

Project Manual For:

**Maine Township High School District 207
Maine West Synthetic Turf Improvements
Maine East High School
2601 W. Dempster Street
Park Ridge, Illinois 60068**

ISSUE FOR BID

December 8, 2025



**Prepared For:
Maine Township High School District 207
1177 South Dee Road
Park Ridge, Illinois 60068**

Prepared by:



Wight & Company
2500 North Frontage Road
Darien, IL 60561
630-969-7000

A/E Project No. 240173

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Maine West Synthetic Turf Improvements
1755 S. Wolf Road
Des Plaines, Illinois 60018

Project Number: 240173

Owner: Board of Education
Maine Township High School District 207
1177 South Dee Road
Park Ridge, Illinois 60068

Architect: Wight and Company
2500 North Frontage Road
Darien, Illinois 60561
630-969-7000

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PROJECT: Maine Township High School District 207
Maine West Synthetic Turf Field Improvements
1755 S. Wolf Road
Des Plaines, IL 60018
Project Number: 240173

ARCHITECT: Wight & Company
2500 North Frontage Road
Darien, Illinois 60561

OWNER: Maine Township High School District 207
1177 Dee Road
Park Ridge, IL 60068

Sealed bids will be received in duplicate by the Owner at the place, date and time stated below and there publicly opened and read:

PLACE: Maine Township Administration Building
1177 Dee Road
Park Ridge, IL 60068

DATE: **January 6, 2026**

TIME: **1:30 PM**

Any proposal received after the time and date stated above will be returned to the Bidder unopened.

The competency and responsibility of the Bidders will be considered in making awards.

Bid security in the form of a certified check, cashier's check, or bid bond made payable to Maine Township High School District 207, in an amount equal to ten percent (10%) of the base bid is required. **THIS IS A PREVAILING WAGE PROJECT.**

Proposals will be received for the following categories of work:

Maine Township High School District 207: Maine West Synthetic Turf Field Improvements

Work includes asphalt, concrete, track surfacing, synthetic turf, misc. demolition, drainage/landscape improvements and other scope per plan documents.

Plans and specifications can be obtained electronically at no cost through **BuildingConnected website**. To ensure bidders are added to the official plan holder's list and receive all addenda or other project related correspondence, bidders must visit www.buildingconnected.com to view or download this project online. Send plan access requests to Shawn Benson at Wight & Company at sbenson@wightco.com.

Please go to: www.buildingconnected.com – **Maine West Synthetic Turf Field Improvements after 1:30 PM on Tuesday, December, 9 2025.**

An **optional pre-bid meeting will be held at Maine West High School on Tuesday, December 16, 2025 (10:30 am at the Maine West Track)**. All questions concerning this project or those concerning bidding requirements should be directed to Shawn Benson at sbenson@wightco.com. **Questions will be received in writing until 1:30 PM on Tuesday December 23, 2025.**

The Owner reserves the right to accept or reject any and all bids, and to waive informalities to any bid when such is deemed by the Owner to be in the Owner's own best interests.

This advertisement is issued in the name of Maine Township High School District 207.

END OF SECTION 001100

INSTRUCTIONS TO BIDDERS

I. EXAMINATION OF SITE, DRAWINGS, ETC.

Each Bidder shall visit the site of the proposed work and acquaint himself with the conditions as they exist so that he may fully understand the facilities, difficulties and restrictions attending the execution under the Contract. Bidders shall also thoroughly examine and be familiar with the plans and the specifications. The failure or omission of any bidder to receive or examine any form, instrument, or to visit the sites and acquaint himself with existing conditions shall in no way relieve and bidder from any obligation with respect to his bid. By submitting a bid, the bidder agrees and warrants that he has examined the site(s) and the drawings(s) and specifications, and where the specifications require in any part of the work, that a given result be produced, that the specifications and drawing(s) are adequate, and the required result can be produced under the specifications and drawing(s).

An optional pre-bid meeting and a tour will be held at Maine West High School on Tuesday, December 16, 2025 (10:00 am at the Maine West Track). All questions concerning this project or those concerning bidding requirements should be directed to Shawn Benson at Wight & Company at sbenson@wightco.com. Questions will be received in writing until 1:30 PM on Tuesday December 23, 2025.

II. REQUIREMENTS OF BIDDERS

The Contractor bidding the project shall be actively engaged in work of the nature described in the plan(s) and specifications. He must be able to demonstrate that he has adequate men and materials to perform the work within the specified time limit.

III. PLANS AND SPECIFICATIONS

Plans and specifications on projects to be bid may be obtained electronically via BuildingConnected website. Contact Shawn Benson at Wight & Company for access to the plans and specifications, sbenson@wightco.com or 630-442-2887.

It is required that all contractors who have obtained project plans and specifications (bid package) from a second or third party organization and have not directly obtained the bid package from the School District to send their contact information to the District in order to receive any future memorandum or addendum. Failure to send your contact information to the District may result in disqualification of the bidder. It is not the responsibility of the District if any memorandums or addendum are not received on account of procuring the bid documents through a second or third party organization.

IV. PROPOSAL FORM

Bidder shall use attached proposal form which shall be filled out completely and submitted in DUPLICATE in sealed envelope, labeled "SEALED BID" the project name, the name of the bidder, date and time of opening, and addressed to Maine Township School District 207, 1177 Dee Road, Park Ridge, IL 60068. Bids shall be received on or before 1:30 p.m. on Tuesday, January, 6, 2025. Bids will be opened at 1:30 p.m. on Tuesday, January 6, 2025, at the Administration Building at 1177 Dee Road, Park Ridge, IL 60068.

V. ACCEPTANCE OR REJECTION OF BID

The Owner reserves the right to accept or reject any and all bids, and to waive informalities to any bid when such is deemed by the Owner to be in the Owner's own best interests. Owner may combine or separate any section or work if it be in the best public interest.

VI. BID SURETY

Pay amount of surety, equal to 10% of the bid price in the form of a Bid Bond or Certified check made payable to: Maine Township High School District 207, shall accompany each bid as a proposal guarantee. The bid surety of all bidders, except the successful Contractor(s) shall be returned with ten (10) days after the decision to accept and/or reject bids by the School District. The successful Contractor's bid surety shall be returned upon receipt of an acceptable Performance and Payment Bond, Certificate or Insurance and signed contract.

VII. LAWS AND CERTIFICATION

The Contractor shall at all times observe and comply with all Federal, State, and local laws, regulations and ordinances which in any manner affect the conduct of the work. Any complaint, claim or action brought against the Contractor for failing to observe or comply with any law, ordinance, or regulation shall be the sole responsibility of the Contractor and shall in no way extend to or expose the Owner to liability and the Contractor shall indemnify and hold harmless the Owner from any and all such complaints, claims, or actions.

WAGES AND RATES: Prevailing Wages. All work on the Project will be subject to the provisions on the Illinois Prevailing Wage Act (820 ILCS 130/0.01, et seq) (the "Act") providing for the payment of prevailing rate of wages. Accordingly, Contractor and all subcontractors of every tier shall pay not less than prevailing wages to all laborers, workers and mechanics performing work on or in connection with the project work, and any repair work, and any warranty work hereunder in accordance with the requirements of the Act as determined by the Illinois Department of Labor (IDOL) for Cook County, for the time period in which the Project Work is performed (the "Prevailing Wages"). Contractor shall notify all subcontractors of any revisions to the Prevailing Wages by IDOL and shall otherwise be responsible for strict compliance with the Act.

The Contractor shall furnish the certified transcript of payrolls to the School District covering all payouts not less than once a month on the forms attached hereto and incorporated herein (the "Certified Transcript of Payroll"), and shall sign the Affidavit attached thereto.

The Contractor shall require all of its subcontractors to strictly comply with the requirements of the Act, which shall be incorporated in each and every subcontractor for all or any portion of the Work.

ILLINOIS WORKERS: The Contractor shall comply with all requirements of Section 2201 et.seq., Chapter 48 of Illinois Revised Statutes with reference to Employment of Illinois Workers on Public Works Project Act.

END OF SECTION 002212

SECTION 002213 - SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

GENERAL

The following supplements modify the "Instructions to Bidders" AIA Document A701, 2018. Where a portion of the Instructions to Bidders is modified or deleted by these Supplementary Instructions to Bidders, the unaltered portions of the Instructions to Bidders shall remain in effect.

ARTICLE 3 - BIDDING DOCUMENTS

3.3 SUBSTITUTIONS

Add Paragraphs 3.3.6 and 3.3.7:

3.3.6 Items of other manufacturers, or design, quality, and capacity, will be considered as alternates or substitutes to those specified or noted on the Drawings only if the Bidder, at the time of submitting their Base Bid (and Alternate Bids), offers to make such substitution and quotes any addition to, or deduction from, the amount of the Base Bid if such substitution should be accepted in the space provided on the Bid Form.

3.3.7 The Owner reserves the right to reject under the Bid any substitute offered for items specified or noted on the Drawings. Only the successful Bidder's proposed Alternates will be evaluated.

ARTICLE 4 – BIDDING PROCEDURES

4.2 BID SECURITY

Change Paragraphs 4.2.1 and 4.2.2 to read:

4.2.1 Each Bid shall be accompanied by a bid security in the form and amount required if so stipulated in the Instructions to Bidders.

4.2.2 The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.

ARTICLE 5 - CONSIDERATION OF BIDS

5.3 ACCEPTANCE OF BID (AWARD)

Add Paragraphs 5.3.3, 5.3.4, and 5.3.5:

5.3.3 The award of a Contract will be made within 45 calendar days after the opening of proposals, to the lowest responsible and qualified Bidder whose proposal complies with

all the requirements prescribed.

5.3.4 No bids will be withdrawn for a period of 45 days after the Bid opening date without consent of the Owner.

5.3.5 If Contracts cannot be awarded promptly, the Owner may permit the three lowest Bidders to substitute bid bonds executed by corporate surety companies satisfactory to the Owner for any cashier's checks or certified checks submitted with their Bids as Bid guarantees, but such substitution shall not be made until a period of 3 days has elapsed after the date of opening Bids.

ARTICLE 6 – POST-BID INFORMATION

Delete Paragraph 6.2 in its entirety, and insert in its place the following:

6.2 Intentionally Deleted.

ARTICLE 8 – ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

Add Paragraph 8.2 - EXECUTION OF AGREEMENT:

8.2 EXECUTION OF AGREEMENT

8.2.1 The Agreement shall be executed by the successful Bidder or Bidders and returned within 5 days after the Contract has been mailed to the Bidder.

8.2.2 If the Bidder or Bidders to whom award is made is a corporation organized under the laws of a state other than Illinois, the Bidder shall furnish the Owner a copy of the corporation's Certificate of Authority to do business in the State of Illinois with the return of the executed Contract. Failure to furnish such evidence of a Certificate of Authority within the time required will be considered as just cause for the annulment of the award and forfeiture of the proposal guarantee to the Owner, not as a penalty, but in payment of liquidated damages sustained as a result of such failure.

Add Paragraph 8.3 - FAILURE TO EXECUTE AGREEMENT:

8.3 FAILURE TO EXECUTE AGREEMENT

8.3.1 Failure of the successful Bidder to execute the Agreement within 5 days after the Contract has been mailed to Bidder shall be just cause for the cancellation of the award and the forfeiture of the Bid guarantee, which shall become the property of the Owner, not as a penalty but in liquidation of damages sustained. Award may then be made to the next lowest responsible Bidder or the Work may be readvertised.

ARTICLE 9 - TIME OF COMPLETION

9.1.1 Time is of the essence in the completion of the Project and the Contract will be predicated upon full compliance with the Contractor's stated time of completion for Owner's useful occupancy included in his Bid. The Owner will evaluate each Bidder's capability in this regard in awarding the Contract.

9.1.2 Bidders are informed that administrative work must be started immediately following the award and signing of Contracts and Work must be carried on continuously thereafter until completion and be fully completed within the time stated in the Bid Form, except on written order from the Architect.

END OF SECTION 002213

BID DATE: Tuesday, January 6th, 2026 1:30 PM

BID TO: Maine Township High School District 207
District Administrative Offices
1177 South Dee Road
Park Ridge, IL 60068

BID FROM: _____

BIDS FOR: **Maine Township High School District 207**
MAINE WEST SYNTHETIC TURF IMPROVEMENTS

Project No. 240173

THE UNDERSIGNED:

Acknowledges receipt of:

Plans and specifications for the work indicated above.

Addenda: No. _____, dated _____

No. _____, dated _____

No. _____, dated _____

Having examined the site of the work and having familiarized himself with local conditions affecting the cost of the work and with all requirements of the bidding documents including Instructions to Bidders, drawings, specifications and duly issued addenda as prepared by the architect. The bidder hereby agrees to perform all work and furnish all labor, material and equipment specifically required of him by the bidding documents and such additional work as may be included as related requirements in other divisions or sections of the specifications.

Agrees:

To furnish and/or install the described material and/or services for stated lump sum price.

To hold this bid open until 60 calendar days after bid opening date.

To accept the provisions of the Instructions to Bidders, Conditions of the Contract, Drawings, specifications, Addenda, and disposition of bid security.

To enter into and execute a contract with the Owner, if awarded on the basis of this bid, and in connection therewith to:

1. Furnish all bonds and insurance required by the bidding documents.
2. Accomplish the work in accordance with the Contract.
3. Complete the work within the Contract time herein specified.

COMPLETION TIME

GENERAL WORK: The undersigned agrees to begin construction work on March 16, 2026, and to complete all work required by the Contract Documents on July 31st, 2025.

BID DEPOSIT

The undersigned furnishes herewith, as required in the Instructions to Bidders, a bid deposit in the amount of 10% of the amount bid in the form of Cashier's Check ____, or Certified Check ____, made payable to the Owner or Bid Bond ____, naming the Owner as obligee. (Bidder to check form of deposit furnished.)

It is understood and agreed that should the undersigned fail to enter into a contract with the Owner or furnish acceptable contract security within the time and in the manner herein provided. The bid deposit shall be retained by the Owner as liquidated damages and not as a forfeiture. As it is impossible to determine precisely an exact amount of damages the Owner will sustain, it is agreed that the bid deposit is a fair and equitable estimate of such damages.

BASE BID

BASE BID: All Maine West Synthetic Turf Improvements per the plans and specifications, excluding Synthetic Turf System components and synthetic turf fine grading. The amount of the Base Bid is:

The sum of: _____ **Dollars (\$** _____ **)**

ALTERNATE BID

ADD ALTERNATE #1A: Synthetic Turf System components and synthetic turf fine grading to install FieldTurf Vertex Prime / yarn height: 2" / PureCob and Silica Sand infill with Shockbase Select Shock Pad. Install per manufacturer specifications. Includes all material and labor. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$**_____ **)**

ADD ALTERNATE #1B: Synthetic Turf System components and synthetic turf fine grading to install AstroTurf Rhino Blend / yarn height: 2" / BrockFill and Silica Sand infill with Brock SP17 pad. Install per manufacturer specifications. Includes all material and labor. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$**_____ **)**

ADD ALTERNATE #1C: Synthetic Turf System components and synthetic turf fine grading to install TenCate Midwest Allsport Ultra 45 / yarn height: 2" / BrockFill and Silica Sand infill with Brock SP17 pad. Install per manufacturer specifications. Includes all material and labor. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$**_____ **)**

ADD ALTERNATE #1D: Synthetic Turf System components and synthetic turf fine grading to install Shaw Legion / yarn height: 2" / BrockFill and Silica Sand infill with Brock SP17 pad. Install per manufacturer specifications. Includes all material and labor. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$**_____ **)**

ADD ALTERNATE #1E: Turf System components and synthetic turf fine grading to install an Alternate turf system per manufacturer specifications. Includes all material and labor. To be approved and evaluated by engineer. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$**_____ **)**

ADD ALTERNATE #2A: Synthetic Turf System components and synthetic turf fine grading to install FieldTurf Vertex Prime / yarn height: 2" / PureCob and Silica Sand infill with Shockbase Select Shock Pad. Install per manufacturer specifications. Includes all material and labor. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$** _____ **)**

ADD ALTERNATE #2B: Synthetic Turf System components and synthetic turf fine grading to install AstroTurf Rhino Blend / yarn height: 2" / BrockFill and Silica Sand infill with Brock SP17 pad. Install per manufacturer specifications. Includes all material and labor. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$** _____ **)**

ADD ALTERNATE #2C: Synthetic Turf System components and synthetic turf fine grading to install TenCate Midwest Allsport Ultra 45 / yarn height: 2" / BrockFill and Silica Sand infill with Brock SP17 pad. Install per manufacturer specifications. Includes all material and labor. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$** _____ **)**

ADD ALTERNATE #2D: Synthetic Turf System components and synthetic turf fine grading to install Shaw Legion / yarn height: 2" / BrockFill and Silica Sand infill with Brock SP17 pad. Install per manufacturer specifications. Includes all material and labor. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$** _____ **)**

ADD ALTERNATE #2E: Turf System components and synthetic turf fine grading to install an Alternate turf system per manufacturer specifications. Includes all material and labor. To be approved and evaluated by engineer. The amount of the Add Alternate Bid is:

The sum of: _____ **Dollars (\$** _____ **)**

ALLOWANCE

The Base Bid includes the following Allowance, as further described in Division 01 Section "Allowances" of the Project Manual:

1. The Bidder has included a \$250,000 Owner's Contingency Allowance for the Base Bid.

UNIT COST

1. Unit Price No. 1: Labor, material, and equipment required for Special Excavation (including Haul Off):

The sum of: _____ Dollars (\$ _____) per cu. yd.

2. Unit Price No. 2: Labor, material, and equipment required for Porous Granular Embankment:

The sum of: _____ Dollars (\$ _____) per cu. yd.

3. Unit Price No. 8: Labor, material, and equipment required to install Tensar Interax NX750 geogrid:

The sum of: _____ Dollars (\$ _____) per sy.

BID ACCEPTANCE

If written notice of the acceptance of this bid is mailed, telegraphed or delivered to the undersigned within the time noted herein, after the date of opening of bids or at any time thereafter before this bid is withdrawn, the undersigned agrees that he will execute a construction contract (AIA Document A101, 2017 Edition) in accordance with the bids as accepted. He will obtain performance and payment bonds with such surety or sureties as the Owner may approve, the cost of which shall be included in the base bid.

The Owner reserves the right to award the contract to his best interests, to reject any of all bids, to waive any informalities in bidding and to hold all bids for the bid guarantee period.

REPRESENTATIONS AND CERTIFICATIONS

The bidder makes the following representations and certifications as part of his bid on the project herein identified in the Bid Form. In the case of a joint venture bid, each party represents and certifies as to his own organization.

SURETY. I have notified a Surety Company that I am submitting a bid for work to be performed on the project. The Surety Company has agreed to issue a performance and labor and material payment bond for my work, if my bid is accepted and the contract awarded to me.

AVAILABILITY. The number and amount of contracts and awards pending which I am and/or will be obligated to perform, now and during the course of the project, will not interfere with or hinder the timely prosecution of my work.

INDEPENDENT PRICE DETERMINATION. The contract sum in this bid has been arrived at independently. Without consultation, communication, or agreement for the purpose of restricting completion.

LAWS AND REGULATIONS

1. Bidder agrees to comply with all laws and regulations applicable to public bidders.
2. In the case of all contracts for public works, the bidder shall provide for the payment of the prevailing rate of wages to all laborers, workmen and mechanics employed by the bidder or any subcontractor thereof, in accordance with the Illinois Prevailing Wage Act, 82 ILCS 130/1et seq. The wage rate scale is on file at the Districts business office.
3. The bidder and all bidder's subcontractors must participate in active apprenticeship and training programs approved and registered with the U.S. Department of Labor's Office of Apprenticeship for each of the trades of work contemplated under the awarded contract. The Maine Township High School District 207 Board of Education reserves the right to waive the apprenticeship and training requirement at its sole discretion.
4. It shall be mandatory that the bidder shall not discriminate against any employee or applicant for employment upon any grounds prohibited by the Human Rights Act, 775 ILCS 5/1-101 et., and further that the bidder will comply with all provision of the Human Rights Act including, but not limited to, the rules and regulations of the Illinois Human Rights Commission.
5. Bidder does hereby certify pursuant to section 3 of the Illinois Drug-Free Workplace Act (30 ILCS 580/3) that bidder shall provide a drug-free workplace for all employees engaged in the performance of work the contract by complying with the requirements of the Illinois Drug-Free Workplace Act and, further certifies, that bidder is not ineligible for award of this contract by reason of debarment for a violation of the Illinois Drug-Free Workplace Act.
6. The contractor shall assume all liability for, and shall protect, defend, indemnify and hold harmless, the Board of Education and its members individually, their officers, employees, servants and agents, from and against all claims, actions suits, judgments, costs, losses, expenses and liabilities of whatsoever kind or nature including reasonable legal fees incurred by owner arising out of:
 - A. Any infringement (actual or claimed) of any patents, copyrights or trade names by reason of any work performed or to be performed by the contractor under this contract or by reason of anything to be supplied by the contractor pursuant to this contract.
 - B. Bodily injury, including death, to any person or persons (including contractor's officers, employees, agents and servants) or damage to or destruction of any property, including the loss of use thereof:
 - Caused in whole or in part by an act, error or omissions by the contractor or any subcontractor or anyone directly or indirectly

employed by any of them regardless of whether or not it is caused in part by a party to be indemnified hereunder.

- Arising directly or indirectly out of the presence of any person in or about any part of the project site or the streets, sidewalks and property adjacent thereto.
- Arising directly or indirectly out of the use, misuse or failure of any machinery or equipment used directly or indirectly in the performance of this contract.

PREVAILING WAGE. The contractor and each subcontractor shall pay not less than the general prevailing rate of hourly wages for work of a similar character in the locality in which the work is performed and not less than general prevailing rate of hourly wages for legal holidays and overtime work in the performance of work under this contract, as established by the Illinois Department of Labor, pursuant to an act of the General Assembly of the State of Illinois approved June 26, 1941 as amended according to the Illinois Revised Statutes, Chapter 48, Section 39s-1, et seq.

Pursuant to Illinois Revised Statutes, Chapter 48, Section 34s-5, the contractor and each contractor shall keep an accurate record showing the names and occupation of all laborers, workers and mechanics employed by them, and also showing the actual hourly wages paid to each such individual, which record shall be open at all reasonable hours to inspection by the Owner, its officers and agents, and to agents of the Illinois Department of Labor.

The contractor and each subcontractor hereby agree, jointly and severally, to defend, indemnify and hold harmless the Owner from any and all claims, demands, liens or suits of any kind or nature whatsoever (including suits for injunctive relief) by the Illinois Department of Labor under the Illinois Prevailing Wage Act, Illinois Revised Statutes, Chapter 48, Section 39s-1, et seq., or by any laborer, worker or mechanic employed by the contractor or the subcontractor who alleges that he has been paid for his services in a sum less than prevailing wage rates required by Illinois law. The Owner agrees to notify the contractor or subcontractor of the pendency of any such claim, demand, lien or suit.

The current prevailing wage rates are included in the specifications for reference only. The contractor and subcontractor must pay the prevailing wage rates in effect at the actual time the labor is performed.

CERTIFICATE OF COMPLIANCE WITH ILLINOIS PREVAILING WAGE RATE ACT. Pursuant to the provisions of the Illinois Prevalent Wage Rate Act. (Illinois Rev. Stat. 1989, Ch. 48, Pars 39N. et seq.), contractor hereby certifies that all workers will be paid at the prevailing wage rate as published by the Cook County Department of Labor.

Initials_____

CERTIFICATE OF ELIGIBILITY TO CONTRACT. Pursuant to Section 33 E-11 of the Illinois Criminal Code of 1961 as amended, contractor hereby certifies that neither they nor any of the officers, partners, or owners of this business have been convicted in the past five years of the offense of bid-rigging under Section 33 E-3, nor bid-rotating under Section 33 E-4, nor bribing or attempting to bribe an officer or an employee of the State of Illinois, or made an admission of guilt or such conduct which is a matter of record.

Initials_____

CERTIFICATE OF COMPLIANCE WITH ILLINOIS DRUG-FREE WORKPLACE ACT. Pursuant to Section 3 of the Illinois Drug-Free Workplace Act, having twenty-five or more employees, contractor does hereby certify that they shall provide a drug-free workplace for all employees engaged in the performance of work under this contract by complying with Illinois Drug-Free Workplace Act, and, further certifies that they are not ineligible for award of this contract by reason of debarment for a violation of the Illinois Drug-Free Workplace Act.

Initials _____

CERTIFICATE REGARDING SEXUAL HARASSMENT POLICY. Pursuant to Section 2-105 of the Illinois Human Rights Act (775 IL-CS5/2-105), contractor certifies they have 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 compliant process available through the Department of Human Rights Commission; (vi) directions of how to contact the Department of Human Rights and Human Rights Commission; and (vii) protection against retaliation.

Initials _____

CERTIFICATE REGARDING EMPLOYMENT OF ILLINOIS WORKERS ON PUBLIC WORKS. Contractor agrees if at the time the Agreement is executed, or if during the term of the Agreement, there is excessive unemployment in Illinois as defined in the Employment of Illinois Workers on Public Works Act, 30 ILCS 570/0/01 et seq., as two consecutive months of unemployment exceeding 5%, then Contractor agrees to employ Illinois laborers in accordance with the Employment of Illinois Workers on Public Works Act. An "Illinois laborer" is defined as any person who has resided in Illinois for at least thirty (30) days and intends to become or remain an Illinois resident.

Initials _____

CERTIFICATE REGARDING PARTICIPATION IN ACTIVE APPRENTICESHIP AND TRAINING PROGRAM. Contractor certifies that all tradespersons and laborers performing work on this job have participated in an approved U.S. Department of Labor Office of Apprenticeship program for each of the trades of work contemplated.

Initials _____

CERTIFICATE REGARDING CRIMINAL HISTORY RECORDS CHECK. All employees of contractor, or employees of subcontractors if applicable, servicing the School District and being present in any school of the School District for two or more consecutive days shall be subject to a fingerprint-based criminal history records check and online database check pursuant to 105 ILCS 5/10-21.9, shall not have been convicted of a prohibited offense and shall be confirmed by Contractor as not being listed on the Illinois Sex Offender Registry or the Illinois Murderer and Violent Offender Against Youth Registry. Contractor shall initiate such a records check prior to the employee's first day of assignment at the School District and shall submit its employees to the School District's fingerprint process. The cost of such checks, if any, shall be Contractor's and School District shall be entitled to receive a copy of the results. The School District reserves the final discretion to determine the assignment of the Contractor's employee to the School District following its receipt of the criminal history report.

Initials_____

FAITH'S LAW: Contractor certifies that prior to sending any employee to the premises for more than a single day, Contractor will have complied with all employment history review and other obligations of 105 ILCS 5/22-94. Upon receipt of an employment history reports from the employee or former employer, Contractor shall disclose all reports, records, information and determinations related to Section 22-94 employment history review for each of its employees or independent contractors to the School District.

Initials_____

VENDOR DESIGNATION. In order to comply with subsection C of Section 10-20.40 of the Illinois School code (105 ILCS 5/10-20.40) added by P.A. 95-707, school districts are required to disclose vendors with whom they have entered a contract or purchased goods in the amount of equal to or greater than \$25,000.00. In addition, school districts are required to specify which of the vendors are owned by a person with disabilities, female, minority and/or locally owned.

Please indicate any of the following that apply to your business.

- Owned by a Person with Disabilities
- Female Owned
- Minority Owned
- Locally Owned (within school district boundaries)
- None of the Above

Initials_____

BIDDER'S QUALIFICATIONS. Included with the Bid, submit two copies of completed American Institute of Architects "Contractor's Qualification Statement" AIA Document A305 (furnished by Bidder).

Initials_____

Signature:

Respectfully submitted this _____ day of _____, 20_____.

Type of Firm (Bidder to indicate)

- _____ Individual
- _____ Partnership
- _____ Corporation
- _____ Joint Venture
- _____

(Firm Name)

(Address)

(Telephone Number)

(Bidder's Signature)

(Title)

(CORPORATE SEAL)

Subscribed and sworn to me

this _____ day of _____, 20_____.

(NOTARY SEAL)

END OF SECTION 004100

SECTION 004343 – PREVAILING WAGE ACT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 PREVAILING WAGE ACT

- A. Pursuant to Illinois Compiled Statutes 820 ILCS 130/0.01 et seq., these specifications list on the following pages, the Illinois Department of Labor prevailing rate of wages for the county where the contract is being performed and for each craft or type of worker needed to execute the contract.
- B. Current wage rate information may be obtained from the IDOL website: <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx>.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 004343

SECTION 006000 - PROJECT FORMS

1.1 FORM OF AGREEMENT AND GENERAL CONDITIONS`

A. The following form of Owner/Contractor Agreement and form of the General Conditions shall be used for Project:

1. AIA Document A101-2017 "Standard Form of Agreement between Owner and Contractor Where the Basis of Payment is a Stipulated Sum."

a. AIA Document A101 Exhibit A: Delete Article A.2.2 and in its place, add the following Sections:

§ A.2.2 Liability Insurance

§ A.2.2.1 In any and all claims against the Owner or the Architect or any of their agents or employees by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the insurance obligation under this Section shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under Workmen's Compensation Acts, disability benefit acts or other employee benefit acts.

§ A.2.2.2 The insurance obligations of the Contractor under this Section shall not extend to the liability of the Architect, his agents or employees arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications or (2) the giving of or failure to give directions or instruction by the Architect, his agents or employees provided that such giving or failure to give is the primary cause of the injury damage.

§ A.2.2.3 The Contractor shall give the Owner an original policy and shall furnish the Architect a memorandum copy of said policy. The named insured in this Protective Liability Policy shall be:

1. Maine Township High School District 207
1177 South Dee Road
Park Ridge, Illinois 60068
2. Wight & Company
2500 North Frontage Road
Darien, IL 60561

- b. AIA Document A101 Exhibit A: Delete Article A.2.3.1 through A.2.3.2 and in its place, add the following Sections:

§ A.2.3.1 Builder's Risk Insurance is required and shall be purchased and maintained until the date established for Substantial Completion of the Project by the Contractor.

§ A.2.3.1.1 The policy shall be a completed Value All-Risk Builder's Risk policy and shall cover all work (including that of all contractors) in the course of construction including temporary structures and materials used in the construction process stored on or within 100 feet of the construction site and while awaiting installation. The policy shall be written in an amount equal to 100-percent of the total sum of all contracts.

§ A.2.3.2 Coverage shall include, but not be limited to:

- A. Fire and Extended Coverage (Lightning, wind storm, hail, explosion, riot, civil commotion, aircraft, vehicle and smoke).
- B. Vandalism and Malicious Mischief.

§ A.2.3.3 Coverage shall not extend to:

- A. Tools and equipment of:
 - 1. Contractors.
 - 2. Subcontractors.
 - 3. The Architect/Engineer.
- B. Property owned by employees of any of the foregoing.
- C. Vehicles of any kind.
- D. Trees and shrubs.
- E. Drawings and specifications.

§ A.2.3.4 The Owner and the Architect/Engineer and all other contractors shall be named as additional insured as their interest may appear.

§ A.2.3.5 A deductible clause of \$1,000 per loss shall be included. The party purchasing the Builder's Risk Insurance shall be responsible for apportioning the amount of losses within the deductible or portions not insurable amount the insured contractors.

§ A.2.3.6 The policy by its terms or endorsement shall specifically permit and allow for beneficial or partial occupancy prior to completion or acceptance of the Project by the Owner.

§ A.2.3.7 To the extent permitted without penalty, expense, or loss of coverage, the Owner, the Architect/Engineer and each contractor waive all rights each against the others for damages caused by fire or any other peril to the extent any loss or claim is covered by Builder's Risk Insurance or any other permanent insurance applicable to the Project except such rights as they

may have to the proceeds of such insurance held by any of the insured as a result of loss. Each insured contractor shall require similar waivers of subrogation from all subcontractors and sub-subcontractors engaged on the Project.

§ A.2.3.8 The prompt repair or reconstruction of the Work as a result of any insured loss or damage shall be the Contractor's responsibility and shall be accomplished at no additional cost to the Owner or Architect/Engineer. The Contractor shall furnish the proper assistance in the adjustment and settlement of any loss. Loss will be adjustable with and payable to the party purchasing the Builder's Risk Insurance who shall be responsible for apportioning the loss proceeds to each and every entity involved in the loss to the extent of his interest. The policy shall contain a provision that the policy will not be canceled, changed or altered until at least 30 calendar days prior to written notice has been given to the named insured.

- c. AIA Document A101 Exhibit A: Delete the semicolon at the end of Section A.3.2.2.2.1 and add: "or persons or entities excluded by statute from the requirements of Section A.3.2.5 but required by the Contract Documents to provide the insurance required by that section."
- d. AIA Document A101 Exhibit A: Add the following Sections to Article A.3.2.2.2:

.12 Liability insurance shall be written on the comprehensive general liability basis, and shall include, but not be limited to, the following sub-lines:

- A. Premises and Operations including x, c, u coverages (explosion, collapse, underground).
- B. Products and Completed Operations.
- C. Independent Contractor's Protective.
- D. Broad Form Comprehensive General Liability Endorsement:
 - 1. Contractual Liability, including Contractors obligation under Section 3.18.
 - 2. Personal Injury & Advertising Injury Liability.
 - 3. Premises Medical Payments.
 - 4. Host Liquor Law Liability.
 - 5. Fire Legal Liability - Real Property.
 - 6. Broad Form Property Damage Liability (including Completed Operations).
 - 7. Incidental Medical Malpractice Liability.
 - 8. Non-owned Watercraft Liability.
 - 9. Limited Worldwide Liability.
 - 10. Additional Persons Insured, including employees for personal and advertising injury.
 - 11. Extended Bodily Injury Liability.
 - 12. Automatic Coverage - Newly Acquired Organizations (90 days).

.13 If liability insurance is written under the new simplified form - Commer-

cial General Liability, the above listed coverages shall be included.

.14 If the General Liability coverages are provided by a Commercial General Liability Policy on a claims-made basis, the policy date or retroactive date shall predate the Contract; the termination date of the policy shall be no earlier than the termination date of coverages required to be maintained after final payment, certified in accordance with Section 9.10.2, and an extended period endorsement "Supplemental Tail," shall be purchased.

e. AIA Document A101 Exhibit A: Delete Article A.3.2.3 through A.3.2.12 and in its place, add the following Sections:

§ A.3.2.2 The insurance required by Section A.3.2.1 shall be written for not less than the following limits, or greater if required by law:

1. Worker's Compensation:

- a. State: Statutory.
- b. Applicable Federal (e.g., Longshoremen's): Statutory.
- c. Employer's Liability:

\$ 500,000.00 Per Accident.
\$ 500,000.00 Disease, Policy Limit.
\$ 500,000.00 Disease, Each Employee.

2A. If written under Comprehensive General Liability Policy Form (including sub-lines specified in Section 11.1.1.8):

1. Bodily Injury:

\$1,000,000.00 Each Occurrence.
\$1,000,000.00 Aggregate.

2. Property Damage:

\$1,000,000.00 Each Occurrence.
\$1,000,000.00 Aggregate.

3. Bodily Injury and Property Damage combined:

\$1,000,000.00 Each Occurrence.
\$1,000,000.00 Aggregate.

4. Personal Injury:

\$1,000,000.00 Aggregate.

2B. If written under Commercial General Liability Policy Form:

\$1,000,000.00 General Aggregate.
\$1,000,000.00 Products Completed Operations Aggregate.
\$1,000,000.00 Personal and Advertising Injury.

\$1,000,000.00 Each Occurrence.
\$ 50,000.00 Fire Damage (any one fire).
\$ 5,000.00 Medical Expense (any one person).

3. Automobile Liability (including owned, non-owned and hired vehicles):

a. Bodily Injury:

\$1,000,000.00 Per Person.
\$1,000,000.00 Per Accident.

b. Property Damage:

\$1,000,000.00 Per Occurrence.

c. Bodily Injury and Property Damage Combined:

\$1,000,000.00 Per Occurrence.

4. Umbrella Excess Liability:

\$2,000,000.00 Over Primary Insurance.
\$ 10,000.00 Retention for Self-Insured Hazards Each Occurrence.

§ A.3.2.3 Automobile Liability coverage shall be written on a comprehensive automobile policy that includes coverage for owned, non-owned, and hired motor vehicles.

f. AIA Document A101 Exhibit A: At the end of Section A.3.2.5, delete the period and add: including private entities performing Work at the site and exempt from the coverage on account of number of employees or occupation, which entities shall maintain voluntary compensation coverage at the same limits specified for mandatory coverage for the duration of the Project.

2. The General Conditions for the Project are AIA Document A201-2017 "General Conditions of the Contract for Construction."
3. The Supplementary Conditions for Project are per Section 007300.

ADMINISTRATIVE FORMS

- B. Administrative Forms: Additional administrative forms are specified in Division 01 General Requirements.
- C. Copies of AIA standard forms may be obtained from the American Institute of Architects; <https://www.aiacontractdocs.org>; (800) 942-7732.
- D. Preconstruction Forms:
 - 1. Form of Performance Bond and Labor and Material Bond: AIA Document A312, "Performance Bond" and AIA Document A312, "Payment Bond."
 - 2. Form of Certificate of Insurance: AIA Document G715-2017, "Supplemental Attachment for ACORD Certificate of Insurance 25."
- E. Information and Modification Forms:
 - 1. Form for Requests for Information (RFIs): AIA Document G716, "Request for Information (RFI).
 - 2. Form of Request for Proposal: AIA Document G709, "Proposal Request."
 - 3. Change Order Form: AIA Document G701, "Change Order."
 - 4. Form of Architect's Memorandum for Minor Changes in the Work: AIA Document G710, "Architect's Supplemental Instructions."
 - 5. Form of Change Directive: AIA Document G714, "Construction Change Directive."
- F. Payment Forms:
 - 1. Schedule of Values Form: AIA Document G703CW, "Continuation Sheet."
 - 2. Payment Application: AIA Document G702/G703CW, "Application and Certificate for Payment" and "Continuation Sheet."
 - 3. Form of Contractor's Affidavit: AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 - 4. Form of Affidavit of Release of Liens: AIA Document G706A, "Contractor's Affidavit of Release of Liens".
 - 5. Form of Consent of Surety: AIA Document G707, "Consent of Surety to Final Payment."

END OF DOCUMENT 006000

SECTION 007200 – GENERAL CONDITIONS

PART 1 - GENERAL

1.1 THE PROJECT

- A. Title: Maine West Synthetic Turf Improvements
A/E Project No. 240173
- B. Owner: Maine Township High School District 207
1177 South Dee Road
Park Ridge, IL 60068
- C. Architect: Wight & Company
2500 North Frontage Road
Darien, Illinois 60561

1.2 GENERAL SCOPE OF WORK

- A. The Work that is to be performed under the Contract for this Project consists of furnishing all the materials, equipment, supplies, labor and transportation which is required to complete the Work described by the Contract Documents titled as above. All in strict accordance with the Contract Documents and whatever other documents are issued by the Architect in amplification or clarification during the prosecution of the work.

1.3 GENERAL CONDITIONS

- A. This Project will be governed by the American Institute of Architects General Conditions, AIA Document Number A201, 2017 edition as amended and bound in this Project Manual. The "General Conditions" referred to throughout these Bidding Documents shall mean the above two documents taken together.
- B. Amended AIA Document A201 and Exhibit A as modified follows immediately after this Section.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 007200

SECTION 007300 - SUPPLEMENTARY CONDITIONS

GENERAL

The following supplements modify AIA Document A201-2017, General Conditions of the Contract for Construction. Where a portion of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

ARTICLE 1 - GENERAL PROVISIONS

§ 1.1 BASIC DEFINITIONS

Change Section 1.1.1 to read:

§ 1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Advertisement or Invitation to Bid, Instruction to Bidders, Bid Form, the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is a (1) a written amendment of the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the work issued by the Architect.

§ 1.2 EXECUTION, CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

Add the following Section 1.2.1.2:

§ 1.2.1.2 In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities:

- .1 Modifications.
- .2 The Agreement.
- .3 Addenda, with those of later date having precedence over those of earlier date.
- .4 The Supplementary Conditions.
- .5 The General Conditions of the Contract for Construction.
- .6 Division 01 of the Specifications.
- .7 Drawings and Division 02 to 49 of the Specifications.
- .8 Other documents specifically enumerated in the Agreement as part of the Contract Documents.

In the case of conflicts or discrepancies between Drawings and Specifications or within or among the Contract Documents and not clarified by Addendum, the better quality or greater quantity of work shall be provided in accordance with the Architect's interpretation. Large-scale drawings shall take precedence over small-scale drawings; figured dimensions on the Drawings over scaled dimensions and noted materials over graphic representatives.

ARTICLE 3 - CONTRACTOR

§ 3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

Add the following Sections:

§ 3.2.2.1 The exactness of grades, elevations, dimensions, or locations given on any drawings issued by the Architect or the work installed by other contractors, is not guaranteed by the Architect or Owner.

§ 3.2.2.2 The Contractor shall, therefore, satisfy itself as to the accuracy of all grades, elevations, dimensions and locations. In all cases of interconnection of the Contractor's work with existing or other work, Contractor shall verify at the site all dimensions relating to such existing or other work. Any errors due to the Contractor's failure to so verify all such grades, elevations, locations or dimensions shall be promptly rectified by the Contractor without extra cost to the Owner.

§ 3.2.2.3 All employees of contractor, or employees of subcontractors if applicable, servicing the School District and being present in any school of the School District for two or more consecutive days shall be subject to a fingerprint-based criminal history records check and online database check pursuant to Illinois Statute 105 ILCS 5/10-21.9, shall not have been convicted of a prohibited offense and shall be confirmed by Contractor as not being listed on the Illinois Sex Offender Registry or the Illinois Murderer and Violent Offender Against Youth Registry. Contractor shall initiate such a records check prior to the employee's first day of assignment at the School District and shall submit its employees to the School District's fingerprint process. The cost of such checks, if any, shall be Contractor's and School District shall be entitled to receive a copy of the results. The School District reserves the final discretion to determine the assignment of the Contractor's employee to the School District following its receipt of the criminal history report.

§ 3.2.2.4 Faith's Law: Contractor certifies that prior to sending any employee to the premises for more than a single day, Contractor will have complied with all employment history review and other obligations of Illinois Statute 105 ILCS 5/22-94. Upon receipt of an employment history reports from the employee or former employer, Contractor shall disclose all reports, records, information and determinations related to Section 22-94 employment history review for each of its employees or independent contractors to the School District.

§ 3.4 LABOR AND MATERIALS

Add the following Section:

§ 3.4.4 The Contractor and each subcontractor shall pay not less than the general prevailing rate of hourly wages for work of a similar character in the locality in which the work is performed and not less than general prevailing rate of hourly wages for legal holidays and overtime work in the performance of work under this Contract, as established by the Illinois Department of Labor, pursuant to the Prevailing Wage Act, 820 ILCS 130/0.01, et. seq. Pursuant to the Prevailing Wage Act, the Contractor and

each subcontractor shall keep an accurate record showing the names and occupation of all laborers, workers and mechanics employed by them, and also showing the actual hourly wages paid to each such individual, which record shall be open at all reasonable hours to inspection by the Owner, its officers and agents, and to agents of the Illinois Department of Labor. The Contractor and each subcontractor hereby agree, jointly and severally, to defend, indemnify and hold harmless the owner from any and all claims, demands, liens or suits of any kind or nature whatsoever (including suits for injunctive relief) by the Illinois Department of Labor under the Illinois Prevailing Wage Act, 820 ILCS 130/0.01, et. seq., or by any laborer, worker or mechanic employed by the Contractor or the subcontractor who alleges that he/she has been paid for his services in a sum less than prevailing wage rates required by Illinois law. The Owner agrees to notify the Contractor or subcontractor of the pendency of any such claim, demand, lien or suit. The current Prevailing Wage Rates are included in these specifications as Exhibit C for reference only. Contractor must pay prevailing wages in effect at time labor is performed.

§ 3.6 TAXES

Change Section 3.6 to read:

§ 3.6 The Owner is exempted by Section 3 of the Illinois Use Tax Act (Section 3, House Bill 1610, approved July 31, 1961, 35 ILCS 105/3 from paying any of the taxes imposed by the Act and Sales to Owner are exempt by Section 2, House Bill 1609, approved July 31, 1961, 35 ILCS 120/2) from any of the taxes imposed by the Act. The Department of Revenue of the State of Illinois under Rule No. 15, issued August 9, 1961, has declared that sales of materials to construction contractors for conversion into real estate for schools, governmental bodies, agencies and instrumentalities are not taxable retail sales.

ARTICLE 8 - TIME

§ 8.3 DELAYS AND EXTENSIONS OF TIME

Add the following Section:

8.3.2.1. Notwithstanding any other provision in the Contract Documents to the contrary, no claim for damage or any claim other than for extension of time as herein provided shall be made or asserted against the Owner by reason of any delays caused by the reasons herein above mentioned.

Section 8.3.3. Delete the term "either party" and replace it with "the Owner."

ARTICLE 9 - PAYMENTS AND COMPLETION

§ 9.3 APPLICATIONS FOR PAYMENT

Add the following Section 9.3.1.3:

9.3.1.3 Until substantial completion, the Owner shall pay 90 percent of the amount due the Contractor on account of progress payments.

§ 9.11 LIQUIDATED DAMAGES

Add the following Section 9.11.1:

9.11.1 For each and every calendar day the work or any portion thereof remains incomplete after the expiration of the time limit set in the Contract, or as extended by the Owner, the amount per calendar day indicated in the Supplementary Conditions will be deducted from the money due or to become due to the Contractor not as a penalty but as liquidated damages and added expense including administrative and inspection cost.

The amount agreed upon and established as liquidated damages is \$500.00 per calendar day.

ARTICLE 11 - INSURANCE AND BONDS

INSURANCE AND BONDS

Delete Section 11.1.2 and substitute the following:

§ 11.1.2 The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds may be obtained through the Contractor's usual source and the cost thereof shall be included in the Contract sum. The amount of each bond shall be equal to 100 percent of the Contract sum.

§ 11.1.2.1 The Contractor shall require the attorney-in-fact who executed the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

Add the following sentence to Section 11.1.4:

On the Certificate of Insurance, delete in the cancellation provision the following words, "Endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives."

§ 11.3 WAIVERS OF SUBROGATION

Add the following sentence: "The waiver of subrogation contained herein shall be effective as against all corporations or entities providing insurance coverage to or for the Project or any person or entity performing work on the Project, and the waiver includes, but is not limited to, insurance coverage provided by private sector insurers and self-insured contractors or corporations."

ARTICLE 13 - MISCELLANEOUS PROVISIONS

§ 13.5 INTEREST

Delete in its entirety. All references to interest payments throughout the Contract Documents are hereby voided.

Add the following Section 13.6:

§ 13.6 REGULATIONS

§ 13.6.1 The Contractor or subcontractor warrants that he/she is familiar with and he/she shall comply with Federal, State and local laws, statutes, ordinances, rules and regulations and the orders and decrees of any courts or administrative bodies or tribunals in any manner affecting the performance of the Contract including without limitation Workmen's Compensation Laws, minimum salary and wage statutes and regulations, laws with respect to permits and licenses and fees in connection therewith, laws regarding maximum working hours. No plea of misunderstanding or ignorance thereof will be considered.

13.6.1.1 Whenever required, the Contractor or subcontractor shall furnish the Architect with satisfactory proof of compliance with said Federal, State and local laws, statutes, ordinances, rules, regulations, orders and decrees.

13.6.2 Each contractor shall carefully examine the Occupational Safety and Health Act (OSHA) of 1970, published in May 1971, as issued by the Federal Register, and the specific regulations governing procedures, techniques, safety precautions, equipment design, and the configuration of the same as required under this Act and each contractor agrees as evidenced by his submission of a bid to comply with all terms of the Act and to perform and complete in a workmanlike manner all work required in full compliance with said Act.

13.6.3 Each bidder agrees as evidenced by his submission of a bid to comply with all terms of the Equal Employment Opportunity Clause of the Illinois Fair Employment Practices Commission.

ARTICLE 15 – CLAIMS AND DISPUTES

15.4 ARBITRATION

Delete Section 15.4 in its entirety. All references to “arbitration” throughout the Contract Documents are hereby voided.

END OF SECTION 007300

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Work covered by the Contract Documents.
 - 2. Type of the Contract.
 - 3. Work phases.
 - 4. Use of premises.
 - 5. Owner's occupancy requirements.
 - 6. Work restrictions.
 - 7. Specification formats and conventions.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification: Maine Township High School District 207
Maine East Track Improvements
 - 1. Project Location: 1755 S. Wolf Road, Des Plaines, Illinois 60018
- B. Owner:
 - 1. Owner's Representative: Mr. David Ulm, Director of Buildings and Grounds, 847-692-8029.
- C. Architect: Wight & Company, 2500 North Frontage Road, Darien, IL 60551
 - 1. Contact: Shawn Benson, 630-442-2887
- D. The Work consists of the following:
 - 1. Synthetic Turf Multi-use field, Concrete, asphalt, track surfacing, and misc. site work per plan documents for the Maine West Synthetic Turf Improvement project.

1.4 TYPE OF CONTRACT

- A. Project will be constructed under a GENERAL Construction Contract.

1.5 WORK PHASES

- A. The Work shall be conducted in one phase in the following order:
 1. Pre-Construction Meeting: To be determined.
 2. Start of Construction: March 16th, 2026.
 3. Final Completion: July 31st, 2026

1.6 USE OF PREMISES

- A. General: Contractor shall have limited use of premises for construction operations as indicated on Drawings by the Contract limits.
- B. Use of Site: Limit use of premises to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 1. Limits: Confine constructions operations to area of work and Owner designated staging area.
 2. Owner Occupancy: Allow for Owner occupancy of Project site and use by the public.
 3. Driveways and Entrances: Keep driveways, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Use of Existing Building: Maintain existing building in a weathertight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period.

1.7 OWNER'S OCCUPANCY REQUIREMENTS

- A. Full Owner Occupancy: Owner will occupy site and existing building during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits, unless otherwise indicated.

1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

1.8 WORK RESTRICTIONS

- A. 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 Owner not less than two days in advance of proposed utility interruptions.
 2. Do not proceed with utility interruptions without Owner's written permission.

1.9 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 2004 -division format and CSI/CSC's "MasterFormat" numbering system.
1. Section Identification: The Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.
 2. Division 01: Sections in Division 1 govern the execution of the Work of all Sections in the Specifications.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase,

MISCELLANEOUS PROVISIONS

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012100 – ALLOWANCES

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Allowances:
 - a. List of allowances to be included in contract sum.
 - b. Procedures for using allowance amounts.
 - c. Unit Price procedures and schedule.

1.2 ALLOWANCE LIST

- A. Owner's Construction Contingency Allowance: Allowance to be use as directed by Owner.
 - 1. \$250,000

1.4 SUBMITTALS

- A. Supporting Data: With applications for payment covering allowance work submit executed modification to the contract.
 - 1. For variations in lump sum cost, include invoices showing actual cost.
 - 2. For variations in unit cost, include invoices showing actual cost.
- B. Supporting Data: With applications for payment covering unit price work submit substantiated measurement of quantity installed or executed.

1.5 CONTRACT CONSIDERATIONS

- A. Allowances:
 - 1. Include in the contract sum all allowances defined in the contract documents.
 - 2. Include the costs of materials and equipment delivered to the site, including all required taxes, less applicable trade discounts.
 - 3. Related costs, including unloading, unpacking, handling at the site, installation, overhead, profit, and other expenses, shall not be included in the allowances unless otherwise indicated; the same shall apply when allowances are expended by subcontractors.
 - 4. Whenever actual costs differ from the allowance amount, the contract sum shall be adjusted by modification to the contract to reflect changes in the related costs which were included in the contract sum, as well as the difference between actual costs and the allowance.
 - 5. Contingency allowance is a lump sum for use only on the owner's instructions, intended to cover all costs for the work performed under the allowance.
 - a. Contractor's costs will be determined as specified for changes in the work.
 - 6. At substantial completion, if not sooner, the contract sum will be adjusted

by modification to the contract.

- B. Procedures for Modifications to the Contract: Procedures for submitting and handling modifications due to changes are specified elsewhere.

PART 2 - PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION 012100

SECTION 012500 – SUBSTITUTION 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. Section includes administrative and procedural requirements for substitutions.
- B. Related Sections:
 - 1. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
 - 2. Divisions 02 through 49 Sections for specific requirements and limitations for substitutions.

1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

1.4 SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use CSI Form 13.1A.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.

- b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

1.6 PROCEDURES

- A. Coordination: Modify or adjust affected work as necessary to integrate work of the approved substitutions.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Substitution request is fully documented and properly submitted.
 - c. Requested substitution will not adversely affect Contractor's construction schedule.
 - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - e. Requested substitution is compatible with other portions of the Work.
 - f. Requested substitution has been coordinated with other portions of the Work.
 - g. Requested substitution provides specified warranty.
 - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after the Notice of Award. Requests received after that time may be considered or rejected at discretion of Architect.
 - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied,

Architect will return requests without action, except to record noncompliance with these requirements:

- a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
- b. Requested substitution does not require extensive revisions to the Contract Documents.
- c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- d. Substitution request is fully documented and properly submitted.
- e. Requested substitution will not adversely affect Contractor's construction schedule.
- f. Requested substitution has received necessary approvals of authorities having jurisdiction.
- g. Requested substitution is compatible with other portions of the Work.
- h. Requested substitution has been coordinated with other portions of the Work.
- i. Requested substitution provides specified warranty.
- j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

SECTION 012600 - 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. Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
 - 1. Division 01 Section "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 5 days after receipt of Proposal Request, submit a detailed quotation of 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. Provide a detailed labor, material and equipment breakdown.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.

- c. Allow, for changes in the work other than that covered by Allowances, Alternates, or Unit Prices, an added percentage to compensate for the Contractor's profit margin, on the following basis:
 - 1) For work performed by the Contractor's own forces, 10 percent.
 - 2) For work performed by Subcontractors to the contractor, 5 percent.
 - 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.
- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect:
- 1. 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. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Allow, for changes in the work other than that covered by Allowances, Alternates, or Unit Prices, an added percentage to compensate for the Contractor's profit margin, on the following basis:
 - a. For work performed by the Contractor's own forces, 10 percent.
 - b. For work performed by Subcontractors to the contractor, 5 percent.
 - 5. 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.
 - 6. Comply with requirements in Division 01 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.

1.5 ADMINISTRATIVE CHANGE ORDERS

- A. Allowance Adjustment: See Division 01 Section "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.
- B. Unit-Price Adjustment: See Division 01 Section "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.

1.6 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor.

1.7 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

SECTION 012900 - PAYMENT 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 necessary to prepare and process Applications for Payment.
- B. Related Sections include the following:
 - 1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 2. Division 01 Section "Construction Progress Documentation" for administrative requirements governing preparation and submittal of Contractor's Construction Schedule and Submittals Schedule.

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittals Schedule.
 - c. Contractor's Construction Schedule.
 - 2. Submit the Schedule of Values to Architect at earliest possible date but no later than fourteen days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values.

1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of Architect.
 - c. Architect's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.

2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed.
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value.
 - 1) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.

3. Provide a breakdown of the Contract Sum, including differentiation of phases, in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. Include evidence of insurance or bonded warehousing if required.

6. Provide separate line items, including differentiation of phases, in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.

8. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment.
- C. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- D. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within five days after notification by Architect. One copy shall include waivers of lien and similar attachments if required.
 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- E. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
 1. Submit partial waivers on each item for amount requested, before deduction for retainage, on each item.
 2. When an application shows completion of an item, submit final or full waivers.
 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 4. Waiver Delays: Submit each Application for Payment with Contractor's waiver of mechanic's lien for construction period covered by the application.
 - a. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 5. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.

- F. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of Values.
 3. Contractor's Construction Schedule (preliminary if not final).
 4. Products list.
 5. Submittals Schedule (preliminary if not final).
 6. List of Contractor's staff assignments.
 7. List of Contractor's principal consultants.
 8. Copies of building permits.
 9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 10. Initial progress report.
 11. Report of preconstruction conference.
 12. Certificates of insurance and insurance policies.
 13. Performance and payment bonds.
 14. Data needed to acquire Owner's insurance.
 15. Initial settlement survey and damage report if required.
- G. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- H. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.
 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 6. AIA Document G707, "Consent of Surety to Final Payment."
 7. Evidence that claims have been settled.
 8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 9. Final, liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

- 1) END OF SECTION 012900

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

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. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General project coordination procedures.
 - 2. Conservation.
 - 3. Coordination Drawings.
 - 4. Administrative and supervisory personnel.
 - 5. Project meetings.
 - 6. Requests for Interpretation (RFIs).
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.
- C. Related Requirements:
 - 1. Division 01 Section "Construction Progress Documentation" for preparing and submitting the Contractor's Construction Schedule.
 - 2. Division 01 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 - 3. Division 01 Section "Closeout Procedures" for coordinating Contract closeout.

1.3 DEFINITIONS

- A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

1.4 COORDINATION

- A. Coordination: Coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.

- B. If necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's Construction Schedule.
 - 2. Preparation of the Schedule of Values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.
 - 7. Project closeout activities.
 - 8. Startup and adjustment of systems.

- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
 - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work.

1.5 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
 - 1. Indicate relationship of components shown on separate Shop Drawings.
 - 2. Indicate required installation sequences.

- B. Staff Names: Within 5 days of starting construction operations, submit a list of principal staff assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

1.6 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
 - 1. Include special personnel required for coordination of operations with other contractors.
- B. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
 - 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Coordinate and secure pre-approval from Architect for scheduled meeting dates and times.
 - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. Contract Documents.
 - b. Options.
 - c. Related Change Orders.
 - d. Purchases.
 - e. Deliveries.
 - f. Submittals.
 - g. Review of mockups.
 - h. Possible conflicts.
 - i. Compatibility problems.
 - j. Time schedules.
 - k. Weather limitations.
 - l. Manufacturer's written recommendations.
 - m. Warranty requirements.
 - n. Compatibility of materials.
 - o. Acceptability of substrates.
 - p. Temporary facilities and controls.
 - q. Space and access limitations.
 - r. Regulations of authorities having jurisdiction.
 - s. Testing and inspecting requirements.
 - t. Required performance results.
 - u. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements.
 4. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- C. Coordination Meetings: Project coordination meetings will be scheduled at regular intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work
 2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Combined Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - b. Schedule Updating: Revise Combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
 - c. Review present and future needs of each contractor present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Change Orders.
 3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

1.7 REQUESTS FOR INTERPRETATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
1. Project name.
 2. Date.
 3. Name of Contractor.
 4. Name of Architect.
 5. RFI number, numbered sequentially.
 6. Specification Section number and title and related paragraphs, as appropriate.
 7. Drawing number and detail references, as appropriate.
 8. Field dimensions and conditions, as appropriate.
 9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 10. Contractor's signature.
 11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
 - a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Software-Generated RFIs: Software-generated form with substantially the same content as indicated above.
1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow seven working days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Architect's actions on submittals.

- f. Incomplete RFIs or RFIs with numerous errors.
 - g. Requests for method and means to construct.
 - 2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.
 - 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
- F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

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. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Preliminary Construction Schedule.
 - 2. Contractor's Construction Schedule.
 - 3. Submittals Schedule.
 - 4. Daily construction reports.
 - 5. Material location reports.
 - 6. Field condition reports.
 - 7. Special reports.
 - 8. Construction photographs.
- B. Related Requirements:
 - 1. Division 01 Section "Payment Procedures" for submitting the Schedule of Values.
 - 2. Division 01 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes.
 - 3. Division 01 Section "Submittal Procedures" for submitting schedules and reports.
 - 4. Division 01 Section "Quality Requirements" for submitting a schedule of tests and inspections.
 - 5. Division 01 Section "Closeout Procedures" for submitting photographic negatives as Project Record Documents at Project closeout.

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
- B. Event: The starting or ending point of an activity.
- C. Float: The measure of leeway in starting and completing an activity.

1. Float is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the following activity.
 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- D. Major Area: A story of construction, a separate building, or a similar significant construction element.
- E. Milestone: A key or critical point in time for reference or measurement.

1.4 SUBMITTALS

- A. Qualification Data: For firms and persons specified in "Quality Assurance" article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- B. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:
1. Scheduled date for first submittal.
 2. Specification Section number and title.
 3. Submittal category (action or informational).
 4. Name of subcontractor.
 5. Description of the Work covered.
 6. Scheduled date for Architect's final release or approval.
- C. Contractor's Construction Schedule: Submit two printed copies of initial schedule.
- D. Daily Construction Reports: Submit one copy at weekly intervals.
- E. Material Location Reports: Submit one copy at weekly intervals.
- F. Field Condition Reports: Submit one copy at time of discovery of differing conditions.
- G. Special Reports: Submit one copy at time of unusual event.

1.5 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from parties involved.
2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Procedures: Comply with procedures contained in AGC's "Construction Planning & Scheduling."
- B. Time Frame: Extend schedule from date established for the Notice of Award to date of Substantial Completion.
 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
 1. Activity Duration: Define activities so no activity is longer than 30 days, unless specifically allowed by Architect.
 2. Procurement Activities: Include procurement process activities for long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
 4. Startup and Testing Time: Include not less than five days for startup and testing.
 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.
 1. Phasing: Arrange list of activities on schedule by phase.
 2. Work under More Than One Contract: Include a separate activity for each contract.
 3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
 4. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Division 01 Section "Summary." Delivery dates indicated stipulate the earliest possible delivery date.

5. Owner-Furnished Products: Include a separate activity for each product. Include delivery date indicated in Division 01 Section "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
6. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use of premises restrictions.
 - f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
7. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
 - a. Subcontract awards.
 - b. Submittals.
 - c. Purchases.
 - d. Mockups.
 - e. Fabrication.
 - f. Sample testing.
 - g. Deliveries.
 - h. Installation.
 - i. Tests and inspections.
 - j. Adjusting.
 - k. Curing.
 - l. Startup and placement into final use and operation.
8. Area Separations: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
 - a. Structural completion.
 - b. Permanent space enclosure.
 - c. Completion of mechanical installation.
 - d. Completion of electrical installation.
 - e. Substantial Completion.
- E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.
- F. Cost Correlation: At the head of schedule, provide a cost correlation line, indicating planned and actual costs. On the line, show dollar volume of the Work performed as of dates used for preparation of payment requests.
 1. Refer to Division 01 Section "Payment Procedures" for cost reporting and payment procedures.

- G. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis to demonstrate the effect of the proposed change on the overall project schedule.

2.2 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. List of separate contractors at Project site.
 - 3. Approximate count of personnel at Project site.
 - 4. High and low temperatures and general weather conditions.
 - 5. Accidents.
 - 6. Meetings and significant decisions.
 - 7. Unusual events (refer to special reports).
 - 8. Stoppages, delays, shortages, and losses.
 - 9. Meter readings and similar recordings.
 - 10. Emergency procedures.
 - 11. Orders and requests of authorities having jurisdiction.
 - 12. Change Orders received and implemented.
 - 13. Construction Change Directives received.
 - 14. Services connected and disconnected.
 - 15. Equipment or system tests and startups.
 - 16. Partial Completions and occupancies.
 - 17. Substantial Completions authorized.
- B. Material Location Reports: At weekly intervals, prepare a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.
- C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare a detailed report. Submit with a request for information on CSI Form 13.2A. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.3 SPECIAL REPORTS

- A. General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

SECTION 013300 - SUBMITTAL 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. Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.
- B. Related Requirements:
 - 1. Division 01 Section "Payment Procedures" for submitting Applications for Payment.
 - 2. Division 01 Section "Project Management and Coordination" for submitting Coordination Drawings.
 - 3. Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule and the Submittals Schedule and construction photographs.
 - 4. Division 01 Section "Quality Requirements" for submitting test and inspection reports and Delegated-Design Submittals and for erecting mockups.
 - 5. Division 01 Section "Closeout Procedures" for submitting warranties Project Record Documents and operation and maintenance manuals.
 - 6. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Architect's responsive action.
- B. Informational Submittals: Written information that does not require Architect's approval. Submittals may be rejected for not complying with requirements.

1.4 SUBMITTAL PROCEDURES

- A. General: Electronic copies of CAD Drawings of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals.

- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Submittals Schedule: Comply with requirements in Division 01 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.
- D. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal.
 - 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Concurrent Review: Where concurrent review of submittals by Architect's consultants, Owner, or other parties is required, allow 15 days for initial review of each submittal.
 - 3. Direct Transmittal to Consultant: Where the Contract Documents indicate that submittals may be transmitted directly to Architect's consultants, provide duplicate copy of transmittal to Architect. Submittal will be returned to Architect, before being returned to Contractor.
 - 4. If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 5. Allow 15 days for processing each resubmittal.
 - 6. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
- E. Identification: Place a permanent label or title block on each submittal for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space approximately 4 by 5 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
 - 3. Include the following information on label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.

- g. Name of manufacturer.
 - h. Unique identifier, including revision number.
 - i. Number and title of appropriate Specification Section.
 - j. Drawing number and detail references, as appropriate.
 - k. Location(s) where product is to be installed, as appropriate.
 - l. Other necessary identification.
- F. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals.
- G. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions of the Contract Documents, initial submittal may serve as final submittal.
- 1. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.
 - 2. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.
- H. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return submittals, without review, received from sources other than Contractor.
- 1. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements of the Contract Documents, including minor variations and limitations. Include the same label information as the related submittal.
 - 2. Include Contractor's certification stating that information submitted complies with requirements of the Contract Documents.
- I. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
- 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked "Approved" or "Approved as Noted".
- J. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- K. Use for Construction: Use only final submittals with mark indicating action taken by Architect in connection with construction.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
 - 1. Submit electronic submittals directly to extranet specifically established for Project.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.
 - c. Manufacturer's installation instructions.
 - d. Standard color charts.
 - e. Manufacturer's catalog cuts.
 - f. Wiring diagrams showing factory-installed wiring.
 - g. Printed performance curves.
 - h. Operational range diagrams.
 - i. Mill reports.
 - j. Standard product operating and maintenance manuals.
 - k. Compliance with recognized trade association standards.
 - l. Compliance with recognized testing agency standards.
 - m. Application of testing agency labels and seals.
 - n. Notation of coordination requirements.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shopwork manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Design calculations.
 - j. Compliance with specified standards.

- k. Notation of coordination requirements.
 - l. Notation of dimensions established by field measurement.
 - m. Relationship to adjoining construction clearly indicated.
 - n. Seal and signature of professional engineer if specified.
 - o. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 30 by 40 inches (750 by 1000 mm).
 3. Number of Copies: Submit three opaque copies of each submittal, unless copies are required for operation and maintenance manuals. Submit five copies where copies are required for operation and maintenance manuals. Architect will retain two copies; remainder will be returned.
- D. Coordination Drawings: Comply with requirements in Division 01 Section "Project Management and Coordination."
- E. Samples: Prepare physical units of materials or products, including the following:
 1. Comply with requirements in Division 01 Section "Quality Requirements" for mockups.
 2. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 3. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from the same material to be used for the Work, cured and finished in manner specified, and physically identical with the product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 4. Preparation: Mount, display, or package Samples in manner specified to facilitate review of qualities indicated. Prepare Samples to match Architect's sample where so indicated. Attach label on unexposed side that includes the following:
 - a. Generic description of Sample.
 - b. Product name or name of manufacturer.
 - c. Sample source.
 5. Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, provide the following:
 - a. Size limitations.
 - b. Compliance with recognized standards.
 - c. Availability.
 - d. Delivery time.

6. Submit Samples for review of kind, color, pattern, and texture for a final check of these characteristics with other elements and for a comparison of these characteristics between final submittal and actual component as delivered and installed.
 - a. If variation in color, pattern, texture, or other characteristic is inherent in the product represented by a Sample, submit at least three sets of paired units that show approximate limits of the variations.
 - b. Refer to individual Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
7. Number of Samples for Initial Selection: Submit two full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
8. Number of Samples for Verification: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project Record Sample.
 - a. Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
9. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- F. Product Schedule or List: Prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 1. Type of product. Include unique identifier for each product.
 2. Number and name of room or space.
 3. Location within room or space.
- G. Delegated-Design Submittal: Comply with requirements in Division 01 Section "Quality Requirements."
- H. Contractor's Construction Schedule: Comply with requirements in Division 01 Section "Construction Progress Documentation" for Architect's action.
- I. Submittals Schedule: Comply with requirements in Division 01 Section "Construction Progress Documentation."

- J. Application for Payment: Comply with requirements in Division 01 Section "Payment Procedures."
- K. Schedule of Values: Comply with requirements in Division 01 Section "Payment Procedures."

2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
 - 1. Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Architect will not return copies.
 - 2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - 3. Test and Inspection Reports: Comply with requirements in Division 01 Section "Quality Requirements."
- B. Contractor's Construction Schedule: Comply with requirements in Division 01 Section "Construction Progress Documentation."
- C. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- D. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.
- E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements and, where required, is authorized for this specific Project.
- G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.
- H. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements.
- I. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.

- J. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements.
- K. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- L. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements.
- M. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- N. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - 1. Name of evaluation organization.
 - 2. Date of evaluation.
 - 3. Time period when report is in effect.
 - 4. Product and manufacturers' names.
 - 5. Description of product.
 - 6. Test procedures and results.
 - 7. Limitations of use.
- O. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements in Division 01 Section "Operation and Maintenance Data."
- P. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- Q. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
 - 1. Preparation of substrates.
 - 2. Required substrate tolerances.
 - 3. Sequence of installation or erection.
 - 4. Required installation tolerances.

5. Required adjustments.
 6. Recommendations for cleaning and protection.
- R. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
1. Name, address, and telephone number of factory-authorized service representative making report.
 2. Statement on condition of substrates and their acceptability for installation of product.
 3. Statement that products at Project site comply with requirements.
 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 6. Statement whether conditions, products, and installation will affect warranty.
 7. Other required items indicated in individual Specification Sections.
- S. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- T. Material Safety Data Sheets: Submit information directly to Contractor. If submitted to Architect, Architect will not review this information but will return it with no action taken.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal

with an action stamp and will mark stamp appropriately to indicate action taken, as follows:

1. Approved
 2. "Approved as Noted"
 3. "Revise & Resubmit"
 4. "Rejected"
 5. "Not Reviewed"
 6. "Other"
- C. Informational Submittals: Architect will review each submittal and will not return it, or will reject and return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents will not be reviewed and may be discarded.

END OF SECTION 013300

SECTION 014000 - QUALITY REQUIREMENTS

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. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. Related Requirements:
 - 1. Division 01 Section "Construction Progress Documentation" for developing a schedule of required tests and inspections.
 - 2. Division 01 Section "Cutting and Patching" for repair and restoration of construction disturbed by testing and inspecting activities.
 - 3. Divisions 02 through 49 Sections for specific test and inspection requirements.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction complies with requirements. Services do not include contract enforcement activities performed by Architect.

- C. Mockups: Full-size, physical example assemblies to illustrate finishes and materials. Mockups are used to verify selections made under Sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Mockups establish the standard by which the Work will be judged.
- D. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

1.4 REGULATORY REQUIREMENTS

- A. Contractor shall be familiar with all applicable regulations affecting the work and shall advise the Architect of any contract requirements which would deviate from such regulations.

1.5 SUBMITTALS

- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Description of test and inspection.
 - 3. Identification of applicable standards.
 - 4. Identification of test and inspection methods.
 - 5. Number of tests and inspections required.
 - 6. Time schedule or time span for tests and inspections.
 - 7. Entity responsible for performing tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.
- C. Reports: Prepare and submit certified written reports that include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Ambient conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and reinspecting.

- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 QUALITY ASSURANCE

- A. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- B. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- C. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- D. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirement for specialists shall not supersede building codes and similar regulations governing the Work, nor interfere with local trade-union jurisdictional settlements and similar conventions.
- G. Testing Agency Qualifications: An agency with the experience and capability to conduct testing and inspecting indicated, as documented by ASTM E 548, and that specializes in types of tests and inspections to be performed.
- H. Preconstruction Testing: Testing agency shall perform preconstruction testing for compliance with specified requirements for performance and test methods.
 - 1. Contractor Responsibilities: include the following:

- a. Provide test specimens and assemblies representative of proposed materials and construction. Provide sizes and configurations of assemblies to adequately demonstrate capability of product to comply with performance requirements.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Fabricate and install test assemblies using installers who will perform the same tasks for Project.
 - d. When testing is complete, remove assemblies; do not reuse materials on Project.
2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect.
 2. Notify Architect seven days in advance of dates and times when mockups will be constructed.
 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 4. Obtain Architect's approval of mockups before starting work, fabrication, or construction.
 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 6. Demolish and remove mockups when directed, unless otherwise indicated.

1.7 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of the types of testing and inspecting they are engaged to perform.
 2. Payment for these services will be made from testing and inspecting allowances, as authorized by Change Orders.
 3. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Unless otherwise indicated, provide quality-control services specified and required by authorities having jurisdiction.

1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ the same entity engaged by Owner, unless agreed to in writing by Owner.
 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Special Tests and Inspections: Owner will engage a testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner.
1. Testing agency will notify Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 2. Testing agency will submit a certified written report of each test, inspection, and similar quality-control service to Architect, with copy to Contractor and to authorities having jurisdiction.
 3. Testing agency will submit a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 4. Testing agency will interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 5. Testing agency will retest and reinspect corrected work.
- D. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing.
- E. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that revised or replaced Work that failed to comply with requirements established by the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 3. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.

4. Do not release, revoke, alter, or increase requirements of the Contract Documents or approve or accept any portion of the Work.
 5. Do not perform any duties of Contractor.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field-curing of test samples.
 5. Delivery of samples to testing agencies.
 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Submit schedule within 20 days of date established for the Notice to Proceed.
1. Distribution: Distribute schedule to Owner, Architect, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Prepare a record of tests and inspections. Include the following:
1. Date test or inspection was conducted.
 2. Description of the Work tested or inspected.
 3. Date test or inspection results were transmitted to Architect.
 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Sections of these Specifications. Restore patched areas and extend restoration into adjoining areas in a manner that eliminates evidence of patching.
 - 2. Comply with the Contract Document requirements for Division 01 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 017300 - EXECUTION REQUIREMENTS

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. Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. General installation of products.
 - 2. Coordination of Owner-installed products.
 - 3. Progress cleaning.
 - 4. Starting and adjusting.
 - 5. Protection of installed construction.
 - 6. Correction of the Work.
- B. Related Requirements:
 - 1. Division 01 Section "Project Management and Coordination" for procedures for coordinating field engineering with other construction activities.
 - 2. Division 01 Section "Submittal Procedures" for submitting surveys.
 - 3. 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.

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. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 3. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 4. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 5. 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 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 Architect not less than seven days in advance of proposed utility interruptions.
 2. Do not proceed with utility interruptions without Architect's written permission.
- B. 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.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

- D. 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 Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.3 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.
 - 4. Maintain minimum headroom clearance of 8 feet in spaces without a suspended ceiling.
- 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 Architect.
 - 2. Allow for building movement, including thermal expansion and contraction.
- 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.

3.4 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. 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.

3.5 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where other contracts 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.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Cutting and Patching: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.
 - 1. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing materials. Restore damaged pipe covering to its original condition.
- H. 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.

- I. 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.
- J. 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.
- K. 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.

3.6 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. 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 01 Section "Quality Requirements."

3.7 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.

3.8 Comply with manufacturer's written instructions for temperature and relative humidity.

3.9 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 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. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

SECTION 017400 – CLEANING AND WASTE MANAGEMENT

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. Section Includes: Furnish all labor, tools, materials, equipment and supervision required for, or incidental to, cleaning as indicated on the Drawings and specified herein.
- B. Related Requirements:
 - 1. Respective Specification Section for cleaning for specific products of work.
- C. Maintain premises and public properties free from accumulation of waste, debris and rubbish caused by construction operations.
- D. At completion of work, remove all waste materials, rubbish, tools, equipment, machinery, and surplus materials from areas of work and clean all visible surfaces; leave project clean and ready for occupancy.

1.3 SAFETY REQUIREMENTS

- A. Standards: Maintain project in accord with following safety and insurance standards.
 - 1. Occupational Safety and Health Administration (OSHA).
 - 2. Applicable codes and ordinances.
- B. Hazard Control:
 - 1. Store volatile wastes in covered metal containers and remove from premises daily.
 - 2. Prevent accumulation of wastes which create hazardous conditions.
 - 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with Federal, State and local ordinances and anti-pollution laws.
 - 1. Do not burn or bury rubbish and waste materials on project site.
 - 2. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary sewer drains.
 - 3. Do not dispose of wastes into streams or waterways.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Select and use all cleaning materials and equipment with care to avoid scratching, marring, defacing, staining or discoloring surfaces cleaned.
- B. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.1 DURING CONSTRUCTION

- A. Contractor shall provide and maintain at a location approved by the Owner, suitable trash and disposal bins for the collection of trash and debris. He shall empty said bins and remove accumulated debris from the project site as required or directed by the Architect. All sub-contractors at all times shall keep the premises free from accumulation of waste materials and rubbish caused by his operations. The contractors and all subcontractors shall deposit waste materials and rubbish collected during daily clean-up in trash disposal bins as described above.
- B. Dry clean (vacuum and broom) the work area each room after work is complete in that room.
- C. If Contractors fail to accomplish the provisions of this Article, the Owner will do the work and backcharge the Contractor at fault. Such charge shall be a direct lien against issue of final certificates of payment and final payment.
- D. Execute cleaning to ensure that building(s), grounds and public properties are maintained free from accumulations of waste materials and rubbish.
- E. At the end of each day's work, clean site and public properties and dispose of waste materials, debris and rubbish. Each room shall be left in a condition that permits the room's immediate use for its designed purpose.
- F. Remove waste materials, debris and rubbish from site and legally dispose of at a public or private dumping areas off Owner's property.
- G. Handle materials in a controlled manner with as few handlings as possible. Do not drop or throw materials from heights.
- H. Besides the general broom and vacuum cleaning, the contractor shall do the following special cleaning at completion of work.
- I. Removing of all temporary protection: Contractor shall remove all temporary protections and leave site in its original condition.
- J. Repair, patch and restore marred surfaces to specified finish, to match adjacent surfaces.

END OF SECTION 017400

SECTION 017700 - 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. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Project Record Documents.
 - 3. Maintenance Manuals.
 - 4. Warranties.
 - 5. Final cleaning.
 - 6. Instruction of Owner's personnel.
- B. Related Requirements:
 - 1. Division 01 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
 - 2. Division 01 Section "Execution Requirements" for progress cleaning of Project site.
 - 3. Divisions 01 through 49 Sections for specific closeout requirements for products of those Sections.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.

5. Prepare and submit Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
7. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
8. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
9. Complete final cleaning requirements, including touchup painting.
10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

1.4 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:

1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report and warranty.
5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training videotapes.

B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Architect and Construction Manager.
 - d. Name of Contractor.
 - e. Page number.

1.6 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Architect's and Construction Manager's reference during normal working hours.
- B. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
 1. Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
 - b. Accurately record information in an understandable drawing technique.
 - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - d. Mark Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Drawings.
 2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.

3. Mark important additional information that was either shown schematically or omitted from original Drawings.
 4. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
 5. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
- C. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Note related Change Orders, Record Drawings, and Product Data, where applicable.
- D. Record Product Data: Submit one copy of each Product Data submittal. Mark one set to indicate the actual product installation where installation varies substantially from that indicated in Product Data.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 3. Note related Change Orders, Record Drawings, and Record Specifications, where applicable.
- E. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- 1.7 MAINTENANCE MANUALS
- A. Assemble a complete set of operation and maintenance data indicating the operation and maintenance of each system, subsystem, and piece of equipment not part of a system. Include operation and maintenance data required in individual Specification Sections and as follows:
1. Maintenance Data:
 - a. Manufacturer's information, including list of spare parts.
 - b. Name, address, and telephone number of Installer or supplier.
 - c. Maintenance procedures.

- d. Maintenance and service schedules for preventive and routine maintenance.
 - e. Maintenance record forms.
 - f. Sources of spare parts and maintenance materials.
 - g. Copies of maintenance service agreements.
 - h. Copies of warranties and bonds.
- B. Organize maintenance manuals into suitable sets of manageable size. Bind and index data in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, with pocket inside the covers to receive folded oversized sheets. Identify each binder on front and spine with the printed title "MAINTENANCE MANUAL," Project name, and subject matter of contents.

1.8 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Partial Occupancy: Submit properly executed warranties within fifteen days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- D. 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 (115-by-280-mm) paper.
- 1. 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.
 - 2. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- E. 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 FINAL CLEANING

- A. General: Provide final cleaning. 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. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - d. Remove snow and ice to provide safe access to building.
 - e. Clean exposed exterior and interior 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.
 - f. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - g. Sweep concrete floors broom clean in unoccupied spaces.
 - h. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
 - i. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - j. Remove labels that are not permanent.
 - k. 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.
 - l. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.

- m. Replace parts subject to unusual operating conditions.
 - n. Clean ducts, blowers, and coils if units were operated without filters during construction.
 - o. 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.
 - p. 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.

3.2 INSTRUCTION OF OWNER'S PERSONNEL

- A. 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 philosophy.
 - 2. Review of documentation.
 - 3. Maintenance.
 - 4. Repair.

END OF SECTION 017700

SECTION 017839 - PROJECT RECORD DOCUMENTS

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 Project Record Documents, including the following:
 - 1. Record Drawings.
- B. Related Sections include the following:
 - 1. Division 01 Section "Closeout Procedures" for general closeout procedures.
 - 2. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 3. Divisions 02 through 48 Sections for specific requirements for Project Record Documents of the Work in those Sections.

1.3 SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set of marked-up Record Prints.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.
 - 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an understandable drawing technique.

- c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. See Civil Drawings for Additional requirements including signed & sealed As-Built Record Documents
 - b. Dimensional changes to Drawings.
 - c. Revisions to details shown on Drawings.
 - d. Depths of foundations below first floor.
 - e. Locations and depths of underground utilities.
 - f. Revisions to routing of piping and conduits.
 - g. Revisions to electrical circuitry.
 - h. Actual equipment locations.
 - i. Duct size and routing.
 - j. Locations of concealed internal utilities.
 - k. Changes made by Change Order or Construction Change Directive.
 - l. Changes made following Architect's written orders.
 - m. Details not on the original Contract Drawings.
 - n. Field records for variable and concealed conditions.
 - o. Record information on the Work that is shown only schematically.
 3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 2. Provide three paper sets of Record Drawings for the Owner. Provide three USB Flash Drives containing scans of all Record Drawings, two for the Owner and one for the Architect.
 3. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."

- d. Name of Architect.
- e. Name of Contractor.

2.2 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents: Store Record Documents in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's and Construction Manager's reference during normal working hours.

END OF SECTION 017839

SECTION 024113.13 – PAVING REMOVAL

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. All labor and equipment to remove the existing bituminous concrete pavement, concrete drives, slabs, pavement pads, curbs, gutters, brick or block walls and sidewalk as required by the contract documents.

1.2 RELATED DOCUMENTS

- A. Specified Elsewhere:
 - 1. 024113.15 – Saw Cutting Pavement
 - 2. 312000 – Earth Moving
 - 3. 321216 – Asphalt Paving
 - 4. 321383 – Portland Cement Concrete Sidewalks
 - 5. 321613 – Concrete Curbs and Gutters

1.3 QUALITY ASSURANCE

- A. The following documents shall provide the standards for construction within the Darien unless otherwise stated in these specifications. In the event of conflict between these specifications and the existing City codes, the City codes will prevail.
 - 1. The Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition, and the latest editions of Supplemental Specifications and Recurring Special Provisions (herein referred to as the “Standard IDOT Specifications”).
- B. Exceptions: All references in the Illinois Department of Transportation Standard Specifications to method of measurements and compensation shall not apply.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

- A. The material removed shall be disposed of legally by the Contractor away from the site.
- B. Sawing to a full depth of pavement, before removal operations begin, will be required for any joint between surface to be removed and surface to remain.
- C. The Trade Contractor shall use extreme care when removing material adjacent to existing construction. Any damage to the brick walls, foundation, or any other building feature or to adjacent pavement, curbs or sidewalks, shall be repaired by the Contractor to the satisfaction of the Construction Manager without additional compensation.

END OF SECTION 024113.13

SECTION 024113.15 – SAW CUTTING PAVEMENT

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. This item consists of sawing joints in the pavements in order to separate that portion to be removed from that which will remain in place. This work must be performed at the locations specified on the plans and as otherwise designated by the Engineer.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, including but not limited to:
 - 1. 321206 – Asphalt Paving
 - 2. 321613 – Concrete Curbs and Gutters
 - 3. 321383 – Portland Cement Concrete Sidewalks
- B. Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, latest revision, along with the Supplemental Specifications and Recurring Special Provisions (herein referred to as the “Standard IDOT Specification”). (Method of Measurement and Basis of Payment shall not apply.)

1.3 QUALITY ASSURANCE

- A. The following documents shall provide the standards for construction within the Darien unless otherwise stated in these specifications. In the event of conflict between these specifications and the existing City codes, the City codes will prevail.
 - 1. Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, latest revision, along with the Supplemental Specifications and Recurring Special Provisions. (Method of Measurement and Basis of Payment shall not apply.)
- B. Exceptions: All references in the Illinois Department of Transportation Standard Specifications to method of measurements and compensation shall not apply.

1.4 SUMMARY

- A. The Contractor must saw a full depth vertical cut at locations where pavement removal is required as noted on the plans. It is the responsibility of the Contractor to determine the composition and thickness of the existing pavement, and the extent to which it is reinforced. No additional compensation will be allowed because of variations from the assumed thickness or from thickness shown on the plans or for variations in the amount of reinforcement. Should the Contractor deface the edge, a new sawed joint must be constructed and any additional work, including removal and replacement, will be done at the Contractor's expense.
- B. The Contractor must make all saw cuts with a concrete sawing machine meeting the approval of the Construction Manager.

END OF SECTION 024113.15

SECTION 311000 – SITE CLEARING

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. All labor, materials, and equipment required to complete site clearing and disposal shown on the drawings.

1.2 RELATED DOCUMENTS

- A. Specified elsewhere within these specifications:
 - 1. 312000 – Earth Moving

1.3 QUALITY ASSURANCE

- A. Unless specifically stated in the specifications, the following documents shall provide general requirements and covenants applicable to construction within the Darien. In the event of conflict between the contents of this document and the existing City codes, the former will supercede the latter and/or the decision of the City will prevail.
 - 1. Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, latest revision, along with the Supplemental Specifications and Recurring Special Provisions. (Method of Measurement and Basis of Payment shall not apply.)

1.4 JOB CONDITIONS

- A. Restore damaged improvements to their specified condition acceptable to the Construction Manager. When required by the drawings, control monuments shall be re-established.
- B. Provide protection of property adjoining the project and limit work to the construction area delineated by the silt fence as shown on the drawings.
- C. Materials removed from the site shall be disposed of off the site in a legal manner.

1.5 JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE)

- A. The Trade Contractor is responsible for calling JULIE at 1-800-892-0123 at least 48 hours prior to beginning any excavation. The Trade Contractor shall notify the Construction Manager with the JULIE dig number at least 48 hours prior to beginning any excavation. The Trade Contractor is responsible for maintaining utility marking throughout construction.

PART 2 - PRODUCTS

2.1 EQUIPMENT

- A. Equipment shall be at the option of the Trade Contractor within the limits of the

"Construction Requirements" of Section 201 of the Standard Specifications.

2.2 DISPOSAL

- A. Disposal of surplus materials shall be in accordance with Article 202.03 of the Standard Specifications.
- B. Disposal of unstable and unsuitable material shall be off the site in a legal manner at a location provided by the Trade Contractor. Unsuitable and unstable material includes but is not limited to rocks, trees, stumps, and soil not suitable for compaction.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine the area where and conditions under which clearing and site preparation are to be performed. Notify Construction Manager in writing of conditions detrimental to proper and timely completion of the work.

3.2 SITE CLEARING

- A. Clearing and site preparation shall be performed in accordance with Section 201 of the Standard Specifications.
 - 1. Remove vegetation, improvements or obstructions interfering with installation of new construction.
 - 2. Fill depressions caused by clearing operations with satisfactory soil material, unless further excavation or earthwork is indicated. Place fill material in horizontal layers not exceeding six inches loose depth, and thoroughly compact to specified density.
 - 3. Existing roadways and drainage structures that are to remain shall be protected and maintained in their present condition. All items damaged shall be repaired at the Trade Contractor's expense.

END OF SECTION 311000

SECTION 312333 – TRENCHING AND BACKFILLING

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. All labor, materials, and equipment required for satisfactory trenching, backfilling, compaction and removal of excess excavation for sanitary sewers, storm sewers and water main. Electrical and communications conduits covered elsewhere.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
 - 1. 311000 – Site Clearing
 - 2. 312000 – Earth Moving
 - 3. 321613 – Concrete Curbs and Gutters
 - 4. 334000 – Storm Drainage Utilities
- B. Work under this Section shall be done in accordance with the applicable provisions of the “Code of Ordinances”, latest edition, as adopted by the Municipality.

1.3 QUALITY ASSURANCE

- A. Unless specifically stated in the specifications, the following documents shall provide general requirements and covenants applicable to construction within the Municipality. In the event of conflict between the existing local municipality codes and the contents of this document, the former will supersede the latter and/or the decision of the local municipality will prevail.
 - 1. Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, latest revision, along with the Supplemental Specifications and Recurring Special Provisions. (Method of Measurement and Basis of Payment shall not apply.)
 - 2. I.S.P.E., Consulting Engineers Council of Illinois, et. al., Standard Specifications for Water and Sewer Main Construction in Illinois, latest revision.

1.4 PROJECT RECORD DOCUMENTS

- A. Record the limits of Trench Backfill.

END OF SECTION 312333

SECTION 321216 – HOT MIX ASPHALT PAVING

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. All labor, materials, and equipment required to satisfactorily complete paving as shown on the plans.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, including but not limited to:
 - 1. 312000 – Earth Moving
- B. Work under this Section shall be done in accordance with the applicable provisions of the "Code of Ordinances", latest edition, as adopted by the City of Park Ridge.

1.3 QUALITY ASSURANCE

- A. Unless specifically stated in the specifications, the following documents shall provide general requirements and covenants applicable to construction within the City. In the event of conflict between the contents of this document and the existing City codes, the former will supercede the latter and/or the decision of the City will prevail.
 - 1. Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, latest revision, along with the Supplemental Specifications and Recurring Special Provisions. (Method of Measurement and Basis of Payment shall not apply.)
 - 2. I.S.P.E., Consulting Engineers Council of Illinois, et. al., Standard Specifications for Water and Sewer Main Construction in Illinois, latest revision.

1.4 SUMMARY

- A. This section includes provisions for IDOT Hot Mix Asphalt. Mix shall be IDOT approved design:

PAVEMENT: See Design Plan Documents for specific site details.

- 1. Base Course - 12" Aggregate Base (CA-6).
- 2. Binder Course – 2½" HMA Binder Course IL-19.0 N50.
- 3. Surface Course - 1½" HMA Surface Course IL-9.5 Mix D N50.

- B. Proofrolling of prepared base is included in Section 312000 – EARTH MOVING

1.5 SUBMITTALS

- A. Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections:
 - 1. Material Certificates: Provide copies of materials certificates signed by material producer and Trade Contractor, certifying that each material item complies with, or exceeds, specified requirements.

END OF SECTION 321216

SECTION 321383 – PCC SIDEWALKS

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. All labor, materials, and equipment required to complete in place the P.C. Concrete Sidewalk as indicated on the drawings, as hereinafter specified or as required to properly complete the WORK.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, including, but not limited to:
 - 1. 311000 – Site Clearing
 - 2. 312000 – Earth Moving
 - 3. 321216 – HMA Paving
 - 4. 321613 – Concrete Curbs and Gutters
- B. Work under this Section shall be done in accordance with the applicable provisions of the “Code of Ordinances”, latest edition, as adopted by the municipality.

1.3 QUALITY ASSURANCE

- A. Unless specifically stated in the specifications, the following documents shall provide general requirements and covenants applicable to construction within the City. In the event of conflict between the contents of this document and the existing City codes, the former will supercede the latter and/or the decision of the City will prevail.
 - 1. Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, latest revision, along with the Supplemental Specifications and Recurring Special Provisions. (Method of Measurement and Basis of Payment shall not apply.)
 - 2. I.S.P.E., Consulting Engineers Council of Illinois, et. al., Standard Specifications for Water and Sewer Main Construction in Illinois, latest revision.

PART 2 - EXECUTION

2.1 CONSTRUCTION

- A. Handicap ramps shall be constructed where shown on the plans and as per the latest Illinois Accessibility Code Standards.

END OF SECTION 321383

SECTION 321613 – CONCRETE CURBS AND GUTTERS

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. All labor, material, and equipment required to complete the construction of concrete curb and combination concrete curb and gutter as indicated on the drawings, as hereinafter specified; or as required to properly complete the WORK.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, including but not limited to:
 - 1. 311000 – Site Clearing
 - 2. 312000 – Earth Moving
- B. Work under this Section shall be done in accordance with the applicable provisions of the “Code of Ordinances”, latest edition, as adopted by the Darien, Illinois.

1.3 QUALITY ASSURANCE

- A. Unless specifically stated in the specifications, the following documents shall provide general requirements and covenants applicable to construction within the Darien. In the event of conflict between the existing City codes and the contents of this document , the former will supercede the latter and/or the decision of the City will prevail.
 - 1. Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, latest revision, along with the Supplemental Specifications and Recurring Special Provisions. (Method of Measurement and Basis of Payment shall not apply.)
 - 2. I.S.P.E., Consulting Engineers Council of Illinois, et. al., Standard Specifications for Water and Sewer Main Construction in Illinois, latest revision.

END OF SECTION 321613

SECTION 321813 – ARTIFICIAL GRASS FIELD

BASE PREPARATION

I. GENERAL

- A. Description: Base preparation shall meet all the specifications included herein the section and also meet selected artificial turf manufactures requirements and full project specifications.

Work included: Base Preparation for this project includes, but is not necessarily limited to:

1. Finished grading, shaping and compaction of aggregate base material within playing fields and other applicable project features.
2. Aggregate base preparation and compaction of playing fields per plan documents and specifications.

B. General Requirements

1. Dust Control

- Use all means necessary to control dust on and near the work site. If such dust is caused by the Contractor's operation during performance of work or if resulting from the condition in which the Contractor leaves the site.
- Thoroughly moisten all surfaces as required to prevent dust from being a nuisance to the public, neighbors, and concurrent performance of other work on the site.

2. Protection

- Use all means necessary to protect all materials of this Section before, during and after installation and to protect all objects designated to remain.
- In the event of damage, immediately make all repairs and replacement necessary to the approval of the Owner at no additional cost to the Owner.

C. Submittals

1. Aggregate base course sieve analysis.

D. Aggregate Base Material

1. Vulcan/McCook 210 or P210 product or approved equal.
Target density of 90 % min. of AASHTO T99 provides the following:
 - i. Permeability - a minimum of 28 ft/day (ASTM D2434);
 - ii. Stability - a minimum CBR of 20 (ASTM D1883);
 - iii. Durability - meets aggregate quality requirements for soundness, abrasion and deleterious materials in IDOT Specification 1004.01.
2. Coarse Aggregate Type CA7: Conform to IDOT requirements.

II. EXECUTION

A. General Requirements

1. Familiarization Prior to all work of this Section, become thoroughly familiar with the site, the site conditions, and all portions of the work following within this Section.
2. Finish line and grading
The Contractor will be responsible for initial, supplemental and replacement stakes, monuments, and elevation for completion of the work. All staking and layout shall be completed by a professional land surveyor. Final completion of the project and verification of conformance to the plans and specifications will be the responsibility of the Contractor.
3. Excess Material
All excess material resulting from earthwork operations shall be hauled off site and disposed of in an approved manner. (Haul excess material away and dispose of off-site.)

B. Preparation of Aggregate Base for Playing Fields: Installation of aggregate base should provide a close, evenly textured surface meeting the required tolerances.

1. Placement: The aggregate base should be placed in a manner that will produce an evenly graded mass to the depth specified. The material should be constructed in successive horizontal layers and spread by appropriate equipment and methods and should be thoroughly and uniformly compacted with a self-propelled roller to achieve the specified density. The material should be placed and distributed so that there will be no pockets of uniform size solid material. Any pockets resulting from segregation of the stone during installation should be reworked.
2. Compaction: The field base material should be thoroughly compacted to prevent any significant differential settlement across the area of synthetic turf surfacing. Typical minimum compaction levels are 95% Standard Proctor for the base materials. The appropriate moisture content must be maintained in the base materials to allow for optimal levels of compaction.
4. Finished Grade Planarity (surface tolerances): Irregularities in the surface of the base materials are typically reflected in the finished field surface. Therefore, it is important to install the base materials to controlled tolerances. Hollows and depressions, which may have developed during the process of compacting the base, should be filled with acceptable material and re-compacted. With base aggregate course laser grade to achieve the desired elevation to a tolerance of 1/4" over a 25-foot continuous span. With finishing aggregate course laser grade to achieve the desired elevation to a tolerance of 1/8" over a 25-foot continuous span.

ARTIFICIAL GRASS FIELD

I. GENERAL Description

Furnish all labor, materials, tools and equipment necessary to install artificial field turf as indicated on the plans and as specified herein. The installation of all new materials shall be performed in strict accordance with the manufacture's installation instructions and in accordance with all approved shop drawings. All manufactures/installers are required to provide a complete system including fine grading, artificial turf, alternate infill, and shock pad as indicated in the drawings and specified in the project manual.

II. REFERENCES

ASTM Standard Test Methods

FM P7825 – Approval Guide; Factory Mutual Research Corporation; current edition

D1577 – Standard Test Method for Linear Density of Textile Fiber

D5848 – Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Covering

D418 – Standard Test Method for Testing Pile Yarn Floor Covering Construction

D1338 – Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings

D1682 – Standard Method of Test for Breaking Load and Elongation of Textile Fabrics

D5034 – Standard Test Method of Breaking Strength and Elongation of Textile Fabrics
(Grab Test)

F1015 – Standard Test Method for Relative Abrasiveness of Synthetic Turf Playing Sur-
faces

D4491 – Standard Test Methods for Water Permeability of Geotextiles by Permittivity

D2859 – Standard Test Method for Ignition Characteristics of Finished Textile Floor
Covering Materials

F355 – Standard Test Method for Shock-Absorbing Properties of Playing Surfaces

F1936 – Standard Test Method for Shock-Absorbing Properties of North American
Football Field Playing Systems as Measured in the Field

F2765-09 – Standard Specification for Total Lead Content in Artificial Turf Fibers

D1557 – Test Method for Laboratory Compaction Characteristics of Soil Using Modified
Effort

III. QUALITY CONTROL

A. Manufacturer: Shall submit a list of ten (10) outdoor installations of comparable size, already constructed, of the specified system of turf and similar infill to be used on this project.

B. Installer: Shall submit a list of ten (10) outdoor installations of comparable size, already constructed, of the specified system of turf and similar infill to be used on this project.

C. Manufacturer/Installer must have been actively installing infilled artificial turf systems for a minimum of five years.

D. Installer shall be approved in writing by the turf Manufacturer and shall exhibit experience in the installation method to be used on the project.

- E. All field markings, layouts and materials shall comply with all current National Federation of High Schools and IHSA rules and standards for Soccer, Football, and Lacrosse as applicable.

IV. SUBMITTALS

- A. Submit the following with the Bid/Proposal:
 - 1. Artificial Turf, one sample of each color, approximately 12" x 12".
 - 2. Infill mix with proper mix ratio, one pound sample.
 - 3. Provide sample of seam.
 - 4. Full box mock sample for owner to evaluate with bid of proposed 2" turf and infill system along with shock pad sample.
 - 5. Manufacturer's Project References: List of 10 successfully completed projects of similar turf system and infill type and size within the last 5 years. Include project name, location, contact person and telephone number, type of turf, and quantity of turf installed.
 - 6. Installer's Project References: Submit list of 10 successfully completed projects similar in type and size within the last 5 years. Include project name, location, contact person and telephone number, type of turf, and quantity of turf installed.
 - 7. Test Reports: Submit certified test reports from qualified independent testing agency indicating results of the following tests on artificial turf:
 - a) Pile Height, Face Weight and Total Fabric Weight, ASTM D418 or D5848
 - b) Primary and Secondary Backing Weights, ASTM D418 or D5848
 - c) Tuft Bind, ASTM D1335
 - d) Grab Tear Strength, ASTM D1682 or D5034
 - e) Total Lead Content in Artificial Turf Fibers, ASTM F2765-09
 - 8. Actual or sample of Manufacturer's Warranty.
 - 9. Manufacturer's Certification that their system does not infringe on any other Manufacturer's Patents, patents allowed or patents pending.
 - 10. Certificate of Compliance: Submit manufacturer's certificate of compliance indicating materials comply with specified requirements.
 - 11. Provide Turf Manufacturer / Installer most recent audited company financial statements.
 - 12. Provide maintenance manual and guidelines regarding proposed turf system and infill.
 - 13. Additional items listed on the Bid Form.
- B. Shop Drawings: Prior to fabrication submit manufacturer's shop drawings, to scale with dimensions, including the following:
 - 1. Field Layout
 - 2. Field Marking Plan and details for the specified sport
 - 3. Roll/seaming layout.
 - 4. Methods of attachment, field openings and perimeter conditions.
 - 5. Detailed color renderings of field.
 - 6. Detailed End-Zone and center field logos, including color renderings for client approval.

- C. Prior to the beginning of installation, the manufacturer/installer of the artificial turf along with the general contractor shall inspect the sub-base surface planarity and compaction for the purpose of obtaining the manufacturer's warranty for finished synthetic turf system.
- D. Turf system must be installed over a turf-manufacturer approved shock pad meeting the G-max and HIC specifications.
- E. The installer shall have the dimensions of the field and locations for markings measured by a professional land surveyor to verify conformity to the specifications and applicable standards. A record of the finished field as built measurements shall be made.
- F. Prior to Final Acceptance, the Contractor shall submit to the Owner three (3) copies of the Maintenance Manuals, which will include all necessary instructions for the proper care and preventative maintenance of the artificial turf system, including painting and markings.

V. QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - 1. Must be experienced in the manufacturer and installation of artificial grass systems for at least five years with the same manufacturer, product, and company. This includes similar fiber, backing, the backing coating, infill and the installation method.
 - 2. Must have ten successfully completed projects similar in type and size of the proposed turf system and similar infill that have been installed within the last five years within the Midwest or comparable temperate climate.
- B. Installer Qualifications:
 - 1. Successful experience in installation of artificial turf of similar type to that specified, with a minimum of 10 projects completed within last 5 years
 - 2. The designated Supervisory Personnel on the project must be certified, in writing by the Turf Manufacturer, as competent in the installation of this material, including sewing seams and proper installation of the infill mixture. The installer supervisor shall have a minimum of 5 years' experience as either a construction manager or a supervisor of synthetic turf installations.
 - 3. The Manufacturer shall have a representative on site to certify the installation and warranty compliance.

VI. PERFORMANCE REQUIREMENTS

- A. Testing Requirements: Immediately following installation of the artificial turf field by the Contractor the field shall undergo the tests listed below. The initial tests shall be conducted by a qualified testing agent approved by the Owner and paid for by the contractor shall conduct the initial tests. All subsequent tests will be done at the Owner's expense. Timing of the tests will be at the Owner's discretion.

Dynamic Cushion Test (Gmax):

1. Test shall be based on ASTM F-355, Procedure A system.
2. Field shall have a Gmax value of 135 maximum upon installation.
3. Gmax value shall not exceed 165 for the duration of the warranty period.

Head Injury Criterion Test (HIC):

1. Test shall be based on ASTM F-355, Procedure E system and ASTM F1292.
2. Field shall have a HIC<850 maximum upon installation.
3. HIC value shall not exceed 1000 for the duration of the warranty period.

- B. The finished playing surface shall appear as mowed grass with no irregularities and shall provide excellent traction for conventional athletic shoes of all types. The finished surface shall resist abrasion and cutting from normal use. The system shall withstand continuous usages of all sport and brand activities in all weather conditions. The event of any visible tear, stretch, or any other performance abnormality shall warrant repair or replacement as specified in the warranty.
- C. Dimensional Stability: The artificial turf system shall be constructed so as to limit expansion and contraction to a maximum of 0.01% over the range of temperature and humidity exposure experienced in the Midwest.
- D. Wind Uplift: The artificial turf system must be capable of withstanding gusts or sustained winds or up to 80 mph without damage to the turf or distortion of the field markings.

VII. WARRANTY

- A. The bidder shall submit a single Manufacturer's Warranty, which guarantees the usability and playability of the artificial turf system for its intended use for a period of eight (8) years commencing with the date of Substantial Completion. Warranty for manufacturer's provided shock pad shall be for a minimum of sixteen (16) years. The warranty shall not be limited to the amount of usage and shall not be pro-rated. The manufacturer agrees to repair or replace components of artificial grass field turf that fail in materials or workmanship within specified warranty period.
- B. Failures include but are not limited to the following.
1. Stretching, tearing, and seam splitting.
 2. Deterioration of surface and other materials beyond normal weathering
 3. Artificial Grass Field Turf shall maintain an AST F 1936 G-max of less than 165 for the life of the warranty.
 4. Shock pad shall not suffer significant deterioration, splitting, and cracking.
- C. Manufacturer shall submit to Owner notification in writing that the field is added to annual policy coverage, guaranteeing warranty to Owner. Insurance policy shall be underwritten by an AM Best A-rated carrier and include the following values.
1. Provide pre-paid 8 year insured warranty, full coverage for eight (8) years

- from the date of Substantial Completion and final acceptance by owner. Provide pre-paid minimum 16 year insured warranty, full coverage for sixteen (16) years for the shock pad from the date of substantial completion.
2. Warrant materials and workmanship for the full warranty period.
 3. Must warrant that the materials installed meet or exceed the product specifications.
 4. Must be a Manufacturer's Warranty from a single source covering workmanships and all self-manufactured or procured materials.
 5. Shall cover 100 percent replacement value of total square footage installed.
 6. Policies that include self-insurance or self-retention clauses are not allowed.
 7. Policy shall not include any form of deductible amount.
 8. Sample policy shall be provided at time of bid to prove that policy is in force. Letters from agent or sample COI are not acceptable.
 9. Must guarantee the availability of replacement materials for the synthetic turf system installed for the full warranty period.
 10. Must warrant that the system will maintain a Lifetime G-Max as specified in PERFORMANCE REQUIREMENTS, for the life of the warranty period. If the maximum G-Max is exceeded, the Manufacturer will, at no cost to the Owner, adjust, reinstall, or replace the infill material and/or shock pad or any other mitigation to obtain an acceptable range.
 11. Must warrant that any covered defects encountered during the warranty period shall be repaired or replaced at no cost to the Owner.

VIII. ARTIFICIAL TURF SYSTEMS

- A. General: All turf systems below have been approved for bidding purposes. All other artificial turf systems other than the systems listed herein shall be approved by the Owner after reviewing the quality of the system being proposed. All alternate bids submitted will be reviewed and evaluated in accordance with the specifications, experience, references, etc. Prior approval by the engineer is not required to submit a bid. It is the responsibility of all bidders of the turf systems proposed, whether approved for bidding or not to be in compliance with bid specifications. Final evaluation of all submitted bids will be completed after the bidding process.
- B. Artificial Turf Systems: See Bid Plans for Alternate designs, layout, and field colors.
ALTERNATE 1 and 2 BID ARTIFICIAL TURF SYSTEM
 - A. FieldTurf Vertex Prime / yarn height: 2" / PureCob and Silica Sand infill with Shockbase Select Shock Pad.
Contact: Brian Smykowski, Phone: 773-569-1038
Email: Brian.Smykowski@FieldTurf.com
(ALTERNATE 1A AND 2A)
 - B. AstroTurf Rhino Blend / yarn height: 2" / BrockFill and Silica Sand infill, with Brock SP17 Pad.
Contact: Mark Staten, Phone: 517-927-8785
Email: mark@astroturfgreatlakes.com
(ALTERNATE 1B AND 2B)

- C. TenCate Midwest Allsport Ultra 45oz / yarn height: 2" / BrockFill and Silica Sand infill, with Brock SP17 Shock Pad.

Contact: Michael Fahey, Phone: 312-543-7864

Email: m.fahey@mwsts.com

(ALTERNATE 1C AND 2C)

- D. Shaw Legion / yarn height: 2" / BrockFill and Silica Sand infill, with Brock SP17 Shock Pad.

Contact: Erich Schoh, Phone: 612-772-5929

Email eric.schoh@shawinc.com

(ALTERNATE 1D AND 2D)

- E. Alternate turf system with appropriate pad, turf, and infill systems per manufacturer's specifications. To be approved and evaluated by engineer.

(ALTERNATE 1E AND 2E)

C. Materials

- A. Shall be tufted, parallel fibrillated slit film polyethylene and monofilament, grass-like fabric coated with a secondary backing of high-grade polyurethane. The fibers shall be tufted to a finished pile height of 2 inches. The artificial turf fabric shall be filled with an alternative infill that varies per ALTERNATE and shall meet the specifications. The artificial turf system shall have a shock pad per ALTERNATE and shall meet the specifications.
- B. All components and their installation method shall be designed and manufactured for use on outdoor athletic fields. The materials as hereinafter specified shall be able to withstand full climatic exposure in all climates, be resistant to insect infestation, rot fungus and mildew; to ultraviolet light and heat degradation, and shall have the basic characteristic of flow-through drainage, allowing free movement of surface runoff through the artificial turf fabric where such water may flow to the existing base and into the field drainage system.
- C. The finished artificial turf surface shall appear as mowed grass with no irregularities and shall afford excellent traction for conventional athletic shoes of all types. The finished surface shall resist abrasion and cutting from normal use. The system shall be suitable for football, soccer, Lacrosse, and recreational use.
- D. Polyethylene pile yarn shall be proven athletic caliber yard designed specifically for outdoor use and stabilized to resist the effect of ultraviolet degradation, heat, foot traffic, water, and airborne pollutants. The pile fiber shall possess the following physical characteristics:

i.	Yarn Denier	9,000 (mono) 5,000 (slit)	ASTM D 1577
ii.	Yarn Thickness / Width	Min. 100 microns (slit film) Min. 300 microns (mono)	ASTM D 3218
iii.	Breaking Load	Min. 20 lbs Force	ASTM D 2256
iv.	PE Pile Fiber Weight	Minimum 38 oz/sq yd	ASTM D 5848
The Pile fabric shall possess the following physical characteristics:			
i.	Finished Pile Height	2"	ASTM D 5848

	ii.	Product Weight (Total)	Minimum 60 oz/sq yd	ASTM D 5848
	iii.	Primary Backing	Minimum 7 oz/sq yd	ASTM D 5848
5.	iv.	Secondary Backing	Minimum 16 oz/sq yd	ASTM D 5848
	v.	Fabric Width	15'	ASTM D 5793
	vi.	Tuft Gauge	3/8"-3/4"	ASTM D 5793
	vii.	Grab Tear Strength	200 lbs/force minimum	ASTM D 5034
	viii.	Tuft Bind Strength	8 lbs/force minimum	ASTM D 1335
	ix.	Carpet Permeability	30 inches/hour min.	ASTM D 4491
	x.	Impact Attenuation/gmax	Less than 135 at installation. Shall not exceed 165 over life of field	ASTM F1936
	xi.	Head Injury Criteria(HIC) Score:	Less than 850	

- D. The carpet shall consist of polyethylene fibers tufted into a primary backing with a secondary backing.
- A. The carpet must be made in the United States of America.
 - B. The carpet shall be furnished in 15' wide rolls. Rolls shall be long enough to extend from sideline to sideline without splicing.
 - C. The carpet's primary backing shall be a double-layered polypropylene fabric treated with UV inhibitors. The secondary backing shall consist of an application of porous, heat- activated urethane to permanently lock the fiber tufts in place.
 - D. The fiber shall be 9,000 denier, low friction and UV-resistant fiber.
 - E. The fiber must be certified as lead free.
 - F. Color shall be as indicated on drawings. Striping shall be as indicated on drawings. End-zone and school logo shall be as indicated on drawings.
- G. The infill materials shall be approved by the Owner.
- a) The proposed infill shall have a cooling characteristic. Provide third party testing proving heat reduction qualities of infill material.
 - b) "Organic" Infill: Shall be per manufacturer's recommendations meeting performance guidelines. Infill shall not require additional maintenance, watering/irrigation, etc.

IX. CERTIFICATION OF BASE CONSTRUCTION

- A. General: A written "Certification of Acceptance of the Base Construction" is required from the artificial turf/surfacing prior to proceeding with any installation work under this section of the specifications.
- B. Scope: This certification shall include but not be limited to the acceptance of:
 - 1. The base construction finish surface is completely acceptable for the application of work specified under this section.
 - 2. The materials and method of installation for the aggregate stone base construction is in conformance with the manufacturer's current recommendations for the application of the turf to be installed under this section.

3. The aggregate stone base construction is totally suitable for work to proceed with the assurance that the final installation of the work under this section will result in a high quality athletic surface fully warranted for the period and conditions specified herein. In order to provide these assurances and Certification of Acceptance, the turf system installer shall cooperate and communicate fully, at all times, with the construction manager. This subcontractor shall be responsible for reviewing all related work, materials and procedures herein. He shall inspect each process of the base construction work and certify that conditions and tolerances required for application of the artificial turf system are being met.
4. All discrepancies between the required materials, application and tolerance requirements noted by the installer shall be brought immediately to the attention of the Contractor and Owner. Failure to immediately inform the Contractor and Owner of any prior work, which does not meet the required specifications for installed of the artificial turf surfacing system, shall be considered an acceptance by the installer of the non-conforming work. This installer at no additional cost to the Owner shall perform any additional work later required to bring the base to acceptable conditions. Any discrepancies in the prior work, which does not meet the specifications and noted in writing to the Contractor and Owner shall be performed immediately at no additional cost to the Owner.

XI. ARTIFICIAL TURF INSTALLATION

- A. General: Only factory-trained technicians, skilled in the installation of athletic caliber synthetic turf systems working under the direct supervision of the approved installer supervisors, shall undertake the placement of the system.
- B. Examination:
 1. Manufacturer / Installer shall verify that all provisions of part VI. QUALITY ASSURANCE have been met.
 2. The subbase and curbs shall be inspected by the contractor and Manufacturer/Installer by means of laser level and plotted on a 10-foot grid. The grid shall be provided to the Owner for review. Based upon the Contractor's inspection of the topological survey, the Site work Contractor shall fine grade the subbase suitably – including properly rolling at compacting the base to the specified density per the BASE PREPARATION section.
 3. The Manufacturer / Installer Project Superintendent shall thoroughly inspect all materials delivered to the site both for quality and quantity to assure that the entire installation shall have sufficient materials to maintain the schedule and proper mixing ratios.
- C. Installation:
 1. The installation shall be performed in full compliance with approved shop drawings and Manufacturer's Instructions.
 2. Artificial turf shall be loose laid across the field; infilled, and attached to the perimeter edge detail. Turf shall be of sufficient length to permit full cross-field installation from sideline to sideline. No head or cross seams will be allowed in main playing area between the sidelines.
 3. Utilizing standard state of the art sewing procedures, each roll shall be attached

to the next. Seam gaps should be uniform and not exceed the gauge of the tufting. When all of the rolls of the playing surface have been installed, the sideline areas shall be installed at right angles to the playing field turf. The perimeter white line, tufted into the sideline rolls, shall be sewn to the properly square and cut playing field roll ends.

4. Seams: 99-percent sewn installation. Gluing rolls is not allowed. Minimum gluing is only permitted to repair problem areas, corner completions, and to cut in logos or inlaid lines indicated. Sew seams using double-bagger stitches and polyester thread or, in the case of inlays only, adhere using seaming tape and high-grade adhesive according to manufacturer's written instructions. Seams shall be flat, tight, and permanent with no separation or fraying.
 5. The perimeter of the field shall be firmly secured to the edge anchors for the life of the warranty and as detailed.
 6. The infill material should be installed uniformly. Infill materials to be installed in multiple thin lifts. Install per depth recommended by turf field manufacturer. The equipment used for the application of the infill materials should erect the fiber, place the infill materials, and should incorporate a metering method to provide consistent distribution. The equipment utilized should not distort or displace any base materials or damage the system in any way. Infill materials should only be installed under dry field conditions.
 7. Upon completion of the infill inspection or as part of the installation process, fibers shall be fibrillated to provide a consistent blade appearance acceptable to the Owner.
 8. The Manufacturer / Installer shall test the installed field on the annual basis throughout the warranty period for the Gmax to assure proper performance as well as Owner's maintenance.
- D. Field Markings:
- a. Field markings will be installed per approved shop drawings and as illustrated on the drawings. For football tuft in five yard lines.
 - b. Inlay balance of sports markings, end zone letters, and logos, according to artwork indicated on Drawings, in colors as indicated on the drawings.
- E. Cleaning:
- a. Contractor shall provide the labor, supplies, and equipment as necessary for final cleaning of surfaces and installed items.
 - b. All usable remnants of new material shall become the property of the Owner.
 - c. The Contractor shall keep the area clean throughout the project and clear of debris.
 - d. Surfaces, recesses, enclosures, etc., shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by the Owner.
 - e. Contractor shall completely remove all temporary access roads and protection and shall restore any areas damaged to their original preconstruction condition.
 - f. Engage a factory authorized service representative to train Owner's maintenance personnel in the use of the turf sweeper and groomer and/or any specialized maintenance for proposed turf system.

END OF SECTION 321813

SECTION 321823.39 –RUNNING TRACK SURFACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:

- 1. Outdoor running track, pole vault, high jump, and long jump surfaces.
 - 2. Line markings.

- B. Related Requirements:

- 1. Earthwork, including finish grading, for synthetic running track surface is indicated on Drawings, details, and specifications.
 - 2. Hot-mixed asphalt paving, portland cement paving and curbs for synthetic running track surface is indicated on Drawings, details and specifications.
 - 3. Storm drainage for synthetic running track surface is indicated on Drawings, details, and specifications.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Track-surfacing Contractor, asphalt-paving Contractor, gravel base Contractor, General Contractor, and Engineer shall meet at Project site near completion of compacted gravel base installation to review and confirm acceptability of gravel base installation, and to confirm guidelines and requirements of asphalt paving installation.

1.4 ACTION SUBMITTALS

- A. Product Data: For each product indicated, including installation guidelines and maintenance instructions.
- B. Shop Drawings: For running track surface indicating location and color for track events, including lane lines, start lines, finish lines, and related markings for Owner to review a minimum of 4 weeks prior to application.
- C. Samples: Three representative track Samples in color of surfacing to be installed.

1.5 INFORMATIONAL SUBMITTALS

- A. Test Reports: For running track surface that verify manufacturer's specifications for products to be installed.

B. Additional Documentation:

1. Submit documentation that verifies that surfacing material does not contain toxic or hazardous substance, which exceeds limits set forth by the EPA.
2. Submit letter stating that surfacing contractor has reviewed asphalt specifications and accepts specifications as correct. Submit letter from surfacing contractor after checking asphalt and accepting it for synthetic surface installation.
3. Submit certificate of accuracy from registered engineer or land surveyor stating that track measures specified distance in lanes from start to finish.
4. Submit letter from surfacing material manufacturer stating that surfacing contractor is qualified to install surfacing material manufacturer's synthetic surface system.
5. Submit evidence that surfacing contractor holds necessary contractor's license to install synthetic surfacing.
6. Submit evidence that synthetic surfacing contractor is a member of the American Sports Builders Association (ASBA).

1.6 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: A qualified manufacturer that has produced surfacing materials for not less than 10 years, with not less than 5 similar projects that have been in successful use for not less than 5 years.
- B. Installer Qualifications: A qualified installer with minimum 5 years experience in successful installation of surfacing systems of type specified.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store in a weathertight location and protect from damage during delivery storage and handling.

1.8 MAINTENANCE

- A. Schedule annual inspection with Owner and surfacing contractor and inspect surface during life of warranty. Repair surfacing as required for warranty issues. For non-warranty items, present method for correction.
- B. Restripe/repaint markings one time before conclusion of five-year warranty for line markings.

1.9 WARRANTY

- A. Special Warranty: Manufacturer's written warranty that its products are free from defects in material and workmanship, and that manufacturer agrees to repair or replace items proven to be defective or refund purchase price of item.
 1. Furnish documents with warranty stating that applied surface materials

conform to manufacturer's specifications and that material will not separate from asphalt or concrete base, and will not blister, bubble, fade, crack, or wear excessively during life of warranty.

2. Warranty Period: 3 years from date of Substantial Completion.
- B. Special Warranty for Line Markings: Manufacturer's written warranty for line markings.
1. Warranty Period: 3 years from date of Substantial Completion.
- C. Installer shall include written statement that they will re-stripe the track one time during the warranty period.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide one of the following:
1. Midwest Track Builders; Seal Flex LR-6.
 2. Equivalent manufacturer or Approved Equal.

2.2 RUNNING TRACK SURFACE SYSTEM

- A. Surfacing: Seal-Flex LR-6 latex track system. Install per manufacturer's specifications and requirements.

2.3 ACCESSORIES

- A. Paint: Lines / Events shall be painted in accordance with National Federation of State High School Associations and Track Builders Associations requirements and rules. School District to approve layout prior to install. Paint shall be water base acrylic latex, compatible with rubber and herein before specified poly-resin latex material. Event markings shall be color coded.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions detrimental to proper or timely completion.
1. Do not proceed until unsatisfactory conditions have been corrected.
 2. Substrate Tolerances:
 - a. Planarity: Not to exceed 1/8 inch in 10 feet, noncumulative.
 - b. Levelness: Not to exceed 0.1 percent in running direction.
 3. Concrete Curbs: Ensure top elevations of continuous concrete curbs are at

constant elevation.

3.2 PREPARATION

- A. Protection: Protect surfaces adjacent to track surfacing operations from any liquids and construction debris/waste.
- B. Surface Preparation: Ensure substrate is fully cured, and free from excess surface oils and chemicals that would impair track surface installation.
 - 1. Asphalt: Volatiles and latent asphalt content within acceptable limits as directed by manufacturer's technical consultant: Not less than 20 day cure time.
- C. Base Inspection and Preparation.
 - 1. Ensure that asphalt compaction tests indicate compaction of 95 percent or greater.
 - 2. Check asphalt meets planarity requirements. The surface shall not deviate more than 1/8 inch in 10 feet from the specified grade when checked with a 10-foot straightedge in all directions. Repair areas not in conformance or replace with new materials, recompact, and recheck surfaces.
 - 3. The surface shall be flooded to determine if any "bird baths" low areas exist. Any areas found not to be in conformance shall be repaired/replaced.
 - 4. Any repaired areas shall be allowed to cure prior to application of synthetic surface per manufacturer's requirements.

3.3 INSTALLATION

- A. Installation, General:
 - 1. Comply with manufacturer's recommendations.
 - 2. Prime areas to be surfaced according to manufacturer's written instructions.
 - 3. Make substrate surface repairs and minor planarity corrections with repair compound.
 - 4. Install track surface as specified to achieve track surface performance and physical dimensions within tolerances.
 - 5. Cover inside curbs with synthetic running track surfacing.

3.4 SPECIFIC SLOPES

- A. Track Oval:
 - 1. Running Direction: Maximum 0.1 percent.
 - 2. Lateral Slope: Maximum 1.5 percent.
- B. High Jump (D Area): 1 percent downward towards cross bar.

- C. Run Ups: 1% lateral slope, 0.1% running direction.

3.5 STRIPING

- A. Line Striping: As required for NCAA/IHSA compliance and as follows:

1. Track shall consist of eight lanes, 42 inches wide each. Stripe track according to NCAA/IHSA guidelines, including the following races (in meters): 110 hurdles and 100 hurdle marks going in both directions, 400 hurdles, 300 hurdles, and steeple hurdle marks, relay exchange zones and acceleration marks (for 400 relay, 800 relay, 1600 relay), starting lines including waterfall starts where appropriate for: 100, 110, and 100 hurdles, 200, 300, 400, 800 (one turn stagger), 1500, 3000, steeple-chase, 5000, 10,000, 800 relay (four turn stagger), 1600 relay (three turn stagger), a common finish line, and break lines following NCAA/IHSA guidelines.
2. Track shall have lane numbers at the common finish line and at every possible starting line.
3. Pole vault runway shall have tick markings on the side starting from the front of the vault box and marking every foot. Runway shall be 1.22 meters wide and a minimum length of 40 meters.
4. Long/triple jump runways shall have a plug/takeoff board and foul marker for long jump on each runway at each end (4) that meets NCAA/IHSA guidelines.
5. Long/triple jump runways shall have striped markings on each end for triple jump takeoff board with one runway displaying women's marks at each end (28, 32, 36), and one runway displaying men's marks at each end (32, 36, 40).
6. Long/triple jump runways shall have tick markings every foot starting at the take off boards, and shall meet NCAA/IHSA specifications for width and length.

3.6 FIELD QUALITY CONTROL

1. Tests: Conduct thickness tests during installation spaced throughout track surface.

3.7 CLEANING

- A. Leave track surface in clean condition with no surface defects.
 1. Touch-up paint striping near end of warranty period.

3.8 WARRANTY

- A. Provided 3 year warranty and include one (1) re-strip within the warranty period.

END OF SECTION 321823.39

SECTION 323113 - CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Chain-link fences.
2. Swing gates.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1. Review coordination of interlocked equipment specified in this Section and elsewhere.
2. Review required testing, inspecting, and certifying procedures.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
 - a. Fence and gate posts, rails, and fittings.
 - b. Chain-link fabric, reinforcements, and attachments.
 - c. Gates and hardware.

B. Shop Drawings: For each type of fence and gate assembly.

1. Include plans, elevations, sections, details, and attachments to other work.
2. Include accessories, hardware, gate operation, and operational clearances.

C. Samples for Initial Selection: For each type of factory-applied finish.

D. Samples for Verification: For each type of component with factory-applied finish, prepared on Samples of size indicated below:

1. Polymer-Coated Components: In 6-inch lengths for components and on full-sized units for accessories.

1.4 INFORMATIONAL SUBMITTALS

A. Product Certificates: For each type of chain-link fence, and gate.

- B. Product Test Reports: For framework strength according to ASTM F1043, for tests performed by a qualified testing agency.
- C. Field quality-control reports.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed chain-link fences and gates similar in material, design, and extent to those indicated for this project and whose work has resulted in construction with a record of successful in-service performance
- B. Engineering Responsibility: Preparation of data for chain-link fences and gates, including shop drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this project.

1.6 FIELD CONDITIONS

- A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.
- B. Interruption of Existing Utility Service: Do not interrupt utility services to 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 owner no fewer than two days in advance of proposed interruption of utility services.
 - 2. Do not proceed with interruption of utility services without owner's written permission.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer to design chain-link fence and gate frameworks.
- B. Structural Performance: Chain-link fence and gate frameworks shall withstand the design wind loads, effects of gravity, and stresses for fence height(s) and under exposure conditions indicated according to ASCE/SEI 7 and according to CLFMI WLG 2445 (minimum post size and maximum spacing for wind velocity pressure).
 - 1. Design shall be most stringent design and shall supercede details and specifications as required.
 - 2. Design Wind Load:

- a. Minimum Post Size: Determine according to ASTM F1043 for post spacing not to exceed 10 feet for Material Group IC, electric-resistance-welded round steel pipe.
 - b. Minimum Post Size and Maximum Spacing: Determine according to CLFMI WLG 2445, based on mesh size and pattern specified.
 - c. Wind Speed: 80 mph
 - d. Fence Height: Varies, See plan documents.
 - e. Lins Post Group: SS 40 Steel
 - f. Wind Exposure Category: B
- C. Lightning Protection System: Maximum resistance-to-ground value of 25 ohms at each grounding location along fence under normal dry conditions.

2.2 CHAIN-LINK FENCE FABRIC

- A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist according to "CLFMI Product Manual" and requirements indicated below:
1. Fabric Height: Varies, see plan documents.
 2. Steel Wire for Fabric: Wire diameter of 0.192 inch. All fence posts and components to be SS40 High Strength.
 - a. Mesh Size: 2 inches.
 - b. Zinc-Coated Fabric: ASTM A392, Type II, Class 2, 2.0 oz./sq. ft. with zinc coating applied before weaving.
 - c. Polymer-Coated Fabric: ASTM F668, Class 2b over zinc-coated steel wire.
 - 1) Color: Black, according to ASTM F934.
 - d. Coat selvage ends of metallic-coated fabric before the weaving process with manufacturer's standard clear protective coating.
 3. Selvage: Knuckled at both selvages.

2.3 FENCE FRAMEWORK

- A. Posts and Rails: ASTM F1043 for framework, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F1043 based on the following:
1. Fence Height: Varies See plan documents.
 2. Heavy-Industrial-Strength Material: Group IC, round steel pipe, electric-resistance-welded pipe.
 - a. Line Post: 2.5 inches in diameter.
 - b. End, Corner, and Pull Posts: 3.0 inches in diameter.
 3. All fence components to SS40 High Strength Steel.

4. Horizontal Framework Members: Intermediate, top, and, bottom rails according to ASTM F1043.
 - a. Top Rail: 1.625 inches in diameter.
5. Metallic Coating for Steel Framework:
 - a. Type B: Zinc with organic overcoat, consisting of a minimum of 0.9 oz./sq. ft. of zinc after welding, a chromate conversion coating, and a clear, verifiable polymer film.
 - b. Coatings: Any coating above.
6. Polymer coating over metallic coating.
 - a. Color: Black, according to ASTM F934.

2.4 SWING GATES

- A. General: ASTM F900 for gate posts and single, double swing gate types.
 1. Sing Swing Gate Leaf Width: 5 feet.
 2. Double Swing Gate Width: 10 feet, see plans.
 3. Framework Member Sizes and Strength: Based on gate fabric height per plan documents.
- B. Pipe and Tubing:
 1. Zinc-Coated Steel: ASTM F1043 and ASTM F1083; protective coating and finish to match fence framework.
 2. Aluminum: ASTM B429/B429M; mill finish.
 3. Gate Posts: Round tubular steel.
 4. Gate Frames and Bracing: Round tubular steel.
 5. SS40 High Strength Steel
- C. Frame Corner Construction: Welded.
- D. Hardware:
 1. Hinges: 360-degree inward and outward swing.
 2. Latch: Permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.
 3. Center gate stops and keepers for each gate leaf more than 5' wide.
 4. Lock: Manufacturer's standard internal device.

2.5 FITTINGS

- A. Post Caps: Provide for each post.
 1. Provide line post caps with loop to receive tension wire or top rail.

- B. Rail Fittings: Provide the following:
 - 1. Rail Clamps: Line and corner boulevard clamps for connecting intermediate, and, bottom rails to posts.
- C. Truss Rod Assemblies: Mill-finished aluminum rod and turnbuckle or other means of adjustment.
- D. Tie Wires, Clips, and Fasteners: According to ASTM F626.
 - 1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, according to the following:
 - a. Hot-Dip Galvanized Steel: 0.148-inch- diameter wire; galvanized coating thickness matching coating thickness of chain-link fence fabric.
 - b. Aluminum: ASTM B211; Alloy 1350-H19; 0.148-inch- diameter, mill-finished wire.

2.6 GROUT AND ANCHORING CEMENT

- A. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107/C1107M. Provide grout, recommended in writing by manufacturer, for exterior applications.
- B. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating, and that is recommended in writing by manufacturer for exterior applications.

2.7 GROUNDING MATERIALS

- A. Connectors and Grounding Rods: Listed and labeled for complying with UL 467.
 - 1. Connectors for Below-Grade Use: Exothermic welded type.
 - 2. Grounding Rods: Copper-clad steel, 5/8 by 96 inches.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for the survey of property lines and legal boundaries, site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.
 - 1. Do not begin installation before final grading is completed unless otherwise permitted by Architect.

- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.
- B. All utility crossings, foundations, structures, etc. crossing below fence line shall be coordinated with all trades, contractors and installers prior to installation of any infrastructure.

3.3 CHAIN-LINK FENCE INSTALLATION

- A. Install chain-link fencing according to ASTM F567 and more stringent requirements specified.
 - 1. Install fencing on established boundary lines inside property line.
- B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
- C. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil. Coordinate with curb detail requirements.
 - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 - 2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
 - a. Conceal Concrete: Top 2 inches below grade to allow covering with surface material. Where installation is required within curblines follow plan document details.
- D. Terminal Posts: Install terminal end, corner, and gate posts according to ASTM F567 and terminal pull posts at changes in horizontal or vertical alignment of 15 degrees or more. For runs exceeding 500 feet, space pull posts an equal distance between corner or end posts.
- E. Line Posts: Space line posts uniformly at 10 feet o.c. max or per design requirements.
- F. Post Bracing and Intermediate Rails: Install according to ASTM F567, maintaining plumb position and alignment of fence posts. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.
 - 1. Locate horizontal braces at midheight of fabric 72 inches or higher, on fences with top rail, and at two-third fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.

- G. Top Rail: Install according to ASTM F567, maintaining plumb position and alignment of fence posts. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.
- H. Intermediate and Bottom Rails: Secure to posts with fittings.
- I. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 2-inch bottom clearance between finish grade or surface and bottom selvage unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.
- J. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts, with tension bands spaced not more than 15 inches o.c.
- K. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric according to ASTM F626. Bend ends of wire to minimize hazard to individuals and clothing.
 - 1. Maximum Spacing: Tie fabric to line posts at 12 inches o.c. and to braces at 24 inches o.c.
- L. Fasteners: Install nuts for tension bands and carriage bolts on the side of fence opposite the fabric side. Peen ends of bolts or score threads to prevent removal of nuts.

3.4 GATE INSTALLATION

- A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation.

3.5 GROUNDING AND BONDING

- A. Comply with requirements in Section 260526 "Grounding and Bonding for Electrical Systems."
- B. Fence and Gate Grounding:
 - 1. Ground for fence and fence posts shall be a separate system from ground for gate and gate posts.
 - 2. Install ground rods and connections at maximum intervals of 1500 feet.
 - 3. Fences within 100 Feet of Buildings, Structures, Walkways, and Roadways: Ground at maximum intervals of 750 feet.
 - 4. Ground fence on each side of gates and other fence openings.

- a. Bond metal gates to gate posts.
 - b. Bond across openings, with and without gates, except openings indicated as intentional fence discontinuities. Use No. 2 AWG wire and bury it at least 18 inches below finished grade.
- C. Protection at Crossings of Overhead Electrical Power Lines: Ground fence at location of crossing and at a ground rod located a maximum distance of 150 feet on each side of crossing.
- D. Grounding Method: At each grounding location, drive a grounding rod vertically until the top is 6 inches below finished grade. Connect rod to fence with No. 6 AWG conductor. Connect conductor to each fence component at grounding location.
- E. Connections:
- 1. Make connections with clean, bare metal at points of contact.
 - 2. Make aluminum-to-steel connections with stainless-steel separators and mechanical clamps.
 - 3. Make aluminum-to-galvanized-steel connections with tin-plated copper jumpers and mechanical clamps.
 - 4. Make above-grade ground connections with mechanical fasteners.
 - 5. Make below-grade ground connections with exothermic welds.
 - 6. Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.

3.6 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests.
- B. Grounding Tests: Comply with requirements in Section 264113 "Lightning Protection for Structures."
- C. Prepare test reports.

3.7 ADJUSTING

- A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.
- B. Lubricate hardware and other moving parts.

3.8 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain chain-link fences and gates.

END OF SECTION 323113

SECTION 330513 – MANHOLES AND STRUCTURES

PART 1 - GENERAL

1.01 WORK INCLUDES

- A. Storm sewer manholes, catch basins and inlets, sanitary sewer manholes and water main valve vaults, as specified on the plans.

1.02 RELATED WORK

- A. Specified elsewhere:
 1. 312333 – Trenching and Backfill
 2. 334000 – Storm Drainage Utilities
 3. Details and Note sections of plan set.

1.03 QUALITY ASSURANCE

- A. The following documents shall provide the standards for construction within the Municipality unless otherwise stated in these specifications. In the event of conflict between these specifications and the existing local municipality codes, the local municipality codes will prevail.
 1. Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, latest revision, along with the Supplemental Specifications and Recurring Special Provisions. (Method of Measurement and Basis of Payment shall not apply.)
 2. I.S.P.E., Consulting Engineers Council of Illinois, et. al., Standard Specifications for Water and Sewer Main Construction in Illinois, latest revision.
- B. Utility Compliance: Comply with local utility regulations and standards pertaining to storm sewerage systems.
- C. Exceptions: All references in the Illinois Department of Transportation Standard Specifications and the Standard Specifications for Water and Sewer Main Construction in Illinois to method of measurements and compensation shall not apply.

1.04 SUBMITTALS

- A. Manufacturer's Data.
 1. Manufacturer's standard data sheet showing compliance with applicable codes and specifications. Data shall indicate joint material for joining of precast sections. Submit data on: sanitary sewer manholes, storm sewer manholes, storm sewer catch basins, water main valve vaults and other associated structures.

PART 2 - PRODUCTS

2.01 PRECAST SECTIONS

- A. Sanitary and storm sewer manholes and precast storm sewer inlets shall be precast concrete in accordance with ASTM C478. Manholes less than four feet in depth shall have precast concrete flat slab top while manholes greater than four feet in depth shall have precast concrete cone sections unless shown otherwise on the drawings. All joints between precast sections shall be made with a rubber gasket. Manhole steps shall be cast iron or reinforced plastic. Manhole frame shall be sealed to top precast section with bitumastic material. Access hatches where shown on the drawings shall be cast in

place. Pipe openings shall be equipped with a cast in place flexible pipe seal. Storm Sewer Manholes shall meet the requirements of IDOT Standard Specifications Section 602.

2.02 FRAMES AND COVERS

- A. Storm Manhole Frames and Covers: Type as specified on the plans, from East Jordan Foundry Company, Neenah Foundry Company, or approved equal. Solid lids are to have the word "STORM" indented and cast into the lid.
- B. Sanitary Manhole Frames and Lids: Lids are to be solid, self-sealing with a pick hole. Product is to be from East Jordan Foundry Company, Neenah Foundry Company, or approved equal. The word "SANITARY" is to be indented and cast into the lid.
- C. Water Valve Vaults Frames and Lids: Lids are to be solid, self-sealing with a pick hole. Product is to be from East Jordan Foundry Company, Neenah Foundry Company, or approved equal. The word "WATER" is to be indented and cast into the lid.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Examine the area where and conditions under which manholes, catch basin or vaults are to be installed. Notify Engineer in writing of conditions detrimental to proper and timely completion of the work.

3.02 COORDINATION

- A. Schedule work and notify all crafts in time so that provisions for their work can be made without delaying the project.

3.03 INSTALLATION

- A. Excavation
 - 1. In order to permit the joints to be installed properly and also to permit proper compaction of the backfill material, the excavation shall be made to a diameter of at least two feet greater than the outside diameter of the structure.
- B. Subbase Preparation
 - 1. Adequate foundation for all manhole structures shall be obtained by removal and replacement of unsuitable material with well-graded granular material, by tightening with coarse ballast rock, or by such other means provided for foundation preparation of the connected sewers.
- C. Manhole Base Installation (Precast Base)
 - 1. A well-graded granular bedding course conforming to the requirements for aggregate for trench backfill (Section 312300), not less than four inches in thickness and extending to the limits of the excavation, shall be firmly tamped and made smooth and level to assure uniform contact and support of the precast element. A precast base section shall be carefully placed on the prepared bedding so as to be fully and uniformly supported in true alignment and making sure that all entering pipes can be inserted on proper grade.
- D. Precast Manholes
 - 1. Precast manholes may be constructed with a precast base section or a monolithic base structure as specified. Precast sections shall be placed and

- aligned to provide vertical sides and vertical alignment of the ladder rungs. The completed manhole shall be rigid, true to dimensions and shall be watertight.
2. All lift holes on precast elements shall be completely filled with an approved bitumastic material. All joints between precast elements on sanitary sewer manholes shall be made with an O-ring rubber or neoprene gasket.

E. Construction Details

1. Inlet and Outlet Pipes for Break-in Connections. Pipe or tile placed in the masonry for inlet or outlet connections shall extend through the wall and beyond the outside surface of the wall a sufficient distance to allow for connections, and the masonry shall be carefully constructed around them so as to prevent leakage along the outer surfaces. Special care shall be taken to see that the openings through which pipes enter the structure are completely sealed by use of nonshrink, non-metallic grout. A rubber gasket shall be installed on the barrel of the pipe prior to grouting it in place. No break-in connections will be allowed without written authorization from the Construction Manager.
2. Placing Castings: Casting adjustments of less than two inches shall be with mortar. The mortar shall be mixed in proportion of one part cement to three parts sand, by volume, based on dry materials. Castings shall be set accurately to the finished elevation so that no subsequent adjustment will be necessary. Castings shall be sealed to concrete sections with bitumastic material.
3. Manhole Inverts: Construct manhole flow channels of concrete of sewer pipe, which shall be of semicircular section conforming to the inside diameter changes in size or grade gradually, and changes in direction shall be by true curves. Provide channels for all connecting sewers to each manhole and benching shown on the drawings.

F. Backfill

1. The space between the sides of the excavation and the outer surfaces of the manhole shall be backfilled with aggregate for trench backfill when the manhole is within a pavement area or when the nearest point of the excavation for the manhole falls within two feet of the pavement edge.

G. Cleaning

1. All newly constructed manholes shall be cleaned of all accumulation of silt, debris or foreign matter of any kind and shall be free of such accumulations at the time of final inspection.

END OF SECTION 330513

SECTION 334000 – STORM DRAINAGE UTILITIES

PART I - GENERAL

1.1 WORK INCLUDES

- A. All labor, materials, and equipment required to satisfactorily install the storm sewer and appurtenances as shown on the plans.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, including, but not limited to:
 - 1. 312333 – Trenching and Backfill
- B. Work under this Section shall be done in accordance with the applicable provisions of the “Code of Ordinances”, latest edition, as adopted by the Municipality, Illinois.

1.3 QUALITY ASSURANCE

- A. Unless specifically stated in the specifications, the following documents shall provide general requirements and covenants applicable to construction within the Municipality. In the event of conflict between the existing local municipality codes and the contents of this document, the former will supercede the latter and/or the decision of the local municipality will prevail.
 - 1. Illinois Department of Transportation, Standard Specifications for Road and Bridge Construction, latest revision, along with the Supplemental Specifications and Recurring Special Provisions. (Method of Measurement and Basis of Payment shall not apply.)
 - 2. I.S.P.E., Consulting Engineers Council of Illinois, et. al., Standard Specifications for Water and Sewer Main Construction in Illinois, latest revision.
- B. Environmental Compliance: Comply with applicable portions of local Environmental Agency regulations pertaining to storm sewerage systems.
- C. Utility Compliance: Comply with local utility regulations and standards pertaining to storm sewerage systems.

1.4 SUMMARY

- A. This Section includes storm sewerage system piping and appurtenances as indicated on the plans outside the building to the point of disposal.

1.5 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections:
 - 1. Product data for drainage piping specialties.
 - 2. Shop drawings for precast concrete storm drainage manholes, catch basins and inlets, including frames, covers, and grates.

1.6 PROJECT CONDITIONS

- A. Site Information: Perform site survey, research public utility records, and verify existing utility locations. Verify that storm sewerage system piping may be installed in compliance with original design and referenced standards.

1.7 PROJECT RECORD DOCUMENTS

- A. Record location of pipe runs, service connections, manholes, cleanouts, and invert elevations.
- B. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

END OF SECTION 334000