

Addendum No.[2]

		Project Name:	Mt. Hope School – New Build
		Project No.:	221125-140
		Architect:	C2AE
		Date:	7/27/2023
Bid Package No.:	2		-
Bid Due Date:	08/03/2023		_

This Addendum is issued to inform the bidders of modifications in the scope of work being bid for this project.

A. Documents included in this Addendum and dated [7/27/2023]:

- Updated W.C. Index and Cross Reference
 - WC 15
 - Removed sped section 084523
 - WC 20
 - Removed spec section 066400
 - o <u>WC 21</u>
 - Added spec section 066400
 - Removed spec section 116000
 - Added spec section 116001
- Updated Project Manual with WC Clarifications and Scope Clarification Diagrams
 - o WC 02
 - General Note #15
 - Added "Provide and install any additional topsoil needed to bring grades to within +/- 0.1'."
 - Specific Note & Detail #10
 - Added "To be funded from this WC's allowance."
 - Related Work by Others Note #5
 - Deleted this note in its entirety.
 - Allowance
 - Increased to \$80,000.
 - o WCII
 - Add Specific Note and Detail #5
 - Provide and install flashing, primer and seimic clips added in addendum 1. Reference details 8 & 9 on A-502 for examples.
 - WC 12
 - Specific Note and Detail #3
 - Deleted this note in its entirety.
 - WC 13
 - Added Related Work by Others note #4
 - WC 22 to provide and install waterproofing at showers.
 - WC 14
 - Specific Note and Detail #4
 - Deleted this note in its entirety.

Addendum No.[2]



o WC 15

- Specific Note and Detail #2
 - Revised this note to state "All furring and fastening at all locations is required to be installed by this WC as necessary for complete installation of the metal panel assembly. This is to include all locations where furring is embedded in spray insulation where installation is required prior to spray."

o WC 18

- Added Related Work by Others note #4:
 - At locations where wood doors are installed in aluminum frames, this WC responsible to furnish and install aluminum frames. Wood doors and door hardware to be by WC 20. Coordinate with WC 20 for installation and frame prep.
- WC 20
 - General Note #8
 - Added "Where wood doors are installed in Aluminum Frames, provide and install wood doors and door hardware. Aluminum Frames furnished and installed by WC 18. Coordinate with WC 18 to ensure doors and door frames are prepared appropriately.
 - Specific Note and Detail #11
 - Deleted this not in its entirety.

WC 22

- Added Specific Note and Detail #2
 - Provide and install all waterproofing at showers for a complete installation.
- Scope Clarification Diagrams
 - Removed WC I I Rigid Insulation responsibility in Typ. Exterior Wall Base
 Detail @ Storefront at Concrete Footing
 - Added WC 10 Rigid Insulation responsibility in Typ. Exterior Wall Base Detail @ Storefront at Concrete Footing
 - Removed WC 13 Waterproofing responsibility in Shower Pan Detail
 - Added WC 22 Waterproofing responsibility in Shower Pan Detail
- Bid Form
 - O Added alternate #4 to mandatory alternates.
- RFI Questions & Answers (to date).
- Prebid Meeting Agenda.

B. Bids are due [8/03/2023].

- Include in your bid the increase or decrease for all materials, labor, supervision, overhead and profit required to properly and completely execute the work described in this Addendum.
- Acknowledge receipt of this Addendum on the Bid Proposal Form.
- Please review the entirety of the project manual. Only portions of the project manual are included in this addendum.

The applicable provisions of the Contract Documents shall govern all work included herein unless specifically noted otherwise.

END OF ADDENDUM NO. [2]

PROJECT MANUAL

Mt. Hope School Lansing, Michigan

VOLUME I

ADDENDUM 2

Bid Package No. 2

Monday, July 27, 2023

New Build

CONSTRUCTION MANAGER

The Christman Company 208 N. Capitol Avenue Lansing, MI 48933-1357 517-482-1488

Architect C2AE 106 W. Allegan St. Suite 500 Lansing, MI 48933

Site Engineer C2AE 106 W. Allegan St. Suite 500 Lansing, MI 48933 Mechanical & Electrical Engineer
Stantec
2338 Coolidge Hwy
Berkley, MI 48072

Structural Engineer C2AE 106 W. Allegan St. Suite 500 Lansing, MI 48933

SECTION TC TABLE OF CONTENTS

SECTION TITLE

Bidding Requirements

00025 Advertisement for Bids 00100 Instructions to Bidders

Geotechnical Report (in C2AE Specifications)

Information Available to Bidders 00200

Proposal Section

Work Category Index and Cross Reference

Work Category Descriptions Scope Clarification Diagrams

Trade Contract Proposal Pre-Submission Checklist

Trade Contract Proposal Form

Trade Contractor Information Request Form

Contract Forms

Subcontract Agreement

Labor and Material Payment Bond

Performance Bond

Familial Disclosure Statements

Non-Discrimination in Employment Certification

Affidavit of Bidder - Non-Collusion Iran Economic Sanctions Act Certificate

Legal Status of Bidder

Guarantee

AIA Documents are not included in this specification, but are part of the contract documents, copies may be obtained from the Construction Manager

Contractor's Qualification Statement (AIA Document A305)

Application and Certificate for Payment and Continuation Sheet (AIA Documents G702 and 703) Submitted and utilized electronically via

Trade Contractor Portal

Certificate of Substantial Completion (AIA Document G704)

Certificate of Insurance (AIA Documents G705)

Contractor's Affidavit of Payment of Debts and Claims (AIA G706)

Consent of Surety Company to Final Payment

(AIA Document G707)

GENERAL CONDITIONS

O750 General Conditions of the Contract for Construction

(AIA Document A201-2007 Edition)

0800 Project Specific Supplementary General Conditions to AIA A201-2007 as

modified

DRAWINGS

00850 Schedule of Drawings

DIVISION 1 .. GENERAL REQUIREMENTS

 VIOIOIV I OLIVLI	WE REGUITERIO
00210	Special Provisions (project schedule, logistics plan, safety plan)
01010	Summary of Work
01019	Contract Considerations
01020	Allowances
012500	Substitution Procedures (C2AE Specifications)
01030	Special Project Procedures
013100	Project Management and Coordination (C2AE Specifications)
01040	Coordination
01045	Cutting and Patching
01049	Mechanical & Electrical Coordination
01050	Field Engineering
01060	Regulatory Requirements
01070	Abbreviations and Symbols
01095	Reference Standards and Definitions
01100	Alternates
01150	Measurement and Payment
01200	Project Meetings
01300	Submittals
01310	Construction Schedules
01370	Schedule of Values
01400	Quality Control
01410	Indoor Air Quality Management Plan
014339	Mockups (C2AE Specifications)
01500	Temporary Facilities
015639	Temporary Tree and Plant Protection (C2AE Specifications)
01600	Material and Equipment
01700	Project Closeout
01740	Warranties
017419	Construction Waste Management
018119	Indoor Air Requirements
019113	General Commissioning Requirements (Also in C2AE Specifications)

DIVISION 2.. SITE WORK

024119	Selective Demolition
--------	----------------------

DIVISION 3 .. CONCRETE

031000	Concrete Forming & Accessories
032000	Concrete Reinforcing
033000	Cast-In-Place Concrete
033543	Polished Concrete Finishing
035113	Cementitious Roof Deck (Cementitious Wood Fiber Plank)

DIVISION 4.. MASONRY

042000	Unit Masonry
--------	--------------

DIVISION 5.. METALS

051200	Structural Steel Framing
051213	Architecturally Exposed Structural Steel Framing
052100	Steel Joist Framing
053100	Steel Decking
054000	Cold-Formed Metal Framing
055000	Metal Fabrications
055213	Pipe and Tube Railings

DIVISION 6.. WOOD & PLASTICS

061000	Rough Carpentry
061700	Engineered Framing Systems
061800	Glued-Laminated Construction
062023	Interior Finish Carpentry
066400	Plastic Paneling

DIVISION 7.. THERMAL & MOISTURE PROTECTION

071113	Bituminous Dampproofing
072100	Thermal Insulation
072119	Foamed-In-Place Insulation
072413	Polymer-Based Exterior Insulation and Finish System (EIFS)
072500	Weather Barriers
072726	Fluid-Applied Membrane Air Barriers
074210.11	Composite Framing Support (CFS) System
074213.13	Formed Metal Wall Panels
074213.23	Metal Composite Material Wall Panels
075423	Thermoplastic-Polyolefin (TPO) Roofing
077100	Roof Specialties
077200	Roof Accessories

078413	Penetration Firestopping
079200	Joint Sealants
079219	Acoustical Joint Sealants

DIVISION 8 .. DOORS & WINDOWS

081113	Hollow Metal Doors and Frames
081416	Flush Wood Doors
083113	Access Doors and Frames
083323	Overhead Coiling Doors
083613	Sectional Doors
084113	Aluminum-Framed Entrances and Storefronts
084413	Glazed Aluminum Curtain Walls
084523	Fiberglass-Sandwich-Panel Assemblies
085113	Aluminum Windows
087100	Door Hardware
087113	Power Door Operators
088000	Glazing
088716	Safety and Security Window Film
088813	Fire-Rated Glazing
089119	Fixed Louvers

DIVISION 9 .. FINISHES

092216	Non-Structural Metal Framing
092900	Gypsum Board
093013	Ceramic Tiling
095113	Acoustical Panel Ceilings
096513	Resilient Base and Accessories
096516	Resilient Sheet Flooring
096543	Linoleum Flooring
096566	Resilient Athletic Flooring
096813	Tile Carpeting
098400	Cementitious Wood Fiber Wall Panels
098433	Sound-Absorbing Wall Units
099114	Exterior Painting (MPI Standards)
099124	Interior Painting (MPI Standards)
099300	Staining And Transparent Finishing

DIVISION 10 .. SPECIALTIES

101100	Visual Display Units
101200	Display Cases
101416	Plaques
101419	Dimensional Letter Signage
101419	Signage
102113.19	Plastic Toilet Compartments

102800	Toilet, Bath, and Laundry Accessories
104413	Fire Protection Cabinets
104416	Fire Extinguishers
105113	Metal Lockers
107500	Flagpoles

DIVISION 11 .. EQUIPMENT

111200	Parking Control Equipment
113013	Residential Appliances
116001	Broadcast, Theater and Stage Equipment
116623	Gymnasium Equipment
116643	Scoreboard

DIVISION 12 .. FURNISHINGS

122413	Roller Window Shades
123216	Manufactured Plastic-Laminate-Clad Casework
123661.16	Solid Surfacing Countertops
126600	Telescoping Stands

DIVISION 20 .. MECHANICAL

200500	Common Work Results for Mechanical
200513	Common Motor Requirements for Mechanical Equipment
200514	Variable Frequency Drives
200516	Expansion Fittings and Loops for Piping
200519	Meters and Gages
200523	General-Duty Valves for Piping
200529	Hangers and Supports
200533	Heat Tracing
200548	Vibration Controls for HVAC
200553	Mechanical Identification
200593	Testing, Adjusting, and Balancing
200700	Mechanical Insulation
200800	Commissioning of Mechanical

DIVISION 21 .. FIRE SUPPRESSION

210523	General-Duty Valves for Fire Protection Piping
211119	Fire Department Connections
211313	Wet-Pipe Sprinkler Systems
211316	Dry-Pipe Sprinkler Systems

DIVISION 22 .. PLUMBING

220523	Valves for Plumbing Piping
221116	Domestic Water Piping

221119	Domestic Water Piping Specialties
221123	Domestic Water Pumps
221316	Sanitary Waste and Vent Piping
221319	Sanitary Waste Piping Specialties
221323	Sanitary Waste Interceptors
221413	Storm Drainage Piping
221423	Storm Drainage Piping Specialties
223400	Fuel-Fired, Domestic-Water Heaters
224200	Commercial Plumbing Fixtures
224500	Emergency Plumbing Fixtures
224700	Drinking Fountains and Electric Water Coolers

DIVISION 23 .. HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)

230900	Instrumentation and Control for HVAC
231123	Facility Natural-Gas Piping
232113	Hydronic Piping
232116	Hydronic Piping Specialties
232123	Hydronic Pumps
233113	Metal Ducts
233300	Air Duct Accessories
233423	HVAC Power Ventilators
233433	Air Curtains
233600	Air Terminal Units
233713	Diffusers, Registers, and Grilles
233723	HVAC Gravity Ventilators
235100	Breechings, Chimneys, and Stacks
235216	Condensing Boilers
237200	Air-To-Air Energy Recovery Equipment
237413	Packaged Unitary Rooftop Units
238126	Split-System Air-Conditioners
238213	Radiant Ceiling Panels
238229	Radiant Wall Panels
238239	Cabinet Unit Heaters
238240	Propeller Unit Heaters

DIVISION 26 .. ELECTRICAL

260010	General Requirements for Electrical Systems
260500	Common Work Results for Electrical
260519	Low-Voltage Electrical Power Conductors and Cables
260526	Grounding and Bonding for Electrical Systems
260529	Hangers and Supports for Electrical Systems
260533	Raceway and Boxes for Electrical Systems
260536	Cabled Trays for Electrical Systems
260543	Underground Ducts and Raceways for Electrical Systems
260553	Identification for Electrical Systems
260573	Overcurrent Protective Device Coordination and Arch Flash Hazard Studies

260923	Lighting Control Devices
260943	Network Lighting Controls
262200	Low-Voltage Transformers
262413	Switchboards
262416	Panelboards
262726	Wiring Devices
262813	Fuses
262816	Enclosed Switches
262913	Enclosed Controllers
263213	Engine Generators
263600	Transfer Switches
265100	Interior Lighting
265600	Exterior Lighting
269999	Electrical Testing

DIVISION 27 .. COMMUNICATIONS

270000	General Technology Requirements
271000	General Cabling Requirements
271116	Racks and Cabinets
271300	Backbone and Outdoor Cabling
271500	Data and Voice Horizonal Cabling
274000	General A/V Systems Requirements
274116	Classroom AV Systems
274119	Multipurpose AV Systems
275116	Public Addressing Systems
275300	POE Clock System

DIVISION 28 .. ELECTRONIC SAFETY AND SECURITY

281300	Access Control
281350	Entry Video Intercom
281600	Intrusion Detection
282300	Video Surveillance
283111	Digital, Addressable Fire-alarm System

DIVISION 31 .. EARTHWORK

311000	Site Clearing
31200	Earth Moving

DIVISION 32 .. EXTERIOR IMPROVEMENTS

321216	Asphalt Paving
321313	Concrete Paving
321373	Concrete Paving Joint Sealants
321723	Pavements Markings
321726	Tactile Warning Surfacing

323113	Chain Link Fences and Gates
323300	Site Furnishings
329113	Soil Preparation
329200	Turf and Grasses
329300	Plants

DIVISION 33 .. UTILITIES

330500	Common Work Results for Utilities
331415	Site Water Distribution Piping
334200	Stormwater Conveyance
334600	Subdrainage

SECTION 00025

Project: Mt. Hope School

Owner: Lansing School District

519 W Kalamazoo St Lansing, MI 48933

Architect/Engineer: C2AE

106 W. Allegan St. Suite 500

Lansing, MI 48933

Construction Manager: The Christman Company

208 N. Capitol Avenue Lansing, MI 48933-1357

517-482-1488

Sealed proposals for all work categories as described in the Project Manual for the above project will be received no later than **Thursday, August 3, 2023 at 2:00 PM**. Proposals must be received at the Lansing School District Purchasing Office, ATTN: Jon Laing, 519 W, Kalamazoo St., Room 208, Lansing, MI. The Lansing School District will not consider any late, faxed or electronic mail bids. Bids will be opened publicly and read aloud. All bids must be presented on the forms provided in the construct documents.

Duplicate proposals shall be submitted on the proposal form provided, in a sealed envelope clearly marked **WORK CATEGORY NO.____**, and shall be identified with the project name and the bidder's name and address.

There will be a **virtual pre-bid conference on Thursday**, **July 13**, **2023 at 1:00 PM** conducted by the Construction Manager. It is strongly recommended that contractors attend the pre-bid conference. The link to the virtual pre-bid conference is below.

Microsoft Teams meeting

Join on your computer, mobile app or room device

Click here to join the meeting Meeting ID: 285 576 889 072

Passcode: LsRPy2

Contract documents can be obtained by visiting the School District's Purchasing website (www.lansingschools.net), the State of Michigan's SIGMA Vendor Self Service website (https://sigma.michigan.gov) or the Builder's Exchange website (www.bxlansing.com).

All questions are to be directed to the Construction Manager. No direct contact with the Owner or Architect is requested. **All questions need to emailed to projects@lansingschools.net** no later than 7/25 at 5:00pm.

All bids must be accompanied by a sworn and notarized Familial Relationship Affidavit and a certified check, cashiers' check, money order, or bid bond made payable to The Christman Company in an amount not less than five percent (5%) of the base bid as a bid security. The Bid Security of Bidders under consideration will be returned immediately after award of contracts by the Construction Manager. The amount of the guarantee shall be forfeited to the Owner if the successful Bidder fails to enter into a contract and furnish required bonds and insurance within 30 days after award of contracts.

All proposals submitted shall remain valid for a period of sixty (60) days after the bid date. The Owner, Architect and Construction Manager reserve the right to waive any irregularities, reject any or all proposals, or accept any proposal, which, in their opinion, will serve their best interest.

All contractors bidding on work must be bondable and must include in their bid the cost for furnishing a Co-Obligee Labor and Material Payment Bond and a Co-Obligee Performance Bond. On the proposal form the contractor will identify a cost to be **added** to their base bid should bonds be required.

END OF SECTION 00025

ARTICLE 1, SCOPE OF PROPOSALS

- 1.1 This is a "Construction Manager Project" for which The Christman Company is the "Construction Manager" For this portion of this project the successful bidders will become "Trade Contractors" and will enter into "Trade Contracts" with the Construction Manager. The Construction Manager will administer separate Trade Contracts for all Work Categories involved in the project. The project will be controlled, coordinated, and scheduled by the Construction Manager on behalf of the Owner.
- 1.2 Provisions shall be such that the Trade Contractor will assume the Construction Manager's obligations to the Owner for the portion of the work performed by each Trade Contractor.
- 1.3 Proposals: Separate proposals for the Work Categories included in this phase of the construction will be received by the Construction Manager. The time and place where proposals shall be received and a listing of the Work Categories included in this phase of the work are included in the Advertisement for Bids.

ARTICLE 2, BIDDER'S REPRESENTATION

2.1 Each Bidder by making his bid, represents that he has read and understands the bidding documents, and that they visited the site and familiarized himself with the local conditions under which the work is to be performed. No plea of ignorance of conditions that exist, or of any other relevant matter concerning the work to be performed in the execution of the work will be accepted as justification for failure to fulfill every detail of all the requirements of the Contract Documents. The Bidder, if awarded the Contract, shall not be allowed any extra compensation by reason of any matter or thing concerning which such Bidder did not fully inform himself prior to the bidding.

ARTICLE 3, BIDDING PROCEDURES

- 3.1 Proposals shall be submitted in duplicate, only on the forms provided by the Construction Manager, all blank spaces shall be fully filled in, including Addenda, Alternates, Price Breakouts, Unit Prices and Bidder's Certificate where applicable. All designations and prices shall be fully and clearly set forth with the amount of the bid stated in words and repeated in numerical figures. In cases of variations, the worded amount shall prevail. Erasures or other changes in the bid shall bear the signature of the Bidder. Insert N/A in those blanks on the Proposal Form that are not applicable. Separate Proposal Forms shall be prepared for each Work Category.
- 3.2 The bids shall be on the basis of a Lump Sum. Proposals shall not contain any added recapitulation of the work to be done as otherwise the proposal may be declared irregular. Oral, telegraphic or telephonic modifications of the work and/or the bid amounts shall not be considered.
- 3.3 The Architect or Construction Manager will make clarifications and corrections by the issuance of an addendum to all Bidders recorded in the Construction Manager's office as having in their possession a set of bidding documents. Addenda shall also be issued to all plan rooms in which bidding documents are on file.

- 3.4 It shall be the responsibility of the Bidders on record to provide all of their prospective subbidders with the information contained in any addenda.
- 3.5 Duplicate proposals shall be submitted in an opaque envelope, clearly marked "PROPOSAL FOR WORK CATEGORY NO. _____, and shall be identified with the Project Name and the Bidder's name and address.
- 3.6 Proposals for this phase of the work will be received at the time and place indicated in the "Advertisement for Bids".
- 3.7 An award of Contracts: Each Work Category or combination of Work Categories will be awarded based on the dollar value of the proposal, qualifications of the Contractor, his ability to perform the work, and in the best interest of the Owner.

ARTICLE 4, EXAMINATION OF THE SITE

- 4.1 Each Bidder shall carefully examine the site of the project and surrounding territory; the means of approach to the site, and the structure of the ground, and make all necessary investigations required to inform himself thoroughly and fully as to facilities for delivering, storing, placing and handling of materials and equipment, and to inform himself fully as to all difficulties that may be encountered in the complete execution of all work in accordance with the Contract Documents.
- 4.2 Should a bidder find apparent discrepancies in, or omission from the Contract Documents, or should he be in doubt as to their true meaning, or should he have any questions regarding any work or material intended, then such Bidder, either Trade Contractor or Trade Subcontractor, shall submit to the Architect, through the Construction Manager, a written request for an interpretation thereof. The person submitting the request shall be responsible for its prompt delivery and such request must be delivered to the Architect by the Construction Manager at least five days before the opening of proposals.
- 4.3 Any verbal information obtained from, or statements made by a representative of the Owner, Architect, or the Construction Manager at the time of examination of the Contract Documents or Site shall not be construed as in any way amending the Contract Documents. Only such corrections or addenda as are issued in writing to all Bidders shall become a part of the Contract. Neither the Owner, the Architect, nor the Construction Manager shall be responsible for verbal instructions.

ARTICLE 5, MODIFICATION OR WITHDRAWAL OF BID

5.1 Bids submitted prior to the time and date designated for receipt of Bids may be modified or withdrawn only by notice to the party receiving Bids. Such notice shall be in writing over the signature of the Bidder, and must be received prior to date and time set for receipt of Bids. Any modification shall be so worded as not to reveal the amount of the original Bid.

ARTICLE 6, REJECTION OF BIDS

6.1 The Bidder acknowledges the right of the Construction Manager, Architect, and Owner to reject any or all bids, and to waive any informality or irregularity in any bid received, or to accept any bid which in the opinion of the Construction Manager, Architect, and Owner shall serve their best interests. In addition, the Bidder recognizes the right of the Construction Manager, Architect, and Owner to reject a bid if the Bidder failed to submit on the date and time required by the bidding documents, or if the bid is in any way incomplete or irregular, including a bid security, if required, is not received with the bid proposal.

ARTICLE 7, PERFORMANCE CO-OBLIGEE BOND AND LABOR & MATERIAL PAYMENT CO-OBLIGEE BOND OWNER AND CONSTRUCTION MANAGER

- 7.1 The Construction Manager may, prior to the execution of the Contract, require the successful Bidders to furnish Co-obligee bonds, written in favor of the Owner and the Construction Manager, covering the faithful performance of the Contract and the payment of all obligations arising thereunder in an acceptable form to the Owner and the Construction Manager, and with such sureties secured through the Bidder's usual sources as long as the surety is licensed to do business in the State of Michigan and holds a minimum "A.M. Best" rating of A. Bonds shall be in the amount of 100% of the Contract sum. The premium for such bonds shall be paid by the Bidder. A space has been provided on the Proposal Form for the Bidders to indicate the amount that shall be deducted from their proposals if Bonds are not required. Should they be required, the Bidder shall deliver the bonds to the Construction Manager not later than the date of execution of the Contract.
- 7.2 The Bidder shall require the attorney-in-fact who executes the bonds on behalf of the surety, to affix thereto a certified and current copy of his power of attorney indicating the monetary limit of such power.

ARTICLE 8, VARIATIONS FROM MATERIALS SPECIFIED

8.1 Wherever materials are specified using names of specific manufacturers, the purpose is to establish a standard of quality and design, and not to limit competition. Contractors desiring to use materials of manufacturers other than those specified, shall indicate such material, manufacturer, and change of price, if any, in the space provided under the heading "Variations from Materials Specified" on the Proposal Forms. BASE BID PROPOSALS SHALL INCLUDE ONLY MATERIALS SPECIFIED. Variations, if accepted, shall be incorporated in the Contract, and the Contract Price adjusted accordingly, and no other materials shall be allowed accept upon written authorization of the Architect, Construction Manager, and Owner.

ARTICLE 9, THE CONTRACT FORM

9.1 Unless otherwise provided in the Bidding Documents, the Agreement for the Work shall be between the Trade Contractor and the Construction Manager on the contract form referenced in the Standard form section of the Project Manual (The Christman Company

subcontract agreement). By submitting your bid the Trade Contractor fully agrees to accept <u>ALL</u> terms and conditions of The Christman Company Subcontractor Agreement without modification.

ARTICLE 10, TIME OF COMPLETION

10.1 Each Bidder, as evidenced by submitting a proposal, shall agree to abide by the construction schedule dates as indicated in the Contract Documents, as developed during the post bid interview, scheduling meetings, and as required by Construction Manager. The completion schedule for this project shall be met without exceptions.

ARTICLE 11, QUALIFICATION OF BIDDER

11.1 The Owner, Architect, and Construction Manager may make such investigations as they deem necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish all such information and data for this purpose as the Construction Manager may request within 24 hours, including a list of projects completed, a financial statement, organization of the firm, etc. The Owner reserves the right, based on the advice of the Construction Manager and Architect, to reject any bid if the evidence submitted by, or investigation of such Bidder fails to prove that such Bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein.

ARTICLE 12, TAXES AND CONTRIBUTIONS

12.1 It is understood that the bid prices stated shall include all applicable Federal, State or other Governmental Division taxes and assessments. Also, all contributions for unemployment compensation, health and welfare, old age benefits or other purposes now or hereafter effective during the term of the contract, and the Owner and Construction Manager shall not be liable for any additional charges therefore.

ARTICLE 13, WARRANTY

13.1 All work shall be guaranteed for a period of at least two (2) years and/or as more specifically stated in the contract documents after final payment but not earlier than substantial completion as determined by the Architect, and all service within that period shall be rendered without charge to the Owner.

END OF SECTION

The Construction Manager will be located at 208 N. Capitol Avenue, Lansing, MI 48933-1357 for questions regarding this Bid Package. Any questions regarding information contained in this Project Manual will be answered following a written request to the Architect through the Construction Manager, and clarified in an addendum. Under no circumstances should any prospective bidder call the Owner or Architect for clarification of the Bidding Documents.

00202 - AIA CONTRACT FORMS

Sample AIA Documents are available for review and reference in the Construction Manager's Main Office.

00203 - AIA STANDARD FORM FOR GENERAL CONDITIONS

AIA Document A201\2007, "General Conditions of the Contract for Construction as modified for this project," is available for review at the Construction Managers Main Office.

00204 - GEOTECHNICAL INVESTIGATION

- 1. A geotechnical investigation report has been prepared for the site by a geotechnical consultant.
- 2. Copies of the geotechnical investigation report are available for review at the offices of the Construction Manager.
- 3. The Contractor is cautioned that the geotechnical investigation report was prepared during early preliminary design stages, and as such, references to elevations, dimensions, loadings, quantities and the like, may not coincide with the building as designed. The Contractor shall coordinate between the geotechnical investigation report and the contract documents.
- 4. Site Information: Data on indicated subsurface conditions are not intended as representations or warranties of accuracy or continuity between soil borings. It is expressly understood that the Owner and Architect will not be responsible for interpretations or conclusions drawn therefrom by the Contractor. Data are made available for convenience of the contractor.
- 5. Additional test borings and other exploratory operations may be made by Contractor at no cost to the Owner.

00205 - PRELIMINARY CONSTRUCTION SCHEDULE NARRATIVE

 Time is of the essence on this project. The Project sequencing will be scheduled by the Construction Manager and must be adhered to by all Trade Contractors. Time, labor, material, equipment and possible cost implication of this sequencing and others not fully conceived or described prior to the time of bidding, shall be included in base bid.

A preliminary schedule is included for reference only. It is emphasized that start dates for work may shift. The bidder shall familiarize himself with expected

- maximum durations and shall include in his proposal sufficient manpower to meet these requirements. All milestone dates are approximate and are to be used as guidelines for the Trade Contractor's basis for bid.
- 3. It is the Trade Contractor's responsibility to establish which items of work within the scope of his work category will be affected by the Owner's or other Trade Contractors operations and coordinate and schedule completion of his work accordingly at no cost to the Owner.

END OF SECTION 00200

The Work Category (W.C.) Description is included as a guide for Prospective Bidders to summarize the scope of work involved with the work category. The description included is **not** a final summary of the scope of work and should not be construed as such. **All** Contract Documents should be used, as a reference in preparing the Bid Proposal and any omissions in the proposal does not relieve the successful bidder of the responsibility to perform this work.

W.C. <u>No.</u>	Category Description ADDENDUM 2	Specification REVISED REVISED
02	Earthwork / Site Utilities	Division 00, Division 01, 024119, 111200, 311000, 312000, 329113, 329200, 330500, 331415, 334200, 334600
05	Site Concrete, Curbs & Paving	Division 00, Division 01, 031000, 032000, 033000, 079200, 321313, 321373, 321726
06	Bituminous Paving	Division 00, Division 01, 079200, 321216, 321723
80	Landscaping	Division 00, Division 01, 329113, 329200, 329300
10	Structural Concrete	Division 00, Division 01, 031000, 032000, 033000, 033543, 071113, 072100, 079200
11	Masonry & Stone	Division 00, Division 01, 042000, 071113, 072100, 072119, 078413, 079200, 079219, 083113
12	Structural Steel, Deck, Stairs/Misc Steel	Division 00, Division 01, 051200, 051213, 052100, 053100, 055000, 055213
13	Waterproofing	Division 00, Division 01, 072500, 072726
14	Roofing & Sheetmetal	Division 00, Division 01, 072100, 075423, 077100, 077200, 079200
15	Metal Siding/Roofing	Division 00, Division 01, 074213.13, 074213.23, 079200, 089119
18	Glass/Glazing & Aluminum Entrances	Division 00, Division 01, 078413, 079200, 083613, 084113, 084413, 084523, 085113, 087100, 088000, 088716, 088813, 089119
20	General Carpentry/Millwork/Doors	Division 00, Division 01, 024119, 035113, 061000, 061700, 061800, 062023, 066400, 078413, 079200, 081113, 081416, 083323, 087100, 101100, 101200, 101416, 101419, 101450, 102113.19, 104413, 104416,

072100, 079200, 095113, 013
079200, 095113,
079200, 095113,
079200, 095113,
079200, 095113,
095113,
013
,
,
,
,
096513,
099114,
099114,
079200,
079200,
331415
078413,
Division
330500,
550500,
070440
078413,
sion 27,

ADDENDUM 2 REVISED

Work Category No. 00 - General Requirements for All Subcontractors

Work Included:

- I. All permits, fees, inspections and approvals required by governing jurisdictions are included within base bid. Coordinate well in advance (at least 24 hours), required inspections and testing with the Construction Manager. This will include liaison between state and local agencies to ensure code compliance and for securing approval for the facility.
- 2. Excessive noise and vibration creating equipment shall be prohibited within close proximity of existing Structures/Buildings or occupied spaces. All proposed equipment scheduled for project shall be reviewed with the Construction Manager prior to delivery onsite.
- 3. Cleanup is required on a daily basis, and/or as directed by the Construction Manager. Cleanup dunnage, shipping materials and associated materials/debris generated from installation and dispose of properly. At no time will shipping containers, crates, materials, piles of debris, tarps, boxes, etc. be left on site, unattended and unsecured, subject to unsafe conditions (i.e. access, fire and slip hazards and wind blown debris).
- 4. At least two (2) weeks prior to starting on-site, meet with the Construction Manager, Architect and Engineer to discuss and resolve any issues relating to status of material procurements, site conditions, access, staging/storage requirements, safety, testing, sequencing and scheduling of work.
- 5. Any work that could interfere with existing owners operation, i.e. use of certain roads, parking lots, access to buildings, shall require pre-task planning with the Construction Manager and shut-down notification requests shall be prepared (72) hrs in advance of any work being scheduled. Pre-task planning shall review and discuss scheduling, coordination with Owner operations, working durations, safe practices and procedures.
- 6. Protect existing structures, equipment, and finishes, including new work in place, from damage during the performance of this work category. Any protection removed to facilitate other work shall be reinstalled / replaced by the trade needing access.
- 7. Include all layout and engineering for each work category. Unless otherwise indicated in Section 00210, two control lines and one bench mark will be provided by the Construction Manager for Trade Contractor use.
- 8. Prior to commencing with installation, verify all field conditions and measurements and report any discrepancies to the Construction Manager.
- 9. Whenever possible all embeds to be furnished to other trades shall be fabricated / modified by the providing contractor with holes / tabs, etc to allow easy for installation by the installing contractor.
- 10. Provide full-time on-site supervision during the performance of your work. Supervision will be responsible for coordination, scheduling, safety, manpower, and other activities necessary to achieve safety, quality and scheduling requirements set forth under this work category. Supervision shall not be removed from this project without prior written consent and approval of the Construction Manager.
- II. Full compliance with all site specific rules and regulations, including (but not limited to) OSHA, State Authorities, Local Authorities, and the Construction Manager. This subcontractor shall submit, prior to performing any work on-site, a copy of their site specific safety program/manual.

CHRISTMA

Mt. Hope School Lansing, Michigan

- 12. Attend Construction Manager's daily morning huddles. All trades on site will be required to have their foreman attend. Huddles will take place at the beginning of each workday. Huddles are mandatory and will last approximately 15 minutes each day.
- 13. Should Subcontractor require on-site trailer or storage units, Subcontractor shall obtain approval from the Construction Manager on size, count and where to locate, prior to delivery on-site. Subcontractor to arrange and pay for service to trailers, including (but not limited to) electrical, phone, etc.
- 14. For material deliveries, if traffic control is required, Subcontractor to arrange manpower accordingly and provide signage, barricading, flagman etc., necessary for the safe performance of own work and protection of the public. Staging, storage on-site, and all deliveries required to support this installation must be reviewed and approved in advance by the Construction Manager.
- 15. Furnish and receive all required materials and deliver FOB jobsite. All deliveries shall be closely coordinated with the Construction Manager and 72 hour advance notice shall be given prior to delivery. Unless noted otherwise, deliveries must be coordinated to be complete with unloading during normal working hours.
- 16. This subcontractor will receive and handle all respective material and properly store/protect before, during and after installations. Excessive and out-of-sequence deliveries will be prohibited and subject to re-handling and removal offsite as directed by the Construction Manager.
- 17. Unless noted otherwise in Section 00210, furnish all hoisting, lifting, scaffolding, and handling to complete your own work.
- 18. Hoisting of materials and equipment over occupied areas will not be permitted, unless areas below are vacated or occupancy access is controlled during lifting. Each subcontractor will be required to notify Construction Manager seven (7) days in advance of required hoisting over occupied areas. Pre-Task planning and shut-down notifications will be required to assure minimum interruptions to Owner operations. In general, any hoisting equipment required to be used on-site must be reviewed in advance with Construction Manager for coordination of site logistics, safety procedures (including FAA approvals if required), access, lift swing areas, duration and overall activities relating to this hoisting equipment.
- 19. Approved O&M manuals are required at least 2 weeks prior to equipment start-up, start of warranty, and Owner training, but no later than thirty (30) days prior to substantial completion.
- 20. In the event of any jurisdictional or labor issues, the subcontractor assigned the work shall arrange to complete all work as required to avoid any interruptions/continuity of work on this project at no additional cost. All labor requirements pertaining to the project will be met.
- 21. Cooperate fully with representatives from Architect, Engineer, Owner, Construction Manager and independent testing agency, and allow for in progress inspections, including providing access to areas of work, when required.
- 22. This project may require multiple phases, which will require re-mobilization. All costs for multiple phasing shall be included.
- 23. Each Trade Contractor shall assume full responsibility for all pre-ordered products after their arrival at this designated location. This includes transportation, storage, start-up, warranty services, and installation in accordance with the General Conditions unless otherwise specified.

24. Critical Scheduling and Sequencing of Work:

The Construction Manager shall provide overall scheduling and coordination for the entire project. All Trade Contractors shall acknowledge the Construction Manager's right to establish and set up, or subsequently modify the sequencing and scheduling of all work on this project for the earliest completion and/or benefit to the Owner. More restrictive sequencing to coordinate the Owner's ongoing operations and/or for the coordination of the various trades shall be spelled out by the Work Category descriptions or as otherwise directed by the Construction Manager. All Trade Contractors agree to cooperate and alter their operations to maintain these more specified restrictions and sequences of the work.

- A. Subcontractor agrees to work concurrently with other subcontractors and the Construction Manager, according to the Master Project Schedule.
- B. Subcontractor shall confirm fabrication lead times, installation durations and sequencing for their Work in writing within two weeks of award, and report any discrepancies to Construction Manager.
- C. Scheduling updates and proper coordination and communication with other trades shall be accomplished as follows:
 - Weekly sub-progress meetings
 - Safety meetings, BIM meetings, scheduling meetings, pre-installation meetings, etc.
- 25. Construction Waste Management And Disposal Review Spec Section 017419 Construction Waste Management And Disposal
- 26. General Commissioning Requirements Review Spec Section 019113 General Commissioning Requirements.
- 27. Indoor Air Quality Management Plan During Construction. Comply with site specific IAQ Management Plan for this project.
- 28. The worksite is a tobacco free site, including inside any personal or company vehicles/trailers on Lansing School District property.
- 29. No food or drink will be permitted within the building once concrete has been installed. Drinking water is an exception and will be allowed.
- 30. Site fencing, gates, etc. must remain closed at all times. If utilized for deliveries it must be closed after each delivery.
- 31. Gang boxes will not be allowed in any area where finish flooring, ceramic tile and/or painting is in progress.
- 32. All materials within the footprint of the building (after the building has been enclosed and concrete floor poured) must be stored on pallets or movable rubber wheeled carts. The intent is all materials, equipment, etc. to be easily movable at all times.
- 33. Reference Scope Clarification Diagrams which can be found directly after the Work Category descriptions.

End of Work Category No. 00

Proposal Section Work Category Description

Work Category No. 02 - Earthwork and Site Utilities

Work Included:

The subcontractor shall timely perform all Earthwork and Site Utility work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Demolition and clearing/grubbing of the entire site, including, but not limited to, the removal of trees, tree roots, stumps, topsoil removal, vegetation and deleterious materials as shown or specified, hard surfaces, fences, handrails, retaining walls, posts, gates, signs, etc. Includes all labor, material, accessories, and equipment for a complete installation.
- 2. Provide all utility demolition as shown or specified including, but not limited to water lines, fire lines, concrete pipe, hydrants, backflow preventors, sewer and storm cleanouts, pipe, and manholes, irrigation pumps, monitoring wells, access ports, etc.
- 3. Provide all necessary items for complete construction and relocation of the water systems to within 5' of the building as shown or specified including all associated structures, manholes, pressure testing, bacteria testing, flushing, drain basins, meters, backflow preventors, wet taps, temporary piping, valving and capping in existing piping for permanent and final connections, demolition and re-working of existing (as called out per the plans), concrete thrust blocks and restraints, inspections, testing and certifications, and all agency fees and agency work as required.
- 4. Furnish and install all piping, structures and accessories required for the performance of the storm and sanitary work to within 5' of the building as shown or specified including all associated structures, as required. Clean the systems upon completion of the work and prior to acceptance by the Owner. Include final adjustment of structures to match final grades. Include underground basin.
- 5. Provide all mass excavation, grading, compaction, backfill, berms and off-site borrowed fill to final subgrade elevations as shown or specified, including backfill required around the building foundations, foundation walls, retaining walls, sidewalks, curb and gutters, drives, asphalt paving, etc. This is to include all rough and final grading to +/- 0.1'. All unsuitable soils and materials shall not be permitted to be stockpiled and must be removed on a daily basis.
- 6. Coordinate and develop soil erosion plan with the Construction Manager for submission to appropriate jurisdiction. Furnish and install soil erosion control measures as shown and/or specified. Maintain soil erosion control measures during the course of this project. Remove erosion control and clean all catch basins and/or pipe as required at completion of project. All inspection logs to be copied directly to the Construction Manager and copies shall be kept within a soil erosion control manual, located within the Construction Manager's trailer.
- 7. Provide all cutting, patching and repairs by a qualified person as required of existing roadways, landscape areas, paving, hardscape, etc. disturbed by this scope of work.
- 8. Provide all required tree protection, sedimentation and water pollution control shown, specified or necessary to perform the work in this package or the work of others, including maintenance and removal upon completion and acceptance of work by the governing agency.

Proposal Section Work Category Description

- 9. Provide all dewatering (ground and rain water) as necessary until final grade and complete and operational storm system is available. All ground water will be diverted so as not to interfere with construction or public traffic flow and the operations of the existing facility. All drainage inlets shall be protected as specified. Maintenance of dewatering system to be considered a 24 hour/7 day week assignment.
- 10. This subcontractor shall participate in all coordination meetings (internal and meetings with local agencies and those having jurisdiction) concerning the relocation of existing utilities so as not to impact the existing facility operations. Include temporary utilities and provisions as necessary to allow relocation of existing utilities without interruption of service to existing facilities. This contractor to provide for temporary support and protections for any existing utility or other piping encountered during performance of this work. Include verification of existing utility locations prior to excavations, and monitoring during excavation and backfill.
- 11. Provide all right-of way permits/bonds, etc. as required by city, county, and state agencies relative to the work within this package.
- 12. Prior to any imported soils entering project site, provide material analytical soils reports and documentation that material is free of contaminants/hazardous materials.
- 13. Clean roads and staging areas of any tracking dirt or debris generated during site clearing, excavation, earth retention, foundations/slab-on-grade and caisson activities as necessary or as directed by the Construction Manager. Dust control and street cleaning on a regular basis as job conditions require.
- 14. Furnish and install all under-drain/foundation/footing drainage systems as shown and specified.
- 15. Strip and stockpile topsoil for re-use. Re-spread topsoil to within specified tolerances, upon completion of rough grading. Large clumps of dirt and stones shall be removed from topsoil. Provide and install any additional topsoil needed to bring grades to within +/- 0.1'.
- 16. Where existing asphalt paving is removed for new utilities, place compacted aggregate base to bottom of asphalt for asphalt patch by others. If asphalt cannot be patched immediately, place aggregate to top of adjacent asphalt. Remove additional aggregate at such time when asphalt can be placed.
- 17. Final tie-ins of all water/storm/sanitary sewer mains will be the responsibility of this Work Category. Hydro excavating is required at tie in points to utilities.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- Some SESC measures will already be in place from building demolition contractor. This WC to maintain
 existing SESC measures already in place. Provide and install any additional SESC measures needed including
 any new permits needed.
 - A. C-101 calls for new silt fence to be provided and installed behind existing curb prior to removal and construction of perimeter sidewalk.
- 2. Getting the SE parking lot installed as soon as possible is a high priority as this will be used for trailers, laydown, and parking. Intent is to install subbase and use that for temporary parking lot/laydown. The WC will need to come back before asphalt is installed to replace, regrade and add any additional subbase needed as a result of the temporary parking/laydown. Reference logistics plan.
- 3. Protect existing utility structures, underground utilities and property corners as shown.
- 4. Sidewalk demo around the perimeter of the site along with road, curbs, etc. demo will be outside the

Proposal Section Work Category Description

construction fencing. This WC responsible to provide barricading as needed to perform this demo and will leave barricading in place until installation is complete.

- 5. Provide and install drain tile and gravel fill at freezer and cooler slabs.
- 6. Provide and install barrier gates including but not limited to operator, concrete footing, gate, controller, vehicle detector, etc. for a complete installation.
- 7. Provide and install subgrade base under asphalt and concrete including but not limited to aggregate, 21AA crushed limestone, class II sand, granular backfill, etc.
- 8. Provide and install chain link fence including all accessories needed for a complete installation. Multiple mobilizations will be needed as posts are to be installed prior to maintenance strip and fencing installed after. Concrete footings for fencing by WC 05.
- 9. Provide excavation and backfill for mockup wall foundation/footing (roughly 10-15' long). This WC is responsible for demoing the mockup foundation/footing at end of the project.
- 10. Provide and install temporary crane pads and drives. Remove drive and crane pad when directed by Construction Manager and restore grades to their original grades or as shown on drawings. The crane pad shall be constructed and maintained as a flat level work platform suitable for heavy cranes. Confirm size, length and location with trades utilizing cranes. To be funded from this WC's allowance.
- 11. This subcontractor will establish a concrete wash out area, maintain, remove and properly dispose of concrete washout materials offsite periodically or as directed by the Construction Manager.
- 12. Provide and install yard hydrant vault, hydrant, supply line, drain, and hose for a complete installation (Detail 33/C-503).

Related Work by Others:

- I. Landscaping by WC 08.
- 2. Sythetic turf, sand infill, aquaflow backing, aggregate base and nailer board per detail 10/L-500 by WC 08. This WC (02) responsible for "natural soil surface".
- 3. Boulder retainage walls including perforated pvc and aggregate base by WC 08.
- 4. Refer to Sections 00210 and 01019 for testing requirements and responsibilities.
- 5. Imported topsoil to be furnished and placed by WC 08. Topsoil will be raked by WC 08 as required. This WC (02) is responsible for getting topsoil grading to +/- 0.1' before WC 08 takes over.
- 6. Final connection of utilities (sewer, water and gas) from 5' outside of building and all work inside of the building by W.C. 26, 27, and 28.
- 7. Mechanical and electrical contractors will perform excavation, backfill, compaction and removal of spoils within the building, as needed.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$80,000. Reference Section 01020 for specific instructions on allowances. Intent of this allowance is to relocate existing SESC measures as needed and replacing unsuitable soils if necessary.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work,

Proposal Section Work Category Description

insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

End of Work Category No. 02



Work Category No. 05 - Site Concrete

Work Included:

The subcontractor shall timely perform all Site Concrete work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish and install all cast-in-place concrete as shown and/or specified including but not limited to sidewalks, curbs and gutters, concrete stairs, concrete paving, concrete planters, bollards, frost walls, and supported slabs. Includes all labor, material, accessories, and equipment for a complete installation.
- 2. Furnish and install joint sealants, curing agents, sealers, and/or expansion joints at curbs, sidewalks, and concrete paving. Protect work until sealants have cured.
- 3. Complete fine grading and compaction under all walks, curbs, and gutters.
- 4. This work is to be coordinated during the same time period with Bituminous Paving and Landscaping.
- 5. Include all layout and engineering for this work category's scope. Two control lines and one bench mark will be provided by the Construction Manager for Trade Contractor use.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. Furnish and install concrete sphere bollards and all accessories for a complete installation including but not limited to steel pipe, threaded inserts, caulking, and foundations.
- 2. Install slabs at entrance slabs. WC 10 will install slab foundation walls including vertical rebar.
- 3. The curbs around the parking lot will be installed early on in the project so the parking lot can get gravel right away to use for laydown and trailer.
- 4. Provide and install tactile/detectable warning surfaces.
- 5. Provide and install concrete foundations for all site features including but not limited to bike racks/loops, benches, lights, signs, retaining walls, canopies, fences, shade structures, owner furnishings, bollards, etc?

Related Work by Others:

- 1. Refer to section 00210 and 01019 for testing requirements and responsibilities.
- 2. Subbase material installed to +/-0.1' by W.C. 02.
- 3. Parking lot light pole foundations by LBWL.
- 4. Structural Concrete by W.C. 10.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$20,000. Reference Section



Proposal Section Work Category Description

01020 for specific instructions on allowances. Intent of the allowance is to remove and replace sections of curb that get damaged in the parking lot that is installed early on in the project and used for laydown.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

End of Work Category No. 05



Work Category No. 06 - Asphalt Paving

Work Included:

The subcontractor shall timely perform all Asphalt Paving, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Including, but not limited to the following:

- I. Furnish and install all bituminous paving including, sealers, joint filler, etc. as indicated on the drawings and specifications. Includes all labor, material, and accessories for a complete installation.
- 2. Furnish all layout and controls for this work category by a qualified surveyor. This work category will be responsible for coordinating with WC 02 and WC 05 on all layouts, for this work category, throughout the duration of this project.
- 3. Saw cut and prepare edge for patch work/new work. Complete all patching of asphalt paving to match existing conditions in surrounding streets necessary for the curb cuts at new entrances and exits.
- 4. Coordinate installation of manhole and catch basin covers prior to installation of asphalt work, including all final adjustments of manhole and catch basin castings by WC 02.
- 5. Provide final grading and proof roll aggregate base for approval and acceptance prior to installing base course. Identify soft spots and bring to the attention of the construction manager. All repairs will be performed by WC 02.
- 6. Broom cleaning will be required between base and final course of paving.
- 7. Provide line striping and markings for finished project; complete all cleaning and layout required for pavement markings. This includes all site markings on asphalt and concrete (four square, basketball court, etc.). Include cleaning of hard surfaces before installing markings.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. Furnish and install parking signage.
- 2. Provide any flagging, signage and permit requirements for road work.

Related Work by Others:

- 1. Refer to Sections 00210 and 01019 for testing requirements responsibilities.
- 2. Gravel base material installed, including compaction, to within +/- 0.1' by WC 02
- 3. Final adjustment of catch basin castings by WC 02.
- 4. Concrete sidewalks, concrete paving, curb and gutters by WC 05.

Proposal Section Work Category Description

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$10,000. Reference Section 01020 for specific instructions on allowances. Intent is for additional striping and signage the owner might want.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

End of Work Category No. 06



Work Category No. 10 - Structural Concrete

Work Included:

The subcontractor shall timely perform all Structural Concrete work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Refence Work Category Index

Work Category Notes:

- I. Furnish and install all cast-in-place concrete as shown and/or specified including but not limited to foundations, slab-on-grade, elevated slabs, elevated slabs on metal decks, tank structures, mud mats, caisson caps, equipment pads, and stair treads and landings.
- 2. Includes re-steel, waterstops, pre-molded joint filler, bonding agents, vapor barriers, perimeter foundation and below slab rigid insulation, grouting of structural steel leveling & base plates, expansion and control joints, floor sealers and hardeners, curing compounds, drilling and grouting of dowels, fine grading under slabs-on-grade.
 - a. Coordinate footings/foundation re-steel layout with WC II.
- 3. All grouting as shown and specified including pump/equipment bases, steel base plates, and grouting of steel beam floor reinforcing.
- 4. Includes installation of anchor bolts, embeds, dovetail anchors, floor doors, unitstrut, and sleeves embedded in structural concrete supplied by others. Coordinate and assist other trades in setting sleeves in formwork. WC 12 will perform an anchor bolt survey complete timely repair any deficiencies found prior to mobilization of the structural steel contractor.
- 5. Includes all forming, placing, finishing, reinforcement, finishing as required, setting, shoring, recesses for other work, dowels, manhole steps, epoxy adhesives.
- 6. Includes all required layouts for the performance of this W.C. All surveying necessary to establish proper layout and elevations are the responsibility of this work category.
- 7. Provide block outs for other trades as shown in contract documents and approved by the construction manager.
- 8. Furnish, install and maintain temporary winter protection/enclosures and heat for this work categories work activities. This includes fuel, equipment, maintenance and safety provisions to continue and complete this work in an uninterrupted manner, despite weather conditions.
- 9. Floor finish tolerances (i.e. flatness and levelness requirements) to be installed to meet requirements of specifications. Provide a concrete survey to confirm pours are within the specified tolerances prior to demobilization.
- 10. This contractor is responsible for the subgrade protection from frost, water, etc. once excavation for concrete is complete and forming is to proceed. This includes dewatering.
- 11. Furnish and install column isolations in slab-on-grade as shown. Remove form work, backfill and pour concrete around the columns after steel erection is complete. Provide temporary covers at each of these locations until the concrete is poured.



- 12. Provide engineered shoring system for supported cast in place concrete walls and formed supported slabs as specified, including all engineering of and installation of any required reshoring.
- 13. Provide safety guardrails for all formed supported elevated slab edges/openings and provide covers for all floor openings as required.
- 14. All concrete embedded items, which are furnished by others, shall be installed, received, inventoried, unloaded, handled and protected by this work category, i.e. Steel, Pre-cast and Curtain wall embedded items, inserts, anchor bolts, Elevator embeds, misc. iron embeds etc., shall be clearly marked and labeled per approved and previously provided erection drawings, and be appropriately delivered (FOB jobsite) to this subcontractor for installation.
- 15. Any saw cutting, grinding, chipping and patching work etc. generating concrete dust, shall be approved in advance by the Construction Manager. Dust control and safety procedures will be reviewed and enforced during this activity.
- 16. Clean metal deck of unidentifiable debris prior to placement of concrete.
- 17. Drill and epoxy dowels into existing concrete structures as required.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. This WC responsible for foundation walls at entrance slabs including vertical rebar that sticks out and will be bent into the slab. WC 05 will install entrance slabs.
 - A. This WC responsible for rigid insulation if required between slabs (example in detail 20/S-501 and 1/A-506).
- 2. Furnish and install all isolation material between this WC's concrete and WC 05's concrete (example is isolation material at entrance slabs on detail 6/S-501).
- 3. Provide and install insulated slabs including rigid insulation, vapor barrier, and blocking.
- 4. All interior slabs scheduled to be poured after masonry walls are installed. The roofing will be done after concrete slabs are poured to allow access from above for a concrete pump crane. The intent of this is to prevent the exposed slabs from being damaged during masonry construction and not done during winter months. This WC to protect walls from concrete splatter and clean concrete off walls if needed.
- 5. Include grading and compaction of sub-grade before concrete slabs are poured.
- 6. Provide and install all concrete at the exterior monument sign.
- 7. Provide and install concrete footings and foundations at the dumpster enclosures.
- 8. Provide and install polished concrete. A mockup is to be provided in a location TBD by Construction Manager of 3 different polish levels. Mock up sizing of each style to be 10'x10'. Include separate mobilization for polishing to be done at a later date than pouring operation.
 - A. Furnish and install floor protection at all polished concrete floors after concrete floors have been polished. Remove floor protection upon project completion.
- 9. Provide and install footings and foundations for an exterior wall mockup of reading nook A (roughly 10-15' in length). WC 02 to excavate, backfill and demo.
- 10. Provide and install concrete benches.



Related Work by Others:

- 1. Furnish anchor bolts and leveling bases by WC 12.
- 2. Concrete materials testing and periodic "in progress" field inspections by Owner. However, if excessive re-testing is required, this subcontractor will be assessed re-testing costs.
- 3. Foundation sub- drainage system by WC- 02.
- 4. Site concrete pavements & curb/gutter by WC 05.
- 5. Utility thrust blocks and concrete encasement of site electrical by WC 26, 27, & 28.
- 6. Building pad, sub base and sand cushion for slab on grade and walks by WC 02.
- 7. Cavity wall insulation by WC 11.
- 8. Reinforcing steel contained entirely within unit masonry by W.C. 11.
- 9. Embedded items in concrete furnished by others.
- 10. De-watering of all excavations to be performed by WC 02 until forming begins.
- 11. Perimeter draining by W.C. 02.
- 12. Concrete walk pads on roof supplied and installed by W.C. 14.
- 13. Foundation water/damp proofing by WC 13.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$15,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

End of Work Category No. 10

Work Category Description



Mt. Hope School Lansing, Michigan

Work Category No. 11 - Masonry

Work Included:

The subcontractor shall timely perform all Masonry work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes, including, but not limited to:

- I. Furnish and install all brick/masonry assemblies, stone assemblies, concrete masonry units, cast stone caps, necessary anchoring of unit masonry work to structural and miscellaneous steel, weeps, and vents. Includes all labor, material, accessories, and equipment for a complete installation.
- Furnish and install horizontal and vertical masonry wall reinforcement, anchors, flashing, bond beams, drip
 edges, insulation, fire safing (including perimeter of walls), top of wall plates, weep vent, cavity mortar
 diverter system, sealants, caulking, expansion joints assemblies and covers, compressible fillers, expansion
 joint fillers, and isolation material.
- 3. All through wall flashings shall be inspected by local building authority (if applicable) and Construction Manager prior to being concealed.
- 4. Receive and install all metal embedded lintels, masonry wall angle supports, bearing plates, anchors, steel lintels, counter flashing reglets, roof counter flashing, etc. as supplied by others to be installed in masonry. Includes final adjustment of items including where masonry walls abut metal deck or steel members.
- 5. Receive, handle, set and grout all hollow metal doors frames at masonry walls provided by others. For door frames required to be left out for access, leave oversized opening and tooth in masonry when directed by Construction Manager.
- 6. Furnish and install access panels if shown in masonry walls. Install all access panels in masonry as may be provided by others.
- 7. Cooperate and coordinate masonry Work with other trades for proper locations of rough-ins and penetrations thru masonry walls. Coordinate with structural steel contractor regarding location and size of tie-in points for steel bearing on existing masonry walls. Required preparation of openings including cutting of block, grouting of walls, and installation of bearing plates by this contractor.
- 8. Include sawcutting and necessary patching where the removal of brick is required for structural tie-in or for corridor penetrations. All saw cutting needs to be wet cut to help reduce dust.
- 9. Include all masonry, toothing (including selective demolition), and patching as required for new openings / frames in existing masonry walls. Demolition contractor will leave a rough opening.
- 10. This work category will be responsible for review/coordination of approved shop drawings such as the curtain wall system, door and window openings, etc, prior to work taking place. These documents can be obtained for review from the Construction Manager.
- 11. Provide required brick and stone samples as well as a mock-up wall as indicated in the specifications, to be reviewed and approved by the architect and owner prior to construction starting for this work category.



- 12. Masonry wall cavities and top of walls shall be covered and protected each day.
- 13. Furnish, install and maintain temporary winter protection/enclosures and heat as required for proper installation of this contractor's work. This includes fuel, equipment, maintenance and safety provisions to continue and complete this work in an uninterrupted manner, despite weather conditions.
- 14. Clean and wash all masonry and stone as specified and in accordance with approved sample. Protect any finished products from the cleaning agents.
- 15. Protect any new and/or existing adjacent surfaces, including from overspray of insulation and mortar droppings.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. Provide and install ALL spray foam insulation (even where not applied on masonry). This might require additional mobilizations.
- 2. Include masonry scope at monument sign.
- 3. Grout cavities solid below flashing at masonry walls.
- 4. Provide and install rigid insulation wedge at masonry walls (example detail 2/A-506).
- 5. Spacing between the building fascade and temporary fencing on the west and south sides of the building is minimal. This WC to account for that and include any measures needed for getting this work done within the space provided.
- 6. Provide and install flashing, primer and seimic clips added in addendum 1. Reference details 8 & 9 on A-502 for examples.

Related Work by Others:

- 1. Foundation insulation and damp proofing by WC 10.
- 2. Steel lintels and angles furnished by WC 12.
- 3. Water/Damp proofing by WC 13.
- 4. Installation of roof flashing (parapet caps) by WC 14.
- 5. Installation of Metal Coping by WC 14.
- 6. Hollow metal frames furnished by WC20.
- 7. Grouting of frames in metal stud walls by WC 20.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$10,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.





Work Category No. 12 - Structural Steel

Work Included:

The subcontractor shall timely perform all Structural Steel, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes, including, but not limited to:

- I. Furnish and install all structural steel, steel joists, floor decking, cellular floor decking, roof deck, miscellaneous metals, sump pans, ornamental metals, grating, steel stairs, ladders, cages, metal fabrications, sump pans, leveling plates, shear studs, pipe bollards, hand rails (interior and exterior), guardrails, etc., indicated by the contract documents (not just limited to the structural drawings) or as required for a complete installation, including labor, materials, equipment, adhesives, fasteners and accessories.
- 2. Furnish only all embedded items including, but not limited to, steel lintels, angles, stair nosings, anchor bolts, pipe bollards, etc., indicated by the contract documents (not limited to the structural drawings).
- 3. All specified coating for ferrous metals, galvanized metals, and aluminum are required and are the responsibility of this work category. Field touch up of shop paint as required. Shop preparation and painting of all structural and miscellaneous metals as indicated on the contract drawings.
- 4. Submittal of all required detailing to allow for architect/engineer review and approval, corrections, fabrication, and delivery without impacting the construction schedule.
- 5. Provide all necessary welding and mill certificates as required by the contract documents or as requested by the Construction Manager.
- 6. Field dimensions and measurements as required for this work. Prior to fabrication and erection contractor shall verify existing conditions and anchor bolt locations through means of a qualified surveying company to field survey the site and submit results to the construction manager for review. Any errors or discrepancies need to be identified in writing. Corrections will be made by the contractor responsible for the original installation. Cost for all field visits/surveying must be in proposal.
- 7. This contractor shall provide the construction manager with all necessary crane/hoisting information (size). This information will be used to prepare the site for the equipment mentioned by this contractor. Four weeks prior to site mobilization, meet with the Construction Manager, Architect and Engineer to discuss and resolve any issues relating to status of material procurements, site conditions, access, staging/storage requirements, material testing program and scheduling.
- 8. Temporary water and power will not be provided for the work of this subcontract. Subcontractors should make provisions for portable generators and welders as required to perform their work.
- 9. For areas shown to receive paint, intumescent paint, or spray-on fireproofing, this subcontractor shall ensure metal decking and steel framing is free of oils or any other materials that could jeopardize adhesion of spray-on fireproofing or paint.
- 10. Coordinate penetrations and related framing with other trades during detailing phase. Provide framing plans to mechanical for verification.

Proposal Section Work Category Description

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. Furnish long lead item submittals within 2 weeks of contract award. Materials to be ordered within 24 hours of receipt of approved submittals. The items must be procured and installed to keep schedule. Notify the Construction Manager in writing with bid proposal if there are any concerns.
- 2. Furnish and install all structural steel for the screenwall (metal panels by WC 15).
- At time structural steel is set, masonry walls will be built and concrete slab will not be installed. Please note this when determining installation methods.
- 4. Aid in layout/elevations of bearing plates and anchor bolts. Perform an anchor bolt and leveling plate survey prior to mobilization. Communicate any deficiencies found prior to mobilization to allow for remediation.

Related Work by Others:

- 1. Grouting of leveling or base plates by WC 10.
- 2. Temporary roads and maintenance of roads, and for delivery trucks to move under their own power.
- 3. Reference Sections 00210 and 01019 for testing requirements and responsibilities.
- 4. Finish painting of steel by WC 24.
- 5. Light gauge framing by WC 21.
- 6. In-fill of stair treads and landings by WC 10.
- 7. Installation of embeds furnished by WC 12.
- 8. Roof and floor hatches by WC 14.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$10,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

Mt. Hope School Lansing, MI

Work Category No. 13 - Waterproofing

Work Included:

The subcontractor shall timely perform all Waterproofing work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish and install all waterproofing, weather barriers, and air barriers. Includes all labor, material, accessories, and equipment for a complete installation including but not limited to surface conditioner or primers, liquid membranes, patching membranes, elastomeric sheets, metal termination bars, insulation, foam rods, tubes, protection board or fabrics, molded sheet drainage panels, insulation, joint sealants, tapes, sheet metal flashing and trim, moisture retention mat, and filter fabrics.
- 2. Prepare surfaces to receive waterproofing sealants as defined in the contract documents and in accordance with the manufacturers recommendations.
- 3. Cooperate and coordinate this work with other trades for a complete water, weather, and air tight assembly.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. This work category is responsible to seal all penetrations (i.e. pipe sleeves, duct banks, steel dowels, etc.) of the waterproofing membrane per manufactures recommendations.
- 2. Provide flexible flashing where blocking gets wrapped with it (example is detail 5/A-101A). WC 20 to install flexible flashing at these locations when installing blocking.
- 3. This work category is responsible for all mobilizations required for the duration of the structure construction.
- 4. This work category is responsible for proper winter protection of work when temperatures exceed limits of specified products in order to maintain project schedule and per manufacturer's recommendations.
- 5. This work category is responsible for the repair/replacement of work that is deemed deficient through inspection or testing.
- 6. Include foundation/footing waterproofing, damp proofing, etc.

Related Work by Others:

- 1. Concrete water stops by work category 10 concrete.
- 2. Concrete cants by work category 10 concrete.
- 3. Slab on grade vapor barrier by work category 10 concrete.
- 4. WC 22 to provide and install waterproofing at showers.

Mt. Hope School Lansing, MI Proposal Section Work Category Description

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$10,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

Proposal Section Work Category Description

Work Category No. 14 - Roofing & Sheet Metal

Work Included:

The subcontractor shall timely perform all Roofing & Sheet Metal work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish and install all roof shingles, membrane roofing, metal roofing, built-up roofing, roof insulation, roof expansion joints, roof hatches and accessories, gutters and downspouts, overflow scuppers, walkway protection, ballast, flashings, copings, gravel stops, reglets, termination bars, trim, sealants, ice and water shield, etc., indicated by the contract documents (not just limited to the roof plan) or as required for a complete installation, including labor, materials, equipment, adhesives, fasteners and accessories.
- 2. Include removal of perimeter fall protection system in conjunction with roofing installation.
- 3. Where perimeter details cannot be completed until the building skin is complete, provide preliminary weather protection (i.e. extend and secure membrane over parapet walls, if required).
- 4. Coordinate with mechanical contractor and steel contractor for installation of roof curbs for mechanical equipment and roof hatches.
- 5. Furnish all hoisting, lifting, and handling, etc. of materials as required for this W.C.
- 6. Provide broom cleaning of concrete and metal deck roof areas, just prior to installation of roofing systems, i.e. tracked dirt, unidentifiable debris.
- 7. All fire stopping, flashings, roof termination details shall be inspected and documented by Construction Manager prior to being covered up and concealed.
- 8. All specified warranty requirements shall be met by this W.C., including all costs of inspection and observation by manufacturer's representatives as required.
- 9. Subcontractor and manufacturer's representatives shall attend a Pre-Roofing Conference at the project site at a time determined by Owner, Architect, and the Construction Manager.
- 10. All materials and equipment shall be secured at all times for wind loads.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. Provide and install tectum decking. This WC to work closely with WC 20 on getting tectum deck installed and water tight as soon as possible after glulam beams are installed. Only so much tectum decking can get installed per day that can be made weather tight at end of the shift.
- 2. Provide and install roof hatch including all accessories for a complete installation. Ships ladder by WC 12.
- 3. Provide, install, and maintain safety flagging system on the roof per MIOSHA requirements for all contractors to use. Include two points of entry/egress (one from the roof hatch and one from the side of

Proposal Section Work Category Description

the building as directed by The Construction Manager). Remove flagging at project completion.

4. At time tectum decking is set, masonry walls will be installed and there will not be a slab on grade. Take this into consideration when determining installation methods.

Related Work by Others:

- 1. Prefabricated roof curbs for mechanical equipment to be furnished and installed by W.C. 27.
- 2. Wood blocking and wood nailers by others.
- 3. Roof sump pans, roof drains, overflow roof drains, roof stairs and ladders furnished and installed by others

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$15,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.



Work Category No. 15 - Metal Siding

Work Included:

The subcontractor shall timely perform all Metal Siding work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish and install all metal siding including but not limited to bent metal trim, drip edges, copings, furring, joint sealants, gaskets, integral louvers, gutters, downspouts, secondary support framing, shims, flashings, trim, and accessories.
- 2. Furnish and install pre-finished sheet metal closures, end panel extrusions, gravel stops, copings, panel flashings, stainless steel counter flashings, etc. Sheet metal copings over architectural pre-cast wall panels. Furnish and install above referenced sheet metal closures and trim that is in contact with metal wall panels & louvers for a complete watertight assembly, including required design and engineering.
- 3. This contractor to coordinate and cooperate with roofing subcontractor on locations of counter flashings, sheet metal closures & trim details, anchoring and other termination details, for a complete water tight installation.
- 4. Full coordination with other contractors to insure all penetrations through the metal siding are sealed completely.
- 5. Provide a color chart with the base bid to indicate which colors have been priced. Provide an alternate price for increased costs for custom colors and color samples for these colors.
- 6. All embedded items, i.e. masonry and pre-cast counter flashing reglets, shall be clearly marked/labeled per approved erection drawings, and appropriately delivered to assigned subcontractor responsible for installation of embedded items. 48-hour advance notification of embedded shipments will be required for proper coordination with others.
- 7. Promptly construct field mock-up sheet metal.
- 8. Properly protect adjacent roofing systems from damage, with rigid insulation and plywood, to avoid crushing tapered roof insulation. Coordinate temporary roof protection details with roofing subcontractor.
- 9. All flashings, roof termination details need to be inspected by the Construction Manager prior to being covered up and concealed.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- 1. Provide and install metal panel screen wall. Structural steel for screen wall system by WC 11.
- 2. All furring and fastening at all locations is required to be installed by this WC as necessary for complete installation of the metal panel assembly. This is to include all locations where furring is embedded in spray

Proposal Section Work Category Description

applied insulation where installation is required prior to spraying.

Related Work by Others:

- Independent Field Testing by Owner.
- 2. Steel frame and girts by WC 12.
- 3. Roof expansion joints and associated counter flashing by WC-14.
- 4. Flat roof by WC 14.
- 5. Wood blocking and plywood in contact with metal wall panels by WC 20.
- 6. Louvers not integral with metal wall panels, blank-off panels at louvers and metal louvers by WC 27.
- 7. Provide in advance, counter flashing reglets to pre-cast and masonry subcontractors, installation by others.
- 8. Roof sump pans, roof drains, overflow roof drains, lighting protection devices and cable, wall and roof anchors, davits, roof stairs and ladders furnished and installed by others.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of **\$0**. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

Work Category No. 18 - Glass, Glazing, and Aluminum Entrances

Work Included:

Complete all Glass, Glazing, and Aluminum Entrances work in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, etc.), Addenda, Specification Sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish and install all aluminum entrance, storefront, curtain wall system, windows, interior and exterior glass/glazing, and window systems complete as shown and/or specified. Includes all labor, material, accessories, and equipment for a complete installation.
- 2. Furnish and install all required fasteners, angles and supports required for complete installation of these systems.
- 3. Include all sealants related to this work required for a complete installation, including glass to aluminum, aluminum to aluminum to adjacent surfaces. Verify compatibility of sealants to surfaces.
- 4. Furnish and install aluminum covers, sills, mullions, trim, sill extensions, flashing and counter flashing etc. where aluminum systems abut other finishes and/or are shown to incorporate structural members or adjacent to the window/glazing systems.
- 5. Furnish and install all glazing at doors and lite frames provided by others. Includes removal, reinstallation, filler-putty and finish touch-up of glazing stops.
- 6. Furnish and install fire stop assembly where floors adjoin the curtain wall system and insulation incorporated into the curtain wall system.
- 7. Coordinate rigid insulation installation with roofing, floor firestopping, and floor anchors systems.
- 8. Coordinate flashing details with roofing subcontractor for water tight installation. All counter flashing details to be inspected and documented by Construction Manager, prior to being concealed.
- 9. Expansion joints integral with curtain wall systems are by Subcontractor.
- 10. Furnish and install metal panel in fills, integral with curtain wall & storefront systems.
- 11. Coordinate this work with structural, architectural and other related trades for thru-wall flashings, trim, closures, joint sealant work, and architectural finishes for a complete water tight assembly.
- 12. Complete shop drawings and sealed engineering calculations by licensed engineer showing compliance with specified design criteria.
- 13. Removal of all labels, stickers, markup, etc. from glass and final washing and cleaning of glass at or just prior to substantial completion. Replace glass damaged from heat absorption into glass from stickers not removed.
- 14. Construct field mock-up wall requirements. Expedite mock-up shop drawings and submittals for prompt review and installation, well in advance of installation. Field mock-up will be subject to independent air & water infiltration testing, performed by an Independent Testing Agency.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted

below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- 1. Furnish and install all window films and coverings.
- 2. Provide and install sectional doors including all accessories for a complete installation. Overhead coiling doors by WC 20.
- 3. A separate mobilization will be needed for the main entrance storefront framing, doors, hardware, etc. The goal is not install that system until the very end of the project to avoid possible damage as this will be the main way into the project site.
- 4. Provide and install all hardware associated with this WC's door assemblies including auto door operators. Manufacturer's rep is to review, approve and sign off on the installation of all door hardware before acceptance by TCC and the Owner.
- 5. Provide and install louvers at aluminum doors/frames.

Related Work by Others:

- I. Independent Testing Agency by Owner.
- 2. Window sills, rough carpentry, and wood and metal framing below sills by others.
- 3. Framed mirrors by WC 20.
- 4. At locations where wood doors are installed in aluminum frames, this WC responsible to furnish and install aluminum frames. Wood doors and door hardware to be by WC 20. Coordinate with WC 20 for installation and frame prep.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of **\$0**. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.



Work Category No. 20 - General Trades

Work Included:

The subcontractor shall timely perform all work as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Complete all exterior and interior Carpentry/Millwork (rough and finish) and various General Trades Work as noted within this Work Category, including all labor, materials and equipment required for a complete installation.
- 2. All exterior and interior rough and finish carpentry including counters, cabinets, trim, nailers, blocking and plywood sheathing.
- 3. Furnish and install all roof nailers, plywood sheathing and blocking. Furnish and install rigid insulation in concealed locations created by Subcontractor.
- 4. Furnish all embedded anchors and bolts for rough carpentry to masonry and concrete to be installed by others.
- 5. Furnish and install wood blocking, FRT, sheets, boards, plywood, etc. for required materials that are to be installed by this work category.
- 6. If in-wall backing/blocking is required by a specific manufacturer for products included as part of this Work, though not specifically shown within the documents, i.e. architectural millwork, handrails, wall trim, wall mounted toilet partitions, visual display surfaces, metal lockers, fire extinguisher cabinets, misc. accessories, etc., Subcontractor to furnish and install blocking for a complete installation.
- 7. Provide non-combustible wood blocking in walls for wall mounted accessories and equipment installed by Owner/others shown or specified.
- 8. Furnish and install doors, frames, and hardware.
 - Provide and install automatic door operators at doors provided by this WC.
 - Electric strikes, magnetic hold-opens, power transfer units will be installed by others WC-28. Coordinate deliveries, installation instructions & wiring diagrams directly with WC-28.
 - Where wood doors are installed in Aluminum Frames, provide and install wood doors and door hardware. Aluminum Frames furnished and installed by WC 18. Coordinate with WC 18 to ensure doors and door frames are prepared appropriately.
- 9. Include grouting of hollow metal door frames in gypsum wall. Hollow metal door frames in masonry walls to be installed as the wall is installed so WC 11 can grout the frames.
- 10. Manufacturer's rep is to review, approve and sign off on the installation of all door hardware before acceptance by TCC and the Owner.
- 11. All interior finish carpentry, architectural woodwork, casework, countertops, shelving and millwork. Provide all sealants to adjacent surfaces, including dissimilar materials. Coordinate counter top support



spacing with WC 27 under lavatory guards and lavatory installation.

- 12. Furnish and install formed metal countertops and shelving.
- 13. Furnish and install wall protection systems.
- 14. Furnished and installed all window sills.
- 15. Furnish and install all solid-surface materials and grommets as indicated.
- 16. Furnish and install all wall protection, handrail, corner guards, and crash rail.
- 17. All architectural hardware for cabinets supplied by this Work Category.
- 18. Include all stainless steel required and associated with millwork.
- 19. Install all custom casework fabricated and furnished by others including cabinets, p-lam coat shelves, p-lam and solid surface vanity tops, and solid surface windowsills.
- 20. All fabricated materials are to be shop assembled to the greatest extent possible before shipping to the job site.
- 21. Furnish and install handrails, display case, wood counter top, transaction counters, crash rails, corner guards, wall hooks, adjustable shelves, wall protection, stainless steel shelves and projection screens.
- 22. Furnish and installation of specialties including but not limited to: lockers, benches, towel bars, shower curtain rods, stainless steel shelves, curtain tracks, specimen pass through boxes, coat rods, coat racks, mop holders, robe hooks, shelving, wall and corner guards, impact rails, fire extinguishers, fire extinguisher cabinets, impact resistant wall protection, brackets, associated signage, coat/clothes hooks, shelving, bulletin boards, broom / mop hooks, hand sanitizer & disposal, coat rods, visual display boards, marker boards, tackboards, window roller shades, tack strips, overhead coiling doors, etc., as well as all items mentioned in the above referenced spec sections.
- 23. Equipment items designated as Owner-Furnished/Contractor-Installed are a part of this scope of work. Owner furnished equipment isolated to an electrical connection "only" will be handled by the electrical subcontractor. Equipment requiring water, ducting, etc. will be handled by the mechanical subcontractor. All equipment that does not have any mechanical and/or electrical connection is the responsibility of this work category to receive, unload, distribute, and install.
- 24. Furnish and install sealants for all materials installed by this contractor such as cabinets, counters, sills, etc.
- 25. Furnish shop drawings, samples, product data, test reports, coordination drawings and other submittals as specified. Coordinate submittal schedule with the Construction Manager.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. A mockup of the reading nook Style A will be constructed prior to installation (see schedule). Once approved, this may be disassembled to be used for final construction if wanted.
 - A. Provide and install wood and all accessories at reading nooks.
 - B. This WC responsible to build, maintain, and remove temporary shelter over the reading nook mock up to prevent it from getting precipitation on it.



- 2. Provide and install glulam beams including all accessories for a complete installation. This WC will need to work closely with WC 14 Roofing to minimize the amount of time the glulam beams are exposed to exterior elements. This WC is responsible to protect glulam beams until roofing is installed.
- 3. Provide and install all signage and plaque(s) including all accessories for a complete installation.
- 4. Furnish and install all athletic equipment including telescopic stands/bleachers, basketball equipment, volleyball equipment, scoreboards, and gymnasium safety wall pads, including all accessories for a complete installation.
- 5. Provide and install the monument sign including but not limited to LED screen, aluminum panels, and lettering/numbering.
- 6. Provide and install the dumpster enclosure gates including but not limited to trex boards, framing, hardware, steel, and all associated accessories. This WC responsible for the pipe sleeve in the concrete for the barn gate stop.
- 7. Provide, install, and maintain temporary plywood wall, double doors, and hardware at the main entrance to be used for the duration of the project. WC 20 to remove this at the end of the project when WC 18 will install the main entrance storefront system.
- 8. Provide and install temporary fire extinguishers (during construction) within a freestanding wood cabinet painted in red, labeled "fire extinguisher" as located by the Construction Manager. Removal following use included. Quantity for each area to match minimum required by MIOSHA.
- 9. Provide and install flag poles including but not limited to excavation, backfill, concrete, wedges, fill, foundation tube, lightning ground spike, etc for a complete installation.
- 10. Provide and install bike racks. Concrete footing by WC 05.
- H. At time glulam beams are set, masonry walls will be built and concrete slab on grade will not be installed. Please note this when determining installation methods.
- 12. Provide and install steel shade structures (outdoor classrooms).
- 13. Provide and install exterior movable bleachers (detail 11/L-500).
- 14. Install flexible flashing where blocking gets wrapped with it (example is detail 5/A-101A). WC 13 to provide flexible flashing.
- 15. Furnish and install plywood backer at all electrical equipment indicated to receive plywood backer.
- 16. Furnish and install Washer & Dryer as indicated on A-121A Equipment Schedule.

Related Work by Others:

- I. Dumpsters
- 2. Temporary water and electrical
- 3. Benchmarks and column lines (one in each direction) by Construction Manager.
- 4. Concrete benches by WC 10.
- 5. Roof access doors, expansion joints and accessories by WC 14
- 6. Roof insulation by WC 14.
- 7. Plywood sheathing and shims at cafeteria platform steps by WC 21

Proposal Section Work Category Description

- 8. Independent testing and inspections by Owner.
- 9. Roof mechanical equipment curbs by WC 27, installed by WC 14.
- 10. Temporary heat by Construction Manager.
- 11. Roof accessories furnished and installed by WC 14.
- 12. All aluminum door hardware provided by WC 18 and keyed by same.
- 13. All structural framing by WC 12 and WC 21.
- 14. Sectional doors by WC 18.
- 15. Acoustical wall panels by WC 21.
- 16. Bathroom accessories (toilet partitions, grab bars, mirrors, soap dispensers, sanitary napkin disposals, shower seats, and waste receptacles. Receive and install owner provided toilet tissue dispensers) by WC 27.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$30,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.



Work Category No. 21 - Walls & Ceilings

Work Included:

The subcontractor shall timely perform all Walls & Ceilings work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish and install all interior and exterior gypsum board, metal stud framing, cold-formed framing, insulation, ceiling grid, ceiling tile, as shown and/or specified. Includes all labor, material, accessories, and equipment for a complete installation.
- 2. Above ceiling support wires for ceiling grid, soffits and hard ceilings will be installed after MEP-above ceiling rough-ins. Hanger wires where required to support light fixtures, grilles, and registers, etc.
- 3. Furnish and install all expansion joints and covers in drywall, soffit assemblies and/or ceiling grid assemblies. Properly anchor, level and set, including fire barrier(s) under and beyond expansion joint areas. Installation of wall and ceiling expansion joints shall occur just prior to finish painting per floor. Fire barrier(s) within concealed locations shall be installed and inspected prior to being covered by architectural walls and ceilings.
- 4. All interior and exterior wall and ceiling fire stopping, thermal and acoustical insulation as it relates to this contractors work.
- 5. Furnish and install all fireproofing and per the drawings and specifications.
- 6. Acoustic sealants and caulking of work within this work category including bottom, sides and top of rated walls. Furnish and install all necessary fire caulking related to this W.C including all required fire taping of walls and ceilings. Subcontractor shall be required to fire-stop, smoke seal and sound seal, all other remaining penetrations, and schedule all Work of this type to completed and inspected just prior to ceiling grid installation.
- 7. Properly fire stop and seal all fire wall penetrations created by this work. Fire stop to mechanical, electrical, and plumbing sleeves furnished and installed by others.
- 8. Furnish and install all access panels shown on the drawings in stud partitions or ceilings including mechanical and electrical panels. It is your responsibility to review all drawings complete including the mechanical and electrical drawings. Install all access panels in metal stud walls and ceilings furnished by mechanical, fire protection, and electrical contractors (not shown on drawings).
- 9. All layout and control lines for wall, partitions, and ceilings related to this W.C.
- 10. Install shimming necessary to maintain true lines.
- 11. Furnish and install all ceiling surfaces per the drawings and specifications.
- 12. Install all light gauge metal framing including truss system & stiff clips.
- 13. Tape and sand joints to bottom of gypsum board to provide even, clean joints to receive vinyl base.
- 14. All cold-formed framing, fire-stopping, non-load bearing steel framing, gypsum board, glass-reinforced

gypsum fabrications, acoustical ceilings, including all labor, materials and equipment required for a complete installation.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- 1. Provide and install all acoustical ceiling panels, including the diffuser panels.
- 2. Furnish and install acoustical wall panels, tectum acoustical wall panels, sound seal wall panels, and fiberglass reinforced panels.
- 3. Provide and install all framing, sheathing, plywood, shims, etc. for a complete cafeteria platform steps system. WC 23 will install flooring over sheathing.

Related Work by Others:

- 1. Dumpsters by Construction Manager.
- 2. Temporary Water and electrical by Construction Manager.
- 3. Benchmarks and column lines (one in each direction) by Construction Manager.
- 4. Roof insulation by WC-14.
- 5. Independent testing and inspections by Owner.
- 6. Temporary heat by Construction Manager.
- 7. Exclude foundation and masonry insulation.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$20,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.



Work Category No. 22 - Hard Tile

Work Included:

The subcontractor shall timely perform all Hard Tile work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish and install all tile including but not limited to ceramic tile, porcelain tile, quarry tile, stone tile, and glass tile, as required (at floors, walls, sills, base, etc) including floor patching, preparation, joints, and sealing as shown and/or specified. Includes all labor, material, accessories, and equipment for a complete installation.
- 2. Furnish and install all transition strips between different floor types.
- 3. Provide additional temporary lighting as required for proper installation.
- 4. Protection of flooring shall be provided by this contractor until substantial completion. Provide final cleaning after floor protection is removed.
- 5. Coordinate elevations of floor sinks and drains with WC 27 for proper adjustment prior to installation of flooring, providing acceptable slope, patterns, and transitions.
- 6. Concrete floors have been placed to meet the flatness tolerances listed in WC 10 specifications. This WC shall provide all surface prep, including scraping, sanding, filling, feathering, etc. for a complete installation.
- 7. Broom sweep and prep floor as required for this work.
- 8. Verify curing compounds & sealers used on new and existing surfaces are compatible for flooring adhesives and materials.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. Provide and install all trim accessories as needed for a complete installation of the hard tile including TR-I through TR-4.
 - a. TR-5 through TR-7 by WC 23.
- 2. Provide and install all waterproofing at showers for a complete installation.

Related Work by Others:

I. Resilient base by WC 23.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$5,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:



Proposal Section Work Category Description

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

Work Category No. 23 - Carpet and Resilient Flooring

Work Included:

The subcontractor shall timely perform all Carpet and Resilient Flooring work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- Furnish and install all carpet, resilient flooring, linoleum flooring, hardwood flooring, as required for a
 complete installation, including resilient and carpet wall base, stair nosings, treads, or risers, adhesives,
 seam welding, seam sealing, floor patching, skim coating, floor leveling, feathering, final cleaning and/or
 vacuuming.
 - a. Furnish and install all rubber base.
- 2. Furnish and install all transition and reducer strips between different floor types.
- 3. Provide additional temporary lighting as required for proper installation.
- 4. Furnish and install materials necessary to match finishes in existing tie-in areas and at different floor types.
- 5. Install and maintain protection of flooring until substantial completion. Remove and final clean after substantial completion.
- 6. Responsible for repairs for damage to wall finishes and other adjacent surfaces caused by flooring installation.
- 7. This contractor accepts condition of floor (flatness, moisture, finish, adhesion compatibility, etc.).
- 8. Concrete floors have been placed to meet the flatness tolerances listed in WC 10. Subcontractor shall provide all surface prep, including scraping, sanding, filling, feathering, etc. for a complete installation.
- 9. Verify curing compounds & sealers used on new and existing surfaces are compatible for flooring adhesives and materials.
- 10. Broom sweep and prep floor as required for this work.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- Provide and install all trim accessories needed for a complete installation of this WC's scope including TR-5 through TR-7.
 - a. TR-I through TR-4 by WC 22.
 - 2. Provide and install game line markings in the gymnasium.
 - 3. Provide and install bleacher block at all flooring locations shown.

Related Work by Others:



- 1. Concrete substrate has been installed in accordance with 33000 for flatness and levelness by WC 10.
- 2. Note any transition strips that may logically be furnished and installed by other flooring contractors, depending on materials and/or sequencing of installations.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$25,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

Work Category No. 24 - Painting & Wallcovering

Work Included:

The subcontractor shall timely perform all Painting and Wallcovering work as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish all labor and material to complete all interior and exterior painting and wall coverings as shown and/or specified, including but not limited to; exposed masonry, exposed steel, exposed unfinished wood materials, field painting of equipment, bollards, stairs, handrails, ladders, decorative columns, concrete walls, lintels, door frames, louvers, canopies, handrails, mechanical, electrical and fire protection piping (including protection of sprinkler heads) etc. including all labor, materials and equipment required for a complete installation.
- 2. All required surface prep for this work including touch up of steel primer as required.
- 3. Final wall preparation to include minor patching (scratches and small dents) and minor caulking in all areas which call out for paint. All areas should be reviewed by the painter prior to new finishes being applied.
- 4. Finishing of millwork/casework and trim items not furnished pre-finished, including wood filler, and putty if required. Light sanding may be necessary prior to applying finishes.
- 5. Temporary protection of all areas and clean up of paint overspray (if materials are outside of interior renovations) and drippings. Protect all new and existing finishes adjacent to painted areas prior to painting.
- 6. Protect fire suppression heads; promptly remove protection.
- 7. Sequence the work as follows: patching and priming, first finish coat, installation of cabinets, tops, etc, and then final coat. Multiple mobilizations will be required by this work category due to phasing of construction.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this Work Category.

- I. This WC to paint exposed MEP items in areas with exposed ceilings (except ductwork). The intent to paint as much of this as possible before it gets installed as the tectum deck and glulam beams do NOT get painted. The MEP contractors will hand over their hangers, Unistrut, etc. for this WC to paint and then the MEP contractors will install. This WC will need to do touch up painting after installation.
- Furnish and install concrete sealer.

Related Work by Others:

- 1. Labeling of piping system and fire rated partitions by others.
- 2. Traffic Marking by W.C. 06.

Allowances:



Proposal Section Work Category Description

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$20,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.



Work Category No. 25 - Food Service Equipment

Work Included:

The subcontractor shall timely perform all Food Service Equipment work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Proposal Section, Contract Forms, General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- 1. Provide and install food service equipment and associated accessories for a complete installation.
- 2. Furnish and install fire protection system for food service equipment as necessary for a complete installation. Coordinate with WC 28 for connection to building fire alarm system.
- 3. Furnish drawings showing size and location of concrete recesses required for Food Service Equipment to Construction Manager. Installation of these recesses is by others.
- 4. Provide patching and repair for all damage to finish surfaces resulting from your work.
- 5. Provide sleeves and coring for remote compressors / condensers, line sets, start up.
- 6. This contractor to provide a separate, dedicated visit for owner training after all food services equipment has been commissioned and training manuals have been provided for owner training.
- 7. Schedule to receive, unload, erect, rig, hoist and place all equipment by own forces. Turn over to respective trades for final connections.
- 8. Provide full time onsite foreman to coordinate, instruct, facility installation and final connections for all food service equipment. Additionally, this person shall be present for the fire marshal and health department site inspections.
- 9. Include applicable Health Department permit(s) and fee(s) as necessary to obtain Approval Certificate from applicable Health Department for food service equipment. Coordination of inspections from the Health Department is the responsibility of this WC. This WC will also coordinate and ensure that the punch list items from the inspecting agency are completed by other effected trades and will call for a re- inspection (if necessary) and secure the certificate of occupancy for this area for the owner to occupy in the timeframe indicated in the construction documents.
- 10. This WC will be responsible to coordinate other trade contractors for corrections to equipment and reschedule final inspection(s) if necessary and obtain final approval from the Health Department consistent with the Construction Schedule.
- II. Final cleaning and sanitization of all food service equipment, including floors, walls and ceilings as necessary to obtain Approval Certificate by appropriate Health Department.
- 12. Full compliance with all the safety regulations and requirements of OSHA, MIOSHA, State Authorities, Local Authorities and the Construction Manager.
- 13. Coordinate all blocking required for this trade work with WC 20 prior to wall construction. Blocking will be installed by WC 20.



- 14. All components of food service equipment shall be completely wired and piped up to the point of final connection with electrical and piping systems.
- 15. Food service equipment contractor shall provide inventory by equipment item and furnish loose to Mechanical and Electrical Systems contractors all hardware required for food service equipment final connections.
- 16. Receiving of all food service equipment, uncrating and proper disposal of packing materials, and inspection of equipment and replacement of damaged units during the time specified in the project schedule are the responsibility of this WC.
- 17. Complete assembly of all shelving and storage rack systems.
- 18. Supply and install equipment, tables, racks, carts, etc., as specified.
- 19. Compliance with local codes for Health Department approval.
- 20. Include all layout required for the performance of this work category. Coordinate locations of all floor mounted and under floor electrical devices with WC 28 and floor sinks/drains with WC 27.
- 21. This WC will make periodic site visits as requested by the Construction Manager to review and coordinate work provided by other trades that is in conjunction with the food service equipment. This will include, but is not limited to trade coordination meetings and health department application submissions. This includes a preinstall drywall visit and a visit prior to installing drywall on metal stud walls.
- 22. Caulking and sealants for this trade's work. Include all required penetrations, and sealing of same, including but not limited to ceiling deck, walls, floors, etc.
- 23. Coordinate rough-in and final connection with other trades and indicate on a dimensioned layout shop drawing.
- 24. Complete the installation and testing of all food service equipment, including un-packaging and cleaning the equipment and smoke capture testing of the hoods. Provide documentation and demonstration of the required testing to the Construction Manager prior to the Health Inspection.
- 25. This WC will be responsible to furnish the hoods indicated. Connection of the hoods to the air handling unit and exhaust fans will be by others.
- 26. Provide clean-up as required for the performance of this work. The Christman Company will provide dumpsters. Each Trade Contractor will be required to separate and dump debris in the appropriate containers.
- 27. Furnish access panels where required for the wall and ceilings that are not shown on the drawings but are necessary for the Food Service Systems.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this work category:

- 1. This work category is responsible for all equipment indicated in the Food Service Equipment written specification and shown on FSE drawings.
- 2. Responsible for coordination with adjacent trade contractors for final connections of Food Service Equipment to the building's mechanical, plumbing, and electrical systems.

- 3. Responsible for any permits and Inspections.
- 4. Provide and install all curbs associated with Food Service Equipment.
- 5. Provide and install heat tape on coil drain line at the freezer.
- 6. Provide and install residential appliances per spec section 113013.

Related Work by Others:

- I. Slotted Channel Framing for Exhaust Hood by WC 12. This WC needs to coordinate framing requirements with WC 12.
- 2. Final electrical connections by WC 28.
- 3. Final plumbing and HVAC connections by WC 27.
- 4. Connection of hoods by WC 27.
- 5. Tie in with existing building fire alarm system by WC 28.
- 6. Custom Millwork by WC 20.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of **\$0**. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.



Work Category No. 26 - Fire Protection

Work Included:

The subcontractor shall timely perform all Fire Protection work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Contract Forms and General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. All design, fabrication, and installation of all wet and dry fire protection systems. Include all pumps, stand pipe risers, hose cabinets, hoses and associated trim, tamper switches, flow switches, gauges, alarms, test headers, drain inspector's test assembly, and fire department connections as specified and detailed in the documents or as required for a complete installation, including labor, materials, accessories, and equipment for a complete installation.
- 2. All permits, fees, inspections and approvals required by governing jurisdictions. This will include liaison between state and local agencies and insurance carriers to ensure code compliance and for securing approval for the facility.
- 3. All demolition, cutting, coring, patching, sleeving and firesafing of walls, floors, ceilings, etc., required for the installation of this work. Patch and repair work is to be done professionally by skilled craftsmen. Include all fire wall penetrations required for this work and sealing of same. All such openings require prior approval from the Construction Manager before work begins.
- 4. All Utility connections, disconnections, tie-ins crossovers, shut downs and similar work must be performed and scheduled so they will not interfere with other work. It may be necessary to make these changes during "off" hours, or it may be necessary to make "hot tap" connections. The contractor should plan on premium time for this work. Coordinate with the Construction Manager prior to performing this work.
- 5. Furnish any access panels required for walls and ceiling valves and controls that are not shown on the Architectural/Mechanical/Fire Protection plans but are necessary for the Fire Protection System. Installation will be others.
- 6. Furnish all hoisting, lifting, scaffolding and handling of all materials required to complete this W.C.
- 7. This contractor shall produce shop drawings as required by code and show all heads on the Architectural Drawings for approval, prior to installation of the heads.
- 8. Provide and install pipe identification and other required identification related to this W.C.
- 9. The Electrical, Fire Protection, and Mechanical Contractors will be required to coordinate in a formal coordination process to accomplish the rough-in and final layout as required and specified in Section 1049. Your attendance will be required for these meetings. Any relocation required to coordinate work will be done at no additional cost to the Owner. All contractors are required to furnish layout and coordination prints for their work prior to these meetings allowing the team to be better prepared at each coordination meeting. Detailers will be provided by this contractor to accomplish this coordination.
- 10. Subcontractor shall protect existing structures, equipment and finishes from damage during the performance of this Work. The items listed below represent a few special requirements to promote a



respectful and professional working environment, and are not to be considered all inclusive:

- Gang boxes will not be allowed within spaces that have finish flooring and finish painted walls.
- Pipe thread/cutting machines will have floor protection, preventing oil droppings/spillage onto concrete and finish floors.
- Testing and draining fire protection systems shall be done in a neat and clean fashion, to avoid effluent spraying on finish surfaces.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this work category:

- I. Unistrut installation in exposed ceiling locations needs to be closely coordinated and approved by The Christman Company. All contractors will do a mock up for all Unistrut, fasteners, clips, etc. that will be installed in the ceiling space of a typical classroom. This mock up needs to be approved before overhead MEP installation can start.
 - a. All unistruct, clips, hangers, etc. that are to be installed in exposed ceilings spaces will be handed over to WC 24 to paint before installation. The tectum deck and glulam beams do not get painted but the exposed MEP items do (expect ductwork).
- 2. Provide and install fire air compressor and all associated accessories.
- 3. This WC to provide and install fire suppression riser. WC 02 will run water main to 5' from building, this WC to pick up the water service main from there.
 - a. Provide and install fire department connection and splash block at drain.
- 4. This WC to include a sketch of a typical classroom fire suppression installation with submission of their proposal. With exposed tectum deck and glulam beams, how the fire suppression is supported and run is a concern along with how the fire suppression will get to the reading nooks.
- 5. Provide and install any signage required by JHA at Fire Department Connection.

Related Work by Others:

- 1. Painting of exposed fire protection by W.C. 24.
- 2. Electrical, Fire Alarm, and Detection System including wiring of tamper and flow switches by W.C. 28. Connection of fire pump controller to building fire alarm system by WC-28. However, Subcontractor to provide approved installation wiring diagrams/instructions, coordination, factory support etc. to allow for proper installation
- 3. Installation of access panels by W.C. 11 & 21.
- 4. Fire extinguishers and fire extinguisher cabinets by W.C. 20.
- 5. Housekeeping pads if shown by WC 10.
- 6. Installation of electrical devices furnished with pumps and controllers, but not specified to be factory mounted, by WC-28 (electrical).

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$10,000. Reference Section 01020 for specific instructions on allowances.

Proposal Section Work Category Description

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.



Work Category No. 27 – Mechanical and Plumbing Systems

Work Included:

The subcontractor shall timely perform all Mechanical and Plumbing work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Contract Forms and General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish and install all mechanical and plumbing systems, including domestic water, sanitary and vent, hydronic piping, water heaters, boilers, unit heaters, unit ventilators, air handling units, chillers, cooling towers, VAV boxes, mechanical louvers, radiant heat systems, humidifiers, condensate, heat exchangers, air conditioners, air curtain, ductwork, insulation, plumbing fixtures, trench drains, temperature controls including DDC or BMS systems, system commissioning, air and water balancing, etc., indicated by the contract documents (not just limited to the mechanical and plumbing drawings) or as required for a complete installation, including labor, materials, accessories and equipment for a complete installation.
- 2. Investigate areas prior to demolition activities, reroute and relocate existing services required for occupied operation. Cut, cap, and make safe, all existing plumbing, temperature controls and HVAC systems in renovated areas prior to demolition. Properly identify and mark system and components to be removed.
- 3. All cutting, capping, coring, patching and firesafing of walls, floors, ceilings, etc., required for the installation of this work. Patch and repair work is to be done professionally by skilled craftsmen. All such openings require prior written approval from the Construction Manager, before work begins. Furnish and install all sleeves and or misc. steel in walls, floors, roofs and ceilings that may be required by this W.C.
- 4. Furnish drawings showing size and location of concrete pads required for mechanical equipment to Construction Manager. Installation of these pads is by W.C. 10.
- 5. All utility connection, disconnections, tie-ins, crossovers, shut downs and similar work must be performed and scheduled so they will not interfere with other work. It may be necessary to make these changes during "off" hours, or it may be necessary to make "hot tap" connections. The contractor should plan on premium time for this work. Coordinate with the Construction Manager prior to performing this work.
- 6. Furnish access panels where required for the wall and ceiling valves, dampers and controls that are not shown on the Architectural/Mechanical plans but are necessary for the Mechanical Systems.
- 7. Furnish all hoisting, lifting, scaffolding and handling of all materials required to complete this work category.
- 8. The Electrical, Fire Protection, and Mechanical Contractors will be required to coordinate in a formal coordination process to accomplish the rough-in and final layout as required and specified in Section 1049. Any relocation required to coordinate work will be done at no additional cost to the Owner. All contractors are required to furnish layout and coordination prints for their work prior to these meetings allowing the team to be better prepared at each coordination meeting. Detailers will be provided by this contractor to accomplish this coordination. These meetings shall be coordinated with the construction manager and shall be held on-site.
- 9. Provide and install mechanical equipment tags, pipe identification and other required identification of



- signage related to his work.
- 10. Run the various building piping systems out five (5) feet from the building walls and make the final connections to underground systems.
- 11. The mechanical contractor will provide assistance during concrete pours to guarantee the proper elevation of drains is maintained during the concrete pour. Accommodate floor finishes when calculating elevations.
- 12. Furnish and install all roof curbs and necessary or required auxiliary steel framing for equipment supplied under this W.C. This includes any auxiliary steel required at roof openings not shown on the structural drawings, or for pipe hangers and plenum stiffeners.
- 13. A coordination meeting will be set up between the controls contractor, mechanical contractor, electrician, and construction manager prior to control work. This will include all required work for a complete system as indicated in the construction documents.
- 14. Caulking and sealants for this trade's work. Include all required penetrations, and sealing of same, including but not limited to ceiling deck, walls, floors, etc.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this work category:

- I. Unistrut installation in exposed ceiling locations needs to be closely coordinated and approved by The Christman Company. All contractors will do a mock up for all Unistrut, fasteners, clips, etc. that will be installed in the ceiling space of a typical classroom. This mock up needs to be approved before overhead MEP installation can start.
 - a. All unistruct, clips, hangers, etc. that are to be installed in exposed ceilings spaces will be handed over to WC 24 to paint before installation. The tectum deck and glulam beams do not get painted but the exposed MEP items do (expect ductwork).
- 2. Owner is providing a commissioning agent. This WC to work with the commissioning agent as much as needed per contract documents.
- 3. Furnish and install heat trace. Coordinate with WC 28 for single point power connection locations.
- 4. Variable Frequency Drives (VFDs) shall be furnished by WC 27 and installed by WC 28.
- 5. All excavation and backfill related to Work including suitable backfill, compaction, & restoration and removal (from site) of all unsatisfactory fill in accordance with the documents.
- 6. This WC to carry SC Tech as controls subcontractor for base bid. Please provide voluntary alternates for any other controls subcontractors.
- 7. Provide and install roof support blocks, mats, etc. for all roof piping. Piping to be run in a professional manner with straight runs and 90 degree turns.
- 8. Furnish and install bathroom accessories including but not limited to toilet partitions, grab bars, mirrors, soap dispensers, sanitary napkin disposals, shower seats, and waste receptacles. Receive and install owner provided toilet tissue dispensers.
- 9. Provide and install roof hydrant(s).
- 10. Provide and install wireguard in the gym for all items installed by this WC as indicated.

Related Work by Others:

- I. Concrete equipment pads by W.C. 10.
- 2. Roof vents flashing and counter flashing by W.C. 14.
- 3. Fire protection system and risers by W.C. 26.
- 4. Site and footing drainage systems by W.C. 02.
- 5. Power supply to mechanical equipment by W.C. 28.
- 6. Installation of access panels/doors by W.C. 11 & 21.
- 7. Site utilities beyond 5' from building perimeter by WC 02 or Utility Company.
- 8. Counter tops to be cut by WC 20.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$20,000. Reference Section 01020 for specific instructions on allowances.

Unit Prices:

Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

End of Work Category No. 27

Proposal Section Work Category Description

Work Category No. 28 - Electrical Systems

Work Included:

The subcontractor shall timely perform all Electrical work, as detailed below, in accordance with the contract documents (including Bidding Requirements, Contract Forms and General Conditions, Supplemental Conditions, General Requirements, Addenda, etc.), including, but not limited to, the following Specification Sections and Work Scope Items. Unless otherwise noted, this contractor is responsible for all items specified in the following specifications sections:

Reference Work Category Index

Work Category Notes:

- I. Furnish and install all electrical systems, including power, lighting, site lighting, site power/data, fire alarm, public address system, lightning protection system, clocks and clock system, telephone/data and CATV systems, system commissioning, low voltage cabling, security, access controls, audiovisual systems, technology, etc., indicated by the contract documents (not just limited to the electrical drawings) or as required for a complete installation, including labor, materials, equipment, adhesives, fasteners, supports, hangers, grounds, blocking, shims and all necessary anchoring devices and accessories.
- 2. Investigate areas prior to demolition activities, reroute and relocate existing services required for occupied operation. Cut, cap, and make safe, all existing electrical systems in renovated areas prior to demolition. Properly identify and mark system and components to be removed by others.
- 3. All cutting, capping, coring, patching and firesafing of walls, floors, ceilings, etc., required for the installation of this work. Patch and repair work is to be done professionally by skilled craftsmen. All such openings require prior written approval from the Construction Manager, before work begins. Furnish and install all sleeves and or misc. steel in walls, floors, roofs and ceilings that may be required by this W.C.
- 4. Furnish drawings showing size and location of concrete pads indicated on the drawings for electrical equipment to the Construction Manager. Installation of these pads is by W.C. 10. All excavation, backfill and compaction related to this W.C. Suitable backfill will be required by this trade and this contractor will be responsible for removal (from site) of all unsatisfactory fill in accordance with the documents.
- 5. All utility connection, disconnections, tie-ins, crossovers, shut downs and similar work must be performed and scheduled so they will not interfere with other work. It may be necessary to make these changes during "off" hours, or it may be necessary to make "hot tap" connections. The contractor should plan on premium time for this work. Coordinate with the Construction Manager prior to performing this work.
- 6. Furnish access panels where required for the wall and ceiling valves, dampers and controls that are not shown on the Architectural/Electrical plans but are necessary for the Electrical Systems.
- 7. Furnish all hoisting, lifting, scaffolding and handling of all materials required to complete this work category.
- 8. The Electrical, Fire Protection, and Mechanical Contractors will be required to coordinate in a formal coordination process to accomplish the rough-in and final layout as required and specified in Section 1049. Any relocation required to coordinate work will be done at no additional cost to the Owner. All contractors are required to furnish layout and coordination prints for their work prior to these meetings allowing the team to be better prepared at each coordination meeting. Detailers will be provided by this contractor to accomplish this coordination. These meetings shall be coordinated with the construction manager and shall be held on-site.
- 9. Provide and install panel labeling, identification and other required identification of signage related to his



work.

- 10. The electrical contractor will provide assistance during concrete pours to guarantee the proper elevation of in-floor items (outlets, activation kits (if applicable), etc) are maintained during the concrete pour. Accommodate floor finishes when calculating elevations.
- 11. A coordination meeting will be set up between the controls contractor, mechanical contractor, electrical contractor, and construction manager prior to control work. This will include all required work for a complete system as indicated in the construction documents.
- 12. Electrical connections to equipment and devices provided by others, including by not limited to duct detectors, fire dampers, flow and tamper switches, variable frequency drives, power assist door motors, food service equipment, overhead doors, coiling shutters, projection screens, Owner furnished items, etc. Verify construction documents have been coordinated with power requirements of equipment prior to installation of devices.
- 13. Furnish and install electrical disconnects for all mechanical equipment provided by W.C. 27.
- 14. Caulking and sealants for this trade's work. Include all required penetrations, and sealing of same, including but not limited to ceiling deck, walls, floors, etc.

Specific Notes and Details:

The following details and notes are included in this Work Category; this list is to clarify the specific items noted below and does not exclude other details or otherwise limit the scope of work for this work category:

- I. Unistrut installation in exposed ceiling locations needs to be closely coordinated and approved by The Christman Company. All contractors will do a mock up for all Unistrut, fasteners, clips, etc. that will be installed in the ceiling space of a typical classroom. This mock up needs to be approved before overhead MEP installation can start.
 - a. All unistruct, clips, hangers, etc. that are to be installed in exposed ceilings spaces will be handed over to WC 24 to paint before installation. The tectum deck and glulam beams do not get painted but the exposed MEP items do (expect ductwork).
- 2. Owner is providing a commissioning agent. This WC to work with the commissioning agent as much as needed per contract documents.
- 3. Include connection of temporary power to The Christman Company's field office trailer at the beginning of the project. Include disconnection of the temporary power to The Christman Company's field office trailer at the completion of the project.
- 4. Furnish and install clevertouchs, interactive flat panel displays, and all televisions.
- 5. Temporary power, wiring, lighting, and distribution in accordance with current MIOSHA requirements. Provide a minimum of enough foot candles in each room to maintain current safe lighting levels. Maintenance of the Temporary Lighting System including replacement of burned out or damaged bulbs by this WC. This WC to work with other trades as walls/ceilings are being built to minimize amount of holes that the temp wiring/lighting creates. During temporary lighting removal, include labor and material to fill holes to meet wall type construction.
 - a. Temporary power systems required are: Provide double duplex ground fault 20 AMP-120-V-I-P outlets throughout the jobsite. There must be a minimum of 4 outlets at each location.
 Outlet locations need to be spaced so that a 75 extension cord from any location inside the building can reach a outlet.



- 6. Absolutely no exposed conduits, etc. are allowed in finished spaces without prior approval for the Construction Manager or expressly called out for in the construction documents. This WC needs to work closely with WC 10, 11 and 21 as concrete floors are poured and walls built to make sure all conduits are run in-wall as much as possible. For spaces with exposed ceiling, conduits need to run in-wall as much as possible until they penetrate at the deck/steel or device.
- 7. The Work Category responsible for all electrical final connections to Food Service Equipment after WC 25 installs the equipment. Refer to Kitchen Equipment Schedule for electrical connection information.
- 8. Variable Frequency Drives (VFDs) shall be furnished by WC 27 and installed by WC 28.
- 9. Provide and install natural gas generator.
- 10. This WC is responsible for providing and installing dual purpose docking station at the generator and everything downstream electrically.
- 11. Provide and install cable tray throughout the corridors for all low voltage wiring to utilize.
- 12. Provide and install any concrete for concrete encased conduits if needed.
- 13. Transport and install Owner's two server cabinets currently stored at their warehouse on the north side of Lansing, MI.
- 14. All excavation and backfill related to Work including suitable backfill, compaction, & restoration and removal (from site) of all unsatisfactory fill in accordance with the documents.
- 15. Verify all specified electrical equipment will fit in the layout indicated and can fit through doors/openings provided prior to ordering equipment.
- 16. Provide and install roof support blocks, mats, etc. for all roof piping. Piping to be run in a professional manner with straight runs and 90 degree turns.
- 17. Provide and install all security, audiovisual, clock, data, & technology items for a complete operational system per the technology and electrical drawings.
- 18. Furnish and install all conduits, pull strings, power etc. to exterior elements including but not limited to the outdoor classrooms, marquee sign, generator, utility pole, and pull boxes.
 - a. Furnish and install additional conduits/pull strings that are spares for future use.
 - b. Provide and install electrical in-ground vaults, pull boxes and inspection boxes.
- 19. Provide and install back doorbell system outside of the kitchen.
- 20. Provide and install any curbs/housing needed for electrical roof penetrations. Coordinate with WC 14 for installation.
- 21. Provide and install wireguard for all light fixtures in the gym.

Related Work by Others:

- 1. Site Parking lot light poles, power, and controls by LBWL.
- 2. Concrete equipment pads by W.C. 10.
- 3. Fire protection system and risers by W.C. 26.
- 4. Installation of access panels/doors by W.C. 21 or 11.
- 5. Low voltage wiring not identified on the drawings by the trade providing equipment.

Proposal Section Work Category Description

- 6. Site utilities to transformers/cabinets by Utility Company.
- 7. Temperature Control wiring and conduit associated with the mechanical systems by W.C. 27.

Allowances:

This Contractor shall include in their Base Bid a Construction Manager's allowance of \$50,000. Reference Section 01020 for specific instructions on allowances. Intent is to allow newer technology to be bought if requested by Owner later on during the project.

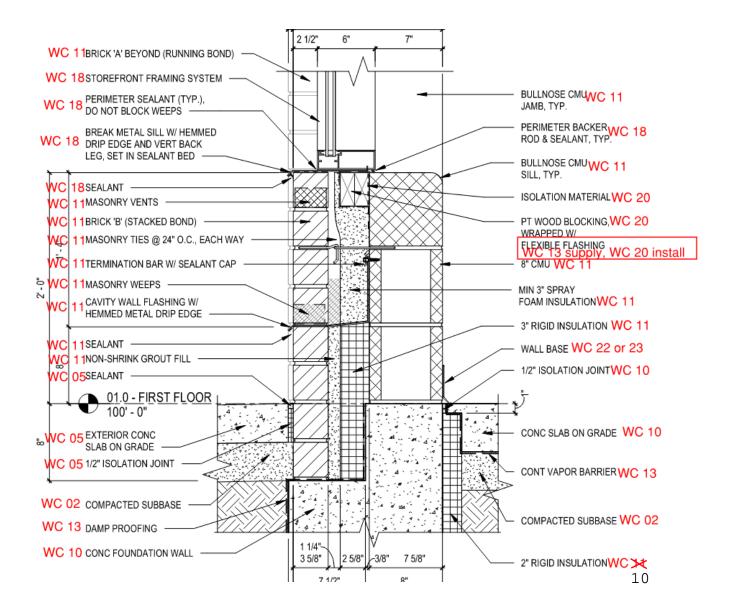
Unit Prices:

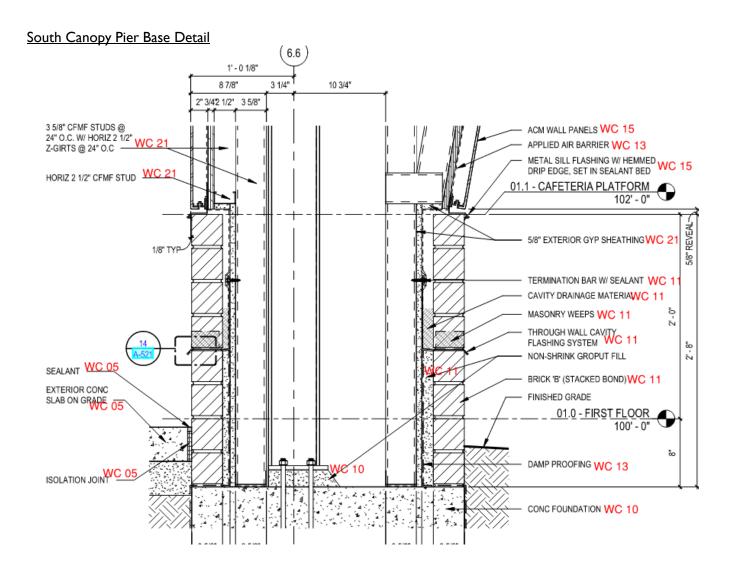
Unit Prices are to be complete furnished in-place operations, and include all costs, incidental materials and work, insurance, fringes, bonds, engineering, overhead and profit. Reference the Trade Contract Proposal form for unit pricing required.

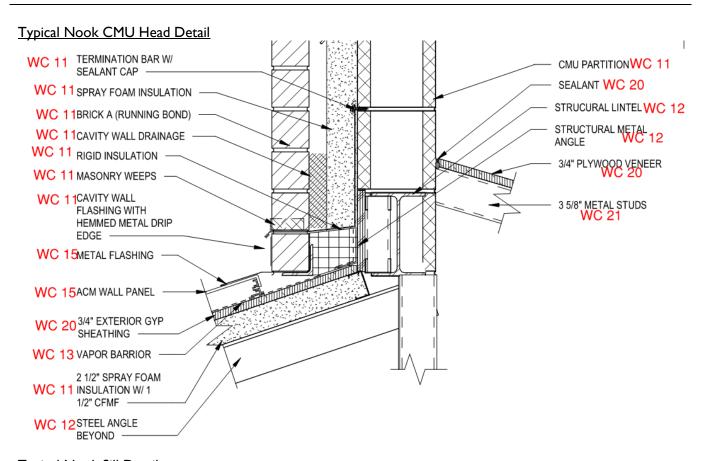
End of Work Category No. 28

Scope Clarification Diagrams

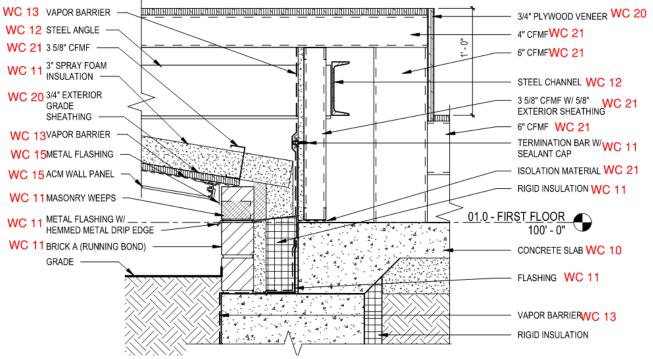
Typ. Exterior Wall Base Detail @ Storefront REVISED ADDENDUM 2



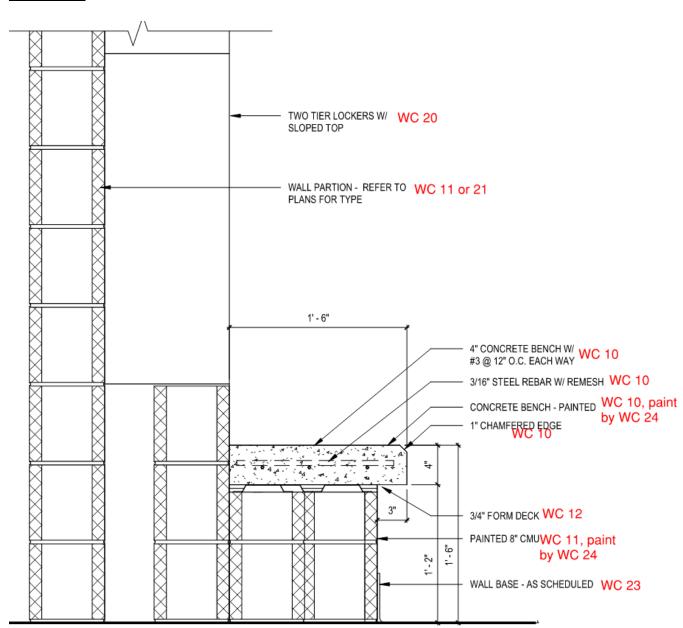


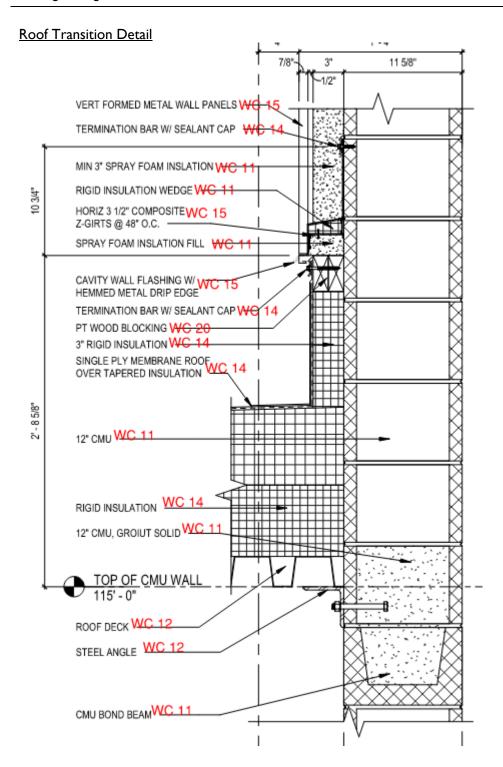


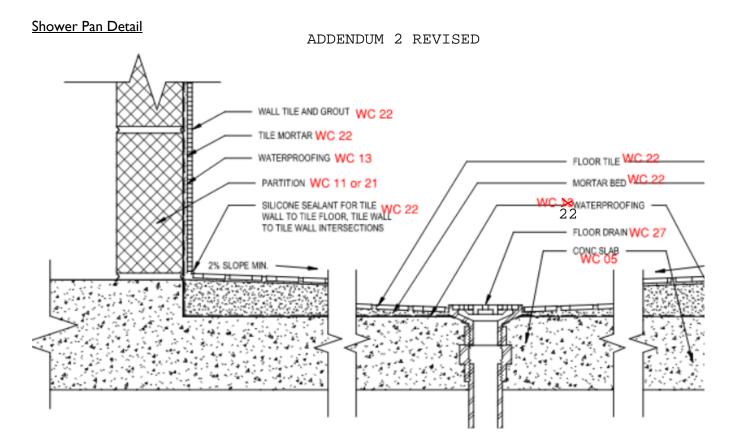
Typical Nook Sill Detail



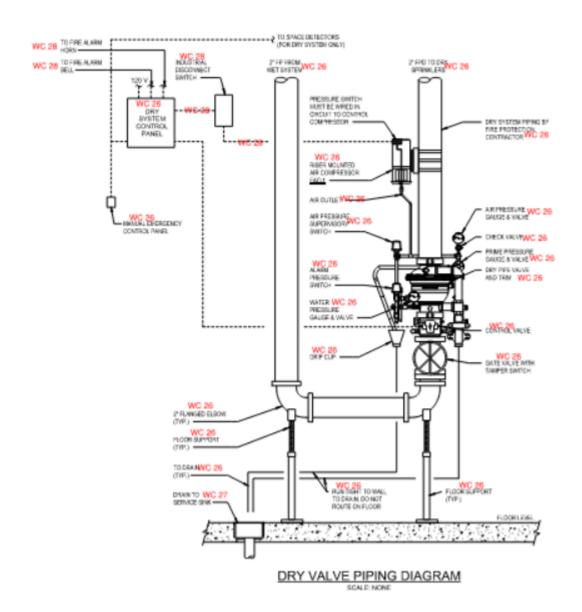
Bench Detail



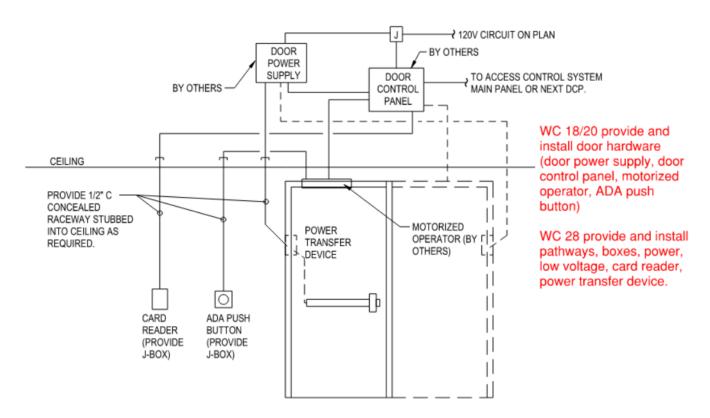




Dry Valve Piping Diagram



Typical Door Access Control Detail



Trade Contract Proposal Pre-Submission Checklist

Trade Contract Proposal Form completely filled out?

Form signed by authorized officer of firm?

Costs for Performance and Labor & Material Bond costs excluded in base bid proposal sum but amount included in break out?

All taxes included in base proposal sum?

Bid security (bond or certified check or money order) of at least 5% of base proposal sum included?

Requested alternates & unit prices quoted?

Sworn & Notarized Familial Affidavit for Lansing School District included?

Sworn & Notarized Familial Affidavit for C2AE & Christman included?

Non-Discrimination Certification included in your proposal?

Iran Sanctions Certificate and Act Certificate included?

Affidavit of Bidder - Non-Collusion included with your proposal?

Legal Status of Bidder Certificate included in your proposal?

All information (proposal, bond, etc.) Submitted in duplicate?

Proposal submitted in sealed envelope per specifications?



Mt. Hope School
Lansing, Michigan
Proposal Section

TRADE CONTRACT PROPOSAL FORM WORK CATEGORY NO. 00 and _____ Date: TO: The Christman Company Re: Mt. Hope School 208 N. Capitol Avenue Lansing, MI 48933-1357 Ladies and Gentlemen: Having carefully examined General Conditions, Supplementary Conditions, General Requirements, Advertisement for Bids, Instructions to Bidders, Proposal Section, Specifications, Drawings, all Addenda issued, Work Category Descriptions, and understanding the scope of work involved in this Work Category (ies) and those that interface with it (them), the undersigned does hereby propose to furnish all labor, materials, insurances, taxes, tools, equipment and services to complete all work required for the Work Category(ies) indicated in accordance with the Work Category Description and the Contract Documents prepared by **BASE PROPOSAL SUM:** (\$ PERFORMANCE & PAYMENT BOND: The Trade Contractor may be required to furnish a Co-Obligee Labor & Material Payment & Performance Bonds for the full contract amount. The name of the Bonding Company is: ___ The sum of (\$______) to cover cost of furnishing these bonds is **added to** the base bid. **EXPERIENCE MODIFICATION RATING (EMR):** List the EMR for your firm as determined by your insurance carrier for the past three (3) years. 2022 _____ 2021 ____ 2020 _____ ADDENDA: The following Addenda have been received, are hereby acknowledged, and their execution is included in Bid Sums listed herein. No _____ Dated _____ No ____ Dated _____ No. ____ Dated _____ **TIME AND MATERIAL RATES:** Labor rates listed below include the following: Cost of labor including Michigan Single Business Tax, Social Security and Medicare, Federal and State Unemployment Tax, and Fringe Benefits Under Collective Bargaining Agreements, and Worker's Compensation Insurance. The rates listed below do not include overhead and/or profit. These rates are only for additions and/or deletions to the contract that could not have been anticipated at the time of the bid.

Bidder's Name Page I of 3



6

sing, Michigan Proposal Section

TRADE CONTRACT PROPOSAL FORM

W	ORK C	ATEGORY NO. 00 and		Date:		
		TRADE	STRAIGHT TIME	SHIFT TIME	I 1/2 TIME	DOUBLE TIME
	1					
	2					
	3					
	4					
	5					

OVERHEAD AND PROFIT (FOR FUTURE CHANGES): Overhead and Profit shall include the following: Supervision, Superintendents, Commercial General Liability and Umbrella Insurances, Wage of Time Keepers, Watchmen and Clerks, Small tools with material value of less than \$1,500.00. Incidentals, General Office Expense, and all other expenses not included in Labor Rates as listed above. The percentage fee for Overhead and Profit on the Contractor's own work shall be 15% of net cost. The percentage fee for Overhead and Profit on Subcontractor's work shall be 5% (see log).

Add/Deduct \$

MANDATORY ALTERNATES:

Alternate #I - Public Address System

Reference Specification Section 01100 for alternate descriptions.

Alternate #2 – Five vs. Three Year Warranty	Add/Deduct	\$
Alternate #3 – Surveillance Camera Type	Add/Deduct	\$
Alternate #4 – Wired Glass Break Sensors	Add/Deduct	\$
UNIT PRICES:		
WC 02 - Snow Removal (parking lots, drives, laydown area, & walk to main	entrance)\$	/Event
WC 02 – Street Sweeping	\$	/Event
WC 02 – Excavation & Removal of Unsuitable Soils (Off-Site)	\$	/cy (truck)
WC 02 – Engineered Fill (Sand) Compacted in Place	\$	/cy (truck)
WC 02 – Engineered Fill (21AA) Compacted in Place	\$	/cy (truck)
WC 02 – Amount Included for temporary crane pads and drives	_	\$
WC 05 – Typical Curb & Gutter	\$_	/sf
WC 05 – Typical 4" Sidewalk	\$_	/sf
WC 05 – Heavy Duty Concrete Pavement	\$_	/sf
WC 06 – Standard Duty Asphalt	\$	/sf
WC 10 – Amount to add Barrier One style admixture to slabs	\$	/sf
WC 10 – Amount included for concrete survey for specified tolerances		\$
WC II – Amount included for winter protection measures		\$
WC 12 - Increase amount if cranes could only use the drives and not crane	pads	\$
WC 14 - Increase amount if cranes could only use the drives and not crane	pads	\$

Bidder's Name Page 2 of 3



Mt. Hope School
Lansing, Michigan
Proposal Section

TRADE CONTRACT PROPOSAL FORM WORK CATEGORY NO. 00 and _____ Date: WC 23 - Amount to add vapor barrier at all flooring not passing moisture tests WC 27 – Increase amount if cranes could only use the drives and not crane pads WC 28 - Amount carried for connecting and disconnecting power to TCC Trailer **VOLUNTARY ALTERNATIVES** (Variations From Materials Specified): Undersigned proposes the following voluntary alternates for materials and/or equipment specified, it being understood that, should any voluntary alternate(s) be accepted by the Owner, applicable amount(s) hereinafter listed will be added to or deducted from the Base Bid. (No voluntary alternates are required) \$ _____ (Add/Deduct) \$ _____ (Add/Deduct) 2. _____ \$ (Add/Deduct) SCHEDULE: The undersigned if awarded a Contract, agrees to work concurrently with the work of other Trade Contractors and the Construction Manager, according to the "Approved Construction Schedule." **BIDDER'S CERTIFICATE:** I hereby certify that all statements herein are made on behalf of (Name of Corporation, Partnership or Person Submitting a Bid) A Corporation organized and existing under the laws of the State of An individual doing business as Signature: Title: Address:

Bidder's Name Page 3 of 3

Phone: Fax: Email:



The Christman Company

Lansing, Michigan 48910

RFI LOG

#	Subject	Status Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
53	SUBSTITUTION REQUEST - Duro-Tuff	Closed	None	Baisch, Kristy (C Jurczuk, Steve (C	07/26/2023	Austin Brown	07/30/2023	07/27/23					
	Austin Brown Sent Wed Jul 26, 2023 at 02:02 pm EDT Q: Attached substitution request for roofing membrane to EDT60_Membrane - White.pdf	Ouro Tuff 60 Mil Membrane											_
	A: Steve Jurczuk (C2AE) Responded Thu Jul 27, 2023 at 08:3 Still rejected. Not the owner's preferred material for roof		to confirm th	e installation m	ethod.								
	A: Steve Jurczuk (C2AE) Responded Thu Jul 27, 2023 at 07:4 REjected. No substitution request form.	46 am EDT											
52	Earthwork/Site work Questions	Open	None	Baisch, Kristy (C Jurczuk, Steve (C Dobbs, Andrew (Th	07/26/2023	Austin Brown	07/30/2023		Brown, Austin (Th				-

Austin Brown Sent Wed Jul 26, 2023 at 11:57 am EDT

- 1. Is there an existing, scaled site drawing with grades?
- 2. Is the fence in the fence contractors bid category?
- 3. What elevation is the demo contractor bringing sand up to after building demo?

Q:

Structural Concrete:

1. I do not see any concrete benches (Note 10 of specific notes)

Who is responsible for the concrete maintenance strip?

RFI #1.docx

Andrew Dobbs (The Christman Company (LAN)) Responded Thu Jul 27, 2023 at 08:35 am EDT Answers in red

- 1. Is there an existing, scaled site drawing with grades?
- 2. Is the fence in the fence contractors bid category? There is no fencing bid category. Fencing is in WC 02.
- 3. What elevation is the demo contractor bringing sand up to after building demo?

A:

Structural Concrete:

1. I do not see any concrete benches (Note 10 of specific notes)

Who is responsible for the concrete maintenance strip? WC 05 to provide and install maintenance strips.

51 Sch 40 Steel to Copper Mech	Piping	Open	None	Jurczuk, Steve (C	07/26/2023	Austin Brown	07/30/2023	Jurczuk, Steve (C
--------------------------------	--------	------	------	----------------------	------------	-----------------	------------	----------------------



The Christman Company

#	Subje	ect	Status Responsible Contractor	Received From	Assignee	Date Initiated	RFI Managei	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impac
					Baisch, Kristy (C					Baisch, Kristy (C				
	Q:	Austin Brown Sent Wed Jul 26, 2023 at 11:55 am EDT All hydronic piping 2 ½" through 4" is to be welded schor leaks and decreases the weight of the pipe exponent RFI 51.pdf TEE FORMING_SUBMITTAL_SPECIFICATION .pdf	, ,,	-				•		II. This would elim	inate a lot of	joints and pot	ential	
50	Roofin	ng insulation r-value from 56 to 30	Closed	None	Baisch, Kristy (C Jurczuk, Steve (C	07/26/2023	Austin Brown	07/30/2023	07/27/23					_
	Q:	Austin Brown Sent Wed Jul 26, 2023 at 11:51 am EDT Can we get clarification on the roof insulation. Is there t R-30. Can we provide an average R-Value of 30? This w RFI 50.pdf				the entire lower ro	of area? Th	nis would give the	roof an average r	-value of approxi	mately 56. M	ichigan requii	res	
	A:	Steve Jurczuk (C2AE) Responded Thu Jul 27, 2023 at 07: The intent is to meet the energy code and provide posit drainage.		meets code as	s specified. On t	the steel deck, the	ere are two	layers of 2.6" thic	k insulation. On to	op of both is taper	ed insulation	to provide po	sitive	_
49		TITUTION REQUEST - Gymnasium Equipment facturer	Open	None	Jurczuk, Steve (C Baisch, Kristy (C	07/26/2023	Austin Brown	07/30/2023		Jurczuk, Steve (C Baisch, Kristy (C				_
		Austin Brown Sent Wed Jul 26, 2023 at 11:17 am EDT We are requesting to bid our Gared/Performance Sports Substitution form along with product data on the equipr		as equal to the	approved manu	ıfacturers listed in	Specificati	on Section 11662	3 – Gymnasium Ed	quipment. I have	attached the	Request For		
	Q:	C & M Associates has been in business for over 35 years years and have completed numerous projects with The							e partnered with G	Gared/Performance	Sports Syste	ems for the pa	st 20	
		We are hopeful to be approved to bid and look forward to MtHope_116623_GymEquip_SubstitutionRequest_C&M.		nan Company (on this project.	If you have any qu	estions, ple	ease do not hesita	ate to email or call					
48	Multip	ole Flooring/Tile RFI's	Open	None	Jurczuk, Steve (C Baisch, Kristy (C	07/26/2023	Austin Brown	07/30/2023		Jurczuk, Steve (C Baisch, Kristy (C				_

Austin Brown Sent Wed Jul 26, 2023 at 11:10 am EDT

- 1. Cafeteria 310A Platform shows on drawing I-101A to install RB-2 wall base. There is no RB-2 wall base on the material schedule. Please advise as to what RB-2 wall base is.
- 2. The ceramic specifications show Schluter Ditra and Schluter Kerdi for the waterproofing/ Crack Isolation. Is this to be installed in the showers Only? Or are they wanting this in the Toilet Rooms also? See attached spec.
- 3. Details 10, 11 & 12/A407 shows the elevations for the ceramic in the showers. The elevations show 2 shower stall walls and one wet wall behind the toilet to receive T-9 Ceramic Tile. What is being installed on the other walls?
- **Q:** Do all the walls in the Shower/Toilet receive wall tile T-9? See attached A407 & A131.

A407 Elevations.pdf Enlarged Floor Plans.pdf Finish Plans.pdf 093013 Ceramic Tiling.pdf



The Christman Company

Q:

#	Subje	ct	Status	Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
47	ACM P	anel Extent	Open		None	Jurczuk, Steve (C Baisch, Kristy (C	07/26/2023	Austin Brown	07/30/2023		Jurczuk, Steve (C Baisch, Kristy (C				
	Q:	Austin Brown Sent Wed Jul 26, 2023 at 11:05 am EDT Drawing A-211 - Yellow highlighted area within the sto Drawing A-202 - Yellow highlighted area within the sto RFI 47 (1).png RFI (2).png													
46	Multip	le Site & Structural Concrete Questions	Open		None	Jurczuk, Steve (C Baisch, Kristy (C	07/26/2023	Austin Brown	07/30/2023		Jurczuk, Steve (C Baisch, Kristy (C				-

Austin Brown Sent Wed Jul 26, 2023 at 07:05 am EDT Received 4:15PM 7/25/2023

I have a few RFI questions for WC No. 05 Site Concrete and WC No. 10 Structural Concrete. WC No. 05 Site Concrete

- Civil C-103 Site Plan does not match ES01 Electrical Site Plan
- Is WC No. 05 responsible for transformer and generator pads?
- Who is responsible for furnishing the site furnishings?
- Can you please provide more information, locations, and details for benches, lights, fences, concrete planters, concrete stairs, and retaining walls in the concrete scope? Or could you please remove it from the scope if not part of the project anymore?
- · Please provide detail for shade structures footings
- Is the electrical area around the northwest entrance area concrete or asphalt?

WC No. 10 Structural Concrete.

• Is WC No. 02 responsible for all excavation and backfill of interior and exterior footings?

45	ACP quantity	Open	None	Jurczuk, Steve (C Baisch, Kristy (C	07/25/2023	Austin Brown	07/29/2023	Jurczuk, Steve (C Baisch, Kristy (C
	Austin Brown Sent Tue Jul 25, 2023 at 03:43 pm EDT Q: 1. RCP's legend A-111A & B identify 2x2 High	h NRC Acoustic Ceiling Panel	(ACP-3), how	vever Materials Sch	edule I-001 doe	s not show A	ACP-3. Please cla	rify and add details for ACP-3 to Materials Schedule.
44	WC 02 & 08 Earthwork Stockpile	Closed	None	Dobbs, Andrew (Th	07/25/2023	Austin Brown	07/29/2023	07/27/23

Austin Brown Sent Tue Jul 25, 2023 at 03:41 pm EDT

Scope item #15 in WC02 states Earthwork is responsible to strip, stockpile and re-spread including removal of clumps and stones. Both WC02 and 08 scopes state that topsoil will be furnished, installed and graded by WC08. It also states that initial placement to within +/- 1" is by WC02 which is conflicting. Is the intent to have 02 strip, stockpile and re-spread existing soils and then have 08 furnish and install any additional topsoil qty that may be required?



The Christman Company

Subject Status Responsible Received Assignee Date Initiated RFI **Due Date** Closed Date Ball In Court Location Schedule Cost Cost Contractor Manager Impact Code Impact Andrew Dobbs (The Christman Company (LAN)) Responded Thu Jul 27, 2023 at 08:20 am EDT The WCs will be adjusted. WC 02 to provide and install any additional topsoil needed to bring grade to within +/- 0.1' after respreading existing topsoil. Jurczuk, Jurczuk, Steve Steve (C... (C... Austin 07/25/2023 07/29/2023 Multiple Masonry Questions Open None Baisch, Kristy Brown Baisch, Kristy (C... (C... Austin Brown Sent Tue Jul 25, 2023 at 03:38 pm EDT RFI CJ- See attached. Please confirm that the masons are responsible for all additional adds/Cost associated with this detail. The seismic clips are unnecessary (Michigan is a low risk seismic zone) and if required are placed in the wrong spot on this detail- Please advise RFI Floor Plan-See Attached- The Floor Plan Tags calls out 4" Burnished CMU, when scaled they show 8" Burnished CMU- which is correct? Please advise • \$503-5 is in the same spot referenced on the floor plan and shows 8" CMU here, not 4" RFI Floor Plan- The wall that divides Classroom 205/206 has a callout for "fully grouted masonry wall" (highlighted in green)- Is this for all walls in this corridor or just this section? Please advise S101 A/B- Note 3: Typical Top of Bond Beam Elevation 12'8". Top of 12" Tall Bond Beam at Exterior wall + 15" • For 8" interior walls, Most TOW framing cuts in structural drawings show 8" bond beam at 13'4" and 14'- is a second bond beam requires at 12'8" for all locations throughout? 0: • S103 A/B note 4 says to place Bond Beam at locations shown on details- which is correct? Please advise S103 A/B- Rebar Schedule. M2 has rebar spacing #4 60" OC- this won't work well and will require additional labor cost. Spacing should be 56" or 64" OC- which is acceptable? Please advise Is an updated schedule going to be released? The current schedule has no mention of dates for spray foam/brick veneer Installation. Load bearing and non-load bearing masonry walls are called out but have a 4-month gap between dates(4-3-24 to 8-15-24). Please advise Are Normal Weight CMU an acceptable alternate? These would be more cost efficient, especially for the burnished CMU which I am informed by the vendors are very costly to produce. Please advise RFI Cl.pdf RFI Floor Plan.pdf Andrew Dobbs (The Christman Company (LAN)) Responded Thu Jul 27, 2023 at 08:07 am EDT Masonry Schedule - A more detailed schedule will be developed with the awarded bidders after contracts have been awarded. The guideline schedule is for a starting reference but does not contain all of the details. The intent was for the spray foam and brick veneer to be included in the load bearing masonry wall schedule item. The reason for the gap between the load bearing and non-load bearing masonry walls is that the non-load bearing masonry walls are installed on top of thickened slabs. The thickened slabs will not be poured until after the load bearing masonry walls are complete. Jurczuk, Steve (C... Austin SUBSTITUTION REQUEST - Premier Panel Systems 07/25/2023 07/29/2023 07/27/23 Closed None Baisch, Kristy Brown

Per Steve Jurczuk: Substitution request accepted.

Kristy Baisch (C2AE) Responded Thu Jul 27, 2023 at 07:30 am EDT

PremierPanelSystems_SubstitutionRequestSigned.pdf

https://premierpanelsystems.com/

Austin Brown Sent Tue Jul 25, 2023 at 03:37 pm EDT Attached is a substitution request for the Mt Hope School.

Q:

(C...

Premier Panel Systems is a local fabricator located in Howell Michigan. We have used Premier at Waterford Schools, Romeo Schools, Roseville Schools, Avondale Schools etc.



Thank you, **Brian Johnson**

The Christman Company

#	Subje	ct	Status Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
41	Cable ¹	Tray	Open	None	Jurczuk, Steve (C Baisch, Kristy (C	07/25/2023	Austin Brown	07/29/2023		Jurczuk, Steve (C Baisch, Kristy (C				
	Q:	Austin Brown Sent Tue Jul 25, 2023 at 03:34 pm EDT From the pre-bid meeting, when should we expect the	addendum regarding the cal	ole tray specif	fications? The su	ppliers are asking	ı what to qu	ote.						
40	Suburl	ban Fab - Bonding	Closed	None	Dobbs, Andrew (Th	07/25/2023	Austin Brown	07/29/2023	07/27/23					
	O:	Austin Brown Sent Tue Jul 25, 2023 at 03:34 pm EDT Suburban Fab would love to quote this project, but we could our portion, and exclude the bond amount for the lf any of this possible, let me know.	-						•	d deck package wo	uld eat most	of that up. If v	we can	
	`	Thanks,												
		Bill Graham Suburban Fabrication												
	A:	Andrew Dobbs (The Christman Company (LAN)) Responds this time, this request is denied.	nded Thu Jul 27, 2023 at 07:5	54 am EDT										
39	SUBST	TITUTION REQUEST - Control Solutions Inc	Closed	None	Jurczuk, Steve (C Baisch, Kristy (C	07/25/2023	Austin Brown	07/29/2023	07/27/23					_
	Q:	Austin Brown Sent Tue Jul 25, 2023 at 03:33 pm EDT Please see attached substitution request to add Contro Substitution Request - Control Solutions.pdf	l Solutions as an approved c	ontrols contra	actor.									
	A:	Andrew Dobbs (The Christman Company (LAN)) ResponsC Tech needs to be carried as the base bid controls co			ould be presente	d as a voluntary a	ilternate on	the bid form.						
38	Tectun	n Decking WC	Closed	None	Dobbs, Andrew (Th	07/25/2023	Austin Brown	07/29/2023	07/27/23					_
		Austin Brown Sent Tue Jul 25, 2023 at 03:31 pm EDT I was notified by my Armstrong Tectum rep in regard to have worked around the entire state of MI. We are curr		-			m Roof Dec	k installer based	in Grand Rapids.	We have an incred	libly experier	nce install crev	w and	
	Q:	I noticed that our scope of work is to be contracted und being contracted under Roofers historically, and have h me know if this change can be made.					-	•			-			
		Armstrong has our full endorsement on this one, we'd l	ove the opportunity to work	with you!										



Item 4: Tectum deck to be painted.

The Christman Company

Subject Status Responsible Received Assignee Date Initiated RFI **Due Date** Closed Date Ball In Court Location Schedule Cost Cost Contractor From Manager Impact Code Impact Project Estimator - Tectum Roof Deck Andrew Dobbs (The Christman Company (LAN)) Responded Thu Jul 27, 2023 at 07:48 am EDT A: The tectum deck scope of work will remain under WC 12 - Roofing. The main reason for this is that tapered insulation needs to be installed on top of the tectum deck and then membrane every day so the tectum deck is not left exposed to the elements. This will require close coordination between the tectum deck installers and the roofers which is why I have lumped them together. Jurczuk, Steve Jurczuk, Steve (C... Austin (C... Multiple Earthwork Questions Open None 07/25/2023 07/29/2023 Baisch, Kristy Brown Baisch, Kristy (C... (C... Austin Brown Sent Tue Jul 25, 2023 at 03:25 pm EDT 1. Please provide a detail for concrete footings/foundations that are required for the shade structure/outdoor classroom. Please provide a detail for the bike rack concrete footings. O: WC 02, Specific Notes & Details Item 8 has the concrete footings for the fence installed by WC 05? This typical is included with the fence contractor's work. Please clarify or remove this from WC 05 responsibility. 4. S-501 detail 6 Entrance Slab section has a 2" clear cover to bottom? Please clarify what this 2" clear cover is? 5. Please provide a detail for the natural gas generator. Jurczuk, Steve (C... Brown, Austin Austin Multiple painting RFI's None 07/25/2023 07/29/2023 Open Baisch, Kristy Brown (Th... (C... Austin Brown Sent Tue Jul 25, 2023 at 03:22 pm EDT 1.) Christman general requirements item #39 Sealant Schedule notes work category 24 is to caulk exposed structural steel. Can you please clarify what specific locations of structural steel need to be caulked by 24? 2.) Is any other caulking required by WC #24 than hollow metal frames and structural steel referenced in the christman sealant schedule? 3.) What paint color is the ductwork to be painted in the cafeteria? The reflected ceiling plan appears to have a note pointing to the ductwork to be P-13, but the reflected ceiling plan general note 7 says all duct to be painted P-10 except classrooms. Which is correct P-13 or P-10? 4.) Reflected ceiling plan legend notes tectum ceilings are to be painted P-15, but Christman scope of work category 24 specific note 1 says tectum deck "does not" get painted. Which is correct? 5.) Do gluelam beams require field staining and varnishing? Spec section 099300 references that they do, but just want to verify. O: 6.) Does the wood laminate at the classroom reading nooks require field finishing by work category 24? 7.) Do the reflected ceiling plan general notes 5, 6 & 8 regarding color coding fire suppression, electrical conduit, and water lines apply to all rooms with exposed ceilings or are there specific rooms that these notes apply to? 8.) Regarding the reflected ceiling plan general note 6 stating to paint all electrical conduit color P-9, does this apply to conduit that is attached directly to exposed ceiling deck that would be painted a different color? Is there a drawing showing the conduit that would need painted to be able to quantify this scope of work in the bid? 9.) Interior paint specification 099124, 3.6B.2 references alkyd dryfall, this product is not available in Michigan due to the new VOC regulations, is an acrylic dryfall acceptable for exposed ceilings? 10.) Interior paint specification 099124, CMU substrate finish is listing a finish of MPI gloss level 3 which is an eg-shel finish. Is the correct that they want an eg-shel finish in lieu of semi-gloss on CMU walls on the project? Kristy Baisch (C2AE) Responded Thu Jul 27, 2023 at 11:42 am EDT Per Steve Jurczuk/Katie Winters: Item 3: P-13 is the correct paint color. Further clarification will be in Addendum #3.



A: Per Paul Twigg, Baron Malow:

33 Decorative Film WF-1 - Unavailable in US

The Christman Company

Date Initiated RFI Subject Status Responsible Received Assignee **Due Date** Closed Date Ball In Court Location Schedule Cost Cost Contractor From Manager Impact Code Impact Item 5: Yes, stain and varnish. Item 6: Veneer plywood and trim that is installed around and within the nooks needs be finishes. Item 7: Intent is all public and student occupied rooms. Item 8: This applied to all conduit, even that applied to deck. Item 9: Yes, this is acceptable. Item 10: This is correct; Eggshell is a district standard. Jurczuk, Steve (C... Austin Brown, Austin Multiple Flooring Questions Open None 07/25/2023 07/29/2023 Baisch, Kristy Brown (Th... (C... Austin Brown Sent Tue Jul 25, 2023 at 03:16 pm EDT • Do you want T-1 behind drinking Fountains in Corridor 201 East side of Janitor 213 • Page A-407 Shows wood look Corridor tile Being 12'9" wide on Hallway, on the finish pages 1-101A & 1-101B Shows 14'2" wide. Could you clarify please. Q: • All Classrooms call for a Little area to receive hard wood flooring, is this correct? If so, the specs just say Niche Wood, White Oak. Could you please clarify? We would also need a transition strip clarification. • Steps in the café Platform 310A, are we figuring RF-1 or RF-2 · Can we also bid the Polish Concrete or does it have to run with the concrete bid category. Kristy Baisch (C2AE) Responded Thu Jul 27, 2023 at 07:38 am EDT Per Katie Winters: • Bullet one: Yes, T-1 to be applied to the drinking fountain wall. This will be in Addendum #3. A: • Bullet two: Sheet A-407 elevation 4 is correct with the 12'-9" dimension. Sheets I-101A and I-101B reference for locations, not specific dimensions. Additional dimensions to be reflected in Addendum #3. • Bullet three: WD-2 is for the niche area only. This is not for classroom flooring. Reference Sheet A-401 elevations 1 and 2. • Bullet four: This is addressed on a previous RFI and will be in Addendum #3. Jurczuk, Steve (C... Austin 34 Fiber installation Closed None 07/25/2023 07/29/2023 07/27/23 Baisch, Kristy Brown (C... Austin Brown Sent Tue Jul 25, 2023 at 03:15 pm EDT Q: 1. Does the RFP include the fiber installation for the outside fiber connection to the district's existing fiber? 2. If so, what count fiber cable is needed? Kristy Baisch (C2AE) Responded Wed Jul 26, 2023 at 04:06 pm EDT

07/25/2023

Austin

Brown

07/29/2023

Brown, Austin

(Th...

MetroNet, the district's internet provider, will install the fiber into the building. The electrical contractor is to install the conduit between the utility pole and MDF and coordinate with MetroNet.

None

Open

Jurczuk,

Steve (C...

Baisch, Kristy



The Christman Company

#	Subje	ect	Status Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
					(C									
	Q:	Austin Brown Sent Tue Jul 25, 2023 at 03:14 pm EDT Per attached email, specified WF-1 is not available in the RE_ Bid Invite from Clark for _Project Namemsg	US and is Europe exclusive	, please revie	ew.									
	A:	Kristy Baisch (C2AE) Responded Thu Jul 27, 2023 at 07:3 Per Katie Winters: Window film WF-1 alternate will be on Addendum #3.	1 am EDT											
32	Expos	sed ductwork insulation vs painting	Open	None	Jurczuk, Steve (C Baisch, Kristy (C	07/25/2023	Austin Brown	07/29/2023		Jurczuk, Steve (C Baisch, Kristy (C				_
	Q:	Austin Brown Sent Tue Jul 25, 2023 at 03:11 pm EDT I have a question about the ductwork insulation we Please clarify: The specs. Say to insulate the Expo		we don't do	that, they wo	uld paint the du	ctwork (cla	assrooms, gym	, and cafeteria).	Let me know.				
		RFI #1.doc												
31		TITUTION REQUEST - Wolverine Enclosures / AAP oved Fabricator spec 07 42 13.23	Closed	None	Jurczuk, Steve (C Baisch, Kristy (C	07/25/2023	Austin Brown	07/29/2023	07/27/23					_

Austin Brown Sent Tue Jul 25, 2023 at 11:22 am EDT Substitution Request Reviewer,

Wolverine Enclosures, Inc. is very interested in bidding the metal wall panel portion of work for this project. The design features you have incorporated into the wall panels for this project fit very well with our capabilities to perform unique and challenging installations. Wolverine is a single source provider of engineered MCM panel systems, furnished and installed. Our fabrication division, Advanced Architectural Products, operates under agreement of major MCM suppliers including Alcoa Reynobond, Mitsubishi / Alpolic and Alucobond.

Wolverine Enclosures successfully completed a major project for LSD / Christman / Stantec in 2022, the Everett High School additions. Some photos of our MCM installed on this project are attached.

Q: I am enclosing data on AAP DS-9500 dry joint pressure equalized rainscreen system and a few other photos of our work. We request that you review the information and consider adding Wolverine Enclosures / AAP as an approved fabricator for Section 07 4213.23 of this project. We are confident that we can offer a knowledgeable and competitive quote.

Received from larry.k@panels.com DS-9500 Air and Water 20 Psf.pdf DS-9500 Structural 30 and 50 Psf.pdf intro letter.pdf JCC Letter.pdf 20221014_101656.jpg 20221014_092316.jpg major projects.pdf



The Christman Company

#	Subje	ect	Status Re Co	sponsible ntractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
		JCC ext.JPG 20221014_101529.jpg SECTION 07 42 43 v.1.pdf IMG_2858.JPG													
	A:	Kristy Baisch (C2AE) Responded Tue Jul 25, 2023 at 01:4 Per Steve Jurczuk: Denied. Substitution request form was not included with	·												
30	Exteri	or Classroom Area Base, and clarifications	Open		None	Jurczuk, Steve (C Baisch, Kristy (C	07/24/2023	Austin Brown	07/28/2023		Jurczuk, Steve (C Baisch, Kristy (C				_
		Austin Brown Sent Mon Jul 24, 2023 at 12:27 pm EDT What is required at the outdoor classroom areas? I can't	t find if it requ	ires gravel or ju	st dirt.										
		Section 31 sheet C504 shows a fence (NIC) and possible	a conc strip i	n between the t	wo walks.										
	Q:	Landscaping L-100 has synthetic turf between the two w	alks.												
		Please clarify.													
29	Exteri	or Site Plan Questions	Closed		None	Jurczuk, Steve (C Baisch, Kristy (C	07/24/2023	Austin Brown	07/28/2023	07/27/23					_
		Austin Brown Sent Mon Jul 24, 2023 at 12:26 pm EDT Regarding the barrier gates at the east side: Is there an	entry gate ar	d exit gate or is	s it just one b	oarrier gate? Ar	e there two barrie	r gates at th	ne entry off of Ha	rding?					
	Q:	C-504 shows all fence NIC, also it calls out AMERISTAR, s	pec just talks	about chain linl	k.										
		Can you provide a fence layout? And details.													
		Can you do something other than trex for the gates at th	ne dumpster,	oossibly go to a	steel frame	with treated wo	od, would this be	acceptable?	?						
		Kristy Baisch (C2AE) Responded Tue Jul 25, 2023 at 01:5 Per Mark Adams: There is one barrier gate on the east side (Harding Aven plans on installing a "AMERISTAR" fence in the future, bu	ue). The gate					ans at only o	one location). The	e perimeter fence	is Not in Contract	(NIC), the Lar	nsing School D	District	
	A:	The fence required for this project is shown, there is cha				·	•	on the plan	ns)						
		Provide base bid as shown; can provide a voluntary alter		·					,						
						Jurczuk, Steve (C		Austin							_
28	Finish	Floor Plan - Cafeteria and surrounding area flooring type	Closed		None	Baisch, Kristy	07/24/2023	Brown	07/28/2023	07/27/23					

(C...



The Christman Company

Subject Status Responsible Received Assignee Date Initiated RFI **Due Date** Closed Date Ball In Court Location Schedule Cost Cost Contractor From Manager Impact Code Impact Austin Brown Sent Mon Jul 24, 2023 at 12:25 pm EDT Please verify the cafeteria and surround areas flooring. The Cafeteria Platform and stairs show RF-2 to be installed. The corridor/stair that flows off of the cafeteria platform receives RF-2, is this also correct? Please see attached. RFI Finish Plan - Area A.pdf Kristy Baisch (C2AE) Responded Tue Jul 25, 2023 at 11:49 am EDT Per Katie Winters: See upcoming addendum Dobbs. Austin 27 Waterproofing Shower WC Responsibility Closed None 07/24/2023 07/28/2023 07/27/23 Andrew (Th.. Brown Austin Brown Sent Mon Jul 24, 2023 at 11:56 am EDT Q: 1. Confirming that Water proofing in the two Shower Areas are by WC13 not WC22Per The Christman Company Project Manual pg 79? Andrew Dobbs (The Christman Company (LAN)) Responded Thu Jul 27, 2023 at 07:20 am EDT Confirmed that waterproofing at the shower areas is by WC 13. Baisch, Kristy (C... Austin 26 Synthetic Turf Curbing Closed 07/21/2023 07/25/2023 07/24/23 None Jurczuk, Brown Steve (C.. Austin Brown Sent Fri Jul 21, 2023 at 11:40 am EDT Detail 10/L-500 for synthetic turf shows conc curbing. Per sheet L-100 synthetic turf is mostly bordered by bldg. wall, conc. walk and/or conc. mow strip. Please confirm whether curbing is required in this case. Steve Jurczuk (C2AE) Responded Mon Jul 24, 2023 at 09:24 am EDT Per L-100, the synthetic turf is only located between the two sidewalks on the north and northeast portions of the site. The concrete walks will serve as the curb. Jurczuk, Steve (C... Austin Detail 31 C-504 Closed None 07/21/2023 07/25/2023 07/24/23 Baisch, Kristy Brown Austin Brown Sent Fri Jul 21, 2023 at 10:45 am EDT Cross Section 31 on C-504 details 8" 21aa and 12" sand under the 6" concrete paving as opposed to 6" sand under remaining 6" concrete paving. Is the section correct? Kristy Baisch (C2AE) Responded Fri Jul 21, 2023 at 01:17 pm EDT A: Per Mark Adams: The pavement structural section for the basketball court should be: 4" concrete over 6" sand, 6 x 6 WWF1.4 x 1.4. This will be clarified in the Addendum. Baisch, Kristv (C... Austin Architectural RFI's - Locker Width, Bench Finish 07/24/2023 07/21/23 Closed None 07/20/2023 lurczuk. Brown Steve (C...

Austin Brown Sent Thu Jul 20, 2023 at 10:17 am EDT

0:

Q1) According to images for the corridor lockers on page A-408 and the equipment schedule on page A-131, you are asking for a locker that is 8" in width. However, none of the manufacturer's listed provides an 8" locker. PLEASE ADVISE.

(The nearest options appear to be 9" wide OR a "two-person" locker at 15" That would include two separate cubby doors on top. There are also "duplex" lockers that are 15" wide but they have to be a minimum 15" depth, OR perhaps you know of a manufacturer that is not listed that offers the size you are asking for? Not sure which direction to go here. PLEASE ADVISE)



The Christman Company

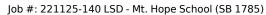
Lansing, Michigan 48910

#	Subje	ect	Status Respons Contract		Assignee	Date Initiated	RFI Manage	Due Date r	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
		Q2) The spec section mentions wooden locker benches Thank you.	. PLEASE ADVISE who	ere on the job these a	re if anywhere	e, because accordin	g to Bench	details 9 and 10	on page A-523 the	changing room b	enches are g	oing to be con	crete.	
	A:	Steve Jurczuk (C2AE) Responded Fri Jul 21, 2023 at 10:0 Q1: We will clarify this by future addendum Q2: Eliminated. We will clarify by future addendum.	46 am EDT											-
23	Plastic	c Laminate Color Selection	Closed	None	Baisch, Krist (C Jurczuk, Steve (C	y 07/20/2023	Austin Brown	07/24/2023	07/21/23					_
	Q:	Austin Brown Sent Thu Jul 20, 2023 at 10:24 am EDT Specification 123216 and color schedule refers to PL-1 Please advised an alternate Plastic Laminate finish sele	J		art color select	tion listed is a wood	d veneer pro	oduct which man	ufacturer's listed i	n 123216 won't u:	se in manufa	cturing.		
	A:	Steve Jurczuk (C2AE) Responded Fri Jul 21, 2023 at 10:: Plesae clarify concern of the use of this product for case LaminArt_Product Sheet.pdf		supports use for this	application. S	See attached produ	ct data she	et.						-
22	Roller	Window Shade Color/Finish Quantity	Closed	None	Baisch, Krist (C Jurczuk, Steve (C	y 07/20/2023	Austin Brown	07/24/2023	07/21/23					_
	Q:	Austin Brown Sent Thu Jul 20, 2023 at 10:31 am EDT Elevations A201, A202 contain a material legend upper Can you confirm this? Or are there 5 totally different co	-	•	pear that ACM	A and ACM C are th	ne same col	or/finish, and tha	at ACM B and ACM	D are the same co	olor/finish.			
	A:	Steve Jurczuk (C2AE) Responded Fri Jul 21, 2023 at 10:2 This will be clarified in upcoming addendum.		CM:										-
21	SUBST	TITUTION REQUEST - Acoustic Tack Panel	Closed	None	Baisch, Krist (C Jurczuk, Steve (C	y 07/20/2023	Austin Brown	07/24/2023	07/21/23					_
	Q:	Austin Brown Sent Thu Jul 20, 2023 at 10:43 am EDT We are submitting the attached substitution request fo AWP5-8 2000 Series Acoustic Tack Panel Specifications AWP5-8 c2ae Substitution Request Form.pdf		l project. Please cont	act us should	you have any ques	tions.							
	A:	Steve Jurczuk (C2AE) Responded Fri Jul 21, 2023 at 10:: Rejected. 220116_RFS-1.pdf	28 am EDT											-
20	SUBST	TITUTION REQUEST - Pressure Water Cooler	Closed	None	Baisch, Krist (C Jurczuk, Steve (C	y 07/20/2023	Austin Brown	07/24/2023	07/21/23					_



The Christman Company

Subject Status Responsible Received Assignee Date Initiated RFI **Due Date** Closed Date Ball In Court Location Schedule Cost Cost Contractor From Manager Impact Code Impact Austin Brown Sent Thu Jul 20, 2023 at 10:41 am EDT In Section 2.1 Pressure Water Cooler I was hoping you would consider allowing Murdock Mfg. Model# A172108F-BF12-BCD-WF1EZ as an Approved Equivalent to other Manufacturers Listed. We have put Murdock Coolers in many Q: of your existing Lansing Schools in the past couple of years. Please see the Specification Sheet attached. Thank you for your consideration on this Project. A172108F-BF12-BCD-WF1EZ.pdf Steve Jurczuk (C2AE) Responded Thu Jul 20, 2023 at 03:37 pm EDT Substitution Form. Steve Jurczuk (C2AE) Responded Thu Jul 20, 2023 at 03:35 pm EDT A: Denied. No substitution request for as part of submission. It is preferred if a contractor makes these submittals for substitutions rather than manufacturer's reps. This gives credence that someone really wants to use the product. Baisch, Kristy (C... Austin Movable Bleachers Specification Closed None 07/20/2023 07/24/2023 07/21/23 Jurczuk, Brown Steve (C.. Austin Brown Sent Mon Jul 17, 2023 at 08:57 am EDT Q: Please provide specifications and approved mfg for "moveable bleachers" as identified in WC-20 scope item #13 Steve Jurczuk (C2AE) Responded Fri Jul 21, 2023 at 09:58 am EDT See detail 11/L-500 for product specifics. Baisch, Kristy (C... Austin Steel Shade Structure Specification Closed None 07/20/2023 07/24/2023 07/21/23 Jurczuk, Brown Steve (C.. Austin Brown Sent Mon Jul 17, 2023 at 08:57 am EDT Please provide specifications and approved mfg for "steel shade sturctures (outdoor classrooms)" as identified in WC-20 scope item #12 Steve Jurczuk (C2AE) Responded Thu Jul 20, 2023 at 03:38 pm EDT A: The spec is on 7/L-500 Baisch, Kristy (C... Austin 17 SUBSTITUTION REQUEST - Roller Window Shades Closed None 07/20/2023 07/24/2023 07/21/23 Brown Jurczuk, Steve (C... Austin Brown Sent Mon Jul 17, 2023 at 08:58 am EDT Requesting a substitution for OpenLight roller shades in lieu of the specified roller shade manufacturers listed in the specifications for Lansing Schools - New Mount Hope Elementary in, Lansing, Michigan. Attached is a product data sheet about OpenLight manual and motorized shades submittal, along with a brochure about OpenLight and Commercial Brochure. OpenLight is made locally in Ann Arbor, Michigan and is able to provide an equivalent quality product as the specified manufacturers. OPENLIGHT BROCHURE.pdf OpenLight-Manual-Submittal.pdf Steve Jurczuk (C2AE) Responded Thu Jul 20, 2023 at 03:36 pm EDT Denied. No substitution request form as part of submission. It is preferred if a contractor makes these submittals for substitutions rather than manufacturer's reps. This gives credence that someone really wants to use the product. Dobbs Austin Door 102.2 & 110.1 - WC Requirements 07/14/2023 07/18/2023 07/26/23 Closed None Andrew (Th... Brown Q: Austin Brown Sent Fri Jul 14, 2023 at 07:54 am EDT





The Christman Company

	A: C105 - :	Doors Numbers 102.2 and 110.1 have Aluminum door Please confirm that WC 18 would have the Aluminum Andrew Dobbs (The Christman Company (LAN)) Resg WC 18 to provide and install aluminum door frames. ST Pipe Type Austin Brown Sent Wed Jul 12, 2023 at 02:25 pm EDT On sheet C105 Site utility plan, one run of pipe is lab Kristy Baisch (C2AE) Responded Tue Jul 18, 2023 at CPer Mark Adams: Specification Section 334200 Stormwater Conveyan 1. Corrugated-steel pipe and fittings. 2. Corrugated-aluminum pipe and fittings. 3. ABS pipe and fittings. 4. PE pipe and fittings.	n door frames and WC 20 would be provided Wed Jul 26, 2023 at 01 WC 20 to provide and install volume Closed Closed Feled to be 12" Concrete pipe.	None All of the othe	d hardware. Jurczuk, Steve (C Baisch, Kristy (C er pipe is just labe	07/12/2023	Austin Brown	07/16/2023	07/21/23 be type is if the rur	ı is labeled "ST".				-
	Q:	Andrew Dobbs (The Christman Company (LAN)) Responder to provide and install aluminum door frames. ST Pipe Type Austin Brown Sent Wed Jul 12, 2023 at 02:25 pm EDT On sheet C105 Site utility plan, one run of pipe is lab Kristy Baisch (C2AE) Responded Tue Jul 18, 2023 at CPer Mark Adams: Specification Section 334200 Stormwater Conveyan 1. Corrugated-steel pipe and fittings. 2. Corrugated-aluminum pipe and fittings. 3. ABS pipe and fittings.	conded Wed Jul 26, 2023 at 01 WC 20 to provide and install v Closed Closed Closed Concrete pipe. 03:03 pm EDT	None All of the othe	d hardware. Jurczuk, Steve (C Baisch, Kristy (C er pipe is just labe	07/12/2023	Austin Brown	07/16/2023		i is labeled "ST".				-
	Q:	WC 18 to provide and install aluminum door frames. ST Pipe Type Austin Brown Sent Wed Jul 12, 2023 at 02:25 pm EDT On sheet C105 Site utility plan, one run of pipe is lab Kristy Baisch (C2AE) Responded Tue Jul 18, 2023 at 0 Per Mark Adams: Specification Section 334200 Stormwater Conveyan 1. Corrugated-steel pipe and fittings. 2. Corrugated-aluminum pipe and fittings. 3. ABS pipe and fittings.	WC 20 to provide and install v Closed r eled to be 12" Concrete pipe. 03:03 pm EDT	None All of the othe	Jurczuk, Steve (C Baisch, Kristy (C		Brown			ı is labeled "ST".				-
	Q:	Austin Brown Sent Wed Jul 12, 2023 at 02:25 pm EDT On sheet C105 Site utility plan, one run of pipe is lab Kristy Baisch (C2AE) Responded Tue Jul 18, 2023 at CPer Mark Adams: Specification Section 334200 Stormwater Conveyan 1. Corrugated-steel pipe and fittings. 2. Corrugated-aluminum pipe and fittings. 3. ABS pipe and fittings.	r eled to be 12" Concrete pipe. 03:03 pm EDT	All of the othe	Steve (C Baisch, Kristy (C		Brown			i is labeled "ST".				
_		On sheet C105 Site utility plan, one run of pipe is lab Kristy Baisch (C2AE) Responded Tue Jul 18, 2023 at C Per Mark Adams: Specification Section 334200 Stormwater Conveyan 1. Corrugated-steel pipe and fittings. 2. Corrugated-aluminum pipe and fittings. 3. ABS pipe and fittings.	eled to be 12" Concrete pipe. 03:03 pm EDT			eled "ST", I could	not find wh	at the desired pip	oe type is if the rur	is labeled "ST".				-
	A:	Per Mark Adams: Specification Section 334200 Stormwater Conveyan 1. Corrugated-steel pipe and fittings. 2. Corrugated-aluminum pipe and fittings. 3. ABS pipe and fittings.	·	als can be use	d:									_
		5. PVC pipe and fittings and, 6. Concrete pipe and fittings. The storm sewer run on Sheet C-105 labeled "12" Co	ncrete pipe" does not have to	be concrete.										
14 Te	Tempor	ary Road and Crane Pad Material	Closed	None	Jurczuk, Steve (C Baisch, Kristy (C	07/12/2023	Austin Brown	07/16/2023	07/26/23					-
(Q:	Austin Brown Sent Wed Jul 12, 2023 at 02:24 pm ED1 Can a detail for the temporary road and crane pad bo		oth, etc.										
	A:	Andrew Dobbs (The Christman Company (LAN)) Res The temporary crane pads will be funded from WC02			will be the respor	nsibility of WC 02	once the cr	ane sizes, weight	s, etc. can be corr	adiated with the V	VC's needing	the cranes.		
13 Z	Zonolit	e Insulation	Closed	None	Dobbs, Andrew (Th	11/04/2022	Andrew Dobbs	11/08/2022	11/10/22		Demolition			_
C	Q:	Andrew Dobbs Sent Fri Nov 4, 2022 at 08:32 am EDT The existing drawings show the possibility of zonolite insulation being in the CMU. Has it been confirmed if this zonolite exists and has it been tested for asbestos?												
	A:	Andrew Dobbs (The Christman Company (LAN)) Resp ERG did not find any zonolite within the CMU. They d			I negative for asl	bestos.								
12 G	Gray G	lass Block Mortar	Closed	None	Dobbs, Andrew (Th	11/04/2022	Andrew Dobbs	11/08/2022	11/10/22		Demolition			-
(Q:	Andrew Dobbs Sent Fri Nov 4, 2022 at 08:28 am EDT At the end of the pre-bid meeting it was discussed the		glass block mo	rtar that was not	t tested in the ori	ginal ERG H	az-Mat survey. H	as that been teste	d yet and what we	ere the results	?		



The Christman Company

#	Subje	ect	Status Responsib Contractor		Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
		ERG found a dark gray/brown cement caulk on the exterior block windows. This was found to be positive for asbestos (it is on the brick edge of the windows). It is estimated that there are approximately 50 square feet of this material. WC 01A to include abatement of 50sf of this dark gray/brown cement caulk in their base bid and provide unit pricing shall any more need to be abated. ERG also found lead chinking strips on the window ledges and on the roof that is believed to be the same material as asbestos containing. There is estimated to be approximately 210sf of this material. WC 01A to include abatement of 210sf of this lead chinking strips in their base bid and provide unit pricing shall any more need to be abated.												
11	Depth	n of Demo & Backfill	Closed	None	Baisch, Kristy (C Jurczuk, Steve (C	11/04/2022	Andrew Dobbs	11/08/2022	11/10/22		Demolition			_
	Q:	Andrew Dobbs Sent Fri Nov 4, 2022 at 08:25 am EDT Is it possible to only demo the existing structure down to a certain depth in lieu of removal of it all? This could possibly save money and running into hidden unknowns. Also do we need to backfill the entire basement and to what elevation? If future excavating contractor is going to dig down for footings/foundations, might make since to leave the backfill down for now.												
	A:	Kristy Baisch (C2AE) Responded Wed Nov 9, 2022 at 11: The basement must be completely removed where belo		ng. Preliminary desi	ign indicates the	e new building loo	cation will re	equire complete i	removal.					_
10	Slab o	on Grade & Basement	Closed	None	Baisch, Kristy (C Jurczuk, Steve (C	11/04/2022	Andrew Dobbs	11/08/2022	11/10/22		Demolition			
	Q:	Andrew Dobbs Sent Fri Nov 4, 2022 at 08:19 am EDT Is this school slab on grade with the exception of above the basement? There was mention at the prebid that there is a crawl space under the whole school.												
	A:	Kristy Baisch (C2AE) Responded Wed Nov 9, 2022 at 11:02 am EST The construction manager has the existing drawings. There is a combination of basement, tunnels, and horizontal ventilation shafts. Contractor shall visit the site AND review the existing documentation.												
9	Drive	way Approches	Closed	None	Dobbs, Andrew (Th	11/04/2022	Andrew Dobbs	11/08/2022	11/10/22		Demolition	1		_
	Q:	Andrew Dobbs Sent Fri Nov 4, 2022 at 08:17 am EDT Since there are current driveway approaches and hard s	urfaces is the Demolit	ion Contractor resp	onsible for a cor	nstruction entran	ce mud mat	t per the SESC Pla	an or is that the re	sponsibility of the	future site wo	ork contractor	?	
	A:	A: Andrew Dobbs (The Christman Company (LAN)) Responded Thu Nov 10, 2022 at 02:55 pm EST WC 01B (Demolition contractor) is responsible for construction entrance mud mat per the SESC plan.												
8	Electr	ic Transformers	Closed	None	Dobbs, Andrew (Th	11/04/2022	Andrew Dobbs	11/08/2022	11/10/22		Demolition			
	Q:	Andrew Dobbs Sent Fri Nov 4, 2022 at 08:17 am EDT There are three electric transformers in the basement area of the building. Who owns them? Who is responsible to remove them?												
	A:	Andrew Dobbs (The Christman Company (LAN)) Respondence are Lansing School District owned equipment. WC												_
7	Sewer	r Removal Location	Closed	None	Baisch, Kristy (C Jurczuk, Steve (C	11/04/2022	Andrew Dobbs	11/08/2022	11/10/22		Demolition			_



Kristy Baisch (C2AE) Responded Wed Nov 9, 2022 at 10:57 am EST

See upcoming addendum.

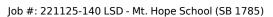
The Christman Company

Subject Status Responsible Received Assignee Date Initiated RFI **Due Date** Closed Date Ball In Court Location Schedule Cost Cost Contractor From Manager Impact Code Impact Andrew Dobbs Sent Fri Nov 4, 2022 at 08:16 am EDT Q: The Demolition Plan drawing does not have the location of the entire sewer proposed to be removed. Please revise the drawing with the sewer located from the street to the building. Kristy Baisch (C2AE) Responded Wed Nov 9, 2022 at 11:01 am EST A: See upcoming addendum. Dobbs, Andrew Plywood Over Openings Closed None 11/04/2022 11/08/2022 11/10/22 Demolition Andrew (Th... Dobbs Andrew Dobbs Sent Fri Nov 4, 2022 at 08:11 am EDT You mentioned that we have to put plywood over all the window and door openings, ground floor only, this is an extremely expensive item when there is going to be safety construction fencing all the way around the facility before Q: this takes place. Demolition will follow within 30 days of asbestos removal. Can the plywood sheeting be removed? Andrew Dobbs (The Christman Company (LAN)) Responded Thu Nov 10, 2022 at 03:03 pm EST A: This was discussed and decided to leave plywood sheeting in WC 01A's scope as outlined in the project manual. Baisch, Kristy (C... Andrew 11/04/2022 11/08/2022 11/10/22 Demolition Stripping Topsoil Closed None Jurczuk, Dobbs Steve (C... Andrew Dobbs Sent Fri Nov 4, 2022 at 08:06 am EDT Q: 1. Note on drawing C-102 says contractor responsible for stripping 6" of top soil for "all disturbed" areas" Does that include the parking lots and sidewalks? Kristy Baisch (C2AE) Responded Wed Nov 9, 2022 at 10:59 am EST A: Per specifications, this includes parking lots and sidewalks. Baisch, Kristy (C... Andrew Condition of Site After Demolition Closed None 11/04/2022 11/08/2022 11/10/22 Demolition Jurczuk, Dobbs Steve (C... Andrew Dobbs Sent Fri Nov 4, 2022 at 08:05 am EDT Q: 1. What condition is the demolition contractor supposed to leave the site in? Are we responsible for the items listed in section 312000 - Earth Moving? Or are we just supposed to strip off 6" of top soil, store on site, backfill the basements with Class II sand and compact to 95%? We aren't placing or installing any subbase courses, drainage courses bedding courses etc. correct? Kristy Baisch (C2AE) Responded Wed Nov 9, 2022 at 10:58 am EST Demolition contractor shall strip 6" of top soil and store on site (coordinate storage area with Construction Manager), back fill basements with Class II and compact to 95%. Do not install any additional courses. Baisch, Kristy (C... Andrew 11/04/2022 11/08/2022 Subbase Removal Closed None 11/10/22 Demolition lurczuk. Dobbs Steve (C... Andrew Dobbs Sent Fri Nov 4, 2022 at 08:04 am EDT Q: 1. Is the subbase material being removed from the asphalt parking lot?



The Christman Company

#	Subject	Status Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manager	Due Date	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
2	Demolition Note 9	Closed	None	Baisch, Kristy (C Jurczuk, Steve (C	11/04/2022	Andrew Dobbs	11/08/2022	11/10/22		Demolition			
	Andrew Dobbs Sent Fri Nov 4, 2022 at 08:04 am EDT Q: 1. Demolition Note 9 says that "established law	wn areas disturbed by the o	contractor op	erations shall be	e seeded and mul	ched" what	about the basketh	pall courts and pla	yground area?				
	A: Kristy Baisch (C2AE) Responded Wed Nov 9, 2022 at 10:5 Per sheet C-101, basketball court and playground areas s												-
1	Boiler's Weight	Closed	None	Dobbs, Andrew (Th	11/04/2022	Andrew Dobbs	11/08/2022	11/11/22		Demolition			
	Q: Andrew Dobbs Sent Fri Nov 4, 2022 at 08:02 am EDT Do we know the weights of the boilers that are to be salva	aged?											
	Andrew Dobbs (The Christman Company (LAN)) Respond. We do not know the weight of the boilers. Attached are phing_6650.JPEG IMG_6645.JPEG			fully help the bi	dder.								_
(None)	Reading Nook Stair Material WC Responsibility	Draft	None	Dobbs, Andrew (Th		Austin Brown			Brown, Austin (Th				
	Q: Austin Brown Sent Mon Jul 24, 2023 at 08:25 am EDT Who is responsible for the reading nook material that is b Wood Floor - Reading Nook Sections and Elevations.pdf I-101AMEMO 01 - Finish Plan - Area A.pdf	eing installed on 3 stair/ be	nch in the cla	assrooms (WD 2)? Please see atta	ched. Is this	s the carpenter? O	r the flooring?					
(None)	Exterior Sheathing WC Responsibility	Draft	None	Dobbs, Andrew (Th		Austin Brown			Brown, Austin (Th				
	Austin Brown Sent Mon Jul 17, 2023 at 08:56 am EDT Q: During the pre-bid meeting the CM briefly went over scop shows ¾" exterior gyp sheathing by WC-20. Should this results to the second shows									ole typical no	ok CMU head	detail	
(None)	WC & Specification Clarification - WC 21 & 11600	Draft	None	Dobbs, Andrew (Th		Austin Brown			Brown, Austin (Th				_
	Austin Brown Sent Thu Jul 20, 2023 at 10:35 am EDT • Specification section 11600 was included. V • Special Note No. 3 calls for installation of ply		s. Should tha	at be by General	Trades?								
(None)	Tectum Decking - WC14	Draft	None	Dobbs, Andrew (Th		Austin Brown			Brown, Austin (Th				-
	Q: Austin Brown Sent Thu Jul 20, 2023 at 10:34 am EDT Is providing and installation of the tectum decking staying	g in work category no. 14?	We do not ty	pically install te	ctum decking.								



EHRISTINAT BUILDING SINCE 1894

The Christman Company

# Subject	Status Responsible Contractor	Received From	Assignee	Date Initiated	RFI Manage	Due Date r	Closed Date	Ball In Court	Location	Schedule Impact	Cost Code	Cost Impact
(None) Drinking Fountain Quantity	Draft	None	Unassigned		Austin Brown			Brown, Austin (Th				

Austin Brown Sent Mon Jul 24, 2023 at 11:55 am EDT

Q:

1. Just confirming that only 3 Drinking Fountains Receive Tile?



Pre-Bid Meeting Agenda

Project Name	MT. Hope School	Work Category	All
Christman Project No.	221125-140	Contractor	All
·		Meeting Date & Time	Thursday July 13th, 2023
		Meeting Location	Microsoft Teams Meeting

Meeting Purpose:

- To communicate clearly defined work scope, quality standards, and anticipated schedule to subcontractors.
- Providing this information improves the likelihood that <u>bids will be consistent with</u> the owner's and The Christman Company's <u>quality standards</u> and <u>schedule expectations</u>.

Meeting Agenda:

I. Introduction

- a. Bid Documents
 - i. C2AE Drawings
 - ii. C2AE Specifications
 - iii. TCC Project Manual
 - iv. LSD Bid Invite

2. Construction Program Overview

- a. Structures
- i. One main building with two outside classroom classrooms adjacent to it.
- b. Infrastructure(s)
- c. Surroundings (parking, landscaping, etc.)
 - i. Residential Community Surrounding project site.

3. General Quality Expectations

- a. Why the owner is building this project
- b. What is important to the owner, building occupants, etc.
- c. The Christman Company's quality commitment to the owner

4. Schedule Expectations

- a. Total timeline
- b. Phasing
- c. Milestone dates (highlight expectations for impact of weather conditions)
 - i. Awareness of WC's temporary obligations throughout seasons.
- d. Owner occupancy commitment

5. Work Scope

- a. Included and excluded activities
 - i. Make sure General Requirements is fully understood.
 - ii. Leveling plates, bearing plates, and base plates/anchors Coordination/Responsibilities
 - iii. Warranties 2-year base bid, 5 year alternate inclusion
- b. Quality expectations for workmanship and results
 - i. WC's mockup expectations, Unistrut Mockups
- c. Allowances
 - i. WC 02 (\$50,000)
 - ii. WC 05 (\$20,000)
 - iii. WC 06 (\$10,000)
 - iv. WC 08 (\$10,000)
 - v. WC 10 (\$15,000)
 - vi. WC II (\$10,000)
 - vii. WC 12 (\$10,000)
 - viii. WC 13 (\$10,000)
 - ix. WC 14 (\$15,000)
 - x. WC 20 (\$30,000)

ECHRISTMAN

Pre-Bid Meeting Agenda

- xi. WC 22 (\$5,000)
- xii. WC 23 (\$25,000)
- xiii. WC 24 (\$20,000)
- xiv. WC 26 (\$10,000)
- xv. WC 27 (\$20,000)
- xvi. WC 28 (\$50,000)

6. Project Specifics

- a. Contractor amenities
 - i. Parking will be limited until subbase is installed in new parking lot area. Getting SE parking lot installed as soon as possible is a high priority
 - ii. Temporary power is to be provided by WC 28. They will be installing 140, if a work category needs more power then that it is on them to provide it.
 - iii. Intent for WC 27 to provide temporary water
 - iv. Placement of Christman Jobsite trailer, how would this affect jobsite activities.
- b. Contractor requirements (permits, delivery scheduling, clean up, dress code, smoking)
 - Trade Contractors required to pull their own permits necessary to complete the WC they are upholding.
 - SESC silt fence that is already in place is to be adopted and maintained throughout the entirety pf the project.
 - iii. Trade Contractors required to uphold CM distributed schedule.
 - iv. Dress code/PPE to be in compliance with project safety manual.
 - v. Absolutely NO smoking on project site.
- c. Building occupancy (shared travel paths, operation of building systems, material delivery & removal, noise, conduct)
 - i. Project site surrounded by residential busy roads. Plan all equipment and material deliveries with on-site construction manager.
 - ii. Material lay down area is specified in site logistics plan.
 - iii. Noise levels to be in compliance with local ordinance.
 - iv. There will be lots of eyes on the project constantly (All 4 sides of the project has residents right across the street) so conduct yourself in a way that is respectable.
- d. Hazardous materials exposure or removal
- e. Safety requirements

7. Bid Procedures

- a. Due date, time, and location
 - i. Thursday, August 3rd, 2023, at 2:00 PM
 - ii. 519 W. Kalamazoo St. Room 208, Lansing MI
- b. Pre-Bid RFI Cutoff
 - i. July 25th, 2023 at 5:00 PM
- c. Addenda requirements
 - i. Addenda I forthcoming
- d. Bond requirements
 - i. All Contracting Companies MUST be Bondable.
- e. Included and voluntary alternates
- f. Tax status
- g. Allowances available
- h. Contact person for questions
 - i. projects@lansingschools.net until July 25th 2023 at 5:00PM
- i. Requests for site access

8. Questions

9. Walk Through