

## **11 Walden Street**

Portsmouth NH

Judie & Steve Mraz/Dion

Residential plumbing/Mechanical/Gas permit: PMGR-22-163

Historic District Commission Work Session or Administrative Approval Application:  
LUHD-502

Land Use Application: LU-22-177

**Dwelling Units:** One

**Lot Area:** .012 Ac.

### **Description of proposed project:**

Installation of a Mitsubishi heat pump system with one outdoor unit and three indoor units. The outdoor unit to be mounted on the Northern most point of the West side of the structure. One wall ductless split mounted on the West side of the First Floor to condition that space. Two floor units, one in each of the two Bedrooms on the Second Floor. Line hide to enclose all refrigerant lines etc. on the exterior of the home. All 3.5" and 4.5" line hide will be painted to match the building color.

All line hide to be located on the West and North side of the home only.

Distance from outdoor unit to property lines:

**18" from the unit to the side property line**

**12" from the unit to the rear property line**

### **Description of existing land use:**

Single Family Residence

### **Project Representatives:**

HVAC contractor

Jay T. Aucella

Aucella Heating & Cooling

6 Province Road

Strafford, NH 03884

(866) 926-6888

[jay@aucella.biz](mailto:jay@aucella.biz)

### **The variance will not be contrary to the public interest.**

The Mitsubishi outdoor unit is quiet: Sound pressure level: Heating = 56 dB(A) Cooling = 52 dB(A)

The Mitsubishi outdoor unit will be hung from the building by a bracket. The outdoor unit protrudes only 18" from the West wall and is partially / mostly hidden by two trees depending on the viewing angle.

**The spirit of the Ordinance will be observed**

The installation does not affect any parking areas or accessways to other buildings. The outdoor unit does not produce any odor, smoke or dust to the environment. The proposed location is on the side and back of the structure, Not on the most visible street side.

**Substantial justice will be done.**

There is very little gain if any, to the public / surrounding neighbors by denying this variance. Mitsubishi ductless systems are quieter, look better, and use less energy than “window units”.

With increasingly warmer summers the need for air conditioning to mitigate indoor temperatures is also increasing.

**The values of surrounding properties will not be diminished.**

Air conditioning outdoor units are common and not known to diminish surrounding property values.

The Mitsubishi outdoor unit is quiet: Sound pressure level: Heating = 56 dB(A) Cooling = 52 dB(A)

The outdoor unit protrudes only 18” from the West wall and is partially / mostly hidden by two trees depending on the viewing angle.

**Literal enforcement of the provisions of the Ordinance would result in an unnecessary hardship.**

This property does not have a 10’ setback from the property line on any side of the structure unlike the surrounding properties. Due to the lack of a 10’ setback the reasonable addition of air conditioning cannot be added in strict conformance with the Ordinance.

# Owner's Authorization

8/29/22

To whom it concerns:

Jay Aucella/Aucella Heating & Cooling is my authorized agent for the proposed air conditioning project at 11 Walden Street, Portsmouth, NH.

Thank you,

DocuSigned by:  
  
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Judith A. Mraz

# Proposed Site #1

west wall

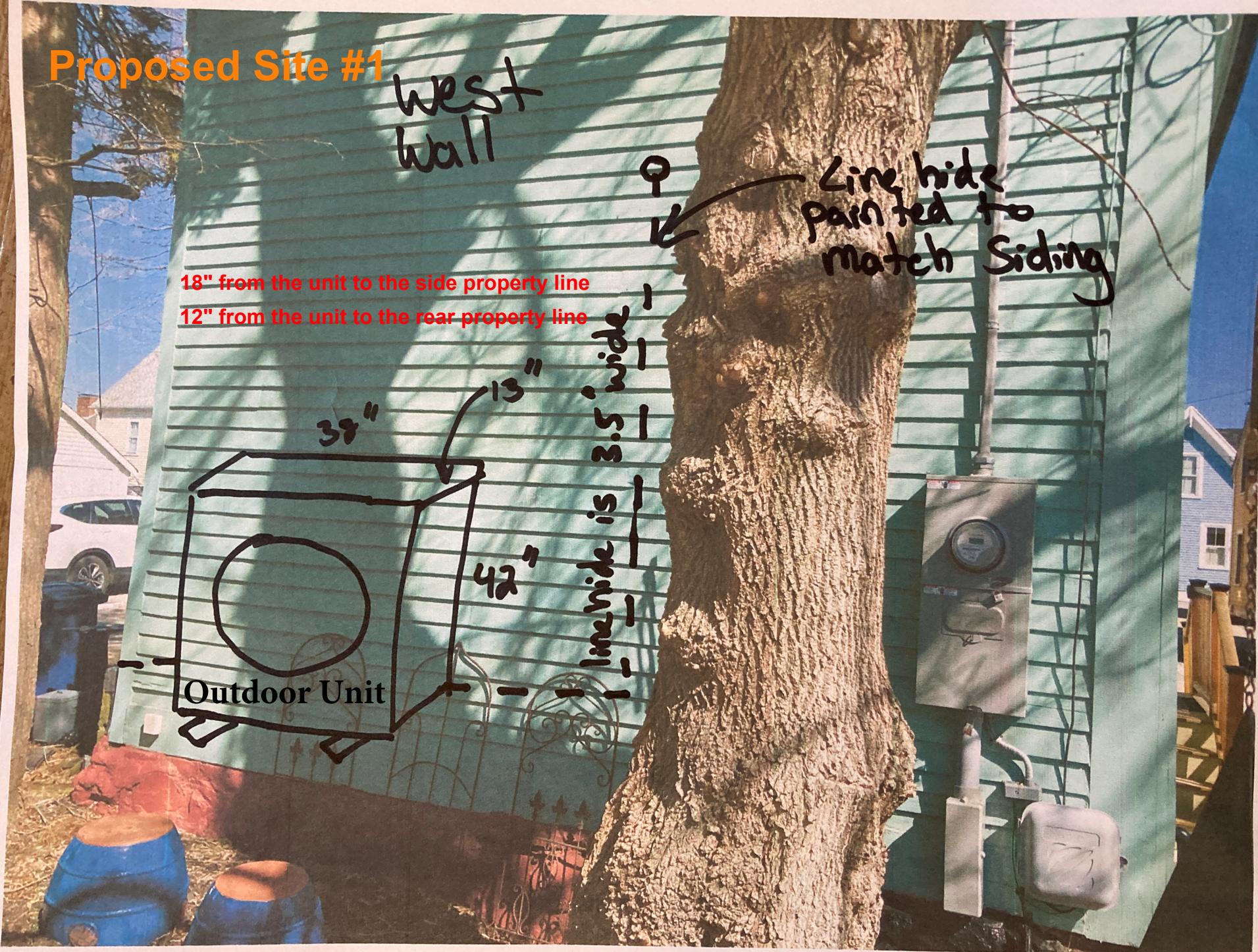
Line hide painted to match Siding

18" from the unit to the side property line

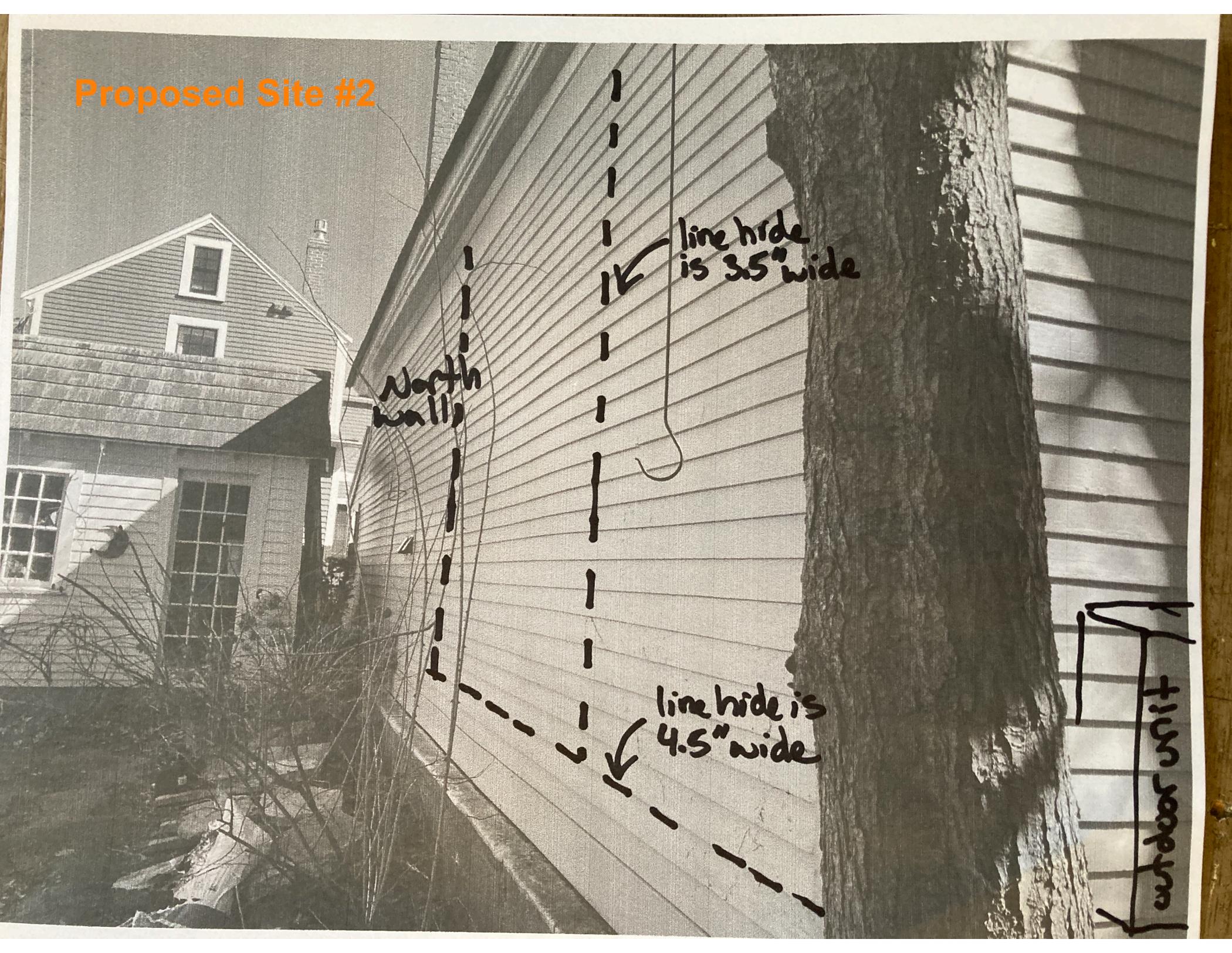
12" from the unit to the rear property line



line hide is 3.5' wide



Proposed Site #2



North wall

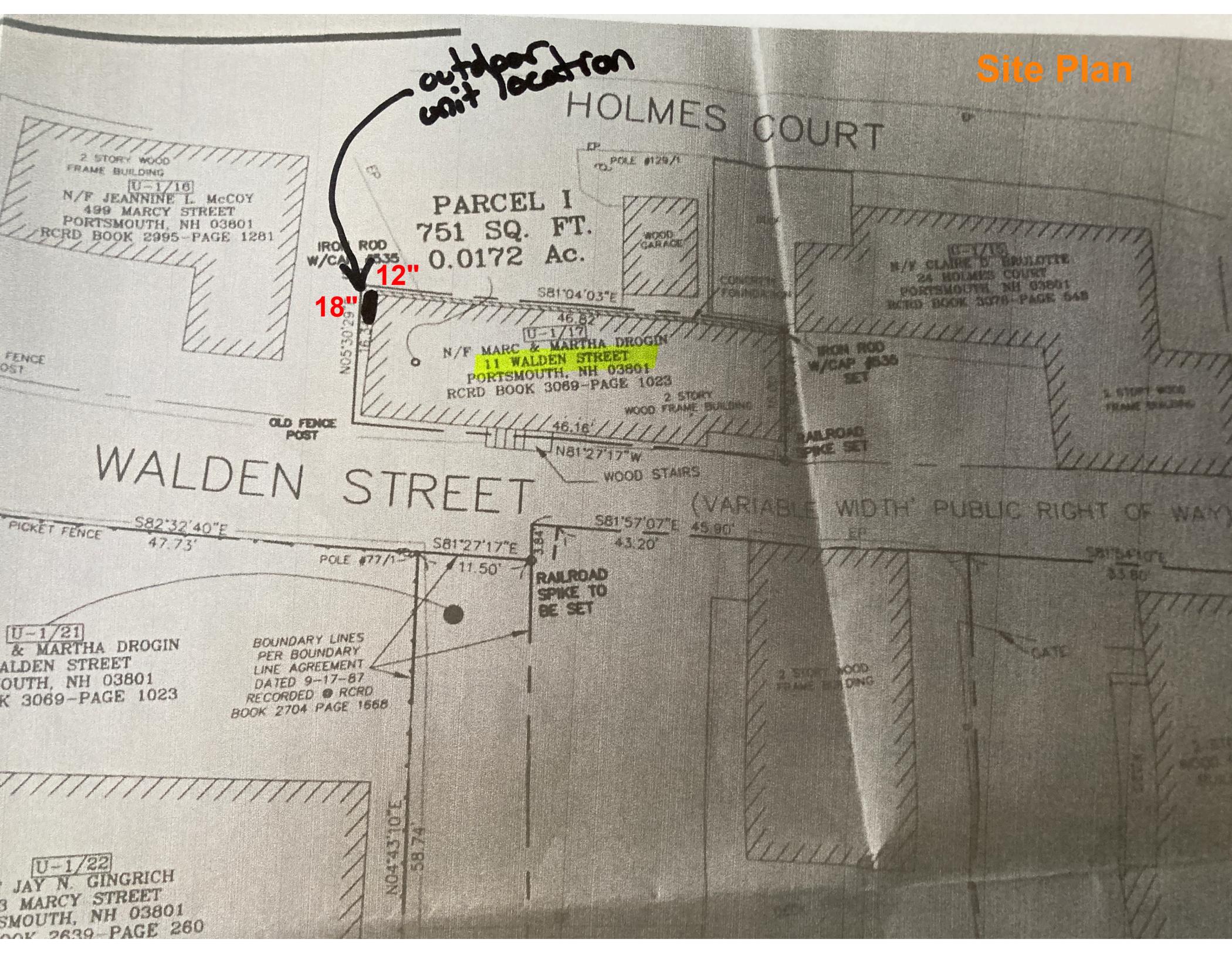
line hrde is 3.5" wide

line hrde is 4.5" wide

outdoor unit

Site Plan

outdoor unit location



HOLMES COURT

PARCEL I  
751 SQ. FT.  
0.0172 Ac.

2 STORY WOOD  
FRAME BUILDING  
U-1/18  
N/F JEANNINE L. McCOY  
499 MARCY STREET  
PORTSMOUTH, NH 03801  
RCRD BOOK 2995-PAGE 1281

U-1/15  
N/F CLAIR D' BRULOTTE  
24 HOLMES COURT  
PORTSMOUTH, NH 03801  
RCRD BOOK 3378-PAGE 548

U-1/17  
N/F MARC & MARTHA DROGIN  
11 WALDEN STREET  
PORTSMOUTH, NH 03801  
RCRD BOOK 3069-PAGE 1023

WALDEN STREET

(VARIABLE WIDTH PUBLIC RIGHT OF WAY)

U-1/21  
& MARTHA DROGIN  
WALDEN STREET  
PORTSMOUTH, NH 03801  
RCRD BOOK 3069-PAGE 1023

BOUNDARY LINES  
PER BOUNDARY  
LINE AGREEMENT  
DATED 9-17-87  
RECORDED @ RCRD  
BOOK 2704 PAGE 1668

U-1/22  
JAY N. GINGRICH  
3 MARCY STREET  
PORTSMOUTH, NH 03801  
RCRD BOOK 2639-PAGE 280

IRON ROD  
W/CAP #335  
12"  
18"

IRON ROD  
W/CAP #335  
SET

RAILROAD  
SPIKE TO  
BE SET

2 STORY WOOD  
FRAME BUILDING

GATE

OLD FENCE  
POST

FENCE  
POST

2 STORY WOOD  
FRAME BUILDING

WOOD STAIRS

2 STORY  
WOOD FRAME BUILDING

WOOD  
GARAGE

CONCRETE  
FOUNDATION

RAILROAD  
SPIKE SET

EP  
POLE #129/1

N05°30'29"  
W 46.11'

S81°04'03"E

46.82'

46.16'

N81°27'17"W

S81°57'07"E

43.20'

S81°27'17"E

11.50'

POLE #77/1

S82°32'40"E

47.73'

N04°43'10"E  
58.74'

S81°54'17"E

33.80'

**MXZ-3C30NA2**  
**MULTI-ZONE INVERTER HEAT-PUMP SYSTEM**



Job Name:

System Reference:

Date:



**FEATURES**

- Variable speed INVERTER-driven compressor
- Optional base pan heater
- Quiet outdoor unit operation as low as 56 dB(A)
- High pressure protection
- Compressor thermal protection
- Compressor overcurrent detection
- Fan motor overheating/voltage protection

# SPECIFICATIONS: MXZ-3C30NA2

(For data on specific indoor units, see the MXZ-C Technical and Service Manual.)

|   |                               |                                 |   |
|---|-------------------------------|---------------------------------|---|
| Cooling*<br>(Non-ducted / Ducted)         | Rated Capacity                | Btu/h                           | 28,400 / 27,400                               |
|   | Capacity Range                | Btu/h                           | 9,500 - 28,400 / 9,500 - 27,400               |
|   | Rated Total Input             | W                               | 2,680 / 2,860                                 |
| Heating at 47°F*<br>(Non-ducted / Ducted) | Rated Capacity                | Btu/h                           | 28,600 / 27,600                               |
|   | Capacity Range                | Btu/h                           | 15,500 - 36,000 / 15,500 - 35,000             |
|   | Rated Total Input             | W                               | 2,150 / 2,220                                 |
| Heating at 17°F*<br>(Non-ducted/Ducted)   | Rated Capacity                | Btu/h                           | 16,000 / 15,100                               |
|   | Rated Total Input             | W                               | 2,120 / 2,140                                 |
| Connectable Capacity                      |                               | Btu/h                           | 12,000 - 36,000                               |
| Electrical Requirements                   | Power Supply                  | Voltage, Phase, Hertz           | 208 / 230V, 1-Phase, 60 Hz                    |
|   | Recommended Fuse/Breaker Size | A                               | 25  |
|   | MCA                           | A                               | 22.1  |
| Voltage                                   | Indoor - Outdoor S1-S2        | V                               | AC 208 / 230                                  |
|   | Indoor - Outdoor S2-S3        | V                               | DC ±24  |
| Compressor                                |                               | INVERTER-driven Scroll Hermetic |   |
| Fan Motor (ECM)                           |                               | F.L.A.                          | 2.43  |
| Sound Pressure Level                      | Cooling                       | dB(A)                           | 52  |
|   | Heating                       | dB(A)                           | 56  |
| External Dimensions (H x W x D)           |                               | In<br>mm                        | 31-11/32 x 37-13/32 x 13<br>(796 x 950 x 330) |
| Net Weight                                |                               | Lbs / kg                        | 137 (62)                                      |
| External Finish                           |                               | Munsell No. 3Y 7.8/11           |   |
| Refrigerant Pipe Size O.D.                | Liquid (High Pressure)        | In / mm                         | 1/4 (12.7)                                    |
|   | Gas (Low Pressure)            | In / mm                         | A: 1/2 (6.35) ; B.C: 3/8 (9.52)               |
| Max. Refrigerant Line Length              |                               | Ft / m                          | 230 (70)                                      |
| Max. Piping Length for Each Indoor Unit   |                               | Ft / m                          | 82 (25)                                       |
| Max. Refrigerant Pipe Height Difference   | If IDU is Above ODU           | Ft / m                          | 49 (15)                                       |
|   | If IDU is Below ODU           | Ft / m                          | 49 (15)                                       |
| Connection Method                         |                               | Flared/Flared                   |   |
| Refrigerant                               |                               | R410A                           |   |

\* Rating Conditions per AHRI Standard:

Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB  
Cooling | Outdoor: 95° F (35° C) DB / 75° F (24° C) WB

Heating at 47° F | Indoor: 70° F (21° C) DB  
Heating at 47° F | Outdoor: 47° F (8° C) DB / 43° F (6° C) WB

Heating at 17° F | Indoor: 70° F (21° C) DB  
Heating at 17° F | Outdoor: 17° F (-8° C) DB / 15° F (-9° C) WB

## OPERATING RANGE:

|         | Outdoor                        |
|---------|--------------------------------|
| Cooling | 14 to 115° F (-10 to 46° C) DB |
| Heating | 5 to 65° F (-15 to 18° C) WB   |

## ENERGY EFFICIENCIES:

| Indoor Unit Type         | SEER | EER  | HSPF | COP @ 47°F | COP @ 17°F |
|--------------------------|------|------|------|------------|------------|
| Non-ducted<br>(09+09+12) | 19.0 | 10.6 | 10.6 | 3.90       | 2.77       |
| Ducted and<br>Non-ducted | 17.6 | 10.1 | 10.1 | 3.77       | 2.78       |
| Ducted<br>(09+09+12)     | 16.2 | 9.6  | 9.6  | 3.64       | 2.78       |

## NOTES:

For actual capacity performance based on indoor unit type and number of indoor units connected, please refer to MXZ Operational Performance.

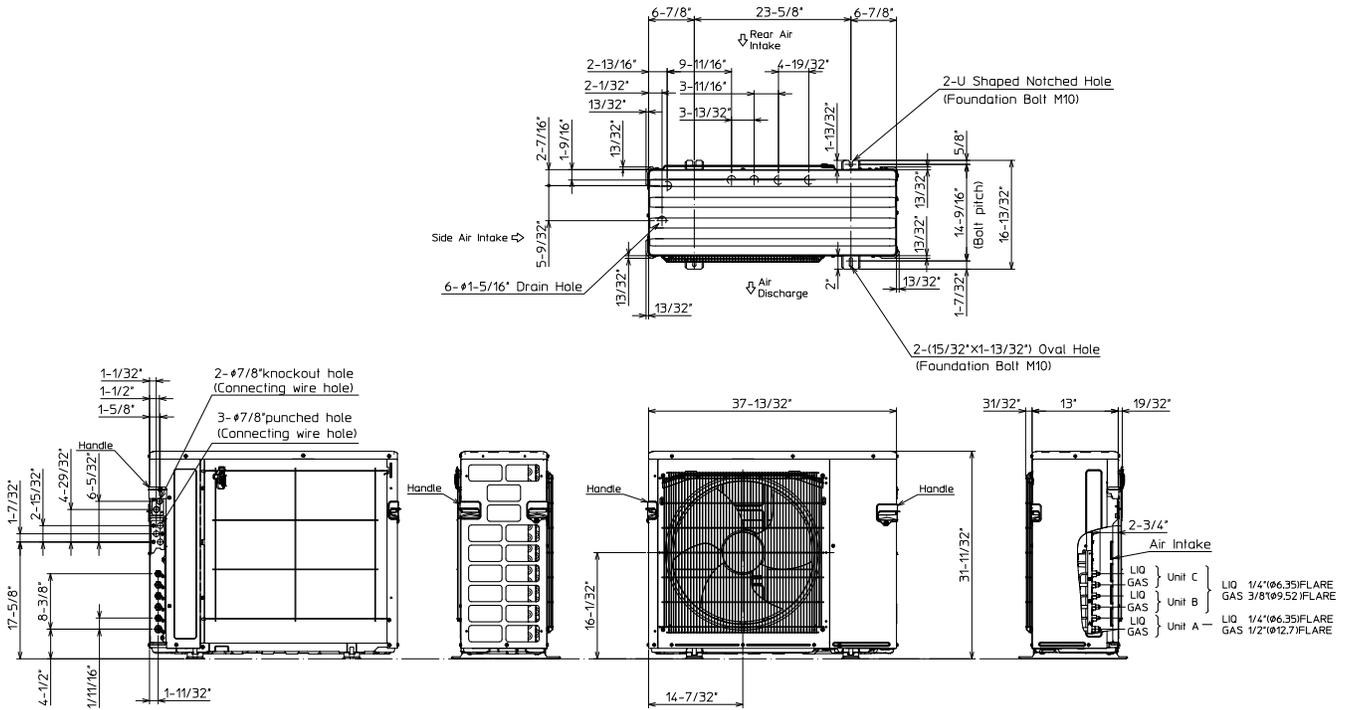
Although the maximum connectable capacity can exceed rated, the outdoor unit cannot provide more than 100% of the rated capacity. Please utilize this over capacity capability for load shedding or applications where it is known that all connected units will NOT be operating at the same time.

## OUTDOOR UNIT ACCESSORIES: MXZ-3C30NA2

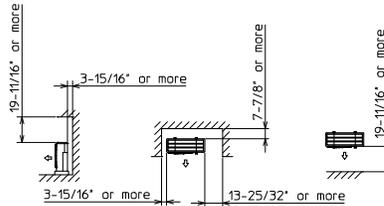
|   |  |               |
|---|--|---------------|
| Air Outlet Guide                        | Air Outlet Guide (1 Piece)   | PAC-SH96SG-E  |
| Ball Valve                              | Refrigeration Ball Valve - 1/2"  | BV12FFSI2     |
|   | Refrigeration Ball Valve - 1/4"  | BV14FFSI2     |
|   | Refrigeration Ball Valve - 3/8"  | BV38FFSI2     |
|   | Refrigeration Ball Valve - 5/8"  | BV58FFSI2     |
| Distribution pipe for Branch Box        | M-NET Converter  | PAC-IF01MNT-E |
| Drain Socket                            | Drain Socket   | PAC-SG60DS-E  |
| Hail Guards                             | Hail Guard   | HG-A9         |
| Mounting Pad                            | Condensing Unit Mounting Pad: 16" x 36" x 3"   | ULTRILITE1    |
|   | Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic   | DSD-400P      |
| Optional Defrost Heater                 | Base Heater  | PAC-645BH-E   |
| Port Adapter                            | Adaptor: 1/2" x 3/8"   | MAC-A455JP-E  |
|   | Adaptor: 1/2" x 5/8"   | MAC-A456JP-E  |
|   | Adaptor: 3/8" x 1/2"   | MAC-A454JP-E  |
|   | Adaptor: 3/8" x 5/8"   | PAC-SG76RJ-E  |
| Power Supplies and Auxiliary Components | M-Net Control Wire, 1,000' Roll (16-AWG, Standard, Twisted Pair, Shielded, Jacketed- Plenum rated) | CW162S-1000   |
| Power Supplies And Auxiliary Components | M-Net Control Wire, 250' Roll (16-AWG, Standard, Twisted Pair, Shielded, Jacketed- Plenum rated)   | CW162S-250    |
| Stand                                   | 18" Single Fan Stand   | QSMS1801M     |
|   | 24" Single Fan Stand   | QSMS2401M     |
|   | Condenser Wall Bracket   | QSWB2000M-1   |
|   | Condenser Wall Bracket -Stainless Steel Finish   | QSWBSS        |
|   | Outdoor Unit Stand — 12" High  | QSMS1201M     |

# OUTDOOR UNIT DIMENSIONS: MXZ-3C30NA2

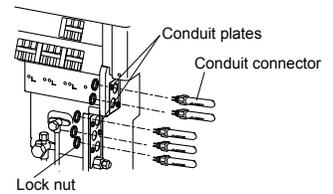
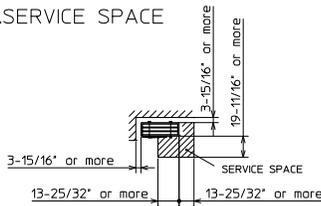
Unit: inch



## 1. FREE SPACE



## 2. SERVICE SPACE



1340 Satellite Boulevard Suwanee, GA 30024  
Toll Free: 800-433-4822 www.mehvac.com

**Existing Conditions #1**

**North  
Wall**

**West Wall**



**Existing Conditions #2**

**West Wall**



Existing Conditions #3

North Wall

