LIVONIA PUBLIC SCHOOLS - EMERSON
2023 WOODSHOP/ART ROOM AC REPLACEMENTS

LOCATION MAP

PROJECT ADDRESS
EMERSON MIDDLE SCHOOL
29100 WEST CHICAGO RD.
LIVONIA, MI 48150

OWNER NAME AND ADDRESS
LIVONIA PUBLIC SCHOOLS
15125 FARMINGTON RD.
LIVONIA, MI 48154

PROJECT SHEET INDEX

MECHANICAL DRAWING INDEX

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<th>DESCRIPTION</th>
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<tr>
<td>M0.00</td>
<td>MECHANICAL GENERAL INFORMATION</td>
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<tr>
<td>M1.00</td>
<td>MECHANICAL DEMOLITION AND NEW WORK PLANS</td>
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<td>M8.00</td>
<td>DETAILS, SCHEDULES, AND TEMPERATURE CONTROLS</td>
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ELECTRICAL DRAWING INDEX

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<td>ELECTRICAL DETAILS, SCHEDULES, AND DIAGRAMS</td>
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STRUCTURAL DRAWING INDEX

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<tr>
<td>S100</td>
<td>ROOF FRAMING PLAN</td>
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BIDS: 10/16/2023
HVAC GENERAL NOTES


B. EXCEPT FOR CHANGES AS MAY BE SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD. IN ACCORDANCE WITH ALTERNATES OF OPTIONS AS STATED HEREINAFTER, ALL WORK MUST BE IN FULL ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS. SYSTEMS ARE TO BE COMPLETE, EFFICIENT, AND SATISFACTORY OPERATION WHEN PROJECT IS DELIVERED TO THE OWNER.

C. THE CONTRACTOR AND EACH SUBCONTRACTOR COVENANTS AND AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CONSULTING ENGINEER, ARCHITECT, AND OWNER FROM AND AGAINST ANY LIABILITY, LOSS, DAMAGE, OR EXPENSE INCLUDING ATTORNEYS ARISING FROM A FAILURE OR ALLEGED FAILURE ON THE PART OF THE CONTRACTOR, SUBCONTRACTORS, AND THEIR AGENTS/EMPLOYEES PROPERLY TO DISCHARGE THE OBLIGATIONS ASSUMED BY HIM/HER IN THE PERFORMANCE OF THE WORK, INCLUDING ANY ACT OR OMISSION ALLEGEDLY RESULTING IN DEATH, PERSONAL INJURY, PROPERTY DAMAGE, OR IMPROPER CONSTRUCTION PROTOCOL.

D. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVAL FROM GOVERNING AUTHORITIES AND FILE NECESSARY FORMS, PAY ALL INSPECTION FEES.

E. CONTRACTOR TO EXAMINE ALL ADJOINING WORK BEFORE COMMENCEMENT OF HIS/HER SCOPE OF WORK. REPORT ANY DISCREPANCIES TO THE CONSTRUCTION MANAGER FOR REVIEW AND APPROVAL. COORDINATE ALL WORK WITH OTHER TRADES TO ENSURE THAT INSTALLATION IS MADE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

F. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT, DUCTWORK/PIPING SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.

G. CONNECTION TO EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS. ALL PIPING CONNECTIONS SHALL BE MINIMUM 3/4" UNLESS NOTED OTHERWISE.

H. FURNISH ADEQUATE LIABILITY INSURANCE AND BONDING DOCUMENTS AS REQUIRED BY THE OWNER.

J. SUPPORT ALL ANCHORS SECURED TO THE BOTTOM OF FLOOR SLABS SHALL BE DROP-IN OR SLEEVE ANCHOR TYPE. ALL SUPPORTING STEEL SHALL BE PROVIDED BY THE CONTRACTOR.

K. DUCTWORK/PIPING SHALL NOT BE INSTALLED IN A LOCATION THAT RESTRICTS THE ACCESS TO MECHANICAL DEVICES REQUIRING ACCESS.

L. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL FOR THE PROPER INSTALLATION OF MECHANICAL SYSTEMS.

M. BRANCH DUCTWORK TO GRILLES, REGISTERS, AND DIFFUSERS SHALL BE THE SAME SIZE AS THE TERMINAL DEVICE NECK SIZE WHERE NO DUCT SIZE IS INDICATED.
1. MODEL NUMBER IS DAIKIN.

6. REFRIGERATION COMPRESSORS SHALL BE VARIABLE SPEED OR DIGITAL.

3. 2" PLEATED MEDIA ENERGY RECOVERY WHEEL FILTERS.

8. PROVIDE WITH REFRIGERATION CONTROLS ONLY. UNIT DDC CONTROLLER TO BE AUTOMATED LOGIC DDC FIELD INSTALLED BY TCC.

9. MODULATING GAS HEAT.
NEW WORK KEYED NOTES

1. NEW ERV-1 ON ROOF, PROVIDE 3P 60A WP SWITCH, RUN 3#6&1#8G 1"C TO EXISTING RP-EE-M-10,12,14 IN JANITOR CLOSET E124. REFER PANEL SCHEDULE E5.00

2. PROVIDE NEW 120V 20A GFI WEATHER PROOF RATED RECEPTACLE WITHIN 25 FT OF ERV-1, CONNECT TO CIRCUIT SHOWN.

POWER GENERAL NOTES


B. EXCEPT FOR CHANGES AS MAY BE SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD. IN ACCORDANCE WITH ALTERNATES OF OPTIONS AS STATED HEREINAFTER, ALL WORK MUST BE IN FULL ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS. SYSTEMS ARE TO BE COMPLETE, EFFICIENT, AND SATISFACTORY OPERATION WHEN PROJECT IS DELIVERED TO THE OWNER.

D. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVAL FROM GOVERNING AUTHORITIES AND FILE NECESSARY FORMS, PAY ALL INSPECTION FEES.

E. ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE LATEST NATIONAL ELECTRICAL CODE, LIFE SAFETY CODE AND APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.

F. ELECTRICAL EQUIPMENT AND WIRING SHALL BE NEW AND SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED.

G. WIRING SHALL BE IN CONDUIT. CONDUIT SHALL BE 3/4" CONDUIT MINIMUM. CONDUITS IN FINISHED AREAS SHALL BE CONCEALED.

H. NEW WIRES SHALL BE TYPE THHN. MINIMUM SIZE SHALL BE #12 AWG, UNLESS OTHERWISE NOTED. FINAL CONNECTIONS TO EQUIPMENT, FURNISHED AND INSTALLED BY OTHERS, SHALL BE PROVIDED BY THIS CONTRACTOR.
### Project: Emerson Elementary Woodshop AC Replacement

#### Unified Building Systems Engineering
- 75 N. MAIN ST., SUITE 221
- MT. CLEMENS, MI  48043
- UBS PROJ. ID: 001.23.04

#### Client: Livonia Public Schools
- 15125 FARMINGTON RD.
- LIVONIA, MI  48154

### Electrical Details, Schedules, and Diagrams

#### Table: RP-EE-M

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Material/Color</th>
<th>Description</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>E5.00 Electrical Panel Board</td>
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1. Verify all existing assumed dimensions and conditions (i.e. existing materials) prior to starting erection actions of the structure. Quality assurance prior to proceeding with work.

2. The design, configuration, and erection safety of all structural steel, including weld and connection joints, is the responsibility of the structural steel welder. All engineered drawings shall include information on materials, welds, and connections as per the latest AISC manual and specification for structural steel. All welds shall be in accordance with AWS Code, E70XX electrodes with welding performed by qualified welders.

3. Use of engineering drawings as erection drawings by the contractor is strictly prohibited. Design criteria and provisions shown on the structural drawings are for the placement and size of structural components only. OSHA, local government codes and safety code requirements shall not be altered.

4. The architect shall submit a schedule of work performed prior to submittal. All submittals shall be made in accordance with the latest available engineering drawings and specifications. Submittals shall be signed by the architect or a duly authorized agent. Any discrepancies found shall be noted and shall be corrected prior to the next submittal.

5. The contractor shall submit a schedule of work performed before proceeding with construction. Submittals shall be made in accordance with the latest available engineering drawings and specifications. Submittals shall be signed by the architect or a duly authorized agent. Any discrepancies found shall be noted and shall be corrected prior to the next submittal.

6. The contractor shall submit a schedule of work performed before proceeding with construction. Submittals shall be made in accordance with the latest available engineering drawings and specifications. Submittals shall be signed by the architect or a duly authorized agent. Any discrepancies found shall be noted and shall be corrected prior to the next submittal.

7. All structural steel, welds, and connections shall be in accordance with the latest AISC manual and specification for structural steel. All welds shall be in accordance with AWS Code, E70XX electrodes with welding performed by qualified welders.

8. The design, configuration, and erection safety of all structural steel, including weld and connection joints, is the responsibility of the structural steel welder. All engineered drawings shall include information on materials, welds, and connections as per the latest AISC manual and specification for structural steel.