TROY SCHOOL DISTRICT

Troy, MI

Tennis Court Reconstruction
TSD Bid # 9652

Specifications Prepared By:

FORESITE design

3269 Coolidge Hwy.
Berkley, MI 48072
(248) 547-7757

RELEASE DATE: **January 20, 2010**

BIDS DUE: **February 4, 2010 @ 3:00 P.M.** **SET # _____**

PROJECT MANUAL

PROJECT:	**Troy High School** 4777 Northfield Parkway Troy, MI 48098
OWNER:	**Troy School District** 4400 Livernois Road Troy, MI 48098
LANDSCAPE ARCHITECT:	Foresite Design, Inc. 3269 Coolidge Hwy. Berkley, Michigan, 48072 (248) 547-7757
RELEASE DATE:	January 20, 2010
BIDS DUE:	February 4, 2010 @ 3:00 p.m.
LOCATION:	Troy School District Purchasing Office 1140 Rankin, Troy MI 48083

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 0110
TABLE OF CONTENTS

TABLE OF CONTENTS	**# OF PAGES**
DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS	
00 1113 Advertisement for Bid	3
00 1200 Scope of Work	1
00 2113 Instructions to Bidders	7
00 4200 Proposal A	2
00 4244 Unit Prices Form	1
00 4336 List of Subcontractors	1
00 4343 Prevailing Wage Rates	15
00 4519 Non-Collusive Affidavit Form	1
00 4550 Statement Re: Familial Relationships	1
00 6513 Material Compliance Form	1
00 7300 Supplementary Conditions	13
DIVISION 01 – GENERAL REQUIREMENTS	
01 2300 Alternates	2
01 2619 Clarification Request	1
01 3523 Safety Requirements	1
01 4100 Regulatory Requirements	1
DIVISION 02 – EXISTING CONDITIONS	
02 4113 Demolition	1
DIVISION 03 – CONCRETE	
03 3010 Portland Cement	5
DIVISION 11 – EQUIPMENT	
11 6826 Net Tension System	2
DIVISION 31 – EARTHWORK	
31 1000 Site Preparation/Clearing	2
31 2000 Earthwork	4
DIVISION 32 – EXTERIOR IMPROVEMENTS	
32 1124 Aggregate Base (Asphalt)	3
32 1218 Plant Mix Bituminous Asphalt (Tennis Court)	4

SECTION 00 0110
TABLE OF CONTENTS

32 1834 Acrylic Tennis Court Surface	3
32 3102 Chainlink Fence (Tennis Court)	3
32 9227 General Lawn Restoration	4
DIVISION 33 – UTILITIES	
33 4600 Subdrainage Systems (Peastone)	2

DRAWINGS	
Sheet #	**Title**
CS1.00	Cover Sheet
L1.01	Site Plan
L1.02	Existing Conditions and Demolition Plan
L1.03	Dimension Plan
L1.04	Grading Plan and Drainage Plan
L1.05	Soil Erosion and Sediment Control Plan
	Details
LD1.01	Tennis Court Details

SECTION 00 1113
ADVERTISEMENT FOR BID

The Troy School District will receive sealed bid proposals until 3:00 P.M. on February 4, 2010 at the Purchasing Department, 1140 Rankin, Troy, MI. 48083. Bids will be opened and publicly read aloud immediately following the deadline for submission for the following bid package:

Troy School District
Tennis Court Reconstruction
Bid # 9652

*** Remove and replace 8 tennis courts at Troy High School ***

1. All bids must be addressed to:

   Troy School District Purchasing Department
   1140 Rankin
   Troy, Michigan 48083
   REF: Tennis Court Reconstruction TSD Bid # 9652

2. Sealed bids will be publicly opened and read aloud:

   Place: Troy School District Purchasing Office
   1140 Rankin
   Troy, Michigan 48083

   Date: February 4, 2010

   Time: 3:00 p.m.

3. Questions may be addressed to:

   a. Foresite Design, Inc.
   Bruce Lemons, R.L.A. (248) 547-7757

   b. All questions will be submitted in writing utilizing 01 2619 CLARIFICATION REQUEST form.

4. Bidding Documents may be viewed:

   Places: a. McGraw Hill Dodge Plan Room
   b. Construction Association of Michigan Plan Room
   c. ftp://ftp.foresitedesign.com

   Date: January 20, 2010

5. Pre-Bid Meeting

   Place: Troy School District Purchasing Office
   1140 Rankin
   Troy, Michigan 48083

SECTION 00 1113
ADVERTISEMENT FOR BID

Date: January 26, 2010

Time: 1:00 p.m.

6. Bidding Documents may be obtained:

Place: Foresite Design, Inc.
3269 Coolidge Highway
Berkley, MI 48072

Deposit: $50.00 (NON-REFUNDABLE) **Make check payable to: Foresite Design, Inc.

Mailing Fee: $15.00

7. Bonding is required as follows:

Bid Bond: 5% of the Bid Amount

Performance Bond and Labor & Material Bond: 100% of the Contract Price

8. The Bid Bond

Bid Security or Cashier's Check, or Certified Check in the amount of five percent (5%) of the bid amount shall be submitted with the "Bid Proposal Packet" and shall be made payable to Troy School District and be submitted with the understanding that if his/her bid is accepted, he/she will enter into a formal contract with the Owner in accordance with the form of agreement AIA A101 and that the required Performance and Payment Bonds will be given. Bidders shall agree not to withdraw proposals for a period of sixty (60) days after date for receipt of bids.

9. The Performance Bond & Labor and Material Payment

Accepted bidders will be required to furnish in the amount of one hundred percent (100%) of the Contract Price, satisfactory Performance Bond and Labor and Material Payment Bond by a T-listed bonding company, acceptable to Troy School District within (ten) 10 days of notifications of intent to enter into a contract with Troy School District. Failure to do so will result in forfeiture of the proposal guarantee.

10. Additional Pertinent Information

All applicable insurance policies will be required of each accepted bidder.

This project is not tax exempt from State Sales Tax and/or Use Tax. All materials and supplies incorporated and used in construction of the work and becoming a permanent part of this project will not be exempt from State Sales Tax and/or Use Tax. State Sales Tax/Use Tax shall be included in the bid price. All other taxes, fees, permits, etc. and shipping costs shall also be included.

11. Bidding Submittal Requirements

The Bid Proposal Packet shall be on forms furnished in these documents.
THE BID PROPOSAL PACKET MUST BE SUBMITTED IN DUPLICATE.

SECTION 00 1113
ADVERTISEMENT FOR BID

12. Tentative Construction Schedule:

Begin Construction for Proposal A:	Troy High School	-	June 7, 2010
Completion of Proposal A:	Troy High School	-	July 19, 2010

The following Bid Proposal Packet information and Additional Information must be submitted in the following order.

1. Proposal Form
2. Unit Price Form
3. Material Compliance Form
4. Bid Security
5. Familial Disclosure Statement
6. Non-Collusive Affidavit

All bidders must provide familial disclosure in compliance with MCL 380.1267. The bid proposal will be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the owner or any employee of the bidder and any member of the Troy School District or Troy School District Board of Education. A bid that does not include the Familial Disclosure Statement will not be read publicly nor will the Troy School District accept a bid proposal that does not include this sworn and notarized disclosure statement.

No bid(s) will be accepted after the above time and date. Bids received after the deadline will be returned unopened. Delivery of the bids is the responsibility of the bidder, whether by mail or in person. Also, the district is not responsible for delays or failures of any other party.

The Owner reserves the right to accept or reject any or all bids and further reserves the right to award each proposal separately and to evaluate any or all bids on factors including but not limited to low bid and to the best advantage of the Troy School District.

All contracts to be entered into by the Troy School District must and will comply with the prevailing wage and equal opportunity laws of the State of Michigan and Troy School District.

END OF SECTION 00 1113

SECTION 00 1113
ADVERTISEMENT FOR BID

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 1200
SCOPE OF WORK

PROPOSAL A:

CM Supplementary Conditions
General Conditions

Specification Section	02 4113 Demolition
Specification Section	03 3010 Portland Cement
Specification Section	11 6826 Net Tension System
Specification Section	31 1000 Site Preparation / Cleaning
Specification Section	31 2000 Earthwork
Specification Section	32 1124 Aggregate Base (Asphalt)
Specification Section	32 1218 Plant Mix Bituminous Pavement
Specification Section	32 1834 Acrylic Tennis Court Surface
Specification Section	32 3102 Chainlink Fence (Tennis Court)
Specification Section	32 9227 General Lawn Restoration
Specification Section	33 4600 Subdrainage Systems

General Scope of Work:

1. Provide engineering and layout as required to complete this work. Contractor shall coordinate layout points of reference prior to commencement of work.
2. Contractor shall provide accessibility to the courts and protection of the existing track.
3. Remove existing fence, asphalt concrete foundations and dispose off site.
4. Install new perimeter drainage system and tap into existing structure
5. Furnish and install 6” aggregate base
6. Furnish and install 3” asphalt (2 Lifts)
7. Install new 10’ Chain Link Fence with Mid Rail.
8. Clean up and remove from site all debris associated with this work. Include sweeping of parking lots and public and private streets.
9. Provide five sets of material submittal for approval. If submittals comply with specifications, “Material Compliance Certificate” may be used.
10. Note: Milestone Schedule. This trade will be required to confirm a detailed schedule prior to award of this contract.

END OF SECTION 00 1200

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 2113
INSTRUCTIONS TO BIDDERS

STANDARD FORM

The Standard Form of Instructions to Bidders, AIA Document A701, 1997 edition, issued by the American Institute of Architects, is part of this specification. Copies are on file and may be obtained at the office of the Architect.

TABLE OF ARTICLES

1. Definitions
2. Bidder's Representation
3. Bidding Documents
4. Bidding Procedures
5. Consideration of Bids
6. Post-Bid Information
7. Performance Bond and Payment Bond
8. Form of Agreement Between Owner and Contractor
9. Description of Work
10. Warranty & Indemnity

The following includes modifications or additions to the above standard form which are applicable to this project.

ARTICLE 1

DEFINITIONS

1.1 All definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, are applicable to these Instructions to Bidders.

1.2 Bidding Documents included the Advertisement for Bids, Instructions to Bidders, Supplementary and General Conditions, Alternates, General Requirements, The Proposal Form and the Technical Specifications including any Addenda issued prior to receipt of bids.

1.3 Addenda are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the bidding documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed. All changes in cost resulting from addenda shall be included in proposals.

ARTICLE 2

BIDDER'S REPRESENTATION

2.1 Each bidder, by making his bid, represents that he has read and understands the bidding documents.

2.1.3 Each bidder, by making his bid, represents that he has visited the site and familiarized himself with the local conditions under which the work is to be performed. No claims for extra compensation shall be allowed due to failure of any Bidder to examine the conditions that exist at the building site nor for conditions or difficulties encountered in the execution of the work which may have been avoided by such examination.

In submitting his proposal, the Bidder also:

- represents that he has reviewed the work outlined in the Description of Work and fully understands the scope of the work required by interfacing Bid Categories as well as that required by Bid Categories covered in his proposal;

- acknowledges that the scope of the work is not necessarily restricted to a single trade, specification division, or section and that his proposal includes the work of all trades within the Bid Category or Categories covered in his proposal;

- agrees that his proposal, if accepted by the Owner, will be the basis for a contract directly with the Owner and to enter into such contract in accordance with the intent of the Contract Documents.

2.1.5 The Bidder shall familiarize himself, prior to bidding, with the work requirements of all other contractors which precede, interface, follow, or are concurrent with the work of this Category.

ARTICLE 3

BIDDING DOCUMENTS

3.3 SUBSTITUTIONS

3.3.1 Each Bidder represents that his bid is based upon the materials and equipment described in the Bidding Documents.

3.3.2 The successful Contractor must include without approved substitution, all materials and equipment which are specifically identified by manufacturer's name, model or catalog number in the respective Specification Section. Where more than one (1) product or material manufacturer is specified, the Bidder may use the one of his choice in his base bid. It is required that Bidder indicated his choice of material by identifying same in check list attached to his proposal together with the cost attributed to such material. This cost shall be a part of Base Bid, not in addition thereto.

Other substitutions will be considered only when:

A. Request of substitution by the Bidder is made seven (7) days prior to the bid opening and approval for such request is given in the form of an Addendum.

B. Offered as a voluntary alternate presented on the Bidder's letterhead together with the amount to be deducted from his base proposal. The Owner may accept or reject such voluntary alternate based upon his best judgment.

3.3.2.1 Each such request shall include a complete description of their proposed substitute, the name of the material or equipment for which it is to be substituted, drawings, cuts, performance and test data and any other data or information necessary for a complete evaluation.

3.3.2.2 The Owner shall receive the benefit of all cost differences resulting from any substitution.

3.3.2.3 Any revisions necessary after substitutions of equipment or materials have been approved shall be the full responsibility of the Contractor without extra cost to the Owner.

3.3.2.4 If the Architect approves any proposed substitution, such approval will be set forth in an Addendum.

3.3.2.5 Refer to Article 3.19 of Supplementary Conditions regarding substitutions after Award of Contract.

ARTICLE 4

BIDDING PROCEDURES

4.1 PREPARATION OF BIDS

4.1.1 All bids must be prepared on the forms provided by the Architect and submitted in accordance with the Instructions to Bidders.

4.1.2 All blank spaces must be filled in by the Bidder.

4.2 BID SECURITY

4.2.2 ANY BID NOT ACCOMPANIED BY A BID BOND, CERTIFIED OR CASHIER'S CHECK MAY BE REJECTED.

4.2.2.1 Either a CERTIFIED OR CASHIER'S CHECK on an open, solvent bank or a BID BOND issued by an approved bonding company payable to Troy School District in an amount equal to five percent (5%) of the bid shall be submitted with each proposal as liquidated damages if successful Bidder fails to sign contract and file necessary general insurance within fifteen (15) days after Notice of Award from Architect or Owner.

4.2.2.2 The bonding company on issuing a bid bond thereby obligates themselves to furnish a Performance, Labor and Material Bond within (10) ten days, in the full amount of the contract should subject Bidder be Low Bidder.

4.2.2.3 The bid deposit of all except the three (3) lowest responsible bidders will be returned within three (3) days after the opening of bids. The bid deposit of the three (3) lowest responsible bidder will be returned within 48 hours after the contract and their required bonds have been finally approved by the Owner.

4.2.3 (d) Contractor fails to provide required bonding and submit post-bid information required to determine contract award.

4.3 SUBMISSION OF BIDS

4.3.2.1 Proposals shall be addressed as follows:

Troy School District Purchasing Department
1140 Rankin
Troy, Michigan 48083
REF: Tennis Court Reconstruction TSD Bid # 9652

4.3.3 A bid is invalid if it has not been deposited at the designated location prior to the time and date for receipt of any bids indicated in the Advertisement for Bids, or prior to any extension thereof issued to the bidders.

4.3.5 The contractor shall include in the bid and contract price all Sales Taxes and Use Taxes currently imposed by Legislative enactment and as administered by the Department of Revenue on the Bid Date. If the Contractor is not required to pay or bear the burden, or obtains a refund or drawback in whole or in part of any Sales or Use Tax, Interest or Penalty thereon, which was required to be and was deemed to have been included in the bid and contract price, the contract price shall be reduced by the amount thereof and the amount of such a reduction whether as a refund or otherwise, shall insure solely to the benefit of the Owner.

4.3.6 If required, a Bidder shall submit to the Architect a properly executed Contractor's qualification statement prior to receipt of proposals. Requested material may include the following:

Bidder's performance record, list of construction equipment, financial statement covering a period of two (2) years and any additional information required to satisfy the Owner that the Contractor is qualified to fulfill the Contract.

4.3.7 Within one (1) hour after the completion of the opening of the bids, the General Contractors who submitted the three lowest bids must submit a list of the names of each subcontractor who will provide labor or a portion of the work or improvement to the Contractor for which he will be paid an amount exceeding 5 percent of the prime Contractor's total bid or $40,000 whichever is greater. If the General Contractor fails to submit such a list within the required time, his bid shall be deemed not responsive.

4.4 MODIFICATION OR WITHDRAWAL OF BID

4.4.1 Unless otherwise provided in any supplement to these Instructions to Bidders, no Bidder shall modify, withdraw or cancel his bid or any part thereof for sixty (60) days after the time designated for the receipt of bids in the Advertisement for Bids.

4.4.2.1 Prior to receipt of the bids, Addenda will be mailed or delivered to each person or firm recorded by the Architect as having received the bidding documents and will be available for inspection wherever the bidding documents are kept available for that purpose. Addenda issued after receipt of bids will be mailed or delivered only to the selected bidder.

ARTICLE 5

CONSIDERATION OF BIDS

5.2 REJECTION OF BIDS

5.2.1 The Bidder acknowledges the right of the Owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the Bidder recognizes the right of the Owner to reject a bid if the Bidder failed to furnish any required BID SECURITY, or to submit the data required by the Bidding Documents, or if the bid is in any way incomplete or irregular.

5.3 ACCEPTANCE OF BID (AWARD)

5.3.1 Emphasis is placed upon the fact that the Owner's decision regarding award of contracts will be influenced by such factors as quality, completion time, construction features, his best judgment of value, etc., and not entirely upon cost, and further, shall reserve the right to accept or reject any or all bids and to waive irregularities in proposals.

5.3.2 Contracts will be awarded based upon proposals received for one Bid Category only or for all work combined under a single proposal.

5.3.3 Time is the essence of the Contract. It is understood that the work is to be carried through to completion with the utmost speed, consistent with good workmanship. The work of all trades shall be complete on days indicated except for minor replacement, correction or adjustment items which will not interfere with the complete operation and utilization of all parts of the contract work. The time of completion will be an important factor in determining award of the contract. Failure to comply with the construction document will result in rejection of the bid and/or cancellation of award.

5.3.4 Amounts entered in Proposal for Breakdowns or Unit Costs are subject to award, unless specifically noted otherwise.

ARTICLE 6

SUBMISSION OF POST BID INFORMATION

6.1.1 Upon request by the Architect, the selected Bidder, within seven (7) days thereafter, shall submit the following:

6.1.1.1 A statement of costs for each major item or work included in the bid or in detail as requested by the Architect.

6.1.1.2 A designation of the work to be performed by the Bidder with his own forces.

6.1.1.3 A list of names of the Sub-Contractors or other persons or organizations (including those who are to furnish the materials or equipment fabricated to a special design) proposed for such portions of the work as may be designated, the names of the Sub-Contractors proposed for the principal portion of the work. The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the proposed Sub-Contractors to furnish and perform the work described in the divisions of the Specifications pertaining to such proposed Sub-Contractor's respective trades. Prior to the Award of Contract, the Architect will notify the Bidder in writing if either the Owner or the Architect, after due investigation, has reasonable and substantial objection to any person or organizations on such list and refuses in writing to accept such person or organization. The Bidder may, at this option, withdraw his bid without forfeiture of bid security, notwithstanding anything to the contrary contained in Paragraph 4.3.3. If the Bidder submits an acceptable substitute with an increase in his bid price to cover the difference in cost occasioned by such substitution the Owner may, at his discretion, accept the increased bid price or he may disqualify the Bidder. Sub-Contractors, manufacturers, material suppliers and other persons and organizations proposed by the Bidder and accepted by the Owner and Architect must be used on the work for which they were proposed and accepted and shall not be changed

except with written approval of the Owner or Architect. Failure to provide the information, as stated, will result in rejection of bid and/or cancellation of award(post-award).

ARTICLE 7

PERFORMANCE BOND AND PAYMENT BOND

7.1 BOND REQUIREMENTS

7.1 The Owner shall require the Bidder to furnish bonds covering the faithful performance of the Contract and the payment of all obligations arising there under in such form and amount as the Owner may prescribe and with such sureties secured through the Bidder's usual sources as may be agreeable to the parties. Premiums shall be paid by the Bidder. The Bidder shall deliver the required bonds to the Owner not later than (10) ten days from the date of intent to enter the contract, or if the work is commenced prior thereto in response to a letter of intent or Notice of Award, the Bidder shall, prior to commencement of the work, submit evidence satisfactory to the Owner that such bonds will be issued. The bonding companies are to be limited to those listed on U.S. Department of Treasury Circular 570. All surety bonds will be checked for validity before an Award will be made. If for any reason the bonds are not valid, the selected Contractor's Proposal will be null and void.

7.1.1. All successful Bidders, except those noted above, shall be required to furnish Performance and Labor and Material Bonds in the following amounts:

1. Performance Bond in the full amount of the contract insuring the faithful performance of all provisions of the contract and the satisfactory completion of the work embraced there under within the time agreed upon, and the covering of guarantees herein provided for. This bond shall also insure the Owner against defective material or workmanship in any work under the contract for a period of one (1) year after completion and acceptance of the project.

2. Payment Bond in the full amount of the contract for the protection of sub-contractors, labor and material men.

7.2 TIME OF DELIVERY AND FORM OF BONDS

7.2.4 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his Power of Attorney indication the monetary limit of such power.

ARTICLE 9

DESCRIPTION OF WORK

PROPOSAL A – Troy High School Tennis Courts

1. Demolition
2. Installation of drainage system
3. Installation of new net tension system
4. Installation of aggregate base
5. Installation of 3” asphalt (2 lifts)
6. Installation of new 10’ Chain link fence
7. Installation of acrylic coatings and markings
8. Landscape restoration and general Clean-Up

ARTICLE 10

WARRANTY AND INDEMNITY

10.1 WARRANTY

10.1 All work shall be guaranteed in writing against defects in workmanship and materials for one (1) year from issuance by the Board of Education's architect of the Certificate of Substantial Completion, or approval, acceptance and final payment by the Board of Education, whichever occurs first.

10.2 INDEMNITY

10.2Contractor shall indemnify, defend and hold the Troy School District harmless from any damages to property or personal injuries resulting from or reasonable attributable to any defects in supplies or services provided by contractor hereunder.

END OF SECTION 00 2113

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 4200
PROPOSAL A

SUBMITTED BY:_____ **Date**:_____

TO: **Troy School District**
Purchasing Department
1140 Rankin
Troy, Michigan 48083
Ref: Tennis Court Reconstruction TSD Bid #9652

I have carefully examined the bidding documents which include the Instructions to Bidders, all General Conditions and Supplemental Conditions, all drawings title Troy School District and all various addenda numbered _____ to _____ as prepared by FORESITE DESIGN, INC. which cover the general and architectural trades, as well as the premises and conditions affecting this work.

The undersigned proposes to furnish all labor, materials and equipment, all utilities, transportation services and taxes for the general construction as indicated under each proposal in accordance with said documents for the sum or sums of:

Within one (1) hour after the completion of the opening of the bids, the General Contractors who submitted the three lowest bids must submit a list of the names of each subcontractor who will provide labor or a portion of the work or improvement to the Contractor for which he will be paid an amount exceeding 5 percent of the prime Contractor's total bid or $40,000 whichever is greater. If the General Contractor fails to submit such a list within the required time, his bid shall be deemed not responsive.

PROPOSAL A

PROPOSAL A: Site Work

SCOPE OF WORK

1. Demolition and Removal of Items Noted on Drawings
2. Drainage
3. Stone
4. Asphalt
5. Concrete Pad
6. New Net Tension Systems
7. New 10' Galvanized Fence w/ Mid Rail & Gates
8. Acrylic Coatings and Markings
9. Clean-up and Lawn Restoration

PROPOSAL A: BASE BID **$**_____

_____ **Dollars**

If notified of acceptance of this proposal, the undersigned agrees to execute a contract for the above work, for the above stated compensation, in form of the standard form of the AIA.

The undersigned understands and agrees that time is of the essence and that all services, the installation of all work and materials, provided for in the contract must be fully completed on or before the following dates:

SECTION 00 4200
PROPOSAL A

Begin Construction for Proposal A:	Troy High School	-	June 7, 2010
Completion of Proposal A:	Troy High School	-	July 19, 2010

The Contractor shall be back-charged an observation fee of $1000.00 per day for each day that the Contractor fails to meet the projected deadlines, weather permitting, and through no fault of the Owner, or Foresite Design, Inc. Observation Fee shall be paid by the Owner to Foresite Design, Inc.

In submitting this bid, it is understood that the right is reserved by the Owner to accept or reject any or all bids or to accept any bid or bids that will be in the opinion of the Owner such that it may be to their best interest. It is agreed that this bid or bids may not be withdrawn for a period of 60 days from the date of opening.

FIRM NAME : _____

ADDRESS: _____

_____

SIGNED: _____

NAME: _____

TITLE: _____

TELEPHONE: _____

FAX: _____

EMAIL: _____

DATE: _____

SECTION 00 4244
UNIT PRICE FORM

Each unit price requested shall include all charges for incidental expense, applicable taxes, insurance, labor, equipment, fittings, overhead and profit. These shall govern for net additions to the work and net deductions from the work.

		Contract Pricing
1.	Asphalt Removal	$_____/SY
2.	Aggregate Base 21AA Limestone	$_____/Ton
3.	Asphalt (1100 Series)	$_____/Ton
4.	Portland Cement	$_____/CY
5.	4" Concrete over 4" Sand Base	$_____/SF
6.	6' Perforated Drain Tile w/sock	$_____/LF
7.	Trough Drain	$_____/LF
8.	4" Topsoil and Seed	$_____/SY
9.	Undercutting (w/o backfill)	$_____/CY
10.	10' CL Galvanized Fence w/ Mid Rail	$_____/LF
11.	4' Chain Link Gate	$_____/Unit
12.	Acrylic Coatings	$_____/SY

If notified of acceptance of this proposal, the undersigned agrees to execute a contract for the above work, for the above stated compensation, in form of the standard form of the AIA.

The undersigned understands and agrees that time is of the essence and that all services, the installation of all work and materials, provided for in the contract must be fully completed on or before the following dates:

Begin Construction for Proposal A:	Troy High School	-	June 7, 2010
Completion of Proposal A:	Troy High School	-	July 19, 2010

FORESITE DESIGN, INC shall be paid, by the Contractor, a $1000.00 per day observation fee for each day that the Contractor fails to meet the projected deadlines, weather permitting, and through no fault of the Owner, or Foresite Design, Inc.

END OF SECTION 00 4244

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 4336
LIST OF SUBCONTRACTORS

TO BE COMPLETED BY BIDDER:

Project:
☐ Proposal A – Tennis Courts

COMPLETE LIST OF SUBCONTRACTORS BIDDER WILL BE USING:

Company Name	Company Name
Contact Name	Contact Name
Address	Address
City, State Zip	City, State Zip
Phone # Fax #	Phone # Fax #
Company Name	Company Name
Contact Name	Contact Name
Address	Address
City, State Zip	City, State Zip
Phone # Fax #	Phone # Fax #
Company Name	Company Name
Contact Name	Contact Name
Address	Address
City, State Zip	City, State Zip
Phone # Fax #	Phone # Fax #

(USE ADDITIONAL SHEETS AS REQUIRED)

SECTION 00 4336
LIST OF SUBCONTRACTORS

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 4343
PREVAILING WAGE RATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

1.2 QUALITY ASSURANCE

B. To verify compliance with prevailing wage rates, contractor shall provide certified payroll forms, copies or signed payroll checks (both front and back). Workers will be audited periodically to ensure compliance.

STATE OF MICHIGAN

JENNIFER M. GRANHOLM
GOVERNOR

DEPARTMENT OF ENERGY, LABOR & ECONOMIC GROWTH
LANSING

STANLEY "SKIP" PRUSS
DIRECTOR

REQUIREMENTS OF THE PREVAILING WAGES ON STATE PROJECTS ACT, PUBLIC ACT 166 OF 1965

The Michigan Department of Labor & Economic Growth determines prevailing rates pursuant to the Prevailing Wages on State Projects Act, Public Act 166 of 1965, as amended. The purpose of establishing prevailing rates is to provide minimum rates of pay that must be paid to workers on construction projects for which the state or a school district is the contracting agent and which is financed or financially supported by the state. By law, prevailing rates are compiled from the rates contained in collectively bargained agreements which cover the locations of the state projects. The official prevailing rates provide an hourly rate which includes wage and fringe benefit totals for designated construction mechanic classifications. The overtime rates also include wage and fringe benefit totals. Please pay special attention to the overtime and premium pay requirements. Prevailing wage is satisfied when wages plus fringe benefits paid to a worker are equal to or greater than the required rate.

State of Michigan responsibilities under the law:

- The department establishes the prevailing rate for each classification of construction mechanic ***requested by a contracting agent*** prior to contracts being let out for bid on a state project.

Contracting agent responsibilities under the law:

- If a contract is not awarded or construction does not start within 90 days of the date of the issuance of rates, a re-determination of rates must be requested by the contracting agent.
- Rates for classifications needed but not provided on the Prevailing Rate Schedule, ***must*** be obtained ***prior*** to contracts being let out for bid on a state project.
- The contracting agent, by written notice to the contractor and the sureties of the contractor known to the contracting agent, may terminate the contractor's right to proceed with that part of the contract, for which less than the prevailing rates have been or will be paid, and may proceed to complete the contract by separate agreement with another contractor or otherwise, and the original contractor and his sureties shall be liable to the contracting agent for any excess costs occasioned thereby.

Contractor responsibilities under the law:

- Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing rates prescribed in a contract.
- Every contractor and subcontractor shall keep certified payrolls, as used in the industry, of each and every construction mechanic, and verification of such certified payroll in writing by either a representative or auditor/certified accountant at the end of such a certified payroll. These records should include the occupation and indicate the hours worked on each project for each classification and the actual wages and benefits paid. This record shall be available for reasonable inspection by the contracting agent or the department.
- Each contractor or subcontractor is separately liable for the payment of the prevailing rate to its employees.

- The prime contractor is responsible for advising all subcontractors of the requirement to pay the prevailing rate prior to commencement of work.
- The prime contractor is secondarily liable for payment of prevailing rates that are not paid by a subcontractor.
- A construction mechanic shall only be paid the apprentice rate if registered with the United States Department of Labor, Bureau of Apprenticeship and Training and the rate is included in the contract.

Enforcement:

A person who has information of an alleged prevailing wage violation on a state project may file a complaint with the Wage & Hour Division. The department will investigate and attempt to resolve the complaint informally. During the course of an investigation, if the requested records and posting certification are not made available in compliance with Section 5 of Act 166, the investigation will be concluded and a referral to the Office of Attorney General for civil action will be made. The Office of Attorney General will pursue costs and fees associated with a lawsuit if filing is necessary to obtain records.

A violation of Act 166 may result in the contractor's name being added to the Prevailing Wage Act Violators List published on the division's website, updated monthly. This list includes the names and addresses of contractors and subcontractors the division has found in violation of Act 166 based on complaints from individuals and third parties. The Prevailing Wage Act Violators List is intended to inform contracting agents of contractors that have violated Act 166 for use in determining who should receive state-funded projects.

SECTION 00 4343
PREVAILING WAGE RATES

JENNIFER M. GRANHOLM
GOVERNOR

Michigan Department of Energy, Labor & Economic Growth
Wage & Hour Division
PO Box 30476
Lansing , MI 48909-7976
517.335.0400
www.michigan.gov/wagehour

STANLEY "SKIP" PRUSS
DIRECTOR

Informational Sheet: Prevailing Wages on State Projects
General Information Regarding Fringe Benefits

Certain fringe benefits **may** be credited toward the payment of the Prevailing Wage Rate:

- If a fringe benefit is paid directly to a construction mechanic
- If a fringe benefit contribution or payment is made on behalf of a construction mechanic
- If a fringe benefit, which may be provided to a construction mechanic, is pursuant to a written contract or policy
- If a fringe benefit is paid into a fund, for a construction mechanic

When a fringe benefit is not paid by an hourly rate, the hourly credit will be calculated based on the annual value of the fringe benefit divided by 2080 hours per year (52 weeks @ 40 hours per week).

The following is an example of the types of fringe benefits allowed and how an hourly credit is calculated:

Vacation	40 hours X $14.00 per hour = $560/2080 =	$.27
Dental insurance	$31.07 monthly premium X 12 mos. = $372.84 /2080 =	$.18
Vision insurance	$5.38 monthly premium X 12 mos. = $64.56/2080 =	$.03
Health insurance	$230.00 monthly premium X 12 mos. = $2,760.00/2080 =	$1.33
Life insurance	$27.04 monthly premium X 12 mos. = $324.48/2080 =	$.16
Tuition	$500.00 annual cost/2080 =	$.24
Bonus	4 quarterly bonus/year x $250 = $1000.00/2080 =	$.48
401k Employer Contribution	$2000.00 total annual contribution/2080 =	$.96
Total Hourly Credit		$3.65

Other examples of the types of fringe benefits allowed:

- Sick pay
- Holiday pay
- Accidental Death & Dismemberment insurance premiums

The following are examples of items that **will not** be credited toward the payment of the Prevailing Wage Rate:

- Legally required payments, such as:
  - Unemployment Insurance payments
  - Workers' Compensation Insurance payments
  - FICA (Social Security contributions, Medicare contributions)
- Reimbursable expenses, such as:
  - Clothing allowance or reimbursement
  - Uniform allowance or reimbursement
  - Gas allowance or reimbursement
  - Travel time or payment
  - Meals or lodging allowance or reimbursement
  - Per diem allowance or payment
- Other payments to or on behalf of a construction mechanic that are not wages or fringe benefits, such as:
  - Industry advancement funds
  - Financial or material loans

WHD-9917 (08/07) Page 1 of 1

MICHIGAN DEPARTMENT OF ENERGY, LABOR & ECONOMIC GROWTH
WAGE & HOUR DIVISION

2009 MICHIGAN PREVAILING WAGE RATE SCHEDULE
for Parking Lot, ROAD, HIGHWAY, BRIDGE & AIRPORT CONSTRUCTION
Issue Date: 01/15/2010
Contract must be awarded by: 04/15/2010
PW #63 Troy School District High School Tennis Court Renovation

Construction Mechanic Classification	Straight Time Rate	Time & One-Half Rate	Double Time Rate	Overtime Code
CARPENTERS				
Zone 1	$47.05	$67.05	$87.04	HHHHHHDDY
Apprentices				
0- 6 months	$24.65	$33.45	$42.24	HHHHHHDDY
7-12 months	$29.05	$40.05	$51.04	HHHHHHDDY
Year 2	$33.05	$46.05	$59.04	HHHHHHDDY
Year 3	$37.06	$52.06	$67.06	HHHHHHDDY
Year 4	$41.05	$58.05	$75.04	HHHHHHDDY
Zone 2	$38.81	$51.91	NONE	HHHHHHHHY
Apprentices				
1st Year	$28.33	$36.19	NONE	HHHHHHHHY
2nd Year	$30.95	$40.12	NONE	HHHHHHHHY
3rd Year	$33.57	$44.05	NONE	HHHHHHHHY
4th Year	$34.88	$46.01	NONE	HHHHHHHHY
CEMENT MASONS				
Zone 1	$37.91	$51.65	NONE	HHHHHHHHY
Apprentices				
Year 1	$25.43	$32.93	NONE	HHHHHHHHY
Year 2	$29.56	$39.13	NONE	HHHHHHHHY
Year 3	$33.70	$45.34	NONE	HHHHHHHHY
Zone 2	$36.41	$49.40	NONE	HHHHHHHHY
Apprentices				
Year 1	$24.60	$31.69	NONE	HHHHHHHHY
Year 2	$28.55	$37.61	NONE	HHHHHHHHY
Year 3	$32.52	$43.57	NONE	HHHHHHHHY

2009 Michigan Prevailing Wage Rate Schedule for Parking Lot, Road, Highway, Bridge & Airport Construction 2
Issue Date: 01/15/2010 Contract must be awarded by: 04/15/2010
PW #63 Troy School District Tennis Court Renovation High School

OPERATING ENGINEERS				
Zone 1 CLASS I	$45.87	$59.83	NONE	HHHHHHHHY
CLASS II	$39.14	$49.73	NONE	HHHHHHHHY
CLASS II GREASE TRUCK	$40.44	$51.68	NONE	HHHHHHHHY
CLASS III	$38.58	$48.89	NONE	HHHHHHHHY
CLASS IV	$38.41	$48.64	NONE	HHHHHHHHY
Zone 2 CLASS I	$45.87	$59.83	NONE	HHHHHHHHY
CLASS II	$38.99	$49.51	NONE	HHHHHHHHY
CLASS II GREASE TRUCK	$40.29	$51.46	NONE	HHHHHHHHY
CLASS III	$38.43	$48.67	NONE	HHHHHHHHY
CLASS IV	$38.11	$48.19	NONE	HHHHHHHHY
Apprentices (**Zones 1 & 2**)				
1st 6 Month Period	$37.50	$47.27	NONE	HHHHHHHHY
2nd 6 Month Period	$38.89	$49.36	NONE	HHHHHHHHY
3rd 6 Month Period	$40.29	$51.45	NONE	HHHHHHHHY
4th 6 Month Period	$41.68	$53.55	NONE	HHHHHHHHY
5th 6 Month Period	$43.08	$55.64	NONE	HHHHHHHHY
6th 6 Month Period	$44.47	$57.73	NONE	HHHHHHHHY
IRONWORKERS: Fence, Sound Barrier & Guardrail Erection/Installation, and Exterior Signage Work				
Zone 1	$30.80	$42.63	$54.45	XXHXXXHDY
60% Level Apprentice	$21.10	$28.20	$35.29	XXHXXXHDY
65% Level Apprentice	$22.31	$30.00	$37.69	XXHXXXHDY
70% Level Apprentice	$23.53	$31.80	$40.08	XXHXXXHDY
75% Level Apprentice	$24.74	$33.61	$42.48	XXHXXXHDY
80% Level Apprentice	$25.95	$35.41	$44.87	XXHXXXHDY
Zone 2	$26.80	$36.63	$46.45	XXHXXXHDY
60% Level Apprentice	$18.70	$24.60	$30.49	XXHXXXHDY
65% Level Apprentice	$19.71	$26.10	$32.49	XXHXXXHDY
70% Level Apprentice	$20.73	$27.60	$34.48	XXHXXXHDY
75% Level Apprentice	$21.74	$29.11	$36.48	XXHXXXHDY
80% Level Apprentice	$22.75	$30.61	$38.47	XXHXXXHDY

2009 Michigan Prevailing Wage Rate Schedule for Parking Lot, Road, Highway, Bridge & Airport Construction 3
Issue Date: 01/15/2010 Contract must be awarded by: 04/15/2010
PW #63 Troy School District Tennis Court Renovation High School

LABORERS				
CLASS 1 **Zone 1**	$34.41	$46.07	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$29.04	$38.02	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$30.12	$39.63	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$31.19	$41.24	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$33.34	$44.46	NONE	HHHHHHHHY
CLASS 1 **Zone 2**	$32.51	$43.22	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$27.71	$36.01	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$28.67	$37.45	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$29.63	$38.90	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$31.55	$41.78	NONE	HHHHHHHHY
CLASS 1 **Zones 3 & 4**	$31.76	$42.10	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$27.14	$35.17	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$28.07	$36.55	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$28.99	$37.94	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$30.84	$40.71	NONE	HHHHHHHHY
CLASS 2 **Zone 1**	$34.54	$46.27	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$29.14	$38.17	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$30.22	$39.79	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$31.30	$41.41	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$33.46	$44.65	NONE	HHHHHHHHY
CLASS 2 **Zone 2**	$32.71	$43.52	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$27.86	$36.24	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$28.83	$37.69	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$29.80	$39.15	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$31.74	$42.06	NONE	HHHHHHHHY
CLASS 2 **Zones 3 & 4**	$31.97	$42.41	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$27.30	$35.41	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$28.23	$36.81	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$29.17	$38.21	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$31.04	$41.01	NONE	HHHHHHHHY

2009 Michigan Prevailing Wage Rate Schedule for Parking Lot, Road, Highway, Bridge & Airport Construction 4
Issue Date: 01/15/2010 Contract must be awarded by: 04/15/2010
PW #63 Troy School District Tennis Court Renovation High School

LABORERS continued				
CLASS 3 **Zone 1**	$34.72	$46.54	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$29.28	$38.37	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$30.36	$40.00	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$31.45	$41.63	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$33.63	$44.90	NONE	HHHHHHHHY
CLASS 3 **Zone 2**	$32.95	$43.88	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$28.04	$36.51	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$29.02	$37.98	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$30.00	$39.46	NONE	HHHHHHHHY
Apprentice 3,001 – 4,000 work hours	$31.97	$42.41	NONE	HHHHHHHHY
CLASS 3 **Zones 3 & 4**	$32.26	$42.85	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$27.52	$35.73	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$28.47	$37.15	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$29.41	$38.58	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$31.31	$41.42	NONE	HHHHHHHHY
CLASS 4 **Zone 1**	$34.80	$46.66	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$29.34	$38.46	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$30.43	$40.10	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$31.52	$41.74	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$33.71	$45.02	NONE	HHHHHHHHY
CLASS 4 **Zone 2**	$33.30	$44.41	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$28.30	$36.90	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$29.30	$38.40	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$30.30	$39.90	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$32.30	$42.90	NONE	HHHHHHHHY
CLASS 4 **Zones 3 & 4**	$32.70	$43.51	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$27.85	$36.23	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$28.82	$37.68	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$29.79	$39.14	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$31.73	$42.05	NONE	HHHHHHHHY

2009 Michigan Prevailing Wage Rate Schedule for Parking Lot, Road, Highway, Bridge & Airport Construction 5
Issue Date: 01/15/2010 Contract must be awarded by: 04/15/2010
PW #63 Troy School District Tennis Court Renovation High School

LABORERS continued				
CLASS 5 **Zone 1**	$35.01	$46.97	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$29.49	$38.69	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$30.60	$40.35	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$31.70	$42.00	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$33.91	$45.31	NONE	HHHHHHHHY
CLASS 5 **Zone 2**	$33.17	$44.21	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$28.20	$36.76	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$29.19	$38.25	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$30.19	$39.74	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$32.18	$42.72	NONE	HHHHHHHHY
CLASS 5 **Zones 3 & 4**	$32.32	$42.94	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$27.56	$35.80	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$28.51	$37.23	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$29.47	$38.65	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$31.37	$41.51	NONE	HHHHHHHHY
CLASS 6 **Zone 1**	$35.31	$47.42	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$29.72	$39.03	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$30.84	$40.71	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$31.95	$42.39	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$34.19	$45.74	NONE	HHHHHHHHY
CLASS 6 **Zone 2**	$33.51	$44.72	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$28.46	$37.14	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$29.47	$38.65	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$30.48	$40.17	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$32.50	$43.20	NONE	HHHHHHHHY
CLASS 6 **Zones 3 & 4**	$32.75	$43.58	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$27.89	$36.28	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$28.86	$37.74	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$29.83	$39.20	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$31.78	$42.12	NONE	HHHHHHHHY

2009 Michigan Prevailing Wage Rate Schedule for Parking Lot, Road, Highway, Bridge & Airport Construction 6
Issue Date: 01/15/2010 Contract must be awarded by: 04/15/2010
PW #63 Troy School District Tennis Court Renovation High School

LABORERS continued				
CLASS 7 **Concrete Specialist** Zone 1	$36.38	$49.03	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$30.52	$40.24	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$31.69	$41.99	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$32.86	$43.75	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$35.21	$47.27	NONE	HHHHHHHHY
CLASS 7 **Concrete Specialist** Zones 2, 3, & 4	$36.08	$48.58	NONE	HHHHHHHHY
Apprentice 0-1,000 work hours	$30.38	$40.03	NONE	HHHHHHHHY
Apprentice 1,001-2,000 work hours	$31.52	$41.74	NONE	HHHHHHHHY
Apprentice 2,001-3,000 work hours	$32.66	$43.45	NONE	HHHHHHHHY
Apprentice 3,001-4,000 work hours	$34.94	$46.87	NONE	HHHHHHHHY
PIPE & MANHOLE REHAB WORK				
General laborer for rehab work or normal cleaning and cctv work; top man, scaffold man, cctv assistant, jetter-vac assistant	$26.00	$34.90	NONE	HHHHHHHHN
Tap cutter/cctv tech; grout equipment operator; unit driver and operator of cctv, grouting equipment and tap cutting equipment in connection with pipe & manhole rehab work	$30.50	$41.65	NONE	HHHHHHHHN
CCTV tech/combo unit; operator of cctv unit or combo unit in connection with normal cleaning and televising work	$29.25	$39.77	NONE	HHHHHHHHN
Boiler operator: unit driver and operator of steam/water heater units and all ancillary equipment associated	$31.00	$42.40	NONE	HHHHHHHHN
Combo unit driver & jetter-vac operator	$31.00	$42.40	NONE	HHHHHHHHN
Pipe bursting & slip-lining equipment operator	$32.00	$43.90	NONE	HHHHHHHHN

2009 Michigan Prevailing Wage Rate Schedule for Parking Lot, Road, Highway, Bridge & Airport Construction 7
Issue Date: 01/15/2010 Contract must be awarded by: 04/15/2010
PW #63 Troy School District Tennis Court Renovation High School

TRUCK DRIVERS				
Zone 1				
Driver of all trucks of 8 cubic yard capacity or less	$36.84	$36.44	NONE	HHHHHHHHY
Driver of trucks of 8 cubic yard capacity or over	$36.94	$36.59	NONE	HHHHHHHHY
Driver of euclid type equipment	$37.09	$36.81	NONE	HHHHHHHHY
Zone 2				
Driver of all trucks of 8 cubic yard capacity or less	$36.74	$36.29	NONE	HHHHHHHHY
Driver of all trucks of 8 cubic yard capacity or over	$36.84	$36.44	NONE	HHHHHHHHY
Driver of euclid type equipment	$36.99	$36.66	NONE	HHHHHHHHY

Effective Date: August 12, 2009

SECTION 00 4343
PREVAILING WAGE RATES

CARPENTERS	
Zone 1	Wayne, Oakland, Macomb, Sanilac, St. Clair, Monroe, and the following townships of Livingston County: Brighton, Deerfield, Genoa, Hartland, Osceola and Tyrone
Zone 2	The entire state except those counties and townships listed in Zone 1

CEMENT MASONS	
Zone 1	Genesee, Oakland, Macomb, Monroe, Washtenaw, Wayne, Livingston and Saginaw Counties
Zone 2	Alcona, Alger, Allegan, Alpena, Antrim, Arenac, Baraga, Barry, Bay, Berrien, Benzie, Branch, Calhoun, Cass, Charlevoix, Cheboygan, Chippewa, Clare, Clinton, Crawford, Delta, Dickinson, Eaton, Emmet, Gladwin, Gogebic, Grand Traverse, Gratiot, Hillsdale, Houghton, Huron, Ingham, Ionia, Iosco, Iron, Isabella, Jackson, Kalamazoo, Kalkaska, Kent, Keweenaw, Lake, Lapeer, Leelanau, Lenawee, Luce, Mackinac, Manistee, Marquette, Mason, Mecosta, Menominee, Midland, Missaukee, Montcalm, Montmorency, Muskegon, Newaygo, Oceana, Ogemaw, Ontonagon, Osceola, Oscoda, Otsego, Ottawa, Presque Isle, Roscommon, Sanilac, Schoolcraft, Shiawassee, St. Clair, St. Joseph, Tuscola, Van Buren, and Wexford Counties

OPERATING ENGINEERS	
Zone 1	Genesee, Oakland, Macomb, Monroe, Washtenaw and Wayne Counties
Zone 2	The entire state except those counties listed in Zone 1

OPERATING ENGINEERS CLASSIFICATION DESCRIPTIONS		
Class I	Asphalt Paver (self-propelled) Asphalt Planer (self-propelled) Asphalt Plant Operator Auto-Grader Blade Grader Operator Batch Plant (concrete-central mix) Backhoe (with over 3/8 yard bucket) Bulldozer Operator Concrete Pump 3" and over Conveyor Loader Operator (euclid type) Crane Operator Dragline Operator Elevating Grader Operator End-loader Operator (1 yard capacity or over) Slip Form Paver Finishing Machine Operator (asphalt) Gradall Operator (and similar type machines) Hoisting Engineer Hydro demolisher (water blaster) Locomotive Operator Mechanic	Paver Operator (5 bags or more) Pump Operator (6" discharge or over, gas, diesel powered, or generator of 300 amp or larger) Pile Driving Operator Roto Mill Roller Operator (Asphalt) Side Boom Tractor (type D-4, equivalent or larger) Self-Propelled or Tractor Drawn Scraper Slurry Machine (asphalt) Swinging Boom Truck (over l2 ton capacity) Shouldering or Gravel Distributing Machine Operator (self-propelled) Shovel Operator Side Boom Tractor (type D-4 or equivalent or larger) Tractor Operator Trenching Machine Operator Tube Finisher (slip form paving) Farm type tractor with attached pan
Class II	Sweeper (wayne type & similar equipment) Screening Plant Operator Washing Plant Operator Crusher Operator Vacuum Truck Operator	Backhoe (with 3/8 yard bucket or less) Side Boom Tractor (smaller than D-4 type or equivalent) Batch Plant (concrete-dry mix)
Class II	Grease Truck	

OPERATING ENGINEERS CLASSIFICATION DESCRIPTIONS continued

Class III

Air Compressor Operator (600 cfm or more)
Air Compressor (2 or more, less than 600 cfm)
Concrete Breaker
Tractor Operator (farm type with attachments)
Wagon Drill Operator

Class IV

Boiler Fireman
Oiler
End-loader Operator (under 1 yard capacity)
Mechanic's Helper
Trencher (service)
Flexplane Operator
Cleftplane Operator
Grader Operator Self-propelled
Fine-Grade or Form (concrete)
Finishing Machine Operator (concrete)
Boom or Winch Hoist Truck Operator
Stump Remover
Skid Steer
Fireman Roller Operator (other than asphalt)
Curing Equipment Operator (self-propelled)
Concrete Saw Operator (Over 40 HP)
Power Bin Operator
Plant Drier Operator (asphalt)
Vibratory Compaction Equipment (6' wide or over)
Guard Post Driver Operator
All Mulching Equipment, Stump Remover, Concrete Pump (under 3")
Farm Type Tractor Operator
End Dumps
Mesh Installer (self-propelled

IRONWORKERS

Zone 1 Genesee, Oakland, Macomb, Monroe, Washtenaw and Wayne Counties

Zone 2 All other counties in the Lower Pennisula

SECTION 00 4343
PREVAILING WAGE RATES

LABORERS	
Zone 1	Genesee, Macomb, Monroe, Oakland, Washtenaw and Wayne
Zone 2	Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Gratiot, Hillsdale, Huron, Ingham, Jackson, Kalamazoo, Lapeer, Lenawee, Livingston, Midland, Muskegon, Saginaw, Sanilac, Shiawassee, St. Clair, St. Joseph, Tuscola, and Van Buren
Zone 3	Alcona, Alpena, Antrim, Arenac, Benzie, Charlevoix, Cheboygan, Clare, Crawford, Emmet, Gladwin, Grand Traverse, Ionia, Iosco, Isabella, Kalkaska, Kent, Lake, Leelanau, Manistee, Mason, Mecosta, Missaukee, Montcalm, Montmorency, Newaygo, Oceana, Ogemaw, Osceola, Oscoda, Otsego, Ottawa, Presque Isle, Roscommon, and Wexford
Zone 4	Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, and Schoolcraft

LABORERS CLASSIFICATION DESCRIPTIONS	
Class 1	Asphalt Shoveler or Loader, Asphalt Raker Tender, Asphalt Plant Misc., Railroad Track and Trestle Laborer, Burlap Man, Carpenter's Tender, Top Man, Yard Man, Guard Rail Builder's Tender, Earth Retention Barrier and Wall and Mechanically Stabilized Earthen Wall Installers Tender, Highway and Median Barrier Installer's Tender (including Sound, Retaining and Crash Barrier), Fence Erector's Tender, Dumper (wagon, truck, etc.) Joint Filling Labor, Misc., Unskilled Labor, Sprinkler Labor, Form Setting Labor, Form Stripper, Pavement Reinforcing, Handling and Placing (e.g. wire mesh, steel mats, dowel bars, etc.) Mason's or Bricklayer's Tender on Manholes, Manhole Builder, Headwalls, etc., Waterproofing (other than buildings), Seal Coating and Slurry Mix, Shoring, Underpinning, Bridge Painting, etc. (spray, roller and brush) Sandblasting, Pressure Grouting, and Bridge Pin and Hanger Removal, Material Recycling Laborer, Horizontal Paver (brick, concrete, clay, stone and asphalt) Ground Stabilization and Modification Laborer, Grouting, Waterblasting, Sign Installer and remote control operated equipment.
Class 2	Mix Operator (less than 5 sacks), Air or Electric Tool Operator (jack hammer, etc.), Spreader, Boxman (asphalt, stone, gravel, etc.), Concrete Paddler, Power Chain Saw Operator, Paving Batch Truck Dumper, Tunnel Mucker (highway work only), Concrete Saw Operator (under 40 H.P.), Dry Pack Machine and Roto-Mill Grounds Person.
Class 3	Tunnel Miner (highway work only), Finishers Tender, Guard Rail Builder, Highway and Median Barrier Installer, Fence Erector, Bottom Man, Powder Man, Wagon Drill and Air Track Operators, Curb and Side Rail Setters' Tender, Diamond & Core Drills, Earth Retention Barriers, Walls and Mechanically Stabilized Earthen Wall Installer (including sound, retaining and crash barrier), grade checker and certified welder.
Class 4	Asphalt Raker
Class 5	Pipe Layers, Oxy-gun
Class 6	Line-Form Setter for Curb or Pavement and asphalt screed checker/screw man on asphalt paving machines.
Class 7	Concrete Specialist, finishing and troweling, of cast in place or precast concrete by any and all methods.

TRUCK DRIVERS	
Zone 1	Genesee, Oakland, Macomb, Monroe, Livingston, Washtenaw and Wayne Counties
Zone 2	The entire state except those counties listed in Zone 1

SECTION 00 4343
PREVAILING WAGE RATES

OVERTIME PROVISIONS FOR Road Builder PREVAILING WAGE RATE SCHEDULE

1. Overtime is represented as a nine character code. Each character represents a certain period of time after the first 8 hours Monday thru Friday.

	Monday thru Friday	Saturday	Sunday & Holidays	Four 10s
First 8 Hours		4	8	9
9th Hour	1	5		
10th Hour	2	6		
Over 10 hours	3	7		

Overtime for Monday thru Friday after 8 hours:
the 1st character is for time worked in the 9th hour *(8.1 - 9 hours)*
the 2nd character is for time worked in the 10th hour *(9.1 - 10 hours)*
the 3rd character is for time worked beyond the 10th hour *(10.1 and beyond)*

Overtime on Saturday:
the 4th character is for time worked in the first 8 hours on Saturday *(0 - 8 hours)*
the 5th character is for time worked in the 9th hour on Saturday *(8.1 - 9 hours)*
the 6th character is for time worked in the 10th hour *(9.1 - 10 hours)*
the 7th character is for time worked beyond the 10th hour *(10.01 and beyond)*

Overtime on Sunday & Holidays
the 8th character is for time worked on Sunday or on a holiday

4 Ten hour days @ Straight Time
The 9th character indicates if an optional 4-day 10-hour per day workweek can be worked between Monday and Friday without paying overtime after 8 hours worked. **To *utilize a 4 ten workweek, notice is required from the employer to employee prior to the start of work on the project.***

2. Overtime Indicators Used in the Overtime Provision:
H -means TIME AND ONE-HALF due
D -means DOUBLE PAY due
X means TIME AND ONE HALF due after 40 hours worked
Y means YES an optional 4-day 10-hour per day workweek can be worked without paying overtime after 8 hours worked
N -means NO optional 4-day 10-hour per day workweek can be worked without paying overtime after 8 hours worked

3. EXAMPLES:
HHHHHHDDY - This example shows that the 1½ rate must be used for time worked after 8 hours Monday thru Friday *(characters 1 - 3)*and for all hours worked on Saturday, *(characters 4 - 6)*, except hours worked after 10 hours on Saturday *(7th character)*. Work done after 10 hours must be paid at the double time rate. Work done on Sunday or holidays must be paid double time *(character 8)*. The Y *(character 9)* indicates that 4 ten-hour days is an acceptable alternative workweek at regular pay.

HHHHHHHHY means that the 1½ rate must be used for time worked after 8 hours worked Monday thru Friday *(characters 1-3)*; and for any hours worked on Saturdays, Sundays or holidays *(characters 4-8)*. The Y *(character 9)* indicates that 4 ten-hour days is an acceptable alternative workweek at regular pay.

XXHXXXHDY this example allows 4 ten hour days Monday thru Saturday to be worked. Hours worked beyond ten Monday thru Saturday OR hours worked after 40 hours in one week must be paid at time and one half. Sunday or holiday hours must be paid at double.

(REV 09/29/09RB)

END OF SECTION 00 4343

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 4519
NON-COLLUSIVE AFFIDAVIT

STATE OF _____) ss

COUNTY OF _____)

_____, being first duly sworn, deposes and says:

That he is (a partner or officer, etc.) of the firm of, _____ the party making the foregoing proposal or bid, that such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any bidder, or to secure any advantage against the Troy School District_____ or any person interested in the proposed contract; and that all statements in said proposal or bid are true.

Signature of:

Bidder, if bidder is an individual:

Partner, if the bidder is a partnership;

Officer, if the bidder is a Corporation.

Subscribed and sworn to before me this ___ day of _____ 20____

My commission expires:

SECTION 00 4519
NON-COLLUSIVE AFFIDAVIT

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 4550
STATEMENT REGARDING FAMILIAL RELATIONSHIP
MCL 380.1267 (d)

I am the _____ of _____, a bidder on a
(Title) *(Company Name)*

construction project for _____ that involves, at least in part,
(Name of School District)

construction of a new school building or an addition to or repair or renovation of an existing school building.

1. I have personal knowledge and/or I have personally verified that the following are all of the familial relationships existing between the owner(s) and employees(s) of the aforementioned contractor and the school district's superintendent and/or board members

☐ **The following are the familial relationship(s):**

	Owner/Employee Name	**Related to:**	**Relationship**
1.			
2.			
3.			
4.			
5.			

(Attach additional pages if necessary to disclose familial relationships.)

2. I have personal knowledge and/or I have personally verified that the following are all of the familial relationships existing between the owner(s) and employees(s) of the aforementioned contractor and the school district's superintendent and/or board members
3. I have authority to bind the aforementioned contractor with the representations contained herein, and I am fully aware that the school district will rely on my representations in evaluating bids for the construction project.

☐ **There is no familial relationship that exists** between the owner(s) and employees(s) of the aforementioned contractor and the school district's superintendent and/or board members.

BIDDER'S FIRM NAME _____

BY (SIGNATURE) _____

PRINTED NAME AND TITLE _____

Subscribed and sworn before me, this _____ Seal:

Day of _____, 20____, a Notary Public

In and for _____ County, _____

_____
Signature
NOTARY PUBLIC

My Commission expires _____ _____

SECTION 00 4550
STATEMENT REGARDING FAMILIAL RELATIONSHIP
MCL 380.1267 (d)

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 6513
MATERIAL COMPLIANCE CERTIFICATE

PROPOSAL A – Tennis Court Reconstruction

This document serves as guarantee by the contractor that all products, devices, materials, etc. used or intended for use in the project are as approved for use in the Specifications issued by Foresite Design, Inc. for Troy School District – Tennis Court Reconstruction TSD Bid # 9652. Furthermore, no additional formal shop drawings will be necessary unless specifically requested by Troy School District or Foresite Design, Inc. Items listed below are approved products and no substitutions have been made without written permission by Foresite Design, Inc. (please attach). By signing this document, the contractor is committed to use products required by the contract documents.

LIST SPECIFICATION #, ITEM, MANUFACTURER AND MODEL #

Spec Section	Item	Manufacturer	Model #

Contractor: _____ Signature: _____

Date: _____ Print Name: _____

Title: _____

Reviewed by: _____ _____

Date: _____ _____

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 00 7300
SUPPLEMENTARY CONDITIONS

STANDARD FORM

The Standard Form of General Conditions of the Contract for Construction, AIA Document A201 - 1997, issued by the American Institute of Architects, is a part of this specification. Copies are on file and may be obtained at the office of the Architect.

TABLE OF ARTICLES

1.	General Provisions	8.	Time
2.	Owner	9.	Payments and Completion
3.	Contractor	10.	Protection of Persons and Property
4.	Administration of the Contract	11.	Insurance and Bonds
5.	Sub-Contractors	12.	Uncovering and Correction of Work
6.	Separate Contracts	13.	Miscellaneous Provisions
7.	Changes in the Work	14.	Termination of Contract

The following supplements modify, change, delete from or add to the above named documents. Where any article of the General conditions is modified or any paragraph, subparagraph or clause thereof is modified or deleted by these supplements, the unaltered provisions of that article, paragraph, subparagraph or clause shall remain in effect.

ARTICLE 1

GENERAL PROVISIONS

1.1 DEFINITIONS

1.1.2 The Contract

1.1.2.1 The work shall be performed under separate or combined contracts. It is the duty of each Contractor to coordinate his work with that of each other Contractor. A complete set of drawings and specifications will be made a part of the Contract Documents for each Contractor.

1.1.4 The Project

The work covered in this project manual consists of construction and other related items, as set forth in the Instruction to Bidders, all pursuant to completion of Troy School District.

1.1.6.1 The Specifications

The term "product" as used in these Supplementary Conditions includes material, systems and equipment.

1.1.7 The Project Manual

The term "Project Manual" as used in these Supplementary Conditions is the volume which includes the Bidding Requirements, Conditions of Contract and the Specifications.

SECTION 00 7300
SUPPLEMENTARY CONDITIONS

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

1.2.3.1 No responsibility either direct or implied is assumed by the Architect for omission or duplications by the Contractor or his Sub-contractor due to real or alleged error in arrangements of matter in these Contract Documents.
It is the intent that the Drawings and Specifications include everything necessary for the completion of the project and to be consistent with each other. It is hereby agreed and understood that work shown on the Drawings and not mentioned in the Specifications, or vise versa, is to be included the same as if it were mentioned in both the Drawings and the Specifications, with no extra charge to the Owner. If any part of the Drawings and/or Specifications are inconsistent, incorrect, or obscured in their meaning, these discrepancies shall be brought to the attention of the Architects in writing before execution of the Contract. Where there is conflict regarding the quality of any equipment or material, the one having the better quality shall be used unless directed by the Architect.

In submitting his proposal, the Contractor agrees to furnish all labor and supervision necessary to produce the construction required by the Contract Documents and all materials and equipment incorporated or to be incorporated in such construction.

1.2.4 The organization of the Specifications is done with the intent of defining the work for multiple Contract performance. The extent of responsibility for Contractor performance is overlapping from one technical section to another. It is the responsibility of each Contractor to cooperate and coordinate his work with other Contractors as necessary to meet all interface conditions standard to the industry and obvious to the intended extent of the work on this particular project.

1.6 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

1.6.1.1 Drawings and Specifications provided to those not party to the contract are to be returned immediately upon request of the Architect.

ARTICLE 2

OWNER

2.1 GENERAL

2.1.1 The Owner of this Project is:

Troy School District
4400 Livernois
Troy, Michigan 48098

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

2.2.3 The Owner shall obtain and pay for those items described (if any) set forth in the General Requirements.

2.2.4.1 The Owner shall issue all instruction to the Contractor through the Architect.

2.4 OWNER'S RIGHTS TO CARRY OUT THE WORK

2.4.1 Delete reference to two (2) "seven (7) day written notices" and insert two (2) "forty-eight (48) hour notices" prior to Owner's carrying out the work. The method of notification is distributed via a fax transmittal and the original will be sent 1st Class Mail.

ARTICLE 3

CONTRACTOR

3.7 PERMITS, FEES AND NOTICES

3.7.1.1 The individual contractor will be responsible for securing and paying for permits pertaining to their area of work, and other items as set forth in the general requirements. Costs and arrangements for governmental inspection shall be the responsibility of the Contractor.

3.9 SUPERINTENDENT

3.9.1 The contractor shall provide adequate supervision over the work involved in his portion of the project. The Contractor shall designate a representative through which all communications shall be made. This representative shall work closely with the Architect in the performance of the work and his communications shall be binding on the part of the Contractor. Important communications shall be confirmed in writing.

3.9.2 All work shall be of the highest quality and in strict accordance with Manufacturer's published specifications and to Owner's satisfaction. Unacceptable workmanship will not be tolerated or permitted to continue.

3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

3.10.1 The Contractor and all Sub-Contractors, suppliers and manufacturers shall schedule materials, deliveries and installation expeditiously, and provisions to this effect shall be included in all subcontracts.

3.10.3 The Projected Construction Schedule as endorsed or modified by the Contractor, is part of the Contract Documents. This schedule constitutes the Contractor's commitment to expedient performance.

3.10.4 Modification to the Schedule as a result of allowable time extensions or increased scope of work shall be accepted by the Contractor as inherent to the construction process and shall not qualify as a basis for extra compensation from the Owner.

3.11 DOCUMENTS AND SAMPLES AT THE SITE

3.11.1 The Contractor shall maintain at the site for the Owner one record copy of all drawings, specifications, addenda, approved shop drawings, change orders and other modifications, in good order and marked to record all changes and underground installation applicable to the work made during construction. The Architect shall be advised by the Contractor of all changes on a current basis.

3.11.1.1 The drawings marked to record all changes and of underground installations made during construction, shall be delivered to the Architect upon completion of the work. Receipt of as-built drawings by the Architect is a condition for Final Payment.

3.11.1.2 The prints for record drawings will be a set of black and white prints provided by the Architect at start of construction. The Contractor shall maintain the set in good condition and shall use colored pencils to mark up the set in a legible manner to show:

3.11.1.2.A Significant deviations made during construction.

3.11.1.2.B Significant details not previously shown on drawings.

3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

3.12.4 Shop drawings and samples shall be submitted to the Architect, dated and marked to show the names of the project, Architect, Contractor, originating Sub-contractor, Manufacturer or Supplier, and separate Retailer if pertinent. Shop drawings shall completely identify Specification section and locations at which materials or equipment are to be installed. Reproductions of Contract Drawings are acceptable as Shop Drawings only when specifically authorized in writing by the Architect.

Submission of shop drawings and samples shall be accompanied by a transmittal letter containing Project name, Contractor's name, number of drawings and samples, titles and other pertinent data.

3.12.4.1 Submission of shop drawings for approval shall consist of five (5) prints. One (1) print will be returned to the Contractor marked per Paragraph 3.12.11.1 following.

3.12.4.1 Unless otherwise specified, the number of shop drawings and the number of samples which the Contractor shall submit for record is the number that the Contractor requires to be returned plus five (5) copies for drawings and three (3) for samples which will be retained by the Architect/Owner.

If the shop drawing affects the work of another contractor(s) the Contractor shall provide additional copies as directed by the Architect.

3.12.5 Each Contractor shall provide the necessary record drawing information in timely and efficient manner.

3.12.8.1 The Contractor shall conscientiously supply all information required when submitting Shop Drawings and Samples. Information pertaining to delivery and expediting will be part of his submittal. This data is vital to field performance; consequently, the submittal will be returned unless complete information is provided.

3.12.11 Grading of shop drawings shall be as follows:

A. No Exception Taken: No corrections, no marks.
B. Reviewed and Noted,: Minor amount of corrections; all items can be fabricated without further correction; checking is complete and all corrections are obvious without ambiguity.

C. Re-submit: Minor amount of corrections; noted items must not be fabricated without further corrections, checking is not complete, details of items noted by checker are to be further clarified before full approval can be given; items not noted to be corrected can be fabricated under this stamp.

D. Disapproved: Drawing or equipment is not in accordance with the contract. Submit new drawings covering equipment which meets specifications. Drawings will be returned unstamped with notification on letter of transmittal.

3.13 USE OF SITE

3.13.1 The control of the site will be by the Owner. The Contractor shall cooperate with him in all matters involving use of the site.

3.14 CUTTING & PATCHING

3.14.2 Where cutting of existing work is necessary, same shall be straight, true and of proper size. No excessive cutting will be permitted nor shall any piers or other structural members be cut without the consent of the Architect. The Contractor shall not endanger any work by cutting, excavating or otherwise and shall not cut or alter the work of any other Contractor without the consent of the Architect.

3.14.2.1 The cutting of all existing work shall be performed by the Contractor requiring same except that the cutting of openings shall be performed by workmen skilled relative to the material being cut.

3.14.2.2 The patching of all exposed work shall be performed by workmen skilled relative to the material being patched.

3.14.2.3 All patching shall be done in a neat, workmanlike manner with materials to match existing.

3.14.2.4 Where cutting or patching is required of one Contractor because of negligence of another Contractor then the cost for same shall be borne by the negligent Contractor.

3.15 CLEANING UP

3.15.2 If the Contractor fails to clean up within 7 days after receipt of notice by the Architect, the Owner may do so and the cost thereof shall be charged to the Contractor.

3.15.2.1 Each Contractor shall perform clean up of his own work including knocked down boxes and other containers. Debris shall not be buried on the site.

3.17 ROYALTIES, PATENTS AND COPYRIGHTS

3.17.1 The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of patent rights and shall hold the Owner and Architect harmless from loss on account thereof.

3.19 SUBSTITUTIONS

3.19.1 After the contract has been executed, the Architect will consider a formal request for substitution of products for those specified, under the following conditions:

A. The request is accompanied by complete data on the proposed substitution substantiating compliance with the Contract Documents including product identification and description, performance and test data, references and samples where applicable, and an itemized comparison or proposed substitution with the products specified or named by Addenda, with data relating to Contract time schedule, design and artistic effect where applicable, and its relationship to separate contracts.

B. The request is accompanied by accurate cost data on the proposed substitution in comparison with the product specified, whether or not modification of the Contract Sum is to be a consideration.

3.19.2 Requests for substitution based on Clause 3.19.1 above, when forwarded by the Contractor to the Architect, are understood to mean that the Contractor:

A. Represents that he has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified.

B. will provide the same guarantee for the substitution that he would for that specified.

C. certifies that the cost data presented is complete and includes all related costs under this contract, but excludes costs under separate contracts and the Architect's redesign costs, and that he waives all claims for additional costs related to the substitution which subsequently became apparent; and

D. will coordinate the installation of accepted substitute, making such changes as may be required for the work to be complete in all respects.

Substitutions will not be considered if:

A. They are indicated or implied on the shop drawings submissions without the formal request required in Clause 3.19 above; or

B. For their implementation they require a substantial revision of the Contract Documents in order to accommodate their use.

ARTICLE 4

ADMINISTRATION OF THE CONTRACT

4.1 THE ARCHITECT

4.1.1 Requests concerning interpretations during the construction period shall be made to the Landscape Architect. The term "Architect" means the Landscape Architect or the Landscape Architect’s representative.

4.1.1.1 The Landscape Architect for this project is Foresite Design, Inc., 3269 Coolidge Highway, Berkley, MI 48072. (248) 547-7757.

SECTION 00 7300
SUPPLEMENTARY CONDITIONS

4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

4.2.1 The Architect will provide general administration of the Construction Contract, including the performance of the functions hereinafter describe.

4.5 MEDIATION

4.5.1 Binding mediation will be entered into only if mutually agreed upon by both the Owner and Contractor.

ARTICLE 6

CONSTRUCTION BY OWNER OR
BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION
AND TO AWARD SEPARATE CONTRACTS

6.1.1 Delete:

"…and waiver of subrogation."

6.1.3.1 A pre-construction conference will be held to review schedule, in the event separate contracts are issued all work must be completed as outlined in the bidding documents. Contractor shall coordinate their Work with other trades in a manner that is in the best interest of the Owner and the overall project.

ARTICLE 8

TIME

8.2 PROGRESS AND COMPLETION

8.2.4 During the course of the work, the Architect will condone reduced crew size or even total absence on the part of the Contractor, providing such reduced activity is mutually agreed to and will not slow down or interfere with the overall progress of the work. However, when work is available and is required to maintain the Construction Schedule or assist an interface situation, performance by the Contractor is mandatory. If performance is not maintained by the contractor, the Owner will give the Contractor forty-eight (48) hours notice before taking over completion of work as covered in Article 2.4.1.

8.2.4.1 The Contractor will keep accurate daily records of performance on all Contracts involved in the project. The comparison of these records with the Contractor's commitment to the Construction Schedule will determine his effort in pursuit or total project completion.

8.3 DELAYS AND EXTENSIONS OF TIME

8.3.1 If a delay on the part of one Contractor directly affects the progress of others, then time extensions shall be granted to those directly affected. Necessarily, however, the granting of time extensions shall not increase the required working time span for any Contractor, only the completion date.

8.3.2 All claims for extension of time shall be made in writing to the Architect no more than seven (7) days after the occurrence of the delay; otherwise, they shall be waived. In the case of a continuing cause of delay, only one claim is necessary.

SECTION 00 7300
SUPPLEMENTARY CONDITIONS

ARTICLE 9

PAYMENTS & COMPLETION

9.2 SCHEDULE OF VALUES

9.2.1 The Architect shall review the schedule of values, submitted by the Contractor. The schedule of values shall be prepared in such a manner that each major item of work and each subcontracted item of work is shown as a single line item on AIA Document G702, Application and Certificate for Payment, Continuation Sheet, G703.

9.3 APPLICATIONS FOR PAYMENT

9.3.1 Substitute the following:

No later than the 15th day of each month, the Contractor shall submit to the Architect an itemized Application for Payment, supported by such data substantiating the contractor's right to payment as the Owner and Architect may require. Payment by the Owner will be made on or before the 20th day of the following month.

9.3.1.3 Until final payment, the Owner will pay ninety percent (90%) of the amount due to the Contractor on account of progress payments. If the manner of completion of the work and its progress are, and remain, satisfactory to the Architect, and in the absence of other good and sufficient reasons and shown to be fifty percent (50%) or more complete in the Application retainage, on presentation by the Contractor of Consent of Surety for each application, the landscape architect shall certify any remaining progress payments to be paid in full.

9.3.1.4 The full contract retainage may be reinstated if the manner of completion of the work and its progress do not remain satisfactory to the Architect, or if the surety withholds his consent, or for other good and sufficient reasons.

9.3.1.5 The form of Application for Payment shall be AIA Document G702, Continuation Sheet, G703.

9.3.1.6 At the time the payment is submitted, the Contractor will present to the Architect in triplicate and original, a Sworn Statement and a Waiver of Lien in the amount of the payment. Waivers from Sub-contractors, and Suppliers representing major expenditures shall also be required. **If these documents are not attached, the pay application will not be processed.**

9.3.1.7 Final payment will be made within 30 days after the Contractor has achieved final completion as determined by Owner and supplied necessary submittals/ warranties/guarantees as may be required elsewhere in the contract document. 10% of value of Work completed and acceptable will be retained by Owner until final payment.

9.6 PROGRESS PAYMENTS

9.6.1 The Owner shall make payment to the Contractor on or before the twentieth (20th) day of the month following the Contractor's submission of Application for Payment and after the Architect has issued a Certificate for Payment.

9.8 SUBSTANTIAL COMPLETION

9.8.1 The Architect will prepare a Certificate of Substantial Completion when he determines that the work of each individual Contract is substantially complete.

9.10 FINAL COMPLETION AND FINAL PAYMENT

9.10.1 The Architect will issue a final Certificate for Payment after he finds the work acceptable under Contract Documents and the Contract fully performed.

9.10.2 Final payment, covering each individual Contract, will be made by the Owner to the Contractor thirty days after Substantial Completion of the work unless otherwise stipulated in the Certificate of Substantial Completion, provided the work has then been completed, the Contract fully performed, and a final Certificate for Payment has been issued by the Architect.

ARTICLE 10

PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 Contractor shall adequately protect building, service drives, lawn, shrubs, trees etc. from damage, including water damage, during the process of performing required Work. Contractor shall repair or be responsible for the costs to repair, all property damaged during the performance of this Contract. Damages to the building will be addressed immediately and sent to Contractor in writing by Owner.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.8 Contractor shall be responsible for all means and methods as they relate to safety and shall comply with all applicable local, state and federal requirements that are safety related. Safety shall be the responsibility of the Contractors. All contractor related personnel shall be instructed daily to be ever mindful of the full time requirement to maintain a totally safe environment for the facilities' occupants including students, staff, visitors and the occurrence of the general public on or near the site.

ARTICLE 11

INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.1 In the first line following the word "maintain", insert the words "In a company or companies licensed to do business in the state in which the Project is located."

11.1.1.6 Liability insurance shall include all major divisions of coverage and be on a comprehensive basis including:

1. Premises - Operations (including X-C-U). (For underground work only)
2. Independent Contractor's protective
3. Products and completed operations
4. Contractual - including specified provisions for the Contractor's obligations under Paragraph 3.18.
5. Owned, non-owned and hired motor vehicles.

6. Broad form coverage for property damage.

Add the following:

11.1.2.1 Add the following minimum limits:

1. Worker's Compensation & Employers' Liability

A.	Each Accident	$	500,000
B.	Disease-Policy Limit	$	500,000
C.	Disease-Each Employee	$	500,000

2. Comprehensive General Liability

A. Bodily Injury

Each Person	$	500,000
Each Occurrence	$	1,000,000

B. Personal Injury

Each Person	$	500,000
Aggregate	$	2,000,000
General Aggregate	$	2,000,000

C. Property Damage

Each Person	$	500,000
Each Occurrence	$	500,000
Aggregate	$	2,000,000

3. Automobile Liability

A. Bodily Injury

Each Person	$	500,000
Each Occurrence	$	500,000

B. Property Damage

Each Occurrence	$	100,000

4. Independent Contractors
Same limits as above

5. Products and Completed Operations
Same limits as above

11.1.2.2 The Contractor will require all Sub-contractors to maintain similar insurance coverage.

11.1.2.3 In addition to the General Liability coverage required by Article 11.1.2.1, the Contractor will maintain during the period of this Contract Umbrella Liability Insurance covering the risk of losses of $ 1,000,000.00 in excess of the limits stated in Article 11.1.2.1.

11.1.3.1 Furnish one (1) copy of Certificates herein required for each copy of the Agreement; specifically set forth evidence of all coverage required by Subparagraph 11.1.1. and 11.1.2. Furnish the Owner copies of any endorsements that are subsequently issued amending coverage or limits.

11.1.3.2 All Certificates for insurance shall name the Owner and Architect as additionally insured.

11.1.3.3 The following language shall be indicated on all certificates of insurance from successful bidder: Troy School District its elected or appointed officials, employees and volunteers are included as insured with regards to damages and defense of claims arising from: (a) activities performed by or on behalf of the named insured, or (b) products and completed operations of the named insured, or (c) premises owned, leased, or used by the named insured".

11.3 PROJECT MANAGEMENT PROTECTIVE LIABILITY INSURANCE

11.3.2 Delete the last sentence in its entirety:

"The policy shall provide for such waivers of subrogation by endorsement or otherwise."

11.4 PROPERTY INSURANCE

11.4.5 Delete the last sentence in its entirety:

"All separate policies shall provide this waiver of subrogation by endorsement or otherwise."

11.4.7 Delete this section in its entirety:

"*Waivers of Subrogation. The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and (2) the Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section 11.4 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Architect, Architect's consultants, separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged."*

11.4.9 Add the following sentence:

In waiving rights of recovery under terms of this Subparagraph, the term "Owner" shall be

deemed to include his employees, the Architect, and their employees as the Owner's representative as provided in the Contract Documents.

11.4.11 If the Owner finds it necessary to occupy or use a portion or portions of the work prior to Substantial Completion, such occupancy shall not commence prior to a time mutually agreed to by the Owner and the Contractor and concurred with by the insurance company or companies. This insurance shall not be canceled or lapsed on account of such partial occupancy.

11.6 OWNER'S PROTECTIVE INSURANCE

11.6.1 The Contractor shall provide Owner's Protective Insurance on same limits as specified in 11.1.1 and 11.1.2 above, naming the Architect as additionally insured.

ARTICLE 13

MISCELLANEOUS PROVISIONS

13.3 WRITTEN NOTICE

13.3.2 Written notice shall be deemed to have been duly served if delivered or sent via the telephone facsimile machine to the last known number to the party giving notice.

13.5 TESTS AND INSPECTIONS

13.5.1 The Owner shall pay for all testing.

13.8 NO SMOKING

13.8.1 No smoking is permitted in the building or on school grounds.

13.9 SECURITY

13.9.1 Contractors shall observe the following procedure when working in a school building, unless otherwise instructed:

1. Proceed to the office, identify yourself, state reason for being in the building, and receive visitors pass.

2. Complete work, then revisit the office to check out prior to leaving the building/premises.

13.10 ENVIRONMENTAL SAFETY/RESPONSIBILITY

13.10.1 It shall be the responsibility of the Contractor or sub-contractor to pay any and all costs incurred from the clean up related to any environmental hazard created by means of contamination caused by accident or neglect of the Contractor or sub- contractor.

It shall be the responsibility of the Contractor or sub-contractor to dispose of any environmentally hazardous product(s) and/or material in accordance with the EPA, DNR, and local applicable laws and regulations.

It shall be the responsibility of the Contractor or sub-contractor, if required, to purchase permits and notify the proper authorities prior to commencing said project or, should a "release" take place, to notify proper authorities of any such release.

It shall be the responsibility of the Contractor or sub-contractor to maintain on site a blood borne pathogen plan and all necessary safety supplies associated with any spill or clean up that may occur.

13.11 RIGHT TO KNOW

13.11.1 In accordance with **MIOSHA** regulations pertaining to the **"Michigan Right to Know Law"** the owner has posted Material Safety Data Sheets for any hazardous chemicals in their workplace. The Contractor shall designate a coordinator to oversee the institution and maintenance of a similar program for the areas in which the construction work will take place. The program must encompass all **MIOSHA** Regulations with regards to the **"Michigan Right to Know Law"** for all hazardous chemicals which will be used on site during the course of construction.

13.12 ASBESTOS FREE CERTIFICATION

No asbestos containing material shall be purchased or installed as a part of this project. The Contractor shall be required to certify that no asbestos containing materials have been replaced in this project. **Approved certification shall be on file with the Owner prior to consideration for final payment.**

13.13 AFFIRMATIVE ACTION

Troy School District is an Equal Opportunity Affirmative Action Employer, Complies with the federal and state laws prohibiting discrimination, including Title IV and Title VII (with amendments) of the 1964 Civil Rights Act, Title IX of the Educational Amendment of 1972, Section 504 of the Rehabilitation Act of 1973 and Veterans Readjustment Act of 1974 as amended 38 USC20-12 and the Americans With Disabilities Act of 1990. It is the policy of the school board that no person, on the basis of race, sex, height, weight, color, religion, nation origin or ancestry, age, marital status, disability or veteran status, shall be discriminated against in employment, educational programs and activities, or admission.

END OF SECTION 00 7300

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 01 2300
ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this section.

1.2 SUMMARY

A. This Section include administrative and procedural requirements for alternates as proposed by the Landscape Architect.

1. **Voluntary Alternates or Substitutions proposed by Bidders will not form the Base Bid Proposal Price**

1.3 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Proposal Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment or installation methods described in the Contract Documents.

1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work, No other adjustments are made to the Contract Sum.

B. Voluntary Alternate: Bidders proposing voluntary alternates and substitutions will not be recognized as part of the Base Bid Price. Owner may review voluntary proposal with the successful Bidder.

1.4 PROCEDURES

A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into the project.

1. Include as part of each alternate, miscellaneous products, equipment, and similar items incidental to or required for a complete installation whether or not indicated as part of the alternate.

B. Notification: Immediately following award of Contract, notify each party involved of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.

C. Execute accepted alternates under the same conditions as other work of the Contract.

D. Schedule: A schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

SECTION 01 2300
ALTERNATES

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.1 SCHEDULE OF ALTERNATES

1. **Not Applicable**

END OF SECTION 01 2300

SECTION 01 2619
CLARIFICATION REQUEST

DATE: _____

Project:

☐ Proposal A – Tennis Court Reconstruction

To: Foresite Design Inc.
3269 Coolidge Hwy.
Berkley, MI 48072
Office: (248) 547-7757
Fax: (248) 547-0218

FROM:

_____
Company Name

_____
Contact Name

_____
Address

_____
City, State Zip

_____
Phone # Fax #

CLARIFICATION:

1. _____
_____

2. _____
_____

3. _____
_____

RESPONSE:

1. _____
_____

2. _____
_____

3. _____
_____

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 01 3523
SAFETY REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Safety is the responsibility of each individual Contractor. Each Contractor shall comply with all local safety ordinances and MI-OSHA regulations and requirements while performing the Work.

B. Each Contractor is required to submit Material Safety Data Sheets (MSDS) to the Construction Manager, to be used for reference only, prior to transporting the material/chemical on site. In addition, it is the responsibility of each Contractor to maintain and accessible MSDS file for their employees, subcontractors, and suppliers on site.

C. Each Contractor shall submit evidence of an Employer Safety Program that complies with current MI-OSHA regulations and requirements prior to beginning any contract Work.

D. The Contractor, their Sub-Contractor(s) and suppliers shall take all necessary precautions to ensure the safety of the public and of workers on the job, and to prevent accidents or injury to any persons, on about, or adjacent to the premises where the Work is being performed. The Contractor and the Sub-Contractor(s) and suppliers shall comply with Federal or State OSHA regulations and all other laws, codes, ordinances, and regulations relative to safety and the prevention of accidents.

E. The Contractor shall designate a responsible representative at the job site as a Safety Representative who shall be responsible for the promotion of safety and prevention of accidents, and shall enforce all applicable laws, ordinances, codes, rules, regulations and standards pertaining to safety and prevention of accidents.

F. Each Contractor shall submit their Experience Modification Rating (EMR) to the Construction Manager. In addition, the Contractor is responsible to provide to the Construction Manager a listing of any MIOSHA violations or citations they have received in the past 5 years.

END OF SECTION 01 3523

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 01 4100
REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 PERMITS AND INSPECTION FEES

A. The Owner will secure and pay for all general building permits.

B. All soil erosion and DEQ permits, mechanical, and electrical permits shall be applied for, secured, and paid for by the Contractor requiring such permits.

C. Any other specialized permits or inspection fees (i.e. utility taps or fees) shall be applied for, secured, and paid by the Contractor requiring such permits.

1.2 INSPECTIONS

A. Any Contractor requiring special inspection by the State or other agency shall arrange and schedule the inspection and give a minimum of 48 hour notice to the Construction Manager, Architect, or Engineer.

B. Partial occupancy permits may be applied for by the Owner. All Contractors will cooperate and assist in securing and maintaining partial occupancy permits.

C. Mechanical and electrical Contractors shall review their specifications to comply with all special testing and inspections.

D. Where the Contract Documents require inspections, tests or approvals of the Work to be made by an independent testing agency or laboratory or an independent professional consultant, the independent testing agency or laboratory or independent professional consultant shall be satisfactory to the Architect, Engineer and Construction Manager.

E. Each contractor shall inspect work of others which will receive or is adjacent to their work before commencing their work. Do not proceed until conditions which would result in a less than satisfactory installation are corrected. Commencing work shall constitute as acceptance of the work or others by the contractor as satisfactory to receive their work.

END OF SECTION 01 4100

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 02 4113
DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections:

1. Section 31 1000 Site Preparation

C. Work Included:

1. Removal of debris.

1.2 SCOPE

A. The work under this section of the specifications shall consist of the removal and disposal of all items as indicated on the drawings. Contractor shall furnish all labor, materials and equipment to complete the work according to the drawings and specifications.

B. All other facilities and items that are indicated shall remain and be protected from construction damage.

PART 2 - PRODUCTS

N/A

PART 3 - EXECUTION

3.1 EXECUTION

A. General

1. Contractor shall not, for any reason, dump or leave any excavated materials on property.

2. Contractor shall remove all items as indicated on drawings.

B. Removal of Debris

1. Promptly remove cleared debris from the site.

2. Burning of debris on site is not permitted, unless permission is obtained from applicable regulatory authority.

3. Obtain permission from applicable regulatory authority for disposal of debris to waste disposal site.

END OF SECTION 02 4113

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 03 3010
PORTLAND CEMENT CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections:

1. Section 32 1124 Aggregate Base Course

1.2 SCOPE

A. The work under this section of the specifications shall consist of furnishing all labor, materials and equipment necessary to construct Portland cement concrete, concrete slabs, and foundations.

1.3 QUALITY ASSURANCE

A. Reference Standards

1. American Society for Testing and Materials (ASTM):

a. C 94-97, Ready Mixed Concrete

b. C171-69 (1975), Sheet Materials for Curing Concrete

c. C.309-74, Liquid Membrane Forming Compound for Curing Concrete

d. D 1751-73, Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types).

1.4 SUBMITTALS

A. Test Reports: Reports of Portland cement concrete compression, yield and air content tests listed in ASTM C 94.

B. Product Data: Submit data for propriety materials and items, including reinforcement and forming accessories, admixtures, patching compounds, joint systems, curing compounds, and others to the Landscape Architect/Engineer.

C. Shop Drawings

1. Reinforcement: Submit shop drawings for fabrication, bending, and placement of concrete reinforcement. Comply with ACI 315 “Manual of Standard Practice for Detailing Reinforced Concrete Structures” showing bar schedules, stirrup spacing, diagrams of bent bars, arrangement of concrete reinforcement. Include special reinforcement required and openings through concrete structures.

D. Samples: Submit samples of materials as specified and as otherwise requested by Landscape Architect, including names, sources and descriptions.

E. Material Certificates: Provide materials certificates in lieu of material laboratory test reports when permitted by Landscape Architect/Engineer. Material Certificates shall be signed by manufacturer

and Contractor, certifying that each material item complies with, or exceeds, specified requirements.

1.5 ENVIRONMENTAL REQUIREMENTS

A. Portland Cement Concrete

1. Allowable concrete temperatures

a. Cold Weather: Maximum and minimum, ASTM C94

b. Hot Weather: Maximum concrete temperature: 90°F. (23°C.)

2. Do not place concrete during rain, sleet or snow.

1.6 PROTECTION

A. Protect concrete from traffic for minimum of seven (7) days.

PART 2 - PRODUCTS

2.1 FORM MATERIALS

A. Forms for Unexposed Finish Concrete: Form concrete surfaces which will be unexposed in finished structure with plywood, lumber, metal or other acceptable material. Provide lumber dressed on at least 2 edges and one side for tight fit. Minimum thickness for lumber form shall be 1” for boards and 5/8” for plywood.

B. Form Coatings: Provide commercial formulation form-coating compounds that will not bond with, stain nor adversely affect concrete surfaces, and will not impair subsequent treatments of concrete surfaces.

C. Forms for Slab-on-grade construction joints: Forms for slab-on-grade construction joints shall be prefabricated metal forms to produce tongue and groove joint. Form shall be approved by Architect/Engineer.

D. Synthetic turf anchoring curb system: Forms shall be prefabricated metal forms to produce tongue and groove joint. Automated self propelled curb-and-gutter equipment shall not be allowed.

2.2 READY MIXED CONCRETE: ASTM C94

A. Cement type: type “1, 3500 psi” (28 day compressive strength)

B. Admixtures:

1. Air-entrained ASTM C260 (6%)

2. Fly Ash – conform to ASTM C618, class C or F, except as modified herein.

a. Loss of ignition shall not exceed 4%.

b. Fine amount retained shall not exceed 25%.

c. Furnish documentation from an independent testing agency that fly-ash proposed for this

project conforms to this specification."

C. Slump: two (2) to three (3) inches.

D. Minimum 564 lbs. of cement per cubic yard.

E. No admixtures other than air-entraining without approval of the Architect.

2.3 CURING MATERIAL

A. ASTM C171 4 MIL white opaque polyethylene type, or ASTM C309, type 2, white pigmented curing compound.

2.4 EXPANSION JOINT FILLERS

A. ASTM D1751-73, performed non-extruding, resilient bituminous type, width as indicated on plans.

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify the earthwork is completed to correct line and grade. Notify the Owner/Architect of any incomplete work by previous contractors.

B. Check that sub-grade is smooth, compacted and free of frost or excessive moisture.

C. Do not commence work until conditions are satisfactory.

3.2 WEATHER PROTECTION

A. Cold weather: When the mean daily air temperature is 40°F. or below, provide suitable protection for concrete work to maintain a minimum concrete temperature of 50°F. for five (5) days (or 70°F. for three (3) days). After the protection period, do not let concrete cool more than 20°F. in each successive day.

B. Hot weather: Employ suitable means to prevent too rapid drying. Shade fresh concrete as soon as possible without marring surface.

C. Wet weather: Unless adequate protection is provided, do not place concrete in rain, sleet or snow.

3.3 INSTALLATION

A. Contractor shall install the first section of sidewalk/slab/foundation as a quality sample in place. Upon approval of sample by Architect, further installation can proceed.

B. The sub-grade upon which concrete is to be placed shall be prepared by excavation or filling with suitable earth to such depth below the finished grade line, that when tamped or rolled until smooth, firm and hard, the sub-grade will be uniform and at the required depth below finished grade line.

C. Unsuitable sub-grade soils shall be replaced as directed.

D. Gravel backfill, when specified in the drawings, shall be constructed to the required depth and

thoroughly compacted.

E. Cast in Place Concrete:

1. Set forms to line and grade

2. Install forms over full length of walk and oil before use.

3. Forms shall be set accurately to line and grade. If the forms are set more than 0.01 foot (3mm) above or below grade or more than 0.01 foot (6mm) from prescribed alignment, they shall be corrected before any concrete is placed.

4. Flexible or curved forms of proper radii shall be used on all curves having a radius of 100 feet or less.

5. Form contraction joints by tooling.

6. Install expansion joint material behind walks at abutment curbs and adjacent structures with expansion joints every 100 feet (30m) or as detailed. Retaining wall shall have expansion joints every 25 feet.

7. Place top of expansion joint material flush with walk surface, unless noted otherwise on plans.

8. Place reinforcing materials.

9. Place concrete with mechanical vibrators.

10. Consolidate concrete with mechanical vibrators.

11. Round edges of walks and turf anchor at top with finishing tool, ¼" to $^{3}/_{8}$" radius. 1" radius for retaining wall.

12. Finished exposed walk surfaces with wood float followed by brushing with broom, smooth band of 12", unless otherwise shown on drawings.

13. Apply plastic sheeting or curing material and cure for seven (7) days.

14. Replace sections that pocket water.

15. Do not allow free drop of more than five (5) feet. Use elephant trunk when necessary.

3.4 FIELD QUALITY CONTROL

A. Slump Tests: Make slump tests whenever concrete is being poured at the direction of the Owner.

B. Compression Tests: Prepare standard test cylinders during the placing of concrete in accordance with ASTM 31 and ASTM 172. One set (three (3) cylinders) is required for each day's pour.

C. Maintain two (2) cylinders at 50 to 70°F. and protect from loss of moisture at the job site for a period of not over 48 hours, then deliver to the laboratory for curing and testing at seven (7) and twenty-eight (28) days, respectively. Place third cylinder near the in place concrete and cure completely at the job in the same manner as the in place concrete. Deliver this cylinder to the laboratory for testing at twenty-eight (28) days. Cure and test cylinders in accordance with ASTM C31, C39 and C192.

Submit test reports to the Architect in duplicate.

3.5 PROTECTION OF FINISHED SURFACES

A. All finished surfaces of concrete shall be protected so as to prevent damage. Marking temporary nailing or other damaging use of surfaces will be prohibited.

3.6 PATCHING

A. Patch to match material, color and texture of surrounding area.

B. Replace defective work if patching is not acceptable to the Landscape Architect.

3.7 CLEAN UP

A. The Contractor shall remove excess excavated material from the site of the work. Spread and finish grade topsoil within five (5) feet of pad edge. Topsoiling is incidental to concrete installation. Contractor shall clean up and dispose of rubble and construction debris satisfactory of the Owner and the Landscape Architect.

END OF SECTION 03 3010

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 11 6826
NET TENSION SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Work shall include:

1. Furnish and install net posts and accessories
2. Excavation for post footings
3. Concrete footing for posts
4. Furnish and install complete net tension systems

C. Related Sections:

1. Section 31 20 00 Earthwork
2. Section 03 30 10 Portland Cement Concrete

1.2 GUARANTEE

A. The Contractor and any Sub-contractors hereunder guarantee their respective work against defective materials or workmanship for a period of two (2) years from the date of filing notice of completion and an acceptance by the Owner.

1.3 INSPECTION

A. All material installed under this specification shall be subject to testing by Owner at his expense. Any material so inspected and found to be not in strict conformance with this specification shall be promptly removed and replaced by the Contractor at his expense.

1.4 SUBMITTALS

A. Submit manufacturer literature, identifying the particular item to be installed. Manufacturer information should include photographs, and applicable technical information.

PART 2 - PRODUCTS

2.1 NET TENSION SYSTEM

A. Net posts shall be seven gauge (7ga.) galvanized steel having an outside diameter of not less than three inches (3") and shall be equipped with self locking re-coiless tension system. Posts and sleeves shall be located where indicated on the drawings or details. Post shall be set plumb and true so as to support the net at a height of forty-two inches (42") above the court surface at each post. Post shall be Hunter Green

B. Posts and sleeves shall be from one of the following manufacturers:

1. Gold Medal, Deluxe Style No. 62-89-0419 Phone: (800)-633-2354
2. Douglas Industries, DTP-37 Phone: 800-553-8907
3. Edwards, (Collegiate Pacific) Phone: (888)- 566-8966

C. Tennis nets shall be a polypropylene netting system with three millimeter (3mm) black braided thickness. The headband shall be double stitched vinyl with a cable system not less than forty-seven feet (47') long and with three thousand pounds (3000 lbs) tensile strength. The cable shall be five millimeters (5mm) in

diameter galvanized steel cable PVC coated, with looped ends and clamps for three thousand pounds (3000 lbs) test tensile strength.

D. Each net must be accompanied by a two inch (2") wide white nylon center strap with adjustable swivel hook. Nets and straps supplied by:

1. Edwards, Modus, Connecticut, Classic Deluxe Net 30 DS
2. Gold Medal, Super Masterpiece
3. Douglas Industries, TN-30

E. One center strap anchor shall be installed for each court.

2.2 CONCRETE

A. Concrete shall conform to Section 03000 Portland Cement Concrete.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Do not install net tension system until leveling course has been installed.

B. Install ground sleeves prior to wearing course installation.

3.2 INSTALLATION

A. Net tension system post foundations shall not be less than fifteen inches (15") in diameter at the top, not less than thirty inches (30") in diameter at the bottom and not less than forty-eight inches (48") deep. Posts shall be set to have forty-two feet (42') on center. Posts and sleeves shall be located where indicated on the drawings or details. Posts shall be set plumb and true so as to support the net at a height of forty-two inches (42") above the court surface at each post. Center strap anchors shall be positioned as shown on the details as set in concrete footings as shown on the drawings and/or details.

3.3 CLEAN UP AND DISPOSAL

A. Remove from the site all equipment, materials, and debris resulting from construction work including this section. Leave work area neat and clean and in a condition acceptable by the Landscape Architect and Troy School District. All work shall be complete, ready for use, at the time of final acceptance.

END OF SECTION

SECTION 31 1000
SITE PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. The work under this Division consists of furnishing all labor, materials and equipment required for:

1. Excavation and Grading
2. Stone
3. Asphalt
4. Drainage
5. Concrete work
6. Fencing (including net tension systems and gates)
7. Acrylic coatings
8. Tennis court markings
9. Landscape restoration
10. General clean-up

C. Bidders shall visit the site before submitting proposals and fully inform themselves as to the job and site conditions and other conditions under which the work of this section must be conducted. Verify themselves with the soil conditions at the site and familiarize themselves with the existing conditions that may be adjusted for this project. Submission of proposals implies that the Bidder has visited the site and is fully aware of these conditions.

D. A pre-construction conference shall be held on the job site with all intended Contractors and Sub-contractors prior to the start of any work.

PART 2 - PRODUCTS

N/A

PART 3 - EXECUTION

3.1 SURVEY REQUIREMENTS

A. The Contractor shall provide all survey work required to locate lines and grades for the construction of this project as herein specified and shown on drawings. The Contractor shall employ a registered engineer or surveyor for this layout.

B. The Contractor upon entering the site and before any other work is underway, shall establish and set control points as indicated on the drawings and verify all finish grades.

C. Existing survey as shown on the drawings is for information only and accurate at time taken. Contractor shall verify field conditions and notify the Landscape Architect or Owner before bid date of any discrepancies found in the survey or site conditions.

D. The Contractor shall provide a complete "as built" survey of the site within the site limits, noting all grades, locations, etc. if final constructed project should vary from bid documents.

SECTION 31 1000
SITE PREPARATION

E. All work under this section shall be coordinated with the Landscape Architect so as to verify their understanding of the plans and intended layout.

END OF SECTION 31 1000

SECTION 31 2000
EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the provisions of the other parts.

B. Section Includes:

1. Excavation
2. Grading
3. Backfill and Fill
4. Topsoiling

1.2 SCOPE

A. Furnish approved labor, materials, equipment, transportation, and services required to complete all earthwork as indicated on the drawings and specified herein The Base Bid includes all earthwork and grading to provide a subgrade for other improvements. Adjustment of grades will be permitted, providing the overall grading concept and the positive drainage swales are maintained.

1.3 EXAMINATION OF SITE

A. The contractor is expected to visit the site to determine all conditions to be encountered, protect improvements on adjoining properties, as well as those on the owner's property, and to restore any improvements damaged by his work to their original condition, as acceptable to the owner or other parties or authorities having jurisdiction.

1.4 SAFETY CODES AND STANDARDS

A. Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.

1.5 LINES AND GRADES

A. The plans indicate lines, grades and elevations of the finish work. In general, areas to be paved shall be excavated and/or filled, and graded to the bottom elevations of such pavements. Grass areas shall be finish graded prior to seeding. Sod areas shall be rough graded to 2" below finish grade prior to placement of topsoil.

1.6 DEWATERING

A. The contractor shall perform all work so as to permit the site to be free draining at all times and to prevent ponding. Contractor shall provide positive drainage for the entire site during the course of construction to eliminate standing water in excavated areas.

1.7 PROTECTION OF EXISTING TREES & VEGETATION

A. Protect existing trees, and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stock piling construction materials or excavated materials within drip line, excess foot or vehicle traffic, or parking of vehicles within drip line. Provide temporary fences, barricades or guards as required to protect trees and vegetation to be left standing. Provide protection for roots over 1.5 inches in diameter that are cut during construction operations. Coat the cut faces with an emulsified asphalt or other acceptable coating that is specially formulated for horticultural use on cut or damaged plant tissues. Temporarily cover all exposed roots with wet burlap to prevent roots from drying out, provide earth cover as soon as possible. Repair or replace trees and vegetation damaged by construction operations in a manner acceptable to the Landscape Architect. Tree damage repair shall be performed by a qualified tree surgeon.

1.8 DEBRIS

A. All debris is to be disposed off Owner's property unless otherwise directed.

B. Debris may not be buried over existing sewers or water mains.

C. All debris must be removed on a daily basis.

PART 2 - PRODUCTS

2.1 BACKFILL AND FILL MATERIALS

A. Backfill shall be excavated soil material, free of rock or gravel larger than 2" in any dimension, debris, waste, frozen materials, vegetable matter, and other deleterious matter. Existing materials may be used for backfill, provided no silt is mixed with material. Backfill consists of placement of acceptable soil material in layers, in excavations, to required subgrade elevation, for each area classification listed below.

B. Fill Material: Fill material shall be clean, hard, durable, uncoated particles of sand or sand gravel mixture, provided that there shall be a substantial excess of sand-screenings.

2.2 TOPSOIL

A. Existing onsite topsoil shall be screened and free of rock or gravel larger than 1" in any dimension, debris, waste, frozen materials, vegetable matter and other deleterious matter.

B. Topsoil to have 5% organic peat content.

PART 3 - EXECUTION

3.1 EXCAVATION

A. Excavation consists of removal of material encountered to obtain required subgrade elevations.

1. Excavation for Ditches: Cut ditches to cross-sections and grades as shown. Deposit excavated materials a sufficient distance from the edge of ditches to prevent cave-ins or material from sliding into ditch. Keep ditches free of leaves, sticks, and other debris until final acceptance of work.

2. Removal of Unsatisfactory Soil Materials: Excavate unsatisfactory soil materials encountered that extend below required elevations, to additional depth directed by the Landscape Architect.

3. Material Storage: Place excavated materials classified as unsatisfactory fill materials where directed by Owner's geotechnical consultant.

4. Stability: Slope sides of excavations over five feet (5') deep to angle of repose of material excavated; otherwise shore and brace where sloping is not possible either because of space restrictions or stability of material excavated. Maintain sides and slopes of excavations in a safe condition until completion of backfill by scaling, benching, shelving, or bracing. Take precautions to prevent slides or cave-ins when excavations are made in locations adjacent to backfill excavations, and when sides of excavations are subjected to vibrations from vehicular traffic or the operation of machinery or any other source. Stabilize earth subgrades under areas of paving and after excavating, but prior to filling, by discing four inches (4") deep and by compacting same as specified for fills. Remove soft or unstable soil below finish grade elevations and backfill such voids with compacted fill material.

3.2 Backfill And Fill Materials

A. Surface Preparation

1. Remove vegetation, debris, unsatisfactory soil materials, obstruction and deleterious materials from ground surface prior to placement of fills. Plow, strip, or break up sloped surfaces steeper than one (1) vertical to four (4) horizontal so that fill material will bond with existing surface. When the existing ground surface has a density less than that specified under "Compaction" (3.2 A 2) for the particular area classification, break up ground surface, pulverize, and compact to the required depth and percentage of maximum density.

2. Compaction: Perform compaction of soil materials for fills and backfills using suitable soil compaction equipment for materials to be compacted and work area locations. Control soil compaction during construction for compliance with percentages of maximum density specified for each classification. All compaction tests shall be in accordance with ASTM D1557 or AASHO T180 C Modified Proctor Method.

3. Placement And Compaction: Place backfill materials in layers not more than eight inches (8") in loose depth. Before compaction, moisten or aerate each layer, as necessary, to provide the optimum moisture content. Compact each layer to required percentage of maximum density for each area classification. Do not place backfill or fill material on surfaces that are muddy, or frozen, or contain frost or ice. Thoroughly compact all fill and backfill by rolling each layer, following spreading, as closely as possible. Roll the areas in equal amounts in two directions. Provide compaction equipment or type best suited to achieve the desired results with the type of soil. In general, use sheeps foot and/or tamping type rollers on soils of a cohesive type; pneumatic wheeled or vibrating rollers on granular fill material, all as approved by the Landscape Architect. Operate compacting equipment on each layer until the entire area has been thoroughly and uniformly compacted to the required density.

4. Maximum Density Requirements: Provide not less than the following percentages of maximum density of the same soil material compacted at optimum moisture content, for the actual density of each layer of soil material in place. Any soils found unsuitable for specified compaction requirements shall be removed as directed by Owner.

5. Lawn or Unpaved Areas: Compact top six inches (6") of subgrade and each layer of backfill or fill material at eighty-five percent (85%) maximum density.

6. Grading: Preparation of subgrade: Rough grade all areas within the limits of site grading under this section, including adjacent transition areas. The rough grade shall be compacted as required. Shape the surface of future lawn areas to the line grade and cross-section with the surface not more than 0.10 feet above or below a subgrade elevation. Take extreme care in the grading of swale areas to insure free movement of surface runoff. Ponding shall be non-existent or at a minimum.

3.3 FINISH GRADING:

A. Sub-Soil Preparation:

1. Fine grade sub-soil systematically to eliminate uneven areas and low spots. Remove debris, roots, branches, stones, etc., in excess of two inches (2") in size. Remove sub-soil which has been contaminated with petroleum products.

2. Bring sub-soil to required levels, profiles and contours suitable for receiving the required finish surfaces. Make changes in grade gradual; blend slopes into level areas. Maximum slope 4:1 unless otherwise indicated.

3. Cultivate sub-grade to a depth of six inches (6") where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted sub-soil.

4. Compact sub-soil at the following percentages to a depth of 12 inches:

a. 85% Modified Proctor where topsoil is to be placed.

B. Placing Topsoil:

1. Place to the following depths, up to finished grade elevations:

a. Four inches (4”) for sodded areas

b. Use topsoil in relatively dry state. Place during dry weather.

c. Fine grade topsoil eliminating rough and low areas to ensure positive drainage. Maintain levels, profiles, and contours of finish grades shown on the plans.

d. Remove all stones, roots, grass, weeds, debris, and other foreign material while spreading.

e. Manually spread topsoil around trees, plants and buildings to prevent damage which may be caused by grading equipment.

f. Compact placed topsoil to 80% Modified Proctor.

END OF SECTION 31 2000

SECTION 32 1124
AGGREGATE BASE COURSE

PART 1 - GENERAL

1.1 GENERAL:

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections:

1. Section 31 2000 Earthwork

1.2 SCOPE:

A. The work under this section of the specification shall consist of furnishing all labor, materials and equipment to produce, place, spread, compact and finish to proper grade and cross section all aggregate base courses according to the drawings and specifications.

1.3 SUBMITTALS:

A. Submit to the Landscape Architect a sieve analysis of the proposed stone to be installed.

PART 2 - PRODUCTS

2.1 MATERIALS:

A. Aggregate base material shall conform to DOT specifications for 21AA 100% crushed limestone and shall be placed and compacted to the minimum depth shown on plans. Crushed concrete, slag, etc. shall not be allowed.

Aggregate Sieve Analysis	Percent Passing
1½”	100
1”	85-100
½”	50-75
No. 8	20-45
No. 200	4-8

PART 3 - EXECUTION

3.1 SUB-GRADE CONSTRUCTION:

A. The sub-grade shall be so constructed as to have uniform stability for a width at least equal to that of the proposed pavement plus one (1) foot on each side. It shall be brought to an elevation and cross section such that, after being rolled, the surface will be at the required elevation. At the time the sub-grade is prepared, the fill area shall have been constructed to the full width and to at least the elevation of the finished sub-grade.

B. The material present in the next six (6) inches below the elevation of the sub-grade shall be scarified, mixed and recompacted, or otherwise treated to produce a uniform condition. Stones over four (4) inches in size shall be removed from the loosened portion of the sub-grade and disposed as directed by the project representative.

C. Depressions that develop during the following shall be filled with suitable material, and the rolling shall continue until the sub-grade is uniformly firm, properly shaped and substantially true to grade and cross section. It shall be so maintained until the pavement is place.

D. Material, other than sand, which will not compact readily under roller shall be removed and replaced with material which will compact readily and that portion of the sub-grade shall be rolled again.

E. The rolling of the sub-grade shall extend for at least twelve (12) inches outside of each edge of the proposed turf boundaries when possible. Piles or ridges of earth or material that would seriously interfere with the operations of finishing the pavement shall not be left on the shoulders.

F. During the process of construction sub-grade, the soil shall be maintained in a condition sufficiently moist to facilitate compaction and produce a firm, compact surface.

G. If, in the preparation of the sub-grade, it becomes necessary to excavate below the elevation of the earth shoulders, ditches or drains shall be provided at frequent intervals to permit ready drainage of surface water from sub-grade to side ditches.

H. If ruts or other objectionable irregularities form in the sub-grade during construction, the Contractor shall reshape and re-roll the sub-grade before the pavement is laid. The material used for filling ruts or other depressions shall be of such character as to make it equally desirable for sub-grade purposes as the material presented in the sub-grade.

I. When the sub-grade is being prepared for placement as an aggregate base course, the elevation of the most finished surface, at the time the next layer is placed, shall not vary by more than 0.05 foot above or below the prescribed elevation at any point where measurement is made.

3.2 AGGREGATE BASE COURSE:

A. Base course construction shall proceed as follows only after the Landscape Architect has approved the sub-grade construction and the gravel tests.

B. The base shall be constructed in layers of not more than three (3) inches (75mm) compacted thickness when conventional rolling equipment is used.

C. If vibratory or other approved special equipment is used, the thickness of every compacted layer may be increased to a maximum of eight (8) inches (150mm).

D. The finished surface of any aggregate base course shall not vary more than 0.02 foot (15mm) from the elevations, grades and cross sections on the drawings.

E. Compacted stone base dimensions shall be a minimum of 6”.

3.3 COMPACTION REQUIREMENTS:

A. Sub-grade shall be compacted to not less than ninety-two percent (92%) of maximum density at not less than seventy-five percent (75%) of optimum moisture content.

B. Aggregate base course shall be compacted to not less than ninety-five percent (95%) of maximum density. Using conventional rolling equipment, moisture content shall not be less than ninety percent (90%) nor more than one hundred-ten percent (110%) of optimum moisture content. Using vibrating equipment, moisture content shall not be less than seventy-five (75%) of optimum moisture content.

C. Maximum density shall be determined in accordance with AASHO Modified Method of Test for the Compaction and Density of Soil, Designation T-180, and the optimum moisture content shall be that corresponding to the maximum density in the above test.

3.4 ROLLERS:

A. Smooth steel-wheeled rollers shall be self-propelled and have a total weight not less than 8 tons. The compression (driving) roller shall exert a pressure of not less than 250 lbs. per inch width of the roller.

B. Pneumatic-tire rollers shall have a compacting width of sixty (60) inches (1.5m) or more and shall be capable of varying the weight from 100 to 250 lbs. per inch of rolling width.

END OF SECTION 32 1124

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 32 12 18
PLANT MIX BITUMINOUS ASPHALT
TENNIS COURT

PART 1 - GENERAL

1.1 GENERAL
- A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.
- B. Related Sections:
  1. Section 32 11 24 Aggregate Base Course
- C. Tack coat courses between lifts of new asphalt shall be incidental to the cost of asphalt installation.

1.2 SCOPE
- A. The work under this section of specifications shall include the furnishing of all labor, materials and equipment necessary to produce, place, spread, compact and finish to proper grade and cross section all plant mix bituminous pavement as shown on the drawings and as specified herein.

1.3 DEPARTMENT OF TRANSPORTATION (DOT) SPECIFICATIONS
- A. All work done under this section of the specifications except as amended herein, shall be in accordance with current edition of the Michigan Department of Transportation Standard Specifications for Highway Construction, referred to hereafter as the MDOT Specifications.

1.4 ACCEPTABILITY OF THE WORK
- A. Grade: Grade conformance tests shall be conducted on both the leveling and wearing courses. The entire surface shall have positive drainage, 1% lateral inclination and 0.1% in running direction.
- B. Planarity: After completion of the finish rolling operations on each course, the compacted surface shall be tested with a 10' straightedge. Measurements shall be made perpendicular to and across all mats at a distance not to exceed 25' feet. The maximum allowable planarity deviation within a pass shall be no more than 1/8" in 10' when measured in any direction.
- C. All work shall meet the specifications of the following industry associations:
  1. American Sports Builders Association (ASBA)
  2. National Federation of State High School Association (NFSHSA)

1.5 PLACEMENT AND COMPACTION
- A. Paving operations shall provide a mat that is smooth, dense and of the proper thickness, slope and planarity. The plant mix bituminous material shall be compacted to 95% of the bulk density as determined by 50 blows-per -side Marshall procedures.
- B. The wearing course shall be placed such that the longitudinal joints of the wearing course are offset from that of the leveling course. Transverse joints shall be off set a minimum of 24".
- C. In placing each succeeding pass after the initial one, the screed of the paver should be set so that it overlaps the preceding pass by 2" and be sufficiently high so that when compacted, a smooth joint is produced. Prior to pinching the joint, the excess material shall be pushed onto the edge of the new pass with a lute. Excess material shall be removed from the pass.
- D. Deficient areas within the base course shall be corrected by sawcutting or milling to a depth equal to the thickness of the mat. Tack coat shall be applied to all edges and the pavement shall be replaced. Skin patching of the wearing course shall only be done with materials acceptable to the surfacing contractor.

PART 2 - MATERIALS

2.1 PLANT MIX
- A. Leveling Course: The bituminous plant mix base course shall meet the requirements of MDOT Specification 7.10 - Plant Mix Bituminous Mixtures. The specific mix and cross sections are as follows.

1. Thickness: Not less than 1 ½" inches when compacted
2. Liquid Asphalt or Bitumen: 5% ~ 7% by weight
3. Asphalt Penetration or Type: (PG-58-28)
4. Aggregate Type: Crushed limestone or natural aggregate. Slag is unacceptable unless other materials cannot be obtained. Only blast furnace slag is acceptable in this case
5. MDOT Mix: 1100 L - 20AA

Aggregate Sieve Analysis	Percent Passing
¾"	100
½"	90-100
⅜"	65-95
No. 8	45-70
No. 30	20-45
No. 200	3-10

B. Wearing Course: The bituminous plant mix base course shall meet the requirements of MDOT Specification 7.10 - Plant Mix Bituminous Mixtures. The specific mix and cross sections are as follows.
   1. Thickness: Not less than 1 ½" inches when compacted
   2. Liquid Asphalt/Bitumen: 5% ~ 9% by weight (±1½%)
   3. Asphalt Penetration or Type: (PG-58-28)
   4. Aggregate Type: Crushed limestone or natural aggregate. Slag is unacceptable unless other materials cannot be obtained. Only blast furnace slag is acceptable in this case. No R.A.P. material permitted.
   5. MDOT Mix: 1100 T - 36-A

Aggregate Screen Size	Percent Passing
½"	100
⅜"	92-100
No. 4	65-90
No. 8	55-75
No. 30	20-50
No. 200	4-10
Percent Crushed	60

C. The Contractor shall submit to the Landscape Architect a job mix formula, including the exact proportions of bituminous material and mineral filler.
D. No bituminous surface shall be placed prior to approval of the job mix formula by the Engineer/Landscape Architect.

PART 3 - EXECUTION

3.1 LIMITATIONS OF OPERATIONS

A. Bituminous tack coat shall be applied only when surface and weather conditions are favorable.
B. Bituminous plant mix shall be placed only during daylight hours when the temperature of a shaded portion of aggregate the base is 40°F. or higher and when the surface upon which it is to be constructed is dry.

3.2 SUB-GRADE AND BASE COURSE PREPARATION

A. Prepare sub-grade and aggregate base course in accordance with these specifications. The subgrade shall be proof compacted loaded rubber tired equipment and witnessed by a representative of the design team. Areas that exhibit significant deflection or pumping shall be removed and replaced with compacted granular material. Aggregate base course shall be compacted to 95% of the maximum dry density as determined by ASTM D698 (AASHTO T99) procedures.

B. At the time of applying bituminous material, the sub-grade surface shall be dry and clean, and all necessary repairs or reconditioning work shall have been completed.

C. All objectionable foreign matter dirt, debris, etc. on the asphalt surface shall be removed and disposed by the Contractor.

3.3 BITUMINOUS TACK COAT

A. Bituminous tack coat shall be applied at a rate of 0.10 gallons per square yard to existing bituminous surfaces and to successive plant mix surfaces. The tack coat may be waived by the Landscape Architect where successive plant mix courses are to be placed during one day's operation.

B. The bituminous tack coat shall be applied uniformly to the clean, dry surface with a pressure distributor. Pools of bituminous material shall not be allowed to remain on the surface. The tack coat material shall be applied far enough ahead of the paving operation to allow it to cure before placing the subsequent plant mix bituminous material.

3.4 TEMPERATURE

A. The temperature of bituminous material at the time of application shall be as approved by the Landscape Architect within the limits specified below.

SS-1h	105-180 degrees F.
Plant Mix	270-330 degrees F.

B. The Landscape Architect may reject any load of plant mix bituminous material whose temperature is outside the temperature limits identified in 3.4A

3.5 BITUMINOUS PAVING

A. After completion and acceptance of the stone base course, install 1½" of leveling course and 1½" of wearing asphalt materials.

B. Installation shall be in two (2) separate courses of 1½" and 1½" after compaction. Each asphalt lift shall be installed using automated laser grade control, self-propelled paving equipment, with dual-slope capabilities.

C. The plant mix bituminous material shall be compacted to 95% of the bulk density as determined by 50 blows-per-side Marshall procedures.

D. Plant mix shall be placed and compacted in accordance with 1990 MDOT Specification Section 4.00 - Plant Mix Bituminous Pavements. The initial contact with the hot mixture leveling course shall be made by the power or driving roll of the steel roller, weighing not less than six (6) tons. The finish surface of the leveling course shall not vary more than 1/4" in 10 feet when measured in any direction. The finish surface of the wearing course shall not vary more than 1/8" in 10 feet when measured in any direction.

3.6 TESTS AND SAMPLES

A. At the direction of the Landscape Architect, the Contractor shall cut samples from any course or finished pavement not to exceed five (5) in number from any days run for tests of density and composition. These samples shall be taken at points designated by the Landscape Architect by sawing with a power driven masonry saw or diamond core drill. Samples shall be sufficiently large to

meet the needs of the testing laboratory.

B. The Owner will hire an independent testing laboratory to perform field density testing with a nuclear density gage to verify that the specified density requirements are being met.
C. The surface from which samples are taken shall be restored by the Contractor not later than the next succeeding day of plant operation.
D. All test results will be available to the Contractor.
E. All testing samples will be paid for in accordance with these specifications.
F. Asphalt paving contractor shall power-wash asphalt prior to installation of tennis court or all weather Tennis Court surface. Contractor shall flood the asphalt to identify all potential “Bird Bath” areas prior to surface application. Bird bath areas will be repaired as directed by the Landscape Architect.

END OF SECTION

SECTION 32 1834
ACRYLIC TENNIS COURT SURFACE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections:

1. Plant Mix Bituminous Pavement

2. Chainlink Fence

1.2 SCOPE OF WORK

A. This proposal shall include the work to complete the tennis court surface for the tennis courts at Troy High School. The tennis court asphalt is to be reviewed and acknowledged for the work under this proposal.

B. Tennis courts shall be cleaned using a stiff bristle broom and a gas-powered, water based pressure spray unit capable of generating 2500 psi. at the nozzle tip, to remove all dirt and debris.

C. The work shall include all labor, materials, equipment and transportation to install the following products.

1.3 SUBMITTALS:

A. Submit manufacturer's data sheets for all materials and all other related items to owner's representative.

PART 2 - PRODUCTS

2.1 TENNIS COURT SURFACE MATERIAL

A. This material shall be a fully pigmented system in-depth color. The material shall be as specified:

1. NOVACOURT, by Novasport USA, Framingham, MA (800) 872-6682

2. DECO SURFACING, by California Products, Cambridge, MA (800) 332-6178

3. LATEXITE, by Surface Coatings Co., Auburn Hills, MI (248) 338-0335

4. PLEX-PAVE, by California Products, Cambridge, MA (800) 225-1141

5. LAYKOLD, by Advanced Polymer Technology, Harmony, PA (888) 266-4221

B. The installation contractor must be able to supply the Owner, upon request, a list of twenty (20) outdoor tennis courts surfaces with the material accepted over the last five (5) years and have required no maintenance.

C. Asphalt or tar in any form will not be permitted in any coating. The color shall be pure acrylic-type containing no asphalt or tar emulsions and no vinyls, alkyds or non-acrylic resins. The color finish system shall contain factory-mixed compositions requiring only the addition of water on the job site. The material shall be delivered to the site in sealed containers with the manufacturer's label affixed.

PART 3 - EXECUTION

3.1 APPLICATION

A. Plant Mix Bituminous Asphalt shall cure for a minimum of 14 days prior to application of surfacing materials.

B. The asphalt surface shall be flooded, and any ponding water that remains after 1 hour and is deep enough to cover the thickness of a five cent piece shall be corrected using a patch mix by the approved surfacing manufacturer.

C. After all leveling and patching, the tennis court area shall receive one (1) coat of sand filled acrylic surfacer material at the rate of .07 gallon/square yard.

D. Application of the system shall be in strict accordance with the printed instructions of the manufacturer. If the system is installed by someone other than the manufacturer, an experienced manufacturer's representative shall supervise the installation of the material. The installer shall provide the Owner with a list of at least five (5) installations of this or similar material, performed by his forces, within the last two (2) years.

E. The surface to receive the tennis surface system as specified shall be checked to be free from grease, oil and other foreign materials before starting the work. The Contractor shall remove by brush, vacuum or blower all dust, dirt, imbedded soil, etc. and shall mechanically wash areas, if required.

F. Holes, cracks and spalled areas shall be clean of dirt, water and deleterious materials before any coating operations are started. After cleaning and treating these areas with the proper filler materials, the application shall proceed only if the surfaces are dry and clean and the temperature is at least fifty degrees Fahrenheit (50°F). and rising and the surface temperature is not in excess of one hundred forty degrees Fahrenheit (140°F).

G. Apply two (2) filler coats and one (1) finish coat. Application shall be in strict accordance with manufacturer's specifications. The material shall have in-depth color in the color combinations as indicated for the final surface.

H. The filler coat shall be applied at a rate of .05 gallons (concentrated material prior to dilution) per square yard for each coat. The final surface shall be applied at a rate of .04 gallons (concentrated material prior to dilution) per square yard. Only small amounts of water shall be added if too rapid drying is occurring during application. The Contractor shall be accountable at all times for the amount of materials of each color used. Permission of the Owner shall be obtained before adding any additional water.

I. Care shall be taken to protect adjacent areas and structures (fences, posts, sidewalks, buildings, etc.) which are not to be coated. Remove immediately before drying occurs.

J. Contractors must notify the Landscape Architect of all applications, 48 hours prior to installation.

K. Acceptability of work: The finished surface shall be constant in color and texture, free from voids, depressions, joint marks, ridges, wheel marks or other imperfections. If any of these become apparent during the installation of the system, the contractor will correct prior to the final coat application, or the surface shall be rejected.

3.2 LINE MARKINGS

A. Upon completion and acceptance of the tennis surface, this Contractor shall prepare and paint lines for tennis.

B. The lines shall be masked on both sides with an acceptable tape. Each measurement shall be accurately set to within 1/8" tolerance in accordance with the American Sports Builders Association (ASBA). Each court area shall be marked for doubles play.

C. All areas that have overlapped in color shall be corrected and non-appearing. All overspray in excess shall be corrected and non-appearing. No spraying shall be done with the wind factor above seven (7) mph.

END OF SECTION 32 1834

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 32 31 02
CHAINLINK FENCE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Work shall include:
   1. Furnish and install posts and accessories
   2. Excavation for post footings
   3. Concrete footing for posts
   4. Furnish and install fence fabric, posts, Top, bottom and mid rails
   5. Furnish and install gates and related hardware

C. Related Sections:
   1. Section 31 20 00 Earthwork
   2. Section 03 30 10 Portland Cement Concrete

1.2 QUALITY STANDARDS

A. Weights and tolerances to conform to Federal Specification RR-F-191G, dated January 25, 1974.

1.3 GUARANTEE

A. The Contractor and any Sub-contractors hereunder guarantee their respective work against defective materials or workmanship for a period of two (2) years from the date of filing notice of completion and an acceptance by the Owner.

1.4 INSPECTION

A. All material installed under this specification shall be subject to testing by Owner at his expense. Any material so inspected and found to be not in strict conformance with this specification shall be promptly removed and replaced by the Contractor at his expense.

1.5 SUBMITTALS

A. Submit shop drawings showing typical fabric pattern, fence and gate construction

PART 2 - PRODUCTS

2.1 FENCE - TENNIS COURTS

A. Chain Link Fabric: The chain link fabric shall be 1-3/4” mesh, 9 gauge. Top and bottom selvage shall have knuckle finish. Fabric shall be free from barbs, icicles or other projections resulting from the aluminizing process, and any fabric not free thereof will be rejected even though erected. Bottom of fence fabric shall be 3/4" plus or minus 1/4" above court surface. Fabric shall conform to:
   1. Standard Specifications for Aluminum Coated Steel Chain Link Fence Fabric, ASTM Designation A-491, corroborated by mill certificates.

B. Line Posts: Line posts shall not be splice welded in such a manner that the weld appears above the grade line. The chain link fabric shall be tied to the line posts with No. 9 gauge annealed galvanized steel tie wire.
   1. Standard Specifications for Black and Hot-Dipped Zinc Coated (Galvanized) Welded and Seamless Pipe for Ordinary Uses, ASTM Designation A-120, SS-30.

C. Terminal and Gate Post: Terminal and gate posts shall not be splice welded in such a manner that the weld appears above the grade line. End, corner and gate posts shall have an outside diameter of 3" and weight of not less than five and seventy-nine one-hundredths (5.79) lbs. per lineal foot.

1. Standard Specifications for Black and Hot-Dipped Zinc Coated (Galvanized) Welded and Seamless Pipe for Ordinary Uses, ASTM Designation A-120.

D. Terminal and Gate Post Fittings: Terminal and gate post fittings including tension bands, brace connections and top rail connections shall be No. 11 gauge. Hot-dipped iron or pot metal fittings will be accepted as equals or substitutes. Top rail, brace and truss bands shall not be less than one inch (1") wide, secured by five-sixteenths inch (5/16") diameter carriage bolts and nuts.

E. Top, Bottom and Midrails: Top rail shall meet the same specifications of quality as line and terminal posts. All rails shall have an outside diameter of one and five-eighths inches (1-5/8") and weigh two and twenty-seven one-hundredths (2.27) lbs. per lineal foot. An outside sleeve-type coupling measuring not less than 6" in length shall be provided at each interval of twenty feet (20'). The chain link fabric shall be tied to the top rail at intervals of twenty-four inches (24") with No. 9 gauge annealed galvanized steel tie wire. Rail(s) shall be securely fastened by means of suitable malleable iron or pressed steel connections. The terminal ends of all top, bottom, mid and bracing rails shall utilize hardware that prevents insects from gaining access into top rails or rails will be filled with a polyurethane insulation, a minimum 6” depth.

F. Braces and Terminal Gate and Gate Posts: Terminal and gate posts shall be strengthened and reinforced by braces meeting the same specifications of quality as line and terminal posts. Braces shall be installed midway between top rail and court surface and extend from each terminal post to the first adjacent line posts. Braces shall be securely fastened to posts by heavy pressed steel connections and also be trussed from line posts back to terminal post with a three-eighths inch (3.8") round truss rod complete with tightened unit. Post Spacing and Settings: Line and terminal posts shall be set in concrete foundation not less than twelve inches (12") in diameter and not less than forty-two inches (42") in depth. Concrete shall attain a compressive strength of not less than three thousand five hundred (3,500) lbs. per square inch at the twenty-eighth (28th) day after pouring. Spacing of posts in the line of fence shall be uniform. See plans for spacing dimensions.

G. Gates: Gates shall be not less than four feet (4') wide and constructed and hung as detailed on drawings. Frames shall be constructed of pipe conforming to Standard Specifications for Black and Hot-Dipped Zinc-Coated (galvanized) Welded and Seamless Steel Pipe for Ordinary Uses, ASTM Designation A-120, having an outside diameter of 1.9" or alternately, being two inches (2") square and weighing two and seventy-two one-hundredths (2.72) lbs. per lineal foot. Gate frames shall be welded, or alternately, shall utilize corner fittings of heavy malleable iron or pressed steel securely riveted to the frame. Fabric matching the fence fabric shall be installed in the frame. Fabric matching the fence fabric shall be installed in the frame by means of tension bars and hoot bolts. Frames having corner fittings shall be equipped with adjustable truss rods having a diameter of three-eighths inches (3/8"). Hinges shall be of adequate strength to support the gate and have large bearing surfaces for clamping in position. Under no conditions of use or abuse shall the hinges twist or turn under action of the gate. Gates shall be capable of being opened and closed quickly and easily by one (1) person. Gates shall be equipped with a positive latching devise that will accommodate padlocking. A plunger rod, catch and semi-automatic outer catch shall be installed on drive gates so as to secure gates in an open position. Hinges, latches and catches shall be one of the manufacturer's standard designs as selected and approved by the Landscape Architect.

H. Post Spacings and Settings: Terminal posts and bracing posts shall be set in concrete foundation not less than twelve inches (12") in diameter and not less than forty-two inches (42") in depth. Concrete shall attain a compressive strength of not less than three thousand five hundred (3,500) lbs. per square inch at the twenty-eighth (28th) day after pouring. Spacing of posts in the line of fence shall be uniform and no more than eight feet (8') apart. Line posts shall be installed using the driven post method (See Section 3, Item 2-E below for total pipe lengths.)

I. Gates: Gates shall be not less than four feet (4') wide and constructed and hung as detailed on drawings.

J. Frames shall be constructed of pipe conforming to Standard Specifications for Black and Hot-Dipped Zinc-coated (galvanized) Welded and Seamless Steel Pipe for Ordinary Uses, ASTM Designation A-120, having an outside diameter of 1.9" or alternately, being two inches (2") square and weighing two and seventy-two one-hundredths (2.72) lbs. per lineal foot. Gate frames shall be welded, or alternately, shall utilize corner fittings of heavy malleable iron or pressed steel securely riveted to the frame. Fabric matching the fence fabric shall be installed in the frame by means of tension bars and hook bolts. Frames having corner fittings shall be equipped with adjustable truss rods having a diameter of three-eighths inches (3/8"). Hinges shall be of adequate strength to support the gate and have large bearing surfaces for clamping in position. Under no conditions of use or abuse shall the hinges twist or turn under action of the gate. Gates shall be capable of being opened and closed quickly and easily by one (1) person. Gates shall be equipped with a positive latching devise that will accommodate padlocking. A plunger rod, catch and semi-automatic outer catch shall be installed on drive gates so as to secure gates in an open position. Hinges, latches and catches shall be one of the manufacturer's standard designs as selected and approved by the Landscape Architect.

2.2 CONCRETE

A. Concrete shall conform to Section 03 30 10 Portland Cement Concrete

PART 3 - EXECUTION

3.1 EXAMINATION

A. Do not construct fence until site grading is complete.

3.2 INSTALLATION

A. All terminal, gate and bracing posts shall be set in concrete foundations
B. All line posts shall be installed utilizing the driven post method.
C. All posts shall be set plumb and in accordance with the following table (unless specified otherwise):

1. Corner/Terminal and Bracing Post - General Fence

Fabric Height	Post Depth	Diameter of Foundation	Foundation Depth	Maximum Spacing
0’ - 6’-0”	36”	12” min	42”	10’-0”
6’-1” - 12’-0”	36”	12” min	42”	10’-0”

2. Line Post - Tennis Court Fence

Fabric Height	Post Depth	Diameter of Foundation	Foundation Depth	Maximum Spacing
10’-0”	36”	12” min	42”	8’-0”

C. Line posts shall be pneumatically driven into the ground using the following chart*:

Fabric Height	Pipe Below Grade	Total Length of Post
4’	4’	8’
6’	5’	11’
8’	6’	14’
10’	7’	17’
12’	8’	20’

3.3 CLEAN UP AND DISPOSAL

A. Remove from the site all equipment, materials, and debris resulting from construction work including this section. Leave work area neat and clean and in a condition acceptable by the Landscape Architect and Owner. All work shall be complete, ready for use, at the time of final acceptance.

END OF SECTION

SECTION 32 9227
GENERAL LAWN RESTORATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Section Includes:

1. Seed

2. Pre-plant and post fertilizer

3. Maintaining lawns until acceptance

C. Related Sections:

1. Section 31 2000 Earthwork

1.2 QUALITY ASSURANCE

A. Submit to Landscape Architect for prior approval, samples and certified analysis of fertilizer.

B. Grass seed shall meet the tolerance for germination and purity of the Official Seed Analysis of North America.

1.3 DELIVERY, STORAGE AND HANDLING

A. Deliver grass seed in original containers showing analysis of seed mixture, percentage of pure seed, year of production, net weight, date of packaging and location of packaging. Damaged packages are not acceptable.

B. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.4 EXISTING CONDITIONS

A. Lawn work Contractor shall inspect finish grade for acceptability. Beginning work means acceptance of existing conditions.

PART 2 - PRODUCTS

2.1 SEED

A. Seed shall be provided from one of the following suppliers
- Lesco - (248) 689-5005
- Rhino Seed & Supply - (800) 482-3130
- Michigan State Seed Solutions - (800) 647-8873

B. Contractors shall seed all areas disturbed during construction and not otherwise developed or indicated to be sodded. Topsoiling, finish grading and fertilization is to remain the same. *Seed shall be new crop, cleaned, and comprising of the following varieties:

1. General Seeding Areas: Blend shall be 50% Kentucky Bluegrass and 50% Perennial Ryegrass by weight for irrigated fields. A blend of tall fescue, bluegrass and ryegrass for non-irrigated

fields.

3 General Seeding Areas

Seed Variety	Purity	Germination
• Banff Kentucky Bluegrass	98%	85%
• Merit Kentucky Bluegrass	98%	85%
• Touchdown Kentucky Bluegrass	98%	85%
• Fiesta II Per. Rye	98%	90%
• Victory Fescue	98%	85%

2.2 COMMERCIAL FERTILIZER

A. Fertilizer shall be uniform in composition, free-flowing and suitable for application with approved spreader, granular or pelleted with 50 percent (50%) of total nitrogen derived from A. natural organic material in a slowly available form, delivered in original unopened containers with the analysis, type and trade name attached to each container. The composition shall be:

1. Pre-plant Fertilizer composition shall be:
   5% Nitrogen (N)
   10% Phosphoric Acid (P_2O_5)
   5% Potash (K_2O)

2. Post Seeding Fertilizer composition shall be:
   12% Nitrogen (N)
   10% Phosphoric Acid (P_2O_5)
   10% Potash (K_2O)

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect existing underground improvements from damage.

B. Remove all foreign materials, plants, roots, stones, and debris larger than 1" in any dimension from site. Do not bury foreign material.

C. Loosen soil to a depth of four inches (4") in lawn areas by approved method of scarification and grade to remove ridges and depressions. Remove all stones or foreign matter from top two inches (2") of soil.

D. If above steps have had rain in sufficient quantity to cause soil to recompact, entire steps are to be done prior to seeding.

E. Where no grades are shown, areas shall have a smooth and continual grade between existing or fixed controls and elevations shown on plans. Roll, scarify, rake and level as necessary to obtain true, even lawn surfaces. All finish grades shall meet approval of the Owner.

F. Grade lawn areas to finish grades, filling as needed or removing surplus dirt and floating areas to a smooth, uniform grade as indicated on grading plans. All lawn areas shall slope to drain.

3.2 PREPLANT FERTILIZING

A. Incorporate fertilizer into topsoil at a rate of 4 lbs./1000 S.F.

3.3 SEEDING

A. Dates of Seeding:

1. Grass seed shall be sown in the fall from August 15th until October 15th or in the spring between March 1st and May 15th or at such other times as approved by the Landscape Architect. All seeding is to be done in dry or moderately dry soil and at times when the wind does not exceed a velocity of five (5) miles per hour.

2. If special conditions exist, which may warrant a variance in the above dates, submit a written request to the Landscape Architect stating the conditions and proposed variance. Permission for the variance will be given if, in the opinion of the Landscape Architect, the variance is warranted.

B. Seed Application:

1. Immediately before sowing the seed, the earth surface shall be re-worked until it is a fine, pulverized, smooth seedbed, showing not more than 1/4" variance from grade.

2. Apply seed mixture, as specified, at a rate of six (6) lbs./1000 sq. ft., using a cultipacker type seeder such as Brillion (or equal). Seed shall be uniformly spread over the previously fine graded and fertilized topsoil. **Hydro-seeding is not acceptable.**

3. Mulching: Apply and crimp clean straw mulch uniformly at a rate of 90 lb./1000 sq. ft.

C. Summer Seeding:

1. If seeding is authorized between June 1 and August 15, annual rye shall be sown separately in addition to specified seed mix. Sow at the rate of (one) 1 lbs./1000 sq. ft.

2. Cultipacker or approved similar equipment may be used to cover the seed and to firm the seed bed in one operation. In areas inaccessible to cultipacker, the seeded ground shall be lightly raked and rolled in two directions with a water ballast roller. Extreme care shall be taken during seeding and raking to insure that the seed in not raked from one spot to another.

3. The seeded areas are to be protected, watered, mowed and otherwise maintained until Owner Acceptance.

D. Post Seeding Fertilizer: Supply 12-10-10 fertilizer when grass reaches height of one (1) inch. Rate of application shall be indicated by manufacturer.

E. Maintenance

1. Maintenance of all lawns consist of mowing, watering and repairing erosion. Maintenance of lawns shall commence when any portion of the seeding has been completed. Seeded lawns shall never reach a height of three (3) inches prior to a cutting and shall be cut to a height of two (2) inches.

2. If, for reasons beyond the Sub-contractor's control, the height of the grass has exceeded three (3) inches, the mower blades shall be raised so that at no time will more than 1/3 of the grass leaf surface be removed. The Owner will accept the lawns after three (3) cuttings if a uniform cover of grass is established.

3. Contractor shall notify the Owner through the Landscape Architect in writing one (1) week in advance of the final lawn cutting to allow the Owner and the Landscape Architect to inspect the lawns and schedule his maintenance work.

4. If an infestation of weeds or crab grass develops prior to acceptance of the lawn, the Contractor shall treat the infestation by hand weeding or chemical control. The chemical control shall be furnished and installed by the contractor as recommended by the manufacturer and approved by the Landscape Architect. At least two weeks shall elapse after chemical control is applied before a request or inspection for acceptance is made to the Landscape Architect.

F. Guarantee

1. Seeded Lawns:

a. It is the responsibility of the Contractor to establish a dense lawn of permanent grasses, free from lumps, depressions and settlement. Any part of the area that fails to show a uniform germination shall be re-seeded and such re-seeding shall continue until a dense lawn is established. Damage to seeded areas resulting from erosion shall be repaired by the Contractor.

b. This guarantee shall extend for one year from the date of acceptance of the lawn.

2. Excavation Areas:

a. It is the responsibility of the Contractor to repair all areas.

3.4 CLEAN UP AND DISPOSAL

A. Remove from the site all equipment, materials, and debris resulting from construction work including this section. Leave work area neat and clean and in a condition acceptable by the Landscape Architect and School District. All work shall be complete, ready for use, at the time of final acceptance.

END OF SECTION 32 9227

SECTION 33 4600
SUBDRAINAGE SYSTEMS

PART 1 - GENERAL

1.1 GENERAL

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections:

1. Section 31 20 00 Earthwork

2. Section 33 44 13 Manholes, Catch Basins and Similar Structures

1.2 SCOPE

A. The work under this section consists of furnishing all labor, materials and equipment to install the drainage system, couplings and accessories for the reconstruction of the track facility.

1.3 REFERENCE STANDARDS

A. ASTM F-405

B. ASTM D 3350

C. ASTM D 4716

D. AASHTO M-288

1.4 SUBMITTALS

A. Manufacturer’s Literature: Furnish to Landscape Architect, copies of manufacturer’s specifications, maintenance, and installation instructions for each item specified herein. Include photographs, catalogue cuts, and other data as may be required to show compliance with these specifications.

PART 2 - PRODUCTS

2.1 DRAINAGE TILE

A. ASTM F-405 perforated corrugated polyethylene tubing (with filter wrap) complete with required couplings and fittings.

2.2 PEASTONE

A. 3/8” minus peastone to be used as backfill material.

PART 3 - EXECUTION

3.1 EXECUTION FOR CORRUGATED POLYETHYLENE TUBING

A. Hand trim excavating to required elevations. Do not over excavate. Remove large stones or other hard matter which could damage drain tile.

B. Place a two inch (2") thick bed of filter aggregate.

C. Install the drainage tile on the filter aggregate bed.

D. Ensure complete connection to storm sewer using perforated pipe.

E. Cover the pipe with filter aggregate to top of trench and compact to 90% Modified Proctor.

END OF SECTION 33 4600

FORESITE design

3269 Coolidge Highway
Berkley, Michigan 48072
Phone 248-547-7757
Fax 248-547-0218

Website: www.foresitedesign.com
Email: blemons@foresitedesign.com

ADDENDUM

ADDENDUM No: #1 **PAGES: 13**

PROJECT: **Troy School District Bid #9652 – Troy High School Tennis Court Reconstruction**

DATE: February 1, 2010

TO: All Bidders

This Addendum is issued prior to the Bid Opening to clarify or change the Bid Documents. All requirements contained in the Contract Documents shall apply to this Addendum. All incidental work necessary to complete the work shall be included in the Contractor's Quotation even though not particularly mentioned. Parts of the Specifications and Drawings referred to herein supersede previously issued data and shall form a part of the Bid Documents.

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents issued January 20, 2010, as noted below. Receipt of this Addendum should be noted on the proposal form; failure to do so may subject Bidder to disqualification.

Boiler Plate and Specifications:

Item #1: Meeting Attendance Sheet from Pre-Bid Meeting held on January 26, 2010 enclosed.

Item #2: Current Planholder's List as of February 1, 2010 enclosed.

Item #3: The last day of school for the Troy School District is June 21, 2010. The construction schedule, both start and completion dates, will remain as indicated in the bidding documents.

Item #4: Specification Section 00 1200 Scope of Work
Add: "11. Remove existing tennis net posts and concrete footings. Concrete footings shall be disposed offsite. Contractor shall give to Owner only the net posts that contain the internal winding mechanisms."

Item #5: **Insert: "Specification Section 02 4110 Salvage and Relocation of Field Items"**

Item #6: Specification Section 00 0110 Table of Contents, Division 02 – Existing Conditions:
Insert: "Specification Section 02 4110 Salvage and Relocation of Field Items"

Item #7: Specification Section 00 1200 Scope of Work:
Insert: "Specification Section 02 4110 Salvage and Relocation of Field Items"

Item #8: Specification Section 00 1200 Scope of Work, Item #3:
Revise to Read: "Remove existing fence, asphalt, concrete foundations and dispose offsite. Existing aggregate base shall be excavated and stockpiled onsite."

Item #9: Specification Section 00 1200 Scope of Work, Item #5:
Revise to Read: "Install +/- 6" of salvaged aggregate base, grade and compact. Furnish and install 6" of new aggregate base."

Item #10: Specification Section 00 1200 Scope of Work, Item #7:
Revise to Read: "Install new Chain Link Fence with top, bottom and midrail. Furnish and install new gates as shown on the drawings."

Item #11: Specification Section 00 1200 Scope of Work
Add: "12. Architect will submit for Soil Erosion and Sedimentation Control plan review with the City of Troy. Once plan is approved, awarded Contractor is responsible for Soil Erosion and Sedimentation Control permit fees associated with this project."

Item #12: Specification Section 00 1200 Scope of Work:
Add: "13. Contractor shall provide an allowance of $1,500.00 for permits and inspections for soil erosion and sedimentation control through the City of Troy. Provide supporting documentation related to costs incurred. Unused monies will revert back to Owner."

Item #13: **Insert: "Specification Section 33 4416 Polymeric Trough Drain System"**

Item #14: Specification Section 00 0110 Table of Contents, Division 33 – Utilities:
Insert: "Specification Section 33 4416 Polymeric Trough Drain System"

Item #15: Specification Section 00 1200 Scope of Work:
Insert: "Specification Section 33 4416 Polymeric Trough Drain System"

Item #16: Specification Section 00 1200 Scope of Work:
Add: "14. Furnish and install new trough drain system including connections to 6" draintile as noted on drawings."

Draawings:

Item #1: Revised Soil Erosion Plan which adds a stockpile area for the salvaged aggregate stone. Stockpile area shall be contained with silt fence. Reference Sheet L1.05
Insert: Sheet A1.1

Item #2: Revised Asphalt Section Detail (typical for all asphalt profile details). Reference Sheet LD1.01 Tennis Court Details:
Delete: Detail #5, Sheet LD1.01
Insert: Detail #5, Sheet A1.2

Item #3: Sheet L1.02 Existing Conditions and Demolition Plan, Demolition Legend, Item #1:
Revise to Read: "Remove and dispose offsite existing asphalt. Existing aggregate base shall be salvaged and stockpiled as shown on Addendum Sheet A1.1."

FORESITE design

Pre-Bid Meeting Attendance

Project Name: Troy High School - 2010 Tennis Court Reconstruction

Date: 1/26/2010
Time: 1:00 PM

Location: Troy School District Purchasing Office

Name	Company	Phone No.	Fax No.	E-mail	Present
Mondo Belardi	Troy School District	(248) 823-4069			X
Bruce Lemons	Foresite Design, Inc.	(248) 547-7757	(248) 547-0218	blemons@foresitedesign.com	X
Mike Sims	Foresite Design, Inc.	(248) 547-7757	(248) 547-0218	mike@foresitedesign.com	X
Kurt Wentheimen	A.S.I. Paving	(248) 819-8906		kwentheimen@asipaving.com	X
Michael Chunko	Hutch Paving	(586) 427-7283		mchunko@hutchpaving.com	X
Ray Kniesteadt	ABC Paving	(734) 676-2020		rkniesteadt@abcpaving.com	X
John Girardot	Nagle Paving	(248) 553-0600		johng@naglepaving.com	X
Marc Olds	S&J Asphalt Paving	(734) 721-4442	(734) 721-2006	marc.olds@live.com	X
Tom Maliszewski III	WCI Contractors, Inc.	(313) 368-2100	(313) 368-8986	wcicontractors@msn.com	X
Jon Vaughn	Goddard Coatings	(248) 634-3006	(248) 634-3122	jon@goddardcoatings.com	X
Brandon Rike	Pro-Line Asphalt	(586) 752-7730	(586) 752-9745	brandon@prolineasphalt.com	X

Troy School District
Troy High School
Tennis Court Reconstruction

Release Date: 01/20/10
Due Date: 02/04/10 @3:00 p.m.

Set No.	Planholder	Date Sent:	Addendum:	Comments
1-2	Mondo Belardi **Troy School District** **1140 Rankin St.** **Troy, MI 48083** Phone: (248) 823-4069 Fax: (248) 823-4051	1/20/10		Delivered
3-4	**Foresite Design** **3269 Coolidge Hwy** **Berkley, MI 48072** Phone: (248) 547-7757 Fax: (248) 547-0218	1/20/10		
5	John Kruso **Best Asphalt** **6334 N. Beverly Plaza** **Romulus, MI 48174** Phone: (734) 729-9940 Fax: (734) 729-6414	1/20/10		Picked Up
6	Daryl Fegan **T&M Asphalt Paving, Inc.** **4755 Old Plank Rd.** **Milford, MI 48381** Phone: (248) 684-2300 Fax: (248) 685-0580	1/20/10		Mailed UPS
7	Cy Chauvin **C.A.M.** **43636 Woodward Ave** **P.O. Box 3204** **Bloomfield Hills, MI 48302** Phone: (248) 972-1000 Fax: (248) 972-1136	1/21/10		Picked Up

FORESITE design

Troy School District
Troy High School
Tennis Court Reconstruction

Release Date: 01/20/10
Due Date: 02/04/10 @3:00 p.m.

Set No.	Planholder	Date Sent:	Addendum:	Comments
8	Paul DuCat **Asphalt Specialists, Inc.** **1780 E. Highwood** **Pontiac, MI 48340** Phone: (248) 648-7531 Fax: (248) 334-4135	1/21/10		Picked Up
9	Tanya Fredricks **Builders Exchange of Michigan** **4461 Cascade Rd SE** **Grand Rapids, MI 49546** Phone: (616) 949-8650 Fax: (616) 949-6831	1/21/10		Mailed UPS
ftp	Jon Vaughn **Goddard Coatings** **15045 Dixie Hwy.** **Suite C** **Holly, MI 48442** Phone: (248) 634-3006 Fax: (248) 634-3122	1/21/10		
ftp	Miriah Walsh **ABC Paving** **2650 Van Horn Rd.** **Trenton, MI 48183** Phone: (734) 676-2020 Fax: (734) 671-7847	1/21/10		
10	Rich Teets **Shamrock Fence Comapany** **19064 Superior** **Southgate, MI 48195** Phone: (734) 283-6670 Fax: (734) 283-6678	1/22/10		Picked Up

FORESITE design

Troy School District
Troy High School
Tennis Court Reconstruction

Release Date: 01/20/10
Due Date: 02/04/10 @3:00 p.m.

Set No.	Planholder	Date Sent:	Addendum:	Comments
11	Rob Johnson **Cortis Bros. Excavating** **6052 Starville Rd.** **Marine City, MI 48039** Phone: (810) 765-1426 Fax: (810) 459-9428	1/22/10		Picked Up
12	Rob Nagle **39525 West 13 Mile Rd.** **Suite 300** **Novi, MI 48377** Phone: (248) 553-0600 Fax: (248) 553-0669	1/22/10		Picked Up
13	Rick Dougherty **Star Trac Enterprise** **26661 W. Ten Mile Road** Southfield, MI 48034 Phone: (248) 354-2304 Fax: (248) 357-4476	1/25/10		Picked Up
14	Mike Chunko **Hutch Paving** **3000 E. 10 Mile Road** **Warren, MI 48091** Phone: (586) 427-7283 Fax: (586) 427-7273	1/25/10		Picked Up
15	Bruce Kilmer **Midwest Landscape Group** **5470 Huron Hills Drive** **Commerce, MI 48382** Phone: (248) 615-6584 Fax: (248) 360-2647	1/25/10		Picked Up

FORESITE design

Troy School District
Troy High School
Tennis Court Reconstruction

Release Date: 01/20/10
Due Date: 02/04/10 @3:00 p.m.

Set No.	Planholder	Date Sent:	Addendum:	Comments
16	Mike Schoenherr **M.L. Schoenherr** **47360 Van Dyke** **Utica, MI 48317** Phone: (586) 739-2010 Fax: (586) 739-2043	1/25/10		Picked Up
17	Contact Name: **Company:** **Address:** Phone: Fax:			
18	Tom Malsizewski **WCI Contractors** **20210 Conner** **Detroit, MI 48234** Phone: (313) 368-2100 Fax: (313) 368-8986	1/26/10		Picked Up
19	Marc Olds **S&J Asphalt Paving** **39571 Michigan Avenue** **Canton, MI 48188** Phone: (734) 721-4442 Fax: (734) 721-2006	1/26/10		Picked Up at Pre-Bld
20	Contact Name: **Company:** **Address:** Phone: Fax:			
ftp	Mike Dickenson **RVP Construction**	1/27/10		

FORESITE design

SECTION 02 4110
SALVAGE & RELOCATION OF FIELD ITEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections:

1. Section 03 2400 Portland Cement Concrete
2. Section 31 1000 Site Preparation
3. Section 31 2000 Earthwork

C. Work Includes Salvage of the Following Items:

1. +/- 6” of existing aggregate base. Salvaged aggregate base shall be stockpiled as shown on the drawings.
2. Existing net post internal winding mechanisms. Salvaged items shall be turned over to Owner.

1.2 SCOPE

A. The work under this section of the specifications shall consist of the salvage of all items as indicated on the drawings. Contractor shall furnish all labor, materials and equipment to complete the work according to the drawings and specifications.

B. All other facilities and items that are indicated shall remain and be protected from construction damage.

PART 2 - PRODUCTS

N/A

PART 3 - EXECUTION

3.1 EXECUTION

A. General

1. Contractor shall salvage items shown on drawings. Locations shall be within District boundaries.
2. Methods to be used in salvaging items to be determined by the Contractor and approved by the Owner. Equipment damaged during salvage/relocation shall be replaced or repaired at the Contractor’s expense.
3. All work to be performed shall be under applicable Government Codes.
4. All items requiring electrical or water will be attached to existing sources and left in working condition.
5. All underground electric wiring shall be installed in PVC Conduit (with exception to 24 volt electrical irrigation wire).
6. Demolish existing footings to a depth of 24” below proposed finish grade.
7. Restoration of all existing equipment locations shall be performed by Contractor.

B. Removal of Debris

SECTION 02 4110
SALVAGE & RELOCATION OF FIELD ITEMS

1. Prompt removal of demolished items (i.e., concrete footings, slabs, etc.) from the site. Legally dispose of debris/material, including obtaining permission from applicable regulatory authority for disposal of debris/material to proper waste disposal site.

END OF SECTION 02 4110

SECTION 33 4416
POLYMER CONCRETE TROUGH DRAIN SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections:
   1. Section 33 46 00 Subdrainage Systems
   2. Section 33 44 13 Manholes, Catch Basins and Similar Structures
   3. Section 03 30 10 Portland Cement Concrete

1.2 SCOPE

A. The work under this section of the specifications shall include all materials, labor and equipment necessary to install a pre-cast, chemical-resistant polyester concrete trough drainage systems as specified, and as shown on the working drawings.

1.3 QUALITY ASSURANCE

A. Manufacturer shall certify that the polymer concrete used meets the strength values of section 2.B.

1.4 SUBMITTALS

A. Manufacturer will submit, when required, shop drawings showing a schematic plan of the total drainage system listing all parts being provided with exact center-line dimensions suitable for installation. Copies of the manufacturer's recommended method of installation, and assemble shall be submitted for review.

B. Manufacturer shall submit a list of projects installed locally during the past five years.

PART 2 - PRODUCTS

2.1 PRODUCTS -

A. Manufacturer shall be one of the following or (approved equal):

Manufacturer:	Model:
1. ACO Polymer Products, Inc. Chagrin Falls, Ohio (216) 247-2033	System 4000 Grate: Black
2. SportsField Specialities Delhi, NY (888) 975-3343	Sport System 4000 Grate: Black

B. Product shall be a one piece polymer concrete channel incorporating a 3/4" longitudinal evacuation slot. Trench drain channels shall be pre-cast, and interlocking, incorporating either polyester or vinyl ester resins and formulated aggregate.

Unit Width	-	5.5 in
Internal Width	-	4.5 in
Unit Depth	-	6.0 in
Compressive Strength	-	14,500 PSI
Flexural Strength	-	2,900 PSI

SECTION 33 4416
POLYMER CONCRETE TROUGH DRAIN SYSTEM

PART 3 - EXECUTION

3.1 SITE PREPARATION

A. Excavate the area for channel placement wide and deep enough to accommodate the channel size and a minimum of 4 inch concrete encasement (channels require a minimum of 4 inches of concrete support and top of grate must be evenly aligned to the surface of the surrounding slab) on both sides as well as underneath the channel.

3.2 INSTALLATION

A. Channel sections are installed from the outlet end of the system, working from either catch basins or other outlets. Insert channels to interlock ends. Channel sections shall be placed on brick, rebar basket, or low slump concrete slurry, to obtain correct finished elevation. Cutting will be made if required, by masonry or concrete saw. Saw cut relief joints at every third (3^{rd}) section channel ($\pm$10). Install drain system in strict accordance with manufacturer's recommendations and shop drawings.

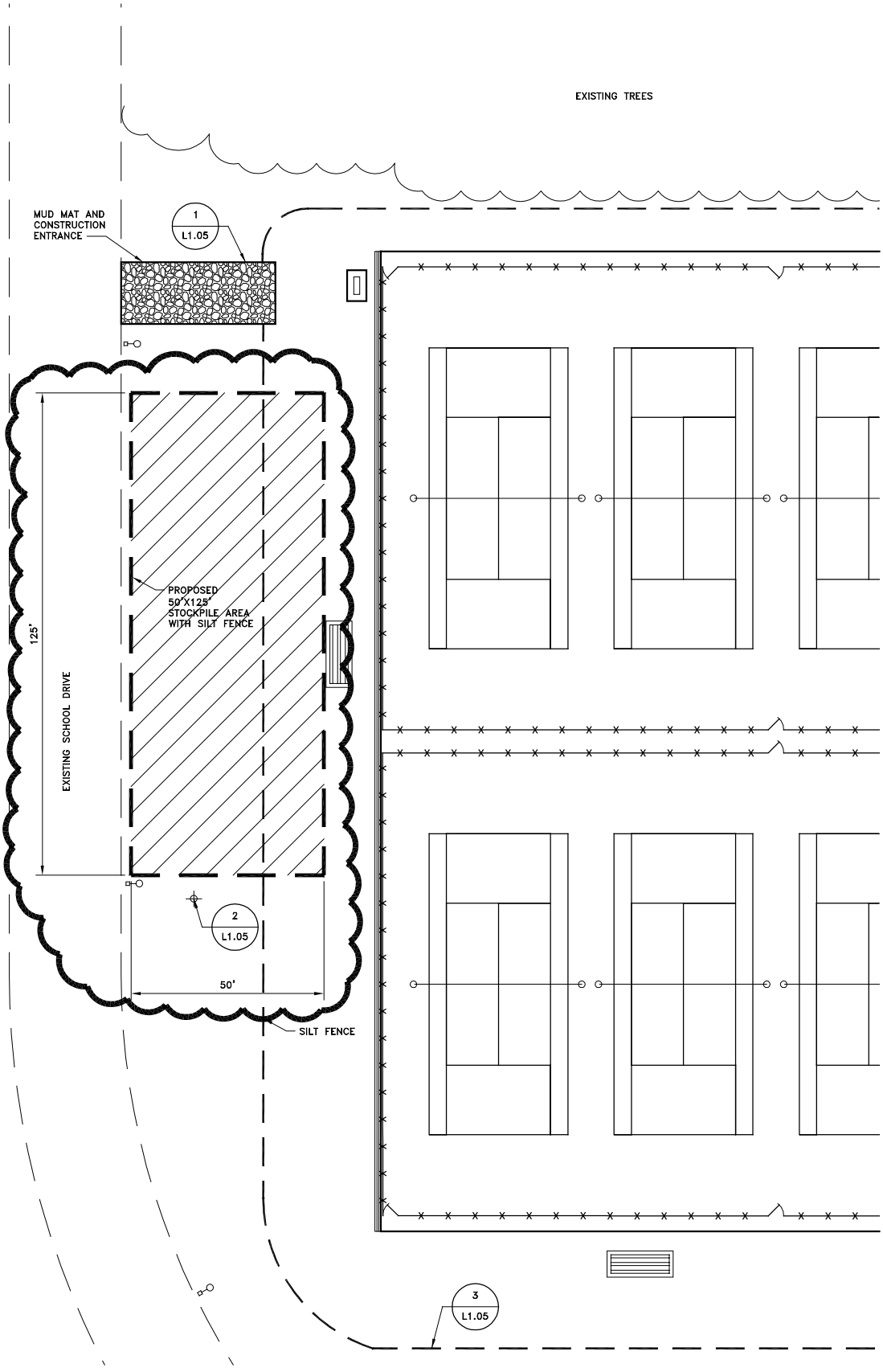
3.3 CONCRETE PLACEMENT

A. Protect the top of the channel against the concrete or other abutting materials during setting. Place concrete in a manner that will no dislodge the channels. Concrete shall be at finished level with the top of the grate to ensure efficient drainage and adequate grate edge protection.

3.4 FINISHING AND CLEAN-UP

A. Following final set of concrete, remove channel protection, if used.

END OF SECTION 33 4416



PROJECT: ***TROY SCHOOL DISTRICT***

BID #9652: TROY HIGH SCHOOL TENNIS COURT RECONSTRUCTION

OWNER: ***TROY SCHOOL DISTRICT***
4400 LIVERNOIS RD.
TROY, MI 48098

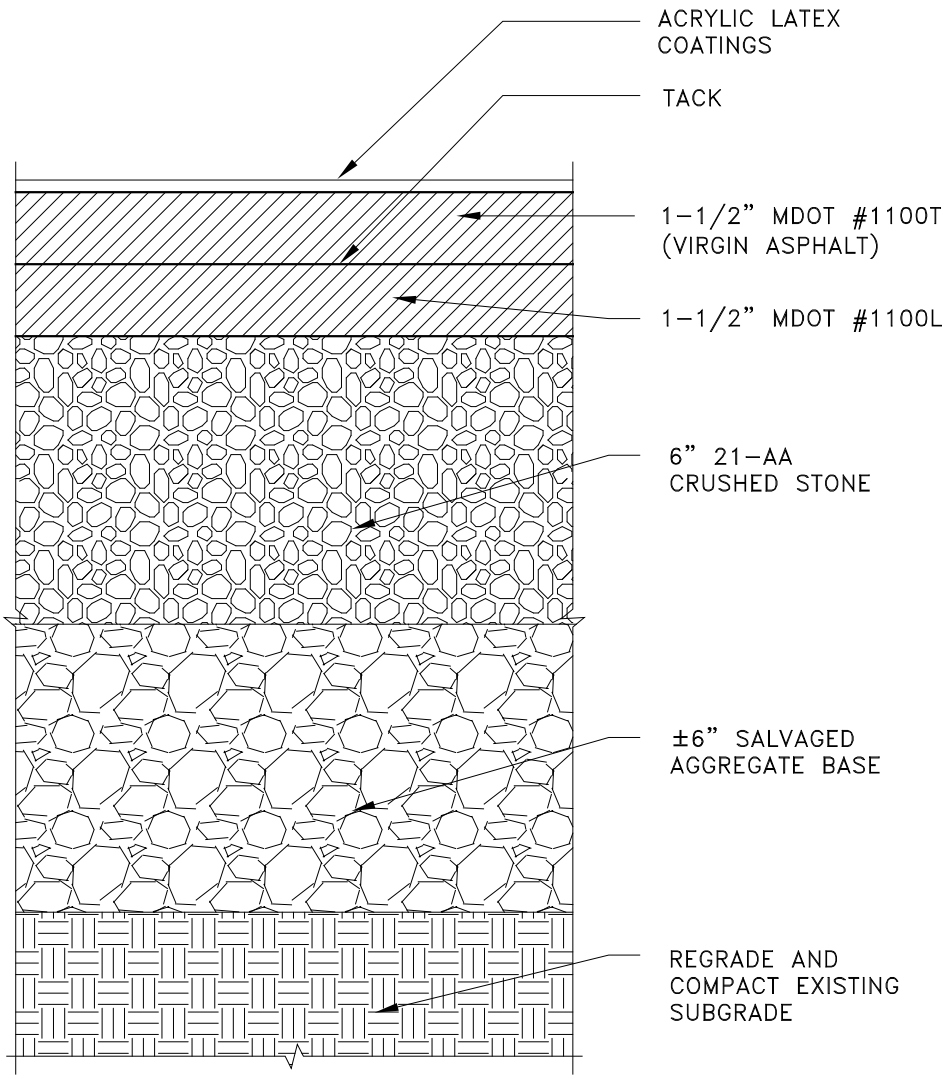
FORESITE design

ATHLETIC FACILITY PLANNING *SITE PLANNING * CONSULTING * LANDSCAPE ARCHITECTURE

WWW.FORESITEDESIGN.COM

DWN: MDS
SCALE: 1"=40'-0"
DATE: 01/26/10

A1.1



5 3" BITUMINOUS PAVEMENT

TYPICAL FOR ALL PROFILE DETAILS SCALE 3"=1'–0"

PROJECT: TROY SCHOOL DISTRICT

BID #9652: TROY HIGH SCHOOL TENNIS COURT RECONSTRUCTION

OWNER: TROY SCHOOL DISTRICT
4400 LIVERNOIS RD.
TROY, MI 48098

FORESITE design
ATHLETIC FACILITY PLANNING *SITE PLANNING * CONSULTING * LANDSCAPE ARCHITECTURE
WWW.FORESITEDESIGN.COM

DWN: MDS
SCALE: AS SHOWN
DATE: 01/26/10

A1.2

Troy School District
Troy H.S. 2010 Tennis Court Reconstruction
Bid # 9652

Bids Due: 02/04/10 @ 3:00 P.M.

BIDDER:	BID SECURITY		ADD. 1	FAMILIAL DSCL.		Proposal A - Site Work	
						BASE BID *Site Work*	REMARKS
Best Asphalt	BB	CC	**1**	**Y**	N	**$228,690.00**	
Nagle Paving	BB	CC	1	Y	N	$228,875.00	
ABC Paving Co.	BB	CC	1	Y	N	$247,450.00	
S&J Asphalt	BB	CC	1	Y	N	$252,750.00	
T & M Companies	BB	CC	1	Y	N	$256,700.00	
Midwest Landscape Group	BB	CC	1	Y	N	$259,000.00	
ML Schoenherr	BB	CC	1	Y	N	$263,200.00	
ASI	BB	CC	1	Y	N	$272,200.00	
WCI	BB	CC	1	Y	N	$276,600.00	
Cortis Brothers	BB	CC	1	Y	N	$277,000.00	
Proline Asphalt					N	Not Read	Missing Familial Disclosure Statement

**Bold Indicates Apparent Low Bidder

FORESITE design