#### **SCOPE OF WORK**

REPLACE THE EXISTING 5.0 TON GAS FURNACE AHU SPLIT UNIT WITH NEW 5.0 TON GAS FURNACE AHU SPLIT UNIT. PROVIDE NEW DUCTWORK AND NECESSARY ACCESSORIES FOR COMPLETE HVAC SYSTEM.

PROVIDE ONE NEW RESTROOM EXHAUST FAN & PROVIDE ONE NEW KITCHEN EXHAUST FAN.

COORDINATE WITH GC ANY ADDITIONAL ON KITCHEN EXHAUST SYSTEMS AND WITH GC AND PLUMBING CONTRACTOR PROVIDING CONDENSATE LINES FOR MECHANICAL EQUIPMENT AND GAS FLUE FOR WATER HEATERS

#### **MECHANICAL PLAN NOTES**

- A. REPLACE THE EXISTING 5.0 TON GAS FURNACE AHU SPLIT UNIT WITI NEW 5.0 TON GAS FURNACE AHU SPLIT UNIT. PROVIDE NEW DUCTWORK AND NECESSARY ACCESSORIES FOR COMPLETE HVAC SYSTEM. PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AIR DUCT CONNECTIONS. INSTAL FIRE DAMPERS IN ANY FIRE WALLS AND BETWEEN FLOORS. PROVIDE DUCTWORK AND AIR DISTRIBUTION DEVICES AS INDICATED ON THE PLAN. REFER TO UNIT SCHEDULE FOR ADDITIONAL REQUIREMENTS.
- FOR SYSTEM OVER 2,000 CFM CHECK FOR RETURN AIR DUCT MOUNTED AIR SMOKE DETECTORS AND THAT MEET THE REQUIREMENTS OF U 268A, INTERLOCKED TO SHUTDOWN ROOF TOP UNIT UPON DETECTION OF SMOKE. IF NECESSARY PROVIDE SMOKE DETECTOR WITH AN ANNUNCIATOR, ALARM AND POWER L.E.D.'S FOR VISIBLE AND AUDIBLE ALARM SIGNAL, AND VISIBLE TROUBLE SIGNAL. MOUNT ANNUNCIATOR ON ROOM SIDE OF CEILING. SMOKE DETECTOR SHALL MEET UL268A
- ALL DUCTS SHALL BE MINIMUM 26 GAUGE SHEET METAL WITH EXTERNAL DUCT WRAP INSULATION FOR CONCEALED DUCTS AND ALL EXPOSED DUCTS WITH INTERNAL INSULATION. ALL DUCTS TO BE MANUFACTURED AND INSTALLED ACCORDING TO ASHRAE AND SMACNA METAL DUCT CONSTRUCTION STANDARD, LATEST EDITION. ALL MATERIALS WILL CONFORM TO NFPA 90A.
- FACTORY-MADE FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOW OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE.
- THERMOSTATS SHALL BE 7-DAY PROGRAMMABLE TYPE. MOUNT THERMOSTAT 48" A.F.F. COORDINATE LOCATION OF THERMOSTAT.
- ALL INTERIOR AIR DUCTS WITH INSULATION SHALL HAVE A MINIMUM O THICKNESS OF 1.5", R-6 INSULATION AND EXTERIOR DUCTS SHALL HAVE
- 6. ALL SEAMS, JOINTS, ETC WILL BE SEALED TO MAKE AIR DUCT AIRTIGHT PRESSURE SENSITIVE MATERIALS AND OTHERS APPROVED BY LATEST SMACNA. SEALING MATERIALS WILL BE USED.
- ALL EVAPORATOR UNITS SHALL HAVE A FLOAT SWITCH TO CONTROL OVERFLOW THAT WILL AUTOMATICALLY SHUT DOWN THE A/C SYSTEM THE DEVICE SHALL BE ATTACHED TO THE SECONDARY DRAIN OUTLET ON THE UNIT.
- ALL NEW AHU CONDENSATE DRAINS WILL BE PVC FULL DIAMETER OF OUTLET AND WILL TERMINATE IN THE NEAREST APPROVED PLACE OF
- ALL EQUIPMENT AND MATERIALS WILL BE INSTALLED ACCORDING T THE MANUFACTURER'S INSTRUCTIONS AND ACCORDING TO THE BEST
- HANGER ATTACHMENTS TO THE STEEL STRUCTURE WILL BE RATED POWDER ACTUATED FASTENERS, "C" CLAMPS, WELDED STUDS, CLAMP HANGERS JOIST CLAMPS OR OTHER METHODS RECOMMENDED BY SMACNA'S "METAL AND FLEXIBLE STANDARDS". CHAPTER 4. AND WILL HAVE A MINIMUM SAFETY MARGIN OF 4:1. SUSPENDED FROM TOP CHORD OF JOISTS, NOTHING FROM DECK OR CROSS BRACING.
- ALL HVAC CONTROLS AND CONTROL WIRING SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.

#### **GENERAL NOTES**

- CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET. PAY SPECIAL ATTENTION TO THE RESPONSIBILITY SCHEDULE. WORK DESIGNATED ON SCHEDULE SHALL BE CONSIDERED INCLUDED IN YOUR SCOPE OF WORK AND CONTRACT AMOUNT.
- CONTRACTOR TO VERIFY THAT ALL EQUIPMENT SHOWN AS EXISTING MATCHES THE DESCRIPTIONS AND SPECIFICATIONS SHOWN ON DRAWINGS AND SCHEDULES. IF DIFFERENT NOTIFY ARCHITECT/ENGINEER BEFORE BIDDING, ORDERING, OR PROCEEDING WITH WORK.
- DRAWINGS/DETAILS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL AND SITE CONDITIONS SHALL GOVERN EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, AND CHECK/COORDINATE DRAWINGS OF ALL TRADES.
- COORDINATE WITH THE WORK OF OTHERS SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE DUCT RISES AND DRIPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.
- DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
- ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- USE OF COMBUSTIBLE MATERIALS IS NOT ALLOWED IN THE RETURN AIR PLENUM. MATERIALS USED IN THE PLENUM SHALL HAVE FLAME SPREAD RATING NOT TO EXCEED 25, AND SMOKE DEVELOPED RATING NOT TO EXCEED 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84. ALL EXPOSED WIRING IN THE PLENUM SHALL BE PLENUM RATED.
- VERIFY LOCATION OF PERMISSIBLE NEW STRUCTURAL ROOF PENETRATIONS AND ADAPT THE REQUIRED DUCTS ACCORDINGLY. THE OPENINGS MUST BE LOCATED USING A REBAR LOCATOR, TRYING TO LEAVE A TRANSVERSE BAR WITHIN 4" FROM THE OPENING. LOCATE OPENINGS AT MID-DISTANCE BETWEEN THE STEMS OF THE DOUBLE TEE AND LONGITUDINAL REINFORCEMENT SHALL NEVER BE CUT. CALL THE ARCHITECT'S OFFICE IN CASE OF UNEXPECTED DIFFICULTIES.
- ALL A/C AND FRESH AIR ROUND EXPOSED DUCTS WILL BE SPIRAL GALVANIZED AND READY FOR PAINTING. ALL RECTANGULAR DUCTS OVER CEILINGS MAY BE SHEET METAL WITH EXTERNAL INSULATION AND EXPOSED DUCTS SHALL BE INTERNALLY INSULATED.
- CONTRACTOR TO FLASH AND SEAL ALL ROOF PENETRATIONS TO MAINTAIN ROOFING WARRANTY.

G.C. SHALL CONTRACT LANDLORD-APPROVED ROOFING

- IF APPLICABLE CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR KITCHEN VENTILATION SYSTEM INCLUDING TYPE 1 HOOD AND FOR THE WALK-IN COOLER & FREEZER REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING
- CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK. M. CONSTRUCTION "AS BUILT" DRAWINGS AND DOCUMENTS SHALL BE PROVIDED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE

OF ACCEPTANCE AND PROVIDE COPY TO LL.

OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER.

#### THERMOSTATIC CONTROLS

PROVIDED FOR EACH HUMIDITY CONTROL SYSTEM.

THAN 50 CONTIGUOUS FEET (15 240 MM).

A. C403.4.1 THERMOSTATIC CONTROLS (MANDATORY) THE SUPPLY OF HEATING AND COOLING ENERGY TO EACH ZONE SHALL BE CONTROLLED BY INDIVIDUAL THERMOSTATIC CONTROLS CAPABLE OF RESPONDING TO TEMPERATURE WITHIN THE ZONE. WHERE HUMIDIFICATION OR DEHUMIDIFICATION OR BOTH IS PROVIDED, NOT FEWER THAN ONE HUMIDITY CONTROL DEVICE SHALL BE

- INDEPENDENT PERIMETER SYSTEMS THAT ARE DESIGNED TO OFFSET ONLY BUILDING ENVELOPE HEAT LOSSES, GAINS OR BOTH SERVING ONE OR MORE PERIMETER ZONES ALSO SERVED BY AN INTERIOR SYSTEM PROVIDED THAT BOTH OF THE FOLLOWING CONDITIONS ARE MET:
- 2. THE PERIMETER SYSTEM INCLUDES NOT FEWER THAN ONE THERMOSTATIC CONTROL ZONE FOR EACH BUILDING EXPOSURE HAVING EXTERIOR WALLS FACING ONLY ONE ORIENTATION (WITHIN ± 45 DEGREES) (0.8 RAD) FOR MORE
- THE PERIMETER SYSTEM HEATING AND COOLING SUPPLY IS CONTROLLED BY THERMOSTATS LOCATED WITHIN THE ZONES SERVED BY THE SYSTEM.

#### B. C403.4.1.2 DEADBAND (MANDATORY)

- WHERE USED TO CONTROL BOTH HEATING AND COOLING, ZONE THERMOSTATIC CONTROLS SHALL BE CONFIGURED TO PROVIDE A TEMPERATURE RANGE OR DEADBAND OF NOT LESS THAN 5°F (2.8°C) WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS SHUT OFF OR REDUCED TO A MINIMUM. **EXCEPTIONS:**
- 1. THERMOSTATS REQUIRING MANUAL CHANGEOVER BETWEEN HEATING AND
- 2. OCCUPANCIES OR APPLICATIONS REQUIRING PRECISION IN INDOOR TEMPERATURE CONTROL AS APPROVED BY THE CODE OFFICIAL.
- C. C403.4.1.3 SETPOINT OVERLAP RESTRICTION (MANDATORY) WHERE A ZONE HAS A SEPARATE HEATING AND A SEPARATE COOLING THERMOSTATIC
- CONTROL LOCATED WITHIN THE ZONE, A LIMIT SWITCH, MECHANICAL STOP OR DIRECT DIGITAL CONTROL SYSTEM WITH SOFTWARE PROGRAMMING SHALL BE CONFIGURED TO PREVENT THE HEATING SETPOINT FROM EXCEEDING THE COOLING SETPOINT AND TO MAINTAIN A DEADBAND IN ACCORDANCE WITH SECTION C403.4.1.2.
- D. C403.4.2 OFF-HOUR CONTROLS (MANDATORY) EACH ZONE SHALL BE PROVIDED WITH THERMOSTATIC SETBACK CONTROLS THAT ARE CONTROLLED BY EITHER AN AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROL
- **EXCEPTIONS** ZONES THAT WILL BE OPERATED CONTINUOUSLY.
- 2. ZONES WITH A FULL HVAC LOAD DEMAND NOT EXCEEDING 6,800 BTU/H (2 KW) AND HAVING A MANUAL SHUTOFF SWITCH LOCATED WITH READY ACCESS.
- E. C403.4.2.1 THERMOSTATIC SETBACK (MANDATORY)
- THERMOSTATIC SETBACK CONTROLS SHALL BE CONFIGURED TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C).
- F. C403.4.2.2 AUTOMATIC SETBACK AND SHUTDOWN (MANDATORY) AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROLS SHALL BE CAPABLE OF STARTING AND STOPPING THE SYSTEM FOR SEVEN DIFFERENT DAILY SCHEDULES PER WEEK AND RETAINING THEIR PROGRAMMING AND TIME SETTING DURING A LOSS OF POWER FOR NOT FEWER THAN 10 HOURS. ADDITIONALLY, THE CONTROLS SHALL HAVE
- FOR UP TO 2 HOURS; OR AN OCCUPANCY SENSOR.
- G. C403.4.2.3 AUTOMATIC START (MANDATORY) AUTOMATIC START CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM. THE CONTROLS SHALL BE CONFIGURED TO AUTOMATICALLY ADJUST THE DAILY START TIME OF THE HVAC SYSTEM IN ORDER TO BRING EACH SPACE TO THE DESIRED OCCUPIED TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY.

A MANUAL OVERRIDE THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP

TO 2 HOURS; A MANUALLY OPERATED TIMER CONFIGURED TO OPERATE THE SYSTEM

## SPLIT (GAS HEAT) SYSTEM SCHEDULE

UNIT TAG	AHU-1(N)
UNIT TYPE	GAS HEAT
AREA SERVED	REFER PLAN
SUPPLY AIR (CFM)	2000
OUTSIDE AIR (CFM)	460
STATIC PRESS. (E.S.P INCH OF W.C.)	0.7
MANUFACTURER	TRANE (OR EQUIVALENT)
MODEL NO.	4PXACU60BS3HAA + S9V2C080U5PSBB (OR EQUIVALENT)
WEIGHT, LBS	215
VOLTS/PH/HZ	120/1/60
M.C.A. & MAX. CKT. BRKR. AMPS	13.9 & 15
TOTAL COOLING CAPACITY (MBH)	60.5
TOTAL SENSIBLE CAPACITY (MBH)	44.8
NOM. HEATING CAPACITY IN GAS (MBH)	80
NOM. HEATING CAPACITY OP GAS (MBH)	77.6
AFUE (%)	96
UNIT TAG	ACCU-1 (N)
AIR HANDLER SERVED	AHU-1(N)
CAPACITY	5.0 TR
REFRIGERANT	R410A
TOT. COOLING CAP. (MBH)	60.5
COOLING SENS. CAP. (MBH)	44.8
COMPRESSOR RLA/LRA	16.2/110
OUTDOOR FAN FLA	1.3
VOLTS-PH-HZ	208/2 <mark>30-3</mark> -60
M.C.A. & MAX. CKT. BRKR. AMPS	22 & 35
MANUFACTURER	TRANE (OR EQUIVALENT)
MODEL	4TTA7060A (OR EQUIVALENT)
SEER	16.5
WEIGHT, LBS	300

. PROVIDE LOW/HIGH PRESSURE CONTROL.

- 2. COORDINATE FINAL LOCATION OF INDOOR AND OUTDOOR UNIT WITH
- ARCHITECT/OWNER/LANDLORD. 3. SUPPLY AIR CFM BASED ON HIGH SPEED
- 4. REFRIGERANT R410A SHALL BE PROVIDED.
- 5. PROVIDE LOW AMBIENT CONTROL.
- 6. PROVIDE HOT GAS BYPASS.
- ALL REFRIGERANT PIPING TO BE SIZED PER MANUFACTURERS RECOMMENDATIONS.
- 8. CONTRACTOR SHALL PROVIDE A LONG LINE SET FOR REFRIGERANT PIPING IN THE EVENT THAT TOTAL REFRIGERANT LENGTH EXCEEDS THE MANUFACTURER'S STANDARD RECOMMENDED LENGTH.
- PROVIDE DRAIN PAN WITH WATER LEAK DETECTOR.
- 10. VERIFY ALL DATA WITH MANUFACTURER PRIOR TO ORDERING EQUIPMENT. 11.PROVIDE CONDENSATE DRAIN PUMP IF REQUIRED. ROUTE CONDENSATE DRAIN FROM AHU-1(N) TO THE NEAREST PLUMBING DRAIN POINT WITH APPROVED MANNER. COORDINATE WITH PLUMBING CONTRACTOR.
- 12.PROVIDE GAS FLUE VENTS AND COMBUSTION AIR INTAKES TO AHUS AS PER MANUFACTURER'S INSTRUCTION.

#### OCCUPANCY CALCULATION PER 2020 NYS MECHANICAL CODE, TABLE 403.3.1.1 CARRYOUT 314 SQ. FT. @30 PEOPLE/1000SQ.FT. 10 PEOPLE FRONT SERVICE 194 SQ. FT. @20 PEOPLE/1000SQ.FT. 4 PEOPLE 339 SQ. FT. @20 PEOPLE/1000SQ.FT. 7 PEOPLE KITCHEN TOTAL 21 PEOPLE VENTILATION REQUIREMENTS PER 2020 NYS MECHANICAL CODE TABLE 402 2 4 4

MECHANICAL CODE, TABLE 403.3.1.1							
CARRYOUT	314 SQ. FT. X 0.06 CFM/SQ. FT. =	19	CFM				
	10 PEOPLE. X 5 CFM/PEOPLE. =	50	CFM				
FRONT SERVICE	194 SQ. FT. X 0.12 CFM/SQ. FT. =	23	CFM				
	4 PEOPLE. X 7.5 CFM/PEOPLE. =	30	CFM				
BACK OK KITCHEN	339 SQ. FT. X 0.12 CFM/SQ. FT. =	41	CFM				
	7 PEOPLE. X 7.5 CFM/PEOPLE. =	53	CFM				
HALLWAY	91 SQ. FT. X 0.06 CFM/SQ. FT. =	6	CFM				
STORAGE	64 SQ. FT. X 0.12 CFM/SQ. FT. =	8	CFM				
OUTSIDE AIR REQUI	RED	230	CFM				
FRONT SERVICE +	533 SQ. FT. X 0.7 CFM/SQ. FT. =	373	CFM				
BACK OF KITCHEN							
RESTROOM	70 CFM PER FIXTURE	70	CFM				
EXHAUST AIR REQU	IRED	443	CFM				
OUTSIDE AIR THROU	JGH A <mark>HU-</mark> 1(N)	460	CFM				
AIR BALANCE							
O/A PROVIDED		+460	CFM				
KEF-1(N)		-380	CFM				
BEF-1(N) (@70 CFM)		-70	CFM				

DIFFUSER SCHEDULE							
MANUFACTURER	TITUS	TITUS	TITUS	TITUS			
DESIGNATION	А	В	R	E			
USE	SUPPLY	SUPPLY	RETURN	EXHAUST			
MODEL	TDC-AA	TDC-AA	56 FL	56 FL			
MOUNTING	CEILING	CEILING	CEILING	CEILING			
LOCATION	AS SHOWN	BATHROOM	AS SHOWN	AS SHOWN			
FACE SIZE	24" X 24"	12"X12"	24" X 24"	24" X 24"			
NECK SIZE	REFER TABLE - A	REFER TABLE - A	-	-			
FRAME TYPE	LAY IN	LAY IN	LAY IN	LAY IN			
ACCESSORIES	VOLUME DAMPER	VOLUME DAMPER	VOLUME DAMPER	VOLUME DAMPER			

1. MAX. NC LEVEL 30 OR LESS. 2. PROVIDE SQUARE TO ROUND NECK ADAPTOR. 3. COORDINATE WITH ARCHITECT FOR PAINT AND FINISH. 4. PROVIDE 4-WAY AIR THROW PATTERN UNLESS NOTED OR INDICATED. 5. PROVIDE INSULATED BACKS ON ALL DIFFUSERS.

NECK SIZE	TABLE - A
NECK SIZE DIA	CFM RANGE
Ø6"	0-100
Ø8"	101-200
Ø10"	201-400
Ø12"	401-600

FAN SCHEDULE										
DESIGNATION	STATUS	QTY.	MANUFACTURER	MODEL	CFM	E.S.P (IN. WG)	AMPS	WEIGHT (LBS)	V/Ph/Hz	NOTES
KEF-1(N)	NEW	1	GREENHECK	CSP-A510	380	0.5	103 WATTS	50	115/1/60	1,3,4,5
BEF-1(N)	NEW	1	GREENHECK	SP-A90	70	0.3	0.17	21	115/1/60	1,2,4

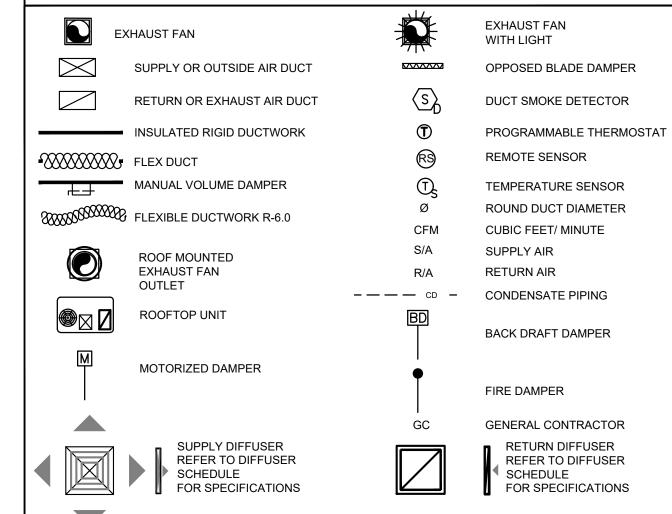
+10 CFM

1. PROVIDE DISCONNECT SWITCH.

**UILDING PRESSURE** 

- 2. FAN SHALL INTERLOCK WITH AHU-1(N) OR PROVIDE 24-HOUR TIME CLOCK. COORDINATE FINAL REQUIREMENT AND INTERCONNECTION WITH OWNER.
- 3. PROVIDE NECESSARY ACCESS DOOR FOR THE FAN IF PLACED ABOVE HARD CEILING.
- 4. PROVIDE BACK DRAFT DAMPER.
- 5. FAN SHALL INTERLOCK WITH AHU-1(N)

## **MECHANICAL SYMBOLS**



NOTE: THIS PROJECT MAY NOT USE EVERY SYMBOL OR DEVICE APPEARING ON THIS LEGEND.

## CITY KINGS PARK BUILDING DEP. NOTES

ALL WORK SHALL COMPLY WITH APPLICABLE SECTIONS OF 2020 NEW YORK STATE BUILDING CODE AND ALL AMENDMENTS AND RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS TO DATE.

THE LICENSED PROFESSIONAL ENGINEER, ARCHITECT OR OTHER PERSON HAVING NOT LESS THAN FIVE (5) YEARS EXPERIENCE SUPERVISING THE INSTALLATION OF SUCH MECHANICAL SYSTEMS AND CONDUCTING SUCH TESTS WILL FILE DOCUMENTATION AND REPORTS OF TESTS THAT THE SYSTEM COMPLIES WITH THE CONSTRUCTION DOCUMENTS AND APPLICABLE LAWS.

TESTS OF MECHANICAL SYSTEMS SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING SECTIONS OF THE 2020 NEW YORK

- STATE MECHANICAL CODE: A. VENTILATION SYSTEM SERVING COMMERCIAL COOKING APPLIANCES - 2020 NEW YORK STATE MECHANICAL CODE 506
- THE FOLLOWING WORK ITEMS, COMPONENTS, MATERIALS, CAPACITIES, ETC. SHALL COMPLY WITH THE REFERENCED CODE OR STANDARD:
- A. DUCT CONSTRUCTION AND INSTALLATION- 2020 NEW YORK STATE MECHANICAL CODE 603
- B. AIR INTAKES, EXHAUSTS AND RELIEF 2020 NEW YORK STATE MECHANICAL CODE 401.5
- C. GAS FIRED EQUIPMENTS 2020 NEW YORK STATE FUEL GAS CODE

METHOD AND CONTRACTOR TO SUBMIT THE AIR - BALANCE REPORT TO INSPECTOR.

- D. AIR FILTERS 2020 NEW YORK STATE MECHANICAL CODE 605 MINIMUM TEMPERATURE TO BE MAINTAINED IN OCCUPIED SPACES DURING HEATING SEASON: 68 DEG. FAHRENHEIT.
- VENTILATION FOR ALL AREA SHALL COMPLY WITH 2020 NEW YORK STATE MECHANICAL CODE 401.
- A STATEMENT SHALL BE FILED BY THE OWNER OR TENANT IN POSSESSION THAT THE VENTILATION SYSTEM WILL BE KEPT IN CONTINUOUS OPERATION AT ALL TIMES DURING THE NORMAL OCCUPANCY OF THE STRUCTURE AS REQUIRED BY 2020 NEW YORK STATE MECHANICAL CODE 403.3

VENTILATION SYSTEMS SHALL BE BALANCED TO MAINTAIN THE MINIMUM VENTILATION AIRFLOW RATE AS PER VENTILATION

REQUIREMENT TABLE - 2020 NEW YORK STATE MECHANICAL CODE 403.3.1.5 . THIS SYSTEM SHALL BE BALANCED BY APPROVED

- REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED FIRE-RATED WALL AND SMOKE WALL CONSTRUCTION AND LOCATION. THESE PLANS ARE APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS
- SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES. ALL HEATING AND COOLING LOADS CALCULATED PER ASHRAE/ACCA 183. ). SMOKE DETECTOR SHALL MEET UL268A.

## **HVAC PIPING INSULATION NOTES**

- ALL INSULATION MATERIALS, INCLUDING JACKETS, FACING, ADHESIVE, COATINGS, AND ACCESSORIES ARE TO BE FIRE HAZARD RATED AND LISTED BY UNDERWRITERS LABORATORIES, INC. USING STEINER TUNNEL TEST METHOD FOR FIRE HAZARD CLASSIFICATION OF BUILDING MATERIALS, STANDARD UL 723 (ASTM E-84), (ASA A2.5-1963). FLAMESPREAD: MAXIMUM 25. FUEL CONTRIBUTED AND SMOKE DEVELOPED: MAXIMUM 50. FLAMEPROOFING TREATMENTS SUBJECT TO DETERIORATION FROM
- MOISTURE OR HUMIDITY ARE NOT ACCEPTABLE. EXPOSED: INDOOR DUCTS, PIPING OR EQUIPMENT LOCATED IN MECHANICAL EQUIPMENT ROOMS AND IN AREAS WHICH WILL BE
- VISIBLE WITHOUT REMOVING CEILINGS OR OPENING ACCESS PANELS. CONCEALED: INDOOR DUCTS, PIPING OR EQUIPMENT WHICH IS NOT EXPOSED.

#### 4. OUTDOOR: DUCTS, PIPING OR EQUIPMENT WHICH IS EXPOSED TO THE WEATHER MINIMUM REFRIGERANT PIPE INSULATION THICKNESS (IN.)

WINNINGWITE HIGHANT II E INSCENTON THICKNESS (III.)									
FLUID	INSULATION CON	IDUCTIVITY	NOMINAL PIPE OR TUBE SIZE (IN.)						
OPERATING TEMP. RANGE & USAGE (°F)	CONDUCTIVITY BTU.IN./(H.FT <sup>2</sup> .°F)	MEAN RATING TEMP., °F	<1	1 TO<1-1/2	1-1/2 TO <4	4 TO <8	≥8		
40 — 60	0.21 — 0.27	75	0.5	0.5	1.0	1.0	1.0		
< 40	0.20 — 0.26	50	0.5	1.0	1.0	1.0	1.5		

SOBO]

REVISIONS DATES:

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PROJECT

PROFESSIONAL SEAL

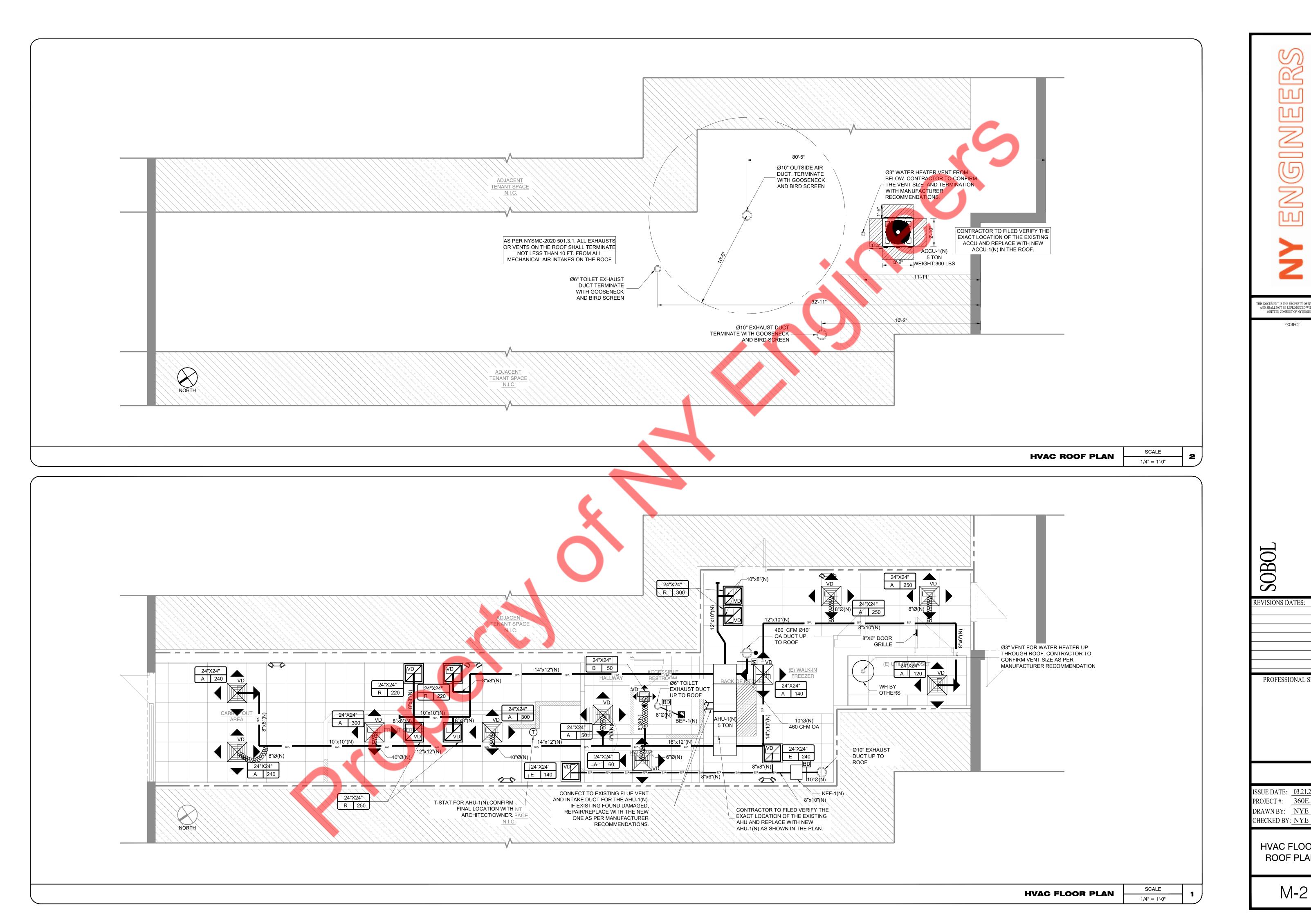
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**HVAC NOTES &** 

SCHEDULES



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PROJECT #: \_360E.1346E DRAWN BY: NYE

> **HVAC FLOOR & ROOF PLANS**

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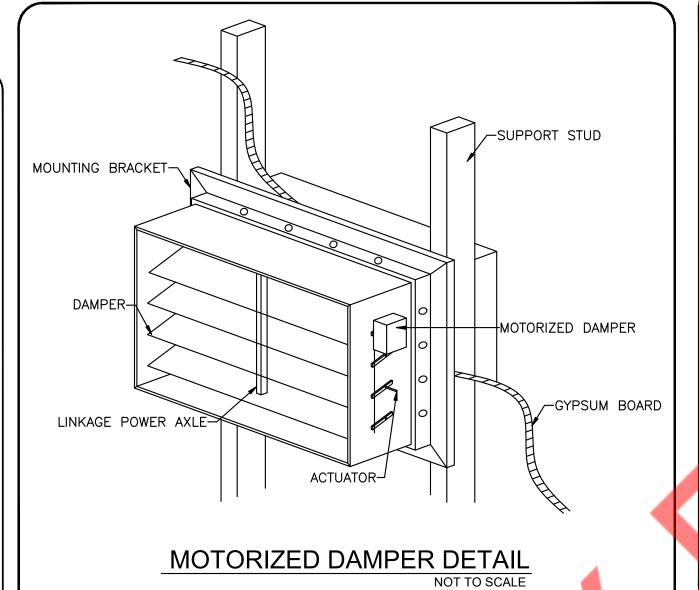
PROFESSIONAL SEAL

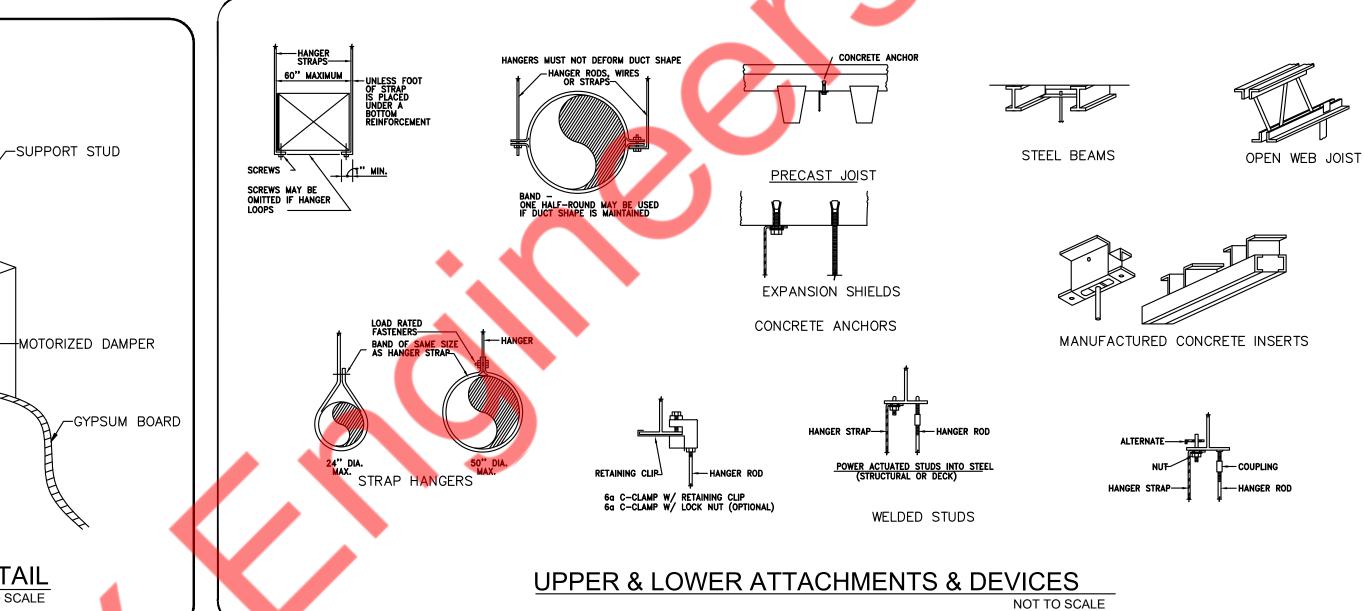
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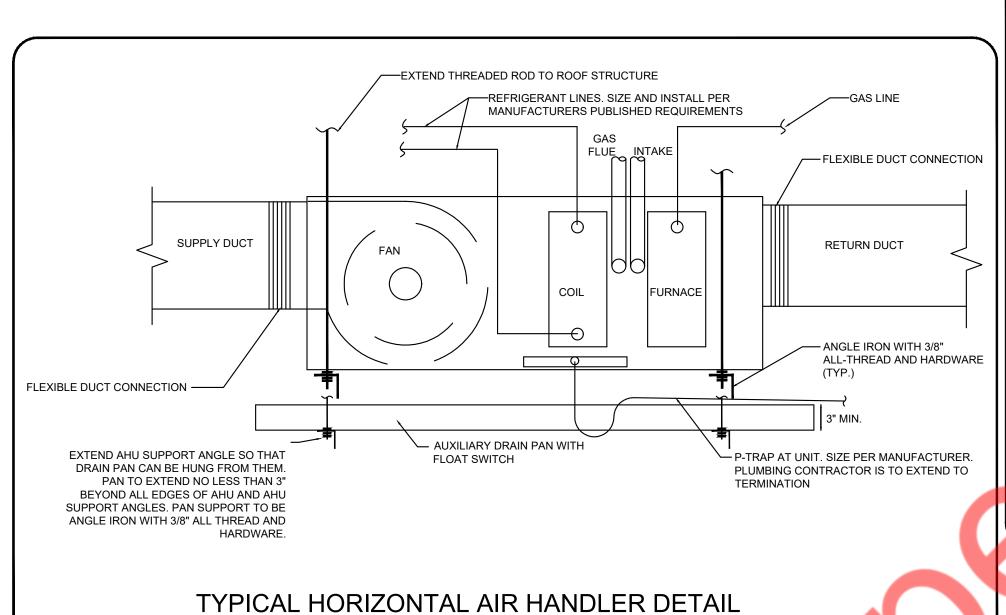
> **MECHANICAL DETAILS**

> > M-3

-SUPPORT STUD MOUNTING BRACKET-DAMPER-MOTORIZED DAMPER \_GYPSUM BOARD LINKAGE POWER AXLE-ACTUATOR-MOTORIZED DAMPER DETAIL







DUCT SMOKE DETECTORS REMOTE TEST SWITCH WILL BE PROVIDED WITH AN AUDIO/VISUAL LED INDICATOR, LOCATED IN A NORMALLY OCCUPIED AREA 48" AFF. NFPA 90A 6-4.4.3(1), & (2) 2015 EDITION.

THE ACTIVATION OF THE DUCT DETECTOR, SHALL SHUT A/C UNITS DOWN IMMEDIATELY, WITHOUT DELAY.

DUCT SMOKE DETECTOR SHALL BE CONNECTED TO BUILDING FIRE ALARM SYSTEM TO ACTIVATE

BUILDING FIRE ALARM IF ONE IS PRESENT.

ALARM | O | POWER

0

KEYED REMOTE TEST STATION

LOCATED W/AUDIBLE & VISUAL

NOT TO SCALE

NEXT TO T-STAT

TEST

ELECTRICAL CONTRACT. SHALL COORDINATE

A/C SHUT DOWN WITH MECH. CONTRACT.

DUCT DETECTOR DETAIL

COORDINATE EXACT LOCATION OF TEST AND RETEST SWITCHES, AND HORN WITH OWNER.

1/2" CONDUIT

HOUSING.

- 2"/O STEEL PIPE SCHEDULE 40 HOT DIP GALV.

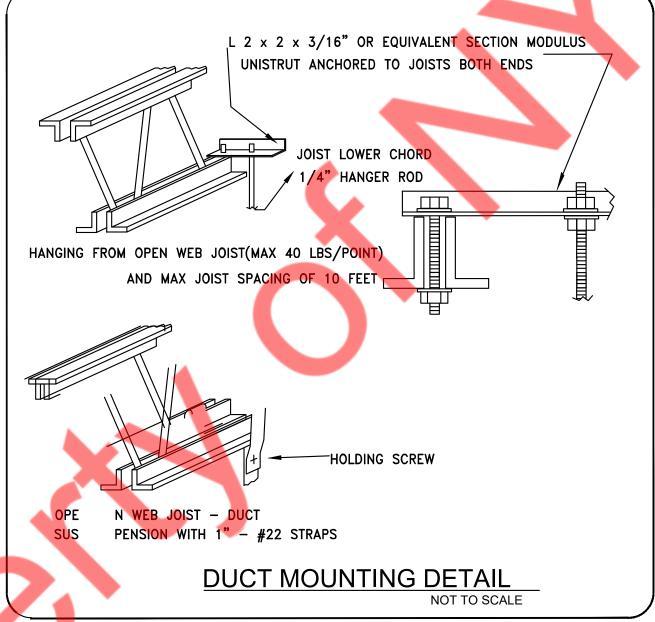
WELDED ALL AROUND (TYP)

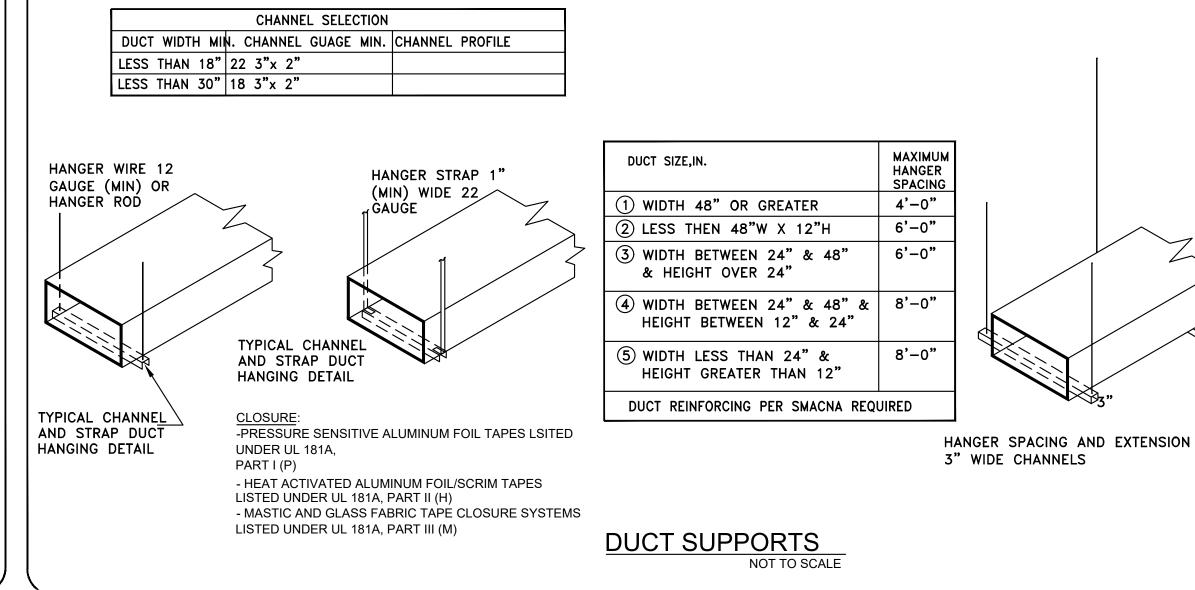
(4) 3/8" BOLT WITH WASHER AND NUTS (TYPICAL)

NOTE: 1. UNIT & STAND SHALL BE ANCHORED TO WITHSTAND F.B.C.-2010 HURRICANE WIND FORCE REQUIREMENTS — HVHZ 1620.2

CONDENSER MOUNTING DETAIL

120/24 V. TRANSF. LOCATED IN DETECT.





INSULATED FLEXIBLE DUCT -

DIFFUSER STARTER COLLAR (MINIMUM 4").

DIFFUSER CONNECTION DETAIL-FLEX DUCT

PROTECTION SADDLE

FLEXIBLE DUCT CONNECTION

— 1" X 20 GAUGE GALVANIZED SUPPORT STRAP

— SQUARE TO ROUND

└── CEILING

— SUPPLY DIFFUSER WITH

LAY-IN FRAME (SURFACE

MOUNT FRAME SIMILAR)

ADAPTOR (IF REQUIRED)

INSULATE BACKPAN OF DIFFUSER

WRAPPED INSULATION COVERING RIGID ROUND DUCT ——

NOTES: 1) PROVIDE AT FLEXIBLE DUCT CONNECTION "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX.

3) BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

2) PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF THE FLEXIBLE DUCT TO ROUND DUCT, DAMPERS AND DIFFUSERS.

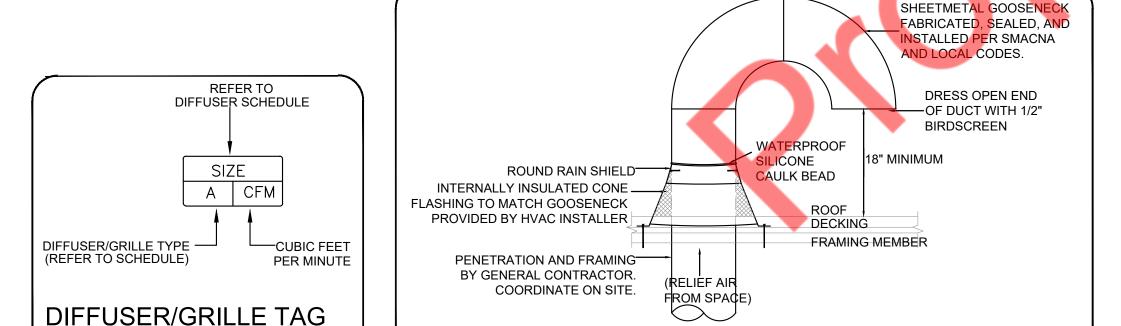
RIGID ROUND SHEET METAL DUCT —

BALANCING HANDLE. LOCK INTO

POSITION AND MARK PERMANENTLY. ---

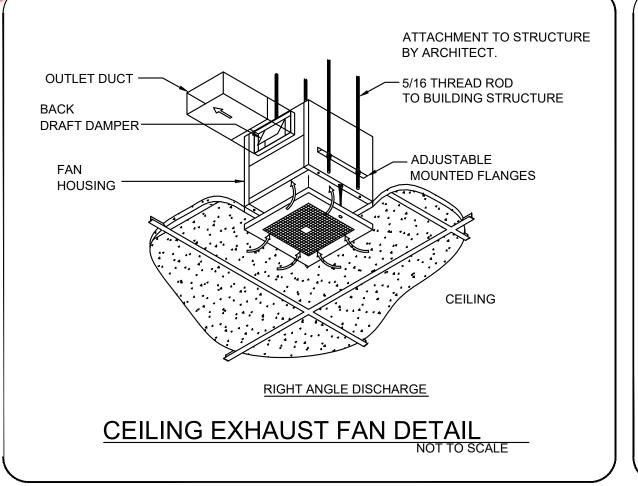
BALANCING DAMPER —

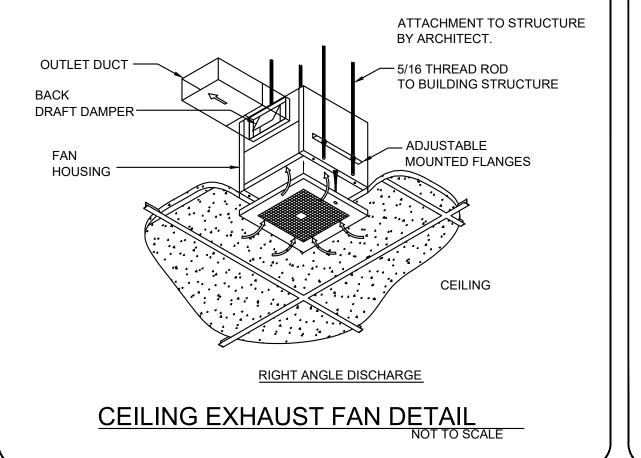
LINED SUPPLY DUCT



NOT TO SCALE

ROUND GOOSENECK DETAIL AT ROOF





#### **SCOPE OF WORK**

REUSE THE EXISTING 200A, 120/208V, 3-PHASE ELECTRICAL SERVICE FROM EXISTING DISCONNECT SWITCH TO THE TENANT SPACE. PROVIDE NEW (1) 200A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "A". ALL NECESSARY EQUIPMENT, WIRING AND LIGHTING FOR THE NEW RESTAURANT INCLUDING WIRING FOR VENTILATION EQUIPMENT. COORDINATE WITH G.C FOR LOW VOLTAGE WIRING.

#### **ELECTRICAL PLAN NOTES**

- ELECTRICAL CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THIS SET. CONTRACTOR TO VERIFY THAT ALL EQUIPMENT SHOWN AS EXISTING
- MATCHES THE DESCRIPTIONS AND SPECIFICATIONS SHOWN ON DRAWINGS AND SCHEDULES. IF DIFFERENT, NOTIFY ARCHITECT/ENGINEER BEFORE BIDDING, ORDERING, OR PROCEEDING WITH WORK. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW
- ELECTRICAL WORK INDICATED. CONSTRUCTION SHALL BE IN ACCORDANCE | 38. ALL LIGHT SWITCHES TO BE AT 42" A.F.F. WITH DRAWINGS AND APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT. CONTRACTOR SHALL NOTIFY THE OWNER OR HIS REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM AND SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL OWNER HAS DIRECTED CORRECTIVE ACTION
- ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING FLECTRICAL AND COMMUNICATIONS INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF EXISTING CONDITIONS OF ELECTRICAL EQUIPMENT, LIGHT FIXTURES, ETC... THAT ARE PART OF THE FINAL SYSTEM SHALL BE VERIFIED BY THE CONTRACTOR PRIOR
- TO SUBMITTING HIS BID. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE AND ORDINANCES OF THE AUTHORITY 42. MOTOR STARTERS SHALL BE MANUAL OR MAGNETIC, WITH OVERLOAD HAVING JURISDICTION
- DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION FOR ALL EQUIPMENT.
- CONFIRM WITH OWNER'S REPRESENTATIVE. ALL ELECTRICAL NOT BEING REUSED MUST BE REMOVED IN ITS ENTIRETY.
- ALL CONDUIT IN OR UNDERGROUND OR IN CONCRETE MUST BE RIGID
- GALVANIZED STEEL. CIRCUIT BREAKERS AND PANELS TO BE BOLT ON TYPE
- 0. ALL EQUIPMENT SHALL BE APPROVED BY UL OR OTHER NATIONALLY RECOGNIZED TESTING COMPANY.
- 1. ALL RECEPTACLES SHALL BE GROUNDED AS REQUIRED BY NEC 250.146
- 2. SUBMIT SERVICE ENTRANCE EQUIPMENT FOR SEPARATE APPROVAL. 3. ALL LOW VOLTAGE MUST BE IN CONDUIT TO ABOVE THE DROP CEILING.
- BRIDAL RINGS OR "J" HOOKS REQUIRED. 4. SEPARATE PERMITS ARE REQUIRED FOR ALL LOW VOLTAGE SUCH AS
- TELEPHONE, DATA, THERMOSTAT, MUSIC, ALARMS ETC.
- 5. SEPARATE PERMIT REQUIRED FOR SIGNAGE.
- GENERAL CONTRACTORS IS REQUIRED. 17. ELECTRICIAN MUST BE ON SITE FOR ALL INSPECTIONS.
- MINIMUM WIRE SIZE SHALL BE #12 A.W.G. EXCLUDING CONTROL WIRING. ALL
- ). OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, PLASTIC AND  $\, ig| \, 53.$
- CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS, AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- 20. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF 💹 54. EXPOSED CONDUIT SHALL BE INSTALLED IN STRAIGHT LINES, PARALLEL OR CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL IN RIGHT ANGLES TO THE BUIDING STRUCTURE. DO NOT LOOP EXCESS ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
- REQUIRED BY THE N.E.C. OR LOCAL CODES.
- 2. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE | 56. ALL EQUIPMENT, DEVICES AND FIXTURES SHALL BE GROUNDED IN
- IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER/ARCHITECT.
- 4. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- 25. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND YEAR FROM DATE THAT CERTIFICATE OF OCCUPANCY IS ISSUED WARRANTY SHALL BE PROVIDED IN WRITING. PROVIDE COPY TO LL.
- 26. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER 60. ALL ELECTRICAL PANELS TO BE MOUNTED ON PLYWOOD BACKER BOARD. PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
- 7. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE
- 28. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT.
- 29. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES.
- 30. CONTRACTOR SHALL COORDINATE WITH MECHANICAL DRAWINGS AND PROVIDE ALL NECESSARY CONTROL WIRING.
- 1. ALL CIRCUIT BREAKERS FEEDING MECHANICAL EQUIPMENT SHALL BE HACR TYPE CIRCUIT BREAKERS.
- 2. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES, DEVICES, ETC. FOR ALL OUTLETS AS INDICATED.
- 3. MATERIALS. PRODUCTS. AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SUCH AS APPEAR ON THE UL LIST OF APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF N.E.C. NEMA, AND IECE.
- 4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR CUT SHEETS OF LIGHTING FIXTURES, SWITCHES, AND OTHER ELECTRICAL ITEMS FOR APPROVAL BY
- B5. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING,

PATCHING AND FIRED CAULKING REQUIRED OF HIS WORK.

- 36. ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS W/TYPE WRITTEN DIRECTORIES.
- 37. ALL ELECTRICAL AND COMMUNICATIONS OUTLETS TO BE AT 24" A.F.F. UNLESS NOTED OTHERWISE, AND VERTICALLY MOUNTED.

- 39. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. ALL ELECTRICAL WIRING FOR HVAC SYSTEM INCLUDING CONTROLS, THERMOSTATS, POWER, ETC. SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 40. BREAKER AND PANELS -- ALL CURRENT CARRYING BUSSES SHALL BE COPPER. ALL GROUND BUS BARS SHALL BE COPPER. PANEL BOARD ENCLOSURES SHALL BE FURNISHED WITHOUT PRE-PUNCHED CONCENTRIC HOLES. A.I.C. RATINGS SHALL BE AS INDICATED ON PANEL BOARD SCHEDULES.
- I. DISCONNECT SWITCHES SHALL BE H.P. RATED, GENERAL DUTY, QUICK-MAKE, QUICK-BREAK ENCLOSURES AS REQUIRED BY EXPOSURE.
- RELAYS IN EACH HOT LEG.
- 43. THE TERM "PROVIDE" USED IN THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS INDICATES THE CONTRACT SHALL FURNISH AND INSTALL.
- 44. CONTRACTOR SHALL CONFIRM WITH ANY AND ALL REQUIREMENTS SUCH AS: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, TRANSFORMER SIZE, SCHEDULED DOWN TIME FOR OWNERS CONFIRMATION, ETC. ANY CONFLICTS SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY
- 45. VOLTAGE DROP FOR ALL BRANCH CONDUCTORS SHALL NOT EXCEED 3%. WHERE VOLTAGE DROP EXCEEDS 3%, CONTRACTOR SHALL INCREASE SIZE
- 46. CONTRACTOR SHALL PROVIDE GFI TYPE BREAKER FOR ALL EXTERIOR 120V CIRCUITS OR GFI PROTECTION -- FOR THE WHOLE CIRCUIT.
- 47. GAS PIPING SHALL BE BONDED.
- 48. ELECTRICAL CONTRACTOR SHALL COORDINATE SERVICE ENTRY WITH SERVICE PROVIDER PRIOR TO DETERMINING EXACT LOCATION OF THE METER BOX IN ORDER TO AVOID DISCREPANCIES BETWEEN DRAWINGS AND JOB CONDITIONS.
- 49. ALL OUTDOOR EQUIPMENT SHALL BE WEATHERPROOF.
- 50. CONSTRUCTION "AS BUILT" DRAWINGS AND DOCUMENTS SHALL BE 16. PRIOR TO ANY CONSTRUCTION WORK BEGINNING AN ON-SITE MEETING WITH PROVIDED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF ACCEPTANCE. PROVIDE A COPY TO LL.
  - 51. OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER.
- CONDUCTORS SHALL BE COPPER AND UNLESS OTHERWISE NOTED THHN 52. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, PATCHING AND FIRE CAULKING REQUIRED OF HIS WORK.
  - . ABSOLUTELY NO FLEXIBLE CONDUIT IS PERMITTED IN DEMISING WALLS. FLEXIBLE CONDUIT IS PERMITTED FOR SHORT FINAL CONNECTIONS ONLY
  - FLEXIBLE CONDUIT IN CEILING SPACE OR WALL CAVITY. NO CONDUIT TO BE
- 55. CABLE TYPES AC AND NM CABLES ARE NOT ACCEPTABLE. TYPE MC CABLE. . ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS ELECTRIC METALLIC TUBING (EMT) AND RIGID GALVANIZED CONDUIT ARE
  - COMPLIANCE WITH NEC AND UL REQUIREMENTS.
- 23. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR 57. ALL PANELS TO BE UL LABELED WITH BOLT-ON TYPE CIRCUIT BREAKERS. 58. 7-DAY 24-HOUR TIME CLOCK IS REQUIRED TO CONTROL STOREFRONT ENTRY LIGHTS, SHOW WINDOW LIGHTS, SHOW WINDOW RECEPTACLES AND STOREFRONT SIGNAGE. ILLUMINATED STOREFRONT SIGNS MUST REMAIN LIT
- DURING ALL MALL BUSINESS HOURS. 59. TENANT IS REQUIRED TO MAKE A FIELD SURVEY OF THE EXISTING WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE | ELECTRICAL SERVICE TO ENSURE THAT THE TOTAL CONNECTED LOAD DOES NOT EXCEED THE ELECTRIC SERVICE. ANY/ALL MODIFICATIONS OR UPGRADES NEEDED ARE SUBJECT TO LANDLORD'S PRIOR APPROVAL AND WILL BE COMPLETED BY TENANT/TENANT'S GC AT TENANT'S SOLE EXPENSE.

  - 61. PANEL PHASE LOADS TO BE BALANCED WITHIN 10%.
  - 62. ELECTRICAL PANELS MAY NOT BE RECESSED IN DEMISING PARTITIONS. SURFACE MOUNT OR FULL FUR OUT WALL TO ACHIEVE FLUSH FINAL **APPEARANCE**
- TESTING. CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS | 63. COORDINATE ALL CONCRETE TRENCHING/CORING TO ENSURE THAT ANY UNDER SLAB UTILITIES, ETC. ARE NOT DAMAGED DURING FLOOR CUT. ANY DAMAGE TO BE REPAIRED AT TENANT'S EXPENSE. PRIOR APPROVAL AND COORDINATION WITH PROPERTY MANAGEMENT IS REQUIRED FOR ALL CONCRETE CUTTING.
  - 64. CONFIRM ELECTRICAL METER REQUIREMENTS WITH MALL OPERATIONS.
  - 65. AN OPERATING MANUAL AND MAINTENANCE MANUAL BE PROVIDED TO THE BUILDING OWNER. THE MANUALS SHALL INCLUDE. AT A MINIMUM. THE FOLLOWING: 3. SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. 4. OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED. 5. NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY.
  - 66. WITHIN 30 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE, RECORD DRAWINGS OF THE ACTUAL INSTALLATION SHALL BE PROVIDED TO THE BUILDING OWNER, INCLUDING: 1. A SINGLE-LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION AND 2. FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION.

#### **GENERAL LIGHTING NOTES**

- WHERE LIGHT FIXTURE IS FOLLOWED BY "NL", THIS FIXTURE IS DESIGNATED AS A NIGHT LIGHT AND SHALL BE CONNECTED TO AN UNSWITCHED HOT CONDUCTOR.
- UPPER CASE LETTER NEXT TO LIGHT FIXTURE DENOTES FIXTURE TYPE.
- C. ALL EMERGENCY FIXTURES SHALL BE CONNECTED TO AN UNSWITCHED HOT

SYMBOL	DESCRIPTION
	EXHAUST FAN
	COMBINATION EXHAUST FAN/LIGHT (REFER TO MECHANICAL PLANS)
(s)	SPEAKERS @ CEILING
Ū	JUNCTION BOX
(SD)	CEILING MOUNTED SMOKE DETECTOR 110V., INTERCONNECTED W/ BAT BACKUP. SMOKE DETECTOR SHALL COMPLY WITH NFPA 72, AND FBC 90
<b>3</b>	BATTERY BACK UP EXIT LIGHT
Q	BATTERY BACK UP EMERGENCY LIGHT
\$	WALL SWITCH (SINGLE, DOUBLE, )
\$3	WALL SWITCH (3 WAY, 4 WAY)
\$ <sub>T</sub>	WALL SWITCH (TIMER)
\$ <sub>D</sub>	DIMMER WALL SWITCH
\$ \$ \$ \$ \$ \$ \$ \$ \$	OCCUPANCY SENSOR WALL SWITCH
\$ <sub>vs</sub>	VARIABLE SPEED SWITCH
<del>O</del>	SINGLE RECEPTACLE
<del>-</del>	DUPLEX RECEPTACLE
<del>+</del>	DUPLEX RECEPTACLE, 46" TO AFF AT KITCHEN, BATHS AND TOPS
<del></del>	HALF SWITCHED DUPLEX RECEPTACLE
	230 VOLT RECEPTACLE
<del> </del>	QUADRUPLEX RECEPTACLE
Ö	FLOOR MOUNTED. FLUSH DUPLEX RECEPTACLE
	FLOOR MOUNTED. FLUSH QUAD. RECEPTACLE
<b>(</b>	FLOOR MOUNTED. FLUSH 230 VOLT RECEPTACLE
CL	CEILING MOUNTED DUPLEX RECEPTACLE
	ELECTRICAL PANEL
	DISCONNECT SWITCH
<b>\$</b>	USB CHARGER RECEPTACLE
<u>▼</u>	TELEVISION OUTLET
<u> </u>	DATA OUTLET
	TELEPHONE/DATA OUTLET
K	TELEPHONE OUTLET
	FLOOR MTD. FLUSH TELEPHONE/DATA OUTLET
QUAD	QUAD. DATA OUTLET RJ45
<del></del>	THERMOSTAT DEVICE
	THERIMOSTAT DEVICE
ABB	REVIATIONS:
<u>55</u>	ABOVE FINISH FLOOR= A.F.F. BELOW COUNTER= BC COUNTER TOP LEVEL= C PUSH BUTTON= PB

VERIFY PRIOR TO INSTALL= VH

AUTHORITY HAVING JURISDICTION= A.H.

WEATHER PROOF= WP

WATER HEATER= WH

EXHAUST FAN = EF

VAPOR PROOF= VP

ELECTRICAL CONTRACTOR=E.C.

BATHROOM EXHAUST FAN=BEF

RECIRCULATION PUMP=RCP

#### LIGHTING FIXTURE SCHEDULE

	TYPE	DESCRIPTION	MANUFACTURER	CATALOG VOLT NO. OF LAMP WATTAG		LAMP WATTAGE	TOTAL WATTS	MOUNTING		
	А	2x4 RECESSED LAY-IN FIXTURE	LITHONIA LIGHTING	EPANL-24-40L-35K	120	5	38.9 WATTS	194.5 WATTS	RECESSED	
	В	2x2 RECESSED LAY-IN FIXTURE	LITHONIA LIGHTING	EPANL-22-34L-35K	120	15	30.8 WATTS	462 WATTS	RECESSED	
<b>+</b>	С	PENDANT LIGHT	MILLENIUM LIGHTING	LEDRWHC14	120	3	11 WATTS	33 WATTS	PENDANT	
<b>⊢</b> ¢	D	WALL SCONCE	MILLENIUM LIGHTING	RGN15-GA	120	2	11 WATTS	22 WATTS	WALL	
<b>⊗</b>	X1	EXIT SIGNS	BEST LIGHTING	X2-LEDR-1B	120	3	2 WATTS	6 WATTS	UNIVERSAL	
<u>~~</u>	Y1	WALL-MOUNTED EMERGENCY LIGHTS	BEST LIGHTING	X2-EZXTEU-1RB	120	5	2 WATTS	10 WATTS	WALL	
\$ <sub>T</sub>	Т	TIMER WALL SWITCH	INTERMATIC	ST700	-	-		-	WALL	
\$ <sub>os</sub>	os	OCCUPANCY WALL SWITCH	INTERMATIC	IOS-DDR-WH	-	-		-	WALL	
(OS)	-	CEILING OCCUPANCY SENSOR	INTERMATIC	IOS-CMP-U	120	-		-	CEILING	
	(E)	EXISTING LIGHTING FIXTURE SHALL REMAIN.	-	-	-			-	-	

REFER TO SHEET A-2 - REFLECTED CEILING PLAN IN ARCHITECTURAL DRAWINGS FOR MORE INFORMATION ON COLORS AND TRIMS REQUIRED.

> (\*) EXISTING FIXTURES ARE ACCEPTABLE. IF THEY NEED TO BE REPLACED, REPLACE W/ EXACT MATCH OR MATCH SCHEDULE.

SUBSTITUTIONS TO THE ABOVE FIXTURE SCHEDULE MUST BE SUBMITTED 14 DAYS PRIOR TO BID & REVIEWED BY THE ARCHITECT. ENGINEER & OWNER. SUBSTITUTIONS WILL NOT BE REVIEWED 2AFTER THIS TIME. SUBMITTAL PACKAGES MUST INCLUDE COLOR, CUT SHEETS, ALL PHOTOMETRICS & FIXTURE SAMPLES FOR ALL DECORATIVE FIXTURES, LANDSCAPE FIXTURES & OUTDOOR FIXTURES. WITHOUT THIS INFORMATION NO REVIEW WILL BE PROVIDED.

FINAL FIXTURE MAKE AND MANUFACTURER OF THE LIGHT FIXTURE TO BE COORDINATED WITH ARCHITECT/OWNER.

EXISTING

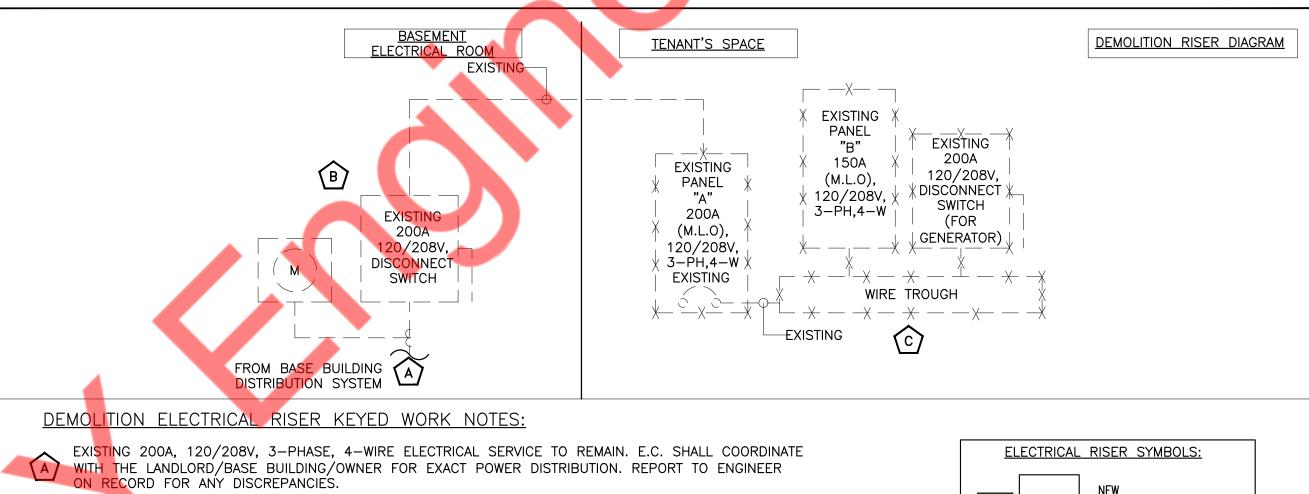
ITEM/FEEDER

EXISTING ITEM/FEEDER

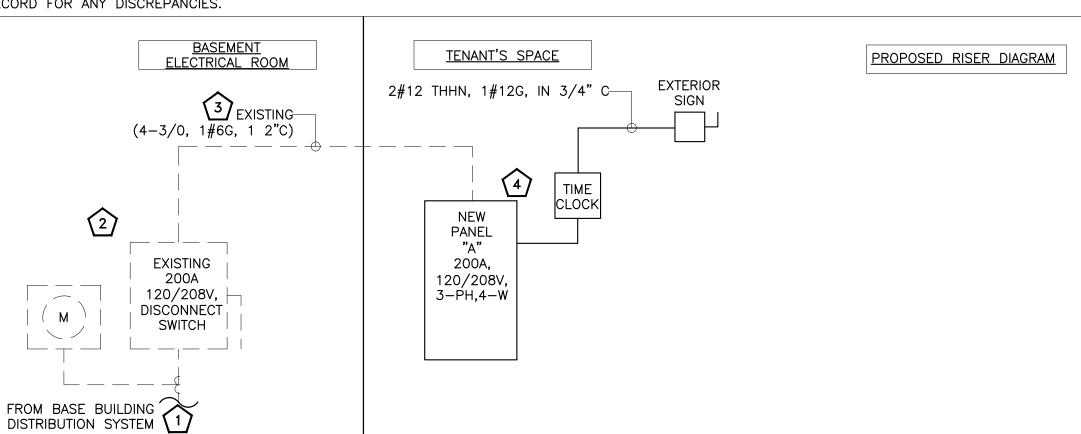
TO BE DISCONNECTED &

TO REMAIN

REMOVED



- EXISTING 200A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL METER AND DISCONNECT SWITCH FOR THE PROJECT SPACÉ TO REMAIN. E.C TO FIELD VERIFY THE EXACT LOCATION, SIZE & OPERABLE CONDITION OF EXISTING METER AND DISCONNECT SWITCH, REPLACE IF INOPERABLE. BASE BID ACCORDINGLY.
- EXISTING 200A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "A", 150A(M.L.O.), 120/208V, PHASE, 4-WIRE ELECTRICAL PANEL "B" AND 200A DISCONNECT SWITCH ALONG WITH THE WIRE TROUGH. E.C. TO FIELD VERIFY EXACT PURPOSE OF IT AS SHOWN IN DEMOLITION RISER. E.C. SHALL COORDINATE WITH THE LANDLORD/BASE BUILDING/OWNER FOR EXACT POWER DISTRIBUTION. REPORT TO ENGINEER ON RECORD FOR ANY DISCREPANCIES.



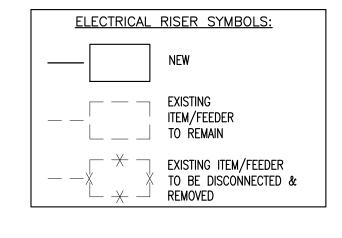
## PROPOSED ELECTRICAL RISER KEYED WORK NOTES:

- EXISTING 200A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL SERVICE TO REMAIN. E.C. SHALL COORDINATE WITH THE LANDLORD/BASE BUILDING/OWNER FOR EXACT POWER DISTRIBUTION. REPORT TO ENGINEER ON RECORD FOR ANY DISCREPANCIES.
- EXISTING 200A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL METER AND DISCONNECT SWITCH FOR THE PROJECT SPACE TO REMAIN. E.C TO FIELD VERIFY THE EXACT LOCATION, SIZE & OPERABLE CONDITION OF EXISTING METER AND DISCONNECT SWITCH, REPLACE IF INOPERABLE. BASE BID
- EXISTING ELECTRICAL FEEDER/CONNECTION SHALL REMAIN. E.C. TO VERIFY THE RATING, SIZE AND OPERABLE CONDITION OF EXISTING ELECTRICAL FEEDER/CONNECTION IN FIELD. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- NEW 200A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "A". E.C. SHALL COORDINATE LOCATION WITH ARCHITECT/OWNER WITH ARCHITECT/OWNER.

## <u>RISER DIAGRAM GENERAL NOTE:</u>

ANY WORK.

- 1. ABOVE RISER DIAGRAM IS FOR REFERENCE PURPOSES ONLY. E.C. SHALL VERIFY EXACT POWER DISTRIBUTION
- IN FIELD AND INFORM ENGINEER ON RECORD FOR ANY DISCREPANCY.
- 2. E.C. SHALL VERIFY INCOMING SERVICE AMPERAGE, WIRE SIZING AND DISTRIBUTION. 3. E.C. TO COORDINATE FAULT CURRENT (Isc) RATING WITH UTILITY COMPANY AND AHJ PRIOR TO COMMENCING
- 4. E.C. TO VERIFY OPERABLE CONDITIONS OF EXISTING DEVICES IN FIELD, REPLACE/RECTIFY IF FOUND IN OPERABLE. BASE BID ACCORDINGLY.



SCALE **ELECTRICAL RISER** N.T.S.

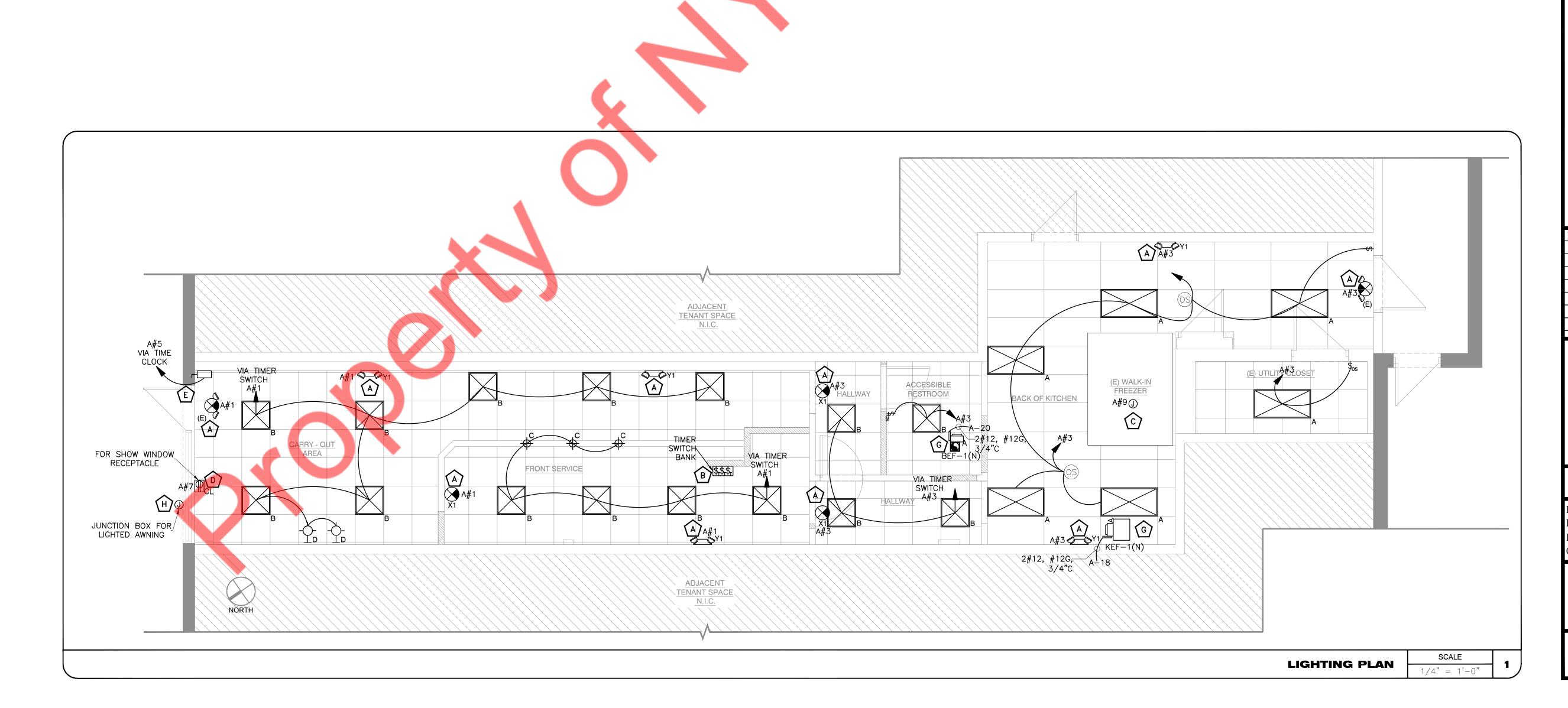
WRITTEN CONSENT OF NY ENGINEERS. PROJECT OBO REVISIONS DATES: PROFESSIONAL SEAL 360E.1346E PROJECT #: DRAWN BY: CHECKED BY: NYE **ELECTRICAL** PLAN NOTES

AND RISER

DIAGRAM

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ELECTRICAL LIGHTING PLAN KEYED WORK NOTES:

C WALK-IN BOX FREEZER LIGHTING TO BE PROVIDED BY MANUFACTURER.

CONNECT ALL EMERGENCY EGRESS AND NIGHT LIGHTING FIXTURES TO THE NEAREST LIGHTING BRANCH CIRCUIT AHEAD OF ALL SWITCHING AND CONTROLS PER STATE AND LOCAL CODES.

PROVIDE CEILING MOUNTED RECEPTACLE FOR SHOW WINDOW AS REQUIRED BY CODE. VERIFY WITH LOCAL ENERGY AGENCY. VERIFY EXACT LOCATION WITH ARCHITECT. SHOW WINDOW RECEPTACLE TO BE PROVIDE BY TIME CLOCK PER TENANT GUIDELINES.

JUNCTION BOX WITH TOGGLE DISCONNECT PER NEC FOR CONNECTION TO BUILDING MOUNTED SIGNAGE. VERIFY EXACT LOCATION AND CONNECT TO SIGN PER MANUFACTURE'S INSTRUCTION. ROUTE CIRCUIT TO PANEL VIA TIMECLOCK AS INDICATED ON PLAN.

PROVIDE IP20 MOTOR RATED SWITCH IN WEATHERPROOF BOX FOR KEF-1(N) AND KEF-2(N). INTERLOCK EXHAUST FAN WITH RTU-1(E). E.C. TO COORDINATE WITH MECHANICAL DRAWINGS.

G INTERCONNECT EXHAUST FANS KEF-1(N) & BEF-1(N) WITH AHU-1(N). E.C. TO COORDINATE WITH MECHANICAL DRAWINGS.

JUNCTION BOX FOR LIGHTED AWNING. E.C. SHALL COORDINATE THE EXACT POWER REQUIREMENTS PRIOR TO ROUGH-IN. MAKE POWER PROVISION AND BID ACCORDINGLY.

B E.C. SHALL COORDINATE EXACT LOCATION OF TIMER SWITCH BANK WITH ARCHITECT/OWNER.

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LIGHTING PLAN

E-2

ELECTRICAL POWER PLAN KEYED WORK NOTES:

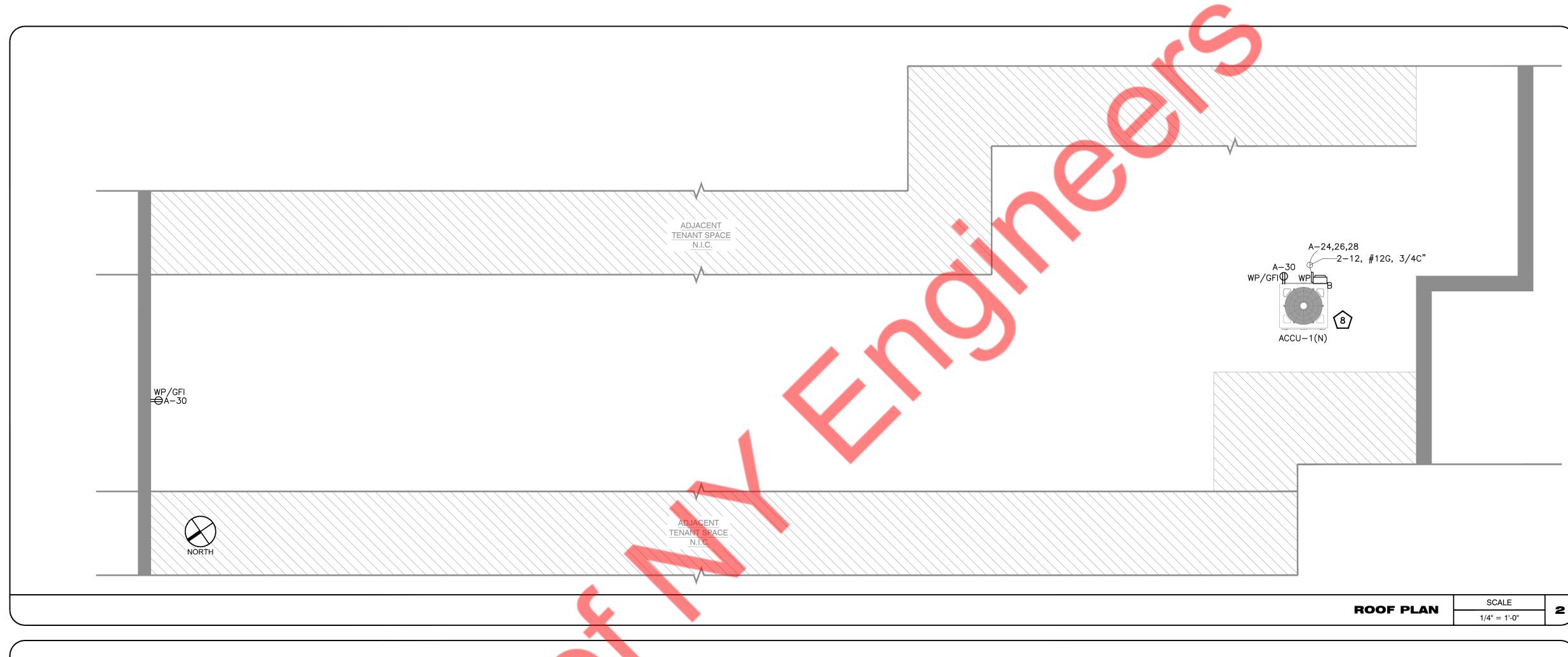
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE WATER HEATER MANUFACTURER FOR THE EXACT POWER REQUIREMENTS PRIOR TO ROUGH—IN. BASE BID ACCORDINGLY.
- JUNCTION BOX FOR HAND DRYER. COORDINATE MOUNTING HEIGHT TO COMPLY WITH ADA.
- PROVIDE (1) DUPLEX RECEPTACLE AND (1) CAT6 DATA CABLE AND CONNECTION FOR EACH MENUBOARD AT 96" A.F.F COORDINATE IN FIELD. FINAL LOCATION WITH OWNER.
- COORDINATE WITH OWNER ADDITIONAL POWER AND DATA REQUIREMENTS FOR MENUBOARD PRIOR COMMENCING WORK
- PROVIDE TWO (2) CAT 6 HOMERUN TO EACH POS (4 TOTAL) AND ONE (1) QUAD 20 AMPS RECEPTACLE AT 24" A.F.F AT COUNTER FOR EACH POS. COORDINATE WITH OWNER PRIOR TO ROUGH—IN.
- NEW 200A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "A". E.C. SHALL COORDINATE LOCATION WITH ARCHITECT/OWNER.
- WORKING SPACE CLEARANCE SHALL NOT BE LESS THAN SPECIFIED IN TABLE 110.26(A)(1) NEC.
- 8 ELECTRICAL CONTRACTOR SHALL COORDINATE FOR EXACT LOCATION OF MECHANICAL EQUIPMENTS WITH MECHANICAL DRAWINGS.
- OUTLET ABOVE WINDOW. ELECTRICAL CONTRACTOR SHALL COORDINATE MOUNTING HEIGHT OF OUTLET WITH OWNER PRIOR TO ROUGH—IN. BASE BID ACCORDINGLY.

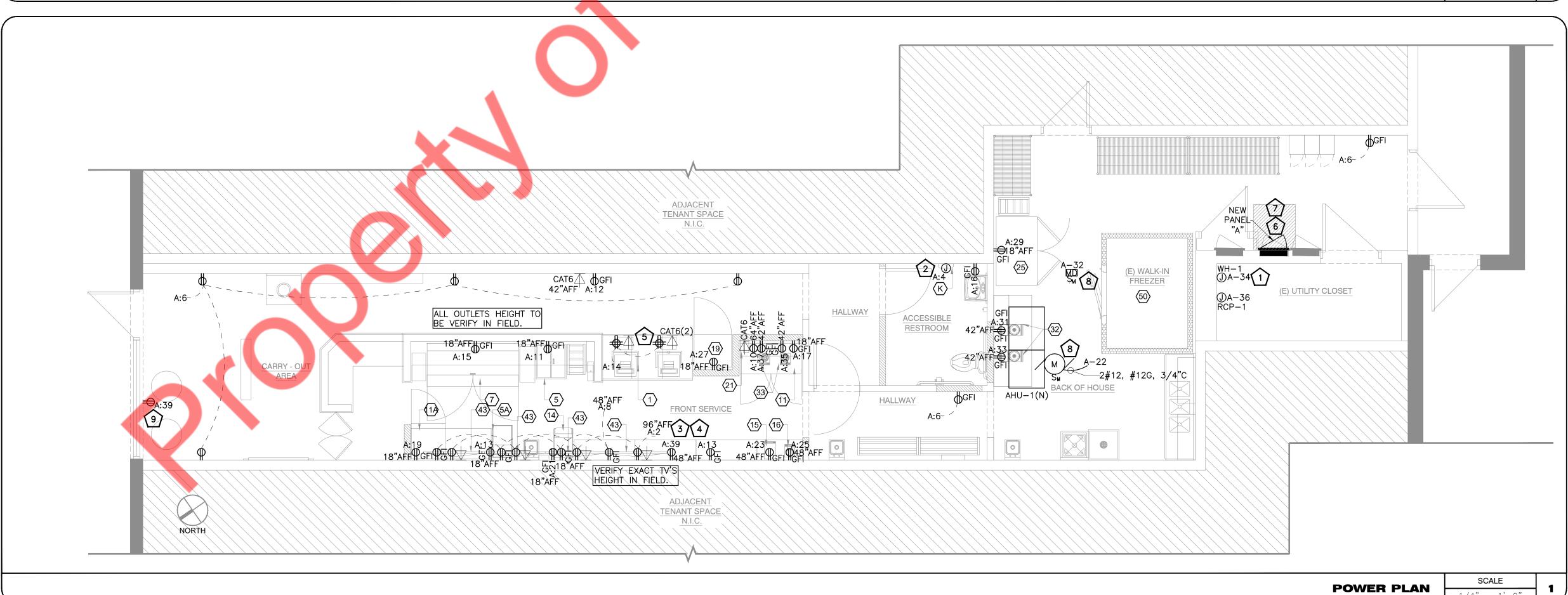
ELECTRICAL POWER PLAN GENERAL WORK NOTES:

1. ARRANGE LOAD TO MAINTAIN A BALANCE BETWEEN PHASES OF 10% OR LESS.

- 2. TENANT SHALL HAVE BREAKER LOCKS ON CONTROL AND TIME CLOCK CIRCUITS.
- 3. SWITCHING DUTY BREAKERS SHOULD BE INSTALLED FOR TURNING LOADS ON/OFF.
- 4. ELECTRICAL DEVICES, TIME CLOCKS, PANELS, CABINETS, ETC., SHALL
- BE MOUNTED ON A FIRE—TREATED PLYWOOD BACKER BOARD.

  5. ELECTRICAL CONTRACTOR SHALL COORDINATE DISCONNECT AND FUSE REQUIREMENT FOR MECHANICAL UNIT WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH—IN AND PROVIDE AS REQUIRED. COORDINATE LOCATION OF DISCONNECT WITH OWNER AND MECHANICAL CONTRACTOR PRIOR TO ROUGH—IN. LOCATE AS REQUIRED TO MAINTAIN NEC CLEARANCES.





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PROJECT

SOBOL

REVISIONS DATES:

PROFESSIONAL SEAL

ISSUE DATE: 03.21.23
PROJECT #: 360E.1346E
DRAWN BY: NYE
CHECKED BY: NYE

POWER AND ROOF PLAN

E-3

PANEL:	A( N )												MOUNTING:	RECESSED		<u> </u>
I AIVEE.	71(14)										1		Wioowiiid.	RECESSED		
208Y/120	VOLTS,	3 PHASE,			4	WIRE										+
•	<u> </u>															
MAIN CB	200A	MLO	NA			BUS	225A		MIN,		<u> </u>	1				
CKT NO.	TRIP	DESCRIPTION OF LOAD	LOAD	LOAD	MINIMUM BRANCH	PEF	PHASE (K	VA)	MINIMUM BRANCH	LOAD	LOAD		DESCRIPTION O	NE LOAD	TRIP	CKT NO.
CKI NO.	AMPS	DESCRIPTION OF LOAD	TYPE	(KVA)	CIRCUIT	Α	В	С	CIRCUIT	(KVA)	TYPE		DESCRIPTION O	T LOAD	AMPS	CKI NO.
1	20	LIGHTING (CARRY-OUT AREA, FRONT SERVICE)	L	0.40	2#12, #12G, 3/4"C	1.60			2#12, #12G, 3/4"C	1.20	R	55" TV ME	NU BOARD(#43)		20	2
3	20	LIGHTING (KITCHEN, HALLWAY, RR, STORAGE)	L	0.37	2#12, #12G, 3/4"C		0.90		2#12, #12G, 3/4"C	0.53	E	HAND DRY	/ER(#K)		20	4
5	20	EXTERIOR SIGN/TIMECLOCK	L	1.20	2#12, #12G, 3/4"C			2.28	2#12, #12G, 3/4"C	1.08	R	GENERAL	RECEPTACLE		20	6
7	20	SHOW WINDOW RECEPTACLES	R	1.60	2#12, #12G, 3/4"C	2.32			2#12, #12G, 3/4"C	0.72	R	CONVENIE	NCE OUTLET		20	8
9	20	WALK-IN BOX MISCELLANEOUS	L	0.54	2#12, #12G, 3/4"C		0.72		2#12, #12G, 3/4"C	0.18	R	CONVENIE	NCE OUTLET		20	10
11	20	SIX TUB ICE CREAM STORAGE FREEZER(#5)	E	0.14	2#12, #12G, 3/4"C			0.32	2#12, #12G, 3/4"C	0.18	R	CONVENIE	NCE OUTLET		20	12
13	20	4 TUB ICE CREAM STORAGE FREEZER(#5A)	Е	0.16	2#12, #12G, 3/4"C	0.88			2#12, #12G, 3/4"C	0.72	R	POS			20	14
15	20	2 DOOR REFRIGERATED SANDWICH PREP TABLE(#7)	E	0.81	2#12, #12G, 3/4"C		0.99		2#12, #12G, 3/4"C	0.18	R	GFI RESTR	OOM RECEPTACI	LE	20	16
17	20	U/C FREEZER (#11)	E	0.36	2#12, #12G, 3/4"C			0.46	2#12, #12G, 3/4"C	0.10	М	KEF-1(N)			20	18
19	20	U/C FREEZER (#11A)	E	0.24	2#12, #12G, 3/4"C	0.26			2#12, #12G, 3/4"C	0.02	М	BEF-1(N)			20	20
21	20	ICE MACHINE(#14)	Е	0.24	2#12, #12G, 3/4"C		1.91		2#12, #12G, 3/4"C	1.67	Н	AHU-1(N)			15	22
23	20	AIRPORT COFFEE BREWER(#15)	Е	1.37	2#12, #12G, 3/4"C			4.01		2.64	Н					24
25	20	COFFEE GRINDER (#16)	E	0.36	2#12, #12G, 3/4"C	3.00			3#8, #10G, 3/4"C	2.64	Н	ACCU-1(N	)		40/3P	26
27	20	DRINK COOLER(#19)	Е	0.81	2#12, #12G, 3/4"C		3.45			2.64	Н					28
29	20	2 DOOR REACH-IN REFRIGERATOR(#25)	Е	0.44	2#12, #12G, 3/4"C			0.80	2#12, #12G, 3/4"C	0.36	R	ROOF REC	EPTACLE		20	30
31	20	BLENDER(#32)	E	1.80	2#12, #12G, 3/4"C	1.81			2#12, #12G, 3/4"C	0.01	R	MOTORISE	ED DAMPER		20	32
33	20	BLENDER(#32)	E	1.80	2#12, #12G, 3/4"C		2.40		2#12, #12G, 3/4"C	0.60	0	WATER HE	EATER(WH-1)		20	34
35	20	DRINK MACHINE(#33)	E	1.38	2#12, #12G, 3/4"C			1.47	2#12, #12G, 3/4"C	0.09	М	RCP-1			20	36
37	20	DRINK MACHINE(#33)	E	1.38	2#12, #12G, 3/4"C	1.38						SPACE				38
39	20	CONVENIENCE OUTLET	R	0.36	2#12, #12G, 3/4"C		0.36					SPACE				40
41	20	LIGHTED AWNING	L	0.40	2#12, #12G, 3/4"C			0.40				SPACE				42
		ТОТ	AL LOAD	(KVA)		11.26	10.72	9.73								
		LOAD CLASSIFICATION		CONNEC	TED LOAD (KVA)	DEMAND	FACTOR	DEM	AND LOAD (KVA)				PANEL TOTAL	IOAD		
	TOTAL L	IGHTING L			2.91	12	5%		3.64				PANLE TOTAL	LOAD		
	TOTAL RE	CEPTACLE R			6.59	10	0%		6.59			TOTAL CO	NNECTED LOAD		31.70	KVA
	TOTA	L <b>HVAC</b> H			9.59	10	0%		9.59			TOTAL D	EMAND LOAD		28.30	KVA
	TOTAL	MOTOR M			0.21	10	0%		0.21		T	OTAL CON	NECTED CURREN	Т	88.11	AMP
TOTA	AL KITCHEI	N/EQUIPMENTS E			11.80	65	5%		7.67			TOTAL DEN	AND CURRENT		78.65	AMP
TOTA	L OTHER/	MISCILLANEOUS O			0.60	10	0%		0.60			SYSTE	M VOLTAGE		120/20	08 Wye

PANEL SCHEDULES

N.T.S.

KITCHEN EQUIPMENT SCHEDULE:

ITEM NO.	DESCRIPTION	VOLTAGE	PHASE	AMPS	kW	REMARKS
5	SIX TUB ICE CREAM STORAGE FREEZER	115	1	1.2	0.14	-
5A	4 TUB ICE CREAM STORAGE FREEZER	115	1	1.4	0.16	-
7	2 DOOR REFRIGERATED SANDWICH PREP TABLE	115	1	7	0.81	-
11	UNDERCOUNTER FREEZER	115	1	3.1	0.36	-
11A	UNDERCOUNTER FREEZER	115	1	2.1	0.24	-
14	AIR COOLED UNDERCOUNTER MEDIUM CUBE ICE MACHINE	115	1	12	1.38	-
15	AIRPOT COFFEE BREWER	120	1	11.4	1.37	-
16	COFFEE GRINDER	120	1	3	0.36	-
19	DRINK COOLER	115	1	7	0.81	
25	SOLID 2 DOOR REACH-IN REFRIGERATOR	115	1	3.8	0.44	
32	PROGRAMMABLE BLENDER	120	1	15	1.80	7
33	DRINK MACHINE	120	1	11.5	1.38	<b>)</b> -
43	55"TV MENU BOARD W/MOUNTING BRACKETS	-	-	-		T.B.D.

1. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MANUFACTURER FOR THE EXACT POWER PROVISION AND REQUIREMENTS PRIOR TO COMMENCING ANY WORK. INFORM ENGINEER ON RECORD FOR ANY DISCREPANCIES. BASE BID ACCORDINGLY.

KITCHEN EQUIPMENT SCHEDULE

SCALE N.T.S.

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CHECKED BY: NYE ROOF PLAN &

PANEL SCHEDULES

#### **PLUMBING NOTES**

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, RULES AND ORDINANCES.
- PLUMBING CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THIS SET. CONTRACTOR TO VERIFY THAT ALL EQUIPMENT SHOWN AS EXISTING MATCHES THE DESCRIPTIONS AND SPECIFICATIONS SHOWN ON DRAWINGS AND SCHEDULES. IF DIFFERENT NOTIFY ARCHITECT/ENGINEER BEFORE BIDDING, ORDERING OR PRECEDING WITH WORK.
- ALL EQUIPMENT WHICH IS TO REMAIN MUST BE REFURBISHED TO A LIKE NEW CONDITION. 4. PLUMBING CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE
- HIMSELF WITH ALL EXISTING CONDITIONS. 5. ALL MATERIALS SHALL BE NEW.
- 5. ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE. ALL EXCAVATION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS CONTRACT.
- REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF
- . PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTION AND TESTS. PLUMBING CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT. PLUMBING CONTRACTOR MUST BE PRESENT FOR ALL INSPECTIONS OF HIS WORK BY REGULATORY AUTHORITIES.
- DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FOR THE EXACT LOCATION OF FIXTURES, PIPING, EQUIPMENT, ETC.
- 10. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION. REPORT ANY DISCREPANCY TO ENGINEER/ARCHITECT
- 11. VERIFY LOCATION, SIZE, DIRECTION OF FLOW AND INVERTS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION. ADVISE ENGINEER OF ANY DISCREPANCIES.
- 12. EXPOSED WATER PIPING SHALL BE TYPE "L" COPPER FOR 2" AND UNDER. WATER PIPING IN WALLS AND UNDERGROUND MAY BE "PEX" TYPE PIPING THAT MEETS ANSI/NSF STANDARD
- 13. SOIL, WASTE, VENT AND RAINWATER PIPING SHALL BE PVC BUT MAY NOT RUN THRU RATED ASSÉMBLIES OR IN PLENUMS.
- 14. ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS AND APPROPRIATELY MARKED ACCESS PANELS. COORDINATE LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO
- 15. FURNISH AND INSTALL APPROVED AIR CHAMBERS AT EACH PLUMBING FIXTURE GROUP AS PER CODE AND WITH GOOD ENGINEERING PRACTICE.
- 16. DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METAL IN PIPING AND EQUIPMENT CONNECTIONS; EXCEPT AT WATER HEATER AS PER CODE.
- 17. ISOLATE COPPER PIPE FROM HANGER OR SUPPORTS WITH ISOLATOR PAD.
- 18. ALL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE PROPERLY PROTECTED FROM FIRE, SMOKE AND WATER PENETRATION BY FILLING VOIDS BETWEEN PIPE AND WALL/FLOOR SLEEVES WITH FIRE RATED FOAM, TO ACHIEVE THE SAME RATING AS WALLS OR FLOORS AS PART OF THE PLUMBER'S WORK.
- L9. PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE WITHIN 72 HOURS OF NOTIFICATION AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED. PROVIDE COPY TO LL
- 20. STUDOR MINI/MAXI AIR ADMITTANCE VALVES MAY NOT BE USED AS AN ALTERNATE TO VENT PIPING THRU ROOF.
- 21. PROVIDE CHROME PLATED COMBINATION COVER PLATE AND CLEAN OUT PLUG OR ACCESS PANEL FOR ALL CLEANOUTS
- 22. NO COMBUSTIBLE MATERIAL TO BE USED IN MECHANICAL ROOMS OR IN CEILING SPACES WHERE USED AS RETURN AIR PLENUMS.
- 23. NO WATER, SANITARY OR DRAINAGE PIPING PERMITTED IN ELECTRICAL OR ELEVATOR **EQUIPMENT ROOMS.**
- 24. WATER PIPING INSULATION SHALL BE 1" THICK ARMAFLEX INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS FOR ALL HOT WATER PIPING. WHERE DOMESTIC WATER TEMPERATURES CAN CAUSE SWEATING, ALL COLD WATER PIPING SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX INSULATION.
- 25. CONDENSATE DRAIN LINES TO BE RUN UNDER SLAB IN PVC SCH40 PIPE AND STUBBED OUT OF WALL TO UNIT. TIE-IN OF A/C TO BE BY OTHERS. PVC PIPING WITH 1/2" THICK ARMAFLEX INSULATION MAY BE USED IN LOCATIONS WHERE ALLOWED BY LOCAL CODES. SEE PLUMBING DRAWINGS FOR SIZE AND LOCATION OF PIPING. PVC WILL BE MIN. SCHEDULE 40
- FOR SIZE AND LOCATION OF PIPING. PVC WILL BE MIN. SCHEDULE 40. 26. PROVIDE ANGLE STOPS ON ALL WATER SERVICE LINES TO FIXTURES FOR INDIVIDUAL SHUT-OFF.
- 27. NO JOINTS UNDERGROUND FOR COPPER.
- 28. PLUMBING FIXTURES SHALL COMPLY WITH 2020 PLUMBING CODE OF NEW YORK STATE.

29. WATER HAMMER ARRESTORS AS PER 2020 PLUMBING CODE OF NEW YORK STATE.

- 30. PLUMBING CONTRACTOR SHALL REVIEW ALL BID DOCUMENTATION.
- 31. PLUMBING CONTRACTOR SHALL REVIEW WALL FINISHES @ LOCATION REQUIRING BARRIER-FREE COMPLIANCE (EXAMPLE: CENTER LINE TO TOILET).
- 32. CONSTRUCTION "AS BUILT" DRAWINGS AND DOCUMENTS SHALL BE PROVIDED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF ACCEPTANCE. PROVIDE A COPY TO LL.
- 33. OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER. PROVIDE A COPY TO LL

## SCOPE OF WORK

PROVIDE ALL PLUMBING FOR NEW FAST FOOD RESTAURANT INCLUDING ALL WATER, SANITARY  $\emptyset$ GAS LINES AND CONNECT TO EXISTING UTILITIES. PROVIDE NEW GAS TANK WATER HEATER. COORDINATE WITH GC AND MECHANICAL CONTRACTOR FOR ANY REQUIRED CONDENSATE

## **EXISTING CONTIDITONS NOTES**

THE CONTRACTOR AND SUB-CONTRACTORS SHALL NOT INITIATE ANY WORK UNTIL **EXISTING FIELD CONDITIONS ARE PROPERLY VERIFIED.** THIS SHALL HOLD TRUE FOR FIRST GENERATION AND 2ND GENERATION SPACES. WHEN DEMOLITION IS REQUIRED, THAT WILL BE PERMITTED TO EXPOSE CONDITIONS. THESE VERIFICATIONS SHALL INCLUDE BUT NOT LIMITED TO: DIMENSIONS BOTH HORIZONTALLY AND VERTICAL, ELECTRICAL SERVICE /PANELS LOCATION AND VOLTS/PHASE, LOCATION/QTY OF ROOF MOUNTED HVAC EQUIPMENT, CONFIRM THAT INTERIOR HVAC HUNG UNITS HAVE PROPER SUPPORT CONNECTIONS FOR EXISTING STRUCTURE, FIRE SPRINKLER MAIN RUNS, TOILET ROOM DIMENSIONS, DOOR SWING FOR DOORS TO REMAIN AND ETC. IF NOT VERIFIED AND DISCOVERED AT A LATER TIME, THE CONTRACTOR SHALL REIMBURSE THE ARCHITECT FOR THE REDESIGN FEE. THIS DOES NOT INCLUDE HIDDEN WORK I.E. PITCH OF SANITARY LINES, ACTUAL CONDITIONS OF EXISTING HVAC EQUIPMENT, STRUCTURAL COLUMNS/BEARING WALLS OR CONDITIONS OF GREASE INTERCEPTORS AND ETC.

# **PLUMBING LEGEND** — −SAN — SANITARY SEWER PIPING

VENT PIPING
DOMESTIC COLD WATER PIPING
HOT WATER PIPING
HOT WATER RETURN PIPING
PIPE UP
PIPE DROP

G	GAS PIPING
E	CAPPED END OF PIPE
FCO ①	FLOOR CLEAN OUT
<b>−</b> ∞	P-TRAP
S.O.V.	SHUT-OFF VALVE
CW	DOMESTIC COLD WATER
HW	DOMESTIC HOT WATER
HWR	DOMESTIC HOT WATER RETURN
DCVA	DOUBLE CHECK VALVE ASSEME

S.O.V.	SHUT-OFF VALVE
CW	DOMESTIC COLD WATER
HW	DOMESTIC HOT WATER
HWR	DOMESTIC HOT WATER RETURN
DCVA	DOUBLE CHECK VALVE ASSEMBLY
$\bowtie$	GATE VALVE
	CHECK VALVE
<b> </b>	GAS SHUT-OFF VALVE
	BALANCING VALVE
Q	WATER HAMMER ARRESTER
	FLOOR DRAIN

WALL CLEANOUT

POINT OF CONNECTION

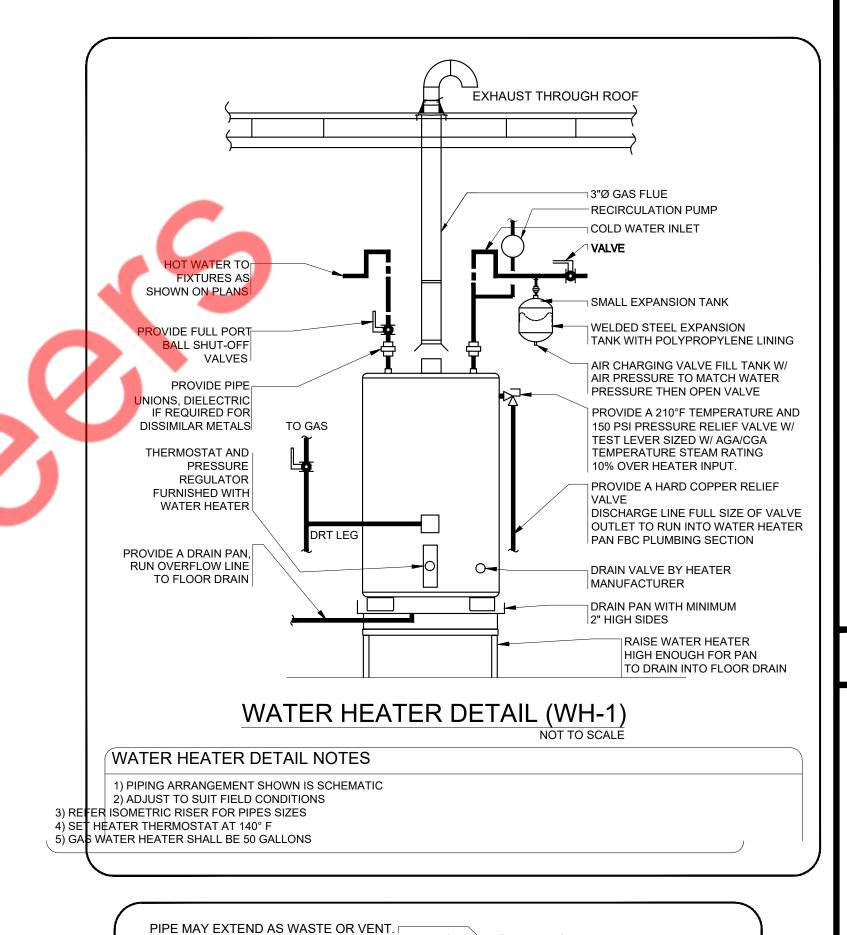
THERMOSTATIC MIXING VALVE

FLOOR SINK

#### RESTROOM FIXTURE SCHEDULE WATER WASTE Hot Cold Waste Usage Spec Description Item No. | Qtv. Manufacturer Model 3483.001 (BOWL) ACCESSIBLE WATER CLOSET AMERICAN STANDARD 4142.100 (TANK)(L) 1.6 GPF 4142.801 (TANK)(R) KOHLER ACCESSIBLE LAVATORY BRENHAM K-1997-4 ACCESSIBLE FAUCET W/BUILT EC-3103 0.5 GPM IN MIXING VALVE 1 INSULATED PLUMBING COVERS | PLUMBEREX HANDI SHIELD

KITCHE	EN E	EQUIPMENT PLUMBING SCHEDULE		WATER		WASTE		
Item No.	Qty.	Description	MANUFACTURER	MODEL	Hot	Cold	Direct	Indirect
2	1	ICE CREAM DIPPER WELL & FAUCET	KROWNE	16-153L		1/2"		1"
14	1	ICE MACHINE	SCOTSMAN	CU0415MA-1		1/2"		3/4"
14B	1	WATER FILTRATION SYSTEM (FOR ITEM 14)	C PURE OCEANLOCH-M					
15	1	COFFEE BREWER	BUNN	CWTF APS		1/2"		
27	1	MOP SINK	MUSTEE	63M			3"**	
27A	1	WALL MOUNTED MOP SINK FAUCET WITH VACUUM BREAKER	REGENCY	600FMS86	3/4"+	3/4"		
28	1	1-COMPARTMENT SINK	ADVANCE TABCO	4-1-18				1-1/2"***
28A	1	PRE RINSE FAUCET	KROWNE	17-108WL	1/2"	1/2"		
34	1	3-COMPARTMENT SINK	EXISTING TO REMAIN	EXISTING TO REMAIN				E
37	1	WASTE DRAIN VALVE	REGENCY					
37B	1	PRE RINSE FAUCET	WATERLOO		3/4"+	3/4"		
38	3	WALL MOUNTED HAND SINK	KROWNE	HS-26L	1/2"	1/2"	2"	
44	1	WATER HEATER	SEE SCHEDULE	SEE SCHEDULE				
50	1	WALK-IN FREEZER	EXISTING TO REMAIN	EXISTING TO REMAIN				
FS	4	FLOOR SINKS	ZURN	Z1900-23-31 (ZS1900 IF IN EXPOSED AREAS)			3"	
FD	2	FLOOR DRAINS*	ZURN	ZS415 W/ TYPE BS STRAINER			3"	

+ HOT WATER 140 DEG, \*PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS, \*\*ADAPTOR REQUIRED, \*\*\*LEVER WASTE VALVE REQUIRED



PROVIDE CLEANOUT TEE WITH [

JOINT COMPOUND

SCREWED COUNTER-SUNK ABS PLASTIC

WHERE CLEANOUT TEE IS CONCEALED

**ROUND 18 GAUGE STAINLESS STEEL** 

IN A CHASE OR A PARTITION, PROVIDE A

EXTENSION IF REQUIRED.

PLUG: TAPARED-THREAD WITH TFE

¬COLUMN OR

SHOWN ON

REFER TO PLUMBING

FIXTURE SCHEDULE

7) DIRECTION

FOR FURTHER

INFORMATION.

FLOOR PLAN

PARTITION AS



#### 1/2" 1/2" 2" 1-1/2" 3/4" 3/4" 3" 2" SERVICE SINK

WATER CLOSET (TANK) 3/4" -- 4" 2"

WATER | WATER

FIXTURE

FLOOR DRAIN / SINK

THICKNESS.

1. AS PER 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE, SECTION C404.4, PIPING FROM A WATER HEATER TO THE TERMINATION OF HEATED WATER FIXTURE SUPPLY PIPE SHALL BE INSULATED IN ACCORDANCE WITH TABLE C403.11.3 OF MINIMUM PIPE INSULATION

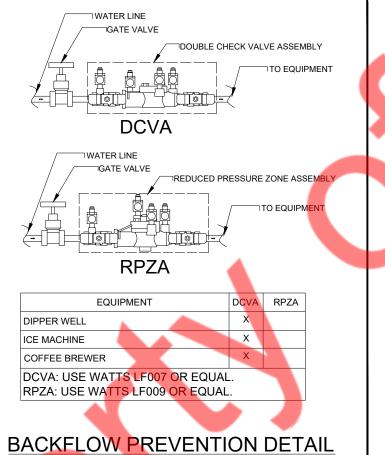
**ENERGY CONSERVATION NOTES** 

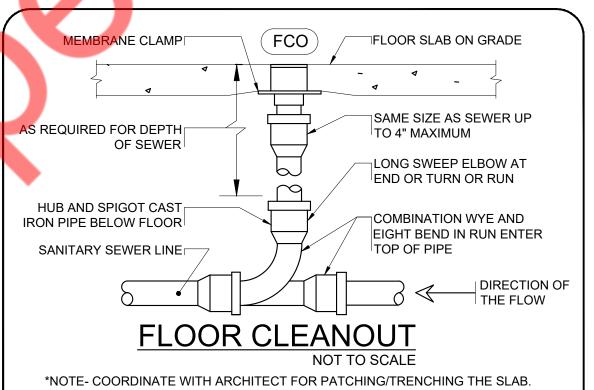
MINIMUM PIPE INSULATION THICKNESS							
FLUID OPERATING	INSULATION CONDUCTIVITY		NOMINAL PIPE OR TUBE SIZE (INCHES)				
TEMPERATURE RANGE AND USAGE (°F)	CONDUCTIVITY BTU· IN./ (H· FT2· °F)	MEAN RATING TEMPERATURE, °F	<1	1 TO <1½	1½ TO <4	4 TO <8	≥8
141-200	0.25-0.29	125	1.5	1.5	2	2	2
105-140	0.21-0.28	100	1.0	1.0	1.5	1.5	1.5
40-60	0.21-0.27	75	0.5	0.5	1.0	1.0	1.0

HOT WATER SYSTEM PIPING IS DESIGNED AS PER MAXIMUM ALLOWED PIPE LENGTH METHOD AS PER 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE, SECTION C404.5.1. THE MAXIMUM ALLOWABLE PIPE LENGTH FROM THE NEAREST SOURCE OF HEATED WATER TO THE TERMINATION OF THE FIXTURE SUPPLY PIPE SHALL BE AS PER MAXIMUM PIPING LENGTH TABLE.

NOMINAL PIPE SIZE	MIXIMUM PIPING LENGTH (FEET)		
(INCHES)	PUBLIC LAV	OTHER FIXTURES	
3/8"	3'	50'	
1/2"	2'	43'	
3/4"	0.5'	21'	
1"	0.5'	13'	
11/4"	0.5'	8'	
1½"	0.5'	6'	
2" OR LARGER	0.5'	4'	

- B. AS PER 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE SECTION C404.6.1 AUTOMATIC CONTROLS SHALL BE INSTALLED THAT LIMITS THE OPERATION OF A RE-CIRCULATING PUMP AND THE SYSTEM RETURN PIPE SHALL BE A DEDICATED RETURN PIPE OR A COLD WATER SUPPLY PIPE.
- AS PER 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE SECTION C404.7 PUMPS SHALL HAVE CONTROLS THAT COMPLY WITH BOTH OF THE FOLLOWING:
- THE CONTROL SHALL START THE PUMP UPON RECEIVING A SIGNAL FROM THE ACTION OF A USER OF A FIXTURE OR APPLIANCE, SENSING THE PRESENCE OF A USER OF A FIXTURE OR SENSING THE FLOW OF HOT OR TEMPERED WATER TO A FIXTURE FITTING OR APPLIANCE.
- THE CONTROL SHALL LIMIT THE TEMPERATURE OF THE WATER ENTERING THE COLD-WATER PIPING TO 104°F (40°C).



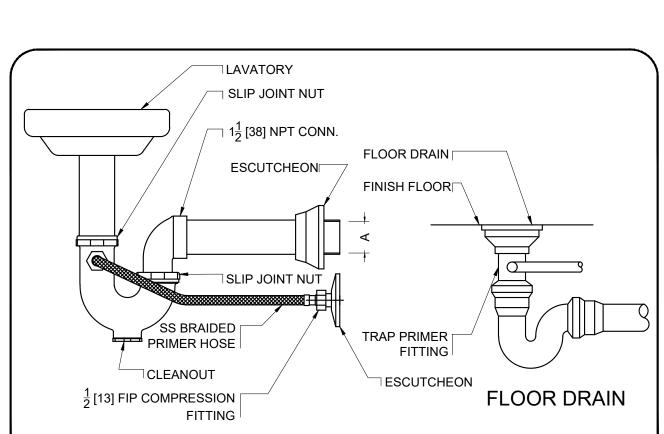


FLOOR CLEANOUT DETAIL NOTES

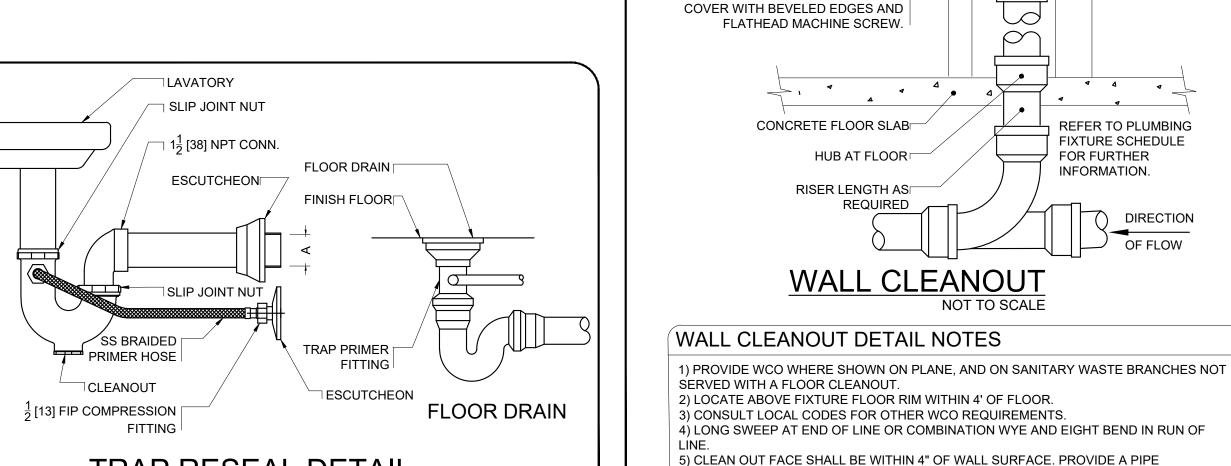
A) BUILDING EXIT B) AT TURNS OF PIPES GREATER THAN 45 DEGREES C) AT 90' INTERVALS ON STRAIGHT RUNS

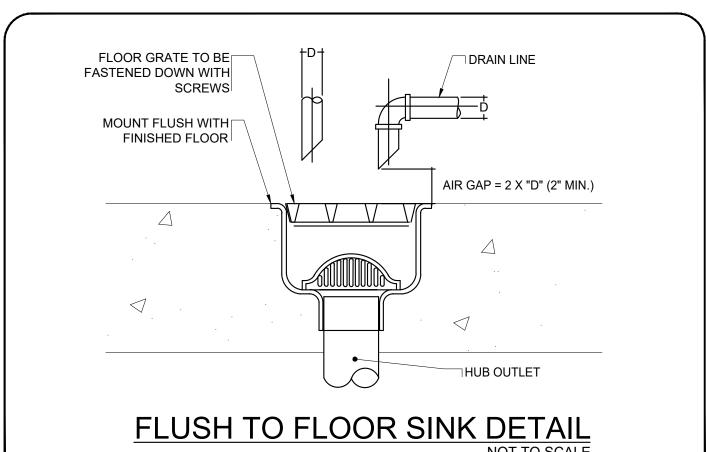
D) WHERE IS SHOWN ON PLANS E) WHERE IS 18" CLEAR AROUND

1) LOCATE CLEANOUT AT THIS LOCATIONS:

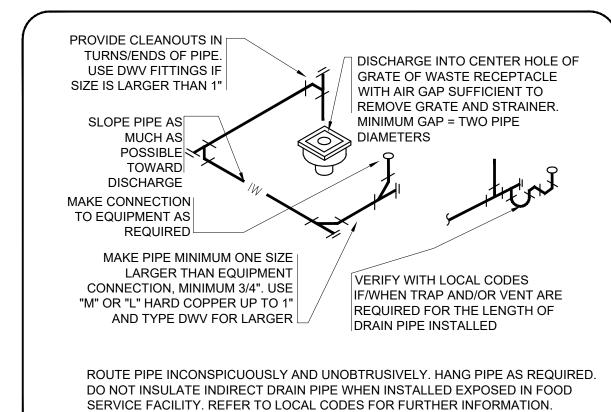








\*NOTE- COORDINATE WITH ARCHITECT FOR PATCHING/TRENCHING THE SLAB.



INDIRECT WASTE CONNECTION DETAIL

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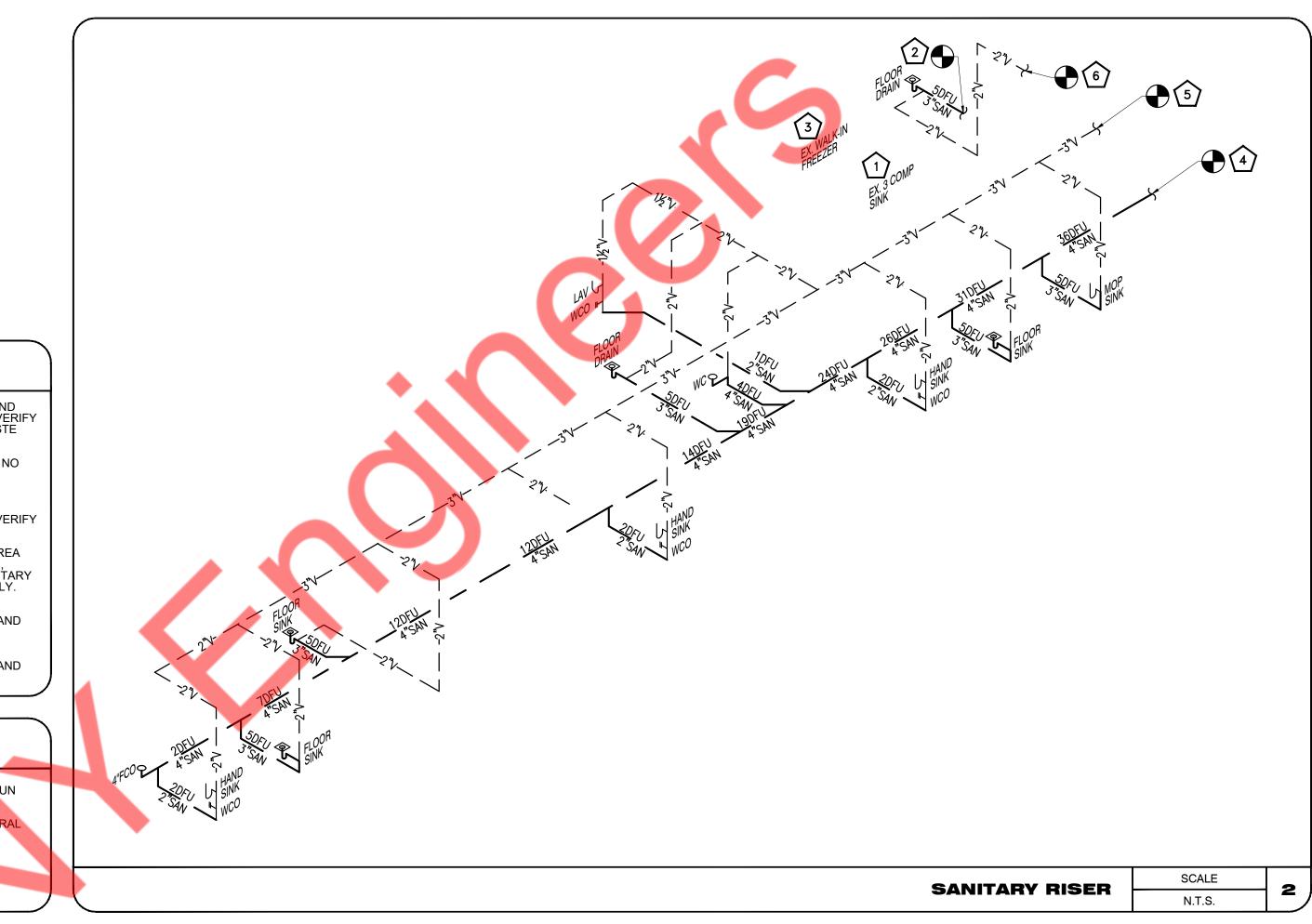
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NOTES, **SCHEDULE & DETAILS** 



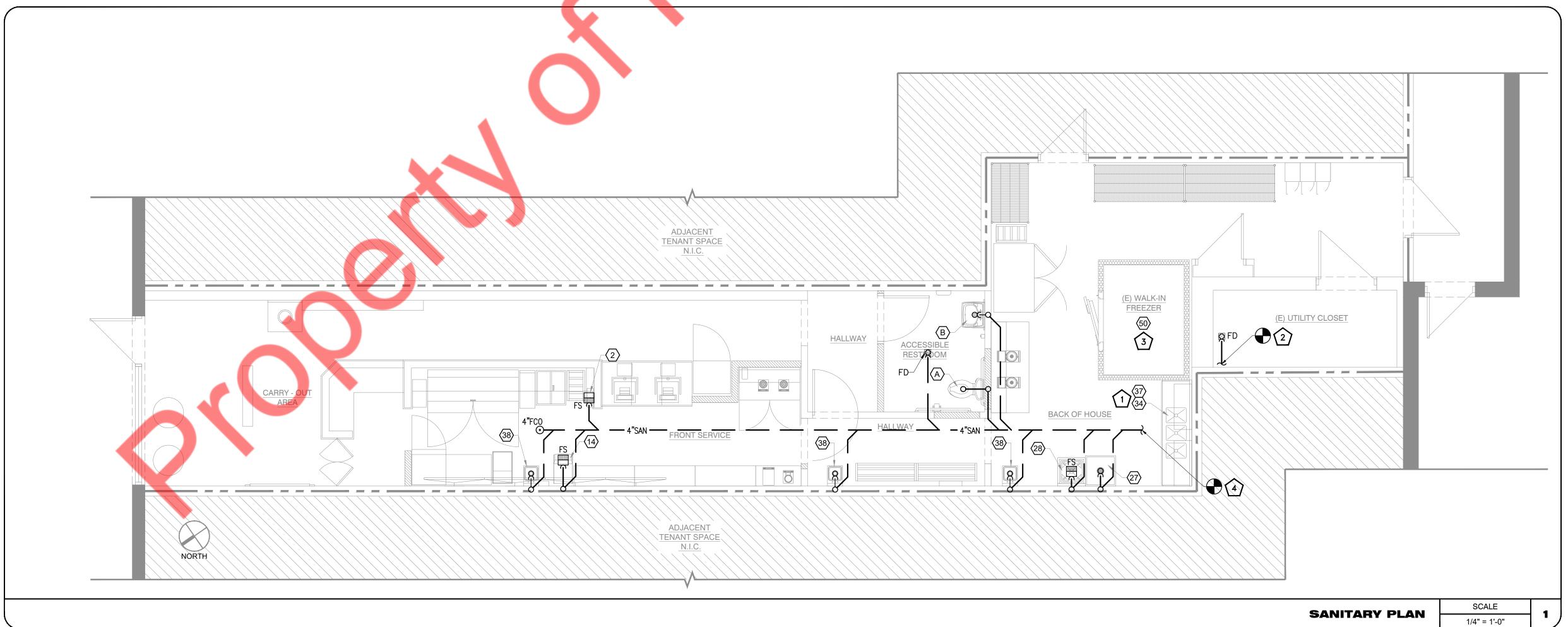
# SANITARY KEY NOTE EXISTING 3 COMPARTMENT SINK WITH EXISTING SANITARY INDIRECT CONNECTION AND RELATED FITTINGS, FIXTURES & ACCESSORIES TO REMAIN. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND REPLACE IF REQUIRED. PROVIDE NEW WASTE DRAIN VALVE AS PER SCHEDULE IF NOT EXISTING. CONTRACTOR TO PROVIDE NEW FLOOR DRAIN NEAR WATER HEATER, IF THERE WAS NO EXISTING DRAIN POINT AND CONNECT 3" SANITARY LINE FROM FLOOR DRAIN TO THE EXISTING NEAREST SANITARY LINE IN THE AREA.

- EXISTING WALK-IN FREEZER WITH EXISTING SANITARY INDIRECT CONNECTION AND RELATED FITTINGS, FIXTURES & ACCESSORIES TO REMAIN. CONTRACTOR TO FIELD VERIFY THE CONDITION OF EXISTING PIPING AND REPLACE/PROVIDE NEW IF REQUIRED.
- THE CONDITION OF EXISTING PIPING AND REPLACE/PROVIDE NEW IF REQUIRED.

  CONNECT NEW 4" SANITARY WASTE PIPING TO EXISTING SANITARY WASTE LINE IN AREA WITH EXISTING HOUSE TRAP. CONTRACTOR TO FIELD VERIFY EXACT SIZE, LOCATION, ROUTING AND INVERT OF EXISTING SANITARY WASTE LINE & HOUSE TRAP. NEW SANITARY LINE SHOULD BE CONNECTED TO EXISTING SANITARY LINE BEFORE HOUSE TRAP ONLY.
- CONNECT NEW 3" VENT PIPING TO EXISTING ADEQUATE SIZE VENT PIPE IN SPACE. CONTRACTOR TO FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING VENT PIPE AND UPGRADE THE SIZE OF EXISTING VENT PIPE IF REQUIRED.
- CONNECT NEW 2" VENT PIPING TO EXISTING ADEQUATE SIZE VENT PIPE IN SPACE.
  CONTRACTOR TO FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING VENT PIPE AND UPGRADE THE SIZE OF EXISTING VENT PIPE IF REQUIRED.

#### **GENERAL NOTES**

- UNLESS OTHERWISE NOTED, SLOPE OF DRAINAGE SYSTEM TO BE 1/8" PER FOOT OF RUN FOR PIPE 3" TO 6" AND 1/4" PER FOOT FOR PIPE 2-1/2" OR LESS.
   CONTRACTOR TO FIELD VERIFY FEASIBILITY OF SLAB PENETRATION AS PER STRUCTURAL REQUIREMENT
- 3. ALL MATERIAL INDICATED AND IMPLIED ON THESE DRAWINGS SHALL BE NEW UNLESS OTHERWISE NOTED.
- 4. ALL CLEANOUTS TO BE ACCESSIBLE.



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SANITARY PLAN & RISER

P-2

KECHKCCH ATICH	PUMP SCHEDUL
MANUFACTURER & MODEL	GRUNDFOS UP 15-18 B5
EQUIPMENT TAG	RCP-1
STATUS	NEW
QUANTITY	1
GPM	2
HEAD (FEET)	13
WATER TEMP.(°F)	140
PUMP TYPE	INLINE
MHP	85 WATTS
V/PH/HZ	115/1/60
RPM	2280
SERVICE FACTOR	1.0

PROVIDE AQUA STAT WITH AUTOMATIC TIMER KIT FOR THE TEMPERATURE CONTROL OF HOT WATER SYSTEM. COORDINATE ELECTRICAL REQUIREMENTS FOR TIMER WITH ELECTRICAL CONTRACTOR.

WATER HEAT	ER SCHEDULE
MANUFACTURER	AO SMITH
MODEL	BTX-80
EQUIPMENT TAG	WH-1
STATUS	NEW
QUANTITY	1
CAPACITY	50 GALLONS
FUEL	GAS
BTU/HR	76,000
RECOVERY	95 GPH*
EFFICIENCY	94%
VENT	3"Ø
VOLTAGE	120/1/60
AMPERAGE	5
WEIGHT (EMPTY)	225 LBS.
NOTES:	

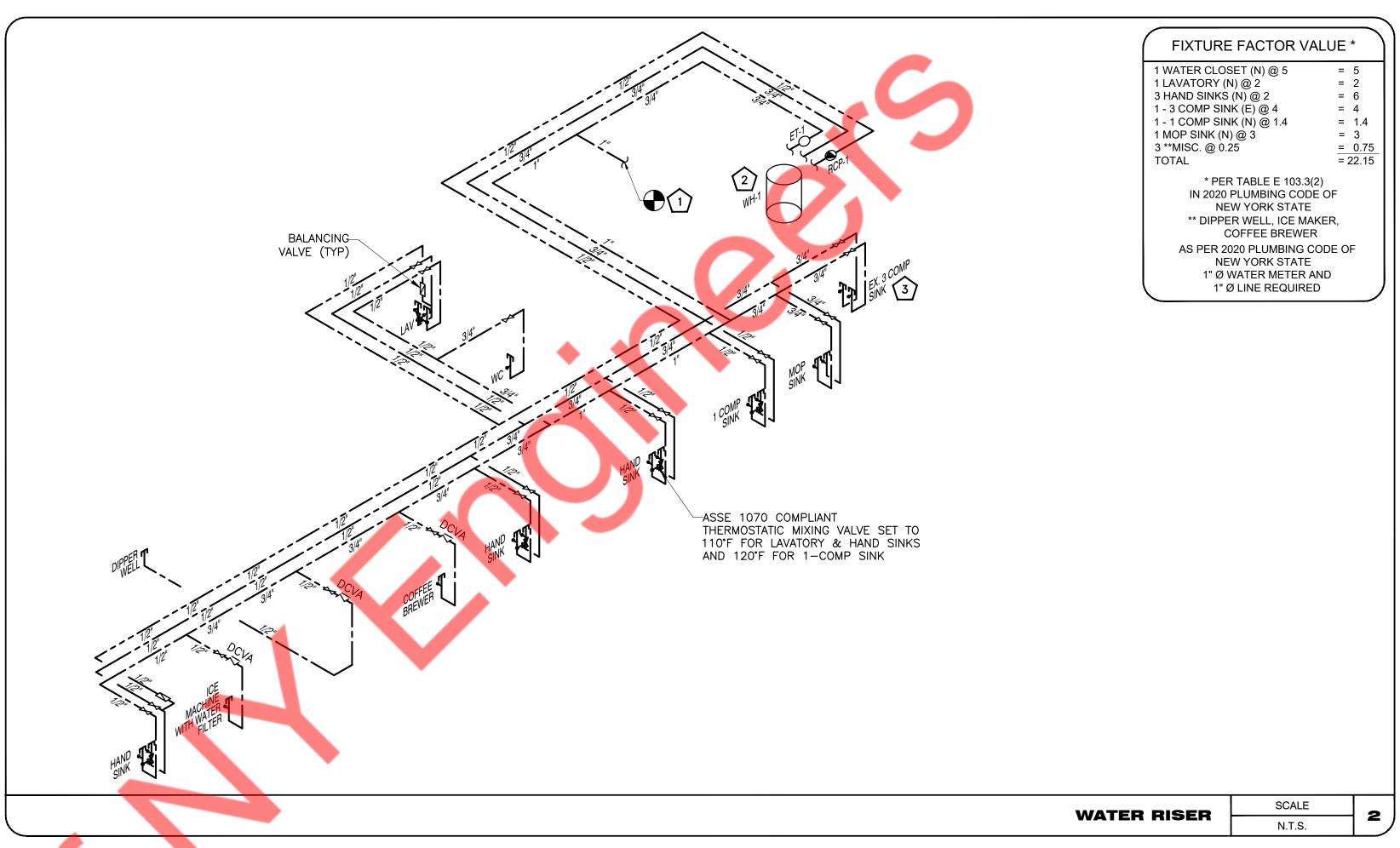
- \* @ 90° F TEMPERATURE RISE.
   INSTALL NEW EXPANSION TANK (ET-1) AMTROL MODEL THERM-X-TROL ST-5C-DD, 2.0 GAL PER LOCAL CODE REQUIREMENTS.
- 3. CONDENSATE AND T&P DRAIN CONNECTION SHOULD BE MADE PROPERLY AS PER LOCAL CODES AND MANUFACTURER RECOMMENDATIONS.

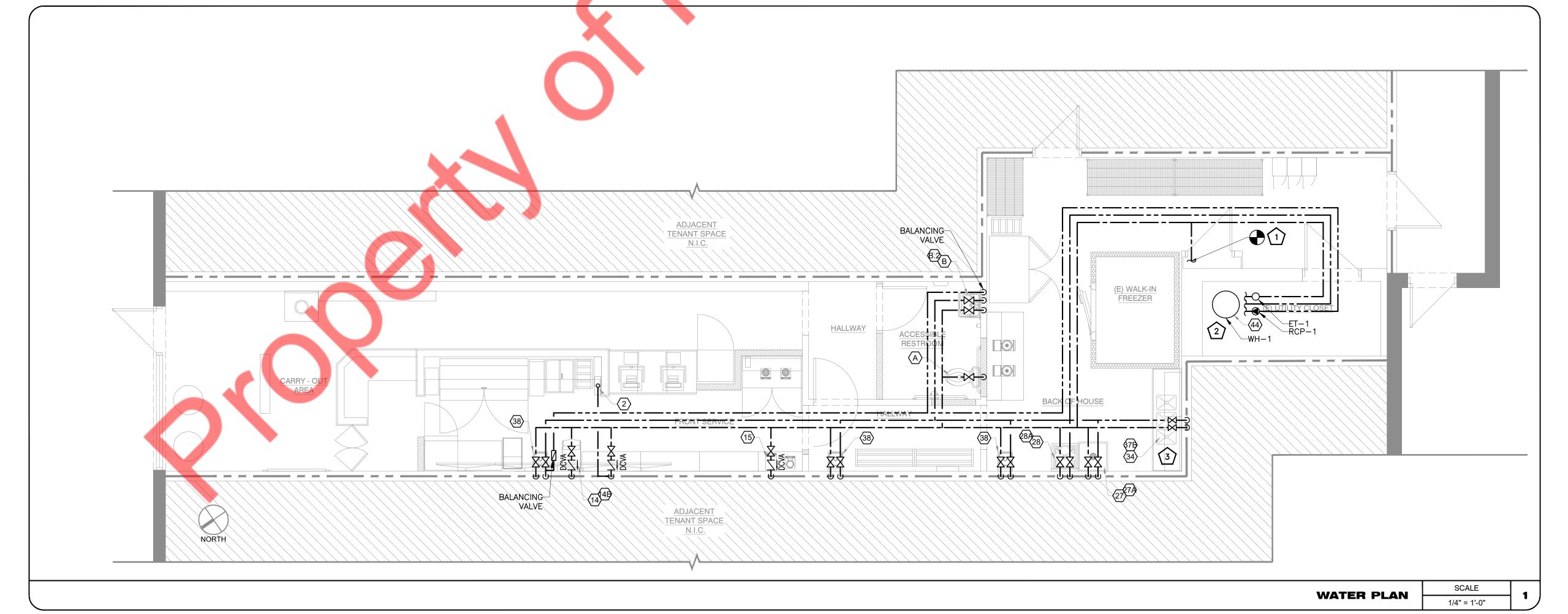
#### WATER PIPING KEY NOTE

- CONNECT NEW 1" CW LINE TO EXISTING WATER MAIN LINE WITH EXISTING SHUT OFF VALVE, WATER METER & BACKFLOW PREVENTER. WATER METER & BACKFLOW PREVENTER IS LOCATED IN THE BASEMENT LEVEL. CONTRACTOR TO FIELD VERIFY SIZE & LOCATION OF EXISTING BACKFLOW PREVENTER, WATER METER & WATER LINE AND UPGRADE IF REQUIRED.
- EXISTING WATER HEATER WITH EXISTING PIPING TO BE DEMOLISHED AND REPLACED WITH NEW WATER HEATER AT SAME LOCATION. CONTRACTOR TO PROVIDE NEW PIPING AND ACCESSORIES AS SHOWN. REFER WATER HEATER SCHEDULE FOR MORE
- EXISTING 3 COMPARTMENT SINK TO BE PROVIDED WITH NEW PRE RINSE FAUCET AS PER ARCHITECTURE SCHEDULE. PROVIDE NEW WATER PIPING FOR NEW FAUCET AS SHOWN. CONTRACTOR TO VERIFY WITH OWNER/ARCHITECT FOR REQUIREMENT OF NEW FAUCET.

#### **GENERAL NOTES**

- 1. CW/HW/HWR PIPING TO BE PROVIDED WITH INSULATION AS PER 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE (REFER SHEET P-1).
- 2. PROVIDE BRANCH PRV IF PRESSURE EXCEEDS 80 PSI.
- 3. CONTRACTOR TO FIELD VERIFY FEASIBILITY OF SLAB PENETRATION AS PER STRUCTURAL REQUIREMENT.
- PROVIDE ACCESS PANELS FOR WATER HAMMER ARRESTOR & SHUT-OFF VALVES AS REQUIRED.
- 5. REFER RISER DIAGRAMS FOR ALL PIPE SIZES.





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WATER PLAN & RISER

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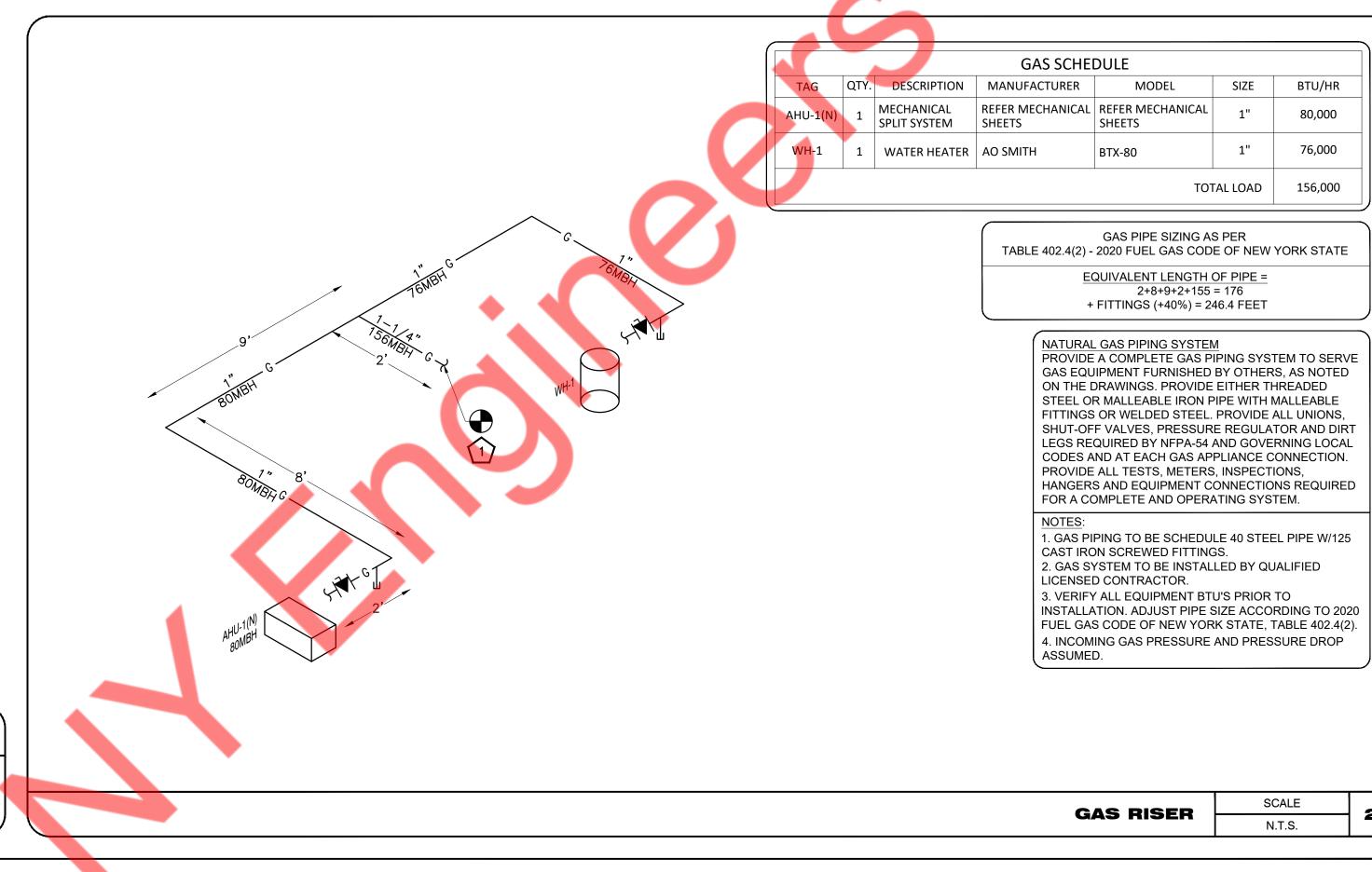
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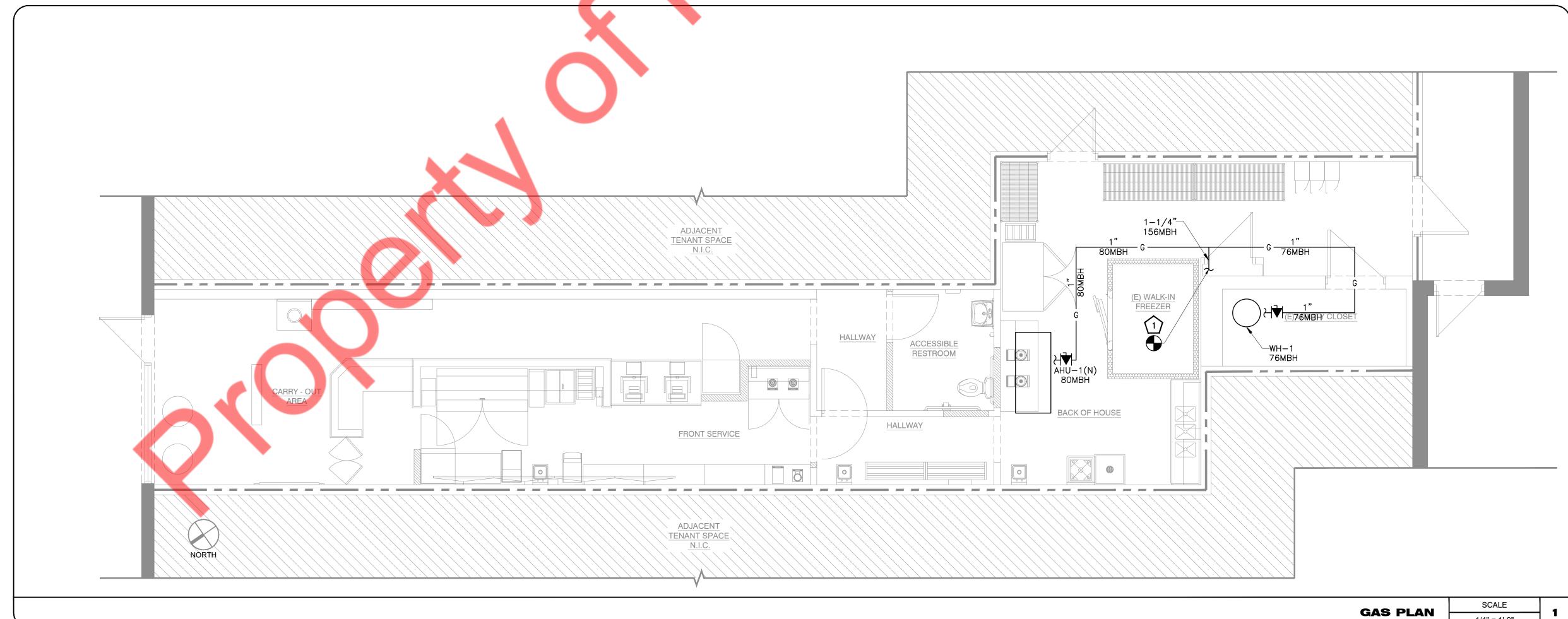
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GAS PLAN & RISER

P-4

1/4" = 1'-0"





GAS PIPING KEY NOTE

CONNECT NEW 1-1/4" GAS PIPING TO EXISTING LINE IN AREA DEDICATED FOR OUR SPACE. CONTRACTOR TO FIELD VERIFY THE EXISTING GAS METER LOCATION & CAPACITY. ALSO, CONTRACTOR TO FIELD VERIFY EXACT SIZE, LOCATION & AVAILABLE PRESSURE OF EXISTING GAS LINE AND UPGRADE IF REQUIRED.