ADDENDUM NO. 1
JANUARY 25, 2023

Re: DAYTON ES REMODELING AND DEFERRED MAINTENANCE PROJECT, PHASE 1
PROJECT NO. 22064 - ANOKA BID NO. 23037B

TO ALL CONTRACTORS

The following are clarifications and/or changes to the Plans and Specifications dated January 12, 2023 for the above-named Project, to be Bid on February 9, 2023 @ 10:00 AM.

ENCLOSURE: ***Certification Page. Pre-Bid Sign-In Sheet.***

Architectural Revised Documents/Section: 00 21 13, 00 73 00, and 12 32 16.
Electrical Revised Drawings: E0.0, ED.1, E6.1, and E6.2.

PRIOR APPROVALS OF SUBSTITUTIONS

1. The following are approved for the above mentioned Project:

   a. Refer to Light Fixture Schedule on Sheet E6.2:

Type	***Acceptable Manufacturer***
E	Mule Lighting C-M5U-G-W
E1	Mule Lighting MX-B-G-U
EM	Mule Lighting TSR-HO-W
F/4'-0"	Axis Lighting B6RLED-700-80-40-FL-4'-W-UNV-DP-1-TB15
F/12'-0"	Axis Lighting B6RLED-700-80-40-FL-12'-W-UNV-DP-1-TB15
H	Fail-Safe MWL-4-42/33-120-L840-EDD2-WH-WT-PS1D-P125

INTRODUCTORY INFORMATION

2. Document 00 01 05 of the Project Manual:

   a. Refer to Certification Page, included as an enclosure with this Addendum.

3. Document 00 11 13 of the Project Manual:

   a. Refer to Pre-Bid Meeting. The Sign-In Sheet is included as an enclosure with this Addendum For Informational Purposes Only.

4. Document 00 21 13 of the Project Manual:

   a. ***Delete*** Document 00 21 13 in its entirety and replace with Revised Document 00 21 13, included as an enclosure with this Addendum. Refer to ***Bold*** and ***Italic*** items within Document.

5. Document 00 73 00 of the Project Manual:

   a. ***Delete*** Document 00 73 00 in its entirety and replace with Revised Document 00 73 00, included as an enclosure with this Addendum. Refer to ***Bold*** and ***Italic*** items within Document.

Re: DAYTON ES REMODELING AND DEFERRED MAINTENANCE PROJECT, PHASE 1
PROJECT NO. 22064 - ANOKA BID NO. 23037B

ARCHITECTURAL SPECIFICATIONS

6. Section 12 32 16 of the Specifications:

   a. ***Delete*** Section 12 32 16 in its entirety and replace with Revised Section 12 32 16, included as an enclosure with this Addendum. Refer to ***Bold*** and ***Italic*** items within Section.

ELECTRICAL DRAWINGS

7. Sheet E0.0 of the Drawings:

   a. Replace Sheet E0.0, with Revised Sheet E0.0, Revision 1, (clouded revision(s), included as an enclosure with this Addendum.

8. Sheet ED.1 of the Drawings:

   a. Replace Sheet ED.1, with Revised Sheet ED.1, Revision 1, (clouded revision(s), included as an enclosure with this Addendum.

9. Sheet E6.1 of the Drawings:

   a. Replace Sheet E6.1, with Revised Sheet E6.1, Revision 1, (clouded revision(s), included as an enclosure with this Addendum.

10. Sheet E6.2 of the Drawings:

    a. Replace Sheet E6.2, with Revised Sheet E6.2, Revision 1, (clouded revision(s), included as an enclosure with this Addendum.

END OF ADDENDUM

22064

DOCUMENT 00 01 05

CERTIFICATION PAGE

PROJECT:

DAYTON ELEMENTARY SCHOOL
REMODELING AND DEFERRED MAINTENANCE - PHASE 1
12000 South Diamond Lake Road
Dayton, Minnesota 55327

ARCHITECT'S CERTIFICATION:

I hereby certify that this Plan, Specification, or Report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Name David M. Maroney, AIA

Signature

Date January 12, 2023 License No. 20992

STRUCTURAL ENGINEER'S CERTIFICATION:

I hereby certify that this Plan, Specification, or Report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Name Timothy G. LaBissoniere, PE

Signature

Date January 12, 2023 License No. 21387

MECHANICAL ENGINEER'S CERTIFICATION:

I hereby certify that this Plan, Specification, or Report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Name Blayne J. Parkos, PE

Signature

Date January 12, 2023 License No. 46630

ELECTRICAL ENGINEER'S CERTIFICATION:

I hereby certify that this Plan, Specification, or Report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Name Nicholas Achina, PE

Signature

Date January 12, 2023 License No. 40408

END OF DOCUMENT

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Dayton Elem Remodeling + Deferred Maint

ATS&R
ARMSTRONG TORSETH SKOLD & RYDEEN INC

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DOCUMENT 00 21 13

INSTRUCTIONS TO BIDDERS

Armstrong, Torseth, Skold & Rydeen, Inc
Architects and Engineers
8501 Golden Valley Road, Suite 300
Minneapolis, Minnesota 55427-4414
Telephone Number: 763-545-3731
Fax Number: 763-525-3289

To be considered, Bids shall be prepared in accordance with these Instructions to Bidders.

1.01 SUMMARY OF BIDDING

A. **Base Bid:** A single lump sum Base Bid will be received for the total Scope of the Work for the Project.

B. Additional Requirements: Sub-Bidders who are offering bids for Divisions 27, 28, and 29 work shall be required to submit their bids directly to Prime Bidders, and not to other Sub-Bidders.

Paragraph B Revised in Addendum No. 1

1.02 DEFINITIONS

A. **Architect/Engineer:** The words "Architect" and "Engineer" are to be considered interchangeable throughout the Project Documents and shall mean Armstrong, Torseth, Skold, & Rydeen, Inc. (ATS&R, Inc.) and their consultants.

B. **Bidding Documents:** Documents include the following:

1. Bidding Requirements:

    a. Call For Bids
    b. Instructions to Bidders
    c. Bid Form

2. Addenda issued during Bidding

3. Contract Forms to be Used:

    a. Agreement Between Owner and Contractor
    b. Performance Bond and Payment Bond
    c. Certificates

4. Conditions of the Contract:

    a. General Conditions
    b. Supplementary Conditions

5. Specifications

6. Drawings

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C. **Base Bid:** Amount stated on the Bid Form as the sum for which a Bidder/Prime Bidder offers to perform the work described in the Bidding Documents.

D. **Bidder or Prime Bidder (Bidder/Prime Bidder):** Person or entity who submits a Bid direct to the Owner and agrees to enter into a Contract with the Owner if Bid is accepted by Owner.

E. **Sub-Bidder:** Person or entity other than a Bidder/Prime Bidder.

F. **Other Definitions:** Definitions provided in Section 00 72 00 - General Conditions of the Contract for Construction, AIA Document A201, and Section 00 73 00 - Supplementary Conditions are applicable to the Bidding Documents.

1.03 BIDDER'S REPRESENTATIONS

A. **Compliance With Responsible Bidders Act:** Prime Bidder upon submitting a Bid for this Project shall submit with their bid certification that they are in compliance with the Laws of Minnesota, 2022, Chapter 253, Minnesota Statute 16C.285, Responsible Contractor Act. Refer to Document 00 45 18.

1.04 PROCUREMENT OF BIDDING DOCUMENTS

A. **PROCUREMENT OF DOCUMENTS BY BIDDERS:** A Bidder and Sub-bidders may view and order bid documents by going to the Franz Reprographics web site at www.franzrepro.com and selecting the **Franz Public Plan Room.** Please select your project from the list of public projects. Once you have selected the project, please review the **Bid Details** for information on ordering documents and the cost of the non-refundable purchase price. To receive **Bid Notices, Bid Addendums, Construction Bulletins, Shipped Order Confirmations, and Electronic Downloads,** for this project, you must place the following email address in your list of Outlook Contacts and indicate that it is a **Safe Sender:** notice@designbidbuild.net These notifications are sent from this email address. If you do not do this, your email server may block the receipt of these notifications. ***Please contact Franz Reprographics, 763-503-3401, for help accessing the Online Plan Room or ordering non-refundable documents.***

B. **Procurement of Addenda:** Architect will issue copies of Addenda to Franz Repro to post in the Plan Room.

C. **Other Sub-bidders and Product Suppliers** may purchase full or partial sets from Franz Reprographics in the plan room at www.franzrepro.com at cost of printing, handling, and shipping. Costs for purchasing Bidding Documents will not be refunded. Subcontract bidders and product suppliers are responsible for determining which portions of the Bidding Documents are needed.

1.05 EXAMINATION OF BIDDING DOCUMENTS AND PROJECT SITE CONDITIONS

A. **Examination of Bidding Documents:** Bidders/Prime Bidders, by submitting a Bid represent that they have read and understand the contents of the Bidding Documents, and that the Bid submitted is in accordance with the bidding requirements.

B. **Examination of Project Site:** Bidders/Prime Bidders shall visit Project site to examine conditions which will affect Project Work and to correlate observations with the Bidding Documents. Notify the Owner prior to visiting the building/site.

C. **Pre-Bid Meeting:** An Optional Pre-Bid Meeting for Bidders will be held on January 24, 2023, starting at 4:00 PM local time. Participants shall meet at the main office, at Dayton Elementary School, located at 12000 South Diamond Lake Road, Dayton, Minnesota 55327.

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1.06 INTERPRETATIONS OR CORRECTION OF BIDDING DOCUMENTS

A. **Questions:** Questions concerning Bidding Documents and Project site existing conditions must be submitted to the Owner via email, at PurchQuotes@ahschools.us by 4:00 PM on February 1, 2023. The Owner, Architect, and Architect's consultants will not be responsible for, nor honor any claims resulting from, or alleged to be the result of misunderstanding by the Bidder. To ensure a transparent bidding process, no phone or in person inquiries will be accepted. It is the Bidder's responsibility to bring all discrepancies, ambiguities, omissions, or matters that need clarification to the Owner's attention. Responses to questions received will be responded to in an addendum, and made available to Bidders.

B. **Interpretations and Correction of Bidding Documents:** Replies to questions and correction of Bidding Documents will be issued to Prime Bidders and Plan Rooms listed with Franz Reprographics, in the form of Addenda, which will become part of the Contract Documents.

C. **Oral Clarification:** Architect, Owner and their Consultants will not be responsible for oral clarifications.

D. **Bidding With Uncertainty:** Do not submit a Bid in uncertainty.

E. **Sub-Bidders Receiving Addenda Information:** Sub-bidders are responsible for contacting Bidders/Prime Bidders or Plan Rooms/Builders Exchanges prior to bid date to receive Addenda information relating to their work.

1.07 SUBSTITUTION OF PRODUCTS

A. **General Requirements For Product Substitution Requests For Approval During Bidding:**

1. To obtain approval for use of products not specified, bidders or product manufacturer representatives or their suppliers shall submit written requests for substitution via email to the Owner at PurchQuotes@ahschools.us by 4:00 PM on February 1, 2023. Requests for substitution approval received after the specified time will not be reviewed.

2. Requests for substitution approval shall clearly describe the product for which approval is being requested and shall include data necessary to demonstrate acceptability of the product.

3. If product is approved for substitution, Architect/Engineer will list it as an approved substitute product in an Addendum.

B. **Procedure for Submittal of Product Substitution Requests:**

1. Submit a request for product substitution approval using a separate substitution request form for each proposed product.

   a. Use Construction Specifications Institute "CSI Form 1.5C". A copy of the form is attached, as an appendix following this Document 00 21 13, for reference purposes.

2. Requests for product substitution approval shall include information regarding Project name and address; Specification Section title and number; specific reference to a particular specified product which the substitution request is based on; name, brand, catalog number and manufacturer of the proposed substitute product; and complete specifications, descriptive literature, and/or samples which are necessary to demonstrate superiority or equality of the product.

3. If required information is not submitted, the request for substitution approval will not be reviewed.

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C. **Reply Requested**: If a return reply of the results of a product substitution approval request review is desired, submit the substitution request in duplicate and submit a self-addressed, stamped envelope.

D. **Costs Resulting From Use of Approved Substitute Products**: Requests for product substitution approval shall inform Architect/Engineer of deviations that proposed substitute product will cause to Project. Include in submitted bid(s), costs which will result due to use of an approved substitute product.

E. **Requirements For Product Substitution After Execution of Contract**: Refer to Section 01 62 00 - Material and Equipment.

1.08 BASIS OF BIDS

A. **General Requirements**: Provide the following cost amounts on the Bid Form:

1. Base Bid: Lump sum amount.

1.09 PREPARATION OF BIDS

A. **General Requirements**: Refer to Call For Bids for additional requirements regarding preparation of Bids.

B. **Bid Form Format**: Submit Bids on Bidder's letterhead, in exact form and wording as copy of Bid Form, included in this Project Manual as Document 00 41 13 or as otherwise issued by Architect.

C. **Modifications to Bid Form**: Bids containing clauses or phrases which modify the issued Bid Form format may be cause for rejection of Bid.

D. **Completeness**: Include all information requested on Bid Form. Failure to include all requested information may be cause for rejection of Bid. Owner reserves the right to accept a Bid if Bidder has not provided an amount on the Bid Form for all requested Bids.

E. **Signing Bids**: Provide signature of authorized and responsible party submitting the Bid, where indicated on Bid Form, with name typed or printed below signature. Where Bidder is a corporation, Bids must be signed with legal name of corporation followed by name of State of Incorporation and legal signature of an officer authorized to bind the corporation to a contract.

F. **Submittals to be Included With Bids**: Include following with Bid submittals:

1. Bid Security
2. Bonds
3. Responsible Contractor Verification of Compliance

1.10 BID SECURITY

A. **General Requirements**:

1. Submit a bid security with the Bid.

2. Provide bid security in the amount of 5 percent of the Base Bid sum.

3. Make bid security payable to Owner.

4. Provide bid security in the form of a certified check, cashiers check, or bid bond issued by a surety licensed to conduct business in the state in which Work is being performed.

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5. The apparent successful Bidder's bid security will be retained until a Contract is executed or until 30 days after bid opening, whichever is shorter.

6. Owner reserves the right to retain the bid security of any or all other Bidders until a Contract is executed or until 30 days after bid opening, whichever is shorter.

7. Bid securities not to be retained will be returned as soon as practical.

8. If a Bidder refuses to enter into a Contract with the Owner, Owner reserves the right to retain Bidders bid security as liquidated damages, but not as a penalty.

1.11 BONDS

A. **Performance Bond and Payment Bond**: Awarded Contractor will be required to submit a Performance Bond and a Payment Bond.

B. **Submission of Bonds**: Submit bonds as specified under Document 00 73 00, Supplementary Conditions.

1.12 SUBMISSION OF BIDS

A. **General Requirements**:

1. Submit Bid in an opaque, sealed envelope. Identify the envelope with: (1) Project name, (2) Owner's name and address, (3) Bidder's name, (4) BID ENCLOSED, (5) Anoka-Hennepin Schools Bid Number: 23037B.

2. Submit 2 copies of completed Document 00 41 13, Bid Form. ***Do Not Backside Bid Form - Single Sided Only.***

1.13 OWNER'S RIGHTS

A. **Disqualification of Bidders:** Owner reserves the right to disqualify a Bidder, before or after Bid opening, upon receiving evidence of collusion with intent to defraud or of other illegal practices by Bidder.

B. **Rejection or Acceptance of Bids**: The School District reserves the right to cancel the Invitation For Bids, to reject any and all bids at its sole discretion when such rejection is in the interest of the School District, or to reject the bid of any bidder who is determined to be not responsive or not responsible.

1.14 DETERMINATION OF RESPONSIBILITY

A. **General Requirements:** Each Bidder shall be prepared, if so requested by the School District, to present evidence of his experience, qualifications and financial ability to carry out the terms of the Contract.

B. **Prior to Award of the Contract:** Prior to award of the Contract, an evaluation will be made to determine if the low Bidder has the capability, in all respects, to perform fully the contract requirements and the moral and business integrity and reliability which will assure good faith performance, and who has been prequalified, if required. In determining the "lowest responsible bidder," the School District will evaluate a bidder's responsibility, or lack of responsibility, including, but not limited to:

1. Its demonstrated compliance with Minnesota's responsible contractor requirements contained in Section 16C.285 of Minnesota Statutes;

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2. References it supplies to the School District which relate to the quality of its performance, management, expertise, responsiveness and timeliness, and its successful completion of work of similar complexity and time restriction.

3. Sufficient financial ability to perform the contract as evidenced by the Bidder's ability to obtain payment and performance bonds from an acceptable surety;

4. Appropriate experience to perform the Work described in the bid documents;

5. Any judgments entered against the Bidder, or any officers, directors, partners or owners for breach of a contract for construction;

6. Any substantial noncompliance with the terms and conditions of prior construction contracts with a public body without good cause where the substantial noncompliance is documented; or

7. A conviction of the Bidder or any officer, director, partner, project manager, procurement manager, chief financial officer, or owner in the last five years of a crime relating to governmental or nongovernmental construction or contracting; payment and performance bonds an acceptable surety; contracting; payment and performance bonds an acceptable surety;

8. Any current debarment of the contractor, any officer, director or owner, from bidding or contracting by any public body of any State, any State agency, or any agency of the Federal government.

C. The School District may consider the quality and timeliness of a bidder's performance of work for the District in determining whether the bidder is "responsible". The School District reserves the right to disqualify or refuse to accept the bid of any bidder who has been convicted, or entered a plea of guilty or nolo contendere, in any Federal or State court to any charge involving any unlawful, corrupt or collusive practice involving a public contract whether Federal, State, or local, or who has been determined in any judicial proceeding to have violated any antitrust, bid-rigging or collusive practice statute in connection with any public contract, or against whom such formal criminal prosecution or other judicial proceeding has been initiated.

D. A Bidder who, despite being the apparent low bidder, is determined not to be a responsible bidder shall be notified in writing.

1.15 MODIFICATION AND WITHDRAWAL OF BIDS

A. **Modification of Bid**: Bids may not be modified after being submitted.

B. **Withdrawal of Bid**: Submitted Bids may be withdrawn at any time before start of bid opening, but withdrawn bids may not be resubmitted. Opened Bids may not be withdrawn for 30 days after date bids were received.

1.16 WAGE RATE REQUIREMENTS

A. **Description**: Contract will be subject to compliance with requirements of State of Minnesota prevailing wage statutes as specified under Document 00 73 46 in this Project Manual.

1.17 OPENING OF BIDS

A. **Procedures**: Bids will be opened as specified in Document 00 11 13 - Call For Bids.

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1.18 AWARD OF CONTRACT

A. **Basis of Award of Contract:** Owner will consider award of the Contract on the basis of the low Base Bid after considerations of the Base Bid amounts submitted by Bidders.

1. The Contract, if awarded, will be awarded to the lowest responsive and responsible Bidder, if any, provided the bid is reasonable and it is in the best interest of the Owner to accept it and subject to the Owner's right to reject any and all bids and to waive informality in the bids and in the bidding.

2. Informalities: The Owner reserves the right to waive any informality in the bids when such waiver is in the interest of the Owner.

3. Responsibility: In determining the "lowest responsible bidder," the School District will evaluate a bidder's responsibility, or lack of responsibility, by (a) its demonstrated compliance with Minnesota's responsible contractor requirements contained in Section 16C.285 of Minnesota Statutes; and (b) references it supplies to the School District which relate to the quality of its performance, management, expertise, responsiveness and timeliness, and its successful completion of work of similar complexity and time restriction. The School District may consider the quality and timeliness of a bidder's performance of work for the District in determining whether the bidder is "responsible."

4. Pre-Award Meeting: Prior to the award of Contract and before commencement of the Work, the Owner shall be extended the opportunity to interview the apparent low, responsible bidder at a pre-award meeting.

    a. The Bidder's project team shall be in attendance with credentials, references, experience.

1.19 QUALIFICATIONS AND REQUIREMENTS

A. **Electronic Access Control Door Hardware Requirements:**

1. Parties providing electronic access control door hardware, must have all required certifications and qualifications with Vanderbilt Industries to perform work involving Owner's existing Vanderbilt Industries system, as required for a complete, working installation. Certifications are required for all Vanderbilt products, including, but not limited to software and controllers

    a. Vanderbilt Industries indicates that certified parties meet the following requirements:

        1) Current on Vanderbilt Industries dealer agreement: a currently certified SMS dealer.
        2) Have an active certified personnel on staff (certified personnel are required to be re-certified every two years).
        3) Have Vanderbilt Industries controllers and reader interfaces on shelf to support existing clients.

    b. By bidding on this Project, Bidders are indicating the parties performing the work are familiar with the Owner's specific software and hardware requirements. Provide a letter of certification and qualification from Vanderbilt Industries, prior to the acceptance of the Bid. (Not required at time of Bid). Bidders not providing this letter, and/or not possessing the required certifications and qualifications applicable to the work of the project will be rejected.

2. Integrated locks specified as part of this project shall be purchased through the Integrator, through Vanderbilt Industries, including Vanderbilt Industries Licensing.

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B. **Electronic Access Control Contractor Qualifications:**

1. All installation work shall be performed by technicians thoroughly trained in the installation and service of specialty low-voltage electronic systems.

2. Contractor shall be an authorized dealer of products and equipment and shall be required to show proof of dealership and appropriate certifications for training equipment. (Two stepping of equipment shall not be permitted).

3. Contractor must have five years' experience and provide at least three (3) references of jobs with similar size and scope.

4. All field technicians shall be full time employees of the authorized dealer and shall be licensed Power Limited Technicians (PLT) in the State of Minnesota.

5. Refer to Section 28 13 27 for additional requirements and conditions.

6. Dealers providing and servicing wireless access control hardware, wiring, commissioning, equipment, and related services and materials must be able to respond and have a technician on-site within two hours of being contacted by the Owner, or early the next business day if a service call is made within two hours of closing.

C. **List Of Available Contractors For Electronic Access Control:** The following parties are indicated by Vanderbilt to have the appropriate certifications required for the work. This list is provided for reference purposes only, and parties on this list are not required to be used in the project. Should any of these parties not be qualified to perform the work at the time of bidding or construction, they shall not be included on the project. The Owner and Architect have no responsibility to verify the qualifications of the parties listed:

1. Twin Cities Hardware (TCH-IAS), New Hope, MN
2. ECSI System Integrators, Bloomington, MN
3. Wheeler Hardware Company, Roseville, MN
4. USA Security, Eden Prairie, MN

END OF DOCUMENT

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DOCUMENT 00 73 00

SUPPLEMENTARY CONDITIONS

The following supplements, modifies, changes, deletes from, or adds to the "General Conditions of the Contract for Construction", AIA Document A201, Sixteenth Edition, 2007. Where any Article of the General Conditions is modified, or any Paragraph, Subparagraph, or Clause is modified or deleted by the Supplementary Conditions, the unaltered provisions of the Article, Paragraph, Subparagraph, or Clause of the General Conditions shall remain in effect.

ARTICLE 1 - GENERAL PROVISIONS

1.1 BASIC DEFINITIONS

Add the following at the end of Subparagraph 1.1.8:

The Architect shall be the Initial Decision Maker under the Contract Documents.

Add the following Subparagraphs 1.1.9, 1.1.10, 1.1.11, 1.1.12, 1.1.13, 1.1.14, 1.1.15, 1.1.16, 1.1.17, 1.1.18, 1.1.19, 1.1.20, and 1.1.21 to Paragraph 1.1:

1.1.9 THE PROJECT MANUAL: The Project Manual is a volume assembled for the Work which may include the bidding requirements, sample forms, Conditions of the Contract, and Specifications.

1.1.10 BIDDING DOCUMENTS: The Bidding Documents are the Advertisement For Bids, Instructions to Bidders, Information Available to Bidders, Bid Form(s) and attachments, Bid Security Form, Contract Forms, Conditions of the Contract, Specifications, Drawings, and Addenda.

1.1.11 ADDENDUM OR ADDENDA: The Addendum or Addenda are any written changes, revisions, or clarifications of the Contract Documents which have been duly issued by the Architect to prospective Bidders prior to the time of the Owner receiving Bid Proposals.

1.1.12 MODIFICATION: A modification is (i) a Change Order, (ii) a Construction Change Directive, or (iii) a written order for a minor change in the Work issued by the Architect pursuant to Section 7.4.

1.1.13 AUTHORITY: Terms "as approved", "for approval", "selected", and "as directed" shall mean the authority of the Architect or Engineer as applicable, who is responsible for the preparation of the Contract Documents, unless linked to the identity of the Owner or Contractor.

1.1.14 PRODUCT: As used in the Contract Documents, "product" includes materials, systems, and equipment incorporated or to be incorporated in the Work.

1.1.15 PROVIDE: As used in the Contract Documents, "provide" shall mean "furnish and install" and shall include, without limitations, all labor, materials, equipment, transportation, services, and other items required to complete the referenced tasks.

1.1.16 FURNISH: As used in the Contract Documents, "furnish" shall mean pay for, deliver (or receive), unload, inspect, and store products, materials, equipment, and accessories as specified while retaining care, custody, and control until received for installation based on a signed receipt.

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1.1.17 INSTALL: As used in the Contract Documents, "install" shall mean receive, unload, inspect, and store as specified while retaining care, custody, and control; set or place in position, make required connections, and adjust and test as specified in the Contract Documents for satisfactory performance and operation.

1.1.18 ARCHITECT/ENGINEER: As used in the Contract Documents, "Architect/Engineer" shall refer collectively to the Architect and any engineer retained by the Owner or the Architect in connection with the Project.

1.1.19 NOT IN CONTRACT: As used in the Contract Documents, "Not In Contract (NIC)" shall mean products furnished, installed, and connected by the Owner's own forces or by others under separate contract with the Owner. All work related to such products is completely excluded from the Construction Contract.

1.1.20 BY OWNER: As used in the Contract Documents, "By Owner" shall mean products furnished and unloaded at the site, by the Owner, in a location as directed by the Contractor. The complete installation and service connections of these items shall be the responsibility of the Contractor.

1.1.21 BY OTHERS: As used in the Contract Documents, "By Others" shall mean products furnished, unloaded at the site, and installed or set in place by others in a location shown. Trimming, service connections, and fittings of Contract equipment or materials to these items shall be the responsibility of the Contractor as is typical of, or set forth under, Contractor's applicable division of work in the Specifications.

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

Modify Subparagraph 1.2.1 as follows:

Modify the last two words in the Subparagraph to read "intended results" in lieu of "indicated results".

Add the following Clauses 1.2.1.1, 1.2.1.2 and 1.2.1.3 to Subparagraph 1.2.1:

1.2.1.1 Execution of the Contract by the Contractor is a representation that the Contractor has carefully examined the Contract Documents and the site, and represents that the Contractor is thoroughly familiar with the nature and location of the Work, site conditions, conditions under which the Work is to be performed, and matters which may affect the Work or its performance. The Contractor further represents that as a result of such examinations and investigations, the Contractor thoroughly understands the Contract Documents and their intent and purpose, and is familiar with all applicable codes, ordinances, laws, regulations, and rules as they apply to the Work, and that the Contractor will abide by same. Claims for additional time or additional compensation as a result of the Contractor's failure to follow the foregoing procedure and to familiarize itself with all local conditions and the Contract Documents will not be permitted.

1.2.1.2 By executing the Contract or a Subcontract on this Work, the Contractor and Subcontractors agree that the products provided will be properly and satisfactorily installed in accordance with the requirements, instructions, and recommendations of the manufacturer of the products being installed and include related components, work, and features that are unique to a specific product or assembly not specifically noted on the Drawings or in the Specifications.

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1.2.1.3 The Contractor shall report any apparent inconsistencies between or among any of the Contract Documents, any apparent defect or omission in any of the Contract Documents, or any inconsistencies between the Contract Documents and applicable standards, codes, and ordinances to the Architect and request a clarification or an interpretation by the Architect. In determining whether an adjustment in Contract Sum or Contract Time is appropriate in connection with any such clarification or interpretation, the better quality or greater quantity of Work, or more stringent requirement, shall be deemed to have been included in the original Contract Sum.

Add the following Clauses 1.2.2.1 and 1.2.2.2 to Subparagraph 1.2.2:

1.2.2.1 The requirements specified within the Specification Sections under Division 1 shall apply to all Sections of the Specifications as they are applicable to the work being provided under each individual Section of the Specifications.

1.2.2.2 Where the Specifications have been divided into divisions and sections, it is for convenience in use. The Architect assumes no responsibility for proper placement of phases of the work into the proper division or section nor the arrangement of Work shown on the Drawings. The Architect shall not be obligated to enter into jurisdictional or other disputes as a result of the organization, arrangement, or location of parts of the Work in Specifications or on Drawings, nor to serve as arbiter to establish Subcontract limits. Unless otherwise specified, the scope of work of each section shall be to furnish labor, materials, equipment, skill, erection, installation, services, and related items for the phase of work of that section, as required by the Drawings, as specified, or as otherwise required to provide and complete the entire work of the section.

Add the following Subparagraph 1.2.4 to Paragraph 1.2:

1.2.4 Where a reference in the Contract Documents is made to a standard, and unless the context otherwise clearly provides to the contrary, the edition of the standard current as of the date of the Project Manual, as amended, shall apply.

1.6 TRANSMISSION OF DATA IN DIGITAL FORM

Add the following Subparagraphs 1.6.1 and 1.6.2 to Paragraph 1.6:

1.6.1 The Architect may, with the concurrence of the Owner, furnish to the Contractor versions of Instruments of Service in electronic form. The Contract Documents executed or identified in accordance with Subparagraph 1.5.1 shall prevail in case of an inconsistency with subsequent versions made through manipulation of electronic means involving computers.

1.6.2 The Contractor shall not transfer or reuse Instruments of Service in electronic or machine readable form without the prior written consent of the Architect.

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DOCUMENT 00 73 00

ARTICLE 2 - OWNER

2.1 GENERAL

Delete Subparagraph 2.1.2 in its entirety.

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

Delete the last sentence in Subparagraph 2.2.3 and replace with the following:

The Contractor shall compare all information provided by the Owner with information from other sources, including the Contractor's observation (including without limitation observable on-site physical conditions), the Contract Documents, and any other information provided by the Owner, and, on the basis of such review, promptly report to the Owner and Architect any apparent inconsistencies, conflicts, discrepancies, errors or omissions the Contractor may discover, or of which the Contractor may otherwise be or become aware. The Contractor shall not be entitled to rely on any such information until such inconsistencies, conflicts, discrepancies, errors or omissions are reconciled to the reasonable satisfaction of the Contractor and the Owner. The Contractor shall be responsible for determining the exact location of subsurface utilities prior to site or demolition work and not rely totally on surveys or information provided by the Owner.

Delete Subparagraph 2.2.5 and replace with the following:

2.2.5 The Contractor will be furnished up to (5) complete sets of the Project Manual, Drawings, and Addenda for Contract Work, free of charge.

2.2.5.1 The Contractor will be furnished additional copies of the Project Manual, Drawings, and Addenda at cost of reproduction and handling, which is $1.50 per sheet of the Drawings and $.15 per sheet of the Project Manual and/or Addenda, plus postage and handling charges if mailing is required. Charges for additional copies of the Project Manual, Drawings, and Addenda are not refundable.

2.2.5.2 The Contractor and Subcontractors may purchase electronic CADD files of the Contract Drawings at a cost of $100.00 per sheet. Charges for these electronic files are not refundable.

Add the following Subparagraph 2.2.6 to Paragraph 2.2:

2.2.6 The Owner will procure and bear costs of structural tests and special inspections as required by the applicable building code.

2.3 OWNER'S RIGHT TO STOP THE WORK

Modify Paragraph 2.3 as follows:

Strike the word "repeatedly" in the second line of Paragraph 2.3.

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2.5 EXTENT OF OWNER RIGHTS

Add the following Paragraph 2.5 to Article 2:

2.5 EXTENT OF OWNER RIGHTS

2.5.1 The rights stated in this Article 2 and elsewhere in the Contract Documents are cumulative and not in limitation of any rights of the Owner (i) granted in the Contract Documents, (ii) at law, or (iii) in equity.

2.5.2 In no event shall the Owner have control over, charge of, or any responsibility for construction means, methods, techniques, sequences, or procedures or for safety precautions and programs in connection with the Work, notwithstanding any of the rights and authority granted to Owner in the Contract Documents.

2.6 OWNER'S RIGHT TO RECORDS

Add the following Paragraph 2.6 to Article 2:

2.6 OWNER'S RIGHT TO RECORDS

2.6.1 The Contractor's records, which shall include but not be limited to accounting records, written policies and procedures, subcontractor files (including proposals of successful bidders), original estimates, estimating work sheets, correspondence, change order files (including documentation covering negotiated settlements), and any other supporting evidence necessary to substantiate charges related to the Agreement (all foregoing hereinafter referred to as "records") shall be open to inspection and subject to audit and/or reproduction, during normal working hours, by Owner's agent or its authorized representative to the extent necessary to adequately permit evaluation and verification of any invoices, payments or claims submitted by the Contractor or any of its payees pursuant to the execution of the contract. Such records subject to examination shall also include, but not be limited to, those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to costs associated with the Agreement.

2.6.2 For the purpose of such audits, inspections, examinations and evaluations, the Owner's agent, or authorized representative, shall have access to said records from the effective date of the Agreement for the duration of Work and until (3) years (or longer if required by law) after the date of final payment by the Owner to the Contractor pursuant to the Agreement.

2.6.3 Owner's agent or its authorized representative shall have access during normal business hours to the Contractor's facilities, shall have access to all necessary records and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with this Article. Owner's agent or authorized representative shall give auditees reasonable advance notice of intended audits.

2.6.4 The Contractor shall require all Subcontractors, insurance agents, and material suppliers (payees) with cost plus contracts and not fixed price contracts to comply with the provisions of this Article by insertion of the requirements hereof in a written contract agreement between the Contractor and payee. Failure to obtain such written contracts which include such provisions shall be reason to exclude some or all of the related payee's costs from amounts payable to the Contractor pursuant to the Agreement.

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ARTICLE 3 - CONTRACTOR

3.1 GENERAL

Add the following sentence at the end of Subparagraph 3.1.2:

The Contractor shall perform no portion of the Work at any time without Contract Documents, or where required, approved Shop Drawings, Product Data, or samples.

3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

Add the following Subparagraphs 3.2.5, 3.2.6, and 3.2.7 to Paragraph 3.2:

3.2.5 Should it appear that the Work described on matters relative to the Work, are not sufficiently detailed or explained in the Contract Documents, the Contractor shall apply to the Architect for supplementary drawings or clarifications as may be necessary and shall meet the requirements of these documents as far as they are consistent with the original Contract Documents. In no case shall the Work be commenced in uncertainty.

3.2.6 If applicable to the Work, the Contractor shall hire a professional utilities locator to investigate and verify existing utility locations prior to earthwork operations, excavations, trenching, or other activities which could result in encountering or damaging existing utilities. Not all site utilities may be identified on the Drawings or surveys provided and as such, verification of the presence of utilities is the responsibility of the Contractor, including verification with the Owner before proceeding with the Work.

3.2.7 If applicable to the Work, the Contractor shall be responsible for site verifying and marking the exact locations of existing site utilities. The general locations of existing utilities noted on furnished surveys or in the Contract Documents are for the Contractor's reference and represent the general location of site utilities to the best of the Owner's knowledge. Damage caused to existing utilities, the site, or work being performed by others due to the Contractor's failure to accurately locate and mark existing utilities shall be corrected at the Contractor's expense.

3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

Delete the last sentence of Subparagraph 3.3.1.

Add the following Subparagraphs 3.3.4, 3.3.5, 3.3.6, and 3.3.7 to Paragraph 3.3:

3.3.4 Inspection of the progress, quantity, or quality of the Work done by the Owner, any Owner's representative, any governmental agency, or the Architect, or any inspector, shall not relieve the Contractor of any responsibility for the compliance of the Work with the Contract Documents. The Owner or its designated representative (heretofore referred to as Owner's representative) shall have access to the work site and all Work. No inspection by the Owner's representative, nor the authority to act nor any other actions taken by the Owner's representative shall relieve the Contractor of any of its obligations under the Contract Documents nor give rise to any duty on the part of the Owner.

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3.3.5 If any of the Work is required, whether required by the requirements of the Contract Documents, by applicable law, or by governing authorities, to be inspected or approved by any public authority, the Contractor shall communicate with governing public authorities and arrange for such inspection or approval to be performed. The Contractor shall not proceed with subsequent work which covers or hinders the required inspections and approvals.

3.3.6 If any of the Work is required, by the requirements of the Contract Documents, to be inspected and/or tested by an independent testing laboratory which the Owner employs, the Contractor shall communicate, coordinate, and schedule the required inspections and tests with the Owner's testing laboratory representatives. No work shall be performed when the Owner's testing laboratory is required to be present during the performance of the Work. The Contractor shall not proceed with subsequent work which covers or hinders the required inspections and tests.

3.3.7 If any of the Work is required to be inspected and approved by the Architect or Engineer, the Contractor shall not proceed with subsequent work which covers or hinders the inspection and approval of the work required to be inspected. The Contractor shall assume costs for removal of the subsequent work which hinders the Architect's or Engineer's inspection and approval, and for the restoration work required as a result of the removal of the subsequent work.

3.4 LABOR AND MATERIALS

Add the following at the end of Subparagraph 3.4.1:

Should the Contract Documents require Work to be performed after regular working hours or should the Contractor elect to perform Work after regular working hours, the additional cost of such Work shall be borne by the Contractor.

Delete Subparagraph 3.4.2 and replace with the following:

3.4.2 The Owner and the Architect will consider a formal request for the substitution of products in place of those specified under the Contract Documents only under the conditions set forth in Section 01 62 00, Product Options and Substitutions, of the Specifications.

Add the following Subparagraphs 3.4.4, 3.4.5, and 3.4.6 to Paragraph 3.4:

3.4.4 The Contractor shall be responsible for costs of additional work and changes required to incorporate substitute materials, products, equipment or systems approved during the bidding period and after the execution of the Contract, including additional work and changes required to be performed by others under other divisions of the work.

3.4.5 The Contractor acknowledges that it is the Contractor's responsibility to hire all personnel for the proper and diligent prosecution of the Work, and the Contractor shall use its best efforts to maintain labor peace for the duration of the Project. In the event of a labor dispute which is not industry wide, the Contractor shall not be entitled to any increase in the Contract Sum.

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3.4.6 After award of the Contract, a request for substitution of a material, product or item of equipment will not be considered by the Owner or the Architect, unless the specified item is no longer manufactured, the specified item is unavailable as a result of an act of government such as declaration of a national emergency, or delivery of the specified items is substantially delayed as a result of labor disputes affecting the manufacturer, delay in transportation, or other cause beyond control of the Contractor or a Subcontractor or material supplier which the Owner and Architect determines justifies the delay. Requests will not be approved where the delay in delivery results from the Contractor's failure to promptly place subcontracts and material orders. Requests for substitution shall be submitted in writing to the Architect and shall clearly describe the proposed substitution and the reason for the request for substitution, and shall be accompanied by such additional data and information as may be necessary to establish the acceptability of the proposed substitution. The Contractor shall be responsible for costs of Architect's time to review substitution requests.

3.5 WARRANTY

Delete Paragraph 3.5 and replace with the following:

The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. The Contractor represents and warrants to the Owner that the Work required by the Contract Documents including without limitation, construction means, methods, procedures and techniques necessary to perform the Work, use of materials, selection of equipment and requirements of product manufacturers are and shall be consistent with: (1) good and sound practices within the construction industry; (2) generally prevailing and accepted industry standards applicable to the Work; (3) requirements of any warranties applicable to the Work; and (4) all laws, ordinances, regulations, rules and orders which bear upon the Contractor's performance of the Work subject to Paragraph 3.2.3. Work, materials, or equipment not conforming to these requirements shall be considered defective, and promptly after notification of non-conformance shall be repaired or replaced by Contractor with Work conforming to the requirements of the Contract Documents. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

3.5.1 Contractor further warrants that all materials or equipment of a category or classification will be a product of the same manufacturer and such materials or equipment shall be of the same lot, batch or type and that such materials and equipment will be as specified in Project Specifications or as approved by Addenda.

3.5.2 The Contractor agrees to assign to the Owner at the time of final completion of the Work any and all manufacturer's warranties relating to materials and labor used in the Work and further agrees to perform the Work in such manner so as to preserve any and all such manufacturer's warranties.

3.5.3 The Contractor shall assign and deliver to the Owner at the time of final completion of the Work all manufacturer's warranties relating to materials and labor used in the Work. The Contractor shall perform the Work in such manner as to preserve all such manufacturer's warranties. In no event shall any manufacturer's warranties operate to relieve the Contractor of, or otherwise diminish, any of the Contractor's warranty obligations under this Paragraph 3.5, under the Contract Documents, under applicable law or otherwise.

3.5.4 The terms "warranty" and "guarantee" may be used interchangeably in the Contract Documents.

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3.5.5 Where a product is specified by manufacturer or brand name, it shall be understood that the specified product is used to establish the minimum standard of quality required, and the published data, including manufacturer's extended warranties, pertinent to the product, shall be considered a requirement of the Contract Documents as if it were quoted herein.

3.5.6 The Contractor's general warranty obligation is not limited or released by the specification of a particular product or procedure.

3.5.7 Warranties provided by manufacturers are in addition to, not in lieu of, the Contractor's general warranty.

3.5.8 The Contractor's general warranty is not limited by the provisions of Paragraph 12.2.

3.6 TAXES

Delete Paragraph 3.6 and replace with the following:

The Contractor shall pay unemployment and social security taxes, as well as other taxes imposed by local, city, state or federal government. If the tax laws are subsequently amended by legislation during the term of the Contract, the Contractor shall provide the new change caused by such amendment.

3.7 PERMITS, FEES, NOTICES, AND COMPLIANCE WITH LAWS

Delete Subparagraph 3.7.1 and replace with the following:

3.7.1 The Contractor will secure and pay for the building permit. The Contractor shall submit to the Owner the invoice for the cost of the building permit, and upon receiving the invoice, the Owner will provide the Contractor with a check to reimburse the Contractor for the cost of the building permit. The Contractor shall secure and pay for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

3.7.1.1 Fees associated with Sewer and Water Accessibility Charges (SAC and WAC) as applicable to the Project shall be paid by the Owner.

3.7.1.2 Fees associated with Minnesota Pollution Control Agency general stormwater permits as applicable to the Project shall be paid by the Owner.

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3.9 SUPERINTENDENT

Delete Subparagraphs 3.9.1, 3.9.2, and 3.9.3 and replace with the following 3.9.1, 3.9.2, 3.9.3, 3.9.4, and 3.9.5:

3.9.1 The Contractor shall employ a competent field superintendent and necessary supervisors. At all times when there is work being performed on a project site, the Contractor shall have on that site a field superintendent or a supervisor to oversee Work occurring at that site, including that work performed by all Subcontractors. This supervisor shall have at least 3 years experience as a foreman or supervisor of similar work. The field superintendent and the supervisors shall be employees of the General Contractor, not independent contractors, and communications given to the field superintendent or supervisors shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. This field superintendent or the supervisors shall be on each project site at all times when work is being conducted. The Contractor shall forward all communications to the Owner through the Architect.

3.9.2 The Contractor, prior to award of Contract and before commencement of the Work, shall submit to the Owner the resumes of the project manager and field superintendent being considered for the Project. The Owner will review the resumes submitted and, after review is completed, the Owner will be extended the opportunity to interview each of the parties the Contractor is considering for roles on the Project. The Owner reserves the right to reject either or both of the parties the Contractor has submitted for consideration. If a party is rejected by the Owner, the Contractor shall submit an alternative party for the Owner's consideration and the process used by the Owner for evaluation of the candidates shall be repeated until persons to serve as the project manager and field superintendent are approved.

3.9.3 The Contractor's field superintendent, or designated person responsible for making decisions regarding the Work, shall remain present on-site whenever work is being performed through completion of the Project closeout work.

3.9.4 If, during the course of the Project, it is evidenced that the field superintendent is not competent or is not managing the progress of the Project or is not coordinating the Subcontractors under the Contractor's supervision, then the Owner and Architect, or either of them, shall document such findings to the Contractor. If, within ten (10) days of receiving such notice, no substantial effort for correction of the findings is made, then the Architect, based upon the Owner's recommendation, may require the replacement of the field superintendent with an acceptable alternative.

3.9.5 Unless the Owner agrees otherwise, the field superintendent starting the Project shall remain throughout the entire Project. The Contractor shall provide the name and resume of the replacement to the Architect for review by the Owner prior to any transition in field superintendent taking place.

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3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

Add the following Subparagraphs 3.10.4, 3.10.5, 3.10.6, 3.10.7, and 3.10.8 to Paragraph 3.10:

3.10.4 The construction schedule shall be in a detailed format satisfactory to the Owner and Architect. If not accepted, the construction schedule shall be promptly revised by the Contractor and re-submitted for acceptance. The Contractor shall monitor the progress of the Work relative to the Contract Documents, promptly advise the Owner and the Architect of any delays or potential delays, and update the accepted construction schedule if required by either the Owner or the Architect. In the event the status of the Work does not agree with the construction schedule and delays in the progress of the Work is indicated, the Contractor shall propose an affirmative action plan to correct the delay, including, without limitation, overtime and/or additional labor, if necessary. Any actions required to be taken by the Contractor to get the Work back on schedule to ensure meeting established completion dates shall not constitute an adjustment in the Contract Time or Contract Sum.

3.10.5 If the Owner or the Architect determines that the performance of the Work is not satisfying the requirements of the accepted construction schedule, the Owner shall have the right to order the Contractor to take corrective measures necessary to expedite the progress of construction, including, without limitation, (i) working additional shifts or overtime, (ii) supplying additional manpower, equipment, and facilities, and (iii) other similar measures. Such measures shall continue until the progress of the Work complies with the stage of completion required by the accepted construction schedule. The Owner's right to require the Contractor to take these additional measures is solely for the purpose of ensuring the Contractor's compliance with the accepted construction schedule and meeting the completion dates established in the Contract. In no event shall the Owner or Architect have control over, charge of, or any responsibility for construction means, methods, techniques, sequence of procedures, or for safety precautions and programs in connection with the Work, notwithstanding the rights and authority granted in the Subparagraph or elsewhere in the Contract Documents.

3.10.6 Each major Subcontractor shall provide input to the Contractor's construction schedule and amendments thereto and shall schedule their operations as work progresses to coordinate with the progress of the Contractors and other Subcontractors.

3.10.7 Each Subcontractor shall adhere to the Contractor's construction schedule and shall not erect any portions of the work where it is necessary that the work of others shall be erected first or carried forward simultaneously without having first given others a reasonable notice of their intentions.

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3.10.8 The Contractor shall prepare monthly, or as otherwise agreed by the Owner, the Architect and the Contractor, a progress report in form and content reasonably acceptable to the Owner and the Architect. The progress report shall specify, among other things, an estimated percentage of completion, whether the Project is on schedule (and, if not, the reason(s) therefor), the number of days worked for each category of labor, and the projected Work to be completed in the next succeeding month. Accompanying the progress report shall be an updated, current Project schedule, and a listing and the status of all Change Orders, modifications, and bulletins, a forecast schedule of submittals, and a transmittal log of submittals and other relevant documents. The Contractor shall cooperate with the Owner and the Architect to prepare such additional reports as reasonably required by the Owner or the Architect. The Contractor shall hold weekly progress meetings at the Project site, or at such other time, place, and frequency as the Owner or Architect may request. Progress of the Work shall be reported in detail with reference to the construction schedules. Each interested Subcontractor shall have present a competent representative to report the condition of its work and to receive information upon request of the Owner or the Architect. The Contractor shall prepare and keep current, for the Architect's and the Owner's approval, a schedule of submittals which shall be coordinated with the Contractor's construction schedule and which allows the Architect and the Owner reasonable time to review submittals.

3.11 DOCUMENTS AND SAMPLES AT THE SITE

Modify the last sentence of Subparagraph 3.11 to read as follows:

These shall be available to the Architect and the Owner and shall be delivered.

3.12 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

Modify the third to the last sentence in Subparagraph 3.12.10 to read as follows:

The Owner and the Architect shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals.

Add the following Subparagraphs 3.12.11 and 3.12.12 to Paragraph 3.12:

3.12.11 Refer to Division 1, General Requirements, for submittal procedures for handling Shop Drawings, Product Data, and samples, processing of reproducibles, number of copies, identification and labeling, revisions, and resubmission procedures.

3.12.12 The Architect/Engineer will make one review and allow one resubmittal review if required for each Shop Drawing, Product Data, sample, or similar submittal. If additional resubmittals are required due to the Contractor's failure to meet the requirements of the Contract Documents, the Architect/Engineer's expense for reviewing the additional resubmittals may be charged to the Contractor and such payment shall be accomplished by a deductive Change Order to the Contract.

3.15 CLEANING UP

Delete the first sentence of Subparagraph 3.15.1 and replace with the following:

Throughout the construction period, the Contractor shall at all times keep the areas of construction and surrounding area clean, free from fire hazards, and free from accumulation of waste materials and rubbish caused by operations under the Contract, and shall at all times keep and maintain the construction areas neat and orderly.

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3.18 INDEMNIFICATION

Delete Subparagraph 3.18.1 and replace with the following:

3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify, defend, protect, and hold harmless the Owner, Owner's representative, if any, Owner's consultants, Architect, Architect's consultants, and any other person or entity designated by the Owner, and the officers, directors, shareholders, partners, representatives, agents and employees of each of them (collectively, the "Indemnitee's") from and against all claims, demands, causes of action, damages, liabilities, losses, and expenses, including, without limitation, attorney's and consultants' fees and expenses, arising out of or resulting from performance of the Work or the acts or omissions of the Contractor, its Subcontractors, sub-subcontractors, suppliers or anyone directly or indirectly employed by any of them or anyone for whose acts they may be liable, regardless of whether or not such claim, demand, cause of action, damage, liability, loss or expense is caused in part by an Indemnitee.

Add the following Subparagraphs 3.18.3, 3.18.4, 3.18.5, 3.18.6, 3.18.7, 3.18.8, 3.18.9, 3.18.10, 3.18.11, and 3.18.12 to Paragraph 3.18:

3.18.3 The Contractor's indemnity obligations under this Paragraph 3.18 shall also specifically include, without limitation, all fines, penalties, damages, liability, costs, expenses (including, without limitation, reasonable attorneys' fees), and exemplary damages (if any) arising out of, or in connection with, any (i) violation of or failure to comply with any law, statute, ordinance, rule, regulation, code, or requirement of a public authority that bears upon the performance of the Work by the Contractor, a Subcontractor, or any person or entity for whom either is responsible subject to Subparagraph 3.7.3, and (ii) failure to secure and pay for permits, fees, approvals, licenses, and inspections as required under the Contract Documents, or any violation of any permit or other approval of a public authority applicable to the Work, by the Contractor, a Subcontractor, or any person or entity for whom either is responsible.

3.18.4 The Contractor shall indemnify all of the Indemnitees from and against any costs and expenses (including reasonable attorneys' fees) incurred by any of the Indemnitees in enforcing any of the Contractor's defense, indemnity, and hold harmless obligations under the Agreement.

3.18.5 To the fullest extent permitted by law, the Contractor shall defend each Indemnitee in any action, proceeding or arbitration brought against the Indemnitee by reason of any such claim described in this Paragraph 3.18. The Contractor's obligation to defend an Indemnitee shall not extend to any action, proceeding or arbitration that asserts or alleges only that the injury to the claimant resulted solely from the negligence or misconduct of the Indemnitee and from no other cause or to the extent caused by the gross negligence or willful misconduct of the Indemnitee provided that a final judgment is obtained establishing that injury to the claimant resulted solely from the negligence or misconduct of the Indemnitee or to the extent caused by the gross negligence or willful misconduct, in which latter event the Contractor's obligation to defend the Indemnitee shall cease upon the date the judgment becomes final, and the Indemnitee shall thereupon reimburse the Contractor for its reasonable attorney's fees and court costs in so defending the gross or sole negligence or willful misconduct of an Indemnitee.

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3.18.6 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner against any assertion of claims for mechanic's liens by Subcontractors, sub-subcontractors, or material or equipment suppliers, and against any assertion of security interests by suppliers of goods or materials, to the extent such claims arise from the failure of the Contractor to pay Subcontractors, sub-subcontractors, or material or equipment suppliers for Work for which the Owner has paid the Contractor, or the failure of the Contractor to process timely Applications for Payment.

3.18.7 If any claim of lien or stop-notice or any other demand for payment or security thereof, including claims or demands upon performance and payment bond sureties for this Contract, is made or filed with the Owner or the Project by any person claiming that the Contractor or any Subcontractor or supplier or any other person claiming under any of them has failed to perform its contractual obligations or to make payment for any labor, services, trust fund contributions, materials, equipment, taxes or other item furnished or obligation incurred for, or in connection with, the Work, or if at any time there should be evidence of such non-performance or non-payment of any claim or lien or stop-notice or other demand for which, if established, the Owner or the Project might become liable, then the Owner shall have the right to retain from any payment then or thereafter due under the Contract or to be reimbursed by Contractor for an amount sufficient to (i) satisfy, discharge, and defend against any such claim of lien or stop-notice or other demand, or any action or proceeding therein that may be brought to judgment or award; (ii) make good any such non-payment, non-performance, damage, failure or default; and (iii) compensate the Owner for, and indemnify it against, any and all loss, liability, damage, cost and expense (including attorneys' and consultants' fees and costs) sustained or incurred in connection therewith.

3.18.8 If the Contractor, any Subcontractor, supplier or other person makes, records or files, or maintains any action on or respecting a claim of mechanic's lien, stop-notice, equitable lien, payment or performance bond or a lis pendens, relating to the Work, the Contractor shall immediately at its own expense procure, furnish and record appropriate statutory release bonds, which will extinguish or expunge said claim, stop-notice, or lis pendens or immediately take such actions to contest the claims as shall be acceptable to the Owner.

3.18.9 The Contractor shall, at its own expense, defend, indemnify and hold harmless the Architect, Owner, its officers, agents, employees, assigns, and successors in interest, from and against any and all liability, damages, losses, claims, demands, actions, causes of action, and costs including attorney's fees and expenses, or any of them, arising from or attributable to a lien or stop-notice filed or served in connection with the Work.

3.18.10 The Contractor shall purchase and maintain at all times liability insurance to insure the Contractor's indemnity obligations under this Paragraph 3.18, naming as other named insureds the Owner, the Architect, and such other persons or entities as may be designated by the Owner; provided, however, no such insurance shall establish, or operate to impose, a limit on the Contractor's liability under this Paragraph 3.18.

3.18.11 None of the provisions of this Paragraph 3.18 shall deprive the Owner or the Architect of any action, right or remedy otherwise available to any or all of them under applicable law.

3.18.12 In the event that any indemnifying party is required, but refuses to honor, the indemnity obligations under this Paragraph 3.18, then such indemnifying party shall, in addition to, and not in lieu of, all other obligations under this Paragraph 3.18 or otherwise, pay the cost of any action to enforce this Paragraph 3.18, including attorneys' fees and expenses, to the party or parties requesting indemnity.

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ARTICLE 4 - ARCHITECT

4.1 GENERAL

Add the following sentence at the end of Subparagraph 4.1.1:

Where the term "Architect" may be used relating to engineering phases or portions of the Work, substitute the term "Engineer" thereto.

4.2 ADMINISTRATION OF THE CONTRACT

Add the following Clauses 4.2.2.1 and 4.2.2.2 to Subparagraph 4.2.2:

4.2.2.1 The Contractor shall reimburse the Owner for compensation paid to the Architect for additional site visits made necessary by the fault, neglect or request of the Contractor; for time required to review requests for substitution after award of Contract; and for time required to review submittals beyond the number of resubmittals specified.

4.2.2.2 The Contractor may not rely upon the Architect's site visits or reports to the Owner as confirmation that the Work is being performed in accordance with the Contract Documents or for any other purpose.

ARTICLE 5 - SUBCONTRACTORS

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

Delete Subparagraph 5.2.1 and replace with the following:

5.2.1 Subsequent to the execution of the Contract, and no later than ten (10) days after the full execution of the Agreement, the Contractor shall submit in writing, to the Owner and the Architect, a Subcontractors and Products List which identifies the names of persons or entities (Subcontractors and material suppliers) proposed for each principal portion of the Work, together with their address, telephone number, facsimile number, and name of contact person. Include in the submittal, under each person or entity, the name of the manufacturer for each product proposed for incorporation into the Work. The Architect will reply in writing, stating if the Owner or the Architect has a reasonable objection to any proposed person, entity, or product identified. Failure of the Owner or Architect to reply, however, is not tacit approval and does not relieve the Contractor of responsibility for conduct of the Subcontractors and their Work; the Contractor shall properly direct and control the Subcontractors. Products not specifically specified or approved by Addenda during the bidding process shall not be proposed and included in the submittal. The Contractor's submittal shall be in accordance with specified requirements of Division 1 of the Specifications.

Add the following Subparagraphs 5.2.5, 5.2.6, and 5.2.7 to Paragraph 5.2:

5.2.5 For purposes of this Paragraph 5.2, any objection by the Owner or the Architect to a person or entity proposed by the Contractor shall be deemed reasonable if such person or entity:

.1 cannot provide materials, equipment, systems, methods, facilities, or other Work as required by the Contract Documents;

.2 proposes unacceptable deviations in materials, equipment, systems, methods, facilities, or other work as required by the Contract Documents;

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.3 cannot provide labor and skill necessary to accomplish the part of the work for which it is proposed, including, but not limited to, quality of workmanship;

.4 lacks experience appropriate to the proper execution and completion for that part of the Work for which such person or entity is proposed;

.5 has previously failed to perform satisfactorily with respect to other projects, including cooperation and necessary services after project completion;

.6 cannot satisfactorily perform the part of the Work for which such person or entity is proposed within the time schedule due to financial status, size of organization, existing workload, or other considerations;

.7 cannot demonstrate ability, through examples of representative work, to perform the part of the Work for which such person or entity is being considered; or

.8 exhibits other factors bearing on the probability of unsatisfactory performance.

5.2.6 Neither acceptance of, nor objection to, a Subcontractor, sub-subcontractor, material supplier, or other person or entity by the Owner or the Architect shall not limit the responsibility of the Contractor to furnish materials, products, equipment, and services in conformance with the requirements of the Contract Documents.

5.2.7 The Contractor shall not submit a product which is not specifically specified or approved by Addenda before the execution of the Contract. If a product is submitted that is not specified or approved, it will be rejected and not incorporated into the Work. Requests for substitution for providing alternative products which were not specified or approved prior to the execution of the Contract will not be entertained by the Architect/Engineer or Owner, except for unusual circumstances that are beyond the control of the Contractor.

5.3 SUBCONTRACTUAL RELATIONS

Delete Paragraph 5.3 and replace with the following:

By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed sub-subcontractors.

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5.3.1 All subcontracts shall be in writing and shall specifically provide that the Owner is an intended third-party beneficiary of such subcontract.

5.3.2 Subcontractors performing the work included in Divisions 27, 28, 29 will be doing so directly as a subcontractor under the Contractor, and not under an additional Subcontractor.

Revised in Addendum No. 1

5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

Delete the last sentence in Clause 5.4.1.2.

Delete Subparagraph 5.4.2 and replace with the following:

5.4.2 If the Work in connection with a subcontract has been suspended for more than sixty (60) days after termination of the Contract by the Owner pursuant to Paragraph 14.2 and the Owner accepts assignment of such subcontract, the Subcontractor's compensation shall be equitably adjusted for any increase in direct costs incurred by such Subcontractor as a result of the suspension.

Delete Subparagraph 5.4.3 and replace with the following:

5.4.3 Each subcontract shall specifically provide that upon assignment as provided for in Subparagraph 5.4.1, the Owner will only be responsible to the Subcontractor for those obligations of the Contractor that accrue subsequently to the Owner's exercise of any rights under this conditional assignment.

ARTICLE 7 - CHANGES IN THE WORK

7.1 GENERAL

Add the following Subparagraph 7.1.4 to Paragraph 7.1:

7.1.4 The amount of credit to be allowed by the Contractor to the Owner for any deletion or change which results in a net decrease in the Contract Sum (individually, a "Deletion") will be the amount of the actual net cost reduction as confirmed by the Architect after consultation with the Owner. The amount of increase to be allowed by the Owner to the Contractor for any addition or change which results in a net increase in the Contract Sum (individually, an "Addition") will be the amount of the actual net cost increase as confirmed by the Architect after consultation with the Owner. When both Additions and Deletions covering related Work or substitutions are involved in any one change, the allowance for both overhead and profit shall be calculated on the basis of the overall net increase or decrease, if any, with respect to such change.

7.2 CHANGE ORDERS

Delete Subparagraph 7.2.2 and replace with the following:

7.2.2 Methods used in calculating adjustments to the Contract Sum shall be as specified in Subparagraph 7.3.11.

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Add the following Subparagraph 7.2.3 to Paragraph 7.2:

7.2.3 By the execution of a Change Order, the Contractor acknowledges and agrees that the Contractor has had sufficient time and opportunity to examine the change in Work which is the subject of the Change Order and that the Contractor has undertaken all reasonable efforts to discover and disclose any concealed or unknown conditions which may, to any extent, affect the Contractor's ability to perform the Work in accordance with the Change Order. Aside from these matters specifically set forth in the Change Order, the Owner shall not be obligated to make any adjustment to either the Contract Sum or Contract Time by reason of any conditions affecting the change in Work addressed by the Change Order which could have reasonably been discovered or disclosed by the Contractor's examination.

7.3 CONSTRUCTION CHANGE DIRECTIVES

Add the following at the end of Clause 7.3.3.1:

A lump sum for an increase in the Contract Sum may contain an allowance for the Contractor's overhead and profit. No allowance for overhead and profit will be required if the change results in a net decrease in cost. When both additions and credits covering related Work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of net increase, if any.

Add the following at the end of Clause 7.3.3.2:

Unit Prices shall cover all of the Contractor's costs for labor, materials, equipment, and related services, including such costs for subcontracted work and the Contractor's overhead and profit.

Delete Clause 7.3.3.4 and replace with the following:

7.3.3.4 As provided in Subparagraph 7.3.10.

Delete Subparagraph 7.3.7 and replace with the following:

7.3.7 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Architect on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an allowance for overhead and profit combined as specified under the provisions of Subparagraph 7.3.11. In such case, and also under Clause 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Supporting data shall include invoices, quotes, order forms, and job tickets to document materials and quantities associated with a change; and time sheets and payroll records to document labor costs associated with a change. The Contractor shall have supporting data to accurately document when work associated with a change commenced and terminated, and shall have documentation which identifies each workers's name, trade, and hours worked per calendar day for such work associated with a change in the Work. Parties to the Contract agree that the Architect may use a recognized estimating manual, which is applicable to the region where the Project is located, in order to resolve disagreements pertaining an adjustment in the Contract Sum.

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Add the following Subparagraph 7.3.11 to Paragraph 7.3:

7.3.11 In Subparagraph 7.3.7, the amount for overhead and profit included in the total cost to the Owner shall be based on the following schedule and clarifications:

.1 For the Contractor, for Work performed by the Contractor's own forces and for materials purchased directly by the Contractor, 10 percent of the actual cost for labor and materials.

.2 For the Contractor, for Work performed by the Contractor's subcontractors, 5 percent of the amount due to the subcontractor.

.3 For each subcontractor or sub-subcontractor involved, for Work performed by that subcontractor's or sub-subcontractor's own forces, 10 percent of the actual cost for labor and materials.

.4 For each subcontractor, for Work performed by the subcontractor's sub-subcontractors, 5 percent of the amount due the sub-subcontractor.

.5 The cost of premiums for additional bonds and insurance required because of changes in the Work shall not be included in the Contractor's costs on which the allowance for overhead and profit is applied, but shall be added as a separate line item to the cost for the change. Calculation of the added cost for additional bonds and insurance shall not exceed the percentage of the total Contract Amount that the Contractor used to determine the cost for bonds and insurance quoted on the Contractor's original Schedule of Values for the Project. The Contractor shall provide substantiating data to support claims for additional costs for bonds and insurance premiums, if requested by the Owner or the Architect.

.6 Except where the Owner is tax exempt, the additional cost associated with sales, consumer, use, and similar taxes required because of changes in the Work shall not be included in the Contractor's cost, subcontractor's cost, or sub-subcontractor's cost on which the allowance for overhead and profit is applied, but shall be added as a separate line item to the cost of the change and, If applicable, passed on as a separate line item to the Contractor by the subcontractors and sub-subcontractors for inclusion into the Contractor's final Change Order Amount.

.7 Permit and inspection fees required by governing authorities shall not be included as a part of a cost proposal, unless a new permit or additional inspections are required due to the changes in the Work. If additional permit or inspection fees are required by governing authorities because of changes in the Work, the additional fees shall not be included in the Contractor's cost on which the allowance for overhead and profit is applied, but shall be added as a separate line item to the cost of the change. The Contractor shall substantiate additional costs by way of submitting applicable invoices from governing authorities.

.8 The cost for the rental of machinery and equipment shall not be included as a part of a cost proposal by the Contractor, subcontractors, or sub-subcontractors, unless such machinery or equipment is rented from an outside party; is required specifically by the change in the Work and is related to hoisting needs, excavation, or earthwork; or represents major equipment needs beyond what the Contractor, subcontractors, or sub-subcontractors would typically have available as a part of their equipment inventory.

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.9 The actual cost of labor associated with a change in the Work on which the allowance for overhead and profit shall apply shall be the actual cost of the labor to perform the required work associated with a change in the Work. Labor costs shall be itemized by each trade involved, labor hours required by each trade for the change, and the actual rate paid the workers for each trade in accordance with the established management labor agreements. The actual labor rate shall include the base rate, taxes, insurance, and fringe benefits. Labor hours shall be the labor time anticipated to be expended by each party by trade performing the work to make such change.

.10 The actual material cost associated with a change in the Work, on which the allowance for overhead and profit shall apply, shall be the amount paid or to be paid by the Contractor, subcontractors or sub-subcontractors for materials, supplies, and equipment permanently incorporated into the Work. Such actual material cost shall not include sales, consumer, use, or similar taxes which may be required. Actual material costs shall be substantiated by actual invoices or quotes. The cost for materials shall not exceed the typical and customary cost of such items available in the geographic area of the Project. Sales, consumer, use, or similar taxes which apply to the cost of material shall be carried as a separate line item as specified in Clause .6 above.

.11 The percentages allowed for overhead and profit as stated within Subparagraph 7.3.11 shall include the following:

(1) All costs associated with the processing of the changes to the Work;
(2) Field and office design, engineering, estimating, administration, and supervision costs, including the field superintendent and foreman, project estimator, project manager, and all other administrative and supervisory personnel;
(3) Use or replacement of tools;
(4) Shop burden;
(5) Cost of safety measures, including those imposed by OSHA;
(6) Shipping, drayage, and demurrage;
(7) Parking and travel subsistence charges;
(8) Clean up and debris removal;
(9) Permits, unless a new type of permit is required;
(10) Preparation of record or as-built drawings;
(11) Cost of tools and consumable supplies and expendable items to perform the Work;
(12) Cost of bonds, unless an increase in premium occurs due to the change in the Work; and
(13) Cost of insurance, unless an increase in premium occurs due to the change in the Work.

.12 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their proprietary can be seen by inspection, shall be accompanied by a complete itemization of costs, including labor, materials, and subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are subcontracts, such items shall also be itemized.

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ARTICLE 8 - TIME

8.2 PROGRESS AND COMPLETION

Add the following Subparagraphs 8.2.4, 8.2.5, 8.2.6, and 8.2.7 to Paragraph 8.2:

8.2.4 Commencement of Work: After award of Contract, it shall be the responsibility of the Contractor to begin Work immediately upon notification to proceed and to thereafter pursue the Work diligently at all times with adequate qualified personnel to be able to deliver the completed Project to the Owner by the specified dates for Substantial Completion and Final Completion. The Contractor shall award subcontracts, take required field dimensions, order materials, and submit Shop Drawings for the Architect's review as soon after award of Contract as practical to ensure that the Work shall be able to proceed without delay or interruption after notification to proceed is given. Contingent upon the complete execution of the Contract, the Work may commence as follows:

8.2.4.1 Date of Commencement: Commencement may begin on June 12, 2023.

8.2.5 Progress and Supervision of Work: It shall be the responsibility of the Contractor to supervise the operations of all Subcontractors responsible to the Contractor so as not to delay the Work.

8.2.6 Date of Substantial Completion: The Owner requires the Work to be substantially complete on or before August 18, 2023.

8.2.6.1 Contractor's failure to substantially complete the Work by specified dates of Substantial Completion shall be subject to liquidated damages as specified in Article 8.5.

8.2.6.2 Definition of Substantial Completion: The date of Substantial Completion is that point when the Work has been completed in accordance with requirements of the Contract Documents where the Owner can occupy and have complete use of the space; when the Work has been accepted by governing authorities and an occupancy permits are issued; when specified Project closeout procedures, submittals, and training have been completed and the Architect has certified a date by issuing a Certificate of Substantial Completion; and when the Architect and the Owner have determined that the Work is substantially complete.

8.2.7 Final Completion: This Project shall have a date for Final Completion of the Work and fulfillment of the requirements of the Contract Documents, which the Contractor by entering into a Contract with the Owner agrees to make, and agrees to pay the Owner a fixed fee per calendar day for each day of delay beyond the date of Final Completion.

8.2.7.1 Date of Final Completion: Thirty (30) calendar days after date of Substantial Completion.

8.2.7.2 Definition of Final Completion: Final Completion of the Work shall be defined as all punchlist items completed and approved by the Architect and the Owner, and the completion of all obligations and requirements for Project closeout as specified in Sections 01 77 00 and 01 78 00 of the Specifications as applicable to the Project.

8.2.7.3 Refer to Paragraph 8.6 for Liquidated Damages due to the Owner for the Contractor's failure to close out the Project by the specified date of Final Completion.

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8.3 DELAYS AND EXTENSION OF TIME

Add the following at the end of Subparagraph 8.3.3:

No payment, compensation or adjustment of any kind (other than the extensions of time provided for) shall be made to the Contractor for damages because of hindrances or delays from any cause in the progress of the Work, whether such hindrances or delays be avoidable or unavoidable, and the Contractor agrees to make no claim for compensation, damages or mitigation of liquidated damages for any such delays, and will accept in full satisfaction for such delays, said extension of time.

Add the following Subparagraph 8.3.4 to Paragraph 8.3:

8.3.4 If the Contractor submits a progress report indicating, or otherwise expresses an intention to achieve, completion of the Work prior to any completion date required by the Contract Documents or expiration of the Contract Time, no liability of the Owner to the Contractor for any failure or inability of the Contractor to so complete the Work shall be created or implied.

8.4 USE OR OCCUPANCY PRIOR TO SUBSTANTIAL COMPLETION

Add the following Paragraph 8.4 to Article 8:

8.4 USE OR OCCUPANCY PRIOR TO SUBSTANTIAL COMPLETION

8.4.1 The Owner shall have the right to make installations within the Project prior to Substantial Completion of the Work. Such installation shall not constitute occupancy or use by the Owner. Refer to Paragraph 9.9.

8.5 LIQUIDATED DAMAGES - SUBSTANTIAL COMPLETION

Add the following Paragraph 8.5 to Article 8:

8.5 LIQUIDATED DAMAGES - SUBSTANTIAL COMPLETION

8.5.1 The Contractor, upon entering into a Contract with the Owner, acknowledges that time is an essential and critical element of the Contract, and based on the Project Schedule and specified date of Substantial Completion, the Contractor hereby agrees that the Owner will be entitled to damages for the failure on the part on the Contractor to complete the Work by the date of Substantial Completion. In view of the impracticality and extreme difficulty of fixing and ascertaining the actual damages the Owner would sustain in the event that the Contractor failed to complete the Work by the specified date of Substantial Completion, the Owner will be entitled to a fixed and agreed to amount of Five-Hundred Dollars ($500.00) per calendar day beyond the date of Substantial Completion. The aforesaid specified amount shall not be construed as a penalty, but as Liquidated Damages for the Contractor's failure to meet its obligations.

8.5.2 The Owner may withhold from payments due the Contractor, such amounts as may be assessed as Liquidated Damages. Upon Substantial Completion and Final Completion, the Owner may adjust the Contract Sum by the amount of the assessed Liquidated Damages.

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8.5.3 The Owner may waive, as they so elect, all or any portion of any Liquidated Damage assessment.

8.5.4 For purposes of determining that the Project is substantially complete, Substantial Completion shall mean that the Work has been inspected by governing authorities with required certificates issued and is in a state of readiness for the Owner to resume normal operations on the day immediately following the specified Substantial Completion date.

8.5.5 Substantial Completion Liquidated Damages will be enacted if Work is not substantially complete by the date specified for the work in Article 8.2, Paragraph 8.2.6, at the Owner's discretion.

8.6 LIQUIDATED DAMAGES - FINAL COMPLETION

Add the following Paragraph 8.6 to Article 8:

8.6 LIQUIDATED DAMAGES - FINAL COMPLETION

8.6.1 The Contractor, upon entering into a Contract with the Owner for the Work under this Project, agrees to pay to the Owner as a fixed and agreed amount for each calendar day of delay beyond the specified date of Final Completion, the sum of One Five-Hundred Dollars ($500.00) per calendar day the Contractor fails to achieve Final Completion under the requirements of the Contract Documents. The aforesaid specified amount shall not be construed as a penalty, but as Liquidated Damages for the Contractor's failure to meet its obligations so the Owner can close out the Project.

8.6.2 Refer to Article 8, Subparagraph 8.2.7, Clauses 8.2.7.1 through 8.2.7.3, for date of Final Completion and related information.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.2 SCHEDULE OF VALUES

Add the following at the end of Subparagraph 9.2:

Refer to Division 1, General Requirements, for form and timing of submittal.

9.3 APPLICATION FOR PAYMENT

Add the following at the end of Subparagraph 9.3.1:

The Contractor may make periodic Applications For Payment no more often than monthly, for work satisfactorily completed and for materials and equipment suitably stored and protected at the job site. The Contractor shall indicate the percentage of completion of each portion of the Work (as defined by the schedule of values) as of the end of the period covered by the Application For Payment. Applications For Payment shall be made on a notarized AIA Document G702 and G703, 1992 Edition.

Delete Clause 9.3.1.1 and replace with the following:

9.3.1.1 Applications For Payment shall not include requests for payment on changes in the Work which have not been included in a fully executed Change Order.

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Delete Clause 9.3.1.2 and replace with the following:

9.3.1.2 Applications For Payment shall not include requests for payment of amounts the Contractor does not intend to pay to a Subcontractor or material supplier because of a dispute or other reason. However, this paragraph will not apply to routine retainage the Contractor intends to withhold from the Subcontractor pursuant to the Subcontract.

Add the following Clauses 9.3.1.3 through 9.3.1.7 to Subparagraph 9.3.1:

9.3.1.3 No such payments will be made until every part of the Work to that point for which payment is claimed is satisfactorily supplied and executed in every detail and particular and until all defects therein are remedied to the entire satisfaction of the Architect. The term "work executed"shall be construed to include materials which have been prefabricated or on which any other labor has been expended, and which are stored on the Project site.

9.3.1.4 Five percent (5%) of each certified Application For Payment will be retained by the Owner until the Work is substantially completed, after which the retained percentage may be reduced, upon the Architect's issuance of a Certificate of Substantial Completion, to an amount adequate to cover the costs for required corrections to the Work, total completion of the Work, and completion of Project closeout requirements, all in accordance with the requirements of the Contract Documents.

9.3.1.5 Upon final acceptance of the work by the Owner, final payment will be made to the Contractor and shall constitute a waiver of all claims against the Owner under or arising out of this Contract.

9.3.1.6 No certificate issued, no payment made to the Contractor, nor partial or entire use or occupancy of the Work by the Owner shall be an acceptance of any work or materials not in accordance with this Contract.

9.3.1.7 No reduction of the retainage amount below two percent (2%) shall be considered until Project closeout requirements are complete and State of Minnesota Form IC-134 has been submitted to Architect for Contractor and all Subcontractors.

Add the following Clauses 9.3.2.1, 9.3.2.2, and 9.3.2.3 to Subparagraph 9.3.2:

9.3.2.1 Progress payments will be made for ninety-five percent (95%) of the value of the Work as described in Clauses 9.3.1.1 and 9.3.1.2, and Subparagraph 9.3.2. Payment for Shop Drawings, mock-ups or similar items will only be made if completed, approved, and noted on the approved schedule of values as separate and individual line items, and only once when the same are one-hundred percent (100%) complete, or if materials are delivered and satisfactorily stored or incorporated in the Work.

9.3.2.2 The Contractor shall submit requisitions from suppliers and Subcontractors to substantiate the amounts requested on the Application For Payment for materials or equipment stored off-site.

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9.3.2.3 Payment for materials stored on-site will not relieve the Contractor from sole responsibility for the following:

.1 Care and protection of materials and work installed in the building or materials stored on-site for which payment has been made.

.2 Restoration of damaged work and replacement of damaged or stolen materials.

.3 Payment shall not waive the Owner's rights to require fulfillment of all terms of the Contract.

Add the following Clause 9.3.3.1 to Subparagraph 9.3.3:

9.3.3.1 The Contractor further expressly undertakes to defend the Owner, at the Contractor's sole expense, against any actions, lawsuits, or proceedings brought against the Owner as a result of liens filed against the Work, project site and any improvements thereon for Work for which the Contractor has been paid. The Contractor hereby agrees to indemnify and hold the Indemnitees harmless against any such liens or claims of lien and agrees to pay any judgment or lien resulting from any such actions, lawsuits, or proceedings for Work for which the Contractor has been paid.

9.5 DECISIONS TO WITHHOLD CERTIFICATION

Add the following Clause 9.5.1.8 to Subparagraph 9.5.1:

.8 failure of the Contractor to furnish satisfactory evidence of payment of State and Federal withholding taxes.

9.6 PROGRESS PAYMENTS

Add the following Clauses 9.6.2.1 through 9.6.2.4 to Subparagraph 9.6.2:

9.6.2.1 In accordance with Minnesota Statutes 471.425, Contractor shall, within 10 days of receipt of a progress payment, pay all Subcontractors and suppliers having an interest in the Contract their pro-rated share of the payment for all undisputed services provided by the Subcontractors and suppliers.

9.6.2.2 If the Contractor does not pay any Subcontractor or supplier on time, the Contractor must pay interest of 1 1/2 percent per month or any part of a month. The minimum monthly interest payment for an unpaid balance of $100.00 or more is $10.00. For an unpaid balance of less than $100.00, the Contractor shall pay the actual amount due the Subcontractor. Any Subcontractor who prevails in a civil action to collect interest from a Contractor must be awarded its costs and disbursements, including attorney's fees incurred in bringing the action.

9.6.2.3 The Contractor may withhold as retainage from the Subcontractor progress payments an amount not to exceed 5 percent of the payment. The Contractor shall reduce or eliminate the retainage for a Subcontractor in the same manner that the Owner reduces or eliminates the retainage for the Contractor.

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9.6.2.4 The enforcement of these conditions shall be the responsibility of the Subcontractor working through the Contractor and the Contractor's surety. To facilitate the resolution of any problems relating to these provisions, the Contractor shall furnish the Subcontractor with the name, address, and telephone number of the Contractor's surety within ten (10) days of the date on which the Contractor signs a Contract with the Owner.

Delete Subparagraph 9.6.4 and replace with the following:

9.6.4 Neither the Owner nor the Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor.

9.7 FAILURE OF PAYMENT

Opening paragraph shall be labeled Subparagraph 9.7.1; add the following Subparagraph 9.7.2 to Paragraph 9.7:

9.7.2 If the Owner is entitled to reimbursement or payment from the Contractor under or pursuant to the Contract Documents, such payment shall be made promptly upon demand by the Owner. Notwithstanding anything contained in the Contract Documents to the contrary, if the Contractor fails to promptly make any payment due the Owner, or if the Owner incurs any costs and expenses to cure any default of the Contractor or to correct defective work, the Owner shall have an absolute right to offset such amount against the Contract Sum and may, in the Owner's sole discretion, elect either to (i) deduct an amount equal to that which the Owner is entitled from any payment then or thereafter due the Contractor from the Owner, or (ii) issue a written notice to the Contractor reducing the Contract Sum by an amount equal to that which the Owner is entitled.

9.8 SUBSTANTIAL COMPLETION

Add the following at the end of the last sentence of Subparagraph 9.8.1:

; provided, however, that as a condition precedent to Substantial Completion, the Owner has received all temporary certificates of occupancy and any other permits, approvals, licenses, and other documents from any governmental authority having jurisdiction thereof necessary for the beneficial occupancy of the Project, unless the Owner's failure to obtain these documents is not due to acts or omissions for which the Contractor is not responsible.

Add the following Clause 9.8.3.1 to Subparagraph 9.8.3:

9.8.3.1 The Architect shall make one Substantial Completion inspection and one Final Completion Inspection. If additional inspections are required due to the Contractor's failure to complete previously listed corrective or uncompleted work, the Architect's expenses for conducting such reinspection and related time in processing, reviewing, and revision or requirements shall be charged to the Contractor and such payment shall be accomplished by a deductive Change Order to the Contract.

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Delete Subparagraph 9.8.4 and replace with the following:

9.8.4 When the Work, or designated portion thereof, is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; shall establish the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance; and shall contain a list of all incomplete work. The Contractor shall finish all items on the punchlist accompanying the Certificate within 30 calendar days of the date of issuance of the Certificate of Substantial Completion. The Contractor shall submit a punchlist completion schedule within 10 days of receipt of the Certificate of Substantial Completion. Costs incurred by the Architect, the Architect's consultants, or the Owner's consultants after 30 calendar days of the date of Substantial Completion to close out the Project shall be deducted from the Contractor's final payment. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work, or designated portion thereof, unless otherwise provided in the Certificate of Substantial Completion.

Modify the last sentence in Subparagraph 9.8.5 as follows:

Such payment shall be reduced by the product of 200 percent (200%) multiplied by the cost estimated by the Owner for completing or correcting the Work that is incomplete or not in accordance with the requirements of the Contract Documents.

9.10 FINAL COMPLETION AND FINAL PAYMENT

Add the following sentence at the end of Subparagraph 9.10.1:

All warranties and guarantees required under or pursuant to the Contract Documents shall be assembled and delivered by the Contractor to the Architect as part of the final Application for Payment. The final Certificate for Payment will not be issued by the Architect until all warranties and guarantees have been received and accepted by the Owner.

Modify Subparagraph 9.10.2, beginning with (5) to the end of that specific sentence as follows:

(5) other data establishing payment or satisfaction of obligations, such as receipts, full and final releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract signed by the Contractor and its Subcontractors and suppliers of all tiers, to the extent and in such form as may be designated by the Owner.

ARTICLE 10 - PROTECTION OF PERSONS OR PROPERTY

10.2 SAFETY OF PERSONS AND PROPERTY

Delete the word "and" at the end of Clause 10.2.1.2.

Add the following sentence at the end of Clause 10.2.1.3:

The Contractor shall also be responsible, at the Contractor's sole cost and expense, for all measures necessary to protect any property adjacent to the Project and improvements therein. All damage to such property or improvements shall be promptly repaired by the Contractor; and

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ARTICLE 11 - INSURANCE AND BONDS

11.1 CONTRACTORS LIABILITY INSURANCE

Modify Subparagraph 11.1.1.8 to read as follows:

claims involving contractual liability insurance and agreements to provide insurance for contractual indemnity applicable to the Contractor's obligations under Section 3.18.

Add the following at the end of Subparagraph 11.1.2:

The Contractor shall, during the life of the Contract, purchase and maintain insurance coverage with minimum limits as follows:

11.1.2.1 Worker's Compensation:

a. Coverage A - Statutory State Coverage for the states designated in the policy, and

b. Coverage B - Employers Liability Coverage in the following basic limits:

Bodily Injury by Accident:	$500,000 Each Accident
Bodily Injury by Disease:	$500,000 Each Employee
Bodily Injury by Disease:	$500,000 Policy Limit

11.1.2.2 Public Liability Insurance:

a. Commercial Form Liability Policy, including Contractual Liability, Each Occurrence:

Combined Single Limit:	$1,000,000
Personal Injury Liability:	$1,000,000
Products/Completed Operations:	$1,000,000
General Aggregate:	$2,000,000

b. Contractor's Excess (Umbrella) Liability Policy:

Each Occurrence:	$2,000,000

11.1.2.3 Business Automobile Liability Insurance:

a. Automobile Liability Policy, Each Occurrence:

Combined Single Limit:	$1,000,000

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Add the following Clauses 11.1.3.1, 11.1.3.2, 11.1.3.3, and 11.1.3.4 to Subparagraph 11.1.3:

11.1.3.1 Insurance Certificates shall be the ACORD Form of the American Insurance Institute, Form 25, without exception. No other form of Insurance Certificate will be accepted. Wording in the Cancellation Clause of the ACORD Form shall be as follows:

> ***CANCELLATION***
> **Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.**

11.1.3.2 Approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder. It is to be understood that the Owner and the Architect do not in any way represent that the insurance or the limits of insurance specified in these articles are sufficient or adequate to protect the Contractor's interests or liabilities, but are merely minimums.

11.1.3.3 Certificate of Insurance shall list the Owner and the Architect as additional insured on the actual policy for General Liability, Automobile Liability, and Umbrella Liability. Additional Insured Endorsement Forms CG2010, CG2037, and CG2032 or equivalent shall be used for General Liability, and Form CA2048 or equivalent shall be used for Automobile Liability.

11.1.3.4 All insurance companies listed on the Certificate of Insurance shall have an A.M. Best rating of A-,VI or higher to be deemed acceptable and shall be authorized as an admitted insurance company in the state in which the Project is located.

Add the following Subparagraph 11.1.5 to Paragraph 11.1:

11.1.5 Where special or unusual hazards peculiar to this Project are foreseeable, the Contractor shall take such steps as are necessary to insure against them.

11.3 PROPERTY INSURANCE

Delete the first sentence of Subparagraph 11.3.1 and replace with the following:

Until the Work is completed and accepted by the Owner, the Contractor shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, builders risk insurance in the amount of the initial Contract Sum, as well as subsequent modifications thereto for the entire Work at the site on a replacement cost basis without voluntary deductibles.

Add the following at the end of Subparagraph 11.3.1:

The Architect shall be listed as an Additional Insured on the Builders Risk policy. The form of policy or this coverage shall be "Completed Value" or "Reporting" at the Contractor's option. If by the terms of this insurance any mandatory deductibles are required, or if the Contractor should elect to increase the mandatory deductible amounts or purchase this insurance with voluntary deductible amounts, the Contractor shall be responsible for payment of the amount of the deductible in the event of a paid claim.

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Delete Subparagraph 11.3.4.

Delete Subparagraph 11.3.6 and replace with the following:

11.3.6 Before an exposure to loss may occur, the Contractor shall file with the Owner (2) certified copies of each policy that includes insurance coverage required by this Paragraph 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions, and endorsements related to this Project. Each policy shall contain a provision that a 30-day written notice by endorsement will be given to the Contractor if the policy is canceled.

11.4 PERFORMANCE BOND AND PAYMENT BOND

Delete Paragraph 11.4 and replace with the following:

11.4 PERFORMANCE BOND AND PAYMENT BOND

11.4.1 Submit a Performance Bond and a Payment Bond, each in the amount of 100 percent of the Contract Sum, as security for the faithful performance of this Contract, and for payment of all persons performing labor and furnishing products in connection with this Work. Submit Bonds using the American Institute of Architect's combined Form AIA Document A312, as furnished by Architect. Forms reproduced by surety companies are not acceptable.

11.4.2 In order to be acceptable by the Owner as a surety, the Contractor's bonding company shall:

11.4.2.1 hold a "Certificate of Authority" acceptable to the U.S. Treasury Department and be listed in that department's current publication of "Bond Qualifiers" with underwriting limitations not less than 10 percent above the Contract Sum;

11.4.2.2 be a corporate surety company authorized to do business in the state in which Work is being performed under this Contract and conditions of the Bonds shall meet requirements of the statutes of that state and all other applicable provisions of state law; and

11.4.2.3 have an A.M. Best rating of A-, VI or higher.

11.4.3 Submit (4) copies of the Performance Bond and Payment Bond to the Architect with the executed Agreement Form. Failure to submit copies of Bonds shall constitute violation of terms of proposal and shall provide grounds for forfeiture of bid security.

11.5 MECHANICAL SURETY BOND

Add Paragraph 11.5 to Article 11 as follows:

11.5 MECHANICAL SURETY BOND

11.5.1 Mechanical Contractor(s) intending to perform work on this Project which is covered by the State of Minnesota Mechanical Code (Chapter 1346), including gas installations, heating, ventilation, air conditioning, fuel burning, and refrigeration (G/HVACR), shall submit to Contractor a copy of their Mechanical Surety Bond Certificate in compliance with the requirements of the State of Minnesota Statute 326.992. The Contractor is responsible for ensuring that their appropriate Mechanical Subcontractor(s) comply with this State of Minnesota Statute. The Contractor is not required to submit copies of the Mechanical Surety Bond Certificates to the Architect.

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ARTICLE 12 - UNCOVERING AND CORRECTION OF WORK

Add the following at the end of Subparagraph 12.1.1:

If prior to the date of Substantial Completion the Contractor, a Subcontractor, or anyone for whom either is responsible uses or damages any portion of the Work (other than start-up), including, without limitation, mechanical, electrical, plumbing, and other building systems, machinery, equipment, or other mechanical device, the Contractor shall cause such item to be restored to "like new" condition at no expense to the Owner.

ARTICLE 13 - MISCELLANEOUS PROVISIONS

13.5 TESTS AND INSPECTIONS

Add the following Clauses 13.5.4.1, 13.5.4.2, and 13.5.4.3 to Subparagraph 13.5.4:

13.5.4.1 If required by state or local ordinances, laws or codes, submit all certificates of testing, inspection or approval to Architect before final payment is made to the Contractor.

13.5.4.2 Mechanical Subcontractor shall furnish (2) copies of the Final Inspection Certificate signed by the State Board of Health and shall furnish certificates of inspection signed by the local inspection department when required by local ordinances.

13.5.4.3 Electrical Subcontractor shall furnish (2) copies of the Final Inspection Certificate signed by the local City Electrical Inspector or by the State Board of Electricity.

Add the following Subparagraph 13.5.7 to Paragraph 13.5:

13.5.7 Refer to Division 1, General Requirements, for specific procedures and responsibilities regarding testing and quality control.

13.7 TIME LIMITS ON CLAIMS

Modify Paragraph 13.7 as follows:

Delete the words "but in any case not more than 10 years after the date of Substantial Completion of the Work" in the first sentence and the entire second sentence.

13.8 PREVAILING WAGES

Add the following Paragraph 13.8 to Article 13:

13.8 PREVAILING WAGES

13.8.1 This is a prevailing wage project. The Contractor and Subcontractors shall pay at least the minimum prevailing wages as established by the Minnesota Department of Labor for commercial construction for each of the trades or crafts which are performing work on the Project. The Contractor and Subcontractors shall abide by the requirements as established in Document 00 73 46 of the Project Manual pertaining to Prevailing Wages.

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13.9 TOBACCO-FREE ENVIRONMENT

Add the following Paragraph 13.9 to Article 13:

13.9 TOBACCO-FREE ENVIRONMENT

13.9.1 The Contractor shall enforce the following policy: "All persons associated with this Project who are present on the school premises for any reason are restricted from using any and all forms of tobacco products. The school premises shall be defined as school buildings and related school property and site. The Contractor shall be responsible for the enforcement of this policy for all parties, including those who are working under subcontracts and delivering products to the site. The Contractor shall notify all parties concerned of the policy and post signs that the site is to be tobacco-free.

13.10 DRUG-FREE WORKPLACE

Add the following Paragraph 13.10 to Article 13:

13.10 DRUG-FREE WORKPLACE

13.10.1 The Contractor shall enforce the following policy: "No persons associated with this Project who are present on the school premises for any reason shall unlawfully manufacture, distribute, dispense, possess or use on or in the workplace any narcotic drug, hallucinogenic drug, amphetamine, barbiturate, marijuana, or any other controlled substance, as defined in Schedules I through V of Section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined by regulation at 21 CFR 1300.11 through 1300.15. Further, no persons associated with this Project who are present on the school premises for any reason shall manufacture, distribute, dispense, possess or use on or in the workplace any alcoholic beverage. Persons who are caught violating this policy or show up at the workplace under the influence of a controlled substance or alcoholic beverage shall be immediately removed from the school premises and not allowed to return to the workplace in the future.

ARTICLE 14 - TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

Modify Subparagraph 14.1.3 as follows:

Delete ", including reasonable overhead and profit, cost incurred by reason of such termination, and damages."

14.2 TERMINATION BY THE OWNER FOR CAUSE

Modify Clause 14.2.1.3 as follows:

Delete "or" at the end of Clause 14.2.1.3.

Add the following Clauses 14.2.1.5 and 14.2.1.6 to Subparagraph 14.2.1:

14.2.1.5 becomes insolvent, files a Petition in Bankruptcy, or is adjudicated bankrupt, makes a general assignment to the benefit of its creditors, or cannot pay its debts as they generally become due; or

14.2.1.6 suspends its business operations or otherwise fails to operate its business in the ordinary course.

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Modify Subparagraph 14.2.2 as follows:

Delete the words ", upon certification by the Initial Decision Maker that sufficient cause exists to justify such action,"

Modify the first sentence of Subparagraph 14.2.4 as follows:

If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages and costs incurred by the Owner in finishing the Work and not expressly waived, such excess shall be paid to the Contractor.

14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

Delete Subparagraph 14.3.2 and replace with the following:

14.3.2 The Contract Time shall be adjusted for increase in the time caused by suspension, delay, or interruption as described in Subparagraph 14.3.1.

14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

Delete Subparagraph 14.4.3 and replace with the following

14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed. The Contractor hereby waives and forfeits all other claims for payment and damages, including without limitation, anticipated profits or lost overhead for portions of unperformed work. Owner shall be credited for (i) payments previously made to Contractor for the terminated portion of the Work, (ii) claims that the Owner has against the Contractor under the Contract, and (iii) the value of the materials, supplies, equipment, or other items that are to be disposed of by the Contractor that are part of the Contract Sum.

ARTICLE 15 - CLAIMS AND DISPUTES

15.1 CLAIMS

Delete Subparagraph 15.1.2 and replace with the following:

15.1.2 Claims for events arising during the performance of the Work by the Contractor must be initiated by written notice to the other party and to the Architect. Claims by the Contractor must be initiated within (10) business days after occurrence of the event giving rise to such Claim or within (21) days after the claimant first recognizes the condition giving rise to the Claim, whichever is later, and the claimant shall use its best efforts to cooperate with the Architect and the party against whom the claim is made in an effort to mitigate the alleged or potential damages, delay, or other adverse consequences arising out of the condition that is the cause of such a Claim. Any notice of Claim or reservation of Claim must clearly identify the alleged cause and the nature of the Claim and include data and information that will facilitate prompt verification and evaluation of the Claim. Claims not timely made as provided herein shall be deemed waived.

Delete Subparagraph 15.1.6.

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15.3 MEDIATION

Delete Subparagraph 15.3.2 and replace with the following:

15.3.2 The parties shall endeavor to resolve their Claims by mediation, which shall be conducted in accordance with Minnesota Rule of General Practice 114. Request for mediation shall be served to the other party in accordance with the Minnesota Rules of Civil Procedure. The request may be made concurrently with the filing of a demand for litigation; however, mediation shall proceed in advance of litigation proceedings, which shall be stayed pending mediation for a period of 90 days from the date of service, unless stayed longer by agreement of the parties or court order.

15.4 ARBITRATION

Delete Paragraph 15.4 in its entirety.

END OF DOCUMENT

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SECTION 12 32 16

PLASTIC LAMINATE FACED CASEWORK

PART 1 - GENERAL

1.01 SUMMARY

A. **Section Includes:**

1. Provide prefabricated and custom plastic laminate faced casework where noted.

2. Provide plastic laminate faced panels, soffits, where noted on Drawings.

3. Provide plastic laminate faced filler panels, scribe strips, and trim required for a complete installation.

4. Provide upholstered bench seating (fabric wrapped high density foam cushion) where noted.

5. Provide fabric wrapped tackable surfaces within casework where noted on Drawings, within reception desk.

6. Provide plastic laminate faced countertops on plastic laminate faced casework, unless otherwise indicated.

    a. Provide 3mm PVC edging on vertical edges of countertops where noted on Drawings.

    b. Provide backsplashes and endsplashes on plastic laminate faced countertops unless noted otherwise on Drawings.

7. Provide Project site constructed plywood sub-bases for support of floor mounted cabinet units as specified in this Section.

    a. Cabinet base height to be 4 1/2 inches, in order to accommodate vinyl base specified under Section 09 65 13.

8. Provide accessory materials related to plastic laminate faced casework as specified in this Section.

9. Provide plastic laminate faced mobile casework, including related accessory items.

10. Provide hardware for plastic laminate faced casework as specified.

11. Provisions Related to Mechanical Systems to be Built Into Casework:

    a. Provide holes/openings required to allow for fixtures and other mechanical related components to be built into, on, or through casework cabinets, countertops, and backsplashes. Coordinate size and location of holes/openings with Mechanical Contractor.

    b. Provide access panels in casework cabinets if needed to allow access to concealed mechanical components. Coordinate the need for access panels and their sizes and locations with Mechanical Contractor as approved by Architect.

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B. **Related Sections:**

1. Section 09 21 16: Blocking within steel stud framed walls for fastening casework.
2. Section 09 65 13: Resilient base on casework.

C. **Related Work by Mechanical:** After casework has been delivered, uncrated, set in place, fitted, trimmed, leveled, and anchored by casework supplier, Mechanical Contractor shall install plumbing products and make connections to service utility lines.

1.02 REFERENCES

A. **American National Standards Institute (ANSI)**: ANSI A208.1, Mat-Formed Wood Particleboard

B. **Americans With Disabilities Act (ADA)**: ADA Accessibility Guidelines for Buildings and Facilities

C. **National Electrical Manufacturers Association (NEMA)**: NEMA LD3, High-Pressure Decorative Laminates

1.03 DEFINITIONS

A. **Definition of Cabinet Components by Surface Visibility:**

1. Exposed Surfaces:

a. Surfaces visible when drawers and solid (non-glazed) doors are closed.

b. Interior surfaces of open units.

c. Bottoms of cabinets 42 inches or more above finish floor.

d. Tops of cabinets less than 78 inches above finish floor, or are visible from an upper floor or occupied space after installation.

e. Front edges of cabinet body members visible through a gap greater than 1/8 inch with doors and drawers closed.

f. Surfaces visible when fixed appliances are installed.

2. Semi-Exposed Surfaces:

a. Surfaces on interior of cabinet which are visible when doors are open.

b. Bottoms of cabinets 30 inches to 42 inches above finish floor.

c. Front edges of shelving behind doors.

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3. Concealed Surfaces:

   a. Surfaces not visible after installation.

   b. Bottoms of cabinets less than 30 inches above finished floor.

   c. Tops of cabinets over 78 inches above finished floor which are not visible from an upper level or raised floor area within the room or adjacent spaces.

   d. Stretchers, blocking, and components concealed by drawers.

1.04 SYSTEM DESCRIPTION

A. **Design Requirements:**

1. Casework to be flush overlay construction with hinged doors and drawer fronts overlaying cabinet body (ends/sides/stiles, top rail, intermediate rails, and bottom rail).

   a. Conceal vertical and horizontal case shell members (stiles and rails) behind doors and drawer fronts.

2. Design of doors and drawer fronts to be square edge and square corners.

3. Within front of each cabinet and at connection to adjacent cabinets, provide not more than a 1/8-inch wide reveal between pairs of doors, between doors and drawers, between drawers, and between doors and drawers and adjacent trim and filler panels.

4. Support separate individual floor mounted casework units (cabinets), and groups of adjacent floor mounted casework units, on a separate sub-base. Sub-base to be continuous under all units of a group. Project site fabricate sub-bases using materials furnished by casework supplier. Casework units supported by integral end panels for each individual cabinet extending down to floor are not acceptable, unless otherwise indicated or approved for a specific casework unit design.

5. Interior of casework units shall be flush and easily cleanable.

6. Base cabinets with double (paired) swinging doors shall provide full access to complete interior without center vertical post, unless a standard referenced casework unit has a center vertical divider or one is specifically indicated to be provided in a modified standard unit.

7. Drawers are to be modular in order to be interchangeable with similar drawers and are to be easily removable in field without the use of special tools.

8. Concealed shelving, behind closed doors, to be pressure fused laminate on particleboard core, with PVC front and back edging.

9. Exposed shelving to be 1-inch plywood core surfaced top and bottom with plastic laminate, and all edges covered with either PVC edging or plastic laminate edging to match face of shelves.

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B. **Americans with Disabilities Act (ADA) Design Requirements:** Where specifically indicated on Architectural Drawings as "ADA", including a General Note, or included as part of casework manufacturer's referenced model number, casework units shall comply with special requirements of Federal Register Volume 56, No. 144, Rules and Regulations.

1.05 SUBMITTALS

A. **General Requirements:** Provide submittals in accordance with Section 01 33 00.

B. **Shop Drawings:**

1. Provide 1/4" = 1'-0" plan drawings of casework layouts with elevations of casework keyed into Plans.

2. Provide 1/2" = 1'-0" or larger elevation drawings of individual units and of banks of casework units which indicate countertop and backsplash materials, utilities required, filler and closure panels, dimensions, shelving, and accessories.

3. Provide cross sections of casework, details, anchor placements, tolerances, and clearances, and location and sizes of sinks, type and location of faucets and other fixtures, and other items to be installed in, on, or through countertops and backsplashes.

4. Indicate relationship of units to surrounding walls, windows, doors, and other adjacent and affected building components.

5. Indicate countertop and backsplash materials, countertop edge profile, backsplash profile, sink cutouts, and methods of attaching and joining countertops.

6. Provide rough-in utility plan drawings for coordination with trades.

7. Indicate all casework and countertop materials and construction.

8. Show cabinet-cut details and dimensions for casework and countertops.

9. Indicate plastic laminate surfaced countertops and backsplashes, include locations of sinks, fixtures, and all other items to be installed in countertops and backsplashes.

C. **Product Data:**

1. Specifications:

   a. Submit complete specifications for products being provided which confirm products comply with requirements of Project Specifications.

   b. Highlight deviations. If no deviations are identified, it is Architect's assumption that products strictly comply with specified requirements.

2. Manufacturer's Data: Submit manufacturer's data for each component and item of equipment and accessory specified.

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D. **Samples for Color Selection:** For selection by Architect, submit manufacturer's color charts and samples which show full range of colors and finishes available for each prefinished material exposed to view, to include, but not be limited to, casework, work surfaces, edging materials, and accessories.

1.06 QUALITY ASSURANCE

A. **Source Limitations:** Obtain casework and related components through one source, from a single casework manufacturer, except where accessory items are specified to be manufactured by other than the casework manufacturer.

B. **Product Designations on Drawings:**

1. Drawings indicate casework sizes, designs, configurations, features, and certain accessories which come standard with a particular item of casework by referencing a specific manufacturer's catalog numbers. Unless otherwise modified on Drawings or in Specifications, catalog description constitutes specific requirements for each type of cabinet.

2. Other manufacturers products not referenced, but which are approved as equivalent to manufacturer's products referenced, are obligated to provide casework equivalent in sizes, design, configurations, features, and quality, and which include accessories comparable to those provided as a part of casework units referenced on Drawings as approved by Architect.

C. **Installer Qualifications:**

1. Direct employee of casework manufacturer, direct employee of local authorized casework dealer, or installer approved by casework manufacturer.

2. Installers must be factory trained and certified, and shall perform installation work under the supervision of manufacturer's representative.

D. **Regulatory Requirements:**

1. Work and materials shall meet requirements of authorities having jurisdiction.

2. Provide products which comply with governing VOC requirements.

E. **Fire Performance Characteristics of Upholstered Seating:** Provide upholstered seating which comply with the following requirements, or approved equal:

1. Padding: New polyurethane foam with an average burn length not exceeding 8 inches and average flame time after removal of flame source not exceeding (15) seconds, with drippings from test specimen not continuing to flame for more than (5) seconds after falling when tested vertically in accordance with Federal Test Method Standard 191, Method 5903.2, or approved equal.

2. Fabric: Provide fabric in accordance with requirements of 16 CFR, Part 1610, Class I.

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1.07 DELIVERY, STORAGE, AND HANDLING

A. **Delivery:**

1. Schedule delivery of casework and equipment so that spaces to receive casework are sufficiently complete, environmental requirements have been met, and after sufficient time has been allowed to condition casework to environmental conditions of installation area before beginning installation.

2. Protect casework during transit and reject casework damaged in transit.

B. **Off Project Site Storage:** If storage of casework is required, store casework under cover in a ventilated building, not exposed to extreme temperature and humidity changes, at conditions similar to those that will be in Project areas where units will be installed.

1.08 PROJECT CONDITIONS

A. **Environmental Requirements:** Do not deliver casework to Project site until following conditions have been met:

1. Windows and doors are installed and building is enclosed, secure, and weathertight.

2. Wet-work such as concrete, masonry, and drywall finishing, is complete and dry.

3. Heating, ventilating, and air conditioning (HVAC) systems are operating and will maintain temperature and relative humidity levels intended for Owner occupancy during remainder of construction period.

4. Ceilings and overhead mechanical and electrical work have been installed.

5. Painting is complete.

B. **Field Dimensions:**

1. Casework supplier shall be responsible for details and dimensions which are controlled by site conditions and shall indicate, on Shop Drawings, required field dimensions beyond supplier's control.

2. Casework supplier shall coordinate with other working trades to establish and maintain field dimensions.

3. Verify that each casework item will be capable of passing through building openings and arriving at designated installation location. Indicate recommended changes on Shop Drawings for items too large for passage.

4. Provide fillers and scribes to allow for Project site trimming and fitting.

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C. **Field Measurements for Countertops:**

1. Verify dimensions of countertops by field measurements after base cabinets are installed, but before countertop fabrication is complete.

2. Coordinate fabrication schedule with construction progress to avoid delaying Work.

1.09 SEQUENCING

A. **Coordination:** Coordinate layout and installation of blocking and reinforcement required in steel stud framed walls/partitions for attachment and support of casework.

1.10 WARRANTY

A. **Special Warranty:** Plastic laminate faced casework manufacturer shall provide written warranty against defects caused during manufacturing and installation of casework, including countertops, for a period of not less than 5 years following date of Substantial Completion of Project.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. **Acceptable Manufacturers:** Subject to compliance with requirements of the Contract Documents, acceptable manufacturers are as follows or approved equal:

1. Basis-of-Design Product: Requirements of these Specifications are based on casework meeting the design, quality of materials, sizes, configurations, features, workmanship, and function of the casework specified and implied by reference to the following manufacturer and product, and as shown on Drawings, regardless of alternative or approved manufacturer's "product standards", unless approved by Architect, in writing, prior to bidding:

   a. TMI Systems Design Corporation, Dickinson, ND, "Trimline Casework"

2. Alternative Manufacturers: Subject to compliance with specified requirements and standards established by Basis-of-Design product, the following manufacturers are acceptable or others approved equal:

   a. Case Systems, Inc., Midland, MI
   b. Stevens Industries, Inc., Teutopolis, IL
   c. The Calmar Manufacturing Company, Calmar, IA, "Tru-Bilt Casework"
   d. Northwest Cabinets, Inc.
   e. Northern Woodwork, Inc.

B. **Cabinet Designations on Drawings:** Drawings refer to catalog numbers of TMI Systems Design Corporation and are used to describe design, shape, size, and quality of casework desired.

C. **Deviations:** Manufacturers shall inform Architect, in writing, of deviations of materials or equipment specified or noted on Drawings. Manufacturers shall obtain written approval of deviations, from Architect, 7 days prior to Bid Date.

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2.02 MATERIALS

A. **Plastic Laminate:**

1. Acceptable Manufacturers: Subject to compliance with requirements of the Contract Documents, acceptable manufacturers are as follows or approved equal:

   a. Formica Corporation
   b. Nevamar
   c. Wilsonart International, Inc.

2. Color Selection: Where noted or scheduled:

   a. PLAM 1 (Cabinets/Benches): Equivalent of Wilsonart #10776-60 'Kensington Maple'

   b. PLAM 2 (Counters): Equivalent of Wilsonart #4944-38 'Casual Linen'

   c. PLAM 3 (Portal Entry and Library Bench): Equivalent of Pionite SB009 'Royal Blue'

3. Applicable Standards: Plastic laminate shall meet requirements of NEMA Standard LD3-2000 as specified.

4. Grade HGS: General Purpose type, 0.048-inch thick, high pressure decorative type, meeting requirements of NEMA Standard HGS48 in accordance with Publication LD3-2000.

5. Grade HGP: Post-forming type, 0.039-inch thick, high pressure decorative type, meeting requirements of NEMA Standard HGP39 in accordance with Publication LD3-2000.

6. Grade VGS: General purpose type, 0.028-inch thick, high pressure decorative type, meeting requirements of NEMA Standard VGS28 in accordance with Publication LD3-2000.

7. Grade VGL: General purpose type, 0.030-inch thick, high pressure decorative type, meeting requirements of NEMA Standard VGL30 in accordance with Publication LD3-2000.

8. Grade CLS: Cabinet liner type, 0.020-inch thick, high pressure cabinet liner type, meeting requirements of NEMA Standard CLS20 in accordance with Publication LD3-2000.

9. Grade BKL: Backer type, 0.020-inch thick, high pressure backer type, meeting requirements of NEMA Standard BKL20 in accordance with Publication LD3-2000.

B. **Pressure Fused Laminate:**

1. Melamine resin impregnated, 120 gram PSM minimum, surface laminated to core under pressure in accordance with NEMA Test LD3-2000.

2. Meeting requirements of NEMA LD3-2000 VGS/VGS Standards and NEMA LD3-2000 CLS Standards.

3. White pressure fused laminate for cabinet interiors behind solid doors and behind drawers.

4. Balance back of pressure fused laminate at all concealed surfaces with phenolic backer. Unsurfaced coreboard not allowed.

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C. **Particleboard Core:** 47-pound density, of balanced 3-ply construction with moisture content of not more than 8 percent, in accordance with ANSI A208.1-1999, Grade M-3.

D. **Fiberboard:**

1. Uniform, medium density conforming to ANSI A208.2, meeting the following minimum standards:

   a. Screw Holding, Face: 355 Pounds
   b. Screw Holding, Edge: 300 Pounds
   c. Modulus of Rupture: 4,500 psi
   d. Modulus of Elasticity: 500,000 psi
   e. Internal Bond: 100 psi

2. Fiberboard components to be of following minimum core thicknesses prior to lamination:

   a. 1/2 Inch: Drawer sides, subfront and back; drawer bottom stiffeners.

   b. 3/4 Inch: Frames for glass doors.

E. **Hardboard:** 1/4-inch thick tempered hardboard with a smooth surface on both sides, complying with requirements of Commercial Standards CS-251 and Federal Specifications LLL-B-00810.

F. **Edging Material:**

1. PVC Edging:

   a. Material: Solid, high impact, purified, color-through, acid resistant PVC.
   b. Thicknesses: 3mm thick as specified for various locations.
   c. Exposed Edges: Edges of edge banding to be radiused for a uniform appearance.
   d. Outside Corners: Corners of edge banding to be radiused.
   e. Colors: As noted on Drawings and Scheduled:

      1) PLAM 1: Equivalent of Rehau #CP20046

      2) PLAM 2: Equivalent of Rehau #CP20731

   f. Application: Factory machine-apply edging using hot melt adhesives.

2. Edge Trim at PLAM 3:

   a. As follows or approved equal: Architect has option to select from any of the following:

      1) Fry Reglet Corporation, Millwork 1/4" Post Outside Corner
      2) Fry Reglet Corporation, Millwork Corner Key #MWCK75

   b. Material: Extruded aluminum alloy 6063 T5
   c. Finish: Clear anodized aluminum.
   d. Fabrication: Make custom miters and intersections with welded corners
   e. Location: Provide at outside corners / edges.
   f. Installation Methods: As recommended by Manufacturer. Protect from damage until date of Substantial Completion. Replace trim which becomes damaged prior to Substantial Completion.

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G. **Bench Cushions:**

1. Description: Cushions shall consist of foam rubber core laminated to plywood base and foam covered with fabric and stapled to underside of plywood base.

   a. Fold fabric with edges wrapped to ensure a flat, wrinkle-free surface, and stitch fabric at corners.

   b. Seat shall be of modern design and proper durability to withstand normal use and abuse.

   c. Secure cushion assembly to bench seat by concealed, commercial grade velcro.

2. Face Fabric for Seat Cushion Covers: Subject to compliance with requirements of the Contract Documents and with the understanding that the Architect has the option and reserves the right to select from any and all manufacturers and related patterns specified under each manufacturer at no additional cost, acceptable manufacturers and their related fabric pattern numbers and/or names are as follows or approved equal:

   a. Momentum, Groove EPU, Digital

   b. Stinson, Lara, Patriot

   c. Designtex, Aspect, Lazuli

   d. Momentum Textiles, Pattern: Silica Etc, Color: Cobalt.

   Subparagraph d added in Addendum No. 1

H. **Concealed Plywood for Bench Cushions:** In accordance with requirements of PS 1/ANSI A199.1.

I. **Fabric Wrapped Tackable Surface Within Casework:**

1. Description: 1/4-inch thick burlap backed cork laminated to casework construction with fabric laminated to face of cork.

2. Materials:

   a. Cork: 1/4 inch thick, plastic coated, burlap backed, manufactured by Neal Slate, Claridge, Dodge Cork, or equal.

   b. Acceptable Manufacturers: Subject to compliance with requirements of the Contract Documents and with the understanding that the Architect has the option and reserves the right to select from any and all manufacturers and related patterns specified under each manufacturer at no additional cost, acceptable manufacturers and their related fabric pattern numbers and/or names are as follows or approved equal:

      1) DesignTex: Gamut

   c. Flame Spread: 25 or less when tested in accordance with ASTM E84.

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2.03 ACCESSORY MATERIALS

A. **Casework Unit Accessories:** Provide each casework unit complete with accessory items which are considered to be standard equipment by manufacturer whose product unit numbers are referenced on Drawings, unless indicated as being, or are required to be, deleted or added as a result of modification of a standard casework unit.

1. Factory or Project site install accessory items on or in each casework unit.

2. An approved equal manufacturer shall provide accessory items similar to those that would be provided by manufacturer of referenced units, as approved by Architect.

B. **Casework Hardware:**

1. Hinges: Heavy duty, five knuckle 2 3/4-inch institutional type hinge shall meet ANSI/BHMA A156.9 Grade 1 requirements. Mill ground, hospital tip, tight pin feature with all edges eased. Hinge to be full wrap around type of tempered steel .095 inch thick. Each hinge to have minimum 9 screws, #7, 5/8-inch FHMS to assure positive door attachment. Hinge to accommodate 13/16-inch thick laminated door and allow 270 degree swing.

   a. Hinge Quantity: One pair per door up to 48-inch door height; 1 1/2 pair over 48-inch door height.

   b. Hinge Finish: No. LH-301 with ChromeCoat Powder Finish

2. Concealed Hinges: Hinges shall be Hafele H-Series Hinge Category No. 316.32.640 fully concealed, nickel plated, self-closing, 175-degree swing, European style with 6-way adjustment. Hinge shall permit door to swing 175 degrees without binding. Doors under 36 inches high shall have (2) hinges; 36 inches to 72 inches high shall have (3) hinges; and over 72 inches high shall have (4) hinges. Doros shall be self-closing and fitted with silencer bumpers. Equivalent product by Grass America, Inc., or Blum.

3. Pulls: Pulls shall be Liberty P61200-SO-A, 4 inches on center, brushed chrome finish.

4. Drawer Slides:

   a. Standard Box Drawer Slides: KV8400 or equal

   b. File Drawer Slides: KV8505 or equal

5. Adjustable Shelf Supports: KV255 steel standards and KV256 clips.

6. Locks: CompX National disc tumbler cam lock

   a. Dull chrome US26D (626) finish.

   b. Provide locks for doors and drawers where indicated on Drawings.

   c. Provide (2) keys for each separately keyed lock.

   d. Key all locks located in each separate room alike.

   e. Key locks in accordance with Owner's instructions.

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f. Provide master keys as directed.

g. Locks shall engage metal strike plate.

h. Locks shall not use double or triple bitted keys.

i. Locks shall permit withdrawal of keys without locking.

7. Magnetic Catches: Provide catches having an opening resistance in compliance with requirements of the Americans with Disabilities Act (ADA).

a. Catch housing to be molded in White.

b. Provide (1) top-mounted magnetic catch for each base, wall, and tall cabinet door.

8. Door Silencer: Molded rubber with built-in air chambers to absorb impact when casework door is closed, designed to be inserted into a hole drilled in casework.

a. Acceptable Manufacturers: Subject to compliance with requirements of the Contract Documents, acceptable manufacturers are as follows or approved equal:

1) H.B. Ives Company, Model No. 21

b. Provide silencers for casework doors where indicated.

9. Wardrobe Rod: 1 1/16-inch diameter rod.

10. Coat Hooks:

a. Single Coat Hooks, Wall Mounted: Satin aluminum finish.

b. Double Coat Hooks, Wall Mounted: Satin aluminum finish.

C. **Countertop Support Brackets:**

1. Acceptable Manufacturers: Subject to compliance with requirements of the Contract Documents, acceptable manufacturers are as follows, or approved equal.

a. Häfele America Co., Countertop Support Bracket, Aluminum, 287.74.751

2. Description: 2 3/4-inch "L" shaped steel angle.

3. Installation: Provide brackets at not more than 36 inches on center.

4. Dimensions: 18 inches x 24 inches (L x H) (Unless shorter brackets are required due to cabinet/countertop dimensions)

5. Capacity: 450 pounds per bracket

6. Material: Aluminum

7. Finish: Factory applied white paint finish. Brackets will be Project Site finish painted under Section 09 91 00.

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2.04 CONSTRUCTION/FABRICATION OF CASEWORK

A. **General Requirements:**

1. Core for Plastic Laminate Surfacing: Provide specified particleboard, unless otherwise approved by Architect.

2. Finish Materials For Enclosed Interiors and Concealed Areas of Casework: Unless otherwise indicated, provide either cabinet liner on core material or pressure fused laminate core material on all surfaces.

3. Assembly devices to be concealed, including on bottom of wall cabinets.

B. **Detailed Requirements for Cabinet Construction:**

1. Cabinet Tops and Bottoms:

   a. Provide solid sub-top for all base and tall cabinets.

   b. Exterior bottoms of wall cabinet to be vertical general purpose grade plastic laminate.

   c. Provide vertical general purpose grade plastic laminate on tops of cabinets more than 5 feet high up to 7 feet high; top of cabinets 7 feet high or more that are exposed to view from a higher elevation within installation room/space or adjacent rooms/spaces, including through windows/borrowed lights.

2. Cabinet Sides (Ends):

   a. Cover exposed exterior surface of cabinet sides (ends) with vertical general purpose grade plastic laminate.

3. Cabinet Interiors:

   a. Interiors Behind Solid (Non-glazed) Doors: Either cabinet liner or pressure fused laminate on all surfaces.

   b. Interiors in Open Cabinets: Vertical general purpose grade plastic laminate on all surfaces.

4. Cabinet Backs - Concealed:

   a. Casework Manufacturer Has Option to: Provide any or all of the following:

      1) Fully house cabinet back into sides, top, and bottom of cabinet, recessed 7/8-inch from cabinet rear. Apply a continuous bead of hot melt adhesive at joint between back and sides/top/bottom at rear (concealed side) of cabinet back.

      2) Solid 3/4-inch thick back secured to top, bottom, and sides of cabinet with glue, dowels, and screws in lieu of routing back into cabinet construction.

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3) Provide full overlay (plant-on) back complying with AWI standards as follows: Not less than 1/2-inch thick particleboard attached to cabinet top, bottom, and sides using 1 1/2-inch length #8 low root, high thread (not "drywall" type) screws at not more than 8 inches on center. Conceal edges of backs at cabinet sides.

4) Optional Cabinet Back: 1/4-inch medium density fiberboard back in lieu of 1/2-inch particleboard. Backs are routed into top, bottom, and sides of cabinet and a 3/4-inch particleboard hang rail dowel pinned and glued to cabinet sides.

b. Glue 3/4-inch thick hang/fastening rails to rear of cabinet back and mechanically fasten to cabinet sides. Provide not less than 2 at base cabinets, 2 at wall cabinets, and 3 at tall cabinets to provide extra rigidity and to facilitate installation.

5. Cabinet Backs - Exposed:

a. Cover exposed exterior surfaces with vertical general purpose grade plastic laminate and interior surface with cabinet liner or pressure fused laminate.

6. Access Panels:

a. Provide access panels in concealed backs and/or in bottom of casework where required to allow access to mechanical components such as cleanouts and valves.

b. Provide hinged access panels, within enclosed cabinet of same material as adjacent cabinet material or of metal, not less than 12 inches by 12 inches, with method of securing door in closed position.

c. Verify field conditions and coordinate locations and actual sizes required with Mechanical Contractor.

7. Doors And Drawer Fronts:

a. Doors and drawer fronts are to provide a flush overlay of the cabinet body.

b. Maintain a consistent space/reveal, of not more than 1/8 inch, between pairs of doors, between doors and drawer fronts, or between multiple drawer fronts, located within and between individual cabinets.

c. Doors and drawer fronts shall consist of not less than 3/4-inch thick particleboard core with vertical general purpose grade plastic laminate adhesively bonded on exterior surface and a pressure fused laminate balancing sheet core or cabinet liner adhesively bonded on interior surface.

d. Band edges with 3 mm PVC edging.

8. Drawers:

a. Provide a separate drawer front applied to face of each drawer body sub-front.

b. Drawer bodies shall be plastic laminate covered particleboard or polyester laminated fiberboard.

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c. Dowel and glue drawer sides to front and back. Machine square and hold entire drawer under pressure while hot melt glueing and pinning drawer together.

d. Drawer Bottom: Not less than 1/4-inch hardboard housed into sub-front, sides, and back. Apply a continuous bead of hot melt adhesive at joint between bottom and back, sides, and front at underside of drawer to provide sealing and rigidity. Reinforce drawer bottoms with 1/2-inch by 4-inch front-to-back intermediate underbody stiffeners, hot melt glued and fastened. Provide drawer stiffeners as follows: (1) for 24-inch, (2) for 36-inch, (4) for 48-inch wide drawers.

e. Provide specified hardware for each drawer.

9. Vertical and Horizontal Dividers: One of the following as indicated by cabinet number on Drawings:

a. Natural hardboard 1/4-inch thick, smooth both faces. Secured in cabinet with molded plastic clips.

b. Pressure fused laminate 3/4-inch thickness. Secured in cabinet with molded plastic clips or dowels.

10. Cabinet Front Rails: Immediately behind all horizontal jointsand between multiple drawers, provide a body rail of not less than 3/4 inch by 6 inches by full width of cabinet, to maintain exact body dimensions, close off space/reveal between doors and drawers, and be a locator for lock strikes.

11. Separator Shelf: Provide a full shelf at separation between locked drawers and adjacent drawer or door cabinet below to prevent pilferage after removing drawer.

12. Edging Type Locations: Provide specified edging types at the following locations, unless otherwise indicated.

a. Door/Drawer front edges: Architect has option to select either or a combination of casework manufacturer's 3mm PVC standard solid colors and wood grain patterns.

b. Cabinet body edge, including door/drawer front spacer rail: FlatEdge PVC, color matched to door/drawer face.

c. Interior body component edging, interior dividers, top of drawer body, shelf: FlatEdge white PVC to match cabinet interior surface color.

d. Shelf Edges: Refer to Fixed and Adjustable Shelves paragraph for shelf edging requirements.

C. **Fixed And Adjustable Shelves:**

1. Shelf Surface Material:

a. Shelves Concealed Behind Solid (Non-Glazed) Doors: Either cabinet liner on both sides of particleboard core or pressure fused laminate on both sides of core.

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2. Shelf Edging:

   a. Cover front and back edges of shelves concealed behind solid doors with 1 mm PVC, in color as selected by Architect, cover side edges with vertical general purpose grade plastic laminate.

   b. Cover all edges of shelves in open cabinets with 1mm PVC edging.

D. **Workmanship:**

1. Adhere plastic laminate finish surface and balancing sheet (cabinet liner - CL20) material to core material under controlled conditions, by approved and regulated laminating methods to assure a premium lamination.

   a. Adhesives: Natural-setting hybrid P.V.A. Type III water resistant adhesives that cure through chemical reaction, containing no health or environmentally hazardous ingredients.

2. Accurately machine and bore cabinet parts for premium grade quality joinery construction utilizing automatic machinery to insure consistent sizing of modular components. Dowel side (end) panels to cabinet bottom and top members.

3. Construct cases square, plumb, and true.

4. No exposed fasteners.

2.05 FABRICATION OF MOBILE UNITS

A. **General Requirements:** Fabricate as specified for cabinets.

1. Mobile Structure: Mobile cabinets shall be designed with a structurally layered base to which above specified plate type casters are bolted.

2. Wheel Casters: Swivel casters shall be plate type caster with ball bearing swivel. Size shall be 5 inches, with 1 1/16-inch wide tread. Wheel brakes on front (2) casters. Minimum 300-pound load rating per caster.

3. Mobile cabinets shall be high pressure plastic laminate on exterior and high pressure cabinet liner on underside. Edges shall be high impact 3 mm PVC.

4. Mobile Cabinet Design and Construction: Mobile cabinets shall be designed with a structurally layered base, to which plate type casters are bolted. No exposed fasteners. Design profile shall allow doors to swing open a full 270 degrees and overlay cabinet sides. Unit top shall be edged with 3 mm PVC and overhang case front, back, and sides to function as a bumper system.

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2.06 COUNTERTOP FABRICATION

A. **General Requirements:** Use post forming grade plastic laminate for countertops with a coved corner to an integral backsplash.

B. **Fabrication of Plastic Laminate Covered Countertops:**

1. Post-forming grade plastic laminate bonded to particleboard core by hot press method. Balance underside with neutral color heavy gauge backing sheet. Provide tops in as long as practical continuous lengths. Provide field glued splines at joints. No joints closer than 24 inches on either side of a sink cutout.

2. Countertop Edging: 3mm thick PVC edge.

3. Backsplash:

   a. Provide a 4-inch height backsplash coved to countertop, unless otherwise indicated.

   b. Provide a backsplash (endsplash) at ends of cabinet countertops whenever they abut a vertical surface, such as a wall or adjacent tall cabinet.

   c. Backsplash (endsplash) at ends of cabinet countertops need not be coved into countertop, but provide a neat, tight and inconspicuous joint between backsplash and countertop. Seal joint tight with clear silicone sealant.

4. Provide cutouts in countertops and backsplashes for all built-in items such as fixtures, sinks, and other equipment. Coordinate locations and sizes with each item supplier as approved by Architect.

2.07 SOLID SURFACE COUNTERTOPS

A. **Acceptable Manufacturers:** Subject to compliance with requirements of the Contract Documents, acceptable manufacturers are as follows or approved equal:

1. Avonite Aristech Acrylics LLC, "Foundations"
2. (DuPont) E. I. du Pont de Nemours & Co., Inc., "Corian"
3. Formica Corporation, "Formica Solid Surfacing"
4. Wilsonart® Solid Surface, "Gibraltar"
5. InPro Corporation, "Bio Prism"

B. **Solid Surface Material:**

1. General: Non-porous homogeneous blend of polyester/acrylic resins and fillers.

2. Flammability Rating: Class I.

3. Thicknesses: 1/2-inch thick.

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4. Finish Textures: Architect will select from manufacturer's full range of finish textures.

5. Colors: Equivalent of Corian "Sparkling White" or color within same price group.

   a. Color/Grain/Pattern: To go all the way through material.

6. Provide all units with uniform surface gloss of matte sheen of 5 to 20 gloss units (220 grit sandpaper).

C. **Miscellaneous Related Materials:**

1. Adhesive: Construction adhesive recommended or approved by solid surface material manufacturer.

2. Mildew-Resistant Silicone Sealant: Provide products formulated with fungicide that are intended for sealing interior joints and other nonporous substrates that are subject to in-service exposures of high humidity and temperature extremes.

   a. Applicable Standards: Sealant meeting requirements of ASTM C920, Type S, Grade NS, Class 25, Use NT, M, G, A, and O as applicable to joint substrates indicated.

   b. Acceptable Manufacturers: Subject to compliance with requirements of the Contract Documents, acceptable manufacturers are as follows or approved equal:

      1) Dow Corning, "786 Mildew Resistant"
      2) GE Silicones, "Sanitary 1700"
      3) NUCO Industries, Inc., " NuFlex 302"
      4) Pecora Corporation, "898 Silicone Sanitary Sealant"
      5) Polymeric Systems, Inc., "PSI-611, Polymeric Systems, Inc."
      6) Tremco, Inc., Sealant/Weatherproofing Division, "Tremsil 600 White"

3. Sealant Colors: Unless otherwise indicated, match color of solid surface material, as approved by Architect.

4. Sealant Related Accessory Materials:

   a. Joint Cleaner, Joint Primer, Bond Breaker Tape, and/or Sealant Backer Rod (Sealant Back-Up) (Cylindrical Sealant Backings): As recommended by sealant manufacturer.

D. **Fabrication Requirements:**

1. Verify colors and textures before fabrication.

2. Verify field measurements before fabrication.

3. Fabricate from 1/2-inch thick material, unless otherwise indicated.

4. Bond solid surface material together using joint adhesive to form profile required or indicated on Drawings.

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5. Ease exposed edges and sand smooth.

6. Fabricate items with as few joints as possible.

7. Solid surface countertops and counters shall be supported by particleboard sub-base, not less than 3/4-inch thick.

8. Provide endsplash where countertops and counters meet at vertical surface.

9. Exposed edges of countertops and counters shall be 1 1/4-inch deep.

10. Provide a formed coved joint where back and side splash meet countertops and counters.

PART 3 - EXECUTION

3.01 PREPARATION

A. **Coordination**: Provide coordination with Mechanical Contractor as specified under this Section.

B. **Examination**: Before installing casework, examine shop fabricated work for completion. Complete fabrication work if required or return to fabricating shop for completion.

C. **Conditioning**: Condition casework to average prevailing temperature and humidity conditions in installation areas before beginning installation.

3.02 INSTALLATION

A. **General Requirements**:

1. Install casework straight, level, and plumb.

2. Securely anchor casework in place.

3. Scribe and closely fit to adjacent work.

4. Cut and fit work around pipes, ducts, and penetrations.

5. Install all items complete and adjust all moving parts to operate properly.

6. Caulking: Install sealants where countertops and backsplashes/endsplashes abut dissimilar materials.

B. **Cabinet Sub-Base Installation**:

1. Provide Project site fabricated wood sub-bases for support of floor mounted cabinet units.

2. Construct sub-bases that are separate from the cabinets and are continuous under an entire group of adjacent cabinet units.

   a. Do not extend individual cabinet body sides to floor for support of casework unless otherwise indicated or approved for a specific cabinet design.

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3. Construct sub-bases using materials furnished by casework manufacturer.

4. Provide ladder-type platform design sub-bases, which consist of front, back, and intermediate front to back connecting members.

   a. Locate intermediate members to be approximately centered on joint between adjacent cabinet units above.

5. Use water resistant exterior grade type plywood for sub-base members.

6. Construct sub-bases to conform to floor and wall conditions, and to form secure and level platforms for supporting cabinets.

7. Securely attach sub-bases to floor substrate using concealed fasteners.

8. Securely attach cabinets to sub-bases using concealed fasteners.

C. **Bench Cushion Installation:** Secure cushions benches with commercial grade velcro, unless other method of installation is indicated on Drawings.

D. **Related Installation Work By Mechanical Contractor:** Provide sinks with related sink drain, sink plug, and fixtures in plastic laminate surfaced countertops.

3.03 REPAIRING/ADJUSTING

A. **General Requirements:**

1. Repair damaged and defective casework where possible to eliminate defects functionally and visually. Where not possible to repair as approved by Architect, remove casework and install new.

2. Adjust joinery to provide uniform appearance.

3. Adjust casework and hardware so doors and drawers are centered in openings and operate smoothly without warp or bind.

4. Lubricate operating hardware as recommended by manufacturer.

3.04 CLEANING

A. **General Requirements:**

1. Clean casework exposed and semi-exposed surfaces.

2. Touch up factory-applied finishes to restore damaged or soiled areas.

3. Clean countertops with diluted dishwashing liquid and water, leaving tops free of grease and streaks. Use no wax or oils.

4. Remove shipping cartons and debris, and leave installation areas clean and ready for Owner's use at time of Substantial Completion.

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3.05 PROTECTION OF FINISHED WORK

A. **General Requirements:**

1. Take precautions for protection of installed materials and fixtures from damage by work of other trades.

2. Protect work surfaces throughout construction period with 1/4-inch corrugated cardboard completely covering top and securely taped to edges.

3. Mark cardboard in large lettering "NO STANDING".

4. Remove products used to provide protection at time of Substantial Completion.

END OF SECTION

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DAYTON ELEMENTARY SCHOOL
Remodeling and Deferred Maintenance Phase 1

Anoka-Hennepin School District 11
12000 S. Diamond Lake Rd
Dayton, MN 55327

ELECTRICAL CONSTRUCTION

ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)	GND	GROUND	RCPT	RECEPTACLE
		GRS	GALVANIZED RIGID STEEL (CONDUIT)	REQD	REQUIRED
A	AMPERE	GYP BD	GYPSUM BOARD	RM	ROOM
AC	ABOVE COUNTER OR AIR CONDITIONER			RSC	RIGID STEEL CONDUIT
ACLG	ABOVE CEILING	HOA	HANDS-OFF-AUTOMATIC SWITCH	RTU	ROOF TOP UNIT
ADO	AUTOMATIC DOOR OPENER	HORZ	HORIZONTAL	SC	SURFACE CONDUIT
AF	AMP FRAME	HP	HORSEPOWER	SEC	SECONDARY
AFF	ABOVE FINISHED FLOOR	HPF	HIGH POWER FACTOR	SHT	SHEET
AFG	ABOVE FINISHED GRADE			SIM	SIMILAR
AFI	ARC FAULT CIRCUIT INTERRUPTER	HT	HEIGHT	S/N	SOLID NEUTRAL
AHU	AIR HANDLING UNIT	HTG	HEATING	SPEC	SPECIFICATION
AL	ALUMINUM	HTR	HEATER	SPKR	SPEAKER
ALT	ALTERNATE	HV	HIGH VOLTAGE	SP	SPARE
AMP	AMPERE	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	SR	SURFACE RACEWAY
AMPL	AMPLIFIER	HWP	HYDRONIC WATER PUMP	SS	STAINLESS STEEL
ANNUN	ANNUNCIATOR			SSW	SELECTOR SWITCH
APPROX	APPROXIMATELY	IC	INTERRUPTING CAPACITY	S/S	STOP/START PUSHBUTTONS
AQ-STAT	AQUASTAT	IG	ISOLATED GROUND	STA	STATION
ARCH	ARCHITECT, ARCHITECTURAL	IMC	INTERMEDIATE METAL CONDUIT	STD	STANDARD
AS	AMP SWITCH	INCAND	INCANDESCENT	SURF	SURFACE MOUNTED
AT	AMP TRIP	IR	INFRARED	SW	SWITCH
ATS	AUTOMATIC TRANSFER SWITCH	IW	INTERLOCK WITH	SWBD	SWITCHBOARD
AUTO	AUTOMATIC			SYM	SYMMETRICAL
AUX	AUXILIARY	J-BOX	JUNCTION BOX	SYS	SYSTEM
AV	AUDIO VISUAL			TEL	TELEPHONE
AWG	AMERICAN WIRE GAUGE	KV	KILOVOLT	TEL/DATA	TELEPHONE/DATA
		KVA	KILOVOLT-AMPERE	TERM	TERMINAL
BATT	BATTERY	KVAR	KILOVOLT-AMPERE REACTIVE	TL	TWIST LOCK
BD	BOARD	KW	KILOWATT	TR	TAMPER RESISTANT
BLDG	BUILDING	KWH	KILOWATT HOUR	T-STAT	THERMOSTAT
BMS	BUILDING MANAGEMENT SYSTEM			TTC	TELEPHONE TERMINAL CABINET
C	CONDUIT	LOC	LOCATE OR LOCATION	TV	TELEVISION
CAB	CABINET	LT	LIGHT	TVTC	TELEVISION TERMINAL
CAT	CATALOG	LTG	LIGHTING		CABINET
CATV	CABLE TELEVISION	LTNG	LIGHTNING	TYP	TYPICAL
CB	CIRCUIT BREAKER	LV	LOW VOLTAGE		
CCTV	CLOSED CIRCUIT TELEVISION	MAX	MAXIMUM	UC	UNDER COUNTER
CKT	CIRCUIT	MAG.S	MAGNETIC STARTER	UE	UNDERGROUND ELECTRICAL
CLG	CEILING	MC	MOMENTARY CONTACT	UG	UNDERGROUND
COMB	COMBINATION	MC	MECHANICAL CONTRACTOR	UH	UNIT HEATER
COMPR	COMPRESSOR	MCB	MAIN CIRCUIT BREAKER	UT	UNDERGROUND TELEPHONE
CONN	CONNECTION	MCC	MOTOR CONTROL CENTER	UTIL	UTILITY
CONST	CONSTRUCTION	MDC	MAIN DISTRIBUTION CENTER	UV	UNIT VENTILATOR OR ULTRAVIOLET
CONT	CONTINUATION OR CONTINUOUS	MDP	MAIN DISTRIBUTION PANEL	V	VOLT
CONTR	CONTRACTOR	MFR	MANUFACTURER	VA	VOLT-AMPERES
CONV	CONVECTOR	MFS	MAIN FUSED DISCONNECT SWITCH	VDT	VIDEO DISPLAY TERMINAL
CP	CIRCULATING PUMP	MH	MANHOLE	VERT	VERTICAL
CRT	CATHODE-RAY TUBE	MIC	MICROPHONE	VFD	VARIABLE FREQUENCY DRIVE
CT	CURRENT TRANSFORMER	MIN	MINIMUM	VOL	VOLUME
CTR	CENTER	MISC	MISCELLANEOUS		
CU	COPPER	MLO	MAIN LUGS ONLY	W	WATT
		MMS	MANUAL MOTOR STARTER	W/	WITH
DCP	DOMESTIC WATER CIRCULATING PUMP	MOA	MULTIOUTLET ASSEMBLY	WG	WIRE GUARD
DEPT	DEPARTMENT	MSP	MOTOR STARTER PANELBOARD	WH	WATER HEATER
DET	DETAIL	MSBD	MAIN SWITCHBOARD	W/O	WITHOUT
DIA	DIAMETER	MT	MOUNT	WP	WEATHERPROOF
DISC	DISCONNECT	MT C	EMPTY CONDUIT		
DIST	DISTRIBUTION	MTS	MANUAL TRANSFER SWITCH	XFMR	TRANSFORMER
DN	DOWN	MTR	MOTOR, MOTORIZED	XFR	TRANSFER
DPR	DAMPER				
DS	SAFETY DISCONNECT SWITCH	N.C.	NORMALLY CLOSED		
DT	DOUBLE THROW	NEC	NATIONAL ELECTRICAL CODE		
DWG	DRAWING	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION	∠	ANGLE
EC	ELECTRICAL CONTRACTOR	NFDS	NON-FUSED SAFETY DISCONNECT SWITCH	@	AT
ELEC	ELECTRIC, ELECTRICAL			Δ	DELTA
ELEV	ELEVATOR			'	FEET
EM	EMERGENCY	NIC	NOT IN CONTRACT	"	INCHES
EMS	ENERGY MANAGEMENT SYSTEM	NL	NIGHT LIGHT	#	NUMBER
EMT	ELECTRICAL METALLIC TUBING	N.O.	NORMALLY OPEN	Ø	PHASE
EP	ELECTRIC PNEUMATIC	NPF	NORMAL POWER FACTOR	℄	CENTER LINE
EQUIP	EQUIPMENT	NTS	NOT TO SCALE	℞	PLATE
EWC	ELECTRIC WATER COOLER				
EXIST	EXISTING	OH	OVERHEAD		
EXH	EXHAUST	OL	OVERLOADS		
EXP	EXPLOSION PROOF				
		PA	PUBLIC ADDRESS		
FA	FIRE ALARM	PB	PULL BOX OR PUSHBUTTON		
FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL	PE	PNEUMATIC ELECTRIC		
		PED	PEDESTAL		
FACP	FIRE ALARM CONTROL PANEL	PF	POWER FACTOR		
FCU	FAN COIL UNIT	PH	PHASE		
FIXT	FIXTURE	PIV	POST INDICATING VALVE		
FLR	FLOOR	PNL	PANEL		
FLUOR	FLUORESCENT	PP	POWER POLE		
FU	FUSE	PR	PAIR		
FUDS	FUSED SAFETY DISCONNECT SWITCH	PRI	PRIMARY		
		PROJ	PROJECTION		
GA	GAUGE	PRV	POWER ROOF VENTILATOR		
GAL	GALLON	PT	POTENTIAL TRANSFORMER		
GALV	GALVANIZED	PVC	POLYVINYL CHLORIDE (CONDUIT)		
GC	GENERAL CONTRACTOR	PWR	POWER		
GEN	GENERATOR				
GFI	GROUND FAULT CIRCUIT INTERRUPTER	QUAN	QUANTITY		
GFP	GROUND FAULT PROTECTOR				

GENERAL ELECTRICAL NOTES

A. ALL CONDUCTORS OPERATING AT 50 VOLTS OR GREATER SHALL BE IN RACEWAY. ALL RACEWAY WITHIN THE STRUCTURE ABOVE THE FLOOR SLAB SHALL BE METAL. RACEWAY BELOW THE FLOOR SLAB AND UNDERGROUND RACEWAY OUTSIDE THE STRUCTURE SHALL BE PVC.

B. ALL LOW VOLTAGE CABLES OR CONDUCTORS OPERATING AT LESS THAN 50 VOLTS SHALL BE IN METAL RACEWAY WHERE INSTALLED WITHIN WALLS OR INACCESSIBLE SPACES. LOW VOLTAGE CABLES SHALL BE RUN IN CABLE SUPPORT HOOKS ABOVE ACCESSIBLE CEILINGS.

C. VERIFY LOCATIONS AND ROUGH-IN REQUIREMENTS OF ALL EQUIPMENT PRIOR TO ROUGH-IN.

D. CONDUIT AND WIRE SHALL NOT BE INSTALLED BELOW FLOOR SLAB UNLESS INDICATED ON PLAN BY DASHED CONDUIT.

E. ELECTRICAL CONTRACTOR, OR THEIR SUB-CONTRACTOR, SHALL BE RESPONSIBLE FOR WIRING ALL ELECTRICAL ITEMS SHOWN ON DRAWINGS.

SPECIFIC CODE NOTES

FIRE PROTECTION REQUIREMENTS

A. PENETRATIONS IN WALLS REQUIRING PROTECTED OPENINGS MUST BE FIRESTOPPED WITH AN APPROVED MATERIAL.

1. CONDUITS MAY PENETRATE WALLS OR PARTITIONS, PROVIDED THEY ARE FIRE-STOPPED.
2. OPENINGS FOR STEEL ELECTRICAL BOXES NOT EXCEEDING 16 SQUARE INCHES ARE PERMITTED PROVIDED OPENINGS DO NOT AGGREGATE MORE THAN 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL OR PARTITION.
3. IN BLOCK WALLS, OUTLET BOXES ON OPPOSITE SIDES OF WALLS MUST BE SEPARATED BY ONE BLOCK CELL.
4. IN STUD WALLS, OUTLET BOXES ON OPPOSITE SIDES OF WALLS MUST BE SEPARATED BY ONE STUD SPACE.

B. LIGHT FIXTURES AND OTHER APPARATUS SUPPORTED BY THE ACOUSTICAL CEILING GRID MUST MEET THE REQUIREMENTS OF NEC SECTION 410.36, MEANS OF SUPPORT.

C. RECESSED LIGHTING FIXTURES INSTALLED IN FIRE RATED CEILING ASSEMBLIES SHALL BE FIRE RATED FIXTURES BEARING THE UL FIRE RATED LABEL. FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE UL FIRE RESISTANCE DIRECTORY, AND SHALL INCLUDE A FIRE RATED ENCLOSURE INSTALLED OVER THE FIXTURE THAT MEETS THE REQUIREMENTS OF THE UL FIRE RESISTANCE DIRECTORY.

TYPICAL LIGHT FIXTURE TAG

TYPICAL POWER TAG

PANELBOARD IDENTIFICATION

EQUIPMENT DESIGNATION	CODE
HIGH VOLTAGE 3Ø4W. 277/480	HL4
LOW VOLTAGE 3Ø4W. 120/208	L4

ELECTRICAL SYMBOLS

SYMBOL	SYMBOL DESCRIPTION	MTG HT
	CONDUIT CONCEALED IN FLOOR	
	CONDUIT UP	
	SURFACE RACEWAY	SEE DWG
	VERTICAL SURFACE RACEWAY	SEE DWG
P	POWER POLE	
	CABLE TRAY	
	RECESSED FLUORESCENT LIGHT FIXTURE	
	SURFACE FLUORESCENT LIGHT FIXTURE	
	WALL MOUNTED LIGHT FIXTURE	SEE SPEC
	SURFACE MOUNTED LIGHT FIXTURE	
	RECESSED LIGHT FIXTURE	
	CEILING MOUNTED EXIT LIGHT	
	WALL MOUNTED EXIT LIGHT	96"
	EMERGENCY/NIGHT LIGHT FIXTURE	
	TRACK LIGHT	
$	SINGLE POLE SWITCH	46"
$	SINGLE POLE SWITCH WITH PILOT LIGHT	46"
$2	DOUBLE POLE SWITCH	46"
$3	THREE WAY SWITCH	46"
$4	FOUR WAY SWITCH	46"
	DIMMER	
	POWER OR DISTRIBUTION CABINET	SEE SPEC
	POWER OR LIGHTING PANELBOARD	SEE SPEC
#	MOTOR - NUMBER REFERS TO MOTOR SCHEDULE	SEE MOTOR SCHEDULE
	DISCONNECT SWITCH	SEE SPEC
R	RELAY	SEE DWG
	DUPLEX RECEPTACLE (SEE NOTE #5)	18"
GFI	DUPLEX GFI RECEPTACLE	18"
USB	DUPLEX RECEPTACLE WITH USB CHARGING PORTS	SEE DWG
	SPECIAL PURPOSE RECEPTACLE (SEE DWG FOR TYPE)	18"
	DOUBLE DUPLEX RECEPTACLE	18"

SYMBOL	SYMBOL DESCRIPTION	MTG HT
	FLOOR BOX WITH DUPLEX RECEPTACLE	
	FLOOR BOX OR POKE -THRU (AS NOTED)	
J	JUNCTION BOX	
D	DROP CORD OUTLET	
H	MUSHROOM HEAD PUSHBUTTON	
C H	CLOCK - FURNISHED BY DIVISION 29. DIVISION 26 SHALL PROVIDE A CLOCK OUTLET, FLUSH MOUNTED AT 96". CONNECT TO NEAREST RECEPTACLE CIRCUIT.	
H	FIRE ALARM HEAT DETECTOR	
F H	WALL MOUNTED HORN/STROBE TO BE REPLACED WITH A NEW WALL MOUNTED SPEAKER/STROBE	
F H	CEILING MOUNTED HORN/STROBE TO BE REPLACED WITH A NEW CEILING MOUNTED SPEAKER/STROBE	
WP F H	WALL MOUNTED WEATHER PROOF HORN/STROBE TO BE REPLACED WITH A NEW WALL MOUNTED WEATHER PROOF SPEAKER/STROBE	
S F H	NEW WALL MOUNTED SPEAKER/STROBE	82"
S F H	NEW CEILING MOUNTED SPEAKER/STROBE	
F H	WALL MOUNTED STROBE TO BE REPLACED WITH A NEW WALL MOUNTED STROBE ONLY DEVICE	
F H	CEILING MOUNTED STROBE TO BE REPLACE WITH A NEW CEILING MOUNTED STROBE ONLY DEVICE	
F H	NEW WALL MOUNTED STROBE ONLY	82"
F H	NEW CEILING MOUNTED STROBE ONLY	
S	SMOKE DETECTOR TO BE REMOVED FOR CONSTRUCTION. REINSTALL IN SAME LOCATION ON NEW CEILING	
F H	FIRE ALARM/MASS NOTIFICATION MANUAL PULL STATION	46"
S-1 S D	FIRE ALARM DUCT SMOKE DETECTOR - UNIT NUMBER(S) INDICATES MOTOR CONTROLLED. PROVIDE REMOTE TEST STATION FOR EACH DETECTOR. SEE SECTION 28 31 00 OF THE SPECIFICATIONS.	
	MAGNETIC DOOR HOLDER	
F	FIRE ALARM FLOW SWITCH	
T	FIRE ALARM TAMPER SWITCH	
F H	FIRE ALARM BELL/STROBE	

SEE SHEET E7.1 FOR TECHNOLOGY SYMBOL SCHEDULE

ELECTRICAL SYMBOL NOTES

THESE SYMBOLS COMPRISE A STANDARD LIST. NOT ALL SYMBOLS MAY APPEAR ON THIS PROJECT.

ALL MOUNTING HEIGHTS ARE TO CENTER OF DEVICE ABOVE FINISHED FLOOR. MOUNTING HEIGHTS SHOWN ARE TYPICAL, UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS. ADA HEIGHTS ARE 15" MINIMUM TO 48" MAXIMUM.

UNLESS SPECIFICALLY NOTED OTHERWISE, ALL TECHNOLOGY BOXES SHALL BE 4 11/16" SQ DEEP WITH TWO GANG MUD RING.

ITEMS CALLED OUT ON SPECIFIC DETAILS TAKE PRECEDENCE OVER THIS SHEET.

PROVIDE "RUGGED-USE" RECEPTACLES IN ALL BOILER ROOMS, MECHANICAL ROOMS, CORRIDORS AND MAINTENANCE AREAS.

REFER TO SYSTEM SYMBOLS SCHEDULE ON SHEET E7.1 FOR ADDITIONAL SYMBOLS NOT SHOWN ON THIS TABLE.

ELECTRICAL DRAWINGS

E0.0	ELECTRICAL TITLE SHEET AND SYMBOL SCHEDULE
E0.1	ELECTRICAL DEMOLITION PLAN
E2.1	LIGHTING PLAN
E3.1	POWER PLAN
E4.1	SYSTEMS FLOOR PLAN
E4.2	FIRE ALARM PLAN
E6.1	MOTORS AND PANELBOARDS PLAN AND RISER DIAGRAM
E6.2	SCHEDULES
E7.1	TECHNOLOGY SYMBOL SCHEDULE AND DETAILS

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REVISIONS

REV NO	DESCRIPTION	DATE
1	Addendum #1	01/25/2023

Dayton Elementary School
Remodeling and Deferred Maintenance Phase 1
Anoka-Hennepin School District 11
12000 S. Diamond Lake Rd., Dayton, MN 55327

SIGNATURE / SEAL

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

Signature

Nicholas Achina, PE
Typed or printed name

January 12, 2023
Date

40408
License Number

KEYPLAN

DRAWN BY
RGE

CHECKED BY
N ACHINA

ISSUED FOR
CONSTRUCTION DOCUMENTS

ISSUE DATE
JANUARY 12, 2023

SHEET NAME
ELECTRICAL TITLE SHEET AND SYMBOL SCHEDULE

ATS&R PROJECT NO.
22064

REVISION NO.
1

SHEET NUMBER
E0.0

1 E6.1 **MOTORS AND PANELBOARDS PLAN**
1/16" = 1'-0"

TYPICAL POWER TAG

RECEPTACLE TYPE — GFI48* / L104/1 — MOUNTING HEIGHT. IF NO HEIGHT NOTED THEN RECEPTACLE IS AT 18" — PANEL/CIRCUIT NUMBER

GENERAL NOTES

A. ENGRAVE THE PANEL NAME AND CIRCUIT NUMBER FEEDING ALL RECEPTACLES ON THE FACE OF THE COVERPLATE.

B. PROVIDE PANEL NAME AND CIRCUIT NUMBERS, OF ALL CIRCUITS CONTAINED IN JUNCTION BOX, ON THE FRONT OF ALL JUNCTION BOX COVERS.

C. VERIFY EXACT LOCATION OF ALL MOTORS AND CONTROLS PRIOR TO ROUGH-IN.

D. SEE MOTOR SCHEDULE ON SHEET E6.1.

E. SEE SWITCHBOARD AND PANELBOARD SCHEDULES ON SHEET E8.1.

F. VERIFY EXACT SIZE OF ALL SWITCHBOARDS AND PANELBOARDS PRIOR TO ROUGH-IN.

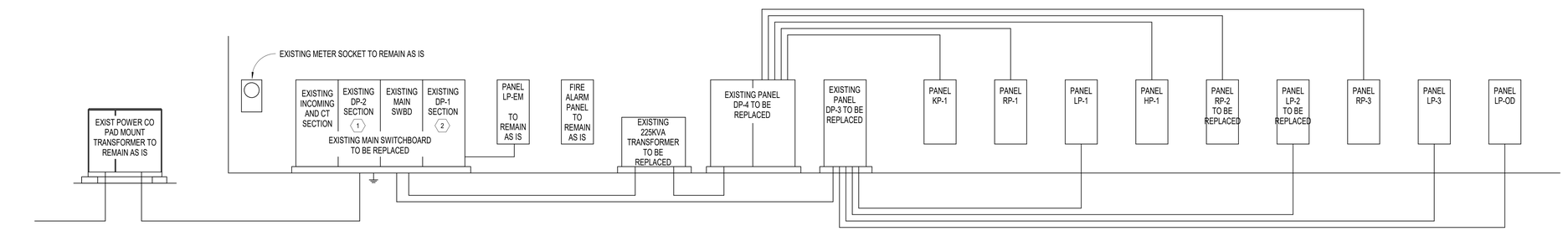
KEYED SHEET NOTES

1. EXISTING SWITCHBOARD MDC TO BE REPLACED. SEE NOTES IN RISER DIAGRAM 2/E6.1
2. EXISTING TRANSFORMER AND ASSOCIATED FEEDER TO BE REPLACED. REPLACE OLD FEEDER WITH NEW MATCHING FEEDER. SEE NOTES IN RISER DIAGRAM 2/E6.1.
3. NEW SWITCHBOARD - SEE RISER DIAGRAM 2/E6.1 AND PANELBOARD SCHEDULE ON SHEET E6.2.
4. EXISTING SWITCHBOARD AND ASSOCIATED FEEDER TO BE REPLACED. REPLACE OLD FEEDER WITH MATCHING FEEDER. SEE NOTES IN RISER DIAGRAM 2/E6.1.
5. PANELBOARD AND ASSOCIATED FEEDER TO BE REPLACED WITH NEW PANEL AND FEEDER. REPLACE OLD FEEDER WITH NEW MATCHING FEEDER. EXTEND/MODIFY EXISTING BRANCH CIRCUIT FEEDERS AS REQUIRED TO REACH NEW BREAKERS. THE INTENT IS TO REUSE PANEL TUBS AND CONDUITS WHEREVER POSSIBLE.

ELECTRIC SERVICE RISER NOTES

1. BRANCH CIRCUITS (11 TOTAL, RATED 100A AND LOWER) SHALL BE MOVED TO NEW PANEL DP-2. PROVIDE JUNCTION BOXES AS REQUIRED AND EXTEND CIRCUITS AS REQUIRED BREAKERS IN NEW PANEL DP-2.
2. BRANCH CIRCUITS ASSOCIATED WITH SWITCHBOARD SECTION DP-1 SHALL BE MOVED TO MDC. EXTEND/MODIFY CIRCUITS AS REQUIRED.
3. EXISTING MAIN SWITCHBOARD TO BE REPLACED WITH NEW SWITCHBOARD MDC. PROVIDE ANY PULL OR JUNCTION BOXES AS MAY BE REQUIRED AND MODIFY/EXTEND EXISTING SERVICE AND BRANCH FEEDERS TO REACH NEW BREAKERS.
4. EXISTING TRANSFORMER AND ASSOCIATED FEEDERS TO BE REPLACED WITH NEW. EXISTING CONDUIT MAY BE USED.
5. EXISTING PANEL AND ASSOCIATED FEEDER TO BE REPLACED WITH NEW PANEL AND FEEDER. EXISTING CONDUIT MAY BE USED. REPLACE OLD FEEDER WITH NEW MATCHING FEEDER. SEE PANEL SCHEDULE ON SHEET E8.1. THE INTENT IS TO REUSE PANEL TUBS AND CONDUITS WHEREVER POSSIBLE
6. NEW PANEL DP-2 - SEE PANEL SCHEDULE ON SHEET E6.2.

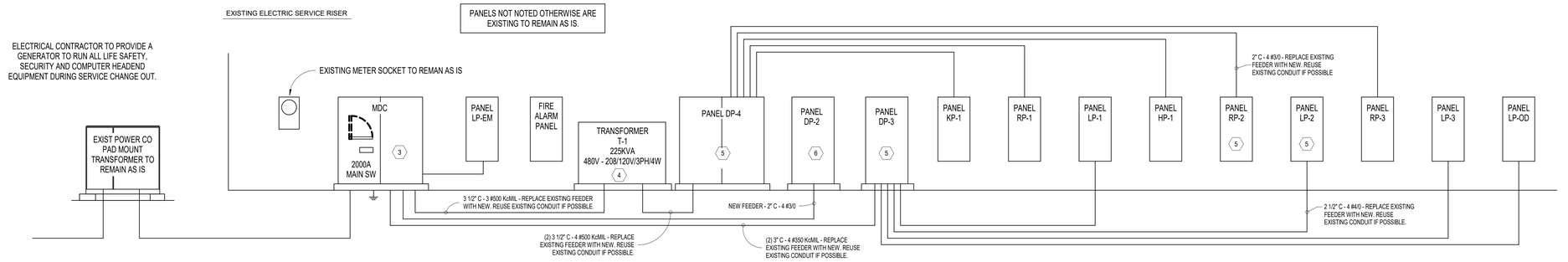
DUE TO TIMING AND AVAILABILITY OF EQUIPMENT, THIS WORK IS TO BE SCHEDULED DURING THE DISTRICT'S SPRINGBREAK OF 2024. INSTALL NEW PANELS DURING SUMMER AND PULL NEW WIRE IN A MANNER THAT ALLOWS TO BE RELANDED INTO NEW SERVICE



EXISTING ELECTRIC SERVICE RISER

PANELS NOT NOTED OTHERWISE ARE EXISTING TO REMAIN AS IS.

ELECTRICAL CONTRACTOR TO PROVIDE A GENERATOR TO RUN ALL LIFE SAFETY, SECURITY AND COMPUTER HEADEND EQUIPMENT DURING SERVICE CHANGE OUT.



NEW ELECTRIC SERVICE RISER

3 E6.1 ELECTRIC SERVICE RISER DIAGRAM
NO SCALE

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REVISIONS

REV NO	DESCRIPTION	DATE
1	Addendum #1	01/25/2023

Dayton Elementary School
Remodeling and Deferred Maintenance Phase 1
Anoka-Hennepin School District 11
12000 S. Diamond Lake Rd., Dayton, MN 55327

SIGNATURE / SEAL

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

Signature

Nicholas Achina, PE
Typed or printed name

January 12, 2023
Date

4 0 4 0 8
License Number

KEYPLAN

DRAWN BY
RGE

CHECKED BY
N ACHINA

ISSUED FOR
CONSTRUCTION DOCUMENTS

ISSUE DATE
JANUARY 12, 2023

SHEET NAME
MOTORS AND PANELBOARDS PLAN AND RISER DIAGRAM

ATS&R PROJECT NO.
2 2 0 6 4

REVISION NO.
1

SHEET NUMBER
E6.1

MAIN SWITCHBOARD: MDC

LOCATION: MECH B501 **VOLTAGE:** 480Y/277 V. 3 ø 4 W.
MAIN DEVICE: 2000 A MCB **A.I.C....** 45,000 AMPS SYMMETRICAL
BUS AMPS: 2000 AMP **SPECIAL:**

CKT	POLES	RATING	KVA	DESCRIPTION/NAMEPLATE	NOTES
1	3	600 A	0.0 kVA	DP-3	
2	3	400 A	0.0 kVA	EXISTING CHILLER	
3	3	350 A	0.0 kVA	TRANSFORMER T1	
4	3	200 A	0.0 kVA	DP-2	
5	3	200 A	0.0 kVA	SPACE ONLY	
6	3	125 A	0.0 kVA	EXISTING LOAD	
7	3	125 A	0.0 kVA	EXISTING LOAD	
8	3	125 A	0.0 kVA	EXISTING LOAD	
9	3	125 A	0.0 kVA	EXISTING LOAD	
10	3	100 A	0.0 kVA	SPARE	
11	3	100 A	0.0 kVA	SPARE	
12	3	30 A	0.0 kVA	EXISTING CHILLED WATER PUMP	
13	3	30 A	0.0 kVA	EXISTING CHILLED WATER PUMP	
14	3	30 A	0.0 kVA	EXISTING RTU	
15	3	60 A	0.0 kVA	EXISTING RTU	
16	3	60 A	0.0 kVA	EXISTING RTU	
17	3	60 A	0.0 kVA	EXISTING RTU	
18	3	60 A	0.0 kVA	EXISTING RTU	
19	3	60 A	0.0 kVA	EXISTING RTU	
20					
21					
22					
23					
24					
25					
26					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
				CONN. LOAD:	0 VA
				EST. DEMAND LOAD:	0 VA
				CONN. CURRENT:	0 A
				EST. DEMAND...	0 A

NOTES:
ELECTRICAL CONTRACTOR SHALL FIELD VERIFY BREAKERS REQUIRED PRIOR TO ORDERING SWITCHBOARDS AND PANELBOARDS.

1

DISTRIBUTION PANEL: DP-2

LOCATION: MECH B501 **VOLTAGE:** 480Y/277 V. 3 ø 4 W.
MAIN DEVICE: 200 A MLO **A.I.C....** 20K
BUS AMPS: 600 AMPS **SPECIAL:**

CKT	POLES	RATING	KVA	DESCRIPTION/NAMEPLATE	NOTES
1	3	70 A	0.0 kVA	EXISTING LOAD	
2	3	30 A	0.0 kVA	EXISTING LOAD	
3	3	30 A	0.0 kVA	EXISTING LOAD	
4	3	15 A	0.0 kVA	EXISTING LOAD	
5	3	15 A	0.0 kVA	EXISTING LOAD	
6	3	15 A	0.0 kVA	EXISTING LOAD	
7	3	15 A	0.0 kVA	EXISTING LOAD	
8	3	15 A	0.0 kVA	EXISTING LOAD	
9	3	15 A	0.0 kVA	EXISTING LOAD	
10	3	15 A	0.0 kVA	EXISTING LOAD	
11	3	15 A	0.0 kVA	EXISTING LOAD	
12	3	30 A	0.0 kVA	SPACE ONLY	
13	3	30 A	0.0 kVA	SPACE ONLY	
14	3	30 A	0.0 kVA	SPACE ONLY	
15	3	30 A	0.0 kVA	SPACE ONLY	
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
				CONN. LOAD:	0 VA
				EST. DEMAND LOAD:	0 VA
				CONN. CURRENT:	0 A
				EST. DEMAND...	0 A

NOTES:
ELECTRICAL CONTRACTOR SHALL FIELD VERIFY BREAKERS REQUIRED PRIOR TO ORDERING SWITCHBOARDS AND PANELBOARDS.

DISTRIBUTION PANEL: DP-3

LOCATION: MECH B501 **VOLTAGE:** 480Y/277 V. 3 ø 4 W.
MAIN DEVICE: 600 A MLO **A.I.C....** 14,000 AMPS SYMMETRICAL
BUS AMPS: 600 AMPS **SPECIAL:**

CKT	POLES	RATING	KVA	DESCRIPTION/NAMEPLATE	NOTES
1	3	200 A	0.0 kVA	EXISTING LOAD	
2	3	200 A	0.0 kVA	EXISTING LOAD	
3	3	100 A	0.0 kVA	EXISTING LOAD	
4	3	60 A	0.0 kVA	EXISTING LOAD	
5	3	100 A	0.0 kVA	SPARE	
6	3	100 A	0.0 kVA	SPACE ONLY	
7	3	60 A	0.0 kVA	SPARE	
8	3	60 A	0.0 kVA	SPACE ONLY	
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
				CONN. LOAD:	0 VA
				EST. DEMAND LOAD:	0 VA
				CONN. CURRENT:	0 A
				EST. DEMAND...	0 A

NOTES:
ELECTRICAL CONTRACTOR SHALL FIELD VERIFY BREAKERS REQUIRED PRIOR TO ORDERING SWITCHBOARDS AND PANELBOARDS.

DISTRIBUTION PANEL: DP-4

LOCATION: MECH B501 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MAIN DEVICE: 800 A MCB **A.I.C....** 14,000 AMPS SYMMETRICAL
BUS AMPS: 800 AMPS **SPECIAL:**

CKT	POLES	RATING	KVA	DESCRIPTION/NAMEPLATE	NOTES
1	3	400 A	0.0 kVA	EXISTING LOAD	
2	3	125 A	0.0 kVA	EXISTING LOAD	
3	3	150 A	0.0 kVA	EXISTING LOAD	
4	3	100 A	0.0 kVA	EXISTING LOAD	
5	3	100 A	0.0 kVA	EXISTING LOAD	
6	3	30 A	0.0 kVA	EXISTING LOAD	
7	3	30 A	0.0 kVA	EXISTING LOAD	
8	2	60 A	0.0 kVA	Kiln	
9	3	200 A	0.0 kVA	SPACE ONLY	
10	3	200 A	0.0 kVA	SPACE ONLY	
11	3	100 A	0.0 kVA	SPACE ONLY	
12	3	100 A	0.0 kVA	SPACE ONLY	
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
				CONN. LOAD:	0 VA
				EST. DEMAND LOAD:	0 VA
				CONN. CURRENT:	0 A
				EST. DEMAND...	0 A

NOTES:
ELECTRICAL CONTRACTOR SHALL FIELD VERIFY BREAKERS REQUIRED PRIOR TO ORDERING SWITCHBOARDS AND PANELBOARDS.

PANELBOARD: LP-2

LOCATION: CORRIDOR B902 **VOLTAGE:** 480Y/277 V. 3 ø 4 W.
MOUNTING: RECESSED NEMA1 **A.I.C. RATING:** 14,000 AMPS SYMMETRICAL
MAIN DEVICE: 225 A MLO **SPECIAL:**
BUS AMPS: 225 AMPS

LOAD DESCRIPTION	BKR	P	CKT	PHASE A kVA		PHASE B kVA		PHASE C kVA		CKT	P	BKR	LOAD DESCRIPTION
EXISTING LOAD	20 A	1	1	0.0	0.0					2	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	3			0.0	0.0			4	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	5					0.0	0.0	6	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	7	0.0	0.0					8	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	9			0.0	0.0			10	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	11					0.0	0.0	12	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	13	0.0	0.0					14	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	15			0.0	0.0			16	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	17					0.0	0.0	18	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	19	0.0	0.0					20	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	21			0.0	0.0			22	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	23					0.0	0.0	24	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	25	0.0	0.0					26	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	27			0.0	0.0			28	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	29					0.0	0.0	30	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	31	0.0	0.0					32	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	33			0.0	0.0			34	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	35					0.0	0.0	36	1	20 A	EXISTING LOAD
			37							38			
			39							40			
			41							42			
	TOTAL LOAD:			0 kVA		0 kVA		0 kVA					
	TOTAL AMPS:			0 A		0 A		0 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
				CONNECTED LOAD:	0 VA
				ESTIMATED DEMAND:	0 VA
				CONNECTED CURRENT:	0 A
				EST. DEMAND CURRENT:	0 A

NOTES:
ELECTRICAL CONTRACTOR SHALL FIELD VERIFY BREAKERS REQUIRED PRIOR TO ORDERING SWITCHBOARDS AND PANELBOARDS.

PANELBOARD: RP-2

LOCATION: CORRIDOR B902 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: RECESSED NEMA1 **A.I.C. RATING:** 10,000 AMPS SYMMETRICAL
MAIN DEVICE: 225 A MLO **SPECIAL:**
BUS AMPS: 225 AMPS

LOAD DESCRIPTION	BKR	P	CKT	A		B		C		CKT	P	BKR	LOAD DESCRIPTION
EXISTING LOAD	20 A	1	1	0.0	0.0					2	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	3			0.0	0.0			4	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	5					0.0	0.0	6	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	7	0.0	0.0					8	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	9			0.0	0.0			10	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	11					0.0	0.0	12	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	13	0.0	0.0					14	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	15			0.0	0.0			16	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	17					0.0	0.0	18	1	20 A	EXISTING LOAD
EXISTING LOAD	20 A	1	19	0.0	0.0					20	1	20 A	EXISTING LOAD
COPIER	20 A	1	21			0.2	0.2			22	1	20 A	COPIER
Receptacles	20 A	1	23					0.4	0.5	24	1	20 A	Receptacles
Receptacles	20 A	1	25	0.4	0.2					26	1	20 A	MICROWAVE
MICROWAVE	20 A	1	27			0.2	0.4			28	1	20 A	MICROWAVE
Receptacles	20 A	1	29					0.4	0.4	30	1	20 A	Receptacles
Receptacles	20 A	1	31	0.9	0.5					32	1	20 A	Receptacles
Receptacles	20 A	1	33			0.9	0.7			34	1	20 A	Receptacles
Receptacles	20 A	1	35					0.7	0.7	36	1	20 A	Receptacles
GFI Receptacles	20 A	1	37	0.6	0.2					38	1	20 A	Receptacles GFI
GFI Receptacles	20 A	1	39			0.2	0.2			40	1	20 A	Receptacles GFI
Receptacles	20 A	1	41					0.2	1.0	42	1	20 A	Receptacles
Receptacles	20 A	1	43	1.2	0.2					44	1	20 A	COW
Receptacles	20 A	1	45			0.9	0.9			46	1	20 A	Receptacles
Receptacles	20 A	1	47					0.9	0.9	48	1	20 A	Receptacles
Load Classification	20 A	1	49	1.8	0.5					50	1	20 A	Receptacles
SPARE	20 A	1	51			0.0	2.5			52	2	30 A	Dryer
SPARE	20 A	1	53					0.0	2.5	54			
	TOTAL LOAD:			6 kVA		7 kVA		9 kVA					
	TOTAL AMPS:			54 A		62 A		73 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	1500 VA	125.00%	1875 VA		
RCPT	2200 VA	100.00%	2200 VA	CONNECTED LOAD:	22380 VA
Receptacles	12780 VA	100.00%	12780 VA	ESTIMATED DEMAND:	22755 VA
				CONNECTED CURRENT:	62 A
				EST. DEMAND CURRENT:	63 A

NOTES:
ELECTRICAL CONTRACTOR SHALL FIELD VERIFY BREAKERS REQUIRED PRIOR TO ORDERING SWITCHBOARDS AND PANELBOARDS

LIGHT FIXTURE SCHEDULE

QUANTITY	TYPE	DESCRIPTION	LENS-LOUVER	MOUNTING	LAMP	DRIVER TYPE	FINISH	VOLTAGE	WATT	MANUFACTURER	APPROVED EQUALS	NOTE
77	A	2 FOOT BY 4 FOOT LED FLAT PANEL FIXTURE WITH SWITCHABLE LEMEN TECHNOLOGY	ACRYLIC BLEND LIGHT GUIDE WITH FROSTED/TEXTURED OUTER LENS	RECESSED IN RXPOSED GRID LAY-IN CEILING	LED - 5926 LUMENS 4000K	0-10 VOLT DIMMING	POST PAINTED WHITE	MVOLT	44 W	COLUMBIA CFP24-55/41/3440 SERIES	LITHONIA CPANEL 2X4 SERIES, METALUX 24FPSL2SCT3	FIELD SELECT 6000 LUMENS
32	A1	2 FOOT BY 4 FOOT LED FLAT PANEL FIXTURE WITH SWITCHABLE LEMEN TECHNOLOGY	ACRYLIC BLEND LIGHT GUIDE WITH FROSTED/TEXTURED OUTER LENS	RECESSED IN RXPOSED GRID LAY-IN CEILING	LED - 4100 LUMENS 4000K	0-10 VOLT DIMMING	POST PAINTED WHITE	MVOLT	34 W	COLUMBIA CFP24-55/41/3440 SERIES	LITHONIA CPANEL 2X4 SERIES, METALUX 24FPSL2SCT3	FIELD SELECT 4100 LUMENS
2	A2	2 FOOT BY 2 FOOT LED FLAT PANEL FIXTURE WITH SWITCHABLE LUMEN TECHNOLOGY	ACRYLIC BLEND LIGHT GUIDE WITH FROSTED/TEXTURED OUTER LENS	RECESSED IN EXPOSED GRID LAY-IN CEILING	LED - 3905 LUMENS 4000K	0-10 VOLT DIMMING	POST PAINTED WHITE	MVOLT	30 W	COLUMBIA CFP22-40/32/2840	LITHONIA CPANEL 2X2 SERIES METALUX 22FPSL2SCT3	FIELD SELECT 3905 LUMENS
6	B	1 FOOT BY 4 FOOT LED FLAT PANEL FIXTURE WITH SWITCHABLE LUMEN TECHOLOGY	ACRYLIC BLEND LIGHT GUIDE WITH FROSTED/TEXTURED OUTER LENS	RECESSED IN EXPOSED GRID LAY-IN CEILING	LED - 4334 LUMENS 4000K	ELECTRONIC LED	POST PAINTED WHITE	MVOLT	37 W	COLUMBIA CFP14-55/41/3440 SERIES	LITHONIA CPANEL 1X4 SERIES, METALUX 14FPSL1SCT3	FIELD SELECT 4400 LUMENS
11	D	6-INCH LED RECESSED DOWNLIGHT	CLEAR ALZAK	RECESSED IN GYPBOARD OR TILE	LED - 1868 LUMENS 4000K	ELECTRONIC LED	--	MVOLT	22 W	GOTHAM EVO6 SERIES	PRESCOLITE LF6LED SERIES, HALO HC6/HM6 SERIES	
3	D1	4 INCH LED DOWNLIGHT	CLEAR ALZAK SELF TRIMMING	RECESSED IN GYPBOARD OR TILE	LED - 1500 LUMENS @ 4000K	0-10V ELECTRONIC DIMMING DRIVER	--	MVOLT	14 W	GOTHAM EV04 SERIES	PRESCOLITE LF4LED SERIES, HALO HC4/HM4 SERIES	
2	E	LED SINGLE FACED EXIT SIGN with EMERGENCY HEADS - WHITE THERMO-PLASTIC HOUSING, SEALED MAINTNANCE FREE NICKEL CADIUM BATTERY, WHITE STENCIL FACE, GREEN LETTERS, AND CHEVRON ARROWS AS SHOWN ON DRAWINGS.	---	UNIVERSAL	LED	---	WHITE	MVOLT	5 W	DUAL-LITE LT SERIES	LITHONIA	
1	E1	LED SINGLE FACED EXIT SIGN - WHITE THERMO-PLASTIC HOUSING, SEALED MAINTENANCE FREE NICKLE CADIUM BATTERY, WHITE STENCIL FACE, GREEN LETTERS AND ARROWS AS SHOWN ON PLANS.	---	UNIVERSAL	LED	---	WHITE	MVOLT	5 W	DUAL LITE EVE SERIES	LITHONIA	
5	EM	EMERGENCY BATTERY UNIT WITH HEADS - WHITE HIGH-IMPACT THERMO-PLASTIC HOUSING.	--	WALL MOUNT	A-19	--	WHITE	MVOLT	3 W	DUAL-LITE EHVC 12-06L SERIES		
2	F/4'-0"	RECESSED LINEAR DIRECT LED FIXTURE - 6-INCH WIDE EXTRUDED ALUMINUM HOUSING WITH DIE-CAST END PLATES.	FROSTED ACRYLIC SNAP-IN LENS	RECESSED IN EXPOSED GRID LAY-IN TYPE CEILING	LED - 700 LUMENS/FT 4000K	0-10V ELECTRONIC DIMMING	POST PAINTED WHITE	MVOLT	36 W	LITECONTROL 6L-LG-D SERIES	MARK LIGHTING SL6L SERIES	
3	F/12'-0"	RECESSED LINEAR DIRECT LED FIXTURE - 6-INCH WIDE EXTRUDED ALUMINUM HOUSING WITH DIE-CAST END PLATES.	FROSTED ACRYLIC SNAP-IN LENS	RECESSED IN EXPOSED GRID LAY-IN TYPE CEILING	LED - 700 LUMENS/FT 4000K	0-10V ELECTRONIC DIMMING	POST PAINTED WHITE	MVOLT	108 W	LITECONTROL 6L-LG-D SERIES	MARK LIGHTING SL6L SERIES	
1	G	60" ROUND PENDENT HUNG LED FIXTURE - 60" DIAMETER BY 6" HIGH THICK WALLED ALUMINUM EXTRUSION.	VIRGIN WHITE ACRYLIC TOP AND BOTTOM DIFFUSERS	(4) VERTICAL FULLY ADJUSTABLE AIRCRAFT CABLES	LED - 15,300 LUMENS 4000K	0-10V ELECTRONIC DIMMING	CUSTOM COLOR AS SLELECTED BY ARCHITECT	MVOLT	180 W	OCL TW1 SERIES	CAMMAN LIGHTING P1063-6S SERIES, LUMUS RP-UP-DN-60-H0 SERIES	HANG SO BOTTOM OF FIXTURE IS AT 7'-6" AFF. COORDINATE EXACT HEIGHT AND LOCATION.
2	H	UP/DOWN LED WALL FIXTURE - UP LIGHT CONTROLLED FROM REMOTE SWITCH ON WALL. DOWNLIGHT CONTROLLED BY PULL SWITCH ON FIXTURE. FINISHED WHITE.	HIGH IMPACT FROSTED POLYCARBONATE	WALL MOUNT AT 7'-6"	LED - 3950 LUMENS UP LIGHT, 2739 LUMENS DOWNLIGHT 4000K	UP LIGHT - 0-10V DIMMING, DOWNLIGHT ELECTRONIC	WHITE POLYESTER POWDER COAT FINISH	120V	112 W	AMICO L-SKY-2 SERIES	WILLIAMS WMAUD SERIES, HUBBELL HEALTHCARE EBL-4 SERIES	

GENERAL NOTES:

1. QUANTITES ARE SHOWN FOR REFERENCE ONLY. DIVISION 26 CONTRACTOR SHALL VERIFY ALL QUANTITIES.
2. ALL METAL PARTS MUST BE POST PAINTED.
3. ALL LEDs SHALL HAVE A MINIMUM 50,000 HOUR LAMP LIFE AT 70% OUTPUT AND BE RATED A MINIMUM OF 80 CRI.
4. VERIFY MOUNTING HEITHT OF ALL WALL MOUNT AND PENDENT HUNG FIXURES WITH ARCHITECT.
5. SEE SPECIFICATION SECTION 26 51 00 FOR A LIST OF SPARE FIXTURES.

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REVISIONS

REV NO	DESCRIPTION	DATE
1	Addendum #1	01/25/2023

Dayton Elementary School
Remodeling and Deferred Maintenance Phase 1

Anoka-Hennepin School District 11
12000 S. Diamond Lake Rd., Dayton, MN 55327

SIGNATURE / SEAL

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

Signature

Nicholas Achina, PE
Typed or printed name

January 12, 2023
Date

40408
License Number

KEYPLAN

DRAWN BY
RGE

CHECKED BY
N ACHINA

ISSUED FOR
CONSTRUCTION DOCUMENTS

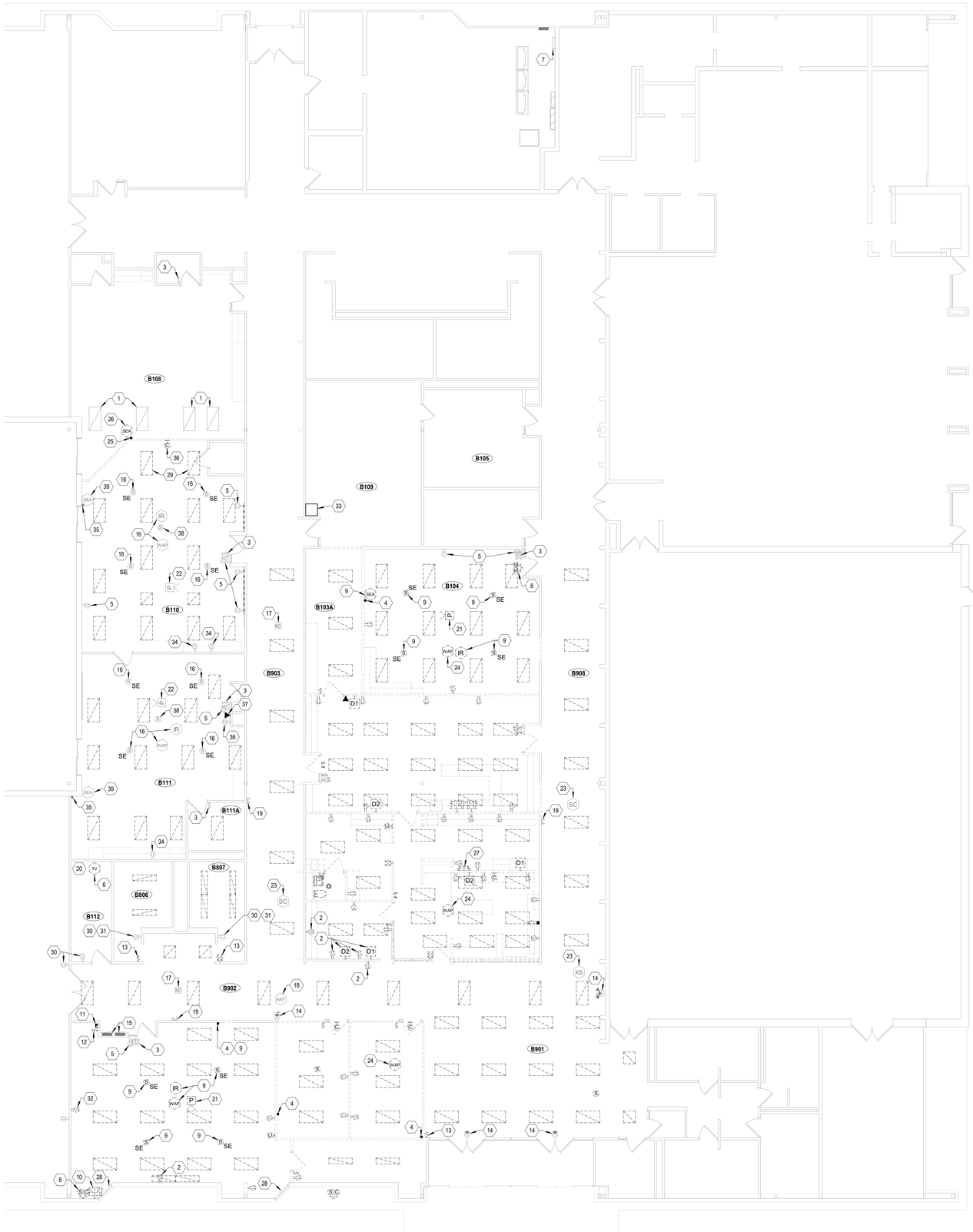
ISSUE DATE
JANUARY 12, 2023

SHEET NAME
SCHEDULES

ATS&R PROJECT NO.
22064

REVISION NO.
1

SHEET NUMBER
E6.2



1 ED.1 **ELECTRICAL DEMOLITION PLAN**
1/8" = 1'-0"

NORTH

DEMOLITION GENERAL NOTES

A. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASES OF DEMOLITION AND CONSTRUCTION. COORDINATE WITH GENERAL CONTRACTOR.

B. FIELD VERIFY EXACT EXISTING CONDITIONS PRIOR TO ANY DEMOLITION WORK REPORT ANY DISCREPANCIES TO THE ENGINEER.

C. DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES SHOWN DASHED UNLESS OTHERWISE INDICATED. REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO PANEL OR LAST REMAINING DEVICE. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL ITEMS REMOVED UNLESS OTHERWISE DIRECTED ON PLANS OR SPECIFICATIONS.

D. MAINTAIN CONTINUITY OF ANY REMAINING DEVICES DOWN STREAM OF DEMOLITION AREA. PROVIDE CONDUIT AND WIRE AND EXTEND EXISTING CIRCUITS AS REQUIRED.

E. ELECTRICAL CONTRACTOR SHALL VERIFY THAT ANY ELECTRICAL CONDUIT IN THE CONSTRUCTION AREA THAT REMAINS IS PROPERLY SUPPORTED AS REQUIRED BY THE NATIONAL ELECTRICAL CODE (NEC). IF CONDUIT IS NOT PROPERLY SUPPORTED, THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY COMPONENTS TO PROVIDE A CONDUIT INSTALLATION THAT MEETS THE REQUIREMENTS OF THE NEC.

F. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO DISCONNECT, REMOVE, AND RELOCATE ANY BRANCH CIRCUIT CONDUITS THAT ARE IN CONFLICT WITH NEW CONSTRUCTION WORK. THE CONTINUITY OF ANY PART OF THE CIRCUIT THAT IS TO REMAIN SHALL BE MAINTAINED. FIELD COORDINATE EXACT EXISTING CONDITIONS.

G. ALL EXISTING SERVICE FEEDERS IN EXISTING AREAS SHALL REMAIN AS IS. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR TO ENSURE THAT NO FEEDERS SHALL OBSTRUCT ANY NEW DUCTWORK, WALLS, CEILINGS, OR STRUCTURES. ELECTRICAL CONTRACTOR SHALL RELOCATE/RE-ROUTE FEEDERS AS REQUIRED TO MAKE ROOM FOR ANY NEW CONSTRUCTION.

H. UNLESS INDICATED OTHERWISE, DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES ON WALLS THAT ARE BEING DEMOLISHED. REMOVE ALL BRANCH WIRING AND ACCESSIBLE CONDUIT BACK TO PANEL OR LAST REMAINING DEVICE. REFER TO THE ARCHITECTURAL PLANS FOR WALLS THAT ARE BEING DEMOLISHED.

I. THE ELECTRICAL CONTRACTOR SHALL STRIP ALL BALLASTS FROM LIGHT FIXTURES THAT ARE BEING DEMOLISHED, AND DISPOSE OF THE BALLASTS APPROPRIATELY.

J. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO DISCONNECT AND REMOVE ALL POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT THAT ARE BEING DEMOLISHED. COORDINATE WITH MECHANICAL CONTRACTOR AND RELOCATE EXISTING CONDUITS AS REQUIRED TO MAKE ROOM FOR DUCTWORK.

K. FURNISH AND INSTALL STAINLESS STEEL BLANK COVER PLATES OVER ALL EXPOSED UNUSED OPENINGS.

L. ELECTRICAL CONTRACTOR SHALL MARK ALL NON-PLENUM RATED CABLES IN CEILINGS AS SOON AS CEILING IS REMOVED. CABLES SHALL BE REMOVED BY OWNER.

M. ONCE CEILING IS REMOVED, ELECTRICAL CONTRACTOR SHALL SUPPORT, FROM STRUCTURE, ANY REMAINING DATA, SECURITY OR FIRE ALARM CABLES NOT PROPERLY SUPPORTED.

N. SEE SHEET E6.1 FOR MORE INFORMATION ABOUT SWITCHBOARD AND PANELBOARD REPLACEMENT.

KEYED SHEET NOTES

1. EXISTING LIGHT FIXTURE TO REMAIN AS IS, SHOWN FOR REFERENCE ONLY.
2. EXISTING DEVICE AND ASSOCIATED WIRING TO BE DISCONNECTED AND REMOVED BACK TO ITS SOURCE.
3. EXISTING SWITCHES TO BE DISCONNECTED AND REMOVED. REMOVE WIRING, BOX AND CONDUIT TO BE REUSED. SEE LIGHTING PLAN.
4. DISCONNECT AND REMOVE SURFACE RACEWAY, ASSOCIATED POWER, TECHNOLOGY DEVICES AND CABLING. MAINTAIN POWER CIRCUIT FOR REUSE.
5. REPLACE EXISTING RECEPTACLE WITH NEW TAMPER-RESISTANT RECEPTACLE AND STAINLESS STEEL COVERPLATE.
6. EXISTING TV SPLITTER AND ALL ASSOCIATED CABLING TO BE DISCONNECTED AND REMOVED.
7. EXISTING FIRE ALARM PANEL TO REMAIN. SEE SHEET E4.2 OF THE DRAWINGS AND SECTION 28 31 00 OF THE SPECIFICATIONS.
8. EXISTING CLOCK AND SPEAKER:
   a. DIVISION 26 SHALL DISCONNECT AND REMOVE THE EXISTING CLOCK AND BACK BOX. PROVIDE A JUNCTION BOX ABOVE CEILING OF CORRIDOR AND RECONNECT 110V POWER AND CORRECTION CABLE TO MAINTAIN CIRCUIT TO REMAINING CLOCKS. EXTEND CLOCK CIRCUIT TO NEW CLOCK LOCATION.
   b. SPEAKER AND ASSOCIATED CABLE TO BE REMOVED BACK TO ITS SOURCE.
9. EXISTING SOUND ENHANCEMENT SYSTEM COMPONENTS (SPEAKER WITH SUBSCRIPT SE, IR RECEIVER AND WALL MOUNTED AMPLIFIER ASSEMBLY) AND WIRELESS ACCESS POINT AND ALL ASSOCIATED CABLING SHALL BE DISCONNECTED AND REMOVED BY DIVISION 27. TURN ALL COMPONENTS OVER TO OWNER.
10. EXISTING 3-GANG BOX CONTAINING A SWITCH, TECHNOLOGY OUTLET AND RECEPTACLE AND ALL ASSOCIATED CABLING SHALL ALL BE DISCONNECTED AND REMOVED. PROVIDE STAINLESS STEEL BLANK COVERPLATE.
11. EXISTING KILN TO BE DISCONNECTED. REMOVE DISCONNECT AND ALL WIRING BACK TO ITS SOURCE.
12. EXISTING KILN EXHAUST HOOD TO BE DISCONNECTED. REMOVE SWITCH AND ALL ASSOCIATED WIRING BACK TO ITS SOURCE.
13. EXISTING CORRIDOR OR RESTROOM SWITCH AND ASSOCIATED WIRING TO BE DISCONNECTED AND REMOVED. PROVIDE STAINLESS STEEL BLANK COVERPLATE.
14. EXISTING EXIT SIGN TO BE REMOVED FOR CONSTRUCTION. REINSTALL IN SAME LOCATION ON NEW CEILING.
15. PANELBOARD AND ASSOCIATED FEEDER TO BE REPLACED WITH NEW PANEL AND FEEDER. SEE SHEET E6.1 FOR MORE INFORMATION.
16. EXISTING SOUND ENHANCEMENT SYSTEM COMPONENTS (SPEAKER WITH SUBSCRIPT SE, IR RECEIVER AND WALL MOUNTED AMPLIFIER ASSEMBLY) AND WIRELESS ACCESS POINT TO REMAIN AS IS. PROTECT FROM DAMAGE AND DUST DURING CONSTRUCTION.
17. DIVISION 27 SHALL REMOVE THE EXISTING SECURITY MOTION DETECTOR FROM CEILING KEEPING THE EXISTING CONNECTION TO THE CABLE. SUPPORT FROM THE BUILDING STRUCTURE SO IT'S OUT OF THE WAY OF CONSTRUCTION. REINSTALL IN SAME LOCATION ON NEW CEILING.
18. DIVISION 27 SHALL REMOVE THE EXISTING ANTENNA FROM THE CEILING KEEPING THE EXISTING CONNECTION TO THE CABLE. SUPPORT FROM THE BUILDING STRUCTURE SO IT'S OUT OF THE WAY OF CONSTRUCTION. REINSTALL IN SAME LOCATION ON NEW CEILING.
19. EXISTING EMERGENCY BATTERY PACK TO BE REMOVED FOR CONSTRUCTION. REINSTALL ON NEW SURFACE.
20. EXISTING DATA RACK AND PAGING SYSTEM RACK TO REMAIN. PROTECT EQUIPMENT AND ALL CABLES FROM DUST AND DAMAGE DURING CONSTRUCTION. ANY DAMAGED CABLES OR EQUIPMENT WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
21. EXISTING PROJECTOR AND ASSOCIATED MOUNTING PLATE AND ACCESSORIES TO BE REMOVED BY DIVISION 27. TURN OVER TO OWNER.
22. EXISTING PROJECTOR AND ASSOCIATED MOUNTING PLATE AND ACCESSORIES TO REMAIN AS IS. PROTECT FROM DAMAGE AND DUST DURING CONSTRUCTION.
23. EXISTING SECURITY CAMERA TO BE DISCONNECTED FOR CONSTRUCTION. REINSTALL IN SAME LOCATION ON NEW CEILING.
24. EXISTING WIRELESS ACCESS POINT (WAP) AND ASSOCIATED CABLING TO BE DISCONNECTED AND REMOVED. TURN WAP OVER TO OWNER.
25. EXISTING PANDUIT AND ASSOCIATED POWER AND TECHNOLOGY TO BE REMOVED FOR CONSTRUCTION. REINSTALL AT NEW LOCATION SHOWN ON SHEETS E3.1 AND E4.1. EXTEND/MODIFY CABLING AND WIRING AS REQUIRED.
26. EXISTING SOUND ENHANCEMENT AMPLIFIER AND ASSOCIATED MOUNTING BRACKET TO BE REMOVED FOR CONSTRUCTION. STORE IN A SAFE AND SECURE LOCATION FOR REINSTALLATION. REINSTALL IN NEW LOCATION SHOWN ON SHEET E4.1. WORK DONE BY DIVISION 27.
27. EXISTING MASTER CLOCK TO BE DISCONNECTED AND REMOVED FOR CONSTRUCTION. EXISTING CLOCK POWER AND CORRECTION CABLES TO BE TERMINATED IN A JUNCTION BOX ABOVE ACCESSIBLE CEILING. EXTEND CABLES TO NEW MASTER CLOCK LOCATION SHOWN ON SHEET E4.1. WORK DONE BY DIVISION 27.
28. EXISTING ELECTRIC HEATER, SURFACE MOUNTED JUST BELOW WINDOW, SHALL BE DISCONNECTED FOR CONSTRUCTION. DRILL THRU NEW CASEWORK AND RECONNECT TO EXISTING CIRCUIT.
29. EXISTING LIGHT FIXTURE TO BE DISCONNECTED AND REMOVED. SAVE FOR REINSTALLATION.
30. REVISE CIRCUITING SO THAT RECEPTACLES ARE ALL ON CIRCUIT RP2/9.
31. REPLACE EXISTING RECEPTACLE WITH GFI RECEPTACLE AND STAINLESS STEEL COVERPLATE.
32. EXISTING RECEPTACLE TO BE DISCONNECTED AND REMOVED. MAINTAIN CIRCUITING TO DEVICES DOWN STREAM.
33. EXISTING TOA BUILDING PAGING SYSTEM HEADEND. DIVISION 29 SHALL REMOVE EXISTING PAGING SYSTEM HEADEND AND TURN IT OVER TO THE OWNER. EXTEND ALL OF THE EXISTING SPEAKER CIRCUITS, INDIVIDUALLY, TO THE NEW BUILDING PAGING SYSTEM LOCATION IN THE DATA HEADEND ROOM.
34. REPLACE EXISTING RECEPTACLE WITH TAMPER-RESISTANT GFI RECEPTACLE AND STAINLESS STEEL COVERPLATE.
35. REMOVE PANDUIT FOR CONSTRUCTION. REINSTALL ON NEW WALL SURFACE. ANY RECEPTACLES MOUNTED IN PANDUIT SHALL BE REPLACED WITH TAMPER-RESISTANT RECEPTACLE.
36. EXISTING CLOCK TO BE DISCONNECTED AND REMOVED. TURN CLOCK OVER TO OWNER.
37. EXISTING PHONE JACK AND ASSOCIATED WIREMOLD AND CABLE SHALL BE DISCONNECTED AND REMOVED.
38. EXISTING SPEAKER TO BE REMOVED AND REPLACED WITH NEW FLUSH 2X2 LAY-IN SPEAKER, VALCOM MODEL V6520B-2. CONNECT TO EXISTING SPEAKER WIRE.
39. EXISTING SOUND ENHANCEMENT AMPLIFIER AND ASSOCIATED MOUNTING BRACKET TO BE REMOVED FOR CONSTRUCTION. STORE IN A SAFE AND SECURE LOCATION FOR REINSTALLATION. REINSTALL IN SAME LOCATION ON NEW WALL SURFACE. WORK DONE BY DIVISION 27.

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REVISIONS

REV NO	DESCRIPTION	DATE
1	Addendum #1	01/25/2023

Dayton Elementary School
Remodeling and Deferred Maintenance Phase 1
Anoka-Hennepin School District 11
12000 S. Diamond Lake Rd., Dayton, MN 55327

SIGNATURE / SEAL

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

Signature

Nicholas Achina, PE
Typed or printed name

January 12, 2023
Date

40408
License Number

KEYPLAN

DRAWN BY
RGE

CHECKED BY
N ACHINA

ISSUED FOR
CONSTRUCTION DOCUMENTS

ISSUE DATE
JANUARY 12, 2023

SHEET NAME
ELECTRICAL DEMOLITION PLAN

ATS&R PROJECT NO.
22064

REVISION NO.
1

SHEET NUMBER
ED.1