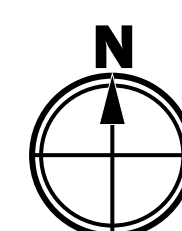
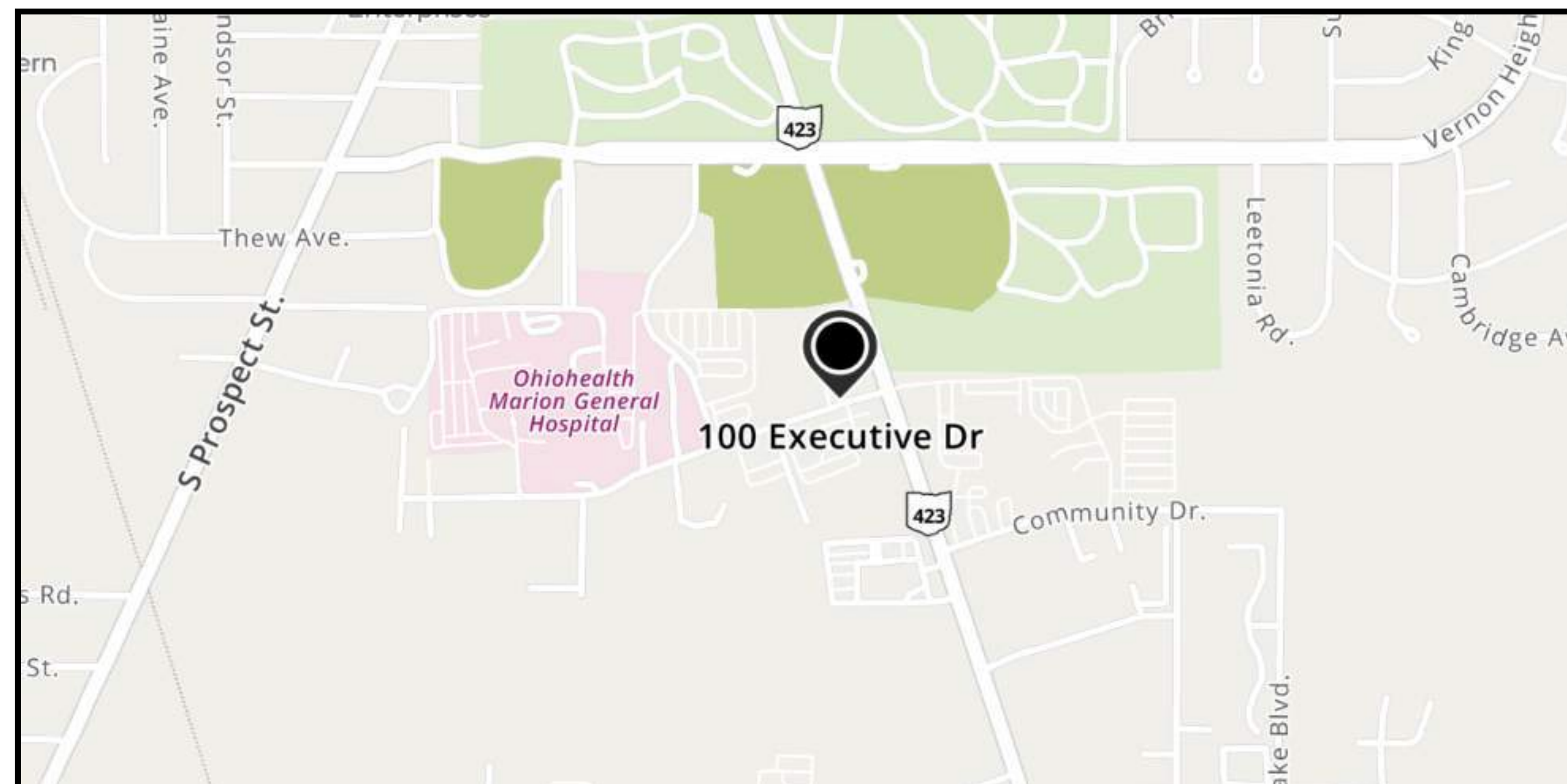


MARION COUNTY, OHIO

**EXECUTIVE DRIVE
HEATING PLANT IMPROVEMENTS
2026**



PROJECT SITE LOCATION: 100 EXECUTIVE DRIVE MARION, OH 43302
NO SCALE

PALMER
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**EXECUTIVE DRIVE - HEATING
PLANT IMPROVEMENTS**

100 EXECUTIVE DRIVE
MARION, OHIO 43302

PROJECT NUMBER:	2500032
DRAWN BY:	EMB/SL
ISSUE	DATE
PROPOSAL SET	03/02/2026

COVER PAGE

C001

ELECTRICAL GENERAL NOTES

A. GENERAL ELECTRICAL INTENT::

GENERAL INTENT IS TO DESIGN AND INSTALL A FULLY FUNCTIONAL AND COMPLIANT ELECTRICAL POWER SYSTEM (APPLICABLE EQUIPMENT AND DISTRIBUTION) TO CORRESPOND DIRECTLY TO NOTED/DESIGNED UPDATES TO THE BUILDING. IT IS EXPECTED THAT AN HVAC EQUIPMENT ADDITION AND REPLACEMENT TO BE PROVIDED WHERE NOTED AND BE COMPLETELY COORDINATED WITH ACCOMPANYING DOCUMENTED SCOPES OF WORK, INCLUDING ANY REQUIRED SERVICE AMP-DISTRIBUTION UPGRADES TO ADEQUATELY POWER NEW/REPLACED EQUIPMENT.

B. DESIGN CRITERIA::

PROPOSERS SHOULD REFER TO OVERALL SPECIFICATIONS AND ACCOMPANYING OWNER'S PROJECT REQUIREMENTS (OPR) DOCUMENTS PUBLISHED FOR DESIGN INTENT AND GUIDELINES.

C. DESIGN & CONSTRUCTION COORDINATION:

PROPOSERS TO IDENTIFY AND COORDINATE REMOVALS OF EXISTING EQUIPMENT (REFER TO DEMOLITION NOTES) AND COMPLETE IMPLEMENTATION OF NEW HVAC/ELECTRICAL POWER SYSTEM. THIS COORDINATION/CONSTRUCTION INCLUDES, BUT IS NOT LIMITED TO:

1. MAIN SWITCHGEAR UPDATES, AS APPLICABLE.
2. DISTRIBUTION PANELS (HVAC POWER, RECEPTACLE PANELS, INCLUDING RE-WORKS OF LEGACY PANELS AS REQUIRED, ETC.)
3. HVAC LOW-VOLTAGE SYSTEM COMPONENTS (UNITARY CONTROLS, INTERFACE TO EXISTING FIRE ALARM/SECURITY SYSTEMS, ETC.)
4. EVALUATION / USE OF SUBSTRATE COMPONENTS IN GOOD CONDITION (ROOFS, CEILING/FLOORS, MISC. SUPPORTS, ETC.).

D. MAIN EQUIPMENT LOCATIONS - GENERAL NOTES:

COORDINATED WITH ESTABLISHED PROJECT GUIDELINES, PROPERLY DESIGN/LOCATE NEW MAIN ELECTRICAL EQUIPMENT FOR FUNCTIONALITY, SECURITY, SAFETY & SERVICING AND MAKE PREPARATIONS FOR ALL ASSOCIATED WORK REQUIRED BY OVERALL SCOPES OF WORK (PANELS, EQUIPMENT, CONTROLS, WALLS, CEILINGS, FLOORS, ETC.):

1. INDOOR SWITCHGEAR EQUIPMENT: IN EXISTING ACCESSIBLE/SERVICEABLE UTILITY ROOMS (COORDINATE MODIFICATIONS TO EXISTING INFRASTRUCTURES).

2. INDOOR PANEL / LOAD CENTER / CONTROL EQUIPMENT / EXISTING MECHANICAL / UTILITY SPACES AND EXISTING WALL LOCATIONS PREFERRED, SELECTED / CONSTRUCTED FOR HEAVY-DUTY ENVIRONMENTS.
3. UTILITY METERING DEVICES: LOCATED TO ACHIEVE FULL BUILDING CONSUMPTION/LOAD MONITORING. VERIFY LOCATIONS IN PIPING AND ELECTRICAL GEAR ON SITE. REFER TO MANUFACTURER RECOMMENDATIONS FOR SPECIFIC INSTALLATION.

E. MAIN ELECTRIC RACEWAYS:

1. DESIGN AND PROPERLY INSTALL MAIN ELECTRIC POWER FEEDS, RACEWAYS AND CABLES WITH INSULATION/ACCESS ACCORDING TO USUAL & CUSTOMARY METHODS AND PERTINENT REGULATIONS. INTENT IS NOT TO DISTURB FINISHED SUBSTRATE (WALLS, HARD CEILINGS, FLOORS) BEYOND WHAT IS REQUIRED FOR NEW SYSTEM IMPLEMENTATION.

F. HVAC CONTROLS:

1. DESIGN AND PROPERLY INSTALL PROPOSER DESIGNED AND VENDOR PROVIDED UNITARY / PACKAGED CONTROL SYSTEMS & COMPONENTS AS REQUIRED FOR THE NEW HVAC EQUIPMENT AND SYSTEM(S).

G. HVAC-RELATED POWER SYSTEMS:

1. DESIGN AND PROPERLY INSTALL ELECTRIC POWER SYSTEMS REQUIRED TO SERVICE NEW HVAC SYSTEMS. COORDINATE SCOPES OF WORK WITH MAIN POWER SYSTEMS/EQUIPMENT UPGRADES (SIZING, LOCATION, DISTRIBUTION PANELS, ETC.).

H. PERMIT DRAWINGS:

1. EXPECTATION IS THAT THE PROPOSER DEVELOP PERMIT DRAWINGS AND OBTAIN REQUIRED PERMITS FROM ALL AUTHORITIES HAVING JURISDICTION OVER WORK OF THE PROJECT. THE PROPOSER SHALL DELIVER TO THE OWNER FOR APPROVAL A COMPLETE SET OF PROJECT DRAWINGS PRIOR TO SUBMISSION FOR PERMITTING.

I. AS-BUILTS:

1. EXPECTATION IS TO DELIVER THE OWNER A COMPLETE PROJECT AS-BUILT DRAWING SET INCLUDING EQUIPMENT SCHEDULES, FLOOR LAYOUTS, ELECTRICAL RECIRCUITING, HVAC PIPE & DUCT PATHS AND SIZES, ZONING LAYOUTS, SENSOR LOCATIONS, CONTROLLER DIAGRAMS, ARCHITECTURALS, ETC.

MECHANICAL GENERAL NOTES

A. GENERAL HVAC INTENT:

GENERAL INTENT IS TO DESIGN AND PROPERLY INSTALL A FULLY FUNCTIONAL AND CODE COMPLIANT HVAC SYSTEM TO CORRESPOND DIRECTLY TO NOTED / DESIGNED UPDATES TO THE BUILDING. IT IS EXPECTED THAT A SYSTEM TO REPLACE THE EXISTING ITEMS, WHERE NOTED, AS A BASIS-OF-DESIGN / PRE-PURCHASED AND BE COMPLETELY COORDINATED WITH ACCOMPANYING DOCUMENTED SCOPES OF WORK.

B. DESIGN CRITERIA:

PROPOSERS SHOULD REFER TO OVERALL SPECIFICATIONS AND ACCOMPANYING OWNER'S PROJECT REQUIREMENTS (OPR) DOCUMENTS PUBLISHED FOR DESIGN INTENT AND GUIDELINES.

C. DESIGN & CONSTRUCTION COORDINATION:

PROPOSERS TO IDENTIFY AND COORDINATE REMOVAL OF EXISTING EQUIPMENT (REFER TO SHEET KEY NOTES) AND COMPLETE IMPLEMENTATION OF NEW HVAC SYSTEM. THIS COORDINATION / CONSTRUCTION INCLUDES, BUT IS NOT LIMITED TO:

1. MAIN HVAC EQUIPMENT (UNIT VENTILATORS, CHILLERS, PUMPS, ROOFTOP UNITS) CENTRAL & LOCAL VENTILATION EQUIPMENT (OUTSIDE AIR, EXHAUST AIR, RELIEF AIR, ETC.)
2. CENTRAL & LOCAL VENTILATION EQUIPMENT (OUTSIDE AIR, EXHAUST AIR, RELIEF AIR, ETC.)
3. SPACE TERMINAL (AS APPLICABLE) HVAC EQUIPMENT (AIR HANDLING UNITS, UNIT VENTILATORS, CHILLERS, ETC.)
4. HOT WATER BOILER SYSTEMS
5. AUXILIARY HEATING-ONLY EQUIPMENT WHERE APPLICABLE
6. EXHAUST FLUES, INTAKES & CONDENSATE DRAINAGE
7. INTERFACE TO SYSTEMS INTEGRATION COMPONENTS FOR:
 - I. NEW PACKAGED HVAC CONTROL SYSTEMS
 - II. HVAC ELECTRIC POWER SYSTEMS
 - III. HVAC LOW-VOLTAGE SYSTEM COMPONENTS (UNITARY CONTROLS)

6. INTERFACE TO FIRE ALARM / SECURITY SYSTEMS, EVALUATION / USE OF SUBSTRATE COMPONENTS IN GOOD CONDITION (ROOFS, GRADES, CEILING/FLOORS, PADS, MISC. SUPPORTS, ETC.)

7. NO WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO IMPEDE THE SERVICABILITY OF EXISTING WORK, OR OTHER WORK INSTALLED AS A PART OF THIS PROJECT.

8. NO PUMPS, VALVES, OR OTHER APPURTENANCES SHALL BE INSTALLED OVERTOP OF BOILERS, CONTROL PANELS, OR OTHER EQUIPMENT.

D. MAIN EQUIPMENT LOCATIONS - GENERAL NOTES:

1. COORDINATED WITH ESTABLISHED PROJECT GUIDELINES, PROPERLY DESIGN / LOCATE NEW HVAC EQUIPMENT FOR FUNCTIONALITY, SECURITY, ACOUSTICAL PERFORMANCE & SERVICING AND MAKE PREPARATIONS FOR ALL ASSOCIATED WORK REQUIRED BY OVERALL SCOPES OF WORK (POWER, CONTROL, DRAINS, CEILINGS, LIGHTS, ETC.)

- I. OUTDOOR EQUIPMENT: IN SECURE ENCLOSURES
- II. INDOOR EQUIPMENT: MECHANICAL ROOMS OR ABOVE CEILINGS AS AVAILABLE
- III. CENTRAL VENTILATION EQUIPMENT-EXISTING MECHANICAL / UTILITY SPACES
- IV. AUXILIARY TERMINAL HEATING EQUIPMENT TO REMAIN AS-IS

E. MECHANICAL PIPING, VENTING & DRAINING:

1. DESIGN AND PROPERLY INSTALL HOT / CHILLED WATER HYDRONIC PIPING INCLUDING COMMON FITTINGS, VALVES, INSULATION, ETC. ACCORDING TO MANUFACTURER'S INSTRUCTIONS. INTENT IS NOT TO DISTURB FINISHED SUBSTRATE (WALLS, HARD CEILINGS, FLOORS) BEYOND WHAT IS REQUIRED FOR NEW SYSTEM IMPLEMENTATION. PROVIDE CONDENSATE PANS/DRAIN LINES FOR PROPER REMOVAL OF CONDENSATE; PROVIDE APPLIANCE VENTS/FLUES FOR PROPER REMOVAL OF EXHAUST GASES AND PRESSURE RELIEF, AS REQUIRED.

F. HVAC CONTROLS:

1. DESIGN AND PROPERLY INSTALL HOT / CHILLED WATER HYDRONIC SYSTEMS CONTROLS, UNITARY/PACKAGED CONTROL SYSTEMS AND COMPONENTS AS REQUIRED FOR THE RENOVATED HVAC SYSTEMS. EXCEPT FOR VENDOR-DESIGNED PACKAGED SYSTEM OR UNITARY CONTROLS, REFER TO SYSTEMS ARCHITECTURE DIAGRAMS AND FLOOR PLANS FOR SCOPE DESCRIPTIONS.

G. HVAC-RELATED POWER SYSTEMS:

1. DESIGN AND PROPERLY INSTALL ELECTRIC POWER SYSTEMS REQUIRED TO SERVICE NEW HVAC SYSTEMS. COORDINATE SCOPES OF WORK WITH MAIN POWER SYSTEMS/EQUIPMENT UPGRADES (SIZING, LOCATION, DISTRIBUTION PANELS, ETC.) - REFER TO MAIN ELECTRICAL SYSTEMS SCOPE NOTES.

H. PERMIT DRAWINGS:

1. EXPECTATION IS THAT THE PROPOSER DEVELOP PERMIT DRAWINGS AND OBTAIN REQUIRED PERMITS FROM ALL AUTHORITIES HAVING JURISDICTION OVER WORK OF THE PROJECT. THE PROPOSER SHALL DELIVER TO THE OWNER FOR APPROVAL A COMPLETE SET OF PROJECT DRAWINGS PRIOR TO SUBMISSION FOR PERMITTING.

I. AS-BUILTS:

1. EXPECTATION IS TO DELIVER THE OWNER A COMPLETE PROJECT AS-BUILT DRAWING SET INCLUDING EQUIPMENT SCHEDULES, FLOOR LAYOUTS, ELECTRICAL RECIRCUITING, HVAC PIPE & DUCT PATHS AND SIZES, ZONING LAYOUTS, SENSOR LOCATIONS, CONTROLLER DIAGRAMS, ARCHITECTURES, ETC.

MECHANICAL INSTALLATION NOTES

- A. COORDINATE OVERALL DESIGN, PIPING LAYOUT, CONTROL COMPONENTS, AND VALVING WITH EQUIPMENT MANUFACTURERS. MAINTAIN REQUIRED CLEARANCES ON NEW DEVICES AND EQUIPMENT.
- B. PROVIDE ALL HANGERS, SUPPORTS AND MISCELLANEOUS COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION.
- C. COMPLETELY INSULATE ALL NEW PIPING AND DUCTWORK PER INDUSTRY STANDARDS AND APPLICABLE ENERGY CODES. USE PROTECTIVE COVERS WHERE APPROPRIATE AND LABEL SERVICE FLOW.
- D. PROVIDE COMPLETE INSTALL OF DRAIN AND VALVE ACCESSORIES PER MFG'S RECOMMENDATIONS, INCLUDING BALANCING/ISOLATION VALVES FOR EACH PIPING BRANCH AND TERMINAL CONNECTION.
- E. FLUSH AND CLEAN SYSTEM PRIOR TO OPERATION. REMOVE FACTORY STRAINERS, INSTALL PERMANENT STRAINERS, AND REPLACE AIR FILTERS PRIOR TO PROJECT COMPLETION.
- F. PROVIDE POWER TO HVAC UNITS AND CONTROLS (LINE AND LOW VOLTAGE), COORDINATE LOW VOLTAGE CONTROL AND LIFE SAFETY WIRING SCOPE WITH OWNER'S SYSTEM INTEGRATOR AND SYSTEM PROVIDERS.
- G. PROPOSER SHALL PROVIDE AIR AND WATER BALANCE REPORTS FOR AFFECTED SYSTEMS.
- H. IT IS EXPECTED THAT A FINAL DESIGN/INSTALLATION DRAWING SET FOR NOTED UPDATES WILL BE PROVIDED BY THE PROPOSER DURING THE SUBMITTAL REVIEW PROCESS. PROPOSER WILL BE RESPONSIBLE FOR APPLICATION AND PAYMENT RELATED TO PERMITTING, INSPECTION

ELECTRICAL INSTALLATION NOTES

- A. INSTALLATIONS ARE TO BE ACCOMPLISHED USING INDUSTRY STANDARD BEST PRACTICES, IN A NEAT AND ORDERLY MANNER AND ADHERING TO ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES. PROPOSER WILL CREATE FINAL DESIGN FOR NOTED ELECTRICAL SYSTEMS BASED ON PROJECT GOALS, OVERALL BENEFITS TO SYSTEM OPERATION, AND MAINTENANCE AND SITE LIMITATIONS.
- B. NOTED AREAS OF NEW ELECTRICAL WORK MAY INVOLVE SELECT DEMOLITION OF EXISTING FIXTURES, CONDUIT, WALL SWITCHES, CONTROLS, ETC. AS REQUIRED AND COORDINATED WITH OTHER PROJECT DOCUMENTATION. ALL EQUIPMENT REMOVED IS TO BE COORDINATED WITH THE OWNER FOR SALVAGE RIGHTS. THAT MATERIAL WHICH IS NOT CLAIMED BY THE OWNER IS TO BE FULLY AND PROPERLY DISPOSED OF. CONDUIT, WIRING, MOUNTING ACCESSORIES NOT BEING REUSED ARE TO BE COMPLETELY REMOVED.
- C. IT IS EXPECTED THAT A FINAL DESIGN/INSTALLATION DRAWING SET FOR NOTED UPDATES WILL BE PROVIDED BY THE PROPOSER DURING THE SUBMITTAL REVIEW PROCESS. PROPOSER WILL BE RESPONSIBLE FOR APPLICATION AND PAYMENT RELATED TO PERMITTING AND PLAN APPROVALS.
- D. INTENT IS TO REPLACE ALL NOTED EXISTING FIXTURES OR LUMINAIRES WITH LED EQUIVALENTS OF SIMILAR DIMENSIONS AND APPROPRIATE LUMEN OUTPUT FOR THE SPACE AND FUNCTION. REFER TO PLAN NOTES FOR SPECIFIC DIRECTION. IT IS EXPECTED THAT ALL BALLASTS FOR EXISTING FIXTURES ARE TO BE REMOVED AND PROPERLY DISPOSED OF DURING THE COURSE OF THIS PROJECT. FINAL FIXTURE COUNTS, CONFIGURATIONS, MEASUREMENTS, LOCATIONS, PATHS, ETC. FOR THIS PROJECT MUST BE FIELD VERIFIED BY PROPOSER. PROPOSER WILL BE REQUIRED TO PRESENT DESIGNS FOR REFLECTED CEILING AND LIGHTING LAYOUTS DURING THE SUBMITTAL PHASE.

PROJECT FORMAT OVERVIEW

EACH DESIGN PROFESSIONAL UTILIZED IN CONTRACTOR'S PROPOSAL HAS THE LIBERTY TO ACT WITH THE OWNER'S BEST INTERESTS IN MIND, BASED ON THE INDIVIDUAL SITUATIONS AND BOUNDARIES PRESENTED BEFORE DESIGN BEGINS AND BASED ON QUALIFIED PROFESSIONAL EXPERIENCE. THE CRITERIA SET FORTH IN THESE SPECIFICATIONS AND DRAWINGS IS INTENDED TO BE A GUIDELINE TO LIMIT THE RISKS OF DISSATISFACTION OVER THE BALANCED TOTAL LIFE OF THIS PROJECT, THE FACILITY, AND THE OWNER. GENERAL GOALS ARE TO MAKE THE TASKS ASSOCIATED WITH LONG-TERM OWNING/MANAGING THE FACILITY AS EFFECTIVE AND EFFICIENT AS POSSIBLE, INCLUDING THE LIMITATION OF EQUIPMENT/SERVICE PROVIDERS TO THOSE NOTED AS BEING OWNER-PREFERRED AND/OR LISTED WITHIN THESE SPECIFICATIONS.

PROVIDE MATERIALS FOR COMPLETING MECHANICAL AND ASSOCIATED ELECTRICAL INSTALLATIONS AND OTHER FINISHES ACCORDING TO APPLICATIONS REQUIRED USING INDUSTRY STANDARD MEANS-AND-METHODS AND COMMON BEST PRACTICES.

THESE SCHEMATIC DRAWINGS SHOW INTENDED CONFIGURATION OF EQUIPMENT AND MATERIALS WHERE NOTED, ALONG WITH EXISTING CONFIGURATIONS, FOR REFERENCE, TO NEW WORK AND DEMOLITION SCOPES. THEY ARE NOT INTENDED TO BE, AND SHOULD NOT BE CONSTRUED AS, COMPLETE DESIGN DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTRACTOR'S FINAL DESIGN

COORDINATE REMOVAL OF EXISTING AND INSTALLATION OF NEW EQUIPMENT, FIXTURES AND FURNISHINGS WITH INFRASTRUCTURE ALREADY IN-PLACE. CONTRACTOR IS HIGHLY ENCOURAGED TO FIELD VERIFY ALL COUNTS, MEASUREMENTS, DIMENSIONS AND PATHS. NO CHANGE ORDERS WILL BE ISSUED FOR FAILURE ON THE PART OF THE CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS. DESIGNS AND WORK SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF NATIONAL, STATE & LOCAL CODES AND BEST PRACTICES.



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EXECUTIVE DRIVE - HEATING PLANT IMPROVEMENTS

100 EXECUTIVE DRIVE
MARION, OHIO 43302

PROJECT NUMBER:	2500032
DRAWN BY:	EMB/SL
ISSUE	DATE
PROPOSAL SET	03/02/2026

PROJECT FORMAT OVERVIEW & GENERAL PROJECT NOTES

G001

PROJECT SCOPE BREAKDOWN

BASE SCOPE:

BUILDING AUTOMATION SYSTEM

- (1) REPLACE EXISTING BUILDING AUTOMATION SYSTEM (BAS) SERVING THE EXISTING BOILER PLANT, INCLUDING ALL CONTROLLERS, SENSORS, ACTUATORS, FLOW METERS, WIRING, AND OTHER COMPONENTS, OPERATED BY THE EXISTING BUILDING AUTOMATION SYSTEM. PROPOSER IS RESPONSIBLE TO REVIEW ALL EXISTING CONTROL POINTS TO MAKE SURE THAT THEY ARE ADDRESSED IN THE NEW BAS. DESIGN, PROVIDE, AND INSTALL BAS TO COMPLY IN ALL RESPECTS WITH MARION COUNTY STANDARDS AND OPR TECHNICAL SPECIFICATIONS. NO CONTROLLERS, CONTROL PANELS, OR CONTROL WIREWAYS ARE TO BE MOUNTED ON THE SIDES OF AIR HANDLING UNITS OR OTHER EQUIPMENT. ALL WIRING IS TO BE IDENTIFIED ON BOTH ENDS IN ACCORDANCE WITH OPR TECHNICAL SPECIFICATIONS. ALL WIRING SHALL BE MAPPED IN THE CONTROLS AS-BUILT DRAWINGS. ALL DATA POINTS, INPUT SETPOINTS, CALCULATED SETPOINTS, AND OTHER "SOFT" POINTS, AS WELL AS ALL "HARD" POINTS SHALL BE EXPOSED FOR INTEGRATION. ALL SETPOINTS SHALL BE USER ADJUSTABLE. ALL SAFETY LOCKOUT SWITCHES SHALL BE REMOTELY RESETTABLE WITH A MAXIMUM OF THREE (3) REMOTE RESETS ALLOWED. ALL CONTROL SYSTEM WIRING ASSOCIATED WITH THE HEATING HOT WATER PLANT SHALL BE REPLACED AS PART OF THIS PROJECT. EACH CABLE SHALL BE IDENTIFIED ON EACH END AS TO THE CONTROL DEVICES THE CABLE IS TERMINATED TO. ALL CONDUCTORS ARE TO BE LABELLED AT THE TERMINATIONS ACCORDING TO THE TERMINAL SAID CONDUCTOR IS TO BE LANDED ON. THE INTENT IS TO BE ABLE TO READ ALL CABLE AND CONDUCTOR MARKERS WITHOUT IT BEING NECESSARY TO REMOVE WIRING DUCT COVERS. LABELS ON CONTROL CABLES INSIDE CONTROL ENCLOSURES SHALL BE OF THE PERMANENT, SHRINK-ON TYPE.
- (2) INSTALL COMPONENTS PROVIDED BY THE OWNER'S MASTER SYSTEMS INTEGRATOR AND PROVIDE / INSTALL ALL ENCLOSURES, AND POWER, NETWORK, AND COMMUNICATION CABLING REQUIRED.
- (3) NEW PUMPS ARE TO BE EQUIPPED WITH MANUFACTURER'S INTEGRAL VARIABLE FREQUENCY DRIVES. PUMP VARIABLE DRIVES SHALL BE CONNECTED TO NEW BAS USING BACNET IP COMMUNICATION PROTOCOL. ENABLE, SPEED, AND DRIVE FAULT SIGNALS SHALL BE CONNECTED TO BAS VIA HARDWIRED CONNECTION. BACnet CONNECTION SHALL SERVE AS A MEANS TO MONITOR THE VARIABLE FREQUENCY DRIVE REMOTELY.
- (4) ALL SET-POINTS, CALCULATED SET-POINTS, SENSOR VALUES, EQUIPMENT STATUS POINTS, AND CONTROL SIGNAL VALUES SHALL BE EXPOSED FOR INTEGRATION. ALL SET-POINTS SHALL BE USER ADJUSTABLE. PROVIDE MANUAL OVERRIDES THROUGH THE BAS FOR ALL ACTUATORS, VARIABLE FREQUENCY DRIVES, AND MOTOR DRIVEN EQUIPMENT. OUTDOOR AIR TEMPERATURE RESET SCHEDULE SHALL BE ACHIEVED THROUGH THE ON-BOARD CONTROLS OF THE BOILERS. BOILER STAGING SEQUENCING, AND LEAD LAG SHALL BE ACCOMPLISHED VIA THE ON-BOARD CONTROLS OF THE NEW BOILERS. **THE NEW BUILDING AUTOMATION SYSTEM SHALL INCORPORATE PROVISION TO MANUALLY TOGGLE LEAD/LAG FROM THE FRONT END FOR ALL EQUIPMENT WITH LEAD/LAG CONFIGURATION, OTHER THAN THE BOILERS.**
- (5) ALL CONTROL RELAYS CONTROLLING MOTOR DRIVEN EQUIPMENT SHALL BE PROVIDED WITH HAND-OFF-AUTO SWITCHES.
- (6) ALL CONTROLLER MAC ADDRESSES SHALL BE SET USING MANUFACTURER PROVIDED ON-BOARD DIP SWITCHES. THE SETTING OF MAC ADDRESSES USING SOFTWARE / REMOTE NETWORK CONNECTION IS NOT PERMITTED.

REPLACE EXISTING BOILER PLANT

- (7) DEMOLISH EXISTING BOILERS AND DESIGNATED PUMPS, PIPING, AND APPURTENANCES. PROPOSER/CONTRACTOR SHALL DISPOSE OF ALL EXISTING EQUIPMENT, PIPING, AND APPURTENANCES NOT TO REMAIN AS PART OF THE NEW INSTALLATION. DISPOSAL IN MARION COUNTY DUMPSTERS IS NOT ACCEPTABLE.
- (8) DESIGN, PROVIDE, AND INSTALL NEW BOILER PLANT CONSISTING OF THREE CONDENSING BOILERS PIPED IN A PRIMARY/SECONDARY ARRANGEMENT, ALONG WITH ASSOCIATED PUMPS NEEDED TO SUPPLY CURRENTLY EXISTING HEATING SYSTEM. EACH BOILER IS TO BE SIZED AT 33% OF TOTAL REQUIRED CAPACITY. TOTAL CAPACITY SHALL BE DETERMINED VIA A HEATING LOAD CALCULATION. LOAD CALCULATION SHALL BE SUBMITTED TO THE OWNER FOR REVIEW AS PART OF THE PROJECT SUBMITTALS PRIOR TO THE START OF CONSTRUCTION. BOILERS SHOULD BE EQUIVALENT TO THERMAL SOLUTIONS "ARCTIC" BOILERS OR LOCHIVAR "CREST" BOILERS.
- (9) NEW BOILERS ARE TO BE INDIVIDUALLY VENTED USING STAINLESS STEEL FLUE SYSTEMS MEETING UL STANDARD 1738. POLYPROPYLENE SYSTEMS, PVC SYSTEMS, OR CPVC SYSTEMS ARE NOT ACCEPTABLE. BOILERS SHALL BE VENTED IN A "DIRECT VENT" CONFIGURATION, WITH COMBUSTION AIR PIPED DIRECTLY FROM THE OUTSIDE TO THE BOILERS. BOILER VENTING AND COMBUSTION AIR PIPING SHALL BE INSTALLED IN ACCORDANCE WITH BOILER MANUFACTURER RECOMMENDATIONS. COMMON VENTING SYSTEMS ARE NOT PERMITTED.
- (10) EACH BOILER IS TO BE PROVIDED WITH AN IN-LINE BOILER CIRCULATOR WITH ELECTRONICALLY COMMUTATED MOTOR.
- (11) NEW PUMPS ARE TO BE PROVIDED WITH PUMP MANUFACTURER'S INTEGRATED VARIABLE FREQUENCY DRIVES.

PROJECT SCOPE BREAKDOWN

ELECTRICAL

- (12) DESIGN, PROVIDE, AND INSTALL NECESSARY ELECTRICAL UPGRADES TO ACCOMMODATE NEW EQUIPMENT. DEMOLISH ALL ELECTRICAL WORK CAUSED TO BE ABANDONED BY THIS PROJECT BACK TO THE SWITCHGEAR / DISTRIBUTION PANEL(S). NEW WORK TO BE COMPLIANT WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND STANDARDS. NEW ELECTRICAL DESIGN AND CHANGES TO EXISTING ELECTRICAL WORK SHALL BE COORDINATED BY PROPOSER WITH OWNER'S FACILITIES MANAGER.
- (13) ENGINEER, PROVIDE, AND INSTALL SPECIFIC DEMOLITION/ADDITION/MODIFICATION OF EXISTING ELECTRICAL POWER DISTRIBUTION SYSTEMS AS REQUIRED FOR NEW EQUIPMENT.

ALL POWER AND CONTROL WIRING SHALL BE INSTALLED IN METALLIC CONDUIT. FLEXIBLE METALLIC, OR LIQUID TIGHT FLEXIBLE METALLIC CONDUIT SHALL BE LIMITED TO LENGTHS OF NO MORE THAN 3 FEET AND SHALL BE PERMITTED ONLY FOR CONNECTIONS TO ELECTRIC MOTORS.

MECHANICAL / ELECTRICAL SPACE HEAT

- (14) DEMOLISH EXISTING FANS AND HOT WATER COILS ORIGINALLY INTENDED TO INTRODUCE MAKEUP AIR INTO THE BOILER ROOM AND THE PUMP / AIR HANDLER / ELECTRICAL ROOM.
- (15) REMOVE ANY EXISTING CONTROLS.
- (16) DEMOLISH ASSOCIATED HOT WATER PIPING BACK TO MAINS, AND CAP AT MAINS.
- (17) PROVIDE AND INSTALL NEW HOT WATER UNIT HEATERS SIZED TO HEAT THE BOILER ROOM, AND THE PUMP / AIR HANDLER / ELECTRICAL ROOM.

GENERAL

- (18) FOR SYSTEMS NOT TO CONTAIN GLYCOL SOLUTION, REPLACE EXISTING HEATING HOT WATER OR CHILLED WATER CHEMICAL SHOT FEEDER(S). CONNECT NEW SHOT FEEDERS IN SUCH A MANNER AS TO CREATE A PRESSURE DIFFERENTIAL TO INDUCE FLOW THROUGH THE SHOT FEEDERS. DO NOT CONNECT NEW SHOT FEEDER OUTLET PIPING WITHIN 10 FEET OF PUMP SUCTION INLETS OR ANY OTHER VALVE OR APPURTENANCE CONTAINING ELASTOMER SEALS. IN SYSTEMS TO CONTAIN GLYCOL, INSTALL NEW FEEDER(S). BUILDING AUTOMATION SYSTEM SHALL PROVIDE LOW LEVEL ALARM FROM GLYCOL FEEDER(S). THE DISCHARGE FROM AUTOMATIC AIR VENTS THAT ARE PART OF GLYCOL FILLED SYSTEMS SHALL BE DIRECTED TO THE RESERVOIR OF THE GLYCOL FEEDER SERVING THAT SYSTEM. THE DISCHARGE OF PRESSURE RELIEF VALVES, OTHER THAN BOILER PRESSURE RELIEF VALVES, OF SYSTEMS CONTAINING GLYCOL SHALL BE DIRECTED TO THE RESERVOIR OF THE GLYCOL FEEDER SERVING THAT SYSTEM.
- (19) PROVIDE COMPLETE WATER BALANCE OF ALL NEW AND MODIFIED EQUIPMENT AND SYSTEMS INCLUDING, BUT NOT LIMITED TO, BOILERS, PUMPS, AIR HANDLING UNITS, VAV BOXES, AIR DEVICES, CONVECTORS, UNIT HEATERS, ETC. PROPOSER IS RESPONSIBLE FOR REPLACEMENT OF ALL EQUIPMENT AIR FILTERS, AND THE CLEANING OF ALL HOT AND CHILLED WATER SYSTEM STRAINERS PRIOR TO BALANCING OF SYSTEMS.
- (20) NEW PIPING 2-1/2" AND LARGER SHALL BE WELDED STEEL. PIPING 2" AND SMALLER SHALL BE SOFT SOLDERED COPPER. BRASS TRANSITION FITTINGS SHALL BE USED AT ALL CONNECTIONS BETWEEN COPPER AND STEEL PIPE. DIELECTRIC UNIONS SHALL NOT BE USED, AND DIRECT COPPER TO STEEL CONNECTIONS ARE PROHIBITED.
- (21) ALL WORK SHALL BE INSTALLED PLUMB, LEVEL, AND PARALLEL OR PERPENDICULAR WITH THE STRUCTURE.
- (22) ALL WORKMANSHIP AND MATERIALS SHALL BE FIRST QUALITY AND SHALL CONFORM TO ALL APPLICABLE CODES AND INDUSTRY STANDARDS.
- (23) THE PROPOSER / CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED ENGINEERING SERVICES, COORDINATION, AND PERMITTING.
- (24) PROPOSER / CONTRACTOR SHALL PROVIDE A DETAILED PROJECT SCHEDULE WITHIN 30 DAYS AFTER AWARD OF CONTRACT. PROJECT SCHEDULE SHALL BE KEPT IN MICROSOFT PROJECT, SHALL BE BASELINED, AND SHALL BE UPDATED WITH PROGRESS ON A MONTHLY BASIS.
- (25) PROPOSER / CONTRACTOR SHALL PROVIDE PRELIMINARY PROJECT DRAWINGS WITHIN 30 DAYS AFTER AWARD OF CONTRACT.
- (26) PROPOSER / CONTRACTOR SHALL PROVIDE FINAL DESIGN DRAWINGS, INCLUDING CONTROLS DRAWINGS, WITHIN 45 DAYS OF AWARD OF CONTRACT.
- (27) PROPOSER / CONTRACTOR SHALL PROVIDE PRODUCT SUBMITTAL INFORMATION WITHIN 45 DAYS OF AWARD OF CONTRACT.
- (28) **THE PROPOSER/CONTRACTOR SHALL HAVE A WORKING SUPERINTENDENT ON SITE AT ALL TIMES THAT WORK IS BEING PERFORMED BY THE PROPOSER / CONTRACTOR'S OWN PERSONNEL OR PERSONNEL OF THE PROPOSER/CONTRACTOR'S SUBCONTRACTORS.**



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MARION, OHIO 43302

PROJECT NUMBER: 2500032
DRAWN BY: EMB/SL

ISSUE DATE
PROPOSAL SET 03/02/2026

PROJECT SCOPE

G002

REMOVE EXISTING MAKEUP AIR FAN, COIL, AND ASSOCIATED PIPING AND CONTROLS. BLANK OFF EXISTING OPENING WITH INSULATED PANEL.

REMOVE EXISTING MAKEUP AIR FAN, COIL, AND ASSOCIATED PIPING AND CONTROLS. BLANK OFF EXISTING OPENING WITH INSULATED PANEL.

REMOVE EXISTING PUMPS AND ASSOCIATED PIPING AND APPURTENANCES.

EXISTING HEATING WATER PIPING IN THE MECHANICAL ROOM TO BE REMOVED. (TYP.)

EXISTING HOT WATER HEAT EXCHANGER TO BE REMOVED.

THE INTENT IS TO INSTALL THE NEW BOILERS IN THE SAME GENERAL AREA AS THE EXISTING BOILERS. PARTICULAR ATTENTION SHALL BE PAID TO MAINTAINING RECOMMENDED SERVICE CLEARANCES AROUND NEW BOILERS.

EXISTING PUMP AND ASSOCIATED PIPING TO BE REMOVED.

EXISTING HOT WATER HEAT EXCHANGER TO BE REMOVED.

REMOVE EXISTING BOILER BREACHING IN ITS ENTIRETY

NOTE:
EXISTING SYSTEM HAS GLYCOL. COLLECT EXISTING GLYCOL DURING DEMOLITION.

REVIEW 01/16/2026

1 | BASEMENT MECHANICAL ROOM DEMOLITION FLOOR PLAN
NOT TO SCALE



**EXECUTIVE DRIVE - HEATING
PLANT IMPROVEMENTS**

100 EXECUTIVE DRIVE
MARION, OHIO 43302

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**BASEMENT
MECH. ROOM
DEMOLITION
FLOOR PLAN**

**EXISTING MECHANICAL PLANS
FOR REFERENCE ONLY**
FIELD VERIFY ALL DIMENSIONS,
PATHS, EQUIPMENT, ETC.

MD101



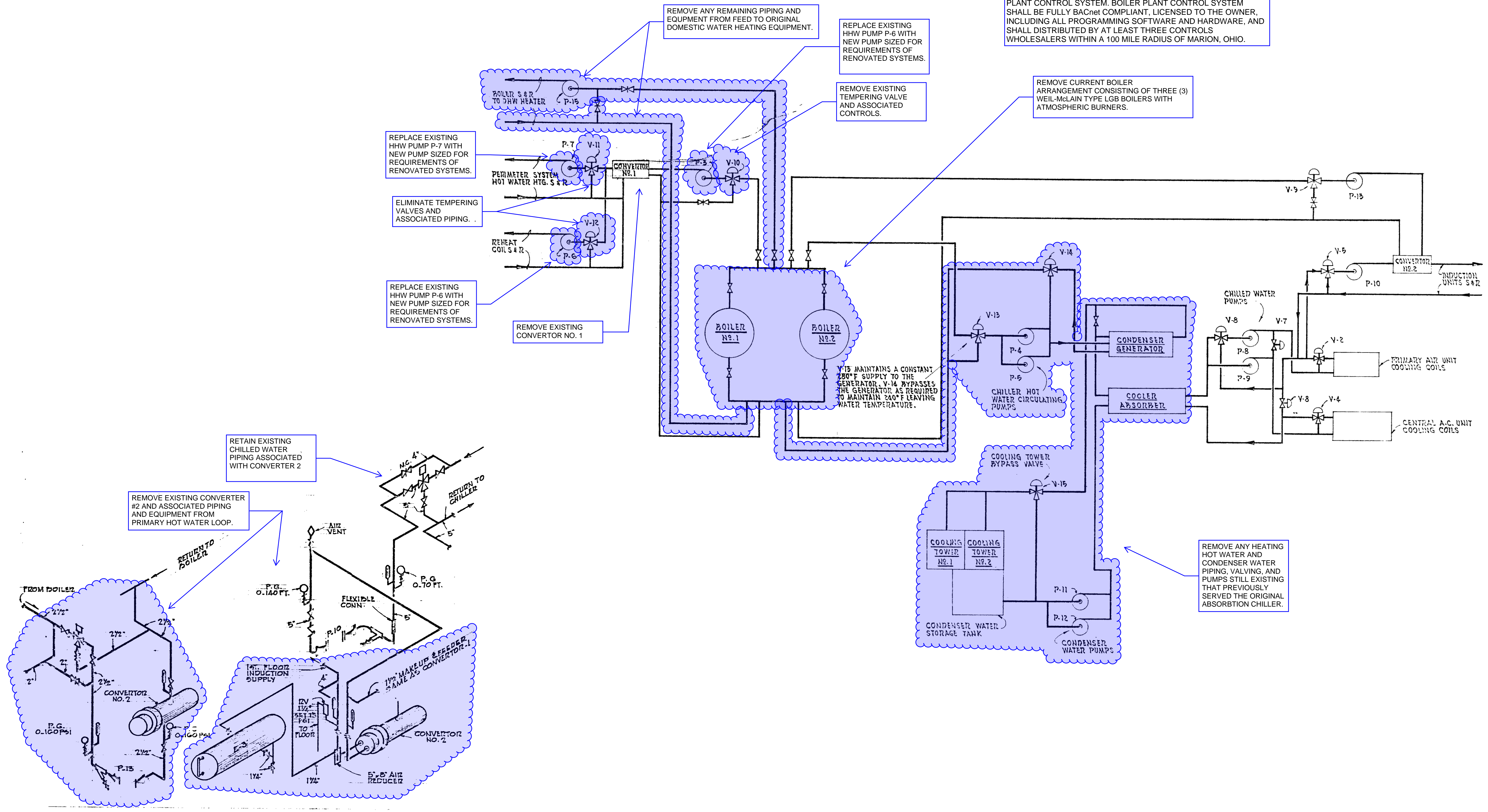
**EXECUTIVE DRIVE - HEATING
 PLANT IMPROVEMENTS**
 100 EXECUTIVE DRIVE
 MARION, OHIO 43302

PROJECT NUMBER: 2500032
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 ISSUE: PROPOSAL SET
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**MECHANICAL
 DEMOLITION
 FLOW DIAGRAM**

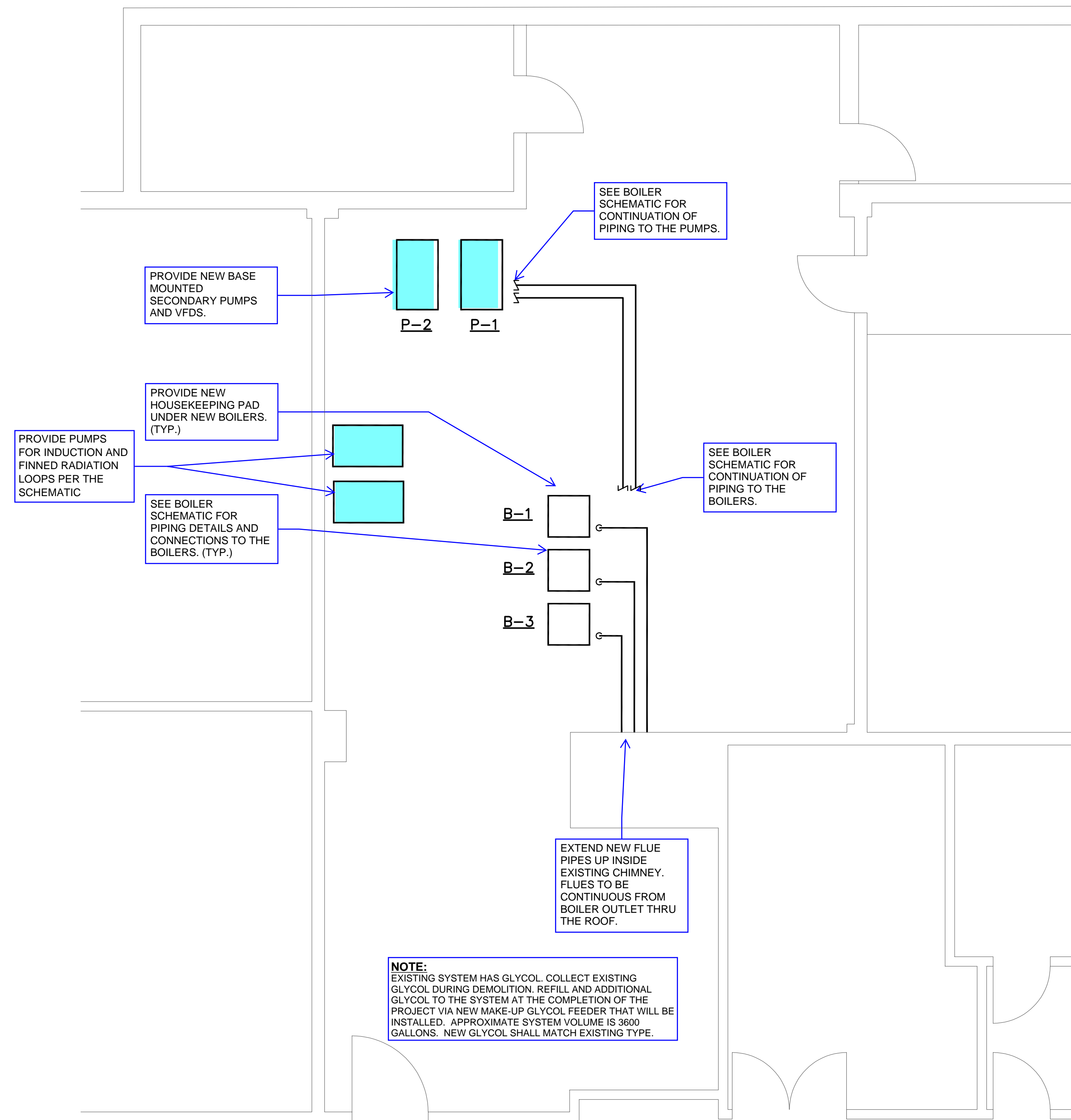
MD102

THE INTENT OF THIS PROJECT IS TO REMOVE CURRENT BOILERS AND ASSOCIATED PIPING, AS WELL AS ALL PUMPS, PIPING, AND APPURTENANCES NO LONGER NECESSARY FOR BUILDING OPERATION. THE INTENT IS TO REPLACE THE CURRENT BOILERS WITH A NEW BOILER PLANT CONSISTING OF CONDENSING BOILERS WITH INDIVIDUAL BOILER CIRCULATORS, PIPED IN A PRIMARY SECONDARY CONFIGURATION. TO REPLACE ALL OTHER HEATING HOT WATER PUMPS, AND TO INSTALL A NEW BOILER PLANT CONTROL SYSTEM. BOILER PLANT CONTROL SYSTEM SHALL BE FULLY BACnet COMPLIANT, LICENSED TO THE OWNER, INCLUDING ALL PROGRAMMING SOFTWARE AND HARDWARE, AND SHALL BE DISTRIBUTED BY AT LEAST THREE CONTROLS WHOLESALERS WITHIN A 100 MILE RADIUS OF MARION, OHIO.



PUMPS P.10, P.13 & CONVERTOR-2 PIPING

**EXISTING MECHANICAL PLANS
 FOR REFERENCE ONLY**
 FIELD VERIFY ALL DIMENSIONS,
 PATHS, EQUIPMENT, ETC.



1 | BASEMENT MECHANICAL ROOM NEW WORK FLOOR PLAN
NOT TO SCALE

**EXISTING MECHANICAL PLANS
FOR REFERENCE ONLY**
FIELD VERIFY ALL DIMENSIONS,
PATHS, EQUIPMENT, ETC.



**EXECUTIVE DRIVE - HEATING
PLANT IMPROVEMENTS**

100 EXECUTIVE DRIVE
MARION, OHIO 43302

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DATE: 03/02/2026

**BASEMENT
MECH. ROOM
NEW WORK
FLOOR PLAN**

M101



**EXECUTIVE DRIVE - HEATING
 PLANT IMPROVEMENTS**

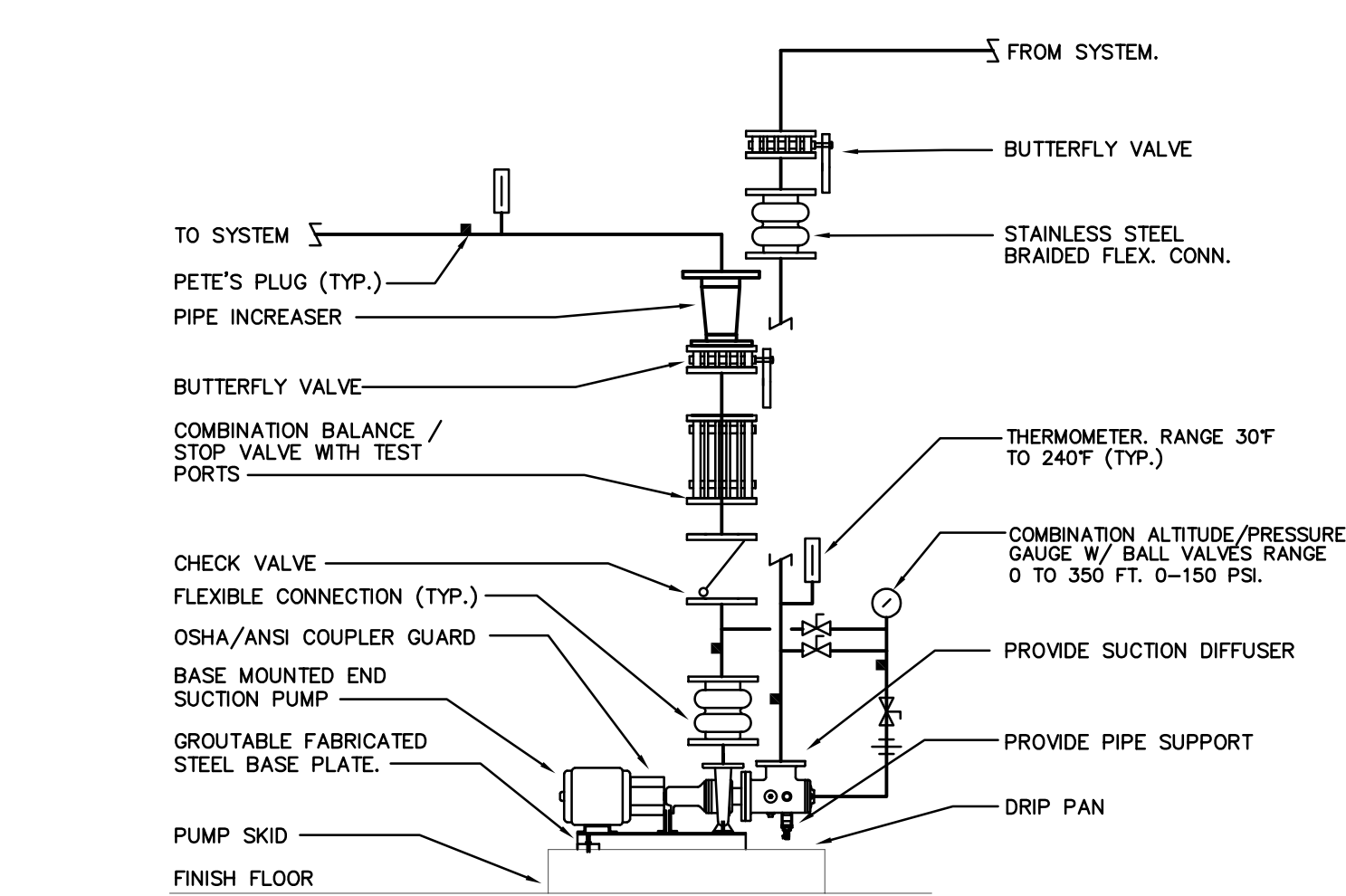
100 EXECUTIVE DRIVE
 MARION, OHIO 43302

PROJECT NUMBER:	2500032
DRAWN BY:	EMB/SL
ISSUE	DATE
PROPOSAL SET	03/02/2026

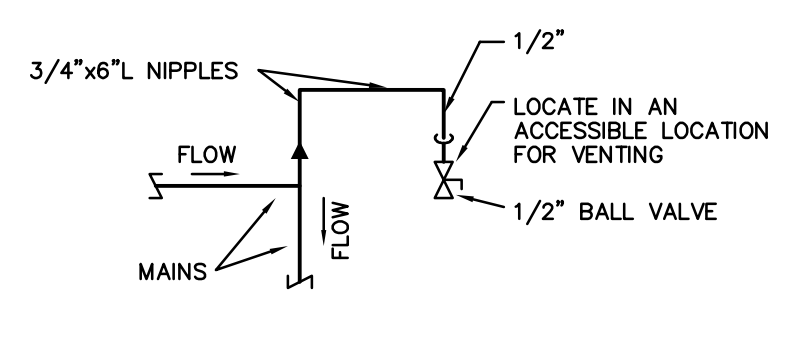
**BOILER SCHEMATIC AND
 DETAILS**

M201

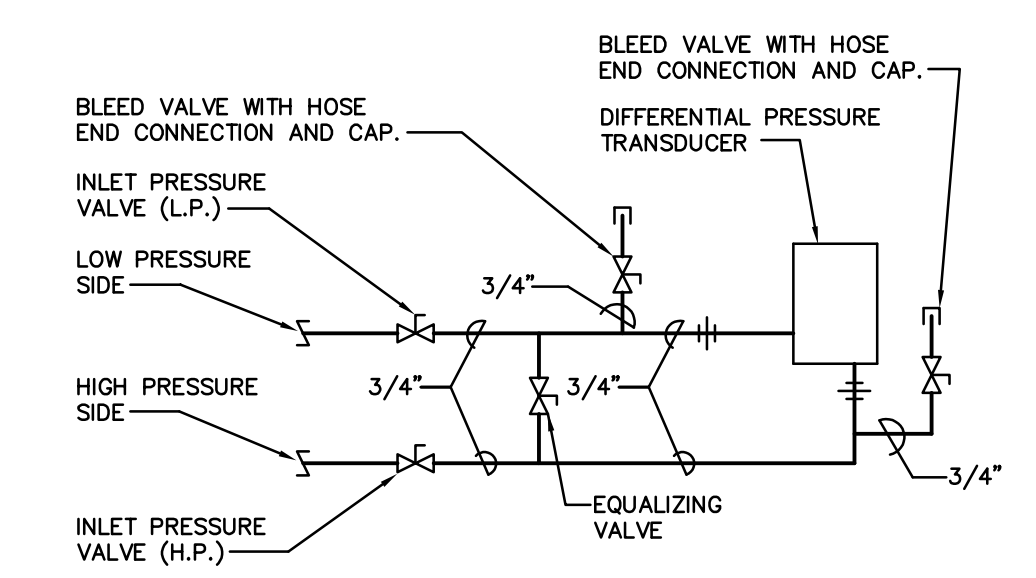
**EXISTING MECHANICAL PLANS
 FOR REFERENCE ONLY**
 FIELD VERIFY ALL DIMENSIONS,
 PATHS, EQUIPMENT, ETC.



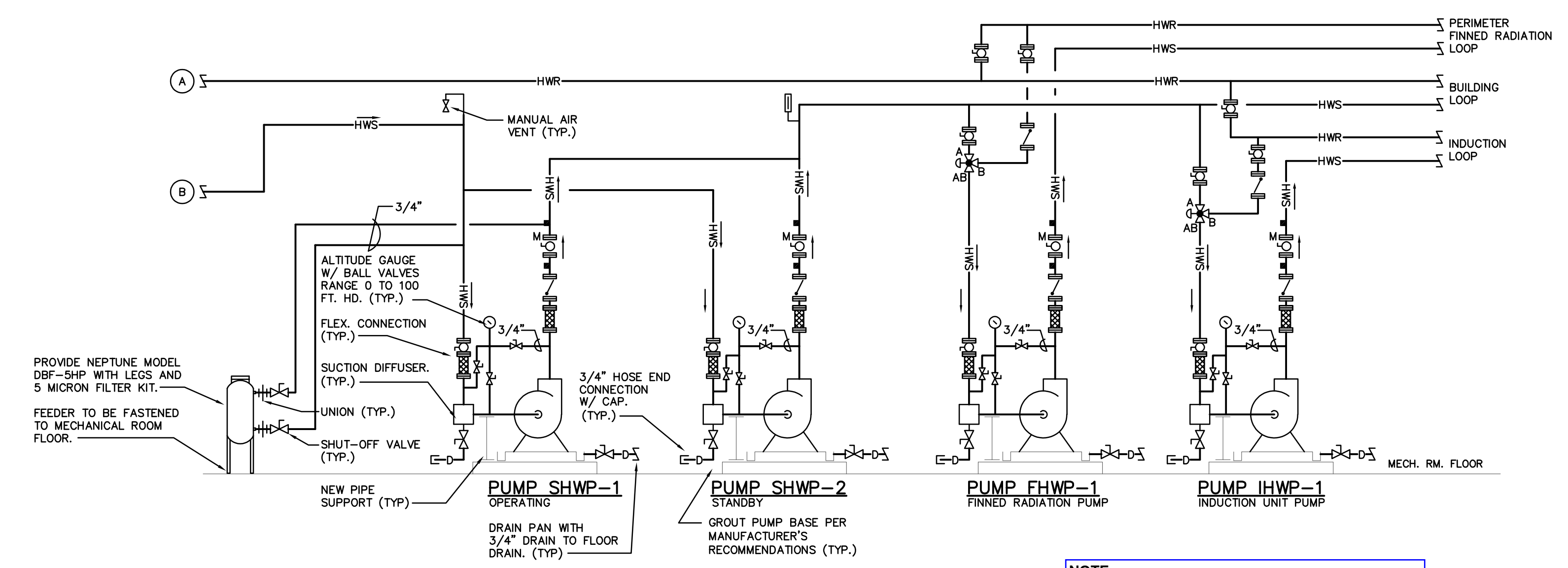
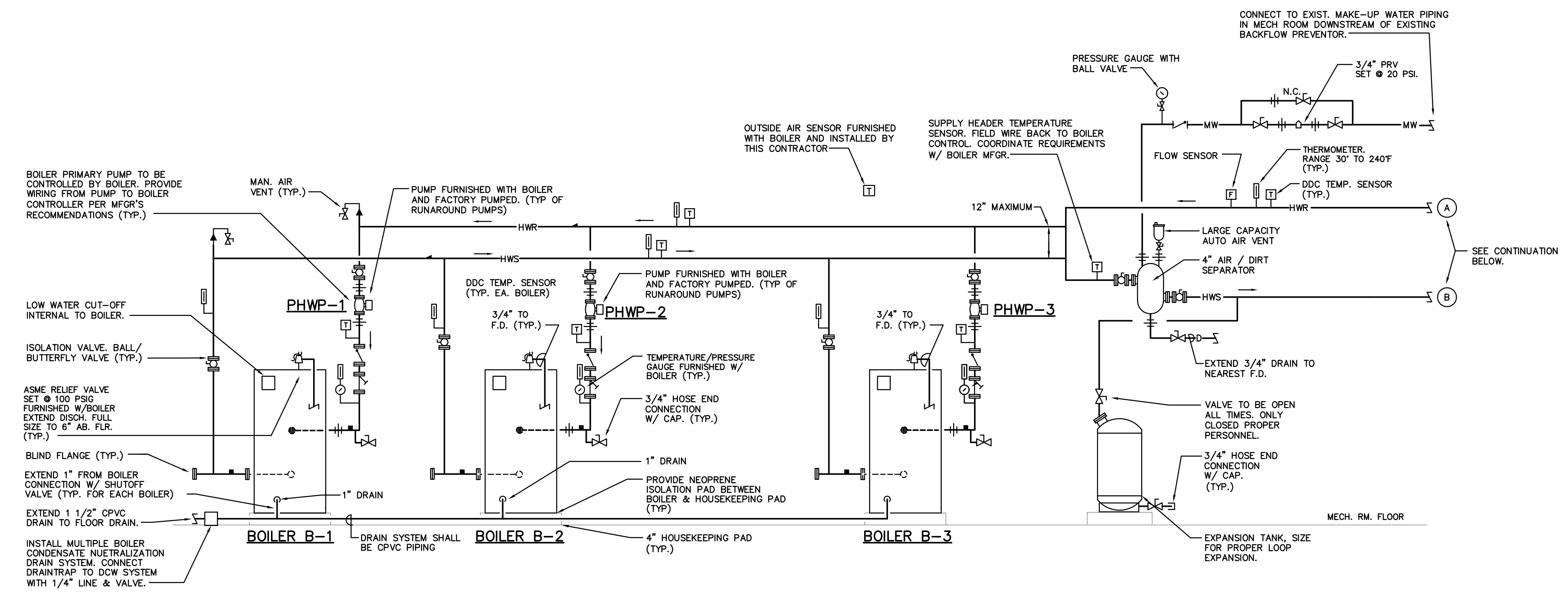
**SECONDARY HEATING WATER
 PUMP DETAIL**
 NO SCALE



**MANUAL AIR
 VENT PIPING**



**DIFFERENTIAL PRESSURE
 SENSOR PIPING DETAIL**



BOILER PIPING SCHEMATIC
 NO SCALE

NOTE:
 EXISTING SYSTEM HAS GLYCOL. COLLECT EXISTING GLYCOL DURING DEMOLITION. REFILL AND ADDITIONAL GLYCOL TO THE SYSTEM AT THE COMPLETION OF THE PROJECT VIA NEW MAKE-UP GLYCOL FEEDER THAT WILL BE INSTALLED. APPROXIMATE SYSTEM VOLUME IS 3600 GALLONS. NEW GLYCOL SHALL MATCH EXISTING TYPE.