

**SITE PLAN REVIEW TECHNICAL ADVISORY COMMITTEE  
PORTSMOUTH, NEW HAMPSHIRE**

**WORK SESSION**

**Conference Room A  
City Hall, Municipal Complex, 1 Junkins Avenue**

**2:00 PM**

**April 9, 2024**

**AGENDA**

**2:00 PM** 413 Lafayette Road  
Friends of Lafayette House, Owner  
Jones & Beach, Engineer  
(LUTW-24-6)

**Site Plan Review**

**2:30 PM** 921 Islington St  
Ampet Inc., Owner  
Applicant  
(LUTW-24-5)

**Site Plan Review/CUP**

# JONES & BEACH ENGINEERS INC.

85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885  
603.772.4746 - JonesandBeach.com

April 2, 2024

Portsmouth Technical Review Advisory Committee  
Attn: Board Members  
1 Junkins Avenue, Suite 3<sup>rd</sup> Floor  
Portsmouth, NH 03801

**RE: TAC Work Session Application  
Friends of Lafayette House  
413 Lafayette Road, Portsmouth, NH  
Tax Map 230, Lot 23A  
JBE Project No. 23036**

Dear Board Members,

Jones & Beach Engineers, Inc., respectfully submits a TAC Work Session Application on behalf of the applicant and owner, Friends of Lafayette House. This structure houses 12 developmentally disabled residents with full-time inhouse care. The intent of this application is to add a 635 S.F. addition to the existing building for the use of the full-time caretaker onsite. Currently the caretaker has a unit inside the building and works 5 days a week all day. On weekends, they have a secondary caretaker that comes in and covers the weekend workload, but they have to live with the full-time caretaker in the same unit. It is tight quarters and they share a bathroom and kitchen and it's not an ideal living situation. The proposed addition is to give the full-time caretaker their own unit and then the weekend caretaker would use the existing space just on the weekends. There is no increase in staffing or residency proposed with this expansion.

The reason for this request to be heard at the work session is to determine what level of plans we need to submit for this small addition. There are no proposed changes to the utilities outside of the building. The addition will be plumbed internally from the existing building. There are no changes proposed for the parking area and minimal increase in impervious coverage. We are removing the existing sheds on the property. Therefore, we would prefer to not provide a full drainage report for these small changes to the site. We are also not proposing any additional landscaping and the lighting modifications will be minimal. The owner would just have a small light above the doorway providing access to the caretaker unit.


The following items are provided in support of this Application:

1. Completed TAC Work Session Application (submitted online).
2. Letter of Authorization.
3. Current Deed.
4. One (1) Full Size Plan Set Folded.
5. One (1) Full Size set of architectural drawings

If you have any questions or need any additional information, please feel free to contact our office. Thank you very much for your time.

Very truly yours,

**JONES & BEACH ENGINEERS, INC.**



Joseph A. Coronati  
Vice President

cc: Melanie Merz, Friends of Lafayette House (via email)  
John Bosen, Esq (via email)  
Chris Mulligan, Esq (via email)

**Letter of Authorization**

Friends of Lafayette House, 400 Little Harbor Road, Suite 1104. Portsmouth, NH 03801, owner of property located in Portsmouth, NH, known as Tax Map 230, Lot 23A, do hereby authorize Jones & Beach Engineers, Inc., PO Box 219, Stratham, NH, and Bosen & Associates, 266 Middle Street, Portsmouth, NH 03801, to act on my behalf concerning the previously mentioned property. The parcel is located at 413 Lafayette Road in Portsmouth, NH.

We hereby appoint Jones & Beach Engineers, Inc., as my agent to act on my behalf in the review process, to include any required signatures.

\_\_\_\_\_  
Witness

  
\_\_\_\_\_  
Friends of Lafayette House

12/20/23  
Date



Ganz Law Office

Box 62

*Cathy Ann Tracy*

LCHIP	ROA474216	25.00
TRANSFER TAX	RO093549	2,884.00
RECORDING		14.00
SURCHARGE		2.00

**WARRANTY DEED**

KNOW ALL MEN BY THESE PRESENTS that **Community Home Solutions, Inc., a New Hampshire corporation**, of 14 New Zealand Road, Seabrook, New Hampshire 03874, for consideration paid, grant to **Friends of Lafayette House, a New Hampshire non-profit corporation**, with a mailing address of PO Box 4545, Portsmouth, New Hampshire 03802, with warranty covenants, the following:

A certain parcel of land, together with the buildings and improvements thereon, situate in Portsmouth, County of Rockingham and State of New Hampshire, identified as Lot 2 on subdivision plan entitled "Plan of Land of J. Philip McCaffery for Great Bay School and Training Center, by Richard P. Millette & Associates", dated December 1981, with Revision I dated January 7, 1982, and recorded in the Rockingham County Registry of Deeds as Plan No. D- 10590 (the "Premises"), as more particularly bounded and described as follows:

Beginning at a point which is 155 feet distant from the Southwest corner of land now or formerly of Lester A. and Priscilla M. Pettis, on a bearing S 79° 23' 39" E from Lafayette Road and from said point of beginning, and being at the Southerly side of Lot 3 on aforesaid plan; thence running S 79° 23' 39" E a distance of 154.32 feet to a point at land now or formerly of Church of Jesus Christ of Latter Day Saints; thence running South by said Church land S 22° 05' 21" W a distance of 179.22 feet to land now or formerly of the City of Portsmouth; thence running S 88° 21' 21"W a distance of 183.14 feet to Lot 1 on said Plan; thence running N 21° 15' 21" E a distance of 187.72 feet to a point at a right of way in common of fifty (50) feet in width; thence running S 79° 23' 39" E a distance of twenty (20) feet to a point; thence running N 21° 15' 21" E, a distance of 30.53 feet to the point of beginning.

There is granted herewith a fifty (50) foot easement right of way as shown on said Plan, extending from Lot 2 to Lafayette Road. This right of way shall run with the land, for all purposes of vehicular and pedestrian passage, for the benefit of Lot 1, Lot 2 and Lot 3 on said Plan, and also for the benefit of land abutting this right of way to the North, now or formerly owned by Lester A. Pettis and Priscilla M. Pettis.

Premises are conveyed subject to the terms of an Option Agreement, a Notice of which is recorded in Rockingham County Registry of Deeds at Book 5879, Page 1258.

Said conveyance is subject to the mortgage to the Newburyport Five Cents Savings Bank dated December 14, 2017 and recorded at Book 5879, Page 120, the Assignment of Rents to the Newburyport Five Cents Savings Bank dated December 14, 2017 and recorded at Book 5879, Page 1247 and a UCC-1 Financing Statement dated December 14, 2017 and recorded at Book 5888, Page 630.

The grantee herein has assumed the financial obligations to Newburyport Five Cents Savings Bank.

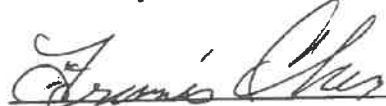
Subject to all rights, restrictions and easements of record.

This is not homestead property of Grantor.

Meaning and intending to describe the same premises conveyed to Grantor by deed of Great Bay Services, Inc. dated December 14, 2017 and recorded in the Rockingham County Registry of Deeds at Book 5879, Page 1225.

Executed this 10th day of December, 2019.

**Community Home Solutions, Inc.**



**By Francis G. Chase, President**

  
Witness


**STATE OF NEW HAMPSHIRE  
ROCKINGHAM, SS.**

**December 10, 2019**

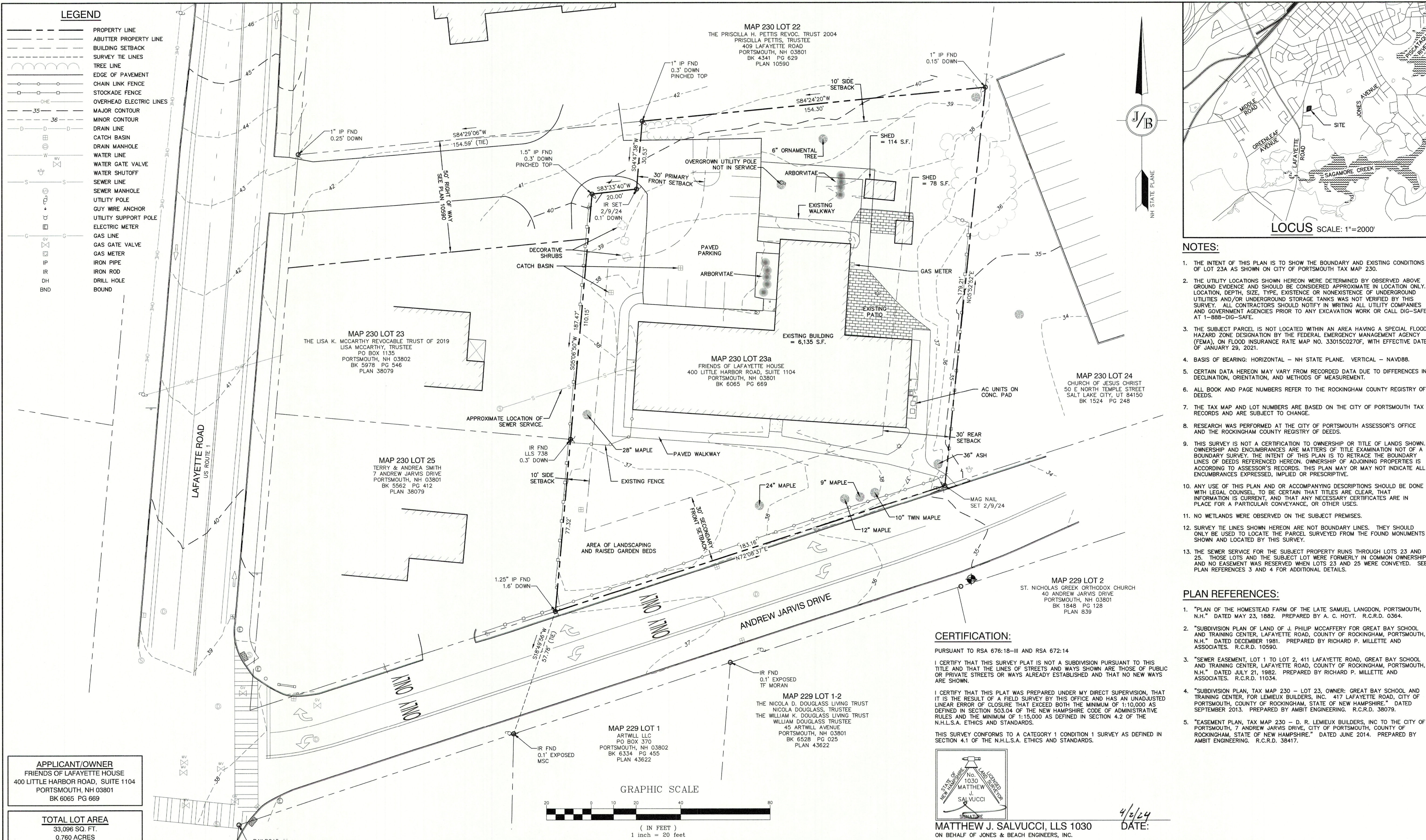
Then appeared the above-named **Francis G. Chase, duly authorized President of Community Home Solutions, Inc.**, known to me or satisfactorily proven through proof of identification (i.e. his driver's license) to be the individual who executed the foregoing instrument, and acknowledged same to be his voluntary act and deed.

Before me,

**Mary Keohan Ganz, Justice of the Peace  
State of New Hampshire  
My Commission Expires: August 28, 2024**

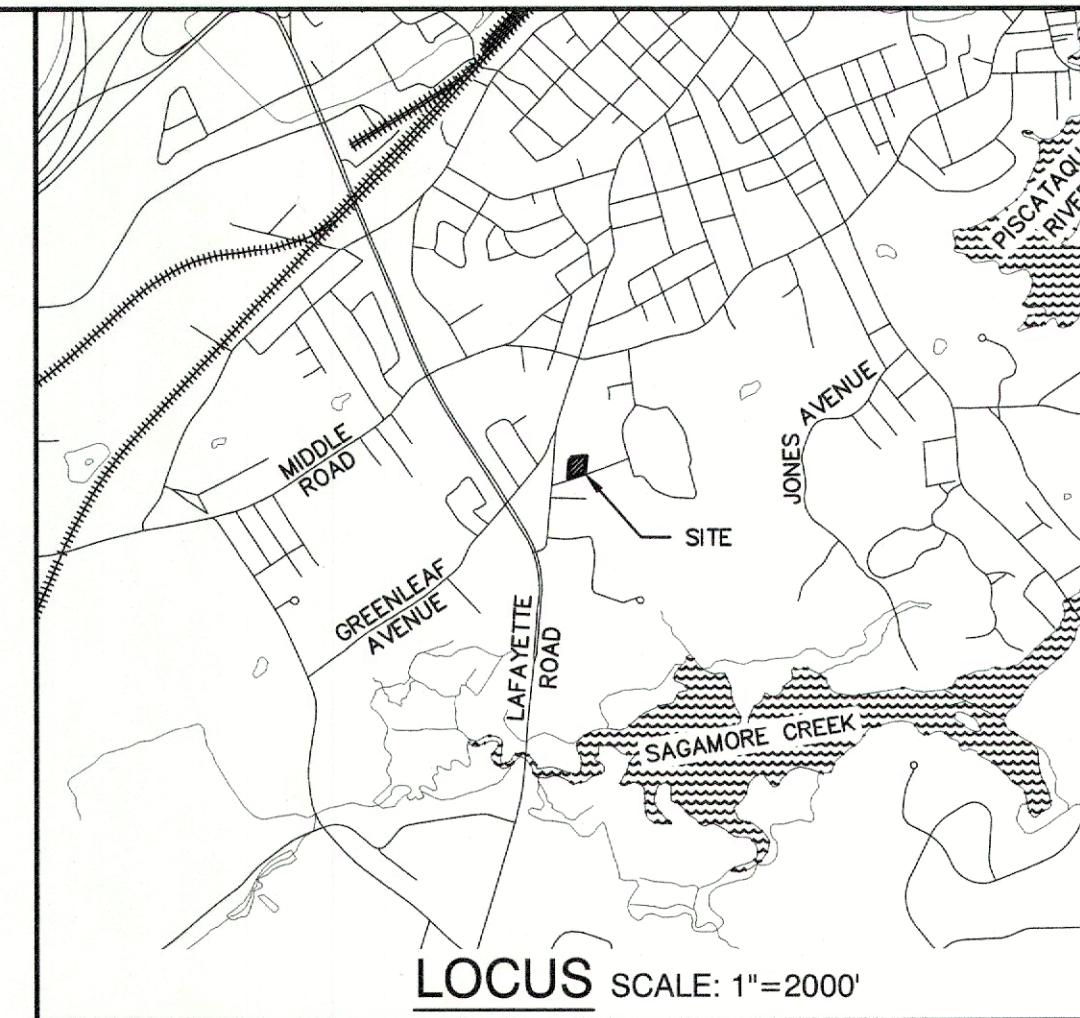
  
**Mary Keohan Ganz - Justice of the Peace  
My Commission Expires: 08/28/2024**

#8784-A/BF



**LEGEND**

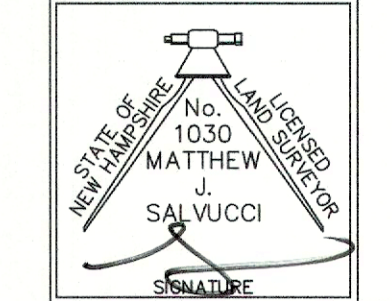
---	PROPERTY LINE
- - -	ABUTTER PROPERTY LINE
---	BUILDING SETBACK
---	SURVEY TIE LINES
---	TREE LINE
---	EDGE OF PAVEMENT
---	CHAIN LINK FENCE
---	STOCKADE FENCE
---	OVERHEAD ELECTRIC LINES
---	MAJOR CONTOUR
---	MINOR CONTOUR
---	DRAIN LINE
---	CATCH BASIN
---	DRAIN MANHOLE
---	WATER LINE
---	WATER GATE VALVE
---	WATER SHUTOFF
---	SEWER LINE
---	SEWER MANHOLE
---	UTILITY POLE
---	GUY WIRE ANCHOR
---	UTILITY SUPPORT POLE
---	ELECTRIC METER
---	GAS LINE
---	GAS GATE VALVE
---	GAS METER
---	IRON PIPE
---	IRON ROD
---	DRILL HOLE
---	BOUND



- NOTES:**
- THE INTENT OF THIS PLAN IS TO SHOW THE BOUNDARY AND EXISTING CONDITIONS OF LOT 23A AS SHOWN ON CITY OF PORTSMOUTH TAX MAP 230.
  - THE UTILITY LOCATIONS SHOWN HEREON WERE DETERMINED BY OBSERVED ABOVE GROUND EVIDENCE AND SHOULD BE CONSIDERED APPROXIMATE IN LOCATION ONLY. LOCATION, DEPTH, SIZE, TYPE, EXISTENCE OR NONEXISTENCE OF UNDERGROUND UTILITIES AND/OR UNDERGROUND STORAGE TANKS WAS NOT VERIFIED BY THIS SURVEY. ALL CONTRACTORS SHOULD NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES PRIOR TO ANY EXCAVATION WORK OR CALL DIG-SAFE AT 1-888-DIG-SAFE.
  - THE SUBJECT PARCEL IS NOT LOCATED WITHIN AN AREA HAVING A SPECIAL FLOOD HAZARD ZONE DESIGNATION BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 33015C0270F, WITH EFFECTIVE DATE OF JANUARY 29, 2021.
  - BASIS OF BEARING: HORIZONTAL - NH STATE PLANE. VERTICAL - NAVD88.
  - CERTAIN DATA HEREON MAY VARY FROM RECORDED DATA DUE TO DIFFERENCES IN DECLINATION, ORIENTATION, AND METHODS OF MEASUREMENT.
  - ALL BOOK AND PAGE NUMBERS REFER TO THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
  - THE TAX MAP AND LOT NUMBERS ARE BASED ON THE CITY OF PORTSMOUTH TAX RECORDS AND ARE SUBJECT TO CHANGE.
  - RESEARCH WAS PERFORMED AT THE CITY OF PORTSMOUTH ASSESSOR'S OFFICE AND THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
  - THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO TRACE THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES EXPRESSED, IMPLIED OR PRESCRIPTIVE.
  - ANY USE OF THIS PLAN AND OR ACCOMPANYING DESCRIPTIONS SHOULD BE DONE WITH LEGAL COUNSEL, TO BE CERTAIN THAT TITLES ARE CLEAR, THAT INFORMATION IS CURRENT, AND THAT ANY NECESSARY CERTIFICATES ARE IN PLACE FOR A PARTICULAR CONVEYANCE, OR OTHER USES.
  - NO WETLANDS WERE OBSERVED ON THE SUBJECT PREMISES.
  - SURVEY TIE LINES SHOWN HEREON ARE NOT BOUNDARY LINES. THEY SHOULD ONLY BE USED TO LOCATE THE PARCEL SURVEYED FROM THE FOUND MONUMENTS SHOWN AND LOCATED BY THIS SURVEY.
  - THE SEWER SERVICE FOR THE SUBJECT PROPERTY RUNS THROUGH LOTS 23 AND 25. THOSE LOTS AND THE SUBJECT LOT WERE FORMERLY IN COMMON OWNERSHIP, AND NO EASEMENT WAS RESERVED WHEN LOTS 23 AND 25 WERE CONVEYED. SEE PLAN REFERENCES 3 AND 4 FOR ADDITIONAL DETAILS.

- PLAN REFERENCES:**
- "PLAN OF THE HOMESTEAD FARM OF THE LATE SAMUEL LANGDON, PORTSMOUTH, N.H." DATED MAY 23, 1882. PREPARED BY A. C. HOYT. R.C.R.D. 0384.
  - "SUBDIVISION PLAN OF LAND OF J. PHILIP MCCAFFERY FOR GREAT BAY SCHOOL AND TRAINING CENTER, LAFAYETTE ROAD, COUNTY OF ROCKINGHAM, PORTSMOUTH, N.H." DATED DECEMBER 1981. PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES. R.C.R.D. 10590.
  - "SEWER EASEMENT, LOT 1 TO LOT 2, 411 LAFAYETTE ROAD, GREAT BAY SCHOOL AND TRAINING CENTER, LAFAYETTE ROAD, COUNTY OF ROCKINGHAM, PORTSMOUTH, N.H." DATED JULY 21, 1982. PREPARED BY RICHARD P. MILLETTE AND ASSOCIATES. R.C.R.D. 11034.
  - "SUBDIVISION PLAN, TAX MAP 230 - LOT 23, OWNER: GREAT BAY SCHOOL AND TRAINING CENTER, FOR LEMIEUX BUILDERS, INC. 417 LAFAYETTE ROAD, CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM, STATE OF NEW HAMPSHIRE." DATED SEPTEMBER 2013. PREPARED BY AMBIT ENGINEERING. R.C.R.D. 38079.
  - "EASEMENT PLAN, TAX MAP 230 - D. R. LEMIEUX BUILDERS, INC TO THE CITY OF PORTSMOUTH, 7 ANDREW JARVIS DRIVE, CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM, STATE OF NEW HAMPSHIRE." DATED JUNE 2014. PREPARED BY AMBIT ENGINEERING. R.C.R.D. 38417.

**CERTIFICATION:**  
 PURSUANT TO RSA 676:18-III AND RSA 672:14  
 I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.  
 I CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEEDS BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.  
 THIS SURVEY CONFORMS TO A CATEGORY 1 CONDITION 1 SURVEY AS DEFINED IN SECTION 4.1 OF THE N.H.L.S.A. ETHICS AND STANDARDS.



MATTHEW J. SALUCCI, LLS 1030  
 ON BEHALF OF JONES & BEACH ENGINEERS, INC.

4/2/24  
 DATE:

**APPLICANT/OWNER**  
 FRIENDS OF LAFAYETTE HOUSE  
 400 LITTLE HARBOR ROAD, SUITE 1104  
 PORTSMOUTH, NH 03801  
 BK 6065 PG 669

**TOTAL LOT AREA**  
 33,096 SQ. FT.  
 0.760 ACRES

Design:	JAC	Draft:	KDR	Date:	2/28/24
Checked:	JAC	Scale:	1" = 20'	Project No.:	23036
Drawing Name:	23036-PLAN.dwg				
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.					

REV.	DATE	REVISION	BY
0	2/28/24	ADDING BUILDING SETBACKS	KDR

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**  
 Civil Engineering Services

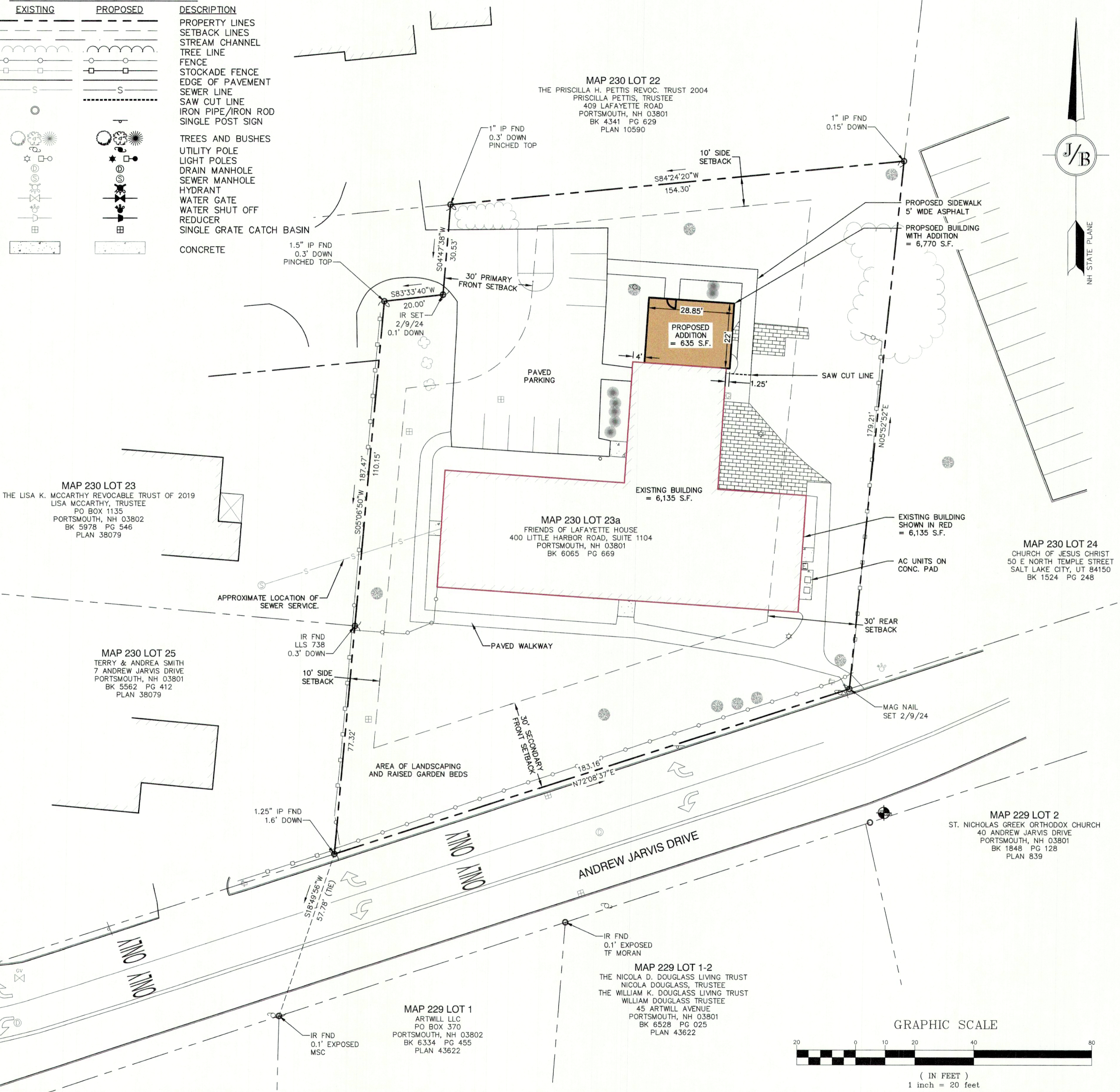
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
 603-772-4746  
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	<b>EXISTING CONDITIONS PLAN</b>
Project:	<b>BUILDING ADDITION 413 LAFAYETTE ROAD, PORTSMOUTH, NH</b>
Owner of Record:	<b>FRIENDS OF LAFAYETTE HOUSE 400 LITTLE HARBOR ROAD, SUITE 1104, PORTSMOUTH, NH 03801</b>

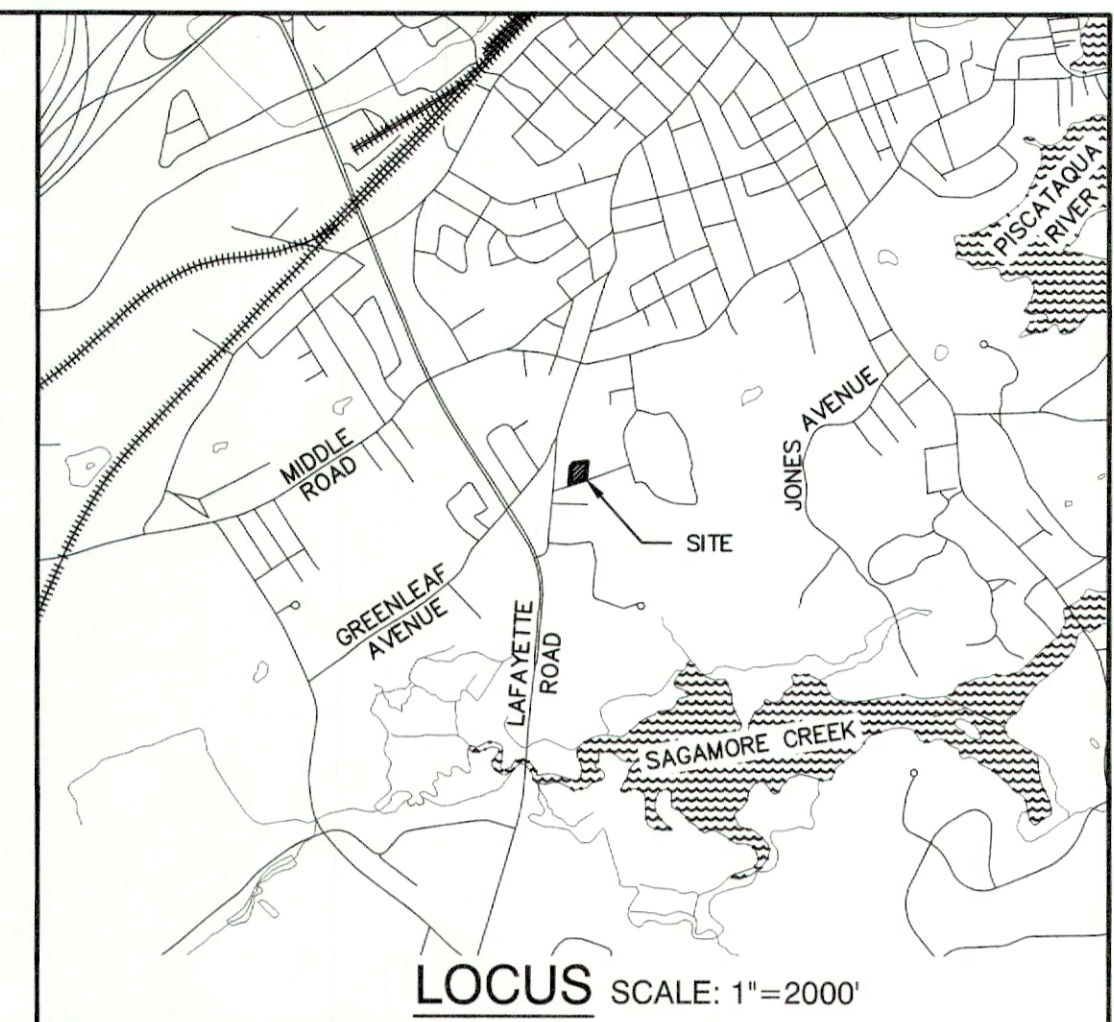
DRAWING No.  
**C1**  
 SHEET 1 OF 2  
 JBE PROJECT NO. 23036

**GENERAL LEGEND**

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINES
		SETBACK LINES
		STREAM CHANNEL
		TREE LINE
		FENCE
		STOCKADE FENCE
		EDGE OF PAVEMENT
		SEWER LINE
		SAW CUT LINE
		IRON PIPE/IRON ROD
		SINGLE POST SIGN
		TREES AND BUSHES
		UTILITY POLE
		LIGHT POLES
		DRAIN MANHOLE
		SEWER MANHOLE
		HYDRANT
		WATER GATE
		WATER SHUT OFF
		REDUCER
		SINGLE GRATE CATCH BASIN
		CONCRETE



	EXISTING & PROPOSED CONDITIONS		
	EXISTING	PROPOSED	PERMITTED/REQUIRED
LAND USE	GROUP HOME	CARE TAKING UNIT ADDITION TO EXISTING STRUCTURE	PRIMARILY RESIDENTIAL
LOT AREA (S.F.)	33,096	33,096	15,000
STREET FRONTAGE (ANDREW JARVIS DRIVE)(FT.)	183	183	100
LOT DEPTH (FT.)	173	173	100 MIN
FRONT YARD (FT.)	59'	59'	30 MIN.
LEFT YARD (FT.)	58.7'	37.6'	10 MIN.
RIGHT YARD (FT.)	25.7'	25.7'	10 MIN.
REAR YARD (FT.)	19.9'	19.9'	30 MIN.
HEIGHT (FT.)	18	18	35 MAX.
BUILDING COVERAGE (%)	19	20.4	20 MAX.
OPEN SPACE COVERAGE (%)	61	58.9	40 MIN.
PARKING	8	8	7

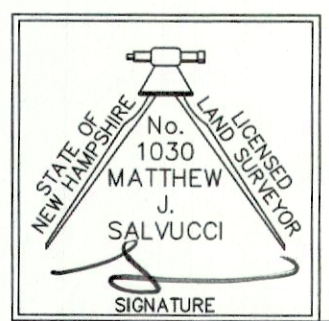


**SITE NOTES:**

- THE INTENT OF THIS PLAN IS TO ADD AN ADDITION FOR A CARETAKER UNIT.
- PARKING CALCULATIONS (ARTICLE 11, SECTION 10.1112.321.2 - ASSISTED LIVING FACILITY/RESIDENTIAL CARE FACILITY):  
REQUIREMENT: 5 PARKING SPACES PER BED OR RESIDENT  
13 TOTAL ROOMS EXISTING \* 5 SPACES PER BED = 6.5 ≈ 7  
7 PARKING SPACES REQUIRED  
8 PARKING SPACES PROVIDED
- THE FOLLOWING VARIANCES HAVE BEEN APPROVED BY THE ZONING BOARD OF ADJUSTMENT ON:  
A) SECTION 10.331 - TO EXTEND, ENLARGE, OR CHANGE THE LAWFUL NONCONFORMING USE WITHOUT CONFORMING TO THE ORDINANCE.  
B) SECTION 10.334 - TO EXTEND THE NONCONFORMING USE TO A REMAINING PORTION OF THE LAND.
- EXISTING IMPERVIOUS CALCULATIONS:  
EXISTING BUILDING = 6,135 S.F. (18.5%)  
PATIO, WALKWAY, CONCRETE = 2,745 S.F. (8.3%)  
PAVED SURFACES = 3,939 S.F. (11.9%)  
SHEDS = 192 S.F.  
TOTAL = 13,011 S.F. (39.3%)  
  
PROPOSED IMPERVIOUS CALCULATIONS:  
PROPOSED BUILDING FOOTPRINT = 6,770 S.F. (20.4%)  
PATIO, WALKWAY, CONCRETE = 2,898 S.F. (8.8%)  
PAVED SURFACES = 3,939 S.F. (11.9%)  
TOTAL = 13,607 S.F. (41.1%)
- THE FACILITY SHALL BE LIMITED TO 12 CARE RESIDENTS OR RESIDENTS UNDER CARE.
- THIS PLAN SET HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC., FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA AS SHOWN ON THE DESIGN PLANS, INCLUDING ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS ON THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS, MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED. CONTRACTOR TO ALWAYS CONTACT DIG SAFE PRIOR TO DIGGING ONSITE OR OFFSITE TO ENSURE SAFETY AND OBEY THE LAW.
- ALL CONSTRUCTION SHALL CONFORM TO TOWN STANDARDS AND REGULATIONS, AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
- SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NO. 33015C0270FB, DATED JANUARY 29, 2021.
- LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.
- ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.). THIS DOCUMENT IS TO BE KEPT ONSITE AT ALL TIMES AND UPDATED AS REQUIRED.
- THE CONTRACTOR SHALL READ AND FOLLOW ALL RECOMMENDATIONS MADE IN THE SITE GEOTECHNICAL ENGINEER REPORT, PREPARED BY \_\_\_\_\_, DATED \_\_\_\_\_.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
- ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PROVIDED BY THE OWNER. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION. BUILDING DIMENSIONS AND AREAS TO BE TO OUTSIDE OF MASONRY, UNLESS OTHERWISE NOTED.
- SNOW TO BE STORED AT EDGE OF PAVEMENT AND IN AREAS SHOWN ON THE PLANS, OR TRUCKED OFFSITE TO AN APPROVED SNOW DUMPING LOCATION.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.

**CERTIFICATION:**

PURSUANT TO RSA 678:18-III AND RSA 672:14  
I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.  
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**MATTHEW J. SALVUCCI, LLS 1030**  
ON BEHALF OF JONES & BEACH ENGINEERS, INC. DATE: 4/3/24

APPROVED - PORTSMOUTH, NH  
PLANNING BOARD

**APPLICANT/OWNER**  
FRIENDS OF LAFAYETTE HOUSE  
400 LITTLE HARBOR ROAD, SUITE 1104  
PORTSMOUTH, NH 03801  
BK 6065 PG 669

**TOTAL LOT AREA**  
33,096 SQ. FT.  
0.760 ACRES

Design: JAC	Draft: KDR	Date: 2/28/24
Checked: JAC	Scale: 1" = 20'	Project No.: 23036
Drawing Name: 23036-PLAN.dwg		
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REV.	DATE	REVISION	BY
0	2/28/24	ADDING BUILDING SETBACKS	KDR

Designed and Produced in NH

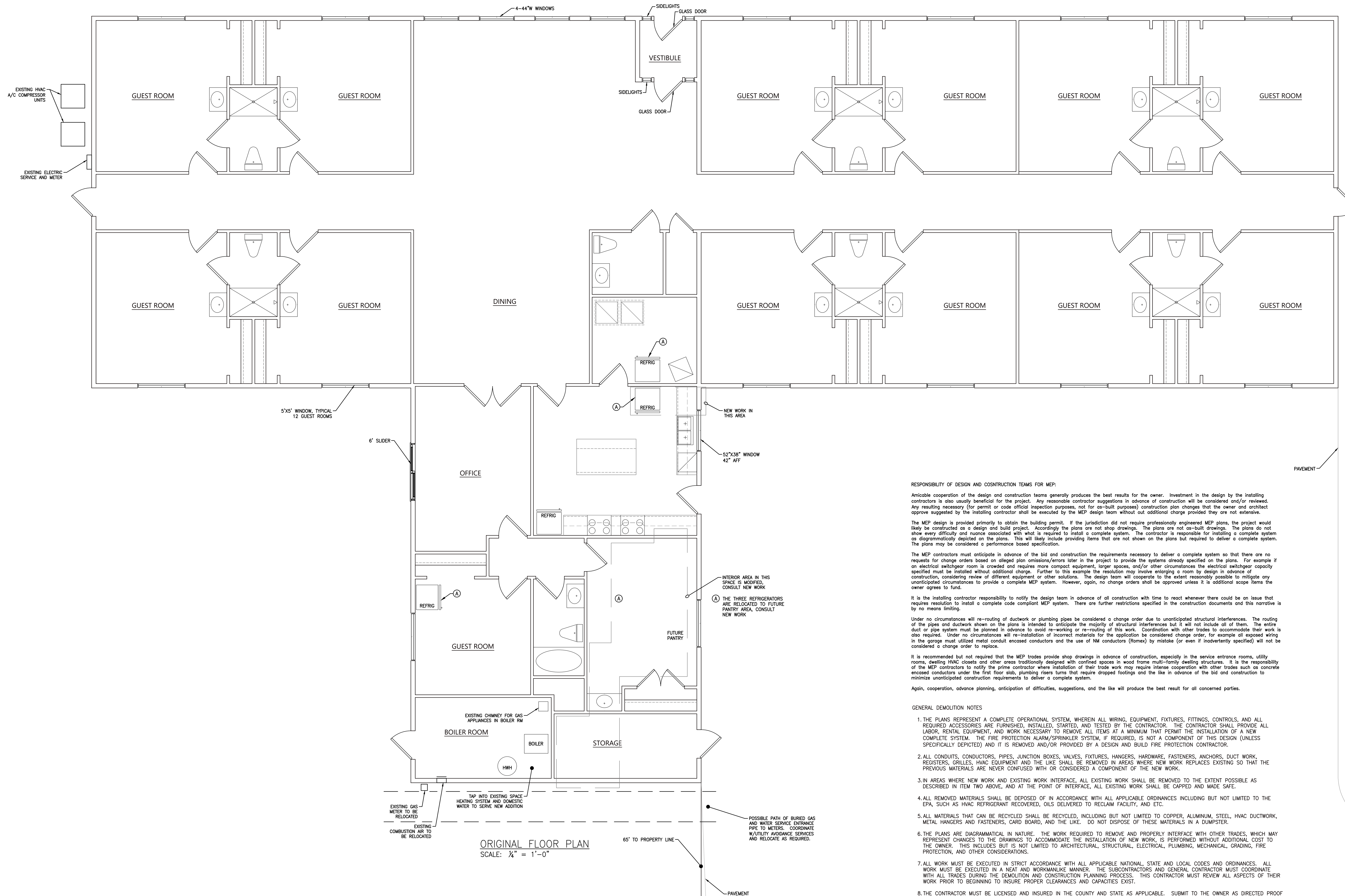
**J/B Jones & Beach Engineers, Inc.**  
Civil Engineering Services

85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
603-772-4746  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	<b>SITE PLAN</b> MAP 230 LOT 23A
Project:	<b>BUILDING ADDITION</b> 413 LAFAYETTE ROAD, PORTSMOUTH, NH
Owner of Record:	FRIENDS OF LAFAYETTE HOUSE 400 LITTLE HARBOR ROAD, SUITE 1104, PORTSMOUTH, NH 03801

DRAWING No.  
**C2**  
SHEET 2 OF 2  
JBE PROJECT NO. 23036





**RESPONSIBILITY OF DESIGN AND CONSTRUCTION TEAMS FOR MEP:**

Amicable cooperation of the design and construction teams generally produces the best results for the owner. Investment in the design by the installing contractors is also usually beneficial for the project. Any reasonable contractor suggestions in advance of construction will be considered and/or reviewed. Any resulting necessary (for permit or code official inspection purposes, not for as-built purposes) construction plan changes that the owner and architect approve suggested by the installing contractor shall be executed by the MEP design team without additional charge provided they are not extensive.

The MEP design is provided primarily to obtain the building permit. If the jurisdiction did not require professionally engineered MEP plans, the project would likely be constructed as a design and build project. Accordingly, the plans are not shop drawings. The plans are not as-built drawings. The plans do not show every difficulty and nuance associated with what is required to install a complete system. The contractor is responsible for installing a complete system as diagrammatically depicted on the plans. This will likely include providing items that are not shown on the plans but required to deliver a complete system. The plans may be considered a performance based specification.

The MEP contractors must anticipate in advance of the bid and construction the requirements necessary to deliver a complete system so that there are no requests for change orders based on alleged plan omissions/errors later in the project to provide the systems already specified on the plans. For example if an electrical switchgear room is crowded and requires more compact equipment, larger spaces, and/or other circumstances the electrical switchgear capacity specified must be installed without additional charge. Further to this example the resolution may involve enlarging a room by design in advance of construction, considering review of different equipment or other solutions. The design team will cooperate to the extent reasonably possible to mitigate any unanticipated circumstances to provide a complete MEP system. However, again, no change orders shall be approved unless it is additional scope items the owner agrees to fund.

It is the installing contractor responsibility to notify the design team in advance of all construction with time to react whenever there could be an issue that requires resolution to install a complete code compliant MEP system. There are further restrictions specified in the construction documents and this narrative is by no means limiting.

Under no circumstances will re-routing of ductwork or plumbing pipes be considered a change order due to unanticipated structural interferences. The routing of the pipes and ductwork shown on the plans is intended to anticipate the majority of structural interferences but it will not include all of them. The entire duct or pipe system must be planned in advance to avoid re-working or re-routing of this work. Coordination with other trades to accommodate their work is also required. Under no circumstances will re-installation of incorrect materials for the application be considered change order, for example all exposed wiring in the garage must utilize metal conduit enclosed conductors and the use of NM conductors (Romex) by mistake (or even if inadvertently specified) will not be considered a change order to replace.

It is recommended but not required that the MEP trades provide shop drawings in advance of construction, especially in the service entrance rooms, utility rooms, dwelling HVAC closets and other areas traditionally designed with confined spaces in wood frame multi-family dwelling structures. It is the responsibility of the MEP contractors to notify the prime contractor where installation of their trade work may require intense cooperation with other trades such as concrete enclosed conductors under the first floor slab, plumbing risers turns that require dropped footings and the like in advance of the bid and construction to minimize unanticipated construction requirements to deliver a complete system.

Again, cooperation, advance planning, anticipation of difficulties, suggestions, and the like will produce the best result for all concerned parties.

- GENERAL DEMOLITION NOTES**
1. THE PLANS REPRESENT A COMPLETE OPERATIONAL SYSTEM, WHEREIN ALL WIRING, EQUIPMENT, FIXTURES, FITTINGS, CONTROLS, AND ALL REQUIRED ACCESSORIES ARE FURNISHED, INSTALLED, STARTED, AND TESTED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ALL LABOR, RENTAL EQUIPMENT, AND WORK NECESSARY TO REMOVE ALL ITEMS AT A MINIMUM THAT PERMIT THE INSTALLATION OF A NEW COMPLETE SYSTEM. THE FIRE PROTECTION ALARM/SPRINKLER SYSTEM, IF REQUIRED, IS NOT A COMPONENT OF THIS DESIGN (UNLESS SPECIFICALLY DEPICTED) AND IT IS REMOVED BY A DESIGN AND BUILD FIRE PROTECTION CONTRACTOR.
  2. ALL CONDUITS, CONDUCTORS, PIPES, JUNCTION BOXES, VALVES, FIXTURES, HANGERS, HARDWARE, FASTENERS, ANCHORS, DUCT WORK, REGISTER, GRILLES, HVAC EQUIPMENT AND THE LIKE SHALL BE REMOVED IN AREAS WHERE NEW WORK REPLACES EXISTING SO THAT THE PREVIOUS MATERIALS ARE NEVER CONFUSED WITH OR CONSIDERED A COMPONENT OF THE NEW WORK.
  3. IN AREAS WHERE NEW WORK AND EXISTING WORK INTERFACE, ALL EXISTING WORK SHALL BE REMOVED TO THE EXTENT POSSIBLE AS DESCRIBED IN ITEM TWO ABOVE, AND AT THE POINT OF INTERFACE, ALL EXISTING WORK SHALL BE CAPPED AND MADE SAFE.
  4. ALL REMOVED MATERIALS SHALL BE DEPOSED OF IN ACCORDANCE WITH ALL APPLICABLE ORDINANCES INCLUDING BUT NOT LIMITED TO THE EPA, SUCH AS HVAC REFRIGERANT RECOVERED, OILS DELIVERED TO RECLAIM FACILITY, AND ETC.
  5. ALL MATERIALS THAT CAN BE RECYCLED SHALL BE RECYCLED, INCLUDING BUT NOT LIMITED TO COPPER, ALUMINUM, STEEL, HVAC DUCTWORK, METAL HANGERS AND FASTENERS, CARD BOARD, AND THE LIKE. DO NOT DISPOSE OF THESE MATERIALS IN A DUMPSTER.
  6. THE PLANS ARE DIAGRAMMATICAL IN NATURE. THE WORK REQUIRED TO REMOVE AND PROPERLY INTERFACE WITH OTHER TRADES, WHICH MAY REPRESENT CHANGES TO THE DRAWINGS TO ACCOMMODATE THE INSTALLATION OF NEW WORK, IS PERFORMED WITHOUT ADDITIONAL COST TO THE OWNER. THIS INCLUDES BUT IS NOT LIMITED TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING, MECHANICAL, GRADING, FIRE PROTECTION, AND OTHER CONSIDERATIONS.
  7. ALL WORK MUST BE EXECUTED IN STRICT ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AND ORDINANCES. ALL WORK MUST BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER. THE SUBCONTRACTORS AND GENERAL CONTRACTOR MUST COORDINATE WITH ALL TRADES DURING THE DEMOLITION AND CONSTRUCTION PLANNING PROCESS. THIS CONTRACTOR MUST REVIEW ALL ASPECTS OF THEIR WORK PRIOR TO BEGINNING TO INSURE PROPER CLEARANCES AND CAPACITIES EXIST.
  8. THE CONTRACTOR MUST BE LICENSED AND INSURED IN THE COUNTY AND STATE AS APPLICABLE. SUBMIT TO THE OWNER AS DIRECTED PROOF OF INSURANCE INCLUSIVE OF LIMITS OF LIABILITY AND DEDUCTIBLE INFORMATION. ALL SUBCONTRACTORS OF SUBCONTRACTORS MUST BE LICENSED AND INSURED TOO.
  9. SINCE THE PLANS ARE DIAGRAMMATICAL IN NATURE FOR CLARITY PURPOSES, THE CONTRACTOR MUST SUBMIT A SHOP DRAWING WHERE DEMOLITION IN COMPLEX OR COULD AFFECT OTHER ASPECTS OF THE WORK OR THAT MAY INCLUDE SUBSTANTIAL DIFFERENCES FROM THE PLANS, INCLUSIVE OF CALCULATIONS AND OTHER ITEMS TO THE OWNER PRIOR TO COMMENCING WORK. THE SHOP DRAWINGS MUST INCLUDE EXACT LOCATIONS, SPECIAL FITTINGS, AND VERIFICATION THAT THIS INFORMATION IS ACCURATE.
  10. THE CONTRACTOR AND ALL SUBCONTRACTORS WARRANT THAT THEY HAVE VISITED THE PROJECT SITE, REVIEWED ALL OF THE CONTRACT DOCUMENTS, AND ARE OTHERWISE FAMILIAR WITH THE REQUIREMENTS NECESSARY TO COMPLETELY EXECUTE THE WORK REQUIRED TO COMPLY WITH THE DIAGRAMMATICAL WORK DEPICTED HEREIN. FURTHER, THE CONTRACTOR WARRANTS THAT, IN POSSESSING A THOROUGH KNOWLEDGE OF THE CODE AND INDUSTRY STANDARD CONSTRUCTION PRACTICES, THE BID FOR PERFORMING THE WORK WILL CONTAIN ALLOWANCES FOR NORMAL DIFFICULTIES EXPERIENCED DURING THE CONSTRUCTION OF A BUILDING OF THIS TYPE. MODIFICATIONS TO THE CONTRACT, WHICH DO NOT ADD VALUE TO THE PROJECT, WILL NOT BE CONSIDERED VALID.
  11. THIS DESIGN IS NON TRANSFERABLE. IT IS INTELLECTUAL PROPERTY WITH TRADE SECRETS TO BE UTILIZED ON THIS PROJECT ONLY.
  12. THE PLANS INDICATE QUANTITIES ON THE PLANS TO ENHANCE THE UNDERSTANDING OF THE DESIGN CONCEPT. THE QUANTITIES ARE RELIABLE, BUT NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE TO INSTALL THE CORRECT QUANTITIES OF ITEMS REQUIRED TO REMOVE AND DELIVER A COMPLETE FUNCTIONING BUILDING.
  13. THIS PROJECT MAY HAVE AREAS OF AN UNUSUAL INTENSE MEP COORDINATION REQUIREMENT, AND IT IS THE RESPONSIBILITY OF THE MEP TRADES TO INSURE THAT ALL ASPECTS OF THE WORK ARE PROPERLY REMOVED AND PROVIDED TO DELIVER A COMPLETE AND FUNCTIONING MEP SYSTEM.
  14. WHERE THERE EXISTS A DISCREPANCY BETWEEN THE PLANS, DOCUMENTS, OR CODE THE CONTRACTOR SHALL PROVIDE FOR THE MOST EXPENSIVE METHOD AND ADVISE THE ARCHITECT IN WRITING PRIOR TO PERFORMING ANY WORK.

ALL DIMENSIONS, SIZES AND CAPACITIES MUST BE FIELD AND CODE VERIFIED.

PROJECT: LAFAYETTE HOUSE  
PORTSMOUTH, NEW HAMPSHIRE

ARCHITECT:  
PROJECT CONSULTING ENGINEER:

MECHANICAL ENGINEER

MECHANICAL ENGINEER

MECHANICAL ENGINEER

MECHANICAL ENGINEER

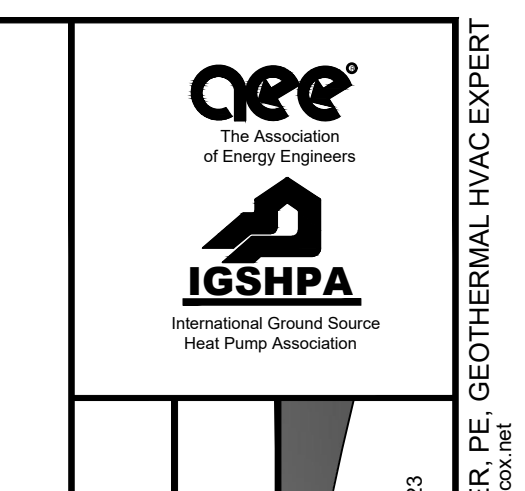
MECHANICAL ENGINEER

MECHANICAL ENGINEER

MECHANICAL ENGINEER

MECHANICAL ENGINEER

MECHANICAL ENGINEER



**SCOTT ENGINEERING**  
INTERNATIONAL GROUND SOURCE HEAT PUMP ASSOCIATION  
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PROJECT NO: 2021-0008

JOSHUA W. CHAPMAN P.E. LEED AP, PRINCIPAL

THE ASSOCIATION OF ENERGY ENGINEERS  
IGSHPA  
INTERNATIONAL GROUND SOURCE HEAT PUMP ASSOCIATION

THE ASSOCIATION OF MECHANICAL ENGINEERS  
ASME  
AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
ASME

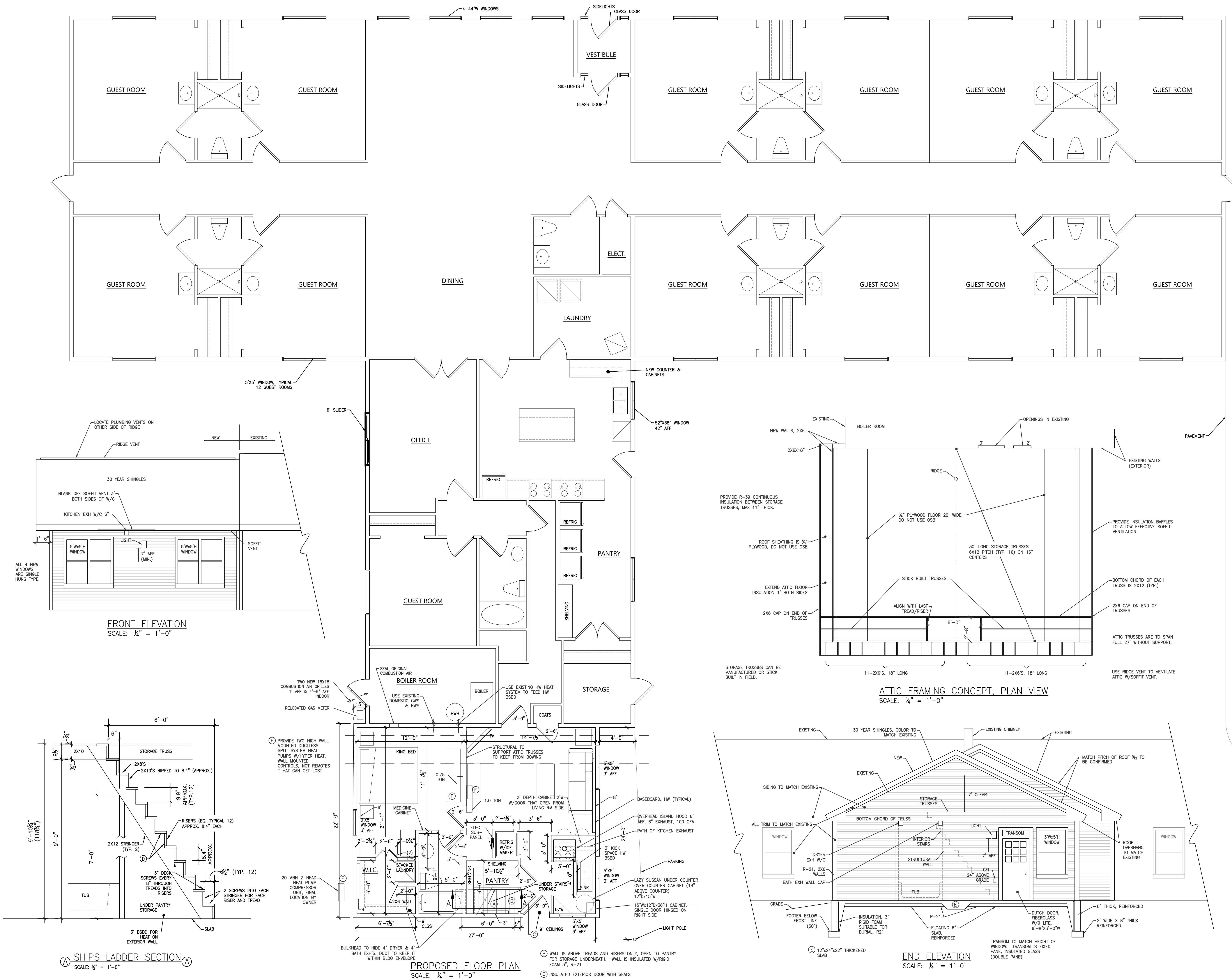
THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND SURVEYORS  
ASPE  
PROFESSIONAL ENGINEER  
STATE OF VIRGINIA  
JOSHUA W. CHAPMAN  
No. 028114

THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND SURVEYORS  
ASPE  
PROFESSIONAL ENGINEER  
STATE OF VIRGINIA  
JOSHUA W. CHAPMAN  
No. 028114

THIS DIAGRAMMATIC DESIGN IS NON TRANSFERABLE, AND REPRESENTS A COMPLETE SYSTEM.  
DRAWING TITLE: FLOOR PLAN  
OWNER: ...  
DESIGNED BY: RSM/JWC DATE: 10/10/2022  
DRAWN BY: LFG/JDMC  
SCALE: AS NOTED CHECKED BY: RSM/JWC  
SHEET IDENTIFICATION  
**A-1**

ALL DIMENSIONS, SIZES AND CAPACITIES MUST BE FIELD AND CODE VERIFIED.

THIS DIAGRAMATIC DESIGN IS NON-TRANSFERABLE AND REPRESENTS A COMPLETE SYSTEM.



FRONT ELEVATION  
SCALE: 1/4" = 1'-0"

ATTIC FRAMING CONCEPT, PLAN VIEW  
SCALE: 1/4" = 1'-0"

END ELEVATION  
SCALE: 1/4" = 1'-0"

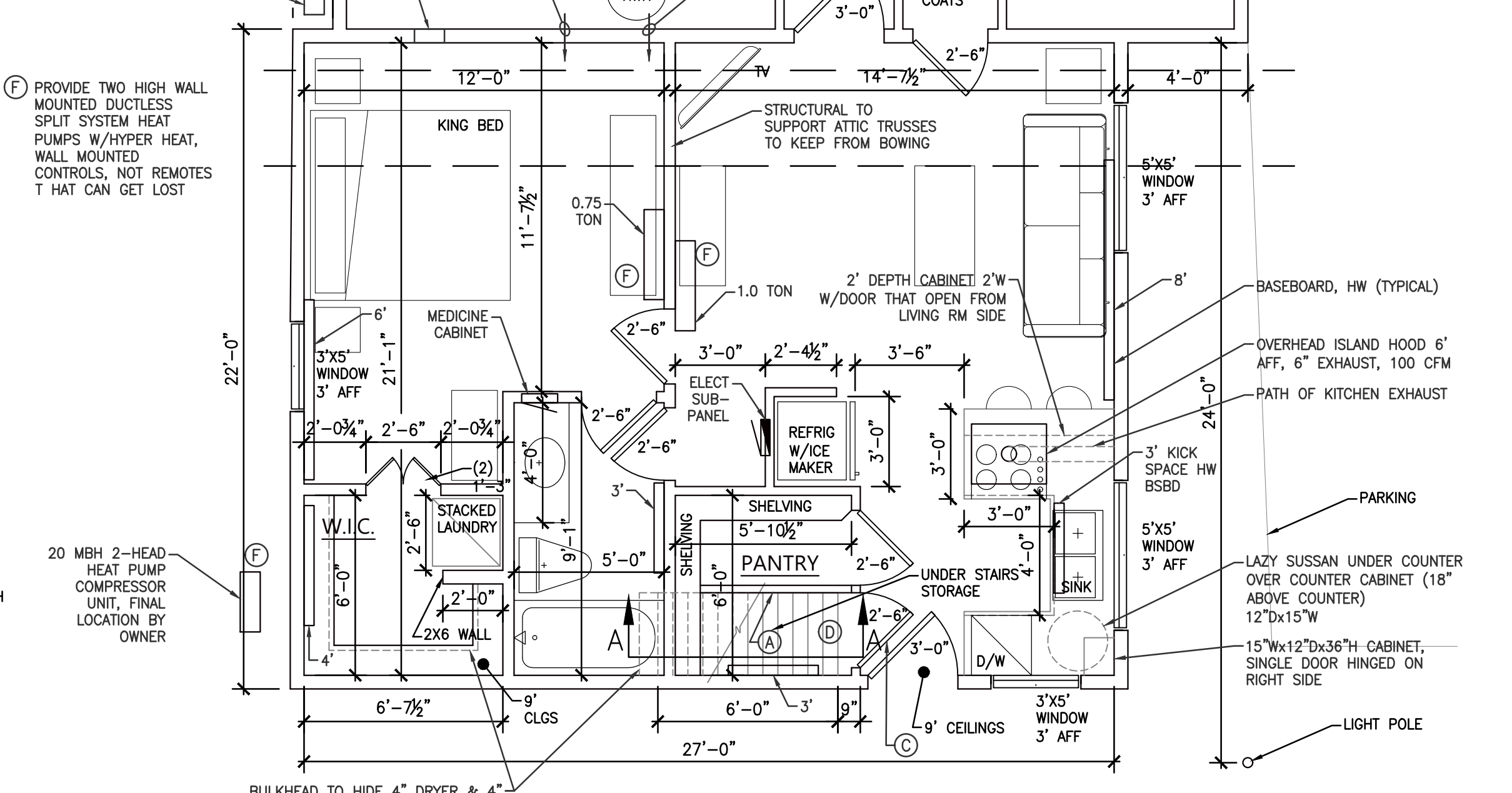
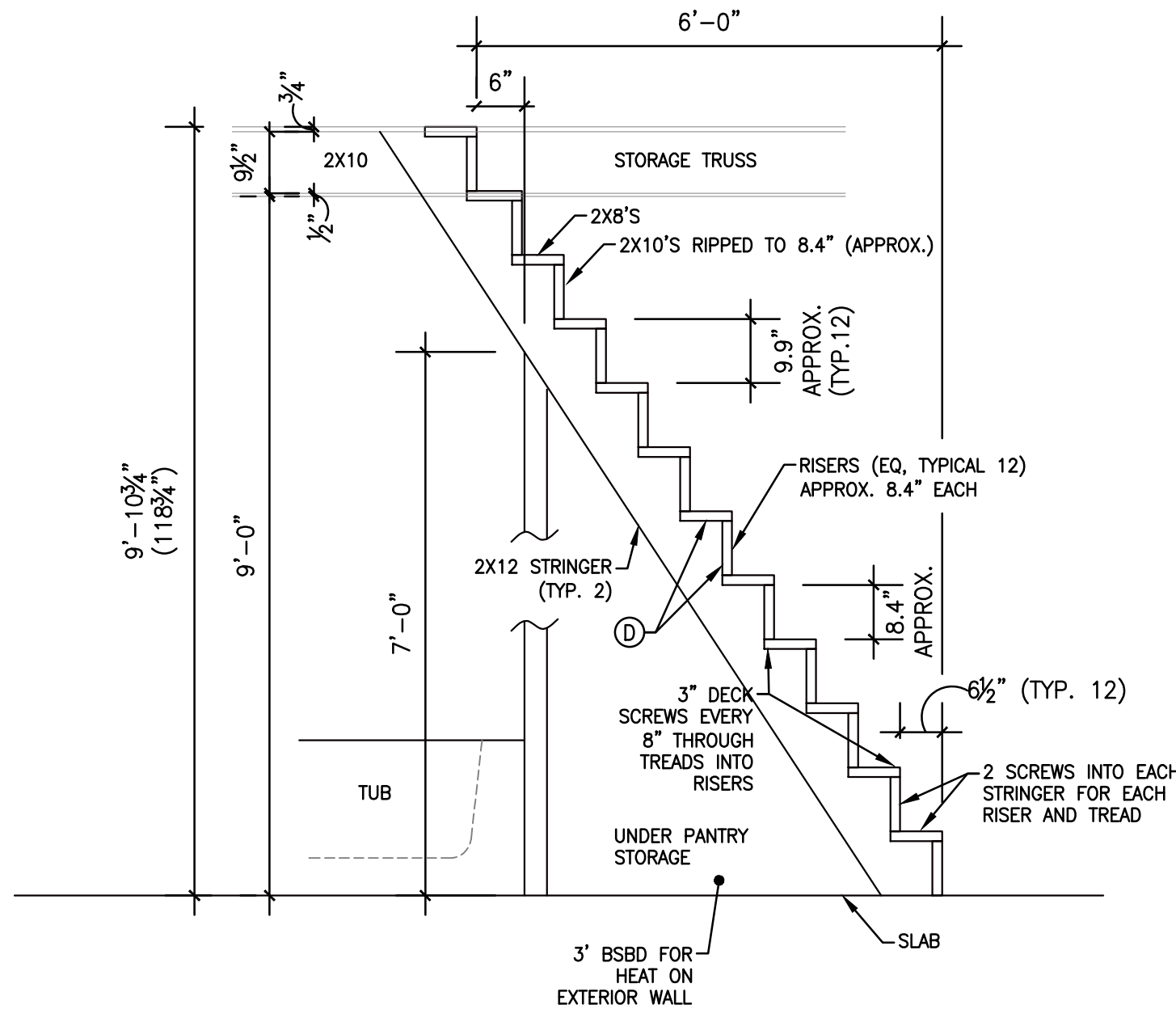
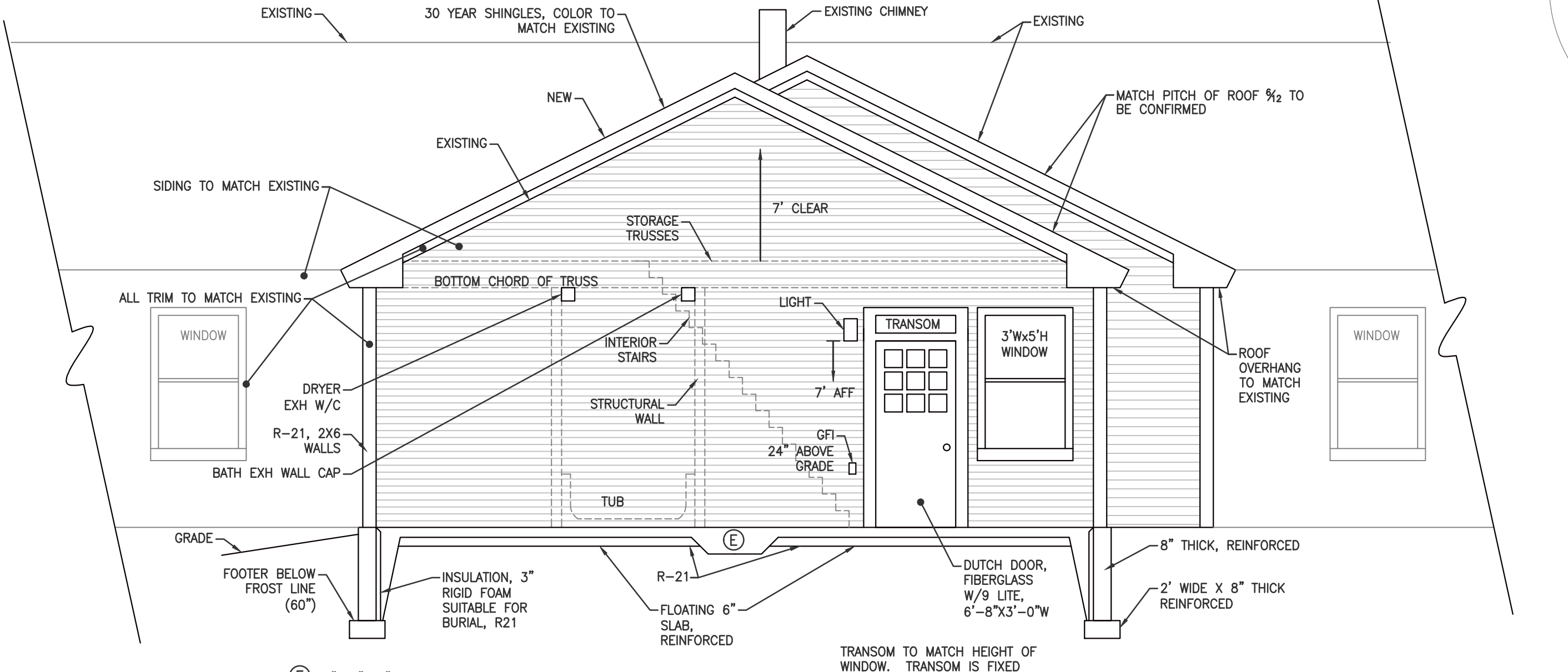
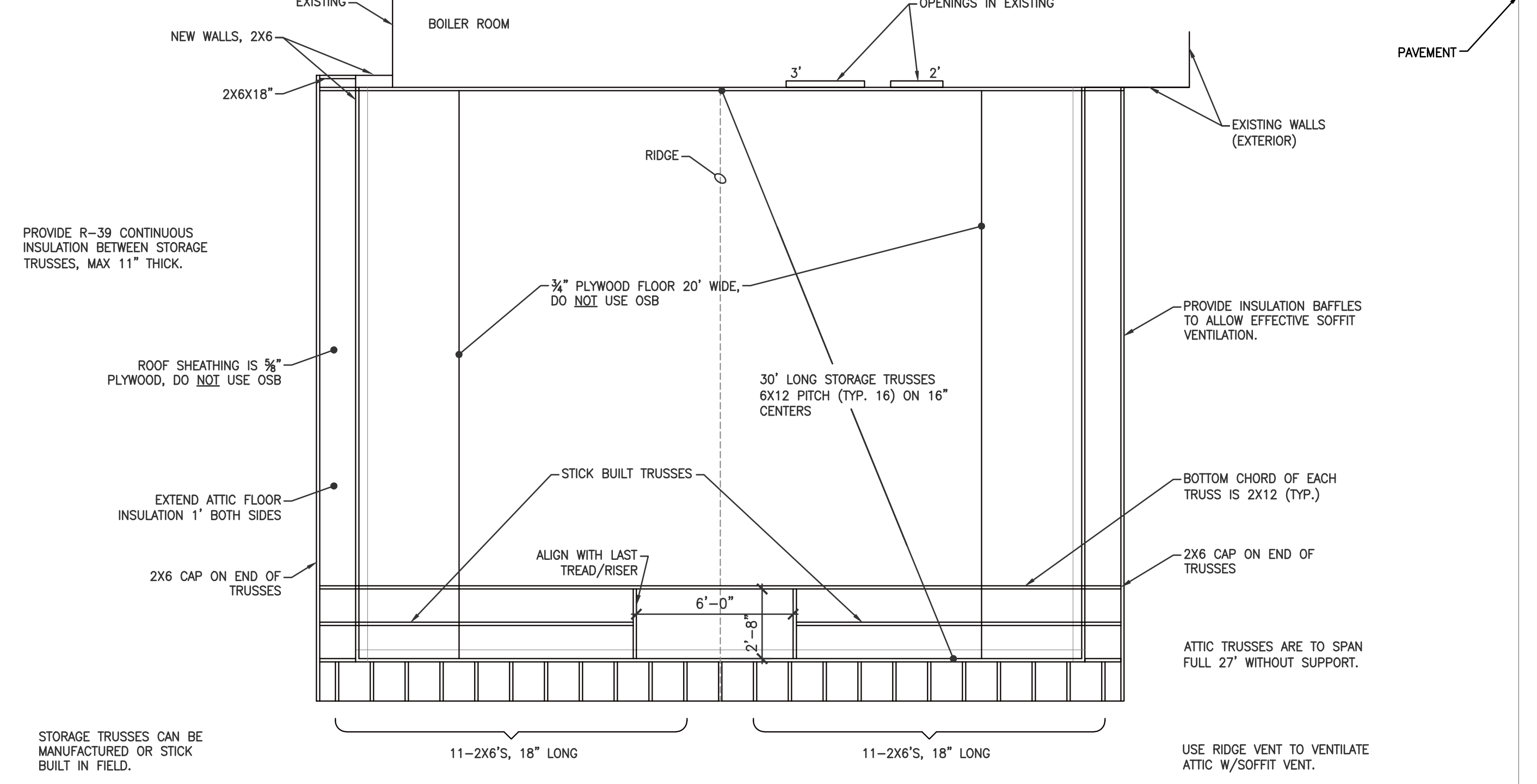
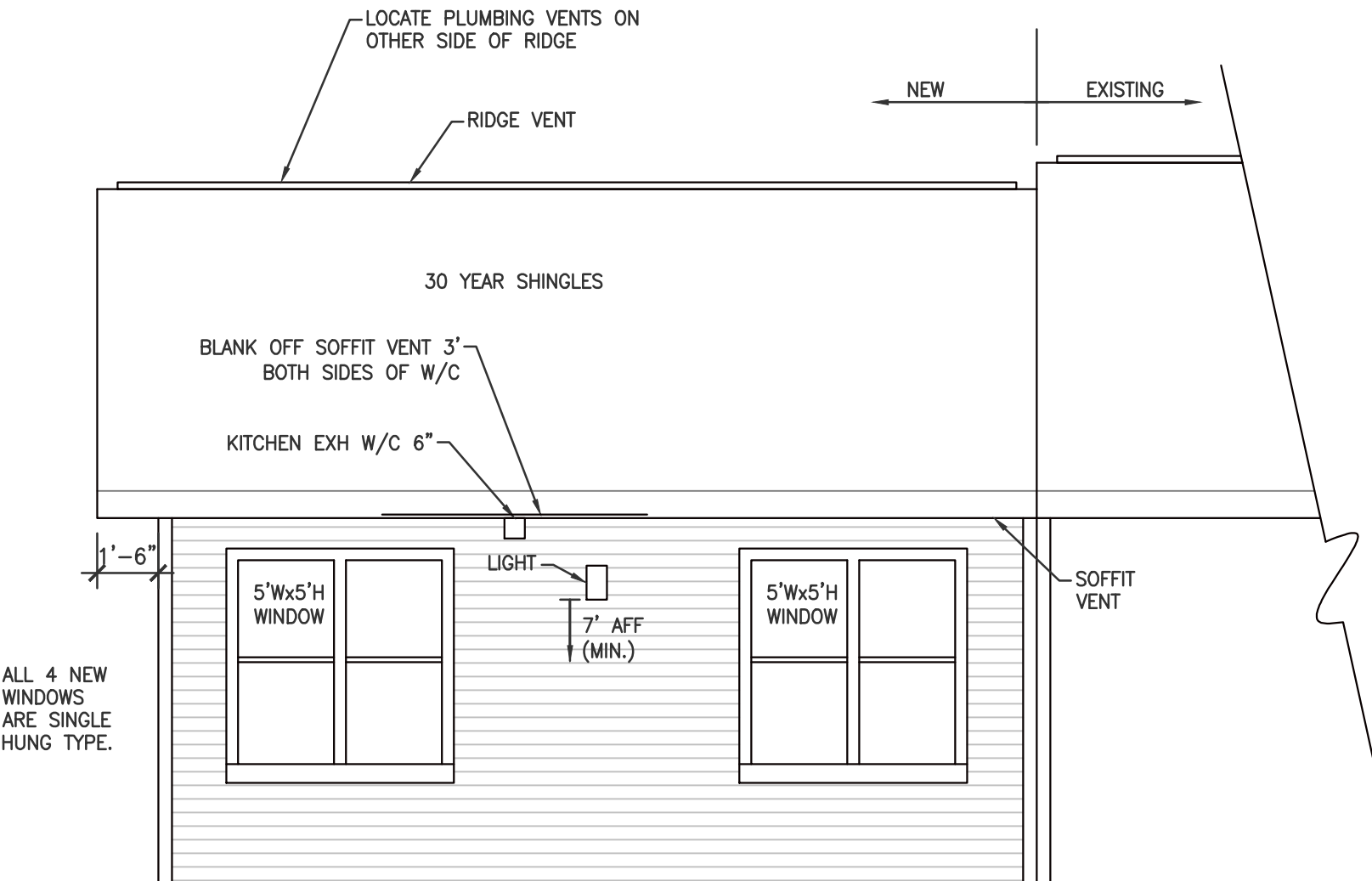
PROPOSED FLOOR PLAN  
SCALE: 1/4" = 1'-0"

SHIPS LADDER SECTION  
SCALE: 1/4" = 1'-0"

- (A) WALL IS ABOVE TREADS AND RISERS ONLY, OPEN TO PANTRY FOR STORAGE UNDERMATH. WALL IS INSULATED W/RIGID FOAM 1/2" R-21
- (B) INSULATED EXTERIOR DOOR WITH SEALS
- (C) UNDERSIDE OF TREADS AND RISERS ARE INSULATED W/3" RIGID FOAM AND PAINTED. SEAL TREADS AND RISERS W/CAULK-ALL SEAMS

- (F) PROVIDE TWO HIGH WALL MOUNTED DUCTLESS SPLIT SYSTEM HEAT PUMPS W/HYPHER HEAT, WALL MOUNTED CONTROLS, NOT REMOTES THAT CAN GET LOST

- (E) 12"x24"x22" THICKENED SLAB



EVERY TRADE IS OBLIGATED TO COMPLY WITH ALL ASPECTS OF ALL PLAN SHEETS. THAT IS FOR EXAMPLE, WHERE A REQUIREMENT ON THE PLUMBING PLANS IS SHOWN ON THE ARCHITECTURAL PLANS, THE PLUMBER MUST COMPLY WITH THAT REQUIREMENT, EVEN IF IT IS NOT SHOWN ON THE PLUMBING PLANS.

**CONSTRUCTION ADMINISTRATION REQUIREMENTS:**

This section applies to the construction documents. This section concerns execution of the work more so than code compliance and accordingly is not completely applicable to jurisdictional plan review.

Construction administration must be organized and this plan sheet is devoted to provide instruction for the contractor to properly apply this process with the engineer of record and design team. Please abide by the submittal format exactly and submit the products grouped as requested. Please issue requests for information (RFI) in accordance with the instructions on this plan sheet. RFIs and submittals out of compliance with this plan sheet may be returned requiring a corrected format. Please do not take this construction document requirement lightly.

It is in our best interest that the trade contractors are successful (profitable), after of course the primary goal of providing a code compliant design that guards the best interests of the public and the owner. It is difficult if there is an adversarial relationship between trade contractors and design team members. Please consider this specification an attempt to prevent wasted resources, which in addition to the protecting the public is a pledge engineers are expected to honor. This is a positive proactive specification intended to avoid mistakes, which will make the entire project more successful.

Please be reminded that the plans function as a complete design. It is not acceptable to accept only portions of the plans. All components of the construction documents must be executed and accepted to provide for a complete installation. It is completely unacceptable to consider the plans as containing optional scope items, where contractors, owners, and the like decide to omit aspects of our plan requirements.

Please be reminded that the mechanical, electrical and plumbing plans are not shop drawings. The mechanical, electrical, and plumbing plans were produced primarily to earn a building permit. If building permit requirements did not require mechanical, electrical, and plumbing plans signed and sealed by a state licensed professional engineer, the project most likely would have become a mechanical, electrical and plumbing contractor design and build project (and these plans would not exist).

Please be reminded from extensive notes listed on the leading plans sheets for mechanical, electrical, and plumbing trades clearly indicate that this is a difficult project for the architectural, structural, mechanical, plumbing and electrical trades to coordinate and interface properly. To state the difficulty even more plainly and understandably, please consider that the plans require that:

1. If the mechanical, electrical, and plumbing trades bid this project they are representing that the equipment is thoroughly researched, priced, taken-off examined, otherwise omitted and proposed in their bid fits. That is the equipment is spatially compatible with all other trades, inclusive of codes required, service required, otherwise, and required clearances for service and safety are all provided and accommodated.
2. If a lack of extensive pre-bid research or post bid proper advance planning and coordination (that is a requirement of the construction documents without exception) seems to be prevented as judged by the mechanical, electrical, or plumbing engineer of record than the trade contractors shall be required to provide shop drawings at no additional cost to the owner. Further, the questions and issues that may arise during the shop drawing production process that are directed to the mechanical, electrical, or plumbing engineer judged to be counter-productive, a nuisance, "fishing for change orders", and the like then answers by the design team shall be issued as the RFIs are inappropriate and unsuitable; returned unanswered.
3. There are often chases, wall cavities, and the like that are large enough to accommodate multiple trades and are shown on each trade plan in the same chase, wall cavity and the like. However, if the trades do not plan ahead (coordinate), the first trade field personnel on the project may install their work in a chase, wall cavity, and the like inefficiently such that the other trade(s) cannot install their work. A frequent example might be a wall cavity with both a vertical pipe and a vertical 3.25 inch deep HVAC duct specifically designed to be installed in between wall studs, and the plumber arrived first and installed the pipe such that the HVAC duct cannot be installed without re-cutting the pipe. This pipe must be relocated without exception. Substantial portions of the HVAC and electrical work cannot be installed until the shingles are on the roof of a building and it is protected from rain entering the building while under construction. The plumbing trade is not restricted in this way. Accordingly we often see pipes that could have been installed on the edge of a chase or wall cavity installed right in the middle as if there did not have to accommodate any other trades which of course is not often true. Often this important planning ahead and coordination is omitted against the very strong objection of the design team, and then an RFI is submitted claiming the plumbing pipe is in the way of the HVAC duct and the plans require more attention. This is not acceptable, and RFIs of this nature shall be considered counter-productive. A counter-productive RFI will be returned not answered and may require additional time to resolve. The answer to the RFI in this example will likely be to relocate the pipe.
4. The mechanical and plumbing plans are frequently reviewed by licensed master HVAC mechanics and master plumbers to ensure that the wall cavities, chases, and the like include the required space to install both trades with some extensive coordination that is required by the construction team. Please consider this before submitting RFIs and other inquires when the answer is likely indicative of a failure to coordinate prior to installing mechanical, electrical and plumbing work.
5. **Attention electricians:** Research the sizes of the switchgear, panels, fire pump controllers and the like so that the spaces allotted on the plans are adequate to install the equipment your bid includes. Switchgear sizes vary widely in size, and we generally utilize the smaller more compact equipment which may cost more. The design team is often under pressure to minimize space devoted to non-revenue producing floor space such as but not limited to switchgear rooms, panel enclosures, and the like. Coordinate with the plumber and the mechanical contractor to ensure that they do not install the equipment in a position that interferes with your work. The mechanical, electrical, and plumbing design team of record sometimes experiences claims by the contractors that the switchgear does not fit. If the project is bid, we consider this representation by the contractor that the electrical equipment is spatially compatible with all trades. If the switchgear is submitted, upon it is considered representation by the contractor that the switchgear is spatially compatible with all trades. Plan changes after permit as a result of failure to research and plan ahead will be considered an additional service.
6. In general the plans require a complete and functional system. The trade contractors are expected to install a complete and functioning system without exception.

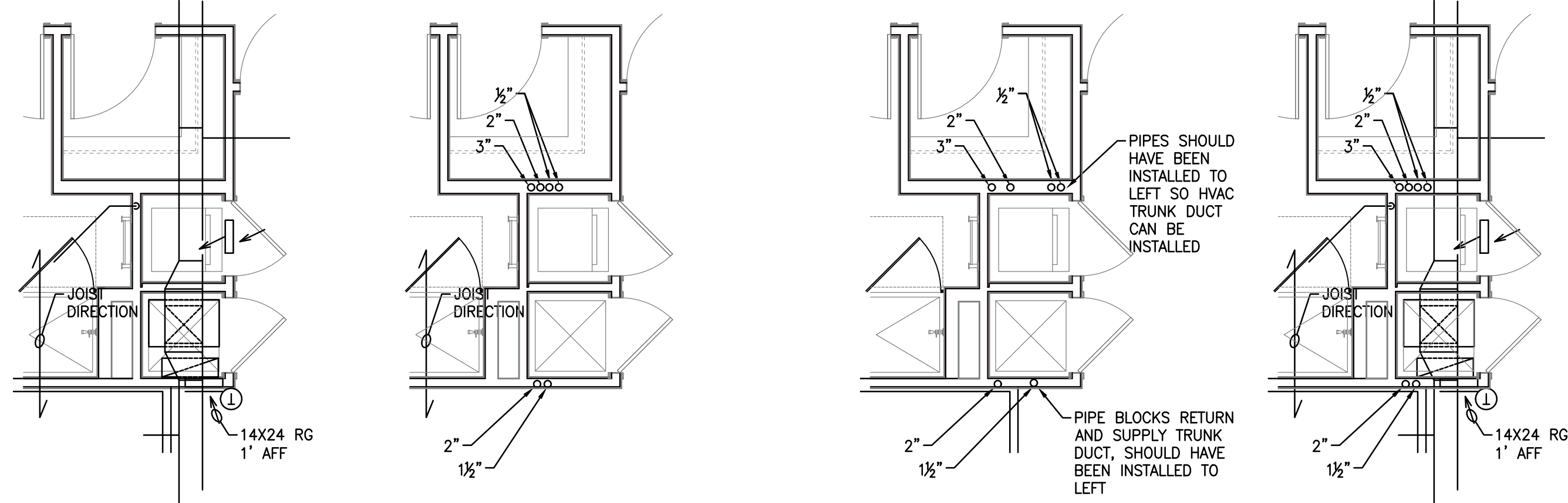
**REQUESTS FOR INFORMATION HEREINAFTER REFERRED TO AS AN RFI REQUIREMENTS:**

1. The RFI applicable to the trade shall be signed by the trade contractor. Often questions that most trade contractors would know are submitted as an RFI from a non-trade entity. The trade contractor is judged sometimes by the RFI. If the design team receives questions that the trade contractor should know and did not answer for the non-trade entity, it reflects poorly on the trade contractor. If the non-trade entity wishes to ask a trade question and receive a design team answer, it should be submitted with the trade contractor answer so that the design team may confirm or deny the trade contractor response. An example might be "why do we need an electric heater in a utility space below a dwelling", and the trade answer may be "to keep plumbing traps from freezing". Then the design team would confirm the RFI quickly. An RFI not reviewed by a trade contractor may be returned without an answer.
2. An RFI that changes the plans design slightly to reduce the cost of the project, but not compromise it, will be reviewed.
3. The RFI shall always contain a thoroughly thought through recommendation/proposed solution for the design team to review. For example, a correctly phrased RFI may read: "The ductwork shown on the plans interferes with a structural beam, by two inches. Is it acceptable to increase the width of the HVAC duct and reduce the depth to accommodate the beam with smooth transitions? An RFI that the design team may return for a proposed contractor solution to be reviewed may read: the ductwork shown on the plans interferes with a structural beam, please provide a new design. This process will expedite construction administration and reduce schedule interruptions.
4. RFI answers that result in a plan change shall be acceptable if conveyed as a sketch, narrative, or as otherwise requires the least documentation while allowing the contractors to continue construction. Drafting RFI answers is an as-built plan maintenance requirement which is an obligation of the construction team, not the design team.
5. When a duct size is changed in accordance with the "Duct-Upgrade", for example a 14x10 to 18x8 with smooth transitions, this does not require an RFI.

- 6. The answer to some common HVAC RFIs we receive is "no" for these questions:**
- 6.1. The return grille is shown as low, can it be installed high above the door of the mechanical closet?
  - 6.2. The return grille is shown ducted to the return air plenum and air handler, can this be deleted and make the mechanical closet a return plenum?
  - 6.3. The outside air duct which brings in fresh air to each dwelling air handler may be unnecessary, can it be deleted?
  - 6.4. Is ductboard acceptable when it is concealed and not able to be accessed completely for cleaning and thorough inspection?

ALL RFIS MUST BE WRITTEN BY THE MECHANICAL, ELECTRICAL AND PLUMBING TRADESMAN, OR WRITTEN BY OTHERS AND SIGNED BY THE MECHANICAL, ELECTRICAL, AND PLUMBING TRADESMAN. TRADESMAN MUST ACCEPT THIS RESPONSIBILITY SERIOUSLY. RFIS THAT APPEAR SIGNED BY TRADESMAN THAT WERE QUESTIONS THE TRADESMAN WOULD NORMALLY KNOW, AND NOT SERIOUSLY REVIEWED WILL BE RETURNED.

ALL RFIS MUST INCLUDE A PROPOSED NO COST RESOLUTION OR THEY WILL BE REJECTED.



**HVAC PLANS, ABBREVIATED**  
SCALE: NO SCALE

**PLUMBING PLANS, ABBREVIATED**  
SCALE: NO SCALE

**AS MAY BE INSTALLED WITHOUT COORDINATION WHICH RESULTS IN RFI**  
SCALE: NO SCALE

**HVAC & PLUMBING PLANS, ABBREVIATED**  
SCALE: NO SCALE

**WHAT SHOULD BE INSTALLED**

The incorrect plumbing work installed blocks the HVAC work from being installed. When this happens our offices may receive an RFI. Our answer is to relocate the pipes as per plan. This example is crystal clear, but often there is 3' of wall space to install half a dozen vertical pipes (which can easily be installed on one stud bay), and a vertical HVAC duct 12" wide in the other stud bay. If the plans are design the plumbing and mechanical work may clash, but it is possible to install the work without violating the design concept, as the plans are conceptual. This construction document sheet is an attempt to graphically portray how important it is to plan ahead when working with conceptual plans. Otherwise contractor shop drawings, which are expensive may become a requirement.

**EXAMPLES OF WHAT WE ARE TRYING TO AVOID, PLAN AHEAD**

PLANS SHOWN ON THIS SHEET ARE EXAMPLES OF MEP PLANS AND ARE NOT TO BE USED AS FLOOR PLANS, BUT TO ENCOURAGE COORDINATION AND PLANNING. THIS SAME PLAN SHEET IS USED ON EVERY JOB.

**CONTRACTORS, PLEASE DO NOT IGNORE THIS PLAN SHEET. IT IS PINACLE TO THE SUCCESS OF THIS PROJECT.**

**Submission of product data proposed by the contractor for use on the project (Submittals) REQUIREMENTS:**

**General:** All submittals must identify the Project name and trade contractor that is submitting the equipment for review. Equipment submitted must be compatible, functional and a proper application. Equipment submitted shall be spatially compatible, do not submit the equipment if it will not fit in the space allotted. The construction team is usually more experienced than the design team in the area of spatial compatibility of various mechanical, electrical, and plumbing equipment. Any deviations from the plans must be noted in the submittal. Any type of approval by the design team relies on the contractor submitting a code compliant and construction document compliant item. Plan deviations submitted shall be clearly identified and only approved if specifically referred and addressed in the engineering submittal review. Quantities and finishes will generally not be reviewed. The engineering submittal review is a double check to hopefully discover a contractor misinterpretation of the construction documents. While this process is reliable, it is not guaranteed. The obligation of providing a correct product is always the responsibility of the contractor, regardless of whether an engineer submittal review approval was issued.

The outline below may include additional product specifications in addition to submittal format and minimum information requirements:

1. Submit the mechanical items in groups (a through l) as outlined exactly herein below:
  - a. Each HVAC equipment submitted including, but not limited to, compressor bearing equipment, air handling units, furnaces, electric heaters, fans and ductless split systems shall be submitted separately and at the beginning include a schedule sheet that includes the equipment designation on plan, the nominal capacity, and the equipment model. Do not submit HVAC equipment data sheets that can be hundreds of pages long with installation instructions and etc with each equipment model not designated or designated for example on page 44 of 241, 61 of 241, 128 of 241 and etc. For HVAC ARI matched equipment such as a heat pump and air handler, include them both in one submittal.

- Primary HVAC equipment for dwellings and common areas, which is comprised primarily of the compressor bearing equipment complete with central fan system and oil accessories associated with the primary equipment. All equipment shall be identified, such as for example lobby, dwelling A2, and etc.
- Refrigeration plans, including pipe sizes that are determined by installed length, not equipment connection sizes.
- Thermostats for all equipment, including adequate stages for heat with dual stage compressor heat pump applications, auto-change-over from heat to cool as specified and required programming.
- Electric heaters, with each heater thoroughly identified. All heaters submitted are considered as represented by the contractor to be a proper application, such as ceiling cavity heaters rated for confined spaces, unit heaters with adequate space beneath them, and etc. All heaters are required to be suitable as primary sources of heat.
- Ductless split systems
- Fire protection dampers including the radiation dampers, curtain fire dampers and fire smoke dampers if applicable. Note that the radiation dampers shall be compatible with the UL floor/ceiling assembly such as for example UL 521, 586 and etc. Note UL555 is not a recognized UL floor/ceiling assembly rating, but rather a standard rating applied to fire protection dampers irrespective of the installation application.
- Ductwork accessories that include at a minimum; louvers, insulation, dampers, flex duct equipment connections, insulation, tape, duct sealing products and etc. Ductwork insulation shall not be permitted to be internal to the ductwork.
- Ductwork that includes metal rigid duct and construction methods
- Flexible air duct and flexible duct connector
- Registers, grilles and diffusers for both dwellings and common areas. Commercial areas always must receive non-residential/commercial products which include mitered, not stamped frames, adjustable supply air blades, individually made return/exhaust blades in register or grille, not an integral stamping of frame, and screw driver operated volume control devices. Linear diffusers shall never utilize face mounted screws for mounting, include concealed fasteners.
- Fire stopping, note it is not acceptable to install multiple conduits, ducts, and especially round items through a single penetration. Provide neatly cut, drilled or otherwise holes through rated assemblies (do not use a hammer).
- Miscellaneous, which can include supports, identification and etc.

2. Submit the electrical equipment in groups (a through h) as outlined herein below:
  - a. Switchgear that includes a shop drawing with a floor plan layout, demonstrating that all equipment is spatially compatible, accounting for required clearances especially. If a shop drawing is not submitted the design team will interpret this as the contractor representing that equipment submitted will fit (spatially compatible with all trades and all coordination is completed). The submittal must include AC ratings and the electrical contractor is responsible for providing the minimum AC rated equipment as specified on the plans or as required by the utility company, generally whichever is greater unless approved in writing from the engineer of record. This includes meter centers, main distribution panels, large disconnects, and fuse, circuit breaker panels, Automatic Transfer Switches. However, certain aspects of this may be split into multiple submittal data if convenient for the electrical contractor.
  - b. Circuit breakers, which must be coordinated with their equipment electrical ratings served. The capacity and quantity of branch circuit breakers, fuse and the like will not be reviewed.
  - c. Conduits, supports, junction boxes, pull boxes and conductor encasing/protective equipment, etc.
  - d. Switches and receptacles, lighting control panel etc.
  - e. Conductors (wires)
  - f. Lighting: The submittal must clearly identify the light fixture and correlate to the light fixture schedule in the construction documents. All light fixtures for a particular building must be submitted together (clubhouse, apartment building, or townhouse). Separate submittals for different building types is acceptable. Submittal MUST indicate the following for each fixture or it may be rejected: socket/amp type, wattage, voltage, IC rated, Airtight, if LED - is the driver integral or remote, if low voltage - is the transformer integral or remote, wet/damp rating, fire rated if applicable. Submittal package to comply with International Energy Conservation Code.
  - g. Fire stopping
  - h. Miscellaneous

3. Submit the plumbing equipment in groups (a through j) as outlined herein below:
  - a. Pumps: domestic booster, sump type, including controls.
  - b. Pumps: sump type, sewage ejector, sewage grinder, including controls.
  - c. Plumbing fixtures, not reviewed for appearance or finishes.
  - d. Plumbing piping (differentiate what is to be used above vs below grade)
  - e. Hot water heaters (DO NOT USE GRAVITY DIRECT VENT, only power direct vent [tank or tankless], electric or electric heat pump are acceptable).
  - f. Backflow preventers, Check valves, ball valves, backwater valves, etc
  - g. Separators: Oil, Sand, or Grease, including traffic rated cover if applicable
  - h. Drains: including roof, floor, interior, exterior, trench at garage entrances, emergency and etc.
  - i. Fire stopping
  - j. Miscellaneous

- Other non-MEP product submissions that should be issued to the MEP engineer of record for review include but are not limited to:
1. Fireplaces, gas or electric. All gas fired fireplaces shall be direct vent without exception.
  2. Appliances, especially dryers to confirm vent lengths and gas fired ranges with gas input rating.
  3. Elevators if applicable, inclusive of especially the electrical requirements and environmental conditions to be maintained in the shaft and elevator machine room. If the elevator shaft is to be conditioned, it must be insulated where walls or roof separate the cab travel from the exterior (not an inside wall).
  4. Fire Pumps, Jockey Pumps, Fire Pump/Jockey Controllers for electrical coordination.
  5. Commercial Kitchen Equipment & appliances if applicable.

Product data submitted for use on this project which is out of compliance with the above written requirements shall likely be returned for further work before it is reviewed. This especially includes the format. If the electric heaters are submitted with the louvers, for example, it may be returned as not reviewed. Then the louvers would need to be included with duct accessories.

**PROJECT COMMISSIONING**

Mechanical, HVAC:  
All HVAC systems with moving parts shall be installed and started up in strict accordance with the published installation and start up instructions published by the manufacturer and documented in writing accordingly.

- Split system and package HVAC systems capacity five tons and less, provide a single start-up and installation page that includes but may not be limited to the information listed below:
- System information:
1. System designation on the plans
  2. Dwelling (each, so if 200 dwellings, here are 200 of these reports minimum, list unit number with level it is on) served, or common area served (such as leasing, club or etc.).
  3. Equipment model numbers, air handler, furnace, compressor section, furnace coil, auxiliary heat as applicable minimum. Also, list thermostat model.
  4. Date of installation, date of start-up, and personnel starting up the equipment.
  5. Size and approximate installed length of refrigeration piping
  6. Confirm that return air conveyance system is ducted from grille to air handler
  7. Confirm that outside air intake duct (where natural ventilation is not used) includes a volume damper and motorized damper interlocked with the air handler and if applicable carbon dioxide sensor.
  8. Confirm that all rated assemblies inside the mechanical closet are protected.

- System operation:
1. Confirm that the air handler is set to 400 cfm per ton, do not leave the factory 3 ton air handler setting for a 1.5 ton system.
  2. Confirm that the outside air (that is ducted to return plenum) is balanced to 30 cfm for one bedroom, 45 cfm for two bedroom and 60 cfm for a three bedroom dwelling.
  3. Confirm that all wall caps serving the dwelling seal tightly, and operate correctly
  4. Confirm that the refrigeration piping have been leak tested
  5. Record weight and type of refrigerant used to charge the system.
  6. Record the ambient conditions and record the interior conditions prior to start up
  7. Record the inlet return air temperature and relative humidity
  8. Record the supply air discharge temperature at the refrigeration coil discharge.
  9. Record the supply air temperature out of the supply outlets in the occupied space.
  10. Record the amps of the blower fan and compressor
  11. Record the refrigeration pressures and temperatures with the return air and supply air temperatures, plus outdoor temperatures.
  12. Record the space temperatures, relative humidity and thermostat setting after a week of operation. Record any room temperatures that are more than 4°F different than the thermostat setting.
- Note the system information and start up documentation prescribed herein above is by no means limiting. The equipment manufacturer may require further work and this shall all be recorded. Any system results (measurements) that are outside of the parameters published by the equipment manufacturer shall be corrected by adjustment or system modifications as may be required without cost to the owner, prime contractor or the like.

Submit all the system information and start-up operation on a single sheet of paper or pdf for all dwellings. These will be checked for repeatability by the building management/ownership or the engineer by selecting a few dwellings or common area systems at random and checking them for the same information specified above. Should a significant discrepancy exist, then all equipment will be re-commissioned as directed by the engineer without additional charge to the owner, prime contractor or the like. Then the process shall begin again.

Any deviation from this specification for commissioning shall be considered a violation of the construction documents.

PLANS SHOWN ON THIS SHEET ARE EXAMPLES OF MEP PLANS AND ARE NOT TO BE USED AS FLOOR PLANS, BUT TO ENCOURAGE COORDINATION AND PLANNING. THIS SAME PLAN SHEET IS USED ON EVERY JOB.

THIS PROJECT IS NOT A DESIGN AND BUILD PROJECT FOR HVAC (MECHANICAL), PLUMBING, AND ELECTRICAL AS OTHERWISE THIS PLAN SHEET WOULD BE OMITTED. THIS PROJECT IS A DESIGN AND BUILD FOR FIRE PROTECTION (SPRINKLER/SUPPRESSION AND ALARM) AS MANDATED BY CODE. ALL OTHER ASPECTS OF THE PROJECT SUCH AS AUDIO, SECURITY, ALARM, VIDEO, CABLE, TELEPHONE AND THE LIKE RELATED TO MEP TRADES THAT DO NOT REQUIRE PLANS TO BE SUBMITTED FOR PERMIT ARE NOT PART OF THIS PLAN SET AND ARE DESIGN AND BUILD BY OTHERS.

ALL DIMENSIONS, SIZES AND CAPACITIES MUST BE FIELD AND CODE VERIFIED.

PROJECT: LAFAYETTE HOUSE  
PORTSMOUTH, NEW HAMPSHIRE

PROJECT ARCHITECT:  
DARRYL D. WILSON ARCHITECT

PROJECT CONSULTING ENGINEER:  
SCOTT ENGINEERING

PROJECT ENGINEER:  
DARRYL D. WILSON

PROJECT CONSULTING ENGINEER:  
SCOTT ENGINEERING

PROJECT ARCHITECT:  
DARRYL D. WILSON ARCHITECT

PROJECT CONSULTING ENGINEER:  
SCOTT ENGINEERING

SCOTT ENGINEERING  
SINCE 1980  
8000 BURNING TREE DRIVE SUITE 100 FLEMING, VA 22033-2723  
PHONE: 800-747-7329 / 541-432-3022  
WWW.SCOTTENGR.COM

JOSHUA W. CHAPMAN, P.E., LEED AP, PRINCIPAL

THIS DIAGRAMATIC DESIGN IS NON TRANSFERABLE, AND REPRESENTS A COMPLETE SYSTEM.

REVISIONS	
NO.	DESCRIPTION

<p style="font-size: x-small;">DRAWING TITLE: CONSTRUCTION ADMIN. NOTES &amp; DETAILS</p>	<p style="font-size: x-small;">OWNER: ...</p> <p style="font-size: x-small;">DESIGNED BY: RSM/JWC</p> <p style="font-size: x-small;">DRAWN BY: DP/DM/MC</p> <p style="font-size: x-small;">DATE: 10/02/22</p> <p style="font-size: x-small;">SCALE: AS NOTED</p>
<p style="font-size: x-small;">SHEET IDENTIFICATION</p> <p style="font-size: 2em; font-weight: bold;">A-3</p>	

GEOEXCHANGE  
Heat Pump Conversion

CGD  
CERTIFIED  
GEOEXCHANGE  
DESIGNER

THE ASSOCIATION OF ENERGY ENGINEERS  
**IGSHPA**  
International Ground Source Heat Pump Association

NEW HAMPSHIRE PROFESSIONAL ENGINEERS AND SURVEYORS

NEW HAMPSHIRE PROFESSIONAL PLUMBERS

NEW HAMPSHIRE PROFESSIONAL MECHANICAL ENGINEERS

NEW HAMPSHIRE PROFESSIONAL ELECTRICAL ENGINEERS

NEW HAMPSHIRE PROFESSIONAL ARCHITECTS

NEW HAMPSHIRE PROFESSIONAL LAND SURVEYORS

NEW HAMPSHIRE PROFESSIONAL CIVIL ENGINEERS

NEW HAMPSHIRE PROFESSIONAL CHEMISTS

NEW HAMPSHIRE PROFESSIONAL AERONAUTICAL ENGINEERS

NEW HAMPSHIRE PROFESSIONAL INDUSTRIAL ENGINEERS

NEW HAMPSHIRE PROFESSIONAL METALLURGICAL ENGINEERS

NEW HAMPSHIRE PROFESSIONAL NUCLEAR ENGINEERS

NEW HAMPSHIRE PROFESSIONAL AGRICULTURAL ENGINEERS

NEW HAMPSHIRE PROFESSIONAL GEOTECHNICAL ENGINEERS

GENERAL DEMOLITION NOTES

- THE PLANS REPRESENT A COMPLETE OPERATIONAL SYSTEM, WHEREIN ALL WIRING, EQUIPMENT, FIXTURES, FITTINGS, CONTROLS, AND ALL REQUIRED ACCESSORIES ARE FURNISHED, INSTALLED, STARTED, AND TESTED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ALL LABOR, RENTAL EQUIPMENT, AND WORK NECESSARY TO REMOVE ALL ITEMS AT A MINIMUM THAT PERMIT THE INSTALLATION OF A NEW COMPLETE SYSTEM. THE FIRE PROTECTION ALARM/SPRINKLER SYSTEM, IF REQUIRED, IS NOT A COMPONENT OF THIS DESIGN (UNLESS SPECIFICALLY DEPICTED) AND IT IS REMOVED AND/OR PROVIDED BY A DESIGN AND BUILD FIRE PROTECTION CONTRACTOR.
- ALL CONDUITS, CONDUCTORS, PIPES, JUNCTION BOXES, VALVES, FIXTURES, HANGERS, HARDWARE, FASTENERS, ANCHORS, DUCT WORK, REGISTERS, GRILLES, HVAC EQUIPMENT AND THE LIKE SHALL BE REMOVED IN AREAS WHERE NEW WORK REPLACES EXISTING SO THAT THE PREVIOUS MATERIALS ARE NEVER CONFUSED WITH OR CONSIDERED A COMPONENT OF THE NEW WORK.
- ALL AREAS WHERE NEW WORK AND EXISTING WORK INTERFACE, ALL EXISTING WORK SHALL BE REMOVED TO THE EXTENT POSSIBLE AS DESCRIBED IN ITEM TWO ABOVE, AND AT THE POINT OF INTERFACE, ALL EXISTING WORK SHALL BE CAPPED AND MADE SAFE.
- ALL REMOVED MATERIALS SHALL BE DEPOSED OF IN ACCORDANCE WITH ALL APPLICABLE ORDINANCES INCLUDING BUT NOT LIMITED TO THE EPA, SUCH AS HVAC REFRIGERANT RECOVERED, OILS DELIVERED TO RECLAIM FACILITY, AND ETC.
- ALL MATERIALS THAT CAN BE RECYCLED SHALL BE RECYCLED, INCLUDING BUT NOT LIMITED TO COPPER, ALUMINUM, STEEL, HVAC DUCTWORK, METAL HANGERS AND FASTENERS, CARD BOARD, AND THE LIKE. DO NOT DISPOSE OF THESE MATERIALS IN A DUMPSTER.
- THE PLANS ARE DIAGRAMMATICAL IN NATURE. THE WORK REQUIRED TO REMOVE AND PROPERLY INTERFACE WITH OTHER TRADES, WHICH MAY REPRESENT CHANGES TO THE DRAWINGS TO ACCOMMODATE THE INSTALLATION OF NEW WORK, IS PERFORMED WITHOUT ADDITIONAL COST TO THE OWNER. THIS INCLUDES BUT IS NOT LIMITED TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING, MECHANICAL, GRADING, FIRE PROTECTION, AND OTHER CONSIDERATIONS.
- ALL WORK MUST BE EXECUTED IN STRICT ACCORDANCE WITH ALL APPLICABLE NATIONAL STATE AND LOCAL CODES AND ORDINANCES. ALL WORK MUST BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER. THE SUBCONTRACTORS AND GENERAL CONTRACTOR MUST COORDINATE WITH ALL TRADES DURING THE DEMOLITION AND CONSTRUCTION PLANNING PROCESS. THIS CONTRACTOR MUST REVIEW ALL ASPECTS OF THEIR WORK PRIOR TO BEGINNING TO INSURE PROPER CLEARANCES AND CAPACITIES EXIST.
- THE CONTRACTOR MUST BE LICENSED AND INSURED IN THE COUNTY AND STATE AS APPLICABLE. SUBMIT TO THE OWNER AS DIRECTED PROOF OF INSURANCE INCLUSIVE OF LIMITS OF LIABILITY AND DEDUCTIBLE INFORMATION. ALL SUBCONTRACTORS OF SUBCONTRACTORS MUST BE LICENSED AND INSURED TOO.
- WHEN THE PLANS ARE DIAGRAMMATICAL IN NATURE FOR CLARITY PURPOSES, THE CONTRACTOR MUST SUBMIT A SHOP DRAWING WHERE DEMOLITION IN COMPLEX OR COULD AFFECT OTHER ASPECTS OF THE WORK OR THAT MAY INCLUDE SUBSTANTIAL DIFFERENCES FROM THE PLANS, INCLUSIVE OF CALCULATIONS AND OTHER ITEMS TO THE OWNER PRIOR TO COMMENCING WORK. THE SHOP DRAWINGS MUST INCLUDE EXACT LOCATIONS, SPECIAL FITTINGS, AND VERIFICATION THAT THIS INFORMATION IS ACCURATE.
- THE CONTRACTOR AND ALL SUBCONTRACTORS WARRANT THAT THEY HAVE VISITED THE PROJECT SITE, REVIEWED ALL OF THE CONTRACT DOCUMENTS, AND ARE OTHERWISE FAMILIAR WITH THE REQUIREMENTS NECESSARY TO COMPLETELY EXECUTE THE WORK REQUIRED TO COMPLY WITH THE DIAGRAMMATICAL WORK DEPICTED HEREIN. FURTHER, THE CONTRACTOR WARRANTS THAT, IN POSSESSING A THOROUGH KNOWLEDGE OF THE CODE AND INDUSTRY STANDARD CONSTRUCTION PRACTICES, THE BID FOR PERFORMING THE WORK WILL CONTAIN ALLOWANCES FOR NORMAL DIFFICULTIES EXPERIENCED DURING THE CONSTRUCTION OF A BUILDING OF THIS TYPE. MODIFICATIONS TO THE CONTRACT, WHICH DO NOT ADD VALUE TO THE PROJECT, WILL NOT BE CONSIDERED VALID.
- THIS DESIGN IS NON TRANSFERABLE. IT IS INTELLECTUAL PROPERTY WITH TRADE SECRETS TO BE UTILIZED ON THIS PROJECT ONLY.
- THE PLANS INDICATE QUANTITIES ON THE PLANS TO ENHANCE THE UNDERSTANDING OF THE DESIGN CONCEPT. THE QUANTITIES ARE RELIABLE, BUT NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE TO INSTALL THE CORRECT QUANTITIES OF ITEMS REQUIRED TO REMOVE AND DELIVER A COMPLETE FUNCTIONING BUILDING.
- THIS PROJECT MAY HAVE AREAS OF AN UNUSUAL INTENSE MEP COORDINATION REQUIREMENT, AND IT IS THE RESPONSIBILITY OF THE MEP TRADES TO INSURE THAT ALL ASPECTS OF THE WORK ARE PROPERLY REMOVED AND PROVIDED TO DELIVER A COMPLETE AND FUNCTIONING MEP SYSTEM.
- WHERE THERE EXISTS A DISCREPANCY BETWEEN THE PLANS, DOCUMENTS, OR CODE THE CONTRACTOR SHALL PROVIDE FOR THE MOST EXPENSIVE METHOD AND ADVISE THE ARCHITECT IN WRITING PRIOR TO PERFORMING ANY WORK.

RESPONSIBILITY OF DESIGN AND CONSTRUCTION TEAMS:

Amicable cooperation of the design and construction teams generally produces the best results for the owner. Investment in the design by the installing contractors is also usually beneficial for the project. Any reasonable contractor suggestions in advance of construction will be considered and/or reviewed. Any resulting necessary (for permit or code official inspection purposes, not for as-built purposes) construction plan changes that the owner and architect approve suggested by the installing contractor shall be executed by the design team without additional charge provided they are not extensive.

The design is provided primarily to obtain the building permit. If the jurisdiction did not require professionally engineered plans, the project would likely be constructed as a design and build project. Accordingly the plans are not shop drawings. The plans are not as-built drawings. The plans do not show every difficulty and nuance associated with what is required to install a complete system. The contractor is responsible for installing a complete system as diagrammatically depicted on the plans. This will likely include providing items that are not shown on the plans but required to deliver a complete system. The plans may be considered a performance based specification.

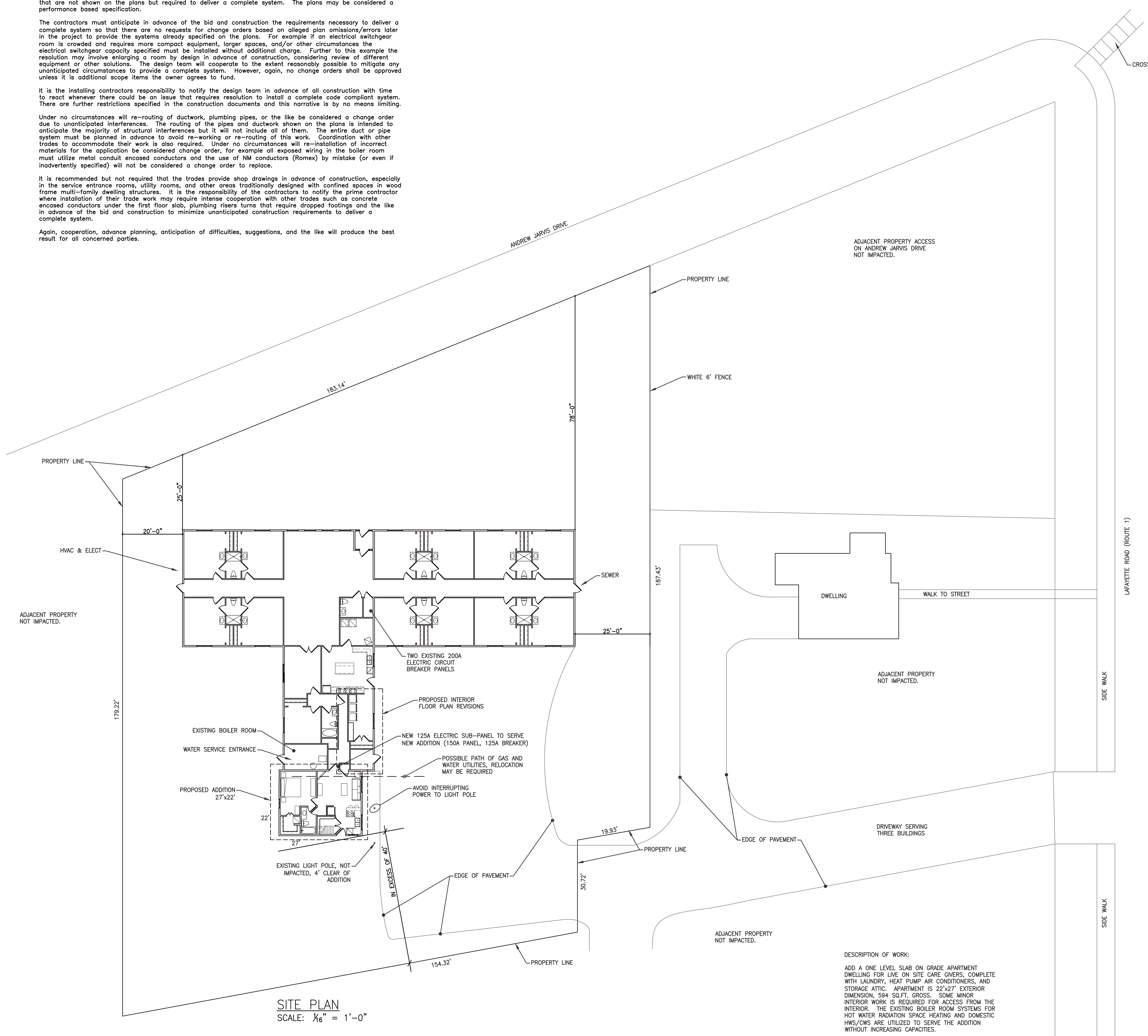
The contractors must anticipate in advance of the bid and construction the requirements necessary to deliver a complete system so that there are no requests for change orders based on alleged plan omissions/errors later in the project to provide the systems already specified on the plans. For example if an electrical switchgear room is crowded and requires more compact equipment, larger spaces, and/or other circumstances the electrical switchgear capacity specified must be installed without additional charge. Further to this example the resolution may involve enlarging a room by design in advance of construction, considering review of different equipment or other solutions. The design team will cooperate to the extent reasonably possible to mitigate any unanticipated circumstances to provide a complete system. However, again, no change orders shall be approved unless it is additional scope items the owner agrees to fund.

It is the installing contractors responsibility to notify the design team in advance of all construction with time to react whenever there could be an issue that requires resolution to install a complete code compliant system. There are further restrictions specified in the construction documents and this narrative is by no means limiting.

Under no circumstances will re-routing of ductwork, plumbing pipes, or the like be considered a change order due to unanticipated interferences. The routing of the pipes and ductwork shown on the plans is intended to anticipate the majority of structural interferences but it will not include all of them. The entire duct or pipe system must be planned in advance to avoid re-working or re-routing of this work. Coordination with other trades to accommodate their work is also required. Under no circumstances will re-installation of incorrect materials for the application be considered change order, for example all exposed wiring in the boiler room must utilize metal conduit enclosed conductors and the use of NM conductors (Romex) by mistake (or even if inadvertently specified) will not be considered a change order to replace.

It is recommended but not required that the trades provide shop drawings in advance of construction, especially in the service entrance rooms, utility rooms, and other areas traditionally designed with confined spaces in wood frame multi-family dwelling structures. It is the responsibility of the contractors to notify the prime contractor where installation of their trade work may require intense cooperation with other trades such as concrete enclosed conductors under the first floor slab, plumbing riser turns that require dropped footings and the like in advance of the bid and construction to minimize unanticipated construction requirements to deliver a complete system.

Again, cooperation, advance planning, anticipation of difficulties, suggestions, and the like will produce the best result for all concerned parties.



SITE PLAN  
SCALE: 1/8" = 1'-0"

DESCRIPTION OF WORK:  
ADD A ONE LEVEL SLAB ON GRADE APARTMENT DWELLING FOR LIVE ON SITE CARE GIVERS, COMPLETE WITH LAUNDRY, HEAT PUMP, AIR CONDITIONERS, AND STORAGE ATTIC. APARTMENT IS 22'x27' EXTERIOR DIMENSION, 594 SQ.FT. GROSS. SOME MINOR INTERIOR WORK IS REQUIRED FOR ACCESS FROM THE INTERIOR. THE EXISTING BOILER ROOM SYSTEMS FOR HOT WATER RADIATION SPACE HEATING AND DOMESTIC HWS/CWS ARE UTILIZED TO SERVE THE ADDITION WITHOUT INCREASING CAPACITIES.

CODES	SHEET INDEX
2015 IMC	S-1 SITE PLAN & COVER SHEET
2015 IECC	A-1 FLOOR PLAN
2015 IRC	A-2 FLOOR PLAN
2015 IBC	M-1 MECHANICAL NOTES & DETAILS
2017 NEC	M-2 FLOOR PLAN
	E-1 ELECTRICAL NOTES & DETAILS
	E-2 ELECTRICAL PLANS
	P-1 PLUMBING NOTES & LEGEND
	P-2 PLUMBING DETAILS & RISERS
	P-3 FLOOR PLAN

THIS DIAGRAMMATIC DESIGN IS NON TRANSFERABLE AND REPRESENTS A COMPLETE SYSTEM.

DRAWING TITLE: SITE PLAN & COVER SHEET

OWNER: ...

DESIGNED BY: RSM/JWC DATE: 10/10/2022

DRAWN BY: DPG/DMM/C DATE: 10/10/2022

SCALE: AS NOTED CHECKED BY: RSM/JWC

ALL DIMENSIONS, SIZES AND CAPACITIES MUST BE FIELD AND CODE VERIFIED.

PROJECT: LAFAYETTE HOUSE  
PORTSMOUTH, NEW HAMPSHIRE

ARCHITECT: ...

CONSULTING ENGINEER: ...

SCOT ENGINEERING  
SINCE 1960  
800 BURNING FLOOR SUITE 100 BENEVA ST FULDA, VA 23039-2723  
PHOTOGRAPHY: 753-2574-1425 - cimg.com

JOSHUA W. CHAPMAN, P.E., LEED AP, PRINCIPAL

IGSHA  
International Ground Source Heat Pump Association

CGD  
CERTIFIED GEOEXCHANGE DESIGNER

REVISIONS

SHEET IDENTIFICATION

S-1

ELECTRICAL SYMBOL LEGEND

- ALL ITEMS SHOWN MAY NOT APPEAR ON DRAWINGS. PER ADA REQUIREMENTS, ALL CONTROL DEVICES MUST BE A MINIMUM OF 15" AFF. TO WITHIN 48" AFF. FOR REACHING ACCESSIBILITY. HEIGHTS ARE GIVEN FROM THE FINISHED FLOOR. VERIFY THICKNESS OF FLOORING ASSEMBLY WITH ARCHITECTURAL PLANS PRIOR TO ROUGH-IN.

ELECTRICAL NOTES:

- 1. ALL ELECTRICAL WORK TO BE INSTALLED IN ACCORDANCE WITH THE GOVERNING EDITION OF THE NATIONAL ELECTRICAL CODE AND ANY OTHER LOCAL AUTHORITIES HAVING JURISDICTION. 2. ALL ELECTRICAL MATERIALS AND EQUIPMENT FOR THE PROJECT SHALL BE NEW AND U.L. OR EQUALLY APPROVED.

- LETTERS INDICATE PANEL BOARD DESIGNATION WHERE REQUIRED FOR ACCESSIBILITY, TOP BREAKER NOT TO EXCEED 48" AFF. PUSH-BUTTON STATION-SINGLE BUTTON, +46" AFF. TO THE CENTER OF THE BUTTON OR AS NOTED.

- 13. THE PLANS INDICATE QUANTITIES ON THE PLANS TO ENHANCE THE UNDERSTANDING OF THE DESIGN CONCEPT. THE QUANTITIES ARE RELIABLE, BUT NOT GUARANTEED, THE CONTRACTOR IS RESPONSIBLE TO INSTALL THE CORRECT QUANTITIES OF ITEMS REQUIRED TO DELIVER A COMPLETE FUNCTIONING BUILDING.

RESPONSIBILITY OF DESIGN AND CONSTRUCTION TEAMS FOR MEP:

AMICABLE COOPERATION OF THE DESIGN AND CONSTRUCTION TEAMS GENERALLY PRODUCES THE BEST RESULTS FOR THE OWNER. INVESTMENT IN THE DESIGN BY THE INSTALLING CONTRACTORS IS ALSO USUALLY BENEFICIAL FOR THE PROJECT. ANY REASONABLE CONTRACTOR SUGGESTIONS IN ADVANCE OF CONSTRUCTION DRAWINGS ARE NOT AS-BUILT DRAWINGS. THE DESIGN TEAM IS RESPONSIBLE FOR PERMIT OR CODE OFFICIAL INSPECTION PURPOSES, NOT FOR AS-BUILT PURPOSES. CONSTRUCTION PLAN CHANGES THAT THE OWNER AND ARCHITECT APPROVE SUGGESTED BY THE INSTALLING CONTRACTOR SHALL BE EXECUTED BY THE MEP DESIGN TEAM WITHOUT BUT ADDITIONAL CHARGE PROVIDED THEY ARE NOT EXTENSIVE.

THE MEP CONTRACTORS MUST ANTICIPATE IN ADVANCE OF THE BID AND CONSTRUCTION THE REQUIREMENTS NECESSARY TO DELIVER A COMPLETE SYSTEM SO THAT THERE ARE NO REQUESTS FOR CHANGE ORDERS BASED ON ALLEGED PLAN OMISSIONS/ERRORS LATER IN THE PROJECT TO PROVIDE THE SYSTEMS ALREADY SPECIFIED ON THE PLANS. FOR EXAMPLE IF AN ELECTRICAL SWITCHGEAR ROOM IS CROWDED AND REQUIRES MORE COMPACT EQUIPMENT, LARGER SPACES, AND/OR OTHER CIRCUMSTANCES THE ELECTRICAL SWITCHGEAR CAPACITY SPECIFIED MUST BE INSTALLED WITHOUT ADDITIONAL CHARGE.

UNDER NO CIRCUMSTANCES WILL RE-ROUTING OF DUCTWORK OR PLUMBING PIPES BE CONSIDERED A CHANGE ORDER DUE TO UNANTICIPATED STRUCTURAL INTERFERENCES. THE ROUTING OF THE PIPES AND DUCTWORK SHOWN ON THE PLANS IS INTENDED TO ANTICIPATE THE MAJORITY OF STRUCTURAL INTERFERENCES BUT IT WILL NOT INCLUDE ALL OF THEM. THE ENTIRE DUCT OR PIPE SYSTEM MUST BE PLANNED IN ADVANCE TO AVOID RE-WORKING OR RE-ROUTING OF THIS WORK.

ELECTRICAL DEMOLITION AND ALTERATIONS

- 1. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT AND WIRING NO LONGER REQUIRED. HE SHALL CUT ALL EXISTING CONDUIT WHICH WILL NOT BE COVERED OR HIDDEN BY THE NEW CONSTRUCTION BACK TO THE CONCRETE CEILING AND FLOOR SLABS. THIS CONTRACTOR, IF FEASIBLE MAY UTILIZE ANY EXISTING CONDUIT, OUTLET BOXES OR JUNCTION BOXES THAT DO NOT INTERFERE WITH THE NEW CONSTRUCTION.

NEW CKTS. PANEL PP1 - HOUSE POWER PANEL

Table with columns: LOCATION, A, B, LTG REC, MIS WIRE, CKT, BRKR, PHASE, BRKR, CKT, WIRE, MIS REC, LTG, A, B, LOCATION. Includes rows for AHU, EXISTING EQUIP, SUB-PANEL "A", and CONN LOAD.

Existing circuits & equipment to remain. See Panel Demand Load Calculations.

PANEL PP2 - HOUSE LIGHTING & RECEPETS PANEL

Table with columns: LOCATION, A, B, LTG REC, MIS WIRE, CKT, BRKR, PHASE, BRKR, CKT, WIRE, MIS REC, LTG, A, B, LOCATION. Includes rows for EXISTING EQUIP, ELEC RANGE/OVEN, CLOTHES DRYER, and CONN LOAD.

All existing circuits & equipment to remain or be reused. See floor plan sheet notes.

PANEL A - APARTMENT SUB-PANEL

Table with columns: LOCATION, A, B, LTG REC, MIS WIRE, CKT, BRKR, PHASE, BRKR, CKT, WIRE, MIS REC, LTG, A, B, LOCATION. Includes rows for DS-2.0, CLOTHES DRYER, RANGE/OVEN, CLOTHES WASHER, REFRIGERATOR, DISHWASHER, DISPOSAL, and CONN LOAD.

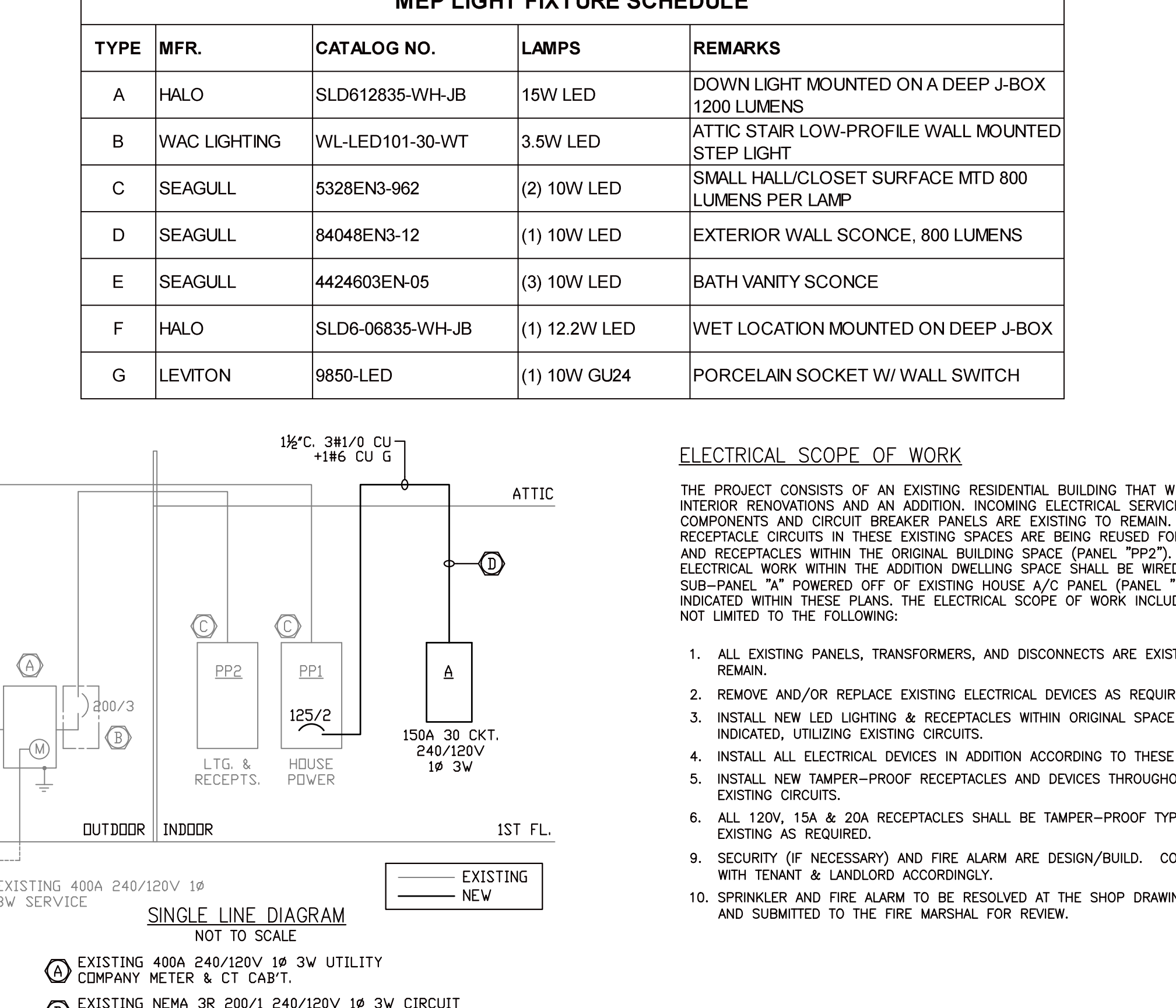
IT IS ACCEPTABLE TO UTILIZE NM CONDUCTORS (ROMEX) IF APPROVED BY THE LOCAL CODE OFFICIAL.

MEP LIGHT FIXTURE SCHEDULE

Table with columns: TYPE, MFR., CATALOG NO., LAMPS, REMARKS. Includes rows for HALO, WAC LIGHTING, SEAGULL, and LEVTON fixtures.

ELECTRICAL SCOPE OF WORK

THE PROJECT CONSISTS OF AN EXISTING RESIDENTIAL BUILDING THAT WILL HAVE INTERIOR RENOVATIONS AND AN ADDITIONAL INCOMING ELECTRICAL SERVICE COMPONENTS AND CIRCUIT BREAKER PANELS ARE EXISTING TO REMAIN. LIGHTING & RECEPTACLE CIRCUITS IN THESE EXISTING SPACES ARE BEING REUSED FOR LIGHTING AND RECEPTACLES WITHIN THE ORIGINAL BUILDING SPACE (PP1).



- 1. ALL EXISTING PANELS, TRANSFORMERS, AND DISCONNECTS ARE EXISTING TO REMAIN. 2. REMOVE AND/OR REPLACE EXISTING ELECTRICAL DEVICES AS REQUIRED. 3. INSTALL NEW LED LIGHTING & RECEPTACLES WITHIN ORIGINAL SPACE AS INDICATED, UTILIZING EXISTING CIRCUITS.

NEW LOAD CALCULATIONS

Table showing calculations for Existing Service (400A, 120/240V 1-phase 3-wire) and Combined Dwelling Load per NEC Table 220-30(4).

PANEL DEMAND LOAD CALCULATIONS

Table showing calculations for Existing Panel "PP1" and New Dwelling Sub-Panel "A" loads.

EXISTING LOADS:

Table listing existing loads for General, Special, and HVAC categories.

PANEL DEMAND LOAD CALCULATIONS

Table listing demand loads for Existing Panel "PP1" and New Dwelling Sub-Panel "A".

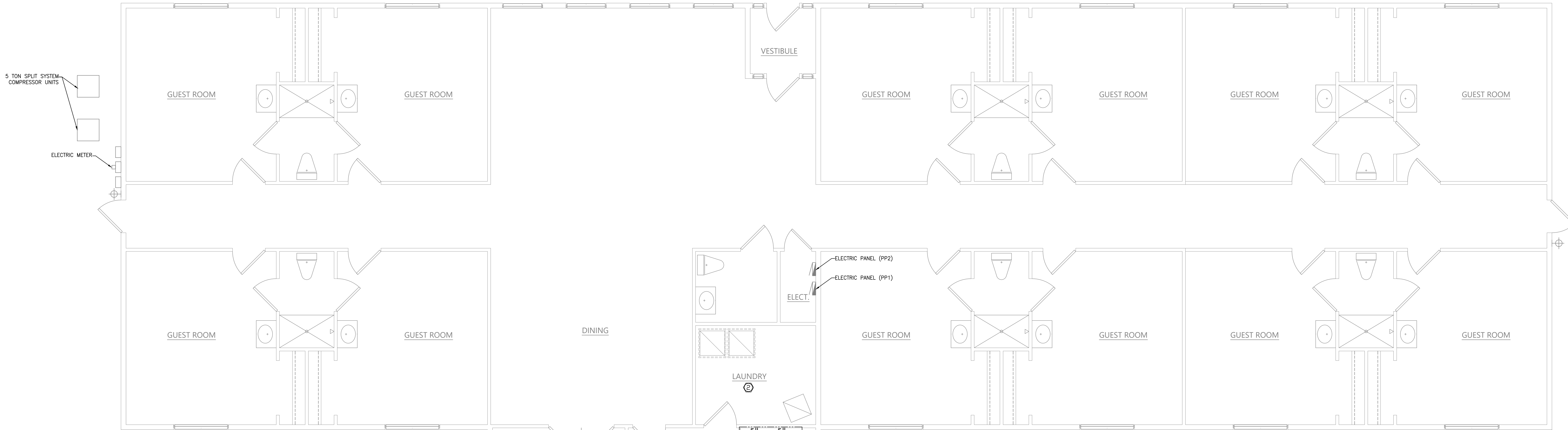
COMBINED DWELLING LOAD PER NEC TABLE 220-30(4)

Table showing final combined dwelling load calculations for General, Special, and HVAC loads.

COMBINED DWELLING LOAD PER NEC TABLE 220-30(4)

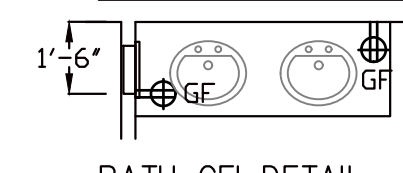
Table showing final combined dwelling load calculations for Existing Panel "PP1" and New Dwelling Sub-Panel "A".

Vertical sidebar containing logos for OEE, IGSHPA, SCOT ENGINEERING, and various professional seals for engineers and architects.



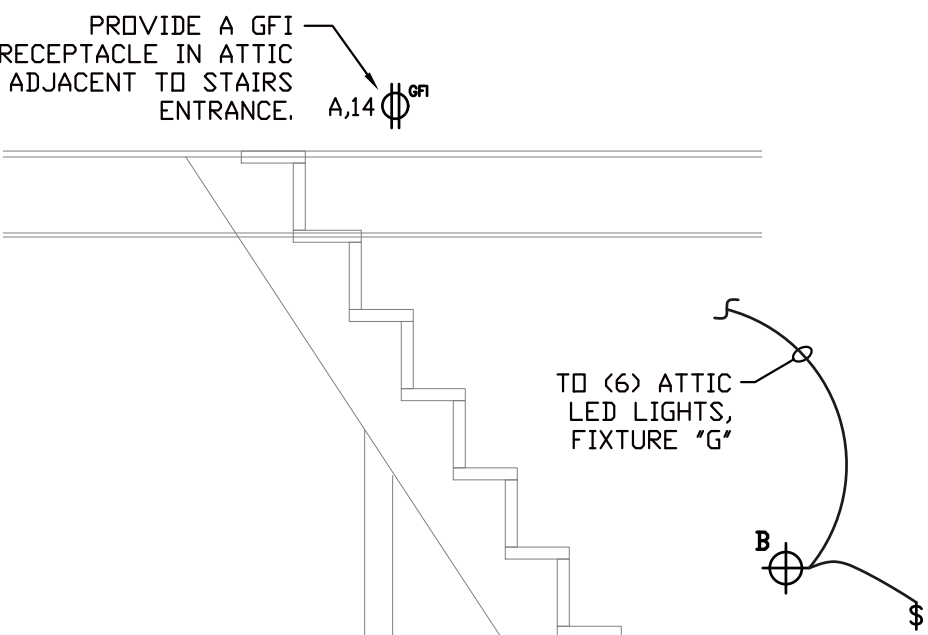
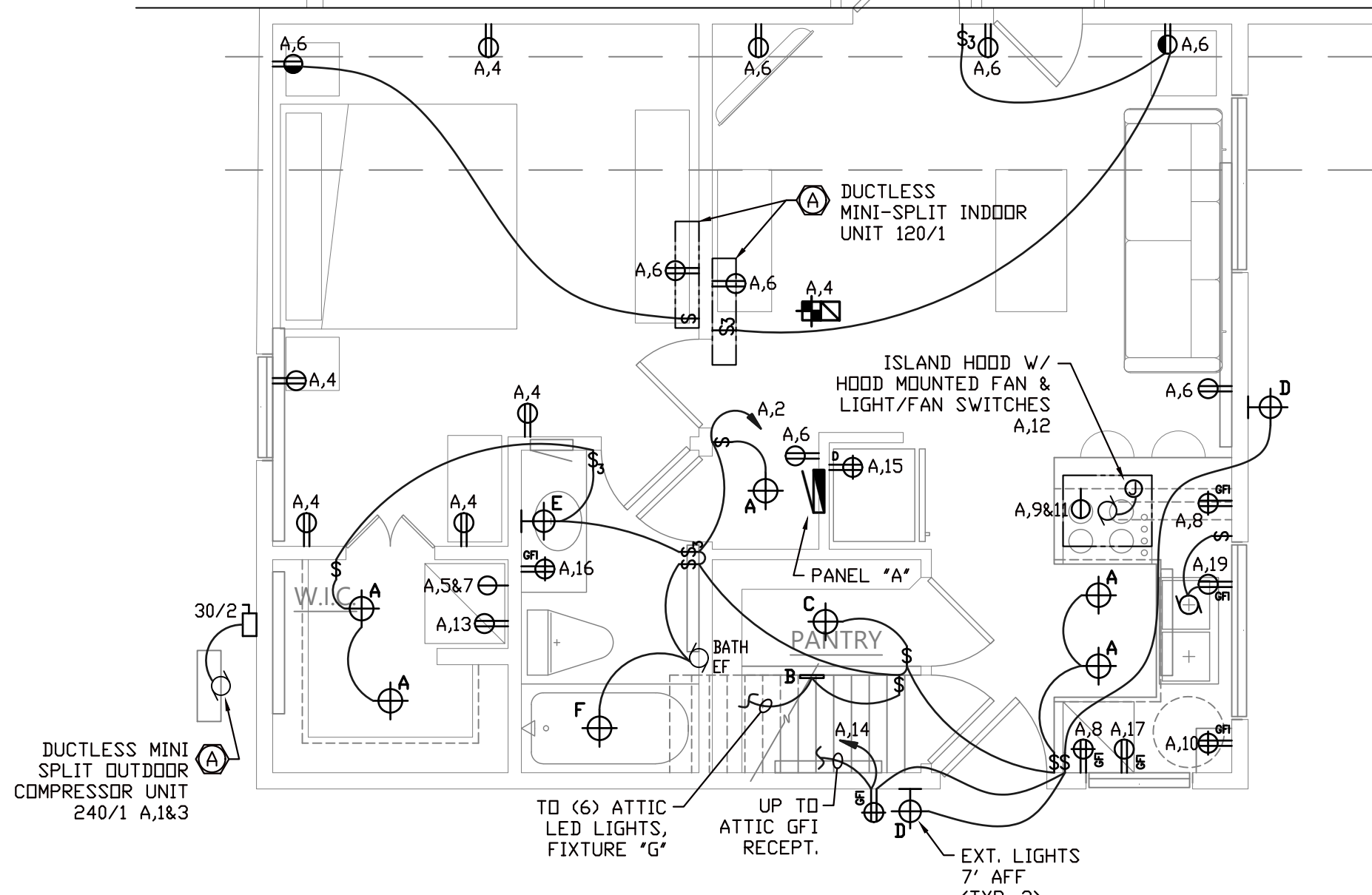
- DEMO NOTES:**
- 1 ALL EXISTING ELECTRICAL WORK IN THE ROOM/AREA TO REMAIN.
  - 2 EXISTING ELECTRICAL WORK IN THE ROOM/AREA TO REMAIN EXCEPT AS NOTED.
  - 3 PORTIONS OF THE WALL/CASEWORK TO BE DEMOLISHED. REMOVE ELECTRICAL DEVICES IN REMOVED PORTION. MAINTAIN CIRCUIT CONTINUITY FOR EXISTING DEVICES.
  - 4 NEW CASEWORK TO BE ADDED. PROVIDE NEW RECEPTACLES AS SHOWN. WIRE TO EXISTING KITCHEN SMALL APPLIANCE CIRCUITS.
  - 5 LOCATIONS OF EXISTING RECEPTACLES TO BE VERIFIED. LOCATE NEW RECEPTACLES AS NEEDED. WIRE TO EXISTING KITCHEN SMALL APPLIANCE CIRCUITS.
  - 6 REMOVE ALL UNUSED/DISPLACED ELECTRICAL DEVICES. UTILIZE EXISTING CIRCUITS FOR NEW WORK. UNUSED CIRCUITS/WIRING SHALL BE REMOVED BACK TO THE PANEL & MARKED AS SPARE. MAINTAIN CIRCUIT CONTINUITY.
  - 7 WIRE TO EXISTING LOCAL LIGHTING, RECEPTACLES, OR DEDICATED APPLIANCE CIRCUIT. REMOVE ALL OBSOLETE DEVICES OR WIRING WITHIN CIRCUIT - DO NOT ABANDON.
  - 8 EXISTING ROOM TO BE DOWNSIZED. EXISTING ELECTRICAL WORK IN THE ROOM/AREA TO REMAIN OR BE RELOCATED AS NOTED. EXISTING LIGHT FIXTURE(S) SHALL BE RELOCATED TO CENTER OF NEW SPACE. MAINTAIN CIRCUIT CONTINUITY.

- DWELLING NOTES:**
- 1. OUTLETS FOR WASHER/DRYER MAY BE LOCATED IN A SPECIAL ASSEMBLY BOX WITH PLUMBING. VERIFY IN FIELD FOR AN ELECTRIC CLOTHES DRYER, PROVIDE A NEMA 14-30R RECEPTACLE OR AS REQUIRED BY THE APPLIANCE MANUFACTURER. PER NEC 2014, WASHER RECEPTACLES ARE REQUIRED TO BE GROUND FAULT.
  - 2. IN EACH DWELLING, WIRE ALL SMOKE DETECTORS TO SOUND ONE ALARM IN THAT DWELLING. SMOKE DETECTORS ARE SHOWN WIRED TO BEDROOM RECEPTACLE CIRCUIT AND MUST BE AFCI COMPATIBLE. IF LOCAL AUTHORITIES HAVING JURISDICTION REQUIRE A DEDICATED CIRCUIT, PROVIDE 15/1 CIRCUIT BREAKER IN PANEL WITH BREAKER LOCK DEVICE. SMOKE DETECTORS WOULD NOT BE REQUIRED TO BE AFCI COMPATIBLE WITH A DEDICATED CIRCUIT BREAKER. SMOKE DETECTORS NOT TO BE MOUNTED WITHIN 3' OF BATHROOM DOORS, HE/AC CEILING REGISTERS AND CEILING FAN BLADES. DO NOT MOUNT WITHIN 10' OF COOKING APPLIANCE. PER NFPA 72-29.8.3.4, IF CLOSER THAN 10' IS REQUIRED, USE A PHOTOELECTRIC TYPE SMOKE DETECTOR.
  - 3. CONCEAL ALL KITCHEN PENINSULA AND ISLAND WIRING IN MILLWORK. FEED ISLAND OUTLETS IN FLOOR SYSTEM TO NEAREST ACCESSIBLE WALL. WHERE A BACK SPLASH IS INSTALLED, WIRE OUTLETS HORIZONTAL.
  - 4. DISHWASHER CIRCUIT TO HAVE GFI BREAKER RATHER THAN A LOCAL GFI DEVICE.
  - 5. RANGE/DVEN IS ELECTRIC. PROVIDE A NEMA 14-30R RECEPTACLE OR AS REQUIRED BY APPLIANCE MANUFACTURER. SEE PLAN FOR CIRCUIT NUMBERS.
  - 6. ELECTRICAL CONTRACTOR TO COORDINATE ELECTRICAL PANEL BOARD LOCATIONS WITH HVAC AND PLUMBING CONTRACTORS TO ENSURE THAT WATER PIPING OR DUCT WORK ARE NOT RUN OVER PANEL BOARDS.
  - 7. PROVIDE LOCAL MEANS OF DISCONNECT FOR BATH EXHAUST FANS IF NOT EQUIPPED WITH SAME.
  - 8. ALL DWELLING OUTLETS TO BE INSTALLED PER NEC 210.52 AND 406 INCLUDING TAMPER PROOF RECEPTACLES.
  - 9. ELECTRICAL CONTRACTOR TO WIRE ALL LIGHTING PRIOR TO GFI DEVICES. ALL EXTERIOR WP, GFI RECEPTACLES SHOULD HAVE THE GFI DEVICE AT THE OUTLET AND BE THE LAST OUTLET IN THE RUN SO THAT TRIPPING OF THE DEVICE WILL NOT TRIP THE PANEL CIRCUIT BREAKER.



**BATH GFI DETAIL**  
NOT TO SCALE  
CONTRACTOR TO PROVIDE SIDE WALL GFI BATHROOM RECEPTACLES MOUNTED A MINIMUM OF 18" FROM INSIDE CORNER

- A PROVIDE 3/4" 4912 CU CONNECTION FROM INDOOR MINI-SPLIT SYSTEM TO OUTDOOR UNIT FOR FAN POWER AND CONTROLS. CONTRACTOR TO PROVIDE 20/1 MOTOR RATED SWITCH AT INDOOR UNIT FOR LOCAL MEANS OF DISCONNECT IF NOT EQUIPPED WITH SAME.
- B PROVIDE 3/4" 3810 CU CONNECTION FROM 2.0 TON OUTDOOR MINI-SPLIT SYSTEM CONDENSER (OCA=14.0A MOP=20A) TO 30/2 BREAKER IN DESIGNATED PANEL. CONTRACTOR TO PROVIDE 30/2 RAIN TIGHT DISCONNECT SWITCH AT THE OUTDOOR UNIT.



**SHIPS LADDER SECTION**  
SCALE: 1/2" = 1'-0"

**PROPOSED FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

ALL DIMENSIONS, SIZES AND CAPACITIES MUST BE FIELD AND CODE VERIFIED.

THE ASSOCIATION OF Energy Engineers  
**IGSHPA**  
International Ground Source Heat Pump Association

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**JOSHUA W. CHAPMAN PE, LEED AP, PRINCIPAL**

ALL DIMENSIONS, SIZES AND CAPACITIES MUST BE FIELD AND CODE VERIFIED.

PROJECT: LAFAYETTE HOUSE  
PORTSMOUTH, NEW HAMPSHIRE

PROJECT ARCHITECT:  
**JOSUA W. CHAPMAN**  
PRINCIPAL  
SCOT ENGINEERING

PROJECT CONSULTING ENGINEER:  
**JOSHUA W. CHAPMAN PE, LEED AP, PRINCIPAL**

REGISTERED PROFESSIONAL ENGINEER  
NEW HAMPSHIRE - MEMBER  
NEW HAMPSHIRE BOARD OF PROFESSIONAL ENGINEERS  
EXPIRES 12/31/2021

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**GEOEXCHANGE**  
The Geothermal Heat Pump Consortium  
CGD  
CERTIFIED GEOEXCHANGE DESIGNER

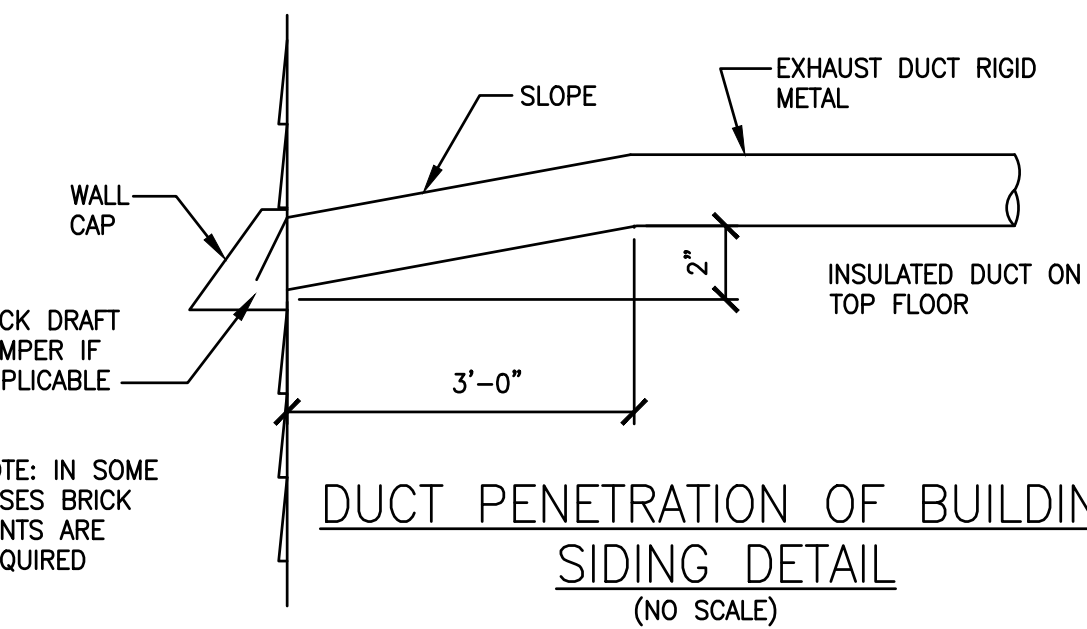
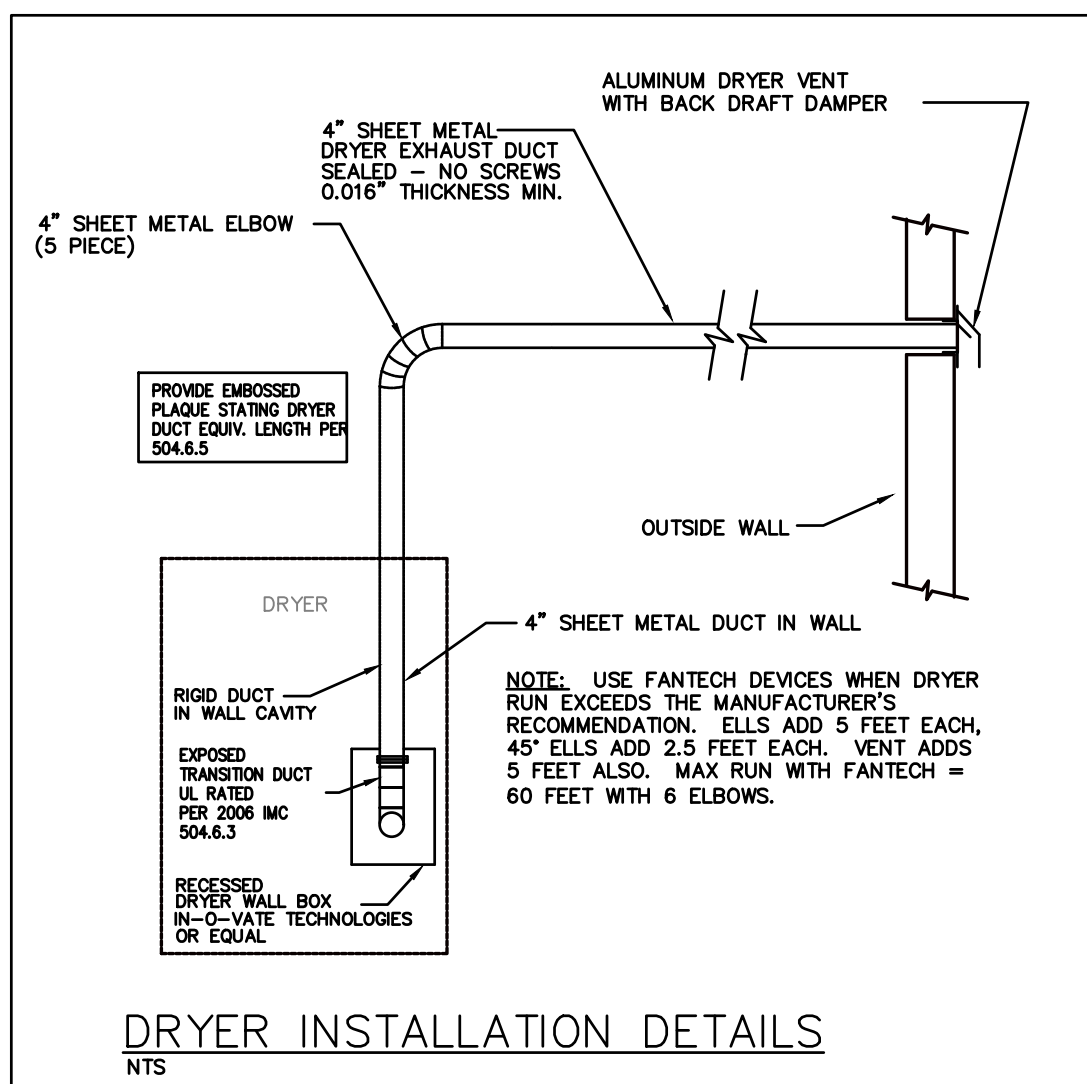
REVISIONS	
NO.	DESCRIPTION

THIS DIAGRAMATIC DESIGN IS NON TRANSFERABLE AND REPRESENTS A COMPLETE SYSTEM.
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OWNER: ...
DESIGNED BY: RSM/JWC DATE: 10/10/2022
DRAWN BY: DPG/DMC CHECKED BY: RSM/JWC
SCALE: AS NOTED
SHEET IDENTIFICATION

LEGENDS	ABBREVIATION
IN RETURN DUCT	AD ACCESS DOOR
⊙ CARBON DIOXIDE SENSOR, W/ RELAY	AD AFF ABOVE FINISHED FLOOR
⊙ SHOW IN GARAGE	AHU AIR HANDLING UNIT
⊙ CARBON MONOXIDE SENSOR W/ RELAY	ALU ALUMINUM
⊙ THERMOSTAT INSTALL 46" AFF	BD BALANCE DAMPER
⊙ CEILING REGISTER WITH RADIATION DAMPER	BDD BACK DRAFT DAMPER
⊙ SUPPLY AIR REGISTER ONE FOOT ABOVE FINISHED FLOOR	BE BOTTOM ELEVATION
⊙ EXHAUST FAN SEVEN FEET ABOVE FINISHED FLOOR	BS BIRD SCREEN
⊙ GAS FURNACE	CA COMBUSTION AIR
⊙ AIR HANDLER	CD CEILING DIFFUSER, LOUVERED FACE
⊙ IN-WALL MOUNTED AIR HANDLER	CG CEILING GRILLE
⊙ RETURN GRILLE WITH RADIATION DAMPER	CR CEILING REGISTER
⊙ FLOOR REGISTER WITH FIRE DAMPER	CSW DISCONNECT SWITCH
⊙ WALL HEATER 2.0 KW	EA EXHAUST AIR
⊙ SUPPLY AIR DUCT UP	ER ENERGY RECOVERY
⊙ RETURN OR EXHAUST DUCT UP	ER EXHAUST REGISTER
⊙ SUPPLY AIR DUCT DOWN	FOT FLAT ON TOP
⊙ RETURN OR EXHAUST DUCT DOWN	FR FLOOR REGISTER
⊙ MOTORIZED DAMPER 24VAC OR 115VAC	HP HEAT PUMP
⊙ FIRE DAMPER	IBJ INSTALL BETWEEN JOISTS
⊙ VOLUME DAMPER	INS INSULATION
⊙ FLEXIBLE DUCT UL181, CLASS 1 (SIZE IN CIRCLE IS DIAMETER), R-8-NO LENGTH LIMIT	IS INSECT SCREEN
⊙ RIGID METAL DUCT, ROUND (SIZE IN CIRCLE IS DIAMETER)	LSW LOW SIDE WALL
⊙ FLEXIBLE CONNECTOR DUCT MAXIMUM LENGTH 14' (2"IP-FLEX)	MUA MAKE UP AIR
NOTE: NOT ALL ITEMS SHOWN ARE USED ON THIS PROJECT	

**GENERAL HVAC CONSTRUCTION NOTES, NOT ALL APPLY**

- The plans represent a complete operational system, wherein all wiring, equipment, fixtures, fittings, controls, and required accessories are furnished, installed, started, and tested by the sub-contractor. The sub-contractor shall provide all materials, equipment, labor, and supervision to deliver a complete system. The fire protection alarm/sprinkler system is not a component of this design (unless specifically depicted) and it is provided by a design and build fire protection contractor.
- The plans are diagrammatic in nature. The work required to properly interface with other trades, which may represent changes to the drawings to accommodate the installation of this design, is performed without additional cost to the builder. This includes but is not limited to architectural, structural, electrical, plumbing, mechanical, grading, fire protection, and other considerations.
- All work must be executed in strict accordance with all applicable national, state and local codes and ordinances. All work must be executed in a neat and workmanlike manner. The subcontractors and builder must coordinate with all trades during the construction process. This sub-contractor must review all aspects of their work prior to installation to ensure proper clearances and capacities exist.
- All air conditioning equipment installed shall be minimum 15 SEER efficiency minimum. All air conditioning equipment must be AHRI matched and rated.
- The sub-contractor must be licensed and insured in the Township, County and State as applicable. Submit to the owner as directed proof of insurance.
- Since the plans are diagrammatic in nature for clarity purposes, the sub-contractor must submit a shop drawing where the contractor intends to install work that includes substantial differences from the plans, inclusive of calculations and other items to the owner prior to commencing work. The shop drawings must include exact locations, special fittings, and verification that this information is accurate.
- The sub-contractor warrants that they have visited the project site, reviewed all of the contract documents, and are otherwise familiar with the requirements necessary to completely execute the work required to comply with the diagrammatical work depicted herein. Further, the sub-contractor warrants that, in possessing a thorough knowledge of the code and industry standard construction practices, the bid for performing the work will contain allowances for normal difficulties experienced during the construction of a building of this type. Modifications to the contract, which do not add value to the project, will not be considered valid.
- The design conditions for this project are heating and cooling per ASHRAE 1% and 99% design temperature extremes minimum of 17°F and 91°F outdoor and 70°F indoor heating and 75°Fdb/50°Frh indoor cooling. The cooling and heating requirements were calculated according to ACCA Manual J with overage construction, East/West Front/Back exposure, and blinds on some windows.
- Provide fire protection dampers whenever a rated assembly is penetrated by ductwork. It is the intent of this plan set to show all fire protection dampers. Inadvertently, a fire protection damper may be shown in a non-rated wall and not be required. Also a fire damper may not be shown in a rated wall but remain a requirement.
- All supply air, return air, and exhaust air duct work installed in an unconditioned space must be insulated with R-8 insulation wrap minimum, or per code if it is stricter. R-8 duct board with a tough guard interior water proof coating installed in strict accordance with the installation instructions published by the manufacturer is acceptable as insulated duct work for top floor dwellings only, in lieu of metal rectangular duct with an insulation wrap. Round ductwork installed in an unconditioned space shall be R-8 insulated class 1 flexible air duct, UL rated, 181 or rigid metal duct wrapped with insulation. Flexible air duct shall be provided with a reflective outer casing, black colored flex duct outer casing is strictly prohibited. The HVAC contractor shall be responsible for installing air conveyance systems in unconditioned spaces which comply with this requirement, to the extent that higher than specified insulation values may be required. All ductwork shall be properly supported.
- All ductwork shall be G60 galvanized metal 26-gauge minimum for rectangular, and 28 gauge minimum for smaller round ductwork. Duct board is not acceptable, except for the top floor dwelling discharge plenums, air distribution manifolds and register boots. Where duct board is utilized it shall be "Toughguard" or equal with the moisture/erosion resistant black coating without exception. Duct board cannot be used for other purposes.
- Seal all duct building penetrations, especially floor register and ceiling register boots.
- All dryer exhaust duct shall be rigid round duct without protrusions (such as screws) into the air stream. The developed length shall not exceed twenty-five feet total, where 90° elbows count as five feet of length. Where the dryer proposed is capable of performing with dryer exhaust developed lengths in excess of 25', longer lengths are permitted where they are within the manufacturer's published requirements. Coordinate with the builder in advance of installation.
- Kitchen exhaust shall be ducted. Coordinate with the builder for installation requirements. Comply with the written installation instructions published by the kitchen hood manufacturer.
- All ductwork shall be leak tested by a third independent party (duct blaster test) for leakage. Leakage shall not exceed five percent @ 0.20" without exception. Seal the ductwork to prevent leaks with metal tape (no tape on round branch to rectangular trunk duct connections) or mastic. Duct sealing shall include the snip lock longitudinal seams, and the end boots, elbow boots and other riveted type manufactured fittings. All ductwork operates at less than 3.0" w.g.
- The plumber shall provide a PVC condensate drain within five feet of the mechanical equipment to drain the g/c condensate (not to the storm water management system or to the irrigation system). The HVAC contractor shall furnish a clean out tee and approximately five feet or less of PVC condensate drip/pipe from the HVAC equipment to the plumber furnished drain within the closet. All furnaces and air handlers shall receive an emergency drain pan with a float switch wired to stop the equipment if moisture is detected. Coordinate equipment location with the builder.
- The plans indicate quantities of items to enhance the understanding of the design concept. The quantities are reliable, but not guaranteed. The contractor is responsible to install the correct quantities of items required to deliver a complete functioning building.
- This design is non-transferable. It is intellectual property with trade secrets to be utilized on this project only.
- The sub-contractor shall provide an air balance as a component of the HVAC system start-up for the residential systems. The HVAC sub-contractor shall provide adjustments as required to meet temperature uniformity throughout the dwellings, should a temperature disparity exist without additional cost to the builder.
- The thermostat shall comply with 503.2.4.1 where a humidity control is included with programmable operation.
- Provide a plaque adjacent to each clothes dryer, within site of dryer not further than 6' away, that specifies max exhaust duct length and dryer exhaust capacity minimum.
- Provide fire smoke dampers 115v-1 whenever a duct penetrates a shaft.
- Provide a water detection device for every AHU in the drain pan to stop equipment to prevent a pan overflow. HVAC systems shall utilize in-line sensors to detect moisture in drain pans, such as Goodman model AG 3172 or similar. Do not use "hockey puck" style drain pan switches.
- All MEP systems shall provide for no pooling of water to the extent possible. The safe pans, drain pans, and condenser pads shall all slope to avoid pools of water. It is acceptable to have a 1/8" depth pool of water in condensate pans during cooling operation.
- All access panels shall be labeled by the trade that receives the benefit of the access panel. The builder provides many access doors for plumbing cleanouts or fire dampers, but the plumber or hvac contractor shall provide the label. The label shall be with 3/8" height letters on non-carbonized or paper type material, permanently affixed to the access door. Duct access doors installed in ductwork shall be made and labeled by the hvac contractor.
- The fire dampers that penetrate the ceiling on the discharge of the air handler shall be installed in strict accordance with the installation instructions published by the manufacturer. Submit the illustration of the installation to the instructions prior to construction and that will suffice as the detail. The damper shall be installed in a sleeve within six inches of the plane of the ceiling at a minimum, complete with a duct access door.
- The registers and grilles shall be residential stamped steel type for dwellings and commercial as shown on the plans for public spaces. The supply devices shall include a manually operated volume damper. The size of the registers and grilles refers to duct connection size internal dimension, equipment of similar size and adequate performance are acceptable (for example if the contractor utilizes 12x8 or 12x4 supply registers as their standard they are acceptable if their performance is similar to the 10x8 size specified). The return air conveyance system shall not include any adjustable devices to restrict air volume. The return air grilles shall be installed such that the blades are positioned to minimize volume into the return air duct.
- Where there exists a discrepancy between the plans, documents, or code the sub-contractor shall provide for the most expensive method and advise the builder in writing prior to performing any work.



- EQUIPMENT NOTES, NOT ALL APPLY**
- All equipment includes ECM motors. All equipment is minimum 15 SEER AHRI rated without utilizing oversized air handlers (poor humidity removal).
- Return air conditions are 75°Fdb/64°Fwb for cooling, and 70°Fdb for heating. ER ratings are based upon 95°Fdb/78°Fwb outside and return air conditions. For common areas and amenity areas, return air conditions are 80°Fdb/67°Fwb to account for outside air conditions mixing with return air.
- All air distribution registers and grilles for common areas shall be commercial type, not stamped steel with manual operated operating levers suitable for the dwellings. For all bathrooms, lockers, and mech. closets, provide 100% aluminum construction for the registers and grilles. The sizes and locations shown on plans accommodate occupant comfort, performance and trusses - do not vary sizes or locations based upon interior designer suggestions without EOR approval.
- All equipment includes high and low refrigerant compressor protection switches.
  - All commercial equipment serving common areas includes auto change over thermostats with remote sensors, where the main control is located in the mechanical closet to be set by management. The location of the thermostat shown on the plans is the sensor location; main controller is in mechanical closet and not shown on the plans.
  - The thermostats shall be the type that when the heating load can be accomplished without operating the resistance heat (except during defrost) and just running the compressor, the thermostat shall control the heat pump accordingly. When the temperature set point is above the room temperature sensor, the compressor shall operate alone unless the sensed temperature falls 5°F below the set point. The thermostat shall gradually ramp up temperature using just the compressor during the end of a night set back temperature period. This is specified to meet code section 6.4.3.5. The thermostat also includes an outdoor temperature sensor to lock out the resistance heat at a point which above it the compressor is able to manage the heat load. Each dwelling will need to program the lockout temperature.
  - Provide MERV 8 filters on AHU systems. Provide MERV 6 on all outdoor air inlets.
  - All refrigeration pipe insulation shall be 1/2" thick minimum, with protection from both physical and UV damage.
  - Provide a moisture detection (water level) switch that will shut off the equipment if the primary drain pan (or pan underneath the air handler) drain becomes blocked to prevent property damage. The device that senses water level rise shall conform to UL508.
- Prototype of Design Models manufactured by Goodman and Carrier (OTHER MANUFACTURERS WILL BE REVIEWED):
- Dwellings: Air handlers, variable speed with ECM motors capable AS NOTED PER THE HVAC SCHEDULE. ALL SYSTEMS SHALL BE AHRI or DOE MATCHED OF EQUAL OR BETTER SEER AND HSPF RATING AS LISTED.
- Corridors and Common Areas: AHPTC series air handlers matched with DS2C16 two stage series heat pumps for corridors.
- Sequence of operation:
- General: The fan is always energized and the compressor is cycled to maintain humidity and temperature settings. On a call for heating the compressor cycles in concert with the back-up heat (defrost and extreme conditions) for heat pump operations.
- All dwelling heat pump split systems:
    - Programmable thermostat with humidity control cycles the HVAC equipment to maintain the thermostat setting.
    - The fan should remain in the on position during occupancy to insure maximum comfort and ventilation.
    - The outside air intake receives a gravity actuated automatic damper at the exterior wall in every case.
  - Common area split system heat pumps:
    - The thermostat is a 7 day programmable unit (for AHREA 90.1, 6.4.3.3.2 set back controls and off hours controls ASHREA 90.1, 6.4.3.3), rather than daily for the dwellings. The programming shall include off hours scheduling as per ASHREA 90.1, 6.4.3.3. The programming shall include a battery back up in each thermostat to prevent each thermostat from having to be reprogrammed as per ASHREA 90.1, 6.4.3.3.1.
    - The thermostat is an auto change over type that switches automatically from heating to cooling as determined by the measured return air temperature (wall sensor adjacent to thermostat) and the heating and cooling set points for both occupied and unoccupied. (optimum start controls). The thermostats shall include a 5°F dead-band between heating and cooling as per ASHRAE 90.1, 6.4.3.1.2. Further, the heating and cooling set point can never overlap (hence the dead-band) as per ASHRAE 90.1, 6.4.3.2.
    - The thermostat is installed inside the mechanical closet for the control and operation by management. The remote sensor is installed where shown on the plans adjacent to the return air grille.
    - In some instances with large volumes of outside air as identified on the floor plans, the outside air is restricted partially by a motorized outside air damper that allows 25% of outside air through an opposed blade damper during unoccupied and full 100% outside air during full occupancy. Full occupancy is determined by a carbon dioxide sensor with an adjustable setting of 1,100ppm set point mounted in the return air duct with a relay option.
  - All refrigeration pipe insulation shall be 1" thick minimum.

**RESPONSIBILITY OF DESIGN AND CONSTRUCTION TEAMS FOR MEP:**

Amicable cooperation of the design and construction teams generally produces the best results for the owner. Investment in the design by the installing contractors is also usually beneficial for the project. Any reasonable contractor suggestions in advance of construction will be considered and/or reviewed. Any resulting necessary (for permit or code official inspection purposes, not for as-built purposes) construction plan changes that the owner and architect approve suggested by the installing contractor shall be executed by the MEP design team without additional charge provided they are not extensive.

The MEP design is provided primarily to obtain the building permit. If the jurisdiction did not require professionally engineered MEP plans, the project would likely be constructed as a design and build project. Accordingly the plans are not shop drawings. The plans are not as-built drawings. The plans do not show every difficulty and nuance associated with what is required to install a complete system. The contractor is responsible for installing a complete system as diagrammatically depicted on the plans. This will likely include providing items that are not shown on the plans but required to deliver a complete system. The plans may be considered a performance based specification.

The MEP contractors must anticipate in advance of the bid and construction the requirements necessary to deliver a complete system so that there are no requests for change orders based on alleged plan omissions/errors later in the project to provide the systems already specified on the plans. For example if an electrical switchgear room is crowded and requires more compact equipment, larger spaces, and/or other circumstances the electrical switchgear capacity specified must be installed without additional charge. Further to this example the resolution may involve enlarging a room by design in advance of construction, considering review of different equipment or other solutions. The design team will cooperate to the extent reasonably possible to mitigate any unanticipated circumstances to provide a complete MEP system. However, again, no change orders shall be approved unless it is additional scope items the owner agrees to fund.

It is the installing contractors responsibility to notify the design team in advance of all construction with time to react whenever there could be an issue that requires resolution to install a complete code compliant MEP system. There are further restrictions specified in the construction documents and this narrative is by no means limiting.

Under no circumstances will re-routing of ductwork or plumbing pipes be considered a change order due to unanticipated structural interferences. The proper routing of the pipes and ductwork shown on the plans is intended to anticipate the majority of structural interferences but it will not include all of them. The entire duct or pipe system must be planned in advance to avoid re-working or re-routing of this work. Coordination with other trades to accommodate their work is also required. Under no circumstances will re-installation of incorrect materials for the application be considered change order, for example all exposed wiring in the garage must utilize metal conduit encased conductors and the use of IM conductors (knobs) by mistake (or even if inadvertently specified) will not be considered a change order to replace.

It is recommended but not required that the MEP trades provide shop drawings in advance of construction, especially in the service entrance rooms, utility rooms, dwelling HVAC closets and other areas traditionally designed with confined spaces in wood frame multi-family dwelling structures. It is the responsibility of the MEP contractors to notify the prime contractor where installation of their trade work may require intense cooperation with other trades such as concrete encased conductors under the first floor slab, plumbing risers turns that require dropped footings and the like in advance of the bid and construction to minimize unanticipated construction requirements to deliver a complete system.

Again, cooperation, advance planning, anticipation of difficulties, suggestions, and the like will produce the best result for all concerned parties.

ALL DIMENSIONS, SIZES AND CAPACITIES MUST BE FIELD AND CODE VERIFIED.

PROJECT: LAFAYETTE HOUSE  
PORTSMOUTH, NEW HAMPSHIRE

PROJECT ARCHITECT:  
SCOTT ENGINEERING

PROJECT CONSULTING ENGINEER:  
SCOTT ENGINEERING

DATE: 10/10/2022

DESIGNED BY: RSM/JWC

DRAWN BY: DPG/DOMIC

SCALE: AS NOTED

CHECKED BY: RSM/JWC

OWNER: ...

**M-1**

THIS DIAGRAMMATIC DESIGN IS NON TRANSFERABLE, AND REPRESENTS A COMPLETE SYSTEM.

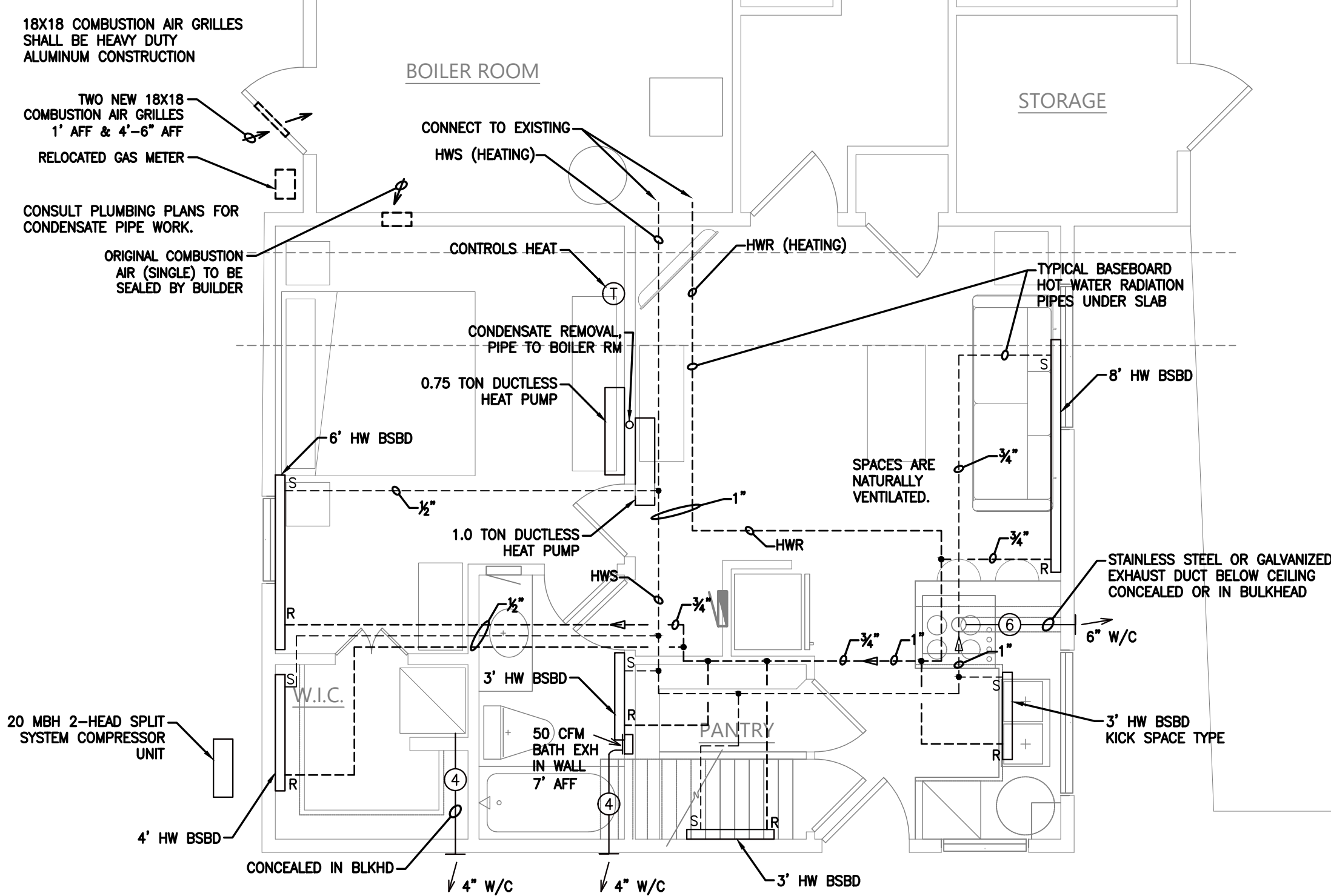
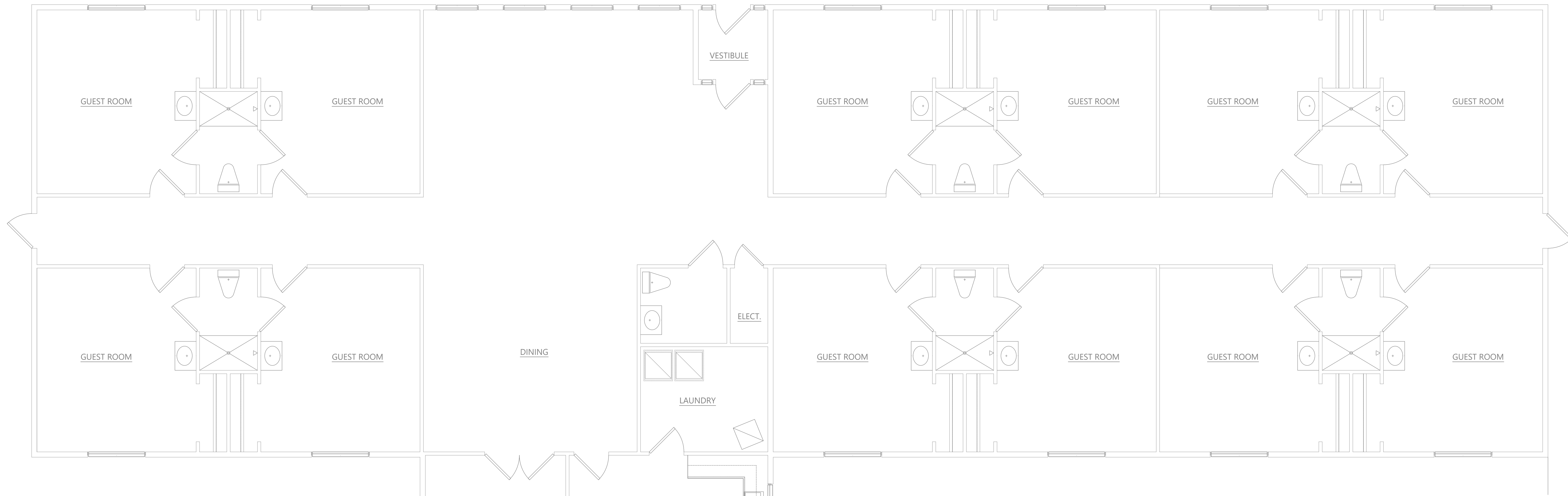
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SHEET IDENTIFICATION

IGSHPA International Ground Source Heat Pump Association

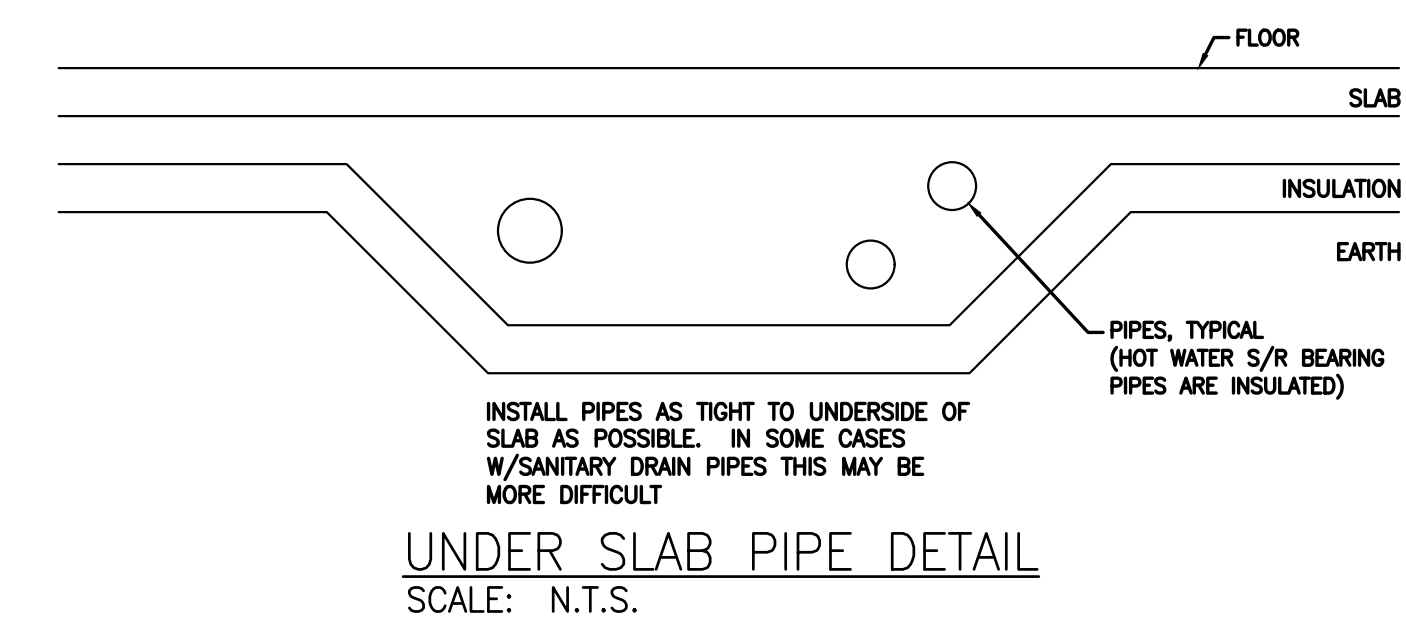
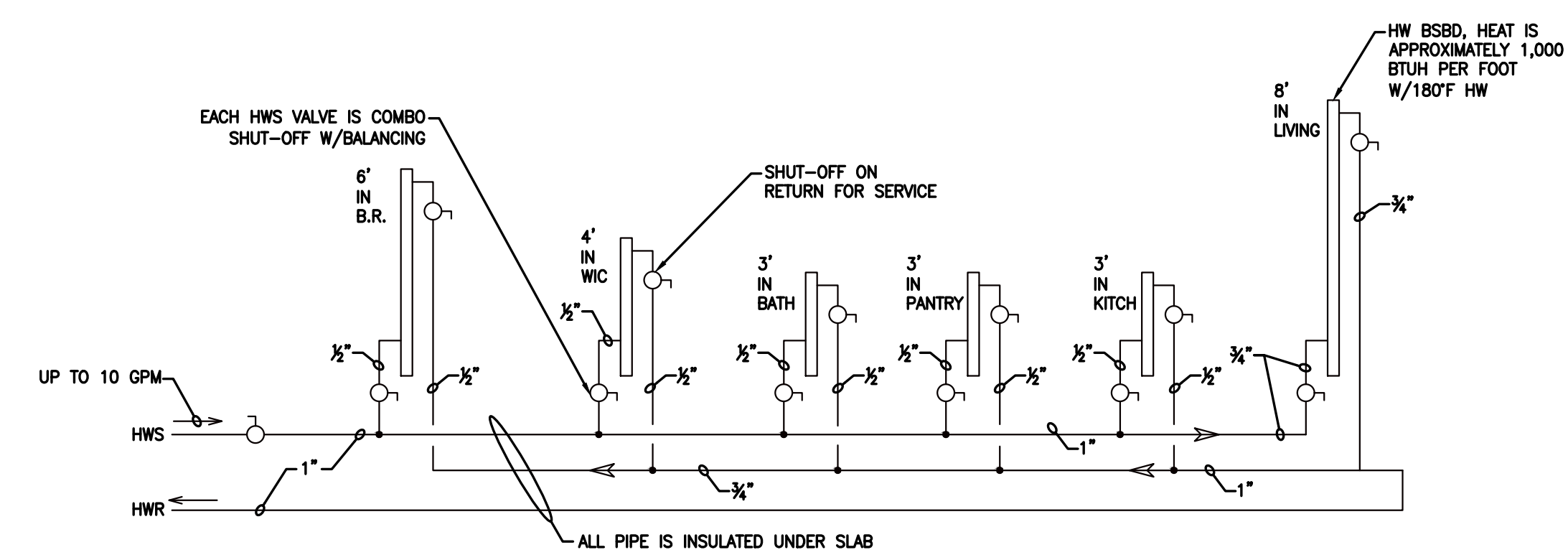
SCOTT ENGINEERING SINCE 1960  
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JOSHUA W. CHAPMAN P.E. LEED AP, PRINCIPAL



**DUCTLESS SPLIT SYSTEM HEAT PUMP SCHEDULE (240V-1)**

COMPRESSOR UNIT:	MITSUBISHI MODEL	MAX22C20NA3U	OR EQUAL
INDOOR UNITS:	MITSUBISHI MODEL	INDR12MH1 WH1P	OR EQUAL
	MITSUBISHI MODEL	INDR09MH1 WH1P	OR EQUAL



**PROPOSED FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

THE EXHAUST DUCTS ARE BELOW CEILING W/SEALED DRYWALL. ABOVE IT, DO NOT FAIL TO SEPARATE HORIZONTAL EXH DUCTS FROM ATTIC W/SEALED DRYWALL, VAPOR BARRIER AND INSULATION.

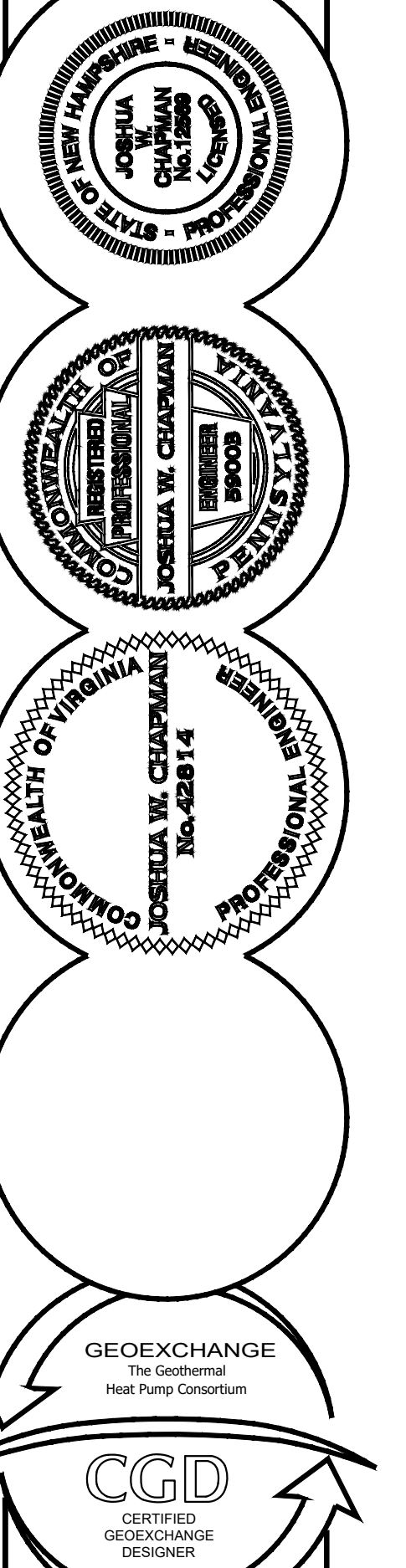
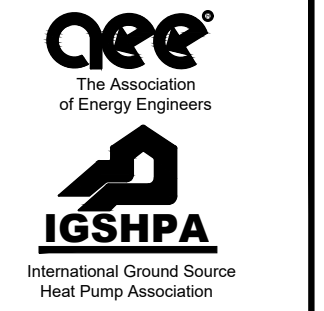
ALL DIMENSIONS, SIZES AND CAPACITIES MUST BE FIELD AND CODE VERIFIED.

PROJECT: LAFAYETTE HOUSE  
PORTSMOUTH, NEW HAMPSHIRE

ARCHITECT:  
PROJECT CONSULTING ENGINEER:

**SCOT ENGINEERING** SINCE 1960  
INTERNATIONAL GEOTECHNICAL HEAT PUMP ASSOCIATION  
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P: (703) 837-3477 F: (703) 837-1425 [info@scoteng.com](mailto:info@scoteng.com)  
WWW.SCOTENG.COM  
PROJ: 2021-0028

JOSHUA W. CHAPMAN P.E. LEED AP, PRINCIPAL



REVISIONS

NO.	DESCRIPTION	DATE

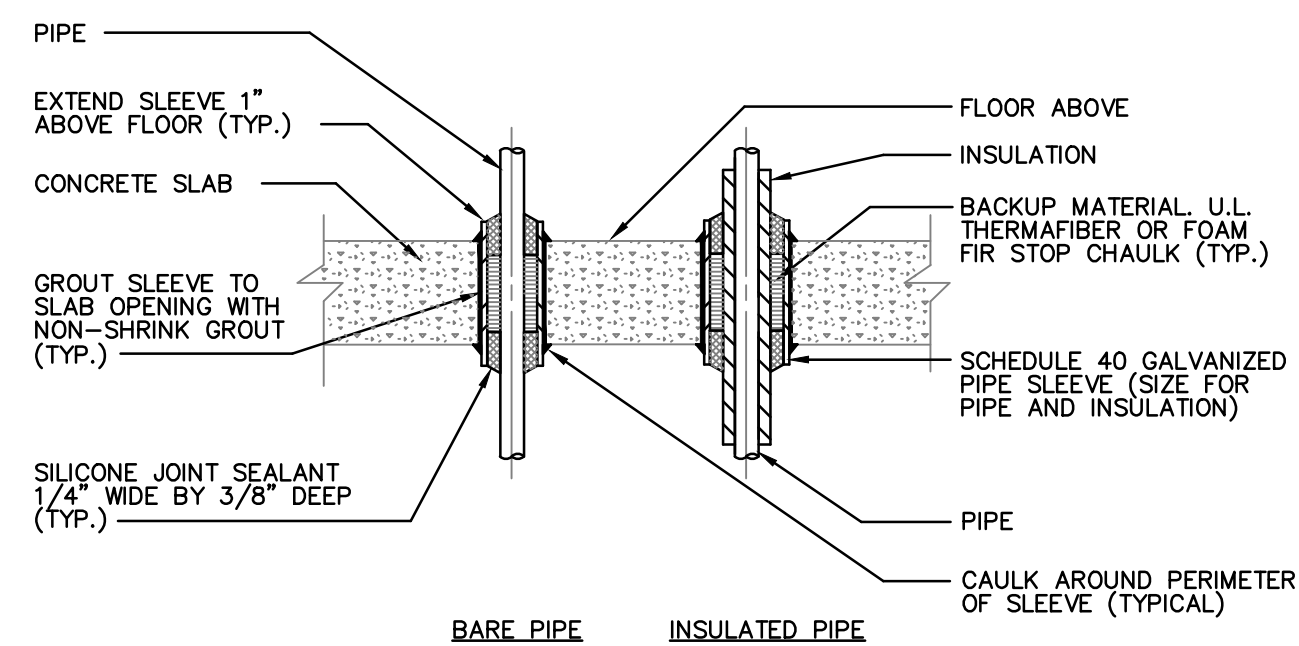
DESIGNED BY: RSM/JWC  
DATE: 10/10/22  
DRAWN BY: DPG/DMC  
CHECKED BY: RSM/JWC  
SCALE: AS NOTED

FLOOR PLAN

SHEET IDENTIFICATION



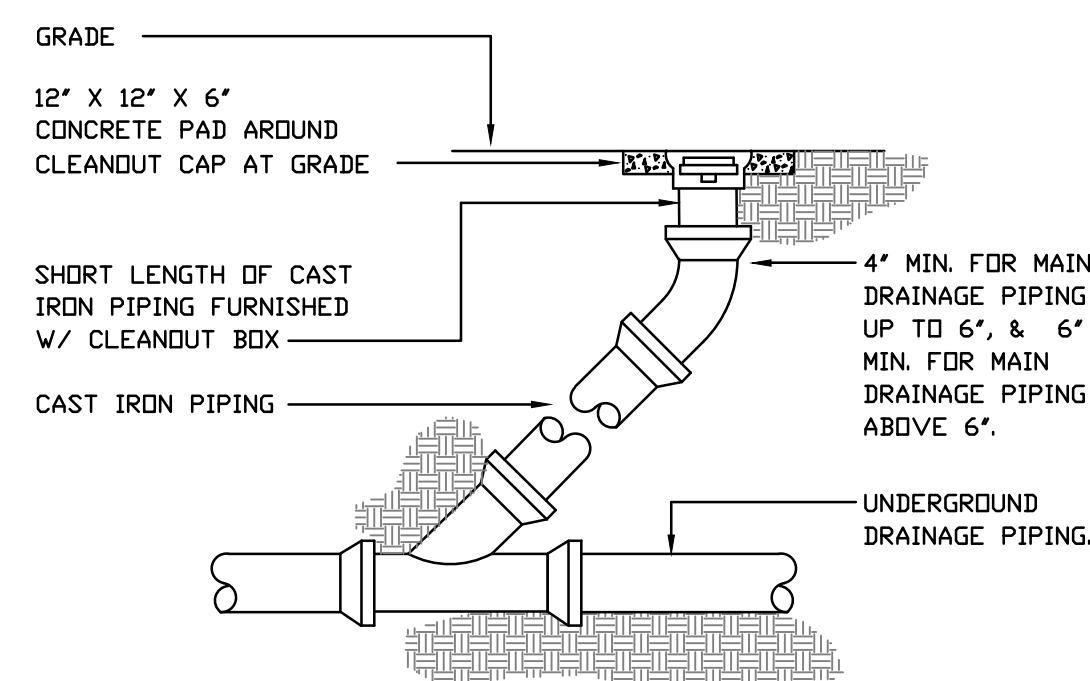




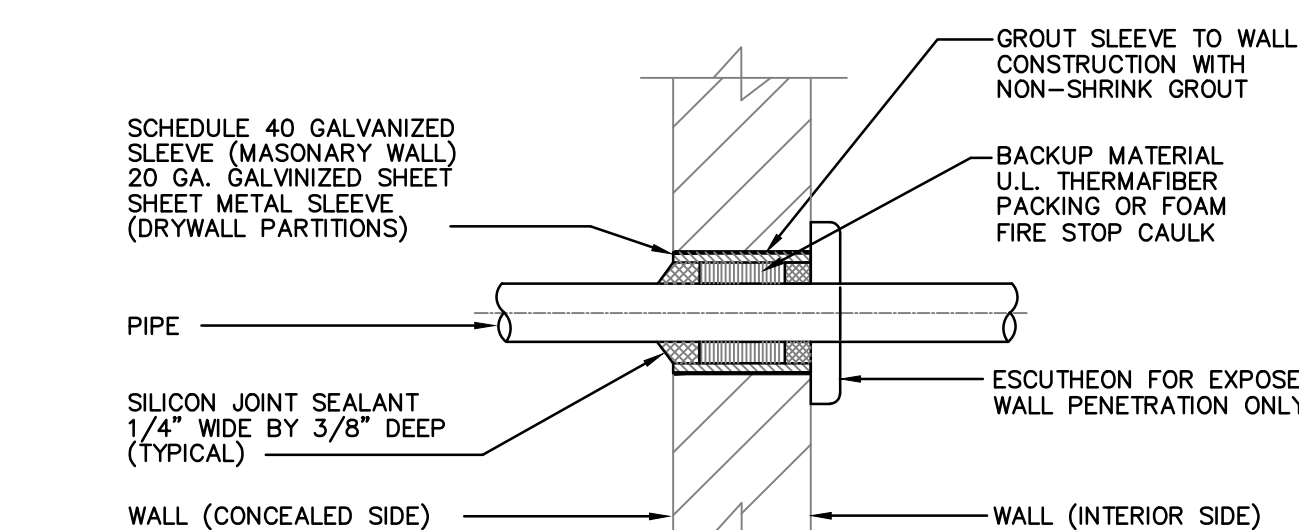
**PIPE SLEEVE THRU CONCRETE SLAB DETAIL**  
NO SCALE

**NOTES**

- 1) AT THE CONTRACTOR'S OPTION A U.L. LISTED/APPROVED FIRE STOP PIPE SLEEVE ASSEMBLY MAY BE SUBMITTED FOR APPROVAL.
- 2) GALVANIZED SLEEVE SHALL BE CAST INTO NEW CONCRETE WALL POURS.



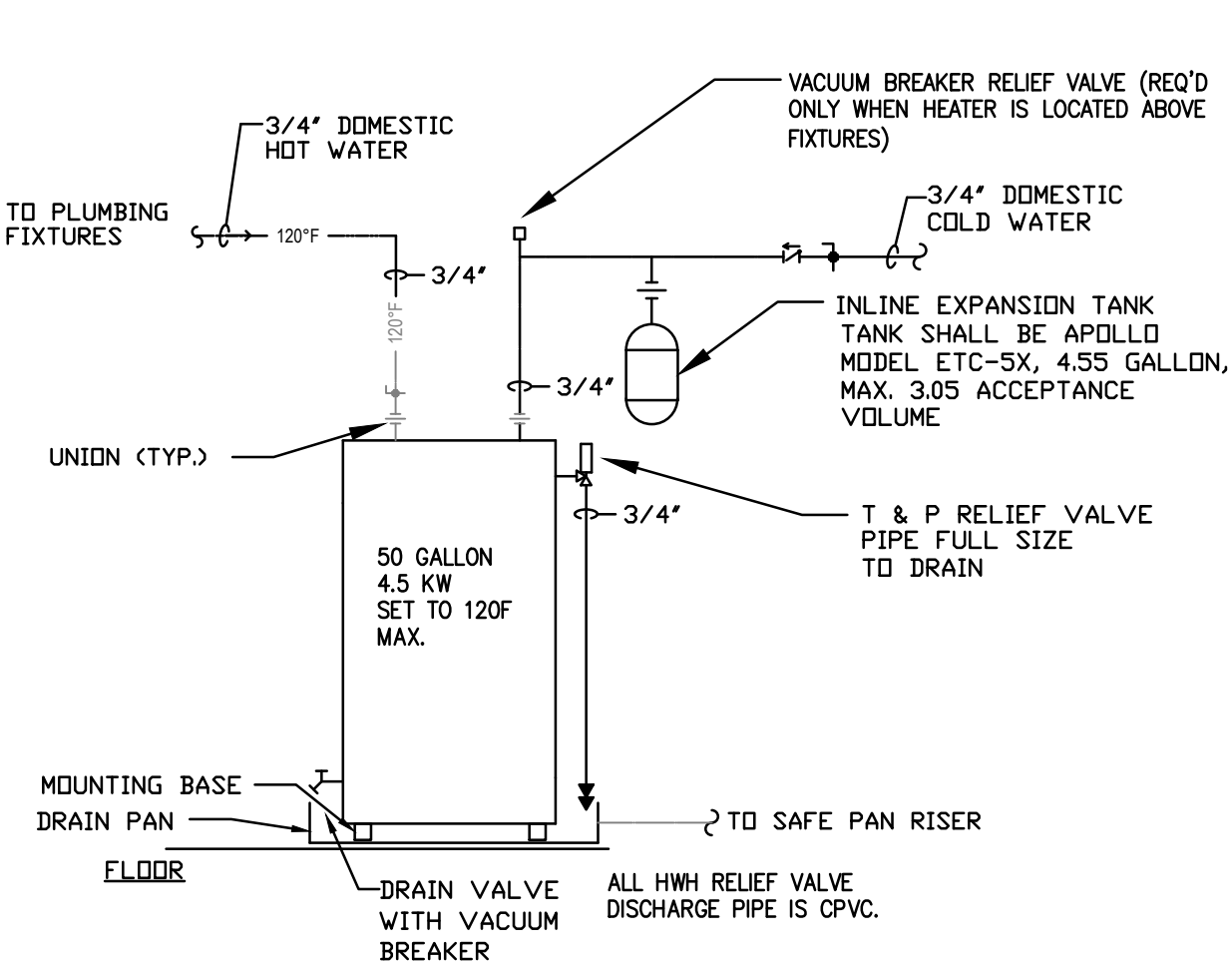
**EXTERIOR CLEANOUT DETAIL**  
NO SCALE



**PIPE SLEEVE FOR BARE PIPE THRU WALL DETAIL**  
NO SCALE

**NOTES**

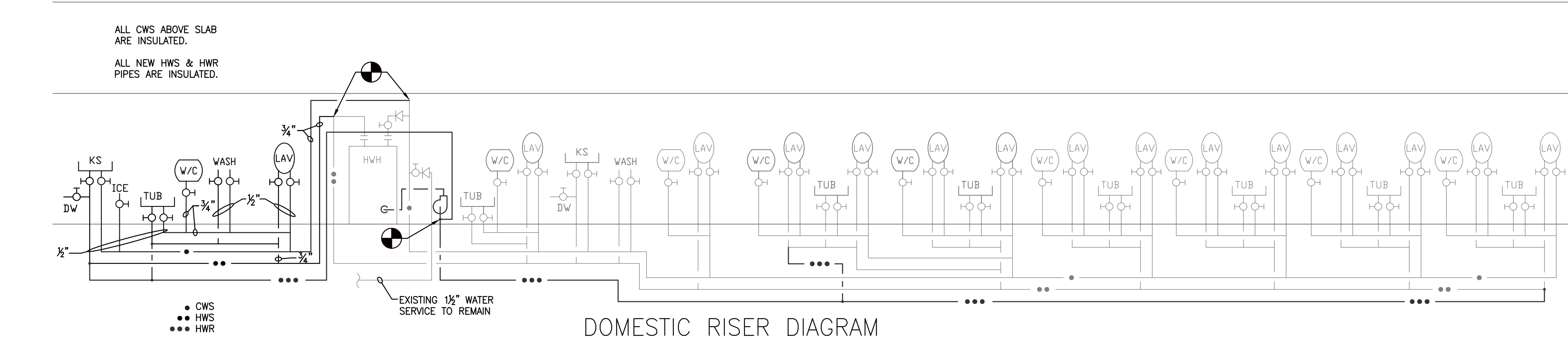
- 1) AT THE CONTRACTOR'S OPTION A U.L. LISTED/APPROVED FIRE STOP PIPE SLEEVE ASSEMBLY MAY BE SUBMITTED FOR APPROVAL.
- 2) GALVANIZED SLEEVE SHALL BE CAST INTO NEW CONCRETE WALL POURS.



**ELECTRIC WATER HEATER PIPING SCHEMATIC**  
NO SCALE - Dwelling HWHs

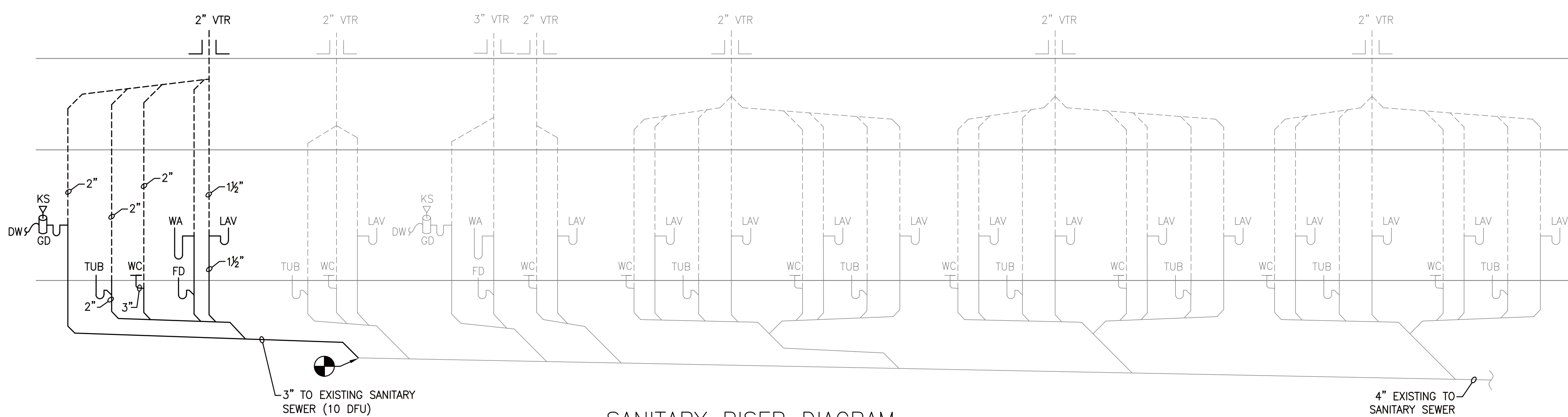
**NOTE:**

- 1) DRAIN PAN BELOW ELEC WATER HEATER SHALL BE 26\"/>



**DOMESTIC RISER DIAGRAM**  
N.T.S.

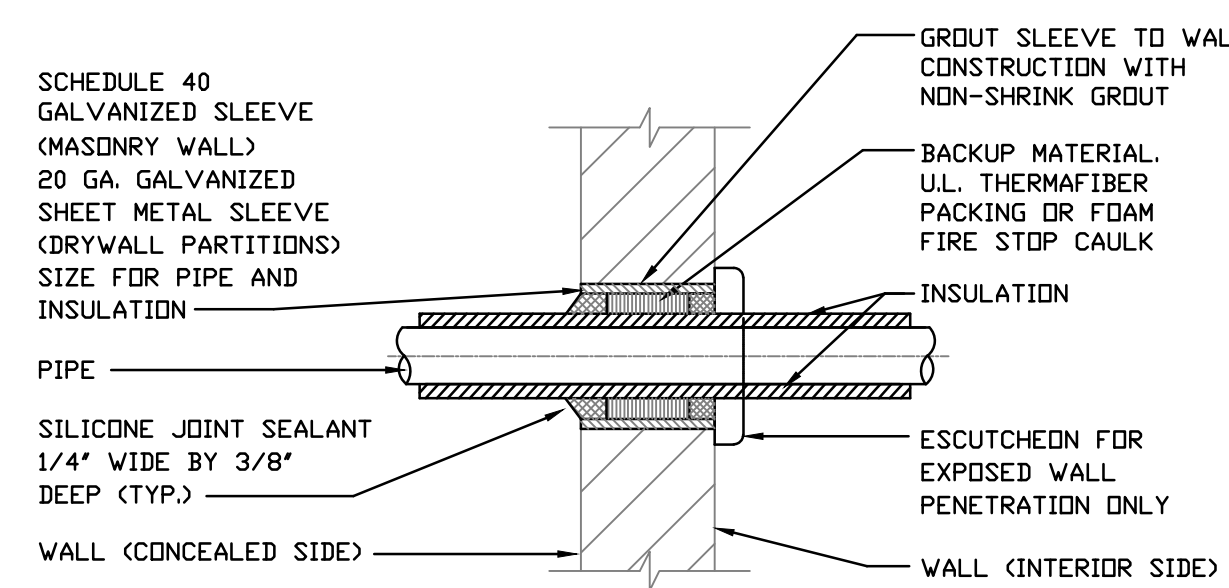
WORK SHOWN IN BOLD IS NEW CONSTRUCTION.  
WORK SHOWN IN LIGHT GRAY IS EXISTING TO REMAIN.



**SANITARY RISER DIAGRAM**  
N.T.S.

**GENERAL DEMOLITION NOTES**

1. THE PLANS REPRESENT A COMPLETE OPERATIONAL SYSTEM, WHEREIN ALL WIRING, EQUIPMENT, FIXTURES, FITTINGS, CONTROLS, AND ALL REQUIRED ACCESSORIES ARE FURNISHED, INSTALLED, STARTED, AND TESTED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ALL LABOR, RENTAL EQUIPMENT, AND WORK NECESSARY TO REMOVE ALL ITEMS AT A MINIMUM THAT PERMIT THE INSTALLATION OF A NEW COMPLETE SYSTEM. THE FIRE PROTECTION ALARM/SPRINKLER SYSTEM, IF REQUIRED, IS NOT A COMPONENT OF THIS DESIGN (UNLESS SPECIFICALLY DEPICTED) AND IT IS REMOVED AND/OR PROVIDED BY A DESIGN AND BUILD FIRE PROTECTION CONTRACTOR.
2. ALL CONDUITS, CONDUCTORS, PIPES, JUNCTION BOXES, VALVES, FIXTURES, HANGERS, HARDWARE, FASTENERS, ANCHORS, DUCT WORK, REGISTERS, GRILLES, HVAC EQUIPMENT AND THE LIKE SHALL BE REMOVED IN AREAS WHERE NEW WORK REPLACES EXISTING SO THAT THE PREVIOUS MATERIALS ARE NEVER CONFUSED WITH OR CONSIDERED A COMPONENT OF THE NEW WORK.
3. IN AREAS WHERE NEW WORK AND EXISTING WORK INTERFACE, ALL EXISTING WORK SHALL BE REMOVED TO THE EXTENT POSSIBLE AS DESCRIBED IN ITEM TWO ABOVE, AND AT THE POINT OF INTERFACE, ALL EXISTING WORK SHALL BE CAPPED AND MADE SAFE.
4. ALL REMOVED MATERIALS SHALL BE DEPOSED OF IN ACCORDANCE WITH ALL APPLICABLE ORDINANCES INCLUDING BUT NOT LIMITED TO THE EPA, SUCH AS HVAC REFRIGERANT RECOVERED, OILS DELIVERED TO RECLAIM FACILITY, AND ETC.
5. ALL MATERIALS THAT CAN BE RECYCLED SHALL BE RECYCLED, INCLUDING BUT NOT LIMITED TO COPPER, ALUMINUM, STEEL, HVAC DUCTWORK, METAL HANGERS AND FASTENERS, GARD BOARD, AND THE LIKE. DO NOT DISPOSE OF THESE MATERIALS IN A DUMPSTER.
6. THE PLANS ARE DIAGRAMMATICAL IN NATURE. THE WORK REQUIRED TO REMOVE AND PROPERLY INTERFACE WITH OTHER TRADES, WHICH MAY REPRESENT CHANGES TO THE DRAWINGS TO ACCOMMODATE THE INSTALLATION OF NEW WORK, IS PERFORMED WITHOUT ADDITIONAL COST TO THE OWNER. THIS INCLUDES BUT IS NOT LIMITED TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING, MECHANICAL, GRADING, FIRE PROTECTION, AND OTHER CONSIDERATIONS.
7. ALL WORK MUST BE EXECUTED IN STRICT ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AND ORDINANCES. ALL WORK MUST BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER. THE SUBCONTRACTORS AND GENERAL CONTRACTOR MUST COORDINATE WITH ALL TRADES DURING THE DEMOLITION AND CONSTRUCTION PLANNING PROCESS. THIS CONTRACTOR MUST REVIEW ALL ASPECTS OF THEIR WORK PRIOR TO BEGINNING TO INSURE PROPER CLEARANCES AND CAPACITIES EXIST.
8. THE CONTRACTOR MUST BE LICENSED AND INSURED IN THE COUNTY AND STATE AS APPLICABLE. SUBMIT TO THE OWNER AS DIRECTED PROOF OF INSURANCE INCLUSIVE OF LIMITS OF LIABILITY AND DEDUCTIBLE INFORMATION. ALL SUBCONTRACTORS OF SUBCONTRACTORS MUST BE LICENSED AND INSURED TOO.
9. SINCE THE PLANS ARE DIAGRAMMATICAL IN NATURE FOR CLARITY PURPOSES, THE CONTRACTOR MUST SUBMIT A SHOP DRAWING WHERE DEMOLITION IN COMPLEX OR COULD AFFECT OTHER ASPECTS OF THE WORK OR THAT MAY INCLUDE SUBSTANTIAL DIFFERENCES FROM THE PLANS, INCLUDING OF CALCULATIONS AND OTHER ITEMS TO THE OWNER PRIOR TO COMMENCING WORK. THE SHOP DRAWINGS MUST INCLUDE EXACT LOCATIONS, SPECIAL FITTINGS, AND VERIFICATION THAT THIS INFORMATION IS ACCURATE.
10. THE CONTRACTOR AND ALL SUBCONTRACTORS WARRANT THAT THEY HAVE VISITED THE PROJECT SITE, REVIEWED ALL OF THE CONTRACT DOCUMENTS, AND ARE OTHERWISE FAMILIAR WITH THE REQUIREMENTS NECESSARY TO COMPLETELY EXECUTE THE WORK REQUIRED TO COMPLY WITH THE DIAGRAMMATICAL WORK DEPICTED HEREIN. FURTHER, THE CONTRACTOR WARRANTS THAT, IN POSSESSING A THOROUGH KNOWLEDGE OF THE CODE AND INDUSTRY STANDARD CONSTRUCTION PRACTICES, THE BID FOR PERFORMING THE WORK WILL CONTAIN ALLOWANCES FOR NORMAL DIFFICULTIES EXPERIENCED DURING THE CONSTRUCTION OF A BUILDING OF THIS TYPE. MODIFICATIONS TO THE CONTRACT, WHICH DO NOT ADD VALUE TO THE PROJECT, WILL NOT BE CONSIDERED VALID.
11. THIS DESIGN IS NON TRANSFERABLE. IT IS INTELLECTUAL PROPERTY WITH TRADE SECRETS TO BE UTILIZED ON THIS PROJECT ONLY.
12. THE PLANS INDICATE QUANTITIES ON THE PLANS TO ENHANCE THE UNDERSTANDING OF THE DESIGN CONCEPT. THE QUANTITIES ARE RELIABLE, BUT NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE TO INSTALL THE CORRECT QUANTITIES OF ITEMS REQUIRED TO REMOVE AND DELIVER A COMPLETE FUNCTIONING BUILDING.
13. THIS PROJECT MAY HAVE AREAS OF AN UNUSUAL INTENSE MEP COORDINATION REQUIREMENT, AND IT IS THE RESPONSIBILITY OF THE MEP TRADES TO INSURE THAT ALL ASPECTS OF THE WORK ARE PROPERLY REMOVED AND PROVIDED TO DELIVER A COMPLETE AND FUNCTIONING MEP SYSTEM.
14. WHERE THERE EXISTS A DISCREPANCY BETWEEN THE PLANS, DOCUMENTS, OR CODE THE CONTRACTOR SHALL PROVIDE FOR THE MOST EXPENSIVE METHOD AND ADVISE THE ARCHITECT IN WRITING PRIOR TO PERFORMING ANY WORK.



**PIPE SLEEVE FOR INSULATED PIPE THRU WALL DETAIL**  
NO SCALE

**NOTES**

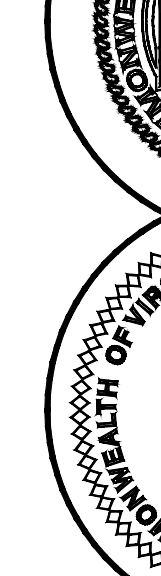
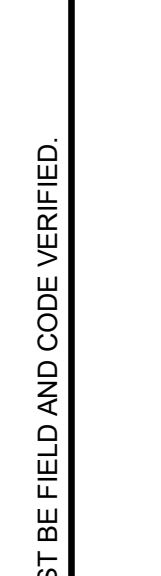
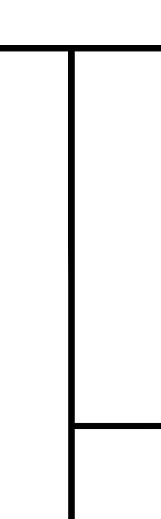
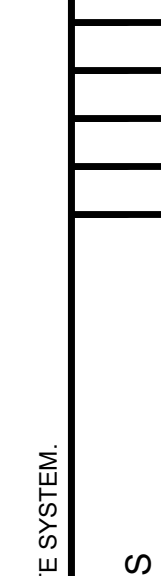
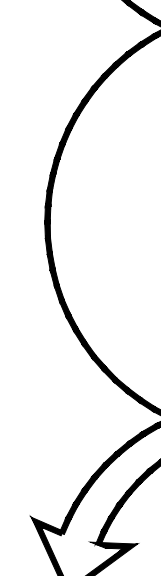
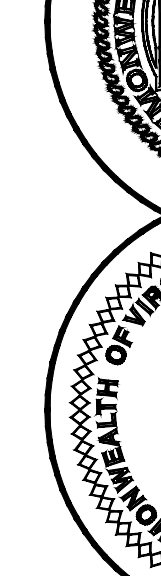
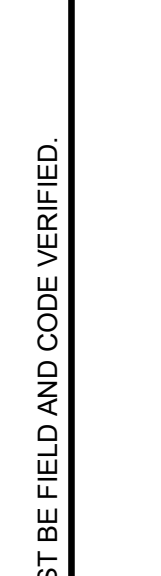
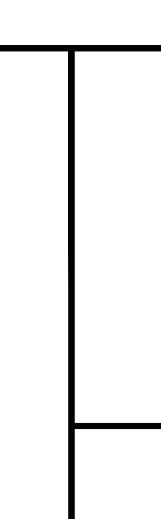
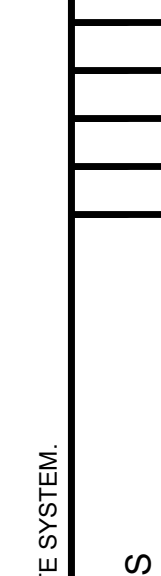
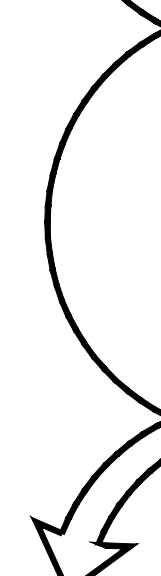
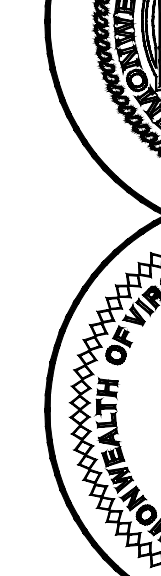
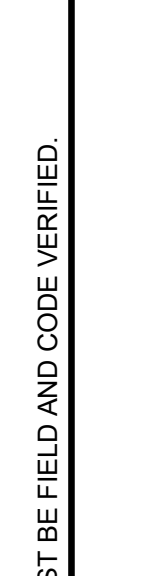
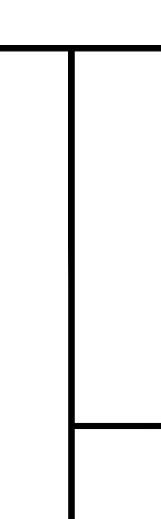
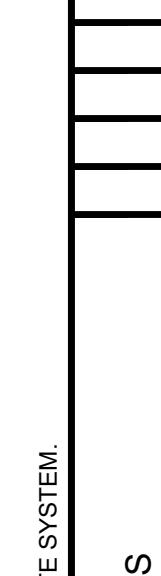
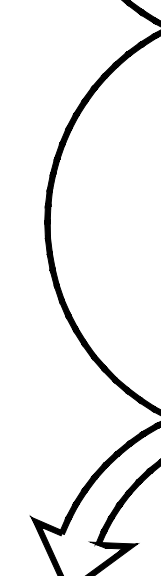
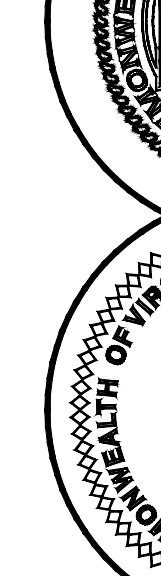
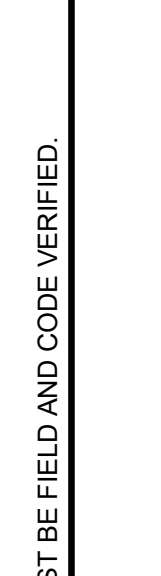
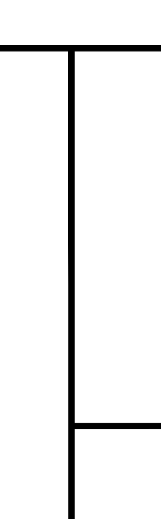
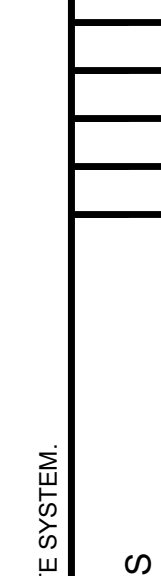
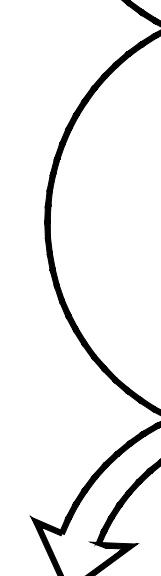
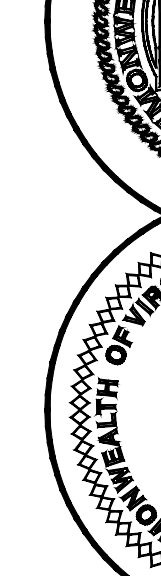
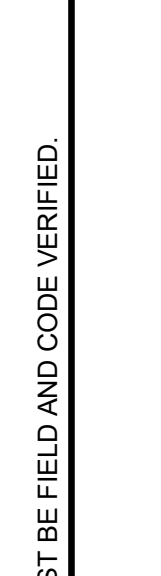
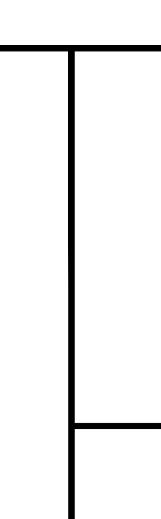
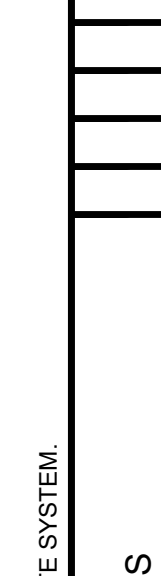
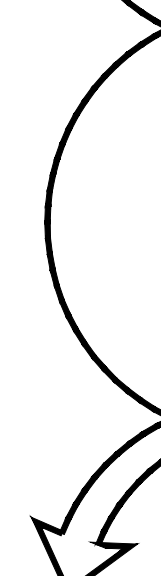
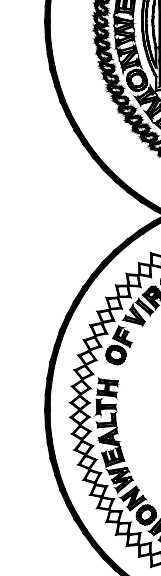
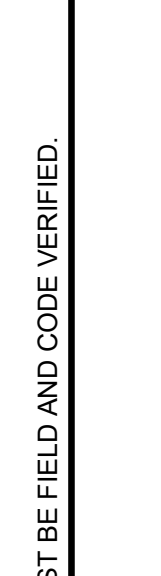
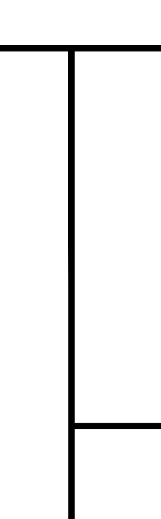
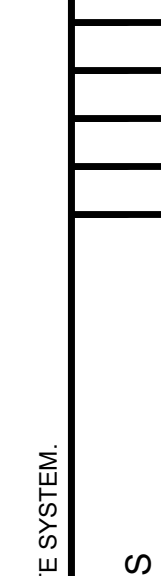
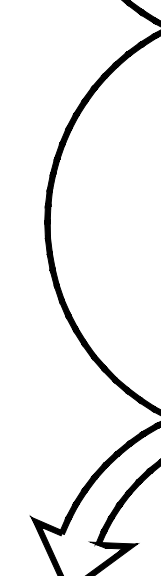
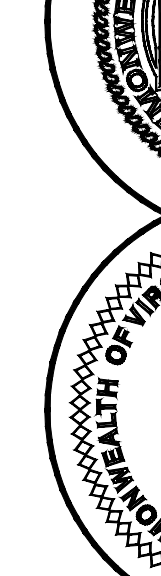
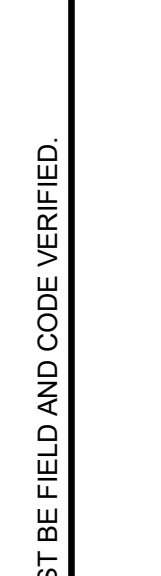
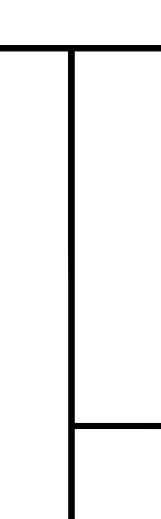
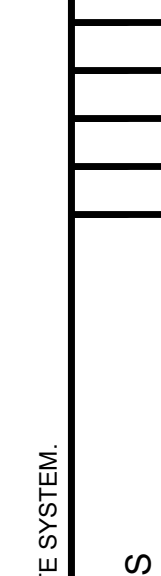
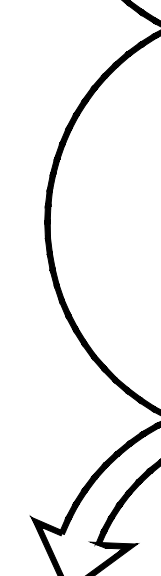
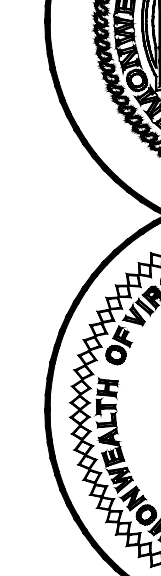
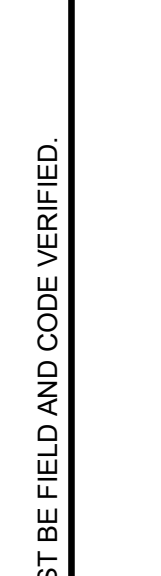
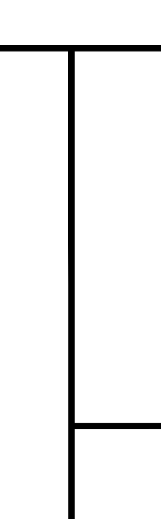
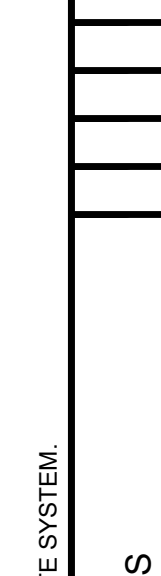
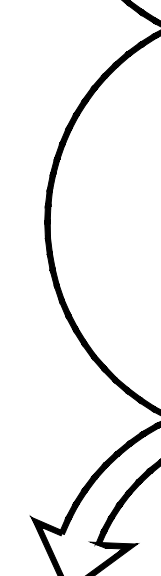
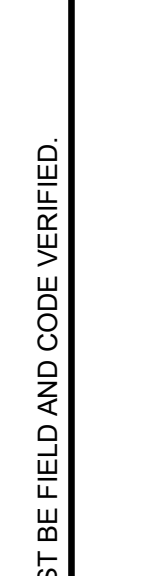
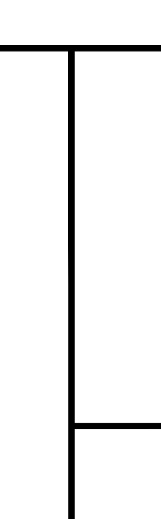
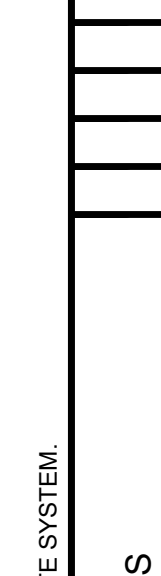
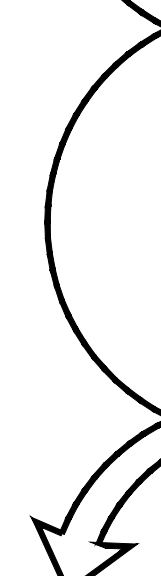
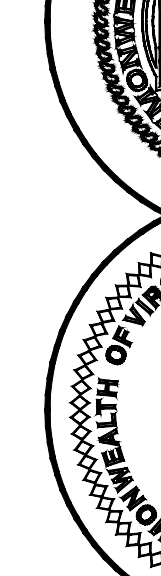
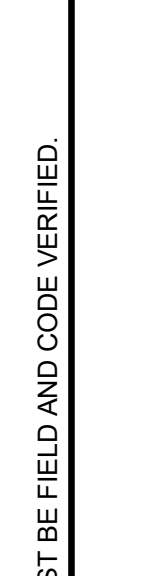
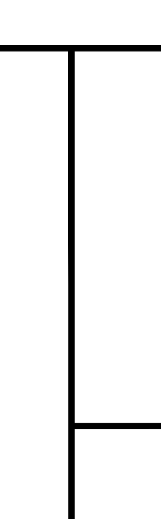
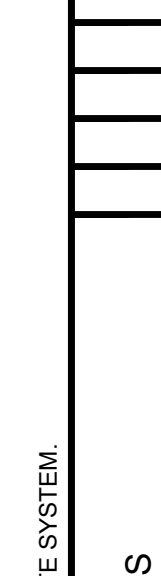
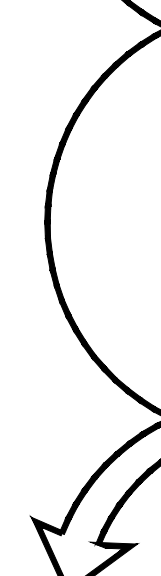
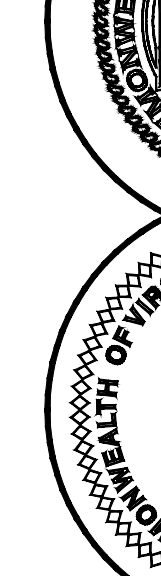
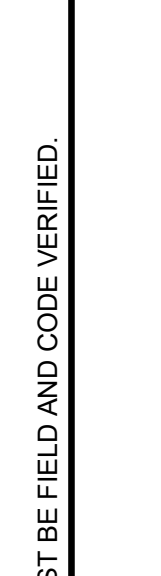
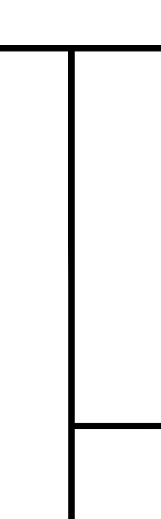
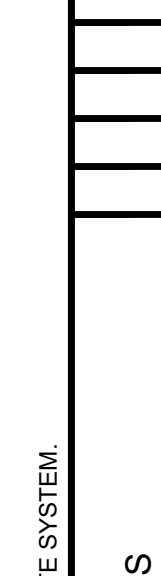
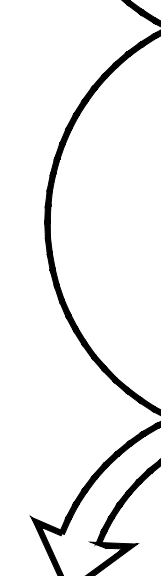
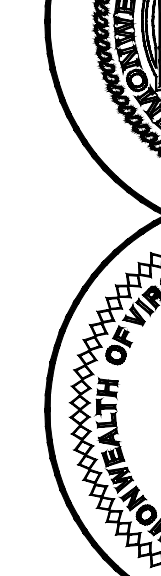
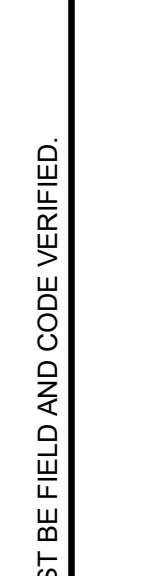
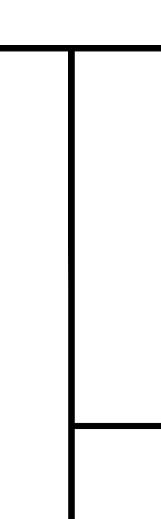
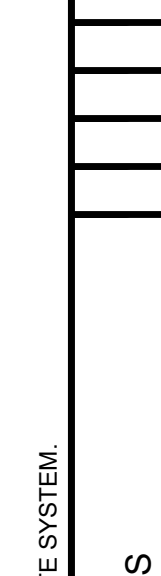
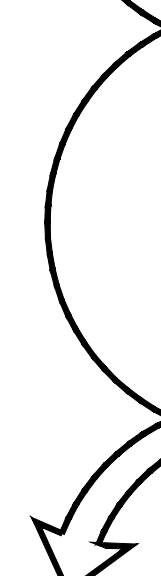
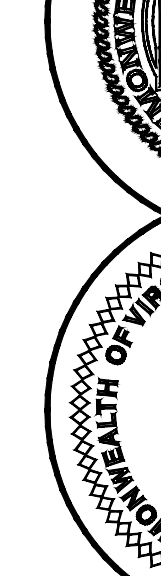
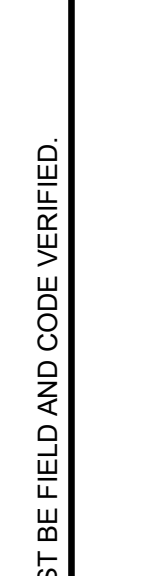
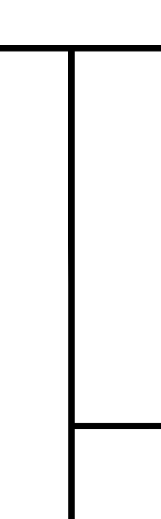
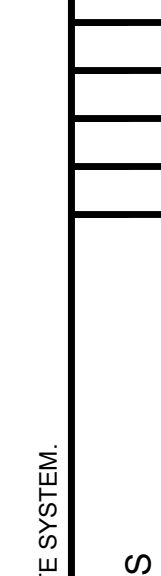
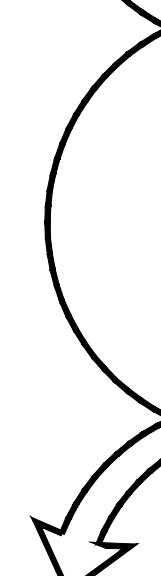
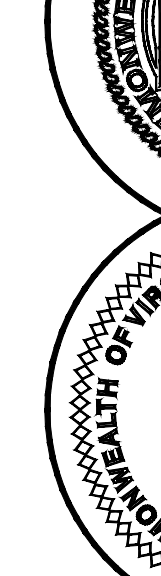
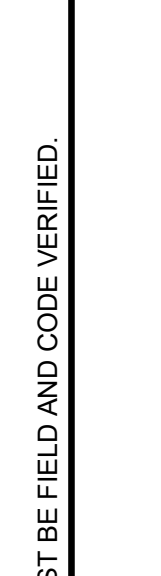
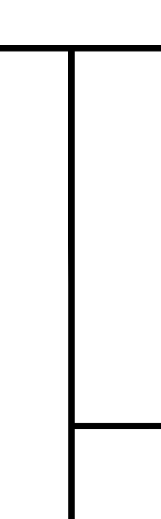
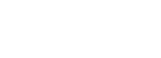
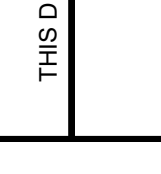
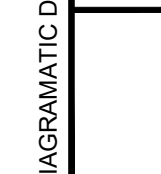
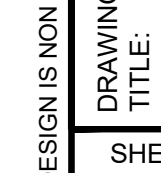
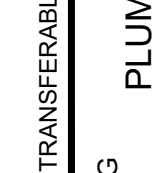
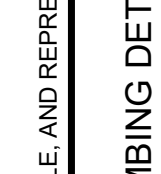
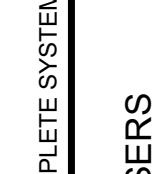
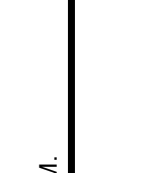
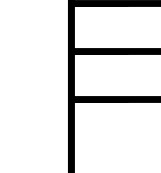
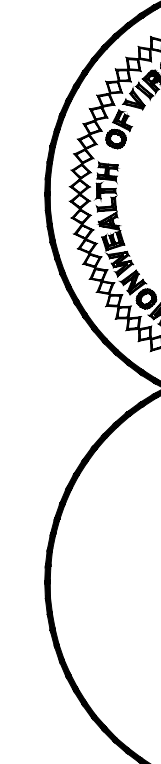
- 1) AT THE CONTRACTOR'S OPTION A U.L. LISTED/APPROVED FIRE STOP PIPE SLEEVE ASSEMBLY MAY BE SUBMITTED FOR APPROVAL.
- 2) GALVANIZED SLEEVE SHALL BE CAST INTO NEW CONCRETE WALL POURS.

ALL DIMENSIONS, SIZES AND CAPACITIES MUST BE FIELD AND CODE VERIFIED.

PROJECT: LAFAYETTE HOUSE  
PORTSMOUTH, NEW HAMPSHIRE

ARCHITECT:  
PROJECT CONSULTING ENGINEER:

JOSHUA W. CHAPMAN P.E. LEED AP, PRINCIPAL





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**Daniel Brechko**

316 3rd St W, PO Box 23  
Carver, MN 55315  
(603) 502-3542  
lola.hldgs@gmail.com

1 April 2024

**Peter Stith, Chair, City of Portsmouth TAC**

1 Junkins Avenue  
Portsmouth, NH 03801

**Re: 921 Islington St**

Dear Mr Stith and TAC Members,

As a prospective buyer of the subject property I am submitting preliminary plans for TAC Review at your April, 9 2024 Work Session. The property is under contract and I would like to complete the site planning process to obtain the necessary special exceptions, variances, permits, etc from the City of Portsmouth prior to completing the purchase to ensure I can proceed with development plans.

Included in this submission:

- (1) Existing conditions from site survey
- (2) Proposed building expansion and parking plan
- (3) Open Area Calculation Drawing

My plans for the property include building renovation and addition to convert existing structure to multi-occupancy building:

- (1) service station (existing)
- (2) fuel dispensing (existing)
- (3) retail baker/deli w/small eat-in area (new)
- (4) four residential dwellings (new)

Scope of work includes:

- (1) Regrade lot to create parking along NE lot line
- (2) Add on to existing service station to create:
  - (a) entrance vestibule to side of garage bays
  - (b) utility and storage to rear of garage bays
- (3) Construct stairwell between service station and new deli
- (4) Add on to existing building for increased deli sqft
- (5) Install natural gas service to building, multi-tenant

- (6) Reconfigure plumbing for new use
- (7) Update electrical service to building, multi-tenant
- (8) Construct 2nd and 3rd floor residential units

My understanding from preliminary review with city staff is that the following items require attention for this project to proceed:

**SPECIAL EXCEPTION** the current service station operates under a special exception. Would the special exception require an extension to enable expansion of the building?

**VARIANCE** per 10.1113.20 Location of Parking Facilities on a Lot, parking is not permitted in the front yard. As shown on the site plan, the placement of the structure toward the rear of the lot to allow access to the pumps limits space available for parking.

**VARIANCE** open area would include includes walkways and a patio for outdoor dining. Is this acceptable or would a variance be required? Also the lot is currently 100% impervious. I am checking with an environmental firm about whether previous surfaces will impact the contaminated soil underground.

**CONDITIONAL USE PERMIT** per 10.1112.30 Off-Street Parking requirements the total spaces required per the table below is 15 however the site plan allows for 12.

Use	Sq Ft	Requirement	No. Spaces
Service Station	1083	2 + 1:400	5
Convenience Goods	900	1:300	3
Dining	200	1:100	2
Dwelling Unit	4x >750 sqft	1.3	6

In reality, customers will likely park their cars at the pump when they shop at the bakery/deli, with adjacencies to businesses and residences much of the customer base is expected to be foot traffic, and finally the service station is small with only one mechanic and is not likely to require 5 parking spaces.

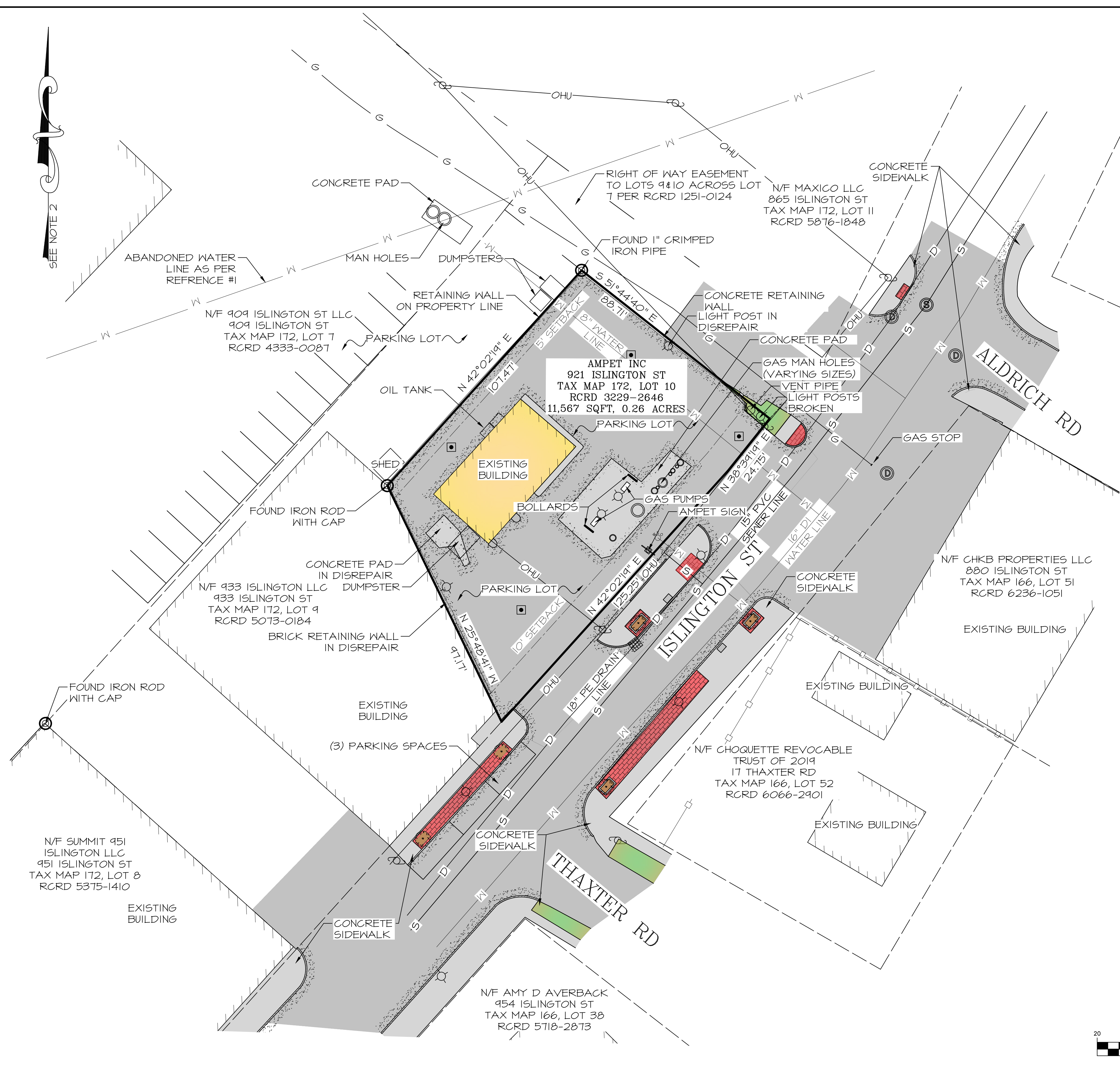
I look forward to working with the Technical Advisory Committee to review the aforementioned items as well as any new points that come up.

Sincerely,



**Daniel Brechko**

SEE NOTE 2



**LEGEND**

- WATER SHUT OFF
- CLEANOUT
- MONUMENT FOUND
- UTILITY POLE
- OVERHEAD UTILITIES
- VERTICAL GRANITE CURB
- MONITORING WELL
- LIGHT POSTS
- DRAIN MANHOLE
- SEWER MANHOLE
- WATER LINE
- GAS LINE
- SEWER LINE
- DRAIN LINE
- CATCH BASIN



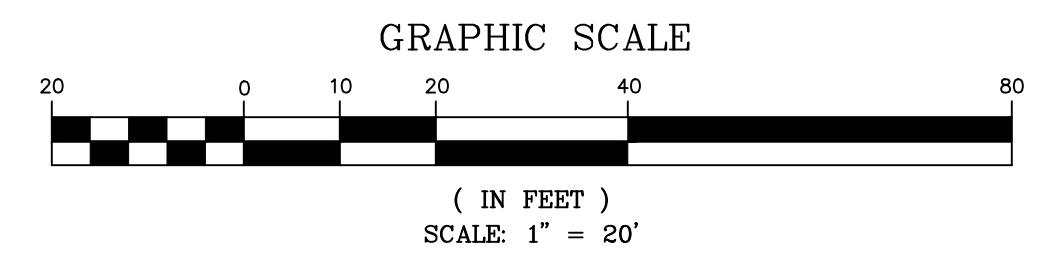
**LOCUS PLAN  
N.T.S.**

**NOTES**

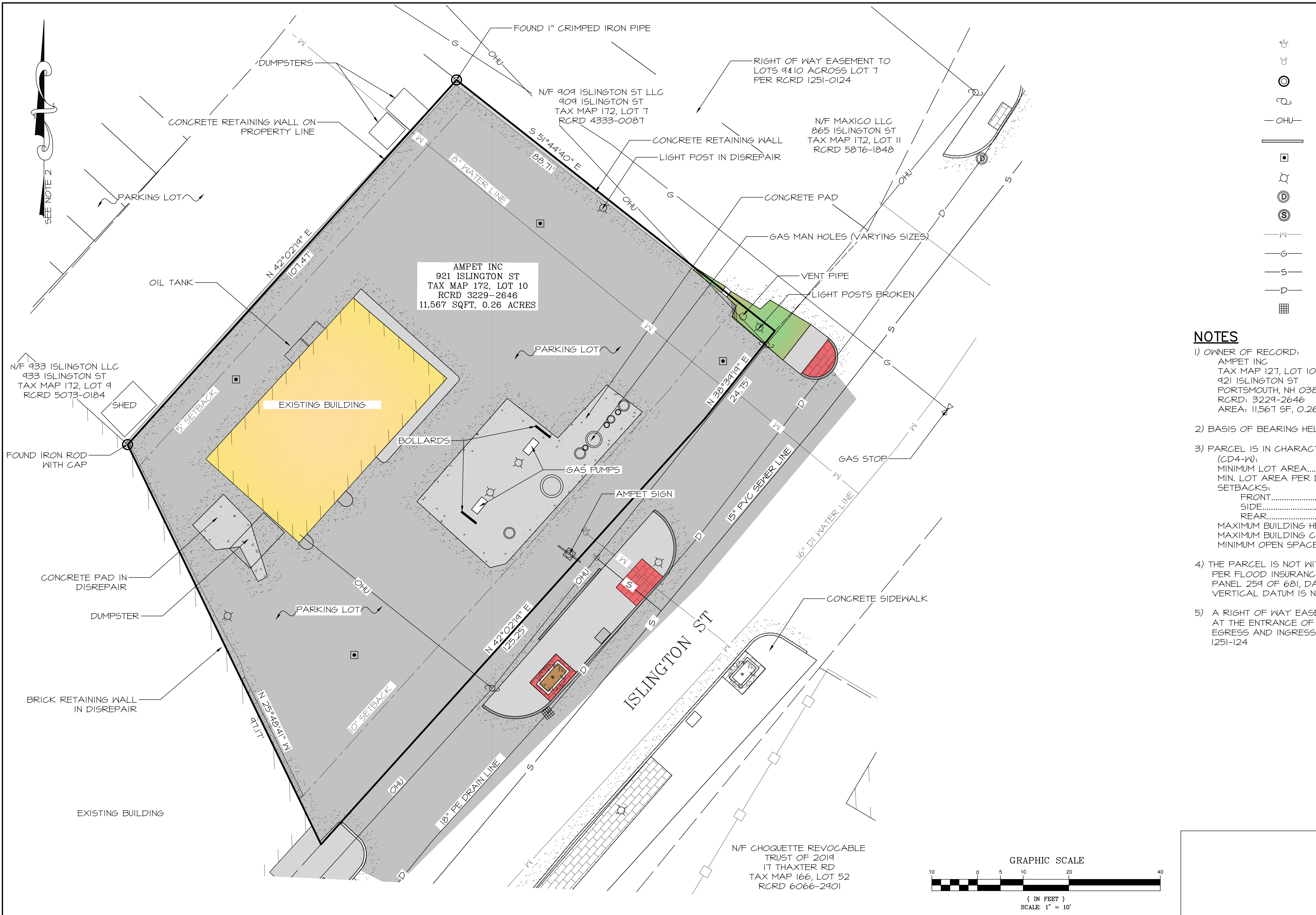
- 1) OWNER OF RECORD:  
AMPET INC  
TAX MAP 127, LOT 10  
921 ISLINGTON ST  
PORTSMOUTH, NH 03801  
RCRD: 3229-2646  
AREA: 11,567 SF, 0.26 ACRES
- 2) BASIS OF BEARING HELD FROM PLAN REFERENCE #1.
- 3) PARCEL IS IN CHARACTER DISTRICT 4 WEST END (CD4-W):  
MINIMUM LOT AREA.....5,000 SF  
MIN. LOT AREA PER DWELLING UNIT.....2,500 SF  
SETBACKS:  
FRONT.....10FT  
SIDE.....0 FT  
REAR.....5 FT  
MAXIMUM BUILDING HEIGHT.....40 FT  
MAXIMUM BUILDING COVERAGE.....60%  
MINIMUM OPEN SPACE.....15%
- 4) THE PARCEL IS NOT WITHIN A FEMA FLOOD ZONE, AS PER FLOOD INSURANCE RATE MAP #33015C0254F, PANEL 254 OF 681, DATED JANUARY 29, 2021. VERTICAL DATUM IS NAVD 1988.
- 5) A RIGHT OF WAY EASEMENT TO THE BENEFIT OF LOTS 9 & 10 EXISTS ACROSS LOT 7 "FOR EGRESS AND INGRESS" SEE PLAN REF #6 & RCRD 1251-124

**REFERENCE PLANS**

- 1) "CONDOMINIUM SITE PLAN MAP 172 - LOT 7 909 ISLINGTON CONDOMINIUM, DECADENT: 909 ISLINGTON STREET, LLC. LOCATED AT: 909 ISLINGTON STEER CITY OF PORTSMOUTH COUNTY OF ROCKINGHAM STATE OF NEW HAMPSHIRE." BY AMBIT ENGINEERING, INC. DATED JANUARY 17TH 2022. NOT RECORDED IN RCRD
- 2) "PLAN OF LAND 933 ISLINGTON STREET PORTSMOUTH, NEW HAMPSHIRE ASSESSOR'S LOT 172-009 OWNER EF II REALTY TRUST" BY JAMES VERRA AND ASSOCIATES, INC. DATED SEPTEMBER 3, 2009. RCRD D-36191
- 3) "LOT LINE RELOCATION PLAN FOR THE MORLEY COMPANY & SARINA SALEM, INC. 909 & 951 ISLINGTON STREET PORTSMOUTH, N.H. COUNTY OF ROCKINGHAM" BY AMBIT SURVEY CIVIL ENGINEERS & LAND SURVEYORS. DATED FEBRUARY 19, 1996. RCRD D-24612
- 4) "LOT LINE REVISION PORTSMOUTH, N.H. FOR DAVID M. & CLAUDIA B. MCLEAN" BY JOHN W. DURGIN ASSOCIATES, INC. DATED NOVEMBER 1978. RCRD C-8281
- 5) "PLAN OF LAND PORTSMOUTH, N.H. OWNED BY ROBERT B. CASWELL" BY JOHN DURGIN CIVIL ENGINEERS DATED FEBRUARY, 1950. RCRD 01956
- 6) "PLAN OF LAND PORTSMOUTH NH FOR MORLEY COMPANY" BY JOHN W. DURGIN DATED NOVEMBER 1948 REVISED 1952 RCRD 01951



1	12/21/2023	PRELIMINARY	
ISS	DATE	DESCRIPTION OF ISSUE	
SCALE 1" = 20'			
CHECKED	A. ROSS		
DRAWN	S.R.O.		
<b>ROSS ENGINEERING, LLC</b> Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560			
CLIENT DANIEL BRECHKO			
TITLE <b>EXISTING CONDITIONS PLAN</b>			
921 ISLINGTON STREET PORTSMOUTH, NH 03801 TAX MAP 172, LOT 10			
JOB NUMBER	DWG. NO.	ISSUE	
23-097	1 OF 2	1	



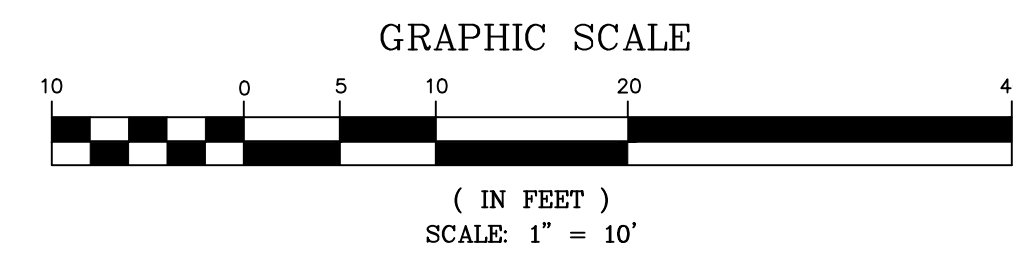
**LEGEND**

- WATER SHUT OFF
- CLEANOUT
- MONUMENT FOUND
- UTILITY POLE
- OVERHEAD UTILITIES
- VERTICAL GRANITE CURB
- MONITORING WELL
- LIGHT POSTS
- DRAIN MANHOLE
- SEWER MANHOLE
- WATER LINE
- GAS LINE
- SEWER LINE
- DRAIN LINE
- CATCH BASIN

**NOTES**

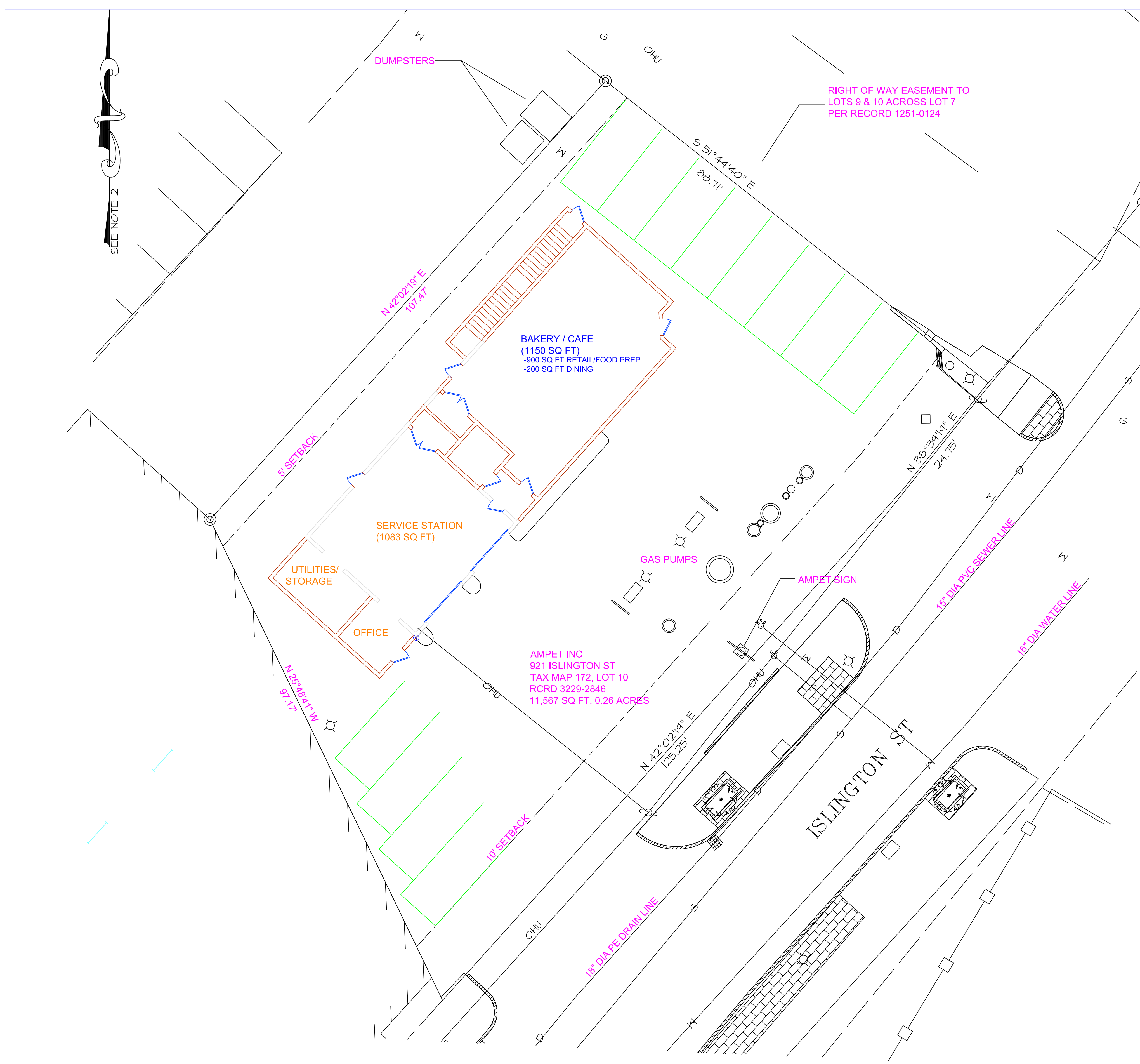
- 1) OWNER OF RECORD:  
 AMPET INC  
 TAX MAP 127, LOT 10  
 921 ISLINGTON ST  
 PORTSMOUTH, NH 03801  
 RCRD: 3229-2646  
 AREA: 11,567 SF, 0.26 ACRES
- 2) BASIS OF BEARING HELD FROM PLAN REFERENCE #5.
- 3) PARCEL IS IN CHARACTER DISTRICT 4 WEST END (CD4-W):  
 MINIMUM LOT AREA.....5,000 SF  
 MIN. LOT AREA PER DWELLING UNIT.....2,500 SF  
 SETBACKS:  
 FRONT.....10 FT  
 SIDE.....0 FT  
 REAR.....5 FT  
 MAXIMUM BUILDING HEIGHT.....40 FT  
 MAXIMUM BUILDING COVERAGE.....60%  
 MINIMUM OPEN SPACE.....15%
- 4) THE PARCEL IS NOT WITHIN A FEMA FLOOD ZONE, AS PER FLOOD INSURANCE RATE MAP #33015C0254F, PANEL 254 OF 681, DATED JANUARY 29, 2021. VERTICAL DATUM IS NAVD 1988.
- 5) A RIGHT OF WAY EASEMENT ACROSS LOT 7 EXISTS AT THE ENTRANCE OF ISLINGTON STREET "FOR EGRESS AND INGRESS" SEE PLAN REF #6 & RCRD 1251-124

1	12/21/2023	PRELIMINARY
ISS	DATE	DESCRIPTION OF ISSUE
SCALE 1" = 10'		
CHECKED	A. ROSS	
DRAWN	S.R.O.	
<b>ROSS ENGINEERING, LLC</b> Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560		
CLIENT DANIEL BRECHKO		
TITLE		
<b>EXISTING CONDITIONS PLAN</b>  921 ISLINGTON STREET PORTSMOUTH, NH 03801 TAX MAP 172, LOT 10		
JOB NUMBER	DWG. NO.	ISSUE
23-097	2 OF 2	1



N/F CHOQUETTE REVOCABLE TRUST OF 2014  
 17 THAXTER RD  
 TAX MAP 166, LOT 52  
 RCRD 6066-2901

SEE NOTE 2



SEE NOTE 2

RIGHT OF WAY EASEMENT TO LOTS 9 & 10 ACROSS LOT 7 PER RECORD 1251-0124

BAKERY / CAFE  
(1150 SQ FT)  
-900 SQ FT RETAIL/FOOD PREP  
-200 SQ FT DINING

SERVICE STATION  
(1083 SQ FT)

UTILITIES/  
STORAGE

OFFICE

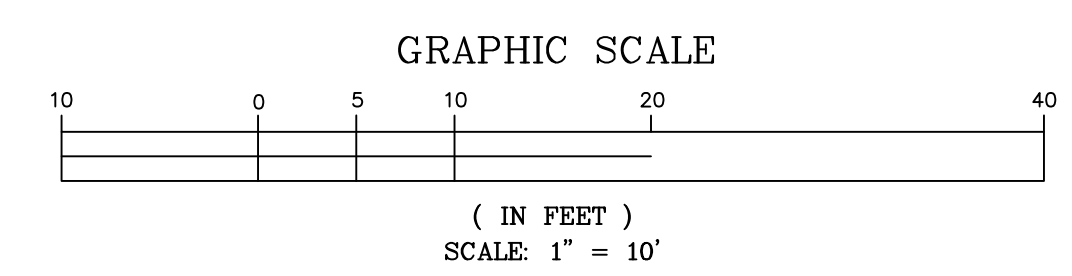
AMPET INC  
921 ISLINGTON ST  
TAX MAP 172, LOT 10  
RCRD 3229-2846  
11,567 SQ FT, 0.26 ACRES

AMPET SIGN

GAS PUMPS

**NOTES**

- 1) OWNER OF RECORD:  
AMPET INC  
TAX MAP 127, LOT 10  
921 ISLINGTON ST  
PORTSMOUTH, NH 03801  
RCRD: 3229-2646  
AREA: 11,567 SF, 0.26 ACRES
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REAR.....5 FT  
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MAXIMUM BUILDING COVERAGE.....60%  
MINIMUM OPEN SPACE.....15%
- 4) THE PARCEL IS NOT WITHIN A FEMA FLOOD ZONE, AS PER FLOOD INSURANCE RATE MAP #33015C0259F, PANEL 259 OF 681, DATED JANUARY 29, 2021. VERTICAL DATUM IS NAVD 1988.
- 5) A RIGHT OF WAY EASEMENT ACROSS LOT 7 EXISTS AT THE ENTRANCE OF ISLINGTON STREET "FOR EGRESS AND INGRESS" SEE PLAN REF #6 & RCRD 1251-124



**921 ISLINGTON ST - PROPOSED SITE PLAN**  
**APRIL 1, 2024**

General Notes

**LEGEND**

- ☼ WATER SHUT OFF
- ☼ CLEANOUT
- ⊙ MONUMENT FOUND
- ⊙ UTILITY POLE
- OHU— OVERHEAD UTILITIES
- VERTICAL GRANITE CURB
- MONITORING WELL
- ☼ LIGHT POSTS
- ⊙ DRAIN MANHOLE
- ⊙ SEWER MANHOLE
- W— WATER LINE
- G— GAS LINE
- S— SEWER LINE
- D— DRAIN LINE
- ☼ CATCH BASIN

No.	Revision/Issue	Date

Firm Name and Address

Project Name and Address

Project	Sheet
Date	
Scale	