

PROJECT MANUAL
FOR
HALL PARK
BALL FIELD IMPROVEMENTS

Hall Elementary School
Aurora, Illinois

March 16, 2017

OWNER:

FOX VALLEY PARK DISTRICT
101 W. ILLINOIS AVE.
AURORA, ILLINOIS 60506
PHONE: 630.897.0516



Owner: Fox Valley Park District
101 W. Illinois Ave.
Aurora, Illinois 60506

Project Location: Hall Park
Hall Elementary School
Heather Drive
Aurora, Illinois

Date: March 16, 2017

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ADVERTISEMENT FOR BIDS

LEGAL NOTICE

Sealed proposals for ball field improvements at Hall Park, located at Hall Elementary School at the intersection of Heather Drive and Laurel Drive in Aurora, IL, shall be received at the Cole Center - Oak Room, 101 West Illinois Avenue., Aurora, IL 60506 until Thursday, March 30, 2017, 3:30 p.m. (local time) when all bids will be publicly opened and read aloud. Bids must be received in a sealed envelope addressed with the name of the Bidder, Owner, Project name, and date and time of the Bid. There will be no pre-bid meeting.

The project consists of the demolition of existing asphalt bleacher pads, the removal of existing chain link fence, fence posts, concrete footings and chain link back stop. The proposed construction will consist of the installation of concrete bleacher and dug out pads, new infield fence /back stop, bleacher installation, new player's benches and turf restoration.

All prospective bidders must be registered with Vendor Registry in order to view Bid Documents. To register, go to the Fox Valley Park District's website at the following link.

<http://www.foxvalleyparkdistrict.org/our-mission/bids-rfps-results/>

Bid documents will be available beginning Thursday, March 16, 2017, at 11:00 a.m. on Vendor Registry.

All addendum and associated Bid Document revisions shall be issued using Vendor Registry. The Fox Valley Park District shall not be responsible for information received or not received through any other source.

Specifications require the submittal of a 10% Bid Surety with the proposal. Following the award of the contract, the successful contractor(s) must be able to provide a satisfactory Performance Bond, Labor and Material Payment Bond, and required proof of insurance.

All contracts for work herein are subject to all District rules and regulations, and are subject to the Illinois Prevailing Wage Act (812 ILCS 130/1-12).

All bids will remain firm for ninety (90) days after the bid opening. Fox Valley Park District reserves the right to reject any or all bids, to waive bid formalities, and to accept the lowest responsible bid that serves the best interests of the District.

Minority and women-owned businesses are encouraged to submit bids for this project. The successful contract bidder(s) are encouraged to utilize minority and women-owned businesses as sub-contractors for supplies, equipment, services and construction.

PUBLISHED BY THE AUTHORITY OF:

The Fox Valley Park District
END OF SECTION - 00 11 13

SECTION 00 11 53 – REQUEST FOR QUALIFICATIONS

HALL PARK – BALL FIELD IMPROVEMENTS
AURORA, ILLINOIS

Have you completed a Contractor's Qualification Statement for the Fox Valley Park District within the last year:

- Yes
- No

If No, please complete the following sections of this form and submit with bid:

- The Bidder General Information
- Bidder Background Information
- Project Experience
- Designation of Subcontractors
- Signatures Sections

If Yes, please list the date of last submitted Qualification Statement:

If Yes, only complete the following sections of this form and submit with bid:

- Project Experience
- Designation of Subcontractors
- Signatures Sections

BIDDER GENERAL INFORMATION:

Bidder Name:

Submitted By:

Name and Title

Address:

Business Phone: _____

Business Fax: _____

Business Type:

- Sole Proprietor
- Partnership
- Corporation formed in the State of _____
- Joint Venture
- Other : _____



If a Sole Proprietor, please answer the following:

Name in Full:

Home Address:

Business Address

Date of Birth

Place of Birth

Driver's License #/State

If a Corporation, please answer the following:

Date & Place Incorporated _____

President: _____

Vice President: _____

Secretary: _____

Treasurer: _____

Is the corporation held publicly or privately? _____

If a Partnership, please answer the following:

Date of Organization: _____

General or Limited Partnership _____

Name & Partnership Share of:

General Partner #1: _____

General Partner #2: _____

General Partner #3: _____

If a Joint Venture, please answer the following:

Date of Organization: _____

Name & Type of Entity of each Joint Venture (partnership/corp./sole prop.):

General Venture #1: _____

General Venture #2: _____

General Venture #3: _____

General Venture #4: _____

BIDDER BACKGROUND INFORMATION:

Contractor is licensed to do business as a Contractor in the jurisdiction where this Project is to be completed:

- Yes
- No

Has your contractor's license been revoked at any time in the last five years?

- Yes
- No

At any time during the last five years, has your firm or any of its owners or officers been convicted of a crime involving the awarding of a contract of a government construction project, or the bidding or performance of a government contract?

- Yes
- No

Contractor has the appropriate level of insurance according to the Bid Documents:

- Yes
- No

Contractor has current Workers' Compensation Insurance as required by the Labor Code:

- Yes
- No

Contractor is licensed to do business as a Contractor in the jurisdiction where this Project is to be completed:

- Yes
- No

How many years has your organization been in business as a contractor?

Is the firm a subsidiary, parent, holding company or affiliate of another construction firm?

- Yes
- No
-

If Yes, please have that company submit this document with your Bid.

Has your firm changed names or license number in the last five years?

- Yes
- No
-

If Yes, please provide all names and contractors' license numbers used within the last five years:

Has there been a change in ownership of the firm at any time in the last three years?

- Yes
- No

If Yes, please list the name and contact information for the previous Owner(s):

Was your firm in bankruptcy at any time during the last five years?

- Yes
- No

If Yes, please attach a copy of the bankruptcy petition, showing the case number and the date on which the petition was filed as well as a copy of the Bankruptcy Court's discharge order.

At any time in the last five years has your firm been assessed liquidated damages?

- Yes
- No
-

If Yes, please provide the information pertaining to the project(s):

In the last five years have you, a subsidiary of your firm or past owner of your firm been associated, been debarred, disqualified, removed or otherwise prevented from bidding on or completing a project:

- Yes
- No

If Yes, please provide the information pertaining to the project(s):

In the last five years has your surety company made any payments on your firm's behalf as a result of a default, to satisfy any claims made against a performance or payment bond issued on your firm's behalf, in connection with a construction project?

- Yes
- No

If Yes, please provide the information pertaining to the project(s):

In the last five years has your insurance carrier, for any form of insurance, refused to renew the insurance policy for your firm:

- Yes
- No

If Yes, please provide the insurance carrier's information and the year this occurred:

Has OSHA cited and assessed penalties against your firm for any violations of its safety or health regulation in the last five years?

- Yes
- No

If Yes, please provide the information pertaining to the project(s):

Bonding Capacity:

Name of Bonding Company/Surety

Address:

Phone:

List all other sureties (name and full address) that have written bonds for your firm during the last five years, include the dates which each wrote the bonds:

PROJECT EXPERIENCE:

List three (3) *Fence Replacement* projects your *organization* has completed in the past five (5) years which are similar in scope to the Work which you would be performing for the Fox Valley Park District. Do not include projects completed by individual employees while working at organizations under a different name.

Provide this information in the following format:

1. Project Name: _____
Owner, Contact Person and Phone Number _____
Architect, Contact Person and Phone Number _____
Contract Amount _____
Date of Completion _____
Percentage of work completed by your organization _____
Percentage of work completed by subcontractors _____

2. Project Name: _____
Owner, Contact Person and Phone Number _____
Architect, Contact Person and Phone Number _____
Contract Amount _____
Date of Completion _____
Percentage of work completed by your organization _____
Percentage of work completed by subcontractors _____

3. Project Name: _____
- Owner, Contact Person and Phone Number _____
- Architect, Contact Person and Phone Number _____
- Contract Amount _____
- Date of Completion _____
- Percentage of work completed by your organization _____
- Percentage of work completed by subcontractors _____

DESIGNATION OF SUBCONTRACTORS:

The undersigned certifies that they have used the sub-bids of the following listed subcontractors in compiling this Bid. The subcontractors listed will be used only for the work for which they are listed in their bid. All subcontractors are subject to the approval of the Owner, and are required to read and follow the Project Specifications that pertain to the work they are performing. If a bidder does not submit any sub-contractors, they will be required to complete all work within their own workforce. If subcontractors are listed, all bonds and insurance shall be written to include them.

1. Subcontractor Name: _____
- Type of Work: _____
- Address: _____
- Phone Number: _____
2. Subcontractor Name: _____
- Type of Work: _____
- Address: _____
- Phone Number: _____

SECTION 00 21 13 – INSTRUCTIONS TO BIDDERS

PART 1 – PROPOSALS

- A. Bids are requested for the ball field improvements at Hall Park for the Fox Valley Park District, (hereinafter referred to as FVPD or Owner), to be performed in accordance with the attached Project Manual and Plans.
- B. Each Bid shall consist of a completed:
1. Request for Qualifications
 2. Bid Form
 3. Certification of Compliance
 4. Prevailing Wage and Compliance Affidavit
 5. Contractor's Drug Free Workplace Certification
 6. Certificate Regarding Sexual Harassment Policy
 7. Certificate Regarding Training
 8. Bid Surety (Bid Bond)
- C. Documents consist of the following:
- 00 11 13 - Advertisement for Bids
 - 00 11 53 - Request for Qualifications
 - 00 21 13 - Instructions to Bidders
 - 00 21 13 - Substitution Request Form
 - 00 31 00 - Preliminary Schedule
 - 00 41 13 - Bid Form
 - 00 45 20 - Certification of Compliance
 - 00 45 27 - Prevailing Wage and Compliance Affidavit
 - 00 45 47 - Contractor's Drug Free Workplace Certification
 - 00 45 48 - Certificate Regarding Sexual Harassment Policy
 - 00 52 13 - Agreement Form
 - 00 61 00 - Bonds, Certificates and Forms
 - 00 72 13 - General Conditions
 - 00 73 00 - Supplementary Conditions
 - Plans, Project Manual, and Addenda.
- D. Plans and specifications may be obtained as described in Document 00 11 13 – Advertisement for Bids.

PART 2 - BID FORM

- A. Bidder shall submit the proposal form provided which shall be filled out completely and addressed to the above address. On the outside of the bid envelope, each sealed bid shall also contain the notation "SEALED BID" along with the following information:

1. HALL PARK – BALL FIELD IMPROVEMENTS
2. Bidder's company name and address.
3. Date and time of bid openings: Thursday, March 30, 2017 at 3:30 pm (local time)

Bids for the HALL PARK – BALL FIELD IMPROVEMENTS shall be received on or before Thursday, March 30, 2017, at 3:30 pm (local time) at the Cole Center – Oak Room of the Fox Valley Park District at which time they will be opened and read publicly. Any proposal received after the scheduled closing time for receipt of proposals will be returned to the bidder unopened.

- B. A Schedule of Values is included as part of the Bid Form. The prices given in this Schedule are intended solely for the purpose of evaluating the lump sum bid. Although the Schedule of Values in some instances includes unit quantities, this project is to be bid as a lump sum. The bidders are responsible for verifying their own quantities for bidding purposes. The lump sum price shall be for an installed and complete project as drawn and specified.
- C. Alternate Bid No. 1 – There is an Alternate Bid no. 1 shown to include the installation of two (2), 15' x 3 row spectator bleachers. The lump sum price shall be for an installed and complete project as drawn and specified.

PART 3 - EXAMINATION OF DOCUMENTS AND INSPECTION OF SITE

- A. Before submitting a Proposal, Bidders shall carefully examine the Project Manual, Drawings and Specifications, visit the site of work, fully inform themselves of all existing conditions and limitations, and include in the Proposal a sum to cover the cost of all items to be constructed.
- B. Bidders may contact *Greg Stevens, Senior Park Planner at (630) 966-4525, gstevens@fvpd.net with any questions* or to obtain entrance into the existing shelter/restroom building and plumbing chase to inform themselves of all existing conditions and limitations prior to bidding.
- C. The failure or omission of any bidder to receive or examine any form or document, or to visit the site and become acquainted with existing conditions shall in no way relieve the bidder from any obligation with respect to his bid. No pleas of ignorance, oversight or miscalculation of the conditions prevailing shall suffice to secure withdrawal of a Proposal submitted or to invalidate the Contract or bond after its execution.

PART 4 - ACCEPTANCE OR REJECTION OF BID

The Contract, if awarded, will be awarded to the responsible Bidder who submits the lowest responsive and best qualified Bid proposal complying with these instructions and all other Contract Documents. The FVPD will accept or reject bids within ninety (90) days after analysis of the proposals, and reserves the right to accept or reject any or all bids, or to waive any informality or technicality in any proposal in the interest of the owner. No Bidder may withdraw his Proposal for a period of ninety days after the date of opening thereof.

PART 5 - QUALIFICATIONS AND REFERENCES

- A. The Contractor bidding the project shall be actively engaged in work of the nature described in the plans and specifications, and must be able to demonstrate that adequate persons and materials are available to perform the work. The Contractor shall submit with the Bid Proposal no less than three (3) references for which the Contractor has completed work similar to that described in the plans and specifications.

PART 6 - PROPOSAL GUARANTY

A bid surety in an amount equal to ten percent (10%) of the bid price shall accompany each sealed bid. The surety can be in the form of a bid bond or certified check and should be made payable to: TREASURER, FOX VALLEY PARK DISTRICT. The bid surety of all bidders, except the successful Contractor(s), shall be returned within ten (10) days after the FVPD's decision to accept and/or reject bids. The successful Contractor's bid surety shall be returned upon receipt of an acceptable performance Bond, Payment Bond, and Certificate of Insurance.

PART 7 - PERFORMANCE AND PAYMENT BOND

Within (10) days after the award of contract, the successful contractor shall furnish a Performance Bond and a Labor and Materials Payment Bond, each equal to 100% of the contract and all obligations arising from it. Bonds shall be provided on the AIA-312 Form or similar form and shall become part of the Contract. The failure of the successful bidder to enter into contract and supply the required bonds within the (10) days of award of contract, or within such extended period as the FVPD may grant, shall constitute default, and the FVPD may either award the contract to the next responsible bidder, or re-advertise for bids. A charge against the defaulting bidder may be made for the difference between the amount of the bid and the amount for which a subsequent contract is executed, irrespective of whether the amount thus due exceeds the amount of the bid guarantee.

PART 8 - ADDENDA

Any Addenda issued during the bidding period shall be included in the bid proposal lump sum price and shall be considered part of the Contract Documents. Receipt of all Addenda shall be acknowledged on the bid form. FAILURE TO ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE BID FORM MAY DISQUALIFY BID.

All Addendum and associated Bid Document shall be issued through Vendor Registry, www.vendorregistry.com. The Fox Valley Park District shall not be responsible for information received or not received through any other source.

PART 9 - SUBSTITUTIONS AND MODIFICATIONS

Substitutions (Alternates) for materials, proprietary products, process or equipment may be made only with prior written approval of the FVPD using the Substitution Request Form found at the end of this section, Instruction to Bidders - 00 21 13.

Requests for substitutions shall be submitted to the FVPD five (5) working days, excluding Saturday and Sunday, prior to the bid opening date exclusive of bid opening date. All requests shall include a complete description of the proposed substitute, the name of the material, process, or equipment for which it is to be substituted, and drawings, specifications and data sheets to sufficiently evaluate how the substitution favorably compares to the specified item. Any substitution accepted by the FVPD shall be done so in a written addendum to the bid documents prior to the bid opening.

Use of an alternative product must be approved prior to bidding. Failure to pre-approve an alternative product assumes (mandates) that the bidder has reflected an intended use of the materials and/or manufacturers of the products specified in the Drawings and Specifications.

Whenever in the Project Manual or on the Drawings any material, equipment, device or process is specified or indicated by patent or proprietary name, or by name of its manufacturer, such reference to a material, equipment, device or process has been used to establish a type and quality.

References to the term "equal" or "approved equal" shall mean that an item substituted for a proprietary item shall be of equal or greater quality and shall be approved in the manner described in this section.

PART 10 - INTERPRETATION OF DOCUMENTS

If any person requires clarification or discovers discrepancies or omissions in the Contract Documents, they shall bring these to the attention of the Civil Engineer or Owner. Any interpretation or correction of the documents will be made only by Addendum issued by the Fox Valley Park District.

All questions shall be submitted in writing. Questions may be directed via email to *Greg Stevens, Fox Valley Park District, email address: gstevens@fvpd.net. Please submit via email. Answers will be addressed on-line on the Vendor Registry site.*

PART 11 - APPLICABLE PREVAILING WAGE AND LABOR LAWS.

A signed Prevailing Wage and Compliance Affidavit shall be included in the bid proposal.

PART 12 - SALES TAX EXEMPTION

The Fox Valley Park District is exempt from payment of the Retailer's Occupation Tax, the Service Occupation Tax (both state and local), the Use Tax and the Service Use Tax, as required by Illinois law. No tax shall be charged for purchases made on behalf of the Fox Valley Park District.

PART 13 - INSURANCE

Bidder's attention is directed to the insurance requirements in the Supplemental Specifications. It is highly recommended that bidders confer with their respective insurance carriers or brokers to determine in advance of bid submission the availability of insurance certificates and endorsements as prescribed and provided herein. If an apparent low bidder fails to comply strictly with the insurance requirements, that bidder may be disqualified from award of the contract.

PART 14 – SUBSTANCE ABUSE PREVENTION

The Contractor shall comply with and cause all subcontractors to comply with the requirements and provisions of the Illinois Substance Abuse Prevention on Public Works Projects Act (820 ILCS 265/1 et seq.) (the "Act").

Failure by the Contractor to comply with the requirements of the Illinois Substance Abuse Prevention on Public Works Projects Act shall constitute a material default of the Contract and shall give the Owner the right to pursue any remedy available to it at law or in equity, including termination of the Agreement for cause in the Owner's sole discretion and any other remedy as provided in the Contract. In the event of a default hereunder, Contractor shall also pay to the Owner all damages Owner is entitled to under the Contract that arise from the default, together with interest, costs and the Owner's reasonable attorney fees.

PART 15 – IDENTITY PROTECTION

Pursuant to the Illinois Identity Protection Act, 5 ILCS 179/1 *et seq*, the Fox Valley Park District has adopted this policy to ensure the confidentiality and integrity of Social Security numbers (SSNs) that the District collects, maintains, and uses. Any information sent or forwarded to the District by various contractors or vendors, especially certified payroll, shall have all references to employee SSNs removed prior to sending.

PART 16 – PERMITS

No permits will be required.

END OF SECTION 00 21 13



SUBSTITUTION REQUEST

(During the Bidding Phase)

Project: _____	Substitution Request Number: _____
_____	From: _____
To: _____	Date: _____
_____	Project Number: _____
Re: _____	Contract For: _____
_____	_____

Specification Title: _____	Description: _____
Section: _____ Page: _____	Article/Paragraph: _____

Proposed Substitution: _____

Manufacturer: _____ Phone: _____

Trade Name: _____ Model No.: _____

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01330.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____

Date: _____

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

SECTION 00 31 00 – PRELIMINARY SCHEDULE

1.01 GENERAL

- A. The following represents the preliminary construction schedule for the Work. This schedule is the current estimate of the Owner to be used for the purposes of bidding. All bidders shall include the costs of all overtime, double-shift, or so-called “premium” time that may be necessary to meet this milestone.

1.02 PRELIMINARY SCHEDULE

- A. Bid Documents Available: March 16, 2017.
- B. Pre-Bid Meeting: N/A
- C. Bids Due: March 30, 2017, 3:30 pm (local time).
- D. Award of Contract: April 10, 2017 at Park District monthly board meeting
- E. Pre-Construction meeting with the Owner and Contractor: To be determined once contracts are signed.
- F. Commencement of Construction: Anticipated start, on or before April 24, 2017 (weather depending).
- G. Substantial Completion: May 15, 2017.

END OF SECTION – 00 31 00

SECTION 00 41 13 – BID FORM

HALL PARK – BALL FIELD IMPROVEMENTS
AURORA, ILLINOIS

(Name of Bidder)

GENTLEMEN:

I have received the documents, Drawings and Project Manual, titled Hall Park – Ball Field Improvements.

I have received the following Addenda and have included their provisions in my bid:

Addendum No. _____, dated _____ .

Addendum No. _____, dated _____ .

I have examined both the documents and site. In submitting this bid, I agree:

1. To hold my bid open for ninety (90) days;
2. To accept the provisions of the Contract Documents;
3. To furnish bonds, bid security, certificate of insurance and schedule of values as specified;
4. To accomplish the work in accordance with the Contract Documents;
5. If awarded the contract, the undersigned further agrees to begin work with an adequate force and equipment within 7 days as established in the agreement.

BASE BID CONTRACT:

I will perform all the work for the Hall Park – Ball Field Improvements, for the base bid price of:

_____ Dollars,

(\$ _____).

(Amount shall be shown in both words and figures. In case of discrepancy, the amount shown in words will govern).

ALTERNATE BID CONTRACT:

I will perform all the work for the installation of the bleachers for an alternate bid price of:

_____Dollars,

(\$_____).

(Amount shall be shown in both words and figures. In case of discrepancy, the amount shown in words will govern).

SCHEDULE OF VALUES – BASE BID

The Unit Price Schedule of Values is for number comparison, aiding the bidder in estimating quantities and preparing the lump sum bid. Bidders are responsible for verifying all quantities and not to rely solely on the quantities shown in this schedule. The bid award is based on a single lump sum bid however, should the project encounter change orders, the unit prices listed below shall govern. The unit price shall include all equipment, materials and labor necessary to complete the work.

Item	Description	Quantity	Units	Unit Price	Item Total
Demolition					
1	Chain Link Fence Removal (6.0' hgt.)	53.00	LF		
2	Chain Link Fence Removal (7.0' hgt.)	91.00	LF		
3	Back stop removal (12' hgt. fence plus hood)	36.00	LF		
4	Asphalt pavement and base removal	54.00	SY		
5	Remove existing player's bench	2.00	EA		
Fence					
6	Chain Link Fence (8' hgt.)	138.00	LF		
7	Chain Link Fence (12' hgt.)	32.00	LF		
Pavement					
8	Earth excavation for concrete pads	33.00	CY		
9	P.C.C. Pavement, 5" thick w/fiber reinforcement	836.00	SF		
10	Aggregate Base Course, Type B, CA-6, 5"	836.00	SF		

Site Furnishings					
11	21' Aluminum player's bench w/back	2.00	EA		
Site Restoration					
12	Import topsoil	24.00	CY		
13	Seeding	375.00	SY		
14	Seed blanket	375.00	SY		

SCHEDULE OF VALUES – ALTERNATE BID

The Unit Price Schedule of Values is for number comparison, aiding the bidder in estimating quantities and preparing the lump sum bid. Bidders are responsible for verifying all quantities and not to rely solely on the quantities shown in this schedule. The bid award is based on a single lump sum bid however, should the project encounter change orders, the unit prices listed below shall govern. The unit price shall include all equipment, materials and labor necessary to complete the work.

Item	Description	Quantity	Units	Unit Price	Item Total
A1	15' Spectator bleacher (3 row)	2.00	EA		

END OF SECTION – 00 41 13

SECTION 00 45 20 - CERTIFICATION OF COMPLIANCE

The undersigned, being first duly sworn on oath, deposes and states that he has the authority to make this certification on behalf of the bidder,

(Name of Company)

- (A) That in connection with this procurement,
- (1) the prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; and
 - (2) the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not be knowingly disclosed by the bidder prior to opening directly or indirectly to any other bidder or to any competitor; and
 - (3) no attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
- (B) The undersigned further states,
- (1) he is the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein and that he has not participated, and will not participate, in any action contrary to (A)(1) through (A)(3) above; or
 - (2)(a) he is not the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein but that he has been authorized to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (A)(1) through (A)(3) above, and as their agent does hereby so certify; and
 - (b) that he has not participated, and will not participate, in any action contrary to (A)(1) through (A)(3) above.
- (C) The undersigned certifies that, pursuant to Illinois Compiled Statutes, 720 ILCS 5/33E-1 et seq., the bidder is not barred from bidding on this contract as a result of a conviction for violation of State of Illinois laws prohibiting bid-rigging or bid-rotating.
- (D) The undersigned certifies that, pursuant to Illinois Compiled Statutes, 65 ILCS 5/11-42.1-1, the bidder is not delinquent in the payment of any tax administered by the Illinois Department of Revenue.

- (E) The bidder agrees to provide a drug free workplace in accordance with the Drug Free Workplace Act, 30 ILCS 580/1 et seq.
- (F) It is expressly understood that the foregoing statements, representations, and promises are made as a condition to the right of the bidder to receive payment under any award made hereunder.

Authorized Signature: _____

Title: _____

SUBSCRIBED AND SWORN TO before me this

_____ day of _____, 2017

Notary Public

END OF SECTION – 00 45 20

SECTION 00 45 27 - PREVAILING WAGE AND COMPLIANCE AFFIDAVIT

I, _____ on oath hereby state and certify
(President)

that _____ pursuant to a contract
(Company)

dated _____

with the Fox Valley Park District, an Illinois Municipal Corporation, has complied and will comply with all laws, including those relating to the employment of labor and the payment of the current general prevailing rate of hourly wages for each craft or type of worker or mechanic needed to execute the contract or perform such work, also the current general prevailing rate for legal holiday and overtime work, as ascertained by the Illinois Department of Labor for Kane County, Illinois, and those prevailing rates are paid and shall be paid for each craft or type of worker needed to execute the aforesaid contract or to perform such work.

I also certify that _____
(Company)

shall abide by and comply with all applicable local and State laws relating workmen's compensation, fair employment practices, and prohibiting discrimination in employment as set forth in the IL Human Rights Act including having a written sexual harassment policy.

I further certify that _____
(Company)

has not been barred from being awarded a contract with a unit of State or local government as a result of a violation or Section 33E-3 or 33E-4 of the Criminal Code of 1961.

Signature

Subscribed and sworn to before me

This _____ day of _____, 2017

(Notary Public)

END OF SECTION 00 45 27

SECTION 00 45 47 – CONTRACTOR’S DRUG FREE WORKPLACE CERTIFICATION

- 1.01 Pursuant to 30 ILCS 580/1 et seq. (the “Drug Free Workplace Act”), the undersigned Contractor hereby certifies to the Fox Valley Park District that it will provide a drug free workplace by:
- A. Publishing a statement:
 - 1. Notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of controlled substance, including cannabis, is prohibited in the contractor’s workplace.
 - 2. Specifying the actions that will be taken against employees for violations of such prohibition;
 - 3. Notifying the employee that, as a condition of employment on such contract, that employee will;
 - a. Abide by the terms of the statement, and
 - b. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than 5 days after such conviction.
 - B. Establishing a drug free awareness program to inform employees about:
 - 1. The dangers of drug abuse in the workplace;
 - 2. The contractor’s policy of maintaining a drug free workplace;
 - 3. Any available drug counseling, rehabilitation, and employee assistance programs, and;
 - 4. The penalties that may be imposed upon employees for drug violations.
 - C. Making it a requirement to give a copy of the statement required by subsection a) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.
 - D. Notifying the contracting or granting agency within 10 days after receiving notice under part b) of paragraph 3) of subsection a) from an employee or otherwise receiving actual notice of such conviction.
 - E. Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by, any employee who is so convicted, as required by Section 5 of the Drug Free Workplace Act.
 - F. Assisting employees in selecting a course of action in the event of drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.
 - G. Making a good faith effort to continue to maintain a drug free workplace through implementation of Section 3 of the Drug Free Workplace Act.

- H. Failure to abide by this Contractor's Drug Free Workplace Certification shall subject the Contractor to the penalties set forth in Sections 6, 7 and 8 of the Drug Free Workplace Act.
- I. Notice: This Contractor's Drug Free Workplace Certification is to be completed by any corporations, partnerships or other entities with twenty-five or more employees at the time of the contract, or a department, division or unit thereof, directly responsible for the performance of a contract of \$5,000 or more with the Fox Valley Park District.

Name of Contractor

By: _____

Its: _____

Attest:

By: _____

Its: _____

Dated: _____, 2017

1.02 INDIVIDUAL'S DRUG FREE WORKPLACE CERTIFICATION

A. Pursuant to 30 ILCS 580/1 et seq. (the "Drug Free Workplace Act"), the undersigned individual certifies to the Fox Valley Park District that the individual will not engage in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in the performance of the contract.

B. Failure to abide by this individual's Drug Free Workplace Certification shall submit the individual to the penalties set forth in Sections 6, 7 and 8 of the Drug Free Workplace Act.

C. Notice: This Individual's Drug Free Workplace Certification is to be completed by any individual directly responsible for the performance of a contract of \$5,000 or more with the Fox Valley Park District.

Name of Individual

By: _____

Dated: _____

END OF SECTION 00 45 47

SECTION 00 45 48 - CERTIFICATE REGARDING SEXUAL HARASSMENT POLICY

The undersigned, does hereby certify pursuant to section 2-105 of the Illinois Human Rights Act (775 ILCS 5/2-105) that it has a written sexual harassment policy that includes, at a minimum, the following information: (i) the illegality of sexual harassment; (ii) the definition of sexual harassment under State law; (iii) a description of sexual harassment, utilizing examples; (iv) an internal complaint process including penalties; (v) the legal recourse, investigative and complaint process available through the Department of Human Rights and Human Rights Commission; (vi) direction on how to contact the Department of Human Rights and Human Rights Commission; and (vii) protection against retaliation as provided by Section 6-101 of the Human Rights Act.

Name of Bidder (Please Print)

Submitted by (Signature)

Title

_____, 2017
Date

END OF SECTION – 00 45 48

SECTION 00 45 49 - CERTIFICATE REGARDING TRAINING

Pursuant to the Fox Valley Park District's Responsible Bidder Ordinance, (16-473. Section 2.F), "The bidder for such public works contracts must participate in active apprenticeship and training programs approved and registered with the United States Department of Labor's Bureau of Apprenticeship and Training."

Describe any certificates, licenses or training your skilled labor has had or will receive:

Certificates:

Licenses:

Training:

Name of Bidder (Please Print)

Submitted by (Signature)

Title

_____, 2017
Date

END OF SECTION – 00 45 49

SECTION 00 52 13 – AGREEMENT FORM

PART 1 – GENERAL

1.01 FORM OF AGREEMENT

- A. AIA Document A101, Owner-Contractor Agreement Form – Stipulated Sum (2007 Edition), forms the basis of Contract between the Owner and Contractor.
- B. The above document may be examined at the Owner’s office or purchased at the American Institute of Architects, <http://www.aia.org/docs-purchase&defPr=1>.

1.02 RELATED REQUIREMENTS

- A. Document 00 72 13 – General Conditions.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION (NOT APPLICABLE)

END OF SECTION - 00 52 13

SECTION 00 61 00 – BONDS, CERTIFICATES AND FORMS

PART 1 – GENERAL

1.01 BONDS AND CERTIFICATES

A. List of Subcontractors:

1. Contractor to provide a List of Subcontractors within seven (7) days .of Contract date. The List shall include the Contractors Name, Trade Performed, Address, Phone Number, Fax Number, and Names and Cell Phone Numbers of Project Manager and Superintendent.

B. Performance / Payment Bonds:

1. The forms of Bonds shall be “Performance Bond” and “Payment Bond”, The American Institute of Architects Document A312, December, Most Recent Edition. The Bidder shall furnish performance and payment bonds covering the faithful performance of the Contract and payment of all obligations arising hereunder. The cost of such Bonds shall be included in the Bid. The Performance and Payment Bond shall be in the amount of 100% of the contract price.

C. Bid Bond:

1. The form of “Bid Bond” shall be AIA Form A-310 or cashier’s check.

D. Contractor’s Qualification Statement:

1. The form of “Contractor’s Qualification Statement” shall be American Institute of Architects Document A305, 1986 Edition.

E. Substantial Completion

1. The form of “Certificate of Substantial Completion” shall be provided by the Landscape Architect.

G. Request For Information (RFI) Form

1. This form shall be used by the Contractor when requesting information about the project, from the Landscape Architect. A copy shall also be sent to the Fox Valley Park District.

H. Substitution Request Form

1. This form shall be used by the Contractor when requesting consideration of a proposed substitution by the Landscape Architect. A copy shall also be sent to the Fox Valley Park District.

PART 2 - INSURANCE

1. Contractor shall procure and maintain, for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the lump sum cost of the Work.
2. Certification of Insurance
3. Minimum Scope of Insurance: Coverage should be at least as broad as the following:
 - i. Insurance Services Office Commercial General Liability Occurrence per Owner; and
 - ii. Owners and Contractors Protective Liability (OCP) policy with the Fox Valley Park District as named insured; and
 - iii. Insurance Service Office Business Auto Liability coverage and shall include "Any Auto" per Owner and
 - iv. Workers Compensation as required by the Labor Code of the State of Illinois and Employer' Liability Insurance.
4. Minimum Limits of Insurance: Contractor shall maintain limits no less than the following:
 - i. Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage.
 - ii. Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
 - iii. Umbrella Liability: \$1,000,000 each occurrence
 - iv. Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits or \$1,000,000 per accident.
 - v. Owners and Contractors Protective Liability Policy: \$1,000,000 each occurrence.
5. Any deductibles or self-insured retentions must be declared to and approved by the Fox Valley Park District. At the option of the Fox Valley Park District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Fox Valley Park District its officials, agents, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of the losses and related investigations, claim administration and defense expenses.

6. Other Insurance Provisions: the policies are to contain, or be endorsed to contain, the following provisions:
 - i. General Liability and Automobile Liability Coverage
 - ii. The Fox Valley Park District, its officials, agents, employees and volunteers are to be covered as insured's as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the member, its officials, agents, employees and volunteers.
 - iii. The Contractor's insurance coverage shall be primary as respects the Fox Valley Park District, its officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the Fox Valley Park District, its officials, agents, employees and volunteers shall be excess of Contractor's insurance and shall not contribute with it.
 1. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Fox Valley Park District, its officials, agents employees and volunteers.
 - iv. The Contractor's insurance shall contain a Severability of Interest/Cross Liability clause or language stating that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respects to the limits of the insurer's liability.
 - i. Workers' Compensation and Employer's Liability Coverage: The insurer shall agree to waive all rights of subrogation against the Fox Valley Park District, its officials, agents, employees and volunteers for losses arising from work performed by Contractor for the Fox Valley Park District.
 - ii. All Coverages: Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Fox Valley Park District.
 - iii. Acceptability of Insurers: Insurance is to be placed with insurers with a Best's rating of no less than A-, VIII and licensed to do business in the State of Illinois.

- iv. **Verification of Coverage:** Contractor shall furnish the Fox Valley Park District with certificates of insurance naming the Fox Valley Park District, its officials, agents, employees and volunteers as additional insured, and with original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements may be on forms provided by the member and are to be received and approved by the Fox Valley Park District before any work commences. The attached Additional Insured Endorsement shall be provided to the insurer for their use in providing coverage to the additional insured. Other additional insured endorsements may be utilized, if they provide a scope of coverage at least as broad as the coverage stated on the attached endorsement. The Fox Valley Park District reserves the right to request full certified copies of the insurance policies and endorsements.
- v. **Subcontractors:** Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.
- vi. **Assumption of Liability:** The contractor assumes liability for all injury to or death of any person or persons including employees of the contractor, any subcontractor, any supplier or any other person and assumes liability for all damage to property sustained by any person or persons occasioned by or in any way arising out of any work performed pursuant to this agreement.

7. **Indemnity/Hold Harmless Provision:**

- i. To the fullest extent permitted by law, the Contractor hereby agrees to defend, indemnify and hold harmless the Fox Valley Park District, its officials, agents and employees, against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, which may in anywise accrue against the Fox Valley Park District, its officials, agents and employees, arising in whole or in part or in consequence of the performance of this work by the Contractor, its employees, or subcontractors, or which may in anywise result therefore, except that arising out of the sole legal cause of the Fox Valley Park District, its agents or employees, the Contractor shall at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefore or incurred in connections therewith, and if any judgment shall be rendered against the member, its officials, agents and employees, in any such action, the Contractor shall, at its own expense, satisfy and discharge the same.
- ii. Contractor expressly understands and agrees that any performance bond or insurance policies required by this contract, or otherwise provided by the

Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the Fox Valley Park District, its officials, agents and employees as herein provided.

COMMERCIAL GENERAL AND UMBRELLA LIABILITY INSURANCE

8. Contractor shall maintain commercial general liability (CGL).
9. CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 10 93, or a substitute form providing equivalent coverage, and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).
10. FVPD shall be included as an insured under the CGL, using ISO additional insured endorsement CG 20 10 or a substitute providing equivalent coverage, and under the commercial umbrella, if any. This insurance shall apply as primary insurance with respect to any other insurance or self-insurance afforded to FVPD.
11. There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, or underground property damage.

CONTINUING COMPLETED OPERATIONS LIABILITY INSURANCE

12. Contractor shall maintain commercial general liability (CGL).
13. Continuing the CGL insurance shall be written on ISO occurrence form CG000110 93, or substitute form providing equivalent coverage, and shall, at minimum, cover liability arising from products completed operations and liability assumed under an insured contract.
14. Continuing CGL insurance shall have a products-completed operations aggregate of at least two times its each occurrence limit.
15. Continuing commercial umbrella coverage, if any, shall include liability coverage for damage to the insured's completed work equivalent to that provided under ISO form CG 00 01.

BUSINESS AUTO AND UMBRELLA LIABILITY INSURANCE

16. Contractor shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit of not less than \$2,000,000.00 each accident. Such insurance shall cover liability arising out of any auto, including owned, hired and non-owned autos.
17. Business auto insurance shall be written on Insurance Services Office (ISO) form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in the 1990 and later editions of CA 00 01.

WORKERS' COMPENSATION INSURANCE AND EMPLOYER'S LIABILITY

18. Contractor shall maintain workers' compensation insurance as required by statute and employer's liability insurance.
19. If FVPD has not been included as an insured under the CGL using ISO additional insured endorsement CG 20 10 under the Commercial General and Umbrella Liability Insurance required in this Contract, the contractor waives all rights against FVPD and its officers, officials, employees, volunteers and agents for recovery of damages arising out of or incident to the Contractor's work.

GENERAL INSURANCE PROVISIONS

20. Evidence of Insurance

- i. Prior to beginning work, Contractor shall furnish FVPD with a certificate(s) of insurance and applicable policy endorsement(s), executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth above. AR certificates shall provide for 30 days' written notice to FVPD prior to the cancellation or material change of any insurance referred to therein. Written notice to FVPD shall be by certified mail, return receipt requested.
- ii. Failure of FVPD to demand such certificate, endorsement or other evidence of full compliance with these insurance requirements or failure of FVPD to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- iii. FVPD shall have the right, but not the obligation, of prohibiting Contractor or any subcontractor from entering the project site until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by FVPD. Failure to maintain the required insurance may result in termination of this Contract at FVPD's option.
- iv. With respect to insurance maintained after final payment in compliance with a requirement above, an additional certificate(s) evidencing such coverage shall be promptly provided to FVPD whenever requested.
- v. Contractor shall provide certified copies of all insurance policies required above within 10 days of FVPD's written request for said copies.

21. Acceptability of Insurers

- i. For insurance companies which obtain a rating from A.M. Best, that rating should be no less than A -VIII using the most recent edition of the A.M. Best's Key Rating Guide. If the Best's rating is less than A -VIII or a Best's rating is not obtained, the FVPD has the right to reject insurance written by an insurer it deems unacceptable.

22. Cross-Liability Coverage

- i. If Contractor's liability policies do not contain the standard ISO separation of insured provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

23. Deductible and Self-Insured Retentions

- i. Any deductibles or self-insured retentions must be declared to the FVPD. At the option of the FVPD, the Contractor may be asked to eliminate such deductibles or self-insured retentions as respects the owner, its officers, officials, employees, volunteers and agents or required to procure a bond guaranteeing payment of losses and other related costs, including, but not limited to, investigations, claim administration and defense expenses.

24. Subcontractors

- i. Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

END OF SECTION - 00 61 00

SECTION 00 72 13 – GENERAL CONDITIONS

PART 1 – GENERAL

1.01 GENERAL CONDITIONS:

- A. The General Conditions for this Project are “General Conditions of the Contract for Construction”, American Institute of Architects Document A201, 1997 Edition, including all supplements.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION - 00 72 13

SECTION 00 73 00 – SUPPLEMENTARY CONDITIONS

PART 1 - TERMS

1.1 TERMS

- A. For the purpose of these specifications, the terms “Owner” and “FVPD” shall refer to the Fox Valley Park District.
- B. The term “Contractor” shall refer to the party entering into the contract for the performance of the Work.
- C. The term “Owner’s Representative”, “Landscape Architect”, “Architect” or “Engineer” shall mean a designated employee or employees of the Fox Valley Park District

1.2 GOVERNING SPECIFICATIONS

- A. The term “IDOT Standard Specifications” shall mean the most current adopted edition of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction.
- B. The IDOT Standard Specifications shall govern the work except as specifically modified on the Plans and in these Specifications.

PART 2 - WORK COMPLETION TIME

2.1 CONTRACT TIME

Work shall commence no earlier than March 27, 2017. The start date shall be fixed in a Notice to Proceed that will be prepared by the Owner. Contractor is encouraged to minimize the length of time involved in on-site construction. Scheduling shall take into account time for ordering and delivery of equipment. Subject to delay resulting from a strike or other force majeure defined herein, substantial completion of all items, including completion of punch list items shall be no later than May 15, 2017 including sod. In case of failure to complete the work within the time named herein or within such extra time as may have been allowed by extensions, the FVPD may withhold such sums as may be necessary from final payment to complete the work.

2.2 DAILY RESTRICTIONS

The daily work schedule shall conform to the stricter of the following two schedules: either 1.) the regulatory limitations imposed by the municipality where the site is located or 2.) work at the project site shall not commence before 7:00 am and shall not be conducted after 6:00 pm on weekdays and not before 8:00 am or after 5:00 pm on weekends.

PART 3 - RETAINAGE

FVPD will retain ten percent (10%) of the amount of each progress payment until final completion and acceptance by the FVPD of all Work included in this Contract.

PART 4 - EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

- A. The Contractor is required to comply with the following equal employment opportunity clause by the Illinois Fair Employment Practices Commission as a material term of all public contracts.
- B. In the event of Contractor's non-compliance with any provision of the Equal Employment Opportunity Clause, the Illinois Fair Employment Practices Act or the Fair Employment Practices Commission's Rules and Regulations for Public Contracts, the Contractor may be declared non responsible and, therefore, ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During performance of this Contract, Contractor agrees as follows:
 - 1. That he/she will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or ancestry and further that he/she will examine all job classifications to determine if minority persons or women are under-utilized and will take appropriate affirmative action to rectify any such underutilization.
 - 2. That if he/she hire additional employees in order to perform this contract or any portion hereof he/she will determine the availability (in accordance with the Commission's Rules and Regulations for Public Contracts) of minorities and women in the area(s) from which they may reasonably recruit and he/she will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized
 - 3. That in all solicitations or advertisements for employees placed by him/her or on his/her behalf, he/she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, national origin or ancestry.

4. That he/she will send to each labor organization or representative of works with which they have or are bound by a collective bargaining or other agreement or understanding, a notice advising each labor organization or representative of the contractor's under Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts. If any such labor organization or representative fails or refuses to cooperate with the contractor in his efforts to comply with such act and rules and regulations, the contractor will promptly so notify the Illinois Fair Employment Practices Commission and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations there under.
5. That he/she will submit reports as required by the Illinois Fair Employment Practices Commission's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the commission or the contracting agency, and in all respects comply with Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts.
6. Contractor shall submit Certified Payroll records as required by the State of Illinois for all public contracts.

PART 5 – BUILDING PERMITS

- A. No permits are required.

END OF SECTION - 00 73 00

SECTION 01 10 00 – SUMMARY OF WORK

PART 1 GENERAL

1.01. DESCRIPTION

- A. Martin Luther King Jr. Park, located at the intersection of N. Farnsworth Avenue and Grand Boulevard in Aurora, Illinois.

The project consists of the removal of existing asphalt path, bleacher pads, and infield fence material and posts. New construction will consist of the installation of concrete bleacher pads, concrete dug out pads, new infield fence /back stop and turf restoration.

1.02. STAGING

- A. The Contractor field office space and material storage will be limited to areas adjacent to and south of the parking lot as directed by the Owner.

1.03. SCOPE OF WORK

- A. Prior to construction, the Contractor shall be responsible for providing the Owner with a detailed construction sequencing schedule outlining the days times, and areas of the park that will be shut off to patrons. The intent is to keep as much of the park open as possible during construction and keep the number of days that the ball field is out of service to a minimum.
- B. During construction the Contractor shall be responsible for erecting and maintaining all temporary traffic control measures, including signs, barricades, etc. required to direct traffic and patrons.
- C. The Contractor shall saw cut the existing asphalt path and parking lot to remove the path in a clean manner. All asphalt shown on the plans shall be removed from the site. The aggregate base may be reused in the construction of the concrete walk and pads as long as it is to a minimum depth as shown on the pavement detail and compacted as specified.
- D. The Contractor shall be responsible for the removal and disposal of all fence material, posts and concrete footings associated with the fence.
- E. The Contractor shall be responsible for the removal and disposal of the existing player's benches and concrete footings. The Owner will be responsible for removing the existing spectator bleachers.
- F. The Contractor shall form and pour all concrete walks and pads to the layout and grades shown on the plans. All form work and pad elevations shall be inspected and approved by the Owner prior to installing any concrete flat work.
- G. The Contractor shall install all fence work to the layout and heights as called for on the plans.

- H. The Contractor shall install a new handicap parking sign and painted handicap symbol on the pavement as shown on the plans.
- I. The Contractor is responsible for importing new topsoil as required in those areas that need to be brought up to finish grade. All areas will receive turf grass seed and blanket as called for in the specifications.
- J. The Contractor shall be responsible for keeping the construction site clean of all debris and miscellaneous construction material at all times.

1.04. CONTRACTOR DUTIES:

- A. Except as specifically noted, provide and pay for:
 - 1. Labor, materials and equipment.
 - 2. Tools, construction equipment and machinery.
 - 3. Other facilities, utilities and services necessary for proper execution and completion of work.
- B. Pay legally required sales, consumer and use taxes.
- C. Secure and pay for, as necessary for proper execution and completion of work.
 - 1. Licenses.
- D. Give required notices.
- E. Comply with codes, ordinances, rules, regulations orders and other legal requirements of public authorities which bear on performance of work.
- F. Promptly submit written notices to Owner, of observed variance of Contract Documents from legal requirements.

1.05. JOB CONDITIONS

- A. Maintain regular traffic flow around site unless otherwise directed.
- B. Repair any damage to property which is to remain in use, or that belongs to any person, or persons, on or off the site, caused by construction.
- C. Perform all work in such a manner as to prevent fires. Remove debris promptly; do not burn materials on the site.
- D. Protect and maintain existing utility lines in such a manner as to prevent interruptions of service.
- E. Cap all utility lines terminated by work on this project in a manner approved by governmental and utility authorities having jurisdiction.
- F. Remove all materials from construction operations in such a manner as to avoid creating a nuisance. Legally dispose of all materials on a daily basis.

1.06. CONTRACTS:

- A. Construct work under single contract, employing acceptable low subcontractors.

1.07. OWNER-FURNISHED PRODUCTS:

- A. The Owner will provide all items not specified in the contract documents. However, the work does include providing support systems to receive Owner furnished equipment, and mechanical and electrical connections.

- B. Owner Duties:

- 1. Schedule delivery date with supplier in accordance with construction schedule.
- 2. Obtain installation drawings and instructions.
- 3. Submit claims for transportation damages.
- 4. Pay for all building and permit fees.
- 5. Arrange for guarantees, warranties.
- 6. Unload delivered products.
- 7. Promptly inspect delivered products; report damaged or defective items.
- 8. Handle at site, including uncrating and storage.
- 9. Protect from exposure to elements, and from damage.
- 10. Install, connect, and finish products

- C. Contractor Duties:

- 1. Designate required delivery date for each product in construction schedule.
- 2. Repair or replace items damaged as result of Contractor operations.

1.08. CONTRACTOR USE OF PREMISES:

- A. Confine operations at site to areas permitted by:
 - 1. Permits.
 - 2. Contract Documents.
- B. Do not unreasonably encumber site with materials or equipment.
- C. Assume full responsibility for protection and safekeeping of materials, tools, equipment and products stored on premises.
- D. Move any store products which interfere with operations of other Contractor.

- E. Obtain and pay for use of additional storage or work areas needed for operations.
- F. Provide all pumping necessary to keep site utility lines and excavations free from water. Do not discharge on adjoining property.

1.09. PERFORMANCE OF WORK:

- A. All contractors shall inspect surfaces, structure and other work precedent to their work and upon which their work depends, and verify that no defects or errors are present that could result in poor application in their work or cause latent defects in workmanship.
- B. Any defects or errors found in work precedent to another contractor's operations, shall be reported to the general contractor, who shall see that such are corrected prior to commencement of work by the contractor affected.
- C. Commencement of any operation shall constitute acceptance of substrates or preceding work by the contractor performing same.
- D. Each sub-contractor shall adequately prepare substrates or preceding work prior to commencing his installation operations.
- E. All manufactured articles, materials, appliances and equipment shall be applied, installed, connected, erected, used, clean conditions, and placed in operation as directed by the respective manufacturer, insofar as these directions are applicable to this particular project and are not in conflict with superior requirements in the specifications or requirements of applicable Building Codes.

1.10. PARTIAL OWNER OCCUPANCY:

- A. Schedule early completion of designated areas for Owner usage prior to substantial completion of entire project.
- B. Contractor Provide:
 - 1. Access for Owner personnel.
 - 2. Operation of mechanical and electrical systems.
- C. Prior to occupancy, execute certificate of substantial completion.
- D. Upon occupancy, Owner provides:
 - 1. Maintenance.
 - 2. Insurance.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION 01 10 00

SECTION 01 23 00 - 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 includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. Alternate: Alternates are synonymous with Substitutions as defined in Section 00 21 13. An amount proposed by bidders and stated on the Bid 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, systems, 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.

1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

- B. Notification:

Substitutions (Alternates) for materials, proprietary products, process or equipment may be made only with prior written approval of the FVPD using the Substitution Request Form found in Section, Instruction to Bidders - 00 21 13.

Requests for substitutions shall be submitted to the FVPD five (5) working days, excluding Saturday and Sunday, prior to the bid opening date exclusive of bid opening date. All requests shall include a complete description of the proposed substitute, the

name of the material, process, or equipment for which it is to be substituted, and drawings, specifications and data sheets to sufficiently evaluate how the substitution favorably compares to the specified item. Any substitution accepted by the FVPD shall be done so in a written addendum to the bid documents prior to the bid opening.

Use of an alternative product must be approved prior to bidding. Failure to pre-approve an alternative product assumes (mandates) that the bidder has reflected an intended use of the materials and/or manufacturers of the products specified in the Drawings and Specifications.

Whenever in the Project Manual or on the Drawings any material, equipment, device or process is specified or indicated by patent or proprietary name, or by name of its manufacturer, such reference to a material, equipment, device or process has been used to establish a type and quality.

References to the term “equal” or “approved equal” shall mean that an item substituted for a proprietary item shall be of equal or greater quality and shall be approved in the manner described in this section.

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

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 23 00

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

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 specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. In general, it is the Contractor's responsibility to notify the Landscape Architect if there will be changes to the Contract Sum or Contract Time. Regardless, if it was owner initiated or due to unforeseen circumstances. This is to be done as soon as possible.
- C. Related Sections include the following:
 - 1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.3 MINOR CHANGES IN THE WORK

- A. Landscape Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests:
 - 1. Landscape Architect will issue a Proposal Request with proposed changes in Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental drawings or attachments. Proposal Request form shall be AIA Document G709, or similar document. A Proposal Request may also come verbally from the Landscape Architect. Do not consider the Proposal Request as a reason to stop work in progress or to execute the proposed change.
 - 2. Contractor shall then submit to Landscape Architect a Proposal estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.

- a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made.
- b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
- c. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship.
- d. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

B. Contractor-Initiated Proposals:

1. If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a Proposal to the Landscape Architect.
2. Contractor shall submit to Landscape Architect a Proposal estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change.
 - b. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made.
 - c. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship.
 - e. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

1.5 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal, Contractor will issue a Change Order for signatures of Owner and Contractor. Using AIA Document G701 or similar.

- B. Any Change Order must be signed, prior to commencement of work. Proposals and Change Orders presented after Work has been complete will not be authorized for payment.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 29 76 - PROGRESS PAYMENT PROCEDURES

PART 1 – GENERAL

1.01 SUBMITTAL OF APPLICATIONS:

- A. Submit applications for payment to the Owner in accordance with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor.

1.02 FORMAT AND DATA REQUIRED

- A. Submit itemized applications type on AIA Document G702, Application and Certificate for Payment, and Continuation Sheets G703.
- B. Provide Itemized Data on Continuation Sheets:
 - 1. Format, schedules, line items and values: Those of the Schedule of Values accepted by Owner.
 - 2. Major trades in Schedule of Values shall be broken down into sub-categories.

1.03 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Fill in required information, including that for change orders executed prior to the date of submittal of application.
- B. Fill in summary of dollar values to agree with the respective totals indicated on the continuation sheets.
- C. Execute certification with the signature of a responsible officer of the contract firm.

1.04 CONTINUATION SHEETS

- A. Fill in total list of all scheduled component items of work with item number and the scheduled dollar and cents value for each item.
- B. Fill in the value in each column for each schedule line item when work has been performed or products stored.
- C. List each change order executed prior to the date of submission, at the end of the continuation sheets.
- D. List by change order number, and description, as for an original component item of work.

1.05 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

- A. When the Owner requires substantiating data, Contractor shall submit suitable information, with a cover letter identifying:
 - 1. Project.
 - 2. Application number and date.
 - 3. Detailed list of enclosures.
 - 4. Item number and identification as shown on application, and description for stored products.

1.06 SUBMITTAL PROCEDURE

- A. Before each certificate for payment is issued, Contractor shall furnish to the Owner a complete statement of the amount due to Subcontractors, parties supplying material, and for his own materials and labor on a Contractor's sworn affidavit form (Construction Industry Affairs Committee of Chicago, Form No. 1, "Application for Payment and Sworn Statement for Contractor and Subcontractor to Owner", Form No. 591).
- B. The first payment request shall be accompanied by the Contractor's partial waiver of lien as well as all Certified Payroll for that pay period.
- C. Each subsequent monthly payment request shall be accompanied by the Contractor's partial waiver and the partial waivers of Subcontractors and suppliers who were included in the immediate preceding payment request, to the extent of that payment as well as all Certified Payroll for the Contractor and Subcontractors. (The Contractor must submit partial waivers on a current basis, but the Subcontractors and suppliers may not be more than one payment late with their partial waivers.)
- D. If there is a project allowance included as part of the Contract Sum, designated in Article 4, Section 4.4 of the AIA Document A101-2007, the Contractor shall submit, with his monthly pay applications, an allowance adjustment summary to the Owner showing what portions, if any, of the allowance have been used.
- E. The Contractor may use his own Allowance Adjustment form or one provided by the Owner.
- F. Applications for payment shall be submitted to the Owner in accordance with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor.
- G. Material necessary to construction of project, delivered upon premises, shall not be removed from premises without written consent of the Owner.

- G. Payments will be made on account of materials (fabricated) or equipment not installed but delivered and suitably stored and protected at the site or stored off site in a bonded warehouse. Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest, including applicable insurance and transportation for those materials and equipment stored off the site.

1.07 APPLICATION FOR FINAL PAYMENT

- A. Fill in application forms as specified for progress payments.
- B. Use continuation sheets for presenting the final statement of accounting as specified in Section 01 70 00, Closeout Procedures.
- C. The acceptance of the final payment by the Contractor shall be held to be a waiver of any and all claims against the Owner arising out of or in connection with the Contract. At the time of substantial completion, all waivers shall be current up to 100 percent of the value of the work as of that date.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 29 76

SECTION 01 70 00 - EXECUTION

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 includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. General installation of products.
 - 4. Coordination of Owner-installed products.
 - 5. Progress cleaning.
 - 6. Starting and adjusting.
 - 7. Protection of installed construction.
 - 8. Correction of the Work.
- B. Related Sections include the following:
 - 1. Division 01 Section "Submittal Procedures" for submitting surveys.
 - 2. Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.
- C. It will be left to the Contractor's discretion if a professional land surveyor is retained for field layout. Otherwise, it will be the responsibility of the Contractor or Subcontractor to implement the field layout.

1.3 SUBMITTALS (Not Used)

1.4 QUALITY ASSURANCE (Not Used)

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
1. Before construction, verify the location and points of connection of utility services.
- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
1. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
 - a. Description of the Work.
 - b. List of detrimental conditions, including substrates.
 - c. List of unacceptable installation tolerances.
 - d. Recommended corrections.
 2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 3. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Landscape Architect and Owner not less than two (2) days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Owner's written permission.
- C. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- D. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- E. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Landscape Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents. Submit requests on CSI Form 13.2A "Request for Interpretation."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Landscape Architect promptly.
- B. General: If practical, engage a land surveyor to lay out the Work using accepted surveying practices.
 - 1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
 - 2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 - 3. Inform installers of lines and levels to which they must comply.
 - 4. Check the location, level and plumb, of every major element as the Work progresses.
 - 5. Notify Landscape Architect when deviations from required lines and levels exceed allowable tolerances.
 - 6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures, foundations, and column grids, including those required for mechanical and electrical

work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piles from two or more locations.

- E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Landscape Architect .

3.4 FIELD ENGINEERING

- A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
 - 1. Do not change or relocate existing benchmarks or control points without prior written approval of Landscape Architect. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Landscape Architect before proceeding.
 - 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- B. Benchmarks: Establish and maintain a minimum of two (2) permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
 - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
 - 2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
 - 3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.
- C. Certified Survey: On completion of foundations, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.
- D. Final Property Survey: Prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by professional engineer, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.
 - 1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.

3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Landscape Architect.
 - 2. Allow for structural movement, including thermal expansion and contraction.
 - 3. Use only anchors and fasteners specified in contract documents or "Approved Equal".
- G. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- H. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.6 OWNER-INSTALLED PRODUCTS

- A. Site Access: Provide access to Project site for Owner's construction forces.
- B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction forces.
 - 1. Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based

on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.

2. Preinstallation Conferences: Include Owner's construction forces at preinstallation conferences covering portions of the Work that are to receive Owner's work. Attend preinstallation conferences conducted by Owner's construction forces if portions of the Work depend on Owner's construction.

3.7 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.
 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 1. Remove liquid spills promptly.
- D. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- E. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- F. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- G. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.8 STARTING AND ADJUSTING

- A. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

- B. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 1 Section "Quality Requirements."

3.9 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.10 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 1 Section "Cutting and Patching."
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

END OF SECTION 01 70 00

SECTION 01 77 00 - CLOSEOUT PROCEDURES

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 includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Project Record Documents.
 - 3. Operation and maintenance manuals.
 - 4. Warranties.
 - 5. Instruction of Owner's personnel.
 - 6. Final cleaning.
- B. Related Sections include the following:
 - 1. Division 01 Section "Progress Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
 - 2. Division 01 Section "Execution" for progress cleaning of Project site.
 - 3. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
 - 4. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 5. Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for products of those Sections.

1.3 INSPECTIONS & PUNCH LISTS

- A. Preliminary Procedures: Before requesting a owner inspection for Substantial Completion, complete the following:
 - 1. Complete startup testing of systems.
 - 2. Submit test/adjust/balance records.
 - 3. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 4. Complete final cleaning requirements, including touchup painting.
 - 5. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Owner inspection: Submit a request for Owner inspection for Substantial Completion.
 - 1. On receipt of request, Owner will either proceed with inspection alone or request contractor to be present.
 - 2. Owner will prepare the Punch List or additional items identified by the Owner that must be completed or corrected before Certificate of Substantial Completion will be issued.
 - 3. Re-inspection: Request re-inspection when the Work identified in Punch List is completed or corrected.
 - 4. Owner re-inspects and initials items on the Punch List that have been completed or corrected. Then notifying contractor of any outstanding items. This cycle continues until all items are verified by Owner to be complete or corrected.

1.4 SUBSTANTIAL COMPLETION

- A. Procedures:
 - 1. When all work is found to be substantially complete and in accordance with the Contract Documents, a Certificate of Substantial Completion will be issued.
 - 2. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
 - 3. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 4. Submit a final Application for Payment according to Division 1 Section "Progress Payment Procedures."

1.5 WARRANTIES

- A. Warranties begin at date designated on the Certificate of Substantial Completion.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.

3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 DEMONSTRATION AND TRAINING

- A. Instruction: Instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
1. Provide instructors experienced in operation and maintenance procedures.
 2. Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
 3. Schedule training with Owner with at least seven (7) days' advance notice.
 4. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.
- B. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections. For each training module, develop a learning objective and teaching outline. Include instruction for the following:
1. System design and operational philosophy.
 2. Review of documentation.
 3. Operations.
 4. Adjustments.
 5. Troubleshooting.
 6. Maintenance.
 7. Repair.

3.2 FINAL CLEANING

- A. General: Provide final cleaning prior to re-inspection of completed punch list items. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Remove snow and ice if present.
 - f. Clean exposed exterior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - g. Remove debris and surface dust from limited access spaces, including equipment vaults, manholes and similar spaces.
 - h. Remove labels that are not permanent.
 - i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - j. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication, paint and other foreign substances.
 - k. Replace parts subject to unusual operating conditions.
 - l. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 - m. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 01 77 00

SECTION 12 93 00 – SITE FURNISHINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Bleachers
2. Player's benches

B. Related Sections: The following sections contain requirements that relate to this section:

1. Division 32 Section "Concrete Paving" for concrete walks.

1.2 SUBMITTALS

1. Submit all Manufacturer's data and product cut sheets for each of the items listed above for Owner approval.
2. Owner shall be provided the Manufacturer's shop drawings for all site furnishings showing the configuration of the equipment, size, location of posts, etc.
3. Owner shall be provided color selections for approval prior to ordering furnishings.

1.3 GUARANTEE

The Contractor shall provide information on the site furnishings manufacturer's guarantee. Contractor shall warranty installation workmanship of all play equipment for a period of one year starting on the date of Substantial Completion.

1.4 QUALITY AND SAFETY ASSURANCE

All site furnishing installation must meet safety requirements and installation guidelines as set forth by the manufacturer.

The Contractor installing the site furnishings must be experienced in the installation of site furnishings with the personnel, facilities, and equipment adequate for the work specified.

1.5 DELIVERY, STORAGE, AND HANDLING

Contractor shall be responsible for delivery, storage and security of the site furnishings until Final Acceptance. Store materials in original undamaged packages and containers, inside well-ventilated area protected from weather, moisture, soiling, extreme temperatures, humidity, vandalism and theft.

1.6 SEQUENCE AND SCHEDULING

- A. Sequence site furniture and sports equipment installation with other work to minimize possibility of damage and soiling during remainder of construction period. Where possible, install after other finishing operations, including painting, have been completed.
- B. Sequence the site furnishing installation and provide adequate signage, fencing and/or protection so that the public cannot use the equipment prior to its being fully installed.

PART 2 - PRODUCT

2.1 EQUIPMENT

- A. Bleachers: The bleachers shall be Model #1183-315A, 3-row, 15' aluminum bleacher w/out guardrails or approved equal. Color: Frame and seats shall be anodized aluminum.

Acceptable alternate: Aluminum Angle Frame, Model No. NR-0315AS, as manufactured by, GT Grandstands, Inc.

- B. Player's Bench: The player's bench shall be Model #1103-21, 21' bench with aluminum seat and back, steel frame. Surface mounted option.

Acceptable alternate: Titan Series Team Bench, Model No. TSG21, as manufactured by, GT Grandstands, Inc.

2.2 SUPPLIER

- A. The specified bleacher and bench are available from the following sales representatives:

Nu Toys Leisure Products. Contact: Rick Beiterman at rickb@nutoys4fun.com.

Cunningham Recreation, Inc. Contact: Gary Graham at garryg@cunninghamrec.com

2.3 HARDWARE AND INCIDENTALS

All incidental hardware not supplied by manufacturers as part of the equipment package shall be supplied by the Contractor. All incidental hardware shall be with the materials, colors and finishes of the equipment. Additional hardware shall be provided in sufficient quantity to complete assembly of the play equipment. All hardware shall be non-ferrous or if ferrous material is used shall be galvanized, electrostatic zinc plated or polyester powder coated in accordance with the approved manufacturer's standard. Provide the Owner with any and all maintenance and repair supplies installation manuals, tool kits and materials shipped with each product for the Owner's inventory

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Verify that all components and parts have been delivered. If not, contact manufacturer to obtain the correct parts.
- B. Examine the areas and conditions under which work of this Section will be performed. Verify that site furnishings are in acceptable condition before setting posts in concrete footings. Do not proceed until conditions detrimental to proper and timely completion of the work have been satisfactorily corrected and thus meet the manufacturer's instructions and the requirements of paragraph 1.2 above. Beginning work constitutes acceptance of conditions as satisfactory.
- C. The contractor shall not modify any site furnishing.
- D. The Contractor shall un-crate, clean and assemble all site furniture and as necessary to install complete and usable item.
- E. The spectator bleacher and player's benches shall be surface mounted and anchored to the concrete pad using stainless steel anchor bolts and concrete anchors.
- F. Adjust accessory items for proper operation. Clean and polish exposed surfaces, using materials and methods recommended by manufacturer.

3.2 PROTECTION

- A. Protect site furniture against damage during remainder of construction period, complying with manufacturer's directions.
- B. Provide signs instructing the public to keep away from the site furniture until construction is finished.

3.3 INSPECTION

Following the Owner's inspection of the completed site furniture installation, perform repairs as necessary to meet or exceed the Owner's requirements for fit and finish and the specifications and guidelines as referenced in 1.2 above.

3.4 WARRANTY

Provide manufacturer's standard warranty for all components. Provide one copy of maintenance and installation manual.

END OF SECTION 12 93 00

SECTION 32 05 13 – TOPSOIL

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes
 - 1. All soil materials designated as topsoil.
- B. Related Sections
 - 1. Turf and Grasses Section 32 92 00

1.2 SUBMITTALS

- A. Topsoil Analysis Report: Submit certified copies of topsoil test reports to the Owner, including testing company's recommendations for topsoil amendments to meet the project specification.
- B. Supply Owner with one (1) cubic foot of topsoil to be used in order to verify condition and consistency.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Topsoil furnished by the Contractor shall consist of a natural friable surface soil without admixtures of undesirable subsoil, refuse, or foreign materials. It shall be reasonably free from roots, hard clay, coarse gravel, stones larger than one inch in any dimension, noxious weeds, tall grass, brush, sticks, stubble or other material which would be detrimental to the proper development of vegetative growth.

Topsoil shall be obtained from naturally well drained sites where topsoil occurs at least 4 inches deep. Topsoil shall not be obtained from bogs or marshes.

- B. Topsoil shall conform to the following grading:

Sieve Sizes	Percentage Passing
1- Inch	100%
½ inch	95% - 100%
No. 4	75% - 100%
No. 10	60% - 100%
No. 200	10% - 60%

- C. Topsoil shall contain not less than 3% or more than 20% organic matter, by weight, as determined by loss-on-ignition or oven –dried samples in accordance with ATM T-6. Organic material shall be decomposed and free of wood.
- D. The Owner shall be notified prior to delivery of topsoil to the project site. The topsoil and its source will be shown to the Owner before approval will be granted for its use.
- E. Topsoil sources lacking organic matter may be used if, prior to delivery to the project site, sufficient organic matter in the form of pulverized peat moss or rich organic soil from other sources is thoroughly mixed with the topsoil to provide a product meeting the above requirements in C.
- F. Organic material for incorporation into the topsoil, if required, shall be partially decomposed fibrous or cellular stems and leaves of any of several species of Sphagnum mosses, or rotted manure. Organic material may require chopping and shredding to insure thorough mixing with the topsoil.
- G. The pH range of the topsoil shall be 6.5 to 7.6. Topsoil that does not meet this pH range will be amended by the addition of pH adjusters, as recommended by the soil analysis and approved by the Owner.

PART 3 - EXECUTION

3.1 TOPSOIL AMENDMENTS

- A. If topsoil amendments are required as determined by the testing lab in order to meet project specifications, incorporate such amendments in a manner approved by the Owner.

3.2 TOPSOIL INSTALLATION

- A. The topsoil shall be evenly spread on the designated areas to a depth of approximately 6 inches, which after settlement and compaction shall match the existing grade.
- B. Spreading shall not be done when the ground or topsoil is frozen, excessively wet, or otherwise in a condition detrimental to the work, as determined by the Owner. Roadway and parking lot surfaces shall be kept clean during hauling and spreading operations.

- C. After spreading has been completed, large clods, stones larger than one inch in any dimension, roots, stumps, and other litter shall be raked up and removed.
- D. The final topsoil grading prior to seeding shall be to a tolerance that will not permit ponding of water in excess of one inch in depth for a period of more than 24 hours.

END OF SECTION 32 05 13

SECTION 32 13 13 -CONCRETE PAVEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes exterior cement concrete pavement for the following:
 - 1. Walkways and pads.
- B. Related Sections include the following:
 - 1. Division 32 Section "Decorative Concrete Paving" for general color additives and texture applications.

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, expansive hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume.

1.4 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixes: For each concrete pavement mix. Include alternate mix designs when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.

1.5 PROJECT CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

1.6 PAYMENT:

- A. Unless noted otherwise, it shall be the responsibility of the Contractor to pay for all testing and result documentation related to soil testing, aggregate base material testing and concrete testing.

PART 2 - PRODUCTS

2.1 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.
 - 1. Use flexible or curved forms for curves of a radius 100 feet or less.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

- A. Epoxy-Coated Welded Wire Fabric: ASTM A 884/A 884M, Class A, plain steel.
- B. Epoxy-Coated Reinforcement Bars: ASTM A 775/A 775M; with ASTM A 615/A 615M, Grade 60, deformed bars.
- C. Steel Bar Mats: ASTM A 184/A 184M; with ASTM A 615/A 615M, Grade 60, deformed bars; assembled with clips.
- D. Epoxy-Coated Wire: ASTM A 884/A 884M, Class A coated, plain steel.
- E. Epoxy-Coated Joint Dowel Bars: ASTM A 775/A 775M; with ASTM A 615/A 615M, Grade 60 , plain steel bars.
- F. Tie Bars: ASTM A 615/A 615M, Grade 60, deformed.

- G. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcement bars, welded wire fabric, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete or fiber-reinforced concrete of greater compressive strength than concrete, and as follows:
 - 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.
 - 2. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer coated wire bar supports.
- H. Epoxy Repair Coating: Liquid two-part epoxy repair coating, compatible with epoxy coating on reinforcement.

2.3 CONCRETE MATERIALS

- A. General: Use the same brand and type of cementitious material from the same manufacturer throughout the Project.
- B. Portland Cement: ASTM C 150, Type I.
 - 1. Fly Ash: ASTM C 618, Class F or C.
 - 2. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.
- C. Aggregate: ASTM C 33, uniformly graded, from a single source, with coarse aggregate as follows:
 - 1. Class: 4S.
 - 2. Maximum Aggregate Size: 1-1/2 inches nominal.
- D. Water: ASTM C 94.

2.4 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cement and to be compatible with other admixtures.
- B. Air-Entraining Admixture: ASTM C 260.
- C. Water-Reducing Admixture: ASTM C 494, Type A.
- D. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
- E. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.

- F. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.

2.5 FIBER REINFORCEMENT

- A. Synthetic Fiber: Fibrillated or monofilament polypropylene fibers engineered and designed for use in concrete pavement, complying with ASTM C 1116, Type III, 1/2" to 3/4" inches long.
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Monofilament Fibers:
 - a. Fibrasol IIP; Axim Concrete Technologies.
 - b. Fiberstrand 100; Euclid Chemical Co.
 - c. Fibermix Stealth; Fibermesh, Div. of Synthetic Industries.
 - d. Forta Mono; Forta Corporation.
 - e. Grace MicroFiber; W. R. Grace & Co., Construction Products Div.
 - f. Polystrand 1000; Metalcrete Industries.

2.6 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- E. Clear Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
- F. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Evaporation Retarder:
 - a. Cimfilm; Axim Concrete Technologies.
 - b. Finishing Aid Concentrate; Burke Group, LLC (The).
 - c. Spray-Film; ChemMasters.
 - d. Aquafilm; Conspec Marketing & Manufacturing Co., Inc.
 - e. Sure Film; Dayton Superior Corporation.
 - f. Eucobar; Euclid Chemical Co.
 - g. Vapor Aid; Kaufman Products, Inc.
 - h. Lambco Skin; Lambert Corporation.

- i. E-Con; L&M Construction Chemicals, Inc.
- j. Confilm; Master Builders, Inc.
- k. Waterhold; Metalcrete Industries.
- l. Rich Film; Richmond Screw Anchor Co.
- m. SikaFilm; Sika Corporation.
- n. Finishing Aid; Symons Corporation.
- o. Certi-Vex EnvioAssist; Vexcon Chemicals, Inc.

2. Clear Waterborne Membrane-Forming Curing Compound:

- a. AH Curing Compound #2 DR WB; Anti-Hydro International, Inc.
- b. Aqua Resin Cure; Burke Group, LLC (The).
- c. Safe-Cure Clear; ChemMasters.
- d. W.B. Resin Cure; Conspec Marketing & Manufacturing Co., Inc.
- e. Day Chem Rez Cure (J-11-W); Dayton Superior Corporation.
- f. Nitocure S; Fosroc.
- g. Aqua Kure-Clear; Lambert Corporation.
- h. L&M Cure R; L&M Construction Chemicals, Inc.
- i. 1100 Clear; W. R. Meadows, Inc.
- j. Resin Cure E; Nox-Crete Products Group, Kinsman Corporation.
- k. Rich Cure E; Richmond Screw Anchor Co.
- l. Resi-Chem Clear Cure; Symons Corporation.
- m. Horncure 100; Tamms Industries Co., Div. of LaPorte Construction Chemicals North America, Inc.
- n. Hydro Cure; Unitex.
- o. Certi-Vex Enviocure; Vexcon Chemicals, Inc.

2.7 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber. Retain paragraph below for integrally colored concrete pavement.
- B. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.
- C. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class and grade to suit requirements, and as follows:
 - 1. Type II, non-load bearing, for bonding freshly mixed concrete to hardened concrete.

2.8 CONCRETE MIXES

- A. Prepare design mixes, proportioned according to ACI 211.1 and ACI 301, for each type and strength of normal-weight concrete determined by either laboratory trial mixes or field experience.
- B. Use a qualified independent testing agency for preparing and reporting proposed mix designs for the trial batch method.
 - 1. Do not use Owner's field quality-control testing agency as the independent testing agency.
- C. Proportion mixes to provide concrete with the following properties:
 - 1. Compressive Strength (14 Days): 3500 psi .
 - 2. Maximum Water-Cementitious Materials Ratio: 0.50.
 - 3. Slump Limit: 4 inches.
- D. All concrete curb and gutter shall be constructed of Class SI concrete and shall be from finished. Concrete test cylinders shall be taken each day that concrete is being poured. A compressive strength of at least 3,500 psi shall be verified by an independent laboratory for the curb and gutter to be acceptable. Results of the testing shall be submitted to the Owner.
- E. All concrete curb and gutter and sidewalk shall be cured with W.R. Meadows CS-309 or approved equal.
- F. All concrete curb and gutter and sidewalk shall be sealed with W.R. Meadows tiah acrylic concrete sealer or approved equal, immediately after seven (7) days of curing at a rate of 300 S.F. per gallon utilizing a spray application. The surface must be thoroughly clean and dry for application.
- G. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than Portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals.
- H. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content as follows within a tolerance of plus or minus 1.5 percent:
 - 1. Air Content: 5.5 percent for 1-1/2-inch maximum aggregate.
 - 2. Air Content: 6.0 percent for 1-inch maximum aggregate.
 - 3. Air Content: 6.0 percent for 3/4-inch maximum aggregate.

- I. Synthetic Fiber: Uniformly disperse in concrete mix at manufacturer's recommended rate, but not less than 1.0 lb/cu. yd.

2.9 CONCRETE MIXING

- A. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94 and ASTM C 1116.
 1. When air temperature is between 85 deg F and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

2.10 CONCRETE SEALER

2. Concrete sealer shall be a ready to use, penetrating, colorless, non-yellowing, and breathable concrete and masonry water repellent treatment compound.
3. Treatment shall chemically react with the substrate to form a long life water repellent surface.
4. Ozinga Water Stopper S-20 or approved equal

PART 3 - EXECUTION

3.1 PREPARATION

- A. Proof-roll prepared subbase surface to check for unstable areas and verify need for additional compaction. Proceed with pavement only after nonconforming conditions have been corrected and subgrade is ready to receive pavement.
- B. Remove loose material from compacted subbase surface immediately before placing concrete.

3.2 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form release agent to ensure separation from concrete without damage.

3.3 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating reinforcement and with recommendations in CRSI's "Placing Reinforcing Bars" for placing and supporting reinforcement.
 - 1. Apply epoxy repair coating to uncoated or damaged surfaces of epoxy-coated reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.
- E. Install fabricated bar mats in lengths as long as practicable. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities, or replace units as required before placement. Set mats for a minimum 2-inch (50-mm) overlap to adjacent mats.

3.4 FIBER REINFORCEMENT:

- A. Fiber reinforcement shall be added to the concrete mix at a rate of 1.0 lbs./cubic yard of concrete. Add directly to the concrete mixing system during, or after, the batching of the other ingredients and mixed at the time and speed recommended by the mixer manufacturer, usually four to five minutes.

3.4 JOINTS

- A. General: Construct construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.
 - 1. When joining existing pavement, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour, unless pavement terminates at isolation joints.
 - 1. Continue reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of pavement strips, unless otherwise indicated.

2. Provide tie bars at sides of pavement strips where indicated.
 3. Use epoxy bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.
1. Locate expansion joints at intervals of 50 feet, unless otherwise indicated.
 2. Extend joint fillers full width and depth of joint.
 3. Terminate joint filler less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
 4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
 5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 6. Protect top edge of joint filler during concrete placement with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt-coat one-half of dowel length to prevent concrete bonding to one side of joint.
- E. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows:
1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with groover tool to the following radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover marks on concrete surfaces.
 - a. Radius: 1/4 inch.
 2. Saw Cut Joints: Saw cut contraction joint after concrete has cured by establishing lines as shown on the Plan.
 - a. 1/8" W x 1/2" D
- F. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to the following radius. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.
1. Radius: 1/4 inch.

3.5 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, reinforcement steel, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. Remove snow, ice, or frost from subbase surface and reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at the time concrete is placed. Do not place concrete around manholes or other structures until they are at the required finish elevation and alignment.
- D. Comply with requirements and with recommendations in ACI 304R for measuring, mixing, transporting, and placing concrete.
- E. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- F. Consolidate concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures to consolidate concrete according to recommendations in ACI 309R.
 - 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand-spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.
- G. Place concrete in two operations; strike off initial pour for entire width of placement and to the required depth below finish surface. Lay welded wire fabric or fabricated bar mats immediately in final position. Place top layer of concrete, strike off, and screed.
 - 1. Remove and replace portions of bottom layer of concrete that have been placed more than 15 minutes without being covered by top layer, or use bonding agent if approved by Architect.
- H. Screed pavement surfaces with a straightedge and strike off. Commence initial floating using bull floats or darbies to form an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading dry-shake surface treatments.
- I. When adjoining pavement lanes are placed in separate pours, do not operate equipment on concrete until pavement has attained 85 percent of its 28-day compressive strength.

- J. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 - 1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
 - 2. Do not use frozen materials or materials containing ice or snow.
 - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.

- K. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and as follows when hot-weather conditions exist:
 - 1. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 deg F. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 2. Cover reinforcement steel with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 - 3. Fog-spray forms, reinforcement steel, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.6 CONCRETE FINISHING

- A. General: Wetting of concrete surfaces during screeding, initial floating, or finishing operations is prohibited.

- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots, and fill low spots. Refloat surface immediately to uniform granular texture.
 - 1. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

3.7 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and follow recommendations in ACI 305R for hot-weather protection during curing.

- B. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Begin curing after finishing concrete, but not before free water has disappeared from concrete surface.
- D. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.8 PAVEMENT CONCRETE SEALANT

- A. Allow newly poured concrete to cure for a minimum of 28 days before applying water repellent treatment.
- B. Surfaces must be structurally sound, dry, clean and free of all contaminants that will prevent the penetration of the repellent treatment.
- C. Apply per Manufacturer's recommended guidelines.
- D. Two (2) coats are to be provided.
- E. Allow a minimum of 24 hours drying time between coats.
- F. Protect areas from foot traffic a minimum of 24 hours before using.

3.9 TOLERANCES

- A. Comply with tolerances of ACI 117 and as follows:
1. Elevation: 1/4 inch.
 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 3. Surface: Gap below 10-foot- long, unlevelled straightedge not to exceed 1/4 inch.
 4. Lateral Alignment and Spacing of Tie Bars and Dowels: 1 inch.
 5. Vertical Alignment of Tie Bars and Dowels: 1/4 inch.
 6. Alignment of Tie-Bar End Relative to Line Perpendicular to Pavement Edge: 1/2 inch.
 7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Pavement Edge: Length of dowel 1/4 inch per 12 inches.
 8. Joint Spacing: 2 inches.
 9. Contraction Joint Depth: Plus 1/4 inch, no minus.
 10. Joint Width: Plus 1/8 inch, no minus.

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified independent testing and inspection agency to sample materials, perform tests, and submit test reports during concrete placement according to requirements specified in this Article.
- B. Testing Services: Testing shall be performed according to the following requirements:
1. Sampling Fresh Concrete: Representative samples of fresh concrete shall be obtained according to ASTM C 172, except modified for slump to comply with ASTM C 94.
 2. Slump: ASTM C 143; one test at point of placement for each compressive-strength test, but not less than one test for each day's pour of each type of concrete. Additional tests will be required when concrete consistency changes.
 3. Air Content: ASTM C 231, pressure method; one test for each compressive-strength test, but not less than one test for each day's pour of each type of air-entrained concrete.
 4. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each set of compressive-strength specimens.
 5. Compression Test Specimens: ASTM C 31/C 31M; one set of four standard cylinders for each compressive-strength test, unless otherwise indicated. Cylinders shall be molded and stored for laboratory-cured test specimens unless field-cured test specimens are required.
 6. Compressive-Strength Tests: ASTM C 39; one set for each day's pour of each concrete class exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. One specimen shall be tested at 7 days and two specimens at 28 days; one specimen shall be retained in reserve for later testing if required.

7. When frequency of testing will provide fewer than five compressive-strength tests for a given class of concrete, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 8. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, current operations shall be evaluated and corrective procedures shall be provided for protecting and curing in-place concrete.
 9. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive compressive-strength test results equal or exceed specified compressive strength and no individual compressive-strength test result falls below specified compressive strength by more than 500 psi.
- C. Test results shall be reported in writing to Landscape Architect, concrete manufacturer, and Contractor within 24 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing agency, concrete type and class, location of concrete batch in pavement, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- D. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Landscape Architect but will not be used as the sole basis for approval or rejection.
- E. Additional Tests: Testing agency shall make additional tests of the concrete when test results indicate slump, air entrainment, concrete strengths, or other requirements have not been met, as directed by Landscape Architect. Testing agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed.

3.11 REPAIRS AND PROTECTION

- A. Remove and replace concrete pavement that is broken, damaged, or defective, or does not meet requirements in this Section.
- B. Drill test cores where directed by Landscape Architect when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with portland cement concrete bonded to pavement with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 32 13 13

SECTION 32 31 13 – COATED CHAIN LINK FENCING SYSTEM

PART 1 – GENERAL

1.1 SUMMARY

- A. Section includes chain link fencing and accessories for commercial and industrial use.
- B. Related Sections
 - 1. Section 32 13 13 Concrete Pavement.

1.2 SUBMITTALS

- A. Shop drawings: Layout of fences and gates with dimensions, details, and finishes of components, accessories, and post foundations.
- B. Product data: Manufacturer's catalog cut sheets indicating material compliance and specified options.
- C. Samples: Color selection for PVC finishes. If requested, samples of materials (e.g., fabric, wires, and accessories).

1.3 WARRANTY

- A. Provide manufacturer's standard limited warranty that chain link fence fabric is free from defects in material and workmanship for a period of 15 years from the date of purchase.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Products shall originate from a qualified manufacturer having a minimum of five years' experience in manufacturing PVC coated chain link fencing.
- B. Obtain chain link fences and gates, including accessories, fittings, and fastenings, from a single source.

2.2 CHAIN LINK FENCE FABRIC

- A. PVC coated, 6 mil (0.15 mm) to 10 mil (0.25mm) thickness, thermally fused to zinc-coated steel core wire, per ASTM F668 Class 2b. Core wire tensile strength 75,000 psi.
- B. Size: Helically wound and woven to a height as indicated on the Ball Field Fence Schedule as part of the Drawings with a 2 inch diamond mesh with a 6 gauge core, 5 gauge finished, fused bonded as listed on the Ball Field Fence Schedule.
- C. Color: Black, ASTM F934.
- D. Selvage of fabric shall have a knuckled finish at the top and bottom.

2.3 STEEL FENCE FRAMING

- A. Framework: SS-40 or MT-40, fence framework conforming to Standard Specification ASTM F 1043, Group 1C. High-strength steel pipe triple coated per ASTM F 1043: external coating, Type B; internal coating, Type D.
- B. PVC Coated finish: In accordance with ASTM F 1043, apply supplemental color coating of 10 to 15 mils in Black color to match fabric.
- C. Pipe diameter: See Ball Field Fence Schedule on Drawings.

2.4 PROTECTIVE FENCE CAP

- A. Provide Top Fence Guard by Advanced Plastic Corporation, 1-847-674-2070, or approved equivalent on all 4' high fence, color to be yellow unless noted otherwise.

2.5 ACCESSORIES

- A. Chain link fence accessories: Provide items required to complete fence system. Galvanize each ferrous metal item and finish to match framing.
- B. Post caps: PVC-coated formed steel, cast malleable iron, or aluminum alloy weather tight closure cap for tubular posts. Provide one cap for each post.
- C. Top rail and brace rail ends: PVC-coated pressed steel per ASTM F626, for connection of rail and brace to terminal posts.
- D. Sleeves: Lengths of top rails to be connected using 6" PVC-coated sleeves that allow for expansion or contraction of the rail.

- E. Tie Wire: PVC-coated, 9 gauge (3.76 mm) galvanized steel or aluminum for attachment of chain link fabric to posts and rails. Hog rings attach fabric to tension wire to be 12 ½ Gauge (2.502) mm.
- F. Brace and tension (stretcher bar) bands: PVC-coated pressed steel.
- G. Tension (stretcher) bars made of one continuous piece of steel or aluminum, 3/16" x 3/4" (4.76 mm x 19 mm). Provide one bar per end or gate post and two bars per corner or pull post.
- H. Tension wire: PVC applied to metallic coated steel wire per ASTM F 1664, Class 2a, 6 gauge (4.88 mm) diameter core wire with tensile strength of 75,000 psi.
- I. Truss rods and tightener: PVC-coated steel rods with minimum diameter of 3/16" (7.9 mm). Capable of withstanding a tension of 2,000 lbs., minimum.
- J. Nuts and bolts are galvanized but not vinyl coated. Cans of PVC touch up paint are available to color coat nuts and bolts if desired.

2.7 SETTING MATERIALS

- A. Concrete: Minimum 28 day compressive strength of 3,000 psi.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify areas to receive fencing are completed to final grades and elevations.
- B. Ensure property lines and legal boundaries or work are clearly established.

3.2 CHAIN LINE FENCE FRAMING INSTALLATION

- A. Install chain link fence in accordance with ASTM F 567 and manufacturer's instructions.
- B. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30° or more.
- C. Space line posts uniformly as shown on the Drawings, not to exceed 10' o.c. maximum allowable spacing.

- D. Concrete set terminal and gate posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have a diameter 4 times greater than outside dimension of post, and depths approximately 6" (152 mm) deeper than post bottom. Excavate deeper as required for adequate support in soft and loose solid, and for posts with heavy lateral loads. Set post bottom as shown on the Drawings. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water sway from posts.
- E. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.
- F. Bracing: Install horizontal pipe brace at mid-height for fences 6' (1829 mm) and over, on each side of terminal posts. Firmly attach with fittings. Install diagonal truss rods at these points. Adjust truss rod, ensuring posts remain plumb.
- G. Top rail: Install lengths, 21' (6400 mm). Connect joints with sleeves for rigid connections for expansion/contraction.
- H. Center rails are to be installed when fence fabric is 12' (3658 mm) or higher, or when shown on the Drawings.
- I. Bottom rails are to be installed as per the Drawings.

3.3 CHAIN LINK FABRIC INSTALLATION

- A. Fabric: Install fabric on security side and attach so that fabric remains in tension after pulling force is released. Leave approximately 1" (25 mm) between finish grade and bottom selvage. Attach fabric with wire ties to line posts at 15" (381 mm) on center and to rails, braces, and tension wire at 24" (600 mm) on center.

3.4 ACCESSORIES

- A. Tie wires: Bend ends of wire to minimize hazard to persons and clothing.
- B. Fasteners: Install nuts on side of fence opposite fabric side of added security.

3.5 CLEANING

- A. Clean up debris and unused material, and remove from the site.

END OF SECTION 32 31 13

SECTION 32 92 00 – TURF AND GRASSES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes turf grass seeding including spreading of topsoil, fine grading, and maintenance operations as indicated on plans and specified herein.
- B. Related Sections
 - 1. Topsoil Section 32 05 13

1.2 QUALITY ASSURANCE

- A. Contractor's Qualifications
 - 1. The work of this section shall be performed by a contractor specializing in seeding and establishing athletic fields and turf grass.

1.3 SUBMITTALS

- A. Submit name of seed and fertilizer suppliers who will be supplying materials for the project.
- B. For Turf Grass Seed Mixes, Contractor must submit to Owner a listing of the exact seed blend to be used including; seed varieties, purity, germination % and origin blend %.

1.4 FINAL ACCEPTANCE

- A. Acceptance will be based upon a satisfactory stand of turf in the restoration areas. Areas which do not meet the contract requirements shall be reseeded. Repair rejected areas of turf within acceptable planting dates.
- B. Turf Grass Seeding
 - 1. Root depth into topsoil a minimum of 2" as determined by random cores.
 - 2. Dense, green, consistent turf void of any bare or patchy areas of more than 9 square inches. Smooth, level surface compacted and level to grading tolerances.

1.5 WARRANTY

- A. The complete turf system shall be warranted against defects in installation or materials for a period of 60 days after the date of substantial completion and include the following:
1. Material specified.
 2. Turf to be mature, true of species and type and free from objectionable weeds and/or grasses.
 3. The contractor shall provide materials and labor necessary to correct any deficiencies in the above during the warranty period.

PART 2 - PRODUCTS

2.1 TURF GRASS SEED MIXES

- A. **Park Seed Mix** – Apply at a rate of 250 lbs/AC for new turf areas and 150 lbs/AC for established turf areas or overseeding.

The park seed mix must consist of 50% Kentucky Blue Grass and 50% Perennial Ryegrass. There shall be no more than 25% of each variety from the approved list below.

List A – Kentucky Blue Grass choices

Arc
Award
Barduke
Diva
Freedom
Midnight 2
Rockstar
Rugby II
Rush
Washington

List B – Perennial Ryegrass choices

Barlennium
CSI
Double Time
Fastball RGL
Grand Slam
Grand Slam GLD
Palmer III
Pennant H20

2.2 SEED BLANKET AND STAPLES

- A. Approved seed blanket shall be North American Green (NAG) S-75 erosion control blanket manufactured by American Excelsior Company or approved equal.
- B. Staples shall be EcoSTAKES® , biodegradable stakes, manufactured by NAG or approved equal. Use manufacturers suggested staple pattern guide when installing.

2.3 FERTILIZER

- A. Fertilizer shall be a complete starter fertilizer, part of the elements of which is derived from organic sources. Fertilizer will be a granular starter variety with not less than 30% of the nitrogen from a slow release source. Contractor shall submit type and purchase source for approval prior to any product being applied.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Contractor must examine the areas and conditions under which all items are to be installed and notify the Landscape Architect, in writing, of the conditions detrimental to the proper and timely completion of the work. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to the Contractor.

3.2 TOPSOIL PLACEMENT

- A. Subgrade Preparation
 - 2. Maintain rough grades in the areas receive topsoil in a uniform condition so as to prevent future depressions. Prior to placing topsoil, repair disturbances to previously graded areas. Scarify areas to a depth of 12 inches prior to topsoil placement. Scarifications to have am maximum 1 foot separation and be cut in two directions, one perpendicular to the other.

B. Placing Topsoil

1. Uniformly distribute topsoil in quantity sufficient to provide minimum depth of 8" after compaction and finish grading. Topsoil shall be spread, cultivated, lightly compacted to prevent future settlement, dragged, and graded to finished grade.

3.3 SEEDING

- A. Sow seed during the months of April, May, August and September, unless otherwise approved by the Landscape Architect. So not sow seed when weather conditions are unfavorable, such as during drought or high winds.
- B. Immediately before seeding, scarify, loosen, float and drag topsoil as necessary to bring it to the proper condition. Remove foreign matter larger than ½ inch in diameter.
- C. Broadcast fertilizer at the rate of 1 pound actual nitrogen per 1,000 square feet. Do not apply fertilizer when there is possibility of rain before lawn areas can be seeded or sodded.
- D. Sow mix seed as field areas are finished as noted in the construction sequencing, as weather permits, unless otherwise approved by the Landscape Architect. So not sow seed when weather conditions are unfavorable, such as during drought or high winds.
- E. Perform drill seeding using approved equipment such as cultipacker seeders and grass seed drills.
- F. Drill the seed uniformly to an average depth of ½ inch. All areas shall be seeded in at least two directions. Turfgrass seeds shall not be covered by more than ¼ inch of soil. The seeding device shall lightly roll the seed bed to provide good contact between the seed and soil.
- G. Water thoroughly and immediately with a fine mist until soil is soaked to depth of 3 inches. Puddling of water is unacceptable. Maintain soil in a moist condition until seeds have sprouted and reached a height of 1 inch.

3.4 SEED BLANKET

- A. All turf grass areas shall be blanketed with an erosion control blanket once seed is sown. The seedbed shall be inspected prior to blanket placement to ensure it has been properly compacted and fine graded to remove any existing rills. It shall be free of obstructions, such as tree roots, projections such as stones and other foreign objects. The contractor shall proceed when satisfactory conditions are present. After the area has been properly shaped, seeded, fertilized and compacted, locate the start of the roll, making sure the roll is facing toward the area to be covered, and then roll out the blanket. Blankets shall be rolled out flat, even and smooth without stretching the

material then anchored to the subgrade in accordance with manufacturer's suggested methods.

- B. Once the blanket has been rolled out it shall be anchored to the subgrade using 100% biodegradable 4" stakes. Stakes shall have barbed shoulders and head for superior holding capabilities. Use manufacturer's suggested staple pattern guide when installing.

3.5 MAINTENANCE

- A. Maintain lawns 30 days from date of Substantial Completion. Maintenance to include watering, weeding, reseeding, mowing, trimming, and edging.
- B. Fill any depressions or settlement that occurs within the maintenance period. Reseed bare spots which occur during the maintenance period.
- C. Irrigate as required to supplement natural rainfall so that repaired lawn areas receive a minimum amount of water equivalent to 1" of rainfall per week.
- D. At the end of the 30 day maintenance period any brown, dead or dying grass shall be overseeded at the Contractor's expense.

END OF SECTION 32 92 00