



ADDENDUM NO. 1

Project Name:	Charlottesville-Albemarle Airport Mechanical Systems Upgrades
RS&H Project Number:	20541892009

DATE OF ISSUANCE: June 28, 2024

MODIFICATIONS TO PROJECT MANUAL		
ITEM	SPECIFICATION	DESCRIPTION OF MODIFICATION
<i>None.</i>		
1	Proposal Form	Revised to remove reference to Baggage Handling System.
2	235123 - Gas Vents	Specification Section Added
3		

BIDDER QUESTIONS AND RESPONSES		
ITEM	BIDDER QUESTION	RESPONSE
1	The Proposal Form has a line item for a "Baggage Handling System" is this a typo?	This is a Typo. A revised Proposal Form is included in this Addendum.
2	Throughout the Project Manual one of the requirements mentioned for the Information Submittals are Coordination Drawings; We respectfully request that the Coordination Drawing requirement be waived for this project. This being a relatively small project, and due to the costs and time considerations, we feel there would be little if any benefit of Coordination Drawings.	The requirement for the submission of Coordination Drawings is waived. Coordination Drawings are NOT required to be submitted.
3	Will the \$2,500.00 / day Liquidated Damages be assessed and charged at the end of each Phase of the project, or only at the end of the final Phase?	Liquidated Damages will only be assessed at the end of the Final Phase.
4	Are there any Davis Bacon, or Wage Determination Requirements on this project?	No. There are no Davis Bacon or Wage Determination requirements.
5	M001 – General Notes #19 – Does this note apply to the variable speed pumps on this project?	Note not applicable for project. Has been deleted. See revised Sheet M001 in Addendum #1.
6	Boiler Spec. 235233 references Specification 235123 "Gas Vents" this spec was not found in the project manual, please provide. Also, we need a specification for the "Air Intake" piping for the gas fired boilers.	Specification 235123 has been included. Air intake for combustion is via room.
7	Domestic Water Heater Spec. 223400 does not have any information on the vent or air intake, please provide.	See revision in Addendum #1 for gas venting. Air intake for combustion is via room.
8	Specification 232513 "Water Treatment for Closed Loop Hydronic Systems" – Section 2.2; Automatic Chemical Feed Equipment, are these items required? they do not show up on the plans.	These items are existing to remain. No new equipment is required.
9	Does CHO Airport have a Water Treatment Contractor for the existing system? If so, can you provide contact information please.	The current water treatment contractor information is below: Water Chemistry, Inc. 3404 Aerial Way Drive Roanoke, VA 24018 Phone: (540) 343-3618 Fax: (540) 342-2054
10	Spec 231123 "Facility Natural Gas Piping" does not include specifications for underground gas pipe, underground valves or specialties required, please provide.	All underground gas piping to be sch 40 steel pipe.
11	Drawing MS101 does not show the paved drive, or the concrete walkways in relation to the Gas Pipe run, we need this information for estimating the hardscape cutting and patching, and Gas pipe Casing, please provide.	Site plan has been updated to show paved areas. See revision in Addendum #1.
12	Drawing MS101-Detail #3 – Steel Casing; please provide a specification for the steel casing, spacers, and seals.	Steel Casing: SCH 40 STEEL CASING SIZE: 1" LARGER DIAMETER THAN GAS PIPING See revision in Addendum #1.

13	Drawing MS101 – Detail #1 – Shows pipe trench detail, we also need the thickness required to patch the asphalt drive, concrete walkway, and concrete apron. Also, the requirements, if any, for re-bar.	Pavement sections are as follows: a. Asphalt Drive: 4” of VDOT SM12.5 asphalt, over VDOT #21A stone to the top of the trench b. Concrete Sidewalk: 4” of VDOT 217 concrete, over VDOT #21A stone to the top of the trench c. Concrete Apron: 12” of VDOT 217 concrete, over VDOT #21A stone to the top of the trench
14	Drawing M501 – Detail A5 Air Separator, and Detail A3 Expansion Tank (ET-1), are these items existing to remain, or new? If so, where are they located, and where are the tie in locations? Also, we need a schedule for these items, listing Capacity, Size, Basis of Design etc... And do they receive insulation?	Details were applicable to a previous scope of work that has been removed. Details have been deleted. See revision in Addendum #1.
15	Drawing M501 – Detail A3 calls for a “Pressure Relief Valve”, and “Backflow Preventor”, are these existing to remain, or new? If new please provide specifications.	Details were applicable to a previous scope of work that has been removed. Details have been deleted. See revision in Addendum #1.
16	Drawing M501 – Detail B3 shows a “Aquastat”, “Circulating Pump”, and “Balancing Valve” are these items existing to remain, or new? If new please provide specification.	Details were applicable to a previous scope of work that has been removed. Details have been deleted. See revision in Addendum #1.
17	Drawing M501 – Detail A1 shows a “Balancing Valve”, and “Check Valve”, we have not found a specification for these items, please provide.	Details were applicable to a previous scope of work that has been removed. Details have been deleted. See revision in Addendum #1.
18	Drawing M801 shows “Setter”, “Balancing, Butterfly, and Check Valves” we have not found a specification in Division 23 for these items, are they existing to remain? If not please provide specification.	Setters and other valving not applicable for controls diagram. See revision in Addendum #1.
19	There is a specification in the project manual for “Potable Water Storage Tank” we have not found this tank on the plans, is it required? If so, where is it located? Also, we will need a schedule for this item, listing Capacity, Size, Basis of Design etc... And does it receive insulation?	Specification was applicable to a previous scope of work that has been overcome by events. Spec section shall be deleted.
20	Please provide a detail of how gas line is to be terminated at ARFF/ATCT?	Site plan has been updated to indicate gas termination at ARFF/ATCT. See revision in Addendum #1.
21	Is the steel containment only to be provided under paved roads, or are we required to provide steel containment for the entire gas line?	Steel Containment is required under pavement only.
22	For the containment piping/steel casing, please provide locations and elevations for the vent and a detail for the vent/screen.	The contact to obtain further detailed information is below: Charlottesville Department of Public Works 305 4th Street, NW Charlottesville, VA 22903 Telephone: (434) 970-3800
23	Are independent gas meters required for each building and do they need to be integrated into BAS?	No, only the main gas meter that has already been installed by the utility is required. No integration to BAS from the meter is required.
24	While the DHW is offline will a rental be needed?	The intent is that the DHW system for the terminal will be available for terminal operations at all times, except for periodic overnight shutdowns when there are not any passengers in the terminal.
25	Please confirm that the points from the boilers and pumps shall be integrated into the existing Johnson Controls Metasys BAS.	Integrate all new points into existing Johnson Controls Metasys BAS.
26	Please confirm if water TAB is to be done for all end devices or just for new equipment.	Test and Balance is only required for the new equipment.
27	Please confirm if Pre-Tab is required.	A Pre-TAB is not required. However if the contractor desires to perform a pre-TAB to document existing system performance prior to the start of construction, they will be permitted to do so. If the contractor conducts a Pre-TAB, they shall submit results to the Engineer.
28	Please confirm if the 200-day project time will begin upon approved submittals in lieu of beginning at time of contract award.	The 200 day project duration will begin at Notice to Proceed to the contractor for the Administrative Phase of the project.
29	Drawing M001 General Note #13 requires coordination drawings. Drawing E001 General Note #B it states that the coordination has been done and states any change must be approved by engineer of records. Please confirm the architect has already performed the coordination and that no BIM/3D drawings are required by the contractor.	See response to Question #2 above.

30	Drawing M001 General Note #19 requires "motor circuit protector type disconnect with short-circuit protection, hands-off-automatic switch and green pilot light in control panel cover." However, these pumps are being provided with variable frequency drives. Please confirm that the VFDs will satisfy the requirements from M001 General Note #19.	See response to Question #5 above.
31	Please confirm what the gas pressure being supplied from the new meter is?	Gas pressure from the new meter is 2 psig to be reduced to required working pressure at equipment.
32	Please confirm that removing the existing water heater & boiler will not have adverse effect on the fresh air requirements of the mechanical plant.	Removal of the existing water heater and boiler will not affect the fresh air requirements for the plant.
33	Regarding MD101 Note #1: Please confirm if we can cap and abandon in place the existing fuel oil lines that go into the trench in the mechanical room.	Correct. The intent is to cap and abandon in place the existing fuel oil lines in the trench in the mechanical room.
34	Regarding MD101: Please confirm that the mechanical room will be clear of non-essential stored items prior to work beginning?	All non-essential stored items in the mechanical room, will be removed by the airport prior to the start of on-site activities in the mechanical room.
35	Regarding MD101 Note #2: Please confirm whether the capping of propane system is to be done at the exterior or interior wall of the boiler room? Please confirm if a ball valve is required prior to the cap.	Propane system is existing to be demolished. Cap piping at interior of wall. Ball valve is not required prior to cap.
36	Please confirm what gas train is to be supplied on the boiler? (ex. UL, IRI, or FM) .	The basis of design equipment complies with FM Global 6-4 requirements.
37	Regarding the gas fired boiler schedule: please confirm the gas pressure is 14 inches w.c. (not psi).	Correct. The pressure is to be 14 inches W.C.
38	Regarding Drawing M501 End Suction Pump Detail: Can a triple duty valve be used instead of check & balancing valve?	Use of a triple duty valve in lieu of the check and balancing valve is allowed.
39	Throughout the drawings, there are several butterfly valves shown which are labeled as gate valves. Please confirm if butterfly or gate valves are required.	Details were applicable to a previous scope of work that has been overcome by events. Any new valves required are to be butterfly valves or ball valves dependent on pipe size. See revision in Addendum #1.
40	Does the existing boiler water mechanical system have a chemical treatment? If yes, please confirm whether shot feeder can be reused, and please provide the name of the chemical treatment provider?	See response to Question #8 & #9 above for existing treatment system and contractor information. Existing shot feeder can be reused.
41	Drawing M501 Detail C2 & Detail B3 show two different types of expansion tanks. Please confirm which type/detail is correct and indicate on the drawings where the expansion tanks and air separator are to be installed.	Details were applicable to a previous scope of work that has been removed. Details have been deleted. Expansion tank and air separator are existing to remain. See revision in Addendum #1.
42	Please provide an equipment schedule for the expansion tanks and air separator.	Details were applicable to a previous scope of work that has been removed. Details have been deleted. Expansion tank and air separator are existing to remain. See revision in Addendum #1.
43	Please confirm location of existing backflow preventer.	Details were applicable to a previous scope of work that has been overcome by events. Backflow preventer is existing to remain. See revision in Addendum #1.
44	Drawing M101 Detail A3 shows a ½" pipe to the air separator, and Detail A5 shows a ¾" pipe from the expansion tank. Please confirm which pipe size is correct.	Details were applicable to a previous scope of work that has been removed. Details have been deleted. Expansion tank and air separator are existing to remain. See revision in Addendum #1.
45	Is type L copper acceptable for propane work?	The propane system is existing to be demolished. No new piping for propane is required.
46	Please confirm pipe material for underground gas pipe.	The underground gas pipe material is sch 40 steel.
47	Regarding Drawing M501 Detail B1: Are pump isolators required in addition to pipe flex connectors?	Provide as shown in detail B1.
48	Specification 221223.11 calls out the necessity to provide water. Will the owner allow us to use on-site potable water for filling, flushing, and testing?	On-site potable water is available for filling, flushing, and testing.
49	Specification 225233-11 references section 235123. Please provide specification 235123.	Specification 235123 has been included. See revision in Addendum #1.

50	Would it be possible to get a little more detail on exactly where the gas line is running? Particularly on the one that runs directly towards the building before cutting to the right. For example, if it's running under the existing sidewalk and where exactly it goes into the building.	Site plan on MS101 has been updated to show pipe routing and surrounding pavement and utilities. See revision in Addendum #1.
51		
52		

ATTACHMENTS	
ITEM	DESCRIPTION
1	Proposal Forms
2	Pre-Bid Meeting Agenda
3	Pre-Bid Meeting Attendee List/Sign-In Sheet
4	Added Spec Section 235123
5	Revised Drawings: M001, MD101, MS101, M101, M501, MP701, M801

June 28, 2024

END OF ADDENDUM NO. 1

**CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD
CHARLOTTESVILLE ALBEMARLE AIRPORT**

PROPOSAL FORM

TO: Charlottesville Albemarle Airport Authority Board
 100 Bowen Loop, Suite 200
 Charlottesville, Virginia 22911

PROJECT: **Mechanical System Upgrades**

AIRPORT'S REPRESENTATIVE (to be contacted for additional information on this Proposal):

Jason Devillier	(434) 973-8342
(Name)	(Telephone Number)

BIDDER: _____

BIDDER'S
ADDRESS: _____

DATE: _____

BIDDER'S REPRESENTATIVE (to be contacted for additional information on this Proposal):

(Name)	(Telephone Number)
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BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons, or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that no member of the surety, partner for copartners or a firm, directly or indirectly owns more than five (5) percent of the total assets or capital stock of the bidding entity, nor will directly or indirectly benefit by more than five (5) percent from the profits or emoluments of this Contract. (For purposes of this paragraph, indirect ownership or benefit does not include ownership or benefit by a spouse or minor child.)

The Bidder further declares that he has carefully examined the Specifications and that this Bid is made according to the provisions and under the terms of the Specifications, which Specifications are hereby made a part of this Bid.

The undersigned hereby declares, as Bidder, that this Proposal is made on the behalf of

(CONTRACTOR)

and no others without collusion on the part of any person, firm or corporation, that he/she has examined the site of the Work, the Plans, Specifications and Form of Agreement and materials related thereto, and he/she proposes and agrees that if his/her bid as submitted in the attached Proposal schedule be accepted he/she will enter into a Contract to perform all the Work required and to complete the same within the stipulated time; and that the Bidder will accept in full payment therefore the prices named in said Proposal schedule. Said prices are to include, and cover the furnishing of all materials, except as otherwise provided in the Specifications, the performing of all the labor requisite or proper, and the providing of all necessary machinery, tools, apparatus, and other means of construction; and the performance and completion of all the Work in the manner set forth, described, and shown in the Specifications or on the drawings for the Work and in the form of agreement.

Enclosed herewith is the Proposal Guaranty in the form specified in Section 20 of the General Provisions which is submitted as a guarantee of the good faith of the Proposal. The Bidder agrees that, upon receipt of notice to award, he/she will, within 15 days, execute the Contract in accordance with the Proposal as accepted, and satisfy the Contract bonding and insurance requirements stipulated in Section 30 of the General Provisions; and that upon his/her failure or refusal to do so, the Proposal Guaranty accompanying his/her bid shall be forfeited to and become the property of the OWNER as liquidated damages for such failure or refusal.

ADDENDA

The Bidder hereby acknowledges that he/she has received the following Addenda:

<u>Addenda No.</u>	<u>Dated</u>
_____	_____
_____	_____
_____	_____
_____	_____

TAXES

The Bidder agrees that any applicable Federal, State and Local sales and use taxes, are included in the stated bid prices. It is the responsibility of the Contractor to determine whether sales taxes are applicable. The Contractor is liable for any applicable taxes which are not included in the stated bid prices.

BID PRICING

Having carefully examined the Specifications and Drawings for the Mechanical Equipment Upgrades Project Located at Charlottesville-Albemarle Airport in Charlottesville, Virginia as well the premises and conditions affecting the work, _____ proposes to furnish all necessary Superintendence, Labor, Materials, Tools, Equipment, Machinery, Apparatus, and whatever else may be necessary to complete all work covered by this proposal within the time stated, in accordance with the Drawings and Specifications and requirements pertaining thereto for the following:

Mechanical System Upgrades:

To provide the replacement of the existing boilers, pumps, domestic water heater, piping, flues, natural gas piping and all accessories complete as described in the drawings and specifications.

_____ Dollars

(\$ _____)

SIGNATURE ACKNOWLEDGES THAT: (Check One)

_____ Bid is in full compliance with the Specifications.

Signature also acknowledges that Bidder has read the Airport's Purchasing Policies and agrees that the provisions thereof shall apply to this bid.

(CORPORATE SEAL)

ATTEST:

BIDDER:

Signature

Signature

By: _____

By: _____

Title: _____

Title: _____

**CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD
CHARLOTTESVILLE ALBEMARLE AIRPORT**

PROPOSAL AFFIDAVIT

The following affidavit must be executed in order that your Proposal may be considered.

STATE OF _____)

COUNTY OF _____)

_____ of lawful age, being first duly sworn, upon his/her oath, deposes and says: That he/she executed the accompanying Proposal on behalf of the Contractor therein named, and that he/she had lawful authority so to do, and said Contractor has not directly or indirectly, entered into any agreement, expressed or implied, with any Contractor or Contractors, having for its object the controlling of the price or amount of such Proposal or any Proposals, the limiting of the Proposal of Contractors, the parceling or farming out to any Contractor or Contractors, to other persons of any part of the Contract or any of the subject matter of the Proposals, or of the profits thereof, and that he/she has not and will not divulge the sealed Proposal to any person whomsoever; except those having a partnership or other financial interest with him in said Proposal or Proposals, until after the sealed Proposal or Proposals are opened.

Signed: _____

Subscribed and sworn to before me this ____ day of _____, 20__.

My Commission Expires:

Notary Public

**CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD
CHARLOTTESVILLE ALBEMARLE AIRPORT**

PROPOSAL GUARANTY

(Not to be filled in if a Cashier's check is submitted)

KNOW ALL MEN BY THESE PRESENTS: That the undersigned Bidder, _____, as Principal, and firmly bound unto the Charlottesville Albemarle Airport Authority Board in the sum of _____ dollars (\$ _____), for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THIS OBLIGATION is such that if Principal:

- 1. Does not withdraw the attached Proposal of _____ dollars (\$ _____) for the improvement of Charlottesville Albemarle Airport for a period of ninety (90) days after the date on which the bids are opened; and
- 2. Enters into the written contract and furnishes the required Certificates of Insurance, Payment and Performance Bonds, with Surety or Sureties acceptable to the Charlottesville Albemarle Airport Authority Board, within fifteen (15) days after notice that the said Proposal is accepted, then this obligation shall be void; otherwise the same shall be in full force and the full amount of this Proposal Bond shall be paid to the Charlottesville Albemarle Airport Authority Board as stipulated herein as liquidated damages.

Signed this ____ day of _____, 20__.

(PRINCIPAL MUST INDICATE WHETHER CORPORATION, PARTNERSHIP, COMPANY OR INDIVIDUAL)

Principal

THE PERSON SIGNING FOR THE PRINCIPAL SHALL, IN HIS/HER OWN HANDWRITING, SIGN THE PRINCIPAL'S NAME, HIS/HER OWN NAME AND HIS/HER TITLE. WHERE THE PERSON SIGNING FOR A CORPORATION IS OTHER THAN THE PRESIDENT OR VICE PRESIDENT, HE/SHE MUST FURNISH A CORPORATE RESOLUTION SHOWING HIS/HER AUTHORITY TO BIND THE CORPORATION.

By: _____
Title

(Affix Surety's Corporate Seal)

Surety

**CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD
CHARLOTTESVILLE ALBEMARLE AIRPORT**

SURETY'S BOND AFFIDAVIT

STATE OF _____)

COUNTY OF _____)

BEFORE ME, THE UNDERSIGNED AUTHORITY, personally appeared _____ who, being duly sworn, deposes and says that he/she is a duly authorized (resident) (non-resident) insurance agent, properly licensed under the laws of the State of _____, and the Commonwealth of Virginia, to represent _____ of _____, a company authorized to make corporate surety bonds under the laws of the Commonwealth of Virginia (the "Surety").

Said _____ further certifies that as agent or attorney-in-fact for the said Surety, he/she has signed the attached bond in the sum of _____ (U.S. \$ _____) on behalf of _____ To the Charlottesville Albemarle Airport Authority Board covering the construction of the **Mechanical Systems Upgrades** project.

Said _____ Further certifies that the premium on the said bond is \$ _____ which will be paid in full directly to the Surety or to him as agent or attorney-in-fact, and included in his/her regular commission as agent or attorney-in-fact, for the execution of said bond and that his/her commission will not be divided with anyone except to _____ who is a duly authorized insurance agent properly licensed under the laws of the Commonwealth of Virginia.

COUNTERSIGNED:

_____ Virginia Resident Agent	_____ SURETY
_____ Address of Resident Agent	_____ Attorney-in-fact
_____ Address of Bond Company	Acknowledgement for Attorney-in-fact
_____ Phone Number	Sworn to and subscribed before me This ____ day of _____ 20____.
_____ Fax Number	Notary Public, State of _____
	My Commission Expires: _____

**CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD
CHARLOTTESVILLE ALBEMARLE AIRPORT**

**EQUAL EMPLOYMENT OPPORTUNITY (EEO) REPORT STATEMENT
as Required by 41 CFR 60-1.7 (b)**

The Bidder (proposer) shall complete the following statement by checking the appropriate boxes. Failure to complete these blanks may be grounds for rejection of bid.

1. The Bidder (proposer) has () has not () developed and has on file at each establishment Affirmative Action Programs pursuant to 41 CFR 60-1.4 and 41 CFR 60-2.
2. The Bidder (proposer) has () has not () participated in any previous Contract or Subcontract subject to the Equal Opportunity Clause prescribed by Executive Order 10925, or Executive Order 11114, or Executive Order 11246.
3. The Bidder (proposer) has () has not () filed with the Joint Reporting Committee the annual compliance report on Standard Form 100 (EEO-1 Report).
4. The Bidder (Proposer) has () has not () submitted all compliance reports in connection with any such Contract due under the application filing requirements; and that representations indicating submission of required compliance reports signed by proposed Subcontractors will be obtained prior to award of subcontracts.
5. The Bidder (Proposer) does () does not () employ fifty (50) or more employees.

If the Bidder (Proposer) has participated in a previous Contract subject to the equal opportunity clause and has not submitted compliance reports due under applicable filing requirements, the Bidder (Proposer) shall submit a compliance report on Standard Form 100, "Employee Information Report EEO-1" prior to the award of Contract.

Standard Form 100 is normally furnished to Contractors annually based on a mailing list currently maintained by the Joint Reporting Committee. In the event a Contractor has not received the form, he/she may obtain it by writing to the following address:

Joint Reporting Committee
1800 G Street
Washington, DC 20506

(Name of Bidder)

By: _____
Signature*

Title: _____

Date: _____

*Must be same signature on Bid Proposal

**CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD
CHARLOTTESVILLE ALBEMARLE AIRPORT**

NON-COLLUSION AFFIDAVIT

STATE OF _____)

COUNTY OF _____)

_____, being first duly sworn, deposes and says that:

1. (S)He is _____ of _____, the Bidder that has submitted the attached Bid;

2. (S)He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

3. Such Bid is genuine and is not a collusive or sham Bid;

4. Neither the Bidder nor anyone acting on behalf of the Bidder, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Charlottesville Albemarle Airport Authority Board or any person interested in the proposed Contract; and,

5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or anyone acting on his/her/its behalf.

(Signature)

(Title)

Subscribed and Sworn to before me of this ____ day of _____,
20____.

(Notary's Signature)

(Notary's Stamped or Printed Name)

Notary Public, in and for _____
County, _____.

My commission expires:

**CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD
CHARLOTTESVILLE ALBEMARLE AIRPORT**

BIDDER'S QUALIFICATIONS

Bidders shall be a licensed contractor in the State of Virginia. Additionally, in accordance with Federal Aviation Administration (FAA) General Provision 20-02 Prequalification of Bidders, each bidder shall furnish the owner satisfactory evidence of his/her competency to perform the proposed work. Such evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, a list of equipment that would be available for the work, and a list of key personnel that would be available. In addition, each bidder shall furnish the owner satisfactory evidence of his/her financial responsibility. Such evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the Contractor's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether his/her financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect his/her (bidder's) true financial condition at the time such qualified statement or report is submitted to the Owner.

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. This bidder may submit any additional information he desires.

1. Projects applied for: _____

2. Name of Bidder: _____

3. Date Submitted: _____

4. Bid Numbers: _____

5. Date of Opening: _____

6. Submitted by: Individual Corporation Partnership

7. Principal Office Address: _____

8. Office Phone: _____

9. (Corporation Only)

Date of Incorporation: _____

State: _____

Capitalisation (paid in rash): _____

Virginia Business License Number: _____

Officers

President: _____

Vice President: _____

Secretary: _____

Treasurer: _____

10. (Partnership Only)

Date of Organization: _____

Type: (General) (Limited)

Partnership

Name: _____

Address: _____

Name: _____

Address: _____

Virginia Business License Number: _____

11. Attach evidence of SCC registration, contractors licenses, business licenses, and FEIN.

12. How many years has your organization been in business as a contractor under your present business name?

13. How many years' experience in this type of construction work has your organization had?

a. As a prime contractor? _____

b. As a sub-contractor? _____

14. If any part of the work is sublet, will you require a bond from sub-contractor?

(Yes) (No)

15. State approximately the largest amount of work you have done in any one calendar year

a. As a prime contractor? _____

b. As a sub-contractor? _____

16. Have you ever failed to complete any work awarded to you?

(Yes) (No)

If yes, state where and why.

17. Have you or any officer or partner of your Organization ever been a partner or officer of some other contracting organization?

(Yes) (No)

If YES, give the following information for each individual:

Name of Individual	Position	Name of Organization

18. Have you or has any director, officer, partner, general manager or any person otherwise active in the management of your organization ever been a director, officer, partner, general manager, or otherwise active in this management of some other (existing or defunct) organization during a time when such organization defaulted on a contract, either as a prime contractor or as a sub-contractor?

(Yes) (No)

If YES, state circumstances (use extra sheet, if necessary).

19. List Contracts with a construction value over \$2 million completed within the last 2 years. (Attach additional sheets as necessary).

Contract	Amount	% Complete

20. List uncompleted contracts with a construction value over \$2 million completed held by you at present. (Attach additional sheets as necessary).

Contract	Amount	% Complete

21. What are the largest airport related projects your organization has completed?

Contract Amount	Class of Work	Date Completed	For Whom	References
				Name
				Address
				Tel:
				Email:
				Name
				Address
				Tel:
				Email:

I/we hereby certify that the statements of fact contained herein are correct to the best of my/our knowledge and belief; and that the statement entitled "Financial Position" presents fairly the financial position of the enterprise. I/we understand that if I/we knowingly make any false statements herein I am/we are subject to such penalties as may be prescribed by law or ordinance. Any depository, vendor, reference, or other agency named herein is authorized to supply the holder with any information necessary to verify this statement.

Note: A partnership must give firm name and signature of all partners. A corporation must give full corporate name and signature of two (2) officials (either president or vice-president and secretary or treasurer)	Firm or Corporate Name	
	Signature	Title
	Signature	Title
Date of Signing	Signature	Title

**CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY BOARD
CHARLOTTESVILLE ALBEMARLE AIRPORT**

Certification of Offer/Bidder Regarding Tax Delinquency and Felony Convictions

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (✓) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

- 1) The applicant represents that it is () is not () a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

- 2) The applicant represents that it is () is not () a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

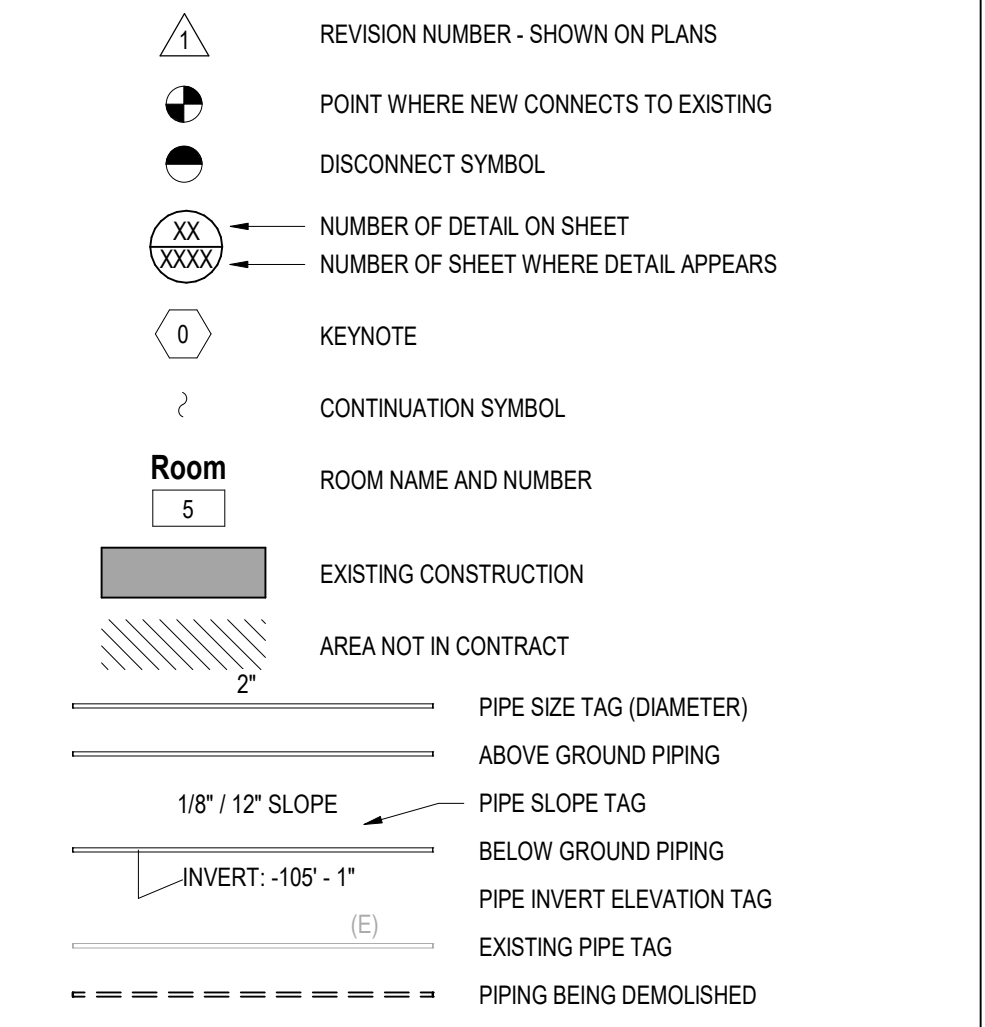
If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions

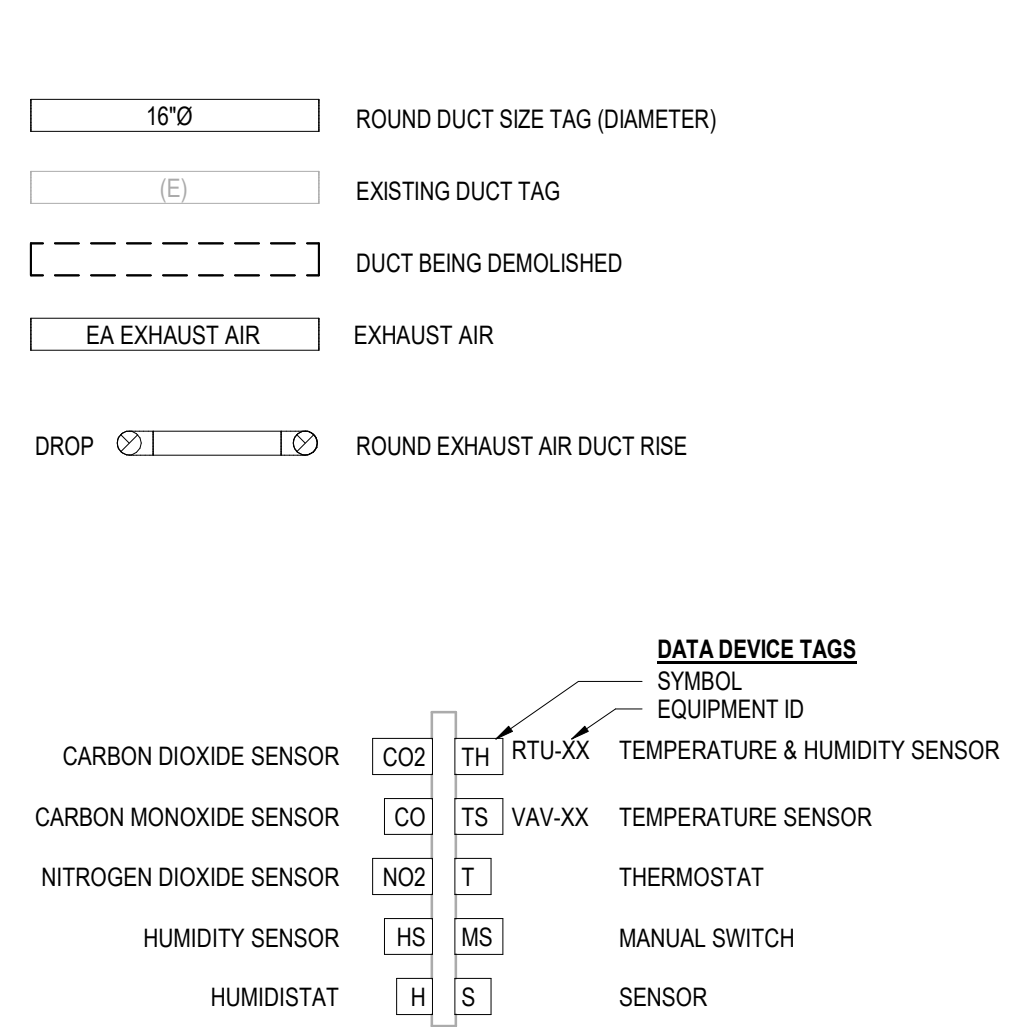
Felony conviction: Felony conviction means a conviction within the preceding twenty four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

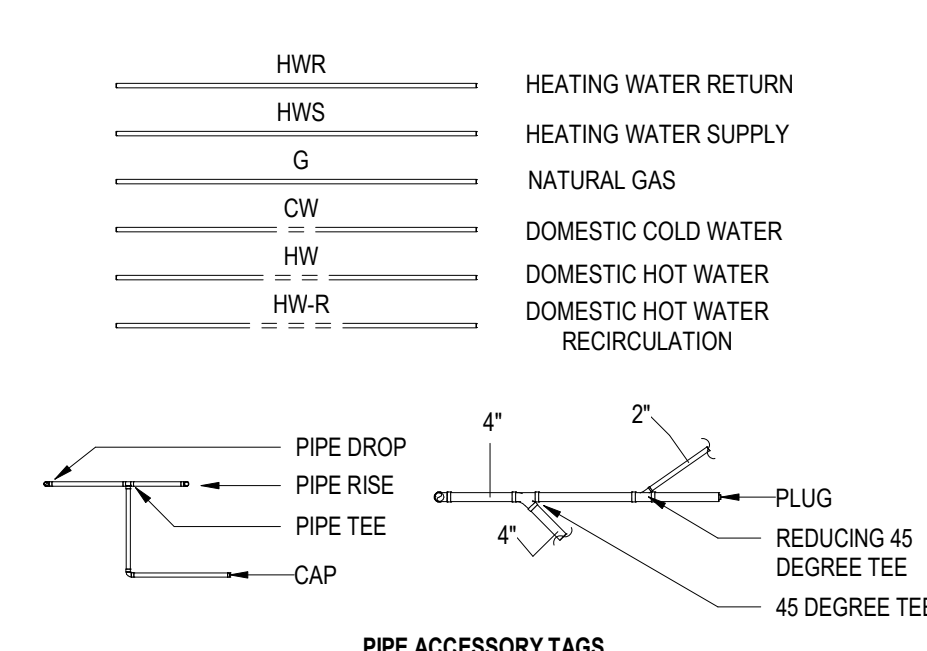
GENERAL MECHANICAL SYMBOLS



HVAC SYMBOLS



PIPING SYMBOLS



GENERAL NOTES

- 1. PROVIDE COMPLETE PRODUCT DATA (SIZE, WEIGHT, OPERATING CHARACTERISTICS, WIRING DIAGRAMS, ETC) FOR ALL EQUIPMENT AND DEVICES SPECIFIED ON THE DRAWINGS.
- 2. ALL HVAC SYSTEMS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL STATE AND NATIONAL CODE REQUIREMENTS, VIRGINIA MECHANICAL CODE 2018, VIRGINIA PLUMBING CODE 2018, NATIONAL ELECTRICAL CODE 2017 AND VIRGINIA BUILDING CODE 2018.
- 3. PROVIDE OFFSETS IN NEW PIPING SYSTEMS AS REQUIRED TO FACILITATE INSTALLATION OF NEW WORK AT NO ADDITIONAL COST TO THE CONTRACT.
- 4. ALL NON-GALVANIZED SUPPORTS AND HANGERS FOR PIPING AND EQUIPMENT MUST BE CLEANED OF DEBRIS AND RUST, PROPERLY PREPARED, PRIMED AND PAINTED.
- 5. IN ADDITION TO THE SPECIFICATION REQUIREMENTS AND PRIOR TO ORDERING EQUIPMENT AND INSTALLATION OF NEW WORK, SUBMIT A COMPOSITE SHOP DRAWING (1/4" MIN. SCALE PLAN AND SECTIONS) SHOWING PIPING AND EQUIPMENT LAYOUT. THIS SHOP DRAWING MUST ALSO INDICATE MAINTENANCE/SERVICE SPACE FOR ALL EQUIPMENT.
- 6. CONCRETE PADS FOR MECHANICAL EQUIPMENT MUST BE SIZED, LOCATED AND PROVIDED BY DIVISION 23. PROVIDE 4' HIGH X UNIT LENGTH PLUS 4' X UNIT WIDTH PLUS 4" CONCRETE PADS FOR ALL HVAC EQUIPMENT MOUNTED ON GRADE OR FLOOR SLAB.
- 7. VERIFY ALL EQUIPMENT WITH MANUFACTURER'S CERTIFIED DRAWINGS, FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
- 8. UNLESS OTHERWISE INDICATED ALL DRAIN LINES FROM EACH PIECE OF EQUIPMENT MUST BE PIPED FULL SIZE OF DRAIN OUTLET, WITH P-TRAP TO FLOOR DRAIN OR JANITOR SINK.
- 9. ALL EQUIPMENT, PIPING, ETC., MUST BE SUPPORTED AS DETAILED AND SPECIFIED. ADDITIONAL SUPPORTS MUST BE PROVIDED AS REQUIRED TO PROPERLY SUPPORT ALL HVAC SYSTEM COMPONENTS.
- 10. VFD'S IF REQUIRED ARE INDICATED ON THE HVAC EQUIPMENT SCHEDULES AND ARE PROVIDED BY DIVISION 23. UNLESS OTHERWISE NOTED, FIELD LOCATE EACH VFD IN THE SAME ROOM THAT THE EQUIPMENT IT SERVES IS LOCATED. VFD'S MUST BE LOCATED SO THEY CAN EASILY BE ACCESSED, HAVE PROPER MAINTENANCE SPACE AND COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC) REQUIREMENTS. GROUND VFD'S IN ACCORDANCE WITH NEC. VFD'S MUST NOT BE MOUNTED ON HVAC EQUIPMENT, UNLESS NOTED OTHERWISE OR FACTORY MOUNTED.
- 11. ALL HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS SHOWN ON THE CONTRACT DRAWINGS MUST BE NEW.
- 12. SUBMIT COMPLETE SHOP DRAWINGS AND PRODUCT DATA FOR ALL EQUIPMENT AND DEVICES SPECIFIED ON THE HVAC DRAWINGS.
- 13. THIS PROJECT REQUIRES COORDINATION DRAWINGS. REFER TO SPECIFICATION SECTIONS 01400, 13000 AND 230050 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- 14. DISCREPANCIES AND CONFLICTS BETWEEN MECHANICAL SYSTEMS AND OTHER DISCIPLINE (ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION) DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE A/E PRIOR TO CONSTRUCTION OF SUBJECT SYSTEMS. FAILURE TO NOTIFY A/E OF THE SUBJECT PROBLEMS MUST CONSTITUTE ACCEPTANCE OF ALL CONDITIONS AND ANY CORRECTIVE WORK REQUIRED AS DIRECTED BY A/E. THE SUBJECT CORRECTIVE WORK MUST BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 15. ALL FURNISHED EQUIPMENT MUST FIT THE ALLOCATED SPACE. PROVIDE ALL MODIFICATIONS TO THE OPENINGS, IN ROOF OR SLAB, STEEL SUPPORTS, ELECTRICAL REQUIREMENTS AND ANY OTHER BUILDING COMPONENTS REQUIRED TO FACILITATE THE DEMOLITION AND INSTALLATION OF SUBJECT EQUIPMENT.
- 16. PRIOR TO FINAL INSPECTION OF EQUIPMENT BY A/E, EACH PIECE OF MECHANICAL EQUIPMENT MUST BE CLEANED AND ALL FOREIGN MATERIALS REMOVED. ALL PENETRATIONS THRU UNIT CASINGS MUST BE PROPERLY SEALED AND ALL CONTROL DEVICES MUST BE OPERATIONAL AND CALIBRATED.
- 17. ALL FINISHES DAMAGED DURING THE INSTALLATION OF NEW HVAC SYSTEM MUST BE REPAIRED TO MATCH EXISTING ADJACENT FINISHES.
- 18. COORDINATE LOCATION OF HVAC EQUIPMENT AND SYSTEM ROUTINGS SO THAT HVAC EQUIPMENT AND PIPING ARE NOT LOCATED ABOVE ELECTRICAL EQUIPMENT, PANELS OR ELEVATOR EQUIPMENT.
- 19. FOR ALL SINGLE-PHASE MOTORS POWERING MECHANICAL EQUIPMENT: PROVIDE ELECTRICAL DISCONNECT AND THE APPROPRIATE NUMBER OF NORMALLY OPEN (N.O.) AND NORMALLY CLOSED (N.C.) CONTACTS REQUIRED TO OPERATE AND CONTROL THE EQUIPMENT IN ACCORDANCE WITH THE SEQUENCES OF OPERATION AS SPECIFIED. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ABBREVIATIONS

(E)	EXISTING	GAL	GALLON
ABV	ABOVE	GALV	GALVANIZED
AC	AIR CONDITIONING UNIT	GH	GRAVITY HOOD
ACC	AIR COOLED CONDENSER	GM	GALLONS PER MINUTE
ACS	AIR CONDITIONING SYSTEM	GVU	GRAVITY UNIT VENTILATOR
ACU	AIR CONDITIONING UNIT	H	HUMIDIFIER
ADJ	ADJUSTABLE	HC	HEATING COIL
AF	AIRFOIL	HP	HORSEPOWER
AFD	ADJUSTABLE FREQUENCY DRIVE	HRC	HEAT RECOVERY UNIT
AFF	ABOVE FINISHED FLOOR	HVAC	HEATING VENTILATION AND AIR
AHU	AIR HANDLING UNIT	HVU	HEATING AND VENTILATING UNIT
AMB	AMBIENT	HWC	HOT WATER COIL
AS	AIR SEPARATOR	IN WC	INCH OF WATER COLUMN
B	BOILER	IN WG	INCH OF WATER GAUGE
BAS	BUILDING AUTOMATION SYSTEM	IRH	INFRARED HEATER
BD	BELT DRIVE	ISOTR	ISOLATION TRANSFORMER
BHP	BRAKE HORSEPOWER	KW	KILOWATTS
BI	BACKWARD INCLINED	LAT	LEAVING AIR TEMPERATURE
BLDG	BUILDING	LD	LINEAR DIFFUSER
BTUH	BRITISH THERMAL UNIT/HOUR	LWT	LEAVING WATER TEMPERATURE
C	CONDENSATE	MAX	MAXIMUM
CAV	CONSTANT AIR VOLUME	MCA	MINIMUM CIRCUIT AMP
CC	COOLING COIL	MCC	MOTOR CONTROL CENTER
CD	CONDENSATE DRAIN	MD	MOTORIZED DAMPER
COL	CONDENSATE DRAIN LINE	MIN	MINIMUM
CF	CAPPED FOR FUTURE	MZ	MULTI-ZONE
CFM	CUBIC FEET PER MINUTE	NC	NOISE CRITERIA
CH	CHILLER	NEC	NATIONAL ELECTRIC CODE (NFPA-70)
CHWP	CHILLED WATER PUMP	No	NUMBER
CHWR	CHILLER WATER RETURN	OAHU	OUTSIDE AIR HANDLING UNIT
CHWS	CHILLED WATER SUPPLY	OPNG	OPENING
CLG	CEILING	P	PUMP
CONC	CONCRETE	PBB	PASSENGER BOARDING BRIDGE
CONT	CONTINUOUS	PD	PRESSURE DROP
COP	COEFFICIENT OF PERFORMANCE	PF	PREFILTER
CP	CONDENSATE PUMP	PH	PREFEAT COIL
CS	CURRENT SENSOR	PHWP	PRIMARY HOT WATER PUMP
CT	CONTROL TRANSFORMER	PRV	PRESSURE REDUCING VALVE
CU	CONDENSING UNIT	PSIA	POUNDS PER SQUARE INCH ABSOLUTE
CUH	CABINET UNIT HEATER	PSIG	POUNDS PER SQUARE INCH GAUGE
CV	CONSTANT VOLUME	QTY	QUANTITY
CW	COLD WATER	RAF	RETURN AIR FAN
CWR	CONDENSOR WATER RETURN	REL	RELIEF AIR
CWS	CONDENSOR WATER SUPPLY	REDD	REQUIRED
DB	DRYBULB	RG	RETURN AIR GRILLE
DN	DOWN	RH	RELATIVE HUMIDITY
DPS	DIFFERENTIAL PRESSURE SWITCH	RLA	RUNNING LOAD AMP
DPT	DIFFERENTIAL PRESSURE TRANSMITTER	RPM	REVOLUTIONS PER MINUTE
DTS	DUCT TEMPERATURE SENSOR	RR	RETURN REGISTER
DWDI	DOUBLE WIDTH, DOUBLE INLET	RS	REFRIGERANT SENSOR
DWS	DRAINING	RTS	ROOM TEMPERATURE SENSOR
DX	DIRECT EXPANSION	RTU	ROOF TOP UNIT
EA	EACH	S	SMOKE DETECTOR
EAT	ENTERING AIR TEMPERATURE	SA	SOUND ATTENUATOR
EDH	ELECTRIC DUCT HEATER	SCHP	SECONDARY CHILLED WATER PUMP
EER	ENERGY EFFICIENCY RATIO	SF	SUPPLY FAN
EF	EXHAUST FAN	SF	SQUARE FEET
EG	EXHAUST GRILLE	SHWP	SECONDARY HOT WATER PUMP
ELEC	ELECTRICAL	SP	STATIC PRESSURE
ENT	ENTERING	SR	SUPPLY REGISTER
EO	EQUAL	SS	STAINLESS STEEL
ERU	ENERGY RECOVERY UNIT	STR	STARTER
ESP	EXTERNAL STATIC PRESSURE	SW	SWITCH
ET	EXPANSION TANK	T	TEMPERATURE SENSOR
ELH	ELECTRIC UNIT HEATER	TA	TRANSFER AIR
EWT	ENTERING WATER TEMPERATURE	TAO	TRANSFER AIR OPENING
EXH	EXHAUST	TEFC	TOTALLY ENCLOSED FAN COOLED
FC	FORWARD CURVED	TEMP	TEMPERATURE
FCU	FAN COIL UNIT	TG	TRANSFER GRILLE
FD	FIRE DAMPER	TOAC	TRANSFER OPENING ABOVE CEILING
FF	FINAL FILTER	TSTAT	THERMOSTAT
FG	FLOOR GRILLE	TUX	TERMINAL UNIT CONTROLLER
FLA	FULL LOAD AMPS	TYP	TYPICAL
FLEX	FLEXIBLE CONNECTION	UH	UNIT HEATER
FLR	FLOOR	UTR	UP THROUGH ROOF
FOT	FLAT ON TOP	V-FH-HZ	VOLTS-PHASE-HERTZ
FPM	FEET PER MINUTE	VAF	VENTILATION AIR FAN
FR	FLOOR RETURN	VAFV	VENTILATION AIR FAN CONTROLLER
FT	FAN TERMINAL	VAV	VARIABLE AIR VOLUME
FTR	FINNED TUBE RADIATION	VFD	VARIABLE FREQUENCY DRIVE
FTU	FAN POWERED VAV TERMINAL UNIT	VP	VACUUM PUMP
GA	GAUGE	VTR	VENT THRU ROOF
		W	WATTS
		WB	WET BULB
		WHP	WATER SOURCE HEAT PUMP
		WP	WEATHER PROOF
		WWF	WOVEN WIRE FABRIC

NOTE
ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET. THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.



PROJECT TITLE:
MECHANICAL SYSTEMS UPGRADE

PROJECT ADDRESS:
100 BOWEN LOOP, SUITE 200
CHARLOTTESVILLE, VA 22911

NO.	DESCRIPTION	DATE
1	ADDENDUM #1	06/28/2024

DATE ISSUED: 09/10/24
 T
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 DRAWN BY: SMB
 DESIGNED BY: SMB
 PROJECT NUMBER:
 20541812009
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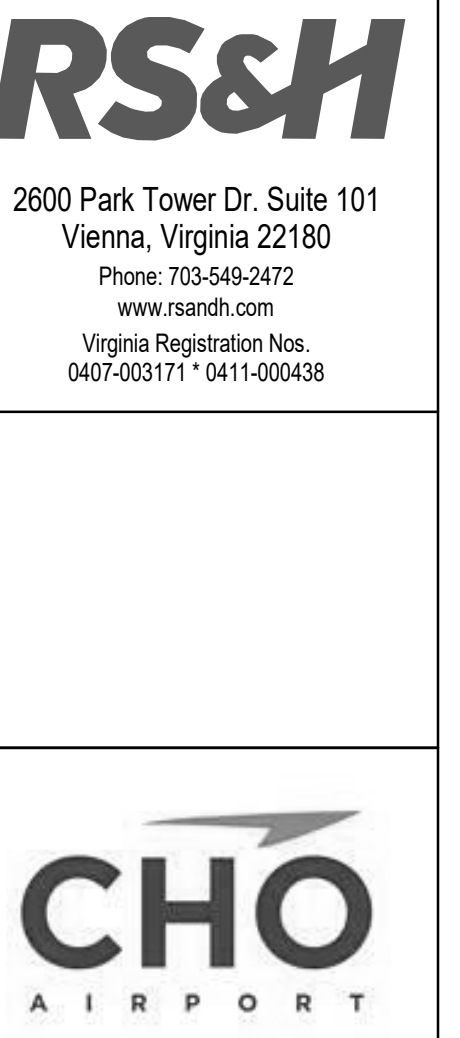
SEAL:

SHEET TITLE:
MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

SHEET ID:
M001

PROJECT STATUS:
ISSUED FOR BID

GENERAL DEMOLITION NOTES	
1. NATURAL GAS PIPING SHALL BE ROUTED NO LESS THAN 12" BELOW GRADE, UNLESS OTHERWISE NOTED.	
BOILER ROOM DEMOLITION NOTES	
MARK	DESCRIPTION
1	REMOVE EXISTING FUEL OIL SYSTEM COMPLETE TO POINT INDICATED. SEE IMAGE 2, THIS SHEET. INCLUDES PIPING, EQUIPMENT, SUPPORTS, CONTROLS, WIRING AND APPURTENANCES. CAP PIPING BELOW FLOOR.
2	REMOVE EXISTING PROPANE SUPPLY SYSTEM COMPLETE. SEE IMAGE 1, THIS SHEET. INCLUDES PIPING, EQUIPMENT, SUPPORTS, WIRING AND APPURTENANCES. CAP PIPING AT ROOM ENTRANCE.
3	REMOVE EXISTING HEATING HOT WATER BOILER COMPLETE. INCLUDES CONTROLS, WIRING, SUPPORTS, AND APPURTENANCES.
4	REMOVE EXISTING HOT WATER PIPING COMPLETE TO POINT INDICATED. INCLUDES INSULATION, SUPPORTS, CONTROLS, WIRING AND APPURTENANCES.
5	REMOVE EXISTING DRAIN PIPING COMPLETE. INCLUDES SUPPORTS AND APPURTENANCES.
6	REMOVE EXISTING EXHAUST FLUE COMPLETE. INCLUDES ROOF STACK, INSULATION, SUPPORTS AND APPURTENANCES.
7	DISCONNECT EXISTING HWS AND HW/R PIPING FROM EXISTING HWP. REMOVE HWP COMPLETE. INCLUDES SUPPORTS AND APPURTENANCES. SEE PHOTO 3, THIS SHEET.
8	EXISTING ROOF PENETRATION TO REMAIN FOR NEW WORK.
9	REMOVE EXISTING DOMESTIC HOT WATER HEATER COMPLETE. INCLUDES CONTROLS, WIRING, SUPPORTS, AND APPURTENANCES.



PROJECT TITLE:
MECHANICAL SYSTEMS UPGRADE

PROJECT ADDRESS:
100 BOWEN LOOP, SUITE 200
CHARLOTTESVILLE, VA 22911

REVISIONS		
NO.	DESCRIPTION	DATE

DATE ISSUED: 05/10/24
REVIEWED BY: KMN
DRAWN BY: SMB
DESIGNED BY: SMB
PROJECT NUMBER: 20541812009
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SEAL:

SHEET TITLE:
MECHANICAL ROOM
DEMO PLANS

SHEET ID:
MD101

PROJECT STATUS:
ISSUED FOR BID



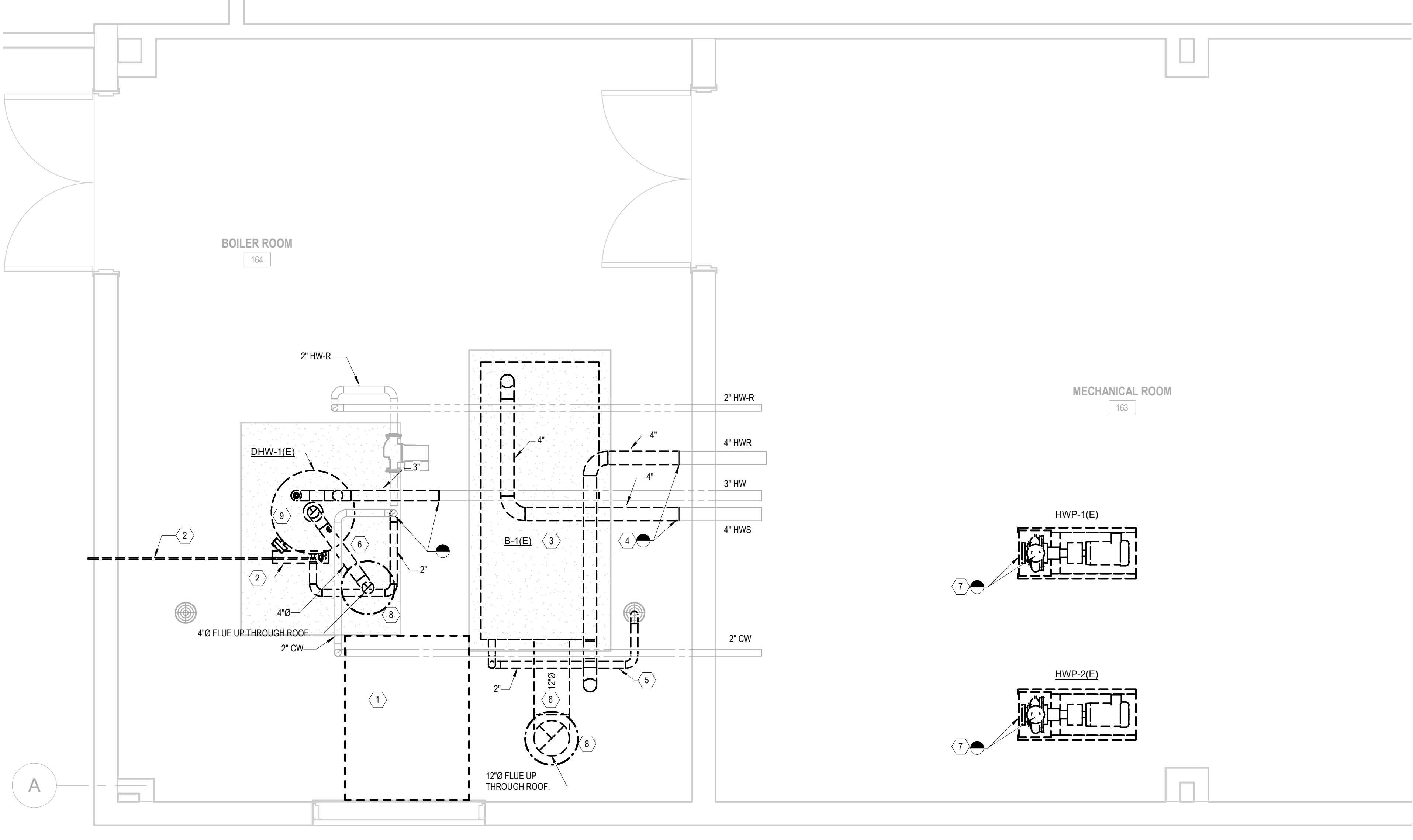
B1 EXISTING DHW PROPANE SYSTEM
SCALE: N.T.S.



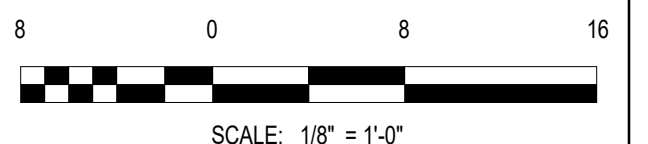
B2 EXISTING FUEL SYSTEM
SCALE: N.T.S.



A1 EXISTING HWP
SCALE: N.T.S.



A3 MAIN TERMINAL BOILER ROOM DEMO PLAN
SCALE: 1/2" = 1'-0"



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GENERAL SITE NOTES	
1.	NATURAL GAS PIPING SHALL BE ROUTED NO LESS THAN 36" BELOW GRADE, UNLESS OTHERWISE NOTED.



2600 Park Tower Dr., Suite 101
 Vienna, Virginia 22180
 Phone: 703-549-2472
 www.rsandh.com
 Virginia Registration Nos.
 0407-003171 / 0411-000438



PROJECT TITLE:
 MECHANICAL SYSTEMS UPGRADE

PROJECT ADDRESS:
 100 BOWEN LOOP, SUITE 200
 CHARLOTTESVILLE, VA 22911

REVISIONS		
NO.	DESCRIPTION	DATE
1	ADDENDUM #1	06/28/2024

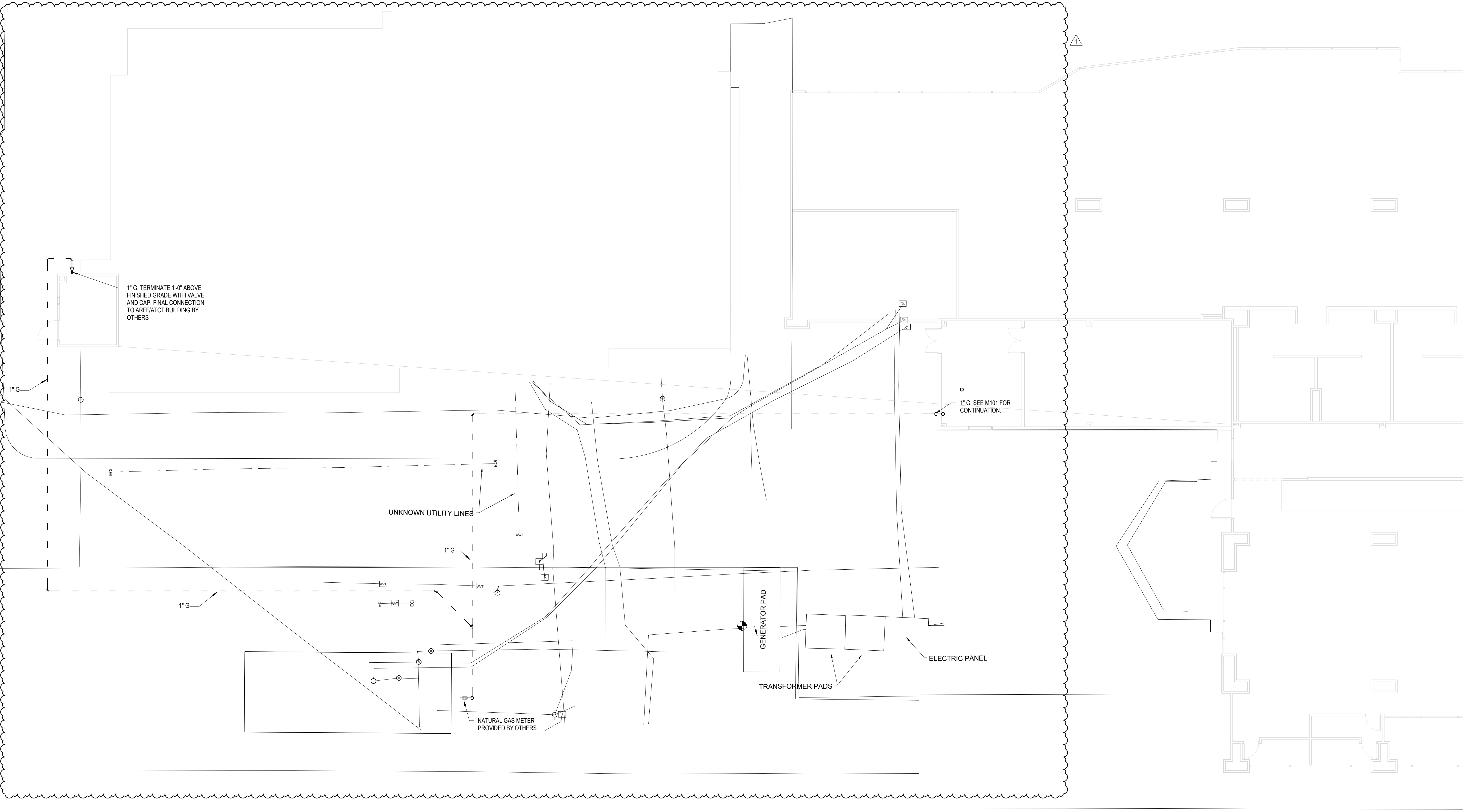
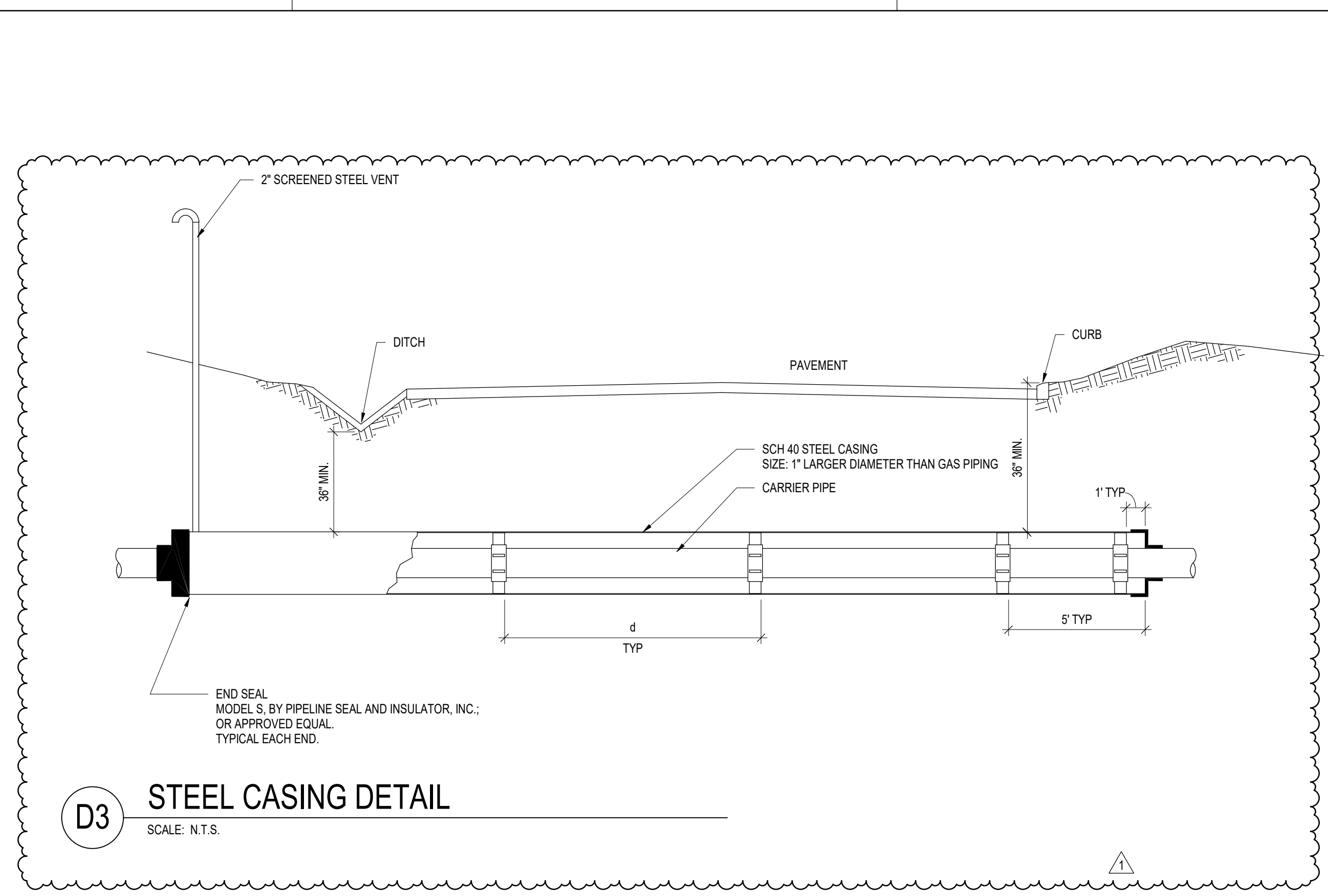
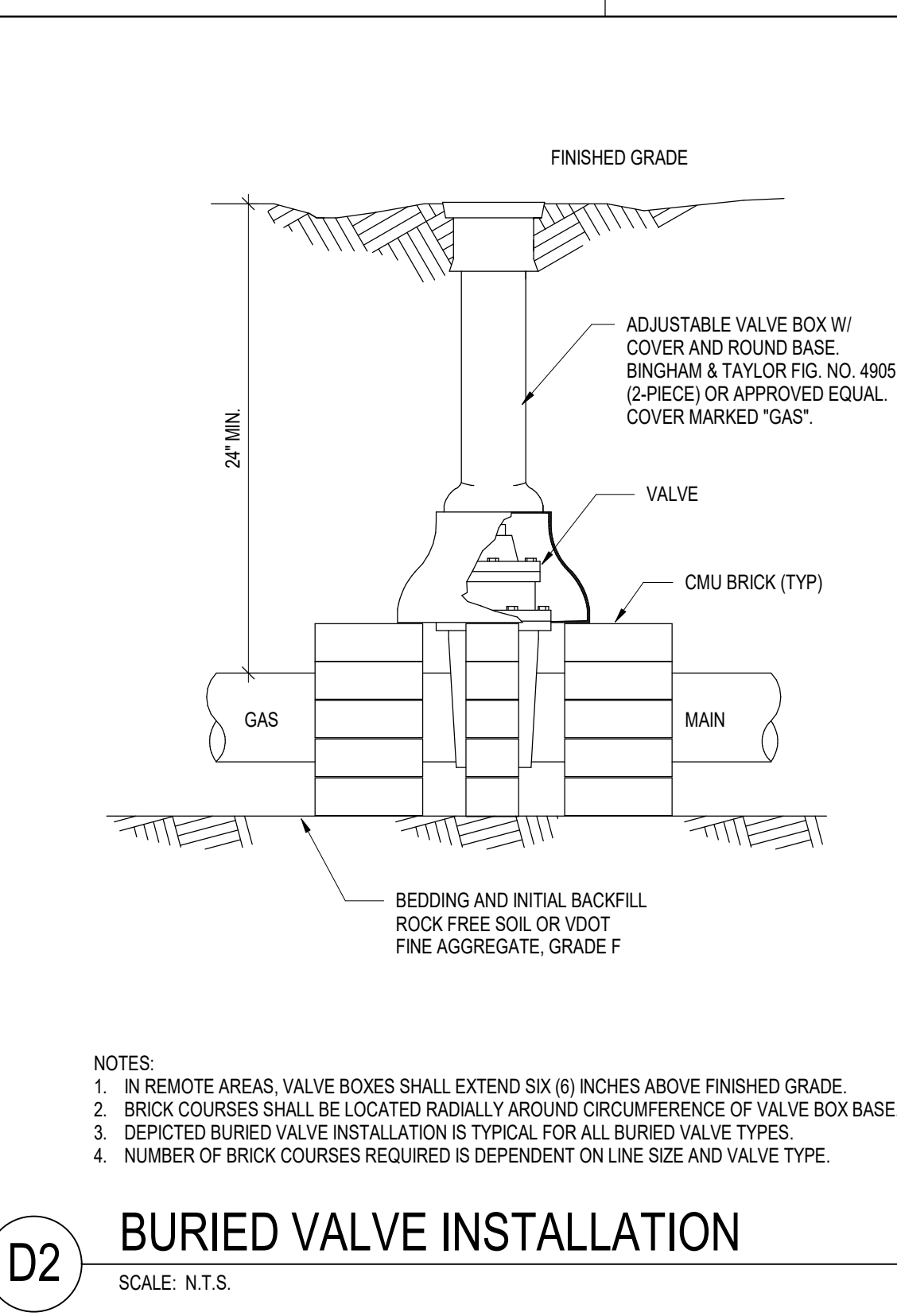
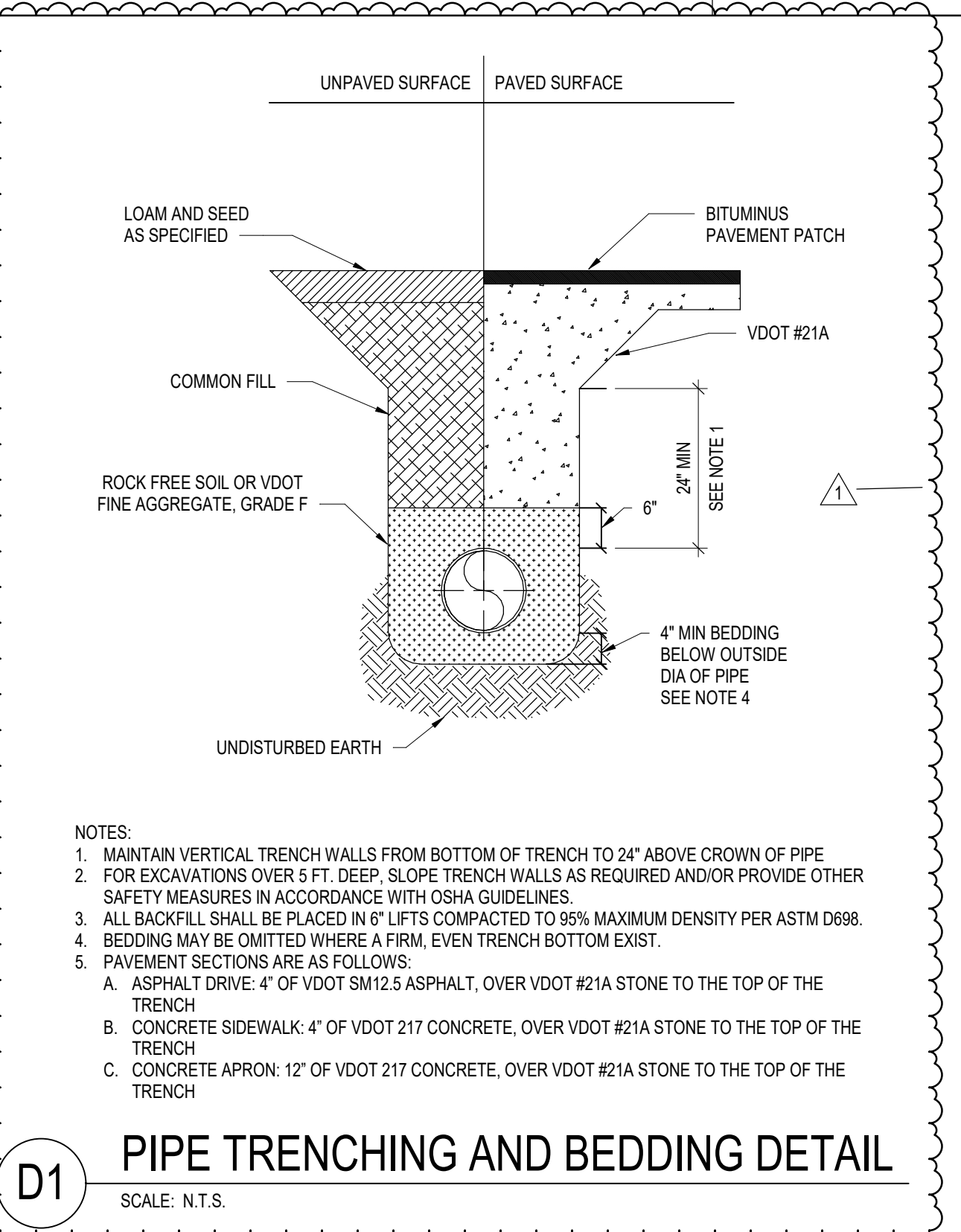
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REVIEWED BY: Checker
DRAWN BY: Author
DESIGNED BY: Designer
PROJECT NUMBER:
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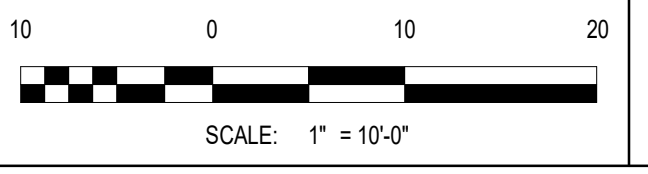
SHEET TITLE:
 MECHANICAL SITE PLAN

SHEET ID:
 MS101

PROJECT STATUS:
 ISSUED FOR BID



A1 Mechanical Site Plan
 SCALE: 1" = 10'-0"



6/28/2024 2:44:52 PM Autodesk Docs://20541812009_CHO Mechanical Systems Upgrade_MP_R22.rvt

GENERAL NEW WORK NOTES

- NATURAL GAS PIPING SHALL BE ROUTED NO LESS THAN 12" BELOW GRADE, UNLESS OTHERWISE NOTED.



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Vienna, Virginia 22180
Phone: 703-545-2472
www.rsandh.com
Virginia Registration Nos.
0407-003171 * 0411-000438



PROJECT TITLE:
MECHANICAL SYSTEMS UPGRADE

PROJECT ADDRESS:
100 BOWEN LOOP, SUITE 200
CHARLOTTESVILLE, VA 22911

REVISIONS

NO.	DESCRIPTION	DATE
1	ADDENDUM #1	06/28/2024

DATE ISSUED: 05/10/24
REVIEWED BY: KMN
DRAWN BY: SMB
DESIGNED BY: SMB

PROJECT NUMBER:
20541812009
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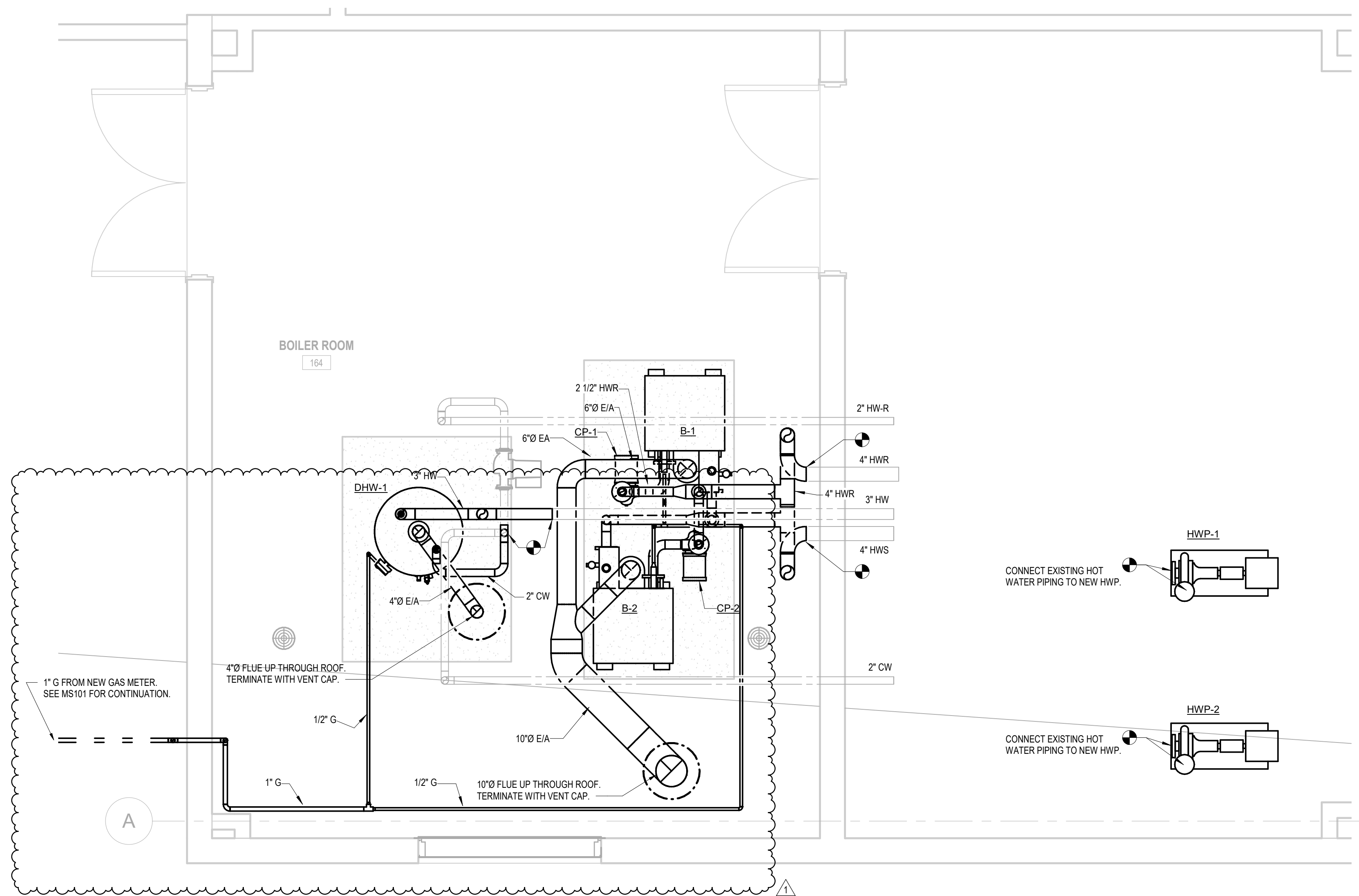
SEAL:

SHEET TITLE:
MECHANICAL ROOM
PIPING PLANS

SHEET ID:

M101

PROJECT STATUS:
ISSUED FOR BID



MARK	NO.	NAME	GAS BURNER		GAS-FIRED HEAT EXCHANGER				THERMAL EFF	UNIT WEIGHT (LBF)		
			INPUT (MBH)	OUTPUT (MBH)	FUEL TYPE	MAX PRESSURE (PSI)	FLOW (GPM)	EWT (FT)			LWT (FT)	PO (FT)
B-1	164	BOILER ROOM	850	824	NATURAL GAS	14.0	82.4	190	190	5.7	96%	750
B-2	164	BOILER ROOM	850	824	NATURAL GAS	14.0	82.4	190	190	5.7	96%	750

NOTES:
1. BASIS OF DESIGN: RB1 ENCLOSE 850
2. INSTALL AS INDICATED PER MANUFACTURERS RECOMMENDATIONS PROVIDED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

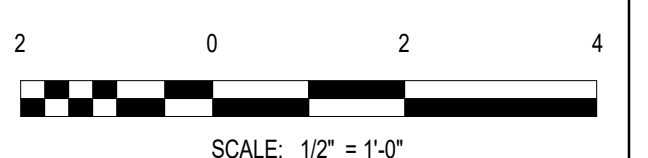
MARK	NAME	GAS BURNER		GAS-FIRED HEAT EXCHANGER				THERMAL EFF	UNIT WEIGHT (LBF)			
		INPUT (MBH)	OUTPUT (MBH)	FUEL TYPE	PRESSURE (PSI)	CAPACITY (GAL)	EWT (FT)			LWT (FT)	TEMP RISE (°F)	RECOVERY (GPH)
DHW-1	MT BOILER ROOM	300	288	NATURAL GAS	2.0	100	55	140	95	390	96%	523

NOTES:
1. BASIS OF DESIGN: A0 SMITH MODEL 8TH
2. INSTALL AS INDICATED PER MANUFACTURERS RECOMMENDATIONS PROVIDED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. SET WATER TEMPERATURE TO 140°F.
4. PROVIDE DRAIN PAN AND DRAIN PAN SENSOR. CONNECT TO BAS. SIGNAL ALARM AND CLOSE AUTOMATIC VALVES ON COLD WATER AND HOT WATER LINES UPON DETECTION OF WATER IN PAN

MARK	NO.	NAME	SERVES	TYPE	PUMP		DRIVE	MOTOR			UNIT WEIGHT	NOTES
					FLOW (GPM)	PRESSURE DROP (FT)		POWER (HP)	RPM	ECM		
CP-1	164	BOILER ROOM	HEATING HOT WATER	CLOSE-COUPLED IN-LINE MOUNTED	85	15.0	DIRECT	0.75	1935	Yes	95	1.3,4,5
CP-2	164	BOILER ROOM	HEATING HOT WATER	CLOSE-COUPLED IN-LINE MOUNTED	85	15.0	DIRECT	0.75	1935	Yes	95	1.3,4,5
HWP-1	163	MECHANICAL ROOM	HEATING HOT WATER	BASE-MOUNTED	195	60.0	DIRECT	5.00	1760	Yes	256	2.3,4,5
HWP-2	163	MECHANICAL ROOM	HEATING HOT WATER	BASE-MOUNTED	195	60.0	DIRECT	5.00	1760	Yes	256	2.3,4,5

NOTES:
1. BASIS OF DESIGN: B&G MODEL 60
2. BASIS OF DESIGN: B&G MODEL 41510
3. INSTALL AS INDICATED PER MANUFACTURERS RECOMMENDATIONS PROVIDED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. PROVIDE WITH VFD AND INVERTER RATED MOTOR.
5. PROVIDE STARTER DISCONNECT.

A1 MAIN TERMINAL HVAC PIPING PLAN
SCALE: 1/2" = 1'-0"



6/28/2024 2:44:48 PM Autodesk Docs://20541812009_CHO Mechanical Systems Upgrade/20541812009_CHO Mechanical Systems Upgrade_MP_0221.dwg

REVISIONS

NO.	DESCRIPTION	DATE
1	ADDENDUM #1	06/28/2024

DATE ISSUED: 05/10/24
 REVIEWED BY: KMN
 DRAWN BY: SMB
 DESIGNED BY: SMB

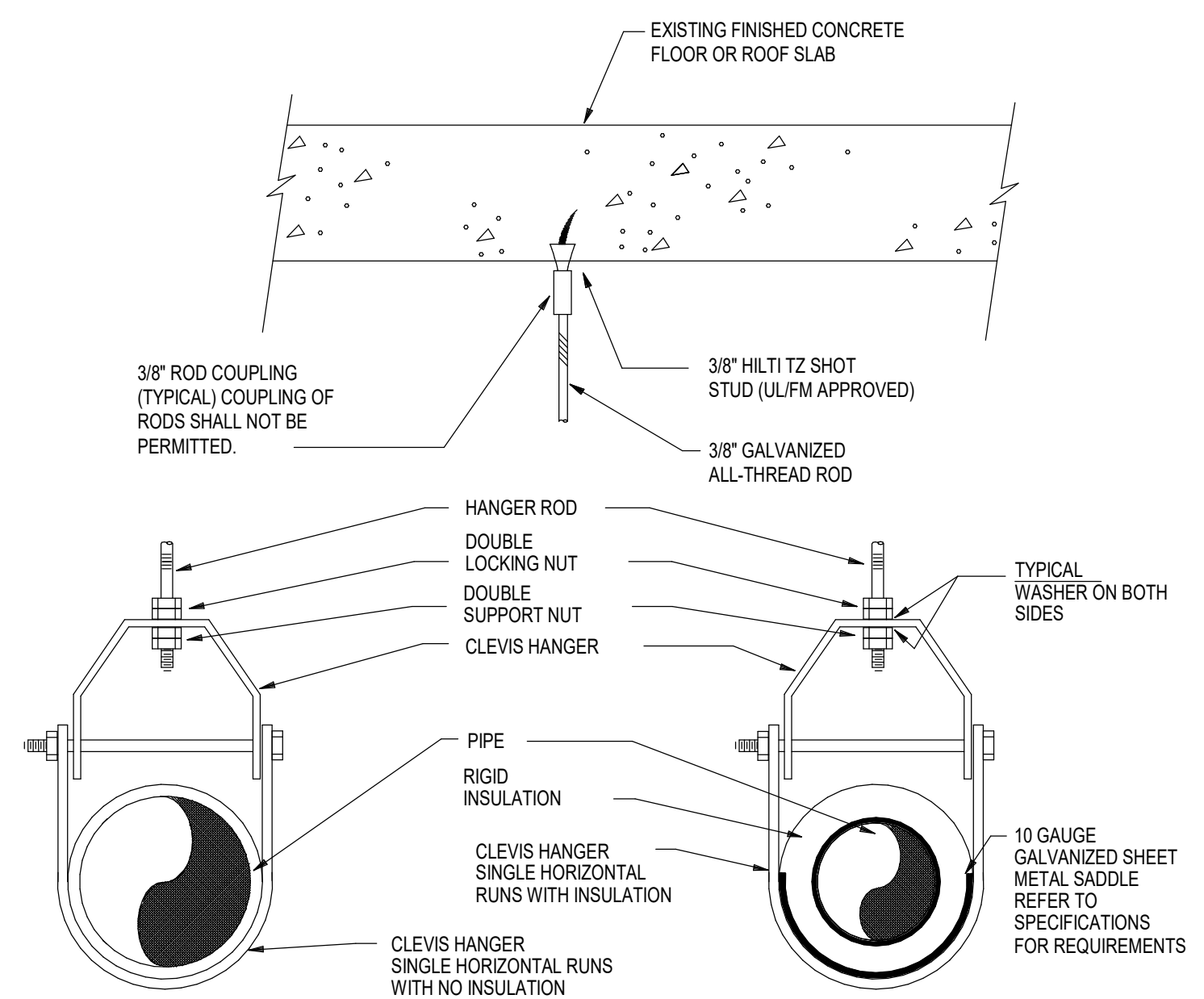
PROJECT NUMBER:
20541812009
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SEAL:

SHEET TITLE:
 DETAILS

SHEET ID:
M501

PROJECT STATUS:
 ISSUED FOR BID

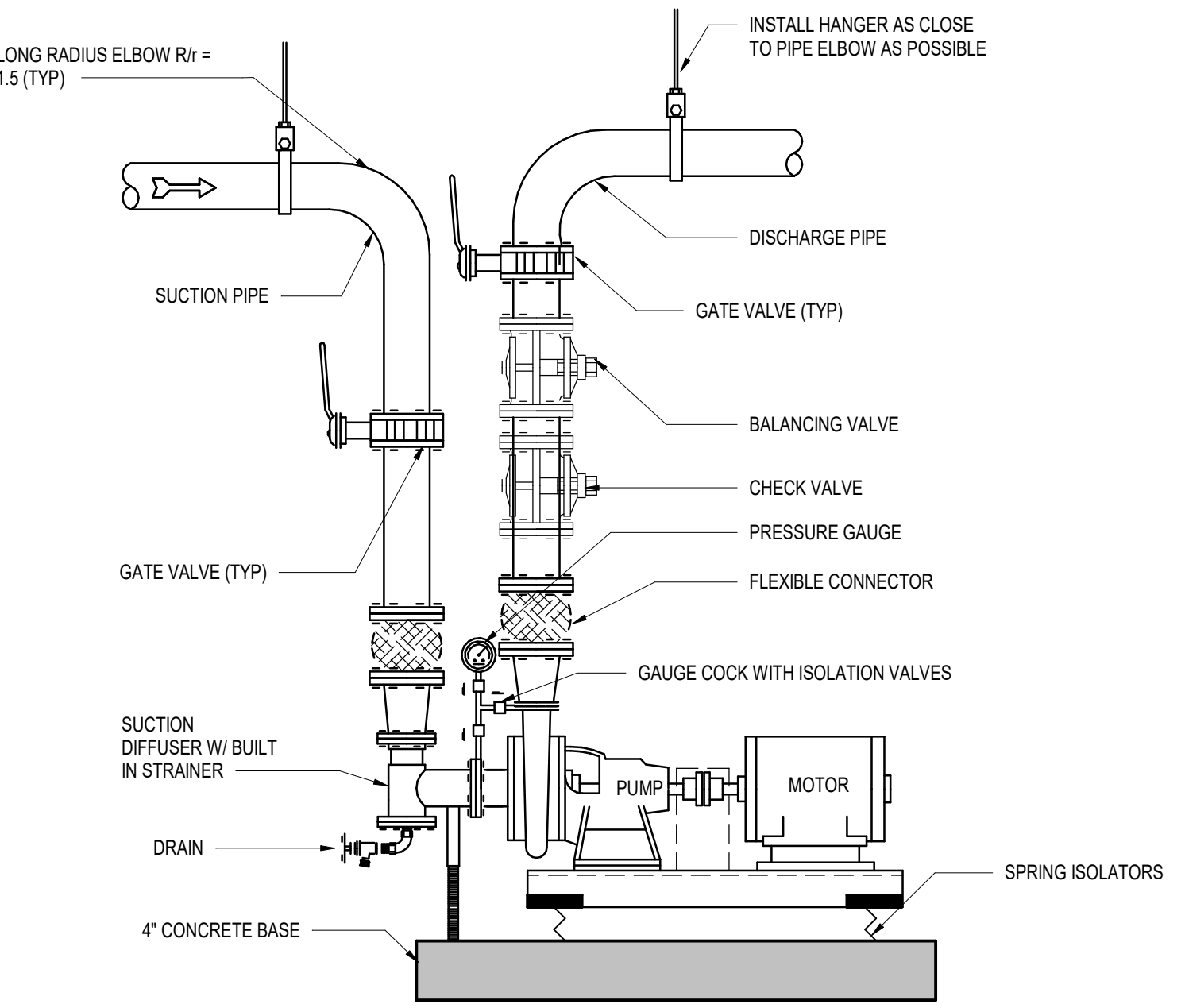


HANGER ROD SCHEDULE

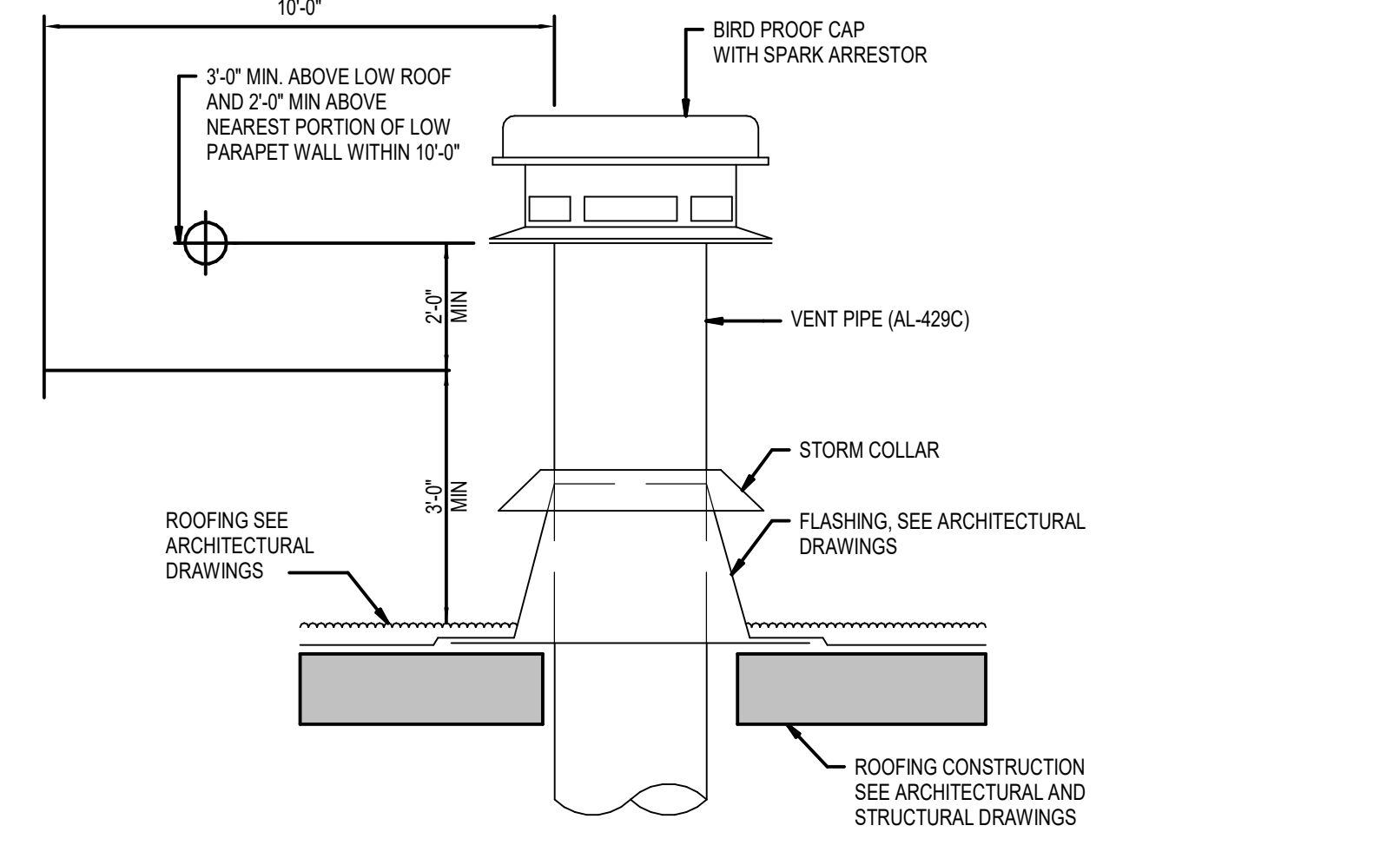
PIPE SIZE	ROD SIZE	PIPE SIZE	ROD SIZE
UP TO 2"	3/8" DIA.	4" THRU 5"	5/8" DIA.
2 1/2" THRU 3"	1/2" DIA.	6" THRU 12"	7/8" DIA.

NOTE:
 NO COUPLING OF RODS IS PERMITTED!
 INSTALLATION AND MATERIALS SHALL MEET WITH FEDERAL, STATE AND LOCAL CODE REQUIREMENTS, INCLUDING N.F.P.A. 99
 REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. INSTALLATION OF SHOT STUDS INTO CONCRETE CONSTRUCTION SHALL HAVE THE APPROVAL AND REVIEW OF THE STRUCTURAL ENGINEER.

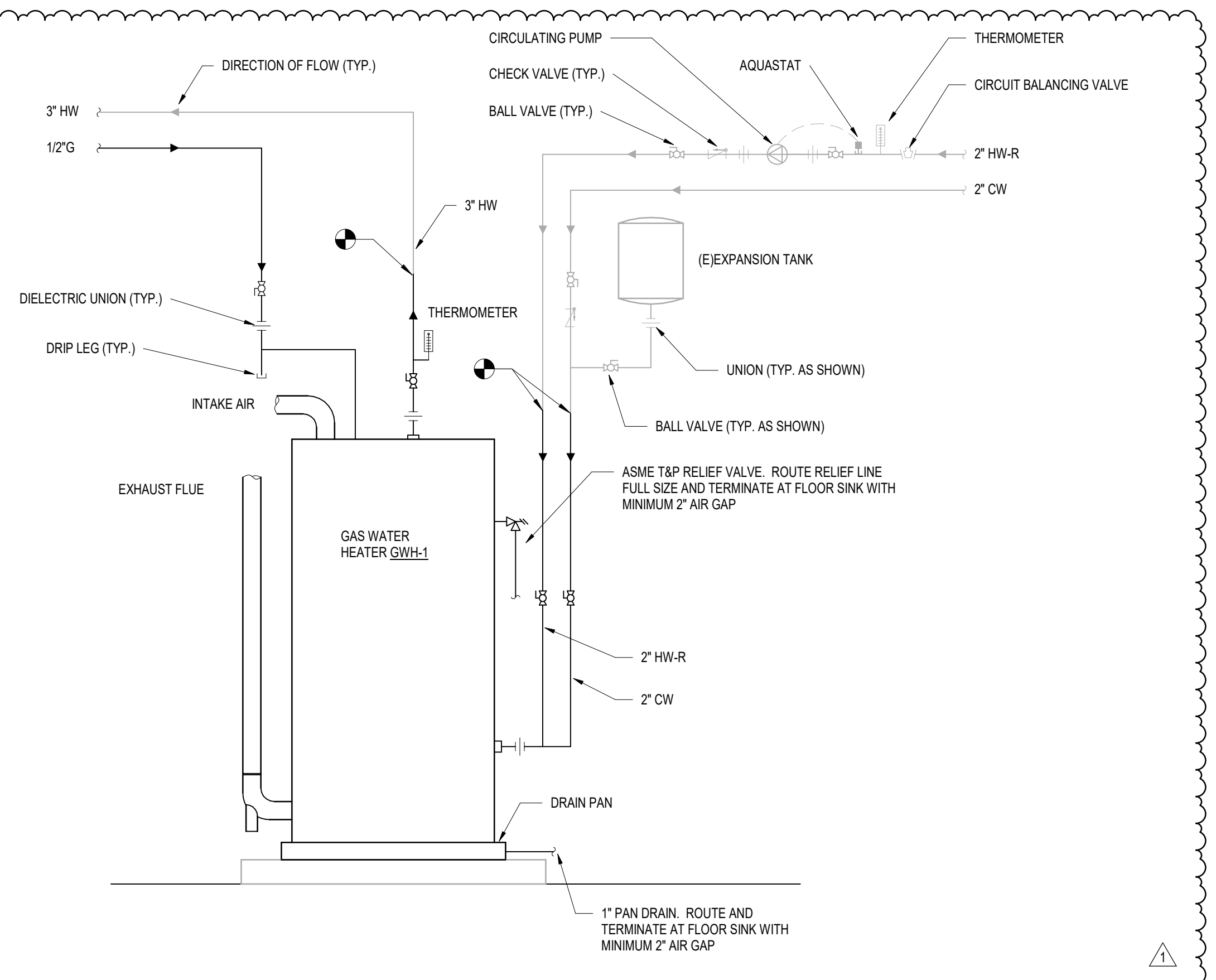
C1 CLEVIS PIPE HANGER DETAIL
 SCALE: N.T.S.



B1 END SUCTION PUMP DETAIL
 SCALE: N.T.S.

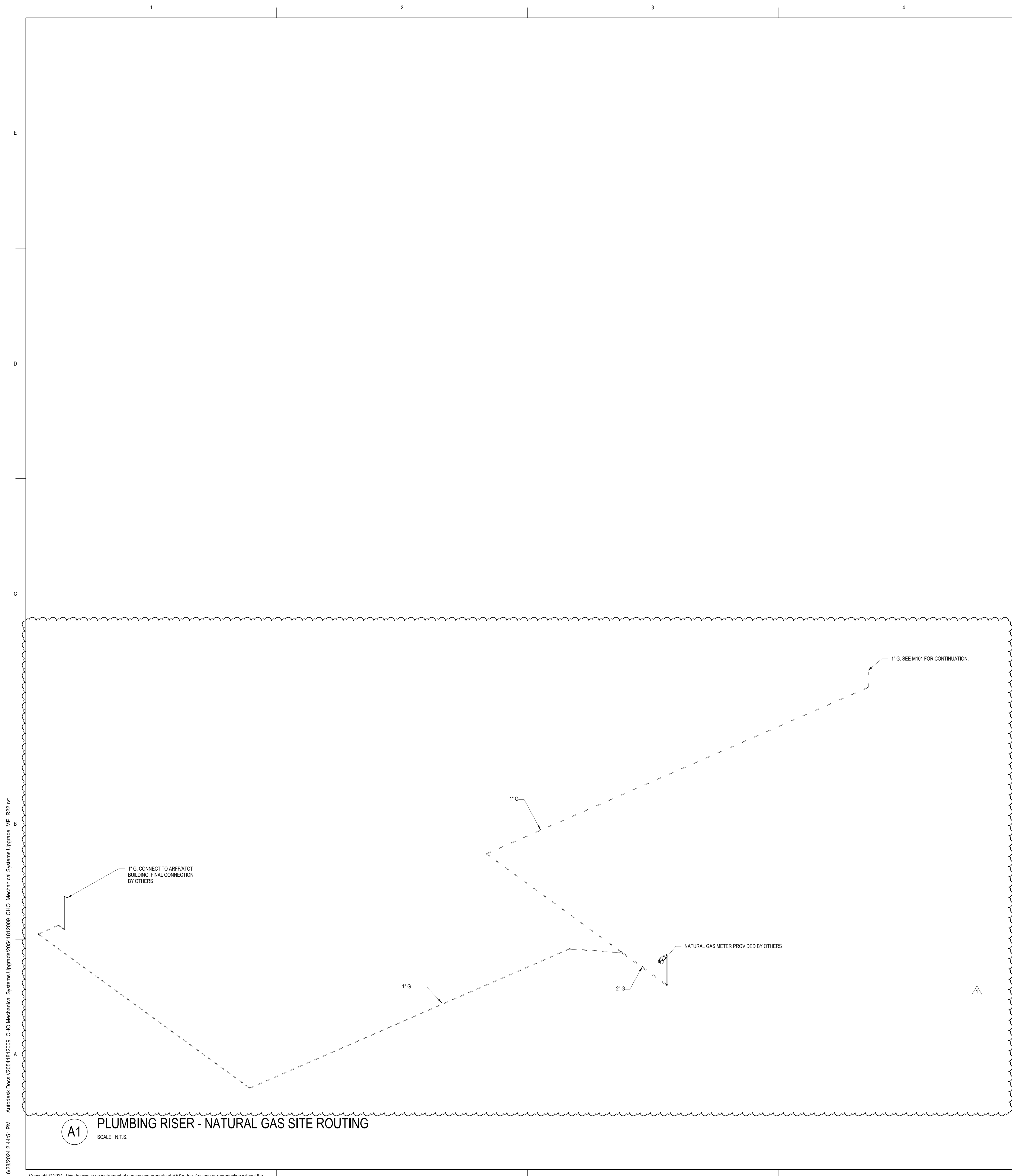


B2 FLUE INSTALLATION DETAIL
 SCALE: N.T.S.

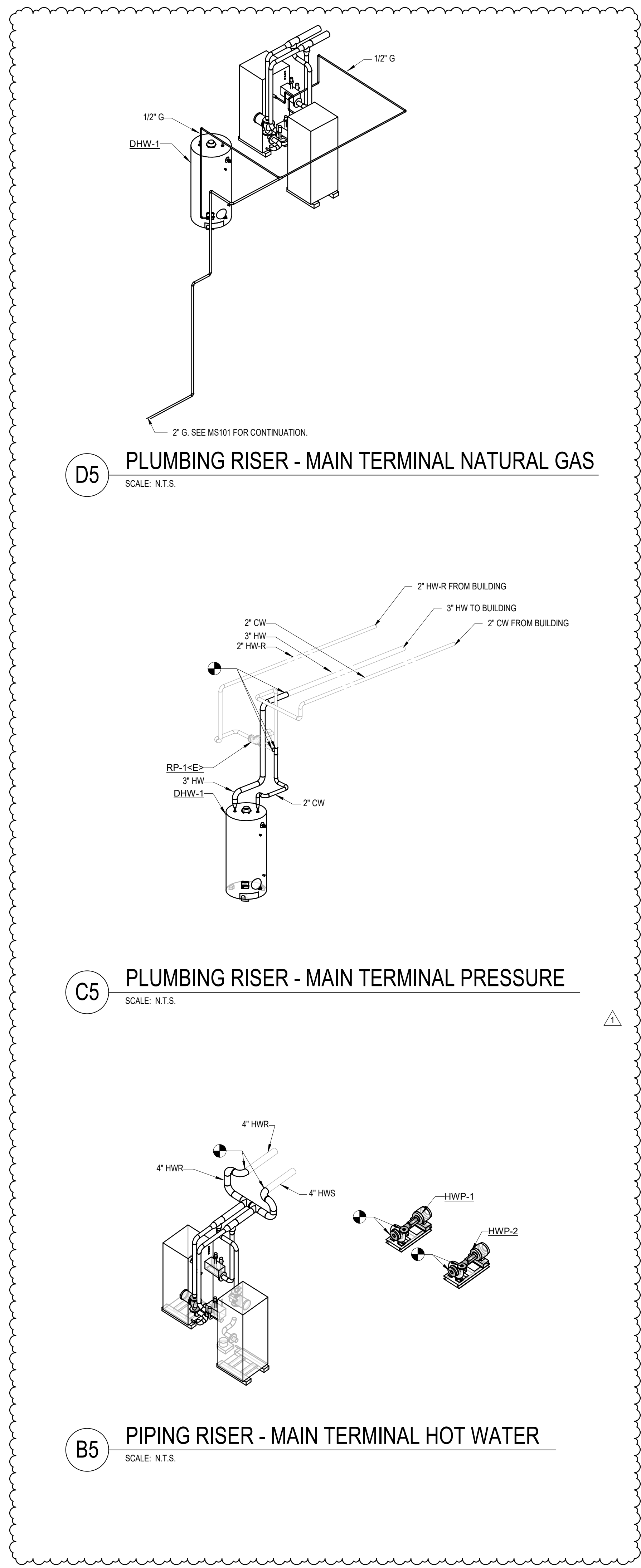


B3 GAS WATER HEATER PIPING DETAIL
 SCALE: N.T.S.

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A1 PLUMBING RISER - NATURAL GAS SITE ROUTING
SCALE: N.T.S.



D5 PLUMBING RISER - MAIN TERMINAL NATURAL GAS
SCALE: N.T.S.

C5 PLUMBING RISER - MAIN TERMINAL PRESSURE
SCALE: N.T.S.

B5 PIPING RISER - MAIN TERMINAL HOT WATER
SCALE: N.T.S.

RS&H

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Vienna, Virginia 22180
Phone: 703-548-2472
www.rsandh.com
Virginia Registration Nos.
0407-003171 * 0411-000438

CHO
AIRPORT

PROJECT TITLE:
MECHANICAL SYSTEMS UPGRADE

PROJECT ADDRESS:
100 BOWEN LOOP, SUITE 200
CHARLOTTESVILLE, VA 22911

REVISIONS		
NO.	DESCRIPTION	DATE
1	ADDENDUM #1	06/28/2024

DATE ISSUED: 05/10/24
REVIEWED BY: KMN
DRAWN BY: SMB
DESIGNED BY: SMB
PROJECT NUMBER:
20541812009
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SEAL:

SHEET TITLE:
PIPING DIAGRAMS

SHEET ID:
MP701

PROJECT STATUS:
ISSUED FOR BID

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REVISIONS

NO.	DESCRIPTION	DATE
1	ADDENDUM #1	06/28/2024

DATE ISSUED: 09/10/24
REVIEWED BY: SMB
DRAWN BY: SMB
DESIGNED BY: SMB
PROJECT NUMBER:
 20541812009
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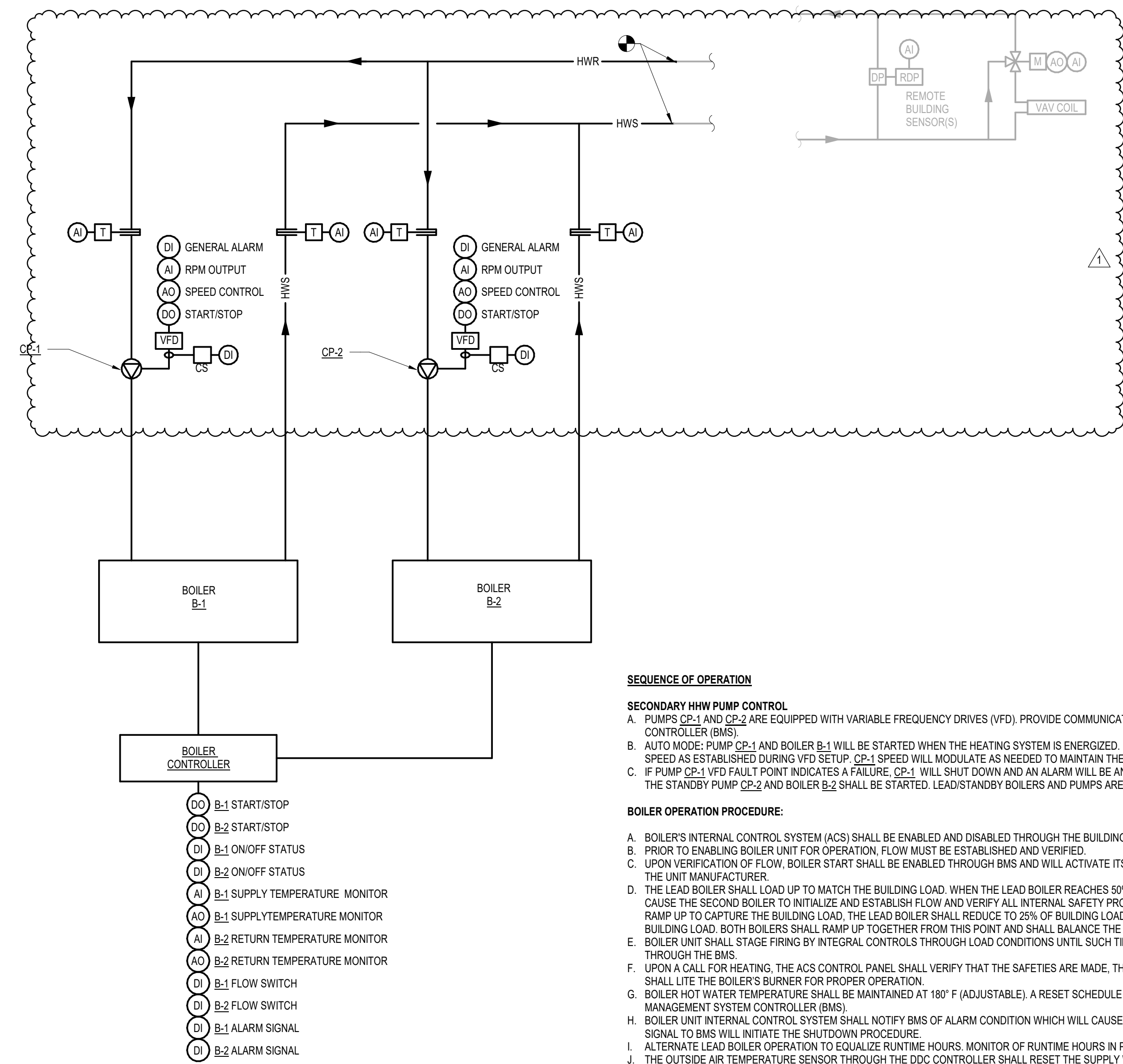
SEAL:

SHEET TITLE:
 CONTROLS

SHEET ID:

M801

PROJECT STATUS:
 ISSUED FOR BID



A4 MT HOT WATER SYSTEM CONTROL DIAGRAM AND SEQUENCE OF OPERATION
 SCALE: N.T.S.

SECTION 235123 - GAS VENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Listed double-wall vents.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For vents.
 - 1. Include plans, elevations, sections, and attachment details.
 - 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 3. Detail fabrication and assembly of hangers and seismic restraints.

1.3 INFORMATIONAL SUBMITTALS

- A. Welding certificates.
- B. Sample Warranty: For special warranty.

1.4 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel," for hangers and supports.
 - 2. AWS D9.1/D9.1M, "Sheet Metal Welding Code," for shop and field welding of joints and seams in vents.
- B. Certified Sizing Calculations: Manufacturer shall certify venting system sizing calculations.

PART 2 - PRODUCTS

2.1 LISTED TYPE B AND BW VENTS

- A. Description: Double-wall metal vents tested according to UL 441 and rated for 480 deg F continuously for Type B or 550 deg F continuously for Type BW; with neutral or negative flue pressure complying with NFPA 211.
- B. Construction: Inner shell and outer jacket separated by at least a 1/4-inch airspace.
- C. Inner Shell: ASTM B209, Type 1100 aluminum
- D. Outer Jacket: Galvanized steel.
- E. Accessories: Tees, elbows, increasers, draft-hood connectors, terminations, adjustable roof flashings, storm collars, support assemblies, thimbles, firestop spacers, and fasteners; fabricated from similar materials and designs as vent-pipe straight sections; all listed for same assembly.
 - 1. Termination: Stack cap designed to exclude minimum 90 percent of rainfall.
 - 2. Termination: Round chimney top designed to exclude minimum 98 percent of rainfall.
 - 3. Termination: Exit cone with drain section incorporated into riser.
 - 4. Termination: Antibackdraft.

PART 3 - EXECUTION

3.1 APPLICATION

- A. Listed Type B and BW Vents: Vents for certified gas appliances.

3.2 INSTALLATION OF LISTED VENTS

- A. Comply with minimum clearances from combustibles and minimum termination heights according to product listing or NFPA 211, whichever is most stringent.
- B. Seal between sections of positive-pressure vents according to manufacturer's written installation instructions, using sealants recommended by manufacturer.
- C. Support vents at intervals recommended by manufacturer to support weight of vents and all accessories, without exceeding appliance loading.
- D. Lap joints in direction of flow.

- E. After completing system installation, including outlet fittings and devices, inspect exposed finish. Remove burrs, dirt, and construction debris, and repair damaged finishes.

END OF SECTION 235123



100 Bowen Loop, Suite 200
Charlottesville, VA 22911
TEL: 434.973.8342, Ext 103
FAX: 434.220.4287

PROJECT: Mechanical Systems Upgrade/Natural Gas

Pre-Bid Meeting

June 12, 2024
10:30 a.m.

ATTENDEES:

Name:

Representing

E-mail

- | Name: | Representing | E-mail |
|--------------------|------------------|--------------------------|
| 1. Jason Devillier | CHO Maint | jdevillier@gocho.com |
| 2. Tim Southern | Hopkins/Lacy | tsouthern@lalacy.com |
| 3. Zac Herrick | Hopkins/Lacy | zac.herrick@jhopkins.com |
| 4. Jeff Brock | Johnson Controls | JBrock@JCI.com |
| 5. Dennis Hubbard | Varney Inc. | dhubbard@varneyinc.com |
| 6. Mike Kelley | Waco Inc. | mkelley@wacoinc.net |
| 7. KEITH NIX | R S F H, Inc. | KEITH.NIX@RSANDH.COM |



PRE-BID MEETING AGENDA

Subject:	Mechanical Upgrades		
Agenda Prepared By:	Keith Nix, RS&H		
Copies to:	Participants	RS&H Project No.	20541892009
Meeting Place:	CHO Main Terminal	Meeting Date / Time:	June 12, 2024 10:30 AM EDT

→ **Owner / Design Team Introductions**

→ **Project Overview**

- Spec Section 01100 – Project Summary
- Base Bid
 - Removal and replacement of existing boilers, water heater, circulating pumps, sections of existing hydronic piping and accessories, flue vents and accessories, and existing fuel oil piping serving the terminal building.
 - Disconnection/Reconnection of existing electrical circuits.
 - Installation of natural gas piping from the utility installed gas meter to the terminal building and equipment and to the ATCT/ARFF building for future connection by others.
 - Integration of new equipment into existing Johnson Controls building controls system.
- Bid Alternates – NONE

→ **Bid Requirements**

- Copies of bid documents may be obtained by e-mailing Keith Nix and Beth Church at RS&H.
 - Keith.nix@rsandh.com
 - Beth.church@rsandh.com
- Form of Bid: Fixed Price Bid
- Pre-Bid Site Walk Thru: Immediately following Pre-Bid Meeting
- Bid due date / time – Wednesday, July 10, 2024 @ 2:00 pm local time
- Procedures for submitting questions
 - Deadline for questions is Tuesday, June 25, 2024, 2:00 PM local time.
- Distribution of Addenda and Answers to Contractor Questions
 - Addenda will be issued to bidders via Newforma.
- DBE Participation Goals: 0.0%
- Buy America Act Requirements: None
- Submitting a responsive bid
 - Bid Bond is required with Bid – 10% of Bid Price .
 - Performance, and Payment bonds are required.
- The awarded Contractor must provide CHO with all documentation necessary for the processing of the contract documents within fifteen (15) calendar days of the Notice of Award. Necessary documentation shall include, and not be limited to, proper insurance certificates, contractor's statement of materials and other charges, and bonds.
 - Bids to remain valid for 90 days.

→ **Security and Badging Requirements**

- Secured area; Will require all employees who will be on site on a regular basis to be badged.

→ **Staging Areas / Site Access**

- Staging areas will be coordinated with the airport. “Permanent” lay down or staging areas not anticipated.
- No personal employee vehicles on secure side
- Contractor responsible for security of own materials and equipment



→ **Construction Safety / Limiting Impacts on Operations**

- Project is within active passenger terminal

→ **Construction Phasing**

- Total contract duration is 200 calendar days for substantial completion. Additional 30 days for closeout
- Phase 0: 45 days prior to start of construction (Mobilization; submittals; verifications and control setup; procurement; other “non-construction” operations; etc.)
- Phase 1: Installation of natural gas piping from meter to Terminal Building and ATCT/ARFF Buildings - 45 calendar days.
- Phase 2: Installation of new boilers, pumps, hot water heater, etc, inside the Terminal Building Mechanical room – NTP for Phase 2 will occur in Spring 2025 after heating season. Anticipate 4 weeks of active construction.

→ **Scheduling**

- Contractor must submit detailed schedule within 15 days of notice of award as to how to complete in allowed duration
- Contractor must provide minimum 14 days notice prior to mobilizing on site

→ **Quality Control vs. Quality Assurance**

- Quality Control: Executed and paid for by the Contractor
- Quality Assurance: Executed by the Architect/Engineer; Paid for by the Owner

→ **Communication**

- During Bidding
 - All communication shall be directed through RS&H.
- During Construction
 - RS&H will be point of contact for all project related communication.
 - Contractor must have qualified superintendent on-site during all construction activities.

→ **Questions / Comments**

Current Roofing contractor for Airport?? - Skyline Roofing.

Coordination Drawings during submittal phase will be waived.