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GENERAL REMODELING NOTES - ALL CONTRACTORS

- CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL CORING, CUTTING, PATCHING REPAIRING, REFINISHING AND REMOVAL/REPLACEMENT OF NEW OR EXISTING BUILDING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OR REMOVAL OF THEIR WORK. ALL PATCHING, REPAIRING AND REFINISHING WORK SHALL BE PERFORMED BY THOSE REGULARLY INVOLVED IN THAT TRADE AND SHALL MATCH THE ADJACENT CONSTRUCTION AS CLOSELY AS POSSIBLE. CARE SHALL BE TAKEN SO AS NOT TO DAMAGE ANY EXISTING BUILDING CONSTRUCTION OR ITEMS THAT ARE TO REMAIN. ANY EXISTING FINISHES THAT ARE DAMAGED DURING THE INSTALLATION OF NEW WORK OR REMOVAL OF EXISTING WORK SHALL BE REPAIRED, REPLACED AND PAID FOR BY THE INSTALLING CONTRACTOR, TO THE SATISFACTION OF THE ARCHITECT AND OWNER. REFER TO ARCHITECTURAL DRAWINGS FOR EXISTING BUILDING CONSTRUCTION THAT IS TO REMAIN AND, THEREFORE, SUBJECT TO PATCHING, REPAIRING, REFINISHING, AND REMOVAL/REPLACEMENT. (NOTE: CONTRACTOR SHALL VERIFY EXISTING BUILDING'S ROOF WARRANTY AND EMPLOY OTHER SUBCONTRACTOR(S) AS REQUIRED BY ROOF MANUFACTURER'S REPRESENTATIVE SO AS NOT TO VOID OWNER'S ROOF WARRANTY.)
- 2. SOME OF THE EXISTING ITEMS AND EQUIPMENT SCHEDULED TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER. ANY ITEMS THAT THE OWNER WANTS TO RETAIN SHALL BE REMOVED CAREFULLY SO AS NOT TO DAMAGE THEM. ALL OTHER ITEMS TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE SITE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR OWN CLEAN-UP DURING CONSTRUCTION. IF CONTRACTOR FAILS TO PROVIDE SUCH CLEAN-UP, THE OWNER WILL DIRECT ANOTHER CONTRACTOR TO PERFORM THE CLEAN-UP AND THE NEGLIGENT CONTRACTOR SHALL PAY THE ASSOCIATED BACK-CHARGES AS DEEMED APPROPRIATE BY THE OWNER.
- CONTRACTOR SHALL INSTALL ALL AUXILIARY SUPPORTING STEEL AS REQUIRED FOR THE SUPPORTING OF THEIR PIPING, DUCTWORK, CONDUIT, TANKS, EQUIPMENT, ETC. ALL SUPPORTING STEEL FOR ITEMS ABOVE A SUSPENDED CEILING SHALL BE FROM BUILDING STRUCTURAL MEMBERS ONLY.
- 5. IT IS MANDATORY THAT THE COMPLETE EXISTING BUILDING REMAIN IN CONTINUOUS AND NON-INTERRUPTED OPERATION DURING REMODELING/ALTERING OF SAID EXISTING BUILDING. THE SPECIFIC AREA(S) BEING REMODELED/ALTERED AT ANY SCHEDULED TIME ARE OBVIOUSLY EXCLUSIVE OF THIS STATEMENT. SERVICES TO EXISTING BUILDING SHALL BE KEPT IN CONTINUOUS OPERATION INCLUDING POWER, SIGNAL SYSTEMS, LIGHTING, TELEPHONE, HEATING, COOLING, VENTILATING, TEMPERATURE CONTROL, SEWERS AND HOT AND COLD WATER. ANY ABSOLUTELY NECESSARY INTERRUPTION OF THESE SERVICES TO ACCOMPLISH CONTRACT WORK SHALL BE ARRANGED WITH THE OWNER A MINIMUM OF TEN (10) WORKING DAYS IN ADVANCE. SUCH INTERRUPTIONS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AS FAR AS TIME INTERVAL IS INVOLVED AND TEMPORARY SERVICES SHALL BE FURNISHED AND INSTALLED UNDER THIS CONTRACT WHERE NECESSARY TO ACCOMPLISH THIS PURPOSE. TEMPORARIES SHALL BE REMOVED BY THE CONTRACTOR ONLY AFTER NEW PERMANENT SERVICES ARE INSTALLED AND FULLY OPERATIONAL.
- 6. UNLESS INDICATED OTHERWISE, THE ENGINEER/OWNER MAKES NO REPRESENTATION AS TO WHETHER OR NOT ANY HAZARDOUS OR CONTAMINATED MATERIALS (INCLUDING BUT NOT LIMITED TO ASBESTOS, PCB'S, CONTAMINATED SOILS, ETC.) ARE PRESENT WITHIN THE EXISTING BUILDING OR ON THE SITE. WORK SHOWN ON THE DRAWINGS AND/OR INDICATED IN THE SPECIFICATIONS SHALL NOT BE CONSTRUED TO CALL FOR CONTACT WITH ANY OF THESE MATERIALS. IF THESE MATERIALS ARE ENCOUNTERED OR SUSPECTED. THE CONTRACTOR SHALL NOT DISTURB THEM AND SHALL CONTACT THE ARCHITECT/ENGINEER IMMEDIATELY.
- WHERE WORK CALLED FOR ON THE DRAWINGS OR IN THE SPECIFICATIONS INVOLVES THE REMOVAL OR RELOCATION OF PIPING OR EQUIPMENT CONTAINING REFRIGERANT. ALL REFRIGERANT SHALL BE RECOVERED BY APPROVED METHODS PER EPA REGULATIONS.
- 8. THE DRAWINGS, SCHEDULES AND SPECIFICATIONS HAVE BEEN PREPARED USING ONE MANUFACTURER FOR EACH PIECE OF EQUIPMENT AS THE BASIS FOR DIMENSIONAL DESIGN. IF THE CONTRACTOR PURCHASES EQUIPMENT FROM A SPECIFIED ACCEPTABLE MANUFACTURER, BUT NOT THE SCHEDULED MANUFACTURER USED FOR THE BASE DESIGN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL THE DIMENSIONS OF THE EQUIPMENT TO VERIFY THAT IT WILL FIT IN THE SPACE SHOWN ON THE DRAWINGS. MINOR DEVIATIONS IN DIMENSIONS WILL BE PERMITTED. PROVIDED THE RATINGS MEET THOSE SHOWN ON THE DRAWINGS AND EQUIPMENT WILL PHYSICALLY FIT INTO THE SPACE ALLOCATED WITH SUITABLE ACCESS AROUND EQUIPMENT FOR OPERATION AND MAINTENANCE OF THE EQUIPMENT. WHEN EQUIPMENT SUBMITTED FOR REVIEW DOES NOT MEET THE PHYSICAL SIZE OR ARRANGEMENT OF THAT SCHEDULED AND SPECIFIED, CONTRACTOR SHALL PAY FOR ALL ALTERATIONS REQUIRED TO ACCOMMODATE SUCH EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR WILL ALSO PAY ALL COSTS FOR ADDITIONAL WORK REQUIRED BY OTHER CONTRACTORS, OWNER, ARCHITECT OR ENGINEER TO MAKE CHANGES WHICH WOULD ALLOW THE EQUIPMENT TO FIT IN THE SPACE AND FUNCTION AS INTENDED.
- 9. CONTRACTOR SHALL PROVIDE OWNER TRAINING ON ALL EQUIPMENT AND BUILDING SYSTEMS PROVIDED/ALTERED BY THEIR WORK. TRAINING SHALL BE ACCOMPLISHED DURING TIME DEDICATED FOR THAT PURPOSE, NOT IN CONJUNCTION WITH SERVICE WORK.
- 10. AT COMPLETION OF PROJECT, CONTRACTOR SHALL SUBMIT ONE PHYSICAL AND DIGITAL COPIES OF OPERATION AND MAINTENANCE MANUALS FOR ALL WORK PROVIDED BY THEM ON PROJECT. MANUALS SHALL BE CLEARLY ORGANIZED AND CONTAIN COPIES OF EQUIPMENT, SHOP DRAWINGS, EQUIPMENT PARTS LISTS, SERVICE CONTACTS, CONTRACTOR AND MANUFACTURER WARRANTÉES, AND "AS BUILT" FLOOR PLANS.
- II. CONTRACTOR SHALL PROVIDE WARRANTY FOR ALL MATERIAL AND GUARANTEE ALL WORKMANSHIP PROVIDED BY THEM FOR I (ONE) YEAR FROM SUBSTANTIAL COMPLETION OF WORK INVOLVED.
- 12. IDENTIFY EQUIPMENT WITH ENGRAVED 3-LAYER PLASTIC LAMINATED TAGS OR SIGNS. IDENTIFY THERMOSTATS WITH LABELS.

GENERAL NOTES - HVAC WORK:

- ALL NEW WORK AND MATERIALS SHALL CONFORM TO CITY OF HICKORY HILLS CODE AND HICKORY HILLS PARK DISTRICT BUILDING STANDARDS.
- 2. PATCH AND REFINISH ALL DAMAGED INSULATED SURFACES OF ALL EXISTING DUCTWORK, PIPING AND ASSOCIATED FITTINGS TO MATCH EXISTING WHERE NEW CONNECTIONS ARE BEING MADE.
- 3. CONTRACTORS SHALL PROVIDE A ONE YEAR WARRANTY ON ALL MATERIALS, EQUIPMENT AND LABOR FROM DATE OF SUBSTANTIAL COMPLETION OF WORK EXCEPT AS FOLLOWS: PROVIDE A 5 YEAR PARTS WARRANTY FOR ROOFTOP UNIT AND AIR COOLED CONDENSING UNIT COMPRESSOR; PROVIDE A 10 YEAR PARTS WARRANTY FOR ROOFTOP UNIT HEAT EXCHANGER.
- 4. EXCEPT AS NOTED OTHERWISE, ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE GALVANIZED SHEET METAL WITH SEALED JOINTS CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH CURRENT SMACNA MANUAL.
- ROUND EXPOSED SUPPLY OR RETURN DUCTWORK SHALL BE SINGLE WALL SPIRAL GALVANIZED.
- 6. ALL NEW SUPPLY AND RETURN DUCTWORK SHALL MATCH EXISTING (LINED OR EXTERNALLY INSULATED).
- 7. ALL NEW OUTSIDE AIR DUCTWORK SHALL BE EXTERNALLY INSULATED 2" THICK WITH FLEXIBLE FIBERGLASS INSULATION WITH FOIL FACED JACKET.
- 8. BALANCE REPLACEMENT ROOFTOP UNIT AND FURNACE UNITS TO ACCOMPLISH AIR QUANTITIES AS SHOWN ON DRAWING AND SUBMIT TEST REPORT TO OWNER.
- 9. ALL REFRIGERANT PIPING SHALL BE TYPE "1" ACR LINESET OR TYPE "K" COPPER WITH WROUGHT COPPER SOLDER FITTINGS AND BE SIZED PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. INSULATE REFRIGERANT SUCTION AND HOT GAS LINES WITH 3/4" THICK AP/ARMAFLEX. PROVIDE EXTERIOR INSULATION WITH 2 COATS UV RESISTANT FINISH.
- 10. DRIP PAN DRAIN PIPING SHALL BE SCHEDULE 40 PVC OR TYPE "M" COPPER WITH 1/2" INSULATION.
- NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK AND CONFORM WITH ASTM STANDARDS WELDED FOR PIPE SIZES 2 1/2" AND OVER AND SCREWED FOR PIPE SIZES 2" AND UNDER. ALL GAS PIPING INSTALLED OUTSIDE OF BUILDING SHALL BE WIRE BRUSHED AND PAINTED WITH 2 COATS OF YELLOW RUST RESISTANT PAINT.
- 12. ALL PIPING SHALL BE SUSPENDED WITH CLEVIS AND/OR TRAPEZE PIPE HANGERS. INSULATED PIPING SHALL REST ON SHEET METAL INSULATION SHIELDS.

250 MBH INPUT, 5.8 AMPS-1 PHASE-120V.

EXTEND EXISTING CIRCUIT AND PROVIDE

─ EXTEND NEW BRANCH FLUE PIPE AND MAKE

CONNECTION TO EXISTING FLUE THRU ROOF.

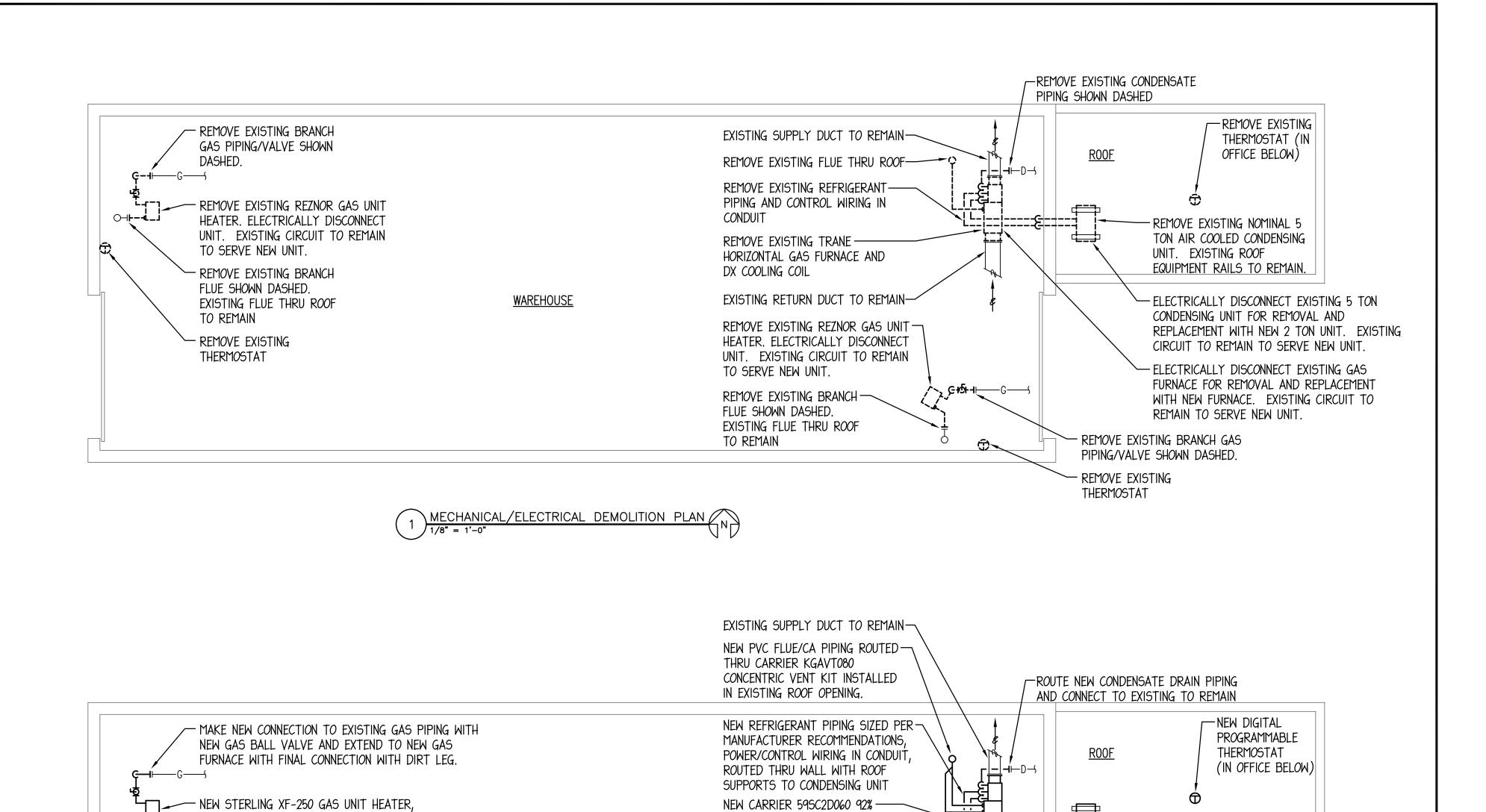
NEW DIGITAL PROGRAMMABLE THERMOSTAT

<u>WAREHOUSE</u>

\ MECHANICAL/ELECTRICAL PLAN

TOGGLE SWITCH DISCONNECT SWITCH.

- 13. PRESSURE TEST AND CHARGE ALL NEW PIPING SYSTEMS AND EXTENSION TO PIPING SYSTEMS. TESTING SHALL BE MINIMUM 50 PSI HIGHER THAN NORMAL OPERATING PRESSURE OF SYSTEM.
- 14. PROVIDE MIRO PIPE CURBS ON TOP OF 3/4" RUBBER ROOF GUARD PAD FOR NEW PIPE OR CONDUIT ON ROOF SUPPORT PIPING OR CONDUITS MAXIMUM 6' ON CENTER.
- 15. BALL VALVES SHALL BE STOCKHAM, MILWAUKEE, OR NIBCO MSS SP 110, 400 PSI WOG, ONE PIECE BRONZE BODY, CHROME PLATED BRASS BALL, FULL PORT, TEFLON SEATS, BLOW-OUT PROOF STEM, SOLDER ENDS, LEVER HANDLE.
- 16. PROVIDE GAS SHUT-OFF VALVE AT EACH PIECE OF EQUIPMENT AND PRESSURE REGULATORS WHERE REQUIRED. VENT ALL PRESSURE REGULATORS WITHIN THE BUILDING FULL SIZE TO BUILDING EXTERIOR.
- 17. LOW VOLTAGE WIRING SHALL BE U/L LISTED AND PLENUM RATED (LOW SMOKE PRODUCING). WIRING SHALL BE CONCEALED IN WALLS AND MAY BE INSTALLED WITHOUT CONDUIT ABOVE ACCESSIBLE LAY-IN CEILING SPACES ONLY.
- 18. OTHER ACCEPTABLE MANUFACTURERS: ROOFTOP UNIT (DAIKIN, JCI/YORK, TRANE), GAS FURNACE/AIR COOLED CONDENSING UNIT (JCI/YORK, TRANE, LENNOX), GAS UNIT HEATER (REZNOR).
- 19. APPROXIMATE WEIGHT OF EXISTING TRANE ROOFTOP UNIT IS 2,500 LBS. CONTRACTOR SHALL PROVIDE ADDITIONAL STRUCTURAL SUPPORT AS REQUIRED BY REPLACEMENT ROOFTOP UNIT AND ADAPTER CURB.



EFFICIENT HORIZONTAL GAS FURNACE,

CNPHP24 DX COOLING COIL, 2.0 TONS.

EXISTING RETURN DUCT TO REMAIN—

STARTS/STOPS. BALANCE TO 100 CFM

NEW STERLING XF-250 GAS UNIT -

PHASE-120V. EXTEND EXISTING

CIRCUIT AND PROVIDE TOGGLE

SWITCH DISCONNECT SWITCH.

EXTEND NEW BRANCH FLUE -

PIPE AND MAKE CONNECTION

TO EXISTING FLUE THRU ROOF.

NEW 6" OUTSIDE AIR DUCT THRU ROOF TO —

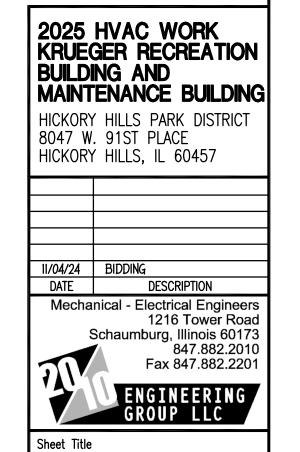
GOOSENECK WITH BIRDSCREEN. PROVIDE 2 POSITION

MOTORIZED DAMPER TO OPEN/CLOSE WHENEVER UNIT

HEATER, 250 MBH INPUT, 5.8 AMPS-I

800 CFM, 60 MBH INPUT, 7.5 AMPS-I

PHASE-120V. INCLUDE CASED



NEW CARRIER 24SCA424 AIR COOLED CONDENSING UNIT

NOMINAL 2.5 TONS CAPACITY, 15.1 MCA-25 MOCP-1

SUPPORT ACROSS EXISTING ROOF EQUIPMENT RAILS

-MODIFY AND EXTEND EXISTING POWER WIRING TO

EXTEND TO TERMINALS OF NEW UNIT AS REQUIRED.

EXTEND RACEWAY AND CONDUCTORS WITH 3#8, IN

3/4"C TO MATCH EXISTING. PROVIDE PULL BOX TO

TO BE REPLACED WITH NEW 25A/3P BREAKER TO

— EXTEND EXISTING 120V. CIRCUIT AND PROVIDE

TOGGLE SWITCH DISCONNECT SWITCH.

- MAKE NEW CONNECTION TO EXISTING GAS PIPING WITH

NEW GAS BALL VALVE AND EXTEND TO NEW GAS

FURNACE WITH FINAL CONNECTION WITH DIRT LEG.

PROTECTION.

- NEW DIGITAL PROGRAMMABLE

THERMOSTAT

INTERCEPT AND EXTEND CONDUCTORS AND RACEWAY

AT INTERCEPTION POINT. EXISTING BREAKER IN PANEL

MATCH MANUFACTURERS RECOMMENDED OVERCURRENT

PHASE-208V. PROVIDE GALVANIZED UNISTRUT

ME1.2 CHECKED BY: 20/10

MECHANICAL/ELECTRICAL PLANS - MAINTENANCE

BUILDING, NOTES

PROJ. MGR: 20/10

DRAWN BY: 20/10

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