

# Dexter Community Schools

## Dexter High School Removal and Replacement of Tennis Courts Project Manual

### Bid Categories Include:

2-1:Dexter High School Tennis Courts  
Replacement



### Issued by:

Dexter Community Schools  
2704 Baker Road  
Dexter, Mi 48130

With agreement from past  
professional firms

### ISSUED

March 17, 2021

**Section 00 0110 Table of Contents**

<b>INTRODUCTORY INFORMATION</b>	<b>DATED</b>
<b>Section 00 0110 Table of Contents</b>	3/17/2021
Section 00 0115 List of Drawing Sheets	3/17/2021
Section 00 1116 Invitation to Bid	3/17/2021
<b>DIVISION 00 – PROCUREMENT REQUIREMENTS</b>	
Section 00 2113 Instructions to Bidders	3/17/2021
Section 00 2410 Work Required for All Bid Categories	3/17/2021
Section 00 2413 Scopes of Work for Bid Categories	3/17/2021
Section 00 4100 Bid Proposal Form	3/17/2021
<b>DIVISION 00 – CONTRACTING REQUIREMENTS</b>	
Section 00 7316 Insurance Requirements	3/17/2021
<b>DIVISION 01 – GENERAL REQUIREMENTS</b>	
Section 01 1100 Summary of Work and Use of Premises	3/17/2021
Section 01 3210 Project Schedule	3/17/2021
Section 01 3520 Safety Requirements	3/17/2021
Section 01 4001 Quality Requirements	3/17/2021
Section 01 6001 Product Requirements	3/17/2021
Section 01 7001 Execution Requirements	3/17/2021
Section 01 7700 Closeout Procedures	3/17/2021

**TECHNICAL SPECIFICATIONS**

311000	Site Preparation	3/12/2021
312000	Earth Moving	3/12/2021
312020	Trenching	3/12/2021
312514	Soil Erosion and Sedimentation Control	3/12/2021
321123	Aggregate Base Courses	3/12/2021
321216	Asphalt Paving	3/12/2021
321313	Concrete Paving	3/12/2021
321834	Tennis Court Construction and Surfacing	3/12/2021
323113	Chain Link Fencing and Gates	3/12/2021
329113	Soil Preparation	3/12/2021
329200	Turf and Grasses	3/12/2021

END OF SECTION

**Section 00 0115 List of Drawing Sheets**

<b><i>Title</i></b>	<b><i>Date</i></b>
HS_c1.0 Tennis Courts 2021	3/12/2021
HS_c1.1 Tennis Courts 2021	3/12/2021
HS_c2.1 Tennis Courts 2021	3/12/2021
HS_c3.0 Tennis Courts 2021	3/12/2021
HS_c4.0 Tennis Courts 2021	3/12/2021
HS_c6.3 Tennis Courts 2021	3/12/2021
HS_c7.0 Tennis Courts 2021	3/12/2021
HS_c7.2 Tennis Courts 2021	3/12/2021

END OF SECTION

## Section 00 1116 Invitation to Bid

PROJECT:DEXTER COMMUNITY SCHOOLS  
DEXTER HIGH SCHOOL TENNIS COURTS REPLACEMENT

OWNER:DEXTER COMMUNITY SCHOOLS  
2704 Baker Road  
Dexter, MI 48130

OWNER REPRESENTATIVE: Brian Schuler, Director of Facilities  
Dexter Community Schools  
7960 Shield Road  
Dexter, MI 48130

PROJECT LOCATION:JOBSITE  
Dexter High School (9-12)  
2200 North Parker Road, Dexter, MI 48130

ADMINISTRATION SITE  
Bates School (Pre-k and Admin)  
2704 Baker Road, Dexter, MI 48130

THE WORK INCLUDES:Replacement of ten tennis courts at Dexter High School.

Invitation is hereby made to have qualified bidders submit bid proposals for the following work categories:

BID CATEGORIES

**BID CATEGORY 2-1: DEXTER HIGH SCHOOL TENNIS COURTS REPLACEMENT (GENERAL CONTRACT)**

ONLY – NO OTHER BID CATEGORIES

An optional pre-bid meeting will be held on March 26, 2021 at 10:00 AM at the Dexter High School Tennis Courts (2200 N. Parker Rd. Dexter MI 48130).

**If bidders attend the pre-bid meeting, additional inspection opportunities may be arranged, but due to school district security concerns, bidders should not go to the site without prior arrangement with Dexter Community Schools.**

Bid proposals are requested and will be received as a “single lump sum proposal” prior to **2:00 PM**, local time, on **April 7, 2021**.

The bid documents are available to Bidders electronically without charge at the following link:  
<https://www.dexterschools.org/departments/business-office/bids-rfps>.

Interested firms should submit a digital/electronic copy of the bid proposal to Dexter Community Schools, at [bond@dexterschools.org](mailto:bond@dexterschools.org). Bids are to be submitted according to the detailed instructions in 00 2113 Instructions to Bidders.

Bidders may submit paper copies of the written bid, in a separate sealed envelope, that must be received on or before the bid opening date and time. Bids are to be submitted to:

Dexter Community Schools  
Attn: Jennifer Miceli, Bond Projects Purchasing  
2704 Baker Road  
Dexter, MI 48130

Bid security in the form of bonds are required to be submitted with all proposals. An electronic copy of the bond may be submitted with electronically submitted bids. Bid security in the form of a certified check is acceptable bid security only for proposal less than \$50,000. If a check is the bid security, bid must be tendered in writing and in person, accompanied by the cashier check.

Dexter Community Schools makes a continuous effort to broaden their business relationships with Diversity Firms (aka Historically Underutilized Businesses (HUB)) and local businesses. EEO M/F/H/V

All bids must contain a sworn and notarized statement disclosing any familial relationship existing between the bidder or any employee of the bidder and any member of the Dexter Community Schools Board of Education and acknowledge compliance with the Michigan Iran Economic Sanctions.

All addenda will be posted to the site linked below. Each bidder shall ascertain, prior to submitting a bid, that they have reviewed all addenda issued and shall acknowledge such on the Bid Proposal Form. No addendum will be issued later than three (3) days prior to the date for receipt of bids except an addendum, if necessary, postponing the date for receipt of bids or withdrawing the request for bids.

Bid security in the form of bonds are required to be submitted with all proposals. An electronic copy of the bond must be submitted with electronically submitted bids. Bid security in the form of a certified check is acceptable bid security only for proposal less than \$50,000. If a check is the bid security, bid must be tendered in writing and in person, accompanied by the cashier check.

Bidders are responsible for all costs and coordination of their work as it is shown within the entire project manual and all other project bid documents.

Dexter Community Schools reserves the right to reject any or all proposals, to accept other than a low bid, and to waive informalities, irregularities and/or errors in proposals, which they feel is in their best interest.

END OF SECTION

### Section 00 2113 Instructions to Bidders

1. DELIVERY OF BIDS: Bids must be RECEIVED not later than 2:00 PM, LOCAL TIME, ON 4/7/2021, for all bid categories. Late bids will be returned unopened. See item BID PROPOSAL REQUIREMENTS below for details of bid preparation and delivery.
2. FORM OF BID: Use ONLY the Section 00 4100 Bid Proposal Form (the most current version) to submit a bid. Do not modify, alter, qualify, or attach stipulations to the Bid Proposal Form unless requested. The Owner reserve the right to reject such bids as non-responsive.
3. BID DOCUMENTS: Bid documents for this project are available at the following link: <https://www.dexterschools.org/departments/business-office/bids-rfps>.
4. ADDENDA: Prior to the receipt of bids, addenda will be posted to the link above. No addendum will be issued later than three (3) days prior to the date for receipt of bids except an addendum, if necessary, postponing the date for receipt of bids or withdrawing the request for bids. Each bidder shall ascertain, prior to submitting a bid, that he/she has reviewed all addenda issued and shall acknowledge such on the Bid Proposal Form.
5. PRE-BID AND SITE INSPECTION MEETING
  - A. Pre-Bid Meeting: Prior to bidding, a project inspection and pre-bid meeting will be held for the purpose of review and clarification of the contract documents, to allow the Contractors to confirm their estimates and quantity surveys, and to allow the Contractors the opportunity to familiarize themselves with the project site. The minutes and attendance list from this meeting will be included in an addendum.
  - B. This meeting is optional for this bid package, however all bidders must stipulate they have inspected the project site on their bid form in order to inform themselves of the jobsite conditions.
  - C. Date & Time: March 26, 2021 at 10:00 AM
  - D. Location: Dexter High School Tennis Courts, 2200 North Parker Road, Dexter, MI 48130
  - E. Due to school district security concerns, bidders should not go to the site without prior arrangement with Dexter Community Schools.
  - F. Pre-Bid site inspection arrangements can be made and questions can be submitted by emailing the Director of Facilities, Brian Schuler at [schulerb@dexterschools.org](mailto:schulerb@dexterschools.org).
6. PERFORMANCE AND LABOR AND MATERIAL BONDS: Bonds required for this project.
7. BIDDERS EXAMINATION OF PREMISES AND THE CONTRACT DOCUMENTS:
  - A. If inspection of the work area is required, it must not interfere with the Owner's ongoing activities.
  - B. Each Bidder shall visit the site(s) to become familiar with local conditions affecting the job. Each Bidder shall take their own measurements and be responsible for the correctness of those measurements. Each Bidder shall be held to have made such examinations and no allowances will be made in their behalf by reason of error or omission on their part. If any portion of the Bidder's work depends, for proper results, upon existing conditions, the Bidder shall notify the Owner of any conditions or defects that will affect the results. Failure to so notify will constitute the Bidder's acceptance of the conditions.
  - C. Each Bidder shall examine the bidding documents carefully. In the event that the documents require interpretation or correction of any inconsistency, ambiguity, or error, the Bidder will notify the Owner in writing at least seven (7) days prior to the bid due date for clarification by written addenda. If such interpretation is not requested, the bid will be presumed to be based on the interpretation and instructions given by the Owner after the Contractor Agreement is executed, and in accordance with the terms of that Agreement. Only a written interpretation or correction prior to the bid due date will be binding. The Owner will not be responsible for any verbal explanations or interpretations of the Contract Documents.
  - D. Plans, diagrams and other descriptive information that depict existing conditions are provided for scope identification and scheduling purposes only dimensions should not be scaled. Quantities, elevations, measurements and locations shown may have been approximated and/or gathered from

dated, incomplete original construction documents. **Therefore, this data should not be used for bidding purposes without field verification by the bidder.**

- E. The Contract Documents are intended to provide sufficient information and intent for the Bidder to assume responsibility for all Work and Materials necessary for proper completion of the Work. The Bidder's own site inspection or contract document review of the work areas shall be relied upon to provide the bidder all other information they may require to properly execute and complete the Work. If inspection presents any unanswered questions, they must be submitted in writing to the Owner as described above.
- F. Failure to request any required written clarification by addenda and submission of a Bid Proposal shall constitute acceptance of all contract document terms and conditions.
- G. Each bidder, by submitting a bid, represents that the bidder has read and understands the bidding documents, has satisfied themselves as to the extent of the proposed work by personal examination of the site and surroundings, is familiar with the local conditions and weather extremes under which the work is to be performed and has made their own estimate there from of the equipment, labor, facilities and difficulties attending the performance and completion of the work.

8. BID SECURITY

- A. Bid security will be required for all proposals.
  - 1) All proposals over \$50,000 shall be accompanied by a satisfactory bid bond executed by the bidder and an approved security company in an amount of not less than five percent (5%) of the final base bid sum.
  - 2) For bids less than \$50,000 a certified check in the amount of 5% of the bid will be allowed as a bid security.
- B. The amount of the bid bond shall be forfeited to the Owner upon failure of the successful bidder to enter into a contract within fifteen (15) days after acceptance of the proposal.
- C. The providing of security hereunder shall entitle the Owner to recover the full amount of the difference between the bid submitted and the amount for which the Owner ultimately contracts for the work, but not more than the 5% bid bond.
- D. Bid security signed by attorney-in-fact must be accompanied by a certified and effectively dated copy of their power of attorney.
- E. The bid security shall be made out to Dexter Community Schools.

9. BID PROPOSAL REQUIREMENTS:

- A. The bidder shall assume full responsibility for timely delivery of bid to the location designated.
- B. DELIVERY OF BIDS: Bids must be **RECEIVED** prior to **2:00 PM**, local time, on April 7, 2021. Late bids will be considered non-responsive. See item Bid Proposal Requirements below for details of bid preparation and delivery.
- C. E-mail bids to: [bond@dexterschools.org](mailto:bond@dexterschools.org).
- D. Use Subject Line: "Bid Enclosed for Dexter High School Tennis Courts Replacement"
- E. For bidders unable to submit their bid electronically
  - 1) Bids shall be submitted in an opaque, sealed envelope. Identify the envelope with:
  - 2) Dexter High School Tennis Courts Replacement
  - 3) Name and address of bidder
  - 4) Notation "BID ENCLOSED"
  - 5) Bids, accompanied by performance and payment bonds, shall be delivered by the same due date and time to

Dexter Community Schools

ATTN: Jennifer Miceli, Bond Projects Purchasing  
2704 Baker Road  
Dexter, MI 48130

- F. A bid is invalid if it has not been received prior to the time and date for receipt of bids indicated or prior to any extension thereof issued by addendum to the bidders. Bids received after the time and date for receipt of bids will be considered non-responsive.
- G. No responsibility shall attach to the Owner for the premature opening of any proposal that is not properly addressed, delivered and identified.
- H. Each bidder shall ascertain, prior to submitting a bid, that he/she has reviewed all addenda issued and shall acknowledge such on the Bid Proposal Form.
- I. All bids must be signed by an individual or officer of the firm authorized to bind the entity.
- J. Negligence in preparation, improper preparation, errors in and/or omissions from the bid shall not relieve the bidder from fulfillment of any and all applicable obligations and requirements of the Contract documents.
- K. Include a scan of the original bid security in the bid proposal document. The original must be presented at the post-bid interview. For bids providing a certified check as bid security (less than \$50,000) the original check must be presented at the time of bid submission.

#### 10. BID READING

- A. Bids will be read publicly and via video conference at 3:00 PM on April 7, 2021 at Bates School Board Room, 2704 Baker Rd. Dexter, MI 48130 and posted on the Owner's website thereafter. The video conference link will be available at:

<https://www.dexterschools.org/departments/business-office/bids-rfps>

#### 11. CONSIDERATION OF BIDS

- A. The bidder acknowledges the right of the Owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the bidder recognizes the right of the Owner to reject a bid:
  - 1) If the bidder fails to furnish any required bid security, or fails to submit the data required by the bidding documents; or
  - 2) If the bid is in any way incomplete or irregular; or
  - 3) If the bidder's performance as a contractor was unsatisfactory under a prior contract for the construction, repair, modification, or demolition of a facility with the Owner; or
  - 4) For known poor performance by the bidder at any other Michigan public school district; or
  - 5) Inadequate financial condition.
- B. It is the intent of the Owner to award a Contract to the lowest, qualified, responsive bidder demonstrating a complete scope of work, provided the bid has been submitted in accordance with the requirements of the bidding documents and does not exceed the funds available.

#### 12. POST-BID MEETING:

- A. After the Bids are received, tabulated, and evaluated, potentially low bidders shall be invited to meet with the Owner at a post-bid meeting. The post-bid meeting will review Contractor understanding of specifications, compliance issues, scope of work, schedule and Contractor capabilities.
  - 1) This meeting may be waived at the discretion of the Owner.
  - 2) The post-bid meeting notes will become a part of the contract documents executed resulting from this meeting.
- B. The Bidder will provide the following information at the post-bid meeting:
  - 1) The original Bid Security and accompanying power-of-attorney if required.
  - 2) Designation of the work to be performed by the Bidder with their own forces including manpower for the Contractor and that of their subcontractors. The Owner reserves the right to disqualify bids wherein the bidder plans to provide less than 30% of the work of the project with their own forces.
  - 3) Detailed cost breakdown of the bid including labor, equipment, material unit prices and subcontract amounts.
  - 4) A list of subcontractors, suppliers and the proprietary names of principal items or systems of materials, and equipment proposed for the work.



- 5) The names and backgrounds of the Contractor's key staff members including superintendent and assistants and establish the reliability and responsibility of the persons or entities proposed to furnish and perform the work described in the Bidding Documents.
  - 6) Commitment to construction schedules, identification of items requiring long lead deliveries and manpower information in accordance with Section 01 3210 Project Schedule.
- C. Prior to award of a contract, the Owner will notify the Bidder if the Owner, after due investigation, has reasonable objection to any proposed person or entity within the Bidder's proposed project team. If the Owner has reasonable objection to any proposed person or entity, the Bidder may submit an acceptable substitute person or entity with an adjustment in their bid price to cover the difference in cost occasioned by such substitution. The Owner may, at their discretion, accept the adjusted bid price or they may disqualify the Bidder. In the event of either withdrawal or disqualification under the terms of this subparagraph, bid security will not be forfeited, notwithstanding the provision of the Bid Security item above in this Section.
- D. The Bidder will be required to establish to the satisfaction of the Owner the reliability and responsibility of the proposed on-site supervision, the workers, subcontractors or entities proposed to furnish and perform the work.

END OF SECTION

## Section 00 2410 Work Required for All Bid Categories

1. Bidders of all Work Categories shall include all Work, compliance and costs for compliance with the appendices, the bidding requirements, General Conditions, general requirements, drawings and technical specifications, including all addenda. All bid categories are bound by the instructions in this Section 00 2410 Work Required for All Bid Categories. They shall include within their bids this work as well as all bid/contracting requirements, and the specification sections as listed within the specific Bid Category Scopes, and the clarifications to scope which follow in each bid category. Particular emphasis is placed on the following requirements, which are stated below for emphasis and clarity.
2. Definitions: In preparation of all proposals and their interpretation by the Owner, the following definitions shall be understood and shall be the source of factual intent in all scope of work descriptions:
  - A. **ADDENDUM:** An addendum is a written and/or graphic instrument issued by the Owner's Representative prior to award of Contract which modifies or interprets the Bidding Documents by additions, deletions, clarifications, or corrections. The Bidding Documents for the original Work shall govern the work therein described, unless modified by the Addendum. All costs or credits due to the Addendum shall be incorporated into the Bidder's Bid Proposal Form for Addenda issued prior to Owner's receipt of Bids and by letter on Bidder's letterhead modifying Bid Form amounts for Addenda issued after Owner's receipt of Bids: letter shall be signed by and as for the original Bid Form submission.
  - B. **ALTERNATE PRICE:** The term used in the Contract Documents means a variation to the Base Bid to cover a variation in the Contract requirements. If the Owner accepts the Alternate Price, the variation is then a part of the Contract and the quoted amount will be added or deducted from the Lump Sum Base Bid Price and will be used in determining or modifying the Contract Sum.
  - C. **BID PROPOSAL:** Is a complete and properly signed proposal to do the Work of an individual Bid Category(ies) for the sums stipulated therein, submitted in accordance with the Bidding Documents.
  - D. **BASE BID** is the sum stated in the Bid Proposal for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which work may be added to or deducted from for sums stated in Alternate Bids.
  - E. **BIDDER** is a person or legal entity who submits a Bid Proposal. After award of a contract, the Bidder will be known as Contractor or Vendor. All Contractors on this project are considered prime Contractors. Vendors provide equipment shipped FOB site and technical support on site, but no installing labor. Subcontractors are firms which have agreements to provide services on behalf of Contractors. The term Contractor(s) include firms who are subcontracted at any tier (sub-subcontractor, etc.). All Subcontractors are to be bound within their respective agreements to higher tier firms, to all the requirements assigned to the prime level Contractor by the Owner.
  - F. **BID CATEGORIES** are units of work performed by a Contractor (and their subcontractors of any tier) which form part of the total project. The term Bid Category should not be confused with the term Specification Technical Section. Technical Sections of the Specification establish quality and performance criteria, and the Bid Categories designate work scope and assignment. Technical Sections are listed within each Bid Category to identify, along with the scope narratives, the assignment of work.
  - G. **BID CATEGORY DESCRIPTION** is a written description of the scope of work to be performed by a Bidder for a Bid Category. A description of the work is provided in the Scope of Work for each Bid Category.
  - H. **BULLETIN:** A written and/or graphic instrument issued after award of Contract, used to solicit a proposal for a change in the Work which may affect cost and/or time. The Contract Documents for the original Work shall govern the work described unless otherwise modified by the Bulletin. A Bulletin is not an order to do the work, but a request to submit a quotation.
  - I. **COMPLETE:** Where complete is used, it shall mean "provided all goods, services, delivery, protection, and work as necessary to put in place specified work complete with connections, supports, attachments, and incidental items necessary for a fully finished and properly operating assembly or installation."

- J. CONNECT: The term connect shall mean “to bring service(s) to point of installation and make final connections of the service(s) to the installed equipment and provide miscellaneous auxiliary appurtenances necessary to make operable for its intended use.”
  - K. CONTRACT DOCUMENTS consist of the Agreement, the Conditions of the Contract (General Conditions), all Division 00 Contracting Requirements, all Division 01 General Requirements, Drawings, Specifications, other documents listed in the Agreement, all Addenda issued prior to and all modifications issued after execution of the agreement.
  - L. CONSTRUCTION CHANGE DIRECTIVE (CCD): A directive to make changes in the work or duration of the work. Contractual obligations upon the Contractor are the same as those BEFORE a CCD is issued unless stated differently within the CCD. A CCD is an order to do the work.
  - M. FURNISH: To supply (only) to another party for their use of installation, including cost of delivery to jobsite and full coordination with the receiving party.
  - N. INSTALL: To unload, distribute, uncrate, assemble, and fix into the intended final positions. The installer to provide all miscellaneous hardware and supplies required to anchor and support securely, connect, clean-up, and legally dispose of rubbish.
  - O. OWNER SUPPLEMENTAL INSTRUCTION (OSI): A clarification or minor change the Owner may issue to clarify its intent in a given work area or work element, which upon receipt the Contractor is to implement as a part of its base bid with no added cost. If the Contractor disputes the OSI is a no cost element, they must request a CCD before proceeding with the work, or it will be presumed by both parties that the OSI is to be implemented without added cost.
  - P. PROVIDE shall be understood to mean furnish, install, protect, trim, cut and patch as required to put in place a complete operable and/or finished installation which is complete in every way intended in the contract documents, including all required expert labor, material, and equipment for said installation.
  - Q. 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 a corresponding generic name, such as "carpenter". It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.
  - R. TRADE SPECIALISTS: Certain Sections of the Specifications require that specific construction activities be performed by specialists who are recognized experts in the operations to be performed. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no choice or option. Nevertheless, the ultimate responsibility for fulfilling Contract requirements remains with the Contractor. 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.
3. All Bidders of Any Category must include:
- A. WORKER & CREWING QUALIFICATIONS: Meet defined requirements for professional (“experienced”) installer. Provide journeyman workforce with apprenticeship or other demonstrable training program. Apprentices/helpers shall not exceed 25% of crewing. Provide at least 30% of the labor required with personnel in the employ of the Contractor. No subcontract may exceed 50% of the Contract without written approval of the Owner.
  - B. SUPERVISION QUALIFICATIONS: Each bidder shall provide proposed competent supervision resume(s) and references from previous project experience if invited to a post-bid interview. If approved by the Owner, the supervisor shall remain assigned to the project for the entire project duration, unless the Owner requests their replacement in writing. The supervisor shall be on-site full-time whenever the Contractor has direct employees or subcontractors (of any tier) on-site. Supervisor must have minimum OSHA 30-hour training. Supervisor shall attend all job progress meetings and other required meetings and inspections.
  - C. REVIEW OF DOCUMENTS AND COORDINATION AMONG TRADES: Develop a complete understanding of other work categories (if any) and provide continuous coordination with interfacing trade contract work of other categories. Bidders are responsible for reviewing all construction documents issued with this bid package including project manual specifications, civil, structural,

- architectural, food service, mechanical, electrical drawings, low voltage/data design information and all other work as shown.
- 1) Note that some sections of the technical specifications may include a paragraph titled "Related Sections". This paragraph is an aid to the Project Manual and is not intended to include all sections which may be related. It is each Contractor's obligation to investigate how related sections may affect their bid and proposed work, and to include costs for the applicable work in related sections and/or coordination with same in their bid proposal to coordinate all sections whether indicated under "Related Sections" or not.
  - 2) Estimating information and quantities indicated on the drawings are for convenience and reference only. Contractors will be held responsible for having provided their own quantity take-offs to determine actual quantities contained in the construction documents.
  - 3) Each Contractor shall include all required labor claimed by its respective trade, for installation of equipment furnished by another Contractor.
- D. TAXES, PERMITS, BONDS AND FEES: All applicable taxes (including Michigan sales tax), permits and fees required by any legal authority are to be included in the Base Bid(s). The cost of all bonds shall be included within the lump sum base bid.
- 1) The Contractor will provide a Washtenaw County SESC Permit, as soil disturbance will be within 500' of Mill Creek. The planned scope of work should fall into the County's Minor Permit category and will require silt fence and inlet filters, depending upon the Contractors logistics plan.
- E. EXISTING CONDITIONS: Contractors are responsible to perform field investigation and review existing conditions and Owner as-built drawings prior to executing the work to ensure that existing conditions are well understood. Contractors shall provide within their bid proposals all costs for modification cut/patch, and neat repair of finishes of existing conditions as required to implement the complete contract documents intent.
- F. HAZARD COMMUNICATION: Under no circumstances are Contractors to disturb Asbestos-Containing Materials (ACM), Lead Containing Materials (LCM) or any other hazardous materials without appropriate engineering controls. If the Contractor suspects that a material within the scope of this project is a hazardous material (including asbestos, lead, polychlorinated biphenyl, or other regulated building material) that has not already been identified and/or is in the scope of work to be abated, notify the Owner immediately. The Contractor shall request hazardous materials data from the Owner as applicable to the worksite location.
- G. If work will be conducted on any previously coated surface of an existing building, the Contractor must submit to the Owner current proof of appropriate detailed written lead work plan in accordance with 29 CFR § 1926.62 (Michigan Part 603). This submittal will include proof of training, written respirator program, and negative exposure assessments from projects with similar conditions at a minimum. Contractors performing work in these buildings must follow the provisions of the University of Michigan AEC & OSEH Construction Safety Requirements (January 2010 – revised 5/1/10) and the division 13 specifications in this project manual. The MIOSHA Lead Standard (Part 603) can be viewed at: [http://www.michigan.gov/documents/CIS\\_WSH\\_part603\\_35656\\_7.pdf](http://www.michigan.gov/documents/CIS_WSH_part603_35656_7.pdf)
4. SAFETY COMPLIANCE: Bidders shall be aware that compliance with all Federal and State OSHA standards is mandatory. Refer to Section 01 3520 Safety Requirements for further information.
  5. OWNER COORDINATION: All Contractors shall be aware of the Owner's on-going use of the facility and shall coordinate and schedule work accordingly with notice to the Owner's representative.
    - A. All work shall comply with local noise and work ordinances where applicable.
    - B. Loud work must be coordinated with the Owner.
    - C. Any work that could endanger staff, students, or visitors will need to be scheduled to avoid such danger. This may include weekend, evening or night work. No crane hoisting or structural demolition will be allowed outside of approved times.
    - D. Contractors will be expected to behave in an appropriate manner. Foul language and inappropriate clothing will not be tolerated.
    - E. No jobsite radios will be allowed if any portion of the facility is occupied during the construction period.

- F. Contractors will relocate stored materials, tools, and equipment, if needed, as directed by the Owner to allow for the Owner's on-going use of the facility. Be prepared to move stored elements as directed by the Owner.
6. SCHEDULE: Work on this bid package must be performed according to the Milestone Schedule which is described in Section 01 3210 Project Schedule. Bidders shall be aware of delivery requirements to accommodate the completion schedule of this project and shall include all expediting, accelerated delivery, and overtime costs to allow for completion and turnover as shown in the milestone schedule.
  7. WORKER IDENTIFICATION: All workers shall carry a State-issued picture identification card on their person at all times and present it to any Owner representative upon request.
  8. NO SMOKING/NO TOBACCO RULE: Per State Law, NO smoking or other tobacco use will be allowed on the project site at any time. There are no exceptions to this rule. Any worker found using any form of tobacco may be permanently removed from the project at the sole discretion of the Owner.
  9. DELIVERIES AND ON-SITE STORAGE: Since storage space on the project site is limited, Contractors must utilize "just-in-time" deliveries. Materials must be received in advance of the time that they will be needed on-site, stored off-site until such time as they are required, and delivered in a timely manner to facilitate work progress. Material, equipment, and tools may not be stored on-site in excess of ten (10) working days prior to installation or use.
  10. TEMPORARY SIGNAGE AND BARRICADES: Provide and maintain barricading and signage required outside the project area to completely define the construction work area. Post all work areas as directed by the Owner. Provide barricades and flagmen to make safe entry and exit of large or slow moving loads on and off public streets and where safe access requires them. During the school year, no deliveries will be allowed during school drop off and pick up times (7:30 to 8:30 AM and 2:30 to 3:30 pm) and other restrictions for school activities as defined by the Owner. No crane shall be used on site until its entire swing area is identified by the Contractor and the entire crane swing work area is blocked by barricades.
  11. ON-SITE ROADS AND TEMPORARY ROAD CLOSURES:
    - A. Each Contractor will enforce a five (5) MPH speed limit on site.
    - B. Each Contractor must provide barricades, signage, and flag persons that comply with the MMUTCD, state, and local requirements to safely reroute pedestrians and vehicles. Each Contractor must also provide barricades, signage and flag persons to facilitate moving trucks and equipment onto and off site as required for the work of their bid category.
    - C. Each Trade requiring road closure in the public ROW shall obtain and pay for any city/state permit costs or fees.
  12. PROTECTION OF EXISTING BUILDING & FINISH CONDITIONS: All Contractors are to protect new or existing finishes while working, operating lifts, and moving items on rolling scaffold or carts by using plywood or masonite panels or other appropriate protection for the loads imposed. Contractors are responsible to clean tires from lifts and carts and remove any lodged objects that could cause damage and to restore any consequential damage that does occur. Protect structure from overloading by analyzing live and static lift loads and provide any protection or shoring required to protect existing structure. Each Contractor working in a finished space is responsible for protecting the area surrounding their work. If any finish (floors, walls, carpet, furniture or seating) needs to be cleaned, replaced, or repaired, the responsible Contractor will pay for any costs incurred. If any furniture fixtures or equipment needs to be moved, each Contractor requiring same shall take a picture or prepare a sketch of in place conditions and locations and shall re-install FF&E in its original location after its work is complete during the summer. During school days this shall be required daily. Further, each Contractor working off shift or on weekends in a finished or occupied space shall clean it completely at the end of each shift so that the space is ready for use the following day for Owner usage.
  13. HOISTING & RIGGING: Provide any personnel lifts or hoisting and rigging necessary to complete work of your bid category. No hoisting or rigging will be provided by the Owner. Do NOT ask to use the Owner's equipment, ladders or tools. Protect all finishes.
  14. WASTE RECYCLING: Dumpsters will NOT be furnished by the Owner. Each Contractor will coordinate with and participate in a waste recycling program. See Section 01 7001 Execution Requirements for more details. Dumpsters for construction debris and unidentifiable waste for the new work will be furnished by

the Contractor. Every Contractor shall pick up and remove all trash and debris caused by their operations EVERY DAY and place it into dumpsters or haul it off-site.

15. UTILITY SHUTDOWNS: Provide three (3) day minimum notice to Owner's representative for any utility shutdowns. Schedule any required utility shut downs so as to minimize the impact to the Owner's use of its building. All shutdowns should be planned and performed during off-hours and scheduled utilizing overtime as required to minimize impact on the Owner.
16. CONTINUOUS AND FINAL CLEAN-UP: Provide continuous trash removal and clean-up per Section 01 7001 Execution Requirements. All Contractors to provide final cleaning of all affected areas immediately prior to Owner occupancy. All adjacent surfaces shall also be wiped clean and restored to the same condition or better than existed before the work was undertaken.
17. LOGISTICS: Before work begins at each site, all Contractors shall all understand where work areas exist, access, deliveries, load-in, load-out, clean up, and parking are permitted. These plans will be followed by all trades and workers. As the work evolves, these plans may be changed if, in the sole opinion of the Owner, it serves the best interest of the project to do so. Notice will be provided of any change.

End of Section

## Section 00 2413 Scopes of Work for Bid Categories

### Bid Category 2-1: DEXTER HIGH SCHOOL TENNIS COURTS REPLACEMENT (GENERAL CONTRACT)

#### A. WORK INCLUDES

1. Except for those items (if any) specifically noted to be excluded as defined below, the work of this bid category shall include all of the work and contract requirements according to Divisions 00 and 01 complete, including all bid requirements, contract documents, general and supplemental conditions, and Division 01 General Requirements. Should any conflict exist between this written scope of work and the scope of work inferred by the Division 01 General Requirements or the technical specifications listed below, the work required by this bid category description shall govern. Work of this bid category shall also include the work of the technical specification sections listed below:
2. Technical Specification Sections Included:
  - 31 1000 SITE PREPARATION
  - 31 2000 EARTH MOVING
  - 31 2020 TRENCHING
  - 31 2514 SOIL EROSION AND SEDIMENTATION CONTROL
  - 32 1123 AGGREGATE BASE COURSES
  - 32 1216 ASPHALT PAVING
  - 32 1313 CONCRETE PAVING
  - 32 1834 TENNIS COURT CONSTRUCTION AND SURFACING
  - 32 3113 CHAIN LINK FENCING AND GATES
  - 32 9113 SOIL PREPARATION
  - 32 9200 TURF AND GRASSES
  - 33 4600 SUBDRAINAGE

#### B. ALSO INCLUDES

1. COORDINATION: Provide continuous coordination with the Owner's representative to keep them advised of your planning and work daily. Advise of any issues, concerns, material supply matters, schedule progress, work quantity and quality. Cell calls and zoom meetings are acceptable when off-site. Owner's rep will visit site daily while work is underway.
2. LAYOUT and CONTROLS: Provide all layout, control points and engineering required for work of this category. Provide as built, topographic survey by registered land surveyor of this work for both the compacted base grade and final asphalt surface at not less than a 10' x 10' grid to include pavement crowns, drainage patterns, low or high points, potential ponding areas and other salient points.
3. PRIME CONTRACT RESPONSIBILITY: Provide all labor, tools, equipment, incidental hardware and materials required to receive, unload, store, install and protect work of this category. The contract is for a prime contract, there are NO other trade contracts being solicited by or provided by the Owner. The prime contractor shall provide all work shown or specified.
4. SUBMITTALS: Submit within fourteen (14) days of receipt of Letter of Intent or contract all submittal information.
5. CLEAN UP: Provide continuous debris and trash removal and clean up. The site must be left clean, safe and secure every day before the Contractor's crews leave the site. Failure to perform this scope item will result in the Owner cleaning up on overtime rates and deducting all costs from contract funds due.
6. SCHEDULE: Bidders shall be aware of delivery requirements to accommodate the completion schedule of this project and shall include all expediting and overtime costs to allow for substantial completion and turnover before August 1, 2021 and final completion before August 15, 2021. It is the Bidder's responsibility to prepare and submit shop drawings and other submittals in a timely manner to accommodate the milestone and progress schedule and prevent delays to the project. The Contractor shall plan to allow the Owner up to 14 calendar days to review and return submittals.
7. EXISTING CONDITIONS: Inspect the site before proposing on the work. Provide removal and reinstallation of fencing components as required to accomplish the work in the specified manner. Note that asphalt replacement will require removal and reinstallation of fencing fabric in whole or in part.

Provide replacement with new matching black vinyl coated components of any fencing damaged in the course of executing the work. Provide limestone gravel mud mat access road to the work area from hard pavement. Repair any existing hard pavement damaged from access. Provide video of existing conditions before work begins to document existing conditions.

8. THE WORK: Provide all work shown or specified including ten (10) replacement tennis courts, fencing removal and reinstallation as required, new drainage and turf replacement/restoration within base bid.
9. ELEMENTS OF THE WORK (partial listing only): Provide removal and replacement of three hundred ninety (390) linear feet of existing concrete curbs which have heaved above or sunk below the proposed asphalt finish grade (see paint markings in field). Employ a licensed surveyor to confirm existing concrete curb grades and provide survey data to Owner to confirm removals extent. In areas of replacement, also remove 8" of gravel base, compact the existing sub-base and reinstall 8" (minimum) of specified well compacted aggregate base. Provide a single unit price per linear foot of curb (valid for both adds and deducts) for lesser or additional removal and replacements.
10. Remove existing asphalt, tennis court equipment and legally dispose of all demolition debris and waste products. Provide within base bid proposal 1" of in-place compacted aggregate over entire tennis court area. If more aggregate is required, it will be paid for on an in-situ compacted cubic yard basis per the unit prices agreed as measured by the Owner's materials testing representative. Fine grade and then compact existing and newly added aggregate base. Proof roll base aggregate as specified while materials testing representative witnesses entire proof roll.  
  
If any unacceptable deflection is observed, the materials testing representative shall paint the deflection area on the compacted grade. The Contractor shall excavate deflection area within paint lines the 18" full depth of the aggregate and sand shown in the cross section, compact the sub-base, provide specified geotextile fabric, and reinstall eighteen inches (18") of fully compacted MDOT21AA crushed limestone aggregate base.
11. Provide a unit price per cubic yard for specified in-place fully compacted aggregate base as described in F.1. below.
12. Provide 750LF of new 6" perforated drainage lines in crushed stone cut-off trenches wrapped with geotextile fabric as shown and specified. In the course of installing drainage asphalt pathways will be cut through; replace any damaged asphalt pathways with 3" pavement over 6" MDOT21AA compacted aggregate. Provide 6" of screened topsoil over drainage lines and restore grass as specified in item 19 below.
13. Provide new tennis court nets, posts and hold down anchors as shown and specified. Note requirement for increased depth of replacement piers and anchors. Provide expansion joint and sealant between all concrete and asphalt. Verify sealant is compatible with proposed tennis court coating system.
14. Provide all new asphalt paving shown or specified. Note the requirement for 100% limestone mix with no RAP. Certification of the mix is required at both the plant and at the point of delivery. Assure that finish wearing course is laid with drainage cross slope as shown.
15. Prior to application of tennis court coatings, flood the entire new asphalt field to demonstrate no ponding areas deeper than a nickel exist one hour after flooding, Effect repairs by heat patch or removal and replacement of finish course of asphalt with the specified asphalt mix. Test repair by flooding the court again. Provide written certification from tennis court coatings applicator that the entire field of new asphalt including any repair areas meets their coating manufacturer's requirements AND those specified. After all coatings are installed and the work is complete, again flood the court to demonstrate no ponding areas deeper than a nickel exist one hour after flooding.
16. Power scrub with stiff bristle machine and detergent, and power wash the entire asphalt field prior to application of tennis court coatings. Provide to Owner written acceptance of asphalt conditions from tennis court coatings installer prior to coatings application.
17. Provide all tennis court coatings and striping shown or specified including on all concrete surfaces.
18. Remove any temporary gravel access drive(s) and add screened topsoil to allow grass restoration.



19. Provide restoration of all disturbed lawn areas wherever they exist, and all areas within 10' around the perimeter of the tennis courts including weeding, roughing surface of soil, seed, fertilizer, raking seed and fertilizer into top ½" of topsoil and then straw mulch.
20. Provide warranty for a minimum of three (3) years that the court and coatings will perform as shown and specified.
21. As part of the base bid, one year after substantial completion, return to project site and provide color matched backer rod and sealant in all control joints and at all concrete to asphalt interface locations. Assure proposed sealant is compatible with concrete to asphalt interface and matches tennis court coating in color.

C. EXCLUDED

1. None.

D. ALLOWANCES

1. None.

E. MANDATORY ALTERNATES

1. None.

F. UNIT PRICES

1. Provide a unit price per cubic yard for specified in-place fully compacted aggregate base including geotechnical fabric on the bid form.
2. Provide a unit price per linear foot for concrete curb replacement per the description in B.9. above.

End of Bid Category

END OF SECTION

### Section 00 4100 Bid Proposal Form

This form must have original signatures and Notary endorsement  
Do not modify, alter, qualify, or attach stipulations

DATE: \_\_\_\_\_

BID CATEGORY & DESCRIPTION: \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

LEGAL ADDRESS: \_\_\_\_\_

\_\_\_\_\_ ZIP CODE \_\_\_\_\_

DELIVERY ADDRESS (IF DIFFERENT FROM ABOVE) \_\_\_\_\_

\_\_\_\_\_ ZIP CODE \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

CONTACT NAME: \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

PROJECT: **Dexter Community Schools  
Dexter High School Removal and Replacement of Tennis Courts**

RECEIPT OF BIDS: prior to **2:00 PM**, local time, **April 7, 2021**

ADDRESSED TO: [bond@dexterschools.org](mailto:bond@dexterschools.org)  
Attn: **Jennifer Miceli, Bond Projects Purchasing  
Dexter Community Schools  
2704 Baker Road  
Dexter, MI 48130**

ADDENDA: Following addenda have been received, are hereby acknowledged, and their execution is included in bid sums listed herein.

Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_ Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_

Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_ Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_

The bidder agrees to perform all work for bid category(ies) as described in the contract documents, for the base bid(s) stated below. Bidders are required to bid the entire scope of work.

The undersigned Bidder, having carefully examined and thoroughly perused specifications for the above named project; and become fully familiar with all conditions affecting the work required by those specifications, dated 3/17/2021 hereby proposes to provide all materials, labor, services, etc., required thereby for the base bid sum of

**BASE BID:** This bid covers all expenses incurred in performing all the work required.

Bid Category & Description: 2-1: DEXTER HIGH SCHOOL TENNIS COURTS REPLACEMENT (GENERAL CONTRACT)

Base Bid (In Figures): \$ \_\_\_\_\_

PERFORMANCE & PAYMENT BONDS: The cost of all bonds shall be included within the lump sum base bid.

LABOR RATES: The following labor rates are required to be offered by all Bidders. The Bidder agrees that the following amounts will be used in determining contract changes from the base bid for authorized changes in the scope of work. Labor rates SHALL NOT include Bidder's mark-up for overhead and profit. Appropriate back-up of labor rates will be required at the post-bid meeting to confirm accuracy of labor rates. Submitted labor rates will be compared with industry-accepted rates.

List all job classifications for all trades planned for work.

JOB TITLE	FOREMAN		JOURNEYMAN	
	TIME	TIME & ½	TIME	TIME & ½
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$

UNIT PRICES: The following unit prices to base bid categories are required to be offered by all Bidders. The Bidder agrees that the following amounts will be used in determining contract changes from the base bid for authorized changes in the scope of work. Do not include unit cost in the base bid amount(s). Unit prices shall include Bidder's mark-up for overhead and profit. Details are in Section 00 2413 Scopes of Work for Bid Categories.

Description	Amount	Unit
Specified in-place fully compacted aggregate base including geotechnical fabric per the description in Section 00 2413 F.1.		
Concrete curb per the description in Section 00 2413 B.9.		

TAXES, PERMITS, BONDS AND FEES: The bid amount must include all applicable taxes, permits, bonds and fees, required by all legal authorities at the location of the Work.

EMR DISCLOSURE: Provide the current EMR for your company. \_\_\_\_\_. Note the Owner may not elect to offer a contract to firm's having an EMR > 1.0, depending upon its understanding of the cause of and rating > 1.0.

ASBESTOS-FREE PRODUCT INSTALLATION: It is hereby understood and agreed that no products/materials containing asbestos, including chrysotile, amosite, crocidolite, tremolite, anthophyllite, actinolite or any combination of these materials that have been chemically treated and/or altered shall be installed or introduced into the building by the contractor or his employees, agents, subcontractors, or other individuals or entities over whom the contractor has control. The contractor, its subcontractors of any tier, and vendors of any tier shall be required to sign a certification statement ensuring that all products or materials installed or introduced into a building will be asbestos-free.

NON-COLLUSIVE CERTIFICATION: By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief.

1. The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or any competitor;
2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor;
3. No attempt has been made or will be made by the bidder to insure any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition;

4. The person signing this bid or proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the bidder as well as to the person signing in its behalf.
5. That attached hereto (if corporate bidder) is a certified copy of resolution authorizing the execution of this certificate by the signature of this bid or proposal in behalf of the corporation bidder.

AGREEMENT: Undersigned agree(s) to execute an agreement for work covered by this proposal on the form included in of these bid documents, and in accordance with the General Conditions, Supplementary Conditions, and other Contract Documents, provided the Bidder be notified of proposal's acceptance within ninety (90) days after due date of opening. Undersigned further agrees that this proposal shall remain open during such ninety (90) day period. Signature below serves as acknowledgment that Bidder understands Bid Documents and Appendices, and Bidder assumes full responsibility for the cost impact of same. Undersigned also acknowledges that Owner reserves right to accept or reject any and all bids with or without cause, and/or to waive informalities in bidding.

BID ATTESTATION: The Bidder, having examined the Bidding Documents and all other related documents and being familiar with the site of the proposed work including the availability of materials and labor and weather conditions hereby proposes to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, all services, and to perform all work in the category bid for construction of the Dexter High School Tennis Courts Replacement for the amount stated above.

All applicable taxes, permits, fees, and bond costs are included in the Base Bid/s and all Unit Prices.

FIRM NAME \_\_\_\_\_

BY (Signature) \_\_\_\_\_

NAME (Type or Print) \_\_\_\_\_

TITLE \_\_\_\_\_ DATE \_\_\_\_\_

**DISCLOSURE AFFIDAVIT FOR COMPETITIVE BIDS**

The Owner will not consider a bid that does not include this disclosure statement.

**DISCLOSURE OF IRAN LINKED BUSINESS**

As a duly authorized representative of the entity submitting this bid, I certify with my signature below, that this bid is submitted in compliance with the Iran Economic Sanctions Act (MCL 129.313) of the State of Michigan. Our business is not an Iran Linked Business as defined in the aforementioned Act, will not become an Iran Linked Business while engaged in this project, and will not subcontract with Iran Linked Businesses for any of the products or services required for this project.

**DISCLOSURE OF FAMILIAL RELATIONSHIPS FOR COMPETITIVE BIDS**

Disclose any familial relationship that exists between the owner or any employee of the bidder and any member of the Dexter Community Schools Board of Education or Superintendent. (MCL 380.1267)

\_\_\_ THERE IS NO FAMILIAL RELATIONSHIP.

\_\_\_ THE FOLLOWING FAMILIAL RELATIONSHIP exists:

\_\_\_\_\_  
\_\_\_\_\_

Attach additional pages, if necessary, to disclose familial relationship(s).

FIRM NAME \_\_\_\_\_

NAME (Printed) \_\_\_\_\_

TITLE \_\_\_\_\_ DATE \_\_\_\_\_

I, \_\_\_\_\_, having been duly sworn on oath, say that  
*[printed name of affiant]*

I am the above-named, that I have personally prepared the foregoing affidavit, and that the same is true to the best of my knowledge and belief.

\_\_\_\_\_  
*[signature of affiant]*

Subscribed and sworn to before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
*[signature of Notary]*

\_\_\_\_\_, Notary Public  
*[printed/typed name of Notary]*

My commission expires: \_\_\_\_\_ .

END OF BID FORM

### Section 00 7316 Insurance Requirements

1. Certificates of Insurance are to include the following coverages:

**GENERAL LIABILITY INSURANCE**

Each Occurrence	\$ 1,000,000
Occurrence box must be checked	
General Aggregate	\$ 2,000,000
Personal and Adv. Injuries	\$ 1,000,000
Products – Comp/Op Aggregate	\$ 2,000,000

**AUTOMOBILE LIABILITY INSURANCE**

Combined Single Limit	\$ 1,000,000
<i>OR</i>	
Bodily Injury (per person) Bodily Injury (per accident) Property Damage	<i>OR</i> \$ 1,000,000

**EXCESS LIABILITY INSURANCE**

Umbrella Form Each Occurrence = Aggregate	\$ 1,000,000
--	--------------

**WORKERS COMPENSATION AND EMPLOYERS LIABILITY**

Statutory Limits box must be checked	X
Each Accident (Employers Liability)	\$ 500,000
Disease – Policy Limit (Employers Liability)	\$ 500,000
Disease – Each Employee (Employers Liability)	\$ 500,000

**PROFESSIONAL LIABILITY INSURANCE (required for all Professional Service Vendors)**

Each Claim	\$ 1,000,000
Aggregate	\$ 1,000,000

2. All liability insurance policies shall name Dexter Community Schools as an additional insured party and shall be non-contributory and primary coverage for the additional insureds.
3. G17957B is not acceptable.
4. The form used for additional insured coverage shall be on form CG 2010, 1985 edition, or equivalent, and shall not exclude products/completed operations hazard coverage.
5. The completed operations coverage shall be kept in effect for two (2) years following completion of the Contractor's work.
6. Notice of Change is required a minimum of thirty (30) days prior and must be listed on the Certificate of Insurance.

END OF SECTION

## Section 01 1100 Summary of Work and Use of Premises

1. SECTION INCLUDES
  - A. Related Documents
  - B. Project Description
  - C. Work by Owner
  - D. Owner Furnished Products
  - E. Use of Premises, Barricades, and Protection
  - F. Administrative Responsibilities
  - G. Permits, Fees & Notices
  - H. Contractor Construction Sequence
2. RELATED DOCUMENTS
  - A. Drawings, Division 00, General and Supplementary Conditions, and other Division 01 Specification Sections which apply to Work of this section.
  - B. In Divisions 01 through 33, a reference to the project General Conditions includes by inference all amendments or supplements in the project Supplementary Conditions.
3. PROJECT DESCRIPTION
  - A. The intent of this Section is to indicate the Work required by the Contractor and to provide information regarding the duties, responsibilities, and cooperation required by the Contractor, with similar requirements for their subcontractors and suppliers.
  - B. The Project is defined to include the Bid Categories described in Section 00 2413 Scopes of Work and each is recognized to be a major part of the project.
  - C. Related sections:  
Some sections of the technical specifications (Divisions 1 through 33) may include a paragraph titled "Related Sections". This paragraph is an aid to the Project Manual and is not intended to include all sections which may be related. It is the Contractor's obligation to coordinate all sections whether indicated under "Related Sections" or not.
4. WORK BY OWNER
  - A. Work by Owner is work that the Owner will contract for separately; design, drawings, specifications, and work will be by others per separate contract. Work by Owner is indicated on drawings or specifically described elsewhere in this Project Manual.
5. OWNER FURNISHED PRODUCTS
  - A. Owner furnished products are indicated on the drawings.
  - B. Owner's Responsibilities:
    - 1) Arrange and pay for product delivery to site.
    - 2) On delivery, inspect products jointly with Contractor.
    - 3) Submit claims for transportation damage and replace damaged, defective, or deficient items.
  - C. Contractor's Responsibilities:
    - 1) Receive, schedule for delivery and unload products at site; inspect for quantity, completeness and damage, jointly with Owner.
    - 2) Handle, store, install and protect finish products.
    - 3) Repair or replace items damaged until substantial completion.
6. USE OF PREMISES, BARRICADES, AND PROTECTION
  - A. Contractors shall be subject to such rules and regulations for the conduct of the work as the Owner may establish. Employees shall be properly and completely clothed while working. Bare torsos, legs, and feet will not be allowed. Contractors and their subcontractors shall recognize that use of vulgar

- or profane language is cause for immediate dismissal. Drugs, alcohol, tobacco products of any kind, or other offensive materials or firearms are absolutely prohibited, and violations are cause for summary dismissal and/or criminal prosecution.
- B. Contractors shall maintain free access to buildings and areas of the site for designated vehicles, service vehicles, and firefighting equipment and at no time shall block off or close roadways or fire lanes without providing auxiliary roadways and means of entrance acceptable to the Owner. Fire hydrants must remain accessible. Contractors shall give the Owner and the local fire department at least 48-hour notice of any such changes of routes.
  - C. Contractors shall not load or permit any part of a structure to be loaded with a weight that will endanger its safety or cause damage to the components of the structure.
  - D. The Owner shall have the option to curtail or delay activities that affect their operations. Should a Contractor be asked to stop his work the Contractor shall do so immediately and proceed with other activities with no additional cost to the Owner. Contractors are to cooperate with the Owner's representative in construction operations to minimize conflict, and to facilitate Owner usage of adjacent spaces not under construction.
7. ADMINISTRATIVE RESPONSIBILITIES OF CONTRACTORS AND OWNER'S REPRESENTATIVE
- A. The Owner's Representative shall be responsible for the maintenance of the Construction Schedule and the general supervision of every phase of the Work.
  - B. Contractors shall cooperate with and assist the Owner's Rep in the preparation of construction progress and procedures, schedule of product deliveries, and their effect on the overall project progress and completion
8. PERMITS, FEES, AND NOTICES
- A. The Contractor will secure and pay for all required permits, including, if required, a general building permit; and any other permits, governmental fees, and licenses necessary for the proper execution and completion of the Work, which are applicable at the time the bids are received. Fees to relocate utilities on Owner's property shall be included in the bid of the Contractor doing the relocation.
  - B. Utility Tie-Ins: Shall be arranged with local utility company and other involved parties for minimum interruption of service.
  - C. Shutdowns of existing systems shall be limited to minimum time required and scheduled with other involved parties. Provide three (3) days written notice of shutdown to Owner.
  - D. Inspections of installed work shall be performed by the governing authority as arranged for by the Owner. Work shall not be covered until approved.
9. CONTRACTOR CONSTRUCTION SEQUENCE
- A. Refer to Section 01 3210 Project Schedule.
  - B. REMINDER: REFER TO SECTIONS 00 2410 and 00 2413 FOR SCOPE OF WORK DESCRIPTIONS

END OF SECTION



### Section 01 3210 Project Schedule

1. SECTION INCLUDES
  - A. Definitions
  - B. Milestone Schedule
2. DEFINITIONS
  - A. Milestone Schedule: This schedule is prepared by the Owner and is included as part of the base bid contract.
3. MILESTONE SCHEDULE
  - A. This schedule will be the basis for the working Construction Schedule. Contractors will review and include provision for completion of all work within the stated timeline.
  - B. All work areas must be available for occupancy no later than those dates shown for each area.
  - C. Completion of the Work will be defined as substantial completion per the General Conditions of the contract.

MILESTONE	DATE/S	TIME
Bid Documents Available	March 17, 2021	
Pre-bid Meeting	March 26, 2021	10:00 AM
Pre-bid Questions Deadline	March 30, 2021	12:00 PM
Bids Due	April 7, 2021	2:00 PM
Contract Award	April 13, 2021	
Construction/Project Work	May 17, 2021- August 1, 2021	
Punchlist Review and Final Completion	August 15, 2021	

END OF SECTION

## Section 01 3520 Safety Requirements

1. The safety requirements herein do not, in any way, relieve the Contractor or their employees, agents, or subcontractors of any safety responsibility. It does not relieve the Contractor of liability for negligence which would apply in the absence of this material. The Contractor shall assure compliance of their subcontractors or agents to site, Federal, State and Local regulations. A Contractor shall at all times use good judgment and discretion about safety.
2. Under no circumstances are Bidders to disturb Asbestos Containing Materials (ACM), Lead Containing Materials (LCM) or other hazardous materials without appropriate engineering controls. The Owner's Hazard Communication Program and MSDS sheets appropriate to the facility are available.
3. The requirements of the Michigan Occupational Safety and Health Act (MIOSHA) absolutely will be adhered to or the Contractor will furnish a written variance from the MIOSHA authority.
4. All materials, procedures, installations, etc., shall be in full compliance with requirements of Rules for Construction Safety issued pursuant to Michigan Occupational Safety and Health Act (MIOSHA).
5. CONTRACTOR REQUIREMENTS: "Each contractor shall ..."
  - A. Be responsible for recording and reporting injuries and illnesses in accordance with OSHA rules and regulations.
  - B. Notify the Owner and MIOSHA immediately of an accident.
  - C. Immediately report any property loss accidents to the Owner.
  - D. In the event of an on-site emergency, immediately account for all employees and report to the Owner.
  - E. Submit a written investigative report to the Owner within 24 hours following an accident which results in employee fatality or injuries requiring hospitalization.
  - F. Provide adequate first aid equipment, supplies and facilities for their personnel.
  - G. Provide to Owner the Contractor's daily COVID safety plan.
6. Accident Reporting
  - A. Notify the Owner immediately of an accident.
  - B. Immediately report any property loss accidents to the Owner.
  - C. In the event of an on-site emergency, immediately account for all employees and report to the Owner.
  - D. Submit a written investigative report to the Owner within 24 hours following an accident, which results in employee fatality or injuries requiring hospitalization.
7. School Safety Initiative Requirements
  - A. Unoccupied Buildings: The parties acknowledge the existence of the laws commonly known as the "School Safety Initiative Legislation." While the parties do not believe that the School Safety Initiative Legislation is applicable to this Agreement, Owner reserves the right to determine at a later date that the School Safety Initiative Legislation is applicable or could be applicable to this Agreement. In the event Owner so determines, Owner reserves the right to impose such requirements on Contractor as may be necessary to ensure compliance with the School Safety Initiative Legislation. Such requirements may include, but are not limited to: (1) requiring Contractor to provide Owner with the fingerprints of all individuals assigned to the project under this Agreement, (2) not assigning any individual to work on the project under this Agreement until the individual's criminal history check and criminal records check has been obtained by Owner, (3) not assigning any individual to work on the project under this Agreement if the reports on such individual's criminal history check or criminal records check disclose that the individual has been convicted of a "listed offense", as that term is defined in Section 2 of the Sex Offenders Registration Act, and (4) not assigning any individual to work on the project under this Agreement if the reports on such individual's criminal history check or criminal records check disclose that the individual has been convicted of a felony other than a "listed offense", unless the Superintendent and the Board of Education of Owner each specifically approve of the work assignment in writing.

- B. Occupied Buildings: The parties acknowledge that the laws commonly known as the "School Safety Initiative Legislation" may be deemed to apply to this Agreement. Pending clarification of their applicability, Owner intends to comply with the provisions of the School Safety Initiative Legislation as they pertain to this Agreement and reserves the right to impose such requirements on Contractor as may be necessary to ensure such compliance. Without limiting the generality of the foregoing, Contractor agrees as follows:
- 1) Contractor shall not employ an individual required to be registered under Article 2 of MCLA 28.721 et seq., as amended (the "Sex Offenders Registration Act") who will be assigned or permitted to work within a Student Safety Zone, as that term is defined in the Sex Offenders Registration Act.
  - 2) As used in this Section, "Personnel" means any individuals assigned or employed by Contractor or any subcontractor, consultant, supplier or other party working directly or indirectly under Contractor with respect to the Project, who is or will be assigned or allowed to work in any of Owner's schools.
  - 3) Within ten (10) days after the execution of this Agreement Contractor shall provide to Owner, in writing, the names and fingerprints of all Personnel. The fingerprints shall be separated by names, shall be taken by an authorized law enforcement agency and otherwise shall be acceptable to Owner. Upon receipt of such information, Owner may request from the Criminal Records Division of the Michigan State Police: (i) a criminal history check, and (ii) a criminal records check through the Federal Bureau of Investigation on each of the Personnel and receive from the Michigan State Police reports concerning the same. Contractor shall reimburse Owner for the cost of each criminal history check and criminal records check performed relative to the Personnel, and Contractor shall be responsible for the cost of providing the fingerprints of the Personnel. Unless otherwise indicated in writing by Owner, no Personnel shall be allowed to work in any of Owner's schools until Owner has received from the Michigan State Police the criminal history check and the criminal records check for the individual and has confirmed that the applicable individual is not debarred from working in the school.
  - 4) If Contractor wishes to add any individuals as Personnel (i.e., assign them to work or permit them to work in any of Owner's schools) after the date of this Agreement, it must provide the information set forth in subsection (c), and the procedures set forth therein shall apply. Unless otherwise indicated in writing by Owner, no Personnel shall be allowed to work in any of Owner's schools until Owner has received from the Michigan State Police the criminal history check and the criminal records check for the individual and has confirmed that the applicable individual is not debarred from working at the school.
  - 5) Contractor shall not assign any individual to work in any of Owner's schools, or otherwise allow any individual to work in any of Owner's schools, if such individual's criminal history check or criminal records check discloses (or a proper check would disclose) that the individual has been convicted of a "listed offense", as that term is defined in Section 2 of the Sex Offenders Registration Act.
  - 6) Contractor shall not assign any individual to work in any of Owner's schools, or otherwise allow any individual to work in any of Owner's schools, if the reports on such individual's criminal history check or criminal records check discloses (or a proper check would disclose) that the individual has been convicted of a felony other than "listed offense", unless the Superintendent and the Board of Education of Owner each specifically approve of the work assignment in writing.
  - 7) Owner reserves the right to refuse Contractor's assignment of any individual, agent or employee of Contractor (or any subcontractor, consultant, supplier or other party working directly or indirectly below Contractor) to render services under this Agreement in any of the Owner's schools where the criminal history of that individual (including any pending charges) indicates, in Owner's sole judgment, unfitness to perform services under this Agreement.
  - 8) Violation of any provision of this Section by Contractor shall be a basis for, among other remedies, immediate termination of this Agreement. Furthermore, Contractor hereby agrees to indemnify and hold harmless Owner and its Board, Superintendent, employees, administrators, agents and consultants from and against any claims, causes of action, judgments, losses, liabilities, damages (including incidental and consequential damages) or expenses, including attorney fees, arising out of or resulting from a breach by Contractor of any provision of this Section or a failure of Contractor or its subcontractors, consultants, suppliers or other persons

working directly or indirectly under Contractor to comply with the School Safety Initiative Legislation, including but not limited to MCL 380.1230, 380.1230a, 380.1230c, 380.1230d and 380.1230g.

END OF SECTION

## Section 01 4001 Quality Requirements

1. SECTION INCLUDES
  - A. Related Sections
  - B. Quality Assurance and Control of Installation
  - C. Dimensional Responsibility
  - D. References
  - E. Inspection and Testing Laboratory Services
  - F. Soil Compaction Testing
  - G. Bituminous Paving Testing
  - H. Inspection of Reinforcing Steel Placement
  - I. Concrete Testing
  - J. Concrete Materials & Mix Design
  - K. Test for FF/FL
  - L. Tests for Mortar
  - M. Test for Grout
  - N. Test of Concrete Masonry Prisms
  - O. Masonry Inspection
  - P. Welding Quality Control
  - Q. Bolted Structural Connections Quality Control
  - R. Structural Steel Alignment Quality Control
2. RELATED SECTIONS
  - A. Section 01 6001 Product Requirements
3. QUALITY ASSURANCE/CONTROL OF INSTALLATION
  - A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
  - B. Comply fully with manufacturers' instructions, including each step in sequence. Perform all steps required by manufacturer to properly install the Work regardless of whether every step is called out in this specification.
  - C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Owner before proceeding.
  - D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
  - E. Perform work by persons qualified to produce workmanship of specified quality. Contractors who utilize unskilled workers to perform skilled trades work will be required to bear the burden of proof and certify in writing that the quality of the work in place, exceeds or equals the specified minimum standard. In any case, should licensing requirements require all work to be undertaken or supervised by journeyman level workers or other specified expertise all such work shall be thus undertaken.
  - F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
  - G. Whenever a Contractor intends to depart from normal work hours, he shall notify the Owner at least 24 hours in advance for approval. Failure of the Contractor to give such timely notice may be cause for the Owner to require the removal or uncovering of the Work performed during such time without

the knowledge of the Owner. Special arrangements can be made for emergency work or shutdowns as may be required.

- H. Upon completion of inspection, testing, sample-taking, and similar services performed on work, repair damaged work and restore substrates and finishes to eliminate deficiencies, including defects in visual qualities of exposed finishes. Except as otherwise indicated, comply with requirements of Contract Documents for "Cutting and Patching." Protect work exposed by or for service activities and protect repaired work.

#### 4. DIMENSIONAL RESPONSIBILITY

- A. Thoroughly examine existing conditions and be familiar with work to be performed as hereinafter specified and as shown on drawings.
- B. Before performing work or ordering materials, verify relevant dimensions of existing and new work and be responsible for their occurrence. Any differences found shall be reported to Owner for consideration before proceeding with work. If Contractor inadvertently or knowingly, proceeds with his work on dimensionally inaccurate work of another, he will be liable for cost of all corrections to his work when error is corrected.

#### 5. REFERENCES

- A. Conform to reference standard by date of issue current on date of Contract Documents.
- B. Should specified reference standards conflict with Contract Documents, request clarification from Owner before proceeding.
- C. The contractual relationship of the parties to the Contract Agreement shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

#### 6. INSPECTION AND TESTING LABORATORY SERVICES

- A. Owner will appoint, employ, and pay for services of an independent firm to perform inspection, sampling, testing, materials testing, air monitoring, and certification of products and mill test reports.
- B. The independent firm will perform inspections, tests, and other services specified in individual specification Sections and as required by the Architect/Engineer and public authorities.
- C. Contractor shall notify Owner and independent firm a minimum of 24 hours prior to expected time for operations requiring services. In general, coordinate activities which require testing at weekly progress meetings to allow all parties efficient manpower utilization. The independent firm shall make efforts to comply with the changing progress of the job given reasonable notice, however should the Contractor fail to schedule or fail to cancel testing or laboratory services, all costs incurred will be borne by the Contractor.
- D. Reports will be submitted by the independent firm within 5 days to the Owner, electronically, indicating observations, results of tests and indicating compliance or noncompliance with Contract Documents. Reports of discrepancy between the observed test values and the specified criteria in the contract documents are to be made within 24 hours or sooner to the Owner.
  - 1) The independent firm's reports will include the following information at a minimum: date of inspection/sampling, date report issues, date test performed, project name and Owner job number, lab name, address, phone and fax, name and original signature of inspector, record of weather and temperature, description of product, applicable specification section, and type of inspection/test, and location in project.
  - 2) Independent firm shall observe and test soils placement and compaction, concrete, masonry, asphalt and structural steel and shall interpret the test results in every case to explain compliance or noncompliance with the Contract Documents.
- E. Retest Responsibility: Where results of required inspection, test, or similar service are unsatisfactory (do not indicate compliance of related work with requirements of Contract Documents), retests are responsibility of Contractor, regardless of whether original test was Contractor's responsibility. Retesting of work revised or replaced by Contractor is Contractor's responsibility, where required tests were performed on original work.

- F. Responsibility for Associated Services: Contractor is required to cooperate with independent agencies performing required inspections, tests, and similar services. Provide auxiliary services as reasonably requested, including access to work, the taking of samples or assistance with the taking of samples, delivery of samples to test laboratories, and security and protection for samples and test equipment at project site.
- G. Coordination: Contractor and each engaged independent agency performing inspections, tests, and similar services for project are required to coordinate and sequence activities so as to accommodate required services with minimum delay of work and without the need for removal/replacement of work to accommodate inspections and tests.
- H. Sampling and testing is required for the following Sections of Work or similarly identified sections and shall be performed by an independent testing lab and paid for by the Owner.
  - 1) Earthwork – soil testing and inspection service during earthwork operations for in-situ conditions of, bearing capacity and compaction of subgrades and fill.
  - 2) Asphaltic Concrete Paving – quality control testing of uncompacted asphalt concrete mix and in-place compacted pavement.
  - 3) Cast-In-Place Concrete – field quality control of concrete.
  - 4) Cast-In-Place Concrete – tests for concrete materials and mix design tests.
  - 5) Cast-In-Place Concrete – testing of FF/FL floor tolerances.
  - 6) Mortar – field quality control of mortar.
  - 7) Grout – field quality control of grout.
  - 8) Unit Masonry – field quality control of unit masonry and masonry assemblies and any required special inspection as required by Code.
  - 9) Structural Metal Framing – field quality control for welds.
  - 10) Structural Metal Framing – field quality control for high strength steel torqued bolted connections.
  - 11) Structural Metal Framing – field quality control for structural steel alignment.

#### 7. SOIL COMPACTION TESTING

- A. The Contractor providing any Earthwork or Utilities Work shall cooperate and coordinate with the soil testing and inspection service for quality control testing during earthwork operations as follows:
  - 1) Field density test reports.
  - 2) One optimum moisture-maximum density curve for each type of soil encountered.
  - 3) Arrange for soils engineer to be on the site for observation and testing during times when the following operations are being performed:
    - a) Proof-rolling.
    - b) Compaction of subgrades and fill. During compaction operations, the soil testing and inspection service shall carefully monitor existing foundations to detect possible foundation movements. If movement is detected, Work shall be stopped and the Owner immediately notified.
- B. Percentage of Maximum Density Requirements: Provide not less than the following percentages of maximum density of soil material compacted at optimum moisture content, for the actual density of each layer of soil material in place (coordinate with soils report) and scope description.
  - 1) Foundations: Compact top 12 inches of subgrade and each 8 inch layer of backfill or fill material to 97 percent Standard Proctor maximum dry density.
  - 2) Building Slabs & Steps: Compact top 12 inches of subgrade and each 8 inch layer of backfill or fill material to 95 percent Standard Proctor maximum dry density.
  - 3) Lawn, Unpaved Areas & Borrow Pit: Compact top 6 inches of subgrade and each 8 inch layer of backfill or fill material to 90 percent Standard Proctor maximum dry density.
  - 4) Walkways: Compact top 6 inches of subgrade and each 8 inch layer of backfill or fill material to 95 percent Standard Proctor maximum dry density.
  - 5) Pavements: Compact top 12 inches of subgrade and each 8 inch layer of backfill or fill material to 97 percent Standard Proctor maximum dry density.
  - 6) Underground Utilities: Compact top 12 inches of subgrade and each 8 inch layer of backfill or fill material to 97 percent Standard Proctor maximum dry density for the respective utility location(s).

- C. Quality Control Testing During Construction: Contractor must provide 2-day notice, if possible, to the Owner's testing service for inspection and approval of subgrades and fill layers before further construction work is performed thereon. Tests of subgrades and fill layers will be taken as follows:
    - 1) Footing Subgrade: For each strata of soil on which footings will be placed, conduct at least one test to verify required design bearing capacities. Subsequent verification and approval of each footing subgrade may be based on a visual comparison of each subgrade with related tested strata, when acceptable to Architect, except that a minimum of one test shall be performed for each 15,000 square foot of buildings area.
    - 2) Paved Areas & Building Slab Subgrade: Make at least one field density test of subgrade for every 2,000 square feet of paved area or building slab, but in no case less than 3 tests. In each compacted fill layer, make one field density test for every 2,000 square foot of overlaying building slab or paved area, but in no case less than 3 tests.
    - 3) Foundation Wall Backfill: Take at least 2 field density tests, at locations and elevations as directed.
    - 4) Trench Backfill: For each compacted backfill layer make one field density test between each drainage structure.
  - D. If, in the opinion of the Owner and any Architect/Engineer they engage, based on reports of testing service and inspection, subgrade or fills which have been placed are below specified density, additional compaction work and testing shall be provided by the Contractor for the Section of the Work involved at no additional expense, until subgrades or fills meet or exceed specified density.
8. BITUMINOUS PAVING TESTING
- A. Field quality control testing shall be performed during paving operations. Perform the following sampling or testing of asphalt concrete mixtures for quality control during paving operations. Record the locations where samples are taken to correlate with subsequent testing.
  - B. Test uncompacted asphalt concrete mix and report the following:
    - 1) Sampling: ASSHTO T168 (ASTM D979).
    - 2) Asphalt Cement Content: AASHTO T164 (ASTM D2172).
    - 3) Perform at least one initial test for paving, unless otherwise specified or directed.
  - C. Test in-place, compacted pavement for density and thickness, as herein specified. Perform one test for each 300 square yards but not less than one test per day, unless otherwise specified or directed.
  - D. The Contractor shall pay for and perform additional Work and testing as may be required if any of the previous tests indicate insufficient values or if directed by the Owner and any Architect/Engineer they engage. Continue Work and testing until specified values have been attained.
  - E. Asphalt concrete material not complying with specified requirements will not be acceptable. The Contractor shall repair or remove and replace defective paving as directed by the Owner and any Architect/Engineer they engage, at no additional cost to the Owner.
9. INSPECTION OF REINFORCING STEEL PLACEMENT
- A. The Contractor incorporating Cast-In-Place Concrete – shall cooperate and coordinate with the testing laboratory to perform field inspection of the placement of reinforcing steel prior to, and in some specified instances during, the placement of concrete in all reinforced concrete structures, unless specifically noted otherwise.
  - B. Inspection shall include the following:
    - 1) All structures
      - a) Size of reinforcing bars.
      - b) Measurement of bar laps.
      - c) Spacing of reinforcing bars.
      - d) Measurement of reinforcing concrete cover.
      - e) Adequacy of reinforcement ties to prevent movement during concrete placement.
      - f) Placement of reinforcing chairs, bolsters and concrete blocks supporting reinforcement.



- g) Condition of reinforcing free of corrosion scale, grease, oil and other foreign materials which would reduce bond of concrete to reinforcement.
- 2) Slabs-On-Grade
  - a) Nominal size of welded wire fabric.
  - b) Measurement of fabric lap.
  - c) Type, size and spacing of supports for welded wire fabric.
  - d) Adequacy of maintaining welded wire fabric in correct position during the concrete placement, and lifting fabric back in to correct position prior to set of concrete (THE TESTING LABORATORY SHALL BE PRESENT DURING THE PLACEMENT OF SLABS-ON-GRADE WHICH USE WELDED WIRE FABRIC OR REINFORCING STEEL BARS).
  - e) Slabs-On-Grade with fibrous reinforcement do not require this inspection.
- C. Report inspection results in writing to the Owner and Contractor the same day that tests are made. Reports shall indicate the specific structural items inspected and the location, with column grid references, where possible to clearly identify the inspected items.
- D. Additional Inspections: Where inspections indicate deficiencies and concrete placement is made prior to correction and retesting of these deficiencies or where concrete placement of any structural item is made without the required inspection, the testing laboratory shall conduct additional tests, including concrete coring, magnetic detection devices, sonic testing devices and other methods as required to verify the conformance of the reinforcing steel placement to the Contract Documents. The Contractor shall pay for such inspections conducted and other additional inspections as may be required when unacceptable or uninspected reinforcing steel placement is verified.

#### 10. CONCRETE TESTING

- A. The Contractor for the Work: Cast-In-Place Concrete, shall cooperate and coordinate with the testing laboratory to perform field quality control testing during concrete work.
- B. Quality Control Testing During Construction: Perform sampling and testing for field quality control during the placement of concrete as follows:
  - 1) Sampling Fresh Concrete: ASTM C172, except modified for Slump to comply with ASTM C94.
  - 2) Slump: ASTM C143, one test for each concrete load at point of discharge, and one for each set of compressive strength test specimens.
  - 3) Air Content: ASTM C231, pressure method; one for every other concrete load at point of discharge or when the indication of change requires.
  - 4) Compression Test Specimens: ASTM C31, one set of 6 standard cylinders for each compressive strength test, unless otherwise directed.
    - a) Cast and store 3 cylinders for laboratory cured test specimens and 3 field-cured test specimens as specified in STM C31.
  - 5) Concrete Temperature: Test hourly when air temperature is 40 degrees F and below and when 80 degrees F and above; and each time a set of compressive test specimens is made.
  - 6) Compressive Strength Tests: ASTM C39, one set for each 100 cubic yards or fraction thereof, of each mix design placed in a day or for each 5,000 square feet of surface area placed; 2 specimens (one field cured and one lab cured) tested at 7 days, 2 specimens (one field cured and one lab cured) tested at 28 days, and 2 specimens (one field cured and one lab cured) retained in reserve for later testing if required.
    - a) When the frequency of testing will provide less than 5 strength tests for a given mix design, conduct testing strength tests for given mix design, conduct testing from at least 5 randomly selected batches or from each batch if fewer than 5 are used.
    - b) When the total quantity of a given mix design of concrete is less than 50 cubic yards, the strength tests may be waived by the Owner and any Architect/Engineer they engage if, in their judgment, adequate evidence of satisfactory strength is provided.

- c) When the strength of field cured cylinders is less than 85 percent of companion laboratory cured cylinders, evaluate current operations and provide corrective procedures for protecting and curing the in-place concrete.
- C. Report test results in writing to the Owner, Contractor, and ready-mix supplier on the same day that tests are made. Reports of compressive strength tests shall contain the project identification name and number, date of concrete placement, name of Contractor, name of concrete supplier and truck number, name of concrete testing service, concrete type and class, location of concrete bath in the structure, design compressive strength at 28 days, concrete mix proportions and materials, type and amount of fibrous reinforcement, compressive breaking strength, and type of break for both 7 day tests and 28 day tests.
- D. Additional Tests: The testing service will make additional tests of in-place concrete as directed by the Owner, when test results indicate the specified concrete strengths and other characteristics have not been attained in the structure. The testing service shall conduct tests on cored cylinders complying with ASTM C42 or by load testing specified in ACI 318 or other acceptable nondestructive testing methods, as directed. The Contractor shall pay for such tests conducted and other additional testing as may be required, when unacceptable concrete is verified.
- E. Evaluation of Quality Control Tests: Do not use concrete delivered to the final point of placement which has slump or total air content outside the specified values.
  - 1) Compressive strength tests for laboratory-cured cylinders will be considered satisfactory if the averages of all sets of 3 consecutive compressive strength tests results equal or exceed the 28 day design compressive strength of the type or class of concrete; and no individual strength test falls below the required compressive strength by more than 500 psi.
  - 2) Strength tests of specimens cured under field conditions may be required by the Owner and any Architect/Engineer they engage to check the adequacy of curing and protecting of the concrete placed. Specimens shall be molded by the field quality control laboratory at the same time and from the same samples as the laboratory cured specimens.
    - a) Provide improved means and procedures for protecting concrete when the 28 day compressive strength of field cured cylinders is less than 85 percent of companion laboratory cured cylinders.
    - b) When laboratory cured cylinder strengths are appreciably higher than the minimum required compressive strengths, field cured cylinder strengths need not exceed the minimum required compressive strengths by more than 500 psi even though the 85 percent criterion is not met.
    - c) If individual tests of laboratory cured specimen produce strength or if tests of field cured cylinders indicated deficiencies in protection and curing, provide additional measures to assure that the load-bearing capacity of the structure is not jeopardized. If the likelihood of low-strength concrete is confirmed and computations indicate the load-bearing capacity may have been significantly reduced, tests of cores drilled from the area in question may be required.
  - 3) If the compressive strength tests fail to meet the minimum requirements specified, the concrete represented by such tests will be considered deficient in strength.
- F. Deficient concrete shall be removed and replaced by the Contractor without additional cost to the Owner.

## 11. CONCRETE MATERIALS & MIX DESIGN

- A. Concrete Materials and Mix Design: The Contractor(s) for Cast-In-Place Concrete shall provide the following in conformance with the requirements of the technical specification for Cast-In-Place Concrete.
  - 1) Ready-mixed concrete shall be mixed and delivered in accordance with ASTM C94.
  - 2) Project Data: Submit electronic copies of manufacturer's specifications with application and installation instructions for proprietary materials and items, including admixtures, bonding agents, waterstops, joint systems, chemical floor hardeners, and dry shake finish materials.

- 3) Laboratory Test Reports: Submit electronic copies of laboratory test reports for concrete materials and mix design tests. The Owner's review will be for general information only. Production of concrete to comply with specified requirements is the Contractor's responsibility.
  - 4) Mix Design: Submit electronic copies of concrete mix designs for each type of mix required by the Concrete Schedule indicating the amount of each ingredient (by weight) in one cubic yard of concrete, the calculated water/cement ration, and the slump.
- B. Tests for Concrete Materials
- 1) For normal weight concrete, test aggregates by the methods of sampling and testing of ASTM C33.
  - 2) For light weight concrete, test aggregates by the methods of sampling and testing of ASTM C330.
  - 3) For portland cement, sample the cement and determine the properties by the methods of test of ASTM C33.
  - 4) Submit written reports for each material sampled and tested, prior to the start of Work. Provide the project identification name and number, date of report, name of Contractor, name of concrete testing service, source of concrete aggregates, material manufacturer and brand name for manufactured materials, values specified in the referenced specification for each material, and test results. Indicate whether or not material is acceptable for intended use.
- C. Submit signed statement from ready-mix plant that concrete furnished for the Project will exactly conform on the approved design mixes.
12. TESTS FOR FF/FL Refer to the technical specifications for cast-in-place concrete.
13. TESTS FOR MORTAR
- A. For colored and non-colored mortars, test for compressive strength by the methods of sampling and testing of ASTM C109 and ASTM C780.
  - B. Provide a minimum of one set of cubes for testing per 5,000 sq. ft. of masonry wall construction and as directed by Architect.
  - C. Submit written reports for each material sampled and tested. Provide the project identification name and number, date of report, name of Contractor, name of testing service, source of aggregates, material manufacturer and brand name for manufactured materials, values specified in the referenced specification for each material, and test results. Indicate whether or not material is acceptable for intended use.
  - D. If the compressive strength tests fail to meet the minimum requirements specified, the mortar represented by such tests will be considered deficient in strength.
  - E. Deficient mortar shall be removed and replaced by the Contractor without additional cost to the Owner.
14. TESTS FOR GROUT
- A. Grout for filling reinforced or unreinforced concrete masonry cores or brick cavities test for compressive strength by methods as described in the technical specifications for Masonry Grout.
  - B. Provide a minimum of one set of 3 test specimens for testing per 5000 sq. ft. of masonry wall construction or for each ready mix truck load of grout and as directed by the Architect.
  - C. Submit written reports for each material sampled and tested. Provide the project identification name and number, date of report, name of Contractor, name of testing service, source of aggregates, material manufacturer and brand name for manufactured materials, values specified in the referenced specification for each material, specified location where material represented by sample is used and test results. Indicate whether or not material is acceptable for intended use.
  - D. If the compressive strength tests fail to meet the minimum requirements specified, the grout represented by such tests shall be considered deficient in strength.
  - E. Deficient grout shall be removed and replaced by the Contractor without additional cost to the Owner.
15. TEST OF CONCRETE MASONRY PRISMS

- A. When required by the Technical Specifications, construct a set of 3 masonry prisms using mortar and concrete masonry units to be used in the masonry work. Unless otherwise noted, construct prisms 8 inches by 8 inches by 16 inches high (nominal) in compliance with ASTM E447, Method B.
- B. When prism tests are required to establish the strength of masonry in lieu of Masonry Inspection, provide a minimum of one set of 3 masonry prisms for testing for each 5,000 sq. ft. (gross) of masonry wall construction.
- C. Submit written reports for each prism tested. Provide the project identification name and number, date of reports, name of Contractor, name of testing service, name of material suppliers, specific location where masonry represented by the prism is used, compression test strength results, and specified required strength.
- D. If the compressive strength tests fail to meet the minimum strength specified in the Plans, the masonry represented by the tests shall be considered deficient.
- E. When tests indicating deficient masonry represent masonry already constructed, such masonry shall be removed and replaced by the Contractor without additional cost to the Owner. In lieu of removal and replacement, additional cores may be grouted as required and directed by the Architect without additional cost to the Owner.

#### 16. MASONRY INSPECTION

- A. Provide masonry construction inspection of concrete or brick masonry walls indicated as requiring inspection on the Masonry Plans to ensure that masonry construction is in conformance with Contract Documents. Provide masonry inspection wherever "Special Inspection" as defined by building code requires same. Masonry inspection is required for those masonry elements which must be constructed to attain high design strengths.
- B. Inspection shall use NCMA-TEK 18-3 Quality Assurance as a guideline.
- C. The individual(s) who will perform the masonry inspection shall be present for the Pre-masonry Conference.
- D. The Masonry Inspector(s) shall prepare a written report or reports for each day of inspection. Masonry Inspection Report Form (DIV.1-MIR.-1) shall be used for all inspection reports.
- E. The masonry inspector shall be present and observe all masonry construction operations in walls requiring inspection. The masonry inspector shall be present at the project site within sufficient time, in advance of grouting operations, to inspect the construction to insure its conformance to the Contract Documents and that grouting may proceed. No grouting shall be permitted unless the masonry inspector is present and has indicated that the masonry construction is properly prepared for the grouting operation.

#### 17. WELDING QUALITY CONTROL

- A. Welding operators shall be qualified under the provisions of the AWS Structural Welding Code on test pieces in positions and with clearances equivalent to those actually to be encountered in construction. Welders shall make only those types of welds for which they are specifically certified.
- B. Welds requiring inspection shall be so indicated in the Drawings. Welds indicated as requiring visual inspection shall be visually inspected by an independent inspector, acceptable to the Architect and Owner prequalified to make the weld being inspected. Welders and inspectors shall be prequalified by the American Welding Society Qualification Test.
- C. Submit written reports for each weld tested. Provide project identification and number, date of report, name of Welding Contractor, name of testing services, location of weld, type of weld, and test results. Indicate whether or not weld is acceptable for intended use.
- D. If by inspection, welds fail to meet minimum acceptable criteria, the welds shall be cut out and replaced.

18. BOLTED STRUCTURAL CONNECTIONS QUALITY CONTROL

- A. The Contractor for the Work of Structural Metal Framing, shall coordinate with a separate testing laboratory, employed and paid by the Owner, to perform field quality control inspection of slip-critical and snug-tight bolted connections.
  - 1) Inspection of slip-critical connections shall be visual. The inspector shall be present at the beginning of steel erection to ensure that the erector is conforming to the Contract Documents and AISC Specifications. The inspector shall verify that the erector is marking the bolts and nuts prior to the turn-of-nut procedure. Ten percent of all slip-critical bolted connections shall be observed as they are installed. Any connections which, in the opinion of the inspector, do not meet the tightening requirements of the Contract Documents shall be corrected by the erector.
  - 2) Inspection of snug-tight connections shall be made by use of a spud wrench. Ten percent of all snug-tight bolted connections selected randomly over the entire limits of the building structure shall be tested to verify tightness. If more than 20 percent of the bolts tested do not meet the General Requirements of the Contract Documents, the erector shall be required to retighten all snug-tight bolted connections on the Project.

19. STRUCTURAL STEEL ALIGNMENT QUALITY CONTROL

- A. The Contractor for the Work of Structural Metal Framing shall coordinate, with a separate testing laboratory, to perform field measurement of structural steel beams, columns, joist, and deck alignment.
- B. Alignment shall be measured and compared to AISC "Code of Standard Practice for Steel Buildings and Bridges."
- C. The Testing Agency shall submit, to the Architect, a written report summarizing the measurements performed and the equipment used in the field work. Where alignment fails to meet AISC requirements, the Contractor for the work in the technical specifications for Structural Metal Framing shall make the required corrections

END OF SECTION

## Section 01 6001 Product Requirements

1. SECTION INCLUDES
  - A. Related Sections
  - B. Products
  - C. Transportation and Handling
  - D. Storage and Protection
  - E. Product Options
  - F. Substitutions
2. RELATED SECTIONS
  - A. Section 00 2113 Instructions to Bidders
  - B. Section 01 4001 Quality Requirements
3. PRODUCTS
  - A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
  - B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
  - C. Provide interchangeable components of the same manufacturer, for similar components.
4. TRANSPORTATION AND HANDLING
  - A. Transport and handle products in accordance with manufacturer's instructions.
  - B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
  - C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
5. STORAGE AND PROTECTION
  - A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.
  - B. Provide off-site storage and protection when site does not permit on-site storage or protection.
  - C. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
  - D. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
  - E. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.
6. PRODUCT OPTIONS
  - A. Product selection is governed by the Contract Documents and governing regulations, not by previous Project experience. Procedures governing product selection include the following:
  - B. Proprietary Specification Requirements: Where only a single product or manufacturer is named, provide the product indicated.
  - C. Semi-proprietary Specification Requirements: Where two or more products or manufacturers are named, provide one of the products or manufacturers indicated. Where one product and manufacturer is named and other manufacturers are listed, the other manufacturer's equivalent

product may be acceptable subject to compliance with Contract requirements, including specifications of the named product, as determined by the Owner's Representative.

- D. Non-Proprietary Specifications: When the Specifications list products or manufacturers that are available and may be incorporated in the Work, but do not restrict the Contractor to use of these products or manufacturers only, the Contractor may propose any available product that complies with contract requirements. Comply with Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
- E. Descriptive Specification Requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.
- F. Performance Specification Requirements:
  - 1) Where Specifications require compliance with performance requirements, provide products that comply with the requirements, and are recommended by the manufacturer for the application indicated. General overall performance of a product is implied where the product is specified for a specific application.
  - 2) Manufacturer's recommendations may be contained in published product literature, or by the manufacturer's certification of performance.
- G. Compliance with Standards, Codes and Regulations: Where the Specifications only require compliance with an imposed code, standard or regulation, select a product that complies with the standards, codes or regulations specified.
- H. Visual Matching: Where Specifications require matching an established Sample, the Owner's Representative decision will be final on whether a proposed product matches satisfactorily.
- I. Visual Selection: Where specified product requirements include the phrase ". . . as selected from manufacturer's standard colors, patterns, textures..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Owner's Representative will select the color, pattern and texture from the product line selected.

## 7. SUBSTITUTIONS

- A. Owner will consider requests for Substitutions 10 days prior to bid.
- B. Substitutions may be considered after bids when a product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
  - 1) Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  - 2) Will provide the same warranty for the Substitution as for the specified product.
  - 3) Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner or other affected subcontractors.
  - 4) Waives claims for additional costs or time extension which may subsequently become apparent.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- F. Substitution Submittal Procedure:
  - 1) Submit electronic copy of a written Request for Substitution for consideration. Limit each request to one proposed Substitution.
  - 2) Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
  - 3) The Owner will notify the Contractor in writing of their decision to accept or reject request.

END OF SECTION

## Section 01 7001 Execution Requirements

1. SECTION INCLUDES
  - A. Protection and Restoration
  - B. Cutting and Patching
  - C. Alteration Project Procedures
  - D. Construction Cleaning
  - E. Construction Waste Management
  - F. Punch List
2. PROTECTION & RESTORATION
  - A. This section includes, but is not necessarily limited to, responsibilities for the protection, restoration and notification requirements for surface and subsurface structures, underground facilities and surface improvements as indicated on the drawings, as specified herein and as necessary for the proper and complete performance of the work.
  - B. The Contractor whose operations necessitate notifications, protection, or restoration shall be responsible for the work described in this section inclusive of all coordination and cost.
  - C. Related Sections: Documents affecting work of this section include, but are not necessarily limited to; General Conditions, Supplementary Conditions and sections in Division 1 of these specifications
  - D. Prior to start of construction responsible Contractor shall:
    - 1) Notify MISS DIG in advance.
    - 2) Arrange for the identification of the locations of existing underground facilities at or contiguous to the site.
  - E. Utility Interruptions:
    - 1) For any period exceeding 2 hours: Provide standby utility service.
    - 2) Provide 48-hour notice to the affected occupants of the time and duration of the anticipated shut off.
    - 3) Notify Fire Department in advance if water main or fire supply line shut off is required.
    - 4) Pay all costs relating to utility interruptions.
  - F. Be responsible for:
    - 1) Protection of structures and utilities at or contiguous to the site in accordance with the project General Conditions
    - 2) Cost of cleaning, repair, relocation, raising, lowering, or replacement of structures and utilities which interfere with new work or are damaged as a result of Contractor's operations.
    - 3) Temporary sheeting, bracing, poles, cables, sand fill or other means used to support a structure or utility exposed or endangered by Contractor's operations.
    - 4) Relocating, raising or lowering of a structure or utility for Contractor's convenience.
  - G. Relocation of poles and structures:
    - 1) Be responsible for temporary and permanent relocation of power, light, telephone and other service poles and appurtenant structures.
    - 2) Make necessary arrangements with the owner of the pole or structure and pay all costs involved.
  - H. Acceptable standards for restoration:
    - 1) Restore to the better of:
      - a) Original condition
      - b) Requirements of the Contract Documents
      - c) Current MDOT Standards
      - d) Property corners, Government survey corners, and plat monuments
    - 2) Protect all existing facilities and site elements from damage or disturbance.



- 3) Provide video survey of the work area with the Owner's Representative before beginning work. Protect discovered control points or areas of concern until Owner has witnessed the control point or area of concern and given direction as to its required maintenance or otherwise referenced their locations.
- 4) Replace if disturbed or removed as a result of construction:
  - a) Arrange for replacement of any control point by a Registered Land Surveyor
  - b) Pay all costs
  - c) Driving surfaces and similar improvements:
  - d) Repair or replace damaged or removed surfaces as indicated on the drawings and specified herein.
- 5) Adjust to temporary or final grade all new and existing castings (water valve boxes, manholes, catch basins and similar structures) for all gravel, bituminous or concrete surfacing or resurfacing.
- 6) Landscaping and miscellaneous improvements:
  - a) Protect from damage by construction operations. In event of damage, replace any damaged items with one of equivalent type and size.
  - b) Includes, but is not limited to, topsoil, seeded areas, sodded areas, shrubs, trees, decorative plantings, fences, mailboxes, signs, guard posts and other similar items.

### 3. CUTTING AND PATCHING

- A. Each Contractor shall make arrangements with other Contractors (if any) and the Owner for fitting his Work into the general construction. Where the Contractor was given sufficient information as to required openings prior to construction, the cost for additional cutting and restoring shall be paid for by the Contractor failing to provide the required openings.
  - 1) Each Contractor shall be responsible for cutting, fitting, and patching that may be required to complete their work. Contractors shall not endanger Work of other Contractors by cutting, excavating, or otherwise altering Work: and shall not cut or alter the work of another Contractor except with written consent of the Owner. Costs caused by defective or ill-timed work shall be borne by the party responsible.
  - 2) Submit written request in advance of cutting or alteration which affects:
    - a) Structural integrity of any element of Project.
    - b) Integrity of weather-exposed or moisture-sensitive element.
    - c) Efficiency, maintenance, or safety of any operational element.
    - d) Visual qualities of sight exposed elements.
    - e) Work of Owner or separate contractor.
- B. Include in request:
  - 1) Identification of Project.
  - 2) Location and description of affected work.
  - 3) Necessity for cutting or alteration.
  - 4) Description of proposed work, and products to be used.
  - 5) Alternatives to cutting and patching.
  - 6) Effect on work of Owner or separate contractors.
  - 7) Written permission of affected separate contractors.
  - 8) Date and time work will be executed.
- C. Primary Products: Those required for original installation.
- D. Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching. Provide video recording of existing conditions.
- E. Beginning of cutting or patching means acceptance of existing conditions.
- F. Provide protection from elements for areas which may be exposed by uncovering work.

- G. Execute work by methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.
  - H. Cut rigid materials using masonry saw or core drill. Pneumatic tools are not allowed without prior approval. Do not pound or make openings with hammers without approval of Owner.
  - I. Restore work with new products in accordance with requirements of Contract Documents.
  - J. Fit work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
  - K. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material to full thickness of the penetrated element, and provide escutcheon plates where exposed.
  - L. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit. Patchwork is subject to Owner approval.
  - M. Contractors shall coordinate cutting and patching with other Contractors to avoid duplication of efforts and to avoid recutting completed work.
  - N. Requirements for Structural Work:
    - 1) Do not cut and patch structural elements in a manner that would reduce their load-carrying capacity or load-deflection ratio.
    - 2) Prior to removing existing construction, provide temporary sheeting, underpinning, shoring, and bracing to carry the loads and stresses withstood by any removed items. Contractor is responsible for the adequacy of same, as well as for any damage to the existing building, or contents thereof, resulting from inadequate sheeting, underpinning, shoring, and bracing.
    - 3) Obtain acceptance of the cutting and patching procedure before cutting and patching structural elements.
  - O. Operational and Safety Limitations:
    - 1) Do not cut and patch operating elements or safety related components in a manner that would result in reducing their capacity to perform as intended, or result in increased maintenance, or decreased operational life or safety.
    - 2) Obtain Owner's and/or governing agency approval of the cutting and patching procedure before cutting and patching operating elements of safety related systems.
  - P. Visual requirements:
    - 1) Do not cut and patch construction exposed on the exterior or in occupied spaces, in a manner that would, in the Owner's Representative's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Work that is cut and patched in a visually unsatisfactory manner shall be removed and replaced.
4. ALTERATION PROJECT PROCEDURES
- A. Verify that demolition is complete, and areas are ready for installation of new Work.
  - B. Beginning of restoration Work means acceptance of existing conditions.
  - C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
  - D. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
  - E. Remove debris and abandoned items from area and from concealed spaces.
  - F. contractor shall remove existing construction items, materials, etc., noted on drawings to be removed or otherwise required to be removed in order to properly execute any and all remodeling, new construction and related work required for respective work category.
  - G. Prepare surface and remove surface finishes to provide for proper installation of new work and finishes.
  - H. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Insulate ductwork and piping to prevent condensation in exposed areas.

- I. Coordinate work of alternations and renovations to expedite completion.
  - J. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes. Patch or replace portions of existing surface which show imperfections prior to re-finishing.
  - K. Where new Work abuts or aligns with existing, perform a smooth and even transition. Patched Work to match existing adjacent Work in texture and appearance.
  - L. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Owner.
  - M. Where a change of plane of 1/4 inch or more occurs, submit recommendation for providing a smooth transition for Owner review.
5. CONSTRUCTION CLEANING
- A. The Work of this Section shall be included as a part of the Contract Documents of each Contractor on this Project. Where such Work applies to only one Contractor, all cleanup will be provided by that Contractor.
  - B. Recognizing that construction processes create large amounts of debris, waste material, dirt and other rubbish and that the accumulation of these products impedes works progress and are a safety hazard, an eyesore, and a violation of local regulations, each Contractor who bids and accepts a contract for any portion of the work, accepts the positive responsibility of keeping the work site clean as defined herein and agrees to comply with the spirit as well as the letter of this specification. If in the sole opinion of the Owner's Representative, the Contractor does not perform clean up satisfactorily, the Owner's Representative may order clean up to be done by another source and deduct cost thereof from moneys due to the Contractor.
  - C. The Owner's Representative reserves the right to act on behalf of the Owner pertaining to the cleanup responsibility that is a part of each Contractor's Work.
  - D. DAILY CLEANING
    - 1) The Contractor shall effectively confine dust, dirt, and noise to the actual construction area as approved by the Owner. As debris is created, it will be the responsibility of the Contractor to place all rubbish and debris into dumpster type containers, provided by Contractor and approved by the Owner.
    - 2) On a daily basis, identifiable debris and waste or recyclable materials will be cleaned up by the Contractor.
    - 3) Cleaning Equipment (air compressors, brooms, shovels, barrels, cleaning rags, supplies, etc.) and accessories (dust masks, gloves, etc.) will be the responsibility of the Contractor to provide for their clean up. Owner's equipment and supplies are not to be used by the Contractor.
  - E. HAZARDS CONTROL
    - 1) Store volatile wastes and any other hazardous wastes in covered metal containers, and remove from premises and legally dispose of these wastes daily.
    - 2) Prevent accumulation of wastes which create hazardous conditions.
    - 3) Provide adequate ventilation during use of volatile or noxious substances.
  - F. Conduct cleaning and disposal operation to comply with local ordinances and anti-pollution laws.
    - 1) Do not burn or bury rubbish and waste materials on project site.
    - 2) Do not dispose of volatile wastes (mineral spirits, oil, or paint thinner) or any other hazardous materials in storm or sanitary drains or in any other illegal fashion.
    - 3) Do not dispose of any wastes into streams or waterways.
  - G. Use only cleaning materials recommended by manufacturer of surface to be cleaned. The use of "Green Certified", nonpolluting, low V.O.C. cleaning materials is required.
  - H. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.
  - I. The Contractor shall perform their respective final clean up and shall leave the project in a clean, neat condition, prior to final acceptance of their work. Scheduling of final cleaning will be at the direction of the Owner.

- J. The following are examples, but do not define limits, of cleaning levels required:
  - 1) Remove labels which are not required as permanent labels. Clean all permanent labels.
  - 2) Clean exposed exterior and interior hard surfaced finishes, to a dirt free condition, free of dust, stains, films, and similar noticeable distracting substances. Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces. Restore reflective surfaces to original reflection condition.
  - 3) Clean project site (yard and grounds), including landscaped areas, of litter and foreign substances. Sweep paved areas to a broom clean condition; remove stains, chemical spills, and other foreign deposits by power-washing or as required to achieve a clean surface. Remove all erosion control systems, temporary fencing, and barricades and rake the areas smooth to provide smooth regular transition to adjacent surfaces. Seed said transition area thereafter. Rake grounds, which are neither planted nor paved, to a smooth, even textured surface.

#### 6. CONSTRUCTION WASTE MANAGEMENT

- A. The Contractor shall develop a waste management plan for approval by the Owner, provide and pay for dumpster type rubbish and recycling containers adequate for the project recyclables, waste, debris and rubbish for the life of the project for Contractors.
- B. Recycled waste and discarded waste are to be tracked, and documented. The responsibility for tracking and documentation will rest with the Contractor; every Contractor at the site is responsible to cooperate with the waste management plan.
- C. Contractor will plan their work to:
  - 1) Minimize packaging and import of non-essential materials to the site.
  - 2) Compact or consolidate materials in the collection containers until removal from the site.
  - 3) Transport waste to the location(s) of a legal off-site repository for waste and recyclables.
- D. Recycling is required for all materials; minimally: concrete, asphalt, masonry, cardboard, plastic, and metals.
- E. Removal of demolition material from the site is the responsibility of the Contractor performing said demolition, and if possible, demolition debris must be recycled.

#### 7. PUNCH LIST

- A. Each Contractor shall prepare and keep their own detailed punch list on the job prior to the Owner's preparation of a project punch list. This punch list is for use by their employees and subcontractors to facilitate completion of the Work. Contractor shall submit copy of punch list to the Owner's Representative within seven (7) days of request or seven (7) days before substantial completion whichever is sooner and shall notify Owner's Representative upon completion of work.
- B. The Contractor's inspection shall be as thorough as possible, in accordance with their desire to provide first class workmanship and maintain good reputation and shall include all Work under their Contract, including that of any subcontractors.
- C. The Owner's Representative shall observe the Work and prepare a Project Punch List for use by the Contractors and any subcontractors to expedite final completion of the Work.
- D. The Contractor must accomplish their initial and subsequent Project Punch List corrective items within fourteen (14) calendar days of notification of such work. The Contractor shall notify the Owner's Representative of their intended schedule to accomplish Punch List items. If the Contractor, for any reason, does not expect to complete their work within this time frame, they shall notify the Owner's Representative, in writing, within seven (7) days. On such notification, the Contractor must explain their reasons for such delay. Lack of response by the responsible Contractor in accomplishing such work will be cause for their work to be assigned to others and all costs expended shall be charged to that Contractor. In the interest of the Owner, and to accommodate other Contractors, the above procedure will be strictly enforced.

END OF SECTION

## Section 01 7700 Closeout Procedures

1. This Section Includes:
  - A. Related Sections
  - B. Operations and Maintenance Manuals
  - C. Owner Training and Demonstration
  - D. Guarantees & Warranties
  - E. Final Completion and Final Payment
2. Related Sections
  - A. Section 00 2413 Scopes of Work for Bid Categories
  - B. Section 01 3210 Project Schedule
  - C. Section 01 7001 Execution Requirements
3. Operation and Maintenance Manuals
  - A. The Contractor shall submit to the Owner an electronic copy of a comprehensive Maintenance and Operating Manual, presenting complete directions and recommendations for the proper care and maintenance of visible surfaces as well as maintenance and operating instructions for equipment items which they have provided.
  - B. At a minimum, the Operation and Maintenance Manuals will contain:
    - Manual index cross referencing specification numbers for each item
    - Operating instructions
    - Emergency instructions
    - Spare parts list
    - Copies of warranties
    - Recommended maintenance procedures and "turn around" cycles
    - Inspection and system-test procedures
    - Copies of applicable Shop Drawings
    - Copies of applicable Product Data
    - Maintenance drawings and diagrams
    - Listing of required maintenance materials
    - Precautions against improper maintenance
    - Names and addresses of nearest service outlets, distributors, or factory outlets for each piece of equipment.
  - C. Operating instructions shall include necessary printed directions for correct operations, adjustment, servicing, and maintenance of movable parts. Operating instructions must include complete integration of new systems with existing systems and how they are to operate together, in series, sequence, etc. Also included shall be suitable parts lists, approved shop drawings, and diagrams showing parts location and assembly.
4. Owner Training and Demonstration
  - A. Owner Training shall minimally include a detailed review of the following items:
    - Maintenance manuals
    - Record documents
    - Spare parts and materials
    - Special Tools
    - Lubricants
    - Hazards
    - Cleaning
    - Warranties and bonds
    - Maintenance agreements & similar continuing commitments

5. Guarantees and Warranties
  - A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
    - 1) Specific requirements for warranties for the Work and products and installations that are specified to be warranted, are included in Section 00 2413 Scopes of Work for Bid Categories.
  - B. General Warranty Requirements and Guarantee Requirements
    - 1) All materials and workmanship provided under this contract shall be guaranteed and warranted for a period of not less than one year (unless specified for a different duration herein) to perform, function and appear as specified.
    - 2) Unless specifically stated otherwise in the specifications, the time period for all guarantees, warranties, etc., required by Contract Documents shall begin on date indicated for Certificate of Substantial Completion.
  - C. Submit final written warranties endorsed by the manufacturer and the Contractor to the Owner prior to the date determined for Substantial Completion.
6. Final Completion and Final Payment
  - A. When the Contractor considers that the work is complete, they shall submit written notice to the Owner's Representative that the Work is ready for final inspection and acceptance, include a final Application for Payment.
  - B. Prior to requesting Owner's Representative inspection for final completion and final payment, complete the following:
    - 1) Final itemized punch list of work to be completed or corrected, certifying that each item has been completed or otherwise resolved for acceptance.
    - 2) Complete Owner's accounting department final close-out requirements including, but not limited to:
      - a) final payment request
      - b) final waivers
      - c) release of all claims
      - d) consent of bonding surety to final payment
      - e) Final Reconciliation of Accounts accounting for changes to the Contract Sum and payments
    - 3) Provide to Owner all guarantees and warranties.
    - 4) Provide to Owner evidence of continuing insurance coverage complying with insurance requirements.
  - C. When the Owner's Representative finds the Work acceptable under the Contract Documents, they will approve the final payment due the Contractor.

END OF SECTION