

PROJECT MANUAL

**GRAND RAPIDS
PUBLIC SCHOOLS**

GRPS Parking Lot Improvements – Shawmut Hills & Ridgemoor Park

Issued For: Bidding and Permits

March 19, 2024

GRPS Facilities & Operations
900 Union Avenue NE
Grand Rapids MI 49503

Telephone (616) 819-3030

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ADVERTISEMENT FOR BIDS
FOR
GRPS PARKING LOT IMPROVEMENTS –
SHAWMUT HILLS & RIDGEMOOR PARK

GRAND RAPIDS PUBLIC SCHOOLS
KENT COUNTY, MICHIGAN

Separate sealed Proposals will be received at Grand Rapids Public Schools, 900 Union Avenue NE, Grand Rapids, Michigan 49503, until 10 a.m., local time, on Tuesday, April 9, 2024, and then publicly opened and read aloud.

Bids will be on the basis of a lump sum with item pricing as listed on the Bid Form.

The approximate quantities of major items of work are as follows:

3,700 Syd HMA Removal
2,920 Tons HMA, 3C
Concrete paving, curb and gutter, striping, restoration and all appurtenant work.

The Contract Documents may be examined at the following locations:

Grand Rapids Public Schools
900 Union Avenue NE
Grand Rapids, Michigan 49503

Moore & Bruggink, Inc.
2020 Monroe Avenue NW
Grand Rapids, Michigan 49505

Builders Exchange
678 Front Avenue NW, Suite 330
Grand Rapids, Michigan 49504

Official Plans and Specifications may be obtained after 1 p.m. on March 19, 2024, by downloading them from <https://grps.org/departments/business-services/>.

This project will be entirely funded by Grand Rapids Public Schools; no federal or state grants are involved.

All Proposals shall be made in accordance with Bidding Documents.

A Proposal Guarantee payable to Grand Rapids Public Schools, in the sum of five percent (5%) of the amount of the bid, must accompany the Proposal in accordance with the Instructions to Bidders.

The right is reserved by Grand Rapids Public Schools to accept any Proposal, reject any or all Proposals, and to waive informalities in bidding when it is deemed to be in the interest of Grand Rapids Public Schools.

GRAND RAPIDS PUBLIC SCHOOLS

INSTRUCTIONS TO BIDDERS

This Project Manual applies to the Grand Rapids Public Schools GRPS Parking Lot Improvements – Shawmut Hills & Ridgemoor Park. A bid form can be found at the end of this section.

PROJECT: GRPS Parking Lot Improvements – Shawmut Hills & Ridgemoor Park

OWNER: Grand Rapids Public Schools
Grand Rapids MI

ENGINEER: *Moore & Bruggink, Inc., 2020 Monroe Avenue NW, Grand Rapids MI 49505,*
Contact: Zach Voogt, P.E., zvoogt@mbce.com, 616.363.9801

BID DATE: April 9, 2024

BID TIME: 10 a.m.

LOCATION FOR RECEIVING BIDS: Grand Rapids Public Schools
Service Building
900 Union Avenue NE
Grand Rapids MI 49503

A conditional or unqualified Proposal will not be accepted.

OBTAINING BID DOCUMENTS

Bid Documents may be obtained after 1 p.m. on *March 19, 2024*, by downloading them from <https://grps.org/departments/business-services/>.

EXAMINATION

Plans may be examined at the Plan Room(s) noted below or at the GRPS Service Building, 900 Union Avenue NE, Grand Rapids MI 49503. Contact Ronnie Sluiter (616) 819-3010 to schedule an appointment if you are coming to the GRPS Service Building to examine documents.

Builders Exchange
678 Front Avenue NW, Suite 330
Grand Rapids, Michigan 49546
616.949.8650
e-mail: projects@grbx.com

Moore+Bruggink, Inc.
2020 Monroe Avenue NW
Grand Rapids, Michigan 49505
616.363.9801

CONTRACT DOCUMENTS

The Contract Documents, alone, detail the requirements of the Project, and bids shall be based only on information presented there. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed or relieve the Contractor from fulfilling any part of the Contract.

MATERIALS AND SUBSTITUTIONS

Unless otherwise noted, materials of manufacturers, other than those specifically named in the bidding documents, will be given consideration provided that written approval for a substitution is obtained from the Engineer. Requests for substitutions must be received at least ten (10) calendar days prior to bid date and may be emailed to the Engineer at the email address noted above. The burden of showing the requested product is an adequate substitution for the specified product rests with the Bidder. Substitution requests shall be reviewed by the Engineer for quality and function, only. Bidders shall be responsible for any unforeseen costs that result from using an approved substitution (e.g. dimension, weight and material quantity changes).

TIME FOR COMPLETION

The Contractor shall be 100% complete with the work before August 1, 2024. The Contractor may start the project no earlier than June 7, 2024, and all work must be complete and ready for use at the latest by August 1, 2024. Conditions precedent to establishing final completion include:

- A. Final inspection and approval by all relevant agencies.
- B. All punch list items have been completed and accepted by Owner.

RESPONSIBILITY OF BIDDERS

Bidders shall study the bid documents and visit the site to satisfy themselves of all conditions before submitting a bid. It is incumbent upon bidders to reconcile any ambiguities, errors or omissions in the documents discovered during the bidding period. Questions about the bid documents, the intent of the design, or notice of errors or omissions shall be formally submitted to the Engineer by email at the address given above not less than 10 calendar days prior to the date set for receipt of bids.

INSPECTION OF PREMISES

Buildings are occupied Monday through Friday, 7:30 AM until 4 PM. For your convenience, call the secretary of Facilities & Operations at (616) 819-3010, prior to visiting the site, to arrange for entry into a secured building and receive custodial assistance.

In order to maintain a safe and orderly environment within our buildings, all school visitors must proceed directly to the main office when entering a Grand Rapids Public School building. Identify yourself and state your business. When you have completed your business, please check out at the office.

BID SECURITY

Bid Security shall be made payable to "Grand Rapids Public Schools" in the form of a certified or cashier's check or money order drawn upon a bank insured by an agency of the Federal Government, or an executed Bid Bond on AIA form A310, or a substantially similar form in the amount of 5% of the bid. The bid bond shall be executed with a surety authorized to do business in the State and listed on the current U.S. Department of the Treasury Circular 570. The certified or cashier's check or money order submitted as bid security by unsuccessful bidders shall be held by the Owner until a contract has been executed with the successful bidder.

BIDDING PROCEDURES

1. Preparation of Bid

- A. Bids shall be submitted on the Bid Form included with this document. All blank spaces shall be printed in ink or typewritten. The Bid Form must be fully completed, signed and sealed. In the event of a discrepancy between the words and figures entered on the Bid Form, the written word shall take precedence over the numerical figures.
- B. Submit three originals of the Bid Form and all attachments.
- C. Submit bid security in the amount identified above.
- D. Prevailing Wages do not apply to this Project.
- E. The DTMB Contractor Demographics, Statistics and Certification form must be completed, signed, and included in the bid or the bid may be disqualified.
- F. The DTMB Certification of a Michigan Based Business form must be completed, signed, and included in the bid or the bid may be disqualified.
- G. The Statement of Familial Relationship must be completed, signed and included in the bid or the bid may be disqualified.
- H. The Iran Business Relationship Affidavit must be completed, signed and included in the bid or the bid may be disqualified.
- I. The Debarment Statement must be completed, signed, and included in the bid or the bid may be disqualified.
- J. The Non-Collusive Affidavit must be completed, signed, and included in the bid or the bid may be disqualified.
- K. The Criminal Background Disclosure Affidavit must be completed, signed, and included in the bid or the bid may be disqualified.

2. Submission of Bids

- A. One original and two copies of the bid shall be submitted in a sealed, opaque envelope bearing the following information clearly marked on the outside:

Attention: Mr. Hady Elsayed
Director of Planning, Design, and Construction

Sealed bid for: *GRPS Parking Lot Improvements – Shawmut Hills & Ridgemoor Park*
Grand Rapids Public Schools
900 Union Avenue NE
Grand Rapids MI 49503

The envelope shall also bear, on the outside, the name of the bidder, his/her address and telephone number, and his/her license number, if applicable.

- B. Bids transmitted by fax, telephone, or electronic mail will not be accepted.

AWARD OF CONTRACT

- A. The Owner may waive informalities or minor defects in a bid; may reject any and all bids; or may award, to a bidder, regardless of bid amount, when the Owner deems it is in its best interest. Without limiting the generality of the foregoing, any bid that is incomplete, obscure, or irregular may be rejected; bids having erasures or corrections in the price sheet may be rejected; bids that omit a bid on any items in the Bid Form may be rejected; any bid in which unit prices are omitted or in which unit prices are obviously unbalanced may be rejected; or any bid accompanied by insufficient or irregular bid surety may be rejected. A conditional or qualified bid may be rejected.

- B. Bids will be evaluated not only on cost but also on the following criteria:

1. Delivery time;
2. Guarantees and warranties;
3. The Bidder's reputation and financial strength;
4. Past experience with Grand Rapids Public Schools; and
5. References.

Total bid must not exceed available funds.

- C. The Owner will issue a Notice of Award to that bidder making Grand Rapids Public Schools the most advantageous offer. Upon receipt of the Notice of Award, the prospective Contractor shall obtain appropriate bonds and insurance. The Owner reserves the right to make no award if all bids exceed its budget for contract award.

INSTRUCTIONS SUBSEQUENT TO BID OPENING

1. Bonds and Insurance

- A. Prior to award, the successful bidder shall furnish satisfactory payment and performance bonds, each in the amount of 100% of the bid price, on AIA form A312, ConsensusDocs form 260/261, or another substantially similar form acceptable to the Owner. Bonds shall be executed with a surety authorized to do business in the State and listed on the current U.S. Department of the Treasury Circular 570.
- B. Prior to award, the successful bidder shall furnish a satisfactory certificate of insurance showing the coverages and amounts specified in the contract documents.

2. Beginning the Work

- A. After executing a contract, the Owner will issue a Notice to Proceed identifying the agreed upon start date. No work shall be performed prior to the start date in the Notice to Proceed.

3. Construction Documents

- A. If requested, the Contractor will be furnished, free of charge, up to 3 copies of drawings and specifications, with Amendments current at time of award. Additional copies will be furnished, at cost, payable to the Owner.

BID FORM

Grand Rapids Public Schools
GRPS Parking Lot Improvements – Shawmut Hills & Ridgemoor Park

DATE: _____ (Bidder to enter date)

SUBMITTED BY: (Bidder to enter name and address)

Bidder's Full Name: _____

Address: _____

City, State, Zip: _____

Telephone: _____ Fax: _____

E-Mail: _____

OFFER

- A. Having examined the place of the Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by GRPS for the above-mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:

Total Bid (Does not include Ridgemoor Alternate): _____
_____ dollars (\$_____), in lawful money
of the United States of America.

Total Base Bid if Bidding Shawmut Hills Only: _____
_____ dollars (\$_____), in lawful money
of the United States of America.

Total Base Bid if Bidding Ridgemoor Only: _____
_____ dollars (\$_____), in lawful money
of the United States of America.

Total Bid if Bidding Ridgemoor & Ridgemoor Alternate Only: _____
 _____ dollars (\$ _____), in lawful money
 of the United States of America.

B. Total project base bid is based on the following unit price breakdown:

| Item No. | Proposal Item | Unit | Estimated Quantity | Unit Cost | Amount |
|-------------------------------------|---|------|--------------------|-----------|--------|
| SHAWMUT HILLS ITEMS | | | | | |
| 1 | Mobilization 10%, Max | Lsum | 1 | _____ | _____ |
| 2 | HMA, REM | Syd | 5,800 | _____ | _____ |
| 3 | Grading | Syd | 5800 | _____ | _____ |
| 4 | Curb and Gutter, Rem | Lft | 470 | _____ | _____ |
| 5 | Sidewalk, Rem | Sft | 1,700 | _____ | _____ |
| 6 | Aggregate Base, 8 inch | Syd | 5800 | _____ | _____ |
| 7 | Subbase, CIP | Cyd | 2,000 | _____ | _____ |
| 8 | Silt Sack | Ea | 4 | _____ | _____ |
| 9 | Silt Fence | Lft | 250 | _____ | _____ |
| 10 | Storm Sewer, 12 inch | Lft | 400 | _____ | _____ |
| 11 | Dr Structure Cover, Type B | Ea | 3 | _____ | _____ |
| 12 | Dr Structure Cover, Type K | Ea | 3 | _____ | _____ |
| 13 | Dr Structure Adj, Case 1 | Ea | 3 | _____ | _____ |
| 14 | Dr Structure, 48 inch Dia, Catch Basin | Ea | 3 | _____ | _____ |
| 15 | Bollard | Ea | 14 | _____ | _____ |
| 16 | HMA, 3C (330 lbs/Syd) | Tons | 960 | _____ | _____ |
| 17 | HMA, 3C (330 lbs/Syd) | Tons | 960 | _____ | _____ |
| 18 | Conc Pavt, Reinf, 8 inch | Syd | 126 | _____ | _____ |
| 19 | Sidewalk, Conc, 6 inch | Sft | 2650 | _____ | _____ |
| 20 | Rolled Curb and Gutter, 24 inch, Modified | Lft | 650 | _____ | _____ |
| 21 | Water Shutoff, Adj, Case 1 | Ea | 2 | _____ | _____ |
| 22 | Pavt Mrkg, Waterborne, 4 inch, Yellow | Lft | 2,600 | _____ | _____ |
| 23 | Pavt Mrkg, Waterborne, 6 inch, Yellow | Lft | 850 | _____ | _____ |
| 24 | Pavt Mrkg, Waterborne, 4 inch, Blue | Lft | 160 | _____ | _____ |
| 25 | Pavt Mrkg, Waterborne, 6 inch, Blue | Lft | 100 | _____ | _____ |
| 26 | Pavt Mrkg, Waterborne, Bus | Ea | 1 | _____ | _____ |
| 27 | Pavt Mrkg, Polyurea, Accessible Sym | Ea | 3 | _____ | _____ |
| 28 | Pavt Mrkg, Waterborne, Thru Arrow Sym | Ea | 13 | _____ | _____ |
| 29 | Barrier Free Parking Sign | Ea | 3 | _____ | _____ |
| 30 | Turf Establishment | Syd | 200 | _____ | _____ |
| Subtotal Shawmut Hills Items | | | | | _____ |
| RIDGEMOOR ITEMS | | | | | |
| 31 | Mobilization 10%, Max | Lsum | 1 | _____ | _____ |
| 32 | Curb and Gutter, Rem | Lft | 1100 | _____ | _____ |

| Item No. | Proposal Item | Unit | Estimated Quantity | Unit Cost | Amount |
|--------------------------------------|---|------|--------------------|-----------|--------|
| 33 | HMA, REM | Syd | 2900 | | |
| 34 | Conc Pavt, Rem | Syd | 15 | | |
| 35 | Grading | Syd | 2900 | | |
| 36 | Aggregate Base, 8 inch | Syd | 2900 | | |
| 37 | Subbase CIP | Cyd | 1000 | | |
| 36 | Dr Structure Cover, Type B | Ea | 3 | | |
| 37 | Dr Structure Adj, Case 1 | Ea | 3 | | |
| 38 | Silt Sack | Ea | 3 | | |
| 39 | HMA, 3C (330 lbs/Syd) | Tons | 500 | | |
| 40 | HMA, 4C (330 lbs/Syd) | Tons | 500 | | |
| 41 | Conc Pavt, Nonreinf, 8 inch | Syd | 140 | | |
| 42 | Sidewalk, Conc, 6 inch | Sft | 80 | | |
| 43 | Curb and Gutter, DET F4, Modified | Lft | 71 | | |
| 44 | Rolled Curb and Gutter, 24 inch, Modified | Lft | 780 | | |
| 45 | Gutter pan, 30 inch, Modified | Lft | 260 | | |
| 46 | Pavt Mrkg, Waterborne, 4 inch, Yellow | Lft | 525 | | |
| 47 | Pavt Mrkg, Waterborne, 4 inch, Blue | Lft | 55 | | |
| 48 | Pavt Mrkg, Waterborne, 6 inch, Crosswalk | Lft | 105 | | |
| 49 | Pavt Mrkg, Waterborne, 6 inch, Blue | Lft | 65 | | |
| 50 | Pavt Mrkg, Polyurea, Accessible Sym | Lft | 2 | | |
| 51 | Barrier Free Parking Sign | Ea | 2 | | |
| 52 | Turf Establishment | Syd | 100 | | |
| Subtotal Ridgemoor Items | | | | | |
| RIDGEMOOR ALTERNATE ADDITIONAL ITEMS | | | | | |
| 53 | Mobilization 10%, Max | Lsum | 1 | | |
| 54 | Grading | Syd | 300 | | |
| 55 | Aggregate Base, 8 inch | Syd | 350 | | |
| 56 | Subbase CIP | Cyd | 150 | | |
| 57 | Earth Excavation | Cyd | 200 | | |
| 58 | HMA, 3C (330 lbs/Syd) | Tons | 50 | | |
| 59 | HMA, 3C (330 lbs/Syd) | Tons | 50 | | |
| 60 | Rolled Curb and Gutter, 24 inch | Lft | 180 | | |
| 61 | Pavt Mrkg, Waterborne, 4 inch, Yellow | Lft | 200 | | |
| 62 | Turf Establishment | Syd | 100 | | |
| Ridgemoor Alternate Additional Items | | | | | |
| TOTAL ALL ITEMS | | | | | |

C. We have included the required bid security, as required by the Instructions to Bidders, in the base bid. The cost of the bid security included is \$ _____ .

- D. The costs of the 100% Performance Bond and the 100% Payment Bond included in the base bid is \$ _____ .
- E. The base bid price includes all applicable state and federal taxes.

ACCEPTANCE

- A. This offer shall be open to acceptance and is irrevocable for sixty days from the date on which bids were opened.
- B. If this bid is accepted by Grand Rapids Public Schools within the time period stated above, we will:
 - 1. Furnish the required bonds and insurance certificates within ten days of receipt of Notice of Award.
 - 2. Execute the Agreement immediately upon receipt from the Owner.
 - 3. Commence work within ten days after written Notice to Proceed.
- C. If this bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required bonds and insurance certificates, the bid security shall be forfeited as damages to Grand Rapids Public Schools by reason of our failure, limited in amount to the lesser of the face value of the bid security or the difference between this bid and the bid upon which a Contract is signed.
- D. In the event our bid is not accepted within the time stated above, the bid security shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders, unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

CONTRACT TIME

- A. If this Bid is accepted, we will complete all work on or before **August 1, 2024**. The Contractor may start the project no earlier than June 7, 2024, and all work must be complete and ready for use at the latest by **August 1, 2024**. We understand that conditions precedent to achieving Final Completion include:
 - 1. Final inspection and approval by all relevant agencies.
 - 2. All punch list items having been completed and accepted by Owner.

CHANGES TO THE WORK

- A. On work deleted from the Contract, our credit to Grand Rapids Public Schools shall be based on actual work completed.

ADDENDA

A. We acknowledge receipt of the following Addenda. These addenda have been evaluated and their effect on the cost of the work has been incorporated into our bid price.

1. Addendum # _____ Dated _____ .
2. Addendum # _____ Dated _____ .

BID FORM SUPPLEMENTS

A. The following information is included with Bid submission:

- Contractor Demographics, Statistics and Certification
- Certification of a Michigan Based Business
- Statement of Familial Relationship
- Iran Business Relationship Affidavit
- Debarment and Suspension Certification
- Non-Collusive Affidavit
- Criminal Background Disclosure Affidavit

B. We agree to submit the following Supplements to Bid Forms within 48 hours after receipt of a Notice of Award:

1. Supplement A – Subcontractors: Include the names of all Subcontractors and the portions of the Work they will perform.

BID FORM SIGNATURE(S)

The Corporate Seal of _____ was hereunto affixed
(Print the full name of your firm)

In the presence of:

Signature

(Seal)

Printed Name and Title

Date

If the Bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

ACKNOWLEDGEMENTS

The Bidder acknowledges:

- a. That this bid was developed without any collusion, undertaking, or agreement, either directly or indirectly, with any other bidder or bidders to maintain the prices of indicated work or prevent any other bidder or bidders from bidding the work.
- b. That this bid will not be withdrawn for a period of 60 calendar days after the date on which bids were opened.
- c. That all work will be complete on or before the Final Completion date(s) identified in the bid documents.
- d. That the following documents, identified in Instructions to Bidders are attached to this Bid Form:
 - Bid Security
 - Statement of Familial Relationship
 - Contractor Demographics, Statistics and Certification
 - Certification of a Michigan Based Business
 - Iran Business Relationship Affidavit
 - Debarment and Suspension Certification
 - Non-Collusive Affidavit
 - Criminal Background Disclosure Affidavit

BIDDER'S FIRM NAME: _____

ADDRESS: _____

CITY / STATE / ZIP: _____

TELEPHONE / FAX: _____

AUTHORIZED CORPORATE OFFICER _____
Signature

Printed Name

Date

GRPS Policy 3670 – Local Construction Contracting

The District provides a preference (bid discount) in construction contracts from local vendors, providing the quality and service are commensurate with the requirements set forth by the District as to satisfy the demands of the bid or proposal. Bids, or proposals when bids are not required, shall be accepted from non-local vendors in order to maintain a fair market price.

In determining the qualification for a Local Purchasing Preference for purposes of this policy, vendors must have obtained the Certification of a Michigan Based Business as determined by the Michigan Department of Technology, Management and Budget as well as meet one of the following criteria:

- a. For at least the last six months had its primary business operations located within the municipality boundaries of the City of Grand Rapids, Michigan (Grand Rapids).
- b. Be certified by the City of Grand Rapids, as a Micro-Local Business Enterprise and have its primary business operations within the municipality boundaries of the City of Grand Rapids.

A successful recipient of a contract and/or purchase order which has received a Local Purchasing Preference may be required to present proof of its status as a Michigan Based Business and documentation of its location within the City of Grand Rapids at any time upon request from an authorized District official. Failure to provide the requested information or failure to maintain business operations with the city of Grand Rapids for the duration of the contract will make the contract voidable at the District's discretion, and will result in disqualification from future consideration of a Local Purchasing Preference for a period of five years unless excused by the Superintendent or Designee.

Preference will be provided on the following basis:

- a. Contractor Participation: Grand Rapids Public Schools will provide up to a 5% bid discount to prime contractors and/or construction managers who satisfy the criteria set forth for consideration as a Local Vendor.
- b. Subcontractor Participation: Construction bids for non-local vendors may be discounted when a bidder on a Grand Rapids Public Schools' project voluntarily subcontracts with businesses meeting Local Vendor Criteria. Prime contractors and/or construction managers must submit affidavit(s) verifying Local Vendor subcontractor participation.

Prime contractors and/or construction managers must require Local Vendor certification documentation to be submitted by each subcontract bidder with their sealed bid. The District at its discretion can request additional documentation for verification of the qualification of any Local Vendor subcontractor participating in a construction project.

- c. The following is a schedule of discounted percentages based upon Local Vendor subcontractor participation achieved by the prime contractor:

| <u>LBE Subcontractor Participation</u> | <u>Discount Percentage</u> |
|--|----------------------------|
| i. 1.0% – 2.5% | 1.0% |
| ii. <u>2.51% – 5.0%</u> | <u>1.5%</u> |
| iii. <u>5.01% – 7.5%</u> | <u>2.0%</u> |
| iv. <u>7.51% – 10.0%</u> | <u>2.5%</u> |
| v. <u>10.01% – 15.0%</u> | <u>3.0%</u> |
| vi. <u>15.01% – 18.0%</u> | <u>4.0%</u> |
| vii. <u>18.01% +</u> | <u>5.0%</u> |

- d. Prime contractors and/or construction managers may not terminate an approved Local Vendor subcontractor working on a Grand Rapids Public Schools construction project, and then perform the work on the terminated subcontract with its own forces or those of another subcontractor, without prior written consent by the Grand Rapids Public Schools Executive Director of Facilities Planning and Management. If a Local Vendor subcontractor fails to complete its work on the contract for any reason, a prime contractor/construction manager must notify the Grand Rapids Public Schools Executive Director of Facilities Planning and Management and make good faith efforts to find another approved Local Vendor subcontractor to substitute for the original Local Vendor subcontractor. Utilizing good faith efforts, and to the extent reasonable, the prime contractor/construction manager shall substitute an approved Local Vendor subcontractor to perform the same amount of work under the contract as the Local Vendor subcontractor that was terminated.
- e. Joint Venture Bidding: As an incentive to contractors engaging in activities that stimulate the growth and development of local, small emerging businesses as partners bidding as a joint venture, Grand Rapids Public School will apply up to a 5% bid discount for partnering with a qualified Local Vendor.
- f. The Bid Discounts outlined above may not exceed 5% or \$25,000 per bid, whichever is lower. Project bids from prime contractors and/or construction managers are considered a single bid for purposes of the Bid Discount consideration.

Grand Rapids Public Schools, Board of Education Members and employees are prohibited from having any financial interest or personal beneficial interest either directly or indirectly, in the award of any construction contracts, sub-contracts, or the recommendation/selection of any professional design service or construction manager, unless previously disclosed in writing to the Superintendent and approved in writing by the Superintendent.

This policy shall not apply to the extent that it would conflict with any provision of Michigan or federal law, regulation or constitution. The local preference shall not be applied to purchases of goods and services made with federal funds.

Policy Adopted: March 19, 2012

LEGAL Ref: MCL 380.1267; 380.1274

POLICY Ref: 3660 Bids and Quotation Requirements

3690 Local Purchasing

1900 Contracts and Board Member Disclosure Obligations

GRPS Policy Rules 3670 R – Local Construction Contracting

Qualification for Local Construction Contracting Preference

On an annual basis beginning with July 1st of each fiscal year, a vendor desiring to receive a bid discount for local construction contracting may submit appropriate documentation to the Executive Director of Facilities and Operations. Appropriate documentation shall include the following:

- a. Proof of completed submittal of Certification of a Michigan Based Business as determined by the Michigan Department of Technology, Management, and Budget

and
- b. Proof it has its primary business operations located within the municipality of the City of Grand Rapids, Michigan for the past six months (on company letterhead)
or
Proof it has been certified as a Micro-Local Business Enterprise by the City of Grand Rapids and has its primary business operations within the municipality boundaries of the City of Grand Rapids (on company letterhead)

A firm may submit the same documentation with its sealed bid or proposal in order to qualify for the bid discount.

Non-Local Vendors

A non-local vendor may qualify for a bid discount if it voluntarily subcontracts with businesses that meet the above documentation requirements. Proof of subcontractors meeting these requirements must be submitted with the sealed bid or proposal in order to qualify for the discount.

Local subcontractor participation will be based on the value of the local subcontracts as compared to the total bid or proposal

Joint Venture Bidding

Contractors that engage in joint venture bidding with a local, small emerging business partner will need to submit documentation of participation level with the sealed bid or proposal. The local bid discount will be based on the value of the local, small emerging business partner as compared to the total bid or proposal.

Eligibility/Verification

The District may request documentation at the conclusion of a project for which a bid discount was received verifying eligibility with local bid discount criteria. If it is determined that a vendor did not actually meet the terms of local preference, disqualification from future consideration of a local purchasing preference may occur for a period of five years unless excused by the Superintendent or Designee.

Dated: March 12, 2012
LEGAL REF: MCL 380.1267; 380.1274
3660- Bids and Quotation Requirements
3690- Local Purchasing
1900- Contracts and Board Member Disclosure Obligations

END OF SECTION



DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET

Facilities and Business Services Administration

Design & Construction Division

PROFESSIONAL/CONTRACTOR DEMOGRAPHICS, STATISTICS, AND CERTIFICATION

1. Company Name: _____
2. Company Address: _____

3. Principal Place of Business: _____

4. Year of Establishment: _____

Woman, Minority, or Veteran Owned Small Business Representation
 (For Statistical Use Only)

DEFINITIONS:

“Woman-owned business” means a small business that is at least 51% owned by a woman or women who are US citizens and who control and operate the business.

The vendor represents that it IS ☐, IS NOT ☐ a woman-owned small business.

“Minority-owned business” means a small business that is at least 51% owned by a minority or minorities who are US citizens and who control and operate the business.

The vendor represents that it IS ☐, IS NOT ☐ a minority-owned small business.

African American ☐ Arab American ☐ Asian American ☐ Hispanic ☐

American Indian ☐ Eskimo ☐

“Qualified Disabled Veteran” means a business entity that is 51% or more owned by one or more veterans with a service-connected disability.

“Qualified Disabled” means a business entity that is 51% or more owned by one or more with a service-connected disability.

The vendor represents that it IS ☐, IS NOT ☐ qualified disabled.

“Veteran -owned business” means a small business that is at least 51% owned by a veteran or veterans who are U.S. citizens and who control and operate the business.

The vendor represents that it IS ☐, IS NOT ☐ a veteran-owned small business.

The contractor represents and warrants that the company meets the above (when checked) and can provide supportive documentation upon request.

Authorized Agent Name (print or type) _____

Authorized Agent Signature _____



Certification of a Michigan Based Business
 (Information Required Prior to Contract Award for Application of State Preference/
 Reciprocity Provisions)

DEFINITION: To qualify as a Michigan business, vendor must have during the 12 months immediately preceding this bid deadline, or if the business is newly established, for the period the business has been in existence, it has (check all that apply):

Bidder shall also indicate one of the following:

- ☐ Bidder qualifies as a Michigan business (provide zip code): _____
- ☐ Filed a Michigan single business tax return showing a portion or all of the income tax base allocated or apportioned to the State of Michigan pursuant to the Michigan Single Business Tax Act, 1975 PA 228, MCL 208.1 – 208.145; or
- ☐ Filed a Michigan income tax return showing income generated in or attributed to the State of Michigan; or
- ☐ Withheld Michigan income tax form compensation paid to the bidder's owners and remitted the tax to the Department of Treasury; or

I certify that **I have personal knowledge** of such filing or withholding, that it was more than a nominal filing for the purpose of gaining the status of a Michigan business, and that it indicates a significant business presence in the state, considering the size of the business and the nature of its activities.

I authorize the Michigan Department of Treasury to verify that the business has or has not met the criteria for a Michigan business indicated above and to disclose the verifying information to the procuring agency.

- ☐ Bidder does not qualify as a Michigan business (provide name of State): _____
- ☐ Principal place of business is outside the State of Michigan, however service/commodity provided by a location within the State of Michigan (provide zip code): _____

Authorized Agent Name (print or type) _____

Authorized Agent Signature _____

Fraudulent Certification as a Michigan business is prohibited by MCL 18.1268 § 268. A BUSINESS THAT PURPOSELY OR WILLFULLY SUBMITS A FALSE CERTIFICATION THAT IT IS A MICHIGAN BUSINESS OR FALSELY INDICATES THE STATE IN WHICH IT HAS ITS PRINCIPLE PLACE OF BUSINESS IS GUILTY OF A FELONY, PUNISHABLE BY A FINE OF NOT LESS THAN \$25,000 and subject to debarment under MCL

FORM OF SWORN STATEMENT OF FAMILIAL RELATIONSHIP

As required by Section 1267 of the Revised School Code – MCL 380.1267

STATE OF MICHIGAN

COUNTY OF _____

_____, being duly sworn, deposes and says:

That _____ (The “Bidder”) has bid for an improvement to the following described real property located in Kent County, Michigan, which is owned by the Grand Rapids Public Schools, and legally described as follows:

Project Name: (Insert project name)

That the following is a statement of disclosure of any familial relationship that exists between the owner or any employee of the Bidder and any member of the Grand Rapids Public Schools Board of Education or Superintendent, as required pursuant to Section 1267 of the Revised School Code, as amended.

1. That there are no such familial relationships existing at this time.
2. That a familial relationship exists between _____, who is an (owner) (employee) of the Bidder and the _____ (nature of familial relationship – e.g., brother, sister, cousin, etc.) of _____, who is (a member of the Board) (the Superintendent).

Deponent _____

Subscribed and sworn to before me this _____ date of _____.

Acting in: _____

My commission expires: _____

IRAN BUSINESS RELATIONSHIP AFFIDAVIT

Effective April 1, 2013 all bids, proposals, and/or qualification statements received in the State of Michigan must comply with the "Iran Economic Sanctions Act". The following certification is to be signed and included at time of submittal.

Certification

Pursuant to the Michigan Iran Economic Sanctions Act, 2012 P.A. 517, by submitting a bid, proposal or response, Respondent certifies, under civil penalty for false certification, that it is fully eligible to do so under law and that it is not an "Iran linked business" as the term is defined in the Act.

Signature

Title

Company

Date

DEBARMENT AND SUSPENSION CERTIFICATION

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- Has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- Does not have a proposed debarment pending; and
- Is not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space:

Exceptions will not necessarily result in denial or award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: *Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Bid. Signing this document on the signature portion thereof shall also constitute signature of this Certification.*

Signature

Title

Company

Date

GRAND RAPIDS PUBLIC SCHOOLS (GRPS)
REQUEST FOR PROPOSAL (RFP) – GRPS PARKING LOT IMPROVEMENTS PHASE 2
ATTACHMENT C.4 – NON-COLLUSIVE AFFIDAVIT
March 19, 2024

NON-COLLUSIVE AFFIDAVIT

STATE OF MICHIGAN)
) SS
COUNTY OF)

_____, being duly sworn, deposes and says that:

1. The proposal has been arrived at by the consultant independently and has been submitted without collusion with, and without any agreement, understanding, or planned common course of action with, any other vendor of materials, supplies, equipment, or services described in the request for proposals, designed to limit independent bidding or competition; and,
2. The contents of the proposal have not been communicated by the consultant or its employees or agents to any person not an employee or agent of the consultant or its surety on any bond furnished with the proposal and will not be communicated to any such person prior to the official opening of the proposal.

Signature of Consultant

STATE OF _____)
)ss.
COUNTY OF _____)

This instrument was acknowledged before me on the _____ day of _____, 2022, by

_____.

_____, Notary Public

_____ County, _____

My Commission Expires: _____

Acting in the County of: _____

DRAFT AIA® Document A105® – 2017

Standard Short Form of Agreement Between Owner and Contractor

AGREEMENT made as of the « » day of « » in the year «Two Thousand Twenty
 »

(In words, indicate day, month and year.)

BETWEEN the Owner:

(Name, legal status, address and other information)

Grand Rapids Public School District
1331 Martin Luther King Jr. St SE

Grand Rapids, Michigan 49506

and the Contractor:

(Name, legal status, ~~address~~addr
ess and other information)

for the following Project:

(Name, location and detailed description)

«Grand Rapids Public School District 2023 Bond Program
Construction and Improvements related to Civil Engineering and Paving Services at
various District Properties
in accordance with Owner-approved plans and specifications, all applicable laws, the
Owner's fixed budget, and as otherwise approved by the Owner. »

General Contractor Services including:

The ~~Architect~~CIVIL ENGINEER (also referred to as the "Architect" herein):

(Name, legal status, address and other information)

«Moore & Bruggink, Incorporated
2020 Monroe Avenue NW
Grand Rapids, MI 49505
(616) 363-9801

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

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ARTICLE 1 THE CONTRACT DOCUMENTS

~~The Contractor shall complete the Work described in the Contract Documents for the Project. The Contract Documents consist of~~ § 1.1 The Contractor shall faithfully and competently complete the Work described in the Contract Documents, or as reasonably inferable, necessary, or incidental to produce the results intended by the Contract Documents for the Project. The Contract Documents consist of

- .1 this Agreement signed by the Owner and ~~Contractor~~; Contractor, as modified;
- .2 ~~the all~~ drawings and specifications prepared by the ~~Architect, dated~~ Architect, dated , ~~and enumerated as follows:~~ Architect for construction of the Project, incorporated herein by this reference, and including but not necessarily limited to the following:

Drawings:

| Number | Title | Date |
|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> |

Specifications:

| Section | Title | Pages |
|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> |

- .3 addenda prepared by the Architect as follows:

| Number | Date | Pages |
|--------|------|-------|
| | | |

- .4 written orders for changes in the Work, pursuant to Article 10, issued after execution of this Agreement; and
- .5 other documents, if any, identified as follows:

« Project Manual

Bid specifications and accepted portions of the Contractor's bid response, to the extent not inconsistent with this Agreement.

If there should be conflict or ambiguity within, between, or among any Contract Document(s), the conflict shall be resolved by complying with the provision that is most beneficial to the Owner, as determined in the Owner's sole discretion. »

ARTICLE 2 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 2.1 The Contract Time is the number of calendar days available to the Contractor to substantially complete the Work.

§ 2.2 Date of Commencement:

Unless otherwise set forth below, the date of commencement shall be the date of this Agreement.

(Insert the date of commencement if other than the date of this Agreement.)

« »

§ 2.3 Substantial Completion:

Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion, as defined in Section 12.5, of the entire Work:

(Check the appropriate box and complete the necessary information.)

[« »] Not later than « » (« ») calendar days from the date of commencement.

[« X »] By the following date: « », 20 »

ARTICLE 3 CONTRACT SUM

§ 3.1 The Contract Sum shall include all items and services necessary for the proper execution and completion of the Work. Subject to additions and deductions in accordance with Article 10, the Contract Sum is:

(\$—) « A lump sum amount of », inclusive of all costs, taxes, fees, reimbursable expenses, and/or any other expenses.

§ 3.2 For purposes of payment, the Contract Sum includes the following values related to portions of the Work:

(Itemize the Contract Sum among the major portions of the Work.)

| Portion of the Work | Value |
|---------------------|-------|
| | |

§ 3.3 The Contract Sum is based upon-upon, and includes, the following alternates, if any, which are described in the Contract Documents and hereby accepted by the Owner:

(Identify the accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

« »

§ 3.4 Allowances, if any, included in the Contract Sum are as follows:

(Identify each allowance.)

| Item | Price |
|------|-------|
| | |

§ 3.5 Unit prices, if any, are as follows:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

| Item | Units and Limitations | Price per Unit (\$0.00) |
|------|-----------------------|-------------------------|
| | | |

ARTICLE 4 PAYMENTS

§ 4.1 Based on Contractor's Applications for Payment certified by the Architect, the Owner shall pay the Contractor, in accordance with Article 12, as follows:

(Insert below timing for payments and provisions for withholding retainage, if any.)

« Applications for Payment shall be submitted to the Architect, certified, and thereafter forwarded to the Owner. If a certified Application for Payment is received by the Owner by the 15th day of the month, the Owner will pay the certified amount to the Contractor by the last day of the next month, unless and to the extent the Owner reasonably disputes same in good faith. A 10% retention shall be withheld on all payments. »

§ 4.2 Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate below, or in the absence thereof, at the legal rate prevailing at the place of the Project.

(Insert rate of interest agreed upon, if any.)

% «Five percent (5%). See MCL 438.31. »

ARTICLE 5 INSURANCE

§ 5.1 The Contractor shall maintain the following types and limits of insurance until the expiration of the period for correction of Work as set forth in Section 14.2, subject to the terms and conditions set forth in this Section 5.1:

§ 5.1.1 Commercial General Liability insurance for the Project, written on an occurrence form, with policy limits of not less than ~~(\$) each occurrence, (\$) general aggregate, and (\$) «One Million Dollars» (\$ «1,000,000») each occurrence, «Two Million Dollars» (\$ «2,000,000») general aggregate, and «Two Million Dollars» (\$ «2,000,000»)~~ aggregate for products-completed operations hazard.

§ 5.1.2 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than ~~(\$) «One Million Dollars» (\$ «1,000,000») per accident, for bodily injury, death of any person, and One Million Dollars (\$1,000,000) property damage arising out of the ownership, maintenance, and use of those motor vehicles along with any other statutorily required automobile coverage.~~

§ 5.1.3 The Contractor may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided that such primary and excess or umbrella insurance policies result in the same or greater coverage as those required under Section 5.1.1 and 5.1.2, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require exhaustion of the underlying limits only through the actual payment by the underlying insurers. Contractor shall provide Excess Umbrella Liability Coverage with policy limits of not less than Five Million Dollars» (\$ «5,000,000) per occurrence and in the aggregate.

§ 5.1.4 Workers' Compensation at statutory limits.

§ 5.1.5 Employers' Liability with policy limits not less than ~~(\$) each accident, (\$) each employee, and (\$) «One Million Dollars» (\$ «1,000,000») each accident, «One Million Dollars» (\$ «1,000,000») each employee, and «One Million Dollars» (\$ «1,000,000») policy limit.~~

§ 5.1.6 The Contractor shall provide builder's risk insurance to cover the total value of the entire Project on a replacement cost basis.

§ 5.1.7 Other Insurance Provided by the Contractor

(List below any other insurance coverage to be provided by the Contractor and any applicable limits.)

| Coverage | Limits |
|-------------------------|-----------------------------|
| <u>Bid Bond</u> | <u>5% of Bid Amount</u> |
| <u>Performance Bond</u> | <u>100% of Contract Sum</u> |
| <u>Payment Bond</u> | <u>100% of Contract Sum</u> |

Insurance coverages, shall be either: (a) written on an occurrence basis, and shall be maintained without interruption from the date of commencement of the Work until one (1) year after the date of final payment, or (b) written on a claims-made basis, and shall be maintained without interruption from the date of commencement of the Work until seven (7) years after the date of final payment.

Insurance coverage and surety bond required under the Agreement shall be written with insurance and surety carriers authorized to do business in the State of Michigan. Insurance coverage and surety bonds shall be in a form and provided by an insurer acceptable to the Owner with an A.M. Best rating of A, XII or better and shall name the Owner as an "additional insured" on all applicable policies. The additional insured coverage shall be primary and non-contributory to any of the Owner's insurance policies and shall apply to both ongoing and completed operations, using the 2013 version of ISO forms CG 1010 07 04 or its equivalent.

The Contractor shall deliver the required performance/payment bonds to the Owner and Architect at least three (3) days before the commencement of any Work at the Project site.

The Contractor shall provide any other type or amount of insurance reasonably required by the Owner in good faith.

The Contractor's insurance shall not be eliminated, reduced or non-renewed without at least thirty (30) days' prior written notice to the Owner.

§ 5.2 The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance and shall provide property insurance to cover the value of the Owner's property. ~~The Contractor is entitled to receive an increase in the Contract Sum equal to the insurance proceeds related to a loss for damage to the Work covered by the Owner's property insurance.~~

§ 5.3 The Contractor shall obtain an endorsement to its Commercial General Liability insurance policy to provide coverage for the Contractor's obligations under Section 8.12.

§ 5.4 Prior to commencement of the Work, ~~each party~~ the Contractor shall provide certificates of insurance showing ~~their respective coverages~~ coverages and stating that insurance coverages and limits shall not be reduced or eliminated without at least thirty (30) days prior written notice to the Owner. The Owner may require additional proof of coverage in the form of a true and accurate copy of the policies of insurance themselves. The maintenance of insurance in strict compliance with the requirements of this Agreement shall be a condition precedent to the Owner's obligation to make any payments to Contractor.

§ 5.5 ~~Unless specifically precluded by the Owner's property insurance policy, the Owner and Contractor waive all rights against (1) each other and any of their subcontractors, suppliers, agents, and employees, each of the other; and (2) the Architect, Architect's consultants, and any of their agents and employees, for damages caused by fire or other causes of loss to the extent those losses are covered by property insurance or other insurance applicable to the Project, except such rights as they have to the proceeds of such insurance. Superior to any other term in this Agreement, any reference in this document to waivers of subrogation shall be deemed to be deleted and of no effect.~~

ARTICLE 6 GENERAL PROVISIONS

§ 6.1 The Contract

The Contract represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a written modification in accordance with Article 10.

§ 6.2 The Work

The term "Work" means the construction and services required by the Contract Documents, and includes all other labor, materials, tools, transportation, equipment, and services provided, or to be provided, by the Contractor to fulfill the Contractor's obligations: (i) to be incorporated into the Project (or the Contractor's portion of the Project if the Contractor is not responsible for the entire Project), (ii) required of the Contractor under the Contract Documents, or (iii) necessary or appropriate to fully construct, operate and maintain the Project (or the Contractor's portion of the Project if the Contractor is not responsible for the entire Project). The Work shall be performed in accordance with the Contract Documents. Contractor agrees that it (and any individuals it assigns to perform the Work) shall adhere to professional standards and will perform all Work in a manner consistent with generally accepted proficiency and competency for the type and nature of work rendered. Contractor shall at all times comply with all applicable federal, state and local laws and regulations, including the Owner's policies.

The Contractor acknowledges that there may be items of the Work, which the Contractor is responsible to provide under the Agreement that are not drawn or specified, but are necessary for the proper execution and completion of the Work and are consistent with and reasonably inferable from the Drawings and Specifications. All such items shall be provided as part of the Work without delay in its progress and without any increase in the Contract Sum.

§ 6.3 Intent

The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all.

§ 6.4 Ownership and Use of Architect's Drawings, Specifications and Other Documents

Documents prepared by the Architect are instruments of the Architect's service for use solely with respect to this Project. The Except as provided in the Agreement between the Owner and Architect, the Architect shall retain all common law, statutory, and other reserved rights, including the copyright. The Contractor, subcontractors, sub-subcontractors, and suppliers are authorized to use and reproduce the instruments of service solely and exclusively for execution of the Work. The Except as provided in the Agreement between the Owner and Architect, the instruments of service may not be used by the Contractor or any subcontractor or material or equipment supplier for other Projects or for additions to this Project outside the scope of the Work without the specific written consent of the Architect-Owner.

§ 6.5 Electronic Notice

Written notice under this Agreement may be given by one party to the other by email as set forth below.

(Insert requirements for delivering written notice by email such as name, title, and email address of the recipient, and whether and how the system will be required to generate a read receipt for the transmission.)

ARTICLE 7 OWNER

§ 7.1 Information and Services Required of the Owner

§ 7.1.1 If requested by the Contractor, the Owner shall furnish all necessary surveys and a legal description of the site.

§ 7.1.2 Except for permits and fees under Section 8.7.1 that are the responsibility of the Contractor, Contractor (including but not limited to as set forth in Section 8.7), the Owner shall obtain and pay for other necessary approvals, easements, assessments, and charges.

§ 7.1.3 Prior to commencement of the Work, at the written request of the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence.

§ 7.2 Owner's Right to Stop the Work

If the Contractor fails to correct Work which is not in accordance with the Contract Documents, the Owner may direct the Contractor in writing to stop the Work until the correction is made. The rights of the Owner pursuant to this Section 7.2 shall be in addition to, and not in limitation of, the Owner's other rights under any other provision of the Contract Documents.

§ 7.3 Owner's Right to Carry Out the Work

If the Contractor fails, refuses, defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies, including any claim against the Contractor's Performance Bond, correct such deficiencies. In such case, the Architect may withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the cost of correction, provided the actions of the Owner and amounts charged to the Contractor were approved by the Architect. correction.

§ 7.4 Owner's Right to Perform Construction and to Award Separate Contracts

§ 7.4.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project.

§ 7.4.2 The Contractor shall coordinate and cooperate with the Owner's own forces and separate contractors employed by the Owner.

ARTICLE 8 CONTRACTOR

§ 8.1 Review of Contract Documents and Field Conditions by Contractor

§ 8.1.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents. Failure of Contractor to independently investigate and become fully informed will not relieve Contractor of its responsibilities under this Agreement.

§ 8.1.2 The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the Owner. Before commencing activities, the Contractor shall (1) take field measurements and verify field conditions; (2) carefully compare this and other information known to the Contractor with the Contract Documents; and (3) promptly report errors, inconsistencies, or omissions discovered to the Architect. Architect and Owner. Failure to undertake these steps shall make the Contractor responsible for any additional costs associated with such conditions, errors, inconsistencies and omissions.

§ 8.2 Contractor's Construction Schedule

The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. Work, in accordance with, and as necessary to timely complete the Work as provided in Article 2.

§ 8.3 Supervision and Construction Procedures

§ 8.3.1 The Contractor shall supervise and direct the Work. Work, using the Contractor's best skill and attention. attention, at all times work is being performed. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work. The Contractor shall immediately notify the Architect in writing of delays or actions of other entities that could impact the timely coordination and completion of the Work.

§ 8.3.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner, through the Architect, the names of subcontractors or suppliers for each portion of the Work. The Contractor shall not contract with any subcontractor or supplier to whom the Owner or Architect have made a timely and reasonable objection. The Owner shall have the right to remove any employee of the Contractor or subcontractors immediately, if the Owner reasonably believes that such person may detrimentally reflect on the Owner and/or the Project (subject to the Contractor's status as independent contractor).

§ 8.4 Labor and Materials

§ 8.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work. Such provision of labor and materials shall occur in sufficient time to satisfy the existing Project schedule. The Contractor bears the risk of any failure to timely provide such labor and/or materials.

§ 8.4.2 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract Work. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

§ 8.4.3 Asbestos-Free Product Installation

1. It is hereby understood and agreed that no product and/or material containing asbestos, including chrysolite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos and any combination of these materials that have been chemically treated and/or altered shall be installed or introduced into the Work by the Contractor or his employees, agents, subcontractors or other individuals or entities over whom the Contractor has control. The Contractor shall be required to sign a certification statement ensuring that all products or materials installed or introduced into the work will be asbestos-free.
2. The Contractor shall also be required to furnish certified statements from the manufacturers of supplied materials used during the construction verifying their products to be asbestos-free in accordance with the requirements of Section 8.4.3.1.
3. The Contractor shall complete and submit to the Owner a certification evidencing asbestos-free product installation prior to issuance of the final Certificate for Payment, in a form acceptable to Owner and Architect.

§ 8.4.4 The Contractor agrees that neither it nor its subcontractors will discriminate against any employee or applicant for employment, to be employed in the performance of this Contract, with respect to hire, tenure, conditions or privilege of employment, or any matter directly or indirectly related to employment, because of race, age, sex, color, religion, national origin, ancestry, or physical disability. Breach of this covenant may be regarded as a material breach of this Contract.

§ 8.5 Warranty

The Contractor warrants to the Owner and Architect that: (1) materials and equipment furnished under the Contract will be new and of good quality unless otherwise required or permitted by the Contract Documents; (2) the Work will be free from defects not inherent in the quality required or permitted; and (3) the Work will conform to the requirements of the Contract Documents. Any material or equipment warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 12.5.

§ 8.6 Taxes

The Contractor shall pay sales, consumer, use, and similar taxes that are legally required when the Contract is executed. The Contractor shall pay all state and federal taxes levied on its business, income or property and shall make all contributions for social security and other wage or payroll taxes. The Contractor shall be solely responsible for such payments and shall indemnify and hold the Owner harmless from same. All taxes are included in the Contract Sum.

§ 8.7 ~~Permits, Fees and Notices~~ Permits, Fees, Licenses, and Notices

§ 8.7.1 The Contractor shall obtain and pay for the building permit and other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work. The Contractor, and all its Subcontractors of any tier, shall maintain at all times the required licenses and registrations required to perform the Work.

§ 8.7.2 The Contractor shall strictly comply with and give notices required by agencies having jurisdiction over the Work. If the Contractor performs Work ~~knowing it to be~~ contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs. The Contractor shall promptly notify the Architect and Owner in writing of any known inconsistencies in the Contract Documents with such governmental laws, rules, and regulations.

§ 8.8 Submittals

The Contractor shall promptly review, approve in writing, and submit to the Architect shop drawings, product data, samples, and similar submittals required by the Contract Documents. Shop drawings, product data, samples, and similar submittals are not Contract Documents.

§ 8.9 Use of Site

The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, the Contract Documents, and the Owner.

§ 8.10 Cutting and Patching

The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.

§ 8.11 Cleaning Up

The Contractor shall keep the premises and surrounding area free from accumulation of debris and trash related to the Work. At the completion of the Work, the Contractor shall remove its tools, construction equipment, machinery, and surplus material; and shall properly dispose of waste materials. Failure of the Contractor to do any of the foregoing will result in the Owner's cleaning of the same at the expense of the Contractor.

§ 8.12 Indemnification

To the fullest extent permitted by law, the Contractor shall ~~indemnify, defend,~~ and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them, from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, ~~provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to including, but not limited to, the injury to or destruction of tangible property (other than the Work itself), property,~~ but only to the extent caused by the negligent acts or omissions of the Contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.

ARTICLE 9 ARCHITECT

§ 9.1 The Architect will provide administration of the Contract as described in the Contract Documents. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract ~~Documents.~~Documents and allowed by law.

§ 9.2 The Architect will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the ~~Work.~~Work and shall provide all services required of it in the applicable Owner/Architect Agreement.

§ 9.3 The Architect will not have control over or charge of, and will not be responsible for, construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility. The Architect will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

§ 9.4 Based on the Architect's observations and evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor.

§ 9.5 The Architect has authority to reject Work that does not conform to the Contract ~~Documents.~~Documents with the Owner's prior consent.

§ 9.6 The Architect will promptly review and approve or take appropriate action upon Contractor's submittals, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 9.7 On written request from ~~either the Owner or Contractor, the Owner,~~ the Architect will promptly interpret ~~and decide~~ matters concerning performance under, and requirements of, the Contract Documents.

§ 9.8 Interpretations ~~and decisions~~ of the Architect will be consistent with the intent of, and reasonably inferable from the Contract Documents, and will be in writing or in the form of drawings. When making such ~~interpretations and decisions,~~ interpretations, the Architect will endeavor to secure faithful performance by ~~both Owner and Contractor, will not show partiality to either Contractor~~ and will not be liable for results of interpretations ~~or decisions~~ rendered in good ~~faith.~~faith and without negligence.

§ 9.9 The Architect's duties, responsibilities, and limits of authority as described in the Contract Documents shall not be changed without written consent of the ~~Owner, Contractor, and Architect.~~ Consent shall not be unreasonably withheld.Owner and Architect.

ARTICLE 10 CHANGES IN THE WORK

§ 10.1 After execution of the Contract, changes in the Work may be accomplished only by written Change Order, directed to the Contractor and signed by the Owner and Architect, or by order for a minor change in the Work. The Owner, without invalidating the Contract, may also order changes in the Work within the general scope of the Contract, consisting of additions, deletions or other revisions, and the Contract Sum and Contract Time shall be adjusted accordingly, in writing. If the Owner and Contractor cannot agree to a change in the Contract Sum, and the Owner desires to still use the Contractor for such Work, the Owner shall pay the Contractor its actual ~~cost plus reasonable overhead and profit~~ and reasonable cost plus reasonable overhead and profit not to exceed ten percent (10%). When directed by a Construction Change Directive signed by the Owner, the Contractor shall proceed with the change in the Work immediately, even in the absence of a formal agreement to change the Contract Sum or Contract Time.

§ 10.2 The Architect may authorize or order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. ~~Such authorization or order shall be in writing and shall be binding on the Owner and Contractor.~~ The Contractor shall proceed with such minor changes promptly.

§ 10.3 The requirements of Section 2 of 1998 PA 57, as amended, are hereby incorporated into this Agreement. The Contractor shall be alert to any indication or evidence of existing underground or concealed utilities or structures not shown on the Contract Documents and shall immediately notify the Owner of discovery of such evidence. If the Contractor encounters such utilities or structures, it shall cease operations immediately to minimize damage and shall notify the Owner and Architect. The Contractor shall bear the cost of damage resulting from its failure to exercise reasonable care in its construction activity or from continuing operations without notifying the Owner. If concealed or unknown physical conditions are encountered at the site that differ materially from those indicated in the Contract Documents or from those conditions ordinarily found to exist, the Contract Sum and Contract Time shall be subject to ~~equitable adjustment~~ reasonable adjustment as permitted by law.

ARTICLE 11 TIME

§ 11.1 Time limits stated in the Contract Documents are of the essence of the Contract. The Contractor shall perform in accordance with the Project schedule, which may be changed from time to time, and also in accordance with the Contractor's provided schedule of performance (if performance is due prior to that set forth in the latest Project schedule).

§ 11.2 If the Contractor is delayed at any time in progress of the Work by ~~changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, or other~~ causes beyond the Contractor's control, the ~~Contract Time shall be subject to equitable adjustment~~ sole remedy of such an occurrence shall be the extension of the Contract Time for a reasonable amount of time agreed to by the Owner and Contractor and, if mutual agreement cannot be reached as reasonably determined by the Architect. The Contractor shall not be entitled to monetary damages for such an occurrence.

§ 11.3 ~~Costs~~ Except as otherwise stated in this Agreement, costs caused by delays or by improperly timed activities or defective construction shall be borne by the responsible party.

§ 11.4 The Contractor shall provide notice in writing to the Owner of a potential claim for a delay related adjustment to the Contract Time within five (5) days of start of any delay and shall request in writing all changes to the Contract Time within twenty-one (21) days after cessation of the delay. The Contractor's failure to strictly comply with this Section 11.4 shall constitute a waiver of and shall forever bar any recover for additional time for the delay.

§ 11.5 No Damage for Delay. In no event shall the Contractor be entitled to any compensation or recovery of any damages in connection with any delay. In no event shall the Contractor be entitled to recover special, incidental, or consequential damages including without limitation, loss of anticipated profits, revenue, or use of capital.

ARTICLE 12 PAYMENTS AND COMPLETION

§ 12.1 Contract Sum

The Contract Sum stated in this Agreement, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 12.2 Applications for Payment

§ 12.2.1 ~~At least ten days before the date established for each progress payment, the~~ The Contractor shall submit to the Architect an itemized Application for Payment for Work completed in accordance with the values stated in this ~~Agreement.~~ Agreement and in accordance with Section 4.1. The Application shall be supported by data substantiating the Contractor's right to payment as the Owner or Architect may reasonably require, such as evidence of payments made to, and waivers of liens from, subcontractors and ~~suppliers.~~ suppliers, and reflecting retainage. Payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, in writing, payment may similarly be made for materials and equipment stored, and protected from damage, off the site at a location agreed upon in writing.

§ 12.2.2 The Contractor warrants that title to all Work covered by an Application for Payment will ~~pass to the Owner~~ no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment, all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or other encumbrances adverse to the Owner's ~~interests.~~ interests, and that such Work is in full compliance with the Contract Documents.

§ 12.3 Certificates for Payment

The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner in writing of the Architect's reasons for withholding certification in part; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole. If certification or notification is not made within ~~such seven day period, thirty (30) days after receipt by the Architect,~~ the Contractor may, upon seven (7) additional days' written notice to the Owner and Architect, stop the Work until ~~payment of the amount owing has been received, certification or notice is provided.~~ The Contract Time and the Contract Sum shall be equitably reasonably adjusted due to the ~~delay.~~ delay in accordance with Section 11.4.

§ 12.4 Progress Payments

§ 12.4.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment for all undisputed sums in the manner provided in the Contract Documents.

§ 12.4.2 The Contractor shall promptly pay each subcontractor and supplier, upon receipt of payment from the Owner, an amount determined in accordance with the terms of the applicable subcontracts and purchase orders.

§ 12.4.3 Neither the Owner nor the Architect shall have responsibility for payments to a subcontractor or supplier.

§ 12.4.4 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the requirements of the Contract Documents.

§ 12.5 Substantial Completion

§ 12.5.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents and where all required occupancy permits, if any, have been issued so the Owner can occupy or utilize the Work for its intended use.

§ 12.5.2 When the Contractor believes that the Work or designated portion thereof is substantially complete, it will notify the Architect and the Architect will make an inspection to determine whether the Work is substantially complete. When the Architect determines that the Work is substantially complete, the Architect shall prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion, establish the responsibilities of the Owner and Contractor, and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 12.6 Final Completion and Final Payment

§ 12.6.1 Upon receipt of a final Application for Payment, the Architect will inspect the Work. When the Architect finds the Work acceptable and the Contract fully performed, the Architect will promptly issue a final Certificate for

Payment. In the event the Architect finds the Work unacceptable, the Architect shall issue a list of unsatisfactory items to the Contractor and the Owner, which the Contractor must complete prior to further payment on the Contract.

§ 12.6.2 Final payment shall not become due until the Contractor submits to the Architect releases and waivers of liens, consent of surety (if required), warranties, and any other data establishing payment or satisfaction of obligations, obligations or otherwise reasonably requested by Owner and/or Architect, such as receipts, claims, security interests, or encumbrances arising out of the Contract.

§ 12.6.3 Acceptance of final payment by the Contractor, a subcontractor or supplier in a written certification accompanying the final Application for Payment shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment. The making of final payment shall not be deemed a waiver of claims by the Owner.

§ 12.6.4 Amounts withheld from the final payment to cover any incomplete work are not considered retainage and shall not be paid to the Contractor until the Work is actually completed and accepted by the Owner. Such withholdings shall not be less than 150% of the estimated cost to the complete the Work.

ARTICLE 13 PROTECTION OF PERSONS AND PROPERTY

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs, including all those required by law in connection with performance of the Contract. The Contractor shall take reasonable precautions to prevent damage, injury, or loss to employees on the Work and other persons who may be affected thereby, the Work and materials and equipment to be incorporated therein, and other property at the site or adjacent thereto. The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, or by anyone for whose acts the Contractor may be liable.

ARTICLE 14 CORRECTION OF WORK

§ 14.1 The Contractor shall promptly correct Work ~~rejected by the Architect as~~ failing to conform to the requirements of the Contract Documents. The Contractor shall bear the cost of correcting such rejected Work, including the costs of uncovering, replacement, and additional testing.

§ 14.2 In addition to the Contractor's other obligations including warranties under the Contract, the Contractor shall, for a period of one year two (2) years after Substantial Completion, correct work not conforming to the requirements of the Contract Documents.

§ 14.3 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Section 7.3. The Contractor shall reimburse the Owner for the cost of correction and any related costs and fees, including, but not limited to attorney fees, incurred by the Owner in the pursuit of such correction or recovery of payment for such correction.

§ 14.4 If the Contractor or any subcontractor chooses to use any systems, equipment, facilities, or services which have been incorporated into the Project as a permanent part thereof, the Contractor shall assume full responsibility for damages caused to said systems, equipment, facilities or services, and have damages repaired as required, so that in no case will the performance of the used systems, equipment facilities or services be diminished from the specified criteria as a result of such use.

ARTICLE 15 MISCELLANEOUS PROVISIONS

§ 15.1 Assignment of Contract

Neither party to the Contract shall assign the Contract as a whole without written consent of the other.

§ 15.2 Tests and Inspections

§ 15.2.1 At the appropriate times, the Contractor shall arrange and bear cost of tests, inspections, and approvals of portions of the Work required by the Contract Documents or by laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities.

§ 15.2.2 If the Architect requires additional testing, the Contractor shall perform those tests.

§ 15.2.3 The Owner shall bear cost of tests, inspections, or approvals that do not become requirements until after the Contract is ~~executed~~. executed and are required through no fault or delay of the Contractor or others. The Owner shall

directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 15.3 Governing Law

The Contract shall be governed by the law of the ~~place where the Project is located, excluding that jurisdiction's choice of law rules.~~ State of Michigan, except that no claim of the Owner shall be barred as untimely if filed within six (6) years of final completion of the Project.

ARTICLE 16 TERMINATION OF THE CONTRACT

§ 16.1 Termination by the Contractor

If the Work is ~~stopped~~ stopped, unscheduled, under Section 12.3 for a period of ~~14 days~~ ninety (90) days for reasons within the Owner's control and through no fault of the Contractor, the Contractor may, upon seven additional days' written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work ~~executed including reasonable overhead and profit, and costs incurred by reason of such properly executed including reasonable overhead and profit on the portion of the Work completed to the date of~~ termination.

§ 16.2 Termination by the Owner for Cause

§ 16.2.1 The Owner may terminate the Contract if the Contractor

- .1 ~~repeatedly~~ refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the subcontractors;
- .3 ~~repeatedly~~ disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; ~~or~~
- .4 ~~is otherwise guilty of substantial~~ otherwise commits a breach of a provision of the Contract ~~Documents.~~ Documents; or
- .5 fails to prosecute the Work or any part thereof with promptness and diligence, fails to perform any provisions of this Agreement, goes into bankruptcy or liquidation, makes an assignment for the benefit of creditors, enters into a composition with its creditors or becomes insolvent.

§ 16.2.2 When any of the above reasons exist, the ~~Owner, after consultation with the Architect, Owner~~ may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may

- .1 take possession of the site and of all materials thereon owned by the Contractor, and
- .2 finish the Work by whatever reasonable method the Owner may deem expedient.

§ 16.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 16.2.1, the Contractor shall not be entitled to receive further payment until the Work is ~~finished~~ finished and until sums due under Section 16.2.4 have been determined.

§ 16.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. This obligation for payment shall survive termination of the Contract.

§ 16.2.5 If the Owner erroneously or improperly terminates the Contractor for cause, then the Owner's action shall be deemed to be a termination for convenience, subject to the provisions of Section 16.3.

§ 16.3 Termination by the Owner for Convenience

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. The Contractor shall be entitled to receive payment for Work ~~executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not properly~~ executed.

ARTICLE 17 OTHER TERMS AND CONDITIONS

(Insert any other terms or conditions below.)

«§ 17.1 The Contractor shall inspect the Work on the Project as it is being performed until final completion and acceptance of the Project by the Owner to assure that the Work performed and the materials furnished are in accordance with the Contract Documents and that Work on the Project is progressing on schedule. In the event that the quality control testing should indicate that the Work, as installed, does not meet the requirements of this Project, the Contractor shall notify the Owner and Architect, the Owner and Architect shall determine the extent of the Work that

does not meet the requirements, and the Contractor shall take appropriate corrective action, and advise the Owner of the corrective action.

§ 17.2 The Contractor shall provide daily full-time, on-site field supervision during the entire construction phase. The Contractor agrees to assign the following listed project team members, as listed in their respective capacities to the Project:

| <u>Staff Name</u> | <u>Assignment</u> | <u>Contact Information – Mobile Phone & Email</u> |
|-------------------|-------------------|---|
|-------------------|-------------------|---|

Contractor shall promptly notify the Owner if services of any one of the listed team members become unavailable due to circumstances beyond the Contractor's control, e.g., extended illness or disability, death, termination of employment, etc. No substitution of any of the above listed project team members shall be made without the prior written consent of the Owner; and before any such substitution the Contractor shall submit to the Owner a detailed justification supported by the qualification of any proposed replacement. Contractor is not entitled to additional compensation for any such substitution(s) of the project team members. The Owner reserves the right to require the replacement of any or all of the above listed team members for cause; and the Contractor shall provide suitable replacement or replacements upon two (2) weeks' notice.

This Section 17.2 shall not be interpreted to eliminate or reduce the Architect's responsibilities under MCL 388.851, et seq. or MCL 339.2011, as applicable, or the Owner/Architect Agreement.

§ 17.3 The Owner, being a public body, shall render required decisions within a reasonable time after being requested to do so by the Contractor, taking into consideration its obligations under the Open Meetings Act and others. The Contractor, assisted by the Architect, shall prepare and submit all recommendations for which approval is required by Owner as soon as reasonably possible unless another schedule is agreed to by the Owner, in writing. The Contractor shall not cause unreasonable delays in the orderly progress of work.

§ 17.4 NOTICE OF CLAIMS

A claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract, including, but not limited to, additional sums, additional time for performance, or damages. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. The Contractor shall not knowingly (as "knowingly" is defined in the Federal False Claims Act, 31 USC 3729, et seq.) present or cause to be presented a false or fraudulent Claim. As a condition precedent to making a Claim by the Contractor, the Claim shall be accompanied by an affidavit sworn to before a notary public or other person authorized to administer oaths in the State of Michigan and executed by an authorized representative of the Contractor, which states that: "The Claim which is submitted herewith complies with subparagraph 17.5 of the Owner/Contractor Agreement, as amended, which provides that the Contractor shall not knowingly present or cause to be presented a false or fraudulent claim."

Claims by the Contractor must be initiated by written notice to the Owner and to the Architect. Claims by the Contractor must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the Contractor first recognizes, or should have recognized, the condition giving rise to the Claim, whichever is later. Failure to timely and properly initiate a claim shall be an irrevocable waiver of such claim. Claims by the Owner shall be governed by the applicable statute of limitations period.

Pending final resolution of a Claim, including mediation and/or litigation, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make undisputed payments in accordance with the Contract Documents.

§ 17.5 If any provision of this Agreement shall be held to be illegal, invalid or otherwise unenforceable by law, the remainder of this Agreement shall not be affected thereby and each provision, term, covenant or condition of this Agreement shall be enforced to the fullest extent permitted.

§ 17.6 Dispute Resolution

The parties shall endeavor to resolve their disputes by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with their Construction Industry Mediation Procedures in effect on the date of this Agreement. A request for mediation shall be made, in writing, delivered to the other party to this Agreement, and filed with the person or entity administering the mediation. For any claim not resolved by mediation required herein, the parties shall pursue litigation as their method of binding dispute resolution.

§ 17.7 Nothing herein shall be deemed to eliminate or reduce the Owner's defense of governmental immunity. »

This Agreement entered into as of the day and year first written above.

(If required by law, insert cancellation period, disclosures or other warning statements above the signatures.)

« »

GRAND RAPIDS PUBLIC SCHOOL DISTRICT,

OWNER (Signature)

«Alex Smart,
Executive Director of Facilities and Operations»

(Printed name and title)

CONTRACTOR (Signature)

« »« »

(Printed name and title)

LICENSE NO.:

JURISDICTION:

Modified: 12/21/21; 8:43am

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

| Name Of Additional Insured Person(s) Or Organization(s): | Location(s) Of Covered Operations |
|--|-----------------------------------|
| | |
| Information required to complete this Schedule, if not shown above, will be shown in the Declarations. | |

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

REQUEST FOR INFORMATION

PROJECT: GRPS Parking Lot Improvements

FROM: _____

COMPANY: _____

NAME: _____

PHONE: _____

E-MAIL: _____

FAX: _____

DATE: _____

QUESTION:
(Type or print in box, or attach additional typed pages with this cover page.)

SEND TO: Ryan Arends
Moore & Bruggink, Inc.
E-Mail: rarends@mbce.com

GENERAL REQUIREMENTS

PART 1 – GENERAL

1.1 FIELD CONDITIONS AND DIMENSIONS

- A. Prior to design, ordering materials, preparing shop drawings, or doing any work, verify at the site all dimensions, details, quantities, and conditions which may affect the work. No allowance for additional compensation will be considered for discrepancies between dimensions indicated on the drawings and actual field dimensions, or for the Subcontractor's failure to comply with this requirement.

1.2 SUBSTITUTIONS

- A. After contract award, the Owner will consider substitution requests only if the proposed substitute offers the Owner cost or schedule advantages. A request for a substitution shall include a proposal for adjustments to the contract price and/or time if the substitution is approved. The Contractor shall bear the burden of providing the Engineer any technical, cost or schedule data needed to make an evaluation.
- B. The Contractor shall be responsible for any unforeseen costs incurred by dimension, weight and material quantity changes occasioned by a substitution.

1.3 CONTRACT DOCUMENTS

- A. The Contract Documents, alone, detail the requirements of the project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed or relieve the Contractor from fulfilling any part of the contract.

1.4 LAWS

- A. The Contractor shall comply with all applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over the construction of the project.

1.5 ASBESTOS

- A. All material to be used in the work shall be certified by the manufacturer to be free of any amount of asbestos. No material will be permitted on the site without such certification.
- B. The Contractor should review the Owner's material management plan for their information regarding asbestos. The Contractor must provide an affidavit stating that no asbestos was used in the project. Any asbestos containing material installed under this Contract by the Contractor shall be removed and replaced with like asbestos-free materials, all at the cost of the Contractor.

1.6 LEAD PAINT

- A. Lead Paint: This renovation project may involve activities that disturb lead-based paint. It is the responsibility of the contractor to determine if the building to be renovated is a **Child-Occupied Facility** as defined under the EPA regulation **Renovation, Repair, and Painting Final Rule (RRP Rule)**. All covered renovations to a **Child-Occupied Facility** must be performed by Certified Firms, using Certified Renovators and other trained workers.

1.7 PROGRESS MEETINGS

- A. The Owner may schedule progress meetings to be held on the jobsite whenever needed to supply information necessary to complete the work without interruptions.
- B. The Contractor shall be represented at each progress meeting by persons with full authority to act for the Contractor in regard to all portions of the work.

1.8 WORKMANSHIP

- A. The Contractor shall be fully responsible for all construction means, methods, techniques, sequence, and procedures and for coordinating all portions of the work under the Contract with the Owner.
- B. The Contractor shall provide an authorized representative at the site – at all times during working hours – to receive and execute orders by the Owner. All such orders given to the Contractor's representative shall be deemed as given to and received by the Contractor.
- C. The Contractor shall maintain a copy of the Project Manual at the project site at all times.

1.9 CODE AND REGULATION COMPLIANCE

- A. Comply with all applicable federal, state, and local codes and regulations relating to buildings, employment, the preservation of public health and safety, use of streets, and the performance of the work under this Contract. It shall be the responsibility of the Contractor to fully understand all such requirements and to ensure that the subject requirements are fully and faithfully enforced.
- B. Any work performed by the Contractor known or should have been known to be contrary to existing laws, rules and regulations, and for which the Contractor fails to give notice of such fact to the Owner, shall be the responsibility of the Contractor. The Contractor shall bear all costs arising therefrom and hold the Owner harmless for any such violation.
- C. Upon completion of the work, the Contractor shall submit to the Owner a certificate of inspection by the civic authority having jurisdiction, showing that all work, subject to inspection has been properly inspected and approved to meet current code requirements.

1.10 PROJECT SAFETY

SAFETY IS OF ABSOLUTE IMPORTANCE. On all sites, the Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs associated with the work. Under no circumstances shall the Contractor's activities jeopardize the safety of the building occupants, Contractor personnel, and the general public.

- A. All work must be accomplished in accordance with all applicable Construction Safety standards rules and regulations for Construction Operations, as set forth by the Department of Labor in the state where the project is located.
- B. The requirements indicated in this section are to be considered as minimal. Where the requirements of any of the listed authorities having jurisdiction conflict with the requirements of this section, the maximum condition shall prevail.
- C. The Contractor shall furnish, install and maintain as long as necessary and remove when no longer required, adequate barriers, warning signs and lights or other necessary or prudent safety measures at all dangerous locations during work operations for the protection of Contractor personnel, building occupants, and the general public. Provide and erect all such safety precautions in accordance with federal, state and local codes and other legal requirements.
- D. Whenever lifting materials or equipment over or near existing or occupied buildings, provide advance notice of such activities and arrange to have any potentially endangered spaces vacated.
- E. During work operations, provide temporary partitions, barriers, curtains, and guards as necessary to confine materials, dust and debris to the immediate work areas. Do not allow dust or debris to enter the building interior. Coordinate the location of temporary barriers or partitions with the Owner.
- F. Remove all temporary protection when work is completed and restore disturbed areas to their original condition.
- G. The Contractor shall hold the Owner harmless from damage or claims arising out of any injury or damage that may be sustained by any person or persons as a result of the work under the Contract.

1.11 PROTECTION OF PROPERTY

- A. Coordinate all work operations with the Owner so that adequate interior protection, as necessary, is provided and disruption to normal building operations is minimized. Repair all property damage caused by lack of such protection to the satisfaction of the Owner.
- B. Confine equipment, storage of materials, debris, and the operation and movements of workmen within the physical limits and time limits directed by the Owner. Such activities are to be governed by applicable local building codes and the traffic regulation and safety and fire regulation of local authorities.

- C. Document existing damage prior to the start of work to avoid responsibility for preexisting conditions. During work operations, provide protection for existing building, finishes, walks, drives, and landscaping in and adjacent to the work areas. Repair or replace building components or site property damaged during the work to match its condition before the damage. If the Contractor fails to repair or replace such damage, the Owner will have the work done by others and the costs of such work will be charged to the Contractor.
- D. Do not store materials, tools, or equipment on any existing roof area adjacent to the work site unless proper protection of the existing roof is provided and the materials are spread out and located at column locations.
- E. The Contractor shall hold the Owner harmless against all claims of damage or alleged damage to any such structure arising out of the work under this Contract.

1.12 FIRE SAFETY

- A. No open fire is permitted on the building site at any time (except for torches to apply modified roof membrane).
- B. Take all precautions to eliminate possible fire hazards at the site, including but not limited to the following:
 - 1. Remove all combustible debris from the roof and storage areas on a daily basis.
 - 2. Store highly flammable materials in well-ventilated areas; mixing and preparation of such materials is also restricted to such areas. Handle all such materials in accordance with safe practices and the requirements of authorities having jurisdiction.
 - 3. The Contractor shall not store large quantities of flammable materials at the site.

1.13 VANDALISM

- A. The cost for any damage by vandalism to material or equipment or that, which occurs to items finished or installed under this contract, is to be borne by the Contractor. The Contractor is responsible for such vandalism from the date of the Notice to Proceed until Final Completion.

1.14 TEMPORARY UTILITIES AND FACILITIES

- A. Water and electricity may be available in the area where work will be performed. If so, the Contractor will not be charged for reasonable use of these services for construction operations. The Contractor shall pay costs for installation and removal of any temporary connections including necessary safety devices and controls.

1.15 MISCELLANEOUS FACILITIES AND CONTROLS

- A. New materials delivered to and stored outdoors on the jobsite shall be fully protected from weather by placement on raised platforms and shall have secure waterproof plastic coverings or tarpaulins. The waterproof plastic coverings or tarpaulins shall not

extend all the way to the ground surface. They shall terminate a few inches above the ground surface. Factory-provided plastic wrap is not an acceptable waterproof covering.

- B. Contractors and their employees or suppliers will not use or interfere with existing public access, drives, roads or parking lots, except as specifically indicated by prior arrangement with the Owner.
- C. Contractor's employee parking, delivery trucks and other construction vehicle parking will only be allowed in areas designated by the Owner.
- D. The Contractor shall provide and regularly maintain portable sanitary facilities at the site. The contractors' employees shall not utilize the restrooms in the school buildings.

1.16 NO SMOKING POLICY

- A. Owner has a strict no smoking policy, which includes all buildings, grounds and vehicles. No smoking will be allowed anywhere on school property at any time.

1.17 REMOVAL OF DEBRIS

- A. Remove all rubbish and debris from the site daily or more often if directed by the Owner. The premises shall be maintained as clean as practical, consistent with the neatness required for the Owner's normal operations.
- B. No storage of removed items or debris will be permitted on the site unless so directed by the Owner.
- C. The location of the trash containers is subject to the Owner's approval.
- D. During non-construction hours, cover and seal trash containers to prevent wind-blown debris and access into trash containers.

END OF SECTION

SUMMARY OF WORK

Project: GRPS Parking Lot Improvements

Work shall include:

Work under this Contract consists of furnishing all materials, tools, and equipment, and performing all services and labor required for complete construction of all work shown on the Plans, cross sections, and details, or specified herein, complete and ready for use. The Work shall include miscellaneous drainage structure repair, full depth HMA base crushing and shaping, select curb and gutter and gutter pan replacement, HMA resurfacing, and turf establishment at Westwood Middle School and Union High School.

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SECTION 1

GENERAL CONDITIONS AND REQUIREMENTS

1.01 DEFINITIONS OF TERMS

Whenever the words hereinafter defined, or pronouns used in their stead, occur in the Contract or any included documents, they shall have the meanings herein given.

1.01.01 Owner – Grand Rapids Public Schools
900 Union Avenue NE
Grand Rapids, Michigan 49503

1.01.02 Deleted

1.01.03 Deleted

1.01.04 Deleted

1.01.05 Engineer. Moore & Bruggink, Incorporated, or other engineer or engineering firm, duly-authorized as agent or representative of the Owner.

1.01.06 Inspector. The authorized representative of the Owner, assigned to make inspections of any or all portions of the Work or the materials therefore.

1.01.07 Laboratory. Any qualified Laboratory which may be designated by the Owner to inspect and determine the suitability of materials.

1.01.08 Bidder. The individual, partnership, or corporation formally submitting a Proposal for the Work contemplated, or any portion thereof, acting directly or through an authorized representative.

1.01.09 Contractor. The individual, partnership, or corporation undertaking the execution of Work under the terms of the Contract and acting directly or through agents or employees.

1.01.10 Subcontractor. The individual, partnership, or corporation undertaking the execution of part of the Work under the terms of the Contract, by virtue of an agreement with the Contractor, and with the consent of the Owner.

1.01.11 Specifications. Specifications for this project prepared by the Engineer.

1.01.12 Addenda or Addendum. Any additional Contract provisions or changes, revisions, or clarification of the Contract documents issued in writing by the Engineer on behalf of the Owner, to all prospective Bidders prior to the receipt of bids.

1.01.13 Contractor's Prequalification. The classification and rating based on the Experience and Financial Statement of the Bidder.

1.01.14 Proposal. The written offer of the Bidder, on the form furnished by the Owner for the Work proposed.

1.01.15 Proposal Guarantee. The security designated in the Proposal and furnished by the Bidder as a guarantee of good faith to enter into a contract for the Work proposed.

- 1.01.16 Contract and Included Documents. The agreement covering the performance of the Work in accordance with the construction drawings and as provided in the Specifications. The Contract includes the Proposal, Information for Bidders, Contract Bond, all Specifications, general and detailed construction drawings, all supplemental agreements, and all general or special provisions pertaining to the Work or the materials therefore.
- 1.01.17 Progress Clause. That part of the Contract pertaining to the order of proceeding with the various items of the Work to be done and the rate of progress for completing said items of Work.
- 1.01.18 Surety. The corporate body which is bound with and for the Contractor for the performance of the Contract and for the payment of all lawful indebtedness pertaining thereto.
- 1.01.19 Contract Bond. The statutory bonds, executed by the Contractor and the Surety, guaranteeing performance of the Contract and the payment of all lawful indebtedness pertaining thereto.
- 1.01.20 Approved. Wherever in the Specifications or upon the Plans, the words “as ordered,” “as directed,” “as required,” “as permitted,” or words of like import are used, it shall be interpreted that the order, direction, requirements, or permission of the Engineer is intended; and similarly, the words “approved,” “acceptable,” “satisfactory,” or words of like import shall mean approved by, or acceptable or satisfactory to the Engineer.
- 1.01.21 Work. Work shall mean the furnishing of all labor, materials, equipment, and other incidentals necessary or convenient to the successful completion of the project and the carrying out of all the duties and obligations imposed by the Contract.
- 1.01.22 Abbreviations.
- AASHO – American Association of State Highway Officials
ASTM – American Society for Testing and Materials
AWWA – American Water Works Association
ASA – American Standards Association, Inc.
MDOT – Michigan Department of Transportation
MDOT Current Standard Specifications for Construction – Standard Specifications for Construction as issued by the Michigan Department of Transportation including supplemental specifications which have been adopted as of the date of the Contract
MIOSHA – Michigan Occupational Safety and Health Act or Administration
- 1.02 BIDDING REQUIREMENTS
- 1.02.01 Deleted
- 1.02.02 Competency of Bidders. Bidder must be prequalified as being capable of performing the Work proposed under this Contract. All persons intending to bid on this project must meet the prequalification requirements as indicated in the Information for Bidders. Proposals will not be accepted from Bidders who have not submitted the prequalification information or from Bidders who have been determined by the Owner to be not qualified to perform the Work.
- A previous failure on the part of any Bidder to perform a contract satisfactorily, or the lack of experience, equipment, or capital necessary for the satisfactory completion of the Work, will be sufficient cause for disqualification.

No contract will be awarded to any person, partnership, or corporation which is in arrears to the Owner for taxes or any other claim.

1.02.03 Contents of Proposal Form. Bidders will be supplied with Proposal forms which will state the location and description of the Work planned, the approximate quantities of the Work to be performed and materials to be furnished, the amount of the Proposal Guarantee, and the date, time, and place of filing and opening bids.

1.02.04 Interpretation of Estimates. The Engineer's estimate of quantities appearing in the Proposal are approximate only and are prepared for the comparison of bids. Payment to the Contractor will be made only for actual quantities of Work performed and accepted, or materials furnished in accordance with the Contract. The scheduled quantities of Work to be done and materials to be furnished may each be increased, decreased, or omitted as hereinafter provided.

1.02.05 Examination of Plans, Specifications and Site of the Work. Before submitting their Proposals, Bidders shall examine the site of the proposed Work, as well as the Drawings and Specifications. They shall also inform themselves of all the requirements of federal, state, and local laws and regulations which may affect the proper prosecution of the Work.

1.02.06 Preparation of Proposal. The Proposal shall be legibly prepared with ink or typed on the form provided. The Bidder shall specify a unit price for each item in the Proposal, and shall show the products of the respective quantities and unit prices in the column provided for that purpose, and the total sum for which he will perform the proposed Work. Any Proposal which does not contain a bid price for each item will be deemed incomplete and will not be considered. Unsolicited alternative bids for any item will not be considered and shall not be submitted, and if submitted, may cause the bid to be rejected. Unbalanced bids are not acceptable and will be grounds for disqualification of bid.

The Proposal shall be properly signed and the complete address of the Bidder shown thereon. If the Bidder is a corporation, the Proposal shall be signed by its duly authorized officers and authority for the signatures shall be attached thereto. If the Bidder is a partnership, the Proposal shall be signed by all partners.

1.02.07 Proposal Guarantee. No bids will be considered by the Owner unless there is enclosed a certified check or bid bond from an approved surety payable to the order of the Owner in the sum of five percent (5%) of the Proposal. The checks of the three lowest Bidders will be retained by the Owner until the Contract has been executed by the successful Bidder and his surety. The checks of all other Bidders will be returned at once.

1.02.08 Delivery of Proposal. The Proposal shall be submitted in a sealed envelope which shall be plainly marked with the same complete project designation shown on the title sheet of the Proposal and with the name and address of the Bidder on the outside of the envelope. All Proposals must be received by the Owner prior to the time and at the place indicated in the Information for Bidders. More than one Proposal for the same project from an individual, partnership, or corporation will not be considered.

1.02.09 Public Opening of Proposals. The Proposals will be opened publicly and read aloud at the time and at the place specified in the information for Bidders.

1.03 AWARD AND EXECUTION OF CONTRACT

1.03.01 Consideration of Proposals. The Proposals received will be compared on the basis of the summation of the products of the quantities of items listed and the unit prices as written in

the Proposal. The unit prices shall govern, and any errors found in the products, or in addition, will be corrected.

The right is reserved by the Owner to reject any or all Proposals, to waive technicalities, to advertise for new Proposals, or to proceed to do the Work otherwise, if in the judgment of the Owner, the best interest of the Owner will be promoted thereby.

1.03.02 Execution of Contract. Acceptance of the Proposal of the successful Bidder, and the rejection of the other Proposals, will be made as soon as practicable after receiving the bids. The Owner will transmit to the successful Bidder, at the address given on his Proposal, Contract and bond forms which shall be fully executed and returned to the Owner within ten (10) days after such transmission.

1.03.03 Contract Bond Requirements. The successful Bidder shall furnish satisfactory performance and payment (lien) bonds each in an amount equal to the total Contract price. Such bonds shall be on the forms provided by the Owner and shall conform to the regulations of the Owner and the requirements specified in the laws of Michigan.

1.03.04 Failure to Execute Contract. Failure on the part of the successful Bidder to execute a Contract and file satisfactory bonds, as provided herein, may be considered cause for the annulment of the award and the forfeiture of the Proposal guarantee to the Owner.

1.04 INSURANCE AND LEGAL RELATIONS AND RESPONSIBILITIES

1.04.01 Damage Liability and Insurance Requirements. As Defined in AIA – A105 Contract

1.04.02 Laws and Regulations. The Contractor shall at all times observe and comply with all federal, state, local and/or municipal laws, ordinances, rules, and regulations which may in any manner affect the equipment and materials used in the proposed construction, those employed on the Work, and the conduct of the Work, and he shall save harmless and indemnify the Owner and all of its officers, agents, and employees against any claim or liability arising from the violation thereof.

Pursuant to the requirements of current applicable state law, the Contractor agrees not to discriminate against any employee or applicant for employment to be employed in the performance of the Contract with respect to his hire, tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment, because of his race, color, religion, national origin, age, sex, height, weight, or marital status. The Contractor further agrees that every subcontract entered into for the performance of the Contract will contain a provision requiring nondiscrimination in employment, as herein specified, binding upon each Subcontractor. Breach of this covenant may be regarded as a material breach of the Contract.

1.04.03 Owner Charter. The Owner Charter shall be the governing document in all contractual relations with the Owner. Any apparent discrepancy in the text of any other document or in construction drawings, or in sketches, shall be interpreted or construed, or set aside in favor of the specific provisions or provisions of the Owner Charter.

1.04.04 Permits and Licenses. The Contractor shall procure all permits and licenses and pay all charges and fees necessarily incidental to the due and lawful prosecution of the Work.

1.04.05 Patented Processes and Materials. The Contractor shall defend any and all patent infringement suits resulting from the use of any design, device, material, or process on the Plans, and he shall save harmless and indemnify the Owner and Engineer on account of such suits or claims for royalties, damages, and costs.

1.04.06 No Waiver of Legal Rights by Owner. The Owner or any officer, agent, or employee thereof, shall not be stopped, bound, or precluded by any determination, return, decision, approval, order, letter, payment, or certificate made or given by the Owner, or any officer, employee, or agent of the Owner at any time, either before or after the final completion and acceptance of the Work and payment therefore from:

- a. Showing the true and correct amount, classification, quality, and character of the Work done and materials furnished by the Contractor or any other person under this Contract, or from showing at any time that any determination, return, decision, approval, order, letter, payment, or certificate is untrue and incorrect, or improperly made in any particular, or that the Work or materials or any part thereof do not in fact conform to the Specifications, and
- b. From demanding and recovering from the Contractor any overpayments made to him, or such damages as it may sustain by reason of his failure to perform each and every part of this Contract in strict accordance with its terms, or both.

1.04.07 Underground Conditions and Subsurface Data. The Contractor hereby agrees to accept full responsibility for his conclusions relative to the nature and probable difficulties of the Work due to underground structures and soil conditions.

The results of subsurface soil investigations when shown on the Drawings or given in the Specifications or furnished by other means are for general information only.

Neither the Owner nor the Engineer guarantees that materials other than those given in this information will not be encountered or that the proportions of the various materials will not vary from the information indicated on the Plans or given in the Specifications.

The Contractor shall be responsible for making his own subsurface soil investigations and shall make his own determinations therefrom. The Contractor hereby waives all claim for damages which he may suffer by reason of the inadequacies or discrepancies of the underground information shown on the Plans or provided in the Specifications. No compensation will be paid to the Contractor due to inadequacies or discrepancies in subsurface data furnished by the Owner or the Engineer.

1.04.08 Land and Rights-of-Way. The Owner will furnish or acquire all land and rights-of-way to be occupied by the project. Where possible, the Contractor shall confine his operations to the rights-of-way or easements shown on the Plans and shall use care in placing construction materials and equipment, and excavated materials so as to cause the least possible damage to property and interference with traffic.

If it is necessary or desirable that the Contractor use or occupy land outside of the Owner right-of-way, the Contractor shall obtain written consent from, or execute a written agreement with, the owner and tenant of such land permitting such occupation; the Contractor shall not enter for material delivery or occupy for any other purposes with men, tools, equipment, construction materials, or with materials excavated from trenches, any private property outside the designated right-of-way boundaries without such written permission from the owner and tenant of the entered or occupied property.

In the event certain land or rights-of-way have not been obtained as contemplated before construction begins, the Contractor shall begin his work upon such land and rights-of-way as the Owner has previously acquired. No claim for damages will be allowed due to any rescheduling of Work that may be required.

- 1.04.09 Contractor's Responsibility for Work. Until the final acceptance of the Work by the Engineer, as evidenced in writing, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof by the action of the elements or from any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the Work. The Contractor shall rebuild, repair, restore, and make good all injuries or damage to any portion of the Work occasioned by any of the above causes before final acceptance and shall bear the expense thereof, except damage to the Work due to unforeseeable causes beyond the control of and without fault or negligence of the Contractor, including but not restricted to acts of God or of the public enemy, or acts of the Government.
- 1.04.10 Protection and Restoration of Property. The Contractor shall restore, at his own expense, any public or private property damaged or injured as a result of any act or omission on his part or on the part of his employees or agents, to a condition similar to and equal to that existing before such damage or injury was done. The Contractor shall make satisfactory and acceptable arrangements with the owner of, or the agency or authority having jurisdiction over, the damaged property or facility concerning its repair or replacement. If the Contractor neglects to make such repairs or replacement, the Owner may, after 48 hours' notice to the Contractor, proceed to make such repairs or restoration by other means and the cost thereof will be deducted from any monies that are or may become due the Contractor. Land monuments and property corners and other reference marks shall be carefully protected from damage or disturbance until the Engineer has witnessed or otherwise referenced their location and shall not be removed until directed.
- 1.04.11 Guarantee. The Contractor shall promptly repair, replace, restore, or rebuild, as the Owner may determine, any finished Work in which defects of materials or workmanship may appear or to which damage may occur because of such defects during the one-year period subsequent to the date of final acceptance. Notice by the Owner to the Contractor to repair, replace, rebuild, or restore such defective or damaged work shall be timely if given not later than ten days subsequent to the expiration of the one-year period or other periods provided herein.
- 1.04.12 Assignments. The Contractor shall not assign, transfer, convey, or otherwise dispose of this Contract or his right to execute it or his right, title, or interest to it or any part thereof, or assign any of the monies due or to become due under this Contract, without the prior written consent of the Owner.
- 1.04.13 Unlawful Provisions. All unlawful provisions shall be deemed stricken from the Contract and shall be of no effect. Upon the application of either party, the unlawful parts shall be considered stricken without affecting the binding force of the remainder of the Contract.
- 1.04.14 Time. In the performance of the Work under this Contract, time shall be deemed to be of the essence.
- 1.04.15 Other Remedies. The provisions outlined herein shall be in addition to any and all other legal remedies permissible in the premises.
- 1.05 PUBLIC CONVENIENCE AND SAFETY
- 1.05.01 Convenience and Access. The Contractor shall at all times so conduct his work to insure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the Work, and to insure the access of persons to the abutting properties. No road or street shall be closed to the public except with the permission of the proper governmental authorities. Emergency vehicles shall have access at all times and shall be assisted by the Contractor if necessary. Near the end of each day's work, the Contractor shall remove obstructions which would make access difficult or impossible.

The Contractor shall confer with and keep police and fire departments of the municipality fully informed as to streets or alleys which are to be closed to traffic for construction purposes. Fire hydrants on or adjacent to the Work shall be kept accessible to firefighting equipment at all times.

Temporary provisions shall be made by the Contractor to insure the usability of sidewalks and the proper functioning of all gutters, sewer inlets, and drainage ditches.

- 1.05.02 Detours. On those projects where the full width of the street is to be closed or partially closed and the public is required to detour on other streets, the Contractor shall furnish and maintain adequate barricades and signs in accordance with the requirements of the appropriate government authorities having jurisdiction over such streets, including street intersections along the detour route, and the Contractor shall furnish and maintain adequate signs and lights at those barricades.

When a detour of traffic is considered necessary to expedite the Work, it shall be approved sufficiently in advance of the road closing to make the necessary arrangements with the proper governmental authorities.

- 1.05.03 Lights, Signs and Barricades. The Contractor shall provide adequate warning signs, barricades, lights, and flagmen and shall take all necessary precautions for the protection of the Work and the safety of the Workmen and of the general public. All streets, roads, highways, alleys, and other areas accessible to the public which are closed to traffic shall be protected by means of effective barricades on which shall be placed approved warning signs.

All open trenches and other excavations shall be provided with suitable barriers, signs, and lights to the extent that adequate protection is provided to the public against accident by reason of such open construction. Obstructions, such as material piles and equipment, shall be provided with similar warning signs and lights.

All barricades shall be illuminated by means of warning lights at night and all lights used for this purpose shall be kept lighted from sunset to sunrise.

All barricades, signs, lights, and other protective devices shall be installed and maintained in conformity with applicable statutory requirements and, where within railroad and highway rights-of-way, as required by the authority having jurisdiction thereover.

- 1.05.04 Dust Control. The Contractor shall keep paved surfaces cleaned and free of debris and shall control dust from construction operations by the application of water, salt, chloride, or by other approved means. If the Contractor fails to correct unsatisfactory conditions promptly after due notification, the Owner will arrange for this Work to be performed by other means and will deduct the cost thereof from any monies that are or may become due the Contractor.

- 1.05.05 Accident Prevention and Safety. The Contractor shall comply with all federal, state, and local laws and regulations, safety devices, and protective equipment. He shall also take any other needed actions on his own responsibility as necessary to protect the life and health of employees on the job, the safety of the public and to protect property during the construction of the project.

The Contractor shall be fully responsible for all accident prevention and safety requirements as may be necessary for the prosecution of his work under this Contract.

1.05.06 Drug & Alcohol Abuse. Contractor agrees no person performing any work on the Owner's property shall, at any time that they are on the Owner's property, either use or be under the influence of illegal drugs or alcohol.

Contractor agrees to immediately remove his employees, or those of any subcontractor or lower tier subcontractor, who violates this policy.

In the event that the Owner or Engineer determines that this provision has been violated, the Owner shall also reserve the right to terminate the Contract immediately upon written notice to the Contractor.

1.05.07 Sanitary Provisions. The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as may be necessary to comply with requirements and regulations of the federal, state, and local health authorities, and he shall take such precautions as are necessary to avoid creating unsanitary conditions.

1.06 SCOPE OF THE WORK

1.06.01 Intent of Plans, Specifications, and Contract. The intent of the Plans, Specifications, and Contract is to provide for the substantial and acceptable completion of all Work shown on the Plans or specified herein or otherwise required by the Contract documents. The Contractor shall furnish all labor, materials, equipment, tools, transportation, and necessary supplies and shall perform all operations required to complete the Work ready for use.

1.06.02 Increased or Decreased Quantities. The Owner reserves the right under the Contract to make such changes from time to time in the character of the Work and the length of the project as may be necessary or desirable to insure the completion of the Work in the most satisfactory manner. When said changes are made in original Contract items, payment shall be as specified under Measurement and Payment 1.09.03.

1.06.03 Deleted Items. The Owner shall have the right at any time to eliminate the performance or completion of any Contract item, and shall promptly notify the Contractor in writing of such action. A fair and equitable amount, representing actual cost incurred on such items prior to such elimination, shall be agreed upon in writing and paid to the Contractor.

1.06.04 Extra Work. In connection with the Work included under the Contract, the Owner may at any time during the progress of the Work, order Work to be performed whenever it is determined necessary or desirable to complete fully the project as contemplated. Such Work shall be done in accordance with the intent of the Contract provisions. No Extra Work shall be performed without prior written authorization from the Owner by means of an approved Change Order or by a written Field Order from the Engineer after approval of the Owner. Field Orders will be added to the Contract by incorporating them into subsequent Change Orders or by including them as extra items in payment requests which are approved by the Owner. Measurement and Payment shall be as specified under Measurement and Payment 1.09.04.

1.06.05 Final Cleaning Up. Upon completion and before final acceptance of the Work, the Contractor shall remove all false work, excavated or useless materials, rubbish, and temporary buildings, bridges, and approaches, replace or renew any fences damaged, and restore in an acceptable manner all property, both public and private, which may have been used or damaged during the prosecution of the Work. The Contractor shall remove from the right-of-way all machinery, equipment, and surplus material and leave all areas

occupied by the Contractor in conjunction with the Contract in a neat and presentable condition satisfactory to the Engineer.

1.07 CONTROL OF THE WORK

1.07.01 Authority of the Engineer. The Engineer shall decide all questions which may arise as to the quality and acceptability of materials furnished, and the completed Work performed; all questions which may arise as to the interpretation of the Plans and Specifications; and all questions as to the fulfillment of the terms of the Contract. The Owner reserves the right to make minor technical changes in the design, when such changes would provide better construction in the judgment of the Engineer, and would not incur additional expense for the Contractor. The authority thus exercised by the Engineer shall be construed as having been delegated to him by the Owner and that he is acting on behalf of the Owner.

1.07.02 Plans and Working Drawings. Plans showing such details as are necessary to give a comprehensive idea of the proposed construction will be furnished by the Engineer; however, the Contractor shall submit to the Engineer for approval such additional shop drawings or working drawings as may be specified or required by the Engineer for any part of the finished Work. Shop drawings shall be submitted according to the following schedule:

- a. Six (6) copies shall be submitted in sufficient time to secure final approval and delivery of materials before the materials indicated thereon are to be needed in order to prevent delay of the Work.
- b. The Engineer shall, within fourteen (14) days of the submittal of any shop drawings, return three (3) copies to the Contractor marked with all corrections and changes required to secure conformance with the Plans and Specifications.
- c. The Contractor shall then correct the shop drawings to conform to the corrections and changes requested by the Engineer, and return six (6) copies to the Engineer for final approval.
- d. The Engineer shall, within fourteen (14) days of the submittal of corrected shop drawings, return three (3) copies to the Contractor marked with any additional corrections and changes, or marked as approved.
- e. Following receipt of approved shop drawings, the Contractor shall order his materials.

After written approval by the Engineer, these shop drawings or working drawings shall become a part of the Contract but shall in no instance supersede the Contract document.

The approval of the Engineer shall not relieve the Contractor from any responsibility for deviation from the Plans or Specifications, nor shall it relieve him from responsibility for errors of any kind in the information submitted.

1.07.03 Equipment Approval Data. The Contractor shall furnish six (6) copies of complete catalog data for every manufacturer's item of equipment and all components thereof to be used in the Work, including specific performance data, material description, rating, capacity, working pressure, material gage or thickness, brand name, catalog number, etc. This submission shall be compiled by the Contractor and approved in writing by the Engineer before any of the equipment is ordered.

It shall be the responsibility of the Contractor to make the necessary field measurements to ascertain space requirements for the various items to be furnished. Any deviations or conflicts in the space required shall be reported to the Engineer immediately.

Equipment approval data shall be considered as shop drawings and shall meet all the requirements specified in Section 1.07.02 above.

1.07.04 Coordination of Plans and Specifications. The intent of the Plans and Specifications is to provide for the completion of the Work in every detail, as shown thereon and as described herein. In case of discrepancy, figured dimensions shall govern over scaled dimensions and project Plans shall govern over Specifications.

1.07.05 Discrepancies in Plans and Specifications. Any discrepancies found between the Plans and Specifications and site conditions, and any errors or omissions in the Plans or Specifications shall be immediately reported to the Engineer who shall promptly correct such discrepancies, errors, or omissions in writing. Any work done by the Contractor after his discovery of such discrepancies, errors, or omissions and before corrections have been made by the Engineer, shall be done at the Contractor's risk.

1.07.06 As-built Records. The Contractor shall keep a record of all changes and deviations from the Contract documents that may take place during construction and shall make such additional measurements as may be required to accurately locate underground pipes, fittings, stubs, and all similar items of work before they are covered. If, for any reason, the Contractor fails to make these measurements as required, the item or items in question shall be uncovered by the Contractor so these measurements can be made accurately.

The Engineer will furnish one (1) set of Plans to the Contractor for these records. Upon completion of construction, but prior to final payment, the Contractor shall submit these Plans to the Engineer with all measurements and all other records complete.

1.07.07 Schedule of Operations. Before execution of a contract by the Owner, the Contractor shall prepare a detailed schedule of all construction operations that shall not only indicate the sequence of the Work but also the time of starting and completion of each part. The schedule shall be submitted to the Engineer for approval.

If conditions beyond the control of the Contractor justify, and the Owner approves, an extension of time, the Contractor shall revise the construction schedule in accordance with such approved extension.

The Owner may require the Contractor to add to his plant, equipment, or construction forces, as well as increase the Working hours, if operations fall behind the approved schedule to an extent that the completion of the Work within the specified time appears doubtful.

After the Contractor's schedule of operations has been submitted to the Engineer for review and before any Work is begun on the project, a meeting will be held at a location designated by the Engineer. Persons in attendance at this meeting shall be the Contractor, the Contractor's supervisor, the Engineer's representative and any other representatives which may be designated by the Owner. The purpose of this meeting will be to discuss the Contractor's schedule of operations, construction staking, and general coordination of the Work and also to clarify any questions the Contractor may have on any of the requirements specified under the Contract.

1.07.08 Supervision and Superintendence. The Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills

and expertise as may be necessary to perform the Work in accordance with the Contract. The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The Contractor shall be responsible to see that the complete Work complies accurately with the Contract.

The Contractor shall keep on the Work at all times during its progress a competent superintendent, who will cooperate fully with the Engineer at all times, and who shall not be replaced without written notice to the Engineer except under extraordinary circumstances. The superintendent will be the Contractor's representative at the site and shall have authority to act on behalf of the Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor.

1.07.09 Deleted

1.07.10 Datum of Elevations. The figures appearing after the word "elevation" or an abbreviation thereof, or figures shown on profiles indicating elevation in the Contract and Specifications and Plans shall mean the distance in feet above sea level as established by the United States Coast and Geodetic Survey unless otherwise indicated in the Specifications or shown on the Plans.

1.07.11 Construction Staking. Unless otherwise specified, construction stakes will be furnished by the Engineer. The Contractor shall give 24 hours' notice when requesting stakes.

The Contractor shall exercise proper care in the preservation of all stakes set for his use or the use of the Engineer and if such stakes are damaged, lost, or removed by the Contractor's operation, the cost of resetting may be charged to the Contractor.

Any irregularity in grade and/or line stakes discovered by the Contractor shall be reported to the Engineer for correction before proceeding with the Work.

The Contractor shall provide such additional methods, materials, or equipment as may be necessary to facilitate laying out, inspecting, and construction of the Work. The Contractor shall assume full responsibility for all detailed dimensions and elevations measured from the lines, grades, and elevations established by the Engineer. The Contractor shall be responsible for making regular checks of line and grade provided by the Engineer.

The construction stakes shall be left in place until each phase of the Work has been completed and inspected. In the event there are discrepancies in the location of grade of the Work, the Contractor shall be responsible for making the necessary corrections unless grade stakes are left in place that show evidence of an error in staking. In the event of a dispute about errors after the stakes are removed, the Contractor shall provide proof of diligence in making grade checks before and during construction.

1.07.12 Cooperation by Contractor. The Contractor shall conduct his operations so as to interfere as little as possible with those of other Contractors, utilities, or any public authority on or near the Work as shown on the Plans or in the Proposal. The Owner reserves the right to perform other work by contract or otherwise, and to permit public utility companies and others to do work on or near the project during progress of the Work.

The Contractor shall conduct his work and cooperate with such other parties so as to cause as little interference as possible with their operations and as the Engineer may direct. No additional compensation will be paid to the Contractor for any delay or inconvenience due to material shortages or reasonable delays due to the operations of such other parties doing the Work indicated or shown on the Plans or in the Proposal, or for any reasonable delays on construction due to encountering existing utilities that are shown on the Plans.

- 1.07.13 Utilities – Location and Protection. The utilities shown on the Plans are located according to the latest available information. The Owner does not guarantee the accuracy of such information. The Contractor shall make a conscientious effort as may be required to verify the locations and/or elevations of all existing utilities which may be affected by the proposed construction.

At points where the Contractor's operations are near the properties of railroad, telephone, and power companies or are near existing underground utilities, damage to which might result in considerable expense, loss, or inconvenience, Work shall not be commenced until all arrangements necessary for the protection thereof have been made.

The Contractor shall protect, shore, brace, support, and maintain all utilities affected by his operations. The Contractor shall be responsible for all damage to utility properties or facilities and shall make his own arrangements with the agency or authority having jurisdiction thereover concerning repair or replacement or payment of costs incurred in connection with said damage.

In the event of interruption to utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the utility owner and shall cooperate with said owner in the restoration of service. If utility service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire department.

- 1.07.14 Work Within Highway and Railroad Rights-of-Way. All Work performed and all operations of the Contractor or his Subcontractor within the limits of railroad and highway rights-of-way shall fulfill all of the requirements of the railroad and highway authority having jurisdiction over and control of the right-of-way in each instance. All of the precautionary construction methods required by the railroad or highway authority shall be performed by the Contractor.

- 1.07.15 Use of Explosives. When the use of explosives is necessary for the prosecution of the Work, the Contractor shall exercise the utmost care not to endanger life or property including new work. The Contractor shall be responsible for all damage resulting from the use of explosives.

All explosives shall be stored in a secure manner in compliance with all laws and ordinances, and all such storage places shall be clearly marked.

The Contractor shall notify each public utility company having facilities in proximity to the site of the Work of his intention to use explosives. Such notice shall be given sufficiently in advance to enable the companies to take such steps as they may deem necessary to protect their property from injury.

- 1.07.16 Inspection. The Owner or Engineer and their representatives shall be allowed access to all parts of the Work at all times and shall be furnished such information and assistance by the Contractor as may be required to make a complete and detailed inspection.

- 1.07.17 Authority and Duties of the Inspector. An Inspector may be appointed to inspect any or all of the Work and the materials used in the Work, including the preparation or manufacture of such materials.

The Inspector shall have the authority to prevent the use of materials which do not meet specifications and to stop Work being done which he believes involve inferior materials or

workmanship, which will result in a finished product less than required by the Plans and Specifications.

The Inspector shall not be authorized to revoke, alter, enlarge, or relax any of these Specifications nor to change the Plans. Neither shall he be authorized to increase or decrease Contract items nor to add new items to the Contract, nor to direct or control the Contractor's work.

If a dispute arises between the Contractor and the Inspector as to the materials furnished or performance of the Work, the Inspector shall have the authority to reject materials or suspend the Work until the dispute is decided by the Engineer and Owner. Work done contrary to the Inspector's directions or while suspended by the Inspector will be considered unauthorized and may have to be removed and replaced at the Contractor's expense as specified in Section 1.07.20.

In no instance shall any action or omission on the part of the Inspector relieve the Contractor of the responsibility of completing the Work in accordance with the Plans and Specifications.

1.07.18 Quality of Equipment and Materials. In order to establish standards of quality, the Engineer has specified certain products by name and catalog number. This procedure is not to be construed as eliminating from competition other products of equal or better quality which are fully suitable in design. The specific article, material, or equipment mentioned shall be understood as indicating the type, function, minimum standard of design, efficiency, and quality desired and shall not be construed in such a manner as to exclude manufacturer's products or comparable quality, design, and efficiency.

If the Contractor desires to use materials other than those specified, he shall furnish and submit such additional data and information as the Engineer may require prior to ordering any such substitutions.

All Proposals for substitutions shall be submitted in writing by the Contractor and not by individual trades or materials suppliers. No substitutions in the equipment or material specified shall be made without prior written approval of the Engineer.

1.07.19 Materials Testing. The Owner reserves the right to sample and test any of the materials required for the proposed construction either before or after delivery to the project, and to reject any material represented by any sample which fails to comply with the minimum requirements specified.

The Contractor shall furnish all materials reasonably required and shall pay all costs for sampling, testing, and analysis necessary for the testing of materials as required by these Specifications.

Tests shall be conducted or observed by an independent testing Laboratory acceptable to the Owner.

The testing Laboratory shall certify to the Owner full compliance with the specified requirements for all accepted materials and shall submit reports covering all tests, acceptances, and rejections. Each test report shall be certified by a qualified person who actually conducted or observed the test. The Contractor shall furnish not less than three copies of each test report and shall distribute them as directed by the Engineer.

1.07.20 Defective Materials and Work. All materials which do not meet the requirements of the Specifications at the time they are to be used will be rejected, and, unless otherwise permitted by the Owner or Engineer, shall be removed immediately from the Work.

Any defective work that may be found before the final acceptance of the Work shall be corrected and replaced immediately as directed by the Owner or the Engineer.

1.07.21 Unauthorized Work. Work done without lines and grades being given, work done beyond the lines shown on the Plans or as given, work done without required inspection, or any extra work done without authority may be considered as unauthorized and may not be paid for under the provisions of the Contract. Work so done may be ordered removed or replaced at the Contractor's expense.

1.07.22 Disputed Claims for Extra Compensation. In case the Contractor deems extra compensation is due him for work or materials not clearly covered in the Contract, or not ordered by the Engineer, the Contractor shall notify the Engineer in writing of his intention to make claim for such extra compensation before he begins work on which he bases the claim and the Contractor shall afford the Engineer every facility for keeping actual cost of the Work. Failure on the part of the Contractor to give such notification or to afford the Engineer proper facilities for keeping strict account of actual cost will constitute a waiver of the claim for such extra compensation. The filing of such notice by the Contractor and the keeping of cost by the Engineer shall not in any way be construed to establish the validity of the claim. When the Work has been completed, the Contractor shall immediately file his claim for extra compensation with the Engineer.

1.07.23 Final Inspection. The Owner or Engineer shall make inspection of all Work included in the Contract, or such portions thereof which are eligible for acceptance, as soon as possible after notification by the Contractor that the Work is completed. If the Work is not acceptable to the Owner or Engineer at the time of such inspection, he shall inform the Contractor orally or in writing as to the particular defects to be remedied before final acceptance.

1.08 PROSECUTION AND PROGRESS

1.08.01 Prosecution of the Work. The Contractor shall begin Work in accordance with the schedule of operations after being notified by the Owner of the award of the Contract. He shall prosecute the Work with force and equipment adequate to complete the major items, portions, or sections in accordance with the time schedule set forth in the schedule of operations. In case of failure to proceed with the Work as rapidly as provided in said schedule, or if it appears at any time that such work is not being prosecuted in such a manner as to insure its completion within the time specified, the Engineer shall have the right to require the Contractor to furnish and place in operation such additional force and equipment as necessary to bring the Work up to the progress required to complete the Work by the date specified.

1.08.02 Limitations of Operations. No work shall be done between 7:00 p.m. and 6:00 a.m., nor on Sundays or legal holidays, except such work as is necessary for the proper care and protection of work already performed, or except in case of an emergency, and in any case only with the permission of the Engineer.

It is understood, however, that night work may be established as a regular procedure by the Contractor if he first obtains the written permission of the Engineer and that such permission may be revoked at any time by the Engineer if the Contractor fails to maintain at night adequate force and equipment for reasonable prosecution and to justify inspection of the Work.

1.08.03 Personnel and Equipment. The Contractor shall employ only competent and efficient personnel, and whenever, in the opinion of the Owner, any employee is careless, incompetent, dishonest, obstructs the progress of the Work, acts contrary to instruction, or conducts himself improperly, the Contractor shall, upon complaint of the Owner, discharge or otherwise remove such employee from the Work and shall not employ him again thereon.

The working force, methods, equipment, and appliances used on the Work shall be such as will produce a satisfactory quality of work.

Equipment used on any portion of the Work shall be of proper size and design to perform the Work with reasonable efficiency and without unnecessary destruction of property or inconvenience to the general public.

1.08.04 Subcontracting or Sub-letting.

a. Definitions. A Subcontractor is the individual, partnership, or corporation undertaking the execution of a part of the Work under the terms of the Contract, by virtue of an agreement with the Contractor.

The term "sub-letting" shall be understood to mean the arrangement by the Contractor with any party or parties to execute any part of the Contract Work.

b. Limitations. The Contractor shall perform with his own organization and with the assistance of workmen under his immediate superintendence, all of the Work embraced in the Contract with the exception of those items which are approved by the Owner for sub-letting.

c. Permission. The Contractor shall not sub-let or assign any portion of the Contract without the written consent of the Owner. Consent of the Owner will only be given on written request by the Contractor. Such consent shall not relieve the Contractor from full responsibility for the performance of the Contract.

d. Subcontractors to be Qualified. Approval of the sub-letting of any portion of the Contract will not be granted unless and until the Subcontractor has furnished adequate evidence to the Owner that he is qualified to perform the Work of the type and the magnitude proposed to be sub-let to him.

1.08.05 Temporary Suspension of Work. The Owner or Engineer shall have the authority to suspend the Work wholly or in part, for such period or periods as he may deem necessary, due to unsuitable weather or such other conditions as are considered unfavorable for the proper prosecution of the Work. The Contractor shall not suspend the Work or remove therefrom equipment or materials without permission from the Owner or Engineer.

Upon suspension, the Work shall be put in proper and satisfactory condition, carefully covered and adequately protected, as directed by the Owner or Engineer. In all cases of suspension of construction operations, the Work shall not again be resumed until authorized by the Owner or Engineer.

1.08.06 Extension of Final Completion Date. A delay beyond the Contractor's control occasioned by an act of God or an act or omission on the part of the Owner, strikes, or increases in the quantities of work, may entitle the Contractor to an extension of time to complete the Work. In order for an extension of time to be considered, the Contractor shall submit a request in writing to the Engineer not later than seven (7) days following the termination of the delay. The Contractor shall set forth fully therein the reasons which he believes would justify the

Owner or Engineer in granting his request and shall also set forth a revised completion date which will provide sufficient additional time for the completion of the Work.

Upon receipt of such written request from the Contractor, if the Owner or Engineer finds that the Work was delayed on account of conditions beyond control of the Contractor, or that the quantities of Work done or to be done are sufficiently in excess of the estimated quantities to warrant additional time, he will, with or without notice to the surety, grant an extension of time, in writing, to such date as appears to him to be reasonable and proper. This date shall thereafter be as binding upon the Contractor and surety as if it appeared in the Contract originally.

When such extension of time, or any part thereof, is granted for the purpose of completing the Work, of one or more of the original Contract items, which, in the judgment of the Owner or Engineer, could have been completed prior to the original completion date, and when the completion date of such original Contract items requires additional expense of inspection, engineering, or other services, the Owner reserves the right to deduct such expense from any monies to be paid the Contractor for the said original Contract items which were completed after the original completion date.

Current estimates of monies earned by the Contractor will not be paid to the Contractor unless the Contract contains a completion date which is not in default at the time such estimates are due, but current after Contract completion date, if all items of Work for which specific payments are provided in the Contract have been finished prior to said completion date.

If an extension of time is not granted, the Contractor's right to proceed with the Work under the Contract may be considered forfeited as of the date for completion originally provided in the Contract or as previously extended, and the Owner may proceed immediately to take over the Work and the materials found thereon and make final settlement of costs incurred as provided under Termination of Contract, except that in such case, it shall not be necessary to give the Contractor the ten-day written notice of such forfeiture.

Permitting the Contractor or the surety to continue and finish the Work, or any part thereof, after the time fixed for its completion may have been extended, shall in no way operate as a waiver on the part of the Owner or any of its rights under the Contract.

1.08.07 Termination of Contract. If the Contractor shall be prosecuting the Work with force, equipment, or materials insufficient to complete the Work by the date set for completion; or shall be performing the Work improperly; or shall discontinue the performance of the Work; or shall neglect or refuse to remove such materials or to correct any such work as shall have been rejected as defective and unsuitable; or shall, for any reason, not carry on the Work in accordance with the Contract; the Owner or Engineer may give the Contractor and surety written notice, specifying the delay, neglect, or default, and the action to be taken by them; and if the Contractor or surety, within a period of ten (10) days after such notice, shall not proceed satisfactorily in accordance therewith, then the Owner shall have full power and authority to take the Work out of the hands of the Contractor and surety; to appropriate and use any and all materials on the ground which may be suitable; or to enter into contract, or use such other methods as in his judgment, may be required for the proper completion of the Work.

If the Contractor commits any act of bankruptcy, or becomes insolvent or be declared bankrupt; if he allows any final judgment against him to remain unsatisfied for a period of five days; or if he shall make an assignment for the benefit of his creditors; then in such case, the Owner shall have full power and authority to proceed in any of the ways aforesaid, forthwith upon the delivery by the Owner or Engineer to the Contractor and surety of written notice stating the reasons for such action.

In case the Owner takes over the uncompleted Work under any of the provisions of this section, all additional costs and damages, and the costs and charges of completing the Work shall be deducted from monies due the Contractor; and if the total of such damages, costs, and charges exceeds the balance of the Contract price which would have been payable to the Contractor had he completed the Work, then the Contractor and surety shall, on demand, pay to the Owner the amount of excess.

1.09 MEASUREMENT AND PAYMENT

1.09.01 Scope of Payment. All costs and expenses incurred by the Contractor in connection with the Work under this Contract shall be included in the unit and lump sum prices submitted in the Proposal. No item of work or cost that is required by the Contract documents for the proper and successful completion of the Contract will be paid for outside of or in addition to the prices given in the Proposal.

Payment for changes or variations in the extent or character of the Work and payment for extra work shall be as specified herein. The Contractor shall accept the compensation, as provided herein, as payment in full for completing all work in accordance with the Contract documents.

1.09.02 Breakdown of Lump Sum Amount. In cases where a lump sum forms the basis of payment under the Contract, the Contractor shall submit a complete breakdown of the Contract amount showing the value assigned to each part of the Work, including an allowance for profit and overhead. Upon approval of the breakdown of Contract amount by the Engineer, it shall be used as a basis for all progress payments.

1.09.03 Payments for Increased or Decreased Quantities. Whenever the quantity of any item of Work as given in the Proposal varies from the original estimate for said item of Work by twenty-five percent (25%) or less, the payment for such item of Work shall be made on the basis of the actual quantity complete at the unit price as bid in the Proposal.

Should the quantity of any item of Work be increased more than twenty-five percent (25%) above the original quantity, the Owner may negotiate a new unit price for each adjustable item thus increased. The Contractor shall not proceed with such additional Work until a written agreement has been executed establishing the unit price for the amount of Work over the original Contract quantity.

Should the quantity of any item of Work be decreased more than twenty-five percent (25%) below the original quantity, the Contractor may negotiate a new unit price for each adjustable item thus decreased. Such adjustment in unit price shall be made upon completion of the Work involved based on the Contractor's actual extra cost by reason of such decrease below the original Contract quantity. Such adjustment in unit price shall be made on the basis of labor, material and equipment cost plus a proportionate amount of overhead and plant charges and not including anticipated profits, but in no case shall the product of the adjusted unit price and the number of units of Work performed exceed the product of the Contract unit price and seventy-five percent (75%) of the Contract quantity. When the final Contract cost, the sum of the regular and extra estimates, is greater than the original Contract price, overhead and plant changes will not be considered in arriving at the adjusted unit price.

Adjustment in the unit price for any item of Work, as provided herein, will not be made if the amount of the adjustment is less than \$500.00.

In case a satisfactory adjustment in price cannot be reached for any such item, the Owner reserves the right to terminate the Contract as it applies to the items in question and make such arrangements as it may deem necessary to complete the Work.

All other items of Work will be paid for at the Contract unit price for the quantity required to complete the Work.

1.09.04 Payment for Extra Work. Extra work shall be performed as specified under Extra Work 1.06.04. No Extra Work shall be performed without a Change Order or a Field Order issued in accordance with the terms and conditions of Section 1.06.04, nor shall the Contractor be compensated for Extra Work unless a Field Order or Change Order was obtained prior to such Extra Work.

Payment for Extra Work shall be made in accordance with one or more of the following methods as determined by the Owner. The method or methods shall be selected by the Owner at the time the Extra Work is authorized.

- a. Lump Sum Proposal. All lump sum Proposals shall be itemized and all quantities and unit prices shall be given, as well as the total amount.
- b. Unit Prices Basis. These unit prices may be those in the original Proposal, or fixed by subsequent agreement.
- c. Force Account Basis. Extra Work shall be done on a force account basis when no satisfactory agreement for payment can be reached between the Contractor and the Engineer or when otherwise ordered by the Engineer. All Extra Work done by force account will be paid for as specified in the current Standard Specifications of the MDOT, under Measurement and Payment 1.09.05.

1.09.05 Partial Payments. Partial payments will be made monthly at the request of the Contractor on the basis of ninety percent (90%) of the value of the Work performed, subject to the following provisions:

- a. That the Work is progressing satisfactorily.
- b. That the orders of the Engineer have been fulfilled.
- c. The time for completion shall not have expired; and
- d. That not less than One Thousand Dollars (\$1,000) have been earned during the month.

Said payments will be based upon estimates, prepared by the Engineer of the value of the Work performed and installation of materials complete in place in accordance with the Contract.

The Owner will retain ten percent (10%) of the amount earned until after completion of the entire Work and its final acceptance, provided that no more than five percent (5%) of the total Contract amount shall be retained under Public Agency Contracts as defined by MI PA 524 of 1980, unless the Work is not progressing satisfactorily.

For non-public agency contracts, the Owner may, after seventy-five percent (75%) or more of the Contract has been earned, reduce the amount withheld to not less than five percent (5%) of the amount earned. If the amount retained is reduced to less than ten percent (10%), the Contractor shall file with the Owner the written consent of the surety to such

reduction and shall furnish an affidavit that all his indebtedness by reason of the Contract has been paid.

In cases where a lump sum forms the basis of payment under the Contract, the Engineer will review the percentages or quantities of Work completed with the Contractor, as a means of estimating the value of Work performed.

At the discretion of the Engineer, and upon presentation of receipted bills from the Contractor, the Engineer may include up to ninety percent (90%) of the cost of certain nonperishable materials or equipment in estimates of the total amount earned for partial payments. The limited availability of such materials, and the progress of the Work will be determining factors in the consideration if payment is made for materials, and such materials shall become the property of the Owner; however, the Contractor shall be entirely responsible for such materials until the materials are incorporated in the Work.

1.09.06

Acceptance and Final Payment. When the Work has been completed and the Engineer has discovered nothing to indicate nonconforming contractor workmanship or materials as required in the Plans and Specifications or such modifications thereof as have been approved, the same will be accepted and the Engineer will make a final estimate, as soon as practicable, but not more than one (1) month after acceptance, for the completed Work, and the total amount due the Contractor, less the total amount of all previous payment, will be paid. Acceptance by the Engineer does not obligate the Engineer, nor transfer the Contractor responsibility for any Contract requirements to the Engineer.

By accepting and recommending any such final payment, the Engineer will not thereby be deemed to have represented that:

- a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to the Engineer in the Contract Documents; or
- b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by the Owner or entitle the Owner to withhold payment to the Contractor.

Neither the Engineer's review of the Contractor's Work for the purposes of recommending payments nor the Engineer's recommendation of any payment, including final payment, will impose responsibility on the Engineer:

- a. to supervise, direct, or control the Work; or
- b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto; or
- c. for the Contractor's failure to comply with Laws and Regulations applicable to the Contractor's performance of the Work; or
- d. to make any examination to ascertain how or for what purposes the Contractor has used the monies paid on account of the Contract Price; or
- e. to determine that title to any of the Work, materials, or equipment has passed to the Owner free and clear of any Liens.

Final payment will not be made until the Contractor has filed with the Owner the consent of the surety to payment of the final estimate and satisfactory evidence by affidavit or otherwise that all his indebtedness by reason of the Contract has been fully paid or satisfactorily secured. In case such evidence is not furnished, the Owner may retain out of any amount due said Contractor sums sufficient to cover all lienable claims unpaid. The Owner reserves the right to require the Contractor to provide full, unconditional waivers of lien from any and all suppliers and subcontractors prior to making final payment.

The acceptance by the Contractor or by anyone claiming by or through him of the final payment, whether such payment be made pursuant to any judgment or any court or otherwise, shall constitute and operate as a release of the Owner from any and all claims of and liability to the Contractor for anything theretofore done or furnished for or relating to or arising out of this Contract, and the Work done hereunder, and for any prior act, neglect, or default on the part of the Owner or any of its officers, agents, or employees, excepting only a claim against the Owner for the amount deducted or retained in accordance with the terms and provisions of this Contract.

END OF SECTION

SECTION 14

GRADING AND PAVING SPECIFICATIONS

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SECTION 14

GRADING AND PAVING SPECIFICATIONS

14.01 DESCRIPTION OF WORK

The work shall consist of the improvement of any street, alley, or ground surface in whole or in part, whether such surface was previously improved or is without previous improvement, by grading, surfacing, curbing, drainage structures, sidewalks, and/or such other construction items as shall be shown on the Plans or otherwise specified.

14.02 MATERIALS

14.02.01 Cement. Portland Cement, Air Entraining Portland Cement, and the sampling and testing procedures for such materials shall conform to the requirements of the current ASTM Specifications.

14.02.02 Aggregates. Fine and course aggregates for concrete mortar, and aggregates for hot mix asphalt paving and aggregate surfacing, and the sampling and testing procedures for such materials shall conform to the requirements of the Michigan Department of Transportation Standard Specifications except as specified herein.

14.02.03 Water. Water to be used for mixing or curing concrete or mortar shall be taken from the local water supply mains, or from any source that has been approved by the State Department of Environmental Quality. Water from other sources, when permitted by the Engineer, shall be clean and free from injurious amounts of oil, alkali, organic matter, and other deleterious substances, and shall be sampled and tested as directed by the Engineer.

14.02.04 Steel Reinforcement and Structural Steel. Steel reinforcement, structural steel, and steel guard rail materials shall be governed by the Michigan Department of Transportation Standard Specifications for the specific application of each of such materials.

14.02.05 Joint Filler. Expansion joint filler shall be a non-extruding and resilient type, pre-molded to the required thickness and cut to the required shape.

The sealing compound shall be hot-poured rubber-asphalt compound.

The expansion joint filler and the sealing compound shall conform to the requirements of the Michigan Department of Transportation Standard Specifications.

14.02.06 Catch Basins and Manhole Materials. Brick or block masonry units and precast concrete sections for catch basins, inlets, manholes, valve chambers, and similar structures shall be governed by the Michigan Department of Transportation Standard Specifications for such materials except as specified elsewhere in these specifications.

14.02.07 Casting. Catch basin castings, manhole castings, manhole steps, and similar items shall conform to the current Michigan Department of Transportation Standard Specifications and Standard Details except as specified elsewhere in these specifications.

14.02.08 Sewer Pipe. Sewer pipe, drain tile, and culvert pipe of the kind specified on the Plans and in the Bidding Documents, and the sampling and testing procedures for such materials shall conform to the requirements of the current ASTM Specifications.

14.02.09 Landscaping Materials. Topsoil, fertilizer, seeding, sodding, mulching, shade trees, and all other landscaping materials shall conform to the current Michigan Department of

Transportation Standard Specifications for such materials except as specified elsewhere in these specifications.

14.03 CLEARING, GRUBBING, AND REMOVING TREES

- 14.03.01 Clearing. All trees, brush, shrubs, and other vegetation occurring within the grading limits for cuts, fills, special ditches, borrow pits, and clear vision areas that are not designated on the Plans or by the Engineer to be saved, and all such material occurring outside such limits that is shown on the Plans to be removed shall be cut off at a height not more than three (3) feet above the ground; provided, however, that in any areas where clearing is required, but grubbing is not required, such material shall be cut level with the ground. Trees shall not be removed until field marked for removal by the Engineer.

All trees, shrubs, and other vegetation within the grading limits that are designated on the Plans or by the Engineer to be saved, and all such materials occurring outside of the grading limits that are not designated on the Plans or by the Engineer to be removed shall be carefully protected from damage or injury during all construction operations.

Where trees cannot be felled without danger to traffic or injurious to other trees, structures, or property, they shall be removed in sections starting at the top.

- 14.03.02 Grubbing. All stumps, roots, logs, and other timber more than three (3) inches in diameter and all brush, matted roots, and debris not suitable for road foundation occurring within the limits for cuts and for fills of less than three (3) feet shall be pulled or otherwise removed to a depth of at least one (1) foot below the ground. Blasting, when permitted, shall be done in compliance with the applicable local ordinance governing the use of explosives.

- 14.03.03 Removing Trees. The trees to be removed shall be only those shown on the Plans as indicated by the Engineer for removal. The proposal item for "Removing Trees" shall include the removal of the stump.

- 14.03.04 Cleanup. All brush, limbs, tops, stumps, roots, logs, and debris resulting from clearing, grubbing, and removing trees shall be disposed of according to the applicable local ordinance, or hauled to a satisfactory dump or otherwise disposed of as directed by the Engineer.

14.04 REMOVING EXISTING STRUCTURES

- 14.04.01 Description. This work shall consist of removing and disposing of the resulting materials, in whole or in part, to include any bridges, retaining walls, culverts, old pavement surface and base course, curb and gutter, sidewalk, masonry, fence, poles, guard rails, manholes, catch basins, inlets, sewers, watermain, and other structures that are not suitable to be left in the roadway or are otherwise objectionable or salvageable. The resulting trenches, holes, and pits shall be backfilled with approved granular material.

All walls, piers, foundations, and similar masonry structures shall be removed entirely; to an elevation of at least two (2) feet below subgrade within the area of the roadbed; or to provide two (2) feet clearance from the proposed new structure, and elsewhere to an elevation of at least one (1) foot below the finished surface.

- 14.04.02 Drop Hammer Prohibited. The use of a drop hammer, pile driver, or any such equipment will not be permitted for the purpose of breaking up any structure in the streets or alleys in which a sewer, watermain, or conduit has been installed.

- 14.04.03 Masonry Saw Required. When a limited portion of a concrete or HMA pavement or similar structure is to be removed, the boundary of such portion shall first be sawed to a depth of not less than one-and-a-half (1-1/2) inches with an approved masonry saw. When the sawing has been completed, the concrete or HMA that is to be removed shall be broken out in such manner as will leave the sides of the opening as nearly vertical and smooth as is feasible.
- 14.04.04 Blasting. Where blasting is necessary, the Contractor shall obtain the required permits and licenses at his own expense. The work shall be done in compliance with applicable local ordinances, and with due regard to the safety of workmen, other people, and public and private property. The method of covering blasts, amount of charges used, and the general procedure for doing this work shall be subject to the approval of the Engineer.
- 14.04.05 Salvage. All materials having salvage value shall be carefully removed to avoid damage and shall be placed in neat piles of like material outside the construction limits and within the right-of-way. Salvaged materials meeting Specification requirements may be used by the Contractor in new work if so provided.
- 14.04.06 Disposal of Waste. All concrete, stone, brick, and other materials that have been broken into pieces not more than one (1) square foot in area and that have no salvage value may be placed in the embankment, outside of the pavement area, in parallel layers, with voids carefully filled with sound earth, thoroughly compacted, but with no such material closer than twelve (12) inches to the subgrade; provided also that no such material shall be placed along the standard locations of future utilities, nor near the location of existing utilities.
- 14.04.07 Removing Tops of Existing Structures. When the top portion of existing manholes, catch basins, valve chambers, or similar structures is to be removed for the purpose of rebuilding such top portions to fit the required crown or grade of the surrounding area, such work shall be performed as herein specified. The work of removing tops of existing structures will not be measured separately, but shall be considered as incidental to the work of rebuilding as specified elsewhere.
- 14.04.08 Backfilling. Unless otherwise specified, all trenches, holes, and pits resulting from the breaking down or removal of any structures shall be filled with sound earth in successive layers not more than six (6) inches deep, loose measure, and each layer shall be thoroughly compacted by tamping.
- 14.04.09 Cleaning Up. When the removed structures are in or near the right-of-way of a public street or alley, or in a right-of-way acquired across private property, the Contractor shall remove all resulting debris from the street surface, walks, gutters, fences, lawns, private property, right-of-way, and adjacent structures. When the removed structures are in, near, or over a public waterway, the Contractor shall remove all resulting debris from the bed of the stream and the adjacent structures and land. All areas and structures to be cleaned as herein specified shall be left in as good condition as originally found, and all machinery, tools, surplus materials (except salvage), temporary buildings, and other temporary structures shall be removed from the site before final payment will be made.
- 14.05 EXCAVATING AND GRADING
- 14.05.01 Description. Excavation and grading shall consist of all work necessary for shaping the street to conform to the established grades and cross-sections shown on the Plans and as indicated on the site by stakes set by the Engineer. It shall include all of the area of the pavement, curb and gutter, sidewalk, entrances to driveways and alleys, and intersecting streets.

- 14.05.02 Stripping Topsoil. Topsoil within the grading limits (including fill areas) shall be stripped and stockpiled in a location as noted on the Plans or as directed by the Engineer. Topsoil shall be kept separate from other excavated material and shall be free from roots, stones, or other undesirable material. Measurement for payment for stripping topsoil will be included in the computation for earth excavation, and payment will be made under that item.
- 14.05.03 Preparing Area for Fills. The following shall govern the preparation of fill area:
- a. All existing topsoil and sod is to be excavated as specified in 14.05.02 above.
 - b. Where fills are to be made in areas containing trees, stumps, brush, shrubs, and other vegetation, the ground shall be prepared as described in Clearing and Grubbing. Fills shall not be started in such areas until the site has been inspected and approved by the Engineer.
 - c. Where embankments are to be constructed on existing slopes steeper than one (1) vertical to six (6) horizontal, steps with a horizontal dimension of not less than five (5) feet shall be formed in the slope before any of the embankment is placed.
 - d. Where existing roadways are to be covered with less than one (1) foot of fill, the surface shall be thoroughly loosened by plowing or scarifying and compacted to the same density as adjacent areas.
- 14.05.04 Construction Embankments. Embankments shall be constructed of sound earth, or of an approved compactable mixture of sound earth and stones not over three (3) inches in largest dimension. Boulders, broken rocks, broken concrete, or broken masonry not larger than one (1) cubic foot may be placed in embankments only by permission of the Engineer. The material shall be placed in such a manner as to insure satisfactory compacting. In the case of clay or loam soils, each layer shall be thoroughly compacted by the use of sheepsfoot or tamping-type rollers having a minimum weight on each tamper, under working conditions, of two hundred (200) pounds per square inch of cross-sectional bearing area; and in the case of sand or gravel soils, by heavy tread-type equipment, by pneumatic-tired equipment. A combination of the above or other approved methods may be used. The operations of compacting shall be continued until each layer is satisfactorily compacted to its full width.
- Embankments within the right-of-way of existing or future streets and also with a 1-on-1 slope from the right-of-way line shall be compacted to not less than ninety-five percent (95%) of the maximum unit weight at optimum moisture. Unless otherwise specified, all other embankments shall be compacted to not less than ninety percent (90%) of the maximum unit weight at optimum moisture.
- Stones over three (3) inches in diameter shall not be placed within twelve (12) inches of the elevation or subgrade under the area of the pavement or curb gutter.
- Frozen lumps shall not be placed within the limits of assumed 1-to-1 slopes, spreading outward from the right-of-way line. During periods of continuous freezing weather when construction of the embankment in layers would result in deposits of frozen materials throughout the embankment, construction shall be postponed or modified as directed by the Engineer.
- 14.05.05 The Grading of Previously Excavated Streets. When a street or alley that is to be improved has been previously excavated to grade, in whole or in part, it will be so indicated on the

Plans, or in the Information for Bidders, or in the Proposal Items as an item for "Street Grading" per linear foot.

This work shall include the necessary grading within the street right-of-way for the construction of streets, sidewalks, drive approaches, and parkways, and shall also include any required slope grading outside of the street right-of-way. It shall include topsoil stripping and the removal of all existing improvements, such as sidewalks, drives, curb and gutter, all types of pavement, existing drainage structures and culverts, and similar items necessary to complete the work to the line and grade shown on the Plans. This work shall not include trench backfill, special excavation and backfill items, or specific removal items, which may be listed in the Proposal or required elsewhere in these specifications.

Measurement for payment of "Street Grading" shall be in linear feet along the centerline of the street and shall be classified as listed in the Proposal. Payment for each foot of "Street Grading" shall include the work performed on both sides of centerline.

Street grading at intersections will be measured along the centerline of one (1) street only and shall include all grading required for the complete construction of proposed curb returns at the intersection. Street grading for an intersecting street that is not measured through the intersection shall be limited to that portion of street beyond the curb return area.

Cul-de-sac streets shall be measured for street grading from the point where the centerline extended intersects the face of proposed curb.

14.05.06 Special Backfill. Should there be areas in the subgrade where the earth is unsuitable for a foundation for pavement, those areas shall be excavated to a depth determined by the Engineer, and backfilled with suitable material to be designated as special backfill. The surplus earth shall be disposed of by the Contractor as directed by the engineer.

14.05.07 Salvageable Material. All excavated material in excess of that needed for backfill or that material classified as unsuitable by the Engineer shall be disposed of by the Contractor. However, the Engineer reserves the right to direct the Contractor to haul all or a portion of the material not required for backfilling to an area designated by the Owner that is not more than one thousand (1,000) feet outside of the project and which is reasonably accessible. This work, when directed, shall be performed at no additional cost to the Owner.

Any existing culverts, sewer pipe, castings, or other salvageable material that are uncovered by the operations of excavation and grading shall be salvaged by the Contractor and suitably stored on the project for disposal by the Owner. The salvaging of such material shall be incidental to excavation or grading.

14.05.08 Adjusting Structures and Castings. All castings on manholes, catch basins, valve chambers, curb boxes, and other structures shall be adjusted to conform to the new grade. Castings shall be set to the required elevation in full mortar beds or otherwise secured as shown on the Plans. The use of brick or wooden wedges to hold the castings in place will not be permitted. The mortar shall be allowed to set before any work is performed that might disturb the casting.

Castings in pavement areas shall be adjusted to grade after the hot mix asphalt base course is laid and prior to placing the leveling hot mix asphalt course. Castings in curb and gutter shall be adjusted after the forms are placed and prior to placing the concrete.

Where existing castings are to be adjusted less than one (1) vertical foot, the adjustment of such castings shall be paid for under the Proposal Item for adjustment of such structures.

Where the reconstruction of more than one (1) vertical foot of masonry is required to adjust existing casting, the construction required shall be measured with the top one (1) foot excluded, and payment shall be made at the price bid per vertical foot under the Proposal Item for reconstruction of such structures.

14.06 SUBGRADE

14.06.01 Definition. The subgrade is that portion of the roadbed upon which the surface material, including curb and gutter, sidewalk, and topsoil is to be placed.

14.06.02 Shaping the Subgrade. After the work of installing underground utilities has been completed, the subgrade for the pavement and curb and gutter shall be scarified to a uniform depth below and for the full width of the pavement and curb and gutter sufficient to eliminate all depressions and irregularities and to permit uniform reshaping. If additional earth or approved material is necessary to bring the subgrade to the desired elevation, this must be done before scarifying. After scarifying, the subgrade shall be shaped correctly to conform to the Plans and be brought to a firm, unyielding surface by rolling the entire area with an approved roller. Any portion of the subgrade that is not accessible to a roller shall be compacted thoroughly with hand tampers weighing not less than fifty (50) pounds, the face of which shall not exceed one hundred (100) square inches.

All soft yielding material that will not compact readily when rolled or tamped shall be removed and replaced with suitable material as directed by the Engineer, and compacted as above specified.

14.06.03 Subgrade Template. The subgrade shall be tested in advance of the paving operations as to crown and elevation by the use of an approved template or stringing method. The template shall be designed so that its bottom edge conforms to the required shape of the subgrade. Any excess material as indicated by the proper use of this template shall be removed. To bring the low areas up to the correct elevation, approved material may be tamped or rolled in place until it is properly compacted, or these areas may be filled with paving material as an integral part of the pavement at the expense of the Contractor. Before the pavement material is deposited on the subgrade, the subgrade shall be rechecked, to insure that the full specified depth of the pavement will be obtained and that the subgrade is cleaned of all undesirable materials that may have fallen upon it.

14.06.04 Maintenance of Subgrade. The finished subgrade shall be maintained in a smooth and compacted condition until the pavement structure has been deposited thereon. No storage piles of paving material shall be placed directly upon the finished subgrade. No trucks whose gross weight, including the weight of the vehicle and the load upon it, exceeds six hundred (600) pounds per inch of width of tire shall be permitted on the finished subgrade.

At any time that trucks cause excessive rutting or displacement of the subgrade material, either lighter trucks shall be used, smaller loads shall be hauled, or suitable runways shall be provided.

14.06.05 Subbase. Where a sand subbase course is called for, the subgrade shall be constructed to the elevation and shape shown on the Plans, and shall be finished and maintained in the same manner as specified above.

14.07 SUBBASE

14.07.01 Description. This work shall consist of a subbase of sand or granular material, constructed to the specified depth below the pavement and stabilized as required.

- 14.07.02 Materials. The subbase shall consist of approved sand meeting the requirements for Granular Material, Class II, as specified by the Michigan Department of Transportation Standard Specifications for Construction.
- 14.07.03 Construction Procedures. The subgrade for the subbase shall be constructed and shaped to the required cross-section shown on the Plans for the bottom of the subbase. The surface of this area shall be accurately trimmed to within one (1) inch above or below the bottom of the subbase. The subbase material shall be evenly spread and compacted to not less than ninety-five percent (95%) of the maximum unit weight for its entire thickness at a moisture content less than optimum. The quantity shall be measured in cubic yards, compacted in place, as determined from the typical cross-section.
- 14.08 CONCRETE SIDEWALK
- 14.08.01 Description. The work shall consist of a concrete sidewalk of the required cross-section, without steel reinforcement constructed on the prepared subgrade.
- 14.08.02 Sidewalk Grade. The normal grade for the back of the sidewalk will be the grade as shown on the Plans; however, when the sidewalk is constructed through improved lawns, the elevation and/or the alignment of the sidewalk may be varied by the Engineer wherever necessary to follow the grade of the lawn and intersecting driveways.
- The Contractor shall exercise care to provide surface drainage from the new sidewalk and from the driveways to the properties adjacent to the sidewalk. The Contractor shall consult with the Engineer concerning any possible drainage problems. Sidewalk that does not provide adequate drainage will not be accepted.
- 14.08.03 Limits of Work. In improved lawn areas, the Contractor shall confine his work to the minimum required for setting forms and grading slopes in accordance with the typical section shown on the Plans.
- 14.08.04 Subgrade. The subgrade shall be formed by trenching or filling to the required elevation for bottom of concrete or to the bottom of the subbase, if a subbase is specified. The subgrade shall be thoroughly tamped or otherwise compacted.
- 14.08.05 Subbase. Where a sand or gravel subbase course is called for, the subgrade shall be constructed to the elevation and shape shown on the Plans, and shall be finished and maintained in the same manner as specified above.
- 14.08.06 Forms. The forms shall be of metal, straight and free from distortion, and of sufficient strength to resist springing during the process of depositing and finishing the concrete. The forms shall be the full depth of the concrete. They shall be set firmly on the subgrade, true to the required line and grade, and be held in place by adequate stakes. Approved flexible steel or wood forms must be used for curves or special sections as determined by the Engineer.
- The use of an approved slip form paver will be permitted, provided that the required grade, cross-section, and finish is obtained.
- 14.08.07 Concrete. The concrete shall be MDOT Grade P1 or S2 concrete and shall be proportioned, mixed, and placed as required by the current Michigan Department of Transportation Standard Specifications for this grade of concrete.
- 14.08.08 Finishing. The concrete shall be thoroughly spaded along the forms and joints before finishing operations are started. The concrete shall be alternately tamped and struck off

with a proper strike board until all the voids are removed and the surface has the required grade and cross-section. The surface shall be floated with a steel float just enough to produce a smooth surface free from irregularities. Broom sidewalks to slightly roughen the surface transverse to direction of the walk.

14.08.09 Joints

- a. Joints shall be constructed true to line, with their faces perpendicular to the surface of the sidewalk. Transverse joints shall be constructed at right angles to the centerline of the sidewalk, and longitudinal joints shall be constructed parallel to the centerline, unless otherwise required. When the sidewalk is constructed in partial width slabs, transverse joints in the succeeding slab shall be placed in line with like joints in the adjacent slab. In the case of widening existing sidewalk, transverse joints shall be placed in line with like joints in the existing sidewalk.
- b. Expansion joints one-half (1/2) inch thick, extending to the full depth of the sidewalk, shall be placed between the sidewalk and the back of the abutting curb or gutter at intersections at those locations where the walk extends from the building or other rigid structure to the curb, and at fifty (50) foot intervals as measured longitudinally along the sidewalk.
- c. Contraction joints shall be constructed by dividing the sidewalk into areas of approximately thirty-six (36) square feet unless otherwise shown on the Plans. Insofar as feasible, the unit areas shall be square or not less than nine (9) square feet. The unit areas shall be produced by use of slab division templates extending the full depth of the concrete or by cutting joints in the concrete, after floating, to a depth of not less than one-fourth (1/4) of the thickness of the sidewalk.

Slab division templates shall be of steel not less than one-eighth (1/8) nor more than one-fourth (1/4) inch thick. They shall be left in place until the concrete has set sufficiently to hold its shape, but shall be removed while the forms are still in place.

The cut joints shall not be less than one-eighth (1/8) inch nor more than one-fourth (1/4) inch in width and shall be finished smooth and true to line.

14.08.10 Curing of Concrete Sidewalks. Immediately after the final finishing operations, all exposed surfaces of the concrete shall be sealed by spraying thereon as a fine mist a uniform application of a non-bituminous curing material in such a manner as to provide a continuous uniform water-impermeable film without marring the surface. This non-bituminous curing material shall conform to the current Standard Specifications of the Michigan Department of Transportation for non-bituminous curing agents.

14.08.11 Protection. Protection of concrete shall be performed in the following manner:

- a. Newly-laid concrete threatened with damage by rain shall be protected with a covering of plastic, burlap, cotton fabric, or other suitable means. Concrete damaged by rain shall be removed and replaced. All costs associated with this removal and replacement shall be borne by the Contractor.
- b. Protect the concrete from freezing until it has attained a compressive strength of one thousand (1,000) psi. Remove and replace concrete damaged by frost action. All costs associated with this removal and replacement shall be borne by the Contractor.

- 14.08.12 Backfilling. Backfilling shall be performed after the concrete has set sufficiently and the side forms have been removed. The space on both sides of the walk shall be backfilled with sound earth which shall be compacted and trimmed to conform to the cross-section shown on the Plans.
- 14.08.13 Clean Up. Clean up shall be completed before final acceptance of the Work. The Contractor shall clean the street surface, walks, gutters, fences, lawns, private property, right-of-way, and structures, leaving them in as good condition as originally found, and shall remove all machinery, tools, surplus materials, temporary buildings, and other temporary structures from the site.
- 14.09 CONCRETE CURB AND GUTTER
- 14.09.01 Description. This work shall consist of constructing curb, gutter, combination curb and gutter, and driveway returns of MDOT Grade P1 or S2 concrete, with or without steel reinforcement, as provided, on the prepared subgrade.
- The construction of concrete curb, gutter, combination curb and gutter, or driveway returns shall precede the construction of non-rigid types of pavement or base course, but may either follow or precede, whichever is the more feasible, the construction of concrete pavement or concrete base course.
- 14.09.02 Forms. The forms shall be metal, straight and free from distortion, and of sufficient strength to resist springing during the process of depositing and finishing the concrete. Flexible steel forms must be used on sharp turns and on special sections and shall be subject to the approval of the Engineer. They shall be of an approved section with a flat surface on top. The forms shall be of the full depth of the structure and shall be well built, substantial, and unyielding. They shall be securely staked, braced, and tied to the required line and grade and sufficiently tight to prevent leakage of mortar. The inside surface of the forms shall be oiled with a light, clear paraffin-base oil which will not discolor or otherwise injuriously affect the concrete.
- The use of an approved slip form curb and gutter paver will be permitted provided that the required grade, cross-section, and finish is obtained.
- If a slip form paver is used, sections of curb and gutter five (5) feet in length on either side of any catch basin or similar structure shall be left out and placed later when the sections adjacent to the castings shall then be constructed using forms as specified above.
- 14.09.03 Concrete. The concrete shall be MDOT Grade P1 or S2 concrete and shall be proportioned, mixed, and placed as required by the current Michigan Department of Transportation Standard Specification for this grade of concrete.
- 14.09.04 Joints. Joints shall be constructed as follows:
- a. General. Joints shall be constructed perpendicular to the line, with their faces perpendicular to the surface, and shall not vary more than one-fourth (1/4) inch from this position. The concrete at the faces of all joints shall be thoroughly spaded and compacted to fill all voids and the surface of the concrete at the joints shall be finished smooth and true to grade.
 - b. Expansion Joints. Expansion joints shall be placed in accordance with the current Michigan Department of Transportation Standard Specifications for Construction and as follows: at spring points of curb returns, at junction with existing curb, at one hundred (100) foot radius intervals, and at other locations that are shown on

the Plans. Expansion joint filler shall extend to the full depth of the joint and shall be flush with the finished surface of the structure. Fiber joint filler shall be one (1) inch thick and shall conform to ASTM D-1751.

- c. Contraction Joints. Contraction joints shall be placed in accordance with the current Michigan Department of Transportation Standard Specifications for Construction except as follows. The maximum spacing for these joints shall be at intervals no greater than ten (10) feet.
- d. Construction Joints. Unless otherwise shown on the Plans, construction joints shall be placed as required. Where curb and/or gutter cross a trench, the joints shall be so spread as to place the trench midway between joints. They shall be formed by steel templates not less than one-eighth (1/8) inch and not more than one-fourth (1/4) inch in thickness shaped to conform to the cross-section of the structures or by the use of a steel jointing tool, after floating. Construction joints shall extend through the structure. The templates shall be left in place until the concrete has set sufficiently to hold its shape; both shall be removed while the forms are still in place, and before the concrete has developed its final set.

14.09.05 Finishing. The edge of the gutter and the back top edge of the curb shall be rounded with an approved finishing tool having a radius of one-fourth (1/4) inch. All transverse joints shall be finished with a double edging tool having a one-fourth (1/4) inch radius on each side. The face of the curb, at the top and bottom, shall be rounded with approved finishing tools having the radii shown on the Plans.

The exposed surface of the curb, gutter, combination curb and gutter, and driveway returns, shall be finished smooth and even by means of a moistened steel trowel and shall not vary more than one-eighth (1/8) inch in ten (10) feet from the established grade. After smoothing the surfaces with a steel trowel, the surfaces shall be brushed lightly with a fine brush to remove tool marks. Neat cement shall not be used as a drier to facilitate the finishing of surfaces.

After the forms are removed, honeycomb and minor defects shall be filled with mortar composed of one part Portland cement, and two parts of fine aggregate, applied with a wooden float, and all joints shall be cut open.

14.09.06 Curing. Immediately after the final finishing operations, all exposed surfaces of the concrete shall be sealed by spraying thereon as a fine mist a uniform application of a white membrane curing compound in such a manner as to provide a continuous uniform water impermeable film without marring the surface. This white membrane curing compound shall conform to the current Michigan Department of Transportation Specifications for concrete curing materials.

14.09.07 Protection. Protection of concrete shall be performed in the following manner:

- a. Newly laid concrete threatened with damage by rain shall be protected with a covering of plastic, burlap, cotton fabric, or by other suitable means. Concrete damaged by rain shall be removed and replaced. All costs associated with this removal and replacement shall be borne by the Contractor.
- b. Protect the concrete from freezing until it has attained a compressive strength of one thousand (1,000) psi. Remove and replace concrete damaged by frost action. All costs associated with this removal and replacement shall be borne by the Contractor.

- 14.09.08 Backfilling. Backfilling shall be done after the concrete has set sufficiently. The spaces on both sides of the curb, gutter, combination curb and gutter, and driveway returns shall be backfilled to the required elevation with suitable material that shall be properly compacted and left in a neat and workmanlike condition.
- 14.09.09 Clean Up. Clean up must be done before final acceptance of the work. The Contractor shall clean the street surface, walks, gutters, fences, lawns, private property, right-of-way, and structures, leaving them in as good condition as originally found, and shall remove all machinery, tools, surplus materials, temporary buildings, and other temporary structures from the site.
- 14.10 GRAVEL BASE
- 14.10.01 Description. The work shall consist of the construction of a gravel base of one (1) or two (2) courses placed on the prepared subgrade or subbase, in accordance with the dimensions shown on the Plans.
- 14.10.02 Materials, Equipment, and Construction Methods. The materials, the equipment used, and the methods of construction shall be as specified in Section 302 of the current MDOT Standard Construction Specifications except as follows:
- a. Aggregate 22A shall be used unless otherwise specified. The material shall be obtained from a source that has been approved by the Engineer. The Contractor shall make arrangements to have the aggregate sampled from the supplier's stockpile and tested by an independent testing laboratory approved by the Engineer. Test results shall be submitted for approval not less than twenty-four (24) hours prior to hauling aggregate to the site.
 - b. Gravel salvaged from existing streets may be used in the lower three (3) inches of the gravel base courses when approved by the Engineer.
 - c. The surface of the gravel base shall be trimmed and compacted to the specified cross-section within a tolerance of plus or minus one-half (1/2) inch.
- 14.10.03 Measurement and Payment. Gravel base will normally be measured in square yards unless listed otherwise.
- 14.11 HOT MIX ASPHALT PAVEMENT
- 14.11.01 Description. This work shall consist of constructing one or more courses of hot mix asphalt (HMA) on a prepared subgrade or subbase.
- 14.11.02 Materials. The materials shall meet the requirements specified in the MDOT Standard Construction Specifications, Division 9.
- 14.11.03 Equipment and Methods of Construction. The equipment used and the methods of construction shall be as specified in Division 5 of this MDOT Standard Construction Specifications and as follows:
- a. A prime coat on the subbase or base will not be required.
 - b. HMA shall be delivered to the project at a temperature between 250 degrees F and 350 degrees F.

- c. The material shall be placed in lifts not to exceed the application rate in the following table:

| Mixture Type | Course Application | Max. Application Rate, lb/syd |
|--------------|---------------------|-------------------------------|
| 2 | Base | 550 |
| 3 | Base | 410 |
| 3 | Leveling | 330 |
| 5 | Leveling, Top | 275 |
| 5 | Top | 220 |
| 13A | Base, Leveling, Top | 250 |
| 36A | Leveling, Top | 165 |
| 2C | Base | 500 |
| 3C | Base, Leveling | 330 |
| 4C | Leveling, Top | 260 |

- d. A bulldozer or motor grader may be used to place the first lift of a base course with the approval of the Engineer.
- e. The surface shall be finished to the specified cross-section within the following tolerances:

Base Course Mixtures:

Lower Courses: 3/4 inch
Top Course: 3/8 inch

Leveling and Top Course Mixtures

Multiple Course Construction:

Lower Courses: 1/4 inch
Top Course: 1/8 inch

Single Course Construction: 1/4 inch

- 14.11.04 Testing. The Contractor shall be required to furnish a certified analysis of the contents of the asphalt. The contractor may also be required to obtain up to three (3) core extractions for each three thousand (3,000) square yards of pavement. The core extractions shall be delivered to the Engineer or his representative for density and mixture testing.
- 14.11.05 Contractor Quality Control. The Contractor shall prepare and implement a quality control plan in accordance with Division 5 of the MDOT Standard Construction Specifications. The Engineer shall be provided a copy of the quality control plan at the pre-construction meeting.
- 14.11.06 Measurement and Payment. HMA will be measured in square yards or in tons as specified in the Proposal and paid for at the unit price given therein. If the unit of measurement is in tons, payment will be limited to ten percent (10%) more than the computed weight based on final measurements of the area, plan thickness, and the rate of one hundred ten (110) pounds per inch thickness per square yard.

Bond coat will not be paid for separately.

14.12 TOPSOIL

14.12.01 General. Topsoil shall be placed four (4) inches in depth where directed by the Engineer. The soil shall consist of natural loam topsoil and shall be of uniform quality free from hard clods, stones, and all other undesirable material. This soil shall contain not less than six percent (6%) organic matter. The acidity range shall be between pH 5.0 and pH 8.0. All topsoil shall be approved by the Engineer before placing. After spreading the topsoil, any large clods and lumps shall be broken with a pulverizer or by other means. All stones and rocks over two (2) inches in diameter, roots, litter, or any foreign matter shall be raked up and disposed of by the Contractor. The topsoil surface shall be brought to the required grade and properly trimmed. In improved lawn areas the topsoil surface shall be raked prior to seeding or reseeding.

14.12.02 Measurement and Payment. Topsoil will be measured using either of the following methods:

- a. Cubic Yard Truck Measure. The Contractor shall furnish delivery tickets showing the date and the amount as it is delivered to the project.
- b. Cubic Yard Measured in Place. The quantity will be determined by measuring the area covered multiplied by a depth of four (4) inches.
- c. Square Yard. Measurement will be made on the area covered.

14.13 FERTILIZING, SEEDING, AND MULCHING

14.13.01 General. Fertilizing, seeding, and mulching shall be placed only where directed by the Engineer.

After the topsoil has been placed as specified above, it shall be fertilized with a 12-12-12 chemical fertilizer at the rate of seven hundred (700) pounds per acre. Fertilizer shall be applied just before the placing of seed to retain its full benefit before unfavorable weather can cause deterioration.

Seed meeting the requirements of the current Standard Specifications of MDOT for the class shown in the Proposal shall be placed as specified therein on all areas disturbed by construction operations, as determined by the Engineer. The seed mixture shall be approved by the Engineer before it is placed. The rate of seeding shall be in accordance with the current MDOT Standard Specifications.

Immediately following the seeding, these areas shall be mulched at the rate of two (2) tons per acre in accordance with the current Michigan Department of Transportation Standard Specifications. Straw, hay, or wood fiber mulch shall be applied at the rate of two (2) tons per acre and shall be held in place by an adhesive coating of asphalt emulsion at the rate of seventy (70) to ninety (90) gallons per ton. Wood fiber mulch shall be applied at the rate of one (1) ton per acre. A tack additive shall be used with wood fiber mulch placed on slopes greater than 1-on-4.

The seed, fertilizer, and mulch may be applied together by the water slurry method when approved by the Engineer.

The unit price per square yard as bid in the Proposal shall be payment in full for furnishing and placing the fertilizer, seed, and mulching as specified.

14.14 FERTILIZING AND SODDING

14.14.01 General. Fertilizing and sodding shall be placed only where directed by the Engineer.

After the topsoil has been placed as specified above, it shall be fertilized with a balanced grade of chemical fertilizer at a rate of two (2) pounds of available nitrogen per one thousand (1,000) square feet.

Fertilizer shall be applied just before the placing of sod to retain its full benefit before unfavorable weather can cause deterioration.

All sod shall meet the requirements of the current Standard Specifications of MDOT for the class specified and shall be approved by the Engineer before it is laid. The unit price per square yard as bid in the Proposal shall be payment in full for "Fertilizing and Sodding" as specified.

14.15 MEASUREMENT AND PAYMENT

The work shall be measured in the units specified for each item in the Proposal.

The contract unit price for each of the items, or the lump sum price for items thus designated, shall be payment in full for furnishing all labor, equipment, and materials, and completing the Work as specified.

END OF SECTION

SPECIAL SPECIFICATIONS
FOR
GRPS PARKING LOT IMPROVEMENTS –
SHAWMUT HILLS & RIDGEMOOR PARK

GRAND RAPIDS PUBLIC SCHOOLS
KENT COUNTY, MICHIGAN

S-1 GENERAL

These Specifications shall supplement and/or supersede the Standard Specifications for this Project.

Where a standard construction method or contract procedure is not specifically covered by the Construction Specifications, the Special Specifications, or the Plans, the current Standard Specifications of the Michigan Department of Transportation shall apply.

S-2 SCOPE OF WORK

Work under this Contract consists of furnishing all materials, tools, and equipment, and performing all services and labor required for complete construction of all work shown on the Plans, cross sections, and details, or specified herein, complete and ready for use. The Work shall include miscellaneous drainage structure repair, full depth HMA removal, select curb and gutter and gutter pan replacement, HMA resurfacing, and turf establishment as shown and detailed on the Project Plans.

S-3 CONSTRUCTION PERMITS

No permits are anticipated as being required.

S-4 CONTROL OF THE WORK

The Contractor shall be solely responsible for the safe and satisfactory completion of the Project in accordance with the Specifications.

General administration of this Project, including execution of the Contract, will be by Grand Rapids Public Schools.

Moore & Bruggink, Inc., will provide inspection and construction administration services for the Project on behalf of Grand Rapids Public Schools.

S-5 MEASUREMENT AND PAYMENT

All proposed construction shall be measured for payment in accordance with the items listed in the Proposal. The unit price bid for each proposal item shall be payment in full for completing the work ready for use as specified.

Any materials furnished and/or installed by the Contractor for their convenience will not be considered for payment, whether or not the Proposal contains a like item for such material used.

Items of work that are called for in the Specifications but are not covered by Proposal items shall be incidental to the major items of construction.

S-6 PRE-BID WALK-THROUGH

A pre-bid walk-through of the project sites has not been scheduled. If you wish to tour the project sites, please contact the Project Engineer.

S-7 PRECONSTRUCTION MEETING

A preconstruction meeting will be scheduled prior to the start of construction to review the Contractor's proposed schedule of operation, to coordinate with the various interested parties, and to review current conditions.

S-8 PROJECT ENGINEER

Moore & Bruggink has designated Zach Voogt, P.E., as Project Engineer. All questions and comments relating to the Work or any request for changes in the Work shall be directed to the Project Engineer.

S-9 EXISTING UNDERGROUND UTILITIES

Locations and sizes of existing underground utilities shall be obtained from the respective utility. Neither the Engineer nor the Owner guarantees the accuracy of the information obtained. The Contractor shall notify MISS DIG prior to the start of construction.

Should service provided by public utilities be interrupted by the Contractor, the Contractor shall be responsible for returning all public utilities to normal working order. Cost for this work shall be incidental to items of construction and no payment will be made therefore by the Owner.

S-10 MAINTAINING TRAFFIC AND SCHEDULING OF WORK

The Contractor shall at all times so conduct their work as to ensure the least possible obstruction to traffic and inconvenience to the general public and residents in the vicinity of the Work, and to ensure the access of persons to the abutting properties in a manner approved by the Engineer. Emergency vehicles shall have access at all times and shall be assisted by the Contractor if necessary. Near the end of each day's work, the Contractor shall remove obstructions that would make access difficult or impossible.

Lights, Signs, and Barricades: The Contractor shall be responsible for all onsite signage, which shall include adequate warning signs, barricades, lights, and flagmen, and shall take all necessary precautions for protection of the Work and safety of workmen and of the general public. All streets, roads, alleys, and other areas accessible shall be protected by means of effective barricades on which shall be placed approved warning signs and lights.

All open trenches and other excavations shall be provided with suitable barriers, signs, and lights, to the extent that adequate protection is provided to the public against accidents by reason of such open construction. Obstructions such as material piles and equipment shall be provided with similar warning signs and lights.

All barricades shall be illuminated at night by means of warning lights and all warning lights used for this purpose shall operate from sunset to sunrise.

All barricades, signs, lights, and other protective devices shall be installed and maintained in conformity with the latest edition of the Michigan Manual of Uniform Traffic Control Devices and applicable statutory requirements and, where within highway rights-of-way, as required by the authority having jurisdiction there over.

Dust Control: The Contractor shall keep paved surfaces cleaned and free of debris and shall control dust from construction operations by the application of water, or by other approved means. If the Contractor fails to correct unsatisfactory conditions promptly after due notification, the Engineer will arrange for this work to be performed by other means and will deduct the cost thereof from any monies that are or may become due the Contractor.

S-11 SOIL EROSION AND SEDIMENTATION CONTROL

The Contractor shall conduct their work in such a manner that all soil, fuels, oils, bituminous materials, chemicals, and all other deleterious materials are confined within the project limits and prevented from entering storm sewers, water courses, streams, rivers, etc.

The Contractor shall place a filter or barrier composed of silt fencing or other approved material around all catch basins and inlets to drainage structures, drainage courses, or creeks to prevent sedimentation in these areas. After the construction operations are completed and vegetation is reestablished, the Contractor shall remove these filters and clean all the sediment and debris from the catch basins and drainage structures.

S-12 REMOVALS

Removal of existing miscellaneous minor items not included in the Plans and specification quantities shall be considered incidental to the major items. Extra payment will not be considered for costs pertaining to this work.

S-13 DRAINAGE STRUCTURE COVER ADJUST

This work shall include the temporary removal, plating, adjustment, and re-mortaring of all manholes and/or catch basin castings within the pavement as directed by the Engineer. All manhole castings and/or catch basin castings within the limits of paving shall be removed, and the structure shall be plated before the leveling course of asphalt is placed. The salvaged or new structure casting shall be installed to the final road grade after the leveling course of asphalt is placed and before the top course is placed. The interior chimney, including adjusting rings of the drainage structures, shall be re-mortared to fill all voids.

This shall include all work necessary to remove the casting, place a steel plate over the structure, adjust the casting to final grade, and re-mortar the structure.

S-14 CONCRETE PAVEMENT, REINFORCED, 8 INCH CONCRETE

This work shall consist of constructing concrete reinforcement collar around all catch basin castings within the HMA pavement section and at dumpster locations as indicated on the Plans. This work shall include all materials, equipment, and labor to construct concrete as detailed.

S-15 RESTORATION/TURF ESTABLISHMENT

All areas outside the pavement disturbed by the Contractor shall receive 4 inches of screened topsoil, MDOT THM seed, fertilizer, and Hydro-mulch.

After seeding is completed, seeded areas shall be watered as necessary to achieve full grass growth. The Contractor's responsibility shall end after three successful mowing attempts of that grass, and upon the inspection and signoff of the Owner and Engineer.

If herbicide is necessary, it shall comply with all federal, state, and local laws. As part of the MDA weed control application, the Contractor is required to make proper notifications and/or postings as per label and MDA requirements for all locations that will be sprayed. Notify the Engineer at least

48 hours prior to any applications being made. Furnish and apply herbicide(s) as needed. It is the Contractor's responsibility to select the herbicide(s) and the rate at which it is used. Obtain the Engineer's approval of work methods and herbicide(s) selected prior to the application of the herbicide(s). Complete a spray log and submit to the Engineer each day an application is made. Do not draw water from any waterway (i.e., river, ditch, creek, lake, etc.) located on state, county, or municipal right-of-way for mixing with herbicides.

S-16 VALUE ENGINEERING AND INSPECTION

Following removal of existing pavements and prior to removal and reconstruction of the existing base materials, the Owner reserves the right to inspect or have inspected the existing base materials for their suitability as a base for the new pavements. Should the existing base materials be found suitable, there is potential for leaving all or some of the existing base material in place for reuse. The Contractor will be involved in any decisions made regarding this item.

S-17 FINAL INSPECTION AND PUNCH LIST

At the completion of the work, a final inspection will be held to review the Contractor's work and document any punch list items. **The punch list items shall be completed within two weeks of the final inspection date. If the punch list items are not completed within two weeks of the final inspection date, liquidated damages will be enforced per the Contract.**

S-18 PRE-BID REQUESTS FOR INFORMATION

The cutoff date for submitting pre-bid Requests for Information (RFIs) is 5 p.m., Tuesday, April 2, 2024.

S-19 PROGRESS SCHEDULE/COMPLETION DATE

The Contractor may start the project no earlier than June 7, 2024, and all work must be complete and ready for use at the latest by **August 1, 2024**.

Soil Borings

[illegible]

Soil Borings

[illegible]