



**Fire Department Generator Installation Project
Town of Manchester by the Sea, Massachusetts**

ADDENDUM #2

Date of Addendum 2: April 15, 2025

Bid Due Date: April 22, 2025 @ 11:00AM EST

All scope associated with the Town Hall Generator is removed from the Project. The scope of the project will solely consist of the work at the Fire Department located at 12 School. Additive Alternate 1 is deleted from the scope of work. Attached is an updated General Bid Form. Also attached are updated project plans.

An interim milestone completion date of June 30, 2025, will be established for the completion of the work associated with base bid item #2 - Fire Dept Generator: Furnish and install pad & platform per S1.0.

The following questions were received:

Q1: Can you please confirm the mailing address to submit this bid? The Invitation attached has both School Street and Central Street addresses.

A1: See paragraph 1.05 of the Invitation to Bid. Bid shall be delivered to MBTS Town Hall – DPW Room 6, 10 Central St, MBTS

Q2: Specifications include DCAMM package but does not state that this is a DCAMM certified bid and does not state the DCAMM certified category.

A2: If the cost of the work exceeds \$150,000 the following will be required: DCAMM Certification in Electrical category, a 100% payment bond, and a 100% performance bond.

Q3: Are equal generator manufacturers acceptable or must the generator be Generac?

A3: Or equal generator manufacturers are acceptable.

YOU MUST ACKNOWLEDGE THIS ADDENDUM IN YOUR SUBMISSION

**FORM FOR GENERAL BID –
ADDENUM #2**

To the Awarding Authority:

- 1.01 The undersigned proposes to furnish all labor and materials required for the **Manchester-by-the-Sea Fire Department - Generator Project** located at **12 School Street, Manchester-by-the-Sea, MA 01944** accordance with the accompanying Contract Documents, Drawings, and Specifications, prepared by Fuss & O'Neill, Inc., 115 Broad St 6th floor, Boston, MA 02110, for the contract prices specified below, subject to additions and deductions according to the terms of the Bid Documents, Drawings and Specifications.

A. The Bid includes Addenda numbered_____.

1.02 Bid Form

BASE BID

Item 1: Fire Dept Generator: Furnish and install, and all associated work including gas supply line to generator

\$ _____(In Numbers)

_____Dollars (In Words)

Item 2: Fire Dept Generator: Furnish and install pad & platform per S1.0

\$ _____(In Numbers)

_____Dollars (In Words)

Item 3: Fire Department: All other work as detailed in the plans and specifications not covered under items 1 & 2

\$ _____(In Numbers)

_____Dollars (In Words)

Base Bid Total

\$ _____(In Numbers)

_____Dollars (In Words)

THIS SECTION SHALL BE COMPLETED BY ALL BIDDERS

- 1.03 BIDDER accepts all of the terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. BIDDER promises and agrees that this Bid will remain subject to acceptance for thirty days after the day of Bid opening.
- 1.04 In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:
- A. BIDDER has examined copies of all the Bidding Documents.
 - B. BIDDER has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and laws and regulations that in any manner may affect cost, progress, performance or furnishing of the work.
 - C. BIDDER has studied carefully all reports and drawings of physical conditions included with these specifications and accepts that all measurements and technical data included herein is ENGINEER'S estimates and BIDDER has made such investigations of his own as necessary and has based his bid on those investigations.
 - D. BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests and studies (in addition to or which pertain to the physical conditions at the site or otherwise may affect the cost, progress, performance or furnishing of the Work) as BIDDER considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, and no additional examinations, investigations, explorations, tests, reports, or similar information or data are or will be required by BIDDER for such purposes.
 - E. BIDDER has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
 - F. BIDDER has given ENGINEER written notice of all conflicts, errors or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to BIDDER.
 - G. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other BIDDER to submit a false or sham bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other bidder or over OWNER.
- 1.05 BIDDER agrees that the work shall be completed in the specified number of working days from the date of the Notice to Proceed.

- 1.06 The terms used in this Bid which are defined in the General Conditions of the Construction Contract (AIA Document A201) included as part of the Contract Documents have the meanings assigned to them in the General Conditions.
- 1.07 The undersigned agrees that, if he is selected as General Contractor, he will within five (5) days, Saturdays, Sundays, and legal holidays excluded, after presentation thereof by the Awarding Authority, execute a Contract in accordance with the terms of his general bid and furnish a performance bond, also a labor and materials or payment bond, each of a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the Awarding Authority and each in the sum of one hundred percent (100%) of the Contract Price, the premiums for which are to be paid by the General Contractor and are included in the Contract Price. Performance and labor and materials payment bonds shall be T-Listed: Surety company(ies) shall be listed in the U.S. Treasury Department Circular 570, most recent edition, as amended.
- 1.08 The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that he will comply fully with all laws and regulations applicable to awards made subject to Section 44A of Chapter 149 of the General Laws.
- 1.09 The undersigned further certifies under penalties of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.
- 1.10 The undersigned hereby certifies, under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection, the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.
- 1.11 The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that he will comply fully with all laws and regulations applicable to awards made subject to section 44A.
- 1.12 The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

1.13 List References for Similar Projects:

1. _____

2. _____

3. _____

4. _____

5. _____

Generator Project
Manchester-by-the-Sea Fire
Department
Manchester-By-The-Sea, MA

THIS BID IS SUBMITTED ON _____ the _____
(month) (day)

Print Name of General Bidder

By _____
Name of Person Signing Bid and Title

SSN or Federal
Identification Number:

Business Address

City, State and Zip Code

Telephone: _____

FAX: _____

Note: If the Bidder is a corporation, indicate state of incorporation; if a partnership, give full name and addresses of all partners; and if an individual, provide residential address if different from business address. Use the following spaces:

If a Corporation:

Incorporated in what state: _____

President: _____

Treasurer: _____

Secretary: _____

If a foreign corporation (incorporated or organized under laws other than laws of the Commonwealth of Massachusetts), is the corporation registered with the Secretary of State of Massachusetts?
Yes _____ No _____.

If the bidder is selected for the work referred to above, it is required under MGL c 30 39L to furnish to the awarding authority a certificate to the Secretary of State stating that the corporation has complied with

MGL c 181 3, 5 and the date of such compliance.

If a Partnership: (name all partners)

Name of Partner: _____

Residence: _____

Name of Partner: _____

Residence: _____

If an Individual: _____

Name: _____

Residence: _____

If an Individual doing business under a firm name:

Name: _____

Name of Individual: _____

Business Address: _____

Residence: _____

Other form of business organization:

The bidder will give below the name and address of the Surety Company who will sign the bonds. Surety Company(ies) shall be listed in the U.S. Treasury Department Circular 570, most recent edition, as amended.

Bid Bond (or equivalent) attached (See Invitation to Bid)

END OF SECTION

Fire Department Generator Project

ELEVATED GENERATOR PLATFORMS AT TOWN HALL
AND FIRE DEPARTMENT

MARCH 2025

PREPARED FOR
THE TOWN OF MANCHESTER-BY-THE-SEA
10 CENTRAL STREET
MANCHESTER-BY-THE-SEA, MA

PREPARED BY



FUSS & O'NEILL
190 HIGH STREET
BOSTON, MA 02110
617.282.4675
www.fando.com



DRAWING INDEX:

G1.0 COVER SHEET

FIRE DEPARTMENT ELECTRICAL:

TS TITLE SHEET
E-0.1 LEGEND, SPECIFICATION, AND RISERS
E-0.2 DETAILS
E-1.0 DEMOLITION PLAN
E-1.1 NEW WORK PLAN
P-0.1 PLUMBING LEGEND, SPECIFICATION, AND DETAILS
P-1.0 PLUMBING FLOOR PLAN

TOWN HALL ELECTRICAL:

~~TS TITLE SHEET~~
~~E-0.1 LEGEND, SPECIFICATION, AND RISERS~~
~~E-0.2 DETAILS~~
~~E-1.0 DEMOLITION PLAN~~
~~E-1.1 NEW WORK PLAN~~

STRUCTURAL:

S1.0 FIRE HOUSE GENERATOR PAD DETAILS
~~S1.1 TOWN HALL GENERATOR PAD DETAILS~~

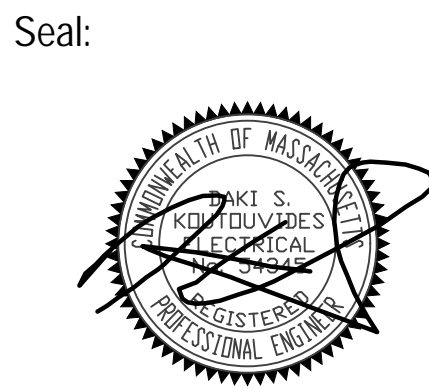
MANCHESTER-BY-THE-SEA
FIRE AND RESCUE DEPARTMENT
GENERATOR PROJECT

Town of Manchester-by-the-Sea
10 Central Street
Manchester-by-the-Sea, MA 01944



DRAWING INDEX:

TS	-	TITLE SHEET
E-0.1	-	LEGEND, SPECIFICATION, AND RISERS
E-0.2	-	DETAILS
E-1.0	-	DEMOLITION PLAN
E-1.1	-	NEW WORK PLAN
P-0.1	-	PLUMBING LEGEND, SPECIFICATION, AND DETAILS
P-1.0	-	PLUMBING FLOOR PLAN



Client:

TOWN OF
MANCHESTER-BY-THE-SEA
10 CENTRAL ST
MANCHESTER-BY-THE-SEA, MA 01944

Submission:
BID DOCS 9/27/24

Revision:

Project:

FIRE AND RESCUE DEPARTMENT
GENERATOR PROJECT
12 SCHOOL ST
MANCHESTER-BY-THE-SEA, MA 01944

THIS MATERIAL IS CONFIDENTIAL
AND MAY NOT BE DISCLOSED
WITHOUT PRIOR WRITTEN AUTHORIZATION
FROM BLW ENGINEERS INC.
COPYRIGHT BLW ENGINEERS INC.

Project No.: 24069

Drawn By: RG

Checked By: CM



Scale: As Noted

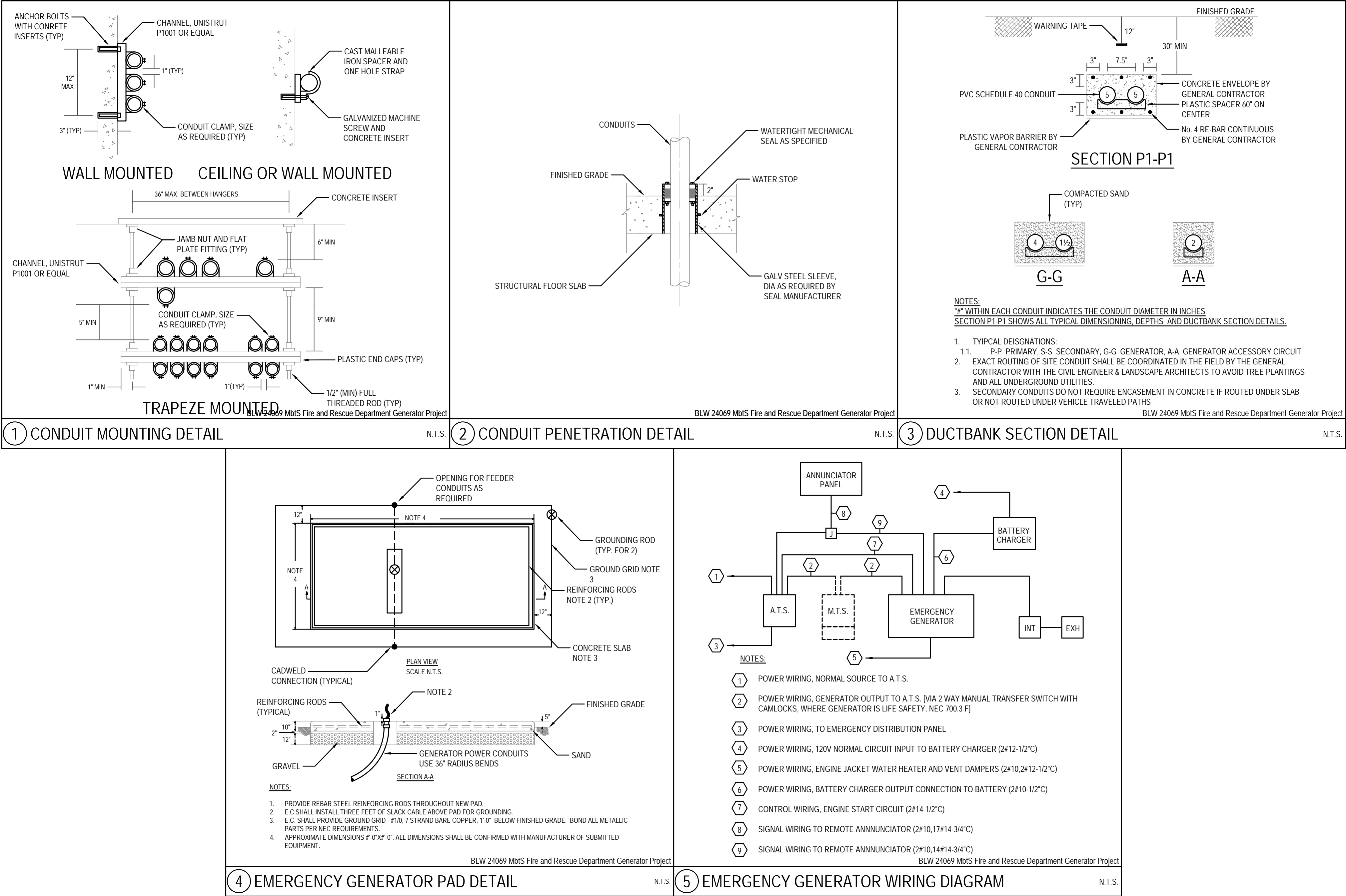
Title:

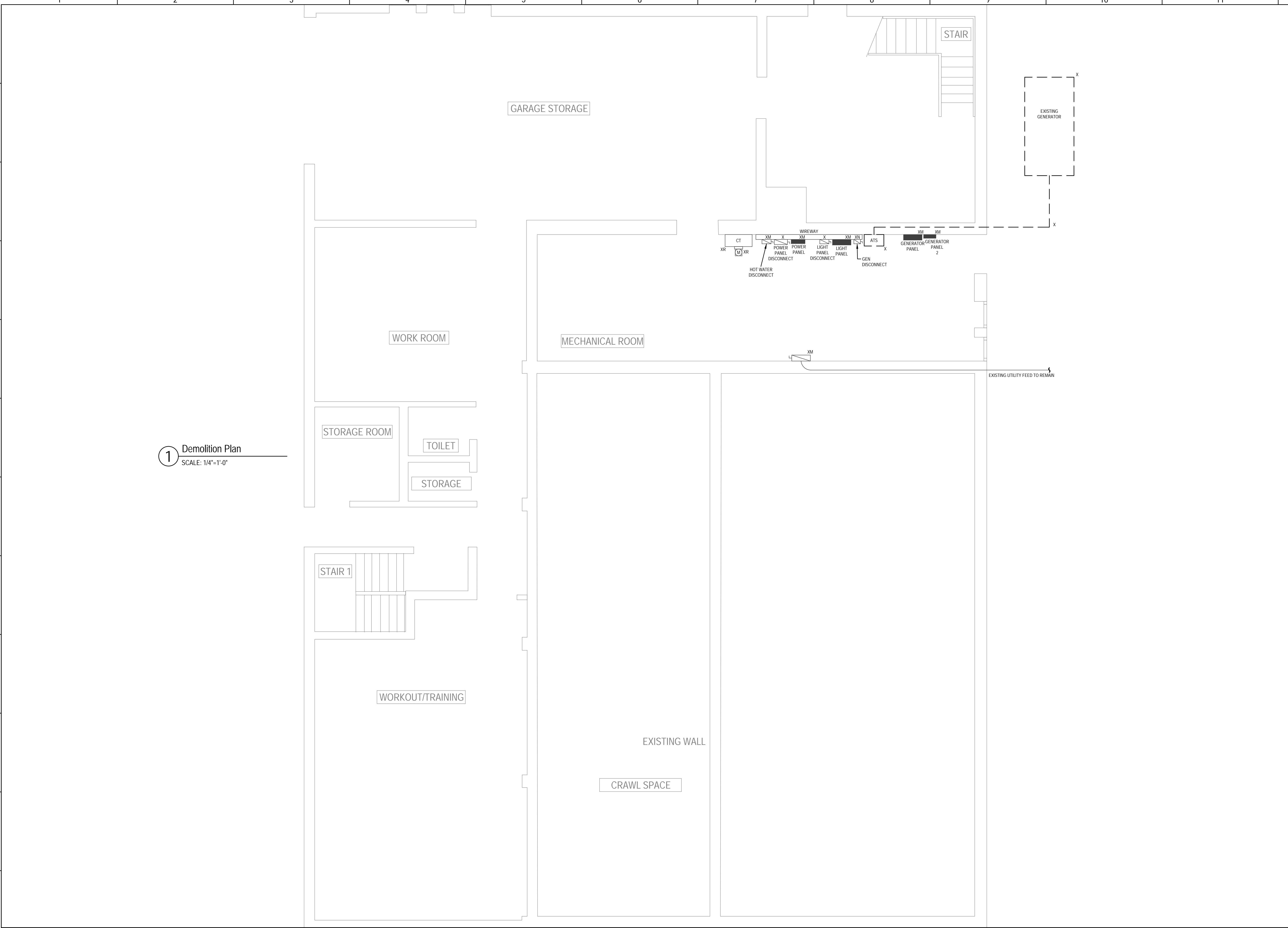
TITLE SHEET

Drawing No.:


TS


1	2	3	4	5	6	7	8	9	10	11	<div>Seal: </div> <div> BLW Engineers, Inc. 311 Great Road, Post Office Box 1551 Littleton, Massachusetts 01460 T: 978.486.4301 F: 978.428.0067 www.blwengineers.com HVAC Electrical Plumbing Fire Protection</div> <div>Client: TOWN OF MANCHESTER-BY-THE-SEA 10 CENTRAL ST MANCHESTER-BY-THE-SEA, MA 01944</div> <div>Submission: BID DOCS9/27/24</div> <div>Revision:</div> <div>Project: FIRE AND RESCUE DEPARTMENT GENERATOR PROJECT 12 SCHOOL ST MANCHESTER-BY-THE-SEA, MA 01944</div> <div>THIS MATERIAL IS CONFIDENTIAL AND MAY NOT BE DISCLOSED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BLW ENGINEERS INC. COPYRIGHT BLW ENGINEERS INC.</div> <div>Project No.:24069</div> <div>Drawn By:RG</div> <div>Checked By:CM</div> <div>Scale:As Noted</div> <div>Title: DETAILS</div> <div>Drawing No.: E-0.2</div>
A											
B											
C											
D											
E											
F											
G											
H											
J											
K											
L											





Seal:





BLW Engineers, Inc.
311 Great Road, Post Office Box 1551
Littleton, Massachusetts 01460
T: 978.486.4301 F: 978.428.0067
www.blwengineers.com
HVAC • Electrical • Plumbing • Fire Protection

Client:

TOWN OF
MANCHESTER-BY-THE-SEA
10 CENTRAL ST
MANCHESTER-BY-THE-SEA, MA 01944

Submission:

BID DOCS9/27/24

Revision:

Project:

FIRE AND RESCUE DEPARTMENT
GENERATOR PROJECT
12 SCHOOL ST
MANCHESTER-BY-THE-SEA, MA 01944

THIS MATERIAL IS CONFIDENTIAL
AND MAY NOT BE DISCLOSED
WITHOUT PRIOR WRITTEN AUTHORIZATION
FROM BLW ENGINEERS INC.
COPYRIGHT BLW ENGINEERS INC.

Project No.:

24069

Drawn By:

RG

Checked By:

CM

Scale:

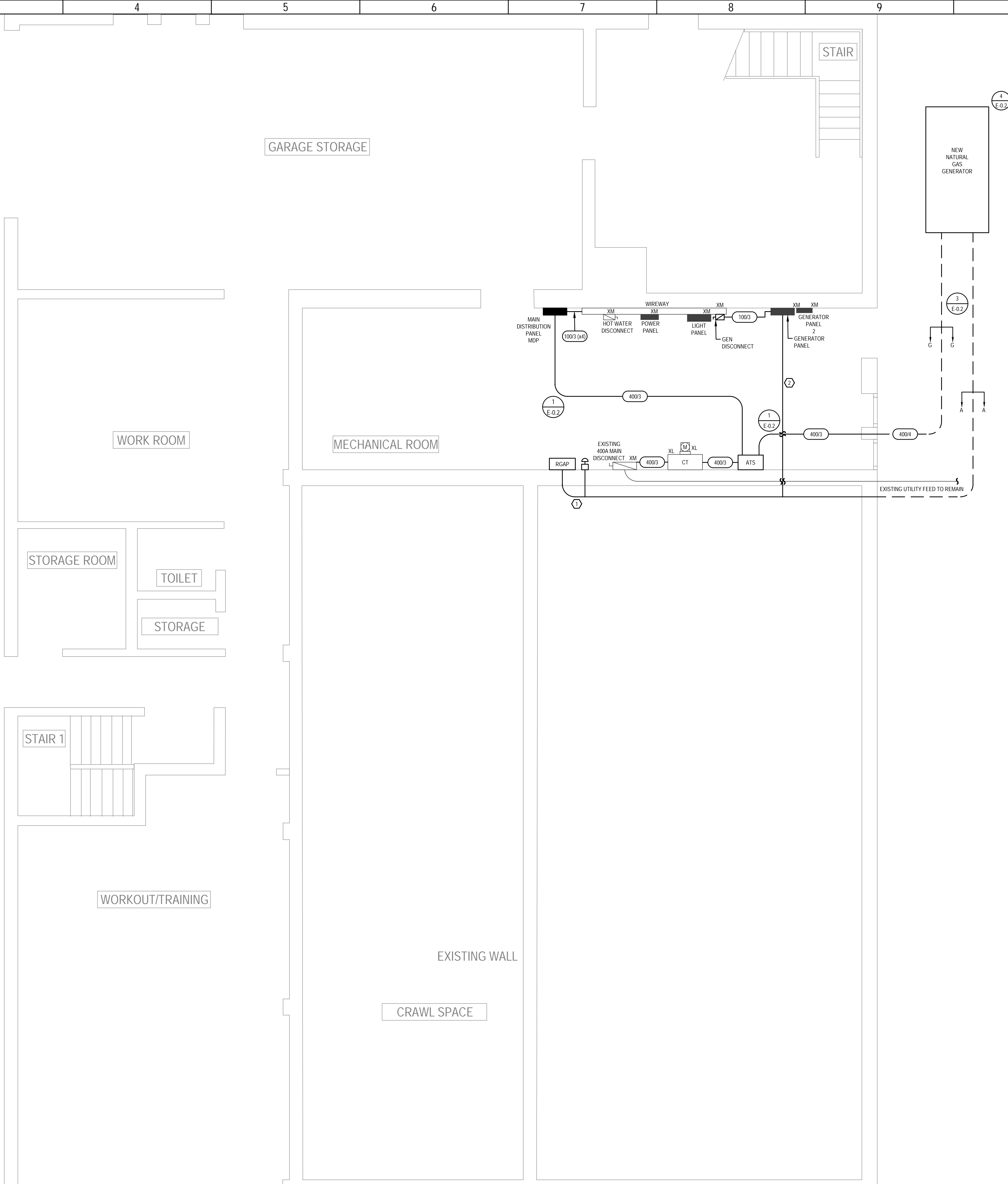
As Noted

Title:

DEMOLITION PLAN

Drawing No.:

E-1.0



-

Client:

TOWN OF
MANCHESTER-BY-THE-SEA
10 CENTRAL ST
MANCHESTER-BY-THE-SEA, MA 01944

Revision:

Project: FIRE AND RESCUE DEPARTMENT
GENERATOR PROJECT
12 SCHOOL ST
MANCHESTER-BY-THE-SEA, MA 01944

THIS MATERIAL IS CONFIDENTIAL
AND MAY NOT BE DISCLOSED
WITHOUT PRIOR WRITTEN AUTHORIZATION
FROM BLW ENGINEERS INC.
COPYRIGHT BLW ENGINEERS INC.

Project No.:	240
Drawn By:	
Checked By:	
Scale:	As No

Title:

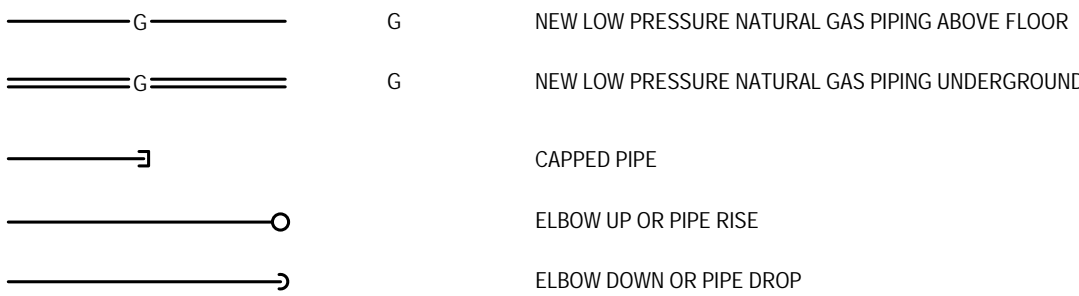
NEW WORK PLA

Drawing No.:
E-1.1

PLUMBING GENERAL NOTES

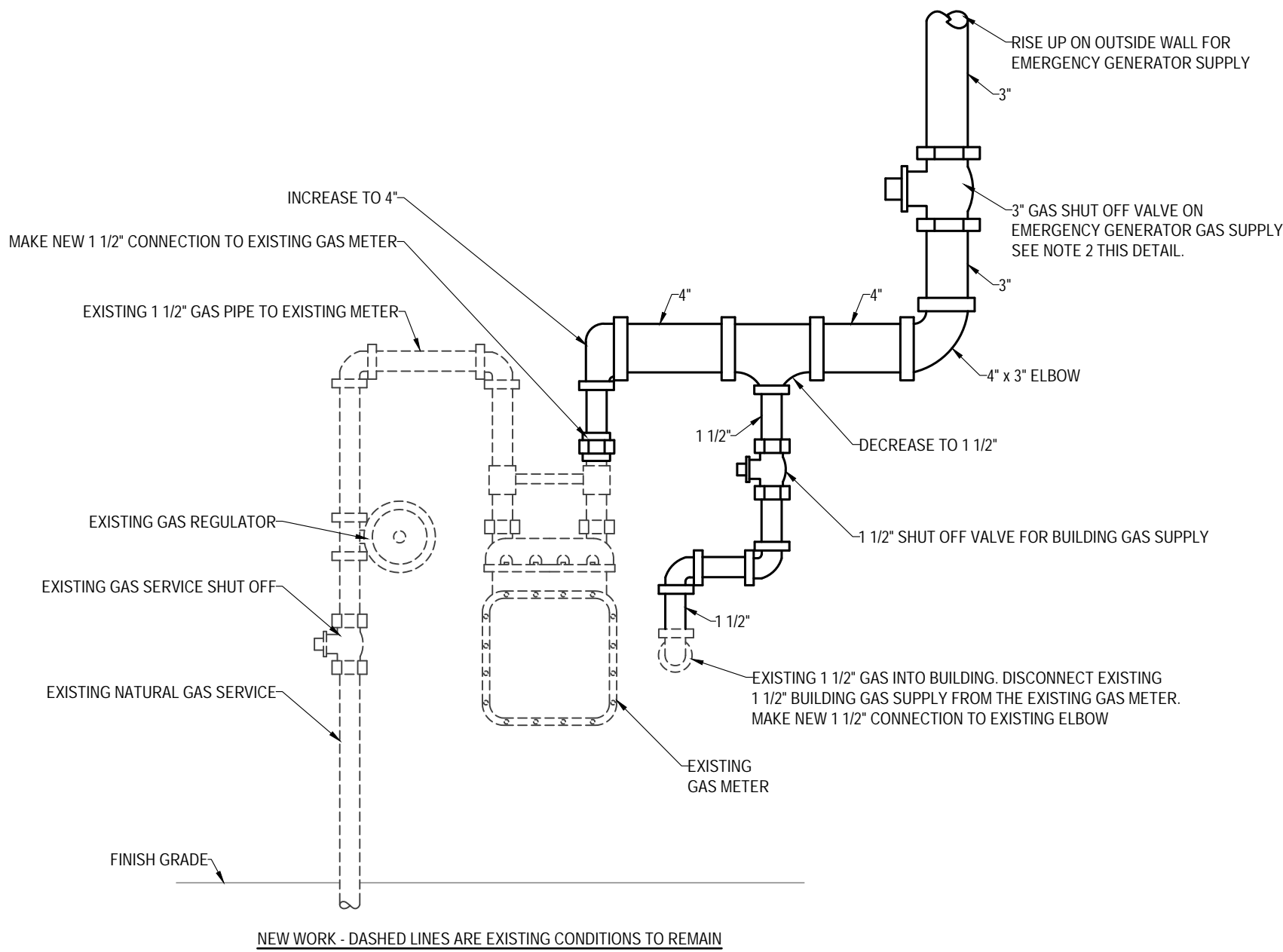
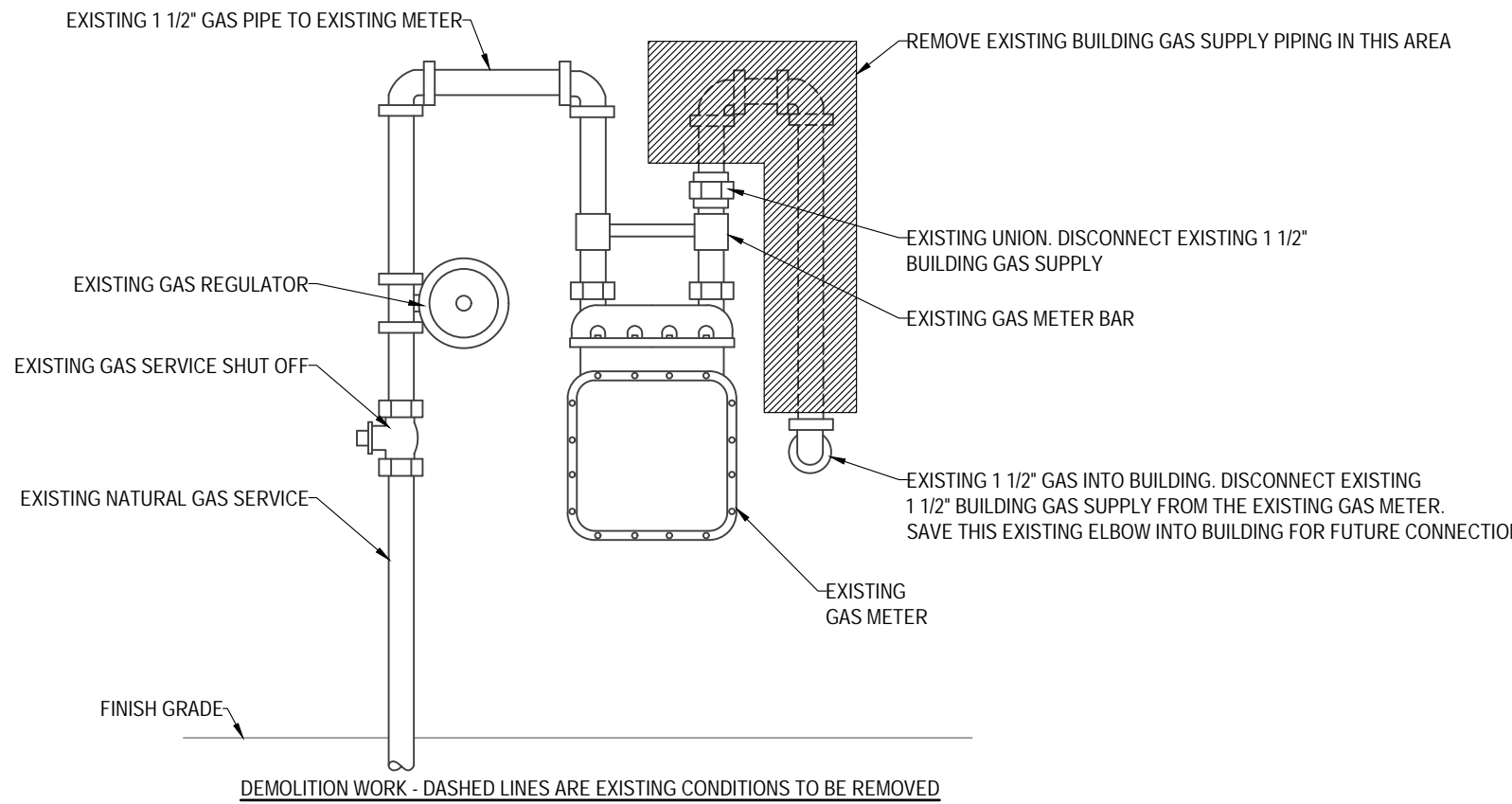
- ALL PLUMBING WORK SHALL BE DONE IN ACCORDANCE WITH THE MASSACHUSETTS STATE PLUMBING CODE.
- CAREFULLY COORDINATE LOCATION OF PIPING WITH ALL OTHER TRADES.
- ALL PIPING SHOWN DIAGRAMMATICALLY AND EXACT LOCATION SHALL BE DETERMINED IN THE FIELD.
- ALL PIPING SHALL BE RUN CONCEALED ABOVE CEILINGS, IN WALLS AND IN CHASES, UNLESS OTHERWISE NOTED.
- NO STRUCTURAL MEMBERS SHALL BE CUT WITHOUT THE APPROVAL OF THE ENGINEER.
- ALL PIPING SHALL BE SUPPORTED FROM BUILDING STRUCTURE.
- ALL PIPING SHALL BE NEW, INSTALLED PARALLEL TO BUILDING LINES AND PITCHED TO LOW POINTS
- PLUMBING CONTRACTOR SHALL PROVIDE FIRE STOPPING FOR ALL PENETRATIONS THRU FIRE WALLS AND FIRE RATED SEPARATIONS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR THESE AREAS
- PLUMBING CONTRACTOR SHALL BE FURNISH, INSTALL AND MAINTAIN ALL SCAFFOLDING, HOISTING EQUIPMENT DERRICKS, ETC., NECESSARY FOR INSTALLATION OF WORK
- ALL PLUMBING PIPING AND DRAINS SHALL BE KEPT CLEAR OF BLOCKAGE WHILE CONSTRUCTION IS UNDERWAY. ALL PLUMBING PIPING SHALL BE DEBURRED BEFORE JOINTS ARE MADE.
- ALL PENETRATIONS THRU OUTSIDE WALLS SHALL BE DONE WITH LINK-SEAL WATERTIGHT SLEEVES AND SEALS OR APPROVED EQUAL
- ALL PENETRATIONS THRU FIRE RATED WALLS AND FLOORS SHALL BE DONE WITH LINK-SEAL FIRE RATED SLEEVES AND SEALS OR APPROVED EQUAL
- THE PLUMBING CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING IN ORDER TO ACCOMMODATE THE PLUMBING WORK. PATCHING SHALL BE MADE TO MATCH THE EXISTING CONDITIONS AND TO THE SATISFACTION OF THE OWNER.
- ALL EXISTING CONDITIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT INTENDED TO SHOW EXACT EXISTING CONDITIONS. ALL EXISTING CONDITIONS SHALL BE VERIFIED BY THE PLUMBING CONTRACTOR IN THE FIELD. ALL POINTS OF CONNECTION TO EXISTING SYSTEMS SHALL BE DETERMINED IN THE FIELD BY THE PLUMBING CONTRACTOR. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING A FIELD SURVEY OF ALL EXISTING PLUMBING CONDITIONS IN ORDER TO IDENTIFY THE EXACT LOCATIONS AND SIZES OF THE EXISTING PLUMBING PIPING SYSTEMS.
- PRIOR TO BID, THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL ASPECTS OF THE WORK AND ALL CONDITIONS TO WHICH THE WORK WILL BE INSTALLED. ANY DISCREPANCIES BETWEEN THE WORK SHOWN ON THE DRAWINGS AND ANY CONDITIONS SHALL BE SUBMITTED TO THE ARCHITECT IN WRITING. FAILURE OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS AND THERE RELATION TO THE NEW WORK SHALL NOT BE ACCEPTED AS A CAUSE FOR ANY EXTRA CHARGES TO THE CONTRACT.
- ALL FINAL GAS CONNECTIONS TO GAS FIRED EQUIPMENT SHALL BE MADE WITH A SHUT OFF VALVE, UNION AND DIRT LEG
- DIRT LEGS SHALL BE PROVIDED AT THE BASE OF ALL VERTICAL GAS PIPING. DIRT LEGS SHALL BE FULL PIPE SIZE AND SHALL BE A MINIMUM OF 6' IN LENGTH WITH A THREADED CAP.
- THE LOCATIONS OF ALL GAS FIRED EQUIPMENT AND THE GAS CONNECTIONS ARE APPROXIMATE ONLY AND SHALL BE DETERMINED IN THE FIELD. THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE HVAC CONTRACTOR FOR LOCATIONS OF ALL GAS FIRED EQUIPMENT AND THE GAS CONNECTION LOCATIONS.
- THE LOCATIONS OF THE GAS METERS AND GAS SERVICE SHOWN ARE APPROXIMATE ONLY AND WILL VARY IN THE FIELD. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE GAS COMPANY FOR THE EXACT LOCATIONS AND CONFIGURATIONS OF THE GAS METERS AND THE UNDERGROUND GAS SERVICE.
- THE PLUMBING CONTRACTOR SHALL SHUT DOWN AND PURGE THE EXISTING NATURAL GAS PIPING SYSTEM IN ORDER TO ACCOMMODATE THE WORK. THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GAS COMPANY AND THE BUILDING OWNER FOR THE SCHEDULE OF THE EXISTING GAS PIPING SYSTEM SHUT DOWN. NO WORK SHALL BEGIN WITHOUT THIS COORDINATION. PERIODS OF GAS SYSTEM SHUT DOWN SHALL BE APPROVED BY THE BUILDING OWNER. PRIOR TO PERFORMING ANY WORK ON THE EXISTING GAS PIPING SYSTEM THE EXISTING GAS PIPING SYSTEMS SHALL BE PURGED OF ALL GAS IN ACCORDANCE WITH NFPA-54 AND THE MASSACHUSETTS STATE FUEL GAS CODE INCLUDING ALL AMENDMENTS.

PLUMBING GENERAL LEGEND



PLUMBING SPECIFICATIONS

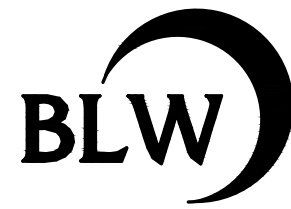
- CAREFULLY COORDINATE LOCATION OF PIPING WITH ALL OTHER TRADES AND ALL EXISTING CONDITIONS AT THE SITE.
- DIELECTRIC INSULATING FITTINGS SHALL BE USED WHERE PIPES OF DISSIMILAR METALS ARE CONNECTED
- ALL PIPING SHALL BE NEW, INSTALLED PARALLEL TO BUILDING LINES AND PITCHED TO LOW POINTS
- CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND COORDINATE BEST ROUTE OF NEW PIPING AND LOCATIONS OF NEW EQUIPMENT IN COORDINATION WITH THE WORK OF ALL OTHER TRADES AND ALL EXISTING CONDITIONS TO INSURE THAT ALL WORK WILL FIT IN THE SPACE WITH NO INTERFERENCE'S
- ALL NEW SYSTEMS SHALL BE TESTED, BALANCED AND ADJUSTED TO INSURE PROPER OPERATION AND CODE COMPLIANT INSTALLATION. PIPING AND EQUIPMENT SHALL BE TESTED IN ACCORDANCE WITH THE STATE PLUMBING CODE
- FOR PIPES 2" AND SMALLER ADJUSTABLE STEEL SWIVEL RING (BAND TYPE) HANGER SHALL BE USED. FOR PIPES 2-1/2" AND LARGER ADJUSTABLE STEEL CLEVIS HANGERS SHALL BE USED. FOR VERTICAL PIPES, STEEL RISER CLAMP SIZED TO FIT OUTSIDE DIAMETER OF PIPE SHALL BE USED. PIPE SIZES 2" AND SMALLER SHALL USE 3/8" THREADED RODS AND BEAM CLAMPS. PIPE SIZES 2-1/2" AND LARGER SHALL USE 5/8" THREADED RODS AND BEAM CLAMPS. PIPE SIZES 2" AND SMALLER SHALL USE 3/8" THREADED RODS AND BEAM CLAMPS. PIPE SIZES 2-1/2" AND LARGER SHALL USE 5/8" THREADED RODS AND BEAM CLAMPS. PIPE HANGERS, SUPPORTS AND RODS SHALL BE GALVANIZED
- ALL PIPING MATERIALS, FITTINGS VALVES UNIONS, HANGERS, EQUIPMENT, INSTALLATION AND ALL ASPECTS OF THE PLUMBING WORK SHALL BE AS APPROVED BY THE MASSACHUSETTS PLUMBING AND FUEL GAS CODES
- THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ANY WORK ASSOCIATED WITH CUTTING, CORING AND PATCHING WALLS, FLOORS AND CEILINGS IN ORDER TO PERFORM THE PLUMBING WORK. NO STRUCTURAL BEAMS OR STRUCTURAL OR BUILDING SUPPORTS SHALL BE CUT. ALL BUILDING CONDITIONS THAT ARE CUT OR CORED SHALL BE PATCHED TO MATCH THE FINISHED BUILDING CONDITIONS AND TO THE SATISFACTION OF THE OWNER.
- ALL VALVES SHALL BE PROVIDED WITH TAGS INDICATING TYPE OF SERVICE. ALL PIPING OF THE VARIOUS PIPING SYSTEMS SHALL BE LABELED WITH ADHESIVE DECALS INDICATING TYPE OF SERVICE. PIPE SYSTEM LABELS SHALL BE PER ASME A13.1 AND STATE PLUMBING CODE STANDARDS, AT 10 FOOT LENGTHS ALONG THE PIPE RUNS, ON EACH SIDE OF WALL/CEILING PENETRATIONS.
- THE PLUMBING CONTRACTOR SHALL SUBMIT MANUFACTURERS SHOP DRAWINGS FOR ALL PROPOSED PLUMBING MATERIALS, VALVES AND EQUIPMENT SHALL BE SUBMITTED TO THE PLUMBING ENGINEER FOR WRITTEN APPROVAL OF ALL PROPOSED PLUMBING MATERIALS, VALVES AND EQUIPMENT SHALL BE RECEIVED FROM THE PLUMBING ENGINEER PRIOR TO THE COMMENCEMENT OF ANY PLUMBING WORK.
- LOW PRESSURE GAS PIPING (14"W.C. OR LESS) 4" AND SMALLER SHALL BE SCHEDULE 40 BLACK STEEL WITH THREADED ENDS AND SCREW FITTINGS. LOW PRESSURE GAS PIPING (14"W.C. OR LESS) LARGER THAN 4" SHALL BE SCHEDULE 40 BLACK STEEL WITH PLAIN END WELDED PIPE AND FITTINGS.
- SHUT OFF VALVES ON GAS PIPE 2" AND SMALLER SHALL BE GAS SERVICE RATED BALL VALVES. SHUT OFF VALVES LARGER THAN 2" SHALL BE IRON PLUG VALVES WITH FLANGED ENDS
- THE LOCATIONS OF GAS FIRED EQUIPMENT AND THE LOCATIONS OF THE GAS PIPE CONNECTIONS ARE APPROXIMATE ONLY. THE PLUMBING CONTRACTOR SHALL COORDINATE IN THE FIELD WITH THE GAS FIRED EQUIPMENT TO DETERMINE THE EXACT SIZE AND LOCATION OF ALL GAS CONNECTIONS. THE PLUMBING CONTRACTOR SHALL ADJUST THE LOCATIONS OF GAS PIPING AND THE FINAL CONNECTIONS TO THE GAS FIRED EQUIPMENT AS REQUIRED. REDUCE ALL PIPE CONNECTIONS AS THE EQUIPMENT AS REQUIRED.
- ALL GAS PIPE, FITTINGS AND VALVES EXPOSED TO OUTDOORS SHALL BE PAINTED WITH ONE COAT OF CORROSION RESISTANT METAL PIPE PRIMER AND ONE FINAL COAT OF CORROSION RESISTANT METAL PIPE FINAL PAINT. PAINT COLOR SHALL BE GRAY. ALL SURFACES SHALL BE CLEANED AND PREPARED IN ACCORDANCE WITH THE PRIMER AND PAINT MANUFACTURERS WRITTEN INSTALLATION INSTRUCTIONS. PRIMER AND PAINT SHALL BE APPLIED IN ACCORDANCE WITH THE PRIMER AND PAINT MANUFACTURERS WRITTEN INSTALLATION INSTRUCTIONS. ALL SURFACES NOT INTENDED TO RECEIVE PRIMER OR PAINT SHALL BE CLEANED OF ALL PRIMER AND PAINT DRIPPINGS, OVER PAINT OR OVER SPRAY.
- GAS COORDINATION NOTE:
THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE NATURAL GAS UTILITY COMPANY FOR THE SHUTTING DOWN OF THE EXISTING GAS SERVICE TO THE TENANT IN ORDER TO ACCOMMODATE THE NEW CONNECTION OF THE NEW GAS FIRED GENERATOR. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL OF THE EXISTING GAS LOADS FOR THIS TENANT SPACE AS WELL AS ALL NEW GAS LOADS THAT WILL BE CONNECTED TO THE EXISTING TENANT GAS METER. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE EXISTING AND NEW GAS LOADS AND REQUIRED GAS PRESSURES WITH THE GAS UTILITY COMPANY TO ENSURE THAT THE EXISTING GAS METER WILL ACCOMMODATE THE GAS DEMAND FOR THIS TENANT. NO WORK SHALL BEGIN AT THE SITE WITHOUT THE PLUMBING CONTRACTOR PERFORMING THIS COORDINATION WORK WITH THE GAS UTILITY COMPANY.



- THE EXISTING CONDITIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT INTENDED TO INDICATE THE EXACT EXISTING CONDITIONS AT THE SITE OR FOR ALL BUILDINGS. THE PLUMBING CONTRACTOR SHALL FIELD SURVEY ALL EXISTING CONDITIONS AND SHALL DETERMINE THE EXACT SCOPE OF WORK IN THE FIELD. MAKE ADJUSTMENTS TO THE WORK SHOWN ON THE DETAIL AS REQUIRED.
- EACH SHUT OFF VALVE ASSOCIATED WITH THE EMERGENCY GENERATOR SHALL BE LABELED TO READ:
"WARNING: GAS USED FOR LIFESAFETY. AVOID SHUTTING OFF GAS UNLESS NECESSARY". ALL VALVE LABELS SHALL BE PERMANENTLY AFFIXED

1 TYPICAL EXISTING GAS METER SCOPE OF WORK
NOT TO SCALE

Seal:



BLW Engineers, Inc.
311 Great Road, Post Office Box 1551
Littleton, Massachusetts 01460
T: 978.486.4301 F: 978.428.0067
www.blwengineers.com
HVAC Electrical Plumbing Fire Protection

Client:

TOWN OF
MANCHESTER-BY-THE-SEA
10 CENTRAL ST
MANCHESTER-BY-THE-SEA, MA 01944

Submission:

BID DOCS 9/27/24

Revision:

Project:

FIRE AND RESCUE DEPARTMENT
GENERATOR PROJECT
12 SCHOOL ST
MANCHESTER-BY-THE-SEA, MA 01944

THIS MATERIAL IS CONFIDENTIAL
AND MAY NOT BE DISCLOSED
WITHOUT PRIOR WRITTEN AUTHORIZATION
FROM BLW ENGINEERS INC.
COPYRIGHT BLW ENGINEERS INC.

Project No.: 24069

Drawn By: DC

Checked By: CM

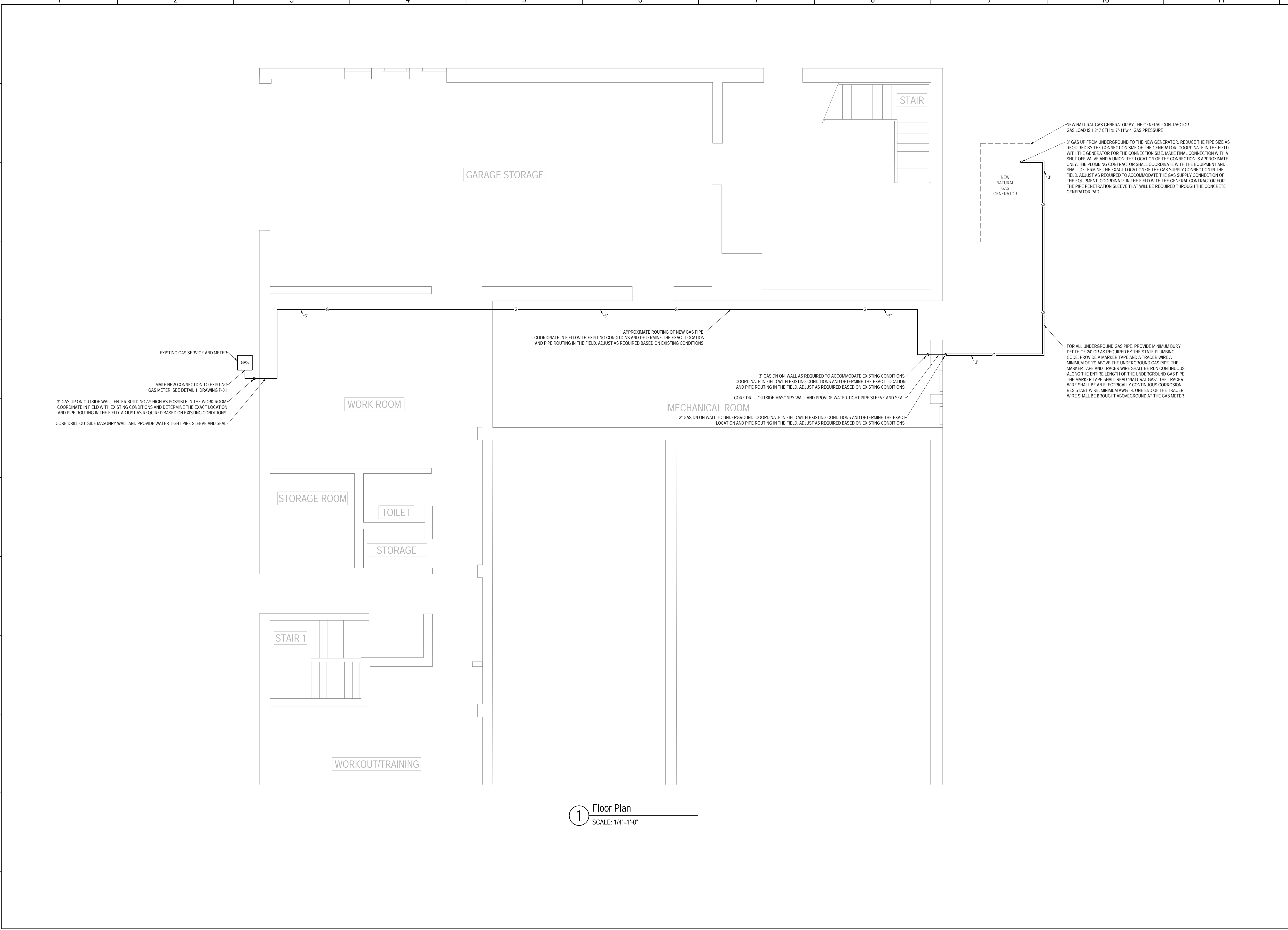
Scale: As Noted

Title:


PLUMBING
LEGEND,
SPECIFICATION,
AND DETAILS

Drawing No.:

P-0.1



Seal:



BLW
BLW Engineers, Inc.
311 Great Road, Post Office Box 1551
Littleton, Massachusetts 01460
T: 978.486.4301 F: 978.428.0067
www.blwengineers.com
HVAC • Electrical • Plumbing • Fire Protection

Client:

TOWN OF
MANCHESTER-BY-THE-SEA
10 CENTRAL ST
MANCHESTER-BY-THE-SEA, MA 01944

Submission:

BID DOCS9/27/24

Revision:

Project:

FIRE AND RESCUE DEPARTMENT
GENERATOR PROJECT
12 SCHOOL ST
MANCHESTER-BY-THE-SEA, MA 01944

THIS MATERIAL IS CONFIDENTIAL
AND MAY NOT BE DISCLOSED
WITHOUT PRIOR WRITTEN AUTHORIZATION
FROM BLW ENGINEERS INC.
COPYRIGHT BLW ENGINEERS INC.

Project No.:

24069

Drawn By:

DC

Checked By:

CM

Scale:

As Noted

Title:

PLUMBING
FLOOR PLAN

Drawing No.:

P-1.0

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 AND 301 REQUIREMENTS. THIS SHALL INCLUDE PROPORTIONING OF CONCRETE MIX, CONCRETE TESTING, PLACEMENT OF CONCRETE, AND CURING PROCEDURES.

2. ALL COLD WEATHER CONCRETING SHALL CONFORM TO THE REQUIREMENTS OF ACI 306. THE GC SHALL BE RESPONSIBLE FOR SUBMITTING A COLD WEATHER CONCRETING PROCEDURE FOR REVIEW PRIOR TO CONSTRUCTION.

3. ALL HOT WEATHER CONCRETING SHALL CONFORM TO THE REQUIREMENTS OF ACI 305. THE GC SHALL BE RESPONSIBLE FOR SUBMITTING A HOT WEATHER CONCRETING PROCEDURE FOR REVIEW PRIOR TO CONSTRUCTION.

4. ALL CONCRETE CURING SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN ACI 308.

5. CONCRETE SHALL HAVE 28-DAY COMPRESSIVE STRENGTH, AIR ENTRAINMENT, W/CM RATIO, AND MAX AGGREGATE SIZE PER THE TABLE BELOW.

6. UNLESS NOTED OTHERWISE, PROVIDED MINIMUM REINFORCING COVER PER TABLE - THIS SHEET:

7. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 UNLESS REQUIRED TO BE WELDED AS SHOWN ON PLANS. ALL REINFORCING BARS REQUIRED TO BE WELDED SHALL CONFORM TO ASTM A706, GRADE 50.

8. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. SUPPORT WIRE FABRIC WITH CHAIRS OR LIFTS. DURING CONCRETE PLACEMENT TO ENSURE PROPER POSITION IN SLAB.

9. ALL REINFORCEMENT SHALL BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS OR STIRRUPS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT FOR ALL BARS.

10. ALL REINFORCING BARS SHALL BE LAPPED AS SPECIFICALLY DETAILED ON THE DRAWINGS. SPlicing & EMBEDMENTS SHALL BE IN ACCORDANCE W/ ACI 318 WHERE NOT SPECIFICALLY INDICATED ON THE DRAWINGS. ALL REINFORCING BARS SHALL BE LAPPED USING THE TENSION SPLICE LENGTHS IN THE LAP SPLICE SCHEDULE. REFER TO TYPICAL DETAIL SHEET.

11. CONCRETE REINFORCING SHALL BE IN ACCORDANCE WITH ASTM A615 AND HAVE THE FOLLOWING MINIMUM YIELD STRENGTH:

 a. MAIN REINFORCING STEEL 60 KSI

 b. TIES & STIRRUPS 40 KSI

12. PROVIDE CONSTRUCTION JOINTS IN ACCORDANCE WITH ACI-318, CHAPTER 6.4. SUBMIT SHOP DRAWINGS SHOWING CONSTRUCTION JOINT DETAILS, LOCATIONS AND THE SEQUENCE OF POURS FOR THE STRUCTURAL ENGINEER'S REVIEW PRIOR TO BEGINNING WORK.

13. WALL CONSTRUCTION JOINTS SHALL BE LOCATED TO PROVIDE A 60 FOOT MAXIMUM LENGTH OF CONCRETE PLACEMENT.

14. VERTICAL CONSTRUCTION JOINTS IN WALLS SHALL BE USED ONLY WITH PRIOR APPROVAL OF THE ENGINEER. SEE NOTE ABOVE, AND SHALL BE LOCATED AS FOLLOWS:

 FOUNDATION WALLS: MINIMUM 8'-0" FROM ANY COLUMN LINE OR WALL OPENING.

15. THE CONTRACTOR SHALL PROVIDE REINFORCING STEEL ERECTOR WITH A SET OF APPROVED SHOP DRAWINGS FOR FIELD USE.

16. ALL ADJOINING SURFACES NOT CAST MONOLITHICALLY SHALL BE ROUGHENED TO 1/4 INCH AMPLITUDE FOR THE ENTIRE INTERSECTING SURFACE ACCORDING TO ACI RECOMMENDATIONS AND APPLY A BONDING AGENT AS REQUIRED.

17. CONTRACTOR SHALL COORDINATE LOCATION ON INSERTS, WELDED PLATES AND OTHER ITEMS TO BE EMBEDDED IN CONCRETE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

18. PROVIDE CORNER BARS AT ALL WALL CORNERS & INTERSECTIONS BEHIND HORIZONTAL REINFORCEMENT. BARS SHALL BE LAPPED A MINIMUM OF 48 BAR DIAMETERS.

19. SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW.

20. NO HORIZONTAL JOINTS SHALL BE PERMITTED IN BEAMS, WALLS AND SLABS UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS OR APPROVED IN WRITING PRIOR TO CONSTRUCTION BY THE ENGINEER.

21. NO CONCRETE TEST WILL BE ACCEPTED IF CONCRETE IS TAMPERED WITH IN ANY WAY AFTER SAID TEST IS PERFORMED. REPEAT TEST IF WATER IS ADDED AFTER INITIAL SAMPLING.

22. ALL SLABS SHALL BE FLAT AND LEVEL PER THE CONCRETE SPECIFICATIONS. THE CONCRETE CONTRACTOR SHALL INCLUDE IN THEIR BID ANY EXCESS CONCRETE REQUIRED DUE TO SUPPORT MEMBER DEFLECTION TO POUR SLABS FLAT AND LEVEL. THE CONCRETE PLACING PROCEDURE SHALL BE CONTROLLED TO MINIMIZE SUPPORT MEMBER DEFLECTION.

23. ALL CONCRETE WORK, REINFORCING, PLACEMENT, AND FORMWORK SHALL BE INSPECTED BY AN INDEPENDENT TESTING AGENCY RETAINED BY THE OWNER. REFER TO PROJECT SPECS FOR THE TESTING REQUIRED ITEMS.

24. FOUNDATIONS SHALL BE PROTECTED FROM FROST THROUGHOUT PHASED CONSTRUCTION IN ACCORDANCE WITH ASCE 32-01 WITH A MINIMUM OF 1 INCH THICK LAYER INSULATION HAVING A NOMINAL RESISTIVITY OF 5 R/IN.

CONCRETE MIX DESIGN PROPERTIES						
ITEM	CONCRETE	EXPOSURE CLASS	MAXIMUM w/CM	MINIMUM f'c PSI	AIR CONTENT	MAX AGGREGATE SIZE
SLAB ON GRADE - EXTERIOR	NW	F3	0.40	5000	6% +/- 1.5%	3/4"
FOUNDATION WALLS	NW	F2	0.45	4500	6% +/- 1.5%	3/4"
FOOTINGS AND PIER	NW	F2	0.45	4500	6% +/- 1.5%	3/4"

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE MASSACHUSETTS STATE BUILDING CODE AND ITS APPLICABLE REFERENCED STANDARDS.
2. THE CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLEEVES, OPENINGS AND ANCHAGES (INCLUDING ANCHORS) REQUIRED BY ALL TRADES. OPENINGS NOT SPECIFICALLY SHOWN SHALL BE APPROVED BY THE ARCHITECT AND STRUCTURAL ENGINEER.
3. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE FOR A SAFE AND EFFICIENT METHOD OF SHORING AND/OR BRACING THE STRUCTURE DURING CONSTRUCTION.
4. ALL SHALL BE CONDUCTED AND REVIEWED BY AN INDEPENDENT TESTING AGENCY. REFER TO SPECIAL INSPECTION NOTES ON THIS SHEET. SUBMIT ALL TEST AND INSPECTION REPORTS TO A/E FOR REVIEW.
5. STRUCTURAL MEMBERS SHALL NOT BE MODIFIED IN THE FIELD WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER. IN THE EVENT OF A CONSTRUCTION OR FABRICATION ERROR, THE CONTRACTOR SHALL PREPARE A SKETCH WITH A PROPOSED REPAIR, AND SUBMIT IT TO THE ARCHITECT AND ENGINEER OF RECORD, FOR APPROVAL PRIOR TO PERFORMING ANY CORRECTIVE WORK.
6. SUBMIT SHOP DRAWINGS FOR APPROVAL - FOR ALL TRADES INDICATED HEREIN - PRIOR TO PROCEEDING WITH FABRICATION AND/OR CONSTRUCTION. CONTRACTOR SHALL ALLOW FOR A 2 WEEK REVIEW PERIOD BY THE DESIGN TEAM.
7. JOB SAFETY AND CONSTRUCTION PROCEDURES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
8. ALL COSTS OF INVESTIGATION AND/OR REDESIGN, DUE TO CONTRACTOR MISLOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS, SHALL BE AT THE CONTRACTOR'S EXPENSE.
9. THESE DRAWINGS REPRESENT THE COMPLETED PROJECT WHICH HAS BEEN DESIGNED FOR THE WEIGHTS OF THE MATERIALS INDICATED ON THE DRAWINGS AND FOR THE SUPERIMPOSED LOADS INDICATED IN THE SPECIFICATIONS DATA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER BRACING AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGINGS, BRACING, SHEETING AND SHORING, ETC.

Architectural drawing of a generator enclosure. The drawing shows a side elevation of a structure with a central generator area and stairs on the right side.

Dimensions:

- Overall height: 16' - 4" ±
- Overall width: EQUIP. PLATFORM WIDTH + 1'-0"
- Stair width: 4' - 4"
- Generator width: 8' - 9"
- Stair platform width: 8' - 0" ±
- Stair riser height: 11" TYP.
- Stair tread depth: 6" TYP.
- Generator height: 10' TYP.
- Stair platform height: 10" TYP.

Components and Notes:

- GENERATOR
- COORD. W/ MECH CONTRACTOR
- COORD. W/ MECHANICAL CONTRACTOR
- APPROX. LENGTH TO BE DETERMINED BY MANUFACTURER
- STEEL OR ALUMINUM STAIRS BY OTHERS, TYP.
- STEEL PLATFORM BY OTHERS, TYP.
- CONC. S.O.G.
- CONC. SLAB AND FOUNDATION WALLS

-
- EXISTING GENERATOR TO BE REMOVED
- LAND SUBJECT TO COASTAL STORM FLOWAGE (EL. 10')
- EXISTING GENERATOR PADO BE DEMOLISHED
- GRADE EL. 8'
- EQUIP PLATFORM WIDTH + 1'-0"
- 4' - 0" MIN.
- 8" OF 3/4" CRUSHED STONE
- #5 @ 12" O.C.
- 4 - #5 BARS, EQ. SPACED
- 1'-0"
- 2'-10"
- #5 L DOWEL @ 1'-0" O.C.
- 10"
- CONC. FDN. WALL, TYP.
- 6" CONC. S.O.G. W/ W2.9xW2.9-4x4 WWF
- FINISHED GRADE
- 1/2" PREFORMED JOINT FILLER, TYP.
- COMPACTED STRUCTURAL FILL OR 3/4" CRUSHED STONE
- 8" CONC. SLAB
- #4 @ 12" O.C. B.W., T&B
- 8' - 10" (PER MANUFACTURER)
- TOP OF SLAB EL. 13.0'
- GENERATOR

2 FIRE HOUSE GENERATOR PAD SECTION
S1.0 3/4" = 1'-0"

c:\Users\acarlton\Documents\20220485.A11 Manchester by the Sea Generator S-Central-R23 acarltonAHJ22.rvt