



BUILD SOMETHING BETTER.

**MCS Site & Athletic
Improvements - Technology
BP1B – Pressbox A/V
Mattawan, MI
AVB-25-118**

**AVB 01 0000
SUBCONTRACTOR GENERAL REQUIREMENTS**

Below is a list of the Sections that help comprise the AVB Contractual General Requirements Article. Documents may be added or deleted as seen fit by AVB Construction with or without notice to the Bidders/Contractors. While this list is a general overview, it is not an all-inclusive list by any means. Other Contractual documents such as drawings, specifications, addenda, Bulletins, RFIs, reports, etc. are to be included as well (See Project Manual for additional information):

- 01 10 00 Summary/General Items.....**
- 01 14 00 Access to/Use of Site**
- 01 25 00 Substitution Procedures.....**
- 01 26 00 Contract Modification Procedures.....**
- 01 29 76 Payment Procedures.....**
- 01 31 00 Project Coordination.....**
- 01 32 13 Construction Scheduling.....**
- 01 33 13 Administrative Submittals (Certifications, Signed Contracts, etc.).....**
- 01 33 23 Submittals (Drawings, Product Data, Samples, etc.).....**
- 01 35 20 Safety**
- 01 35 21 Asbestos Awareness.....**
- 01 35 40 Environmental Goals.....**
- 01 35 43 Construction Waste Management Plan**
- 01 40 00 Reference Standards and Definitions.....**
- 01 51 00 Temporary Utilities**
- 01 52 00 Temporary Facilities**
- 01 71 00 Layout.....**
- 01 73 00 Cutting and Patching**
- 01 74 00 Cleaning and Debris Control.....**
- 01 77 19 Project Close-Out**
- 01 78 36 Warranty Requirements**
- 01 80 00 General Installation Provisions**

Within the following pages are the descriptions of each Section noted above as it pertains to MCS Campus Site and Athletic Improvements - Technology, BP1B - Pressbox A/V also referred to herein as “The Project”. Each Bidder/Contractor/Sub-

Contractor will be held responsible for reading and adhering to any and all data as found within the following pages. See also Article AVB 00 0000 Bidder Instructions and Requirements.

01 10 00 Summary/General Items

- 1.1. The Subcontractor shall determine all quantities required and indicate same where required, and verify all quantities indicated on the Form of Bid Proposal, and provide any and all quantity information requested.
- 1.2. The Subcontractor shall have full-time supervision on the jobsite at all times who is knowledgeable and competent in the detailed requirements of the work of this work category. This person shall not be removed from this project until the work is complete and shall not be removed or replaced without the approval of AVB Construction.
- 1.3. The Subcontractor shall provide all quality safety and dust control required for the work of this work category, including specific layout and location of all items.
- 1.4. The Subcontractor shall not commence work until the following insurance certificates and other items are received from the Subcontractor and approved by AVB Construction (**See Section 01 33 13 for requirements and deadlines**):
 1. Signed construction Subcontract
 2. Bonds (if applicable to project)
 3. Commercial General Liability, Auto and Worker's Compensation Insurance Certificates
 4. Safety Manual
 5. Schedule of Values
- 1.5. All work installed under this work category must meet all applicable codes and governing body requirements, as well as applicable or referenced standards.
- 1.6. Subcontractors shall comply with those items as noted in Article 00 00 00, Section 00 45 00 which includes Michigan Department of Civil Rights and Michigan's Right-To-Know-Law.
- 1.7. The Subcontractor shall keep pace with the project schedule, as it accelerates or decelerates with other trades, as directed by AVB Construction. The Subcontractor will be given a twenty four (24) hour notice to increase/decrease production to maintain schedule. Failure to comply will be just cause for AVB Construction to contract with other sources to maintain schedule. The cost of this additional work will be borne by the Subcontractor.
- 1.8. Subcontractor shall schedule all required inspections applicable to this work with the Governing Inspection Department. Subcontractor shall have sole responsibility for the completed function of the work of this work category to gain final inspection approval of all Governing Authorities. Any additional work or process required to gain such approval and acceptance is the responsibility of the Subcontractor and is included in the bid cost of the work of this work category.
- 1.9. Subcontractor must coordinate its work with the work of other Subcontractor at the site to eliminate conflicts. No additional costs as a result of a lack of coordination will be allowed.
- 1.10. Subcontractor shall complete the work of this work category according to the schedule provided by AVB Construction, or complete it sooner, and as a part of the work of this work category agrees to comply with any and all schedule changes, updates and directives.
- 1.11. Any requests for extra charges presented by Subcontractor to AVB Construction will be considered if, and only if, AVB Construction is contacted regarding the necessity of a revision, alteration, and/or additional work prior to the performance of the work. AVB Construction must authorize the work to be performed and agree to the charges in advance and in writing by issuing a written change order for the work. AVB Construction will not be responsible for the cost of extra work performed without written approval.
- 1.12. Subcontractor shall be responsible to perform all work of this work category in a 100% safe manner, without any risk to its employees or the employees of others at the site. Subcontractor shall be responsible for the cost of repairs as a result of this Subcontractor damaging its work, and shall be responsible for the cost of repairs as a result of this Subcontractor damaging the work of other Subcontractor, with the repair costs by others deducted from this Subcontractor's contract by change order.
- 1.13. Subcontractor, if applicable, is to verify that the required "fall" of any surface will meet its required intercept point prior to Subcontractor starting installation of the work.

- 1.14. Subcontractor shall provide all layout required for the work of this work category for:
 1. Specific line
 2. Grade
 3. Control
 4. and location
- 1.15. Subcontractor shall store all equipment and materials in locations approved and as directed by AVB Construction, and will relocate these items, at no cost, if so directed by AVB Construction.
- 1.16. Subcontractor shall be responsible for cleaning up debris resulting from its work on a daily basis. Debris will be disposed of in the jobsite dumpster provided by AVB Construction. Failure to comply will result in AVB Construction completing the clean-up work on behalf of the Subcontractor with a deductive Change Order written to the Subcontract, including applicable equipment costs.
- 1.17. Temporary jobsite power will be available at 110 Volts, 20 Amps at the site. Any power requirements in addition to that provided must be supplied by this Subcontractor.
- 1.18. Final payment application will be processed per [Section 01 77 19 Project Close-out](#).
- 1.19. Subcontractor shall warranty, as applicable, the workmanship of the materials supplied or materials and installation of the work of this work category for a period of two (2) years from the date of receipt of the final certificate of occupancy, such period as required, or such period as provided by the manufacturer, whichever is longer.
- 1.20. Subcontractor shall be responsible to repair a minor amount of damage to its work caused by others.
- 1.21. Retainage will be held against payments to the Subcontractor at the rate of ten percent (10%) until the completion of the project.
- 1.22. Change Orders will not be considered on the monthly application for payment until the Change Orders have been issued and formally executed by both parties.
- 1.23. Tobacco Products are prohibited on the MCS Campus, including, but not limited to, the footprint of the building or in the Construction Management Building/Facility.
- 1.24. Dress Code: Proper work attire is required for all Subcontractors working on site. Long pants, shirts with sleeves (no cut-offs), proper PPE including: work boots, safety glasses and hard hats are required at all times.
- 1.25. Self Conduct: Improper language or behavior will not be tolerated and will be considered applicable grounds for dismissal from the site/project. Subcontractors and vendors are not to communicate with students or staff. If approached by students or staff, subcontractor is to direct persons to the AVB field office to speak with AVB Project Management Team.

End of Section 01 10 00 General Items

01 14 00 Access to/Use of Site

- 1.1. **Site Logistics will be discussed at Post Bid Interviews.**
- 1.2. Subcontractor shall limit his use of the premises for his work and for storage to allow for:
 1. work by other Subcontractors,
 2. Owner occupancy, and
 3. public use.
- 1.3. Limitations on site usage as well as specified requirements that impact site utilization are indicated on the drawings and by other contract documents. In addition to these limitations and requirements, the Construction Manager will administer allocation of available space equitably among entities needing both access and space so as to produce the best overall efficiency in performance as the total work of the project. Schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.
- 1.4. SubContractor shall obtain and pay for the use of additional storage or work areas needed for operations.
- 1.5. Subcontractor shall assume full responsibility for the protection and safekeeping of products under his contract that are stored on the site. This includes moving, at no additional cost, any stored products, under Subcontractor's control, which interfere with operations of the Owner or other Subcontractors.
- 1.6. See Section 01 51 00 for Temporary Utilities and Section 01 52 00 for Temporary Facilities if applicable.

End of Section 01 14 00 Access to/Use of Site

01 25 00 Substitution Procedures

- 1.1.** For Substitution Requests during Construction, a Substitution Request Form will need to be filled out and submitted to the Construction Manager accordingly (see Architectural Specifications for Formal Form). Contractors to allow sufficient time for A/E and Owner review. Upon obtaining approval, a formal submittal will then need to be turned in to the CM for the Submittal Review Process (See **Section 01 33 23**) before product may be ordered, constructed, etc.

End of Section 01 25 00 Substitution Procedures

01 26 00 Contract Modification Procedures

- 1.1. There are several means and methods which may generate a contractual scope of work modification once Contractual Agreements have been met for The Project. Several, not all, of those documents are listed below.
 - 1.2. Minor changes in the work. Supplemental instructions authorizing minor changes in the Work, not involving an adjustment to the Contract Sum or Contract Time, will be issued by the Architect on AIA Form G714, Construction Change Directive, and the cost will be listed as -0-.
 - 1.3. Change order proposal requests. Subcontractor cost for extras shall be limited to the following: cost of materials, including Use and Sales Tax, Michigan Single Business Tax, and cost of delivery; cost of labor directly involved in the work, excluding supervision, including Social Security, Federal and State Unemployment Tax, and Fringe Benefits under collective bargaining agreements; Worker's Compensation Insurance, Bond Premiums; and rental value of power tools and equipment. The Maximum Percentage Fee for Overhead and Profit shall be ten percent (10%) of net costs for work performed directly by the Subcontractor's own forces. The maximum amount of five percent (5%) for Overhead and Profit will be allowed for work performed by a Subcontractor of a Subcontractor (Sub-subcontractor).
 1. Owner-Initiated Proposal Requests: Proposed changes in the Work that will require adjustment to the contract Sum or Contract Time will be issued by the Architect, with detailed description of the proposed change and supplemental or revised Drawings and Specifications, if necessary.
 - a. Proposal requests issued by the Architect are for information only. Do not consider them an instruction either to stop work in progress or to execute the proposed change.
 - b. Within (7) calendar days of receipt of the proposal request, submit to the Construction Manager for the Architect's and Owner's review an estimate of costs necessary to execute the proposed change.
 1. Include list of quantities of products to be purchased and unit costs, along with the total amount of purchases to be made.
 2. Indicate applicable taxes, delivery charges, equipment rental.
 3. Include statement indicating the effect the proposed change in the Work will have on the Contract Time.
 2. Subcontractor-Initiated Change Order Proposal Requests: When latent or other unforeseen conditions require modifications to the Contract, the Subcontractors may propose changes by submitting requests for change to the Construction Manager.
 - a. Include statement outlining the reasons for the change and the effect of the change on the Work. Provide complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
 - b. Include list of quantities of products to be purchased and unit costs along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
 - c. Indicate applicable taxes, delivery charges, and equipment rental.
 3. Bulletins:
 - a. Change Orders will be preceded by issuance of Bulletins.
 - b. Bulletins are documents (written and/or graphic) which describe proposed Change in the Work and which are issued to Subcontractor for purpose of obtaining his proposal for change(s) of Contract Sum and/or Contract Time should such proposed Change in the Work be authorized by Change Order.
 - c. Subcontractor shall submit his proposal on or before due date stated on Bulletin. If no due date is stated, it shall be (7) calendar days following date of issue. If no quotation is received by the due date for a Bulletin which is presumed to add to the Contract Sum, proposed Change in the Work will be considered to be "No Cost" change, or cost estimate of the Construction Manager will be used, and Subcontractor shall, upon written instruction from the Construction Manager, proceed to execute the Change in the Work with no change of Contract sum, or at cost figure estimated by the Construction Manager.
 - d. Submit Labor Rate Backup Sheet for each specific trade at the time when first change is executed for that trade.
- NOTE: ALL Change Order Proposal Request shall be submitted to Amanda Peters at apeters@avbinc.com no later than the 25th of the month prior to the one you in which you wish to bill these costs.** These Change Order Proposals will be evaluated for approval, and if granted, will generate a formal Change Order which will be issued the following month (i.e. Change Order Requests in by November 25th will be reviewed and if approved, the formal Subcontract Change Order will be issued in time for you to place on your December Pay Application).

- 1.4. **Requests for Interpretation (RFI):** RFIs are to be sent in to the CM directly. Do NOT forward requests to the Architect/Engineer or the Owner by any means. RFIs are typically in the form of an email or a phone/ field conversation. The CM will generate the formal RFI form to the Architect/Engineer/Owner and once a response is

returned, the CM will then forward to the Subcontractor accordingly. Typically, an RFI is caught up in the drawings and issued on the next Bulletin where it will then be priced and change order awarded. However, on some projects pricing from RFIs will be enough to directly issue a change order. Unless requested sooner, any and all cost changes associated with an RFI are due back to the CM within (5) business days upon issuance to the Subcontractors.

1.5. Construction Change Authorization

1. Construction Change Authorization: When the Owner, Architect, Construction Manager and Subcontractor are not in total agreement on the terms of the Change Order Proposal Request, the Construction Manager may issue a Construction Change Authorization, instructing the Subcontractor to proceed with change in the Work for subsequent inclusion in the Change Order. The Construction Change Authorization will contain complete description of the change in the Work and designate the method to be followed to determine change in the Contract Sum or Contract Time.
2. Documentation: Maintain detailed records on time and material basis of work required by the Construction Change Authorization. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

- 1.6. Change order procedures:** Upon the Owner's approval of Change Order Proposal Request, the Construction Manager will issue the Change Order for signatures of the Owner, Architect, Construction Manager and Subcontractor.

End of Section 01 26 00 Contract Modification Procedures

01 29 76 Payment Procedures

- 1.1. Subcontractors shall submit the below noted and outlined documents to AVB Construction by the 25th of each month. Payment is scheduled to be made to Subcontractors between the 25th and 30th of the month following the draw application, or upon funding. Retainage will be held at a rate of ten percent (10%) until completion of the project.
- 1.2. Following are the Monthly Progress Payment Procedure Requirements as noted above. Corresponding sample forms may also be shown on the following pages.
 1. **Application and Certificate for Payment** (Draw Request): Subcontractors shall submit an updated Application and Certificate for Payment (Draw Request Cover) each month to indicate current draw request information and current change order status. An electronic spreadsheet of this form is available by request.
 - a. If drawing for stored materials, Subcontractor shall also submit an insurance rider which names the Owner as additionally insured, photos of stored material, and shipping tickets.
 2. **Continuation Sheet** (Schedule of Values: Subcontractors shall submit an updated Continuation Sheet (Schedule of Values) each month to reflect current requested amounts being drawn on each line item. This document shall list, exactly as in the Subcontract; each itemized line of work, the item number, six digit cost code, item description and scheduled value. Change orders included in the draw request must be listed by change order number below the approved original Schedule of Values line items. All change orders must be processed and approved prior to submitting for payment.
 3. **Sworn Statement:** Subcontractors shall submit an updated SWORN STATEMENT each month documenting each and every sub-subcontractor, supplier, material man, laborer, person or entity that it contracts with, or procures from, on a charge or credit basis, any amount of labor, equipment, equipment rental, materials, services or subcontract services, on behalf of the project, and must indicate the approximate cost of such services, for the one month period covered by the monthly draw request. AVB reserves the right to issue joint checks to ensure payment is made to the sub-subcontractors/sub-suppliers.

The accuracy of your Sworn Statement is very important; please communicate with your corresponding departments to ensure accuracy on each draw. The person signing the Sworn Statement is responsible for its truthfulness and can be prosecuted for submitting a sworn statement containing false or incomplete information. It is your responsibility to pay suppliers/subcontractors once funds are drawn/received. Prior to final payment all companies listed on the Sworn Statement must provide a Full Unconditional Waiver or a Joint Check will be issued to cover outstanding amounts.
 4. **Waiver of Lien:** Subcontractors shall submit a PARTIAL CONDITIONAL WAIVER in the amount of the current draw request.
 5. **Notice of Furnishing Form:** Subcontractors shall provide a NOTICE OF FURNISHING form to each sub-subcontractor, vendor, consultant or laborer listed on their sworn statement. A Proof of Service of a Notice of Furnishing Form is provided to the Subcontractor/Supplier for their optional use.
 6. **Prior to Final Payment:** Subcontractors shall submit all the above referenced documents reflecting final amounts along with full conditional waivers for final draw amount plus retainage and full unconditional waivers from all parties listed on the sworn statements. A joint check will be issued to any parties listed on the sworn statements who do not have a full unconditional waiver submitted with the final payment request. All warranty and closeout documents must be submitted and approved prior to receipt of final payment.

SUBCONTRACTOR / SUPPLIER APPLICATION AND CERTIFICATE FOR PAYMENT

TO CONSTRUCTION MANAGER:
 AVB Construction, LLC
 4200 West Centre Avenue
 Portage, Michigan 49024

PROJECT: [Redacted] **Draw Number:** [Redacted] **Draw #:** [Redacted]

FROM SUBCONTRACTOR / SUPPLIER:
 Your Company Name
 Address
 City, State Zip
 Your Company Contact
 Phone: [Redacted] **Contact Phone:** [Redacted] **Contact Fax:** [Redacted]

Period to: [Redacted] **Date:** [Redacted]

Project Number: [Redacted] **AVB Job #:** [Redacted]

Subcontract Number: [Redacted] **AVB Subcontract #:** [Redacted]

CONTRACT FOR: [Redacted] **Your Scope of work on project:** [Redacted]

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total COs approved in prev months by CM		
Total changes approved this month by		
Totals	\$0.00	\$0.00
NET CHANGES by Change Order		\$0.00

I make this statement as the Subcontractor, or as agent of the Subcontractor, that to the best of my knowledge, information, and belief, this Draw Request accurately reflects the work done on the Project as required by the Subcontract Documents. I further declare that all payments from monies received from previous Draw Requests have been paid and that this Draw Request is complete, accurate and now due and owing.

Subcontractor: [Redacted] **Name:** [Redacted] **Date:** [Redacted]

Signature: [Redacted] **State of:** Michigan)
) ss.
 County of: [Redacted])
 Subscribed and sworn before me this [Redacted] Day of [Redacted]

Notary's name: [Redacted], Notary Public
 County: [Redacted] County, Michigan
 My Commission expires: [Redacted] **Expiration Date:** [Redacted]
 Acting in [Redacted] County

SUBCONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the subcontracted. Continuation sheet AVB Draw Request Page 2 is attached.

1. ORIGINAL CONTRACT SUM \$0.00
2. Net change by change orders \$0.00
3. REVISED CONTRACT AMOUNT (Line 1 +/- Line 2) \$0.00
4. TOTAL COMPLETED/STORED TO DATE (Column G on Page 2) \$0.00
5. RETAINAGE:
 - a. 10% of Completed Work \$0.00
 - b. 10% of Stored Material \$0.00

Total Retainage (Line 5a + 5b) \$0.00

6. TOTAL EARNED LESS RETAINAGE (Line 4 less line 5) \$0.00

7. Less previous requests for payment (Line 6 from prior Draw Request) \$0.00

8. CURRENT REQUEST FOR PAYMENT \$0.00

Less current retainage \$0.00

CURRENT AMOUNT DUE \$0.00

Use this amount for your waiver.

9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6) \$0.00

the sums set forth above. * [Material that a contractor or subcontractor furnishes out of its own inventory and that has not been purchased specifically for the purpose of performing the contract does not need to be listed.]

Deponent further says that deponent makes the foregoing statement as the subcontractor or as representing to the owner (or lessee) of the above-described premises and its agents that the above-described property is free from claims of construction liens, or the possibility of construction liens, except as specifically set forth above and except for claims of construction liens by laborers which may be provided pursuant to Section 109 of the construction lien act, Act No. 497 of the Public Acts of 1980, as amended, MCL 570.1109.

WARNING TO OWNER: AN OWNER OR LESSEE OF THE ABOVE-DESCRIBED PROPERTY SHALL NOT RELY ON THIS SWORN STATEMENT TO AVOID THE CLAIM OF A SUBCONTRACTOR, SUPPLIER OR LABORER WHO HAS PROVIDED A NOTICE OF FURNISHING OR A LABORER WHO MAY PROVIDE A NOTICE OF FURNISHING PURSUANT TO SECTION 109 OF THE CONSTRUCTION LIEN ACT, MCL 570.1109, TO THE DESIGNEE OR TO THE OWNER OR LESSEE IF THE DESIGNEE IS NOT NAMED OR HAS DIED.

IF THIS SWORN STATEMENT IS IN REGARD TO A RESIDENTIAL STRUCTURE, ON RECEIPT OF THIS SWORN STATEMENT, THE OWNER OR LESSEE, OR THE OWNER'S OR LESSEE'S DESIGNEE, MUST GIVE NOTICE OF ITS RECEIPT, EITHER IN WRITING, OR BY TELEPHONE, OR PERSONALLY, TO EACH SUBCONTRACTOR, SUPPLIER, AND LABORER WHO HAS PROVIDED A NOTICE OF FURNISHING UNDER SECTION 109 OR, IF A NOTICE OF FURNISHING IS EXCUSSED UNDER SECTION 108 OR 108A, TO EACH SUBCONTRACTOR, SUPPLIER, AND LABORER NAMED IN THE SWORN STATEMENT. IF A SUBCONTRACTOR, SUPPLIER, OR LABORER WHO IS ENTITLED TO NOTICE OF RECEIPT OF THE SWORN STATEMENT MAKES A REQUEST, THE OWNER, LESSEE, OR DESIGNEE SHALL PROVIDE THE REQUESTER A COPY OF THE SWORN STATEMENT WITHIN 10 BUSINESS DAYS AFTER RECEIVING THE REQUEST.

Deponent Printed Name Notary of Public Acting in the State of Michigan

Deponent Signature _____

WARNING TO DEPONENT: A PERSON, WHO WITH INTENT TO DEFRAUD, GIVES A FALSE SWORN STATEMENT IS SUBJECT TO CRIMINAL PENALTIES AS PROVIDED IN SECTION 110 OF THE CONSTRUCTION LIEN ACT, ACT NO. 497 OF THE PUBLIC ACTS OF 1980, AS AMENDED, BEING SECTION 570.1110 OF THE MICHIGAN COMPILED LAWS.

Subscribed and sworn to before me this _____ day of _____

Notary's Name _____ County, Michigan
Notary Public, _____ County
My Commission Expires: _____ Date Commission Expires
Acting in _____ County

SAMPLE FORM 01 29 76.1.2.4

Job No.: _____
Subcontract No.: _____
Draw No: <Draw No.>
Description of Work: <Description of Work>

PARTIAL CONDITIONAL WAIVER AND RELEASE OF CLAIMS

The undersigned Subcontractor is the contractor for the performance of certain work and/or the furnishing of certain materials or supplies ("Work") for a project at <project address or description> ("Project") pursuant to a contract ("Contract") between AVB Construction, LLC ("Construction Manager") and Subcontractor.

This waiver is conditioned upon Subcontractor's receipt of a check from Construction Manager in the sum of \$<amount billed pursuant to this month's sworn statement> payable to Subcontractor. When the check has been properly endorsed and has been paid by the bank upon which it is drawn, this document shall become effective to release any mechanic's lien, stop notice, bond right, claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for persons in the Subcontractor's position that the Subcontractor has on the Project through and including the Release Date.

This release covers a progress payment for labor, services, equipment, and material furnished to or for the benefit of the Project through <this month's billing date>, (the "Release Date") only and does not cover any retentions retained, pending modifications and changes, or items furnished after the Release Date. Rights based upon work performed or items furnished under a written change order which has been fully executed by the parties prior to the Release Date are covered by this Release unless specifically reserved by Subcontractor herein.

The undersigned certifies that he or she is authorized to execute and deliver this document on behalf of Subcontractor, and that notwithstanding anything herein to the contrary the progress payment referenced herein covers all labor, service, equipment, and material charges incurred and owed since the last Release Date.

The undersigned, for the Subcontractor, warrants and represents that with respect to the amounts received to date: (i) title to all work, materials, and equipment covered by said payment, whether or not incorporated in the improvement on the Project, has passed to the Owner of the Project, free and clear of all liens, claims, security, or encumbrances; (ii) all taxes applicable to the materials furnished for use in or on the Project and all taxes for the work performed under the Contract have been fully paid; and (iii) all laborers, mechanics, subcontractors, materialmen, and suppliers have been paid in full (or will be paid in full from this progress payment) for all work, materials, equipment, and services provided for or to the Project as of the Release Date.

Dated: <date>

Subcontractor Name: <Subcontractor's name>

By: <signatory's name>

Title: <job title>

Phone: <subcontractor's phone>

Address: <Subcontractor's address>

<Subcontractor's address>

DO NOT SIGN BLANK OR INCOMPLETE FORMS. RETAIN A COPY.

SAMPLE FORM 01 29 76.1.2.7

Job No.: <AVB or BMC-## ##>
Subcontract No.: <#####>
Draw No: <Draw No.>
Description of Work: <Description of Work>

FULL CONDITIONAL WAIVER AND RELEASE OF CLAIMS

The undersigned Subcontractor is the contractor for the performance of certain work and/or the furnishing of certain materials or supplies ("Work") for a project at <project address or description> ("Project") pursuant to a contract ("Contract") between Subcontractor and AVB Construction, LLC ("Construction Manager"). Subcontractor declares that this Contract has been fully paid and satisfied.

This waiver is conditioned upon Subcontractor's receipt of a check from Construction Manager in the sum of \$<final billing amount> payable to Subcontractor. When the check has been properly endorsed and has been paid by the bank upon which it is drawn, (i) this document shall become effective to release any mechanic's lien, stop notice, bond right, claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for persons in the Subcontractor's position that the Subcontractor has on the Project whatsoever; and (ii) Subcontractor unconditionally waives and releases any and all liens, claims, and rights to lien for any and all work, labor, and materials performed and furnished in or about the Project.

The undersigned certifies that he or she is authorized to execute and deliver this document on behalf of Subcontractor, and that notwithstanding anything herein to the contrary the final payment referenced herein covers all labor, service, equipment, and material charges incurred and owed for the Work.

The undersigned, for the Subcontractor, warrants and represents that (i) title to all work, materials, and equipment passed to the Owner of the Project, free and clear of all liens, claims, security, or encumbrances; (ii) all taxes applicable to the materials furnished for use in or on the Project and all taxes for the work performed under the Contract have been fully paid; and (iii) all laborers, mechanics, subcontractors, materialmen, and suppliers have been paid in full (or will be paid in full from this final payment) for all work, materials, equipment, and services provided for or to the Project whatsoever.

Dated: <date>

Subcontractor Name: <Subcontractor's name>

By: <signatory's name>
Title: <job title>
Phone: <subcontractor's phone>
Address: <Subcontractor's address>
<Subcontractor's address>

DO NOT SIGN BLANK OR INCOMPLETE FORMS. RETAIN A COPY.

SAMPLE FORM 01 29 76.1.2.7

Job No.: <AVB or BMC-##-###>

Description of Work/Materials:

<Description of Work>

FULL UNCONDITIONAL WAIVER AND RELEASE OF CLAIMS

The undersigned Sub-subcontractor is the contractor for the performance of certain work and/or the furnishing of certain materials or supplies ("Work") for a project at <Project Address or Description> ("Project") pursuant to a contract ("Contract") between <Your Sub/Supplier's Name> ("Sub-subcontractor") and <Your Company Name> ("Subcontractor"). Sub-subcontractor declares that this Contract has been fully paid and satisfied.

This waiver effectively releases any mechanic's lien, stop notice, bond right, claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for persons in the Sub-subcontractor's position that the Sub-subcontractor has on the Project whatsoever; and (ii) Sub-subcontractor unconditionally waives and releases any and all liens, claims, and rights to lien for any and all work, labor, and materials performed and furnished in or about the Project.

The undersigned certifies that he or she is authorized to execute and deliver this document on behalf of Sub-subcontractor, and that notwithstanding anything herein to the contrary the final payment referenced herein covers all labor, service, equipment, and material charges incurred and owed for the Work.

The undersigned, for the Sub-subcontractor, warrants and represents that (i) title to all work, materials, and equipment passed to the Owner of the Project, free and clear of all liens, claims, security, or encumbrances; (ii) all taxes applicable to the materials furnished for use in or on the Project and all taxes for the work performed under the Contract have been fully paid; and (iii) all laborers, mechanics, subcontractors, materialmen, and suppliers have been paid in full (or will be paid in full from this final payment) for all work, materials, equipment, and services provided for or to the Project whatsoever.

Dated: <Date>

Subcontractor Name: <Sub-subcontractor's name>

By: <Signatory's Name>

Title: <Job Title>

Phone: <Sub-Subcontractor's Phone>

Address: <Sub-subcontractor's Address>

<Sub-subcontractor's Address>

DO NOT SIGN BLANK OR INCOMPLETE FORMS. RETAIN A COPY.

Job No: AVB-##-###
Sub No: #####-#####

FULL UNCONDITIONAL WAIVER AND RELEASE OF CLAIMS

The undersigned Subcontractor is the contractor for the performance of certain work and/or the furnishing of certain materials or supplies ("Work") for a project at Project Name , Street Address , City , St ("Project") pursuant to a contract ("Contract") between Subcontractor and AVB Construction, LLC ("Construction Manager"). Subcontractor declares that this Contract has been fully paid and satisfied.

This waiver effectively releases any mechanic's lien, stop notice, bond right, claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for the persons in the Subcontractors position that the Subcontractor has on the Project whatsoever, and (ii) Subcontractor unconditionally waivers and releases any and all liens, claims, and rights to lien for any and all work, labor, and materials performed and furnished in or about the Project.

The undersigned certifies that he or she is authorized to execute and deliver this document on behalf of Subcontractor, and that notwithstanding anything herein to the contrary the final payment covered all labor, service, equipment, and material charges incurred and owed for the Work.

The undersigned, for the Subcontractor, warrants and represents that (i) title to all work, materials, and equipment passed to the Owner of the Project, free and clear of all liens, claims, security, or encumbrances; (ii) all taxes applicable to the materials furnished for use in or on the Project and all taxes for the work performed under the Contract have been fully paid; and (iii) all laborers, mechanics, subcontractor, material men, and suppliers have been paid in full for all work, materials, equipment, and services provided for or to the Project whatsoever.

Date

Signature
Printed Name

Company Name
Street Address
City, State. Zip Code

BLANK
PAGE

End of Section 01 29 76 Payment Procedures

01 31 00 Project Coordination

1.1. Pre-Construction Conferences

1. The Construction Manager will schedule Pre-Construction Conference and organizational meeting at the Project site or other convenient location prior to commencement of specific construction activities as determined by the Construction Manager. The meeting will be conducted to review responsibilities and personnel assignments of the various Subcontractors and to review installation procedures and sequencing.
2. Attendees: The Construction Manager will conduct all jobsite meetings with optional attendance by the Owner, Architect and their consultants. The Subcontractors and their superintendents and major Subcontractor shall each be represented at the conference by persons familiar with and authorized to conclude matters relating to the Work.

1.2. Coordination Meetings:

1. The Construction Manager will conduct periodic Project Coordination Meetings from time to time as may be required. Project Coordination Meetings are in addition to specific meetings held for other purposes, such as regular progress meetings and special pre-installation meetings.
2. The Construction Manager will request Subcontractors' representation at each meeting by every party currently involved in coordination or planning for the construction activities involved.
3. The Construction Manager will record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

1.3. Weekly Progress Meetings

1. The Construction Manager will conduct Progress Meetings at the Project site at weekly intervals. The Owner and Architect will be in attendance on scheduled meeting dates. The dates of meetings will be coordinated with the preparation of the payment request.
2. Attendees: In addition to representatives of the Owner and Architect, Subcontractors, Subcontractor, suppliers or other entity concerned with current progress or involved in planning, coordination or performance of future activities shall be represented at these meetings by persons familiar with the Project and authorized to conclude matters relating to progress.
3. Agenda: The Construction Manager will review and approve minutes of the previous progress meeting and review other items of significance that could affect progress. Items of significance that could affect progress include such topics as:
 - a. Current construction schedule.
 - b. Critical Work sequencing.
 - c. Designation of responsible personnel.
 - d. Procedures for processing field decisions and Change Orders.
 - e. Procedures for processing Applications for Payment.
 - f. Distribution of Contract Document Revisions.
 - g. Submittal of Shop Drawings, Product Data and Samples.
 - h. Preparation of record documents.
 - i. Use of the premises.
 - j. Office, Work and storage areas.
 - k. Equipment deliveries and priorities.
 - l. Safety procedures.
 - m. First aid.
 - n. Security.
 - o. Housekeeping.
 - p. Working hours.
4. Reporting: No later than (7) calendar days after each progress meeting date, The Construction Manager will distribute copies of minutes of the meeting to each party present and to other parties who should have been present.

1.4. Electronic Communication. See individual Sections for details on Electronic Communication Protocols.

1.5. Request of Electronic Files: [Contact Amanda Peters \(apeters@avbinc.com\)](mailto:apeters@avbinc.com)

End of Section 01 31 00 Project Coordination

01 32 13 Construction Scheduling

- 1.1. Introduction. The Construction Manager shall provide overall scheduling and coordination for the entire project. All Subcontractors 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. All Subcontractors shall expedite the ordering and delivering of materials and equipment, etc. to meet these critical phasing and staging requirements and to make every effort possible to minimize disruption of normal building usage.
- 1.2. Bar-Chart Schedule: The Construction Manager shall prepare a fully developed, horizontal bar-chart type Subcontractor's construction schedule including the following information:
 1. Each Subcontractor shall notify the Construction Manager of time commitments for performing critical elements of the Work from parties involved. Each element on the schedule will be coordinated with other construction activities; include minor elements involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically sequences necessary for completion of related portions of the Work.
 2. The Construction Manager will detail separate time bars for each significant construction activity.
 3. A summary schedule to show data for the entire construction period.
 - a. Work Stages: Important stages of construction for each major portion of the Work, including testing and installation will be indicated.
 - b. Distribution: Following response to the initial submittal, the Construction Manager will print and distribute copies to the Architect, Owner, Subcontractors, and other parties required to comply with scheduled dates. Copies will be posted in the Project meeting room and temporary field office.
 - c. Schedule Updating: The schedule will be periodically revised after meetings or activities where revisions have been recognized or made. The Contract Manager will issue the updated schedule concurrently with report of such meetings.
- 1.3. Submittal Schedule
 1. Concurrent with the development and acceptance of the Subcontractor's construction schedule input, each Subcontractor shall prepare a complete schedule of submittals for the inclusion by the Construction Manager into a total project submittal schedule.
 - a. Coordinate submittal schedule with the Construction Manager's construction schedule.
 - b. Prepare the schedule in chronological order; include submittals (see section 01 33 23). Provide the following information:
 1. Durations
 2. Critical Path
 3. Milestone Dates
 - c. Scheduled date for the first submittal.
 1. Related Section number.
 2. Submittal category.
 3. Name of Subcontractor.
 4. Description of the part of the Work covered.
 5. Scheduled date for resubmittal
 6. Scheduled date the Contract Manager's final release or approval.
- 1.4. General
 1. The work shall proceed at such rate as will ensure meeting the specified Milestone Dates & Durations and dates for Substantial Completion and Final Completion. By execution of the Contract, the Subcontractor represents he has analyzed the work, the materials and methods involved, the systems of the building, availability of qualified mechanics and unskilled labor, restrictions of the site, constraints imposed, his own work load and capacity to perform the work and agrees that the specified dates are reasonable considering the existing conditions prevailing in the locality of the work, including weather conditions, and other factors, with reasonable allowance for variations from average or ideal conditions.
 2. The Milestone Dates and the Bid Schedule provided at the end of this section are part of the Contract Documents. A Project Schedule will be prepared by the Construction Manager based on the Subcontractor's input after Contract Award. Special requirements shall be brought to the attention of the Construction Manager. While rearrangement of activity sequences may occur after contract award, all Milestone Durations shall remain in effect and all bidders shall accept the date.
- 1.5. Update and Modifications to the Construction Schedule

1. If, during the progress of the work, the Subcontractor determines he will not be able to complete this work in the time allotted, he must notify the Construction Manger within five (5) days after publication of the Construction Manager's updated Project Schedule. Adjustments may be made to accommodate the Subcontractor if written notification is given to the Construction Manager, the adjustment is within the stated milestone dates, and the Construction Manager approved the adjustment after reviewing its impact on other Subcontractors. Otherwise, the construction Manager's Project Master Schedule shall be deemed acceptable by all parties and becomes a contractual requirement for the Subcontractor.
 2. The Construction Manager will hold periodic schedule "update" meetings at the job site. The Construction Manager and each Subcontractor are to provide the services of a qualified representative at each meeting. Subcontractors are to provide necessary scheduling information and manpower commitments at these meetings. The Construction Manager will update the detailed Project Master Schedule and prepare progress reports accordingly. Each Subcontractor shall be responsible to be familiar with this schedule, how it affects or modifies his operations, and how it affects his coordination with activities of other Subcontractors.
 3. Periodic progress meetings will be held at the job site. Field Supervisors from all Subcontractors are to attend all progress meetings. The Subcontractor shall prepare a short interval schedule, generally covering four-week periods, to coordinate the detailed activities of Subcontractors and suppliers. The short interval schedule shall be prepared in bar chart form and submitted 24 hours prior to the job progress meetings, or as required by the Construction Manager.
- 1.6. Adjustment of Subcontractor's Efforts**
4. Whenever it becomes apparent from the review of progress in relation to the Project Schedule that the Subcontractor may not achieve Milestone dates or dates for Substantial Completion or Final Completion, as required by the Contract Documents, or that the Subcontractor is performing his work in a manner which is inconsistent with the Project Schedule and which may prevent other Subcontractors or the Construction Manager from achieving their Milestone dates or dates from Substantial Completion or Final Completion, then the Subcontractor shall, within three (3) days of receipt of written notice from the Construction Manager, and at no additional cost to the Owner, commence and implement such actions as may be necessary to assure completion by such dates, including but not limited to, the following:
 - a. The Subcontractor shall increase its manpower and provide additional equipment and temporary facilities.
 - b. The Subcontractor shall increase the number of working hours per shift, add shifts, or increase the number of working days per week.
 - c. The Subcontractor shall take such measures as may be necessary to expedite delivery of equipment and materials.
 - d. The Subcontractor shall reschedule his activities to achieve maximum practical concurrence of activities.
 5. If the Subcontractor fails to take such actions as may be necessary to assure achievement of Milestone dates or dates of Substantial Completion or Final Completion or to bring his work into conformance with the Project Schedule so as to assure that other Subcontractors and the Construction Manager can start their work on schedule and can meet their Milestone dates or dates of Substantial or final Completion, then the Construction Manager may, without prejudicing any of its or the Owner's rights under the Contract, proceed with one or more of the following courses of action:
 - a. Take over those aspects of the work which are behind schedule, or portions thereof, as the Construction Manager may, at its sole discretion, deem appropriate and deduct by Change Order all costs of performing such work from the Contract Sum.
 - b. Withhold payment in accordance with the provisions of the Subcontract Agreement.
 - c. Terminate the Contract in accordance with the provisions of Subcontract Agreement, Termination by the Owner.
- 1.7. Specific schedule and phasing for The Project is in the AVB 00 0000 Bidder Instructions and Requirements.**

End of Section 01 32 13 Construction Scheduling

01 33 13 Administrative Submittals (Certifications, Signed Contracts, etc.)

- 1.1. Administrative submittals shall be submitted in accordance with the following (days shown are calendar days):
 1. Signed Contract Agreement: Seven (7) days after receipt.
 2. Certificate of Insurance: Seven (7) days after receipt of Notice to Proceed; PRIOR to being on site.
 3. Contractor safety program: Prior to start of construction.
 4. List of Contractor's staff assignments and phone numbers: (14) days after Notice to Proceed.
 5. Schedule of Values: Provide Schedule of Values to AVB Project Manager with proposal, prior to scheduling post bid interview. Schedule of Values should show labor and material costs for each item.
 6. Submittal Register, including lead times of long lead items: (14) days after receipt of Notice to Proceed.

- 1.2. **Insurance Requirements:** Trade Contractor (including, but not limited to, all commercial project, residential project, and service contractors) must maintain and keep in full force and effect, prior to commencement, during the progress of Trade Contractor's Work, and for two years after completion of work, the insurance requirements below:
 1. Minimum Coverages
 - a. **General Liability.** Comprehensive General Liability Insurance, including Independent Contractor's Liability, Completed Operations and Contractual Liability covering, but not limited to, the liability assumed under the Indemnification Provisions of this Contract. Liability for injury to or death of Builder's employees and third parties shall be proved and extended to include a minimum limit of \$1,000,000 per occurrence for Personal Injury and Property Damage including that of third parties. The policy shall include Broad Form Property Damage coverage extended to apply to completed operations and XCU exclusions removed. The completed operations coverage shall have an aggregate limit of no less than \$2,000,000 and must be maintained for a minimum of two (2) year after final completion and acceptance of work, with evidence of same filed with Builder. Combined General Aggregate Limit of Bodily Injury and Property Damage Liability Insurance in the amount of at least \$2,000,000, including death, as an excess of the primary coverage required above.
 - b. **Automobile Liability.** Comprehensive Automobile and Truck Liability Insurance, covering owned, hired, and non-owned vehicles with a combined single limit of \$1,000,000 for Bodily Injury and Property Damage per occurrence.
 - c. **Worker's Compensation.** Worker's Compensation as required by law; Employer's Liability insurance of not less than \$500,000 for each accident, not less than \$500,000 for each employee, and not less than a \$500,000 policy limit. Independent Contractors with no employees must also carry workers compensation as indicated. If necessary, please contact a local insurance agent to purchase the coverage from the Compensation Advisory Organization of Michigan (CAOM).
 - d. **Umbrella Liability.** Umbrella coverage of \$1,000,000 minimum coverage per occurrence must be carried.
 - e. **Additional Insured.** American Village Builders, Inc., AVB Construction, LLC, Project Owner, and any other parties identified in the contract must be designated as additional insureds under the general liability, automobile liability, and any excess liability coverage. Certificate of Liability Insurance (COI) must be followed by supporting endorsements.
 - f. **Waiver of Subrogation.** A waiver of subrogation must apply to all policies. Certificate of Liability Insurance (COI) must be followed by supporting endorsements. Certificate of Liability Insurance (COI) must be followed by supporting endorsements.
 - g. **Certificate Holder.** American Village Builders, Inc., AVB Construction, LLC, 4200 W. Centre St., Portage, MI 49024 must be named as certificate holder.

Builder does not represent that the insurance coverage specified herein, whether in scope of coverage or amounts of coverage, is adequate to protect the obligations of Trade Contractor, and Trade Contractor shall be solely responsible for any deficiencies thereof. Nothing in this Section 16, Schedule C shall be deemed to limit Trade Contractor's liability. If Trade Contractor determines for its own purposes that it requires insurance coverages in excess of the coverage specified above, nothing in this Trade Contractor Agreement shall prevent Trade Contractor, at its own expense, from purchasing insurance coverages in excess of the coverage required by this Trade Contractor Agreement. No special payments shall be made by the Builder for any insurance that Trade Contractor may be required to carry, as all are included in the contract price and the contract unit price. If Trade Contractor's Work for any Project is substantially damaged or destroyed by any insured casualty prior to completion of Trade Contractor's work, then Builder shall pay Trade Contractor's costs incurred in performing the work to the date of the casualty. However, Builder shall receive credit for all payments previously paid to Trade Contractor.

Trade Contractor, within five (5) days prior to starting its work, must furnish evidence of insurance for no less than the coverage and amounts set forth above. All insurance must be maintained in the form and with a company (or companies) satisfactory to Builder. Trade Contractor's certificate of insurance shall be filed with Builder on a form acceptable to Builder, and must require that Builder be notified in writing thirty (30) days prior to cancellation, modification or non-renewal of any insurance policy listed in Trade Contractor's certificate. **Failure to provide appropriate documentation of required insurance and supporting documents may result in forfeiture of bids and/or removal from job site.**

Supporting Documents. Trade Contractor (including, but not limited to, all commercial project, residential project, and service contractors) shall maintain updated supporting documents prior to commencement, during the progress of Trade Contractor's Work, and for two years after completion of work as outlined below:

A) Form W-9. A current Form W-9 must be on file with Builder. Blank forms can be found on the IRS website or requested from Builder using the contact information listed below.

B) Independent Contractor Statement. An Independent Contractor must have an Independent Contractor Statement on file with Builder. A blank form can be requested from Builder using the contact information listed below.

Contact Information. All forms, questions, and/or concerns can be directed to Builder's insurance department via contact information below:

- Email: insurance@avbinc.com
- Phone: (269) 323-2022
- Mailing Address: AVB, Inc., 4200 W. Centre Ave, Portage, MI 49024

End of Section 01 33 13 Administrative Submittals (Certifications, Signed Contracts, etc.)

01 33 23 Submittals (Drawings, Product Data, Samples, etc.)

- 1.1. Submittal Coordination:** Each Subcontractor shall prepare a schedule of submittals coordinated with Construction Manager's construction schedule. All submittals are to be submitted to the Construction Manager within 20 days of Award of Contract or sooner if item require for construction. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination. The Construction Manager reserves the right to withhold action on submittal requiring coordination with other submittals until related submittals are received.
 3. Coordination Drawings: Subcontractors shall prepare and submit coordination Drawings where close and careful coordination is required for installation of products and materials fabricated off-site by separate entities and where limited space availability necessitates maximum utilization of space for efficient installation of different components.
 - a. Show the interrelationship of components shown on separate Shop Drawings.
 - b. Indicate required installation sequences.
 - c. Comply with requirements contained in Section "Submittals."
 - d. Refer to Electrical Specifications for specific coordination Drawing requirements for electrical installations.
- 1.2. Submittal Review Time Lines:** Allow sufficient review time so that installation will not be delayed as the result of the time required to process submittals, including time for resubmittals.
1. Allow 5 days for initial review by Construction Manager. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Construction Manager will promptly advise the Subcontractor when submittal being processed must be delayed for coordination.
 2. If an intermediate submittal is necessary, process the same as the initial submittal.
 3. Allow an additional 10 days (pending type of submittal) for review and reprocessing of each submittal by the Architect
 4. No extension of Contract Time will be authorized because of failure to transmit submittals to the Construction Manager sufficiently in advance of the Work to permit processing.
- 1.3. Submittal Preparation:**
1. Transmittal:
 - a. Package each submittal appropriately for transmittal electronically. Transmit each submittal from Contractor to Construction Manager using a transmittal. Submittals received from sources other than the Contractor will be returned without action.
 - b. Each submittal shall be for one (1) Specification Section Number only. Multiple submittals under the **same Specification Section** may be submitted together on the same transmittal. However, **multiple Specification Sections** on the same transmittal will be rejected.
 - c. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
 2. Space Provisions for Architect/ CM Remarks (may be located on the transmittal itself or on a immediate successor to the transmittal): Provide space approximately 5 inches by 8 inches on the front page of Product Data submittals or on the title block on Shop Drawings in which to allow the Construction Manager and/ or the Architect to note their review and approval markings and the action taken.
 3. All submittals to include the following items (may be located on the transmittal itself or on a immediate successor to the transmittal):
 - a. Project name.
 - b. Date.
 - c. Name of Architect and Architect's project number.
 - d. Name of Construction Manager and Construction Manager's project number.
 - e. Name of Subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Number and title of appropriate Specification Section.
 - i. Drawing number and detail references, as appropriate.
 4. Shop Drawings

- a. Subcontractors shall submit newly prepared information drawn to accurate scale. Indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
 - b. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:
 1. Dimensions
 2. Identification of products and materials included.
 3. Compliance with specified standards.
 4. Notation of coordination requirements.
 5. Notation of dimensions established by field measurement.
 - c. Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8 1/2 inches by 11 inches but no larger than 30 inches by 42 inches.
 - d. Quantity: Submit electronic prints for the Construction Manager's and Architect's review; electronic print will be returned.
 - e. Do not use Shop Drawings for fabricating materials without an appropriate final stamp indicating action taken in connection with construction.
5. Product Data
- a. Subcontractors shall collect Product Data into single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."
 - b. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
 1. Manufacturer's printed recommendations.
 2. Compliance with recognized trade association standards.
 3. Compliance with recognized testing agency standards.
 4. Application of testing agency labels and seals.
 5. Notation of dimensions verified by field measurement.
 6. Notation of coordination requirements.
 - c. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
 - d. Quantity: Submit electronic prints for the Construction Manager's and Architect's review; electronic print will be returned.
 - e. **Distribution:** Furnish copies of final submittal to installers, Subcontractor, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 1. Do not proceed with installation until an applicable copy of Product Data applicable is in the installer's possession.
 2. Do not permit use of unmarked copies of Product Data in connection with construction.
6. Samples
- a. Subcontractors shall submit four (4) samples of the material or product proposed. Size of samples will be 8" x 12" or 12" long unless otherwise noted within the particular specification section. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture and pattern. (1) will be returned with marked action.
 - b. Package samples in the manner specified to facilitate review of qualities indicated. Prepare Samples to match the Architect's Sample. Include the following:
 1. Generic description of the Sample.
 2. Sample source.
 3. Product name or name of manufacturer.
 4. Compliance with recognized standards.
 5. Availability and delivery time.
 - c. Submit Samples for review of kind, color, pattern, and texture, for final check of these characteristics with other elements, and for comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - d. Preliminary Submittals: Where Samples are for selection of color, pattern, texture or similar characteristics from range of standard choices, submit full set of choices for the material or product.

Preliminary submittals will be reviewed and returned with the Architect's mark indicating selection and other action.

- e. Maintain sets of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.
- f. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
- g. Sample sets may be used to obtain final acceptance of the construction associated with each set.

1.4. Submission:

- 1. All product data and shop drawings shall be submitted electronically via Procore.

- 2. Physical samples shall be submitted to the following location:

AVB Construction
Attn: **Amanda Peters**
4200 W. Centre Ave.
Portage, MI 49024
Re: MCS Campus Site and Athletic Improvements - Technology
BP1B - Pressbox A/V

End of Section 01 33 23 Submittals (Drawings, Product Data, Samples, etc.)

01 35 20 Safety

- 1.1. Subcontractor is advised that the project shall be a hard-hat, safety glasses and high-visibility vest (or t-shirt) project 100% of the time, no exceptions, and is required to instruct all employees accordingly. Non-conforming employees will be barred from working on the site.
- 1.2. The following items must be on file at or supplied to AVB Construction prior to work commencing at the site. Work activities should not commence, and monthly progress payment requests will not be processed, until AVB Construction is in receipt of the following items:
 1. Executed Construction Subcontract.
 2. A copy of Subcontractor's written safety program, which shall include a written section of "Specific Task Training" of employees, to be utilized at the site.
 3. A copy of Subcontractor's written "HAZ-COM" safety program, including all MSDS sheets on all products to be used at the site.
 4. Written "Job Specific Hazard Analysis" of all its work at the project site, identifying all foreseeable hazards that Subcontractor's work will create for all individuals at the site, outlining what steps Subcontractor's personnel will take to work 100% safe at the project site.
 5. Daily equipment safety checklists as required.
- 1.3. Subcontractor shall comply with all safety rules and regulations of all governing bodies and authorities as well as the AVB Safety Manual. Note that where an overlap in definitions or procedures occur, the more stringent requirement shall take precedence. This includes wearing a hard hat, safety glasses, and high-visibility vest or t-shirt at all times when on site. All appropriate "personnel protective equipment" must be utilized as required.
- 1.4. All employees of the Subcontractor must be OSHA defined "Specifically Task Trained" on each and every work activity that they will perform to accomplish the safe operation of any equipment they will use and on the specific requirements of "personal protective equipment" they will utilize. When trenching will be a part of the work, Subcontractor must have on-site, and designate, the "competent individual" for evaluation of soil types, excavation depths, and bank stability and lay-back.
- 1.5. Subcontractor shall be solely responsible for:
 1. The means the methods of accomplishing its work.
 2. Equipping its employees with the proper, prudent and required personal protective and safety equipment
 3. Monitoring its employees to insure proper usage of such equipment
 4. Fall protection, which must be provided only by the use of a full body harness. This shall include all personnel exposed to a fall (i.e. ironworkers, roofers, people working on scaffolding or mobile lifts, etc.)
 5. Waist belts and lanyard can only be used to restrain an employee from access to an edge or hazard.
- 1.6. Subcontractor agrees that it and its employees will comply immediately with any safety directives issued by AVB Construction, and also agrees that AVB Construction may stop the work of the Subcontractor at any time, in order to stop unsafe acts of work by the Subcontractor's employees, without AVB Construction assuming any responsibility for the safety or procedures of the Subcontractor or its employees. Subcontractor will be responsible for any costs of any kind associated with such a work stoppage and a deductive Change Order, as applicable, will be written to the Subcontractor.
- 1.7. AVB Construction will hold Progress and / or Safety meetings, held at the job site, which the Subcontractor's safety representative must attend. Any Subcontractor working at the site within a two-week window of the meeting date must attend. Copies of the meeting minutes will be distributed to all parties attending. Any Subcontractor not attending the Progress and / or Safety meeting may have their draw request held, by AVB Construction until the Subcontractor is in compliance.
- 1.8. Subcontractor jobsite/toolbox safety meetings will be held. It is an absolute requirement that each and every on-site employee of the Subcontractor attend every meeting, every time, where specific jobsite safety concerns must be discussed and documented. Employee attendance shall be recorded by the Subcontractor's manager. Each employee shall be required to sign both the weekly topic verification sheet and attendance sheet to document participation. Copies of each must be given to AVB Construction. Subcontractor's monthly progress payment requests will not be processed if the Subcontractor's weekly toolbox meetings are not held or if the minutes of the Subcontractor's toolbox safety meetings are not supplied. AVB Construction will have the right to bar any individual from working on the site that does not attend the Subcontractor's weekly safety meeting.

- 1.9. This Subcontractor shall have the sole responsibility, when applicable, to have direct communication with the local Utility Locator Protection Service to make a final and certain discovery and location of all underground utility services in existence at the site. This Subcontractor shall have the sole responsibility for ascertaining other utilities that will not be located by the Locator Service, and must contact those other utilities directly for locator services.
- 1.10. Subcontractor shall employ and maintain:
 1. Traffic controls
 2. Barricades
 3. Working, audible, backing up horns or annunciates on all equipment used at the site.
 4. Any other safety devices as required or deemed necessary by AVB, or other governing agency or authority.
- 1.11. Local ground fault current interruption (GFCI) device is required at all extension cord ends. Device must be as close as possible to power tool being used, at the user end of the cord.
- 1.12. Subcontractor shall specifically caution and instruct each employee of the Subcontractor at the site of the existence of potential hazard of personnel being run over by equipment backing up, trenching and vertical bank collapse and cave in hazards, concrete chemical burn hazards, over crane lift failures and falling materials, form work collapse, concrete splash and the need for employees to plan and at accordingly. Each employee must be OSHA defined “specifically Task Trained” with special emphasis placed on the above noted hazards.

End of Section 01 35 20 Safety

01 40 00 Reference Standards and Definitions

1.1. Below are some definitions of terms used throughout this Article.

1. **Indicated:** The term "indicated" refers to graphic representations, notes or schedules on the Drawings, or other Paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used, it is to help the reader locate the reference; no limitation on location is intended.
2. **Directed:** Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean "directed by the Construction Manager," "requested by the Construction Manager," and similar phrases.
3. **Approve:** The term "approved," where used in conjunction with the Construction Manager's or Architect's action on the Subcontractor's submittals, applications, and requests, is limited to the Construction Manager's or Architect's duties and responsibilities as stated in the Conditions of the Contract.
4. **Regulation:** The term "Regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
5. **Furnish:** The term "furnish" is used to mean "supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."
6. **Install:** The term "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations."
7. **Provide:** The term "provide" means "to furnish and install, complete and ready for the intended use."
8. **Installer:** An "Installer" is the Subcontractor or an entity engaged by the Subcontractor, either as an employee, Subcontractor, or Subcontractor of lower tier for performance of particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.
 - a. The term "experienced," when used with the term "Installer," means having minimum of five previous projects similar in size and scope to this Project, being familiar with the special requirements indicated, and having complied with requirements of the authority having jurisdiction.
 - b. **Trades:** Use of titles such as "carpentry" is not intended to imply that certain construction activities must be performed by accredited or unionized individuals of corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to trades persons of the corresponding generic name.
 - c. **Assignment of Specialists:** Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in the operations to be performed. The specialists must be engaged for those activities, and assignments are requirements over which the Subcontractor has no choice or option. Nevertheless, the ultimate responsibility for fulfilling Contract requirements remains with the Subcontractor. This requirement shall not be interpreted to conflict with enforcement of building codes and similar regulations governing the Work. It is also not intended to interfere with local trade union jurisdictional settlements and similar conventions.
9. **Project Site** is the space available to the Subcontractor for performance of construction activities, either exclusively or in conjunction with others performing other work as part of the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.
10. **Testing Laboratories:** "Testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

End of Section 01 40 00 Reference Standards and Definitions

01 51 00 Temporary Utilities

1.1. Temporary Utilities

1. Temporary electrical power and lighting
 - a. The temporary electrical power and lighting will be installed by the Electrical Subcontractor. The Owner shall pay for all power consumed for the temporary electrical service.
 - b. All Subcontractors shall obtain the power for their temporary electric requirements from the existing power sources available on the site. All necessary lugs, transformers, disconnect switches, fuses, cable, posts, ground fault interrupters, etc., required for connection to the power source and distribution, including wires, cable, supports, etc., shall be provided by the Subcontractor, all as coordinated and approved by the Construction Manager. The Owner shall pay for all power consumed for the temporary electrical service. Electric heaters will not be allowed for heating temporary trailers and offices.
 - c. The building electrical Subcontractor shall maintain outlets for temporary power with (1) duplex for every 500 square foot of building space.

End of Section 01 51 00 Temporary Utilities

01 71 00 Layout

1.1. General layout provisions

1. Under the supervision and with the assistance of the Construction Manager, each Subcontractor will be responsible for the layout of his particular portion of the work. Checking of layout and any assistance provided by the Construction Manager shall in no way be construed to relieve the Subcontractors of their responsibilities for layout dimensions, tolerances, and accuracy of their work as set forth in the Contract Documents.
2. Each Subcontractor shall carefully protect monuments, stakes, and benchmarks. If destroyed or disturbed by the Subcontractor or his employees, the cost of replacing them shall be charged against the Subcontractor and shall be deducted from the Subcontractor's contract amount.
3. Except as otherwise noted, each Subcontractor shall obtain his own field measurements and establish lines, grades levels, and measurements shown on the drawings, and reconcile all measurements and conditions shown on the drawings with existing conditions at the site from the site survey provided and building corner indications and ground floor elevation designated by the Construction Manager.
4. Before custom fabricating any materials, the Subcontractor shall verify all dimensions of any existing and new work and shall be responsible for their accuracy. Any differences found shall be submitted to the Architect through the Construction Manager for consideration before proceeding with the work. No extra compensation will be permitted because of differences between actual dimensions and measurements indicated on the project drawings.
5. Existing Utilities and Equipment: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction.
6. Prior to construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer and water service piping.

End of Section 01 71 00 Layout

01 73 00 Cutting and Patching

1.1. General:

1. Refer to other sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work. Requirements of this section apply to mechanical and electrical installations. Refer to Division 21 and Division 42 sections where applicable for other requirements and limitations applicable to cutting and patching mechanical and electrical installations.

1.2. Submittals:

1. **Cutting and Patching Proposal:** Where approval of procedures for cutting and patching is required, before proceeding Subcontractors shall submit proposal describing procedures well in advance of the time cutting and patching will be performed and request approval from the Construction Manager to proceed. Include the following information, as applicable, in the proposal:
 - a. Describe the extent of cutting and patching required and how it is to be performed; indicate why it cannot be avoided.
 - b. Describe anticipated results in terms of changes to existing construction; include changes to structural elements and operating components as well as changes in the buildings appearance and other significant visual elements.
 - c. List products to be used and firms or entities that will perform the work.
 - d. Indicate dates when cutting and patching is to be performed.
 - e. List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.
 - f. Where cutting and patching involves addition of reinforcement to structural elements, submit details and engineering calculations to show how reinforcement is integrated with the original structure.
 - g. Approval by the Construction Manager to proceed with cutting and patching does not waive the Construction Manager's right to later require complete removal and replacement of part of the work found to be unsatisfactory.

1.3. Quality Assurance:

1. **Requirements for Structural Work:** Do not cut and patch structural elements in a manner that would reduce the load-carrying capacity or load-deflection ratio. Obtain approval for the cutting and patching proposal before cutting and patching the following structural elements:
 - a. Foundation construction.
 - b. Bearing and retaining walls.
 - c. Structural concrete.
 - d. Structural steel.
 - e. Lintels.
 - f. Structural decking.
 - g. Stair systems.
 - h. Miscellaneous structural metals.
 - i. Exterior curtain wall construction.
 - j. Equipment supports.
 - k. Piping, ductwork, vessels and equipment.
2. **Operational and Safety Limitations:** Do not cut and patch operating elements or safety **related components in manner** that would result in reducing their capacity to perform as intended, or result in increased maintenance or decreased operational life or safety. Obtain approval of the cutting and patching proposal before cutting and patching the following operating elements or safety related systems:
 - a. Shoring, bracing, and sheeting.
 - b. Primary operational systems and equipment.
 - c. Air or smoke barriers.
 - d. Water, moisture, or vapor barriers.
 - e. Membranes and flashings.
 - f. Fire protection systems.
 - g. Noise and vibration control elements and systems.
 - h. Control systems.
 - i. Communication systems.
 - j. Conveying systems.
 - k. Electrical wiring systems.

3. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces, in a manner that would, in the Construction Manager's and Architect's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Remove and replace work cut and patched in visually unsatisfactory manner.

1.4. Sequencing and Scheduling

1. Coordinate cutting, patching, repairing, redecorating, and related work necessary for incorporating work into existing or new construction. Cutting shall be done by Subcontractors requiring same. Patching shall be done by finish Subcontractors (masonry, gypsum board, painting, ceiling, concrete, flooring, etc.) assigned by the Construction Manager.

1.5. Products

1. Materials: Each Subcontractor shall use materials that are identical to existing materials. If identical materials are not available or cannot be used where exposed surfaces are involved, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials whose installed performance will equal or surpass that of existing materials.

1.6. Execution

1. Inspection. Before cutting existing surfaces, each Subcontractor shall examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding if unsafe or unsatisfactory conditions are encountered.
2. Preparation
 - a. Temporary Support: Provide temporary support of work to be cut.
 - b. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations.
 - c. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
 - d. Take all precautions necessary to avoid cutting existing pipe, conduit or ductwork serving the building but scheduled to be removed or relocated until provisions have been made to bypass them.
3. Performance
 - a. General: Each Subcontractor shall employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay. Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to the original condition.
 - b. Cutting: Cut existing construction using methods least likely to damage elements to be retained or adjoining construction. Where possible review proposed procedures with the original installer. Comply with the original installer's recommendations.
 1. In general, where cutting is required, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots neatly to size required with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 2. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
 3. Cut through concrete and masonry using cutting machine such as carborundum saw or diamond core drill.
 4. Comply with requirements of applicable sections of Division 2 where cutting and patching requires excavating and backfilling.
 5. Bypass utility services such as pipe or conduit before cutting where services are shown or required to be removed, relocated or abandoned. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after bypassing and cutting.
4. Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
 1. Where feasible, inspect and test patched areas to demonstrate integrity of the installation.
 2. Restore exposed finished of patched areas and extend finish restoration into retained adjoining construction in manner that will eliminate evidence of patching and refinishing.
5. Cleaning. Each Subcontractor shall thoroughly clean areas and spaces where cutting and patching is performed or used as access. Remove completely paint, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering to its original condition.

End of Section 01 73 00 Cutting and Patching

01 74 00 Cleaning and Debris Control

1.1. Responsibilities.

1. The Construction Manager shall be responsible for the following items of cleaning and debris control:
 - a. Oversee cleaning and ensure that the building and grounds are maintained free from accumulations of waste materials, rubbish, and debris.
 - b. The Construction Manager may, from time to time, schedule joint trade clean-up times in which all Subcontractors shall provide labor, in proportion to the manpower employed during the time period, to clean up all identifiable and undefinable debris.
 - c. If Subcontractors fail to maintain the site, the Construction Manager may arrange for cleanup of all undefinable debris and prorate the cost of such removal to the Subcontractors in proportion to the manpower employed during the time period. Such proration will be billed directly to the Owner for subsequent future reduction in Subcontractor's payments.

2. Each Subcontractor shall be responsible for the following items of cleaning and debris control:
 - a. Clean up all waste materials, rubbish and debris resulting from his own operations at such frequencies as required by the Construction Manager.
 - b. Place waste materials, rubbish and debris outside the building in trash containers supplied by the Construction Manager.
 - c. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from interior and exterior surfaces of fixtures, hardware, glass, and equipment furnished as a part of his contract.
 - d. Repair, patch, and touchup marred surfaces to match adjacent finished damaged by his own operations.
 - e. Leave all work areas in a "broom clean" condition at the completion of their work.
 - f. Participate in joint clean up as requested by the Construction Manager.

End of Section 01 74 00 Cleaning and Debris Control

01 77 19 Project Close-Out

- 1.1. This Section specifies administrative and procedural requirements for project close-out, including but not limited to:
 1. Inspection procedures.
 2. Project record document submittal.
 3. Operating and maintenance manual submittal.
 4. Submittal of warranties.
 5. Final cleaning.
- 1.2. Close-out requirements for specific construction activities are included in the appropriate Sections in **Divisions 3 through 33**.
- 1.3. Substantial Completion
 1. **Preliminary Procedures:** Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request.
 - a. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete. Include supporting documentation for completion as indicated in these Contract Documents and statement showing an accounting of changes to the Contract Sum.
 - b. Advise Construction Manager of pending insurance change-over requirements.
 - c. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.
 - d. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.
 - e. Submit record drawings, maintenance manuals, final project photographs, damage or settlement survey, property survey, and similar final record information.
 - f. Deliver tools, spare parts, extra stock, and similar items.
 - g. Make final change-over of permanent locks and transmit keys to the Construction Manager. Advise the Construction Manager of change-over in security provisions.
 - h. Complete start-up testing of systems, and instruction of the Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
 - i. Complete final clean up requirements, including touch-up painting. Touch-up, repair and restore marred exposed finishes.
 2. Inspection Procedures: On receipt of the Subcontractor's request for inspection, the Architect will either proceed with inspection or advise the Construction Manager of unfilled requirements.
 - a. Following the initial inspection, the Architect will either prepare the certificate of substantial completion or will advise the Construction Manager of work that must be performed before the certificate will be issued. The Architect will repeat the inspection when requested and when assured that the work has been substantially completed.
 - b. Results of the completed inspection will form the initial "punch list" for final acceptance.
- 1.4. Final Acceptance
 1. **Preliminary Procedures:** Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
 - a. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 - b. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
 - c. Submit certified copy of the Architect's final inspection list, stating that each item has been completed or otherwise resolved for acceptance, and the list has been endorsed and dated by the Architect.
 - d. Submit final meter readings for utilities, measured record of stored fuel, and similar data as of the date of Substantial Completion, or when the Owner took possession of and responsibility for corresponding elements of the Work.
 - e. Submit consent of surety to final payment.
 - f. Submit final liquidated damages settlement statement.
 - g. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 2. Reinspection Procedure: The Architect will reinspect the Work upon receipt of the Construction Manager's notice that the work, including inspection list items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the Architect.

- a. Upon completion of reinspection, the Architect will prepare certificate of final acceptance, or advise the Construction Manager of work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
- b. If necessary, reinspection will be repeated.

1.5. Record Document Submittals

1. **General:** Do not use record documents for construction purposes; protect from deterioration and loss in secure, fire-resistive location; provide access to record documents for the Architect's reference during normal working hours.
2. Transmit:
 - a. Package each Record Document appropriately for transmittal electronically. Transmit each document from Contractor to Construction Manager.
 - b. Each submittal shall be for one (1) Specification Section Number only. Multiple submittals under the same Specification Section may be submitted together on the same transmittal. However, multiple Specification Sections on the same transmittal will be rejected.
 - c. Submittals shall be uploaded electronically to Procore for CM/Architect review and Owner Record purposes.
 - d. Be sure to include the following information on each Closeout Document:
 1. Project Name,
 2. Date(s) and
 3. Other project and product/supplier identification information on the cover of each set.
3. **Record Drawings:** Maintain clean, undamaged set of blue line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at later date.
 - a. Mark record sets with multiple colors to distinguish between variations in separate categories of the Work.
 - b. Mark new information that is important to the Owner, but was not shown on Contract Drawings or Shop Drawings.
 - c. Note related Change Order numbers where applicable.
 - d. Organize record drawing sheets into manageable electronic files, separated by specification.
4. **Record Product Data:** Maintain 1 copy of each Product Data submittal. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations. Give particular attention to concealed products and portions of the Work that cannot otherwise be readily discerned later by direct observation. Note related Change Orders and mark-up of record drawings and Specifications. Upon completion of mark-up, upload complete set of record Product Data to Procore for AE/CM Review and Owner's Records.
5. **Miscellaneous Record Submittals:** Refer to other Specification Sections for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Upload complete set of Record Data to Procore for AE/CM Review and Owner's Records.
6. **Notarized Affidavits:**
 - a. Notarized affidavits which may be required for submission to appropriate District Field Office of Fire Marshal Division of Michigan Department of State Police governing project shall be submitted in form and content as required by Agency.
 - b. Following information is required in notarized affidavits pertaining to interior finish materials.
 1. Name of product.
 2. Name and address of facility in which product was used.
 3. An indication that product was tested by nationally recognized independent testing laboratory.
 4. Name of testing laboratory.
 5. Laboratory project or test number.
 6. Date of test.
 7. Test results.
7. In addition, separate notarized affidavit must be received from installer of product indicating that product was installed as tested.
8. Following is suggested format to use for affidavit (sample FORM 01 77 19.1.6.8). Affidavit must be signed and notarized:

SAMPLE FORM 01 77 19.1.6.8
FLAME SPREAD AFFIDAVIT

AFFIDAVIT

This is to certify that, **(Name of Product)** which was or will be furnished to **(Company making Application of Product)** for **(Job or Project Name and Address)** is same in all respects in content, and specifications for mixing and/or application as specimen tested by **(Name of Laboratory)** on their project or test number **(Test Number)** dated **(Date of Test)**.

Flame Spread _____

9. **Maintenance Manuals:** Organize operating and maintenance data into suitable sets of manageable electronic files. Upload complete set of Record Data to Procore for AE/CM Review and Owner's Records. Include the following types of information:
 - a. Emergency instructions.
 - b. Spare parts list.
 - c. Copies of warranties.
 - d. Wiring diagrams.
 - e. Recommended "turn around" cycles.
 - f. Inspection procedures.
 - g. Shop Drawings and Product Data.
 - h. Fixture lamping schedule.
10. **Spare Parts and Material Inventory:** Organize all spare parts and material inventory specified to be turned over to the Owner. Itemize each item including the following information:
 - a. Quantity submitted of each item.
 - b. Date materials were submitted.
 - c. Location and Owner's representative where material was received.
 - d. Provide acknowledgment that the Owner has received the above materials by uploading a signed transmittal to Procore showing received items and authorized Owner Rep signature.
11. **Asbestos Certificate:** This Certificate provides confirmation from the Contractor that all products/materials that he has supplied and or installed are free of asbestos.
12. **Warranty and Guaranty:** Provide all product and labor warranties and guaranties as specified in the Technical Specifications. In addition, complete Construction Manager's standard material and labor warranty for the specified periods.
13. **Operating and Maintenance Instructions:** Arrange for each installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. If installers are not experienced in procedures, provide instruction by manufacturer's representatives. Include detailed review of the following items:
 - a. Maintenance manuals.
 - b. Record documents.
 - c. Spare parts and materials.
 - d. Tools.
 - e. Lubricants.
 - f. Fuels.
 - g. Identification systems.

- h. Control sequences.
 - i. Hazards.
 - j. Cleaning.
 - k. Warranties and bonds.
 - l. Maintenance agreements and similar continuing commitments.
14. As part of instruction for operating equipment, demonstrate the following procedures:
- a. Start-up.
 - b. Shutdown.
 - c. Emergency operations.
 - d. Noise and vibration adjustments.
 - e. Safety procedures.
 - f. Economy and efficiency adjustments.
 - g. Effective energy utilization.
15. At the conclusion of the Owner's instruction, provide to the Construction Manager an affidavit signed by the Owner's operator(s) that sufficient and satisfactory Operating and Maintenance Instructions have been provided, and that the Owner has fully accepted all responsibility for the operation and maintenance of the equipment.

End of Section 01 77 19 Project Closeout

01 78 36 Warranty Requirements

- 1.1. General. **All subcontractors are to include a minimum 2-year warranty** from the date of FINAL OWNER'S ACCEPTANCE OF THE PROJECT. Longer warranties may be required for some items; refer to the specifications for longer warranty requirements. Attached is the required Basic Warranty Letter that subcontractors are required to submit at the project close out FORM 01 78 36.1.1. Longer warranties as required by the specifications shall be submitted as well. The following are additional warranty stipulations and requirements:
1. **Disclaimers and Limitations:** Manufacturer's disclaimers and limitations on product warranties do not relieve the Subcontractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, **manufacturers, and Subcontractors required to countersign special warranties with the Subcontractor.**
 2. **Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as result** of such failure or that must be removed and replaced to provide access for correction of warranted Work.
 3. **Reinstatement of Warranty:** When Work covered by warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
 4. **Replacement Cost:** Upon determination that Work covered by warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Subcontractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through portion of its anticipated useful service life.
 5. **Owner's Recourse:** Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 6. The Owner reserves the right to refuse to accept Work for the Project where special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

FORM 01 78 36.1.1
WARRANTY FORM

Date < date >

AVB Construction
4200 W. Centre Ave
Portage, MI 49024

RE: Subcontractor Warranty
< Project Name >
AVB Job Number: < AVB job number >

Subcontractor's Work Performed: **< work performed >**

To Whom It May Concern:

We hereby guarantee that all labor and materials furnished and installed by us and/or our subcontractors on the above referenced job are in accordance with the contract, plans and specifications, and authorized alterations and additions. We guarantee all of the labor and materials in our contract for a period of two (2) years, commencing on **< warranty start date >** and ending on **< warranty date + 2 years >**. We also include extended guarantees for special items related to our work that are indicated in the specifications to have Guarantee periods of longer than two (2) years.

Any defects that develop during the Guarantee Period due to improper or defective materials, equipment, or workmanship shall be remedied by our company, (along with any other work affected as a result of such defects), upon written notice, within ten (10) days (or within 24 hours in the case of emergency) without expense to AVB Construction or the Owner.

If we fail to fulfill the preceding obligation, and if AVB Construction or the Owner brings an action to enforce this guarantee, we agree to pay all costs incurred as a result of our failure to make corrections including the cost of reasonable attorney's fees incurred in connection therewith. Receipt of notice from the Owner shall be presumptive evidence that none of the exclusions to the applicable warranty have been determined to exist. If we fail to comply with the warranty requirements within the time periods set forth above, we shall bear the burden of proving that the exclusions were applicable.

It is agreed and understood between AVB Construction, the Owner and this Subcontractor, that the foregoing guarantee may be enforced by AVB Construction, the Owner, any tenant of the project, or their successors and assigns.

Subcontractor: _____

Signed: _____

Name and Title: _____

Date: _____

BLANK
PAGE

End of Section 01 78 36 Warranty Requirements

01 80 00 General Installation Provisions

1.1. General

1. Inspection of Conditions: The Installer of each major component shall inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
2. Manufacturer's Instructions: Comply with manufacturer's installation instructions and recommendations to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.
3. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
4. Provide attachment and connection devices and methods necessary for securing Work. Secure Work true to line and level. Allow for expansion and building movement.
5. Visual Effects: Provide uniform joint widths in exposed Work. Arrange joints in exposed Work to obtain the best visual effect. Refer questionable choices to the Architect for final decision.
6. Recheck measurements and dimensions before starting each installation.
7. Install each component during weather conditions and Project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.
8. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.
9. Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Architect for final decision.

1.2. Protection

1. During handling and installation, Subcontractors shall clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
2. Clean and maintain completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
3. Limiting Exposures: Each Subcontractor shall supervise their construction activities to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:
 - a. Excessive static or dynamic loading.
 - b. Excessively high or low temperatures.
 - c. Thermal shock.
 - d. Excessively high or low humidity.
 - e. Air contamination or pollution.
 - f. Water or ice.
 - g. Solvents.
 - h. Chemicals.
 - i. Heavy traffic.
 - j. Soiling and staining.
 - k. Rodent and insect infestation.
 - l. Electrical current.
 - m. Improper lubrication,
 - n. Contact between incompatible materials.
 - o. Destructive testing.
 - p. Unprotected storage.
 - q. Improper shipping or handling.
 - r. Theft.
 - s. Vandalism.

End of Section 01 80 00 General Installation Provisions

END OF ARTICLE
AVB 01 00 00
GENERAL REQUIREMENTS