Town of Goffstown

TOWN OFFICES
16 MAIN STREET • GOFFSTOWN, NH 03045

TOWN OF GOFFSTOWN
REQUEST FOR PROPOSALS

The Town of Goffstown seeks proposals for an air to air VRV system with heat recovery option and ductless inside units and a mechanical ventilation system for occupied areas through energy recovery ventilators operated with carbon dioxide sensors. Town Hall's existing ductwork currently serving the heat pump systems could be used in whole or in part for the new ventilation system. The entire proposal package is available at Town Hall or on the town's website www.goffstown.com, click on RFP/BIDS. Proposals must be submitted in a sealed envelope clearly marked **"Proposal for Design/Build VRV Pump System and Ventilation System"** to Administration, Town Hall, 16 Main St., Goffstown NH on **Wednesday 7/18/2012 by 2:00 pm** at which time the proposals will be opened and publicly read. The Town of Goffstown reserves the right to reject proposals or parts of proposals and waive any informality if deemed in the best interests of the Town of Goffstown.

TOWN OF GOFFSTOWN NH

REQUEST FOR PROPOSALS (RFPs)

Design/Build VRV Pump System and Ventilation System

The Town of Goffstown seeks to replace the existing HVAC system which provides heat and cooling at Town Hall, 16 Main Street, Goffstown NH 03045 with a VRV Pump System and Ventilating System. Currently there are four (4) split air to air heat pump systems, two serving downstairs and two serving upstairs. One system on each floor serves the north perimeter and one on each floor serves the south perimeter. The upstairs system servicing the north perimeter is currently not functioning.

INSTRUCTIONS FOR PROPOSALS:

Proposals must be submitted in a sealed envelope clearly marked **"Proposal for Design/Build VRV Pump System and Ventilation System"** to the Administration Office, Town Hall, 16 Main Street, Goffstown NH on **Wednesday 7/18/2012 by 2:00 pm** at which time the proposals will be opened and publicly read.

PHASES:

Due to budget constraints the Town of Goffstown seeks a proposal with itemized quotes for each phase. Availability of funds will determine if Phase #2 will be done this year.

1. Phase #1: VRV Pump System and Ventilation System for upstairs offices.
2. Phase #2: VRV Pump System and Ventilation System for downstairs meeting rooms.

GENERAL CONDITIONS:

The Town of Goffstown seeks a heating/cooling and ventilation system which provides high energy efficiency and balanced temperature control in each office. The Town solicits proposals for the design and installation of ICC code compliant system following ASHREA Guidelines for:

1. An air to air Variable Refrigeration Volume (VRV) pump system with a heat recovery option and ductless inside units; and
2. Mechanical ventilation for occupied areas through energy recovery ventilators operated with carbon dioxide sensors. Existing ductwork currently serving the heat pump systems could be used in whole or in part for the new ventilation system.

SPECIAL BID CONDITIONS:

1. Proposals must itemize costs of materials and services.
2. Proposals must itemize any rebates available for this replacement system.
3. Proposals must itemize trade-in value for existing HVAC systems.
4. Proposal must provide for the integration of the existing "Heat Smart System".
5. Deadline for installation of Phase #1 is 9/28/12.
6. Any proposals of $35,000 of more require a performance bond (RSA 447:16) in the amount of the total project cost. This bond is due from the successful contractor prior to the start of the project. Said bond shall be released by the Town of Goffstown after project completion.

7. The Town of Goffstown reserves the right to reject proposals, renegotiate any contract and waive any informalities which do not compromise the actual proposal if deemed in the best interests of the Town of Goffstown.
8. Addendum A – Design Day Mechanicals Inc. Assessment dated 6/11/12
9. Addendum B – List of rooms with number of occupants and detail of office equipment
10. Addendum C – Drawing of current office layout on top floor
11. Addendum D – Drawing of existing HVAC layout and ductwork

CONTRACTORS PRE-PROPOSAL MEETING:
There will be a meeting on **Monday 7/9/2012 at 2:00 pm** in Room 106 at Town Hall, 16 Main Street, Goffstown NH for contractors interested in submitting a proposal. There will be a walk-through of the building and staff will be available to answer any questions about the building or this RFP. Questions and answers will be posted as Addendum E to this RFP on the town's website www.goffstown.com click on RFP/BIDS.

REFERENCES:
Proposals must include three references for similar type of design/installations preferably with other government entities.

WARRANTY:
Each proposal must state the warranty period for parts and labor.

AWARD OF PROPOSAL:
The Town shall consider all items listed in this "Request for Proposal" in determining award of the project.

CERTIFICATION:
The undersigned certifies under penalty of perjury that this proposal is in all respects bonafide, fair and made without collusion or fraud with any other person. As used in this section the word "person" means any natural person, joint venture, partnership, corporation or other business or legal entity.

Signature: _____ Date: _____

Name/Title of Person Signing Proposal: _____

Company Name: _____

Company Address: _____

Company Phone Number/Email: _____

Addendum A

DESIGN DAY
MECHANICALS INC

6/11/12

Mark Toussaint
Energy Efficiency Services
Public Service of New Hampshire
780 North Commercial Street
Manchester, NH 03105

Re: HVAC Systems - Goffstown Town Offices

Mark,

On May 29th I visited the Goffstown Town Offices to assess their existing HVAC systems. There are four (4) split air to air heat pump systems, two serving the downstairs and two serving the upstairs. One system on each floor serves the north perimeter and one on each floor serves the south perimeter. Currently the upstairs system serving the north perimeter is not functioning.

Three of these units are around 24 years old, well beyond their normal expected life cycle.

The general idea of having dedicated units for the north and south perimeters is good in addressing the difference in external solar gains. However, after assessing the variations of internal heat gains and occupancy schedules, it is unlikely that a single heat pump with a single operating thermostat can satisfy the very different thermal comfort needs of all the occupant in all the rooms served by a single system.

There is no outside air connection for any of the heat pumps. It is possible the operable windows in most, if not all the rooms meet the natural ventilation requirements of the International Mechanical Code. However, it is impractical and energy inefficient to expect occupants to open outside windows for ventilation purposes in the winter. There also did not appear to be operable toilet exhaust fans in the two main toilet areas on the lower level.

Based on these observations I recommend a Variable Refrigeration Volume (VRV) heat pump system with the heat recovery option. This type of system will allow for much more individualized temperature control, more options for operating only one room when required, such as a single meeting room in the evening, and will allow for sharing of energy between spaces, especially in the fall and spring when there may be some simultaneous need for air conditioning, perhaps in the IT Office with its larger computer loads, and heating in a single occupancy office on the north side of the building.

David E. Goddard, P.E	1 Mapleleaf Drive, Nashua, NH 03062	(603) 888-1632	davidegoddard@live.com
Douglas C. Waitt	P.O. Box 447, New Ipswich, NH 03071	(603) 291-0111	dougwaitt@comcast.net
Richard D. Gagnon	84 Gilford Street, Manchester, NH 03102	(603) 668-5027	rdgjhg@comcast.net
John L. Waitt	148 Beaver Ridge Road, Center Barnstead, NH 03225	(603) 269-7253	jlwdd@tds.net

DESIGN DAY
MECHANICALS INC

I would also recommend providing mechanical ventilation for occupied areas through energy recovery ventilators operated with carbon dioxide sensors. Toilet exhaust could also be incorporated into these system. Existing ductwork currently serving the heat pump systems could be used in whole or in part for the new ventilation system. The proposed VRV heat pump system used mostly ductless inside units so that there would be no need to reuse the heat pump ductwork for heating and cooling.

DESIGN DAY MECHANICALS, INC.

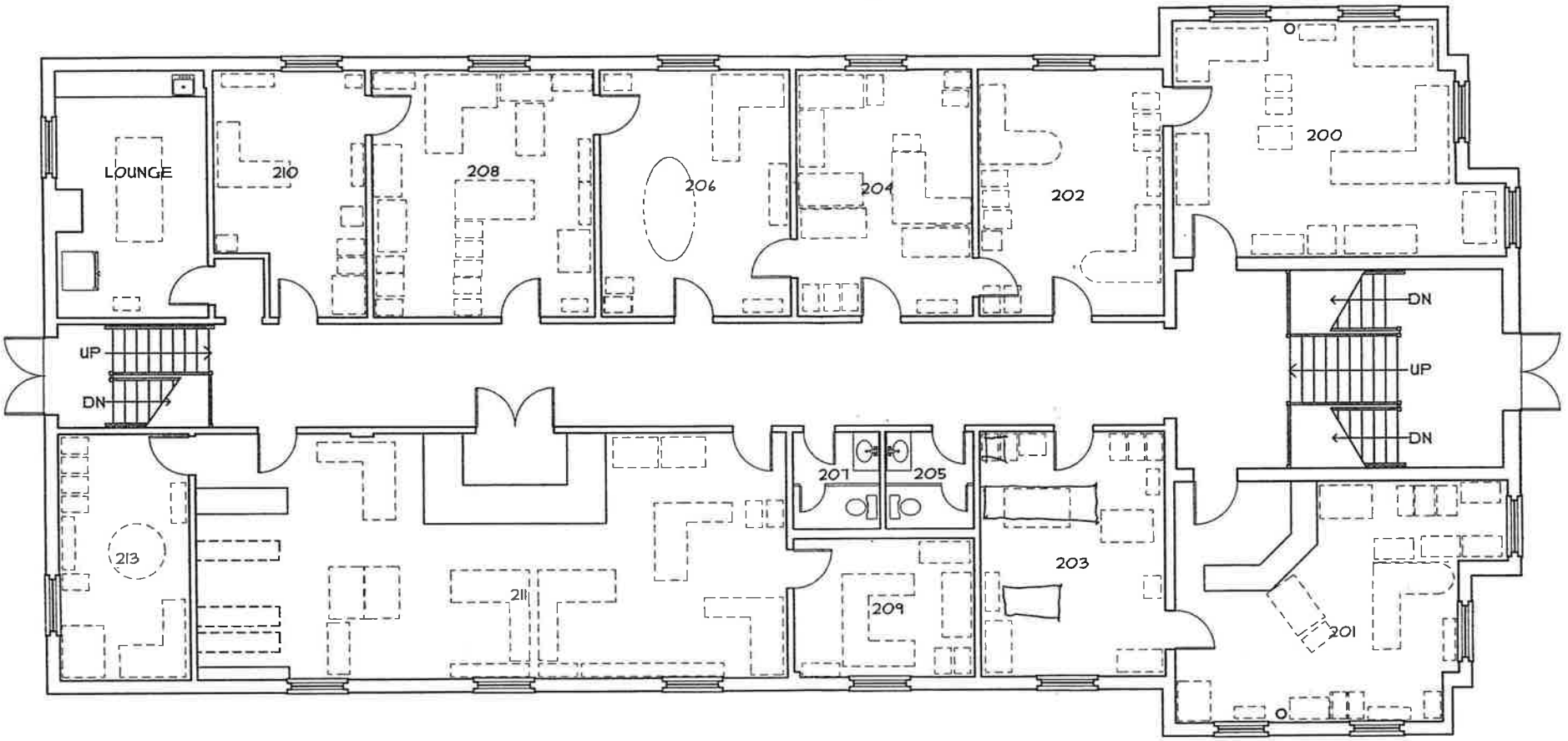
Douglas C. Waitt

Addendum B – List of rooms with number of occupants and detail of office equipment

Floor	Side	Room	Dimensions (W x L x H)*	Full Time Employees	Equipment					Notes
2	North	200 IT	18'4" x 21'6" x 9'	2.0	6 PCs	1 Printer	1 Plotter	1 Network Switch		
2	North	202 Finance	19' x 13'6" x 9'	2.0	2 PCs	1 Printer				
2	North	204 Finance	19'1" x 14'1" x 9'	2.0	2 PCs	1 Printer				
2	North	206 Town Admin.	14'4" x 19' x 9'	1.0	1 PC					Also used as staff meeting space.
2	North	208 Town Admin.	18'11" x 17' x 9'	1.0	2 PCs	1 Printer	1 Copier	1 Fax	1 Shredder	Part-time use by volunteer(s).
2	North	210 Accountant/Welfare	11'6" x 18'11" x 9'	1.0	1 PC					
2	North	Employee Lounge	19' x 11'8" x 8'11"	-	-					
2	South	201 Town Clerk	18'6" x 18'7" x 9'	4.0	7 PCs	8 Printers				
2	South	203 Tax Collector	18'8" x 14' x 9'	1.0	1 PC	1 Printer				
2	South	205 Women's Lavatory	7'5" x 6'8" x 8'	-	-					
2	South	207 Men's Lavatory	7'5" x 6'8" x 8'	-	-					
2	South	209 Assessor	14' x 10'8" x 9'	1.0	1 PC					
2	South	211 Land Use	18'7" x 45'7" x 9'	4.0	5 PCs	2 Printers	1 Copier	1 Plotter		1 Vacant desk for potential employee.
2	South	213 Planner	18'10" x 9'9" x 8'9"	1.0	1 PC					
2		Hallway	7'10" x 74' x 7'11"	-	-					
1	North	Storage	18'6" x 12'2" x 8'	-	-					
1	North	Women's Public Lavatory	8'5" x 13'7" x 8'							
1	North	104 Selectmen's Room	13'5" x 18'6" x 7'7"	-	1 PC	1 Printer				
1	North	106 Mildred Stark Mtg. Rm.	18'4" x 42'10" x 7'7"	-	-					
1	North	GTV Room	13'3" x 8'10" x 7'7"		1 PC			TV Broadcasting Equipment		Used nightly to broadcast public meetings.
1	North	108 Building Supervisor	9'2" x 13'1" x 7'7"	1.0	1 PC	1 Printer				
1	North	110 Mechanical Room	12'9" x 18'9" x 9'8"	-						
1	South	Vault	18'5" x 15'7" x 10'9"	-	-					
1	South	Men's Public Lavatory	8'5" x 13'9" x 7'10"	-						
1	South	103 Server Room	11'8" x 8'10" x 7'2"	-	5 Servers			Network Storage		
1	South	107 Meeting Room	18'3" x 33'2" x 7'9"	-	-					
1	South	109 Meeting Room/Storage	18'2"x26'3"x7'8"	-	-					

*Dimensions are approximate. Not included are stairways, foyers, closets, and some unoccupied space.

Addendum C (Page 1)



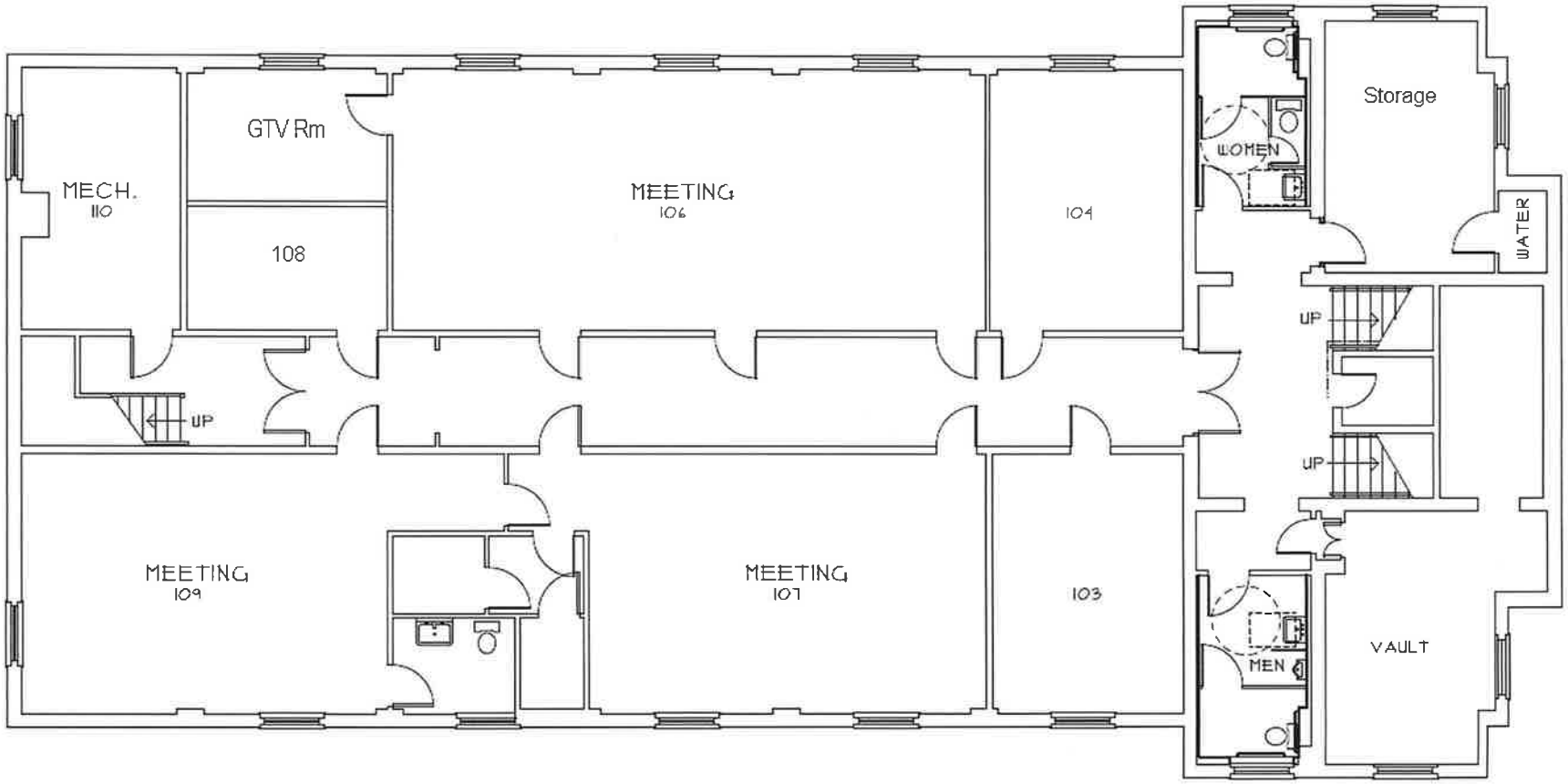
GOFFSTOWN TOWN HALL

EXISTING CONDITIONS

SCALE: 1/8" = 1'-0" 10/10/11

AMOSKEAG ARCHITECTURAL GROUP
ALAN H. YEATON architect
1650 elm street, suite 401, manchester, nh 03101-1217
phone: (603) 606-7878 fax (603) 627-9855

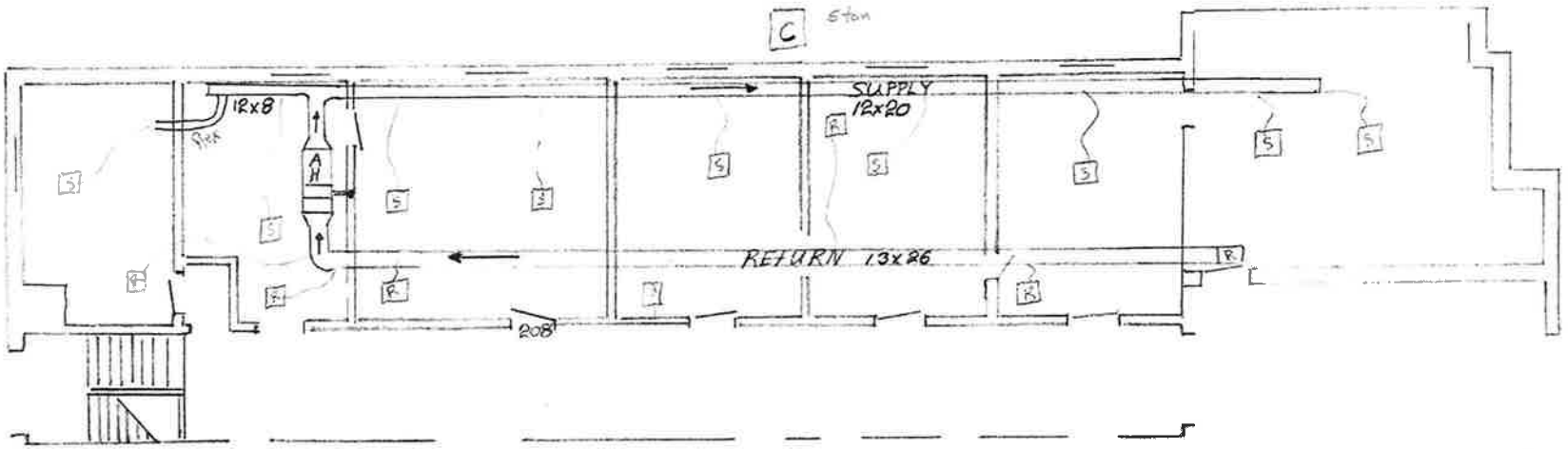
Addendum C (Page 2)



LOWER LEVEL

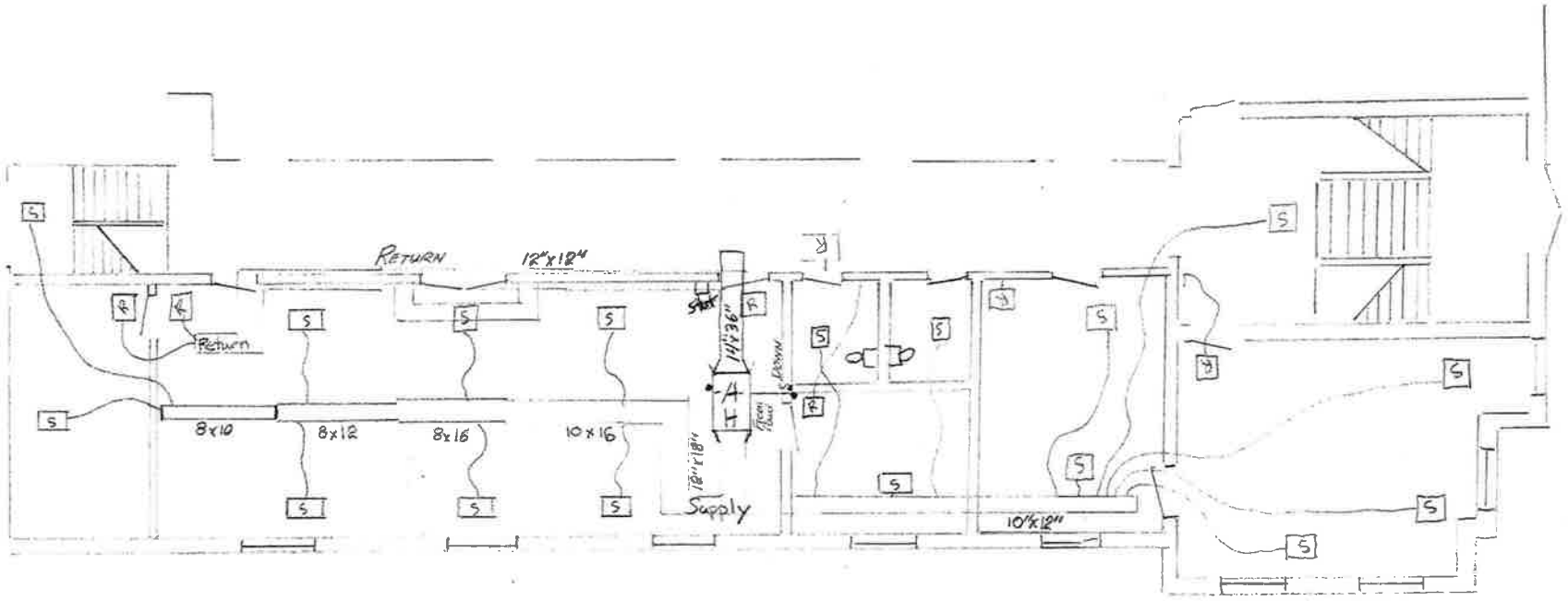
Addendum D (Page 1)

Upper level Admin. Zone



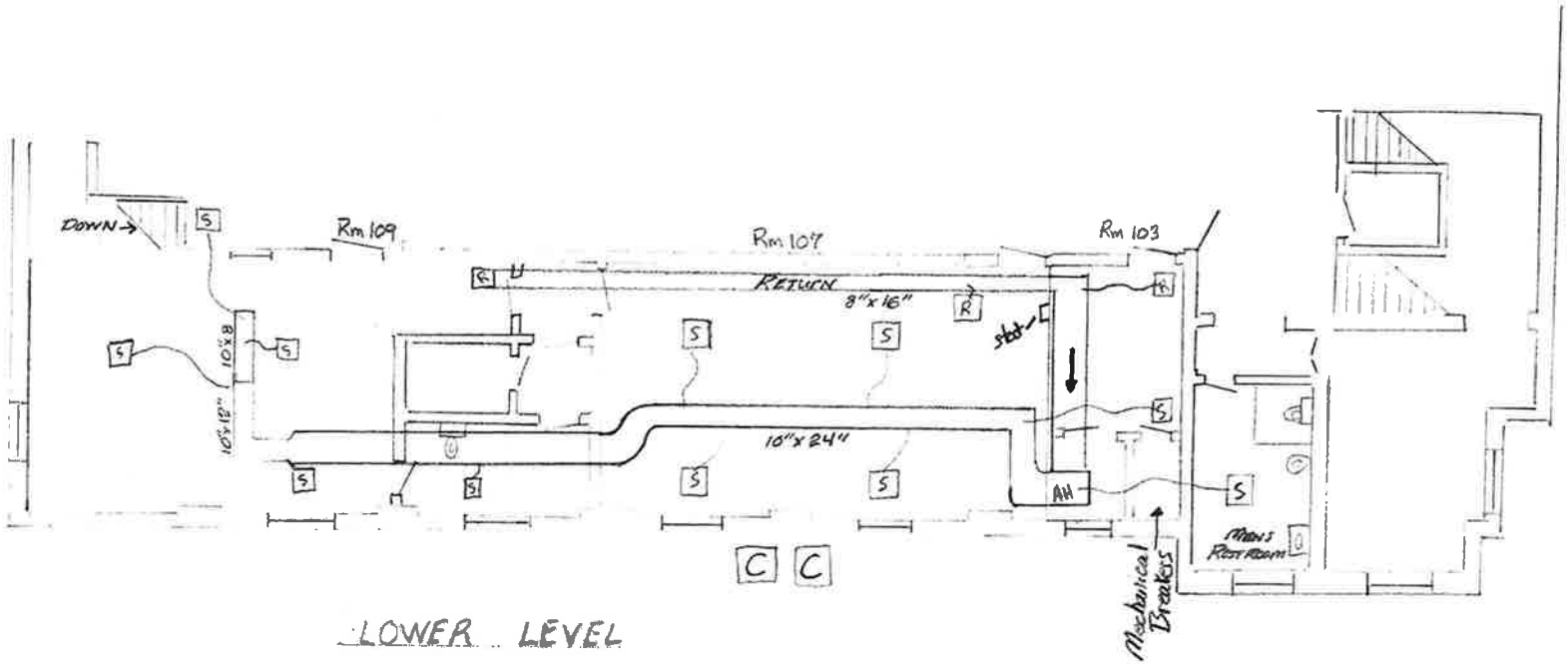
Air Handler
22"x 5'2"
York
Serial MEWS261242
Model W2AHDR0A060
208 / 230
3/4 HP 5.9 FLA

Addendum D (Page 2)

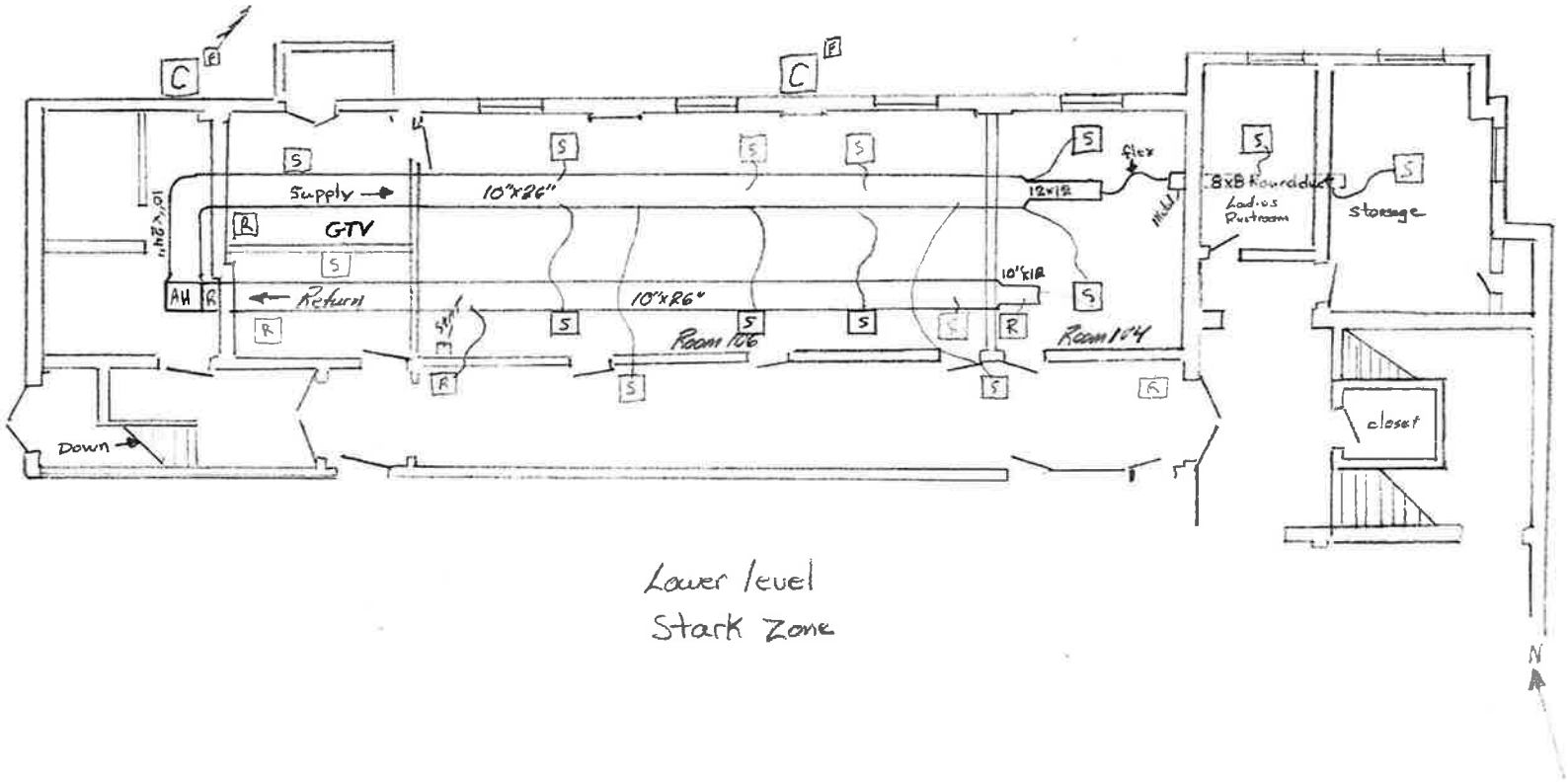


Building department zone

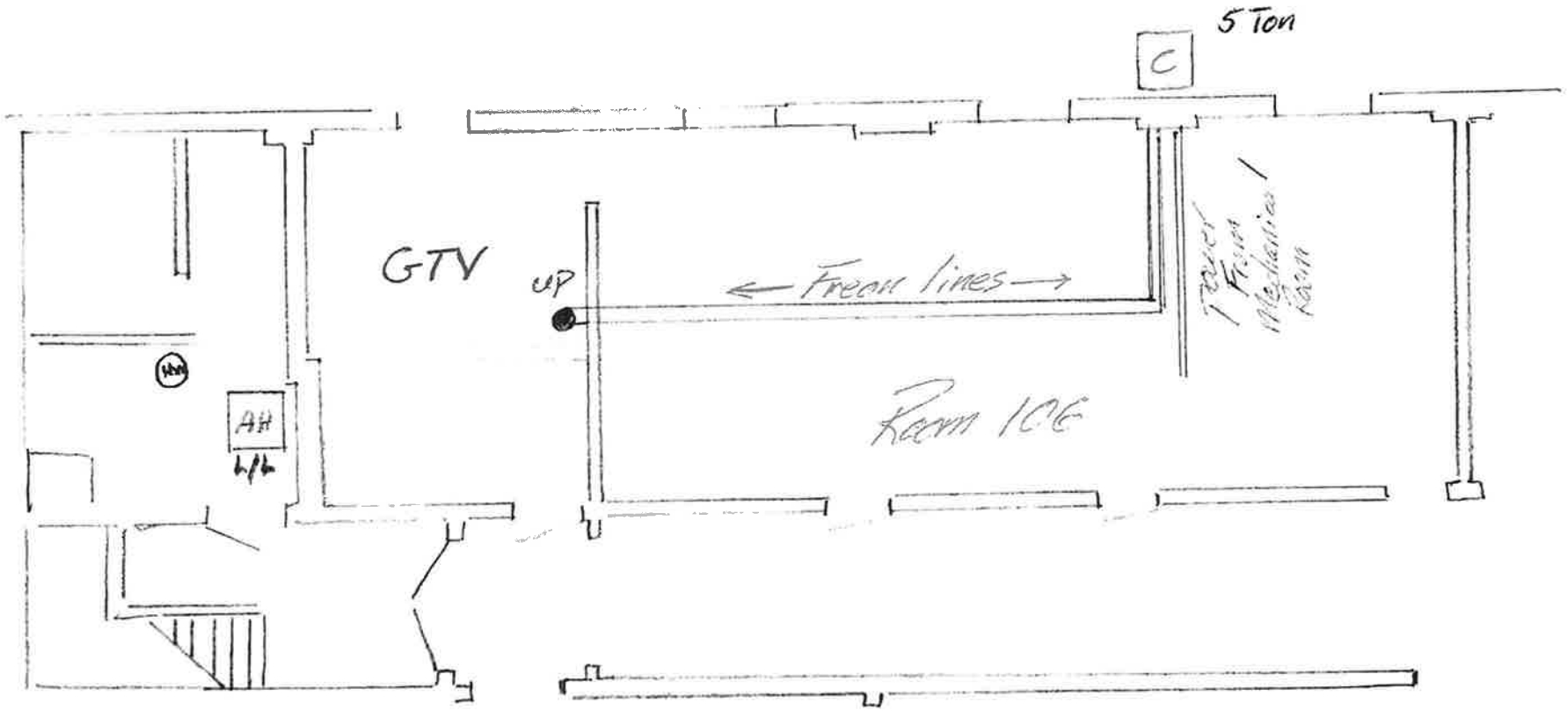
Addendum D (Page 3)



Addendum D (Page 4)



Lower level
Stark Zone


5 Ton
C
GTV
UP
← Freon lines →
Tower Fans / Mechanical Room
AH
Room 106

Lower level