<b>The Babcock &amp; Wilcox Company</b> a McDermott company <small>©2007 THE BABCOCK &amp; WILCOX COMPANY. ALL RIGHTS RESERVED. THIS DRAWING IS THE PROPERTY OF THE BABCOCK &amp; WILCOX COMPANY (B&amp;W) AND ITS USE IS GOVERNED BY THE TERMS AND CONDITIONS OF THE CONTRACT FOR WHICH IT WAS CREATED. B&amp;W GRANTS A NON-EXCLUSIVE LICENSE TO USE, REPRODUCE AND DISTRIBUTE THIS DRAWING SOLELY FOR THE MAINTENANCE, REPAIR AND OPERATION, AND FOR SOLICITING BIDS FOR THE ERECTION OF THE EQUIPMENT DISCLOSED HEREIN.</small>			
ERECTION ARRANGEMENT SECTIONS & VIEWS 2 AIREJET™ PC FIRED BURNERS		PROJECT NO 199A	COA AC5100	DWG NO B0012049	REV D 2

REVISIONS

REV	DESCRIPTION	DATE	APPROVAL
-----	-------------	------	----------

ENGINEERING GRAPHICS RESPONSIBILITY

WELDING ENGINEER RESPONSIBILITY (NOTE 4)

COMMODITY NAME COMPONENT GROUP	ITEM NO.	DESCRIPTION	ARRANGEMENT DRAWING NUMBER	NON-PRESSURE PART		APPLICABLE CODE (NOTE 2)	WELD FUNCTION		SIZE AND TYPE OF WELD	QUANTITY OF WELD (LBS)	NDE SPECIAL REQUIREMENTS (MT-PT-RP-UT)	NDE CODE REQUIREMENTS (MT-PT-RP-UT-VT)	WELDING PROCEDURE				TOTAL LBS PER DIA.	ITEM NO.							
				BASE MATERIAL	MIN THK AT JOINT		BASE MATERIAL	MIN THK AT JOINT					LOAD CARRYING	NON-LOAD CARRYING	MINIMUM PREHEAT (°F)	POST WELD HEAT TREAT (°F)			FILLER METAL REQ'D (NOTE 3)	WELDING PROCEDURE SPEC.	FILLER MATERIAL TYPE	TOTAL LBS PER DIA.			
																						3/16	3/8	1/2	OTHER
BURNERS 39-14	1	SUPPORT CHANNEL TO ATTACHMENT PLATE	566930E, 566931E 566932E, 566933E 566934E, 566935E 566936E, 566937E B0012048, B0012049	A36	5/16"	TP309H	1/2"	-	X	5/16 FILLET	66 LF	VT								1					
	2	SLIP SEAL TO WALLBOX	566930E, 566931E 566932E, 566933E 566934E, 566935E 566936E, 566937E B0012048, B0012049	TP309H	1/4"	A36	1/4"	-	X	3/16 FILLET	54 LF	VT								2					
	3	REG ROD SPRT PIPE TO ROD & PORT SEAL	566933E, 566937E B0012057	TP309H	.203 WALL	A27 N2 CL2	3/8"	-	X	1/8 FILLET	3 LF	VT								3					
	4	REG ROD SPRT PIPE TO COAL ELBOW SFAI PIATF	566933E, 566937E B0012057	TP309H	.203 WALL	A36	3/8"	-	X	1/8 FILLET	5 LF	VT								4					
	5	DRIVE BRACKET TO REG ROD SPRT PIPE	566933E, 566937E B0012057	SA106B HF/CF	.216 WALL	TP309H	.203 WALL	-	X	3/16 FILLET	2 LF	VT								5					
NOX PORTS 39-08	6	SUPPORT CHANNEL TO ATTACHMENT PLATE	566927E 566928E B0057712	A36	3/16"	TP309H	1/2"	-	X	3/16 FILLET	40 LF	VT								6					
	7	SLIP SEAL TO WALLBOX	566927E 566928E B0057712	TP309H	1/4"	A36	1/4"	-	X	3/16 FILLET	11 LF	VT								7					
	8	THERMOCOUPLE WELD SLEEVE TO OUTER AIR SLEEVE	B0054727	TP310H	1/16"	TP309H	3/8"	-	X	1/8 FILLET	1 LF	VT								8					
	9	THERMOCOUPLE WELD SLEEVE TO INNER AIR SLEEVE	B0054727	TP310H	1/16"	TP309H	1/4"	-	X	1/8 FILLET	1 LF	VT								9					
	10	THERMOCOUPLE WELD CLIP TO STIFFENER BAR	B0054727	TP310H	1/16"	TP309H	1/2"	-	X	1/8 FILLET	4 LF	VT								10					
	11																				11				
	12																				12				
	12																				12				
	13																				13				

NOTES:

- SEE CONTRACT INFORMATION SHEETS FOR CUSTOMER SPECIFIED WELDING AND/OR WELD RELATED NDE REQUIREMENTS, IF ANY.
- APPLICABLE CODES: UNLESS OTHERWISE NOTED, ALL WELDING PROCEDURES AND PERFORMANCE QUALIFICATIONS TO BE PERFORMED IN ACCORDANCE WITH ASME SECTION IX, WELD ACCEPTANCE CRITERIA SHALL BE IN ACCORDANCE WITH AWS D1.1. ANY OTHER CODE REQUIREMENTS MUST BE LISTED IN THE APPLICABLE CODE COLUMN.
- FILLER METAL ABBREVIATIONS:  
CS - CARBON STEEL (AI ACCEPTABLE)  
70 UTS - CARBON STEEL WITH 70,000 UTS STRESS RELIEVED (AI ACCEPTABLE)  
75 UTS - CARBON STEEL WITH 75,000 UTS STRESS RELIEVED (AI ACCEPTABLE)  
AI - CARBON MOLYBDENUM  
C3 - 1 NICKEL  
B1X - 1/2 CHROMIUM-1/2 MOLYBDENUM (B2X ACCEPTABLE)  
B2X - 1 1/4 CHROMIUM-1/2 MOLYBDENUM  
B3X - 2 1/4 CHROMIUM-MOLYBDENUM  
3XX - STAINLESS STEEL  
NiCr - INCONEL (ERNIC-3 OR ENICFe-2)
- THE RESPONSIBILITY FOR ALL FIELD WELDING RESTS SOLELY WITH THE ERECTION CONTRACTOR.

3340656-39-53 ACAD PART NAME: B0012054.dwg

CONSTRUCTION		DWN	C.A.IAFANO
CONTRACTOR	CUSTOMER	CHK'D	D.A. SMITH
WELD ENG.	EVC	APP'V'D	D. DOWDELL
DATE	6/27/08	DATE	6/27/08
CUSTOMER	PUBLIC POWER GENERATION AGENCY	CONTRACT NO.	334-0656-39
LOCATION	WHELAN ENERGY CENTER-UNIT 2	ORIG. CONTRACT NO.	
		- DO NOT SCALE - USE DIMENSIONS ONLY	

**The Babcock & Wilcox Company**  
a McDermott company

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FIELD WELD & NDE SCHEDULE  
NON-PRESSURE  
TO  
NON-PRESSURE

SCALE	CC-SECT	DWG. NO.	REV.
NONE	825-02	B0012054	00

**ERECTION NOTES:**

- NE1. UNLESS OTHERWISE NOTED: ALL NPP TO NPP WELDS SHALL CONFORM TO GOOD INDUSTRY PRACTICE.
- NE2. DISSIMILAR WELD SST TO CARBON. SEE FIELD WELD SCHEDULE DRAWING.
- NE3. TO AVOID DAMAGE TO BURNERS, USE 2" DIA HOLES PROVIDED IN LIFTING LUG ON COVER PLATE AND AIR SLEEVE. (DO NOT LIFT BURNER BY AIR SLEEVE SUPPORT BARS).
- NE4. SUPPORT CHANNELS TO BE PARALLEL TO TUBE WALL, PERPENDICULAR TO CENTERLINE OF BURNER AND RESTING ON SUPPORT RAILS IN WINDBOX. BEFORE WELDING SUPPORT CHANNELS, ERECTOR TO INSURE CLEARANCE DIMENSIONS AT SUPPORT BRACKETS.
- NE5. TACK WELD SLIP SEAL TO FRONT PLATE CONCENTRIC WITH THROAT OPENING +/- 1/8". SLIP SEAL WILL SERVE AS A GUIDE FOR POSITIONING THE BURNER AIR SLEEVE WITH RESPECT TO THE THROAT OPENING. (DO NOT SUPPORT BURNER WEIGHT ON SLIP SEAL.)
- NE6. BURNERS ARE TO BE AS LEVEL AND PERPENDICULAR TO THE WALL TUBES AS POSSIBLE WITHOUT INFRINGING ON THE 1/2" +1/4" -0" GAP TOLERANCE. ALL SUPPORT BRACKETS MUST BE CARRYING THE LOAD OF THE BURNER. THEN COMPLETE THE WELDING OF THE SLIP SEAL TO THE FRONT PLATE. INSTALL ROPE PACKING AND BEND SLIP SEAL TABS OVER TO HOLD PACKING IN PLACE.
- NE7. THE FIELD INSTALLED INSULATION AND LAGGING IS THE RESPONSIBILITY OF THE ERECTOR UNLESS OTHERWISE SPECIFIED.
- NE8. ERECTOR TO INSURE PROPER DISK MOVEMENT AFTER BURNER INSTALLATION IS COMPLETE.
- NE9. JORDAN DRIVE INTERNAL LIMIT SWITCHES WILL BE ADJUSTED AT BURNER COMMISSIONING.
- NE10. ERECTOR TO BREAK TACK WELDS AND ROTATE NOZZLE FLANGE, IN NECESSARY, TO LINE UP WITH BOLT HOLES IN COAL ELBOW, SEE GENERAL ARRANGEMENTS FOR CORRECT ORIENTATION. SEE DRAWING 275065A.
- NE 11. APPLY RTV SEALER TO LEADING EDGE OF DEFLECTOR AND COAL NOZZLE. FILL HOLES IN COAL NOZZLE FOR DEFLECTOR RETAINER BARS WITH RTV SEALER.
- NE12. ERECTOR MUST INSERT BURNERS IN THEIR APPROPRIATE LOCATIONS BY BURNER NUMBER PER THE GENERAL ARRANGEMENTS. BURNERS ARE STENCILED BY BURNER NUMBER AND NOZZLES ROTATED TO THEIR APPROXIMATE LOCATIONS BY MANUFACTURING.
- NE13. ESTIMATED WEIGHTS:  
BURNER ELEMENT ASSEMBLY: 4350 LBS.  
JORDAN DRIVE: 90 LBS.
- NE14. TORQUE REQUIREMENTS:  

FIND NO.	DESCRIPTION	FT-LBS.
17 & 18	5/8" DIA BOLT & NUT	60
21 & 24	1" DIA BOLT & NUT	245
22	1/2" NUT	30
ACTUATOR MOUNTING BOLTS	1/4" DIA BOLT	6
- NE15. ERECTOR TO REMOVE ALL SUPPORT MEMBERS PAINTED YELLOW AFTER INSTALLATION IS COMPLETE. (DO NOT USE THESE MEMBERS FOR LIFTING BURNER.)
- NE16. GENERAL HANDLING FOR CERAMIC COMPONENTS:  
CERAMIC IS A VERY BRITTLE PRODUCT, AND REQUIRES SPECIAL HANDLING TO AVOID BREAKING, CRACKING AND CHIPPING.  
A. ALWAYS USE LIFTING LUGS, IF PROVIDED, TO LIFT THE PART.  
B. FOR PARTS WITHOUT LIFTING LUGS USE A NYLON SLING FOR LIFTING.  
C. DO NOT USE A CABLE OR CHAIN THROUGH OR AROUND ANY CERAMIC PART FOR LIFTING.  
D. CARE SHOULD BE TAKEN TO AVOID CONTACT WITH ANY OTHER OBJECT, ANY IMPACT CAN DAMAGE THE CERAMIC.
- NE17. INSURE PROPER LOCATION FROM LIGHTER SHIELD TO CENTERLINE OF TUBE WALL. LIGHTER SHIELD MUST ALSO BE CENTERED BETWEEN AIR SEPARATION VANE SEGMENTS. TACK WELD LIGHTER ASSEMBLY THEN STROKE AIR CLYINDER TO INSURE CLEARANCE THRU AIR VANES. THEN WELD LIGHTER PIPE AT COVER PLATE.
- NE18. LOCATE HIGH ENERGY EXCITER WITHIN 10'-0" OF LIGHER. DO NOT MOUNT HIGH ENERGY EXCITER ON WINDBOX CASING.

- NE19. LOOP OF HOSE TO BE INSTALLED IN A VERTICAL POSITION AND PARALLEL TO THE VERTICAL CENTERLINE OF BURNER TO PREVENT TWISTING. NO TORSIONAL FORCES MAY BE APPLIED TO HOSE BY TWISTING HOSE DURING INSTALLATION.
- NE20. TO PREVENT DAMAGE TO HOSE, ALL ADJUSTMENTS MUST BE MADE IN PIPE THREADS. (NO ADJUSTMENTS TO BE MADE BY TWISTING HOSE.)
- NE21. FOR WELDING CERAMIC LINED COMPONENTS, SEE DRAWING 275065A.
- NE22. ERECTOR TO FILE MARK SPARK TOD WITH (4) 1/4" INCREMENTS. FIRST MARK TO BE FLUSH WITH CLAMPS WHEN PROBE TIP IS FLUSH WITH OIL IGNITOR SHIELD.

**ACTUATOR (ITEM NO. 20) INSTALLATION PROCEDURES:**

- UNBOLT AND REMOVE (4) 1/4" OUTSIDE NUTS, DISCARD THE NUTS BUT KEEP THE BOLTS IN PLACE.
- ASSURE DAMPER BLADE IS IN THE MOST CLOSED POSITION WITH THE FLATS ON THE DAMPER SHAFT BEING PERPENDICULAR TO THE DAMPER SHAFT.
- SLIP COUPLING ASSEMBLY (ITEM NO. 4) ONTO DAMPER BLADE.
- PLACE ACTUATOR IN PLACE THROUGH THE HOLE IN THE MOUNTING BRACKET AND INTO THE COUPLING. VERIFYING THE 3/4" NPT CONDUIT CONNNECTION IS ON THE APPROPRIATE SIDE AND THE KNOB IS PARALLEL TO THE DAMPER BLADE AND TO THE CORRECT SIDE AS SHON IN THE FRONT VIEW.
- TIGHTEN THE (4) BOLTS INTO THE ACTUATOR PER THE TORQUE REQUIREMENTS IN NOTE NE14.
- RUN THROUGH SEVERAL CYCLES TO ASSURE FREE MOVEMENT TO THE DAMPER.

**GENERAL NOTES:**

- G1. JORDAN LINEAR DRIVE AND WORCESTER ROTARY ACTUATOR POWER SUPPLY REQUIREMENTS:  
120 VAC, 60 HZ, 1 PHASE
- G2. ELECTRICAL ERQUIREMENTS FOR HIGH ENERGY SPARK IGNITOR:  
120 VAC, 60 HZ, 1 PHASE, 2.5 AMP
- G3. SEAL AIR REQUIREMENTS:

	DESCRIPTION	FLOW	PRESSURE
a	OIL IGNITOR CONN.	5 SCFM	2" WC ABOVE WINDBOX
b	OIL IGNITOR CONN.	10 SCFM	2" WC ABOVE FURNACE

- G4. AIR REQUIREMENTS FOR OIL IGNITOR DRIVE CYLINDER:  
80-120 PSIG: .087 CF PER STROKE
- G5. AIR REQUIREMENTS FOR OIL IGNITOR PROBE DRIVE CYLINDER:  
80-120 PSIG: .017 CF PER STROKE
- G6. ELECTRICAL DATA FOR OIL IGNITOR PROXIMITY SWITCH:

AC VOLTS	AMPS	DC VOLTS	AMPS
120	4	24	3
240	2	48	1.25
--	--	125	.5
--	--	250	.5

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	REVISED NE4.	9/10/2008	DWD
2	CHANGED ITEM NO. 21 TO 20 IN TITLE OF ACTUATOR INSTALLATION PROCEDURES.	7/13/2009	DWD
3	REVISED NOTE NE17.	3/29/2010	DWD
4	REVISED NOTE G6.	2/3/2011	DWD

**SYMBOL:**

Ⓣ INDICATES BURNER TERMINAL

**REFERENCE DRAWINGS:**

- GENERAL ARRANGEMENT FRONT WALL . . . . . 93306J
- GENERAL ARRANGEMENT REAR WALL . . . . . 93307J
- ERECTION ARRANGEMENT CW . . . . . 566930E
- ERECTION ARRANGEMENT CW . . . . . 566931E
- ERECTION ARRANGEMENT CW . . . . . 566932E
- ERECTION ARRANGEMENT CCW. . . . . 566934E
- ERECTION ARRANGEMENT CCW. . . . . 566935E
- ERECTION ARRANGEMENT CCW. . . . . 566936E
- ERECTION ARRANGEMENT SECTIONS & VIEWS 1 . . . . . B0012048
- ERECTION ARRANGEMENT SECTIONS & VIEWS 2 . . . . . B0012049

**PUBLIC POWER GENERATION AGENCY  
WHELAN ENERGY CENTER-UNIT 2  
STEAM GENERATOR  
145300.62.3401**

**The Babcock & Wilcox Company**  
a McDermott company

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**ERECTION ARRANGEMENT  
ERECTION AND GENERAL NOTES  
AIREJET™ PC & OIL FIRED  
BURNERS**

DWN C.A.IAFANO	<b>The Babcock &amp; Wilcox Company</b> a McDermott company		
CHKD D.A.SMITH			
APPVD D.W.DOWDELL	DATE 06/27/08		
USER DEFINED FIELD 334-0656-39-53	SCALE NTS		
ORIG CONTRACT NO	TYPE DIST CUST	PROJECT YES	
- DO NOT SCALE - USE DIMENSIONS ONLY	DIST EREC DIST MFG	YES NO	
	PROJECT NO 199A	COA AC5100	DWG NO B0012055
			REV C 4

**ERECTION NOTES:**

NE1. UNLESS OTHERWISE NOTED: ALL NPP TO NPP WELDS SHALL CONFORM TO GOOD INDUSTRY PRACTICE.

NE2. DISSIMILAR WELD SST TO CARBON. SEE FIELD WELD SCHEDULE DRAWING.

NE3. TO AVOID DAMAGE TO BURNERS, USE 2" DIA HOLES PROVIDED IN LIFTING LUG ON COVER PLATE AND AIR SLEEVE. (DO NOT LIFT BURNER BY AIR SLEEVE SUPPORT BARS).

NE4. SUPPORT CHANNELS TO BE PARALLEL TO TUBE WALL, PERPENDICULAR TO CENTERLINE OF BURNER AND RESTING ON SUPPORT RAILS IN WINDBOX. BEFORE WELDING SUPPORT CHANNELS, ERECTOR TO INSURE CLEARANCE DIMENSIONS AT SUPPORT BRACKETS.

NE5. TACK WELD SLIP SEAL TO FRONT PLATE CONCENTRIC WITH THROAT OPENING +/- 1/8". SLIP SEAL WILL SERVE AS A GUIDE FOR POSITIONING THE BURNER AIR SLEEVE WITH RESPECT TO THE THROAT OPENING. (DO NOT SUPPORT BURNER WEIGHT ON SLIP SEAL.)

NE6. BURNERS ARE TO BE AS LEVEL AND PERPENDICULAR TO THE WALL TUBES AS POSSIBLE WITHOUT INFRINGING ON THE 1/2" +1/4" -0" GAP TOLERANCE. ALL SUPPORT BRACKETS MUST BE CARRYING THE LOAD OF THE BURNER. THEN COMPLETE THE WELDING OF THE SLIP SEAL TO THE FRONT PLATE. INSTALL ROPE PACKING AND BEND SLIP SEAL TABS OVER TO HOLD PACKING IN PLACE.

NE7. THE FIELD INSTALLED INSULATION AND LAGGING IS THE RESPONSIBILITY OF THE ERECTOR UNLESS OTHERWISE SPECIFIED.

NE8. ERECTOR TO INSURE PROPER DISK MOVEMENT AFTER BURNER INSTALLATION IS COMPLETE.

NE9. JORDAN DRIVE INTERNAL LIMIT SWITCHES WILL BE ADJUSTED AT BURNER COMMISSIONING.

NE10. ERECTOR TO BREAK TACK WELDS AND ROTATE NOZZLE FLANGE, IN NECESSARY, TO LINE UP WITH BOLT HOLES IN COAL ELBOW, SEE GENERAL ARRANGEMENTS FOR CORRECT ORIENTATION. SEE DRAWING 275065A.

NE 11. APPLY RTV SEALER TO LEADING EDGE OF DEFLECTOR AND COAL NOZZLE. FILL HOLES IN COAL NOZZLE FOR DEFLECTOR RETAINER BARS WITH RTV SEALER.

NE12. ERECTOR MUST INSERT BURNERS IN THEIR APPROPRIATE LOCATIONS BY BURNER NUMBER PER THE GENERAL ARRANGEMENTS. BURNERS ARE STENCILED BY BURNER NUMBER AND NOZZLES ROTATED TO THEIR APPROXIMATE LOCATIONS BY MANUFACTURING.

NE13. ESTIMATED WEIGHTS:  
BURNER ELEMENT ASSEMBLY: 4350 LBS.  
JORDAN DRIVE: 90 LBS.

NE14. TORQUE REQUIREMENTS:

FIND NO.	DESCRIPTION	FT-LBS.
17 & 18	5/8" DIA BOLT & NUT	60
21 & 24	1" DIA BOLT & NUT	245
22	1/2" NUT	30
44	3/8" HVY HEX NUT	31
ACTUATOR MOUNTING BOLTS	1/4" DIA BOLT	6

NE15. ERECTOR TO REMOVE ALL SUPPORT MEMBERS PAINTED YELLOW AFTER INSTALLATION IS COMPLETE. (DO NOT USE THESE MEMBERS FOR LIFTING BURNER.)

NE20. GENERAL HANDLING FOR CERAMIC COMPONENTS:  
CERAMIC IS A VERY BRITTLE PRODUCT, AND REQUIRES SPECIAL HANDLING TO AVOID BREAKING, CRACKING AND CHIPPING.  
A. ALWAYS USE LIFTING LUGS, IF PROVIDED, TO LIFT THE PART.  
B. FOR PARTS WITHOUT LIFTING LUGS USE A NYLON SLING FOR LIFTING.  
C. DO NOT USE A CABLE OR CHAIN THROUGH OR AROUND ANY CERAMIC PART FOR LIFTING.  
D. CARE SHOULD BE TAKEN TO AVOID CONTACT WITH ANY OTHER OBJECT, ANY IMPACT CAN DAMAGE THE CERAMIC.

NE17. INSURE PROPER LOCATION FROM LIGHTER SHIELD TO CENTERLINE OF TUBE WALL. LIGHTER SHIELD MUST ALSO BE CENTERED BETWEEN AIR SEPARATION VANE SEGMENTS. TACK WELD LIGHTER ASSEMBLY THEN STROKE AIR CLYINDER TO INSURE CLEARANCE THRU AIR VANES. THEN WELD LIGHTER PIPE AT COVER PLATE.

NE18. LOCATE HIGH ENERGY EXCITER WITHIN 10'-0" OF LIGHER. DO NOT MOUNT HIGH ENERGY EXCITER ON WINDBOX CASING.

NE19. LOOP OF HOSE TO BE INSTALLED IN A VERTICAL POSITION AND PARALLEL TO THE VERTICAL CENTERLINE OF BURNER TO PREVENT TWISTING. NO TORSIONAL FORCES MAY BE APPLIED TO HOSE BY TWISTING HOSE DURING INSTALLATION.

NE20. TO PREVENT DAMANGE TO HOSE, ALL ADJUSTMENTS MUST BE MADE IN PIPE THREADS. (NO ADJUSTMENTS TO BE MADE BY TWISTING HOSE.)

NE21. FOR WELDING CARMIC LINED COMPONENTS, SEE DRAWING 275065A.

NE22. ERECTOR TO FILE MARK SPARK ROD WITH (4) 1/4" INCREMENTS. FIRST MARK TO BE FLUSH WITH CLAMPS WHEN PROBE TIP IS FLUSH WITH OIL IGNITOR SHIELD.

NE23. INDEX REGULATING ROD AT NORMAL FIRING POSITION, WITH SCRIBE LINE.

NE24. ASSEMBLE FLOW CONTROL VALVES FIIND NO. 51 WITH ARROW POINTING AWAY FROM AIR CYLINDER TO CONTROL TRAVEL SPEED.

NE25. ASSEMBLE COAL ELBOW FIND NO. 5, REG. ROD SUPPORT PIPE FIND NO. 34, DRIVE BRACKET FIND NO. 35, MOUNTING BRACKET FIND NO. 36 AND AIR CYLINDER FIND NO. 39 TO THE BURNER AND VERIFY ALIGNMENT BY CHECKING CONCENTRICITY OF HOLES AT EACH END OF STROKE AND INSURE UNRESTRICTED TRAVEL OF REGULATING ROD, THEN WELD SUPPORT BRACKET TO REG. ROD SUPPORT PIPE, ROD & PORT SEAL ASSEMBLY TO REG ROD SUPPORT PIPE AND REG. ROD SUPPORT PIPE TO COAL ELBOW. WELD PROCEDURE TO BE 5/8" LG. SEAL WELD IN A 12, 3, 6 & 9 O'CLOCK PATTERN TO FORM A COMPLETE WELD.

**GENERAL NOTES:**

G1. JORDAN LINEAR DRIVE AND WORCESTER ROTARY ACTUATOR POWER SUPPLY REQUIREMENTS:  
120 VAC, 60 HZ, 1 PHASE

G2. ELECTRICAL ERQUIREMENTS FOR HIGH ENERGY SPARK IGNITOR:  
120 VAC, 60 HZ, 1 PHASE, 2.5 AMP

G3. SEAL AIR REQUIREMENTS:

	DESCRIPTION	FLOW	PRESSURE
a	OIL IGNITOR CONN.	5 SCFM	2" WC ABOVE WINDBOX
b	OIL IGNITOR CONN.	10 SCFM	2" WC ABOVE FURNACE
c	ATOMIZER ASPIRATOR	10 SCFM	2" WC ABOVE FURNACE
d	ROD & SEAL PORT	4 SCFM	4" WC ABOVE FURNACE

G4. AIR REQUIREMENTS FOR OIL IGNITOR DRIVE CYLINDER:  
80-120 PSIG: .087 CF PER STROKE

G5. AIR REQUIREMENTS FOR OIL IGNITOR PROBE DRIVE CYLINDER:  
80-120 PSIG: .017 CF PER STROKE

G6. ELECTRICAL DATA FOR OIL IGNITOR PROXIMITY SWITCH:

AC VOLTS	AMPS	DC VOLTS	AMPS
120	4	24	3
240	2	48	1.25
--	--	125	.5
--	--	250	.5

G7. AIR REQUIREMENTS FOR ATOMIZER DRIVE CYLINDER:  
80-100 PSIG: .089 CF PER STROKE

G8. ELECTRICAL DATA FOR ATOMIZER PROXIMITY SWITCH:

AC VOLTS	AMPS	DC VOLTS	AMPS
120	4	24	3
240	2	48	1.25
--	--	125	.5
--	--	250	.5

**SYMBOL:**

(T) INDICATES BURNER TERMINAL

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	REVISED NE4. CAI/DAS	9/10/2008	DWD
2	CHANGED ITEM NO. 31 TO 20 IN TITLE OF ACTUATOR INSTALLATION PROCEDURES. LLT/DAS	7/13/2009	DWD
3	REVISED NOTE NE17. DAS	3/29/2010	DWD
4	NOTE G8 REVISED ALL DC AMPS, REMOVED 480 VOLTS FROM AC RATINGS. DAS	2/1/2011	DWD
5	REVISED NOTE G6. CAI/DAS	2/3/2011	DWD

**ACTUATOR (ITEM NO.20) INSTALLATION PROCEDURES:**

- UNBOLT AND REMOVE (4) 1/4" OUTSIDE NUTS, DISCARD THE NUTS BUT KEEP THE BOLTS IN PLACE.
- ASSURE DAMPER BLADE IS IN THE MOST CLOSED POSITION WITH THE FLATS ON THE DAMPER SHAFT BEING PERPENDICULAR TO THE DAMPER SHAFT.
- SLIP COUPLING ASSEMBLY (ITEM NO. 4) ONTO DAMPER SHAFT.
- PLACE ACTUATOR IN PLACE THROUGH THE HOLE IN THE MOUNTING BRACKET AND INTO THE COUPLING, VERIFYING THE 3/4" NPT CONDUIT CONNNECTION IS ON THE APPROPRIATE SIDE AND THE KNOB IS PARALLEL TO THE DAMPER BLADE AND TO THE CORRECT SIDE AS SHON IN THE FRONT VIEW.
- TIGHTEN THE (4) BOLTS INTO THE ACTUATOR PER THE TORQUE REQUIREMENTS IN NOTE NE14.
- RUN THROUGH SEVERAL CYCLES TO ASSURE FREE MOVEMENT TO THE DAMPER.

**REFERENCE DRAWINGS:**

- GENERAL ARRANGEMENT FRONT WALL .....93306J
- GENERAL ARRANGEMENT REAR WALL .....93307J
- ERECTION ARRANGEMENT CW .....566933E
- ERECTION ARRANGEMENT CCW.....566937E
- ERECTION ARRANGEMENT SECTIONS & VIEWS 1 .....B0012048
- ERECTION ARRANGEMENT SECTIONS & VIEWS 2 .....B0012049
- ERECTION ARRANGEMENT SECTIONS & VIEWS 3 .....B0012057

**PUBLIC POWER GENERATION AGENCY  
WHELAN ENERGY CENTER-UNIT 2  
STEAM GENERATOR  
145300.62.3401**

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a McDermott company

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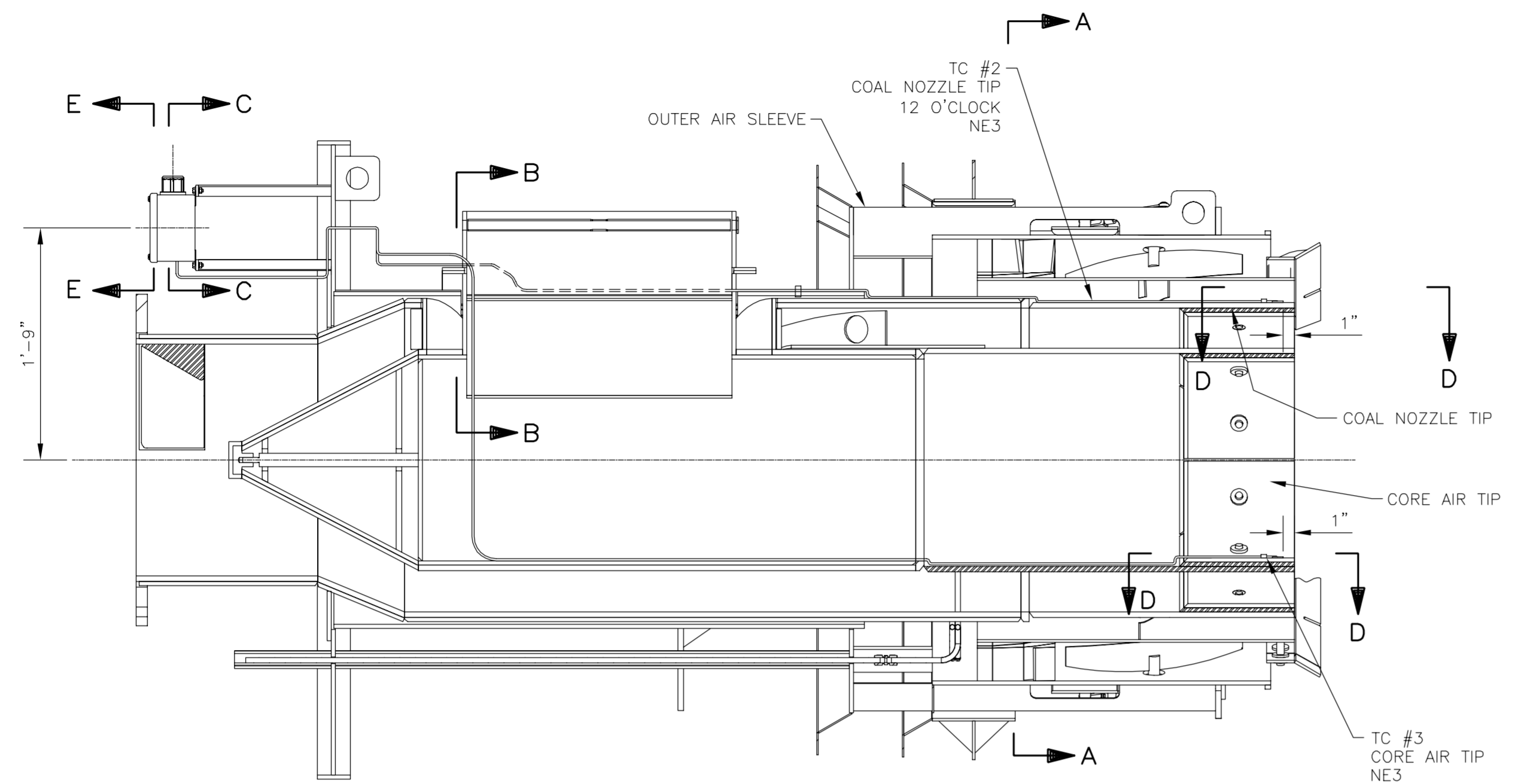
**ERECTION ARRANGEMENT  
ERECTION AND GENERAL NOTES  
AIREJET™ PC & OIL FIRED  
BURNERS**

DWN C.A.IAFANO	<b>The Babcock &amp; Wilcox Company</b> a McDermott company		PROJECT NO	COA	DWG NO	REV
CHKD D.A.SMITH			199A	AC5100	B0012056	C 5
APPVD D.W.DOWDELL	DATE 06/27/08		SCALE NTS			
DATE	USER DEFINED FIELD 334-0656-39-53	TYPE	PROJECT			
	ORIG CONTRACT NO	DIST CUST	YES			
		DIST EREC	YES			
		DIST MFG	NO			
	- DO NOT SCALE - USE DIMENSIONS ONLY					

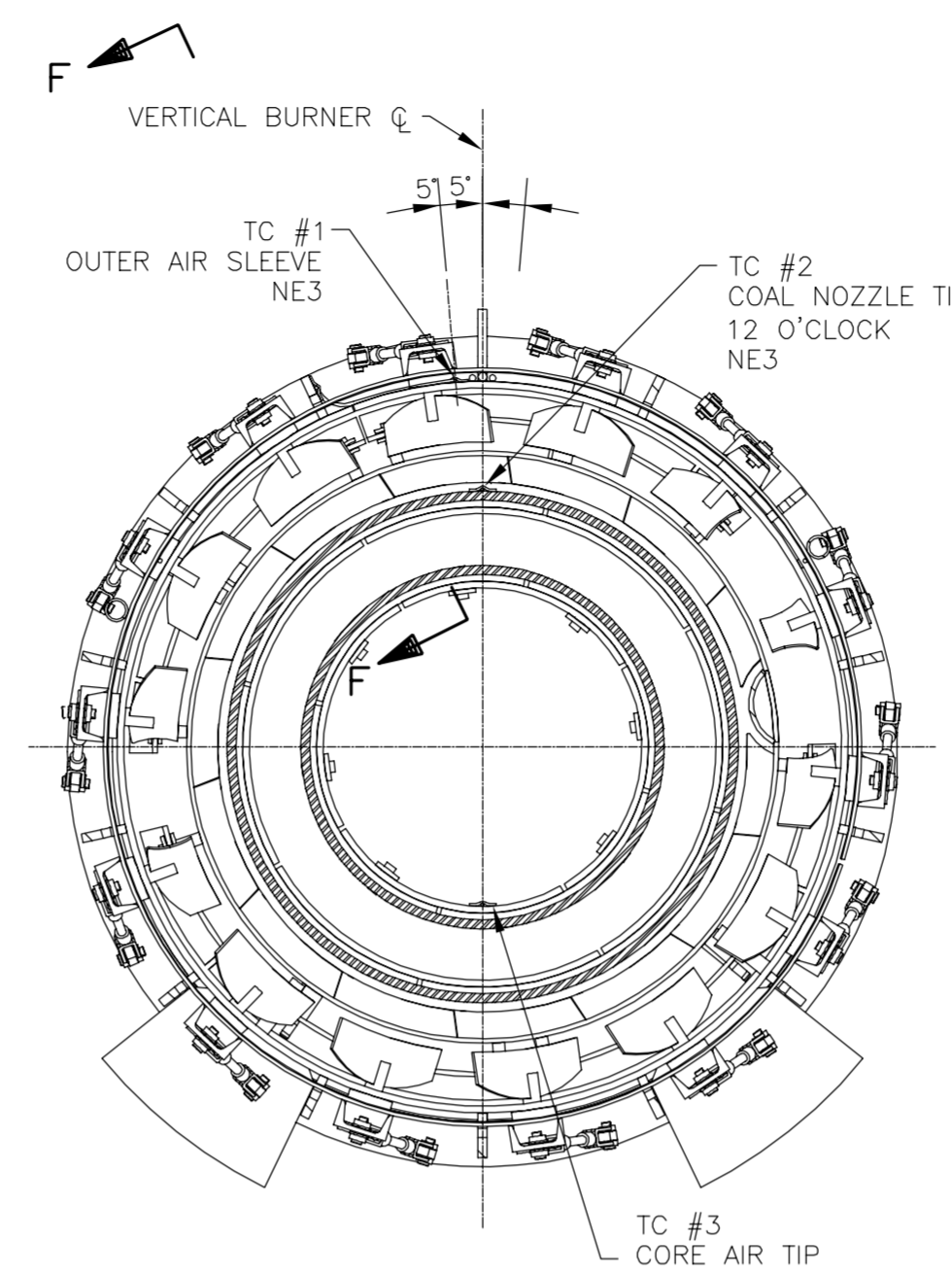


FIND NO.	QTY	DESCRIPTION	DWG. NO.	PART NO.
1	3	THERMOCOUPLE, SINGLE ELEMENT, TP310 SST, UNGROUNDED JUNCTION, WITH ARMOR LEAD TYPE "K", CHROMEL-ALUMEL #20 AWG WIRES IN 3/16" OD TP310 SHEATH WITH MAGNESIUM OXIDE INSULATION. A= 14'-0" B= 11'-0" C= 2'-0"	315574B	6267859
2	3	THERMOCOUPLE WELD SLEEVE (SUPPLIED W/TC)	6254930A	6254930

REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL
1	UPDATED BURNER GRAPHICS.	LLT 7/7/21	KAO

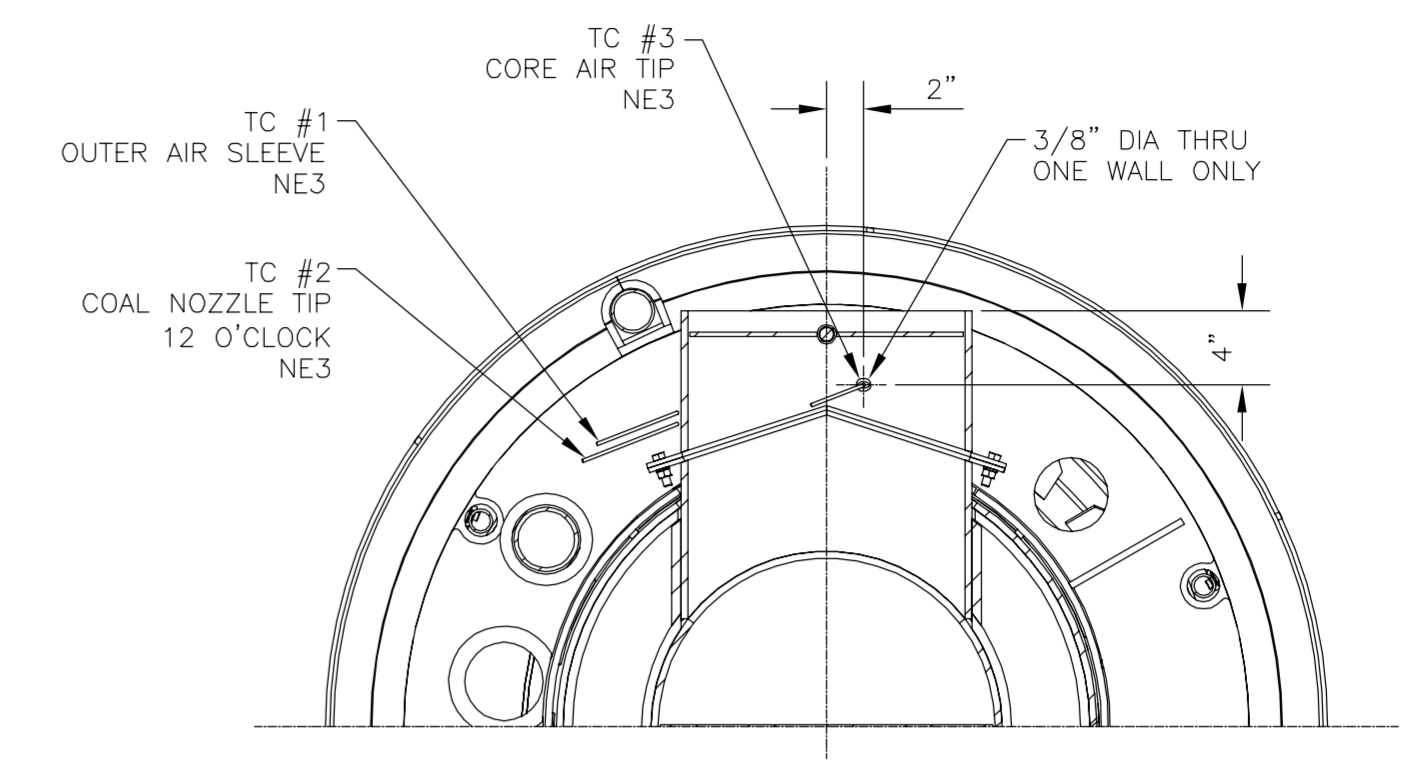


TYPICAL BURNER SECTIONAL SIDE VIEW



SECTION A-A

THERMOCOUPLE LOCATIONS TO BE USED WITH BURNERS  
566934E, 566935E, 566936E & 566937E  
566930E, 566931E, 566932E & 566933E  
THERMOCOUPLE LOCATIONS OPPOSITE.

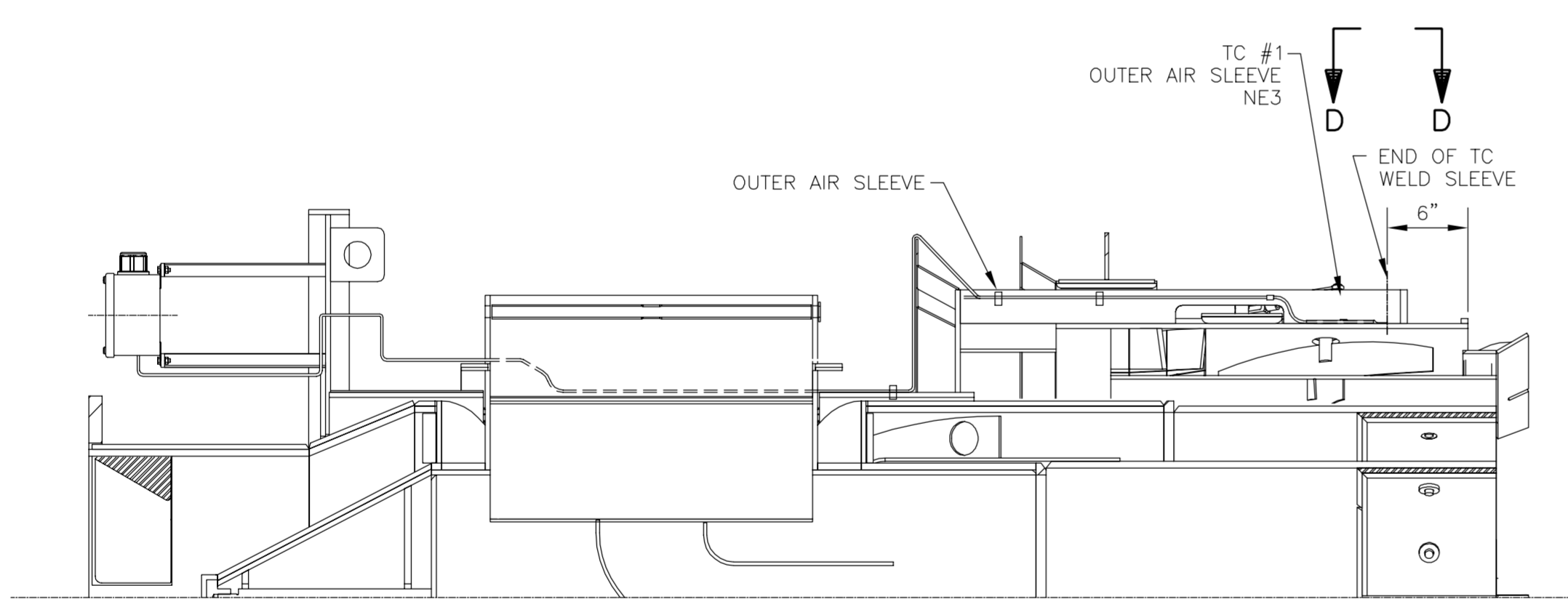


SECTION B-B

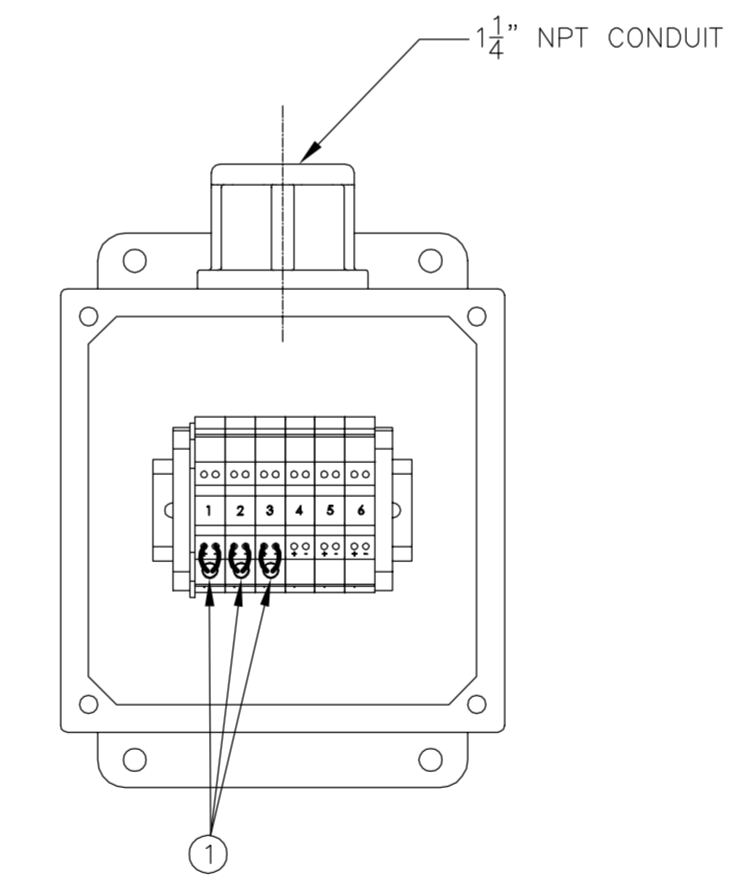
THERMOCOUPLE LOCATIONS TO BE USED WITH BURNERS  
566934E, 566935E, 566936E, 566937E  
566930E, 566931E, 566932E & 566933E  
THERMOCOUPLE LOCATIONS OPPOSITE.  
EXCEPT CORE AIR TIP THERMOCOUPLE

**ERECTION NOTES**

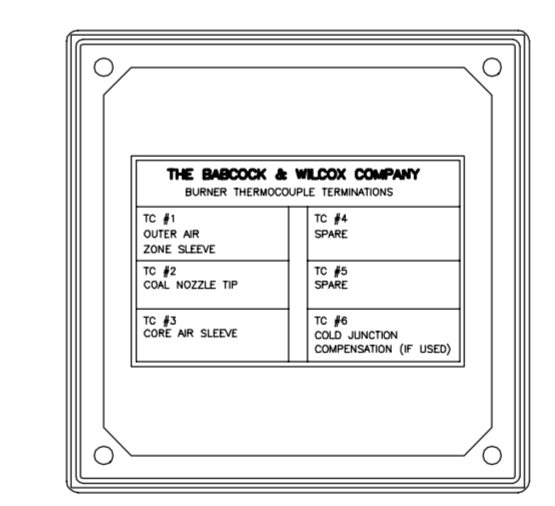
- NE1. UNLESS OTHERWISE NOTED: ALL NPP TO NPP WELDS SHALL CONFORM TO GOOD INDUSTRY PRACTICE.
- NE2. CAUTION SHOULD BE USED NOT TO KINK LEAD WIRE WHEN BENDING. A 2" MINIMUM BEND RADIUS IS REQUIRED.
- NE3. LOCATE THERMOCOUPLE AS SHOWN AND ROUTE LEAD WIRE SUCH THAT IT CLEARS ALL MOVING MECHANISMS. LEAD WIRE TO BE KEPT CLEAR OF ANY OBSTRUCTION OR INTERFERENCE.
- NE4. THERMOCOUPLE TO BE TAGGED IN FIELD TO INDICATE LOCATION OF THERMOCOUPLE WELD SLEEVE  
EX: COAL NOZZLE, AIR SLEEVE, EXT
- NE5. EXCESS THERMOCOUPLE WIRES SHOULD BE BOUND IN A (6") MINIMUM RADIUS WHEN POSSIBLE.
- NE6. TYPE "K" THERMOCOUPLE WIRE:  
+ THERMOCOUPLE WIRE COLOR = YELLOW  
- THERMOCOUPLE WIRE COLOR = RED



SECTION F-F



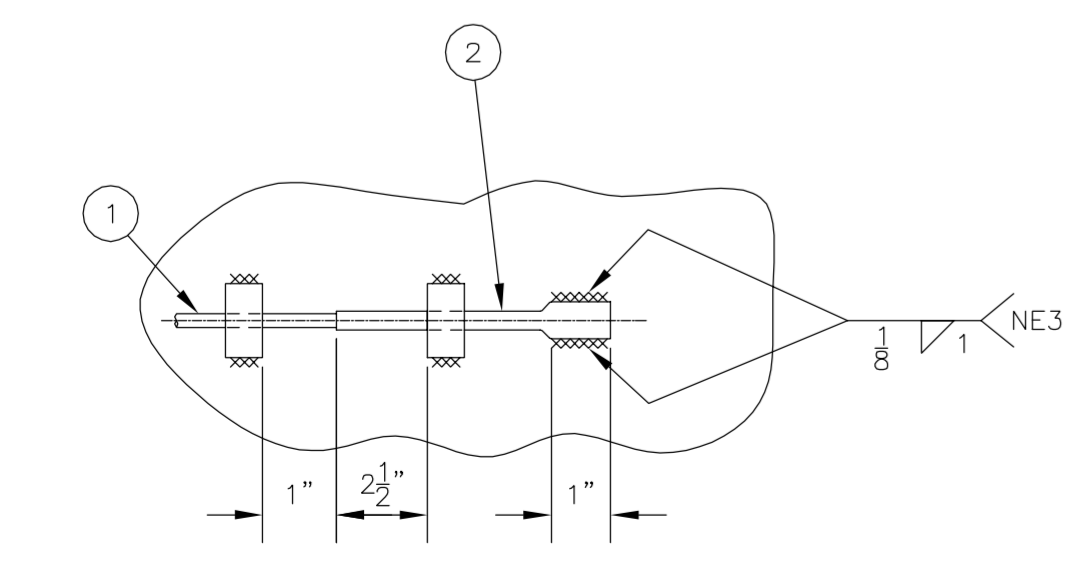
SECTION C-C  
PTC TERMINAL CABINET INTERIOR LAYOUT  
SHOWN WITH COVER REMOVED



SECTION E-E

**REFERENCE DRAWINGS:**

ERECTION ARRANGEMENT BURNER CW	566930E
ERECTION ARRANGEMENT BURNER CW	566931E
ERECTION ARRANGEMENT BURNER CW	566932E
ERECTION ARRANGEMENT BURNER CW	566933E
ERECTION ARRANGEMENT BURNER CCW	566934E
ERECTION ARRANGEMENT BURNER CCW	566935E
ERECTION ARRANGEMENT BURNER CCW	566936E
ERECTION ARRANGEMENT BURNER CCW	566937E



VIEW D-D  
SCALE: 6" = 1'-0"

PUBLIC POWER GENERATION AGENCY  
WHELAN ENERGY CENTER - UNIT 2  
STEAM GENERATOR  
145300.62.3401

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DWR: C.A. IAFANO CHK'D: D.A. SMITH APP'D: D.W. DOWELL DATE: 06/27/08 SCALE:	PROJECT NO: 0635-199A COA: AC5100 DWG. NO: B0012050 REV: 01
USER DEFINED FIELD TYPE: PROJECT DIST. CUST: YES DIST. EREC: YES DIST. MFG: NO INTERNAL OFFICE DWG. NO.: CUST. DWG. NO.:	PROJECT NO: 0635-199A COA: AC5100 DWG. NO: B0012050 REV: 01 - DO NOT SCALE - USE DIMENSIONS ONLY



Weld Schedule Version: 2.1.6

NON-PRESSURE TO NON-PRESSURE WELDS										COMMODITY:		AIREJET BURNER					
ITEM NO.	DESCRIPTION	ARRANGEMENT DRAWING NUMBER	NON-PRESSURE PART		NON-PRESSURE PART		APPLICABLE CODE (NOTE 1)	SIZE AND TYPE OF WELD	QUANTITY OF WELD (LF)	WELDING ENGINEER RESPONSIBILITY							
			BASE MATERIAL	MIN. THK. AT JOINT	BASE MATERIAL	MIN. THK. AT JOINT				NDE REQUIREMENTS	MINIMUM PREHEAT (°F)	POST WELD HEAT TREAT (°F)	FILLER METAL TYPE (NOTE 2)	WELDING PROCEDURE SPEC	TOTAL LBS PER DIA.		
														3/32"	1/8"	OTHER	
C1	REGULATING ROD SUPPORT PIPE TO COAL ELBOW	B0644020	TP309H	0.178	A36	0.500	S	1/8 FILLET	3	VT	70	NONE REQUIRED	309				C1
C2	REGULATING ROD SUPPORT PIPE TO ROD AND PORT SEAL	B0644020	TP309H	0.178	A27 N2 CL2	0.375	S	1/8 FILLET	3	VT	70	NONE REQUIRED	309				C2
C3	REGULATING ROD SUPPORT PIPE TO DRIVE BRACKET	B0644020	TP309H	0.178	SA106B	0.189	S	3/16 FILLET	2	VT	70	NONE REQUIRED	309				C3

**NOTES**

1. APPLICABLE CODES:  
E = ASME B31.1 BOILER EXTERNAL  
N = ASME B31.1 NON-BOILER EXTERNAL  
S = ASME SECTION I  
C = CFR SECT. 46 PARTS 41 TO 69  
M = MIL-STD-278E  
ANY OTHER CODE MUST BE LISTED IN APPLICABLE CODE BLOCK

2. FILLER METAL ABBREVIATIONS:  
CS - CARBON STEEL (AI ACCEPTABLE)  
70 UTS - CARBON STEEL WITH 70,000 PSI UTS (A1 ACCEPTABLE)  
75 UTS - CARBON STEEL WITH 75,000 PSI UTS STRESS RELIEVED  
A1 - CARBON - 1/2 MOLYBDENUM  
C3 - CARBON - 1 NICKEL  
B2 - 1 1/4CR - 1/2 MOLYBDENUM  
B3 - 2 1/4CR - 1 MOLYBDENUM  
B9 - 9CR - 1 MOLYBDENUM - V (MN + NI ≤ 1.5%)  
3XX - STAINLESS STEEL  
NiCr - INCONEL  
ANY OTHER FILLER METAL MUST BE LISTED IN FILLER METAL TYPE BLOCK

3. THE RESPONSIBILITY FOR ALL FIELD WELDING RESTS SOLELY WITH THE ERECTION CONTRACTOR.  
ADDITIONAL NOTES:

UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN INCHES.

ITEM NO	QTY	DESCRIPTION	DRAWING NUMBER	PART NUMBER	MATERIAL
1	1	ASSEMBLY CORE AIR SLEEVE & COAL NOZZLE	6361421J	6361421	
2	1	DEFLECTOR, 1'-9" NOZZLE	2135896C	2135896	SILICON CARBIDE
3	1	GASKET	356104C	4687579	
4	1	GASKET CLOTH FIBERGLASS W/NR 400F	193291B	3002321	CLOTH FIBERGLASS W/NR 400F
5	1	COAL NOZZLE MOUNTING PLATE	6372973B	6372973	A36
6	1	COAL NOZZLE MOUNTING PLATE	6378475B	6378475	A36
7	2	ASSEMBLY & DETAIL RETAINER BAR	B0411378	7204267	
8	1	SEALER, RTV SILICONE RUBBER		0330146	GERTV 106
9	2	NUT, HEX 1/2"-13UNC-2B		4546572	A563A
10	2	PLAIN WASHER, 1/2" TYPE B (W), ID=17/32" OD=1 3/4" THK=3/32"		6029947	F844

**NOTES (EXISTING COAL NOZZLE AND CORE AIR SLEEVE REMOVAL):**

- NE1. UNBOLT COAL ELBOW AND LAY ASIDE.
- NE2. UNBOLT CERAMIC DEFLECTOR AND LAY ASIDE.
- NE3. UNBOLT CORE AIR INLET ASSEMBLY. PROP IN PLACE TO NOT DAMAGE DAMPER SHAFT.
- NE4. REMOVE WELD AROUND COAL NOZZLE MOUNTING PLATES TO COVER PLATE. GRIND ANY WELD RESIDUE FROM BURNER COVER PLATE. REMOVE WELD ALL AROUND THE CORE AIR INLET TO CARRIER SLEEVE AND SCAB PLATE. REMOVE WELDS OF SCAB PLATE TO CARRIER SLEEVE. SAVE SCAB PLATE FOR REINSTALLATION.
- NE5. REMOVE OLD COAL NOZZLE AND CORE AIR SLEEVE ASSEMBLY.

**REFERENCE DRAWINGS:**

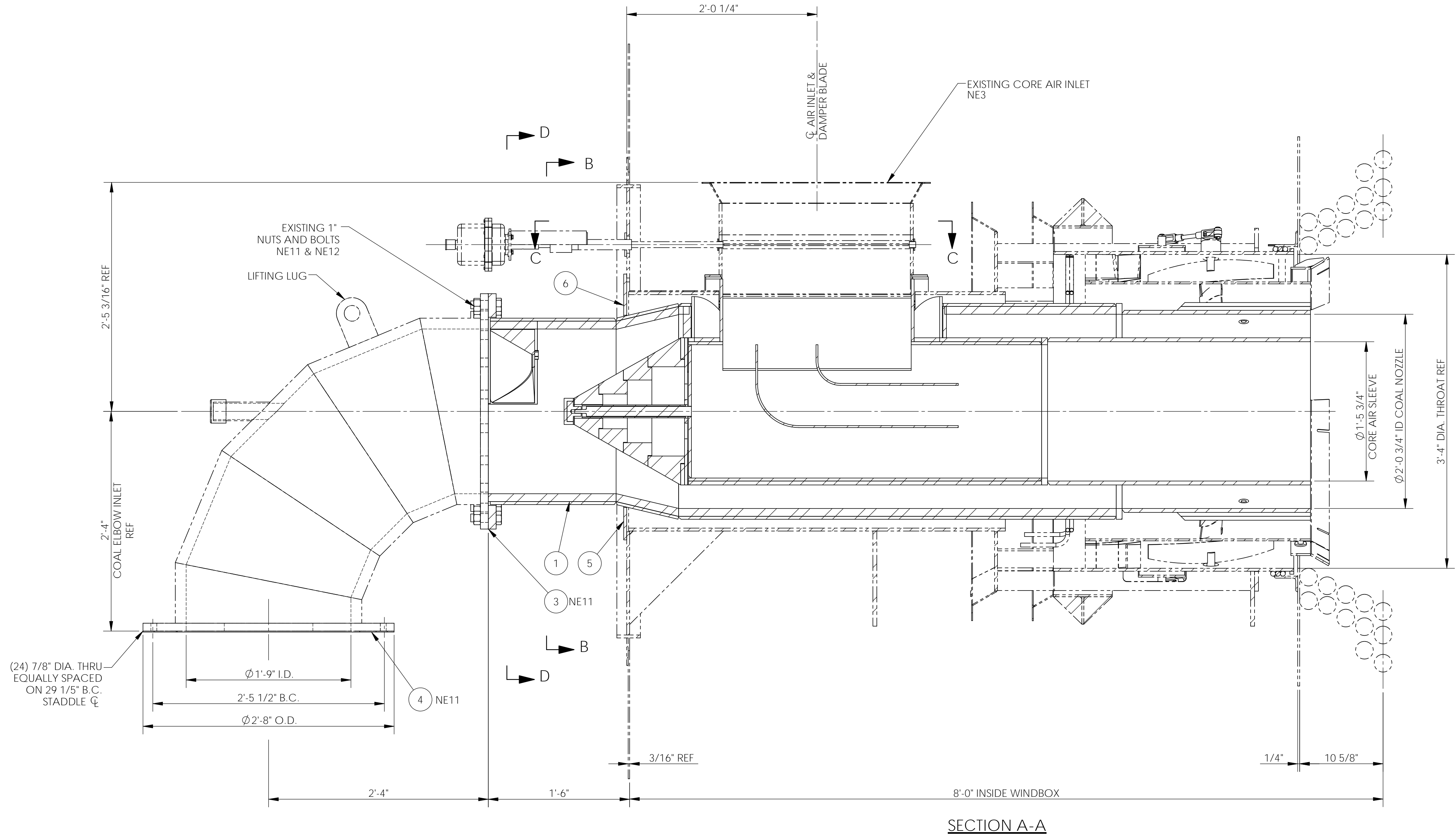
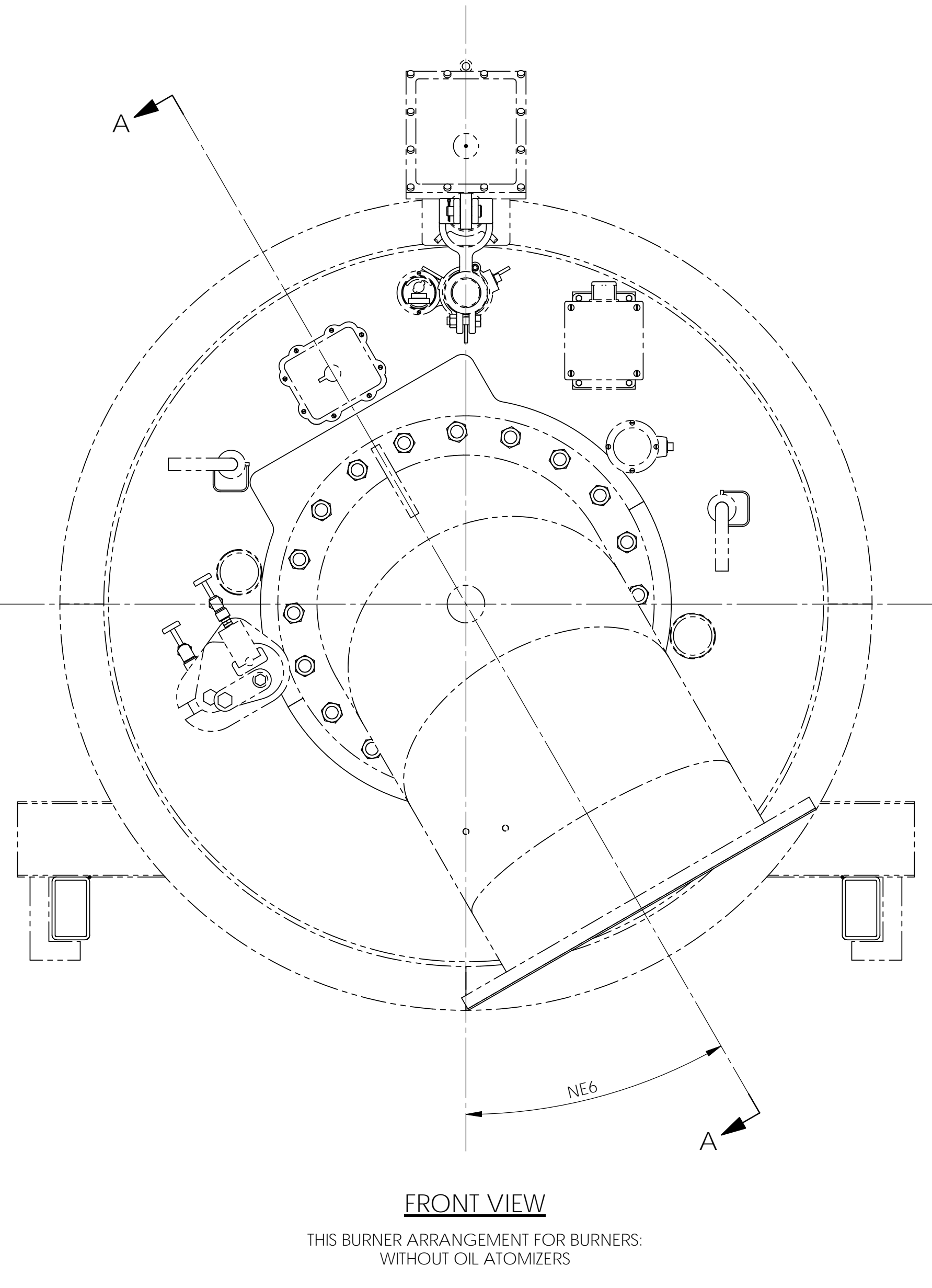
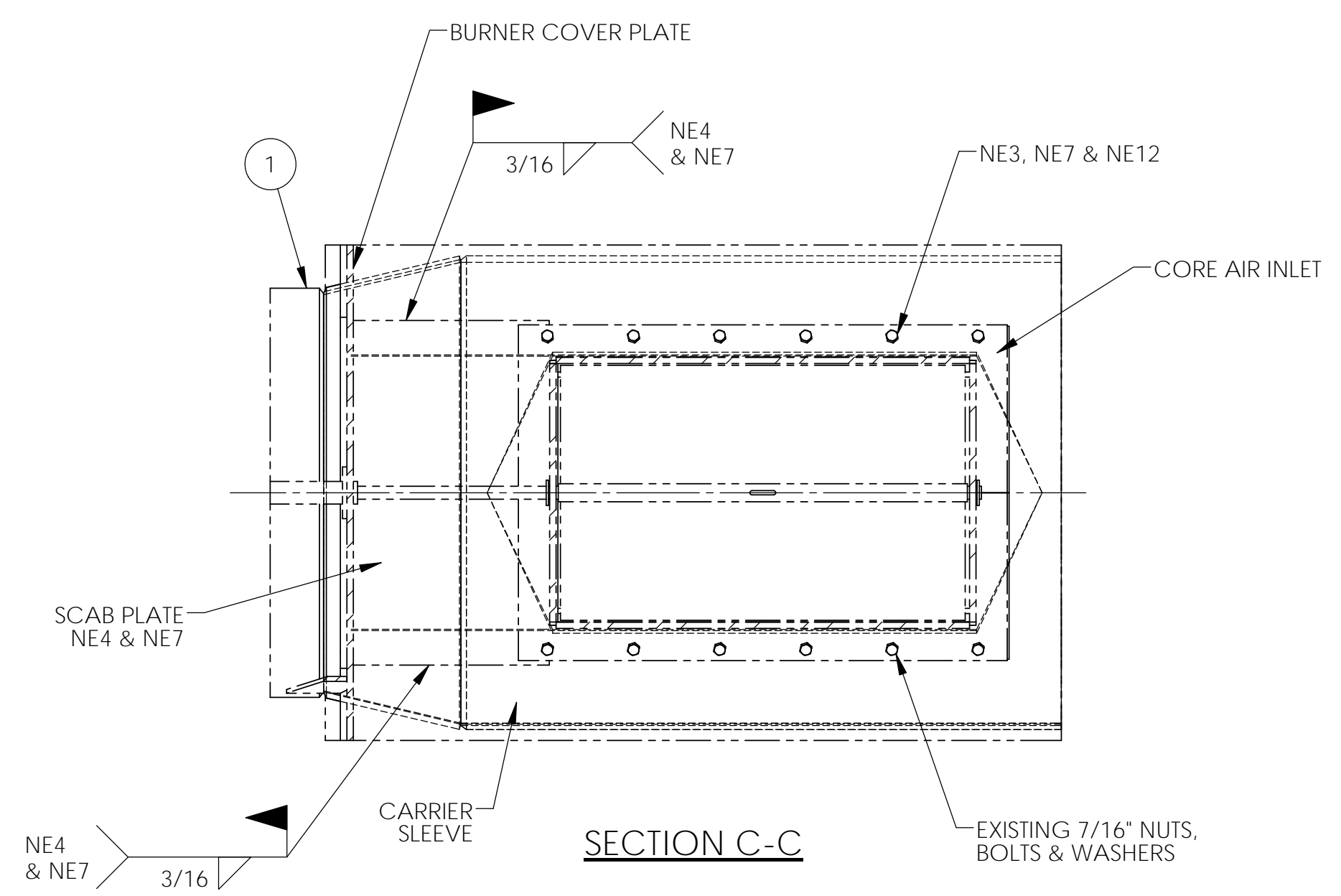
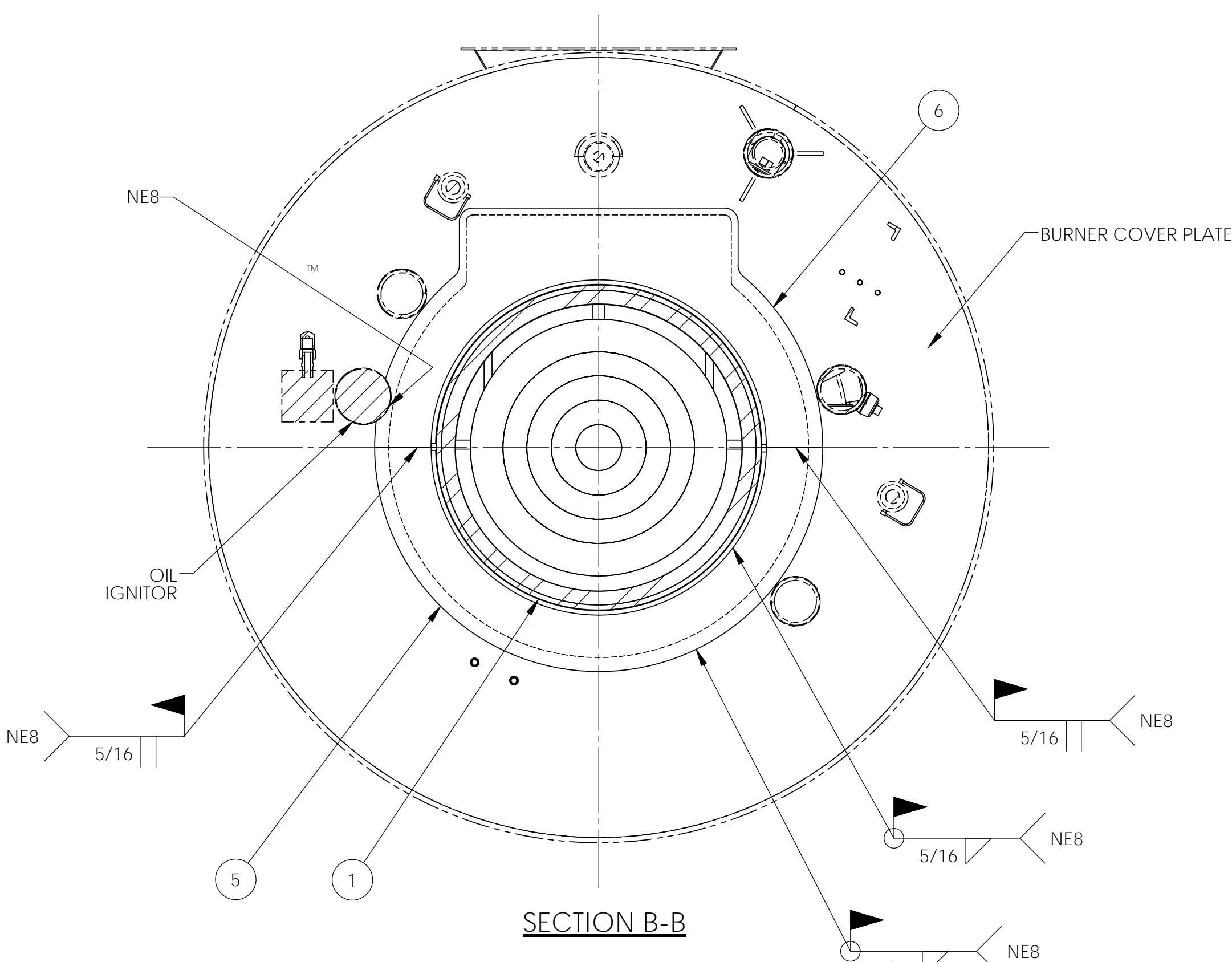
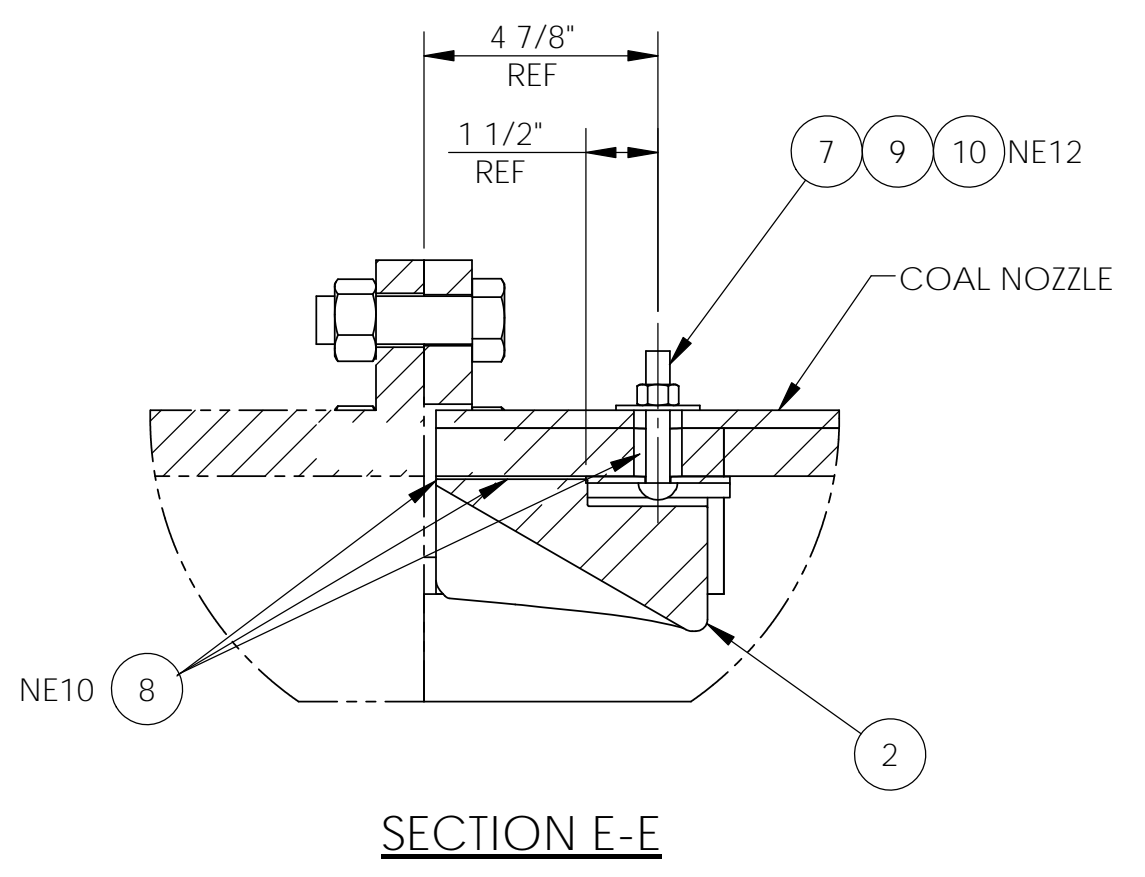
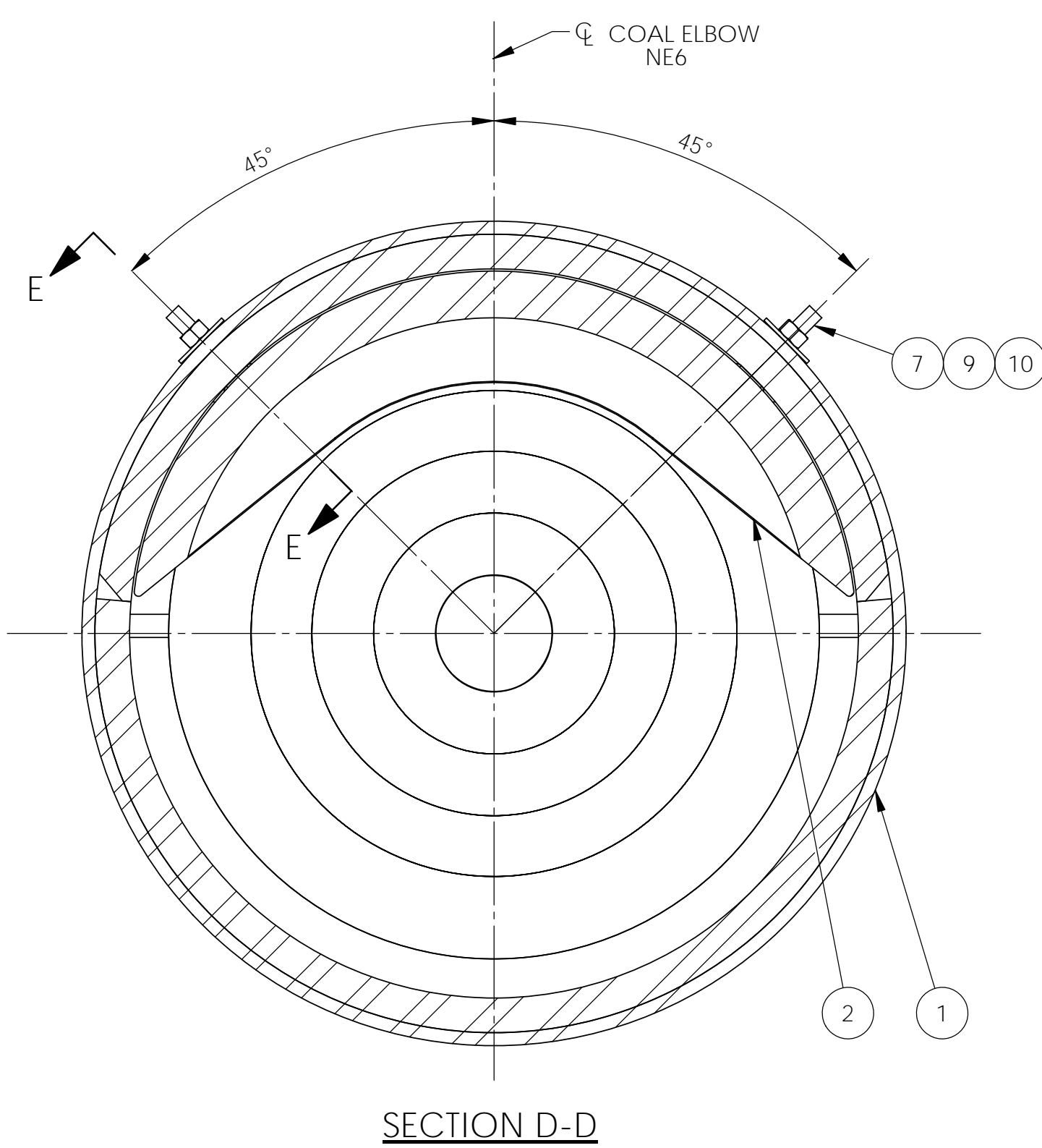
- GENERAL ARRANGEMENT FRONT WALL ..... 93306J
- GENERAL ARRANGEMENT REAR WALL ..... 93307J
- ERECTION ARRANGEMENT THERMOCOUPLE ASSEMBLY ..... B0012050
- WELDING INSTRUCTIONS FOR CERAMIC COMPONENTS ..... 275065A

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	UPDATED NOTES NE4 & NE7. ADDED WELDS AND LABELS IN SECTION C-C.	1/26/2023	KAO

**NOTES (NEW COAL NOZZLE AND CORE AIR SLEEVE INSTALLATION):**

- NE6. INSTALL NEW COAL NOZZLE AND CORE AIR ASSEMBLY IN APPROPRIATE BURNER. SEE GENERAL ARRANGEMENT DRAWING. TO SEE WHAT ROTATION TO SET COAL NOZZLE AND CORE AIR ASSEMBLY FOR BURNER IT IS BEING INSTALLED IN. SET DIMENSION TO COAL NOZZLE INLET FLANGE, AS SHOWN.
- NE7. REATTACH CORE AIR INLET ASSEMBLY, USING EXISTING 7/16" HEX BOLT, WASHER AND NUTS. INSTALL THE EXISTING SCAB PLATE BACK OVER THE OPENING BETWEEN THE BURNER COVER PLATE AND CORE AIR INLET AND WELD ENDS TO CARRIER SLEEVE. NO WELDING IS NECESSARY AROUND THE CORE AIR INLET.
- NE8. SEAL WELD MOUNTING PLATES ITEMS 5 & 6 TO COVER PLATE AND COAL NOZZLE. PER SECTION B-B. NOTCH AS REQUIRED. TO CLEAR OIL IGNITOR. FOR WELDING CERAMIC LINED COMPONENTS SEE DRAWING 275065A.
- NE9. INSTALL DEFLECTOR, ITEM NO. 2, USING ITEMS 7, 9 & 10.
- NE10. APPLY A LIBERAL COAT OF RTV SEAL, ITEM NO. 8, TO TOP SIDE OF DEFLECTOR. ALSO APPLY TO LEADING EDGE OF DEFLECTOR AND COAL NOZZLE AND FILL HOLES IN THE COAL NOZZLE FOR DEFLECTOR RETAINER BARS.
- NE11. REATTACH COAL ELBOW USING EXISTING 1" BOLTS AND NUTS. USE GASKET, ITEM NO. 4 AT COAL ELBOW INLET AND GASKET, ITEM NO. 3, AT COAL ELBOW OUTLET.
- NE12. TORQUE REQUIREMENTS:  

ITEM NO.	DESCRIPTION	FT/LBS
EXISTING CORE AIR INLET	7/16" BOLTS NUTS	20
EXISTING COAL ELBOW	1" BOLTS AND NUTS	245
9	1/2" NUT	8
- NE13. ESTIMATED WEIGHTS:  
 DEFLECTOR (ITEM NO. 2) 23 LBS  
 COAL NOZZLE AND CORE AIR SLEEVE (ITEM NO. 1) 3200 LBS



PUBLIC POWER GENERATION AGENCY  
WHELAN ENERGY CENTER-UNIT 2

**The Babcock & Wilcox Company**

FIELD ALTERATION  
COAL NOZZLE & CORE AIR SLEEVE  
AIREJET PC FIRED  
BURNER

OWNER: DOW	DESIGNER: L.L. THOMAS	PROJECT NO:	0635-BA9311102
CHECKED: K.A. OYER	DATE: 1/17/2023	COA: AC5100	DWG NO: B0644019
APPROVED: K.A. OYER	SCALE: 1 1/2"=1'-0"	CUSTOMER: B0644019	REV: 1
DATE: 1/17/2023	TYPE: PROJECT	INTERNAL OFFICE DWG NO:	
DEFERRED FIELD:	TYPE: PROJECT	CUSTOMER:	
DWG CONTRACT NO:	DEF EREC: YES	CUSTOMER:	
DEF MFG: NO	DEF EREC: YES	CUSTOMER:	
- DO NOT SCALE - USE DIMENSIONS ONLY			

ITEM NO.	QTY	DESCRIPTION	DRAWING NUMBER	PART NUMBER	MATERIAL
1	1	ASSEMBLY CORE AIR SLEEVE & COAL NOZZLE	B0653233	6962197	
2	1	GASKET	356104C	4687579	
3	1	COAL NOZZLE MOUNTING PLATE	6372973B	6372973	A36
4	1	COAL NOZZLE MOUNTING PLATE	6378475B	6378475	A36
5	2	ASSEMBLY & DETAIL RETAINER BAR	B0411378	7204267	
6	2	SCAB PLATE	B0653264	6963894	A1011
7	1	SCAB PLATE	6373125B	6373125	A1011
8	1	ASSEMBLY CORE AIR INLET	B0653225	6963742	
9	1	ASSEMBLY AND DETAIL BELLMOUTH INLET	B0653228	6963750	
10	1	DAMPER SHAFT	B0653226	6963746	A36
11	1	ASSEMBLY DAMPER BLADE	B0653227	6963745	
12	2	NUT, HEX 1/2"-13UNC-2B		4546572	A563A
13	2	PLAIN WASHER, 1/2" TYPE B (W), ID=17/32" OD=1 3/4" THK=3/32"		6029947	F844
14	2	PLAIN WASHER, 3/4" TYPE A (N), ID=13/16" OD=1 15/32" THK=1/8"		0493526	F844
15	14	BOLT, HEX 7/16"-14UNC-2A X 1 1/4" LG		4661267	A307A
16	14	LOCK WASHER, 7/16" HELICAL SPRING REG		3042675	STL
17	14	NUT, HEX 7/16"-14UNC-2B		4709823	A563B
18	2	SEALER RED SILICONE RUBBER GE RTV 106 (10.1 OZ. TUBE)		6834034	

**ERECTION REMOVAL NOTES:**

- ER1. UNBOLT COAL ELBOW FROM COAL NOZZLE AND COAL PIPE AND SET ASIDE FOR RE-INSTALLATION.
- ER2. UNBOLT DEFLECTOR AND SET IT ASIDE FOR RE-INSTALLATION.
- ER3. UNBOLT BELLMOUTH AIR INLET FROM CORE AIR INLET.
- ER4. REMOVE ROTARY ACTUATOR AND COUPLING.
- ER5. CUT DAMPER SHAFT BETWEEN BURNER COVER PLATE AND CORE AIR INLET. LOOSEN ROD SEAL CAP AND REMOVE SHAFT SEGMENT FROM ROD SEAL.
- ER6. REMOVE BELLMOUTH AIR INLET WITH DAMPER AND REMAINING DAMPER SHAFT.
- ER7. REMOVE EXISTING SCAB PLATE FROM CARRIER SLEEVE.
- ER8. REMOVE WELD AROUND CORE AIR INLET TO CARRIER SLEEVE.
- ER9. REMOVE WELD AROUND COAL NOZZLE MOUNTING PLATE SEGMENTS TO BURNER COVER PLATE.
- ER10. REMOVE EXISTING CORE AIR SLEEVE AND COAL NOZZLE ASSEMBLY.

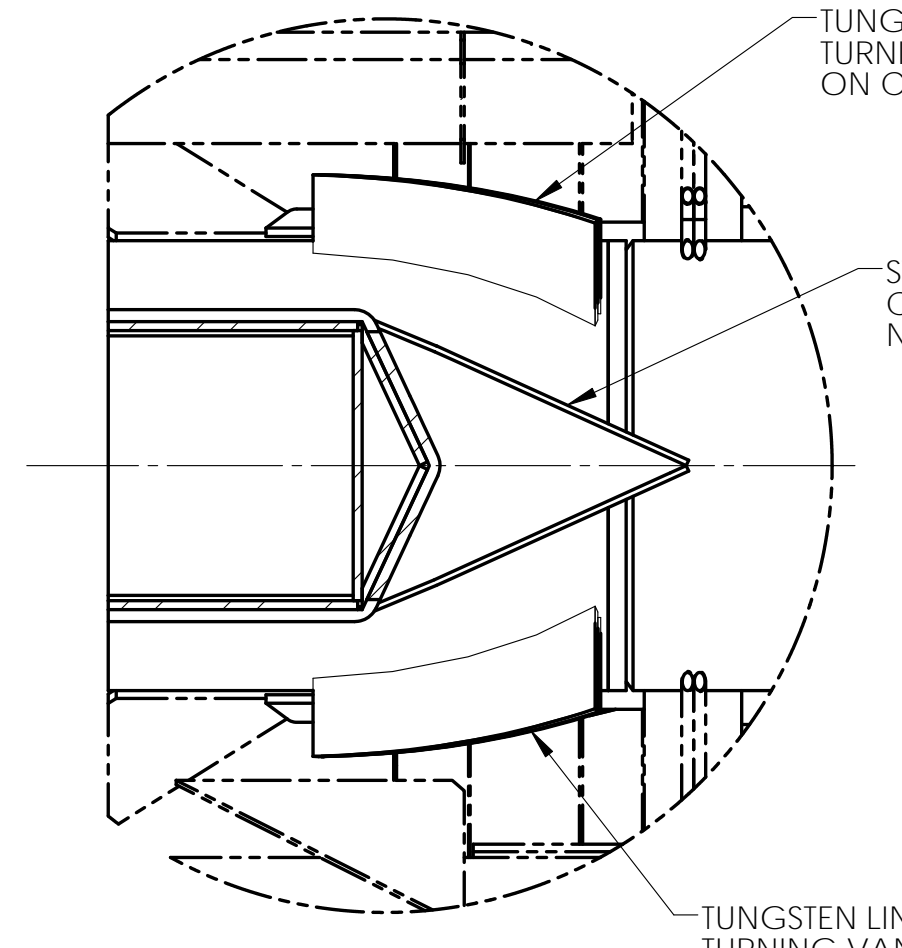
**ERECTION INSTALLATION NOTES:**

- EI1. TRIM EXISTING CARRIER SLEEVE TO DIMENSIONS SHOWN IN SECTION E-E (APPROX 6" DEEPER).
- EI2. INSERT NEW CORE AIR SLEEVE AND COAL NOZZLE ASSEMBLY INTO APPROPRIATE BURNER. REFER TO THE GENERAL ARRANGEMENT DRAWINGS TO MATCH THE ANGLE OF THE COAL NOZZLE AND CORE AIR ASSEMBLY WITH THE APPROPRIATE BURNER ROTATION.
- EI3. LOCATE END OF CORE AIR SLEEVE AND COAL NOZZLE ASSEMBLY EVEN WITH THE END OF THE INNER AIR SLEEVE, AS SHOWN.
- EI4. LOCATE SCAB PLATES ITEM NO'S. 6 & 7 AND WELD INTO PLACE.
- EI5. WELD CORE AIR INLET TO CARRIER SLEEVE AND SCAB PLATES, AS SHOWN.
- EI6. INSTALL NEW BELLMOUTH INLET AND BOLT IN PLACE TO CORE AIR SLEEVE  
A) TORQUE REQUIREMENT FOR 7/16" NUT AND BOLT IS 30 FT/LBS.
- EI7. WHILE HOLDING DAMPER (SLOT SIDE UP) AND WASHER ITEM NO. 14 IN PLACE, INSERT SHAFT THRU ROD SEAL, WASHER AND CORE AIR INLET.
- EI8. LOCATE DAMPER SHAFT FLATS, PER SECTION K-K AND DISTANCE OF SHAFT FROM BURNER COVER PLATE PER VIEW G.
- EI9. TIGHTEN ROD SEAL CAP TO INSURE PACKING IS TIGHT AGAINST CAP AND SHAFT.
- EI10. WELD DAMPER TO SHAFT (VIEW H-H), WITH THE DAMPER BLADE IN THE FULLY CLOSED POSITION AND WELD WASHERS TO SHAFT (VIEW G).
- EI11. WELD BELLMOUTH ASSEMBLY IN PLACE.
- EI12. REINSTALL COUPLING AND ROTARY ACTUATOR.
- EI13. SEAL WELD MOUNTING PLATES ITEMS 3 & 4 TO COVER PLATE AND COAL NOZZLE. PER SECTION M-M, ERECTOR WILL NEED TO SCALOP THE OUTSIDE OF MOUNTING PLATES, AS REQUIRED TO CLEAR OIL IGNITOR, SCANNER MOUNTS, VIEWPORTS, ETC. FOR WELDING CERAMIC LINED COMPONENTS, SEE DRAWING 275066A.
- EI14. INSERT EXISTING DEFLECTORS AND BOLT IN PLACE.  
A) APPLY A LIBERAL COAT OF RIV SEALER, TO TOP SIDE OF DEFLECTOR. ALSO APPLY TO LEADING EDGE OF DEFLECTOR AND COAL NOZZLE AND FILL HOLES IN THE COAL NOZZLE FOR DEFLECTOR RETAINER BARS.  
B) TORQUE REQUIREMENT FOR 1/2" NUT IS 8 FT/LBS.
- EI15. ATTACH ELBOW TO COAL NOZZLE AND COAL PIPE WITH GASKET ITEM NO. 2 AND EXISTING NUTS AND BOLTS.  
A) TORQUE REQUIREMENT FOR 1" NUT AND BOLT IS 245 FT/LBS.

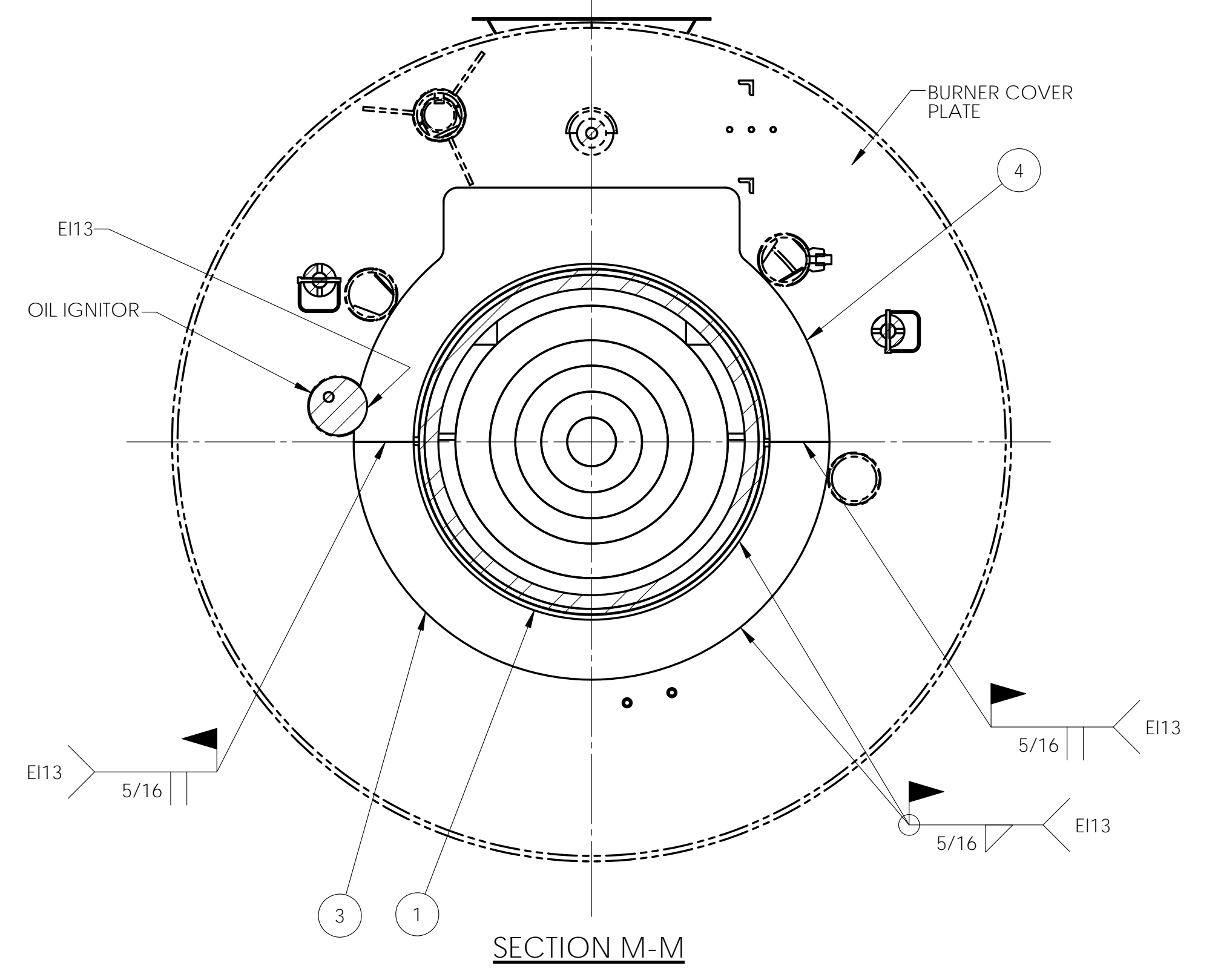
**REFERENCE DRAWINGS:**

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- GENERAL ARRANGEMENT REAR WALL ..... 93307J

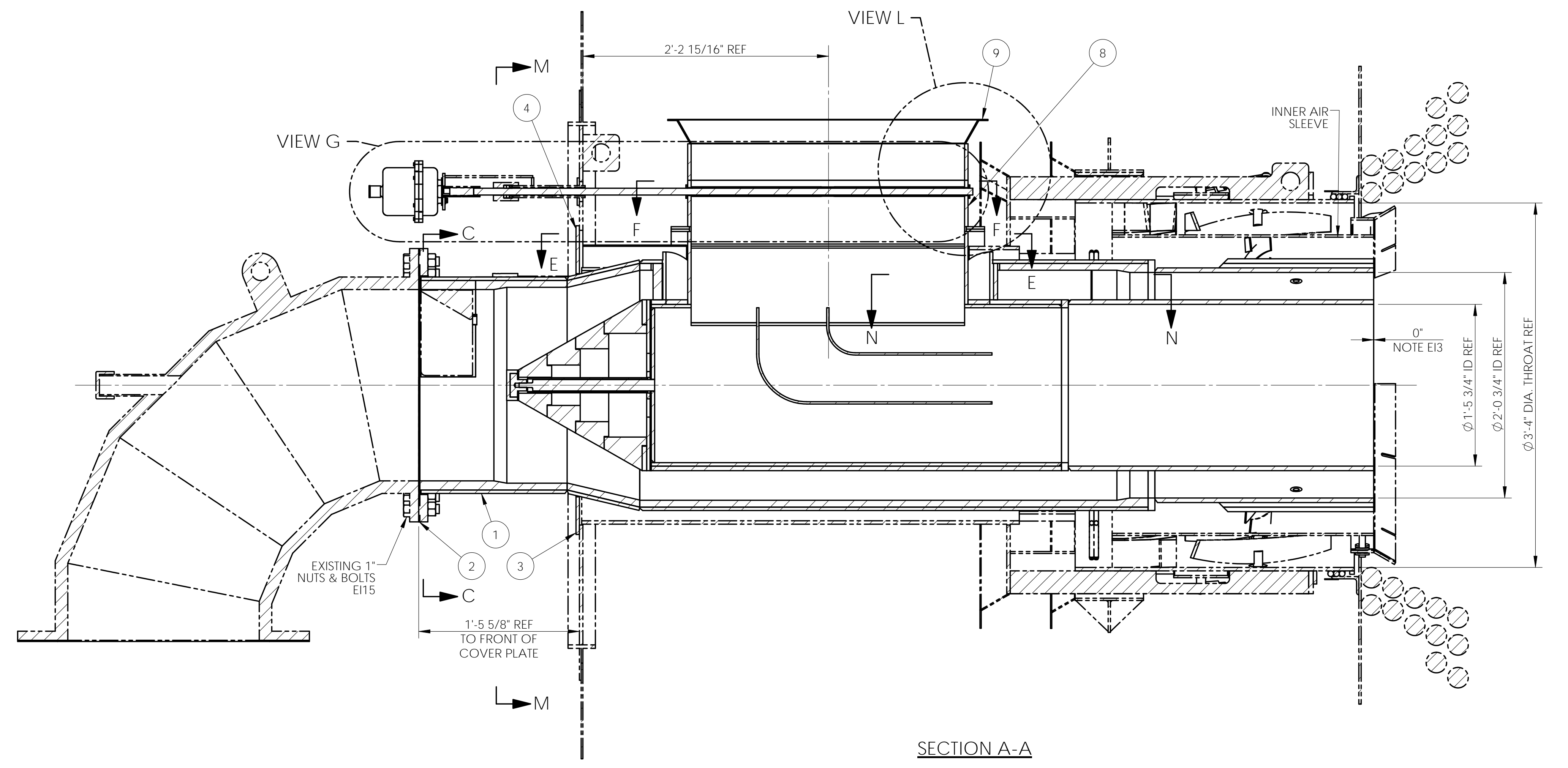
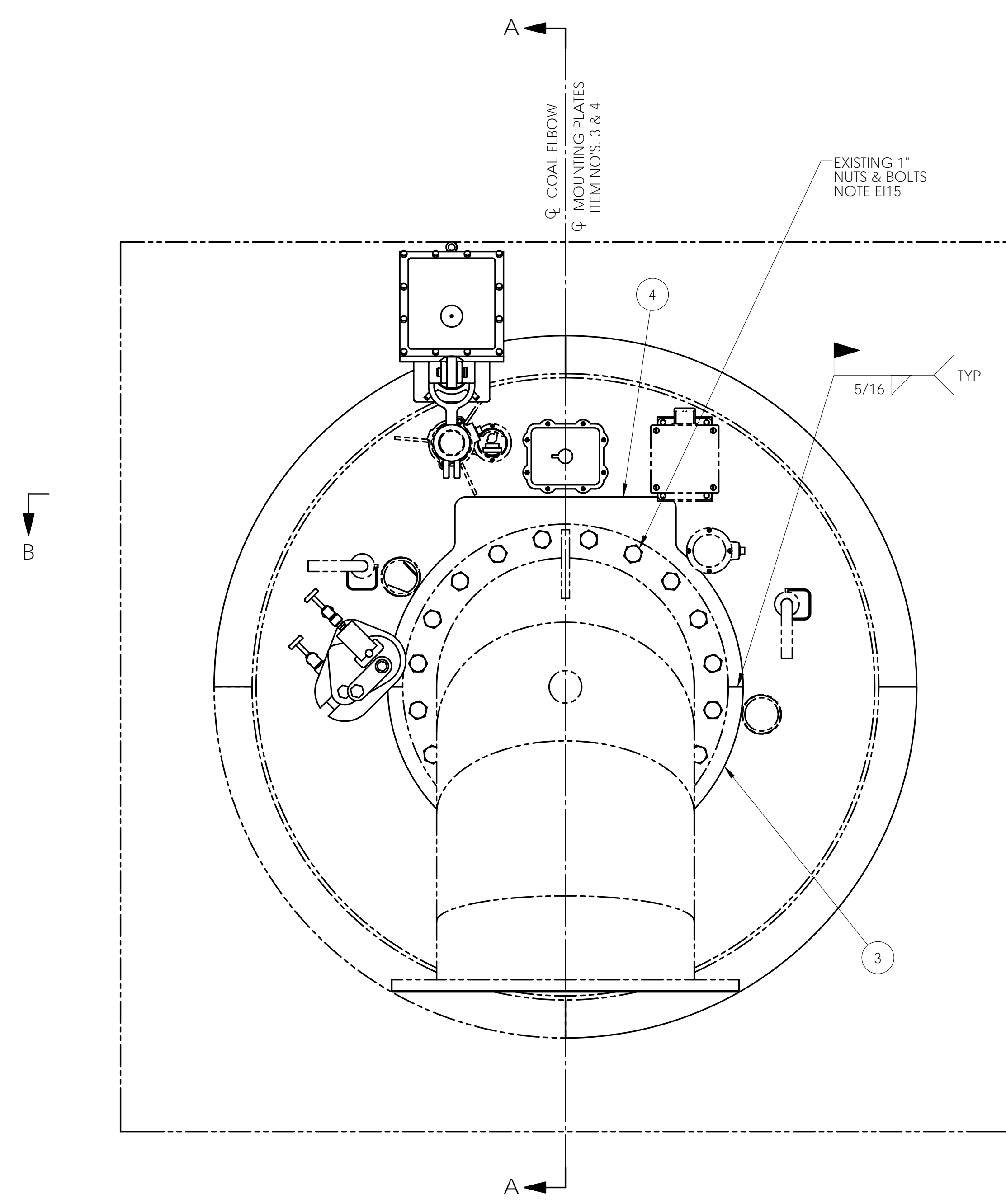
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	ADDED SECTION N-N	7/30/2024	KAO



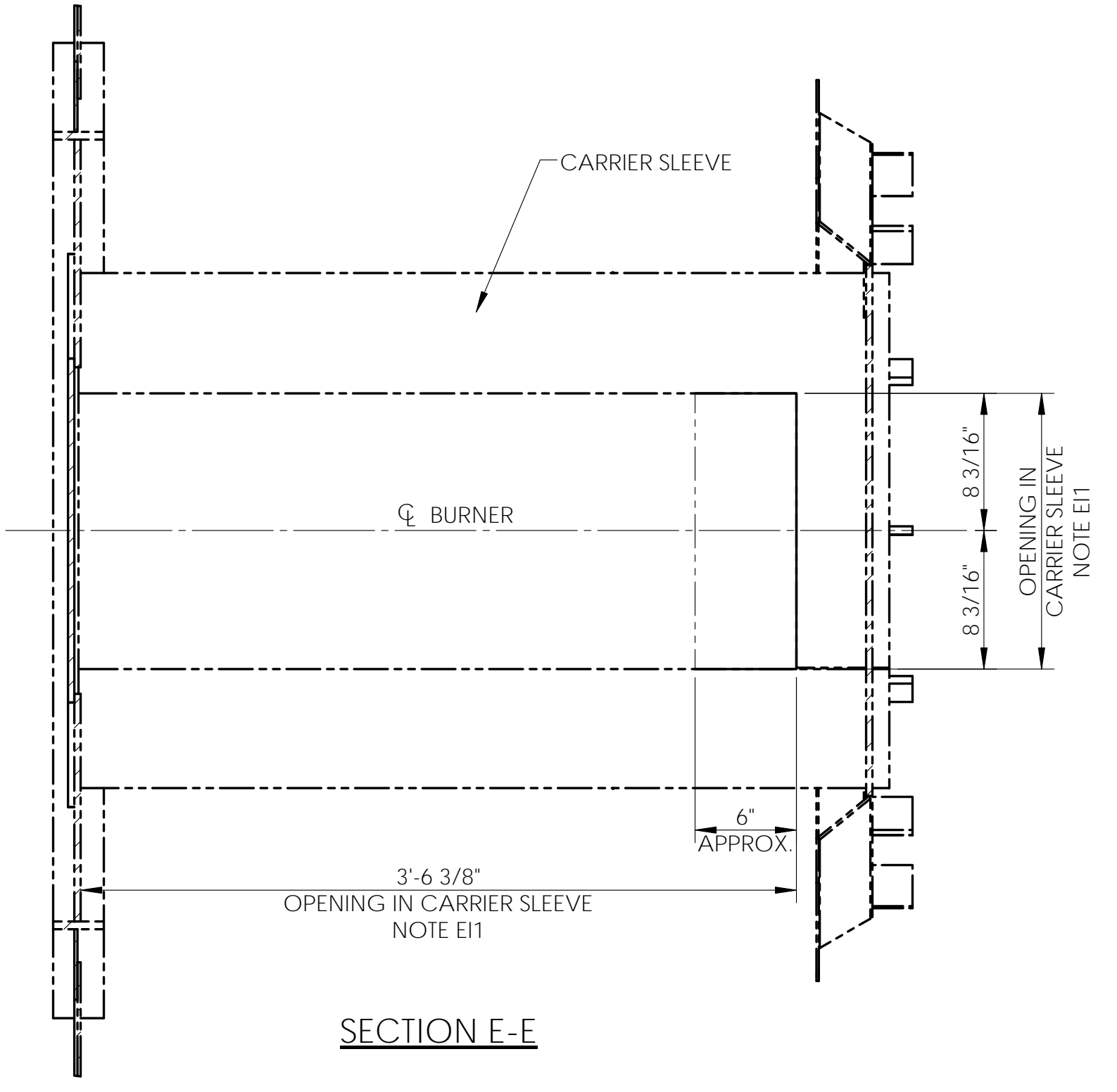
SECTION N-N



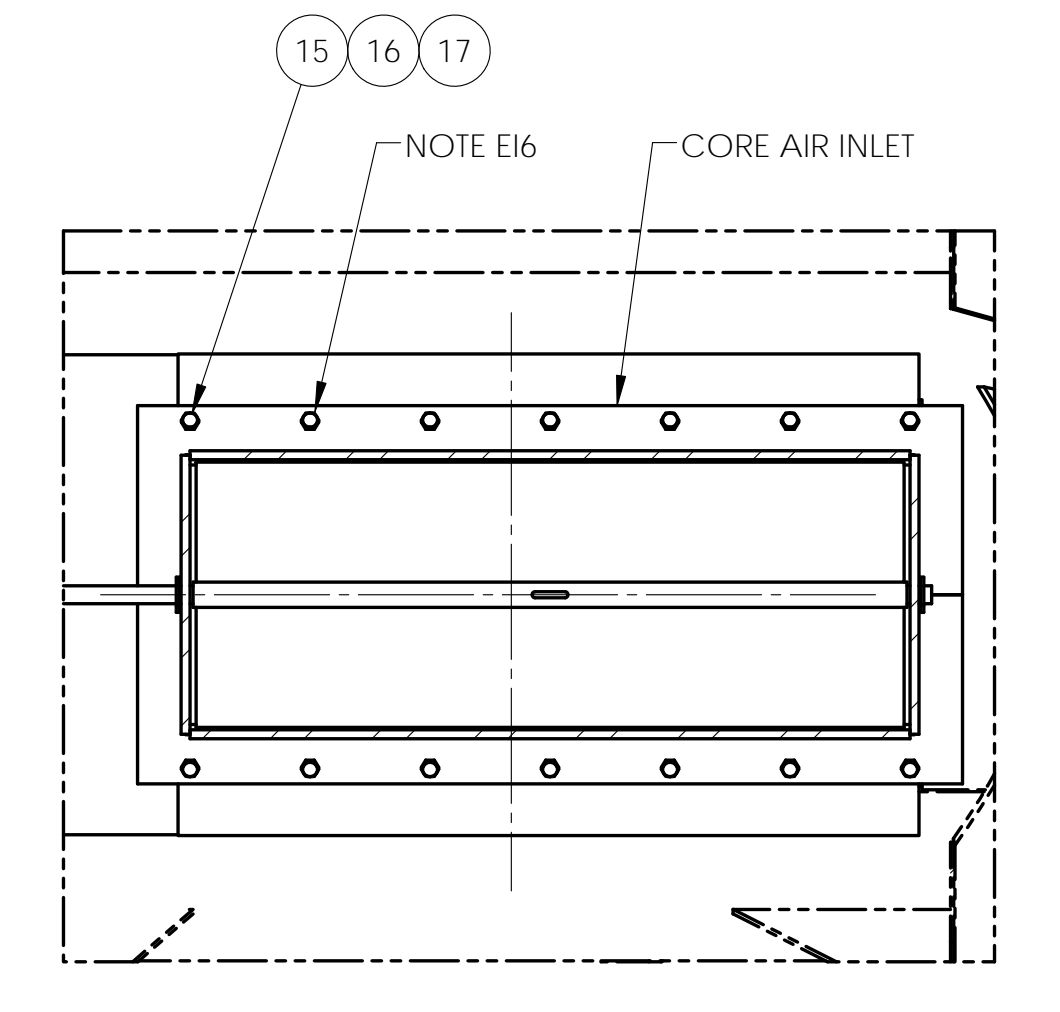
SECTION M-M



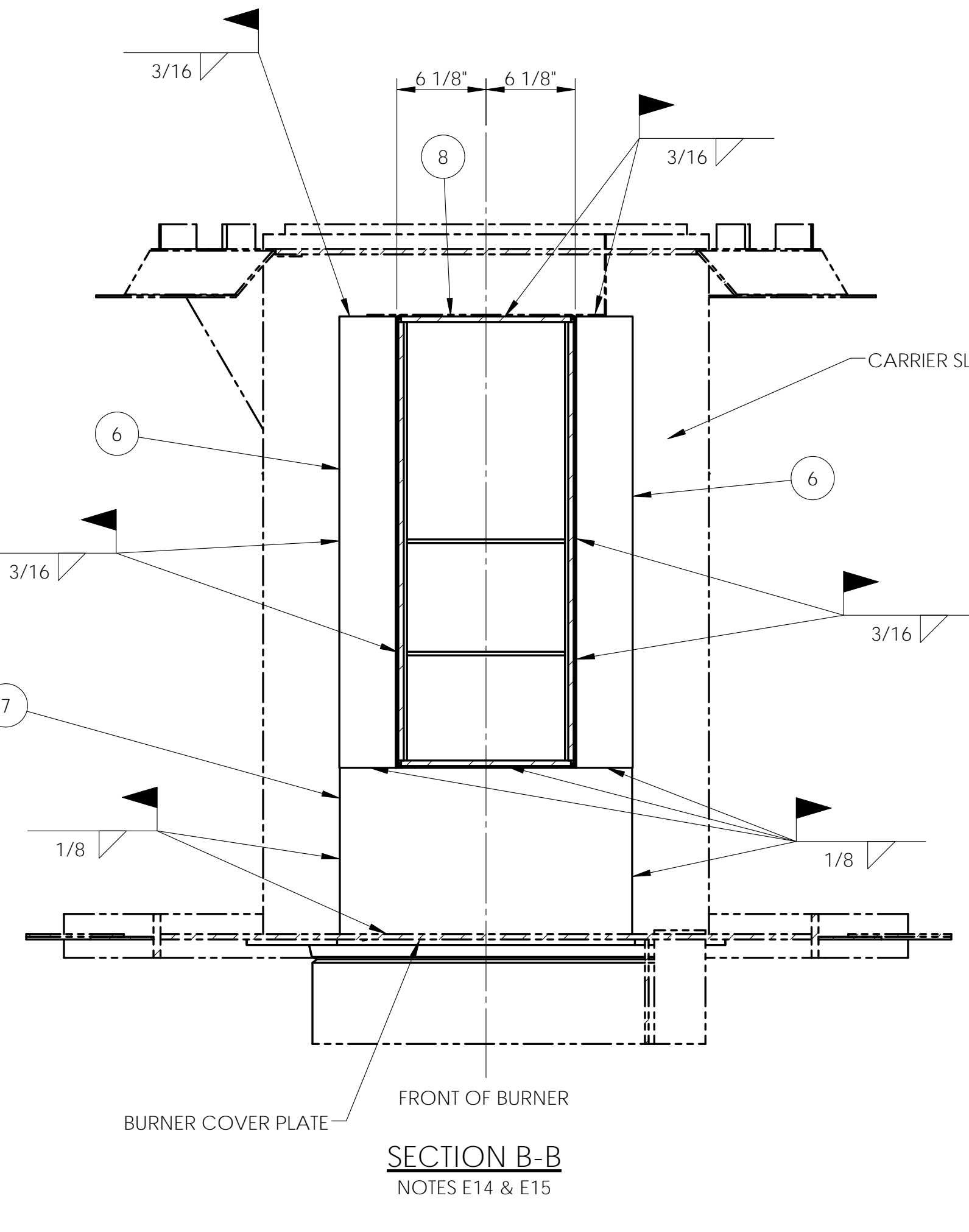
SECTION A-A



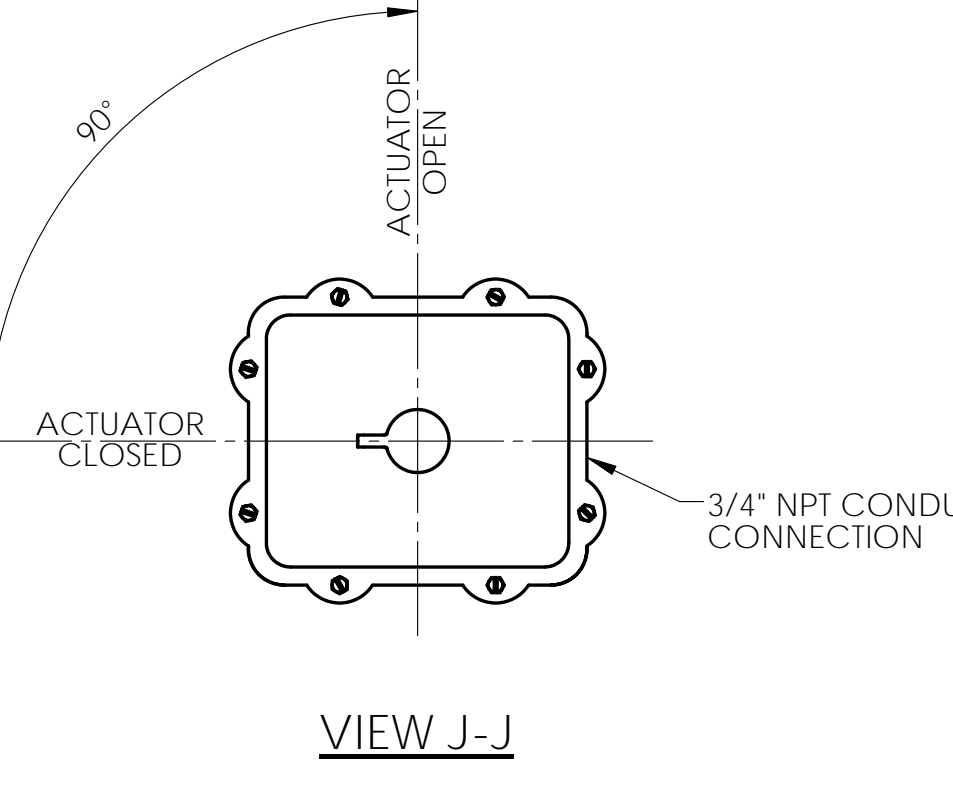
SECTION E-E



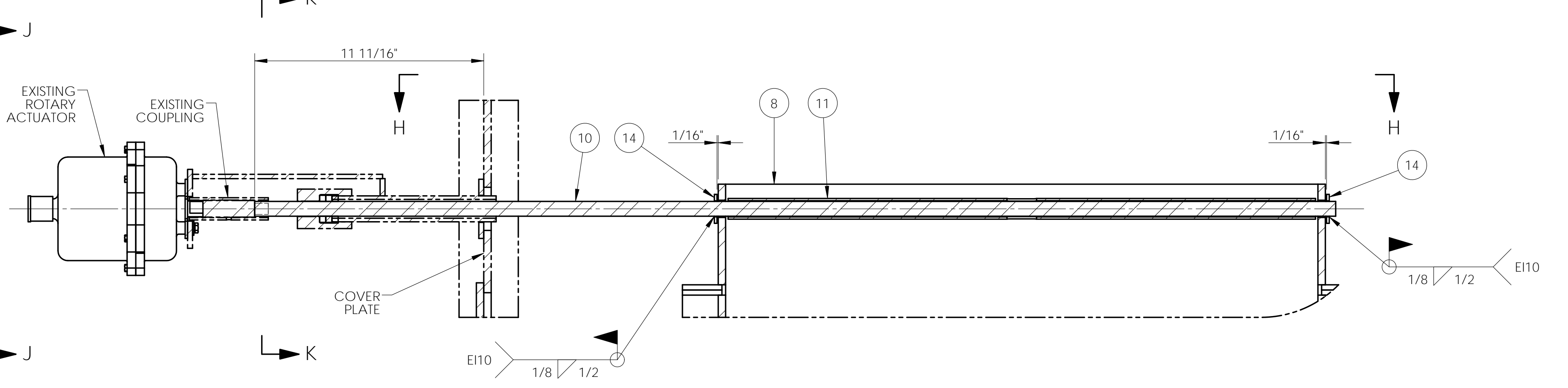
SECTION F-F



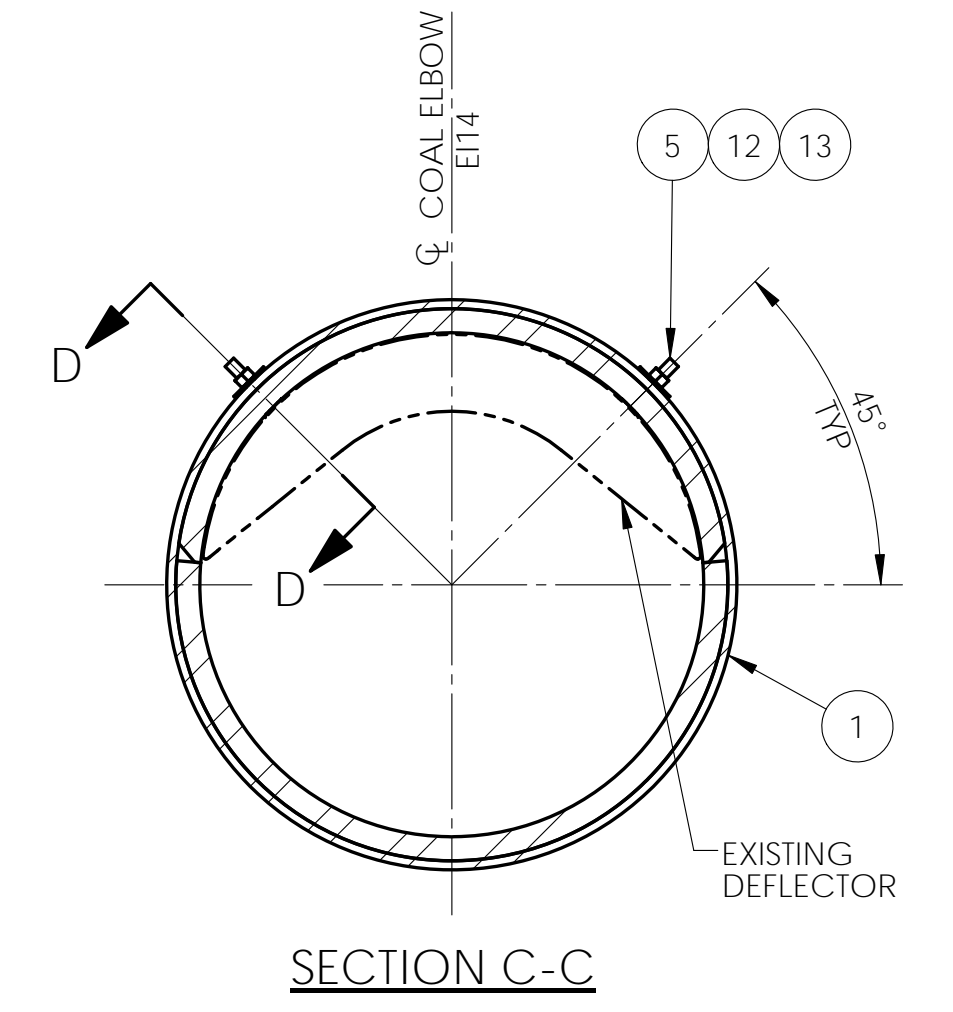
SECTION B-B  
NOTES E14 & E15



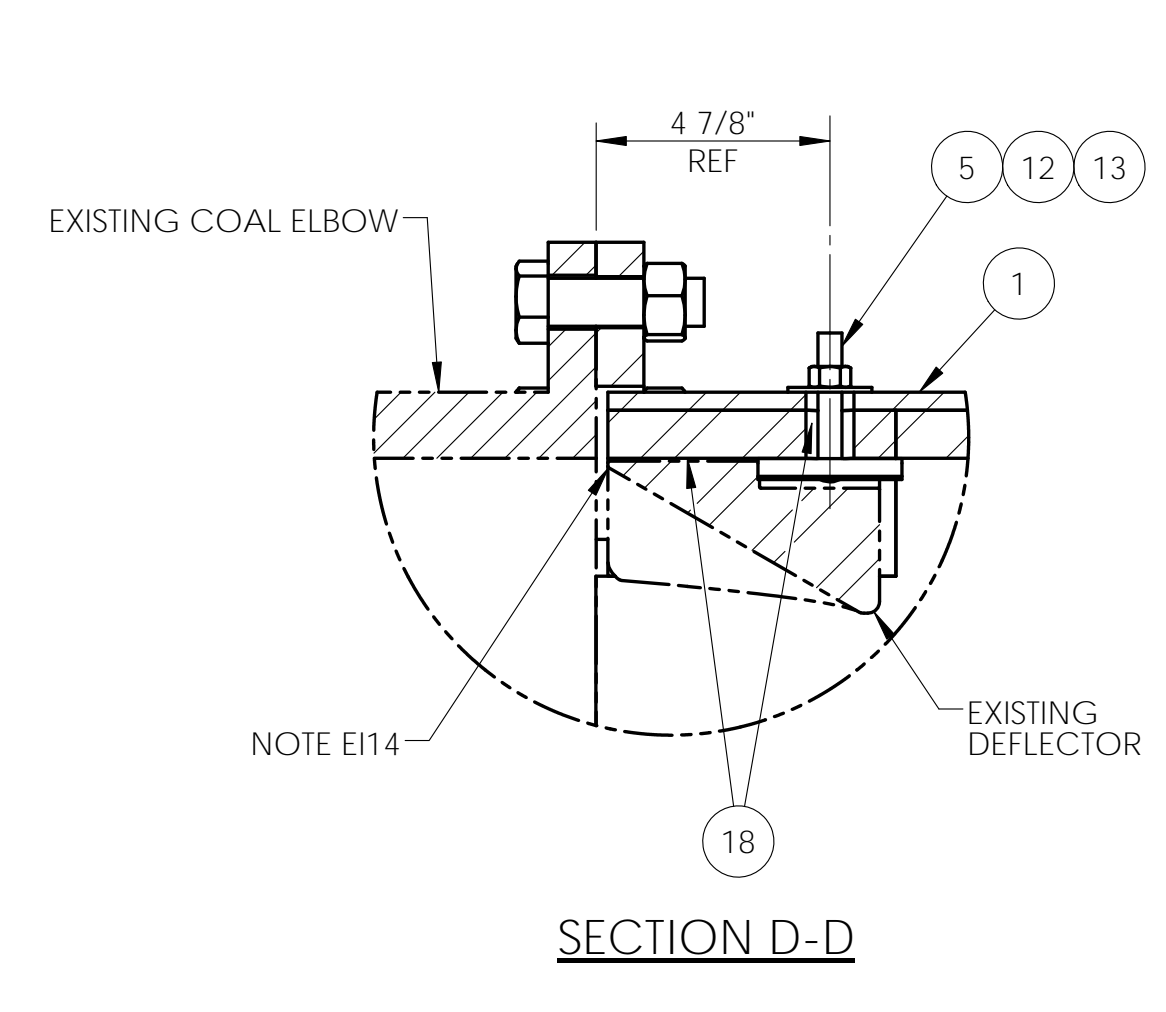
VIEW J-J



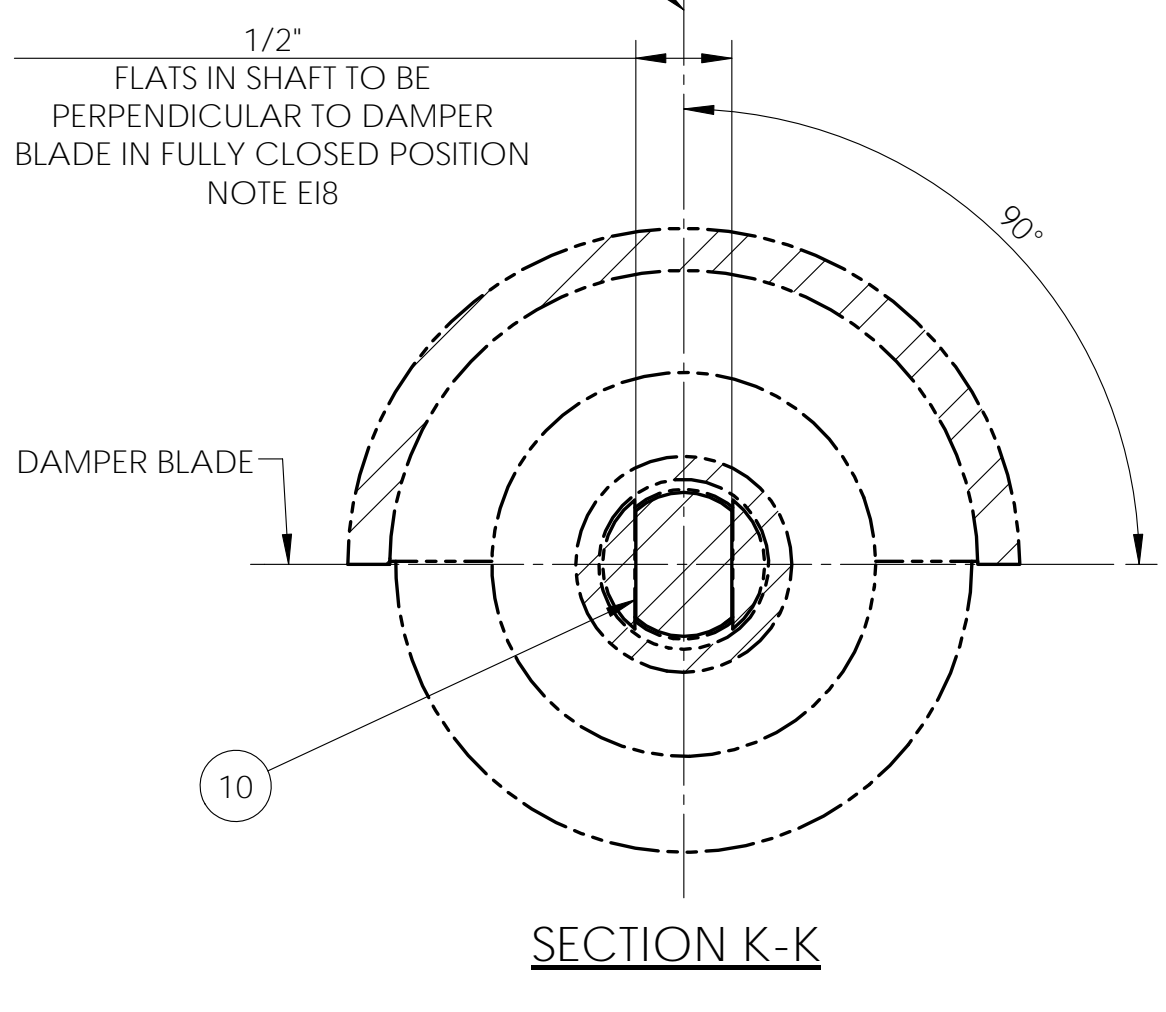
VIEW G



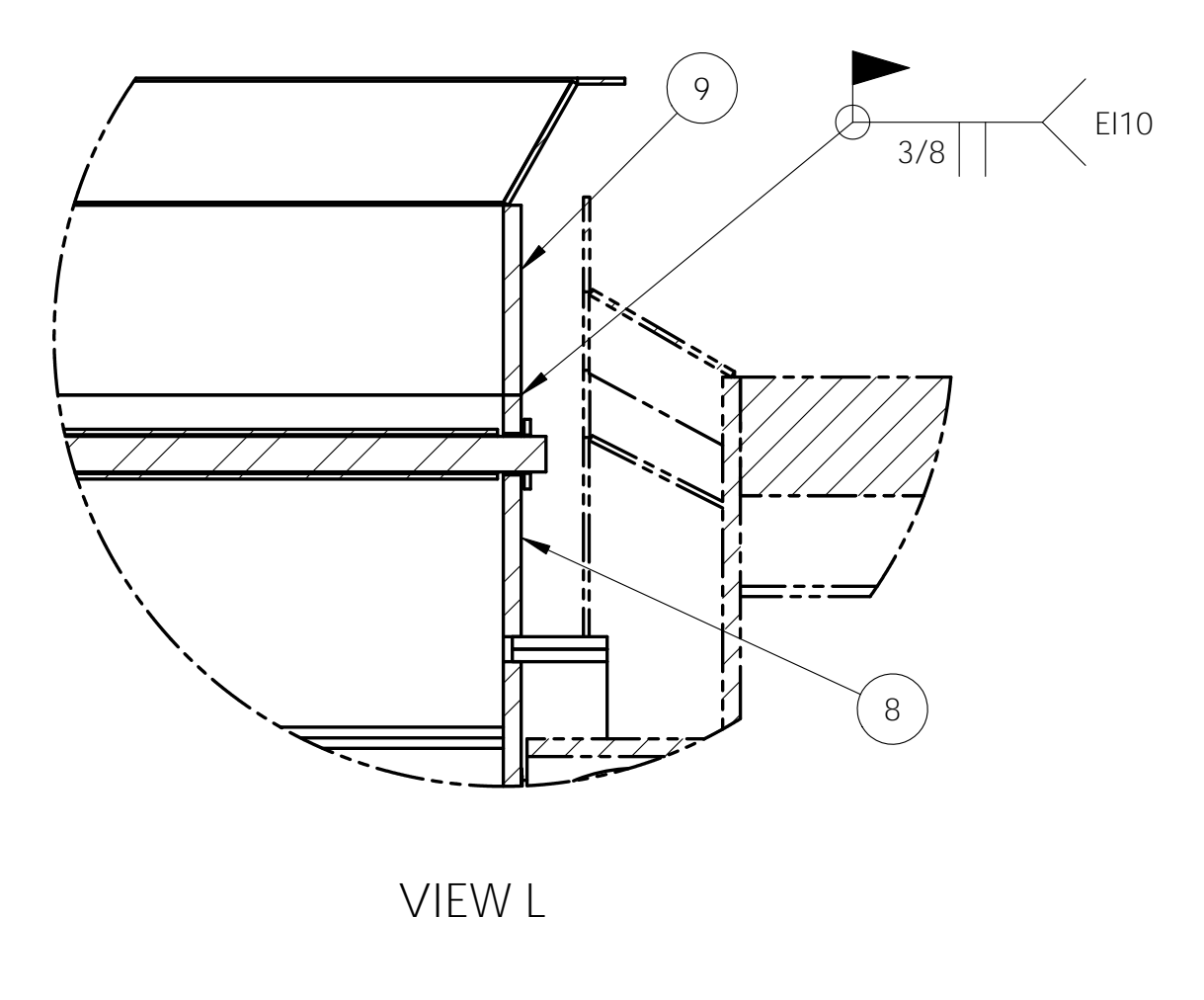
SECTION C-C



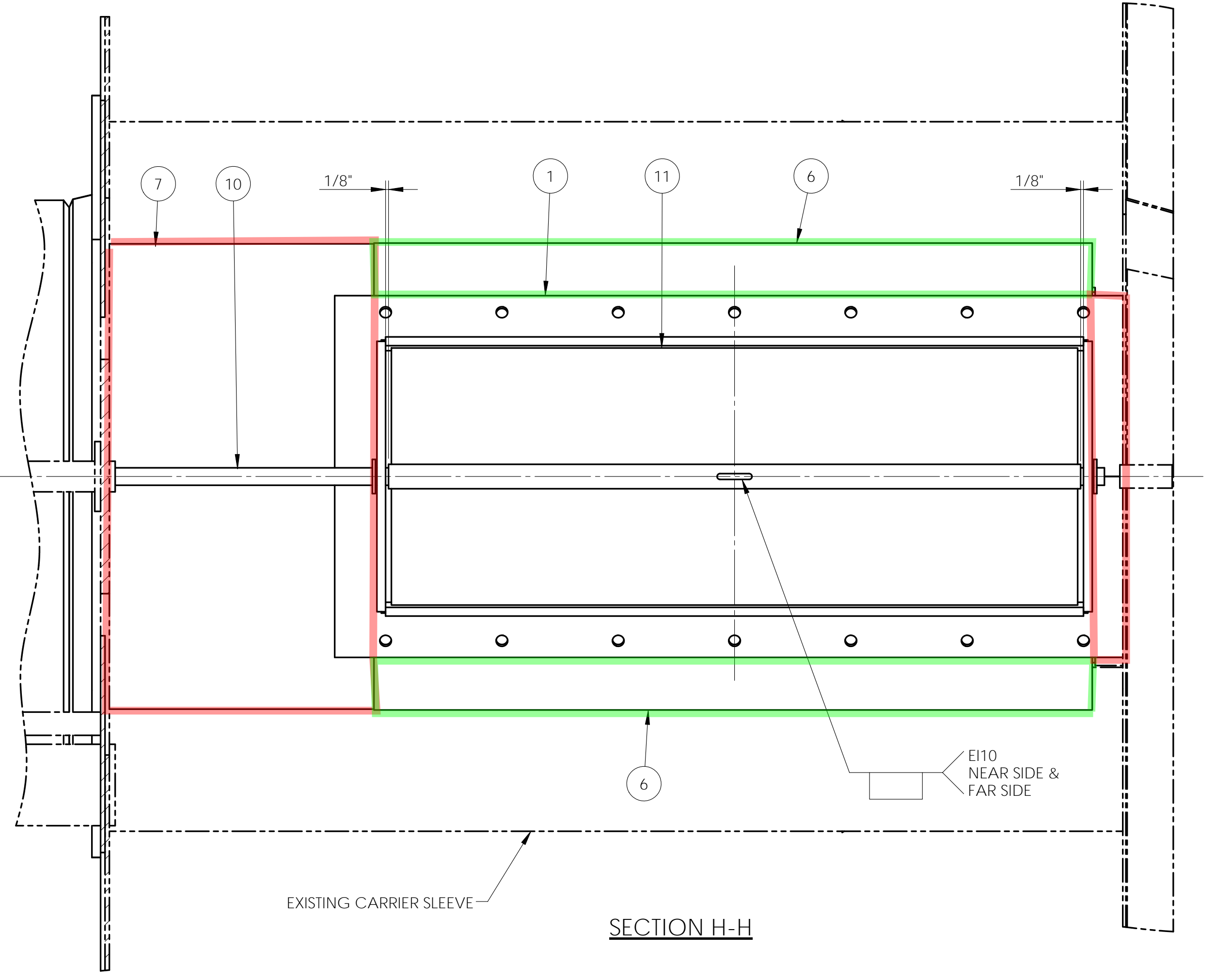
SECTION D-D



SECTION K-K



VIEW L



SECTION H-H

PUBLIC POWER GENERATION AGENCY  
WHELAN ENERGY CENTER - UNIT 2

DRAWN: L.L. THOMAS CHECKED: J.A. DYER DATE: 7/12/2024 SCALE: 1 1/2" = 1'-0"	<b>The Babcock &amp; Wilcox Company</b> FIELD ALTERATION <b>AIREJET® PC FIRED BURNERS</b>
PROJECT NO: AC5100 DRAWING NO: B0653124 SHEET NO: J 1	PROJECT NO: AC5100 DRAWING NO: B0653124 SHEET NO: J 1