

Division 1 General Requirements

King Court Storm Sewer Improvements

November 2022

Capital Region Development Authority (CRDA)

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01 10 00 SUMMARY

A. **Summary:** Section 01 10 00 Summary contains the following Subsections:

01 11 00	Summary of Work
01 11 13	Work Covered By Contract Documents
01 12 16	Work Sequence - Phase(s);
01 12 19	Contract Interface
01 14 00	Work Restrictions
01 14 16	Coordination With Occupants

01 11 00 SUMMARY OF WORK

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Project Number:** 22-009
- C. **Project Title:** King Court Storm Sewer Improvements
It is to be completed and ready for use by the Owner within the Contract Time specified in Division 00, Bid Proposal Form.
- D. **Project Location:** King Court and Crosby Street in East Hartford Connecticut.
- E. **The Project Description:**
1. Removal of a portion of the existing storm drainage system within King Court from Crosby Street south, and the installation of a new storm drainage system consisting of a 36" and 24" trunk storm sewer and catch basins connected into the trunk sewer with 15" diameter pipes.
 2. The storm sewer drainage installation includes trench repair and milling and paving, curbs, and concrete sidewalk reconstruction where required.
 3. This Project **does not Exceed** the Threshold Limits as defined by the Connecticut General Statutes.

01 11 13 WORK COVERED BY CONTRACT DOCUMENTS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The Work includes but is not limited to the following: Construction of a storm sewer system with pipe sizes ranging from 36" to 15", associated storm manholes and catch basins, trench repair within King Court pavement including base, milling and paving of pavement, replacement of curbing and concrete sidewalks where required, installing and loaming and seeding of disturbed areas.
- C. The Contractor will include in his bid, all items required in order to carry out the intent of the work as described, shown and implied in the Contract Documents.
- D. It shall be the Contractor's responsibility upon discovery to immediately notify the Construction Administrator, in writing, of errors, omissions, discrepancies, and instances of noncompliance with applicable codes and regulations within the documents, and of any work which will not fit or properly function if installed as indicated on the Contract Documents. Any additional costs

arising from the Contractor's failure to provide such notification shall be borne by the Contractor.

E. The Work will be constructed under a single lump sum.

F. **Examination of Site:**

1. It is not the intent of the Documents to show all existing conditions. All contractors are advised to visit and examine the site with the Construction Administrator prior to submitting bids.
2. Contractors should investigate and satisfy themselves as to the conditions affecting the work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, uncertainties of weather, roads or similar physical conditions of the ground, the character of equipment, and facilities needed preliminary to and during the prosecution of the Work. The Contractor should further satisfy himself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, as well as from information presented by the Contract Documents. Any failure by the Contractor to acquaint himself with the available information shall not relieve him from the responsibility for estimating properly the difficulty and cost of successfully performing the Work.
3. **Pre-Bid Conference**
 - 3.1 A Pre-Bid Conference and tour of the site will be conducted as scheduled in the Invitation to Bid. This scheduled conference is the only official opportunity for the bidders to tour the site with the CRDA, Engineer, Construction Administrator, and Town of East Hartford.

G. **Project Documents:**

1. The Specifications and Drawings are intended to describe and illustrate the materials and labor necessary for the work of this Project.
2. Throughout the Technical Specifications, the Connecticut Department of Transportation Standard Specifications for Roads, Bridges, Facilities and Incidental Construction Form 818, latest edition at time of bid including any interim and supplemental specifications are referenced. Where so referenced the requirements set forth therein are applicable and made a part hereof. Copies of Form 818 are available from the Connecticut Department of Transportation at a nominal charge.

H. The Contractor will be given **Five (5)** sets of the Contract Documents on or about the time of execution of Contract, free of charge. If additional copies are wanted, they will be available at the direct additional cost of their reproduction, to the contractor.

I. The Contractor shall receive **one (1)** set of AutoCAD compatible (latest version) Site Plans on disks at no cost on or about the time of execution of the Contract from the Engineer. Additional sets of AutoCAD compatible (latest version) Site Plans on disks can be made available from the Engineer at the cost of their reproduction, to the contractor.

01 12 16 WORK SEQUENCE - PHASE(S)

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The entire Project shall be constructed in a single Phase.

01 12 19 CONTRACT INTERFACE

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

B. Owner: The owner of King Court and Crosby Street and the storm drainage infrastructure is the Town of East Hartford. Construction of a portion of this project occurs on land owned by Goodwin University under a drainage right-of-way easement in favor of the Town of East Hartford. The project is funded by the State of Connecticut and the Town of East Hartford ARPA Funds. Funds will be administered by the Capital Region Development Authority (CRDA), 100 Columbus Boulevard, Suite 500, Harford, CT 06103-2819, Phone: (860) 527-0100. CRDA will hold the CM contract and oversee construction. Where "Owner" appears in the RFP and contract documents, it shall generally refer to CRDA, but when referencing meetings and inspection, may also include representatives of the Town of East Hartford and Goodwin University.

1. **The Contract Administrator** is the authorized representative for the Owner authorized to approve and execute Contract Amendments and Change Orders relating to changes in the scope of work and matters involving revoking, altering, enlarging or relaxing any requirements of the contract documents.

The Contract Administrator is Anthony L. Lazzaro Jr. Esq., Deputy Director and General Counsel, CRDA, PH (860) 493-2905, Email: alazzaro@crdact.net.

2. **The Project Manager** is the authorized representative for the Owner responsible for oversight of the Construction Administrator and Account Administrator.

The Project Manager is not empowered to revoke, alter, enlarge, or relax any requirements of the Contract Documents, or to issue instructions contrary to the Contract Documents. The Project Manager will make recommendations on these matters to the Contract Administrator.

The Project Manager shall in no case act as foreman or perform other duties for the Contractor, nor shall the Project Manager interfere with the management of the Work by the Contractor. Any advice, which the Project Manager may give the Contractor, shall in no way be construed as binding the Owner in any way, nor releasing the Contractor from the fulfillment of the terms of the Contract Documents.

The Project Manager is Robert Saint, Director of Construction Services, CRDA, PH (860) 493-2917 (direct), Email rsaint@crdact.net

3. **The Construction Administrator** is the representative for, and appointed by CRDA, responsible to inspect all Work for conformance to the Construction Agreement and the Contractor's Construction Documents. With the Engineer's reports and recommendations, the Construction Administrator is authorized to reject all Work found to be defective, unacceptable, and nonconforming to the Contract Documents. Such inspections and rejections may extend to all or any part of the Work, and to the preparation or manufacture of the material to be used.

The Construction Administrator is not empowered to revoke, alter, enlarge, or relax any requirements of the Contract Documents, or to issue instructions contrary to the Contract Documents. The Construction Administrator shall in no case act as foreman or perform other duties for the Contractor, nor shall the Construction Administrator interfere with the management of the Work by the Contractor. Any advice, which the Construction Administrator may give the Contractor, shall in no way be construed as binding CRDA or the Owner in any way, nor releasing the Contractor from the fulfillment of the terms of the Agreement.

The Construction Administrator for this project is Michael Yost, Assistant Project Manager, CRDA, PH (860) 493-2928 (direct), Email myost@crdact.net.

4. **The Account Administrator** is the representative for the CRDA responsible for maintenance of project documentation and administration of the Contractor's monthly requisitions for payment. The Account Administrator is Erica Levis, Construction Program Manager, CRDA, PH (860) 493-2921 (direct), Email elevis@crdact.net.

5. **Goodwin University:** Construction of a portion of this project occurs on land owned by Goodwin University and the work within the town right of way is adjacent to their

residential properties. The Contractor shall coordinate all construction activities with Goodwin University through the Construction Administrator.

- C. Construction Administrator:** (Defined in Section 01 12 19 B3 above)
1. As information to the Contractor, the Construction Administrator's status is defined as follows:
 - 1.1. The Construction Administrator is the CRDA's representative who will, among other things, monitor the Contractor's performance, scheduling and construction, processing of shop drawings, material, and equipment submittals.
 - 1.2. The Construction Administrator will be the Contractor's point of contact for all correspondence to and from the Owner and/or Engineer
 - 1.3. The Construction Administrator will assist the Account Administrator in review and processing the Contractor's monthly Application for Payment.
 - 1.4. The Construction Administrator will review and make recommendations to the Project Manager regarding cost changes. The Construction Administrator will process cost changes approved by the Contract Administrator.
 - 1.5. The Construction Administrator will process all requests for information, interpretations and decisions regarding the meaning and intent of the Contract Documents, consulting with appropriate parties prior to rendering the interpretations or decisions to the Contractor. All such requests and replies shall be in writing.
 - 1.6. The Construction Administrator will coordinate all construction activity with the Town of East Hartford and Goodwin University.
- D. Engineer:** The Engineering Firm is ZUVIC, Inc. and is located at 40 Cold Spring Road in Rocky Hill, Connecticut. The Engineer representing the firm for this project is Fraser Walsh, P.E. Phone: 860-899-1916; Fax: 860-436-4953; E-mail: fraser.walsh@zuvic.com.
1. The Engineer or their accredited representative is referred to in the Contract Documents as "Engineer" or "Engineers" or "Architect" or "Architects" or by pronouns which imply them. As information for the Contractor, the Engineer's or Engineer's status is defined as follows:
 - 1.1. The Engineer will not make interpretations or decisions directly to the Contractor. All interpretations or decisions will be conveyed through the Construction Administrator.
 - 1.2. As the authorized representative of the Owner, the Engineer is responsible for review of shop drawings, materials, and equipment intended for the work, in accordance with the "General Conditions," and the "Supplementary Conditions."
 - 1.3. The Engineer is responsible to review and respond to any Requests for Information submitted by the Contractor.
 - 1.4. The Engineer will review the Contractor's monthly application for payment and make recommendations to the Construction Administrator regarding the Contractor's percentage of completion.
 - 1.5. Wherever the Engineer is mentioned in the documents in connection with an administrative function, it shall include the Construction Administrator in that function except for shop drawings.

01 14 00 WORK RESTRICTIONS

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B.** The Contractor shall confine his operations, including storage of apparatus, equipment and materials to the limits of construction or as directed by the Construction Administrator.

- C. The buildings, including their access, shall be maintained free and clear throughout the contract term.
- D. Parking for Contractor's employees will be limited to an area (or areas) designated by the Construction Administrator. The Contractor may be required to provide identification stickers for employees' cars.

E. STANDARDS OF CONDUCT

Work will be done in a residential area. Specific standards of conduct are deemed necessary to ensure the orderly and efficient performance of duties and services and to protect the health, safety, and welfare of all members of the community. The contractor(s) are required to adhere to these standards while working on site. In accordance with those standards, the following are strictly prohibited on school property:

- 1. Use or possession of drugs or alcohol;
- 2. Possession of firearms or other weapons;
- 3. Smoking in school buildings;
- 4. Harassment (sexual, racial or otherwise) or intimidation of any member of the community;
- 5. Violation of applicable traffic or public safety regulations;
- 6. Conduct or behavior that endangers the health, safety, and welfare of any member of the public or of the University community;
- 7. Interference with the work of University employees;
- 8. Improper attire;
- 9. Loud, vulgar behavior or the use of profanity.

Goodwin University may, at its discretion, recommend to the Owner, discharge of any employee of the awarded contractor found to be in violation of these standards.

01 14 16 COORDINATION WITH OCCUPANTS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Full Occupancy During Construction:** Goodwin University will continue to occupy the site and existing buildings during the entire construction period. Cooperate with Goodwin University during construction operations to minimize conflicts and facilitate their usage. Perform the Work so as not to interfere with Goodwin University's operations.
 - 1. Provide adequate building and fire code egress from the buildings during the renovation process. The Contractor will be responsible to maintain and protect egress ways during the construction.
 - 2. Contractor to maintain emergency access for fire and emergency vehicles to all buildings.

End
Section 01 10 00
Summary

01 20 00 PRICE AND PAYMENT PROCEDURES

- A. **Summary:** Section 01 20 00 Price and Payment Procedures contains the following subsections:

01 25 00 **Substitution Procedures**
01 26 00 **Contract Modification Procedures**
01 29 76 **Progress Payment Procedures**

01 25 00 SUBSTITUTION PROCEDURES

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

B. **Summary**

1. This Section includes administrative and procedural requirements for handling requests for equals and substitutions made after award of the Contract.
2. Related Sections: The following Sections contain requirements that relate to this Section:
 - 2.1 Division 01 Section 01 33 00 "Submittal Procedures" specifies requirements for submitting the Contractor's Construction Schedule and the Submittal Schedule.
 - 2.2 Division 01 Section 01 42 19 "Reference Standards" specifies the applicability of industry standards to products specified.
 - 2.3 Division 01 Section 01 60 00 "Product Requirements" specifies requirements governing the Contractor's selection of products and product options.

C. **Definitions**

1. Definitions in this Article do not change or modify the meaning of other terms used in the Contract Documents.
2. **Equals or Substitutions General:** Changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract.

D. **Submittals**

1. **Equals and Substitution Request Submittals:** The Owner will consider requests for equals or substitutions if made prior to the Receipt of the Competitive Bid. The information on all materials shall be consistent with the information herein. After the contract award, substitutions will be considered for materials or systems specified that are no longer available. It will not be considered if the product was not purchased in a reasonable time after award. The Contractor shall submit all equal and substitutions requests on the "Substitution Request" Form at the end of this Section. See Article 15 in the General Conditions for further refinement and information.
 - 1.1 The Contractor is required to prepare and submit three (3) copies of the required data for the first manufacturer listed or procedure listed in the specifications section with reference to all of the following areas: the substance and function considering quality, workmanship, economy of operation, durability and suitability for purposes intended including the size, rating and cost. All submissions must include all the required data for the first listed manufacturer or procedure as specified, as well as the required data for the proposed Equal or Substitution. This will enable the Owner and Engineer to determine that the proposed Equal or Substitution is or is not substantially equal to the first listed manufacturer or procedure.
2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.

3. Provide complete documentation showing compliance with the requirements for equals or substitutions, and the following information, as appropriate:
 - 3.1 Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate contractors that will be necessary to accommodate the proposed Equal or Substitution.
 - 3.2 A detailed comparison chart of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements, such as performance, weight, size, durability, and visual effect.
 - 3.3 Product Data, including Shop Drawings and descriptions of products and fabrication and installation procedures.
 - 3.4 Samples, where applicable or requested.
 - 3.5 A statement indicating the effect on the Contractor's Construction Schedule compared to the schedule without approval of the Equal or Substitution. Indicate the effect on overall Contract Time.
 - 3.6 Cost information, broken down, including a proposal of the net change, if any in the Contract Sum.
 - 3.7 The Contractor's certification that the proposed Equal or Substitution conforms to requirements in the Contract Documents in every respect and is appropriate for the applications indicated.
 - 3.8 The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the Equal or Substitution to perform adequately.
4. **Engineer's Action:** If necessary, the Engineer will request additional information or documentation for evaluation within **seven (7)** Calendar Days of receipt of the original request for equal or substitution request. The Engineer will notify the Construction Administrator who will notify the Owner of recommended acceptance or rejection of the proposed equal or substitution, within **fourteen (14)** Calendar Days of receipt of the request, or **seven (7)** Calendar Days of receipt of additional information or documentation, whichever is later. The Construction Administrator will give final acceptance or rejection by the Owner not less than **seven (7)** Calendar Days after notification.
 - 4.1 Any request deemed an "Equal" and accepted by the Construction Administrator, Engineer, Owner, and Town of East Hartford will result in written notification to the Contractor and will not be in the form of a change order for an "Equal."
 - 4.2 Any request deemed a "Substitution" and rejected or approved by Construction Administrator, Engineer, and Owner may result in written notification to the Contractor and may be in the form of a Change Order if the "Substitution" is approved.

E. Equal or Substitutions

1. **Conditions:** The Engineer will consider the Contractor's request for Equal or Substitution of a product or method of construction when one or more of the following conditions are satisfied, as determined by the Engineer. If the following conditions are not satisfied, the Engineer will return the requests to the Construction Administrator without action except to record noncompliance with these requirements.
 - 1.1 The proposed request does not require extensive revisions to the Contract Documents.
 - 1.2 The proposed request is in accordance with the general intent of the Contract Documents.
 - 1.3 The proposed request is timely, fully documented, and/or properly submitted.
 - 1.4 The proposed request can be provided within the Contract Time. However, the Engineer will not consider the proposed request if it is a result of the Contractor's failure to pursue the Work promptly or coordinate activities properly.

- 1.5** The proposed request will offer the Owner a substantial advantage, in cost, time, energy conservation, or other considerations, after deducting additional responsibilities the Owner must assume. However, if the proposed request requires the Owner to incur additional responsibilities, including but not limited to, additional compensation to the Engineer for redesign and evaluation services, increased cost of other construction by the Owner or similar considerations, then the Owner will have just cause to reject the request for Equal or Substitution.
 - 1.6** The proposed request can receive the necessary approvals, in a timely manner, required by governing authorities having jurisdiction.
 - 1.7** The proposed request can be provided in a manner that is compatible with the Work as certified by the Contractor.
 - 1.8** The proposed request can be coordinated with the Work as certified by the Contractor.
 - 1.9** The proposed request can uphold the warranties required by the Contract Documents as certified by the Contractor.
- 2.** The Contractor's submission and the Engineer's review of Submittals, including but not limited to, Samples, Manufacturer's Data, Shop Drawings, or other such items, which are not clearly identified as a request for an Equal or Substitution, will not be considered or accepted as a valid request for an Equal or Substitution, nor does it constitute an approval.
- 3. Equal or Substitution Produce Request Form (Example):**

Equal or Substitute Product Request

Request Phase: Pre-Bid Post Bid (See Article 15 Materials: Standards, General Conditions)

(If Pre-bid only) Current Bid Due Date: Request No.: Dated:

To: CRDA Project No.:

Project Name / Location:

References: Specification(s): Section(s): Paragraph(s):

Drawing(s): Drawing(s) No(s): Detail(s) No(s):

Contractually Specified Product:

Contractor Proposed Product:

Proposed Product is: Equal: Substitute: Model No.:

IMPORTANT:
See Attached Data For Both Specified And Proposed Products
As Required By Article 15 General Conditions.

Data attached: Drawings: Product Data: Reports: Samples:

Tests: Other:

Reason(s) for not providing the Specified Product:

Similar Installation:

Project Name: Architect's Name:

Project Location: Owner's Name:

Date Installed:

**Division 01
GENERAL REQUIREMENTS**

Will proposed substitution impact other parts of the Work? No Yes *If Yes Attach An Explanation.*

Will proposed substitution increase Contract Time? No Yes *By Number Of Calendar Days*

Actual Dollar Savings to the State of Connecticut if substitution is accepted: \$

**The Undersigned Certifies:
That The Proposed Request For An Equal Or Substitute Product Conforms To All Of The
Requirements Of Division 01 General Requirements, Section 01 25 00 Substitution Procedures.**

Request Submitted By General Contractor / CMR:
(Firm's Typed Name)

By:
(Typed Name) (Title) (Signature) (Date)

Contractor / CMR Send copies to : PM: CA:

Consultant's Request Received on (Date):

Consultant's Review – This Substitution Request is:

Approved: *(Submittal(s) in accordance with Div. 01 General Requirements, Section 01 33 00 Submittal Procedures.)*

Approved as Noted: *(Submittals in accordance with Div. 01 General Requirements, Section 01 33 00 Submittal Procedures.)*

Rejected: Use Specified Materials.

Rejected: Request Not Received Within Specified Time Period - Use Specified Materials.

Reviewed Issued By:

Name:
(Typed Name)

Title:

Signature:
(Signature) (Date)

CONSULTANT Send copies to: PM CA Engineer

If Approved: As noted by Consultant,
CRDA:
(Signature) (Date)

Copies: Project File Red R2

01 26 00 CONTRACT MODIFICATION PROCEDURES

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Summary**
1. This Section specifies administrative and procedural requirements for handling and processing contract modifications.
- C. Related Sections:** The following Sections contain requirements that relate to this Section:
1. Division 01 Section 01 25 00 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after award of the Contract.
 2. Division 01 Section 01 29 76 "Progress Payment Procedures" for administrative procedures governing Applications for Payment.
 3. Division 01 Section 01 32 16 "Construction Progress Schedules" for requirements for construction scheduling and reporting progress of work.
 4. Division 01 Section 01 33 00 "Submittal Procedures" for requirements for submittal of the Construction Progress Schedule.
- D. Requests for Information**
1. In the event that the Contractor or subcontractor, at any tier, determines that some portion of the drawings, specifications, or other contract documents requires clarification or interpretation by the Engineer, the Contractor shall submit a "Request for Information" in writing to the Engineer with a copy to the Construction Administrator. "Requests for Information" may only be submitted by the Contractor and shall only be submitted on the "Request for Information" forms as required by the Owner.
 - 1.1 In the "Request for Information," the Contractor shall clearly and concisely set forth the issue for which clarification or interpretation is sought and why a response is needed from the Engineer.
 - 1.1 In the "Request for Information," the Contractor shall set forth an interpretation or understanding of the requirement along with reasons why such an understanding was reached.
 - 1.2 The Owner acknowledges that this is a complex project. Based upon the owner's past experience with projects of similar complexity, the Owner anticipates that there will probably be some "Requests for Information" on this project.
 - 1.3 The Engineer will review all "Requests for Information" to determine whether they are valid "Requests for Information." If it is determined that the document is not a valid "Request for Information," it will be returned to the Contractor, unreviewed as to content, for resubmittal on the proper form and in the proper manner.
 - 1.4 A "Requests for Information Response" shall be issued within **seven (7)** Calendar Days of receipt of the request from the Contractor unless the Owner determines that a longer time is necessary to provide an adequate response. If a longer time is determined necessary by the Owner, the Owner will, within **seven (7)** Calendar Days of receipt of the request, notify the Contractor of the anticipated response time. If the Contractor submits a "Request for Information" on an activity with **seven (7)** Calendar Days or less of float on the current project schedule, the Contractor shall not be entitled to any time extension due to the time it takes the Engineer to respond to the request provided that the Engineer responds within the **seven (7)** Calendar Days set forth above.

E. Minor Changes in the Work

1. The Engineer, through the Construction Administrator, will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or Contract Time, on the "Supplemental Instructions" form as required by the Owner.

F. Proposal Request

1. **Engineer/Owner-Initiated Requests For Proposals:** The Engineer or Owner will issue a detailed description of proposed changes in the Work via the Construction Administrator that will require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications. Such requests shall be on a "Proposal Request" form as required by the Owner.

- 1.1 "Proposal Request" is issued for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.

G. Change Order Proposal:

1. When either a "Request for Information" from the Contractor or a "Proposal Request" from the Engineer or Owner results in conditions that may require modifications to the Contract, the Contractor may propose changes by submitting a request for a "Change Order Proposal" to the Engineer via the Construction Administrator on forms as approved by the Owner. These forms shall also include "Change Order Proposal Worksheets" as required by the Owner.
2. **"Change Order Request" Forms:** Use "Change Order Proposal" and "Change Order Proposal Worksheets" forms as approved by Owner.
3. A "Change Order Proposal" cannot be submitted without either prior submission of a "Request for Information" from the Contractor or as a response to a "Proposal Request" submitted by the Engineer or Owner.
4. Any "Change Order Request" submitted without a prior submittal of a "Request for Information" or as a response to a "Proposal Request" will be immediately rejected and returned to the Contractor.

G. Construction Change Directive:

1. **"Construction Change Directive":** When the Owner and the Contractor disagree on the terms of a "Change Order Proposal" resulting from either a "Request for Information" or "Proposal Request," then the Engineer through the Construction Administrator may issue a "Construction Change Directive" on a "Construction Change Directive" form as authorized by the Owner. The "Construction Change Directive" instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a "Change Order."
 - 1.1 Contractor must proceed with the Work once a "Construction Change Directive" is issued.
 - 1.2 Issuance of "Construction Change Directive" does not guarantee payment for the Work described in the "Construction Change Directive."
2. **Documentation:** The Contractor shall maintain detailed records on a time and material basis of work required by the "Construction Change Directive."
 - 2.1 After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.
 - 2.2 The final value shall be negotiated based on the supporting data to determine the value of the work.

3. **Change Order Procedures:**
 - 3.1 Upon the Owner's approval of a Contractor's "Change Order Proposal," the Construction Administrator will issue a "Change Order" for signatures of the Engineer, Owner and the Contractor on a "Change Order" form as required by the Owner.

01 29 76 PROGRESS PAYMENT PROCEDURES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Summary:**
 1. This Section specifies procedures for preparation and submittal of the Contractor's Applications for Payment.
 2. **Related Sections:** The following Sections contain requirements that relate to this Section.
 - 2.1 Division 01 Section 01 32 16 "Construction Progress Schedules" for requirements for construction scheduling and reporting progress of work.
 - 2.2 Division 01 Section 01 33 00 "Submittal Procedures."
 - 2.3 Division 01 Section 01 77 00 "Closeout Procedures" for requirements for Final Payment.
- C. **Schedule of Values:**
 1. **Coordination:** Coordinate preparation of the "Schedule of Values" with preparation of the Construction Schedule. Use "Schedule of Values" form as approved by the Owner.
 - 1.1 Submit the "Schedule of Values" to the Construction Administrator at the earliest possible date but no later than **twenty-one (21)** Calendar Days after Contract Start Date.
 - 1.2 **Sub-schedules:** Where Work is separated into phases requiring separately phased payments, provide sub-schedules showing values correlated with each phase of payment.
 2. **Format and Content:** Use the Project Manual Table of Contents as a guide to establish the format for the "Schedule of Values." Provide at least one line item for each Specification Section on electronic media printout.
 - 2.1 Identification: Project identification on the Schedule of Values shall include, but not be limited to, the following:
 - 2.1.1 **Owner;**
 - 2.1.2 **Project Number;**
 - 2.1.3 **Project Name;**
 - 2.1.4 **Project Location;**
 - 2.1.5 **Contractor's name and address.**
 - 2.2 Arrange the "Schedule of Values" in tabular format as required by the Owner, containing separate columns including, but not limited to, the following Items:
 - 2.2.1 **Item Number;**
 - 2.2.2 **Description of Work with Related Specification Section or Division Number;**
 - 2.2.3 **Scheduled Values;**
 - 2.2.4 **Retainage;**
 - 2.2.5 **Contract sum in sufficient detail.**

3. Percentage of Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
4. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual Table of Contents. Break principal subcontract amounts down into several line items. In addition, the following item listed below must be included.
 - 4.1 Division 1 requirements.
5. Round amounts to nearest whole dollar; the total shall equal the Contract Sum.
6. Unit-Cost Allowances: Show the line-item value of unit-cost allowances, as a product of the unit cost, multiplied by the measured quantity. Estimate quantities from the best indication in the Contract Documents.

D. Applications for Payment:

1. Each Application for Payment shall be consistent with previous applications and payments as certified by the Engineer and Construction Administrator and paid for by the Owner.
 - 1.1 The initial "Application for Payment," the "Application for Payment" at time of "Substantial Completion," and the final "Application for Payment," involve additional requirements.
2. **Payment-Application Terms:** The Owner will process monthly progress payments. The Contractor may submit applications for payment on a monthly basis.
3. **Payment-Application Forms:** Use the "Application for Payment" form as required by the Owner. Present the required information on electronic media printout or Owner approved form; multiple pages should be used if required.
 - 3.1 For each item, provide a column including but not limited to the following items:
 - 3.2 Item Number.
 - 3.4 Description of Work and Related Specification Section or Division.
 - 3.5 Scheduled Value, break down by units of material and units of labor.
 - 3.6 Work Completed from previous application.
 - 3.7 Work Completed this period.
 - 3.7.1 Materials presently stored.
 - 3.7.2 Total Completed and stored to date of application.
 - 3.7.3 Percentage of Completion.
 - 3.7.4 Balance to Finish.
 - 3.7.5 Retainage.

E. Application Preparation: Complete every entry on the Application form. At the time of Final Payment only, include an executed Application form by a person authorized to sign legal documents on behalf of the Contractor. The Construction Administrator will return incomplete Applications without action.

1. Entries shall match data on the "Schedule of Values."
2. Include amounts of Change Orders issued prior to the last day of the construction period covered by the application.

F. Transmittal: Except for final payment, submit to the Construction Administrator by a method ensuring receipt within **forty-eight (48)** hours. The Contractor shall first submit a draft copy for review. **Two (2)** complete, signed and notarized original of each Application for Payment, including lien waivers and similar attachments when required.

G. Applications for Payment: Administrative actions and submittals, that must precede or coincide with submittal of the first Application for Payment and all subsequent Application for Payments including, but not limited to, the following items:

1. List of subcontractors and suppliers' name, FEIN/Social Security numbers, and Connecticut Tax Registration Numbers;
2. List of principal suppliers and fabricators;
3. Schedule of Values;
4. Contractor's Construction Schedule (preliminary if not final);
5. Schedule of principal products;
6. Submittal Schedule (preliminary if not final);
7. List of Contractor's staff assignments;
8. List of Contractor's principal consultants;
9. Copies of all applicable permits;
10. Copies of authorizations and licenses from governing authorities for performance of the Work;
11. Proof that subcontractors have been paid amounts included on the Contractor's Application for Payment within thirty (30) days after the Owner has paid the Contractor for the particular Application for Payment in accordance with Connecticut General Statute § 49-41a (a)(1).
12. Releases of Lien from subcontractors with amounts included on the Contractor's Application for Payment when Contractor has been paid by the Owner for the particular Application for Payment but the subcontractors have not been paid.
13. Copies of all Subcontractor Invoices and back-up documentation for any Allowance items.
14. Certified Payrolls to verify compliance with Prevailing Wage requirements.
15. Proof that as-built documents are updated as required by Section 01 77 00 "Closeout Procedures."
16. Initial as-built survey and damage report, if required.
15. In accordance with CGS § Section 1. Section 42-158j:
Each payment requisition submitted shall include a statement showing the status of all pending construction change orders, other pending change directives and approved changes to the original contract or subcontract. Such statement shall identify the pending construction change orders and other pending change directives and shall include the date such change orders and change directives were initiated, the costs associated with their performance and a description of any work completed. As used in this section, "pending construction change order" or "other pending change directive" means an authorized directive for extra work that has been issued to a contractor or a subcontractor.

H. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion submit an Application for Payment form; use the form as authorized by the Owner. Present the required information on electronic media printout.

1. This application shall reflect Certificates of Partial Substantial Completion issued previously.
2. Administrative actions and submittals that shall precede or coincide with this application include, but are not limited to, the following:
 - 2.1 ***Warranties (guarantees) and maintenance agreements;***
 - 2.2 ***Maintenance instructions;***
 - 2.3 ***Final cleaning;***
 - 2.4 ***Application for reduction of retainage and consent of surety;***
 - 2.5 ***Final progress photographs;***
 - 2.6 ***List of Incomplete Work, recognized as exceptions to Engineer's Certificate of Substantial Completion.***

- I. Final Payment Application:** Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include, but are not limited, to the following:
1. **Completion of Project Closeout requirements.**
 2. **Completion of list of items remaining to be completed as indicated on the attachment to the Certificate of Substantial Completion.**
 3. **Ensure that unsettled claims will be settled.**
 4. **Ensure that incomplete Work is not accepted and will be completed in accordance with a schedule prepared by the Contractor which is acceptable to the Owner.**
 5. **Transmittal of required Project construction records to the Owner (including as-built documents specified in Section 01 77 00 "Closeout Procedures").**
 6. **Proof that taxes, fees, and similar obligations were paid.**
 7. **Removal of temporary facilities and services.**
 8. **Removal of surplus materials, rubbish, and similar element.**
 9. **The requirements of the General Conditions and Supplementary Conditions for Final Acceptance, Final Completion, Final Inspection, and Final Payment.**
 10. **Asbestos, lead or other hazardous material manifests.**
 11. **Completion of "Building Contractor Reporting Form" as supplied by Owner, for all Contractors, Subcontractors, Vendors, Suppliers, etc. who work on the Contract. The form includes the following information:**
 - 11.1 **Contractor/Subcontractor name.**
 - 11.2 **FEIN/Social Security Numbers**
 - 11.3 **Connecticut Tax Registration Numbers**
 - 11.4 **Type of work**
 - 11.5 **Name of business and address**
 - 11.6 **Remittance address.**

End
Section 01 20 00
Price and Payment Procedures

01 30 00 ADMINISTRATIVE REQUIREMENTS

- A. **Summary:** Section 01 30 00 Administrative Requirements contains the following Subsections:
- 01 31 13 **Project Coordination**
 - 01 31 19 **Project Meetings**
 - 01 32 16 **Construction Progress Schedules**
 - 01 32 33 **Photographic Documentation**
 - 01 33 00 **Submittal Procedures**
 - 01 35 16 **Alteration Project Procedures**
 - 01 35 19 **Confined Space Entry**
 - 01 35 53 **Security Procedures**

01 31 13 PROJECT COORDINATION

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Related Sections:** The following Sections contain requirements that relate to this section
1. **Section 01 29 76 “Progress Payment Procedures”** submission of Schedule of Values and Applications for payment.
- C. **Construction Administrator:**
1. The Construction Administrator is identified in Division 01 **Section 01 12 19 “Contract Interface.”**
 2. **Construction Mobilization:**
 - 2.1 Cooperate with the Construction Administrator in the allocation of mobilization areas of the site, for field offices and sheds, for Owner and CRDA facility access, traffic, and parking facilities.
 - 2.2 During Construction, coordinate use of site and facilities through the Construction Administrator.
 - 2.3 Comply with Construction Administrators procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
 - 2.4 Coordinate field engineering layout as specified in Division 01 **Section 01 71 23 “Field Engineering”** for work under the instructions of the Construction Administrator.
- C. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections that depend on each other for proper installation, connection, and operation.
- D. **Administrative Procedures:** Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. ***Preparation of schedules.***
 2. ***Delivery and processing of submittals.***
 3. ***Progress meetings.***
 4. ***Project closeout activities.***
- E. **General Coordination Provisions:**
1. **Inspection of Conditions:** Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed and coordinate such inspections with the Construction Administrator and authorities having jurisdictions. If unsatisfactory conditions exist notify the Construction

Administrator immediately. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.

01 31 19 PROJECT MEETINGS

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Pre-construction Conference:**
1. The Contractor will attend a Pre-construction Conference before starting construction, as scheduled by the Construction Administrator convenient to the Owner, the Construction Administrator, Engineer, and Contractor. This meeting will take place within **fourteen (14)** Calendar Days after the written Notice to Proceed and before the Contract Start Date. Hold the conference at the Project Site or another convenient location as directed by the Construction Administrator. The Construction Administrator shall conduct the Pre-construction Conference to review the Contractor and Subcontractor responsibilities and personnel assignments.
 2. **Attendees:** Authorized representatives of the Construction Administrator, Owner, Engineer, and their consultants; the Contractor and its superintendent; major subcontractors; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
 3. **Agenda:** Discuss items of significance that could affect progress, including the following:
 - 3.1 *Tentative construction schedule;*
 - 3.2 *Critical work sequencing;*
 - 3.3 *Progress meeting schedule;*
 - 3.4 *Designation of responsible personnel;*
 - 3.5 *Procedures for processing field decisions and Change Orders;*
 - 3.6 *Procedures for processing Applications for Payment;*
 - 3.7 *Distribution of Contract Documents;*
 - 3.8 *Submittal of Shop Drawings, Product Data, and Samples;*
 - 3.9 *Preparation of record documents;*
 - 3.10 *Use of the premises;*
 - 3.11 *Parking availability;*
 - 3.12 *Office, work, and storage areas;*
 - 3.13 *Equipment deliveries and priorities;*
 - 3.14 *Safety procedures;*
 - 3.15 *First aid;*
 - 3.16 *Security;*
 - 3.17 *Housekeeping;*
 - 3.18 *Working hours;*
- C. Progress Meetings:**
1. The Construction Administrator will conduct progress meetings, bi-weekly, at the Project Site or at regular intervals as agreed upon at the Pre-construction Conference. The Construction Administrator will notify CRDA, the Owner, the Engineer, and the Contractor of the scheduled Progress Meeting dates. Coordinate dates of Progress Meetings with preparation of Application for Payment requests.
 2. **Attendees:** In addition to representatives of the Contractor, Construction Administrator, CRDA, Owner and the Engineer, subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities may be requested to attend these meetings on an as

needed basis. All participants at the meeting shall be familiar with the Project and authorized to conclude matters relating to the Work. The Contractor shall include the site superintendent as a minimum.

3. **Agenda:** Progress Meetings shall review and correct or approve minutes of the previous Progress Meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
 - 3.1 **Construction Schedule:** Review progress since the last Progress Meeting. Determine where each activity is in relation to the required Contractor's "Construction Schedule" and whether each activity is on time or ahead or behind Schedule. Determine how Work that is 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.
 - 3.2 Review the present and future needs of each entity present
4. **Reporting:** The Construction Administrator will distribute minutes of the meeting to each party present, promptly and before the next scheduled meeting, and to parties who should have been present.
5. A schedule of regular Project Meetings will be established at the Pre-construction Conference.

01 32 16 CONSTRUCTION PROGRESS SCHEDULES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Summary:**
 1. This Section includes administrative and procedural requirements for the preparation, submittal, and maintenance of the Contractor's computerized progress schedule, reporting progress of the Work, and Contract time adjustments, including the following:
 - 1.1 Preliminary schedule.
 - 1.2 Baseline schedule.
 - 1.3 Two (2) week look ahead schedules.
 - 1.4 Schedule revisions.
 - 1.5 Recovery schedules.
 - 1.6 As-Built Schedule
 - 1.7 Narratives.
 - 1.8 Schedule time extensions.
- C. **Related Documents:** The following Sections contain requirements that relate to this section
 1. Refer to the General Conditions and the Agreement for definitions and specific dates of Contract Time.
- D. **Related Sections:** The following Sections contain requirements that relate to this section
 1. **Section 01 29 76 "Progress Payment Procedures"** submission of Schedule of Values and Applications for payment.
 2. **Section 01 31 19 "Project Meetings"** specifies the requirements for submitting and distributing meeting and conference minutes.
 3. **Section 01 33 00 "Submittal Procedures"** specifies requirements for submitting the preliminary Construction Schedule and the monthly Schedules
 4. **Section 01 45 00 "Quality Control"** specifies requirements for submitting inspection and test reports.
 5. **Section 01 60 00 "Product Requirements"** specifies requirements for submitting the list of products.
- E. **Definitions:**

1. **Activity:** An element of the Work or task consisting of a single trade performed during the course of the project. Each schedule activity shall be a clearly defined and manageable task depicting an expected duration.
2. **Baseline Schedule:** The original work plan approved by Owner as the Project Schedule.
3. **Critical Path:** The Project critical path is defined as the path with the least amount of total float which constitutes the longest, continuous path of interrelated activities depicting project work from notice of award to project completion. Unless otherwise approved by Owner, the Baseline Schedule Critical Path shall use all allotted Contract time.
4. **Critical Path Method (CPM):** A scheduling technique utilizing activities, durations, and dependencies (logic), such that all activities are interrelated with logic ties from the beginning of the project to the completion of the project.
5. **Data Date:** The data date of each schedule update shall be the first calendar day of each month and represent all work performed through the last calendar day of the preceding month.
6. **Float:** Is the difference between the planned early dates and the planned late dates; the amount of time an activity can be delayed without affecting the Substantial Completion Date. Float is considered a project commodity jointly shared between Owner and the Contractor and shall be used in the best interest of completing the Project on time.
7. **Free float:** Is the amount of time an activity's start can be delayed without adversely affecting the early start of the following activity.
8. **Fragnet:** A subset group of interrelated activities representing only a portion of the CPM schedule.
9. **Milestone:** A key or critical point in time for reference or measurement.
10. **Project Schedule:** The Project Schedule includes the Preliminary Schedule the approved Baseline Schedule (developed based on the Preliminary Schedule), and all subsequent Schedule Updates, Schedule Revisions, Recovery Schedules, and As-Built Schedule.
11. **Recovery Schedule:** A schedule depicting the Contractor's plan for recovery of time lost on the project, regardless of fault.
12. **Schedule Revision:** A schedule in which the plan for the work is revised. A Schedule Revision is required when the current schedule no longer represents the actual or planned prosecution of the Work.
13. **Schedule Update:** A schedule in which only progress is updated from the prior data date to the current data date. No revisions to logic ties will be permitted in a Schedule Update.
14. **Time Impact Analysis:** A technique to demonstrate the comparison of the time impact for each schedule revision or proposed revision against the current approved Project Schedule.
15. **Total Float:** The amount of time an activity (or chain of activities) can be delayed without affecting the Project Substantial Completion Date.

F. Construction Schedule Format:

1. **Format:** Provide a detailed, time-scaled computer-generated Project Schedule with activities representing each portion of the Work for the entire Contract Performance Period. The Project Schedule shall utilize the Critical Path Method (CPM) for the planning, scheduling and reporting of the work to be performed under the contract. The type of schedule shall be Precedence Diagramming Method (PDM).
2. **Electronic Schedule Naming:** The Contractor shall not submit any two (2) schedule files with the same file name. Preliminary, Baseline, and Update Schedules shall have a prefix P, B, and U, respectively.

4. **Maximum Activity Durations:** The Contractor shall prepare schedule utilizing activity durations in terms of days.
4. **Activity Predecessors and Successors:** Every activity shall have logically assigned predecessors and successors.
5. **Calendars:** The planning unit for the Work shall be days. The Contractor shall coordinate weekends (Saturdays and Sundays) and State holidays to be observed with the Owner and incorporate them into the schedule as non-working days. The schedule shall be based on a **seven (7)** day week, Sunday through Saturday.
6. **Weather Days Allowance:** The Contractor shall include as a separate identifiable activity on the Critical Path, an activity labeled "Weather Days Allowance" inserted at the end of the schedule.
 - 6.1 The duration of the Weather Days Allowance shall be **seven (7)** days per year and shall be prorated for partial years.

G. Content

1. Show complete sequence of construction by activity with dates showing the beginning and completion of each element of construction.
2. Identify work of separate phases and other logically grouped activities.
3. Provide separate schedule of submittal dates for shop drawings, product data, and samples. Indicate decision dates for selection of finishes.
4. Indicate critical path with original baseline indicated.
5. Coordinate content with Schedule of Values specified in Section 01 29 76 "Progress Payment Procedures."

H. Baseline Schedule:

1. The Contractor shall submit the proposed Baseline Schedule to the Construction Administrator for all the work of the project within 7 days after issuance of the Notice to Proceed.

I. Two-Week Look Ahead Schedules:

1. The Contractor shall be required to produce and submit to the Construction Administrator a two weeks look-ahead schedule to be updated and submitted the first day of each week.

J. Schedule Revisions:

1. Either CRDA or the Contractor may request a Schedule Revision. Schedule Revisions shall not be made without the written consent of the Owner. Updating the Project Schedule to reflect actual progress shall not be considered revisions to the Project Schedule.
2. A Schedule Revision is considered necessary under the following conditions:
 - 1.1 If there is a significant change in the Contractor's operations that will affect the Project Critical Path.
 - 1.2 Actual prosecution of the Work differs from that represented on the latest Schedule Update.
 - 1.3 There are additions, deletions, or revisions to activities required by Contract modification.
 - 1.4 The Construction Administrator determines there is a reasonable doubt that milestones or the Substantial Completion Date will not be met. The Schedule Revision (also known as a Recovery Schedule) shall demonstrate how the Contractor will reschedule the remaining work, at no additional cost to the state, through re-sequencing and/or reallocating its forces to complete the Work within the Substantial Completion Date.
3. Contractor shall submit its proposed schedule revisions in Frgnet form. Schedule Revisions shall be accompanied by a detailed narrative explaining the reason for the

revision, the anticipated effect of the revision on the Project Schedule and Substantial Completion Date, including describing the change in the affected activities' Total Float value.

4. The Construction Administrator and Contractor shall meet after the Construction Administrator's receipt of the Revision Schedule to review and make necessary adjustments. Should adjustments be required, the Contractor shall submit a revised Revision Schedule to the Construction Administrator within **three (3)** Calendar Days after the meeting and receipt of the Construction Administrator Comments. Subsequent follow-up meetings and resubmissions may continue until the Construction Administrator accepts the Revision Schedule.
5. The Construction Administrator reserves the right to accept or reject any schedule revisions proposed by the Contractor.
6. In the event of change modifications:
 - 6.1 As determined by CPM schedule analysis, only delays determined to be solely caused by Owner that affect the Substantial Completion Date will be considered for a time extension.

K. Recovery Schedules:

1. If, in opinion of the CRDA, a Schedule Update indicates that the Contractor has fallen behind schedule, or that a revision in sequence or operations may be necessary for any other reason, the Contractor shall within **three (3)** Calendar Days of receiving a written request to perform "Recovery" from the Construction Administrator, immediately institute all necessary steps to improve his progress and shall submit such revised network diagrams, tabulations, operational plans and any supplementary information, as may be deemed necessary by the Owner, to demonstrate the manner in which an acceptance rate of progress will be regained.

L. Contract Time Extensions:

1. Time Extensions will be granted only to the extent that equitable adjustments for the activity or activities affected exceed or exceeded the total or remaining float along the Critical path or activities at the time of the actual delay. Actual delays in activities which do not affect the Critical Path work or which do not move the Contractor's planned completion date beyond the Contract completion date or current completion date as affected by previous delays, will not be the basis for an adjustment to the Contract time. Time Extensions shall not be granted until a delay occurs that is:
 - 1.1 Beyond control of and without fault of or negligence of the Contractor and the major Trade Contractors or Suppliers at any time.
2. Extends the actual performance of the work beyond the Contract completion date or other specified Interim Milestones.
3. Should a non-compensable excusable delay be concurrent with one or more compensable delays, the Contractor and Owner agree that the net result is a non-compensable, excusable delay to the extent the delay is caused by the non-compensable event.

M. Review and Acceptance of Project Schedule Submittals:

1. The Construction Administrator shall review schedule submittals for conformance with the requirements of the Contract Documents. Schedule review comments by the Construction Administrator may address whether items of Work are omitted, activity durations are reasonable or the means, methods, timing, and sequencing of the Work are practicable. The planning, scheduling or execution of the Work and the accuracy of any Project Schedule shall remain the sole responsibility of the Contractor.
2. It is the Contractor's responsibility to ensure that all Project Schedules are in compliance with all of the requirements of the Contract Documents. Non-conforming schedule submittals shall be returned by the Construction Administrator without further review for correction and re-submittal. The Construction Administrator's failure to return a schedule submittal shall not be construed to mean that the submittal is in compliance with the requirements of the Contract Documents. The Construction

Administrator, at its discretion, may choose to complete a schedule submittal review even though the submittal fails to meet one of more of the conditions for rejection stated herein.

3. The Contractor shall be responsible for all delays due to its failure to submit complete submittals in accordance with the requirements of the Contract Documents.
4. The Schedule submitted will not be considered acceptable until all of the Construction Administrator's comments are incorporated into the schedule to the Construction Administrator's satisfaction.
5. Errors in any Project Schedule accepted by the Construction Administrator, including but not limited to activity durations, relationships between activities, resource allocation or other float suppression techniques that do not accurately reflect the work may be identified at any time and once identified shall be corrected by the Contractor.

N. Payment:

1. Failure of the Contractor to submit a Baseline Schedule or Revised Baseline Schedule for any portion of the work in accordance with this specification may result in the withholding all Contract payment until the schedule is submitted to, and accepted for compliance with the specification and reasonableness, by the Construction Administrator.
2. The CRDA shall review the Contractor's monthly request for payment upon receipt and shall process the request for payment based upon the current approved Schedule Update. The CRDA will consider the Contractor's overall progress toward Project Completion along with the progress for discrete activities to determine the amount to be approved for the monthly payment request.

O. Performance Monitoring:

1. The CRDA may elect throughout, or at any time during, the Project to record the number of workers and construction equipment working on each construction schedule activity in each area of the Project. The CRDA request for this information will be without additional cost to the CRDA and shall be provided within **three (3)** Calendar days of receipt of the CRDA written request. This information will be used by the CRDA to evaluate the adequacy of the Contractor's performance and project manpower staffing, as well as any Contractor claims.

P. Distribution:

1. Distribute copies of the computer-generated schedules to Construction Administrator, Engineer, CRDA, Subcontractors, suppliers, and other concerned parties.
2. Instruct recipients to promptly report, in writing, problem anticipated by projections indicated in schedules.

01 32 33 PHOTOGRAPHIC DOCUMENTATION

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Related Sections:** The following Sections contain requirements that relate to this section
 1. **Section 01 29 76 "Progress Payment Procedures"** submission of Schedule of Values and Applications for payment.
- C. On the date the work is begun and every **Seven (7)** days thereafter (typically at the end of the week- until the work is at least 95 percent complete), the Contractor shall have photographs taken of the construction.
- D. As photographs are a record of the work progress, they shall be taken each week, whether or not they show work done during the preceding week. Deliver digital photos to the Construction Administrator within **five (5)** Calendar Days of their taking.

01 33 00 SUBMITTAL PROCEDURES

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Summary**
1. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including but not limited to the following:
 - 1.1 **Submittal schedule.**
 - 1.2 **Shop Drawings.**
 - 1.3 **Product Data.**
 - 1.4 **Samples.**
 - 1.5 **Quality assurance submittals.**
 - 1.6 **Proposed "Substitutions/Equals."**
 - 1.7 **Warranty samples.**
 - 1.8 **Coordination Drawings.**
 - 1.9 **O & M Manuals**
- C. Administrative Submittals:** Refer to other Division 01 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
1. **Permits.**
 2. **Applications for Payment.**
 3. **Performance and payment bonds.**
 4. **Contractor's construction schedule.**
 5. **Daily construction reports.**
 6. **Construction Photographs.**
 7. **Insurance certificates.**
 8. **List of subcontractors.**
 9. **Subcontractors/Suppliers FEIN #'s and Connecticut tax registration #.**
- D. Related Sections:** The following Sections contain requirements that relate to this Section:
1. Division 01 Section 01 25 00 "Substitution Procedures" specifies requirements for submittal of requests for equals and substitutions.
 2. Division 01 Section 01 29 76 "Progress Payment Procedures" specifies requirements for submittal of the Schedule of Values.
 3. Division 01 Section 01 31 13 "Project Coordination" for Project Coordination documents.
 4. Division 01 Section 01 31 19 "Project Meetings" specifies requirements for submittal and distribution of meeting and conference minutes.
 5. Division 01 Section 01 32 16 "Construction Progress Schedules" for requirements for construction scheduling and reporting progress of work.
 6. Division 01 Section 01 32 33 "Photographic Documentation" specifies requirements for submittal of periodic construction photographs.
 7. Division 01 Section 01 45 00 "Quality Control" specifies requirements for submittal of inspection and test reports and mockups.
 8. Division 01 Section 01 77 00 "Closeout Procedures" specifies requirements for submittal of Project Record Documents and warranties at project closeout.
 9. Division 01 Section 01 78 30 "Warranties and Bonds."

E. Definitions

1. Coordination Drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended and as identified in the Specification Divisions 02 through 49.
 - 1.1 Preparation of Coordination Drawings is specified in Division 01 Section 01 31 13 "Project Coordination" and may include components previously shown in detail on Shop Drawings or Product Data.

F. Submittal Procedures

1. **Coordination:** Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1.1 Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 1.2 Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - 1.2.1 The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
 - 1.2.2 The Engineer reserves the right to reject incomplete submitted packages.
 - 1.3 **Processing:** To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for re-submittals.
 - 1.3.1 Allow **fourteen (14)** calendar days for initial review. Allow additional time if the Engineer must delay processing to permit coordination with subsequent submittals.
 - 1.3.2 If an intermediate submittal is necessary, process the same as the initial submittal.
 - 1.4 Allow **fourteen (14)** calendar days for reprocessing each submittal.
 - 1.5 No extension of Contract Time will be authorized because of failure to transmit submittals to the Engineer sufficiently in advance of the Work to permit processing.
2. **Submittal Preparation:** Place a permanent label, title block or **8-1/2 inches x 11 inches** cover page approved by the Engineer, on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
 - 2.1 Submittals shall be submitted electronically or as determined otherwise at the pre-construction conference or by the Construction Administrator.
 - 2.2 Provide a space approximately **4 inches by 5 inches** on the label, beside the title block or on the cover page on Shop Drawings to record the Contractor's review and approval markings and the action taken.
 - 2.3 Include the following information on the label for processing and recording action taken.
 - 2.3.1 ***Project Name and CRDA Number.***
 - 2.3.2 ***Date.***
 - 2.3.3 ***Name and address of the Engineer, Construction Administrator, and Owner Representative.***
 - 2.3.4 ***Name and address of the Contractor.***
 - 2.3.5 ***Name and address of the subcontractor.***
 - 2.3.6 ***Name and address of the supplier.***

- 2.3.7** *Name of the manufacturer.*
- 2.3.8** *Number and title of appropriate Specification Section.*
- 2.3.9** *Drawing number and detail references, as appropriate.*
- 3.10** *Indicate either initial or resubmittal.*
- 3.11** *Indicate deviations from Contract Documents.*
- 3.12** *Indicate if "equal" or "substitution."*

3. Submittal Transmittal: Submit each submittal electronically. Include a transmittal form. Copy the Construction Administrator on the transmittal. The Engineer will return all submittals to the Contractor after action is taken with a complete copy of the submittal package. The Engineer will not accept submittals received from sources other than the Contractor.

3.1 On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

G. Distribution

1.1 **Distribution:** Following response to the initial submittal, print and distribute copies to the Construction Administrator, Engineer, Owner, subcontractors, and other parties required to comply with submittal dates indicated.

3.6.1 When revisions are made, distribute to the same parties and post in the same locations.

H. Daily Construction Reports

1. Prepare a daily construction report recording the following information concerning events at the site, and submit duplicate copies to the Construction Administrator at weekly intervals:

- 1.1** *List of subcontractors at the site.*
- 1.2** *Approximate count of personnel at the site.*
- 1.3** *High and low temperatures, general weather conditions.*
- 1.4** *Accidents and unusual events.*
- 1.5** *Meetings and significant decisions.*
- 1.6** *Stoppages, delays, shortages, and losses.*
- 1.7** *List of equipment on site and identify if idle or in use.*
- 1.8** *Orders and requests of governing authorities.*
- 1.9** *Change Orders received, start and end dates.*
- 1.10** *Partial Completion's.*
- 1.11** *Substantial Completion's authorized.*
- 1.12** *Equals or Substitutions approved or rejected.*

I. Shop Drawings

1. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.

2. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates and similar Drawings. Include the following information:

2.1 Dimensions.

- 2.2 Identification of products and materials included by sheet and detail number.
- 2.3 Compliance with specified standards.
- 2.4 Notation of coordination requirements.
- 2.5 Notation of dimensions established by field measurement.
- 2.6 Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least **8-1/2 by 11 inches** but no larger than **36 by 48 inches**.
 - 2.6.1 The Contractor's submittal shall identify the specification section and/or drawing number applicable to the submittal.
 - 2.6.2 Details shall be large scale and/or full size.
- 3. The Contractor shall review the Shop Drawings, stamp with his approval, and submit them electronically with reasonable promptness and in orderly sequence so as to cause no delay in his Work or in the Work of any subcontractor. Shop Drawings shall be properly identified as specified for item, material, workmanship, and project number. At the submission, the Contractor shall inform the Engineer, in writing of any deviation in the shop drawings from the requirements of the Contract Documents.
- 4. The Engineer will review and comment on shop drawings with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the project and with the information given in the Contract Documents. Refer to Article 5 of the General Conditions. Shop Drawings received by the Engineer that indicate insufficient study of drawings and specifications, illegible portions or gross errors, will be rejected outright. Such rejections shall not constitute an acceptable reason for granting the Contractor additional time to perform the work.
- 5. The Contractor shall make any corrections required by the Engineer and shall resubmit the Shop Drawings until fully reviewed.
- 6. The Engineer's review and comments on Shop Drawings shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents.
- 7. Only final reviewed Shop Drawings are to be used on the Project site.

J. Product Data

- 1. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information, schedules, such as manufacturer's installation instructions, catalog cuts, standard color charts, standard wiring diagrams, and performance curves.
 - 1.1 Mark each copy to show applicable choices and options.
 - 1.2 Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
 - 1.3 **Preliminary Submittal:** Submit a preliminary single copy of Product Data electronically where selection of options is required. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
 - 1.4 **Distribution:** Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 - 1.5.1 Do not proceed with installation until a copy of Product Data is in the Installer's possession.
 - 1.5.2 Do not permit use of unmarked copies of Product Data in connection with construction.

K. Samples

- 1. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial

sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern.

L. Quality Assurance Submittals

1. Submit quality-control submittals, including design data, certifications, manufacturer's instructions, manufacturer's field reports, and other quality-control submittals as required under other Sections of the Specifications.

M. Engineer's Action:

1. Except for submittals for the record or information, where action and return are required, the Engineer will review each submittal, mark to indicate action taken, and return promptly.
 - 1.1 Compliance with specified characteristics is the Contractor's responsibility.

01 35 16 ALTERATION PROJECT PROCEDURES

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

B. Summary

1. This Section includes administrative and procedural requirements for performing alteration and renovation Work.
2. **Related Sections:** The following Sections contain requirements that relate to this Section:
 - 2.1 Division 01 Section 01 31 13 "Project Coordination" for procedures for coordinating cutting and patching with other construction activities.
 - 2.2 Refer to other Sections for specific requirements and limitations applicable to performing alteration Work with individual parts of the Work.

C. Project Procedures for Work Involving Asbestos Containing Material (ACM):

1. The CRDA is responsible for abating all ACM that is visible and accessible.
2. If the Contractor should encounter any material suspect or known to contain ACM, he should immediately notify the Construction Administrator of same. It is the CRDA's responsibility to have the material tested and abated (if necessary). The CRDA will respond within **twenty-four (24)** hours after receiving the Contractor's written request to the Construction Administrator for testing the suspect material. The CRDA will abate ACM (if necessary) within a reasonable time period, or may request the Contractor to perform, or hire an abatement subcontractor to perform the abatement as a Change Order to the Contract.

01 35 19 CONFINED SPACE ENTRY

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

B. Summary: The work could involve "Confined Space Entry." The Contractor shall develop and submit to the Construction Administrator a confined space entry program. Confined spaces that affect the Work of this Project will be defined in accordance with the requirements of OSHA, 29 CFR 1910.146 "Permit-Required Confined Spaces," and the Owner's confined space Entry Plan. In the event that the Contractor must perform work within a permitted "confined space" as defined by Federal OSHA regulations, the Contractor shall notify the Construction Administrator and will comply with all safety and monitoring requirements imposed by OSHA relative to work within the permitted confined space.

C. Definitions:

1. **Acceptable Entry Conditions:** means the conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

- 2. **Confined Space:** means a space that:
 - 2.1 Is large enough and so configured that an employee can bodily enter and perform assigned work; and
 - 2.2 Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and
 - 2.3 Is not designed for continuous employee occupancy.
 - 3. **Entry:** means the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.
 - 4. **Permit-Required Confined Space (Permit Space):** means a confined space that has one or more of the following characteristics:
 - 4.1 Contains or has a potential to contain a hazardous atmosphere;
 - 4.2 Contains a material that has the potential for engulfing an entrant;
 - 4.3 Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
 - 4.4 Contains any other recognized serious safety or health hazard.
 - 5. **Permit-Required Confined Space Program (Permit Space Program):** means the employer's overall program for controlling, and, where appropriate, for protecting employees from, permit space hazards and for regulating employee entry into permit spaces.
 - 6. **Permit System:** means the employer's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.
- D. All proposed entries must be reviewed and approved, in advance, by the Construction Administrator prior to the Contractor's entry into a permitted confined space.
 - E. All such compliance measures will be at the Contractor's expense and performed with their own equipment. The CRDA reserves the right to suspend the Contractor's operations for any violation of the above-mentioned confined space regulations.
 - F. The Contractor shall be responsible for obtaining the Permit at no additional cost to the CRDA or the Owner.

01 35 53 SECURITY PROCEDURES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Provide a security program and facilities to protect work, existing facilities, and Owner's operations from unauthorized entry, vandalism, and theft. Coordinate with Goodwin University's security program.
- C. The Contractor shall be solely responsible for damage, loss, or liability due to theft or vandalism.

End
Section 01 30 00

Administrative Requirements

01 40 00 QUALITY REQUIREMENTS

A. **Summary:** Section 01 40 00 Quality Requirements contains the following Subsections:

01 42 16	Definitions
01 42 19	Referenced Standards
01 45 00	Quality Control

01 42 16 DEFINITIONS

A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

B. **Definitions**

1. **General:** Basic contract definitions are included in the General Conditions of the Contract for Construction.
2. **"Indicated":** The term "indicated" refers to graphic representations, notes, or schedules on the Drawings, or other paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the reader locate the reference. Location is not limited to this term.
3. **"Directed":** Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed by the Engineer, requested by the Engineer, and similar phrases.
4. **"Approved":** The term "approved," when used in conjunction with the Engineer's action on the Contractor's submittals, applications, and requests, is limited to the Engineer's duties and responsibilities as stated in the Conditions of the Contract.
5. **"Regulations":** The term "regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
6. **"Furnish":** The term "furnish" means supply and deliver to the Project Site, ready for unloading, unpacking, assembly, installation, and similar operations.
7. **"Install":** The term "install" describes operations at the Project Site including the actual unloading, unpacking, assembly, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
8. **"Provide":** The term "provide" means to furnish and install, complete and ready for the intended use.
9. **"Installer":** An installer is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in the operations they are engaged to perform.
 - 9.1 The term "experienced," when used with the term "installer," means having a minimum of **five (5)** previous projects similar in size and scope to this Project, being familiar with the special requirements indicated, and having complied with requirements of authorities having jurisdiction.
 - 9.2 **Trades:** Using terms such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.
 - 9.3 **Assigning Specialists:** Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the

Contractor has no option. However, the ultimate responsibility for fulfilling contract requirements remains with the Contractor.

9.3.1 This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade-union jurisdictional settlements and similar conventions.

3. **"Project Site"**: Is the space available to the Contractor for performing construction activities, either exclusively or in conjunction, with others performing other Work as part of the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.
4. **"Testing Agencies"**: A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

01 42 19 REFERENCE STANDARDS

- A. **Related Documents**: Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Industry Standards**:
 1. **Applicability of Standards**: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
 2. **Publication Dates**: Comply with the standards in effect as of the date of the Contract Documents unless a specific date is indicated in the Contract Documents or the governing regulations cited herein.
 3. **Conflicting Requirements**: Where compliance with **two (2)** or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent and highest quality requirement. Request a decision from the Engineer before proceeding on requirements that are different but apparently equal, and where it is uncertain which requirement is the most stringent.
 4. **Minimum Quantity or Quality Levels**: The quantity or quality level shown or specified shall be the minimum acceptable. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of the requirements. Request a clarification from the Engineer regarding uncertainties before proceeding.
 5. **Copies of Standards**: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
- A. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source.
 1. **Abbreviations and Names**: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-generating organization, authorities having jurisdiction, or other entity applicable to the context of the text provision. Refer to Thompson Gale's "Encyclopedia of Associations," available in most libraries.
- D. **Governing Regulations and Authorities**:
 1. **Copies of Regulations**: Obtain copies of the following regulations and retain at the Project Site to be available for reference by parties who have a reasonable need during submittals, planning, and progress of the Work, until Substantial Completion.

- 1.1 *State Building Code/2016 Connecticut Supplement.*
- 1.2 *International Building Code/2012.*
- 1.3 *International Existing Building Code/2012.*
- 1.4 *International Mechanical Code/2012.*
- 1.5 *International Plumbing Code/2012.*
- 1.6 *International Energy Conservation Code/2012.*
- 1.7 *National Electric Code NFPA 70-2014.*
- 1.8 *Connecticut Fire Safety Code/2005.*
- 1.9 *ICC/ANSI A117.1-Accessible and Usable Buildings and Facilities/2003.*
- 1.10 *NFPA 101-2003.*
- 1.11 *OSHA 29 CFR Part 1910 Occupational Safety and Health Regulations/1999.*
- 1.12 *OSHA 29 CFR Part 1926 Occupational Safety and Health Regulations for Construction/1999.*
- 1.13 *State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 818.*

E. Submittals:

- 1. Permits, Licenses, and Certificates: For the CRDA and the 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.

01 45 00 QUALITY CONTROL

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

B. Summary

- 1. This Section includes administrative and procedural requirements for quality-control services.
- 2. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with Contract Document requirements.
- 1. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
 - 3.1 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.
 - 3.2 Specified inspections, tests, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with Contract Document requirements.
 - 3.3 Requirements for Contractor to provide quality-control services required by Engineer, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

C. Related Sections: The following Sections contain requirements that relate to this Section:

- 1. Division 01 **Section 01 33 00 "Submittal Procedures"** specifies requirements for development of a schedule of required tests and inspections.
- 2. Division 01 **Section 01 77 00 "Closeout Procedures,"** specific requirements for contract closeout procedures.

D. Responsibilities

- 1. Contractor Responsibilities:** Unless otherwise indicated as the responsibility of another identified entity, the CRDA, through the Construction Administrator, shall provide inspections, tests, and other quality-control services specified elsewhere in the Contract Documents and required by authorities having jurisdiction. All tests required by the individual specification sections are required to be scheduled and notification given to the Construction Administrator **48** hours in advance of the test/inspection as applicable or as agreed to at the Pre-Construction Conference. Costs for these services are not included in the Contract Sum.
 - 1.1** Where individual Sections specifically indicate that certain inspections, tests, and other quality-control services are the Contractor's responsibility, the Contractor shall employ and pay a qualified independent testing agency to perform quality-control services. Costs for these services are included in the Contract Sum.
 - 1.2** Where individual Sections specifically indicate that certain inspections, tests, and other quality-control services are the CRDA's responsibility, the CRDA will employ and pay a qualified independent testing agency to perform those services.
 - 1.2.1** Such services include Special Inspections as required by the latest edition of the "Connecticut State Building Code."
 - 1.2.2** Where the CRDA has engaged a testing agency for testing and inspecting part of the Work, and the Contractor is also required to engage an entity for the same or related element, the Contractor shall not employ the entity engaged by the CRDA. The CRDA will if required engage the services of a qualified Special Inspector for this project. The Special Inspector, as a representative of the CRDA and Owner, shall document and confirm compliance with the provisions of the Connecticut State Building Code for Special Inspections.
 - 1.2.3** Materials and assemblies for this project will be tested and construction operations inspected as the work progresses. Failure to detect any defective work or material shall not in any way prevent later rejection when such defect is discovered nor shall it obligate the State for final acceptance.
 - 1.2.4** The CRDA's use of testing and inspection services shall in no way relieve the Contractor of the responsibility to furnish materials and finished construction in full compliance with the Contract Documents and the Connecticut State Building Code.
- 2. Retesting:** The Contractor is responsible for retesting where results of inspections, tests, or other quality-control services prove unsatisfactory and indicate noncompliance with Contract Document requirements, regardless of whether the original test was Contractor's responsibility.
 - 2.1** The cost of retesting construction, revised or replaced by the Contractor, is the Contractor's responsibility where required tests performed on original construction indicated non-compliance with Contract Document requirements.
 - 2.2** The CRDA will issue a credit change order to cover all costs incurred related to all re-tests/re-inspections due to non-compliance to the Contract Documents, including but not limited to the CRDA's costs and the Consultant's costs.
- 3. Associated Services:** Cooperate with agencies performing required inspections, tests, and similar services, and provide reasonable auxiliary services as requested. Notify the Agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include, but are not limited to, the following:
 - 3.1 Provide access to the Work.**

- 3.2 *Furnish incidental labor and facilities necessary to facilitate inspections and tests.*
 - 3.3 *Take adequate quantities of representative samples of materials that require testing or assist the agency in taking samples.*
 - 3.4 *Provide facilities for storage and curing of test samples.*
 - 3.5 *Deliver samples to testing laboratories.*
 - 3.6 *Provide an approved design mix proposed for use for material mixes that require control by the testing agency.*
 - 3.7 *Provide security and protection of samples and test equipment at the Project Site.*
4. **Duties of the Testing Agency:** The independent testing agency engaged to perform inspections, sampling, and testing of materials and construction specified in individual Sections shall cooperate with the Construction Administrator, Engineer and the Contractor in performance of the testing agency's duties. The testing agency shall provide qualified personnel to perform required inspections and tests.
- 4.1 The testing agency shall notify the Construction Administrator and the Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 4.2 The testing agency is not authorized to release, revoke, alter, or enlarge requirements of the Contract Documents or approve or accept any portion of the Work.
 - 4.3 The testing agency shall not perform any duties of the Contractor.
5. CRDA will pay for the services of an independent testing agency laboratory to perform inspections, tests and other services required by the Specifications except as noted below, listed for which the CRDA will issue a deduct change order to cover the cost associated with these tests:
- 5.1 When the Contractor notifies the Construction Administrator and/or Testing Agency less than **24 hours** before the expected time of testing.
 - 5.2 When the Contractor requires testing for his own convenience.
 - 5.3 When the Contractor schedules a test and is not ready for the required test.
6. Submit reports of tests that are part of the submittal requirements which indicate compliance or non-compliance with the specified standard.

E. Submittals

- 1. Unless the Contractor is responsible for this service, the independent testing agency shall submit a certified written report, in duplicate, of each inspection, test, or similar service to the Construction Administrator, Contractor and Engineer, or as decided at the Pre-Construction Conference. If the Contractor is responsible for the service, submit a certified written report, in duplicate, of each inspection, test, or similar service through the Contractor.
 - 1.1 Submit additional copies of each written report directly to the governing authority, when the authority so directs.
 - 1.2 Report Data: Written reports of each inspection, test, or similar service include, but are not limited to, the following:
 - 1.2.1 Date of issue.
 - 1.2.2 Project title and number.
 - 1.2.3 Name, address, and telephone number of testing agency.
 - 1.2.4 Dates and locations of samples and tests or inspections.
 - 1.2.5 Names of individuals making the inspection or test.
 - 1.2.6 Designation of the Work and test method.
 - .1 Identification of product and Specification Section.

- .2 Complete inspection or test data.
- .3 Test results and an interpretation of test results.
- .4 Ambient conditions at the time of sample taking and testing.
- .5 Comments or professional opinion on whether inspected or tested Work complies with Contract Document requirements.
- .6 Name and signature of laboratory inspector.
- .7 Recommendations on re-testing.

F. Quality Assurance

- 1. **Qualifications for Service Agencies:** Engage inspection and testing service agencies, including independent testing laboratories, that are pre-qualified as complying with the National Voluntary Laboratory Accreditation Program and that specialize in the types of inspections and tests to be performed.
 - 1.1 Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the state where the Project is located.

G. Repair and Protection

General: Upon completion of inspection, testing, sample taking and similar services, repair damaged construction and restore substrates and finishes.

- 1. Protect constructions exposed by or for quality-control service activities, and protect repaired construction.
- 2. Repair and protection are the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing, or similar services.

End
Section 01 40 00
Quality Requirements

01 50 00 TEMPORARY FACILITIES AND CONTROLS

A. **Summary:** Section 01 50 00 Temporary Facilities and Controls contains the following subsections:

- 01 51 36 Temporary Water
- 01 52 13 Field Offices and Sheds
- 01 52 19 Temporary Sanitary Facilities
- 01 54 00 Construction Aids
- 01 55 16 Haul Routes
- 01 56 00 Temporary Barriers and Enclosures
- 01 56 43 Temporary Protection
- 01 57 19 Temporary Environmental Controls
- 01 57 19 Environmental Management
- 01 58 13 Temporary Project Signage

01 51 36 TEMPORARY WATER

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Water Service May Not Be Available at the Site:** Contractor shall arrange with MDC for temporary water from an adjacent fire hydrant, if available or transport water to the project. Cost shall be paid by the Contractor.

01 52 13 FIELD OFFICES AND SHEDS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Field Office:**
1. **General:** Contractor may (though he is not required to) establish a field office trailer suitable to accommodate the Contractor's on-site administrative responsibilities and on-site meetings.
 - 1.1 The Contractor shall provide and install a 20-lb. ABC fire extinguisher, and an approved first aid kit for the workspaces.
 - 1.2 Contractor to provide a cell phone to their Project Superintendent for immediate phone access by the Owner 24 hours a day, unless a different time span is agreed to.
- C. **Storage Sheds:**
1. Storage sheds for tools, materials and equipment shall be weathertight with heat, lighting and ventilation for products requiring controlled conditions.
 2. Remove temporary materials, equipment services and construction before Substantial Completion.
 3. Clean and repair damage caused by installation or use of temporary facilities. Restore existing facilities used during construction to be specified or to original condition.

01 52 19 TEMPORARY SANITARY FACILITIES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Contractor's Construction Work:** Provide toilet facilities for Contractor's and subcontractor's employees engaged on the Project, including employees of other contractors in accordance with the OSHA Table D-1 (29CFR CH.XVII, OSHA Standard 1926.51)_below. Locate toilets where directed and maintain them in a sanitary condition.

Division 01
GENERAL REQUIREMENTS

Number Of Employees	Minimum Number Of Facilities*
20 or less	1 toilet
20 or more	1 toilet and 1 urinal per 40 employees
200 or more	1 toilet and 1 urinal per 50 employees
*Toilet/Urinal Combinations shall count as only one facility.	

1. Job sites, not provided with a sanitary sewer, shall be provided with one of the following toilet facilities unless prohibited by State Codes:
 - 1.1 Chemical toilets;
 - 1.3 Recirculating toilets;
 - 1.4 Combustion toilets.
 2. Locate toilet facilities no more than 1000 feet from any work location.
- C. The Contractor shall provide, where directed, chemical toilets with toilet tissue, plus wash basins with water, soap and paper towels. The Contractor shall maintain the facilities in a sanitary condition.
- D. If women are employed in the work, provide separate, designated facilities for them of the same kind. Provide an adequate number of each kind of facility for each gender.

01 54 00 CONSTRUCTION AIDS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The Contractor shall furnish tools, apparatus and appliances, hoists and/or cranes and power for same, scaffolding, runways, ladders, temporary supports, shoring, and bracing and similar work or material necessary to insure convenience and safety in the execution of the Contract Documents except where this is otherwise specified in any Technical Specification Section. All such items shall meet the approval of the CRDA and Owner but responsibility for design, strength, and safety shall remain with the Contractor. All such items shall comply with Federal OSHA regulations and applicable codes, statutes, rules and regulations, including compliance with the requirements of the current edition of the "Manual of Accident Prevention in Construction" published by the A.G.C. (Associated Contractors of America) and the standards of the Connecticut Department of Labor (DOL).
- C. Staging/laydown areas, required for the execution of the Contract Documents, shall be furnished, erected, relocated if necessary, and removed by the Contractor. Staging/laydown shall be maintained in a safe condition without charge to the CRDA or Owner and for the use of all trades as needed. The Contractor is responsible to repair/restore all staging/laydown areas used for the project to the condition that existed before their use without charge to the CRDA or Owner.

01 55 16 HAUL ROUTES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The Contractor may use on-site paved roads and parking areas but shall not encumber same or their access. Public highways shall not be blocked by standing trucks, parked cars, material storage, and construction operations or in any other manner.
- C. Public roads and existing paved roads, drives and parking areas on Goodwin University's property shall be kept free from scrap or debris due to construction operations and any damage to their surface caused by the Contractor shall be repaired by the Contractor at their own expense.
- D. If the work of the Contract affects public use of any street, road, highway, or thoroughfare, the Contractor shall confer with the police authority having jurisdiction to determine if and how many police are needed for public safety in addition to any barriers and signals that may be needed. The Contractor will be responsible for payment of any needed police services.

01 56 00 TEMPORARY BARRIERS AND ENCLOSURES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Provide barriers to prevent public entry into construction areas and to protect existing facilities from damage by construction operations.
- C. Provide barriers around **all** trees and plants designated to remain. Protect against vehicular traffic, materials' dumping, chemically injurious materials, puddles, or running water.
- D. Barriers and enclosures shall be in conformance with code requirements. Do not block egress from occupied buildings unless necessary to further the work of the Contract. In this case, secure the Construction Administrator and Goodwin University's approval of an alternate egress plan.

01 56 43 TEMPORARY PROTECTION

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Protect buildings, equipment, furnishings, grounds, and plantings from damage. Any damage shall be repaired or otherwise made good at no expense to the State.
- C. Provide protective coverings and barricades to prevent damage. The Contractor shall be held responsible for, and must make good at his own expense, any water, or other type of damage due to improper coverings. Protect the public and building personnel from injury.
- D. Provide temporary protection for installed products. Control traffic in immediate area to minimize damage.

01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Temporary Environmental Controls:** Contractor is to provide the following controls.
 - 1. Dust Control (construction and demolition);
 - 2. Noise Control;
 - 3. Erosion and Sediment Control;
 - 4. Pollution Control;
 - 5. Traffic Control.

01 57 19 ENVIRONMENTAL MANAGEMENT

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Summary:**
 - 1. Section includes:
 - 1.1 Special requirements for environmental management during construction operations.
- C. **Related Sections:**
 - 1. **01 45 00 – Quality Control:** Meetings and project coordination.
- D. **Definitions**
 - 1. Environmental pollution and damage: The presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances; or degrade the utility of the environment for aesthetic, cultural, or historical purposes.
- E. **Preconstruction Meeting**

1. After award of Contract and prior to the commencement of the Work, schedule and conduct meeting with Owner and Engineer to discuss the proposed Environmental Protection Plan and to develop mutual understanding relative to details of environmental protection.

E. Environmental Protection

1. **Protection of natural resources:** Comply with applicable regulations and these specifications. Preserve the natural resources within the Project boundaries and outside the limits of permanent Work performed under this Contract in their existing condition or restore to an equivalent or improved condition as approved by Owner.
 - 1.2 Confine demolition and construction activities to **10 feet beyond solid paving, and 25 feet beyond pervious paving**.
 - 1.2.1 Disposal operations for demolished and waste materials that are not identified to be salvaged, recycled or reused:
 - .1 Remove debris, rubbish, and other waste materials resulting from demolition and construction operations, from site.
 - .2 No burning permitted.
 - .3 Transport materials with appropriate vehicles and dispose off-site to areas that are approved for disposal by governing authorities having jurisdiction.
 - .4 Avoid spillage by covering and securing loads when hauling on or adjacent to public streets or highways. Remove spillage and sweep, wash, or otherwise clean project site, streets, or highways.
 - 1.3 **Water resources:** Protect groundwater resources from contaminants.
 - 1.3.1 Comply with requirements of the National Pollutant Discharge Elimination System (NPDES) and the State Pollutant Discharge **Elimination System (SPDES)**.
 - 1.3.2 Oily substances: Prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water.
 - .1 Store and service construction equipment at areas designated for collection of oil wastes.
 - 1.3.3 Mosquito abatement: Prevent ponding of stagnant water conducive to mosquito breeding habitat.
 - 1.3.4 Prevent run-off from site during demolition and construction operations.
 - 1.4 **Land resources:** Prior to construction, identify land resources to be preserved within the Work area. Do not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and landforms without permission from the CRDA and Owner.
 - 1.4.1 **Earthwork:** As specified in the applicable Specification Section under Division 31 Earth Work and as follows:
 - .1 **Erodible soils:** Plan and conduct earthwork to minimize the duration of exposure of unprotected soils, except where the constructed feature obscures borrow areas, quarries, and waste material areas. Clear areas in reasonably sized increments only as needed to use the areas developed. Form earthwork to final grade as shown. Immediately protect side slopes and back slopes upon completion of rough grading.
 - .2 Delineate work zones so as to restrict compaction of soil elsewhere.
 - .3 Erosion and sedimentation control devices: Construct or install temporary and permanent erosion and sedimentation control features as required.
 - 1.5 **Air Resources:**
 - 1.5.1 Prevent creation of dust, air pollution, and odors.

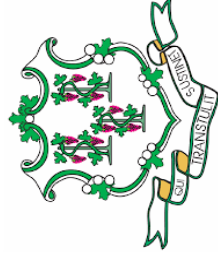
- 1.5.2 Sequence construction to avoid disturbance to site to the greatest extent possible.
- 1.5.3 Use mulch, water sprinkling, and other appropriate methods to limit dust and dirt rising and scattering in air to lowest practical level.
 - .1 Do not use water when it may create hazardous or other adverse conditions such as flooding and pollution.
- 1.5.4 Store volatile liquids, including fuels and solvents, in closed containers.
- 1.5.5 Properly maintain equipment to reduce gaseous pollutant emissions.

01 58 13 TEMPORARY PROJECT SIGNAGE

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Project Sign:** The Contractor shall engage an experienced sign painter to apply graphics. The Construction Administrator shall provide the Contractor with all of the detailed illustration of the sign of the project sign, including but limited, format, wording, font size, color selection, and State Seal. Within seven (7) Calendar Days of the Date of the Commencement of the Work the Contractor shall erect a Project Sign at the construction site, in a location designated by the Construction Administrator.
 - 1. **Groundbreaking Ceremonies Sign:** For groundbreaking ceremonies only, provide a temporary tripod for the sign illustrated and described below. Make the tripod of 12 ft long 2" x 4"s (Stud Grade), beveled and bolted at the top. Provide approximately 5-ft between legs at grade. Provide a 6-ft long, 2" x 4" seat for the sign; locate 5-ft above grade and nail in place. Nail sign at four (4) places where edges intersect tripod legs. Drive a 24" long, pointed 2" x 4" stake into the earth next to each leg and nail to legs.
 - 2. **Project Sign:** The Contractor shall fabricate the Project Sign as follows:
 - 2.1 4' x 8'-3/4", MDO-EXT-APA plywood exterior grade;
 - 2.2 mounted on preservative treated fir posts secured 3' into grade. Top of sign to be 8'-0" above grade;
 - 2.3 painted both sides and all edges of sign and the posts with two coats of exterior, white, alkyd primer;
 - 2.4 borders and letters painted royal blue with "bulletin" (sign) paint; Typeface to be Helvetica Medium;
 - 2.5 State and Town seals to be provided by the Construction Administrator;
 - 3. **Project Sign Detail:** Sign letter sizes, fonts, colors and related information are shown in the following illustration:

96 in

King Court Storm Sewer Improvements



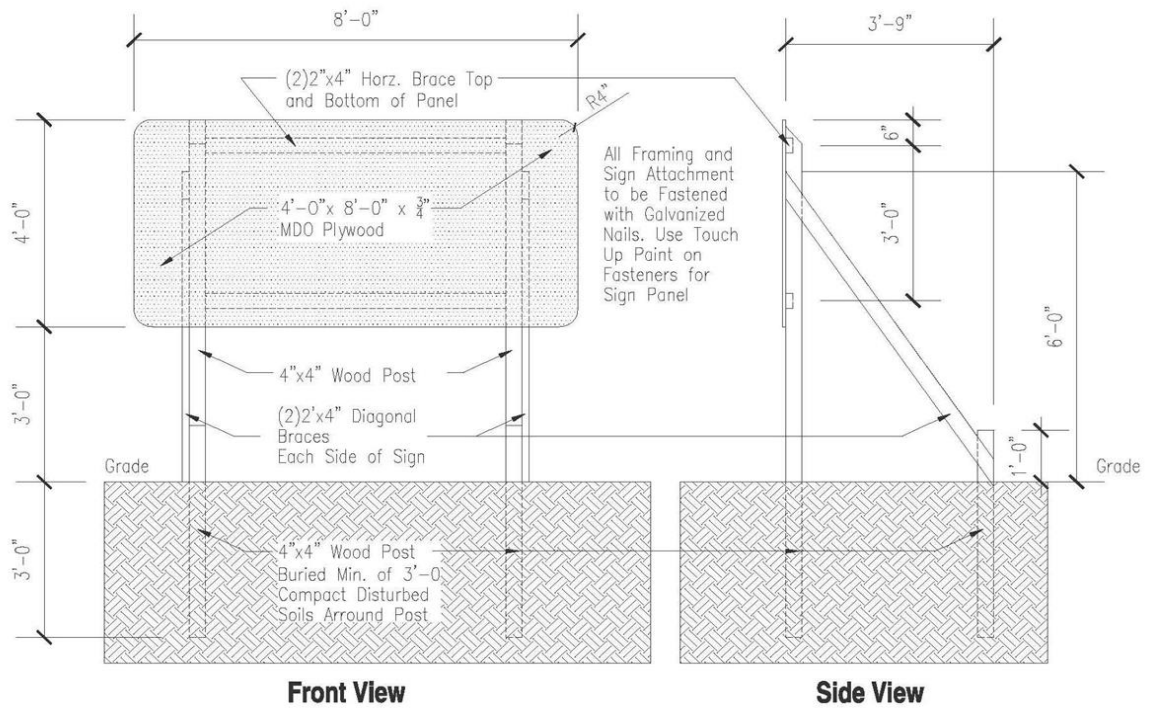
The Town of East Hartford
Mayor Michael P. Walsh
Constructed in Cooperation with the
State of Connecticut
Governor Ned Lamont
and the
Capital Region Development Authority
Suzanne M. Hopgood, Chairperson



ZUVIC, Inc.

Contractor

48 in



Construction Details—NTS.

Project Sign—Agency Administered Projects

Page 2 of 2

The above sign is for illustrative purposes only. The exact layout of the sign and sign information to be supplied by the Owner prior to sign construction.

- C. The Contractor shall remove and properly dispose of the Project Sign within **seven (7)** Calendar days after Acceptance of the Work of the project.

End
Section 01 50 00
Temporary Facilities and Controls

01 60 00 PRODUCT REQUIREMENTS

A. **Summary:** Section 01 60 00 Product Requirements contains the following subsections:

01 60 00 Product Requirements

01 60 00 PRODUCT REQUIREMENTS

A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

B. **Materials and Equipment:** Shall be delivered, stored and handled to prevent intrusion of foreign matter and damage by weather or breakage. Packaged materials shall be delivered and stored in original, unbroken packages.

1. Promptly inspect shipments to assure that products comply with requirements, that quantities are correct and products are undamaged.

2. Packages, materials and equipment showing evidence of damage will be rejected and replaced at no additional cost to the CRDA or Owner.

C. **Storage and Protection:**

1. Store products in accordance with manufacturers' instructions with seals and labels intact and legible. Store sensitive products in weathertight enclosures; maintain within temperature and humidity range required by manufacturer.

2. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.

3. Store loose granular material on solid surfaces in a well-drained area; prevent mixing with foreign matter.

4. Arrange storage to provide access for inspection. Periodically inspect to ensure products are undamaged and are maintained under required conditions. Keep log showing date, time and problems, if any.

5. Stone, masonry units and similar materials shall be stored on platforms or dry skids and shall be adequately covered and protected against damage.

End
Section 01 60 00
Product Requirements

01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS

- A. **Summary:** Section 01 70 00 Execution and Closeout Procedures contains the following subsections:

01 71 23	Field Engineering
01 74 13	Progress Cleaning
01 77 00	Closeout Procedures
01 78 30	Warranties and Bonds

01 71 23 FIELD ENGINEERING

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The Contractor shall provide field engineering services to establish and record grades, lines, and elevations.
- C. The Contractor shall retain a Professional Engineer or Land Surveyor registered by the State of Connecticut to lay out the underground utility lines, and other site work from the horizontal and vertical control information furnished by the Engineer and to establish and record the necessary elevations, at no additional cost to the CRDA.
- D. The Contractor shall forward a letter from his Land Surveyor or Professional Engineer stating that the control information furnished by the Engineer is accurate or shall identify inaccuracies, if they exist. The Contractor shall not take advantage of errors, which may be included in the control information. Stakes and markings shall be preserved.

01 74 13 PROGRESS CLEANING

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **This Section includes:**
1. Cleaning requirements during construction operations.
 2. Final cleaning prior to turning the project over to the Owner.
- C. **Quality Assurance**
1. Coordinate with **Section 01 57 19 - Environmental Management.**
 2. Coordinate with **Section 01 77 00- Close out Procedures.**
- E. Maintain areas under the Contractor's control free of waste materials, debris, and rubbish. Maintain in a clean and orderly condition.
- F. Remove waste materials, debris, and rubbish from site daily and dispose of legally off-site. No scrap/debris shall remain anywhere on site upon final acceptance of the project.
- G. **Final Cleaning:**
1. At completion of Work, remove all remaining waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all exposed surfaces; leave Project clean and ready for occupancy.
 - 1.1 After review of trees to remain by Engineer and Owner, remove tree tags.

01 77 00 CLOSEOUT PROCEDURES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Substantial Completion:**
1. Upon completion of the work, the Contractor shall submit to the CRDA and Engineer a Certificate of Substantial Completion wherein the Contractor certifies that all conditions of the Contract Documents have been met, and that the facility is ready for

occupancy by the Owner. Issuance of a Certificate of Substantial Completion by the CRDA shall be a pre-condition for payment by the CRDA.

- 1.1 **Preliminary Procedures: Before requesting inspection for Certification of Substantial Completion, complete the following. List exceptions in the request.**
 - 1.2 **In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent (100%) completion for the portion of the Work claimed as substantially complete.**
 - 1.2.1 **Include supporting documentation for completion as indicated in the Contract Documents and a statement showing all accounting of the Contract Documents.**
 - 1.2.3 **If 100 percent (100%) completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete shall be provided as well as a schedule for completion of work.**
 - 1.3 **Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.**
 - 1.5 **Obtain and submit releases enabling the Owner unrestricted use of the Work.**
 - 1.6 **Submit as-built record drawings, maintenance manuals, damage or settlement surveys, and similar final record information.**
 - 1.7 **Deliver tools, spare parts, extra stock, and similar items.**
 - 1.8 **Demonstration, through operation and testing, the functions of all systems and/or equipment to the satisfaction of the Engineer, CRDA and Owner for compliance to the contract. Complete testing of systems and instruction of the Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.**
 - 1.10 **Complete final cleanup requirements, including touchup painting.**
 - 1.11 **Touch up and otherwise repair and restore marred, exposed finishes.**
 - 1.12 **Compliance with other terms as outlined in the Contract Documents.**
 - 1.13 **List of all the Contractor's suppliers, sub-contractors, etc. Include name of firm, address, FEIN number and CT Tax I.D. number.**
2. **Inspection Procedures:** The Contractor shall be ready and prepared when they request a Substantial Completion inspection. If the inspection reveals that the work is not complete, there are extensive punchlist items and as the items listed above are not complete, the Construction Administrator, CRDA and Owner will determine the inspection has failed.
 3. The Contractor is responsible for all costs to re-inspect due to a failed inspection.
 - 3.1 The Contractor will repeat inspection when requested and assured that the Work is substantially complete.
 - 3.2 Results of the completed inspection will form the basis of requirements for Acceptance of the Work.

C. Acceptance of the Work

1. **Preliminary Procedures:** Before requesting a Final Inspection and Certificate of Acceptance and Final Payment, complete the following. List exceptions in the request.
 - 1.1 Submit a request for the Final Inspection and Certificate of Acceptance, with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required. Submit an updated final statement, accounting for final additional changes to the Contract Sum.

- 1.2 Submit a certified copy of the Engineer's Final Inspection list of items to be completed or corrected, endorsed and dated by the Engineer. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Engineer.
 - 1.3 Submit consent of surety to Final Payment.
- D. Reinspection Procedure:** The Inspection Group will re-inspect the Work upon receipt of notice from the Construction Administrator that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the CRDA and Owner.
1. Upon completion of re-inspection, the Construction Administrator will prepare a Certificate of Acceptance for issuance by the CRDA and Owner. If the Work is incomplete, the Construction Administrator will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for Acceptance.
- E.** Issuance of a Certificate of Acceptance, in accordance with CGS § 4-61(b)(2) as amended, by the CRDA and Owner does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- F. Contractor's As-Built Drawings Submittal:**
1. **General:** The Contractor shall not use the As-Built Drawings for construction purposes. Protect Contractor's As-Built Drawings from deterioration and loss in a secure, fire-resistant location. Provide access to the As-Built Drawings for CRDA's, Owner's and Construction Administrator's reference during normal working hours. Keep documents current; do not permanently conceal any work until required information has been recorded. Failure to keep documents current is sufficient cause to withhold progress payments.
 - 1.1 The Contractor shall also engage the services of a Surveyor registered in the State of Connecticut to conduct a final survey to determine the location of exterior underground utility lines and to record the results, and update existing electronic media.
 - 1.2 The record of exterior underground utilities shall be made at the time of installation on Mylar film drawing and AutoCAD (latest version) compatible disks. The drawing shall bear the seal of the Land Surveyor and a statement of accuracy.
 2. **Contractor's As-Built Drawings:** The Contractor shall maintain one clean, complete undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark which drawing is most capable of showing conditions fully and accurately. Where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date. **Failure to keep As-built Documents current is sufficient cause to withhold progress payments.**
 - 2.1 Mark record sets with erasable pencil to distinguish between variations in separate categories of the Work.
 - 2.2 Mark all new information that is not shown on Contract Drawings.
 - 2.3 Note related Agreement Amendments where applicable.
 - 2.4 Organize record drawing sheets into manageable sets. Bind sets with durable-paper cover sheets; print suitable titles, dates, and other identification on the cover of each set.
 - 2.5 Upon completion of the work, the Contractor shall submit Record Drawings to the Construction Administrator for the CRDA's and Owner's Records who will pass them on to the Engineer for transferring the changes to the Record Drawing.
 - 2.6 Submit electronic format data of all Coordination Drawing drawings as required by the Owner.

- 2.7 Upon completion of the work, the Contractor shall submit Record Drawings to the Engineer for transferring the changes to the Record Drawings.
- G. Contractor's Record Documents:** Within **thirty (30)** Calendar Days after receipt of the Contractor's "As-Built Drawings" the Engineers shall convert the Contractor "As-Built" information into an electronic CADD format as required by the Owner, using the original A/E contract documents as base drawings. The Engineer shall produce "Record Documents" that show all of the significant modifications made during the course of the project. The Engineer's shall produce **two (2)** sets of electronic CADD format "Record Documents" on electronic media as required by the Owner. The original Mylar "Cover Sheet" that includes the original A/E Team Members dated signatures and professional seals shall be the Record Documents Cover Sheet. The Engineer's final "Record Documents" (electronic media shall be made at the Engineer's expense and shall become the property of the Town of East Hartford.
- H. Contractor's Record Specifications:** The Contractor shall maintain one complete copy of the Project Manual. Include with the Project Manual one copy of other written construction documents, such modifications issued in printed form during construction.
1. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications.
 2. Give particular attention to the Technical Specifications and selection of options and information on concealed construction that cannot otherwise be readily discerned later by direct observation.
 3. Note related record drawing information and Product Data.
 4. Upon completion of the Work, submit record Specifications to the Construction Administrator for the Owner's records.
- I. Contractor's As-Built Product Data:** The Contractor shall maintain one copy of each As-Built Product Data submittal and a markup of record drawings and As-Built Specifications.
1. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site and from the manufacturer's installation instructions and recommendations.
 2. Give particular attention to concealed products and portions of the Work that cannot otherwise be readily discerned later by direct observation.
 3. Upon completion of markup, submit complete set of As-Built Product Data to the Construction Administrator for the Owner's records.
 4. The Engineer will be responsible for the accuracy of As-Built Drawings.
- J. Contractor's Record Sample Submitted:** Immediately prior to Substantial Completion, the appropriate A/E Team Members shall meet with the CRDA, Construction Administrator, and the Town of East Hartford's personnel at the Project Site to determine which Samples are to be transmitted to the Owner for record purposes. Comply with the Town of East Hartford's instructions regarding delivery to the Town of East Hartford Sample storage area.
- K. Contractor's Miscellaneous Record Submittals:** Refer to other Specification Sections for requirements of miscellaneous record keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order. Identify miscellaneous records properly and bind or file, ready for continued use and reference. Submit to the Construction Administrator for the Owner's records.
- L. Maintenance Manuals:** Organize operation and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual, heavy-duty, **2-inch, 3-** ring, vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder according to Section **01 78**

23 **“Operation and Maintenance Data.”** The manual shall include, but not be limited to, the following types of information:

1. ***Emergency instructions.***
2. ***Spare parts list.***
3. ***Copies of warranties.***
4. ***Wiring diagrams.***
5. ***Inspection procedures.***
6. ***Shop Drawings and Product Data.***
7. ***Fixture lamping schedule.***
8. ***List of vendors and addresses.***

M. Closeout Procedures:

1. Operation and Maintenance Instructions: Arrange for each Installer of equipment that requires regular maintenance to meet with the Town of East Hartford's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:

- 1.1 ***Maintenance manuals.***
- 1.2 ***Record documents.***
- 1.3 ***Spare parts and materials.***
- 1.4 ***Identification systems.***
- 1.5 ***Control sequences.***
- 1.6 ***Hazards.***
- 1.7 ***Cleaning.***
- 1.8 ***Warranties and bonds.***
- 1.9 ***Maintenance agreements and similar continuing commitments.***

N. Final Cleaning:

1. **General:** The Contract Documents require general cleaning during construction. Regular site cleaning is included in **Section 01 74 13 “Progress Cleaning.”**
2. **Exterior:**
 - 4.1 Clean the site, including landscape development areas, of rubbish, litter, and other foreign substances. Sweep paved areas broom clean; remove stains, spills, and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth, even-textured surface.
 - 4.2 Remove waste and surplus materials, rubbish and construction equipment and facilities from the site, and deposit it legally elsewhere.
3. **Removal of Protection:** Remove temporary protection and facilities installed for protection of the Work during construction.
4. **Compliance:** Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from the site and dispose of lawfully.
 - 7.1 Where extra materials of value remain after completion of associated Work, they become the Owner's property. Dispose of these materials as directed by the Construction Administrator.

01 78 30 WARRANTIES AND BONDS

- A. Related Documents:** Drawings and general provisions of the Contract, including General and supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

- B. Summary:** This Section includes administrative and procedural requirements for warranties required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
 - 1. Refer to the General Conditions for terms of the Contractor's period for correction of the Work.

Related Sections: The following Sections contain requirements that relate to this Section:

- 1. Division 01 Section **01 33 00 "Submittal Procedures"** specifies procedures for submitting warranties.
 - 2. Division 01 **Section 01 77 00 "Closeout Procedures"** specifies contract closeout procedures.
 - 3. The Divisions 02 through 49 Sections for specific requirements for warranties on products and installations specified to be warranted.
 - 4. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- D. Disclaimers and Limitations:** Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve the suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
 - E. Related Damages and Losses:** When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
 - F. Reinstatement of Warranty:** When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
 - G. Replacement Cost:** Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
 - H. Owner's Recourse:** Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - 1. **Rejection of Warranties:** The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - I.** Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.
 - J.** The Contractor shall warranty all materials and workmanship for a period of **eighteen (18)** months from the date of Acceptance of the Work. In addition, the Contractor shall furnish the warranties listed below. Submit four copies of each to the Engineer in the supplier's standard form or in the form given below if there is no standard form available.
 - K. Specification/Warranty Table:** The Contractor shall provide for all warranties as shown in the Specification/Warranty table:

Specification / Warranty Table

Division 01
GENERAL REQUIREMENTS

Item No.	Section No.	Specification Product/Warranty
02	32 <u>92</u>	Turf and Grasses/ 24 months
	<u> </u>	
	<u> </u>	

L. Form of Warranty: Warranties shall be submitted in following format:

<h2 style="margin: 0;">Warranty</h2>			
<i>Owners Name and Address</i>			
<i>Project Number:</i>			
<i>Project Title: King Court Storm Sewer Improvements</i>			
<i>I (We) hereby warranty</i>			
<i>the</i>	<i>_____ work on the referenced project for a period of</i>	<i>18</i>	<i>months</i>
<i>from</i>	<i>_____ , 20 _____</i>	<i>against failures of workmanship and materials in accordance</i>	
<i>with the requirements of Section _____ , Page _____ , Paragraph _____ , of the Specifications.</i>			
<i>Installer</i> <input type="checkbox"/>	<i>Subcontractor</i> <input type="checkbox"/>	<i>Vendor/Suppliers</i> <input type="checkbox"/>	<i>Manufacturer</i> <input type="checkbox"/>
<i>Installer or Subcontractor or Vendor/Suppliers or Manufacturer Name:</i> _____			
<i>Installer or Subcontractor or Vendor/Suppliers or Manufacturer Signature:</i> _____			
<i>Contractor's Name</i> _____			
<i>Contractor's Signature:</i> _____			
<i>or</i>			
<i>Contractor's Authorized Agent Signature:</i> _____			

M. Submittals:

1. Submit written warranties prior to the date certified for Substantial Completion. If the Contractor's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the CRDA or Owner.
2. Forms for special warranties are included in this Section. Prepare a written document utilizing the appropriate form, ready for execution by the Contractor's, and by the Contractor's subcontractor or vendor/supplier, or manufacturer. Submit a draft to the Owner, through the Construction Administrator, for approval prior to final execution.
 - 2.1 Refer to the Divisions 02 through 48 Sections for specific content requirements and particular requirements for submitting special warranties.
3. **Form of Submittal:** At Acceptance of the Work compile **two (2)** copies of each required warranty properly executed by the Contractor, and by the Contractor's subcontractor or vendor/supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
4. Bind warranties and bonds in heavy-duty, commercial-quality, durable 3-ring, vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive **8-1/2-inch by-11-inch (115-by-280-mm)** paper.

- 4.1 Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the 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 the Installer.
- 4.2 Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project Title, name of the Contractor, and name of Contractor's subcontractor or vendor/supplier, or manufacturer.
- 4.3 When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

End
Section 01 70 00
Execution and Closeout Procedures

And

Division 01
General Requirements
Small Projects