

## SPLIT SYSTEM SCHEDULE

DRAWING CODE (DU/ODU)	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL (DU/ODU)	ALTERNATE APPROVED MANUFACTURERS	SYSTEM TYPE	COOLING (AHRI STANDARD)			HEATING (AHRI STANDARD)			INDOOR UNIT		AUXILIARY ELECTRIC HEATER (KW)	ELECTRICAL			OUTDOOR UNIT			WEIGHT (LBS.)		NOTES	ACCESSORIES		
					TOTAL (MBH)	SENSIBLE (MBH)	EFFICIENCY	TOTAL (MBH)	EFFICIENCY	SUPPLY AIRFLOW (CFM)	OUTSIDE AIRFLOW (CFM)	ESP (IN WG.)		(N)	INDOOR UNIT (V/PHHZ)	(MCA)	(MOCP)	INDOOR UNIT (V/PHHZ)	(MCA)	(MOCP)	INDOOR UNIT			OUTDOOR UNIT	
(X)AHU01 / (X)HP01	-	-	-	HEAT PUMP	84.9	68.5	EER	11.3	79.1	COP	3.3	2,700	270	0.5	15.0	460/360	26.0	30	460/360	18.0	30	375	350	10	-
(X)AHU02 / (X)HP02	TRANE	TEMA40C36S41 / 4TWA4036A4	N/A	HEAT PUMP	-	-	-	-	-	-	-	1,080	200	0.5	-	-	-	-	-	-	-	-	-	6	D
(X)AHU03 / (X)HP03	-	-	-	HEAT PUMP	-	-	-	-	-	-	-	7,200	1,440	0.8	-	-	-	-	-	-	-	-	-	7.9	-
(X)AHU04 / (X)HP04	-	-	-	HEAT PUMP	-	-	-	-	-	-	-	7,200	1,440	0.8	-	-	-	-	-	-	-	-	-	7.9	-
(X)AHU06 / (X)HP06	-	-	-	HEAT PUMP	119.3	92.4	EER	11.3	118.1	COP	3.3	3,600	360	0.5	26.0	460/360	42.0	45	460/360	25.0	40	450	475	10	-
(X)AHU13 / (X)HP13	-	-	-	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	10	-
(X)AHU14 / (X)HP14	-	-	-	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	10	-
(X)AHU15 / (X)HP15	-	-	-	HEAT PUMP	46.7	33.3	SEER	14.5	41.5	HSPF	8.2	1,440	290	0.5	7.7	460/360	15.3	20	460/360	8.0	15	200	300	10	-
(X)AHU16 / (X)HP16	-	-	-	HEAT PUMP	84.9	68.5	EER	11.3	79.1	COP	3.3	2,700	540	0.5	15.0	460/360	26.0	30	460/360	18.0	30	340	350	10	-
AHU17 / HP17	TRANE	GAM5B0B36M31 / 4TWA4036A4	YORK, CARRIER	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	12,3,4,8	A,B,C,D
(X)AHU18 / (X)HP18	-	-	-	HEAT PUMP	56.2	41.9	SEER	14.5	52.5	HSPF	8.5	1,800	360	0.5	9.6	460/360	19.1	20	460/360	9.0	15	200	300	7	-
AHU19 / HP19	TRANE	GAM5B0B36M31 / 4TWA4036A4	YORK, CARRIER	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	12,3,4,8	A,B,C,D
AHU20 / HP20	TRANE	GAM5B0B36M31 / 4TWA4036A4	YORK, CARRIER	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	12,3,4,8	A,B,C,D
(X)AHU22 / (X)HP22	-	-	-	HEAT PUMP	46.7	33.3	SEER	14.5	41.5	HSPF	8.2	1,440	290	0.5	7.7	460/360	15.3	20	460/360	8.0	15	200	300	3	-
AHU23 / HP23	TRANE	GAM5B0B36M31 / 4TWA4036A4	YORK, CARRIER	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	12,3,4,8	A,B,C,D
AHU24 / HP24	TRANE	GAM5B0B36M31 / 4TWA4036A4	YORK, CARRIER	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	12,3,4,8	A,B,C,D
AHU25 / HP25	TRANE	GAM5B0B36M31 / 4TWA4036A4	YORK, CARRIER	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	12,3,4,8	A,B,C,D
AHU26 / HP26	TRANE	GAM5B0B36M31 / 4TWA4036A4	YORK, CARRIER	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	12,3,4,8	A,B,C,D
AHU27 / HP27	TRANE	GAM5B0B36M31 / 4TWA4036A4	YORK, CARRIER	HEAT PUMP	34.5	24.7	SEER	15.0	31.4	HSPF	8.5	1,080	200	0.5	4.8	460/360	9.8	15	460/360	6.0	15	150	240	12,3,4,8	A,B,C,D
NOTES:	1. REFER TO SPECIFICATION SECTION 238126 - SPLIT-SYSTEM HEAT PUMPS FOR FURTHER INFORMATION. 2. MOUNT OUTDOOR UNIT ON CONCRETE HOUSEKEEPING PAD. 3. CONTRACTOR SHALL PROVIDE THERMOSTATHUMIDISTAT AND SES DEHUMIDIFICATION MODULE. CONFIRM PROPER OPERATION WITH EQUIPMENT MANUFACTURER. 4. AUXILIARY ELECTRIC HEATER VOLTAGE IS 460/360. 5. NOT USED. 6. EXISTING SYSTEM TO BE RELOCATED, REBALANCED. 7. EXISTING SYSTEM TO BE REBALANCED. 8. SCHEDULED COOLING CAPACITY IS NET. 9. BALANCE AIR HANDLER ONLY. 10. EXISTING SYSTEM SCHEDULED FOR REFERENCE ONLY.																								
ACCESSORIES:	A. LOW AMBIENT COOLING OPERATION TO 40F. B. E-COATED COILS WITH HAIL GUARDS. C. SINGLE POINT POWER CONNECTION FOR INDOOR UNIT. D. THERMOSTAT MODEL BAYSTAT152. THERMOSTAT TO CONNECT IN CONJUNCTION WITH SES DEHUMIDIFICATION MODULE.																								

### NOTES:

- REFER TO SPECIFICATION SECTION 238126 - SPLIT-SYSTEM HEAT PUMPS FOR FURTHER INFORMATION.
- MOUNT OUTDOOR UNIT ON CONCRETE HOUSEKEEPING PAD.
- CONTRACTOR SHALL PROVIDE THERMOSTATHUMIDISTAT AND SES DEHUMIDIFICATION MODULE. CONFIRM PROPER OPERATION WITH EQUIPMENT MANUFACTURER.
- AUXILIARY ELECTRIC HEATER VOLTAGE IS 460/390.
- NOT USED.
- EXISTING SYSTEM TO BE RELOCATED, REBALANCED.
- EXISTING SYSTEM TO BE REBALANCED.
- SCHEDULED COOLING CAPACITY IS NET.
- BALANCE AIR HANDLER ONLY.
- EXISTING SYSTEM SCHEDULED FOR REFERENCE ONLY.

### ACCESSORIES:

- LOW AMBIENT COOLING OPERATION TO 40F.
- E-COATED COILS WITH HAIL GUARDS.
- SINGLE POINT POWER CONNECTION FOR INDOOR UNIT.
- THERMOSTAT MODEL BAYSTAT152, THERMOSTAT TO CONNECT IN CONJUNCTION WITH SES DEHUMIFICATION MODULE.

## DUCTLESS SPLIT SYSTEM SCHEDULE

DRAWING CODE (DU/ODU)	MANUFACTURER	DESIGN MODEL	ROOM SERVED	SYSTEM TYPE	COOLING (AHR STANDARD)			HEATING (AHR STANDARD)			INDOOR UNIT SUPPLY AIRFLOW (CFM)	ELECTRICAL			REFRIGERANT PIPING				WEIGHT (LBS.)		NOTES	ACCESSORIES
					TOTAL (BTU/H)	EFFICIENCY		TOTAL (BTU/H)	EFFICIENCY			POWER SUPPLY (V/PH/Hz)	INDOOR UNIT (MCA)	OUTDOOR UNIT (V/PH/Hz)	(MCA)	(MOCP)	MAXIMUM LENGTH (FT.)	MAXIMUM HEIGHT DIFFERENTIAL (FT.)	INDOOR UNIT	OUTDOOR UNIT		
DAH05 / DHP05	DAIKIN ELECTRIC	PKA-A12HA7 / PUZ-A12NKA7	100F SOUND	HEAT PUMP	12,000	SEER	20.8	14,000	HSPF	10.20	370	208/1160	1.0	208/1160	11.0	15	100	100	29	93	1,2,3	A,B,C
NOTES:																						
1. REFER TO SPECIFICATION 238126.18 - SPLIT DUCTLESS SYSTEMS FOR FURTHER INFORMATION.																						
2. MOUNT OUTDOOR UNIT ON CONCRETE HOUSEKEEPING PAD.																						
3. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT AND CONDUCTOR FROM OUTDOOR UNIT TO INDOOR UNIT.																						
ACCESSORIES:																						
A. WALL-MOUNT HAND-HELD WIRELESS REMOTE.																						
B. INDOOR UNIT POWERED CONDENSATE PUMP.																						
C. SEACOAST COATING PROTECTION ON OUTDOOR UNIT.																						

- NOTES:
- REFER TO SPECIFICATION SECTION 238126.16 - SPLIT DUCTLESS SYSTEMS FOR FURTHER INFORMATION.
  - MOUNT OUTDOOR UNIT ON CONCRETE HOUSEKEEPING PAD.
  - ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT AND CONDUCTOR FROM OUTDOOR UNIT TO INDOOR UNIT.

### ACCESSORIES:

- WALL-MOUNT HAND-HELD WIRELESS REMOTE.
- INDOOR UNIT POWERED CONDENSATE PUMP.
- SEACAST COATING PROTECTION ON OUTDOOR UNIT.

## LOUVER SCHEDULE

DRAWING CODE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	ALTERNATE APPROVED MANUFACTURERS	TYPE	FRAME	DESCRIPTION	MATERIAL	LOUVER DEPTH (IN.)	SIZE (W x H) (IN.)	SERVICE	AIRFLOW (CFM)	PERFORMANCE RATINGS			NOTES	ACCESSORIES
												FREE AREA (SF)	S.P. LOSS (IN.H2O)	WATER PENETRATION (OZ./SF)		
L01	RUSKIN	ELF6375DXH	GREENHECK, POTTORFF	FIXED	EXTERIOR FLANGE	HORIZONTAL DRAINABLE-BLADE	ALUMINUM	6	24 X 24	INTAKE	600	1.90	0.02	-	1,2	A
L02	RUSKIN	ELF6375DXH	GREENHECK, POTTORFF	FIXED	EXTERIOR FLANGE	HORIZONTAL DRAINABLE-BLADE	ALUMINUM	6	16 X 16	EXHAUST	250	0.77	0.01	-	1,2	A

### NOTES:

- REFER TO SPECIFICATION SECTION 08119 - FIXED LOUVERS FOR FURTHER INFORMATION.
- FINISH AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF COLOR AND GLOSS.

### ACCESSORIES:

- BIRD SCREENING (MATERIAL TO MATCH LOUVER MATERIAL).

## POWER VENTILATOR SCHEDULE

DRAWING CODE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	ALTERNATE APPROVED MANUFACTURERS	FAN TYPE	SERVICE	CAPACITIES			FAN RPM	MOTOR RPM	ELECTRICAL				SONES	WEIGHT (LBS.)	NOTES	ACCESSORIES	
						AIRFLOW (CFM)	ESP (IN. WG.)	(IN. WG.) DRIVE ARRANGEMENT			MOTOR TYPE	MOTOR SIZE (W/HP)	V/PH/Hz	FLA					MOCP
(X)F05	-	-	-	-	EXHAUST	70	0.38	DIRECT	-	-	-	-	120/180	-	-	-	2	-	
(X)F06	-	-	-	-	EXHAUST	300	0.25	DIRECT	-	-	-	-	120/180	-	-	-	2	-	
PV08	GREENHECK	SP-80-VG	TWIN CITY, PENNBARRY	CEILING-MOUNTED VENTILATORS	EXHAUST	70	0.25	DIRECT	935	-	ECM	6 W	120/180	0.1	15	0.6	25	A,B,C,D,E	
(X)PV09	-	-	-	-	EXHAUST	470-570	0.38	DIRECT	-	-	-	-	120/180	-	-	-	2	-	
(X)PV10	-	-	-	-	EXHAUST	1,250	0.38	DIRECT	-	-	-	-	120/180	-	-	-	2	-	
(X)PV11	-	-	-	-	EXHAUST	625	0.38	DIRECT	-	-	-	-	120/180	-	-	-	2	-	
PV12	GREENHECK	SQ-80-VG	TWIN CITY, PENNBARRY	IN-LINE CENTRIFUGAL FANS	EXHAUST	250	0.38	DIRECT	1484	-	ECM	1/10 HP	120/180	2.6	15	6.8	50	1,3	B
NOTES:																			
1. REFER TO SPECIFICATION SECTION 233423 - HVAC POWER VENTILATORS FOR FURTHER INFORMATION.																			
2. EQUIPMENT IS EXISTING, SHOWN FOR REFERENCE ONLY.																			
3. HARD WIRE POWER, NO SWITCH.																			
ACCESSORIES:																			
A. BIRDSCREEN.																			
B. GRAVITY DAMPER.																			
C. WALL CAP.																			
D. 277V TO 120V TRANSFORMER.																			
E. ON/OFF SWITCH WITH BUILT IN OCCUPANCY SENSOR LOCATED PER ELECTRICAL PLANS.																			

### NOTES:

- REFER TO SPECIFICATION SECTION 233423 - HVAC POWER VENTILATORS FOR FURTHER INFORMATION.
- EQUIPMENT IS EXISTING, SHOWN FOR REFERENCE ONLY.
- HARD WIRE POWER, NO SWITCH.

### ACCESSORIES:

- BIRDSCREEN.
- GRAVITY DAMPER.
- WALL CAP.
- 277V TO 120V TRANSFORMER.
- ON/OFF SWITCH WITH BUILT IN OCCUPANCY SENSOR LOCATED PER ELECTRICAL PLANS.

## DIFFUSERS, REGISTERS AND GRILLES SCHEDULE

DRAWING CODE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	ALTERNATE APPROVED MANUFACTURERS	TYPE	SERVICE	NECK SIZE (IN.)	BRANCH CONN. SIZE (IN.)	MODULE SIZE (IN.)	MATERIAL	FINISH	MOUNTING	NOTES	ACCESSORIES
G1	PRICE	ASPD	METALAIRE, TITUS	PLAQUE SQUARE CEILING DIFFUSER	SUPPLY	60	60	24 X 24	ALUMINUM	WHITE	T-BAR	1,2	A
G2	PRICE	ASPD	METALAIRE, TITUS	PLAQUE SQUARE CEILING DIFFUSER	SUPPLY	60	80	24 X 24	ALUMINUM	WHITE	T-BAR	1,2	A
G3	PRICE	ASPD	METALAIRE, TITUS	PLAQUE SQUARE CEILING DIFFUSER	SUPPLY	100	100	24 X 24	ALUMINUM	WHITE	T-BAR	1,2	A
R1	PRICE	630	METALAIRE, TITUS	EGG CRATE GRILLE	RETURN	20 X 20	-	24 X 24	ALUMINUM	WHITE	T-BAR	1,2	A
E1	PRICE	630	METALAIRE, TITUS	EGG CRATE GRILLE	EXHAUST	20 X 20	-	24 X 24	ALUMINUM	WHITE	T-BAR	1,2	A

### NOTES:

- REFER TO SPECIFICATION SECTION 233713 - DIFFUSERS, REGISTERS, AND GRILLES FOR FURTHER INFORMATION.
- DUCT BRANCH CONNECTION SIZE TO BE EQUAL TO THE NECK SIZE OF DIFFUSER UNLESS NOTED OTHERWISE ON PLANS.

### ACCESSORIES:

- VOLUME DAMPER.

## MECHANICAL DEMOLITION NOTES

- THE MECHANICAL CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS FOR DEMOLITION REQUIREMENTS AND LAYOUT HIS WORK IN A COMPATIBLE AND COMPLEMENTARY MANNER. REMOVE ALL EQUIPMENT, DUCTWORK, SUPPORTS, CONTROLS, ACCESSORIES, ETC., AND MECHANICAL ITEMS MADE OBSOLETE BY THESE ALTERATIONS AS SHOWN IN THE MECHANICAL DRAWINGS. ALL ITEMS TO BE REMOVED OR MODIFIED MAY NOT BE SHOWN, HOWEVER, THIS CONTRACTOR SHALL REMOVE ANY MECHANICAL WORK AS REQUIRED BY THE CONSTRUCTION OR AS DIRECTED BY THE OWNER OR THE ENGINEER. SURVEY THE AFFECTED AREAS BEFORE SUBMITTING A BID.
- SCHEDULING OF DEMOLITION - COORDINATE SCHEDULING OF MECHANICAL DEMOLITION WORK WITH THE OWNER AND GENERAL CONTRACTOR SO AS TO MINIMIZE DISRUPTION OF THE OWNER'S USE OF THE FACILITIES AND MAINTAIN THE CONSTRUCTION SEQUENCE OF THE GENERAL CONTRACTOR. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INSTRUCTIONS CONCERNING PHASING AND SEQUENCE OF WORK.
- EXISTING MECHANICAL SYSTEMS - VERIFY CONDITION OF EXISTING MECHANICAL SYSTEMS TO BE REUSED SO THAT COMPLETE, FULLY OPERATIONAL AND RELIABLE SYSTEMS ARE OBTAINED AT THE COMPLETION OF THE WORK. NOTIFY ARCHITECT/ENGINEER OF ANY SYSTEMS FOUND TO BE OF QUESTIONABLE CONDITION.
- ALL EXISTING MECHANICAL EQUIPMENT AND DEVICES SHALL REMAIN UNLESS SPECIFICALLY NOTED TO BE REMOVED.
- DEMOLISHED MATERIALS - UNLESS SPECIFICALLY REQUESTED BY THE OWNER, ALL DEMOLISHED MECHANICAL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
- CUTTING AND PATCHING - PERFORM CUTTING AND PATCHING FOR MECHANICAL WORK SO AS TO MINIMIZE DAMAGE TO CEILINGS, FLOORS AND WALLS. REFER TO ARCHITECTURAL DRAWINGS AND GENERAL SPECIFICATIONS SECTIONS FOR SPECIFIC RESPONSIBILITIES REGARDING CUTTING AND PATCHING.
- THESE DRAWINGS ARE COMPILED BY THE ARCHITECT/ENGINEER FROM THE OWNER'S AS-BUILT RECORD DRAWINGS AND LIMITED FIELD VERIFICATION OF EXISTING CONDITIONS FOR THE PURPOSE OF INDICATING THE WORK REQUIRED AND ARE BELIEVED TO BE CORRECT. NOTWITHSTANDING, THE CONTRACTOR SHALL VERIFY ALL DUCTWORK, EQUIPMENT LOCATIONS, DIMENSIONS AND ALL FIELD CONDITIONS AFFECTING HIS WORK.
- WHERE MECHANICAL SYSTEMS PASS THROUGH THE DEMOLITION AREAS TO SERVE OTHER PORTIONS OF THE PREMISES, THEY SHALL REMAIN OR BE SUITABLY RELOCATED AND THE SYSTEM RESTORED TO NORMAL OPERATION. ADVISE THE ARCHITECT/ENGINEER IMMEDIATELY IF SUCH CONDITIONS ARE UNCOVERED BEFORE PROCEEDING WITH ADDITIONAL WORK.
- PROTECT ALL EXISTING LIFE SAFETY SYSTEMS, FIRE ALARM AND PUBLIC ADDRESS SYSTEMS AND MAINTAIN THEM IN OPERATION THROUGHOUT THE PROGRESS OF THE WORK. NOTIFY THE OWNER AND ARCHITECT/ENGINEER IN WRITING OF SHUTDOWNS ARE REQUIRED PRIOR TO ANY OUTAGE OF SERVICE. WHERE THE DURATION OF A PROPOSED OUTAGE CANNOT BE TOLERATED BY THE OWNER, PROVIDE TEMPORARY CONNECTIONS AS REQUIRED MAINTAINING SERVICE.
- SURVEY THE EFFECTED AREAS BEFORE SUBMITTING A BID AS ALL EXISTING CONDITIONS CANNOT BE COMPLETELY DEPICTED ON THE DRAWINGS AND SOME UNUSUAL CONDITIONS EXIST.

## MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

CLIMATE ZONE	3A - WARM/HUMID
WINTER DRY BULB:	23°F
SUMMER DRY BULB	95°F
INTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	70°F
SUMMER DRY BULB	75°F
RELATIVE HUMIDITY	60% RH
RENOVATED BUILDING HEATING LOAD:	175 MBH
RENOVATED BUILDING COOLING LOAD:	282 MBH
MECHANICAL SPACING CONDITIONING SYSTEM	SEE SCHEDULES
UNITARY	
DESCRIPTION OF UNIT:	SEE SCHEDULES
HEATING EFFICIENCY:	SEE SCHEDULES
COOLING EFFICIENCY:	SEE SCHEDULES
SIZE CATEGORY OF UNIT:	SEE SCHEDULES
BOILER	
SIZE CATEGORY, IF OVERSIZED STATE REASON:	N/A
CHILLER	
SIZE CATEGORY, IF OVERSIZED STATE REASON:	N/A



SEA-TECH  
HIGH SCHOOL  
RENOVATIONS  
PHASE 3

NEW HANOVER  
COUNTY  
SCHOOLS

**CBHF**  
Engineers, PLLC

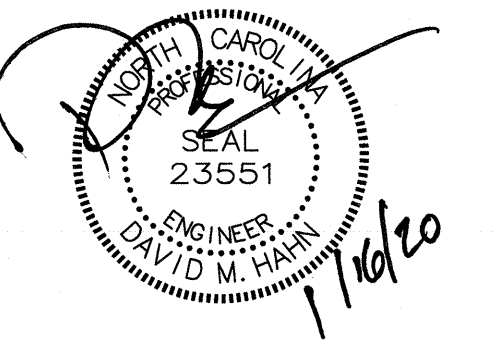
2246 Yeupon Drive  
Wilmington, NC 28403  
Phone: 910.791.4000  
Fax: 910.791.4266  
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CONSTRUCTION  
DOCUMENTS

NEW HANOVER COUNTY  
SCHOOLS PROJECT  
NUMBER: 20-9189

**LS3P**

**LS3P ASSOCIATES LTD.**  
2528 INDEPENDENCE BLVD., SUITE 200  
WILMINGTON, NORTH CAROLINA 28412  
TEL. 910.790.9901 FAX 910.790.3111  
WWW.LS3P.COM



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REVISIONS:

PROJECT: 7201-188080  
DATE: 01/17/2020  
DRAWN BY: GRM  
CHECKED BY: DMH

MECHANICAL  
PARTIAL HVAC  
PLAN

**M-101**

SOLUTIONS THROUGH LISTENING  
SERVICE BY DESIGN

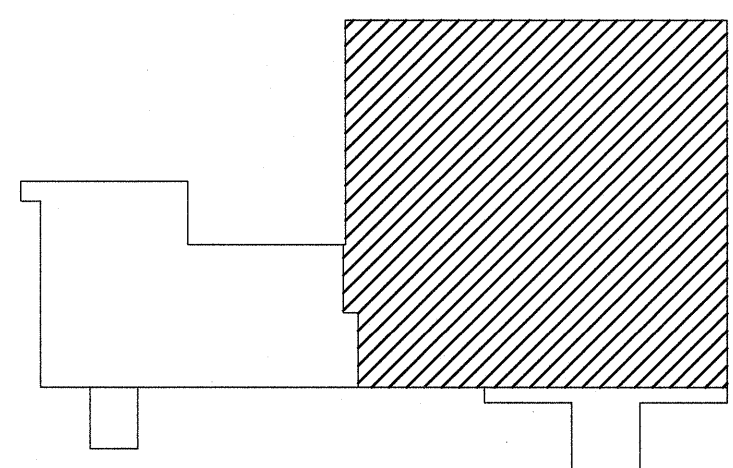
CONSTRUCTION KEYED NOTES

- 1 PROVIDE LITTLE GIANT VCM-20 SERIES CONDENSATE PUMP OR APPROVED EQUAL.
- 2 PROVIDE EQUIPMENT PAD 6" LARGER THAN EQUIPMENT FOOT PRINT. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- 3 RECONNECT REFRIGERANT PIPING TO RELOCATED AIR HANDLER.
- 4 RELOCATE THERMOSTAT / HUMIDISTAT.

FIRE RATING LEGEND

1 HR 1 HOUR FIRE BARRIER U.L.  
NO. U404  
2 HR 2 HOUR FIRE BARRIER U.L.  
NO. U805

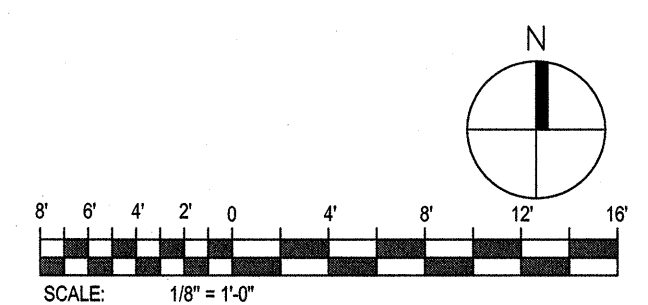
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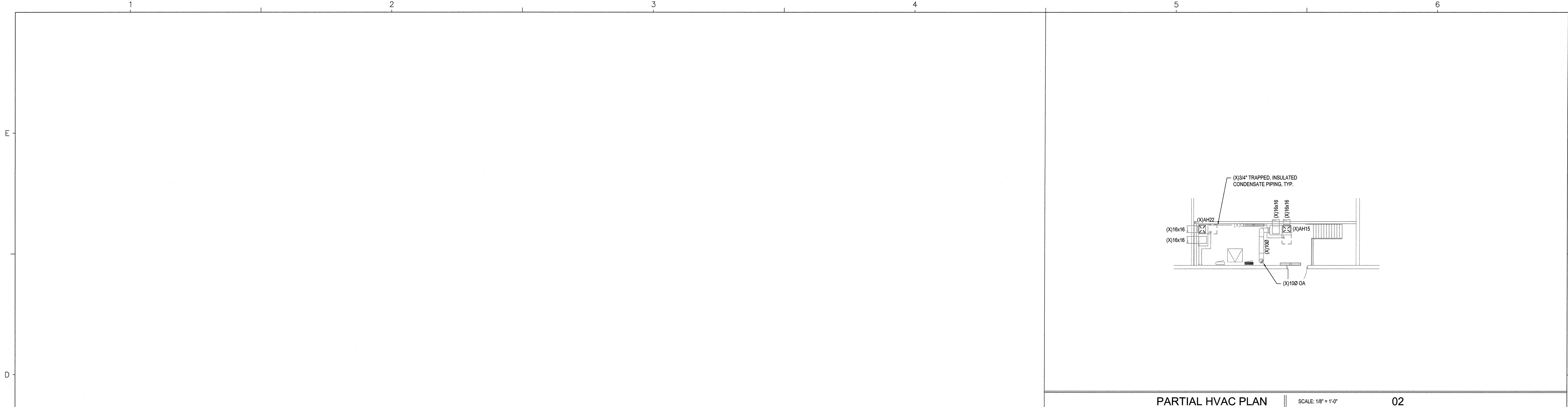
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PARTIAL HVAC PLAN || SCALE: 1/8" = 1'-0"

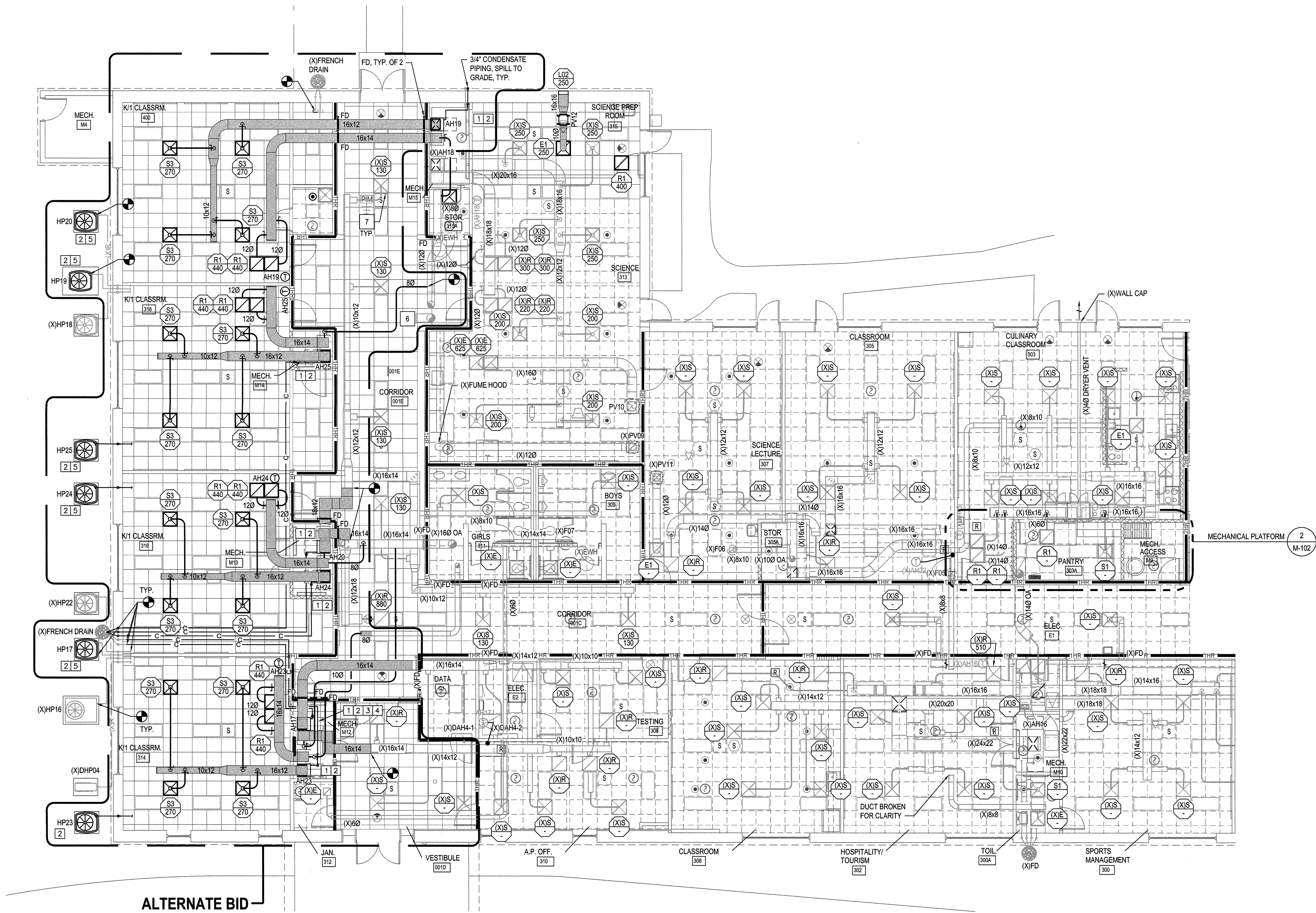
01







PARTIAL HVAC PLAN || SCALE: 1/8" = 1'-0" 02



ALTERNATE BID

PARTIAL HVAC PLAN || SCALE: 1/8" = 1'-0" 01

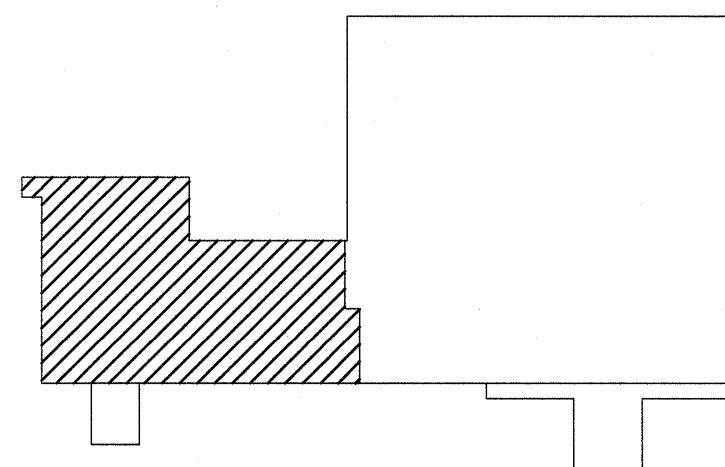
CONSTRUCTION KEYED NOTES

- 1 PROVIDE LITTLE GIANT VCM-A-20 SERIES CONDENSATE PUMP OR APPROVED EQUAL.
- 2 PROVIDE EQUIPMENT PAD 6" LARGER THAN EQUIPMENT FOOT PRINT. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- 3 PROVIDE STRUCTURAL STEPS/WALKWAY OVER DUCTWORK FOR MAINTENANCE ACCESS. SUBMIT FOR APPROVAL.
- 4 EXTEND NEW CONDENSATE PIPING FROM AHU TO WHERE EXISTING CONDENSATE PIPING WAS DEMOLISHED.
- 5 EXTEND NEW REFRIGERANT PIPING FROM AHU TO WHERE EXISTING REFRIGERANT PIPING WAS DEMOLISHED. CONTRACTOR MAY REUSE THE EXISTING REFRIGERANT PIPING IF THE SIZES ARE CORRECT FOR THE NEW EQUIPMENT BEING FURNISHED. IF THE SIZES ARE NOT CORRECT THE CONTRACTOR MUST REPLACE REFRIGERANT PIPING.
- 6 CAP UNUSED OUTSIDE AIR DUCT AND SEAL AIR-TIGHT.
- 7 CLEAN ALL INLETS / OUTLETS TO REMAIN AND BE INSTALLED IN NEW CEILING.

FIRE RATING LEGEND

- 1-HR 1 HOUR FIRE BARRIER U.L. NO. U404
- 2-HR 2 HOUR FIRE BARRIER U.L. NO. U905

FIRE LEGEND || SCALE: NO SCALE 00.2



KEY PLAN || SCALE: NO SCALE 00.1

SEA-TECH  
HIGH SCHOOL  
RENOVATIONS  
PHASE 3

NEW HANOVER  
COUNTY  
SCHOOLS

**CBHF**  
Engineers, PLLC

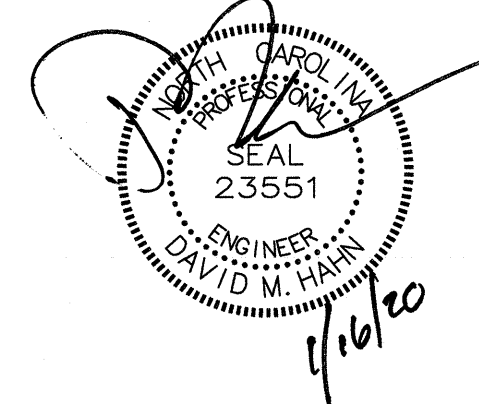
2246 Vaupen Drive  
Wilmington, NC 28403  
Phone: 910.791.4000  
Fax: 910.791.3566  
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CONSTRUCTION  
DOCUMENTS

NEW HANOVER COUNTY  
SCHOOLS PROJECT  
NUMBER: 20-9189

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REVISIONS:

PROJECT: 7201-188080  
DATE: 01/17/2020  
DRAWN BY: GRM  
CHECKED BY: DMH

MECHANICAL  
PARTIAL HVAC  
PLAN

M-102

SOLUTIONS THROUGH LISTENING  
SERVICE BY DESIGN







SEA-TECH  
HIGH SCHOOL  
RENOVATIONS  
PHASE 3

NEW HANOVER  
COUNTY  
SCHOOLS

**CBHF**  
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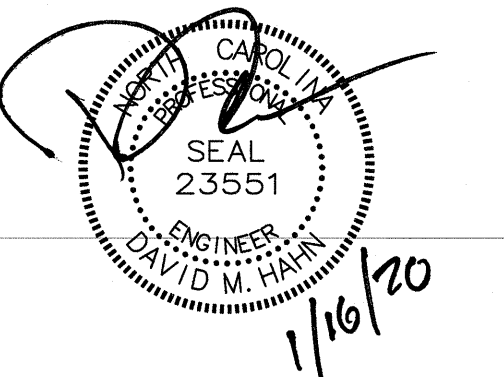
2246 Yaupon Drive  
Wilmington, NC 28403  
Phone: 910.791.4000  
Fax: 910.791.5299  
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REVISIONS:

PROJECT: 7201-188080  
DATE: 01/17/2020  
DRAWN BY: GRM  
CHECKED BY: DMH

MECHANICAL  
PARTIAL HVAC  
PLAN - DEMOLITION

**MD101**

SOLUTIONS THROUGH LISTENING  
SERVICE BY DESIGN

DEMOLITION KEYED NOTES

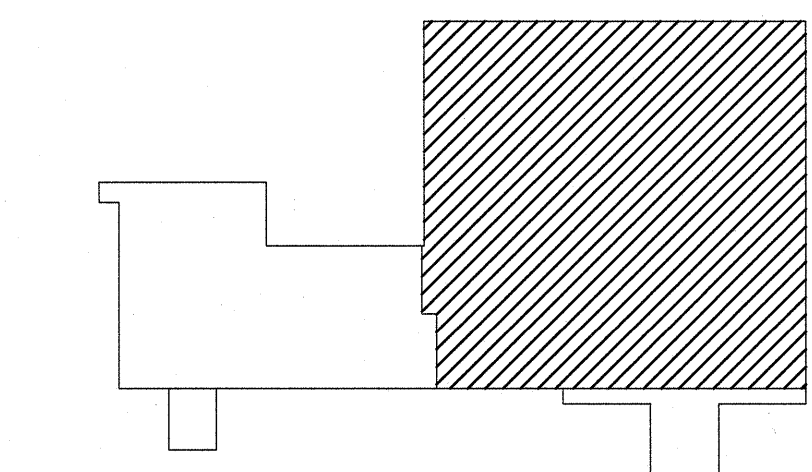
- 1 RELOCATE EXISTING AIR HANDLER. RECOVER REFRIGERANTS ACCORDING TO LOCAL AND STATE REQUIREMENTS. REFER TO NEW WORK PLAN FOR NEW LOCATION.
- 2 REMOVE AND DISPOSE OF DUCT WORK AND PIPING TO THE EXTENT INDICATED.
- 3 REMOVE AND DISPOSE OF DIFFUSER/GRILLE.
- 4 REMOVE AND DISPOSE OF EXISTING THERMOSTAT.
- 5 EXISTING THERMOSTAT/HUMIDISTAT TO BE RELOCATED. REFER TO M-101 FOR NEW LOCATION.

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NO. U404

2 HOUR FIRE BARRIER U.L.  
NO. U905

FIRE LEGEND SCALE: NO SCALE 00.2

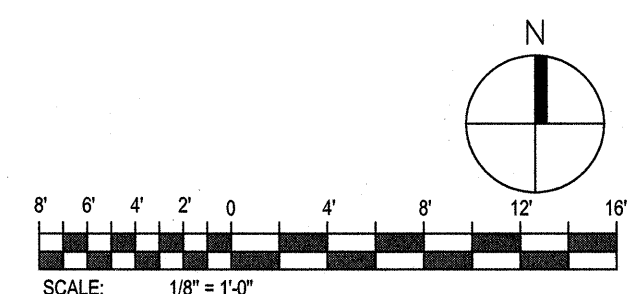


KEY PLAN SCALE: NO SCALE 00.1

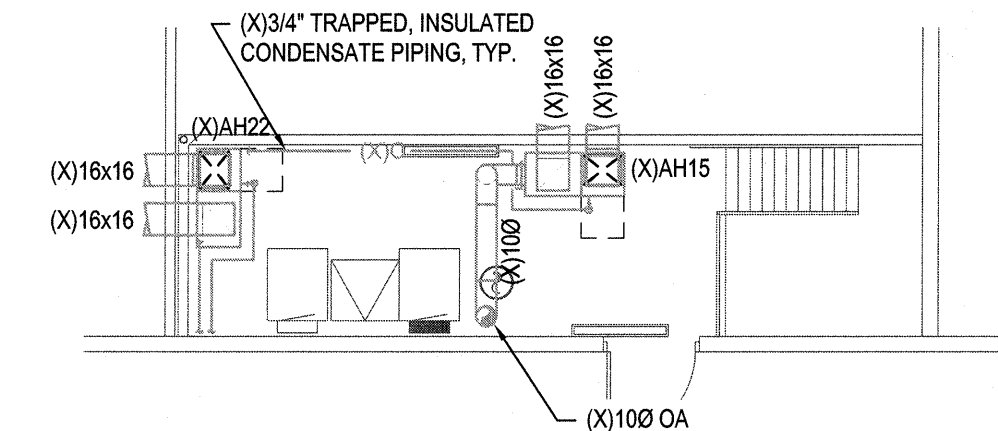
PARTIAL HVAC PLAN - DEMOLITION

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

01







PARTIAL HVAC PLAN

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

02

DEMOLITION KEYED NOTES

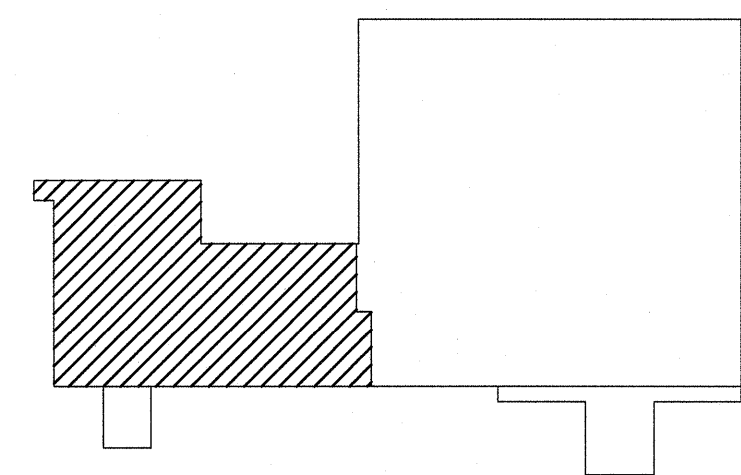
- 1 REMOVE AND DISPOSE OF AIR HANDLER. REMOVE AND DISPOSE OF DUCTWORK AND PIPING TO THE EXTENT INDICATED. RECOVER REFRIGERANTS ACCORDING TO LOCAL AND STATE REQUIREMENTS. TURN OVER REFRIGERANT TO NHCS MAINTENANCE DEPARTMENT. PREPARE REMAINING CONDENSATE AND REFRIGERANT PIPING TO BE REUSED WITH NEW, RELOCATED AIR HANDLER. CONTROLS TO BE REUSED.
- 2 REMOVE AND DISPOSE OF CONDENSING UNIT. REMOVE AND DISPOSE OF PIPING TO THE EXTENT REQUIRED TO INSTALL NEW EQUIPMENT. RECOVER REFRIGERANTS ACCORDING TO LOCAL AND STATE REQUIREMENTS. TURN OVER REFRIGERANT TO NHCS MAINTENANCE DEPARTMENT. PREPARE REMAINING CONDENSATE AND REFRIGERANT PIPING TO BE REUSED WITH NEW CONDENSING UNIT. CONTROLS TO BE REUSED.
- 3 REMOVE AND DISPOSE OF EXHAUST FAN. REMOVE AND DISPOSE OF DUCTWORK. PREPARE ROOF CURB FOR ACCEPTANCE OF INSULATED CURB CAP.
- 4 REMOVE AND DISPOSE OF DUCT WORK AND PIPING TO THE EXTENT INDICATED.
- 5 REMOVE AND DISPOSE OF DIFFUSER/GRILLE.
- 6 REMOVE AND DISPOSE OF EXISTING THERMOSTAT.
- 7 REMOVE AND DISPOSE OF DUCT SMOKE DETECTOR.

FIRE RATING LEGEND

1 HOUR FIRE BARRIER U.L.  
NO. U404

2 HOUR FIRE BARRIER U.L.  
NO. U905

FIRE LEGEND || SCALE: NO SCALE 00.2



KEY PLAN || SCALE: NO SCALE 00.1

PARTIAL HVAC PLAN - DEMOLITION

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

01

