



# CONTRACT BID DOCUMENTS

FOR

## COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT COLCHESTER, CT

PREPARED FOR:

TOWN OF COLCHESTER  
127 NORWICH AVENUE  
COLCHESTER, CT 06415

AUGUST 2021

Prepared By:

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## **TAB A**

Invitation to Bid



## INVITATION TO BID COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT

The Town of Colchester, Connecticut is soliciting sealed bids for the Colchester Town Green Bicycle & Pedestrian Improvement Project.

The project consists of construction improvements to the historic Colchester Town Green located at the intersection of Main Street (Rte. 85) and Hayward Avenue. Improvements shall include the reconstruction and installation of shared-use pathways throughout the green along with the installation of accessible sidewalk ramps, light poles with associated electrical service upgrades, benches and trash receptacles. Additionally, the scope of work also includes minor drainage improvements within Hayward Avenue, the rehabilitation of the historic gazebo, replacement of an existing wooden event board, the construction of a new bus shelter which shall be consistent with the Town Green's historic architecture and minor turf establishment and landscape improvements.

A pre-bid meeting will be held at the Colchester Town Green at 10:00 a.m. prevailing time on Wednesday, September 1, 2021. Attendance is mandatory.

Sealed Bids will be received at the office of the First Selectman of the Town of Colchester, 127 Norwich Avenue, Suite 201, Colchester, Connecticut, 06415; Attention: Ms. Mary Bylone, First Selectman until but no later than 2:00 p.m. prevailing time on Wednesday, September 15, 2021, at which time and place said Bids will be opened publicly and read aloud.

The Contract Documents, including specifications and drawings, may be examined at the office of the First Selectman at the Colchester Town Hall, 127 Norwich Avenue, Colchester, CT during regular business hours. Copies of the Contract Documents may be downloaded from the Town of Colchester's website, <https://www.colchesterct.gov/doing-business-colchester>, under the RFP/RFQ tab.

A satisfactory Bid Bond or Certified Check, in an amount equal to five percent (5%) of the base bid, shall be submitted with each bid. The Bid Bond shall be made payable to Town of Colchester and shall be properly executed by the Bidder and acceptable sureties. All bonds must be from sureties registered in the State of Connecticut.

This contract is subject to state set-aside and contract compliance requirements. See CHRO Requirements in Contract Documents.

No Bidder may withdraw his Bid for a period of sixty (60) days after the date of Bid opening.

The award of a Contract, if awarded, will be the lowest responsible qualified bidder, provided that the bid is reasonable and that it is in the best interest of the Town of Colchester to accept such bid. The Town reserves the right to accept or reject any or all Bids, or waive any technicality in any Bid or part thereof, if deemed to be in the best interest of the Town of Colchester.

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Mary Bylone  
First Selectman  
Purchasing Authority



## **TAB B**

### Instructions to Bidders



## INSTRUCTIONS TO BIDDERS

### 1. PROJECT DESCRIPTION:

The project consists of construction improvements to the historic Colchester Town Green located at the intersection of Main Street (Rte. 85) and Hayward Avenue. Improvements shall include the reconstruction and installation of shared-use pathways throughout the green along with the installation of accessible sidewalk ramps, light poles with associated electrical service upgrades, benches and trash receptacles. Additionally, the scope of work also includes minor drainage improvements within Hayward Avenue, the rehabilitation of the historic gazebo, replacement of an existing wooden event board, the construction of a new bus shelter which shall be consistent with the Town Green's historic architecture and minor turf establishment and landscape improvements.

### 2. GENERAL:

Sealed Bids will be received for the **COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT** at the office of the First Selectman of the Town of Colchester, 127 Norwich Avenue, Suite 201, Colchester, Connecticut, 06415 Attention: Ms. Mary Bylone, First Selectman until but no later than 2:00 p.m. prevailing time on Monday, August 16, 2021.

### 3. CONTRACT DOCUMENTS:

These Contract Documents include a complete set of Bidding Forms to be used by the bidder. Division II Construction Details and Division III Materials Section in the State of Connecticut Department of Transportation (CTDOT) Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 818, dated 2021 and including the latest supplemental specifications, which are incorporated herein and are referred to herein after as "Form 818," which is part of the contract, may be purchased from CTDOT –DOT Print Shop, (860) 594-3086.

### 4. BIDS:

Bid Documents shall be enclosed in a sealed envelope addressed to the Colchester First Selectman and clearly marked "**SEALED BID – COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT**" along with the name of Bidder, date and time of Bid opening in order to guard against premature opening of the Bid.

All Bids must be submitted on forms supplied by the Owner and shall be subject to all requirements of the Contract Documents, including "Instructions to Bidders." All Bids must be regular in every respect; no interlineations, ditto marks, excisions or special conditions shall be made or included in the Bid Form by the Bidders.

The Owner may consider as irregular any Bid on which there are any omissions, alterations of form, additions not called for, conditional or alternate Bids, or irregularities of any kind and, at its option, may reject same. The blank spaces in the proposal must be filled in correctly where indicated for each and every item for which a quantity is given typed or printed in ink. If any price is omitted, the Bid may be rejected. The Bidder shall sign his proposal correctly. If the proposal is made by an individual, his name and post office address must be shown. If made by a firm,

partnership, or by a corporation, the proposal must be signed by an official of the firm, partnership, or corporation authorized to sign contracts, and also must show the post office address of the firm, partnership or corporation.

A Non-Collusion Affidavit shall be completed and returned with the submitted Bid. More than one proposal from an individual, a firm or partnership, a corporation or association under the same or different names will not be considered. Reasonable ground for believing that any Bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such Bidder is interested. Proposals in which the prices are obviously unbalanced may be rejected.

#### **5. ADDENDA & INTERPRETATIONS:**

Any request from a prospective Bidder for interpretation of meaning of Contract Drawings, Specifications or other Contract Documents shall be made in writing to the office of Barton and Loguidice, 41 Sequin Dr. Glastonbury, CT 06033 and to be given consideration must be received at least seven (7) days prior to date fixed for opening of proposals. Such requests may be sent via facsimile (fax) to Barton and Loguidice (860) 633-5971 or e-mail [kgrindle@bartonandloguidice.com](mailto:kgrindle@bartonandloguidice.com). Interpretations will be made in the form of written Addenda to Contract Documents, which Addenda shall become a part of the Contract. Not later than three (3) days prior to date fixed for opening of proposals, Addenda will be mailed or delivered to all parties recorded as having obtained Contract Documents. Failure of any Bidder to receive any such addenda shall not relieve Bidder from any obligations under his proposal as submitted. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

#### **6. SITE CONDITIONS:**

All information on the Drawings or in the contract Documents relating to subsurface conditions, utilities, and other structures is from best sources available at present to the Owner. All such information and drawings of existing construction are furnished only for the information and convenience of Bidders.

At the date fixed for opening of Bids, it will be presumed that each Bidder has made an examination of location and site of work to be done under Contract; has satisfied himself as to actual conditions, requirements and quantities of work; has considered federal, state and local laws and regulations that may affect cost, progress, performance or furnishing the Work; and has read and become thoroughly familiar with Contract Documents including Contract Drawings, Specifications, Addenda, and documents referenced therein.

The Owner and the Engineer assume no responsibility whatsoever with respect to ascertaining for the Contractor any facts concerning physical characteristics at the site of the project.

A mandatory pre-bid meeting will be held on the Colchester Town Green at 10:00 a.m. prevailing time on Wednesday, September 1, 2021.

## 7. BIDDER'S QUALIFICATIONS:

All bidders shall provide information with their bids demonstrating their qualifications to perform the work. At a minimum, each bidder must provide the following information:

- Evidence of Bidder's qualification to do business in the State of Connecticut as well as copies of all required professional licenses.
- A list of present commitments or obligations that may delay the work.
- A list of the major tasks to be completed on the job as well as who will be performing each task (i.e. your company or a subcontractor). If a subcontractor will be utilized, please identify their name.
- A list of relevant project experience demonstrating ability to complete job within the time required and within the established budget. A minimum of four or five references and project owner's primary contact from construction projects completed in the last four years (note: projects shall be competitively bid, and preferably lump sum (as opposed to unit price) contracts. Preference is for projects of similar size and scope to this, with minimum contract value of \$250,000. Please also provide the original contract value (at time of contract signing) and final contract value (upon project completion), including all change orders.

The Owner shall make such investigation as deemed necessary to determine the ability of the Bidder to discharge his Contract. After Bid opening, Bidder shall be prepared to furnish the Owner with any additional written evidence as may be required for this purpose within five (5) days after Owner requests such evidence.

Bids received from Bidders who have previously failed to complete contracts within the time required, or who have previously performed similar work in an unsatisfactory manner, may be rejected. A Bid may be rejected if the Bidder cannot show that he has the necessary capital and experience, and owns, controls, or can procure the necessary plan to commence and complete the work at the rate or time specified, and that he is not already obligated for the performance of other work which would delay the commencement, prosecution, or completion of the work.

Please note that the prime contractor is required to self-perform a minimum of 50% of the original total contract value.

## 8. MODIFICATION:

Any Bidder may modify his Bid at any time prior to the scheduled closing time for receipt of Bids, by submitting an appropriate document duly executed in a manner that Bid must be executed and delivered to the place where Bids are to be submitted. After opening of Bids, no Bidder may withdraw his proposal for a period of sixty (60) days. Owner may, in its sole discretion, release any Bid prior to that date.

## 9. REJECTION OF BIDS:

The Owner also reserves the right to reject any or all Bids, for any reason it deems advisable, and to award Contract or Contracts to any of the Bidders, regardless of amount of Bid.

**10. TIME OF COMPLETION & LIQUIDATED DAMAGES:**

The Bidder must agree to fully complete all work within the number of consecutive calendar days of the issuance of the Notice to Proceed set forth in the Agreement. The Bidder must agree also to pay as liquidated damages the sum set forth in the Agreement for each consecutive calendar day thereafter.

**11. AWARD OF CONTRACTS:**

If the Contract(s) is (are) awarded, Owner will give successful Bidder(s) a Notice of Award within forty-five (45) days after the day of Bid opening. The successful Bidder(s) shall then execute and deliver to the Owner, within ten (10) days after notification of the award, three (3) executed Agreements, Final Certificate of Insurance, Performance Bond, Payment Bond and Contractors Minority Business Enterprise Utilization Form on forms provided by the Owner. If a successful Bidder fails to comply with the requirements of these documents within ten (10) days of receiving said Notice, that Bidder shall forfeit Bid Security and, at the option of the Owner, the Award may become null and void. The Owner may then proceed to Award the Contract(s) to another of the Bidders.

Nonresident contractors shall comply with the State of Connecticut Department of Revenue Services (DRS) Special Notice SN 2012(2) 2011 Legislative Changes to the Procedures Governing Nonresident Contractors.

**12. BID SECURITY:**

Each Bid must be accompanied by a surety bond in the amount of 5% of the total of the Bid with the forms supplied by the Owner. A certified check will not be acceptable. Bid security of the successful Bidder will be retained until such Bidder has executed the Agreement, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of the seventh day after the Effective Date of the Agreement or the sixty-first day after Bid opening, whereupon the Bid security furnished by such Bidders will be returned. Bid security with Bids which are not competitive will be returned within seven (7) days of Bid opening.

**13. SECURITY FOR FAITHFUL PERFORMANCE:**

In addition to the Agreement, a successful Bidder shall also provide, within the time stipulated, a Construction Performance Bond by a company satisfactory to the Owner in an amount equal to One Hundred Percent (100%) of Estimated Total Contract Price recorded in the Proposal section of the Contract as executed, and a Construction Payment Bond in like amount will be required from the successful Bidder for faithful performance of the Contract.

**14. COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES (CHRO) CONTRACT COMPLIANCE (See Tab I):**

The grantee and their contractors will need to comply with 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5 of the

Connecticut General Statutes (C.G.S.). The above statutes and regulations require the grantee to “aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials.” on projects. **All bidders must complete, sign, and return the “CHRO Bidder Contract Compliance Monitoring Report” form to the grantee at the time of bid opening. Bids not including this form should be considered incomplete and rejected.** This form is attached, and can also be found at: <http://www.ct.gov/chro/lib/chro/pdf/notificationtobidders.pdf>

The contractor who is selected to perform this State project must comply with CONN. GEN. STAT. §§ 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5.

State law requires a minimum of twenty-five (25%) percent of the state-funded portion of the contract for award to subcontractors holding current certification from the Connecticut Department of Administrative Services (“DAS”) under the provisions of CONN. GEN. STAT. § 4a-60g. (25% of the work with DAS certified Small and Minority owned businesses and 25% of that work with DAS certified Minority, Women and/or Disabled owned businesses.) The contractor must demonstrate good faith effort to meet the 25% set-aside goals.

For municipal public works contracts and quasi-public agency projects, the contractor must file a written or electronic non-discrimination certification with the Commission on Human Rights and Opportunities. Forms can be found at:

[http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmlNav\\_GID=1806](http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmlNav_GID=1806)

#### **For Contracts Equal to or Greater than \$500,000.00**

The contract cannot be awarded until:

The Contractor has submitted an approved Affirmative Action Plan to CHRO

OR

Authorization has been obtained from CHRO to execute contract and retain 2% per month of the total contract value until CHRO approves the Contractor’s Affirmative Action Plan.



## TAB C

### Forms

Bid Proposal

Bidder Contract Compliance Monitoring Report

Non-Collusion Affidavit of Bidder

Bid Bond

Agreement

Performance Bond

Payment Bond



Barton & Loguidice, LLC.

Colchester Town Green Bicycle & Pedestrian Improvement Project  
Colchester, CT

## **BID PROPOSAL**



**BID PROPOSAL  
COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN  
IMPROVEMENT PROJECT**

**PROJECT IDENTIFICATION:**

Colchester Town Green Bicycle & Pedestrian Improvement Project

**THIS BID IS SUBMITTED TO:**

Town of Colchester  
First Selectman  
127 Norwich Avenue, Suite 201  
Colchester, Connecticut 06415  
Attention: Mary Bylone

The Undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Bid Price and within the Bid Times indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

Bidder accepts all terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for sixty (60) days after the day of Bid opening. Bidder will sign and deliver the required number of counterparts of the Agreement with the Bonds and other documents required by the Bidding Requirements within ten (10) days after the date of Owner’s Notice of Award.

In submitting this Bid, Bidder represents, as more fully set forth in the Agreement, that:

1. Bidder has examined and carefully studied the Bidding Documents and the following Addenda receipt all of which is hereby acknowledged (List Addenda by Addendum Number and Date):

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2. Bidder has examined and carefully studied the Contract Documents including the Commission on Human Rights and Opportunities (CHRO) Contract Compliance requirements.
3. Bidder has visited the work areas and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance and furnishing of the Work.
4. Bidder is familiar with and is satisfied as to all federal, state and local Laws and regulations that may affect cost, progress, performance and furnishing of the Work.

5. Bidder has carefully studied all reports and explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) which have been identified in the Supplementary Conditions. Bidder acknowledges that Owner and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bidding Documents with respect to Underground Utilities at or contiguous to the site. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface, Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by Bidder and safety precautions and programs related thereto. Bidder does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the determination of the Bid for performance and furnishing of the Work in accordance with the times, price and other terms and conditions of the Contract Documents.
6. Bidder is aware of the general nature of Work to be performed by Owner and others at the site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.
7. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
8. Bidder has given Engineer written notice of all conflicts, errors, ambiguities or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by Engineer is acceptable to Bidder, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
9. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.
10. The bidder shall fill in, unit bid prices, written in numbers and in words and an extended price in numbers based on the estimated quantities shown. It is understood that the unit prices shown in numbers shall govern in case of discrepancy between unit prices in words and the extended prices.
11. Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

**CONTRACT LUMP SUM – Town Green Bicycle & Pedestrian Improvements**

Bidder will complete the Work in accordance with the Contract Documents for the following price:

\_\_\_\_\_ Dollars  
(in words)

\$ \_\_\_\_\_  
(in numbers)

**UNIT PRICE ADJUSTMENT NO.1 – Light Pole**

Work consists of installation of light pole, fixture, base and 50’ of conduit and wire as shown on the contract plans. Bidder will reduce or increase the Base Bid No. 1 lump sum price stated above by the following amount. (Reductions shall reflect a negative value):

\_\_\_\_\_ Dollars  
(in words)

\$ \_\_\_\_\_  
(in numbers)

**ALLOWANCE:**

**NO. & ITEM:** \_\_\_\_\_

**1. RENOVATION OF EXISTING GAZEBO:**

This allowance includes all work related to the replacement of all rotted wood within and adjacent to the existing Gazebo including but not limited to eaves, soffits, decking, stairs, and structural members. Also included is the installation of a new asphalt shingle roof once all repairs have been made.

Estimate (EST)      \$ 41,500.00  
(in numbers)

**2. ELECTRICAL SERVICE UPGRADES:**

This allowance includes all work related to the removal of an existing utility pole/light fixture and relocate an existing 600volt/120amp electrical service from a wooden cabinet to a new underground vault (a weather rated and tamper resistant pad mounted enclosure providing improved aesthetics to gazebo surroundings should be considered). The contractor shall coordinate all work related to this connection.

Estimate (EST)      \$ 15,000.00  
(in numbers)

**3. BUS SHELTER REPLACEMENT:**

This allowance includes all work related to the removal and construction of a new bus shelter. The bus shelter will be 10' x 14' and shall include concrete pad, benches, bollards, and planters. Contractor shall coordinate with Town for bus shelter brand/design.

Estimate (EST)      \$ 27,500.00  
*(in numbers)*

Quantities are not guaranteed. Final payment will be based on actual quantities.

- 4. Bidder agrees that the Work will be substantially completed and completed and ready for final payment in accordance with Article 14 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 5. Bidder accepts the provisions of the Agreement as to liquidate damages in the event of failure to complete the Work within the times specified in the Agreement.
- 6. Communications concerning this proposal shall be addressed to the address of bidder below.
- 7. Terms used in this proposal which are defined in the General Conditions or Proposal will have the same meanings indicated in the General Conditions or Proposal Instructions.

SUBMITTED on: \_\_\_\_\_, 2021.

By: \_\_\_\_\_ Title: \_\_\_\_\_

Bidder: \_\_\_\_\_

Address: \_\_\_\_\_

SEAL – if Proposal is by a Corporation

## BIDDER CONTRACT COMPLIANCE MONITORING REPORT



**COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES**  
**CONTRACT COMPLIANCE REGULATIONS**  
**NOTIFICATION TO BIDDERS**

(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by Sections 4a-60 and 4a-60a of the Connecticut General Statutes; and, when the awarding agency is the State, Sections 46a-71(d) and 46a-81i(d) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at Section 46a-68j-21 through 43 of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by Sections 4a-60 and 46a-71(d) of the Connecticut General Statutes.

According to Section 46a-68j-30(9) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to “aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials.” “Minority business enterprise” is defined in Section 4a-60 of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: “(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of Section 32-9n.” “Minority” groups are defined in Section 32-9n of the Connecticut General Statutes as “(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . .” An individual with a disability is also a minority business enterprise as provided by Section 4a-60g of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of Section 46a-68j-21(11) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder’s qualifications under the contract compliance requirements:

- (a) the bidder’s success in implementing an affirmative action plan;
- (b) the bidder’s success in developing an apprenticeship program complying with Sections 46a-68-1 to 46a-68-17 of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder’s promise to develop and implement a successful affirmative action plan;
- (d) the bidder’s submission of employment statistics contained in the “Employment Information Form”, indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder’s promise to set aside a portion of the contract for legitimate minority business enterprises. See Section 46a-68j-30(10)(E) of the Contract Compliance Regulations.

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**INSTRUCTIONS AND OTHER INFORMATION**

The following BIDDER CONTRACT COMPLIANCE MONITORING REPORT must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to Sections 4a-60 and 4a-60a CONN. GEN. STAT., and Sections 46a-68j-23 of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder’s good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

1) **Definition of Small Contractor**

Section 4a-60g CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision 4a-60g CONN. GEN. STAT.

**MANAGEMENT:** Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

**BUSINESS AND FINANCIAL OPERATIONS:** These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

**MARKETING AND SALES:** Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

**LEGAL OCCUPATIONS:** In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

**COMPUTER SPECIALISTS:** Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

**ARCHITECTURE AND ENGINEERING:** Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

**OFFICE AND ADMINISTRATIVE SUPPORT:** All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

**BUILDING AND GROUNDS CLEANING AND MAINTENANCE:** This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

**CONSTRUCTION AND EXTRACTION:** This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category..

**INSTALLATION, MAINTENANCE AND REPAIR:** Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

**MATERIAL MOVING WORKERS:** The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

**PRODUCTION WORKERS:** The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

<p><u>White</u> (not of Hispanic Origin)- All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.</p> <p><u>Black</u>(not of Hispanic Origin)- All persons having origins in any of the Black racial groups of Africa.</p> <p><u>Hispanic</u>- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.</p>	<p><u>Asian or Pacific Islander</u>- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa.</p> <p><u>American Indian or Alaskan Native</u>- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.</p>
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**BIDDER CONTRACT COMPLIANCE MONITORING REPORT**

**PART I - Bidder Information**

Company Name Street Address City & State Chief Executive	Bidder Federal Employer Identification Number _____ Or Social Security Number _____
Major Business Activity (brief description)	Bidder Identification (response optional/definitions on page 1)  -Bidder is a small contractor. Yes ___ No ___ -Bidder is a minority business enterprise Yes ___ No ___ (If yes, check ownership category) Black ___ Hispanic ___ Asian American ___ American Indian/Alaskan Native ___ Iberian Peninsula ___ Individual(s) with a Physical Disability ___ Female ___
Bidder Parent Company (If any)	- Bidder is certified as above by State of CT Yes ___ No ___
Other Locations in Ct. (If any)	

**PART II - Bidder Nondiscrimination Policies and Procedures**

1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes ___ No ___	7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes ___ No ___
2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes ___ No ___	8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes ___ No ___
3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes ___ No ___	9. Does your company have a mandatory retirement age for all employees? Yes ___ No ___
4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes ___ No ___	10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes ___ No ___ NA ___
5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes ___ No ___	11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes ___ No ___ NA ___
6. Does your company have a collective bargaining agreement with workers? Yes ___ No ___ 6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes ___ No ___ 6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of Ct? Yes ___ No ___	12. Does your company have a written affirmative action Plan? Yes ___ No ___ If no, please explain.  13. Is there a person in your company who is responsible for equal employment opportunity? Yes ___ No ___ If yes, give name and phone number. _____

1. Will the work of this contract include subcontractors or suppliers? Yes\_\_ No\_\_

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above?

Yes\_\_ No\_\_

**PART IV - Bidder Employment Information**

Date:

JOB CATEGORY *	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	male	female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

\*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification  (X)	3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source		
State Employment Service				Work Experience	
Private Employment Agencies				Ability to Speak or Write English	
Schools and Colleges				Written Tests	
Newspaper Advertisement				High School Diploma	
Walk Ins				College Degree	
Present Employees				Union Membership	
Labor Organizations				Personal Recommendation	
Minority/Community Organizations				Height or Weight	
Others (please identify)				Car Ownership	
				Arrest Record	
				Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)
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**NON-COLLUSION AFFIDAVIT OF BIDDER**



**NON-COLLUSION AFFIDAVIT OF BIDDER**

State of: \_\_\_\_\_)  
\_\_\_\_\_) SS:  
County of: \_\_\_\_\_)

\_\_\_\_\_ ; being first duly sworn, deposes and says that:

- 1.) He is the owner, partner, officer, representative or agent of the Bidder that has submitted the attached Bid:
- 2.) He is fully informed regarding the preparation and contents of the attached Bid and of all pertinent circumstances regarding such Bid:
- 3.) Such Bid is genuine and is not a collusive or sham Bid:
- 4.) Neither the said Bidder nor any of its officers, partners, owner, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any Bidder, or to fix any overhead, profit or cost element of the bid price or the bid price of any other Bidder or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage with the Town of Colchester or any person interested in the proposed Contract.
- 5.) The price quoted in the attached Bid is fair and proper and is not tainted by collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

Notary Public: \_\_\_\_\_

My Commission expires \_\_\_\_\_, \_\_\_\_\_



**BID BOND**



# BID BOND

Any singular reference to Bidder, Surety, Owner, or other party shall be considered plural where applicable.

---

BIDDER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

## BID

Bid Due Date:

Project (Brief Description Including Location):

## BOND

Bond Number:

Date (Not later than Bid due date):

Penal sum

\_\_\_\_\_ )  
(Words)

\_\_\_\_\_ )  
(Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

BIDDER

SURETY

(Seal  
)

(Seal)

\_\_\_\_\_  
Bidder's Name and Corporate Seal

\_\_\_\_\_  
Surety's Name and Corporate Seal

By: \_\_\_\_\_  
Signature and Title

By: \_\_\_\_\_  
Signature and Title  
(Attach Power of Attorney)

Attest: \_\_\_\_\_  
Signature and Title

Attest: \_\_\_\_\_  
Signature and Title

Note: Above addresses are to be used for giving required notice.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Surety's liability.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
  - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
  - 3.2. All Bids are rejected by Owner, or
  - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

## AGREEMENT



## AGREEMENT

BETWEEN OWNER AND CONTRACTOR  
ON THE BASIS OF A STIPULATED PRICE

THIS AGREEMENT is dated as of the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_ by and between the Town of Colchester (hereinafter called OWNER) \_\_\_\_\_ (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

### Article 1. WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Colchester Town Green Bicycle & Pedestrian Improvement Project

### Article 2. ENGINEER

The Project has been designed by:

Barton and Loguidice, LLC.  
41 Sequin Drive  
Glastonbury, Connecticut 06033  
Phone: (860) 633-8770

who is hereinafter called ENGINEER and who is to act as OWNER's representative from time to time, assume some duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents. OWNER will perform most of the duties associated with processing applications for payments in lieu of ENGINEER.

### Article 3. CONTRACT TIMES

- 3.1 The Work will be completed within sixty-two (62) calendar days of issuance of Notice to Proceed as provided in paragraph 2.03 of the General Conditions and are as modified by the Supplementary Conditions.
- 3.2 *Liquidated Damages.* OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER may suffer financial loss if the Work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER seven hundred fifty dollars (\$750.00) for each calendar day that expires after the time specified in paragraph 3.1 for Completion

until the Work is substantially complete as defined in Section 14.04 of the General Conditions. After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time specified in paragraph 3.1 for completion and readiness for final payment or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER three hundred fifty dollars (\$350.00) for each calendar day that expires after the time specified in paragraph 3.1 for completion and readiness for final payment.

**Article 4. CONTRACT PRICE**

OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to paragraphs 4.1, 4.2 below:

4.1 In accordance with the Contract Lump Sum of the Contractor’s Bid (BP-1 thru BP-4)

4.2 The total estimated base price based on estimated quantities is:

\_\_\_\_\_

*(in numbers)*

\_\_\_\_\_

*(in words)*

**Article 5. PAYMENT PROCEDURES**

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by OWNER or ENGINEER as provided in the General Conditions and Supplementary Conditions.

5.1 *Progress Payments; Retainage.* OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by the ENGINEER, each month during construction as provided in paragraphs 5.1.1 and 5.1.2. below. All such payments will be measured by the schedule of values established in paragraph 2.07 of the General Conditions (and in the case of Unit Price Work based on the number of units completed), or, in the event there is no schedule of values, as provided in the General Requirements.

5.1.1 Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.02 of the General Conditions.

95% of Work completed (with the balance being retainage).

90% (with the balance being retainage) of materials and equipment not incorporated in the Work (but delivered, suitably stored and accompanied by documentation satisfactory to OWNER as provided in paragraph 14.02 of the General Conditions).

- 5.1.2 Upon Substantial Completion, in an amount sufficient to increase total payments to CONTRACTOR to 98% of the Contract Price (with the balance being retainage), less such amounts as ENGINEER shall determine, or OWNER may withhold, in accordance with paragraph 14.02 of the General Conditions.
- 5.2 *Final Payment.* At the end of the One Year Correction Period, the CONTRACTOR shall submit to ENGINEER an Application for Payment of the retainage in accordance with paragraph 14.07 of the General Conditions.

## Article 6. INTEREST

All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the maximum rate allowed by law at the place of the project.

## Article 7. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement, CONTRACTOR makes the following representations:

- 7.1 CONTRACTOR has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents including "technical data".
- 7.2 CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.
- 7.3 CONTRACTOR is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.
- 7.4 CONTRACTOR has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.0.2 of the General Conditions. CONTRACTOR accepts the determination set forth in paragraph 4.0.2 of the Supplementary Conditions of the extent of the "technical data" contained in such reports and drawings upon which CONTRACTOR is entitled to rely as provided in paragraph 4.0.2 of the General Conditions. CONTRACTOR acknowledges that such reports and drawings are not Contract Documents and may not be complete for CONTRACTOR's purposes. CONTRACTOR acknowledges that OWNER and ENGINEER do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to Underground Facilities at or contiguous to the site. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such additional supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations,

explorations, tests, studies or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.

- 7.5 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.
- 7.6 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
- 7.7 CONTRACTOR has given ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written solution thereof by ENGINEER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

#### **Article 8. CONTRACT DOCUMENTS**

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

- 8.1 This Agreement (pages A-1 to A-6, inclusive).
- 8.2 Exhibits to this Agreement (Exhibits A, B, C, D, E, ....).
- 8.3 Exhibit A – Contractor’s Certificate of Insurance
- 8.4 Exhibit B – Contractor’s Performance Bond & Payment Bond.
- 8.5 Exhibit C – Contractor’s Bid Proposal
- 8.6 Exhibit D – Bid Addenda (if any....)
- 8.7 Exhibit E – Notice to Proceed
- 8.8 Exhibit F – Original Bid Documents
- 8.9 The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying or supplementing the Contract Documents pursuant to paragraph 3.0.4 of the General Conditions.

The documents listed in paragraphs 8.2 et seq. above are attached to this Agreement (except as expressly noted otherwise above).

There are no Contract Documents other than those listed in this Article 8. The Contract Documents may only be amended, modified, or supplemented as provided in paragraph 3.0.4 of the General Conditions.

#### **Article 9. MISCELLANEOUS**

- 9.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.

- 9.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 9.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.
- 9.4 Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement, in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed, initialed or identified by OWNER and CONTRACTOR or identified by OWNER and CONTRACTOR or identified by ENGINEER on their behalf.

This Agreement will be effective on \_\_\_\_\_, 2021, (which is the Effective Date of the Agreement).

OWNER: Town of Colchester

CONTRACTOR: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

[CORPORATE SEAL]

[CORPORATE SEAL]

Attest \_\_\_\_\_

Attest \_\_\_\_\_

Address for giving notices:

Address for giving notices:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(If OWNER is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of Agreement.)

License No. \_\_\_\_\_

Agent for service of process: \_\_\_\_\_

\_\_\_\_\_

(If CONTRACTOR is a corporation, attach evidence of authority to sign.)

Barton & Loguidice, LLC.

Colchester Town Green Bicycle & Pedestrian Improvement Project  
Colchester, CT

## **PERFORMANCE BOND**



# PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

## CONTRACT

Date:

Amount:

Description (Name and Location):

## BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By: \_\_\_\_\_

Signature and Title

(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

Attest: \_\_\_\_\_

Signature and Title

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By: \_\_\_\_\_

Signature and Title

(Attach Power of Attorney)

Attest: \_\_\_\_\_

Signature and Title:

EJCDC No. C-610 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.

2. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 3.1.

3. If there is no Owner Default, Surety's obligation under this Bond shall arise after:

3.1. Owner has notified Contractor and Surety, at the addresses described in Paragraph 10 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and

3.2. Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 3.1; and

3.3. Owner has agreed to pay the Balance of the Contract Price to:

1. Surety in accordance with the terms of the Contract;
2. Another contractor selected pursuant to Paragraph 4.3 to perform the Contract.

4. When Owner has satisfied the conditions of Paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:

4.1. Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or

4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and Contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
2. Deny liability in whole or in part and notify Owner citing reasons therefor.

5. If Surety does not proceed as provided in Paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 4.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.

6. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To a limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:

6.1. The responsibilities of Contractor for correction of defective Work and completion of the Contract;

6.2. Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions or failure to act of Surety under Paragraph 4; and

6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.

7. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.

8. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1 Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.

12.2 Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

12.3 Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.

12.4 Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone  
Surety Agency or Broker  
Owner's Representative (engineer or other party)

Barton & Loguidice, LLC.

Colchester Town Green Bicycle & Pedestrian Improvement Project  
Colchester, CT

## **PAYMENT BOND**



# PAYMENT BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

---

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

## CONTRACT

Date:

Amount:

Description (Name and Location):

## BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By:

\_\_\_\_\_  
Signature and Title

(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

Attest:

\_\_\_\_\_  
Signature and Title

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By:

\_\_\_\_\_  
Signature and Title

(Attach Power of Attorney)

Attest:

\_\_\_\_\_  
Signature and Title:

EJCDC No. C-615 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to Owner, this obligation shall be null and void if Contractor:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.

4. Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with Contractor:

1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to Surety and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.

5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.

6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:

6.1. Send an answer to that Claimant, with a copy to Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.

8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.

9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### 15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

15.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

**FOR INFORMATION ONLY – Name, Address and Telephone  
Surety Agency or Broker:  
Owner's Representative (engineer or other party):**

## **TAB D**

### General Conditions



This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

**ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE**

and

Issued and Published Jointly By



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*a practice division of the*  
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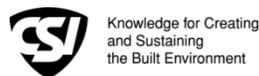
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The Associated General Contractors of America



Construction Specifications Institute

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These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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## GENERAL CONDITIONS

### ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

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#### 1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other

Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

## 1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

### B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

### C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

### D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

a. does not conform to the Contract Documents, or

b. does not meet the requirements of any applicable inspection, reference standard, test, or

approval referred to in the Contract Documents, or

c. has been damaged prior to Engineer's - recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

#### *E. Furnish, Install, Perform, Provide*

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

## ARTICLE 2 - PRELIMINARY MATTERS

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### 2.01 *Delivery of Bonds and Evidence of Insurance*

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

### 2.02 *Copies of Documents*

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

### 2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

### 2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

### 2.05 *Before Starting Construction*

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

### 2.06 *Preconstruction Conference*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

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3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

- a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

### 3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;
2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or
3. Engineer's written interpretation or clarification.

### 3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or
2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract.

Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

### 3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

## ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

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### 4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as

necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

#### 4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

#### 4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

#### C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous

areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

#### 4.04 *Underground Facilities*

*A. Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents,

c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

#### *B. Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further

disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

#### 4.06 *Hazardous Environmental Condition at Site*

*A. Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

*B. Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified

in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on

a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

## ARTICLE 5 - BONDS AND INSURANCE

### 5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the

Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

#### 5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

#### 5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

#### 5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

#### 5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

#### 5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions,

and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

#### 5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

#### 5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order .

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

#### 5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract

Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

#### 5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

## ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

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#### 6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or

received from the superintendent shall be binding on Contractor.

#### 6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

#### 6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

#### 6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

#### 6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

#### 2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services;

4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

**B. Substitute Construction Methods or Procedures:** If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

**C. Engineer's Evaluation:** Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

**D. Special Guarantee:** Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

**E. Engineer's Cost Reimbursement:** Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract

Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

**F. Contractor's Expense:** Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

#### 6.06 Concerning Subcontractors, Suppliers, and Others

**A.** Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

**B.** If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

**C.** Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual

or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

#### 6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

#### 6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

#### 6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

*B. Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

*C. Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

*D. Loading Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Draw-

ings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

#### 6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

#### 6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

#### 6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

#### 6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

##### 1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples*: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.

a. Submit number of Samples specified in the Specifications.

b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals , any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

##### C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents

with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

#### D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

#### E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

#### 6.18 Continuing the Work

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or

disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

#### 6.19 Contractor's General Warranty and Guarantee

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

#### 6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

#### 6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal

shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

## ARTICLE 7 - OTHER WORK AT THE SITE

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### 7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and
2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and

properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

#### 7.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
2. the specific matters to be covered by such authority and responsibility will be itemized; and
3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

#### 7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

## ARTICLE 8 - OWNER'S RESPONSIBILITIES

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### 8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

### 8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

### 8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

### 8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

### 8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

### 8.06 *Insurance*

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

### 8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

### 8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

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9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep

Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show

partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

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10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall

promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

#### 10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

#### 10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

#### 10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

#### 10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,

2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK;  
ALLOWANCES; UNIT PRICE WORK

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11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and

Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have

resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

**B. Costs Excluded:** The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.

**C. Contractor's Fee:** When all the Work is performed on the basis of cost-plus, Contractor's fee shall

be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

**D. Documentation:** Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

## 11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

### B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

### C. Contingency Allowance

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

## 11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

## ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

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### 12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an

allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

### 12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted

by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

### 12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

## ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

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### 13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

### 13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

### 13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to

be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

#### 13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

#### 13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

#### 13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications .

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

#### 13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

#### 13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

### ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

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#### 14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress

payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

#### 14.02 *Progress Payments*

##### A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

##### B. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

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

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent

inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

#### *C. Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

#### *D. Reduction in Payment*

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

- a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling Owner to a set-off against the amount recommended; or
- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

#### *14.03 Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

#### *14.04 Substantial Completion*

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, , Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial

Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

#### 14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

#### 14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals

that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 14.07 *Final Payment*

##### A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;

b. consent of the surety, if any, to final payment;

c. a list of all Claims against Owner that Contractor believes are unsettled; and

d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

##### B. *Engineer's Review of Application and Acceptance*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations

under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

#### C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

#### 14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

#### 14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those provisions made in accordance

with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

## ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

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#### 15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

#### 15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety ) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

#### 15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

#### 15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

## ARTICLE 16 - DISPUTE RESOLUTION

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### 16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be

governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or

2. agrees with the other party to submit the Claim to another dispute resolution process, or

3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

## ARTICLE 17 - MISCELLANEOUS

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### 17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

### 17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

### 17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

### 17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

### 17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

### 17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.



## **T A B L E**

Supplementary Conditions



## SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the General Conditions and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

### ARTICLE 1 REVISIONS:

#### **1.01.29 Engineer**

After the word “performed,” add the words “Owner may designate in writing one or more authorized representatives who shall have express authority to bind the Owner with respect to matters requiring Owner’s approval or authorization. The Engineer does not have such authority. The term “Owner” means the Owner, and the Owner’s Authorized Representative. The Owner’s Authorized Representative is not to be confused with the owner’s representative to which Article 9 refers.”

Add the following:

#### **1.01.53 Project Manager**

The person employed by the Town of Colchester on behalf of the owner. All major decisions and determinations required during the work will be made jointly by the owner, and the project manager; and if applicable, the architect/engineer, however, instructions to the contractor are to be from the Owner. If the contractor performs work beyond the scope of the project at the direction or request of any person other than the owner, it will be at his own risk and expense. If this work must be removed or revised, that also will be at the expense of the contractor.

### ARTICLE 2 REVISIONS:

#### **2.05 Before Starting Construction**

To Paragraph 2.05.A, after the word “review,” add the words “and Owner’s approval:”

Delete Article 2.05.A.3 and replace with the following new Article 2.05.B.1.:

Documentation submitted by CONTRACTOR prior to execution of Agreement shall include a preliminary schedule of values for all of the Work that includes quantities and prices of items which, when added together, equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work. The approved schedule of values shall follow the format provided in the Bidding Documents.

#### **2.07 Initial Acceptance of Schedules**

To Paragraph 2.07.A, after the word “Engineer,” in line 4, add the words “and Owner”. And after the word “Engineer” in line 10, add the words “for its review and the Owner’s approval.”

To Paragraph 2.07.A.1, after the word “Engineer,” in line 2, add the words “and Owner”. And after the word “Engineer” in line 4, add the words “and Owner.” And after the word “therefore” in line 8, add “The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work. A Contractor’s construction schedule and any and all updates shall be prepared and maintained by the Contractor using the Critical Path Method and shall contain a minimum of 25 activities. The Contractor shall submit its schedules to the Owner and Engineer at regular intervals, not to exceed one month. Each submittal shall include, at a minimum, plots of bar charts showing progress of the Work, Total Float and Critical Paths, in addition to a listing of the supporting data organized in tabular form. The Contractor’s construction schedule updates shall identify the Work completed to date based on completed activities as a percentage of the total Work.”

To Paragraph 2.07.A.2, after the word “Engineer,” in line 2, add the words “and Owner”.

To Paragraph 2.07.A.3, after the word “Engineer,” in line 2, add the words “and Owner”.

#### ARTICLE 3 REVISIONS:

##### **3.07 Add the following:**

The Contract Documents are complementary; what is called for by one is as binding as if called for by all. In resolving conflicts, errors, and discrepancies, the documents shall be given precedence in the following order: Agreement, Specifications, Drawings. Within the specifications the order of precedence shall be as follows: Special Provisions, Instructions to Bidders, General Conditions, Technical Provisions. Figure dimensions on Drawings shall govern over scale/dimensions, and detailed Drawings shall govern over general Drawings. The Contractor assumes full responsibility for having familiarized itself with the nature and extent of the Contract Documents, work, locality, and local conditions that may in any manner affect the work to be done.

#### ARTICLE 4 REVISIONS:

##### **4.01 Availability of Lands**

Add the following:

- D. If the Contractor, by direct negotiation and bargaining with any land owner, lessee or tenant, has secured for himself any right to use more space or greater privileges in the space provided for purposes incidental to the performance of the Contract, he shall, upon request of the Owner’s Representative, furnish to the Owner’s Representative proper evidence that such additional right have been properly secured and assurance that no damage to or claim upon the Owner will arrive there from. The Owner shall not be liable in any way for any expense incurred by the Contractor in securing any such right to use additional property.

- E. If access is provided by means of any road or driveway or through private lands, the Contractor shall permit the regular Owners or users thereof to use the same so far as it is consistent with the construction of the work. If any existing driveway or road is damaged by his use thereof, the Contractor shall at once restore it to as good condition as it would have been had he not used it. The Contractor and those under him using any private road or driveway must assume to use that road or driveway on an "as is" basis and use it at their own risk. Neither the Owner nor the land owner shall be liable for damage to persons or property of the Contractor's forces arising from any defect in such road or driveway, except as such defect may be the consequence of negligence of the Owner or the land owner after the award of the Contract.

#### **4.05 Reference Points**

To Paragraph 4.05.A, after the word "Work," in line 4, add the words "The Contractor shall be entitled to rely on the accuracy of the information furnished by the Owner unless the Contractor has actual knowledge to the contrary."

### **ARTICLE 5 REVISIONS:**

#### **5.01 Performance, Payment, and Other Bonds**

To Paragraph 5.01.A, add "The Contractor shall deliver the executed, approved bonds to the Owner at the time of execution of this Contract. In the alternative, Contractor shall furnish Owner with an irrevocable, documentary standby letter of credit in the amount of the Contract sum. The letter of credit may be drawn upon by the Owner if a default under the Contract occurs and/or to pay any Liquidated Damages Amount. If the Owner draws on the letter of credit to pay any of the Liquidated Damages amounts, the Contractor shall remain liable for any remaining Liquidated Damages Amount after such draw(s). The letter of credit (a) shall be in a form and by a financial institution reasonably acceptable to the Owner, (b) shall be payable on sight draft, in partial draws, if applicable, to Owner without other conditions except for the beneficiaries certificate that it is entitled to draw thereon, (c) shall not expire prior to Final Completion of the Work, and (d) shall be for an initial term of one (1) year, which term shall be automatically renewable for subsequent one-year terms thereafter, or for an initial term of one (1) year with a provision that the Owner receive thirty (30) days prior written notice of the termination date of the letter of credit, at which time the Owner may draw on the letter of credit, whether or not a default under the Contract exists, prior to such termination date; provided, however, that such letter of credit shall be returned no later than thirty (30) days following Final Completion of all of the work. The Contractor shall deliver such executed, approved letter of credit to Owner at the time of the execution of this Contract."

#### **5.03 Certificates of Insurance**

To Paragraph 5.03.A, add "Contractor shall also deliver to Owner copies of each of the insurance policies required of Contractor under this Contract, including without limitation,

declarations, and any other document evidencing types of coverage, limits of coverage, insureds, and additional insureds.”

#### 5.04 Contractor’s Liability Insurance

Add the following:

- C. The insurance required by Paragraph 5.04 shall be written for not less than amounts set forth below or required by law, whichever coverage is greater. Coverages shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment. Such coverages shall be maintained by insurance carriers acceptable to Owner and Owner’s lender in all respects.
1. Workers’ Compensation and Employer’s Liability Insurance: Workers’ Compensation limits shall not be less than those statutorily required by the State of Connecticut and shall include Employers Liability limits of liability of \$1,000,000 bodily injury per accident/employee; \$1,000,000 bodily injury per disease/employee; \$1,000,000 policy by disease;
  2. Commercial General Liability Insurance: Limits of liability shall not be less than Two Million dollars (\$2,000,000) per occurrence combined Bodily Injury and Property Damage and Four Million dollars (\$4,000,000) in the aggregate. The limits may be provided through a combination of Primary and Umbrella/Excess Liability policies acceptable to the Owner;
  3. Commercial Automobile Liability Insurance: Limits of liability shall not be less than Two Million dollars (\$2,000,000) per occurrence combined Bodily Injury and Property Damage. The limit may be provided through a combination of Primary and Umbrella/Excess Liability policies acceptable to the Owner;
  4. The Contractor shall, within 30 days of being awarded the contract, provide the Owner with copies of the insurance policies required of it under this contract, each of which names the Town of Colchester and Barton and Loguidice, LLC. as additional insureds, with the Town of Colchester as the Certificate Holders. The “Hold Harmless” endorsement of the insurance shall include the interest of the Town of Colchester. The Contractor and Subcontractors and other interests shall be so named. The policy shall insure against all risks of physical damages except as modified by the Contract Documents and subject to the normal all risk exclusions.
  5. The amount of insurance contained in aforementioned insurance coverage shall not be construed to be a limitation of the obligation or liability on the part of the Contractor or any of its subcontractors under the provisions of this Contract or at law.
  6. The aforementioned insurance coverage outlined in this section and any other coverage that Contractor may consider necessary are the Contractor’s sole responsibility and any deficiency in coverage or policy limits of the Contractor will be the sole responsibility of the Contractor.
  7. In the event of failure of the Contractor to furnish and maintain the aforementioned insurance and to furnish satisfactory evidence thereof, such failure shall constitute a

breach of this Contract and the Owner shall have the right, in addition to any other rights, to immediately cancel and terminate this Contract without any further costs to the Owner or, at the Owner's option, to take out and maintain the same on behalf of the Contractor who agrees to furnish all necessary information relative thereto and to pay the cost thereof to the Owner immediately upon presentation of a bill

- D. Insurance requirements shall also apply to all Subcontractors, and the Contractor shall not allow any Subcontractor to commence work until the Subcontractor's insurance has been obtained.

## 5.06 Property Insurance

Delete Paragraph 5.06.A.2, and replace with the following new Paragraph 5.06.A.2: "Property insurance shall be on an "all-risk" form and shall include, without limitation, insurance against earthquake, flood, windstorm, falsework, testing and startup, demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Engineer's and Contractor's services and expenses required as a result of such insured loss."

To Paragraph 5.06.B, in line 10, delete the words "and shall be listed as an insured or additional insured."

## 5.07 Waiver of Rights

To Paragraph 5.07.A, in line 14, delete the words "Owner and", replace the word "waive," with "waives", and after the word "against", add "Owner." From line 15, delete the word "their" and replace with "its". Add "The Contractor shall require of the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of the Owner. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged."

Add the following:

- D. Claims for Consequential Damages. Except as otherwise provided in the Contract Documents, the Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:
1. damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
  2. damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 15. Nothing contained in this section 5.07 shall be deemed to preclude an award of liquidated non-consequential damages, when applicable, in accordance with the requirements of the Contract Documents."

## ARTICLE 6 REVISIONS:

Add the following:

### **6.10 Supervision and Superintendence**

To Paragraph 6.01.A, after the phrase "Contract Documents" in line 5, add "in a manner consistent with the degree of care and skill usually exercised by contractors experienced in projects of similar scope and in accordance with the standards of skill and care expected of contractors experienced in projects similar to the Project. Under no circumstances shall the quality and completeness of Work be less than recognized industry standards."

To Paragraph 6.01.B, add "The Superintendent shall be satisfactory to the Owner and the Owner shall have the right to request Contractor to dismiss from the Project any Superintendent whose performance is not satisfactory to Owner. In the event Owner and Contractor fail to agree as to whether such dismissal is warranted, the Engineer shall make such determination and both parties shall agree to abide by the decision of the Engineer. The Contractor shall not replace the Superintendent without the consent of the Owner, which consent shall not be unreasonably withheld."

### **6.02 Labors; Working Hours**

To Paragraph 6.02.A, after the word "Site" in line 5, add "The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors. If the Owner or Engineer has reasonable objection to an employee of the Contractor or any of its Subcontractors, the Contractor must submit an acceptable substitute person or entity to the Owner."

### **6.04 Progress Schedule**

To Paragraph 6.04.A.1, after the words "Engineer for", add "review and Owner".

### **6.06 Concerning Subcontractors, Suppliers, and Others**

To Paragraph 6.06.A, add "Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner the names of persons or entities (including those who

are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Owner will promptly reply to the Contractor in writing stating whether or not the Owner or the Engineer, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Engineer to reply promptly shall constitute notice of no reasonable objection.”

To Paragraph 6.06.G, add “Any part of the work performed for the Contractor by a Subcontractor shall be pursuant to a written Subcontract between the Contractor and Subcontractor. Copies of all Subcontractor bids or proposals, and ultimately, subcontracts, shall, upon request of Owner, be submitted to Owner and Engineer.”

Add the following:

“H. The Contractor shall obtain lien waivers from Subcontractors and material suppliers upon payment to such parties and shall supply copies of the same to Owner promptly upon receipt thereof. If Contractor fails to comply with the provisions of this Paragraph 6.06.H, and for so long as such failure continues, Owner may make all payments attributable to a Subcontractor or material supplier co-payable to the Contractor and such Subcontractor or material supplier.”

#### **6.08 Permits**

To Paragraph 6.08.A, add “The Contractor will perform and complete the Work in accordance with all requirements of law and with the Contract Documents and no work shall be undertaken until the Contractor has been issued all required permits. Contractor shall prosecute all work diligently to assure completion no later than the date specified therefore.”

#### **6.09 Laws and Regulations**

To Paragraph 6.09.A, after the word “Work” in line 3, add “Contractor shall review the Contract Documents and notify the Owner and the Engineer of any discrepancy between building codes and regulations of which the Contractor has actual knowledge without independent investigation. The Contractor shall not violate any zoning, set-back or other locational requirements of applicable laws, codes or ordinances, or of any recorded covenants of which the Contractor has actual knowledge. If the Contractor observes or is told by any building inspector that portions of the Contract Documents are at variance with applicable laws, statutes ordinances, building codes, rules or regulations, the Contractor shall promptly notify the Engineer and Owner in writing, and necessary changes shall be accomplished by appropriate modification.”

Add the following:

“D. The Contractor shall be responsible to procure Certificate(s) of Occupancy, if required, from the authorities having jurisdiction.”

“E. The Contractor shall maintain policies of employment as follows:

1. The Contractor and the Contractor's subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to their race, religion, color, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination.
2. The Contractor and the Contractor's Subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, or national origin."

## **6.10 Taxes**

To Paragraph 6.10.A, add "The Contractor shall not be paid or reimbursed for any state, consumer, use, service, ad valorem or other tax paid by the Contractor related to the performance of the Work. The Town of Colchester is exempt from payment of taxes. Therefore, the Contractor should obtain from the Owner's Department of Finance tax exempt certificates for each of the Contractor's vendors and suppliers in order to avoid the imposition of any of the aforesaid taxes. In any event, the Owner will not pay or reimburse the Contractor for any taxes that the Contractor may pay in the performance of the Work."

### **6.11.A.1 Use of Site and Other Areas**

- A.1 "The exact limit of Work and equipment storage shall be verified and agreed to by Owner and Contractor in the field."

## **6.12 Record Documents**

To Paragraph 6.12.A, add "In the event that either party to this Agreement terminates the Agreement, the Contract Documents and Project files that were maintained in paper and electronic formats shall be the property of and reside with the Owner."

## **6.19 Contractor's General Warranty and Guaranty**

To Paragraph 6.19.A, after the word "guarantee" in line 5, add "The Contractor warrants to the Owner and Engineer that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. Work not

conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Owner or Engineer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. The Contractor further warrants and represents that:

1. The Contractor is financially solvent, able to pay all debts as they mature and possessed of sufficient working capital to complete the work and perform all obligations under the Contract Documents;
2. the Contractor is able to furnish the tools, materials, supplies, equipment and labor required to complete the work and perform all obligations under the Contract Documents, and has sufficient experience and competence to do so;
3. the Contractor is authorized to do business in the state where the Project is located and is properly licensed by all necessary governmental, public and other authorities having jurisdiction over the Contractor and the Project;
4. the persons executing the Contract Documents are authorized to do so;
5. the Contractor has visited the site of the Project and become familiar with the Contract Documents and the conditions of the site, and knows of no reason why the work cannot be performed as set forth in the Contract Documents;
6. The Contractor shall warrant all Work for a period of one (1) year after Final Completion; and
7. The Contractor shall assign any extended warranties (in excess of the Contractor's one (1) year warranty) on equipment and materials furnished as part of the Work to the Owner."

## **6.20 Indemnification**

To Paragraph 6.20.A, after the word "performance" in line 10, add "or non-performance".

## **6.22 Prevailing Wage Rate Requirements**

- A. "Town of Colchester construction contracts are subject to Connecticut's prevailing wage law as codified in Connecticut General Statutes Section 31-53 and 31-53a. The Contractor shall be required to comply with all requirements of Connecticut's prevailing wage laws if the project value exceeds the monetary thresholds which are described in Connecticut General Statutes Section 31-53(g)."
- "B. Upon the award of the Contract, the Contractor shall certify, under oath, to the Labor Commissioner the pay scale to be used by the Contractor and any of its Subcontractors for the work to be performed under the Contract. Additionally, the Contractor and any of its Subcontractors must file certified payrolls with the Owner containing

information, including but not limited to, employee names; occupations; hours worked; rates paid; and the employers compliance with various provisions of law.

- C. The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them in either its own organization, or in any of its subcontractor's respective organizations. All work required to be done by persons licensed under all applicable governmental requirements and codes shall be performed by such licensed persons. Contractor agrees to maintain a harmonious job site and to use laborers, suppliers and subcontractors that will not cause any labor disruptions or disharmony in connection with the performance of the Work or any other work being performed at the Project. Contractor agrees to address any labor disputes or disruptions promptly."

#### ARTICLE 7 REVISION:

##### **7.01 Related Work at Site**

To Paragraph 7.01.C, after the word "Engineer" in line 4, add "and Owner."

#### ARTICLE 8 REVISION:

##### **8.11 Evidence of Financial Arrangements**

Delete Paragraph 8.11.A in its entirety.

#### ARTICLE 9 REVISION:

##### **9.04 Authorized variations in Work**

To Paragraph 9.04.A, after the word "Engineer," in line 1, add the words "after having received approval from the Owner,".

##### **9.08 Decisions on Requirements of Contract Documents and Acceptability of Work**

Delete Paragraph 9.08.A in its entirety.

##### **9.09 Limitations on Engineer's Authority and Responsibility**

Add the following:

- "F. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Owner's designated representative about matters arising out of or relating to the Contract. Communications by and with the Engineer's consultants shall be through the Engineer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner's designated representative."

## ARTICLE 10 REVISIONS:

**10.05 Claims**

Delete Paragraph 10.05.E in its entirety.

## ARTICLE 11 REVISIONS:

Add the following:

**11.04 Equipment Rental Rates Not Otherwise Covered**

With regard to rental rates applicable to work not covered by either Lump Sum pay items or Unit Adjustments, for any power-operated machinery, trucks or equipment, necessary to use, the Engineer will allow the Contractor the rental rate set forth in the most current edition of the "Rental Rate Blue Book," including all Rate Adjustment Tables and amendments, as published by Dataquest, Inc. of San Jose, California in effect at the time the work is performed for Contractor-owned equipment or at a lower rate, if submitted by the Contractor.

- A. Should the proper completion of the work require equipment of a type not covered by the above-mentioned schedule, the Engineer will allow Contractor a reasonable rental rate which shall be based on that prevailing in the area of the work and shall be agreed upon in writing before the work is begun. However, the Contractor shall show the sources for the rates he has proposed.
- B. For power-operated machinery, truck or equipment, which the Contractor must obtain by rental, he shall inform the Engineer of his need to rent the equipment prior to using it on the work. He shall be paid the actual rental for the equipment, provided that rate does not exceed the rental rate set forth in the "Rental Rate Blue Book", including all Rate Adjustment Tables and amendments as published by Dataquest, Inc. The Contractor shall provide a copy of the paid receipt for the rental expense incurred.
- C. The estimated operating cost per hour will apply only to the actual time the equipment is operating. Operators will be paid as stated hereinbefore for labor except for certain trucks listed in the "Rental Rate Blue Book" as published by Dataquest, Inc. which show the operators to be included.
- D. For rented equipment not owned by the Contractor or a subsidiary of the Contractor, the following rates shall apply:
  - 1. The daily rate per hour shall apply when the equipment is specifically assigned to the work by the Engineer for a period of 7 consecutive calendar days or less.
  - 2. The weekly rate per hour shall apply when the assigned time exceeds 7 consecutive calendar days but does not exceed 21 calendar days.
  - 3. The monthly rate per hour shall apply when the assigned time exceeds 21 consecutive calendar days.
- E. For Contractor-owned equipment or equipment rented or obtained from a subsidiary of the Contractor, the maximum hourly rate to be used shall be the monthly rate as set

forth in the current edition of the “Rental Rate Blue Book”, including Rate Adjustment Tables and amendments as published by Dataquest, Inc., divided by 176 (176 working hours per month).

ARTICLE 12 REVISIONS:

**12.03 Delays**

To Paragraph 12.03.B, after the words “equitable adjustment in” in line 6, delete the words “Contract Price or the”, and after the words “Contract Times, delete the words “, or both”. Add “Such an adjustment to the Contract Time shall be the Contractor’s sole and exclusive remedy for the delays discussed in this paragraph 12.03.”

To Paragraph 12.03.C, after the words “Contract Times” in line 9, add the words “and only to the extent that the critical path to the Project Schedule is extended.”

ARTICLE 13 REVISIONS:

**13.03 Delays**

Delete section 13.03.B, and replace with the following new section 13.03.B:

“All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be retained by the contractor as part of his obligation. The owner reserves the right to approve/disapprove the firm(s) selected to perform any and all tests/inspections and to be given a copy of any reports thus generated.

Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.

Any authorized agent of the Municipality shall be permitted to inspect the project in general or any of its phases. “

**13.07 Correction Period**

To Paragraph 13.07.A, after the words “the date of” in line 1, delete the words “Substantial Completion”, and replace with the words “Final Completion.”

ARTICLE 14 REVISIONS:

**14.01 Schedule of Values**

To Paragraph 14.01.A, after the words “acceptable to Engineer” in line 4, add the words “and Owner.”

**14.02.C Payment Becomes Due**

To Paragraph 14.02.C.1, add “In no event shall the Owner be obligated to pay the Contractor for more than the amount certified by the Engineer for each Application for Payment, plus any pending change orders that the Owner agreed to approve.”

**14.07 Final Payment**

Add Paragraph 14.07.D – Acceptance of Final Payment as Release

The acceptance by the contractor of final payment shall be and shall operate as a release to the owner of all claims and all liability to the contractor for all things done or furnished in connection with this work and for every act and neglect of the owner and others relating to or arising out of this work. No payment, final or otherwise, shall operate to release the contractor or his subcontractors or his surety from any obligation under this contract or the bonds affixed thereto.

Add the Following:

**14.10 Withholding of Payments**

The Owner may withhold payments necessary to pay laborers, mechanics, apprentices and trainees employed by the contractor or subcontractor on the work, the full amount of wages required by the contract. In the event of failure to pay any laborer, mechanic, apprentice or trainee employed or working on the site of the project or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project, all or part of the wages required by the contract, the Municipality may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

**ARTICLE 15 REVISIONS:**

Delete the word “persistent” from Article 15.0.2.A.1

**15.03 Owner may Terminate for Convenience**

To Paragraph 15.03.A.1, delete from line 3 the words “including fair and reasonable sums for overhead and profit on such Work.”

To Paragraph 15.03.A.2, delete from line 5 the words “plus fair and reasonable sums for overhead and profit on such expenses.”

To Paragraph 15.03.A.4, add “, but no overhead and profit on work not executed.”

Add the following:

- “C. In no event shall the Contractor or any Subcontractor employed on the Project be entitled to profit, overhead, or damages on work that was not performed as of the date of termination, regardless of the reasons for termination.”
- “D. Upon receipt of written notice from the Owner of such termination for the Owner’s convenience, the Contractor shall:
1. cease operations as directed by the Owner in the notice;
  2. take actions necessary, or that the Owner may direct, for the protection and preservation of the Work;
  3. except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders; and
  4. provide a detailed inventory to the Owner that indicates the value, nature, and description of all material, labor, and equipment supplied as of the date of termination.”

#### ARTICLE 16 REVISIONS:

Delete Paragraph 16.01.A, and replace with the following new Paragraph 16.01.A.:

“Owner, in its sole discretion, may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05. The mediation will be governed by the Construction Industry Mediation Rules of the American Dispute Resolution Center, New Britain, Connecticut, currently in effect.”

Delete Paragraph 16.01.C, and replace with the following new Paragraph 16.01.C:

“Any Claim arising out of or related to the Contract, except Claims relating to aesthetic effect and except those waived in the Contract Documents, shall, at the sole discretion of the Owner, be subject to arbitration. If the Owner chooses to Arbitrate the Claims, the arbitration shall be in accordance with the Construction Industry Arbitration Rules of the American Dispute Resolution Center, New Britain, Connecticut, currently in effect. The demand for arbitration shall be filed in writing with the other party to the Contract and with the American Dispute Resolution Center, and a copy shall be filed with the Engineer.”

#### ARTICLE 17 REVISIONS:

Add the following:

##### **17.07 Time for Completion and Liquidated Damages:**

- A. It is hereby understood and mutually agreed, by and between Contractor and Owner, that the date of beginning and the time for completion as specified in the Agreement of the work to be done hereunder are essential conditions of this Contract; and it is further mutually understood and agreed that the Work embraced in this Agreement shall be commenced on a date to be specified in the Notice to Proceed.
- B. Contractor agrees that said Work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between Contractor and Owner, that the time for the completion of the Work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and conditions in this locality.
- C. If said Contractor shall neglect, fail or refuse to complete the Work within the time herein specified, or any proper extension thereof granted by Owner, then the Contractor does hereby agree to pay to Owner the amount specified in the Agreement, not as a penalty but as Liquidated Damages for such breach of Agreement, for each and every calendar day that Contractor shall be in default after the time stipulated in the Agreement for completing the Work.
- D. The said amount is fixed and agreed upon by and between Contractor and Owner because of the impracticality and extreme difficulty of fixing and ascertaining the actual damages Owner would in event sustain, and said amount shall be retained from time to time by the Owner from current periodical estimates.
- E. It is further agreed that time is of the essence of each and every portion of this contract and of the specification wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is allowed for the completion of any of the work, the new time limit fixed by such extension shall be of the essence of this contract, provided that the contractor shall not be charged with liquidated damages or any excess cost when the owner determines that the contractor is without fault and the contractor's reasons for the time extension are acceptable to the owner, provided further that the contractor shall not be charged with liquidated damages or any excess cost when the delay of completion of the work is due:
1. to any preference, priority or allocation order duly issued by the government;
  2. to unforeseeable cause beyond the control and without the fault or negligence of the contractor, including but not restricted to, acts of the owner, acts of another contractor in the performance of a contract with the owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather; and/or
  3. to any delays of subcontractors or suppliers occasioned by any of the causes specified in the preceding two paragraphs, provided further that the contractor shall, within ten (10) days from the beginning of such delay, unless the owner shall grant a further period of time prior to the date of final settlement of the contract, notify the owner, in writing, of the cause of delay,

who shall ascertain the facts and extent of the delay and notify the contractor within a reasonable time of its decision in the matter.

#### **17.08 REQUIRED PROVISIONS DEEMED INSERTED:**

Each and every provision of law required to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein. If through mistake or otherwise any provision is not inserted, or is inserted incorrectly then upon the application of either party the contract shall be amended to make such insertion or correction.

#### **17.09 EMPLOYMENT OF CERTAIN PERSONS PROHIBITED:**

No person under the age of sixteen and no person who at the present time is serving sentence in a penal or correctional institute shall be employed on the work covered by this contract.

#### **17.10 OTHER PROHIBITED INTERESTS:**

No official of the owner who is authorized solely or jointly to negotiate, make, accept, or approve any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the owner who is authorized in a capacity to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or any part thereof.

#### **17.11 NO CONFLICT**

No member or Delegate to Congress of the United States, and no Resident Commissioner, shall be admitted to any share or part of this contract or to any benefit to arise from the same.

#### **17.12 SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION:**

In order to protect the life and health of his employees under the contract, the contractor shall comply with all pertinent provision of the Contract Work Hours and Safety Act commonly known as the Construction Safety Act as pertains to health and safety standards; and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under this contract.

The contractor alone shall be responsible for the safety, efficiency, and adequacy of his plant, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operation.

**17.13 PROJECT MANAGER'S AUTHORITY:**

The project manager shall give all orders and directions contemplated under this contract and specifications relative to the execution of the work. The project manager shall determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to the work. The project manager's estimates and decisions shall be final and conclusive, except as otherwise provided. In case any question shall arise between the parties hereto relative to the contract or specifications, the determination or decision of the project manager shall be a condition precedent to the right of the contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

The project manager shall decide the meaning and intent of any portion of the specifications and of any plan or drawing where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the contractor and any other contractors performing work for the owner shall be adjusted and determined by the project manager.

**17.14 NOTICE AND SERVICE THEREOF:**

Any notice from the owner to any contractor regarding any part of this contract shall be in writing and considered delivered and the service thereof completed when the notice is posted by certified or registered mail to the contractor at his last given address, or delivered in person to the contractor or his authorized representative on the work site.

**17.15 ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS:**

The contractor may be furnished additional instructions and detail drawings as necessary to carry out the work included in the contract.

The additional drawings and instructions thus supplied to the contractor will coordinate with the contract documents. The contractor shall carry out the work in accordance with the additional detail drawings and instructions. The contractor and the project manager will prepare jointly (a) a schedule, fixing the dates at which specific detail drawings will be required, such drawings, if any, to be furnished by the project manager in accordance with said schedule and (b) a schedule fixing the respective dates for the submission of shop drawings, the beginning of manufacturer's testing, installation of materials, supplies and equipment, and the completion of the various parts of the work; each such schedule is subject to change in accordance with actual work progress.

**17.16 CONTRACTOR'S TITLE TO MATERIAL:**

No materials or supplies for the work shall be purchased by the contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The contractor warrants that he has good title to all materials and supplies used in the work, free from all liens, claims or encumbrances.

#### **17.17 PREVAILING WAGE RATES:**

Prevailing wage rates will be applicable for bids over \$100,000 per C.G.S. 31-53g. It is the contractor's responsibility to obtain the annual prevailing wage rate increases directly from the State Department of Labor website. The owner will not allow additional costs for Labor rate increase during the course of the project.

#### **17.18 SUBCONTRACTING:**

The contractor may utilize the services of specialty subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors.

The contractor shall not award any work to any subcontractor without the approval of the owner. Approval will not be given until the contractor submits to the owner a written statement including appropriate certifications concerning the proposed award to the subcontractor, which statement will contain such information as the owner may require.

The contractor shall be as fully responsible to the owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons employed directly by him.

The contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the contractor by the terms of the general conditions and other contract documents insofar as applicable to the work of subcontractors and to give the contractor the same power as regards terminating any subcontract that the owner may exercise over the contractor under any provision of the contract documents.

Nothing contained in this contract shall create any contractual relation between any subcontractor and the owner.

The contractor shall insert these same general and supplemental conditions in any subcontract he awards.

#### **17.19 MUTUAL RESPONSIBILITY OF CONTRACTORS:**

If through acts of neglect on the part of the contractor, any other contractor or subcontractor shall suffer loss or damage on work, the contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration if the other contractor or subcontractor shall assert any claim against the owner on account of any damage alleged to have been sustained,

the owner shall notify the contractor, who shall indemnify and save harmless the owner against any such claim.

#### **17.20 WEATHER CONDITIONS:**

In the event of temporary suspension of work, or during inclement weather, or whenever the project manager shall direct, the contractor will, and will cause his subcontractors to, carefully protect his and their work and materials against damage or injury from the weather. If, in the opinion of the project manager, any work or materials shall have been damaged or injured by reason of failure on the part of the contractor or any of his subcontractors to so protect his work, such materials shall be removed and replaced at the expense of the contractor.

#### **17.21 PROTECTION OF WORK AND PROPERTY - EMERGENCY:**

The contractor shall, at all times, protect the owner's property from injury or loss in connection with this contract. He shall, at all times, safely guard and protect his own work, and that of adjacent property, from damage. The contractor shall replace or make good any such damage, loss or injury unless it was caused directly by errors contained in the contract or by the owner, or the owner's duly authorized representative.

In case of an emergency which threatens loss or injury of property and/or safety of life, the contractor will be allowed to act, without previous instructions from the project manager immediately thereafter. Any claim for compensation by the contractor due to such extra work shall be promptly submitted to the project manager for approval.

Where the contractor has not taken action but has notified the project manager of an emergency threatening injury to persons or damage to the work or any adjoining property, he shall act as instructed or authorized by the project manager.

The amount of reimbursement paid to the contractor on account of any emergency action shall be determined by the project manager and owner based on their review of submitted documentation of actual costs incurred by the contractor.

#### **17.22 EXTRAS:**

Without invalidating the contract, the project manager may order extra work of the kind bid upon or make changes by altering, adding to or deducting from the work. The contract sum will be adjusted accordingly, and the consent of the surety will be obtained as required. All of the work of the kind bid upon shall be paid for at the prices stipulated in the proposal, and no claims for any extra work or materials shall be allowed unless the work is ordered in writing by the project manager and the cost therefore is stated in the order.

#### **17.23 ANTI-LOBBYING:**

- A. No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;
- B. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, it will complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions; and
- C. It will require that the language of paragraph (n) of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

#### **17.24 QUANTITIES OF ESTIMATE:**

Wherever the quantities of work to be done and materials to be furnished on a unit basis under this contract are shown in any of the documents including the proposal, they are given for use in comparing bids. The owner reserves the right to increase or decrease the units as may be deemed reasonably necessary or desirable to complete the work in this contract. Any such increase/decrease shall in no way invalidate this contract, nor shall any such increase/decrease give cause for claims or liability for damages.

#### **17.25 ASSIGNMENTS:**

The contractor shall not assign the whole or any part of this contract or any monies due or to become due hereunder without the express, written consent of the owner. In case the contractor assigns all or any part of any monies due or to become due under this contract, the instruments of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the contractor shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for the performance of the work called for in this contract.

#### **17.26 GENERAL GUARANTY:**

Neither the final payment nor partial or entire occupancy of the premises constitute an acceptance of any work not done in accordance with the contract documents; nor does either condition relieve the contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear

within a period of one year from the date of final acceptance of the work unless a longer period is specified. The owner will give notice of observed defects with reasonable promptness.

#### 17.27 OSHA

Any contract awarded on or after July 1, 2009 requires any mechanic, laborer, or worker who performs work in a classification listed on the prevailing wage rate schedule on any public works project is required to complete a ten (10) hour federal OSHA safety and health course and provide proof of completion.

#### 17.28 EQUAL EMPLOYMENT OPPORTUNITY:

- A. The Contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut. The contractor further agrees to take affirmative action to insure that applicants with job related qualifications are employed and that employees are treated when employed with out regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation, or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved;
- B. The contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the commission;
- C. The contractor agrees to provide each labor union or representative of workers with such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the commission advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;
- D. The contractor agrees to comply with each provision of Conn. Gen. Stat. §§ 4a-60, 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to Conn. Gen. Stat. §§ 46a-56, as amended by Section 5 of Public Act 89-253, 46a-68e;
- E. The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and

procedures of the contractor as relate to the provisions of this section and section 46a-56. If the contract is a public work contract, the contractor agrees and warrants that he will make good faith efforts to employ minority and women business enterprises as subcontractors and suppliers of materials on such public works project.

**Pursuant to the provisions of Conn. Stat. Sect. 4a-60a.**

- A. The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientations, in any manner prohibited by the laws of the United States or of the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation;
- B. The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;
- C. The contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f of the general statutes and with each regulation or relevant order issued by said Commission pursuant to section 46a-56, 46a-68e and 46a-68f of the general statutes;
- D. The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor as relate to the provisions of this section and section 46a-56 of the general statutes.

**Executive Order 11246.30 Federal Regulations 12319 (1965) Equal Opportunity Clause.**

"During the performance of this contract, the contractor agrees as follows:

- A. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertisement; layoff or termination; rates of pay or other forms of compensation; and selection for training, including

apprenticeship. The Contractor agrees to post in conspicuous places, and to make available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

- B. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- C. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the Contract Compliance Officer advising the said labor union or workers' representatives of the contractor's commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- D. The contractor will comply with all provisions of (Federal) Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the (United States) Secretary of Labor.
- E. The contractor will furnish all information and reports required by (Federal) Executive Order 11246 of September 24, 1965, and by the rules and regulations, and orders of the (United States) Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by HUD, by the State Department of Housing and by the (United States) Secretary of Labor, for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- F. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further (United States) Government contracts or federally assisted construction contracts procedures authorized in (Federal) Executive Order 11246 of September 24, 1965, or order of the (United States) Secretary of Labor, or as otherwise provided by law.
- G. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the (United States) Secretary of Labor issued pursuant to Section 204 of (Federal) Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as HUD shall direct as a means of enforcing such provisions, including sanctions for noncompliance: provided, however, that in the event a contractor becomes

involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by HUD, the contractor may request the United States to enter into such litigation to protect the interest of the United States”

**Exemptions from above Equal Employment Opportunity Clause (4)(CFR Chap. 60):**

- A. Contracts and subcontracts of \$10,000 or less (other than Government bills of lading) are exempt. The amount of the contract, rather than the amount of the Federal financial assistance shall govern in determining the applicability of this exemption.
- B. Except in the case of subcontracts for the performance of construction work at the site of construction, the clause shall not be required to be inserted in subcontracts below the second tier.
- C. Contracts and subcontracts of \$100,000 or less for standard commercial supplies or raw materials are exempt.

The contractor shall not be nor enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

The contractor shall carry out sanctions and penalties for violation of these specifications and the Equal Employment Clause, including suspension, termination and cancellation of existing subcontracts, as imposed or ordered by the Office of Federal Contract Compliance in accordance with Executive Order 11246. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in the sub-paragraphs above, so as to achieve maximum results from its employees to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

The contractor shall designate a responsible official to monitor all employment-related activity in order to ensure that the company EEO policy is being carried out. The designated official must keep records and submit reports relating to the provisions hereof as required by the Municipality. Records shall include for each employee the name, address, telephone numbers, construction trade union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the

degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

Nothing herein shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application or requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**Executive Order Number 3.**

This contract is subject to the provisions of Executive Order No. 3 of Governor Thomas J. Meskill promulgated June 16, 1971, and, as such, this contract may be canceled, terminated, or suspended by the State Labor Commissioner for violation of or noncompliance with said Executive Order No. Three, or any State or Federal law concerning nondiscrimination, notwithstanding that the Labor Commissioner is not a party to this contract. The parties to this contract, as part of the consideration hereof, agree that said Executive Order No. Three is incorporated herein by reference and made a part hereof. The parties agree to abide by said Executive Order and agree that the State Labor Commissioner shall have continuing jurisdiction in respect to contract performance in regard to nondiscrimination, until the contract is completed or terminated prior to completion.

**Executive Order Number 17.**

This contract is subject to the provision of Executive Order No. 17 of Governor Thomas J. Meskill, promulgated February 15, 1973, and, as such, this contract may be canceled, terminated, or suspended by the State Labor Commissioner for violation of or noncompliance with said Executive Order No. Seventeen, notwithstanding that the Labor Commissioner may not be a party to this contract. The parties to this contract, as part of the consideration hereof, agree that Executive Order No. Seventeen is incorporated herein by reference and made a part hereof. The parties agree to abide by said Executive Order and agree that the State Labor Commissioner shall have continuing jurisdiction in respect to listing all employment openings with the Connecticut State Employment Service.

Certification of Nonsegregated Facilities as required by 41CFR 60-1.8, must be submitted prior to the award of federally assisted construction contracts exceeding \$10,000 which are not exempt from the provisions of the Equal Employment Clause.

Contractors receiving federally assisted construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Employment Clause shall be required to provide for the forwarding of the following notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Employment Clause:

- A. A certification of non-segregated facilities as required by the 32CFR 7439, May 19, 1967, must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Employment Opportunity Clause.
  
- B. Contractors receiving subcontract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Employment Opportunity Clause shall be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Employment Opportunity Clause.

**TAB F**

Special Provisions



## SPECIAL PROVISIONS

### DESCRIPTION:

These Special Provisions amend or supplement the Division II Construction Details (Technical Provisions) and Division III Materials Section in the State of Connecticut Department of Transportation (CTDOT) Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 818, dated 2021 (including the latest Supplemental Specifications) which are incorporated herein and are referred to herein after at "Form 818". Only the Form 818 Division II Construction Details and Division III Materials Section are incorporated herein.

Copies of Form 818 may be purchased from:

CTDOT  
DOT Print Shop  
(860) 594-3086

### GENERAL:

It is required that the prime contractor self-perform a minimum of 50% of the original total contract value.

Special Provision amendments or supplements that apply throughout Form 818 Division Details (Technical Provisions) are outlined below:

1. Replace the word "State" and the word "Department, wherever they appear, with the word "Town" throughout Form 818. Unless otherwise determined by the town, all references to the State and the Department of Transportation, including its officers and employees and its sub-agencies such as the Office of Environmental Planning, shall be considered as references to the town.

### RELEVANT SECTIONS:

The following is a partial list of relevant sections of Form 818 that apply to this project. This list is provided as reference only, meaning that it does not exclusively limit the scope of work for this project.

<u>Section</u>	<u>Description</u>
2.01	Clearing and Grubbing
2.02	Roadway Excavation, Formation of Embankment and Dispose of Surplus Material
2.09	Subgrade
2.12	Subbase
2.19	Sedimentation Control System
3.04	Processed Aggregate Base
4.06	Bituminous Concrete
5.86	Catch Basins, Manholes and drop Inlets
6.86	Drainage Pipes, Drainage Pipe Ends
8.11	Concrete Curbing
8.15	Bituminous Concrete Curbing
9.15	Tree Root Protection
9.21	Concrete Sidewalks and Ramps
9.22	Bituminous Concrete Sidewalk, Bituminous Concrete Driveway

- 9.23 Bituminous Concrete for Patching
- 9.39 Sweeping for Dust Control
- 9.44 Topsoil
- 9.50 Turf Establishment
- 9.70 Trafficperson
- 9.71 Maintenance and Protection of Traffic
- 9.74 Removal of Masonary
- 9.75 Mobilization and Project Closeout
- 9.77 Traffic Cone
- 9.78 Traffic Drum
- 9.80 Construction Staking
- 9.99 Disposal of Buildings
- 12.08 Sign Face – Sheet Aluminum
- 12.10 Epoxy Pavement Markings
- 12.20 Construction Signs – Type III Reflective Sheeting

**SUBMITTALS:**

The Contractor shall submit one electronic copy in a pdf file format of each working drawing, shop drawing and product data to the Town or it's agent for approval, prior to construction. All working drawings shall be signed, sealed and dated by a qualified Professional Engineer licensed to practice in the State of Connecticut. If requested, hard copies shall also be provided. The Town or its agent will endeavor to respond with their approval and/or review comments within a (2) week period of their receipt of said submittals. The Contractor shall make submittals on the following items that specifically pertain to the work of this project:

Subbase

Stone Dust (Including Material Sample)

Bituminous Concrete Mix Designs

Concrete Mix Design

Light Poles, Fixtures & Bases

Pedestrian Bench

Trash Recepticle

Materials for Repair of Existing Gazebo

Materials for Bus Shelter Replacement

Catch Basins

HDPE Pipe

Detectable Warning Pad

Electrical Materials for Existing Utility Upgrades and Proposed Underground Electrical Service

**COORDINATION OF WORK:**

The Contractor shall coordinate with the Town and its agents accordingly.

**SCHEDULE:**

The contract time for this project is sixty (60) consecutive calendar days, starting on the Notice to Proceed date, and does not allow for a winter shutdown period. The anticipated project schedule is as follows:

Bid Closed:	09/15/21
Notice of Award:	10/8/21
Contract Signing/Pre-Construction Meeting:	10/11/21
Notice to Proceed (NTP):	10/12/21
Anticipated Construction Start:	10/12/21
Substantial Completion	12/10/21

**LIQUIDATED DAMAGES:**

The Contractor is hereby notified that liquidated damages in the amount of five hundred dollars (\$500.00) per consecutive calendar day apply to this project in order to help ensure a timely completion.

**PREVAILING WAGE RATES:**

Respondants shall comply with State Statutes concerning Employment and Labor Practices, as applicable, and Section 31-53 of the Connecticut General Statutes, as amended (Prevailing Wages). Wage Rate Determination for this project from the State of Connecticut is included in the Bid Documents.

**PORTABLE CHEMICAL TOILET FACILITY:**

The Contractor shall furnish one (1) portable chemical toilet at each active project location for the entire duration of the contract time period to support this construction project. There shall be no separate measurement and payment for this portable chemical toilet.

**PERMITS:**

The Town of Colchester has secured approvals for the Historic District Commission and the Bacon Academy Trustees. The majority of the work is inside the Town owned right-of way. (It is the responsibility of the contractor to obtain all other required permits including a CT DOT Encroachment Permit for work within the State ROWs. The Town has received approval of the design to expedite the permit process for the Contractor.)

**CALL-BEFORE- YOU- DIG (CBYD):**

The Contractor is hereby notified that he shall contact Call-Before-You-Dig (CBYD) 1-800-922-4455 [www.cbyd.com](http://www.cbyd.com) and obtain authorization prior to start of work as required by law.

**MAINTENANCE & PROTECTION OF TRAFFIC:**

The Contractor shall be responsible for furnishing, installing and maintaining all temporary pedestrian & traffic barriers and construction signage as required for the duration of the contract period. The Contractor shall coordinate the location of these barriers with the Town of Colchester or their agent. There shall be no separate measurement and payment for maintenance & protection of traffic.

**INSPECTION:**

The Contractor is hereby notified that the Town or its agent shall perform any testing as deemed necessary to ensure contract compliance.

**TECHNICAL SPECIFICATIONS:**

The technical specifications that form part of these special provisions are included on the following pages. The contractor shall refer to CTDOT Form 818 as referenced in the project description for all items not specifically outlined within the technical specifications herein.

**TECHNICAL SPECIFICATIONS INDEX**

<b>SECTION</b>	<b>TITLE</b>
01 11 00	Summary of Work
01 31 13	Project Coordination
01 43 00	Quality Assurance
01 45 23	Testing and Inspection Services
01 57 13	Sedimentation Control System
01 57 26	Dust Control
01 58 13	Temporary Project Sign
01 71 13	Mobilization
01 71 23	Construction Layout
03 30 00	Cast-In-Place Concrete
03 81 13	Flat Concrete Sawing
06 10 00	Rough Carpentry
06 20 00	Finish Carpentry
26 05 00	Common Work Results for Electrical
31 11 00	Clearing & Grubbing
31 23 00	Excavation and Fill
31 23 13	Formation of Subgrade
31 23 25	Granular Material
31 23 33	Trenching and Backfilling
31 23 35	Bedding for Pipes and Structures
32 11 23	Processed Aggregate Base
32 12 16	Bituminous Concrete
32 15 40	Crushed Stone Surfacing
32 16 21	Concrete Curb
32 17 23	Pavement Markings
32 91 19	Topsoil Placement and Grading
32 92 00	Turf and Grasses
33 42 00	Stormwater Drainage – Piping
33 42 00	Stormwater Drainage - Structures
33 46 11	Stormwater Detention Basin
33 70 00	Underground Conduit

**SECTION 01 11 00  
SUMMARY OF WORK****PART 1 - GENERAL****1.01 DESCRIPTION**

- A. The entire scope of work covered under these Contract documents includes completing the proposed Town Green improvements.

The project consists of construction improvements to the historic Colchester Town Green located at the intersection of Main Street (Rte. 85) and Hayward Avenue. Improvements shall include the reconstruction and installation of shared-use pathways throughout the green along with the installation of accessible sidewalk ramps, light poles with associated electrical service upgrades, benches and trash receptacles. Additionally, the scope of work also includes minor drainage improvements, the replacement of an existing wooden event board, the construction of a new bus shelter, repairs to the existing wooden gazebo and minor turf establishment and landscape improvements.

The work described above includes furnishing, installing and incorporating all materials and equipment into the project as well as performing or providing all labor, supervision equipment and services unless otherwise specifically noted within the Contract Documents. The Contractor shall obtain all required State and local permits, including but not limited to;

1. Connecticut Department of Transportation Highway Encroachment Permit to be obtained from State of Connecticut Department of Transportation Bureau of Highway Operations and Maintenance - District 2 office.
2. Town of Colchester Building/Electrical Permits for work related to the Gazebo, bus shelter and electrical service upgrades.

Application fees associated with Town of Colchester permits shall be waived, all other permit fees shall be paid for by the Contractor. The Contractor is responsible for all bonds, insurance and associated inspection and acceptance coordination.

**1.02 CONTRACT**

- A. Complete the entire scope of work under the lump sum contract pricing as noted on the bid proposal form and in accordance with the Contract Documents.
- B. The contract time for this project is sixty (60) consecutive calendar days, starting on the Anticipated Construction Start date.

**PART 2 - PRODUCTS**

Not Applicable

**PART 3 - EXECUTION**

Not Applicable

**PART 2 - PRODUCTS**

Not Applicable

**PART 3 - EXECUTION**

Not Applicable

## SECTION 01 43 00 QUALITY ASSURANCE

### PART 1 – GENERAL

#### 1.01 DESCRIPTION

- A. Work includes
  - 1. Quality assurance and control of installation
  - 2. References
  - 3. Field samples
  - 4. Manufacturers' field services and reports

#### 1.02 RELATED WORK

- A. Section 01 11 00 – Summary of Work
- B. Section 01 45 23 – Testing and Inspection Services
- C. All individual Technical Specifications.

#### 1.03 QUALITY ASSURANCE

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step-in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as a minimum quality of the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
- G. Conform to reference standard by date of issue current on date specified in product Sections.
- H. Obtain copies of standards when required by Contract Documents.

- I. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- J. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference documents.
- K. When specified in individual specification sections, the contractor shall require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, and test, adjust and balance equipment as applicable, and to initiate instructions when necessary.

#### 1.04 SUBMITTALS

- A. None

### **PART 2 - PRODUCTS**

#### 2.01 GENERAL

- A. Not Applicable

### **PART 3 - EXECUTION**

#### 3.01 GENERAL

- A. Not Applicable

### **PART 4 - MEASUREMENT AND PAYMENT**

#### 4.01 MEASUREMENT

- A. There shall be no separate measurement for Quality Control and Assurance.

#### 4.02 PAYMENT

- A. There shall be no separate payment for Quality Control and Assurance.

**END OF SECTION**

**SECTION 01 45 23**  
**TESTING AND INSPECTION SERVICES****PART 1 - GENERAL**

## 1.01 DESCRIPTION

- A. The Owner will select and will pay for an Independent Testing Laboratory to perform inspections and in place testing as required by the Contract Documents. The Contractor shall engage the services of the designated laboratory. The cost of laboratory testing which is considered to be the Contractor's responsibility, includes, but not limited to testing required to demonstrate material quality is in compliance with the Contract Documents.
- B. The Contractor shall employ the services of a separate qualified laboratory for additional samples and tests required by the Contractor beyond the specified requirements. The Owner will not pay for any additional Contractor testing required to fulfill the intent of these contract documents. Costs associated with re-testing after results of initial testing indicates non-conformance with the plans or Specifications shall be the responsibility of the Contractor.
- C. The Contractor shall arrange for any inspections required by the State or the Town officials. The Contractor shall bear the costs of any such inspections.
- D. The Testing Laboratory shall demonstrate in providing comparable services to those specified in the Contract Documents.

## 1.02 RELATED WORK

- A. Section 01 43 00 – Quality Control and Assurance
- B. Section 31 23 13 – Formation of Subgrade
- C. Section 31 25 53 – Sedimentation Control
- D. Section 31 23 25 – Granular Material
- E. Section 31 23 33 – Trenching and Backfilling
- F. Section 31 23 35 – Bedding for Pipes & Structure
- G. Section 32 12 16 – Bituminous Concrete
- H. Section 32 15 40 – Crushed Stone Surfacing
- I. Section 32 91 19 – Topsoil Placement and Grading
- J. Any other testing required by one or more of the various Technical Specification Sections of the Contract Documents and not itemized above.

### 1.03 QUALITY ASSURANCE

- A. Comply with the requirements of ANSI/ASTM E329 and ANSI/ASTM D3740 – latest revisions.
- B. All testing laboratories shall be licensed/authorized to operate in the State of Connecticut.
- C. Testing laboratories shall maintain a full time CT Registered Engineer on staff to review services.
- D. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either the National Bureau of Standards (NBS) Standards or accepted values of natural physical constants. All testing equipment used on this project shall have been calibrated within the last thirty (30) calendar days prior to the date of performing the Contract required testing.

### 1.04 SUBMITTALS

- A. Prior to the start of work, submit the name, address, and telephone number and names of full time CT Registered Professional Engineer and responsible officer of the laboratory required by and to be paid for by the Contractor.
- B. Submit copy of report of laboratory facilities inspection made by Materials Reference Laboratory of NBS during most recent tour of inspection, with memorandum of remedies of any deficiencies reported by the inspection. Submit evidence of calibration in conformance with Part 1.02.D above.

### 1.05 LABORATORY RESPONSIBILITIES

- A. Test the samples submitted by the Contractor.
- B. Provide qualified personnel at site after due notice; cooperate with Engineer and Owner in performance of services.
- C. Perform specified inspection, sampling, and testing of products.
- D. Ascertain compliance of materials and mixes with requirements of Contract Documents.
- E. Promptly notify Engineer, Owner and Contractor of observed irregularities or non-conformance of work or products.
- F. Perform additional inspections and tests required by Engineer.

## 1.06 LABORATORY DUTIES

- A. Cooperate with Owner, and Contractors, provide qualified personnel promptly on notice. Perform specified inspections, sampling and testing of materials and methods of construction; ascertain compliance with requirements of Contract Documents.
- B. Promptly notify Owner, and Contractors of irregularities or deficiencies of work, which are observed during performance of services. Submit two (2) copies of reports of inspections and tests to the Engineer, addressed to the Owner, including:
  - 1. Date issued
  - 2. Project title and number
  - 3. Testing Laboratory name and address
  - 4. Name and signature of Inspector
  - 5. Date of inspection or sampling
  - 6. Record of temperature and weather
  - 7. Date of test
  - 8. Identification of product and specification section
  - 9. Location in project
  - 10. Type of inspection or test
  - 11. Observations regarding compliance with Contract Documents.
- C. Laboratory is not authorized to release, revoke, alter or enlarge on requirements of Contract Documents; to approve or accept any portion of work, or perform any duties of the contractor.
- D. Laboratory may not assume any duties of the Contractor; and the Laboratory has no authority to stop work.

## 1.07 CONTRACTOR RESPONSIBILITIES

- A. Deliver to laboratory at designated location, adequate samples of materials proposed to be used which require testing, along with proposed mix designs.
- B. Cooperate with Laboratory personnel and provide access to work.
- C. Provide to Laboratory, preliminary representative samples of materials to be tested in required quantities.
- D. Furnish casual labor and facilities to provide access to work to be tested, to obtain and handle samples at the site, and to facilitate inspections and test.
- E. Notify Laboratory sufficiently in advance of operations to allow for his assignment of personnel and schedule of tests.

- F. Arrange with Laboratory, and pay for, any additional samples and testing required for Contractor's convenience.
- G. Arrange with Laboratory, and pay for, any additional inspections, sampling and testing required when initial tests indicate that work does not comply with Contract Documents.
- H. Arrange for and conduct any inspections required by State and/or local building, fire protection, safety, health or environmental officials.

**PART 2 - PRODUCTS**

Not Applicable

**PART 3 - EXECUTION**

Not Applicable

**PART 4 - MEASUREMENT AND PAYMENT**

4.01 MEASUREMENT

- A. There shall be no separate measurement for Testing and Inspection Services.

4.02 PAYMENT

- A. There shall be no separate payment for Testing and Inspection Services.

**END OF SECTION**

## SECTION 01 57 13 SEDIMENTATION CONTROL SYSTEM

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. This work shall consist of furnishing, placing, maintaining and removal of sedimentation control systems (hay bales, silt fences, fabric geotextile, erosion control blankets, waddles, inlet sediment control devices, etc.), as shown on the plans or as directed by the Engineer and where necessary to prevent erosion and control sedimentation.
- B. The sedimentation control system shall be placed prior to beginning construction activities. For stockpiles, sediment control system shall be placed on the first day the stockpile is used. For catch basin protection, sediment control system shall be placed on the first day the catch basin is installed.

#### 1.02 RELATED WORK

- A. Section 01 57 26 – Dust Control
- B. Section 31 11 00 – Clearing & Grubbing
- C. Section 31 23 00 – Excavation and Fill
- D. Section 31 23 13 – Formation of Subgrade
- E. Section 32 11 16 – Subbase
- F. Section 32 11 23 – Processed Aggregate Base Course
- G. Section 32 91 19 – Topsoil Placement and Grading
- H. Section 32 92 00 – Turf and Grasses

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications to January 2021.
- B. References to "2002 Connecticut Guidelines for Soil Erosion and-Sedimentation Control".

#### 1.04 SUBMITTALS

- A. Submit haybales, silt fence, filter fabric geotextiles (along with any other materials which are proposed to be used to control sedimentation during construction) to the Engineer for approval.
- B. Submit inlet sediment control device manufacturer specification to the Engineer for approval.
- C. Manufacturer's specifications for all other sedimentation control materials which the contractor proposes to use shall be submitted to the design engineer for approval prior to installation.

## **PART 2 - PRODUCTS**

### 2.01 MATERIALS

- A. Silt fence shall be a woven geotextile conforming to the plans and specifications. Filter fabric shall be a non-woven geotextile. Geotextiles shall conform to Form 818 Article M.08.01-19.
- B. Haybales shall conform to Form 818 Article 2.19.02.
- C. All other sedimentation control materials which the contractor proposes to use shall be installed and maintained per their manufacturer's recommendations.

## **PART 3 - EXECUTION**

### 3.01 GENERAL

- A. The work shall conform to the requirements of Form 818 Article 2.19.03.
- B. The work shall include the implementation of the appropriate portions of the erosion and sedimentation control plan.
- C. The Contractor shall appoint an individual, acceptable to the Engineer, to coordinate and supervise the maintenance and control of sedimentation and erosion control systems and devices. Compliance with these provisions shall also be included in all subcontract agreements.
  - 1. Provide the Engineer with daily logs of the construction progress, updated schedules and conditions of on-site sedimentation and erosion controls/water quality.
  - 2. All sedimentation and erosion control devices shall be inspected weekly by the Contractor to verify their operation and to determine the cleaning and repair necessary for the duration of this Contract. In addition, special attention shall be given to the adequacy of the control systems prior to severe storm weather forecasts. Suspend operations (earthwork) for major storm events and implement additional sedimentation and erosion controls as necessary. Inspect control systems during and after storms to determine necessary repairs.

3. Repairs to sedimentation control systems directed by the Engineer shall be accomplished within 24 hours of the directive or as soon as possible prior to storm forecasts.
  4. Contractor shall maintain on-site, at all times, replacement materials for the devices utilized, readily available for necessary repairs.
  5. The Contractor shall comply with the Best Management Practices as shown in Form 817, Article 1.10.03 and the CTDEEP's "2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control".
- D. The Engineer has the authority to control the surface area of each material exposed by construction operations and to direct the Contractor to immediately provide permanent or temporary pollution control measures to prevent contamination of adjacent wetlands, watercourses or other areas of water impoundment. Every effort shall be made by the Contractor to prevent erosion on the site and abutting property.
- E. The Engineer shall limit the surface area of earth material exposed if the Contractor fails to sufficiently protect the slopes to prevent pollution.
- F. The erosion control features installed by the Contractor shall be maintained by the Contractor to ensure their efficient operation, and be removed/replaced if ordered by the Engineer.
- G. The Contractor shall operate all equipment and perform all construction operations so as to minimize pollution. The Contractor shall cease any operations, which will increase pollution during rainstorms.

### 3.02 HAY BALE INSTALLATION

- A. Hay bales shall be placed in accordance with the plans or as directed by the Engineer and shall be installed pursuant to the construction details on the plans. Bales shall be maintained or replaced until they are no longer necessary for the purpose intended or are ordered removed by the Engineer.

### 3.03 SILT FENCE INSTALLATION

- A. Silt fence shall be mounted on wood-stakes or posts with or without fence backing as recommended by the fabric manufacturer and depicted on the construction details.
- B. Maintain silt fence throughout the contract period and remove all such temporary features when directed. Any damaged during construction shall be replaced at no additional cost to the Owner.
- C. Sediment buildup shall be removed from behind silt fence before it exceeds six (6") inches in depth. Silt fence shall be inspected weekly and repaired/replaced as necessary. Additional

inspections may be required prior to or immediately following any major rainstorms. Silt fence shall be removed at the completion of the project.

### 3.04 INLET SEDIMENT CONTROL DEVICE INSTALLATION

- A. Install inlet sedimentation control devices per manufacturer's instructions or as directed by the engineer.
- B. Sediment buildup shall be removed from the inlet sediment control device before it exceeds half capacity in depth. The device shall be inspected weekly and repaired/replaced as necessary. Additional inspections may be required prior to or immediately following any major rainstorms. The device shall be removed at the completion of the project.

### 3.05 MAINTENANCE

- A. Sedimentation control measures shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
- B. Should the sedimentation control measure decompose or become ineffective prior to the end of the expected usable life, the sedimentation control measure shall be replaced promptly by the contractor.
- C. Sediment deposits shall be removed when they reach approximately one-half the height of the sedimentation control measure or as directed by the engineer.
- D. Any sediment deposits remaining in place after the sedimentation control measure is no longer required shall be reviewed by the engineer and may be dressed, prepared and seeded or removed from site.

### 3.05 REMOVAL AND CLEANUP

- A. All temporary erosion control facilities when ordered by the Engineer shall be removed in a neat and workmanlike manner, and shall also include removal and disposal of accumulated silt.
- B. Sediment deposits are to be removed when they reach approximately one-half the height of the device, i.e. silt fence, hay bales, etc. Accumulations of one-half of the wet storage volume in any temporary sediment trap will be used as criteria for commencement of cleaning operation. Disposal of materials removed during cleaning operations shall be the responsibility of the Contractor. Dispose material off-site or as directed by the Engineer.
- C.

## **PART 4 - MEASUREMENT AND PAYMENT**

#### 4.01 MEASUREMENT

- A. Silt fence shall not be measured but will be paid at the contract lump sum price.
- B. Hay bales shall not be measured but will be paid at the contract lump sum price.
- C. Inlet sediment control device shall not be measured but will be paid at the contract lump sum price.

#### 4.02 PAYMENT

- A. Silt fence shall be paid for under the applicable contract lump sum price for “Sedimentation Control System - Silt Fence”, which shall include all materials, equipment, tools and labor incidental to the installation, maintenance, replacement, removal and disposal of the system and surplus material.
- B. Hay bales shall be paid for under the applicable contract lump sum price for “Sedimentation Control System - Hay Bales”, which shall include all materials, equipment, tools and labor incidental to the installation, maintenance, replacement, removal and disposal of the system and surplus material.
- C. Inlet sediment control device shall be paid for under the applicable contract lump sum price for “Inlet Sediment Control Device”, which price shall include all materials, equipment, tools and labor incidental to the installation, maintenance, replacement, removal and disposal of the system and surplus material.

**END OF SECTION**

## **SECTION 01 57 26 DUST CONTROL**

### **PART 1 - GENERAL**

#### 1.01 DESCRIPTION

- A. During the progress of the work, the Contractor shall conduct his operations and maintain the area of his activities so as to minimize the creation and dispersion of dust. If the Engineer decides that it is necessary to use water or calcium chloride for more effective dust control, the Contractor shall furnish and spread the material, as directed.

#### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 31 11 00 – Clearing & Grubbing
- C. Section 31 23 00 – Excavation and Fill
- D. Section 31 23 13 – Formation of Subgrade
- E. Section 32 11 23 – Processed Aggregate Base Course
- F. Section 32 91 19 – Topsoil Placement and Grading
- G. Section 32 92 00 – Turf and Grasses

#### 1.03 SUBMITTALS

- A. Submit material certification with specification for calcium chloride.

#### 1.04 PRODUCT HANDLING

- A. Calcium chloride to be delivered in sealed bags.

### **PART 2 - PRODUCTS**

#### 2.01 CALCIUM CHLORIDE

- A. Calcium chloride shall conform to the requirements of ASTM Specification D98 and may be Type 1 or Type 2.
- B. Water for dust control shall be potable.

### **PART 3 - EXECUTION**

#### 3.01 WATER FOR DUST CONTROL

- A. Water trucks shall be capable of applying a uniform spread of water over the surface.

- B. A suitable device for a positive shut-off and for regulating the flow of water shall be located so as to permit positive operation control.
- C. Water shall be applied when directed by the Engineer.

### 3.02 CALCIUM CHLORIDE FOR DUST CONTROL

- A. Calcium chloride shall be applied only at the locations and at such times and in the amount as may be directed by the Engineer.
- B. It shall be spread in such manner and by such devices that uniform distribution is attained over the entire area on which it is ordered placed.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 MEASUREMENT

- A. The work which conforms to this specification shall be measured as defined below.
- B. Calcium chloride used for dust control shall be measured by the ton which is placed and accepted. Weights as marked on the shipping containers shall be used; or those measured by scales which are furnished by and at the Contractor's expense.
- C. Water for dust control shall not be measured for payment.

### 4.02 PAYMENT

- A. This work shall be paid for at the contract lump sum price for "Dust Control – Calcium Chloride" which price shall include all material, equipment, tools, labor and work incidental thereto. Water for dust control shall not be measured for payment.

**END OF SECTION**

## SECTION 01 58 13 TEMPORARY PROJECT SIGN

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work under this specification covers providing all labor, equipment and materials required for the construction/installation of all temporary project sign(s) including sign panels, sign posts and misc. hardware as shown on the plans or as directed by the Engineer.

#### 1.02 RELATED WORK

- A. Section 01 11 00 – Summary of Work
- B. Section 01 71 13 – Mobilization

#### 1.03 QUALITY ASSURANCE

- A. Where Form 817 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications to January 2021.

#### 1.04 SUBMITTALS

- A. Submit shop drawings of sign panel including materials, lettering, colors, typeface to the Engineer for approval.
- B. Location of sign must be reviewed with Engineer prior to installation.

### PART 2 - PRODUCTS

#### 2.01 CARPENTRY

- A. Sign panel must be ¾" MDO-EXT-APA Plywood. All letters and symbols are to be royal blue unless otherwise noted within the construction details and contract documents. The background shall be white enamel. Back of plywood and support structure shall be painted matte black.
- B. (2) 4"x4" posts must be pressure treated wood posts secured 4' into grade unless otherwise noted in the construction details or by the engineer.

### PART 3 - EXECUTION

#### 3.01 CONSTRUCTION METHODS

- A. Sign shall be located to be clearly visible to the public and shall be installed at the start of construction and removed at the completion of construction. Location shall be coordinated with the engineer prior to installation.

#### **PART 4 - MEASUREMENT AND PAYMENT**

##### **4.01 MEASUREMENT**

- A. This work shall not be measured for payment but will be paid at the contract lump sum price for "Temporary Project Sign". All installation, removal and site restoration activities shall be included in this work.

##### **4.02 PAYMENT**

- A. This work shall be paid for at the contract lump sum price for "Temporary Project Sign" which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

## **SECTION 01 71 13 MOBILIZATION**

### **PART 1 - GENERAL**

#### 1.01 DESCRIPTION

- A. This item shall consist of all work necessary for the movement of personnel and equipment to the project site, and for the establishment of all field offices, buildings and other facilities necessary to the performance of the work.
- B. The Contractor shall provide all temporary facilities necessary for the proper completion of the work. Temporary facilities shall include but not be limited to contractor's field trailer, water supply, electrical, telephone, and sanitary services.

#### 1.02 RELATED WORK

- A. Section 01 11 00 – Summary of Work

#### 1.03 SUBMITTALS

- A. No submittal's required.

### **PART 2 - PRODUCTS**

#### 2.01 GENERAL

- A. Not applicable.

### **PART 3 - EXECUTION**

#### 3.01 GENERAL

- A. Not applicable.

### **PART 4 - MEASUREMENT AND PAYMENT**

#### 4.01 MEASUREMENT

- A. This work shall be measured for payment in the manner described hereinafter; however, the determination of the total contract price earned shall not include the amount of mobilization earned during the period covered by the current money estimate but shall include amounts previously earned and certified for payment:

1. When the first payment estimate is paid, 50 percent of the lump sum bid price for this item or 5 percent of the total original contract price, whichever is less, will be certified for payment.
  2. When ten percent of the original contract price is earned, 75 percent of the lump sum price of this item or 7.5 percent of the total original contract price, whichever is lesser, minus any previous payment, will be certified for payment.
  3. When 30 percent of the total original contract price is earned, 100 percent of the lump sum price for this item or 10 percent of the total original contract price, whichever is lesser, minus any previous payment, will be certified for payment.
- C. Upon completion of all work on the project, payment of any amount bid for mobilization in excess of 10 percent of the original contract amount will be paid.
- D. Nothing herein shall be construed to limit or preclude partial payments otherwise provided for by the contract.

#### 4.02 PAYMENT

- A. This work shall be paid for at the contact lump sum price for "Mobilization & Demobilization" which price shall include materials, equipment, tools, labor, transportation, operations and all work incidental thereto.

**END OF SECTION**

## SECTION 01 71 23 CONSTRUCTION LAYOUT

### PART 1 – GENERAL

#### 1.01 DESCRIPTION

- A. The work under this item shall consist of all construction layout and reference staking necessary for the proper control and satisfactory completion of all work on the project. Also included in this item is an as built survey of the site after completion of the project.
- B. The Contractor is hereby notified that the Town's agent(s); Lamb-Keifer Land Surveyor, LLC or Barton and Loguidice, LLC. shall provide to the Contractor all control points and bench marks in the field necessary for the prosecution of the work.
- C. The Contractor is also responsible for supplying an as built survey (performed by a licensed surveyor to A2/T2 standards) to the Town of Colchester upon completion of the project.

#### 1.02 RELATED WORK

- A. Section 31 11 00 – Clearing & Grubbing
- B. Section 01 57 13 – Sedimentation Control System
- C. Section 31 23 13 – Formation of Subgrade
- D. Section 33 42 00 – Stormwater Drainage - Structures
- E. Section 32 12 16 – Bituminous Concrete
- F. Section 32 91 19 – Topsoil Placement and Grading

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications to January 2021.

#### 1.04 SUBMITTAL

- A. No submittals are required.

### PART 2 - PRODUCTS

#### 2.01 GENERAL

- A. Stakes shall be of the quality specified in Form 818, Article 9.80.02.

### PART 3 - EXECUTION

#### 3.01 GENERAL

- A. The work shall conform to Form 818, Article 9.80.03 except as amended below:
1. Paragraph 1 of Article 9.80.03 is deleted.
  2. The Engineer shall provide to the Contractor all control points and bench marks in the field necessary for the prosecution of the work.
  3. A digital copy of the contract plans will be furnished in AutoCAD format to the contractor upon request.

#### **PART 4 - MEASUREMENT AND PAYMENT**

##### **4.01 MEASUREMENT**

- A. This work shall not be measured but will be paid for at the contract lump sum price. Fifty percent of this item will be certified for payment when 10% of the contract is complete. Seventy-five percent of this item will be certified for payment when 30% of the contract is complete. One-hundred percent of this item will be certified for payment when 50% of this contract is complete.

##### **4.02 PAYMENT**

- A. This work shall be paid for at the contract lump sum price for "Construction Layout" which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

## SECTION 03 30 00 CAST-IN-PLACE CONCRETE

### PART 1 - GENERAL

#### 1.01 DESCRIPTION OF WORK

- A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
1. Cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures and finishes for the following applications:
    - a. Slabs-on-grade.
    - b. Cutting and patching of mechanical and electrical penetrations through cast-in-place concrete.
    - c. Cast-in-place site concrete including curbs and sidewalks.
- B. Related Work: The following items are not included in this Section and will be performed under the designated Sections:
1. Section 312000 - EARTH MOVING for drainage fill under slabs-on-grade.
- C. Related Sections include the following:
1. Division 01 Section 017419 Construction Waste Management and Disposal

#### 1.02 RELATED WORK

- A. Section 32 11 23 – Processed Aggregate Base Course  
B. Section 32 12 16 – Bituminous Concrete  
C. Section 32 91 19 – Topsoil Placement and Grading

#### 1.03 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
1. Indicate amounts of mixing water to be withheld for later addition at Project site.
  2. Indicate amount of fly ash in the mix.

- C. Steel Reinforcement Shop Drawings: Placing drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement. Comply with ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures.
    - 1. Blockouts for Architectural Joint Systems: Indicate blockouts and coordination with architectural joint systems
  - D. Anchor Bolt Location: Indicate compliance with approved shop drawings.
  - E. Material Test Reports: For the following, from a qualified testing agency, indicating compliance with requirements:
    - 1. Aggregates.
  - F. Material Certificates: For each of the following, signed by manufacturers:
    - 1. Cementitious materials.
    - 2. Admixtures.
    - 3. Form materials and form-release agents.
    - 4. Steel reinforcement and accessories.
    - 5. Waterstops.
    - 6. Curing compounds.
    - 7. Floor and slab treatments.
    - 8. Bonding agents.
    - 9. Adhesives.
    - 10. Vapor retarders.
    - 11. Semirigid joint filler.
    - 12. Joint-filler strips.
    - 13. Repair materials.
  - G. Field quality-control test and inspection reports.
- 1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94 requirements for production facilities and equipment.
- B. Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated, as documented according to ASTM E 548.
  - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-01 or an equivalent certification program.
  - 2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician - Grade I. Testing Agency

laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician - Grade II.

- C. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from one source, and obtain admixtures through one source from a single manufacturer.
- D. Welding: No welding of reinforcing will be allowed.
- E. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
  - 1. ACI 301, "Specification for Structural Concrete."
  - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
  - 3. ACI 318, "Building Code Requirements for Reinforced Concrete".
  - 4. Concrete Reinforcing Steel Institute (CRSI), "Manual of Standard Practice".
  - 5. ACI 304, "Recommended Practice for Measuring, Mixing Transporting, and Placing Concrete".
  - 6. ACI 305, "Hot Weather Concreting".
  - 7. ACI 306, "Cold Weather Concreting".
  - 8. ACI 315, "Details and Detailing of Concrete Reinforcement".
  - 9. ACI 347, "Recommended Practice for Concrete Formwork".
  - 10. ACI 211, "Recommended Practice for Selecting Proportions for Normal and Heavyweight Concrete".
  - 11. ACI 214, "Recommended Practice for Evaluation of Compressive Test Results of Concrete".
  - 12. ACI 302, "Guide for Concrete Floor and Slab Construction".
  - 13. ACI 201, "Guide to Durable Concrete".
- F. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.
- G. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01.
  - 1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
    - a. Contractor's superintendent.
    - b. Independent testing agency responsible for concrete design mixtures.
    - c. Ready-mix concrete manufacturer.
    - d. Concrete subcontractor.
  - 2. Review special inspection and testing and inspecting agency procedures for field quality control, concrete finishes and finishing, cold- and hot-weather concreting procedures,

curing procedures, construction contraction and isolation joints, and joint-filler strips, semirigid joint fillers, forms and form removal limitations, shoring and reshoring procedures, vapor-retarder installation, anchor rod and anchorage device installation tolerances, steel reinforcement installation, floor and slab flatness and levelness measurement, concrete repair procedures, and concrete protection.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage. Avoid damaging coatings on steel reinforcement.
- B. Waterstops: Store waterstops under cover to protect from moisture, sunlight, dirt, oil, and other contaminants.

#### 1.06 PROJECT CONDITIONS

- A. Protection of footings against freezing: Cover completed work at footing level with sufficient temporary or permanent cover as required to protect footings and adjacent subgrade against possibility of freezing, maintain cover for time period as necessary.
- B. Protect adjacent finish materials against spatter during concrete placement.

#### 1.07 STORAGE OF MATERIALS

- A. Metal Reinforcement: Store on wood mud sills, off ground. Keep clean of dirt. Provide proper drainage of groundwater.

### **PART 2 - PRODUCTS**

#### 2.01 CONCRETE MATERIALS

- A. Cement: shall be American-made Portland Cement, free from water soluble salts or alkalis which will cause efflorescence on exposed surfaces. Portland Cement shall be Type II, ASTM C150. Use only one brand of cement for each type of cement throughout project. Contractor shall be responsible for whatever steps are necessary to insure that no visual variations in color will result in exposed concrete and shall place on order and secure in advance a sufficient quantity of this cement to complete concrete work specified herein.
  - 1. Fly Ash: ASTM C 618 Standard Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Users as a Mineral Admixture in Portland Cement Concrete. ASTM C 311, Standard Methods of Sampling and Testing Fly Ash and Natural Pozzolans for Use as a Mineral Admixture in Portland Cement Concrete.
  - 2. Ground Granulated Blast-Furnace Slag: ASTM C 989, Ground Granulated Blast-Furnace Slag for Use in Concrete Mortars. Grade 100 or 120. Standard Practice ACI 226.R1, Ground Granulated Blast-Furnace Slag as a Cementitious Constituent in Concrete.

- B. Normal weight Fine Aggregate: shall be washed, inert, natural sand conforming to ASTM C33 and following additional requirements:

Sieve	Retained Percent
#4	0 - 5
#16	25 - 40
#50	70 - 87
#100	93 - 97
Fineness Modulus	2.80 (Plus/Minus 0.20)
Organic	Plate 2 maximum
Silt	2.0 percent maximum
Mortar Strength	100 percent minimum compression ratio
Soundness	5 percent maximum loss, magnesium sulfate, five cycles

- C. Normal weight Coarse Aggregate: shall be well graded crushed stone or washed gravel conforming to ASTM C33 and the following additional requirements:

Designated Size (inches)	3	2	1-1/2	1	3/4	1/2	3/8
F.M.(+/-0.20)	7.95	7.45	7.20	6.95	6.70	6.10	4.50
Organic	Plate 1 maximum						
Silt	1.0 percent maximum						
Soundness	5 percent maximum loss, magnesium sulfate, five cycles						

Maximum designated sizes for normal weight coarse aggregate to be used in concrete sections shall be as noted below, except that sizes shall also be chosen in conjunction with required clearances.

- One and one-half inches for sections over ten inches in thickness.
  - One inch for sections more than eight and up to ten inches in thickness.
  - Three-quarter inch for sections more than three and up to eight inches in thickness.
- D. Concrete Fill for Steel Stair and Landing Pans: Shall be composed of 1:2:2 mix with three-eighths inch maximum size normal weight aggregate and shall be placed with a 0 inches to 1 inch slump.
- E. Water: Shall be from approved source, potable, clean and free from oils, acids, alkali, organic matter and other deleterious material.
- F. Admixtures:
- Water-reducing agent: ASTM C 494, Type A, and containing not more than 0.1 percent chloride ions by weight of cement.

- a. "WRDA" - W.R. Grace & Co.
  - b. "PDA25" - Protex Industries, Inc.
  - c. "Pozzolith 344H" - Master Builder's Co.
  - d. Note: Water-reducing agent shall be by same manufacturer as air-entraining agent.
2. Air-entraining agent: ASTM C 260, certified by manufacturer to be compatible with other required admixtures.
- a. "DAREX AEA" - W.R. Grace & Co.
  - b. "PROTEX AEA" - Protex Industries
  - c. "MB-VR" or "MB-AE" - Master Builder's Co.
3. Superplasticizer: High-range water-reducer conforming to ASTM C494, Type F or Type G.
4. Water-Reducing; Non-Chloride Accelerator Admixture: ASTM C 494, Type C or E, and containing not more than 0.1 percent chloride ions by weight of cement.

Products: Provide one of the following:

- a. "Accelguard 80", Euclid Chemical Co.
  - b. "Pozzotec 20", Master Builders
  - c. "Daraset Accelerator", W. R. Grace
5. Water-Reducing, Retarding Admixture: ASTM C 494, Type D., and containing not more than 0.1 percent chloride ions by weight of cement.

Products: Provide one of the following:

- a. "Pozzolith 100XR", Master Builders
  - b. "Eucon Retarder 75", Euclid Chemical Co.
  - c. "Daratard", W. R. Grace
6. Concrete Waterproofing admixture: Concrete moisture proofing admixture for interior slab-on-grade construction. (Note: sheet vapor retarder must be compatible with concrete waterproofing admixture and conform to ASTM E 1745-09 Class A vapor barrier maintaining a permeance of 0.01 US perms (grains/ft<sup>2</sup> \*hr\*inHg) or less. Sheet vapor barrier shall include manufacturer's recommended adhesive or pressure-sensitive tape.) The Manufacturer shall issue a 10 year warranty, that the product will stop moisture emission from the concrete, and such warranty shall include labor and material for repair, removal and replacement of a moisture remediation system and replacement of flooring materials like or if not available exceeding the quality of the original products.

Products: Provide one of the following:

- a. Barrier-1 Admixture, Barrier-1, Inc.
- b. Concure Systems Admixture, Concure Systems.

c. Moxie 1800 Super-Admix, Moxie International

7. Prohibited Admixtures: Calcium chloride thyo cyanates of admixtures containing more than 0l1 percent chloride ions are not permitted.

2.02 CONCRETE MIXTURES

- A. The Contractor shall recommend, on the basis of trial mixes and strength curves specified below, design mixes for each type and strength of concrete. The Testing Agency will verify that the proposed mix designs conform to all specification requirements.
- B. Sufficient materials for concrete mix design shall be furnished by Contractor not less than five weeks before use. Duplicate small samples plainly and neatly labeled with source, where proposed to be used, date, and name of collector shall be provided and presented to Testing Agency for permanent reference.
- C. Mixes shall be designed in accordance with "Method 1" of ACI 301, and the requirements of this Section. All concrete is normalweight unless specifically designated otherwise; air-dry weight not to exceed 150 lbs. per cubic foot.
- D. Limiting values shown below apply for specific strengths of concrete with coarse aggregates less than one and one-half inches unless noted otherwise in TABLE A below.

**TABLE A**

Use compressive strengths of concrete as shown on the drawings and classes of concrete generally as tabulated below.

- 1. Class I: All interior concrete not specifically mentioned.
- 2. Class II: Interior slabs on grade.
- 3. Class III: All exterior concrete, including but not limited to, walls and foundations.
- 4. Class IV: Concrete fill on metal deck.
- 5. Class V: Concrete subject to deicers.
- 6. Class VI: Concrete framing members.
- 7. Class VII: Concrete site work, including curbs and sidewalks.
- 8. Class VIII: Concrete pavement.
- 9. Class IX: Concrete columns and Piers.

Class Requirements	Strength @ 28 Days	Maximum Water/Cement	Slump	Special
I	3000 PSI	0.54	4"	Note (1)
II	4000 PSI	0.45	3"	Note (3) Note (4) Note (6)

III	4000 PSI	0.54	4"	Note (1) Note (2)
IV	3500 PSI	0.45	3"	Note (1) Note (3) Note (4) Note (6)
V	4000 PSI	0.40	3"	Note (1) Note (2) Note (3)
VI	4000 PSI	0.45	3"	Note (1) Note (3) Note (4)
VII	4500 PSI	0.45	4"	Note (1) Note (2)
VIII	4500 PSI	0.45	4"	Note (1) Note (2) Note (5)
IX	4000 PSI	0.45	4"	Note (1) Note (2) Note (3)

**Table A (Continued)**

Slump values are those which will be measured at the point of discharge and prior to the addition of super-plasticizer.

Note (1) Use water reducing admixture

Note (2) Use air-entraining admixture

Note (3) High range water reducing admixture (super-plasticizer) may be used to increase slump to a maximum value of 8".

Note (4) Limit air content to 3%.

Note (5) Pigmented concrete with stamped finish, Color to be selected by Landscape Architect.

Note (6) Concrete Waterproofing Admixture.

- E. In all slabs and walls exposed to weather, all concrete shall contain the approved air-entraining admixture as per manufacturer's written instructions, to provide entrained air, by volume, in the cured concrete within 4.5 to 6.5 percent.
- F. Water-Reducing Admixture - The approved water-reducing admixture shall be used in all concrete, in accordance with manufacturer's written instructions.
- G. Concrete slabs, including slabs on grade, shall have a maximum water cement ratio of 0.45.
- H. The approved superplasticizer shall be used in all concrete slabs, including slabs on grade.
- I. Water content and cement content of concrete to be used in work shall be based on curve showing relation between water content, cement content, and 7 and 28 day compressive strengths of concrete made using proposed materials. Curves shall be determined by four or more points, each representing an average of at least three test specimens at each age, and shall have range of values sufficient to yield desired data, including all compressive strengths required by Contract Documents, without extrapolation. Design mix of concrete to be used in work, as determined from curve, shall correspond to following test strengths (TABLE B) obtained in laboratory trial mixtures, but in no case shall resulting mix conflict with limiting values as specified in TABLE A.

**TABLE B**

Minimum Strength of Lab Trial Mixes (psi)

Design Strength	Trial Mix Strength	
	7-days	28-days
3000	2700	3750
3500	3150	4375
4000	3800	5000
5000	4750	5750
6000	5700	6800

- J . Any deviation from approved mix design, which Contractor deems desirable under certain project conditions, will not be allowed without written approval of the Engineer. Cost of any additional testing by Testing Agency associated therewith shall be paid for by Contractor.
- K. Evaluation and Acceptance of Concrete
  - 1. The evaluation and acceptance of concrete shall be governed by "Building Code Requirements for Reinforced Concrete" (ACI 318).
  - 2. In general, the strength level of the concrete will be considered satisfactory if the averages of all sets of three consecutively tested concrete specimens equal or exceed the required

strength and no individual strength test result falls below the required strength by more than 500 PSI.

3. If the above requirements are not met, and if the likelihood of low strength concrete is confirmed, additional tests shall be performed at the Contractor's expense as outlined in Chapter 4 of the ACI 318 Code or other action appropriate to the circumstances and as determined by the Architect/Engineer shall be taken to assure the load-carrying capacity of the structure under design loads.

## 2.03 FORM MATERIALS

- A. Construct formwork to shapes, lines, and dimensions required, plumb and straight, secured and braced sufficiently rigid to prevent deformation under load, and sufficiently tight to prevent leakage, all in conformance with ACI Standard 347, "Recommended Practice for Concrete Formwork".
- B. Formwork for exposed concrete shall be medium-density plastic overlaid plywood, 5/8" minimum thickness; for concealed concrete shall be "Plyform" plywood, 5/8" minimum thickness.
- C. Formwork for pan joists shall be re-usable, fiberglass forms.
- D. Chamfer Strips: Half-inch, 45 degree poplar wood strips, nailed six inches on center, and installed in inside corners of all forms for all exterior corners and edges of permanently exposed concrete, unless otherwise directed by the Engineer.
- E. Form Ties and Spreaders: Richmond Tyscrus by Richmond Screw Anchor Co.; Superior-ties by Superior Concrete Accessories, Ind.; or Sure-Grip Ties by Dayton Sure-Grip and Shore Co. Wire ties shall not be used. Ties for foundation walls shall be snap-ties or type specified above with removal cones and shall incorporate water seal washer. Ties shall be arranged in a symmetrical manner.
- F. Form Release Agent: Non-staining and non-emulsifiable type, or equal approved by the Engineer. Form release agent shall be biodegradable and shall not impart any stain to concrete nor interfere with adherence of any material to be applied to concrete surfaces.

## 2.04 REINFORCEMENT AND ACCESSORIES

- A. Reinforcing Steel Bars: shall be newly rolled billet steel conforming to ASTM A615 Grade 60. Bars shall be bent cold.
- B. Welded Wire Fabric: shall conform to ASTM A185.
- C. All embedded items shall be hot-dip galvanized after fabrication in accordance with ASTM A123.

All hot-dip galvanized steel shall be inspected for compliance with ASTM A123 and shall be marked with a stamp that indicates the number of ounces of zinc per square foot of steel. A notarized Certificate of Compliance with all of the above shall be required from the galvanizer.

- D. Reinforcement Accessories: shall conform to Product Standard PS7-766, National Bureau of Standards, Department of Commerce, Class C, as produced by Superior Concrete Accessories, Inc.; Dayton Sure-Grip Co.; or R.K.L. Building Specialties Co., Inc. Reinforcement accessories shall include spacers, chairs, ties, slab bolsters, clips, chair bars, and other devices for properly assembling, placing, spacing, supporting, and fastening reinforcement.
- E. Tie wire shall be annealed wire of sufficient strength for intended purpose, but not less than No. 18 gage. Metal supports shall be of such type as not to penetrate surface of formwork and show through surface of concrete. Accessories touching interior formed surfaces exposed to view shall have not less than 1/8 inch of plastic between metal and concrete surface. Plastic tips shall extend not less than 1/2 inch up on metal legs. Individual and continuous slab bolsters and chairs shall be of type to suit various conditions encountered and must be capable of supporting 300 pound load without damage or permanent distortion.

## 2.05 MISCELLANEOUS MATERIALS

- A. Grout: shall be ready-to-use metallic aggregate product requiring only addition of water at job site such as "Embeco Pre-mixed Grout" by Master Builder's; "Vibro-Foil Ready-Mixed" by W.R. Grace & Co.; or "Ferrolith G" by Sonneborn Building Products, Inc. Grout shall be easily workable and shall have no drying shrinkage at any age. Compressive strength of grout (2" x 2" cubes) shall not be less than 5000 psi at 7 days, and 7500 psi at 28 days.
- B. Membrane Curing Compound: shall conform to ASTM C309, Type 1. Product used shall be shown to be compatible with the later application of coatings. Curing compound shall not be used on any floor slab scheduled to receive an adhered floor finish.
- C. Chemical Hardener: All exposed concrete slabs shall be hardened with three applications of fluosilicate chemical hardener followed by two applications of clear acrylic concrete sealer by Sonneborn Division, ChemRex Inc. "Lapidolith"; or equal product by W.R. Meadows Co. or Concrete Service Material Company.
- D. Bonding Compound: Acrylic or Styrene Butadiene:  
  
Products: Provide one of the following:
  - a. "J-40 Bonding Agent", Dayton Superior Corp.
  - b. "Everbond", L & M Construction Chemicals
  - c. "SBR Latex", Euclid Chemical Company
  - d. "Daraweld C", W. R. Grace Company
- E. Epoxy Adhesive: ASTM C 881, two component material suitable for use on dry or damp surfaces. Provide material "Type", "Grade", and "Class" to suite project requirements.

Products: Provide one of the following:

- a. "Thiopoxy", W. R. Grace Co.
  - b. "Sikadur Hi-Mod", Sika Chemical Co.
  - c. "Euco Epoxy 452 or 620", Euclid Chemical Co.
- F. Structural Repair Compound: The Euclid Chemical Company's "Euco Epoxy #460 or #463, Sika Corporation's "Colma-Dur LV", or L & M Construction Chemical's "Epopatch".
- G. Absorption Cover: Burlap cloth made from jute or kenaf, weighting approximately 9 oz. per sq. yd., complying with AASHTO M 182, Class 2.
- H. Moisture-Retaining Cover: One of the following, complying with ASTM C 171.
1. Waterproof paper
  2. Polyethylene film
  3. Polyethylene-coated burlap
- I. Premoulded Joint Filler: Homex 300 expansion joint filler, ¼" thick by full depth of slab for building slabs, ½" thick by full depth of slab for site work slabs and pavement, as manufactured by Homasote Company. Equivalent non-bituminous material may be used if approved by the Architect/Engineer.
- J. Urethane Joint Filler: Self leveling two part elastomeric joint filler.  
Products: Provide one of the following:
1. "Sikaflex-2c NS/SL", Sika Corporation
  2. "3200 Hand-Mix", The Burke Company
  3. "Mark-262", Poly-Carb, Inc.
- K. Compressible Backup Material: Closed cell polyethylene foam rod equivalent to Ethafoam sealant backer rod, manufactured by Dow Chemical Company.
- L. Dovetail Slots: Shall be 22 gage material.  
Products: Provide one of the following:
1. "D/A 100", Dur-O-Wal
  2. "AA 100", AA Wire Product Company
  3. "No. 100 Standard", Heckmann
- M. PVC Waterstop: Provide polyvinyl Chloride waterstops conforming to Corps of Engineers CRD-C 572 flat, dumbbell type or centerbulb type waterstops at construction joints and other joints as indicated. Size to suite the joint.

Manufacturer: Subject to compliance with requirements, provide products of one of the following:

1. Anti-Hydro Waterproofing Co.
  2. The Burke Co.
  3. Harbour Town Products
  4. W. R. Meadows
- N. Below Grade Wall Waterproofing: As specified in Division 07.
- O. Wall Joint Waterproofing: Volclay Hydrobar tube waterproofing manufactured by American Colloid Company.
- P. Joint Seal: Trowel grade form of volclay bentonite with a consistency similar to grease manufactured by American Colloid Company.

### **PART 3 - EXECUTION**

#### **3.01 INSPECTION**

- A. Examine all work prepared by others to receive work of this Section and report any defects affecting installation to the Contractor for correction. Commencement of work will be construed as complete acceptance of preparatory work by others.

#### **3.02 HANDLING, STORAGE, AND PROTECTION OF MATERIALS**

- A. Handle and store materials separately in such manner as to prevent intrusion of foreign matter, segregation, or deterioration. Do not use foreign materials or those containing ice. Remove improper and rejected materials immediately from point of use. Cover materials, including steel reinforcement and accessories, during construction period. Stockpile concrete constituents properly to assure uniformity throughout project.

#### **3.03 FORMWORK**

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Construct forms tight enough to prevent loss of concrete mortar.
- D. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
1. Install keyways, reglets, recesses, and the like, for easy removal.

2. Do not use rust-stained steel form-facing material.
- E. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- F. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- G. Chamfer exterior corners and edges of permanently exposed concrete.
- H. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- I. Set and maintain formwork to insure complete concrete work within tolerance limits listed in ACI 347 latest edition, "Recommended Practice for Concrete Formwork", and with following additional requirements:
1. Maximum variations from plumb:
    - a. In surfaces of columns and walls:
 

In any 10 feet of length	1/4 inch
Maximum for entire length	1/2 inch
  2. Maximum variations from established position in plan shown on the drawings:
 

Column	1/2 inch
Walls	3/4 inch
  3. Variations in cross-sectional dimensions of columns and beams and in thickness of slabs and walls.
 

Minus	1/8 inch
Plus	1/4 inch
- J. For a minimum of one hour prior to concrete placement, wet forms continuously with water to swell forms in order to prevent leakage of concrete matrix and to minimize absorption of concrete matrix water by form materials. This requirement may be waived for those specific cases where the Engineer deems it unnecessary or impractical. Care must be exercised to prevent a build-up of water at base of forms.
- K. Before form materials can be re-used, surfaces that will be in contact with freshly cast concrete shall be thoroughly cleaned, damaged areas repaired and projecting nails withdrawn. Re-use of form material shall be subject to approval by the Engineer. Follow form liner manufacturer recommendation on reuse of form liner.

- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

### 3.04 PLACING OF REINFORCEMENT

- A. Reinforcement shall be placed in accordance with requirements of CRSI 93, "Recommended Practice for Placing Reinforcing Bars" and CRSI 93, "Recommended Practice for Placing Bar Supports" and with further requirements below.
- B. Reinforcement shall be accurately placed in accordance with Contract Documents and shall be firmly secured in position by wire ties, chairs, spacers, and hangers, each of type approved by the Engineer.
- C. Bending, welding or cutting reinforcement in field in any manner other than as shown on Drawings, is prohibited, unless specific approval for each case is given by the Engineer.
- D. Reinforcement shall be continuous through construction joints unless otherwise indicated on Drawings.
- E. Reinforcement shall be spliced only in accordance with requirements of Contract Documents or as otherwise specifically approved by the Engineer. Splices of reinforcement at points of maximum stress shall generally be avoided. Welded wire fabric shall lap six inches or one space plus two inches whichever is larger, and shall be wired together.
- F. At time concrete is placed, reinforcement shall be free of excessive rust, scale, or other coatings that will destroy or reduce bond requirements. Reinforcement expected to be exposed to weather for a considerable length of time shall be painted with a heavy coat of cement grout. Protect stored materials so as not to end or distort bars in any way. Bars that become damaged will be rejected.
- F. Before concrete is cast, check all reinforcement after it is placed to insure that reinforcement conforms to Contract Documents and approved Shop Drawings. Such checking shall be done only by qualified experienced personnel. In addition, the Engineer shall be notified at least 36 hours prior to concrete placement and given opportunity to inspect completed reinforcement and formwork before concrete placement. Prior approval of Shop Drawings shall in no way limit the Engineer's right to demand modifications or additions to reinforcement or accessories.

### 3.05 JOINTS

- A. Construction and control joints indicated on Drawings are mandatory and shall not be omitted.
- B. Joints not indicated or specified shall be placed to least impair strength of structure and shall be subject to approval of the Engineer.

- C. Provide keyways at least 1-1/2" deep in construction joints in walls, slabs, and between walls and footings; accepted bulkheads designed for this purpose may be used for slabs.
- D. Place construction joints perpendicular to main reinforcement. Continue reinforcement across construction joints, except as otherwise indicated.
- E. Waterstops: Install waterstops in construction joints where indicated on the drawings in accordance with the manufacturer's recommendations. Each piece of premoulded waterstop shall be the maximum practicable length to limit the number of joints. Joint at intersections and at ends shall be made in accordance with the manufacturer's recommendations and shall develop effective watertightness equal to that of the continuous waterstop.
- F. Isolation Joints in Slabs-on-Ground: Construct isolation joints in slabs-on-ground at points of contact between slabs-on-ground and vertical surfaces, such as column pedestals, foundation walls, grade beams, and elsewhere as indicated, using 1/2" thick premoulded joint filler through full thickness of slab.
- G. Contraction (Control) Joints on Slabs-on-Ground: Construct contraction joints in slabs-on-ground to form panels of patterns as shown. Use saw cuts 1/8" x 1/4 slab depth, unless otherwise indicated.
  - 1. Contraction Joints in unexposed floor slabs shall be formed by saw cuts as soon as possible after slab finishing as may be safely done without dislodging aggregate.
- H. If joint patterns not shown, provide joints not exceeding 15 feet in either direction and located to conform to bay spacing wherever possible (at column centerlines, half bays, third-bays), with equal or close to equal spacings in each direction.
- I. At exposed interior construction and contraction joints in floor slabs shall be filled with the specified urethane joint filler. Joint preparation and mixing and placing of the joint filler shall be in strict accordance with the directions of the manufacturer. Joints shall not be filled sooner than 28 days after slab placement. Carefully clean joints prior to filling with joint filler.

### 3.06 INSTALLATION OF EMBEDDED ITEMS

- A. Conform to requirements of ACI 318, paragraph 6.3, "Conduits and Pipes Embedded in Concrete", and as specified below.
- B. Install steel sleeves, embedded wall plates and similar items, furnished by other trades, at locations shown on the drawings.
- C. Anchor bolts for column baseplates shall be installed with templates provided. Vertical alignment and plan locations shall be maintained within one-sixteenth inches of the locations shown on the drawings.

1. Inspection shall be performed by a surveyor licensed in the state the project is located. Certify compliance with shop drawings.

D. No pipes or conduit of any kind is permitted to be installed in slabs in metal deck.

### 3.07 MIXING, CONSISTENCY, AND DELIVERY OF CONCRETE

A. Concrete shall be ready-mixed, produced by plant acceptable to the Engineer. Hand or site mixing shall not be done. Constituents, including admixtures except certain corrosion inhibitors and superplasticizers, shall be batched at central batch plant. Admixtures shall be premixed in solution form and dispensed as recommended by manufacturer.

B. Central plant and rolling stock equipment and methods shall conform with Truck Mixer and Agitator Standard of Truck Mixer Manufacturer's Bureau of National Ready-Mixed Concrete Association, and Contract Documents. Consistency of concrete at time of deposit shall be as follows:

Portion of Structure	Slump	
	Recommended	Max. Range
Walls columns	4"	3" - 5"
Slabs, beams	3"	2" - 4"

C. Ready mixed concrete shall be transported to site in watertight agitator or mixer trucks loaded not in excess of rated capacities. Discharge at site shall be within one and one-half hours after cement was first introduced into mix. Discard cement not discharged within one and one-half hours and dispose of legally. Concrete with a temperature greater than 85 degrees F. shall not be placed. Central mixed concrete shall be plant mixed a minimum of five minutes. Agitation shall begin immediately after premixed concrete is placed in truck and shall continue without interruption until discharged. Transit mixed concrete shall be mixed at mixing speed for at least ten minutes immediately after charging truck followed by agitation without interruption until discharged. Concrete shall be furnished by a single plant unless accepted by the Engineer in writing.

D. Retempering of concrete which has partially hardened, that is, mixing with or without additional cement, aggregates, or water, will not be permitted.

### 3.08 PLACING CONCRETE

A. Preplacement Inspection: Before placing concrete, inspect and complete formwork installation, reinforcing steel, and items to be embedded or cast-in. Notify other crafts to permit installation of their work, cooperate with other trades in setting such work. Moisten wood forms immediately before placing concrete where form coatings are not used.

- B. Remove water and foreign matter from forms and excavations and, except in freezing weather or as otherwise directed, thoroughly wet wood forms just prior to placing concrete. Place no concrete on frozen soil and provide adequate protection against frost action during freezing weather.
- C. To secure full bond at construction joints, surfaces of concrete already placed, including vertical and inclined surfaces, shall be thoroughly cleaned of foreign materials and laitance, roughened with suitable tools such as chipping hammers or wire brushes, and recleaned by stream of water or compressed air. Well before new concrete is deposited, joints shall be saturated with water. After free or glistening water disappears joints shall be given thorough coating of neat cement slurry mixed to consistency of very heavy paste. Surface shall receive coating of approximately one-eighth inch thick; this shall be scrubbed in by means of stiff bristle brushes. New concrete shall be deposited before neat cement dries or changes color.
- D. Do not place concrete having slump outside of allowable slump range.
- E. Transport concrete from mixer to place of final deposit as rapidly as practical by methods which prevent separation of ingredients and displacement of reinforcement, and which avoid rehandling. Deposit no partially hardened concrete. When concrete is conveyed by chutes, equipment shall be of such size and U-shaped design as to insure continuous flow in chute. Flat (coal) chutes shall not be employed. Chutes shall be of metal or metal lined and different portions shall have approximately same slope. Slope shall not be less than 25 degrees nor more than 45 degrees from horizontal and shall be such as to prevent segregation of ingredients. Discharge end of chute shall be provided with baffle plate or spout to prevent segregation. If discharge end of chute is more than five feet above surface of concrete in forms, spout shall be used, and lower and maintained as near surface of deposit as practicable. When operation is intermittent, chute shall discharge into hopper. Chute shall be thoroughly cleaned before and after each run and debris and any water used shall be discharged outside forms. Concrete shall not be allowed to flow horizontally over distances exceeding five feet.
- F. Concrete shall be placed in such manner as to prevent segregation, and accumulations of hardened concrete on forms or reinforcement above mass of concrete being placed. To achieve this end, suitable hoppers, spouts with restricted outlets and tremies shall be used as required.
- G. During and immediately after depositing, concrete shall be thoroughly compacted by means of internal type mechanical vibrators or other tools, or by spading to produce required quality of finish. Vibration shall be done by experienced operators under close supervision and shall be carried on only enough to produce homogeneity and optimum consolidation without permitting segregation of constituents or "pumping" of air. Vibrators used for normalweight concrete shall operate at speed at not less than 7,000 vpm and be of suitable capacity. Do not use vibrators to move concrete. Vibration shall be supplemented by proper wooden spade puddling to remove included bubbles and honeycomb adjacent to visible surfaces. At least one vibrator shall be on hand for every 10 cubic yards of concrete placed per hour, plus one spare. Vibrators shall be operable and on site prior to starting placement.

- H. Vertical lifts shall not exceed 18 inches. Vibrate completely through successive lifts to avoid pour lines. Vibrate first lift thoroughly until top of lift glistens to avoid stone pockets, honeycomb, and segregation.
- I. Concrete shall be deposited continuously, and in layers of such thickness that no concrete will be deposited on concrete which has hardened sufficiently to cause formation of seams and planes of weakness within section. If section cannot be placed continuously between planned construction joints, as specified, field joint and additional reinforcement shall be introduced so as to preserve structural continuity. The Engineer shall be notified in any such case.
- J. Cold joints, particularly in exposed concrete, including "honeycomb", are unacceptable. If they occur in concrete surfaces exposed to view, the Engineer will require that entire section in which blemish occurs be removed and replaced with new materials at Contractor's expense.
- K. When placing exposed concrete walls or columns, strike corners of forms rapidly and repeatedly from outside along full height while depositing concrete and vibrating.
- L. Chutes, hoppers, spouts, adjacent work, etc. shall be thoroughly cleaned before and after each run and water and debris shall be discharged outside form.

### 3.09 FINISHING OF UNFORMED CONCRETE SURFACES

- A. Smooth troweled finish: shall be provided where concrete flatwork is to be exposed in the finished work or is to receive resilient flooring materials.
  - 1. After floating, being first trowel finish operation using a power-driven trowel. Begin final troweling when surface produces a ringing sound as trowel is moved over surface. Consolidate concrete surface by final hand-troweling operation, free of trowel marks, uniform in texture and appearance, and with surface leveled to tolerances of  $F_F 20 - F_L 17$ . Grind smooth surface defects which would telegraph through applied floor covering system. For concrete slabs on metal deck level surface to a tolerance of  $F_F 25$ .
- B. Floated finish: shall be provided where concrete flatwork is to receive waterproofing membranes or setting beds for finished materials.
- C. Rough struck surface shall be provided at top of pedestals.
- D. Steel Broom Finish (with smooth edging): shall be provided at exterior concrete walks, pavements and steps. Side walks shall receive a broom finish perpendicular to the run of the sidewalk.
- F. Site curbs shall receive a rubbed and brushed finish.

- E. Contractor, at his own expense, shall level depressed spots and grind high spots in concrete surfaces which are in excess of specified tolerances. Leveling materials proposed for providing proper surface shall be approved by the Engineer.

### 3.10 REPAIRING OF UNFORMED CONCRETE SURFACES

- A. Tops of slabs and top of walls shall be repaired by using either same material as originally cast or by use of dry-pack material, as approved by the Engineer. Areas affected shall be chipped back square and to depth of one inch minimum. Hole shall then be moistened with water for a minimum of two hours, followed by brush coat of 1/16 inch thick cement paste. Immediately plug hole with concrete, or with dry pack material consisting of 1:1.5 mixture of cement and concrete sand mixed slightly damp to touch. Hammer dry-pack into hole until dense, and excess paste appears on surface. Finish patch flush and to same texture as surrounding concrete. For large repairs employ 1-1-2 mixture of cement, concrete sand and pea gravel at same dry-pack consistency.

### 3.11 CURING AND PROTECTION

- A. When concrete is placed at or below ambient air temperatures of 40 degrees F. or whenever in opinion of the Engineer, such or lower temperatures are likely to occur within 48 hours after placement of concrete, cold weather concreting procedures, according to ACI 306 and as specified herein, shall be followed. To this end, entire area affected shall be protected by adequate housing or covering, and heating. No salt, chemicals or other foreign materials shall be used in the mix to lower freezing point of concrete.
- B. Protect concrete work against injury from heat, cold, and defacement of any nature during construction operations.
- C. Concrete shall be treated and protected immediately after concreting or cement finishing is completed, to provide continuous moist curing above 50 degrees F. for at least seven days, regardless of ambient air temperatures.
- D. Concrete shall be wet cured for a minimum of 96 hours after placing and finishing.
- E. Curing compounds will not be permitted for slabs, and framed concrete structure.
- F. Keep permanent temperature record showing date and outside temperature for concreting operations. Thermometer readings shall be taken at start of work in morning, at noon, and again late in afternoon. Locations of concrete placed during such periods shall likewise be recorded, in such manner as to show any effect temperatures may have had on construction. Copies of temperature record shall be distributed daily to the Engineer.

### 3.12 HARDENER

- A. Prepare surfaces and apply surface hardener to all concrete floors not receiving resilient flooring, ceramic tile or membrane waterproofing.
- B. Prepare surface and apply special sealer system to all concrete flatwork and curbs exposed to the elements.

### 3.13 REMOVAL OF FORMWORK, SHORING AND RESHORING

- A. Contractor shall be responsible for proper removal of formwork, shoring, and reshoring.
- B. Forms shall be removed only after concrete has attained sufficient strength to support its shown weight, construction loads to be placed thereon and lateral loads, without damage to structure or excessive deflection.
- C. Forms and supports shall remain in place for not less than minimum periods of time noted below. These periods represent cumulative number of days or fractions thereof, consecutive unless otherwise approved by the Engineer during which time mean daily air temperature at surfaces of concrete is above 50 degrees F.
  - 1. Vertical surfaces: concrete shall have reached 100 day-degrees\* and shall have attained strength of not less than 30 percent of  $f_c$ . Where such forms also support formwork for slab or beam soffits, removal times for latter shall govern.
  - 2. Horizontal surfaces: except as noted below, concrete shall have reached 300 day-degrees\* of curing and attained strength of not less than 60 percent of  $f_c$ .
    - a. Soffits of beams or girders shall remain supported and in place until concrete has attained 600 day-degrees\*.
    - b. Forms and supports of floor slabs shall remain in place until concrete has reached 400 day-degrees\*.

\*Definition of day-degrees: Total number of days times mean daily air temperature at surfaces of concrete. For example, five days at temperature of 60 degrees F. equals 300 day degrees. Days or fractions of days in which temperature is below 50 degrees F. shall not be included in calculation of day-degrees.

- D. Form removal shall be so performed that reshores are placed at same time as stripping operations, and that no area larger than one-fourth of a slab panel is unsupported at any time.
- E. Any test cylinders required to verify the specified minimum strengths for form removal shall be field cured under the same conditions as the concrete they represent. Such cylinders and testing shall be at the Contractor's expense.

## 3.14 REPAIRING AND FINISHING OF FORMED AND ARCHITECTURAL CONCRETE SURFACES

- A. In accordance with the provisions of ACI 301, Chapter 10, all concrete shall have "smooth form finish".
- B. Intent of this Specification is to require forms, mixtures of concrete, and workmanship so that concrete surfaces will require no patching, except for plugging of tie holes. However, where patching is acceptable to the Engineer, procedure described below shall be followed.
- C. Defective concrete and honeycombed areas shall not be patched unless examined and approval is given by the Engineer. If such approval is received by Contractor, areas involved shall be chipped down square and at least one inch deep to sound concrete by means of cold chisels or pneumatic chipping hammers. If honeycomb exists around reinforcement, chip to provide clear space at least three-quarter inch wide all around steel to afford proper ultimate bond thereto. For areas less than one and one-half inches deep, patch shall be made in same manner as described above for filling unformed concrete surfaces, care being exercised to use crumbly-dry (non-trowelable) mixtures and to avoid sagging. Thicker repairs shall require build-up in successive days, each layer being applied as described. To aid strength and bonding of multiple layer repairs, non-shrink, non-metallic aggregate shall be used as an additive as follows:

Materials	Volumes	Weights
Cement	1.0	1.0
Non-Metallic Aggregate	0.15	0.25
Sand	1.5	1.55

For very heavy (generally, formed) patches, pea gravel may be added to mixture and proportions modified as follows:

Materials	Volumes	Weights
Cement	1.0	1.0
Non-Metallic Aggregate	0.2	0.33
Sand	1.0	1.0
Pea Gravel	1.5	1.55

After hardening, rub lightly as described above for form tie holes.

1. Mortar for patching shall be same mix as above except aggregate shall pass a No. 14 sieve.
2. For all concrete to receive "smooth" finish, remove formwork fins and clean entire surface of grease, form oil, laitance, dust, and other foreign matter.
3. "Smooth" finish shall consist of having all fins removed, joint marks smoothed off,

blemishes removed, and surfaces left smooth and unmarred.

4. Begin finishing operations as soon as practicable after removal of forms, continue with curing operations after finishing is completed. After concrete has been well cured, carefully inspect surfaces. Remove any fins, rough spots, streaks, hardened mortar or grout and other foreign material. Patch defects with finishing mortar as specified above, to satisfaction of the Engineer.
- D. Patches which become crazed, cracked, or sound hollow upon tapping shall be removed and replaced with new material at Contractor's expense.

### 3.15 CLEANING

- A. Concrete surfaces shall be cleaned of objectionable stains as determined by the Engineer. Materials containing acid in any form or methods which will damage "skin" of concrete surfaces shall not be employed, except where otherwise specified.

### 3.16 QUALITY CONTROL

- A. The testing laboratory will analyze the proposed concrete design mix and sample and test aggregate and concrete as follows:
1. Fine Aggregate Tests: Organic content, sieve analysis, fineness modulus.
  2. Coarse Aggregate Tests: Sieve analysis
  3. Mix Design: Refer to Section 033000-1.3 and 2.5 for requirements and submittal format.
- B. The Testing Laboratory will perform the following field tests:
1. Secure samples in accordance with ASTM C 172 except modified for slump to comply with ASTM C 94.
  2. Slump: ASTM C 143, one test for each 100 cubic yards, or fraction thereof, at point of discharge for each day's pour of each type of concrete; additional tests when concrete consistency seems to have changed.
  3. Air Content: ASTM C 173, volumetric method for lightweight or normal weight concrete. ASTM C 231 pressure method for normal weight concrete, one for each day's pour of each type of air-entrained concrete.
  4. Concrete Temperature: Test hourly when air temperature is 40 deg F (4 deg C) and below, and when 80 deg F (27 deg C) and above, and each time a set of compression test specimens made.
  5. Compression Test Specimen: ASTM C 31; one set of 4 standard cylinders for each compressive strength test, unless otherwise directed. Mold and store cylinders for laboratory cured test specimens except when field-cure test specimens are required.
  6. Compressive Strength Tests: ASTM C 39; one set for each day's pour exceeding 5 cu. yds. plus additional sets for each 100 cu. yds. Of each concrete class placed in any one day; one

- specimen tested at 7 days, two specimens tested at 28 days, and one specimen retained in reserve for later testing if required.
7. When frequency of testing will provide less than 5 strength tests for a given class of concrete, conduct testing from at least 5 randomly selected batches or from each batch if fewer than 5 are used.
  8. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, evaluate current operations and provide corrective procedure for protecting and curing the in-place concrete.
  9. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive strength test results equal or exceed specified compressive strength, and no individual strength test result falls below specified compressive strength by more than 500 psi.
- C. Test results will be reported in writing to the Structural Engineer and Contractor within 24 hours after tests. Reports of compressive strength tests shall contain the project identification name and number, date of concrete placement, name of concrete testing service, concrete type and class, location of concrete batch in structure, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength and type of break for both 7-day tests and 28-day tests.
1. Additional Tests: The testing service will make additional tests of in-place concrete when test results indicate specified concrete strengths and other characteristics have not been attained in the structure, as directed by the Engineer. Testing service may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed. Contractor shall pay for such tests when unacceptable concrete is verified.
  2. Reinforcing: The testing service will inspect the location and installation details of all reinforcing steel for compliance with the approved drawings, specifications and ACI 318.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 MEASUREMENT

- A. Cast in Place Concrete – This work shall not be measured but will be paid for at the contract lump sum price. Reinforcing steel, wire mesh reinforcement, expansion joint, joint fillers/sealers, detectable warning surfaces, processed aggregate base and curing compounds shall not be measured separately for payment, but shall be included in this work.

### 4.02 PAYMENT

- A. This work shall be paid for at the contract lump sum price for “Cast in Place Concrete” which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

**SECTION 03 81 13  
FLAT CONCRETE SAWING**

**PART 1 - GENERAL**

1.01 DESCRIPTION

- A. Work under this specification covers saw cutting existing bituminous concrete pavement as shown on the plans or as directed by the Engineer.

1.02 RELATED WORK

- A. Section 01 31 13 – Project Coordination
- B. Section 31 23 00 – Excavation and Fill
- C. Section 32 12 16 – Bituminous Concrete
- D. Section 32 16 13 – Bituminous Concrete Curb

1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications to January 2021.

**PART 2 - PRODUCTS**

Not Applicable.

**PART 3 - EXECUTION**

3.01 CONSTRUCTION METHODS

- A. All bituminous concrete pavement to be removed shall be cut uniformly along lines as shown on the plans or as directed by the Engineer.
- B. Bituminous concrete pavement shall be cut with an approved concrete saw completely through the full depth of the pavement.
- C. Bituminous curbs shall be cut at the designated lines.

**PART 4 - MEASUREMENT AND PAYMENT**

4.01 MEASUREMENT

- A. Saw cut concrete pavement - This work shall not be measured but will be paid for at the contract lump sum price.

4.02 PAYMENT

- A. This work shall be paid for at the contract lump sum price for "Flat Concrete Sawing" which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

**SECTION 06 10 00**  
**ROUGH CARPENTRY**

**PART 1 - GENERAL**

1.01 DESCRIPTION

A. Work under this section includes the following:

1. Framing with dimensional lumber.
2. Framing with engineered wood products.
3. Engineered wood products.
4. Wood blocking, cants, and nailers.
5. Sheathing.

1.02 RELATED WORK

A. Section 06 20 00 - Finish Carpentry

1.03 QUALITY ASSURANCE

A. All materials and workmanship shall comply with recommendations of:

1. NELMA-Northeastern Lumber Manufacturers Association.
2. NLGA-National Lumber Grades Authority.
3. WWPA-Western Wood Products Association.
4. APA-American Plywood Association.

1.04 DEFINITIONS

- A. Rough Carpentry: Carpentry work not specified in other Sections and not exposed unless otherwise indicated.
- B. Exposed Framing: Dimension lumber not concealed by other construction.
- C. Engineered Wood Products: Laminated-Veneer Lumber: A composite of wood veneers with grain primarily parallel to member lengths, manufactured with an exterior-type adhesive complying with ASTM D2559.
- D. Lumber grading agencies, and the abbreviations used to reference them, include the following:
1. NELMA - Northeastern Lumber Manufacturers Association.
  2. NLGA - National Lumber Grades Authority.

3. WWPA - Western Wood Products Association.
4. APA – American Plywood Association.

#### 1.05 SUBMITTALS

- A. Product Data: For each type of factory-fabricated product, indicate component materials and dimensions and include construction and application details.
  1. For products include statement that moisture content of lumber was reduced to levels specified before shipment to Project site.
  2. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used, net amount of preservative retained, and chemical treatment manufacturer's written instructions for handling, storing, installing, and finishing treatment material.
  3. Include copies of warranties from chemical treatment manufacturers for each type of treatment.
- B. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the American Lumber Standards Committee Board of Review.
  1. Preservative-treated wood.
  2. Engineered wood products
  3. Power-driven fasteners.
  4. Expansion anchors.
  5. Metal framing anchors.
  6. Dimensional lumber.

#### 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber and plywood panels; place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

### **PART 2 - PRODUCTS**

#### 2.01 MATERIAL

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following, or approved equal:
  1. Dimensional Lumber:

- a. Boise Cascade Corporation.
  - b. Georgia-Pacific Corporation.
  - c. Louisiana-Pacific Corporation.
2. Plywood Sheathing:
- a. Boise Cascade Corporation.
  - b. Georgia-Pacific Corporation.
  - c. Rosboro Lumber Co.
3. Metal Fasteners:
- a. ITW Buildex, Inc.
  - b. Ford Fasteners, Inc.
  - c. Fastenal Co.

## 2.02 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.
1. Factory mark each piece of lumber with grade stamp of grading agency.
  2. For exposed lumber indicated to receive a stained or natural finish, mark grade stamp on end or back of each piece, or omit grade stamp and provide certificates of grade compliance issued by grading agency.
  3. Provide dressed lumber, S4S, unless otherwise indicated.
  4. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2" thickness or less, unless otherwise indicated
- B. Plywood Underlayment: Veneer plywood panels shall comply with U.S. Product Standards, National Bureau of Standards PS1-66.
1. PSI (ANSI A 199.1) with applicable APA Performance Standard.
  2. Factory mark each piece of plywood with type, grade, mill and grading agency, except omit marking from surfaces to be exposed with transparent finish or without finish.

## 2.03 DIMENSION LUMBER

- A. General: Provide dimension lumber of grades indicated according to the American Lumber Standards Committee National Grading Rule provisions of the grading agency indicated.
- B. Exterior and Load-Bearing Lumber: Including but not limited to wood studs, joists and rafters, construction grade and any of the following species:

1. Hem-fir; WCLIB or WWPA.
2. Hem-fir (north); NLGA.

#### 2.04 ROOF SHEATHING

- A. Preservative Treatment by Pressure Process: AWP A U2 (lumber) and
1. Preservative Chemicals: Acceptable to authorities having
  2. For exposed items indicated to receive a stained or natural finish,
  3. Grade: C\_D Exterior Grade.

#### 2.05 MISCELLANEOUS LUMBER

- A. General: Provide lumber for support or attachment of other construction, including the following:
1. Blocking.
  2. Cants.
  3. Nailers.
  4. Furring.
- B. For items of dimension lumber size, provide Standard grade lumber with 19 percent maximum moisture content and any of the following species:
1. Hem-fir or Hem-fir (north); NLGA, WCLIB, or WWPA.
  2. Spruce-pine-fir (south) or Spruce-pine-fir; NELMA, NLGA, WCLIB, or WWPA.
- C. For concealed boards, provide lumber with 19 percent maximum moisture content and any of the following species and grades:
1. Hem-fir or Hem-fir (north),
- D. For furring strips for installing plywood, select boards with no knots capable of producing bent-over nails and damage to paneling.

#### 2.06 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in all applicable codes and in this Article for material and manufacture.
1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.

- B. Wood-To-Metal Self Drilling Fasteners:
  - 1. For Wood to Metal Applications.
  - 2. Teks 4 WTM 3PFH x with Wings Wood-to-Metal Self-Drilling
  - 3. Screws, as manufactured by ITW Buildex, Inc. or equal.
  - 4. Teks Drill Point; Cutting Wings; Phillips Flat Head; Carbon Steel with Gray Spex finish provides excellent corrosion resistance and lower tapping torque.
- C. Nails: Conform to ASTM A153 – Standard Specification for Zinc Coating (Hot-Dip).

## 2.07 MISCELLANEOUS MATERIALS

- D. Sheathing Tape: Pressure-sensitive plastic tape for sealing joints and penetrations in sheathing and recommended by sheathing manufacturer for use with type of sheathing required.

## **PART 3 - EXECUTION**

### 3.01 INSTALLATION, GENERAL

- A. Set wood framing and plywood sheathing to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Do not use materials with defects that impair quality of rough carpentry or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- C. Apply field treatment complying with AWWPA M4 to cut surfaces of lumber and plywood.
- D. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
  - 1. CABO NER-272 for power-driven fasteners.
  - 2. Published requirements of metal framing anchor manufacturer.
  - 3. Table 2304.9.1, "Fastening Schedule," in the IBC 2012 International Building Code.
- E. Use galvanized or stainless steel common wire nails for attachment of plywood sheathing to wood decking, unless otherwise indicated. Make tight connections between members. Install fasteners without splitting wood.

### 3.02 WOOD BLOCKING AND NAILER INSTALLATION

- A. Set install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading.

### 3.03 WOOD FRAMING INSTALLATION, GENERAL

- A. Framing Standard: Comply with AFPA's "Manual for Wood Frame Construction," unless otherwise indicated.
- B. Framing with Engineered Wood Products: Install engineered wood products to comply with manufacturer's written instructions.
- C. Do not splice structural members between supports.
- D. Where built-up beams or girders of 2-inch nominal-dimension lumber on edge are required, fasten together with 2 rows of 20d nails spaced not less than 32 inches o.c. Locate one row near top edge and other near bottom edge.
  - 1. For continuous members, stagger end joints at quarter points between supports

### 3.04 WALL AND PARTITION FRAMING INSTALLATION

- A. General: Arrange studs so wide face of stud is perpendicular to direction of wall or partition and narrow face is parallel. Provide single bottom plate and double top plates using members of 2-inch nominal thickness whose widths equal that of studs, except single top plate may be used for non-load-bearing partitions. Anchor or nail plates to supporting construction, unless otherwise indicated.
  - 1. For exterior walls, provide 2-by-6-inch nominal size wood studs spaced 16 inches o.c., unless otherwise indicated.
  - 2. For interior partitions and walls, provide 2-by-4-inch nominal- size wood studs spaced 16 inches o.c., unless otherwise indicated.
- B. Construct corners and intersections with three or more studs. Provide blocking and framing as indicated and as required to support facing materials, fixtures, specialty items, and trim.
  - 1. Provide continuous horizontal blocking at mid-height of partitions more than 96 inches high, using members of 2-inch nominal thickness and of same width as wall or partitions.

- C. Fire block concealed spaces of wood-framed walls and partitions at each floor level and at ceiling line of top story. Where fire blocking is not inherent in framing system used, provide closely fitted wood blocks of 2-inch nominal- thick lumber of same width as framing members.
- D. Frame openings with multiple studs and headers. Provide nailed header members of thickness equal to width of studs. Set headers on edge and support on jamb studs.
  - 1. For non-load-bearing partitions, provide double-jamb studs with headers not less than 4-inch nominal depth for openings 48 inches and less in width, 6-inch nominal depth for openings 48 to 72 inches in width, 8-inch nominal depth for openings 72 to 120 inches in width, and not less than 10-inch nominal depth for openings 10 to 12 feet in width.
  - 2. For load-bearing walls, provide double-jamb studs for openings 72 inches and less in width, and triple-jamb studs for wider openings. Provide headers of depth indicated or, if not indicated, according to Table 602.7 in the International One- and Two-Family Dwelling Code.
- E. Provide bracing in exterior walls, at both walls of each external corner, full-story height, unless otherwise indicated. Provide one of the following:
- F. Provide bracing in walls, at locations indicated, full-story height, unless otherwise indicated. Provide one of the following:
  - 1. Diagonal bracing at 45-degree angle using let-in 1-by-4-inch nominal size boards.
  - 2. Diagonal bracing at 45-degree angle using metal bracing.
  - 3. Oriented-strand-board panels not less than 48 by 96 inches applied vertically.
  - 4. Particleboard sheathing panels not less than 48 by 96 inches applied vertically.
  - 5. In lieu of bracing at corners or at locations indicated, continuous gypsum sheathing may be provided in panels not less than 48 by 96 inches applied vertically.
  - 6. In lieu of bracing at corners or at locations indicated, continuous fiberboard sheathing, intermediate type, may be provided in panels not less than 48 by 96 inches applied vertically.

### 3.05 PLYWOOD SHEATHING INSTALLATION

- A. Fasten plywood sheathing panels to intermediate supports and then at edges and ends. Use galvanized roofing nails or galvanized staples; comply with manufacturer's recommended

spacing and referenced fastening schedule. Drive fasteners flush with surface of sheathing and locate perimeter fasteners at least 3/8 inch from edges and ends.

- B. Cover sheathing as soon as practical after installation to prevent deterioration from wetting.

### 3.06 SHEATHING TAPE APPLICATION

- A. Apply sheathing tape to joints between wood decking and at items penetrating wood decking. Apply at upstanding flashing to overlap both flashing and sheathing.

## PART 4 - MEASUREMENT AND PAYMENT

### 4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

### 4.02 PAYMENT

- A. This work shall be paid for under the contract allowance items for "Repair of Existing Gazebo" and "Bus Shelter Replacement" which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

**SECTION 06 20 00  
FINISH CARPENTRY****PART 1 - GENERAL**

## 1.01 DESCRIPTION

- A. Perform all on-site finish carpentry items as specified herein and as shown on the drawings. Such work shall include, but not be limited to, the following:
- B. Section Furnish and install all exterior and interior wood trim.
- C. Furnish, install and finish all handrails, bases, and other wood products shown or called for.
- D. Install all wood shelving.
- E. Install all woodwork and millwork.

## 1.02 RELATED WORK

- A. Section 06 10 00 - Rough Carpentry

## 1.03 QUALITY ASSURANCE

- A. Installation of all custom wood working shall be in conformance with standards as specified by the Architectural Woodworking Institute (AWI), 1984 Edition.

## 1.04 SUBMITTALS

- A. Product Data: For each type of factory-fabricated product, indicate component materials and Dimensions and include construction and application details.

**PART 2 - PRODUCTS**

## 2.01 MATERIAL

- A. Wood handrails, chair rails, window sills, trim and all other hardwood items exposed in the finish work of the buildings. Materials, finishes and surfaces shall be rated for exterior use unless otherwise noted.

**PART 3 - EXECUTION**

## 3.01 INSTALLATION

- A. General Finish Work: Securely attach carpentry work to substrate by anchoring and fastening as shown and as required by recognized standards. Countersink nail heads on exposed carpentry work and fill holes. Use common wire nails, except as otherwise indicated. Use finishing nails for finish work. Select fasteners to size that will not penetrate members where opposite side will

be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting of wood; predrill as required.

- B. Finish Carpentry Workmanship: All work shall be level and plumb. Joints shall be neat and clear and permanently secured. Fastenings shall be concealed wherever possible. Where nails are necessary, they shall be as small as practical and countersunk for putty. Where required, carefully scribe work to other finishes.
- C. Coordinate all appropriate M.E.P. work with subcontractors through the General Contractor.
- D. Arrange for painter to prime all sides and edges of all wood scheduled to receive a paint finish prior to execution.

#### **PART 4 - MEASUREMENT AND PAYMENT**

##### 4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

##### 4.02 PAYMENT

- A. This work shall be paid for under the contract allowance items for "Repair of Existing Gazebo" and "Bus Shelter Replacement" which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

## SECTION 26 05 00 COMMON WORK RESULTS FOR ELECTRICAL

### PART 1 – GENERAL

#### 1.01 DESCRIPTION

- A. This Section covers the specification of basic materials and methods for furnishing and installing electrical system work. Refer to general conditions, supplementary conditions, and any applicable parts of the specification package for other general requirements or as directed by the Engineer.
- B. All work and materials shall comply with the latest rules, applicable regulations & codes required by Federal, State and local laws or regulations. Permits, fees or charges for inspection or other services shall be paid for by the contractor. Codes & ordinances are minimum requirements & properly executed without expense to the owner, but do not relieve the contractor from work shown that exceeds minimum requirements.
- C. Furnish and install all materials and equipment and provide all labor required and necessary to complete the work shown on the drawings and/or specified and all other work and miscellaneous items, not specifically mentioned, but reasonably inferred for a complete installation, including all accessories required for testing the systems. It is the intent of the drawings and specifications that all systems be complete and ready for operation.
- D. This work includes but is not limited to furnishing all labor, materials, equipment and incidentals required to construct and install the complete electrical systems shown on accompanying plans and specified herein. This work shall include, but not be limited to:

#### 1.02 RELATED WORK

Related work specified in other Divisions of the Specification includes, but is not limited to:

- 1. Site excavation, backfilling and grading if necessary.
- 2. Rough & Finish Carpentry

#### 1.03 QUALITY ASSURANCE

- A. All electrical systems shall be in accordance with the plans.
- B. All work of this Division shall conform to standards set forth in applicable codes:
- C. The contractor shall insure that all workmanship, all materials employed, all required equipment and the manner and method of installation conforms to accepted construction and engineering practices and that each piece of equipment is in satisfactory working condition to satisfactorily perform its functional operation. Provide quality assurance tests and operational check on all components of the electrical distribution system, controls, all lighting fixtures, & special systems.

#### 1.04 GENERAL

- A. This Division includes electrical work for site improvements as shown on the drawings and as described in the general provisions of the Contract. All General and Supplementary Conditions apply to this Section. Related or necessary electrical work described or specified elsewhere is included in this section. All work and materials shall comply with the latest rules, applicable regulations & codes required by Federal, State and local laws or regulations. Permits, fees or charges for inspection or other services shall be paid for by the contractor or as agreed upon by the Town. Codes & ordinances are minimum requirements & properly executed without expense to the owner, but do not relieve the contractor from work shown that exceeds minimum requirements.

#### 1.05 SITE CONDITIONS

- A. The successful bidder will be held to have familiarized themselves with all discernible conditions. No extra payment will be allowed for work required because of existing conditions, whether specifically mentioned or not.
- B. Lines of other service that are damaged as a result of this work shall be promptly repaired at no expense to the owner and to the complete satisfaction of the owner. Field verification or correction of scale dimensions on plans shall be performed by the contractor. Actual locations, distances, and levels shall be governed by field conditions.

#### 1.06 DRAWINGS AND SPECIFICATIONS

- A. Drawings and all specifications shall be considered as a whole & work of this Division shown anywhere therein shall be furnished under this Division. Drawings are diagrammatic and indicate the general arrangement of equipment and wiring. Most direct routing of conduits and wiring is not assured. Exact requirements shall be governed by architectural, structural and mechanical conditions of the job. Consult all other drawings in preparation of the work. Extra lengths of wiring or addition of pull or junction boxes, etc., necessitated by such conditions shall be included in the bid. Some equipment is specifically designated on the drawings. It is not the intent to sole source any item unless explicitly stated. Items have been specified based upon design requirements.
- B. Bidders are encouraged to submit products for approval. With respect to order of precedence between contract documents, Contractor should be aware that the most specific documentation or information has the highest precedence.

#### 1.07 SAFETY AND INDEMNITY

- A. The contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. No act, service, drawing review or construction review by the owner is intended to include review of the adequacy of the contractor's safety measures in, on, or near the construction site.

#### 1.08 CONSTRUCTION OBSERVATION

- A. Prior to covering: any major portion of the materials installed under this section, notify the Engineer/Owner so an observation can be made.

#### 1.09 PROJECT COMPLETION

- A. Upon completion of all work & systems operational checks, the contractor shall request a final construction observation be performed. The engineer/owner shall compile a punch list of items to be completed or corrected. The contractor shall notify the owner upon completion of the items.

#### 1.10 GUARANTEE

- A. All work under this section shall be guaranteed in writing to be free of defective work, materials, or parts for a period of one (1) year, after final acceptance of the work under the contract. Repair, revision or replacement of any and all defects, failure or inoperativeness shall be done by the contractor at no cost to the owner.

#### 1.11 SUBMITTALS

- A. Submit product data for each type of product indicated.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

#### 1.12 ELECTRICAL SUPPORTS AND SEISMIC RESTRAINTS

- A. Comply with seismic-restraint requirements in the IBC. Provide hangers and supports for electrical equipment and systems. Provide seismic restraints for electrical equipment and systems. Support systems shall be adequate for weight of equipment including associated conduit and conducts. The Engineer's drawings constitute an integral part of this work but is not exhaustive of all elements. They indicate the schematic layout of the electrical system and show approximate locations. The contractor is to be aware that all elements may not be shown but may be necessary for complete and functional systems. All items not specifically mentioned in the specifications or noted on the drawings, but which obviously are required to make the working installation complete, shall be included in the contract. Mounting detail & incidental apparatus is not shown.

**PART 2 - PRODUCTS**

## 2.01 GENERAL

- A. All electrical products used on this project shall conform, unless otherwise specifically noted, to NEMA and/or ANSI applicable standards. In addition, materials and equipment shall be sized, and installed according to the National Electric Code (NEC), NFPA, OSHA, and the regulations of local authorities and utilities. Materials shall have the approval of an independent testing laboratory such as UL or approved equal.
- B. Where materials, equipment, apparatus or other products are specified by manufacturer, brand name, type or catalog number, such designations are to establish standards of desired quality and style and shall form the basis of the bid.
- C. Materials so specified shall be furnished under the contract unless changed by mutual agreement between the Contractor and the Engineer. Where two or more designations are listed, choice shall be optional with the Contractor.

## 2.02 MATERIAL APPROVAL

- A. All materials must be new and UL listed or by an independent testing laboratory. Submit shop drawings and materials on equipment, apparatus & devices to be used to the engineer.

## 2.03 RECORD DRAWINGS

- A. Keep an as built plan set of revisions on the project. Submit as built drawings to the engineer/owner at completion of job.

## 2.04 MATERIAL HANDLING

- A. Deliver, store, and handle materials in a manner to prevent damage. Protect equipment from weather and dampness.

## 2.05 MANUFACTURERS

- A. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include but are not limited to manufacturers specified or pre bid approved equal. Subject to compliance with requirements, provide products by the manufacturers specified or submit an equal with the bid.

## 2.06 GROUNDING WORK

- A. Provide a copper grounding conductor in each conduit whether shown or not shown.

## 2.07 CONDUCTORS

- A. Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.

## **PART 3 – EXECUTION-CONSTRUCTION METHODS**

### 3.01 GENERAL

- A. Work shall present a neat coordinated appearance. Install work as shown on Contract Drawings and as described herein. Modify work as necessary to:
  - a. Provide adequate clearance and ready access to all parts of the work, for inspection, operation, safe maintenance and repair, and code conformance.
  - b. Coordinate and arrange work to avoid conflicts and as needed for satisfactory space conditions.
  - c. Where space is inadequate, consult Engineer before proceeding with installation.
- B. Comply with laws, ordinances, rules and regulations of Local, State and Federal authorities having jurisdiction, rules and regulations of National Board of Fire Underwriters, National Electric code and local utility companies.
- C. All work shall be completed recognizing the National Electric Code as the minimum standard. Interpretations of the N.E.C. rest with the Authority Having Jurisdiction & enforced by the local enforcing authority.
- D. Equipment and materials shall be new, of first quality, selected and arranged to fit properly into spaces indicated. Install equipment and materials in accordance with manufacturer's recommendations. All terminals in equipment, terminal blocks, etc. shall be copper and shall be made tight with terminal threads in full engagement.
- E. Wire splices shall be waterproofed if below grade and are to have heat shrink insulation and covering if above grade.

### 3.02 WORKMANSHIP & CONTRACTOR'S QUALIFICATIONS

- A. Only quality workmanship will be accepted. Provide experienced journeymen & a foreman in charge of this work.

### 3.03 COORDINATION

- A. Coordinate work with other trades to avoid conflict and to provide correct rough-in and connection for equipment furnished under trades that require electrical connections. Inform contractors of other trades of the required access to and clearances around electrical equipment to maintain serviceability & code compliance.
- B. Verify dimensions and requirements with provisions specified under this Section. Check actual job conditions before fabricating work. Report necessary changes in time to prevent needless work. Changes or additions subject to additional compensation, which are made without the authorization of the owner, shall be at contractor's risk and expense.

### 3.04 EXCAVATION AND BACKFILL

- A. Excavation: the contractor shall do all necessary excavation of whatever substances encountered for proper laying of all raceways or cables. Excavated materials not required for fill shall be removed from the site as directed by the owner.
- B. Excavation shall be carried low enough to allow minimum coverage over raceways. Excess excavation below required level shall be backfilled at the contractor's expense with earth, sand or gravel. Perform all backfilling.

### 3.05 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION

- A. Headroom Maintenance: Arrange & install components and equipment to provide maximum possible headroom consistent with these requirements. Install Equipment to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

### 4.02 PAYMENT

- A. This work shall be paid for at the contract lump sum price for "Electrical" and/or within the Electrical Service Upgrades (as applicable) which price shall include all materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

## **SECTION 31 11 00 CLEARING & GRUBBING**

### **PART 1 - GENERAL**

#### 1.01 DESCRIPTION

- A. The work of this specification includes, but is not limited to clearing the ground of trees, stumps, brush, rubbish and all objectionable material in accordance with the plans, these specifications or as directed by the Engineer. This work shall also include the clearing of the ground necessary for the construction and installation of proposed site improvements.
- B. Included in this work shall be the preservation from injury or defacement of vegetation and objects designated to remain.

#### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 01 57 26 – Dust Control
- C. Section 31 23 00 – Excavation and Fill
- D. Section 31 23 13 – Formation Subgrade

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications to January 2021.

### **PART 2 - PRODUCTS**

#### 2.01 GENERAL

- A. Not applicable.

### **PART 3 - EXECUTION**

#### 3.01 CONSTRUCTION METHODS

- A. Unless otherwise directed, all work shall comply with Form 818 Article 2.01.03.
- B. Remove all stumps, roots, etc., within fill areas.
- C. Comply with all applicable regulations for disposal of materials. On-site burning will not be permitted. All material shall be disposed of off-site.

- D. Protect existing utilities and work already installed by others.
- E. Protect horizontal and vertical control points.
- F. Install erosion control devices prior to beginning clearing and grubbing operations.

**PART 4 - MEASUREMENT AND PAYMENT**

4.01 MEASUREMENT

- A. This work shall not be measured but shall be paid for at the contract lump sum price. Off site disposal of trees, stumps, brush, rubbish, and all objectionable material shall not be measured separately for payment, but shall be included in the work.

4.02 PAYMENT

- B. This work shall be paid for at the contract lump sum price for "Clearing & Grubbing" which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

## SECTION 31 23 00 EXCAVATION AND FILL

### PART 1 GENERAL

#### 1.01 DESCRIPTION

- A. Work under this section shall consist of all earthwork inside the limits of the project which includes, but is not limited to; moving provided fill material, excavating; stockpiling materials as needed; grading and compacting to obtain the required finish contours and elevations; dewatering; and the disposal or relocation of surplus and unsuitable material.

#### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 01 57 20 – Dust Control
- C. Section 01 71 23 – Construction Layout
- D. Section 31 23 13 – Formation of Subgrade
- E. Section 32 91 19 – Topsoil Placement and Grading

#### 1.03 QUALITY ASSURANCE

- A. Where Form 817 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 817, 2016" and including all Supplemental Specifications to July 2017.

#### 1.04 PROJECT CONDITIONS

- A. All information given on the plans or within the contract documents, relating to subsurface conditions and existing pipes and other structures is from best sources at present available to the Owner and Engineer and is for information only.
- B. All such information and drawings of existing construction are furnished only for the information and convenience of the Contractor. It shall be understood and agreed that the Owner and Engineer do not warrant or guarantee that materials encountered during construction will be the same as those indicated by information given on the drawings. The Contractor must satisfy himself regarding character, quantities and conditions of the various materials and work to be done.

### PART 2 – PRODUCTS

## 2.01 GENERAL FILL & BORROW

- A. General fill and borrow shall meet the requirements of Section 31 23 23 General Fill & Borrow.

## PART 3 - EXECUTION

### 3.01 GRADING

- A. Grading shall be performed to the lines, grades, and contours shown on drawings.
- B. All sedimentation control measures shall be placed prior to beginning construction.
- C. Finished grades are shown on the plans and the Contractor shall grade to those limits. If changes to the plans are made, those changes will be transmitted to the Contractor in the form of a change order.
- D. In fill areas, the topsoil shall be removed and the existing soil shall be compacted to the appropriate density (95%) prior to beginning fill operations.
- E. All soft and yielding material and other portions of the subgrade which will not compact readily when rolled, vibrated or tamped shall be clarified, blended and handled to obtain the proper moisture content to facilitate compaction. At the direction of the Engineer, unsuitable material shall be removed and replaced with suitable material.
- F. General fill will be placed between the existing site grades and the proposed site grades. General fill shall also be utilized in excavated areas that must be brought up to grade. After all grading of the subgrade for the backfill has been substantially completed and all drains laid, the backfill shall be brought to the lines, grades and cross-sections shown on the plans or where directed by the Engineer and in accordance with these specifications.
- G. Should the volume of on-site general fill be insufficient to obtain the required proposed grades, borrow shall be supplied and placed as general fill.
- H. Fill operations shall commence in all low areas and proceed in such manner that the entire fill is raised uniformly and shaped to provide positive drainage at all times. The Contractor shall construct and maintain on the site, all ditches and channels necessary to keep the site in a dry, workable condition. Where water is infiltrating into an excavation, the Contractor shall provide for pumping and other drainage facilities to divert water from such excavation to a water outlet.

### 3.02 EARTH EXCAVATION

- A. Earth excavation shall include all materials removed as indicated or directed except water and rock.

### 3.04 PLACEMENT OF FILL

- A. The embankment shall be constructed by depositing successive layers of fill for the full width of the embankment, unless a partial width is permitted by the Engineer. No embankment layer shall be deposited on surfaces of snow or ice, nor shall it be placed on frozen or unstable surfaces.
- B. The depths of each layer, before compaction, shall not exceed 6 inches except as directed by the Engineer and as noted below.
- C. The embankment shall be crowned or pitched to provide drainage at the close of each day's operation.
- D. The entire area of each layer shall be leveled off by suitable grading equipment and shall be compacted as hereinafter specified.
- E. No stone over 5 inches in its greatest dimension shall be placed within 12 inches of the elevation of the top of the prepared subgrade unless otherwise approved by the engineer.
- F. Areas to receive topsoil shall be graded to accept the topsoil to within no more than 0.10 feet of the grades shown on the plans. Variations shall not be completely in one direction.
- G. When embankments are to be constructed on slopes steeper than 1 vertical to 3 horizontal, the slope of the existing ground on which the embankment is to be placed shall be plowed deeply or cut into steps before the filling is begun.
- H. Large stones shall not be placed in nests but shall be distributed over the area; and the interstices shall be filled with spalls, finer fragments or earth to form a solid, compact mass.
- I. No rock fill shall be placed above an elevation which is 2 feet below the top of the embankment, unless shown on the plans or approved by the Engineer.
- J. The Contractor shall be required to construct fills and embankments which are stable and non-deforming. The blending of materials may be required to achieve this condition.

### 3.05 COMPACTION

- A. The entire area of each layer shall be uniformly compacted to at least the required minimum density by use of compaction equipment consisting of rollers, compactors, or a combination thereof. Earth-moving and other equipment not specifically manufactured for compaction purposes will not be considered as compaction equipment.
- B. The dry density for soil after compaction shall be not less than 95 percent of the dry density for that soil when tested in accordance with AASHTO T180, Method D.

- C. If necessary to obtain the required compaction, water shall be added to acquire optimum moisture content.
- D. In areas where compaction is found not to comply with Contract Documents, any necessary retesting and re-compaction shall be done at the Contractor's expense.
- E. The Contractor shall maintain sufficient reference points to provide vertical and horizontal locations of soil test locations.
- F. Compaction for each layer of fill shall be achieved prior to the placing of subsequent layers and shall conform to Section 2.02.03-6 of the Standard Specifications.
- G. Jetting, flooding, or other similar methods of compaction will not be permitted.

### 3.06 DEWATERING

- A. Prevent surface water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area.
- B. Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rainwater and water removed from the excavation or run-off from adjacent areas. Do not use trench excavation as temporary drainage ditches.
- C. All dewatering discharge shall be to a sediment basin or recharge basin.

### 3.07 MATERIAL STORAGE

- A. Stockpile satisfactory excavated materials where directed, until required for backfill or fill. Place, grade and shape stockpiles for proper drainage.

### 3.08 COLD WEATHER PROTECTION

- A. Protect excavation bottoms against freezing when atmospheric temperature is less than 35°F (1°C) prior to placing any material.

### 3.09 MOISTURE CONTROL

- A. Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to the surface of subgrade or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations.
- B. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by, harrowing or pulverizing until moisture content is reduced to a satisfactory value.

### 3.10 DISPOSAL OF UNSUITABLE MATERIAL

- A. All material excavated and unsuitable for fill material shall become the property of the Contractor and shall be removed from the site and disposed of by the Contractor unless otherwise directed by the Engineer.

### 3.11 DISPOSAL OF SURPLUS MATERIAL

- A. All surplus material excavated from the site and not required too satisfactorily complete the work, shall become the property of the Contractor and shall be removed from the site and disposed of by the Contractor unless otherwise directed by the Engineer.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 MEASUREMENT

- A. This work shall not be measured but shall be paid at the contract lump sum price.
- B. General fill material created from regrading, excavations or general earthwork, shall not be measured for payment but shall be included in this work.
- C. Borrow fill required if the existing general fill is insufficient in volume to obtain the required grades will be measured by the cubic yards installed and compacted in place.

### 4.02 PAYMENT

- A. This work shall be paid for at the contract lump sum price for "Excavation and Fill" which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

## **SECTION 31 23 13 FORMATION OF SUBGRADE**

### **PART 1 GENERAL**

#### 1.01 DESCRIPTION

- A. Work under this specification covers the formation of subgrade. The subgrade is the plane coincident with the bottom of the subbase as shown on the plans or as directed by the Engineer. The work of formation of subgrade shall be performed at this plane. After all earth excavation and trench excavation for these areas have been substantially completed, the subgrade shall be brought to the lines, grades and cross sections shown on the plans or as directed by the Engineer.

#### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 01 57 26 – Dust Control
- C. Section 01 71 23 – Construction Layout
- D. Section 31 23 00 – Excavation and Fill

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications to January 2021.

### **PART 2 – PRODUCTS**

#### 2.01 GENERAL

- A. Not applicable.

### **PART 3 - EXECUTION**

#### 3.01 CONSTRUCTION METHODS

- A. Formation of subgrade shall be performed in conformance with Form 818, Article 2.09.03.

### **PART 4 - MEASUREMENT AND PAYMENT**

#### 4.01 MEASUREMENT

- A. Formation of subgrade not be measured but shall be paid for at the contract lump sum price.

#### 4.02 PAYMENT

- A. This work shall be paid for under the applicable contract lump sum price for "Formation of Subgrade" which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

**SECTION 31 23 25  
GRANULAR MATERIAL**

**PART 1 - GENERAL**

1.01 WORK INCLUDED

- A. Work of this specification covers furnishing and placing compacted granular fill for foundation for structures as shown on the plans or as directed by the Engineer.

1.02 RELATED WORK

- A. Section 32 30 00 – Cast in Place Concrete

1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications to January 2021.

1.04 SUBMITTALS

- A. Submit certified test results from a testing laboratory to the Engineer for approval. Test results must indicate characteristics of materials including gradations. The cost of all testing shall be borne by the Contractor.

**PART 2 - PRODUCTS**

2.01 MATERIALS

- A. Granular fill materials shall conform to the requirements of Form 818, Articles M.02.02, **with the exception that reclaimed miscellaneous aggregate shall not be allowed.**

**PART 3 - EXECUTION**

3.01 CONSTRUCTION METHODS

- A. Granular fill installation shall conform to Form 818, Article 2.14.03.

**PART 4 - MEASUREMENT AND PAYMENT**

4.01 MEASUREMENT

A. A. This work shall not be measured but will be paid at the contract lump sum price.

#### 4.02 PAYMENT

A. This work shall be paid for under the applicable contract lump sum price for “Granular Material” which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

**SECTION 31 23 33  
TRENCHING AND BACKFILLING****PART 1 - GENERAL**

## 1.01 DESCRIPTION

- A. Work under this specification covers trench excavation and backfilling for the installation of all storm water drainage, sanitary sewer, gas service, water service, telephone service, cable service, conduits and associated appurtenances as shown on the plans or as directed by the Engineer. Furthermore, work under this specification covers trench excavation of earth, rock, and unsuitable materials.

## 1.02 RELATED WORK

- A. Section 31 23 13 – Formation of Subgrade
- B. Section 01 57 13 – Sedimentation Control System
- C. Section 31 23 35 – Bedding for Pipes and Structures
- D. Section 33 42 00 – Stormwater Drainage – Piping and Structures
- E. Section 33 70 00 – Underground Conduit

## 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications to January 2021.

## 1.04 SUBMITTALS

- A. None Required

**PART 2 - PRODUCTS**

## 2.01 GENERAL

- A. Lumber used for sheeting, rangers, bracing and other construction purposes shall be sound, straight grained spruce or fir and shall be free from shakes, loose knots and other defects liable to impair its strength or durability. Lumber sheeting may be reused if in good condition.
- B. Steel sheeting components shall meet the requirements of ASTM A328.

**PART 3 - EXECUTION**

## 3.01 GENERAL

- A. Trench excavation and backfilling shall be performed in accordance with Form 818, Article 2.05.03 and Article 10.01.03
- B. Trench excavation and backfilling shall be performed to the lines and grades necessary to install the relevant underground utility pipe, conduit and appurtenances as shown on the plans or as directed by the Engineer. In all cases, the banks shall be as nearly vertical as practicable.
- C. Except where rock or unsuitable material is encountered, care shall be taken not to excavate below the depths indicated. The Contractor shall furnish and employ such shores, braces, sheeting, pumps, etc., as may be necessary for the protection of property, proper completion of the work and the safety of the public and employees of the Contractor and the Owner. All bracing, sheeting, etc., shall be removed when no longer required for the construction or safety of the work.
- D. The material remaining at the bottom of the trench upon which the utility bedding is to be placed shall be smoothed and compacted. Any part of the bottom of the trench inadvertently excavated below the specified grade shall be filled with utility bedding at the Contractor's expense and thoroughly compacted to the satisfaction of the Engineer.
- E. After the excavation is completed; the Contractor shall notify the Engineer. No masonry, pipe or other material shall be placed in the excavated area until the Engineer has approved the character of the foundation material.
- F. During excavation, material suitable for general fill shall be piled in an orderly manner a sufficient distance from the banks of the trench to avoid overloading and to prevent slides or cave-ins. All excavated materials shall be incorporated into plan fills or removed and properly disposed of.
- G. Excavation shall consist of the removal of all encountered materials including, but not limited to rock, clay, silt, sand, muck, gravel, hardpan, loose shale, loose stone in masses, boulders, existing pipe, manholes and other concrete or masonry structures, and buried stumps and debris.
- H. Unless otherwise specified or approved by the Engineer, excavation shall be by cut and cover.

### 3.02 EXTENT OF OPEN EXCAVATION

- A. The extent of excavation open at any time will be controlled by the conditions but shall always be confined to the limits prescribed by the Engineer.

### 3.03 TRENCH WIDTH

- A. Trench widths shall be as specified on the plans and shall not be unnecessarily widened. Every effort shall be made to keep the sides of the trenches firm and undisturbed until backfilling has been completed and consolidated.

### 3.04 SHEETING AND BRACING

- A. The Contractor shall furnish, put in place and maintain such sheeting, bracing, shoring, etc., as may be necessary to support the sides of the excavation and to prevent any movement of earth other than that intended to be accomplished by the excavation. Such sheeting, shoring and bracing shall be done as may be necessary for the protection of the work and for the safety of personnel and shall comply with the safety precautions as outlined in the Associated General Contractors of America, "Manual of Accident Prevention in Construction", and the "Occupational Safety and Health Act" of 1970 (OSHA). Sheeting, bracing, shoring etc., shall be installed in such a manner as to prevent material in behind the sheeting or bracing from falling into the trench.

### 3.05 SEEPAGE OR SURFACE WATER

- A. To insure proper conditions at all times during construction, the Contractor shall provide and maintain ample means and devices with which to intercept and/or remove promptly and dispose properly of all water entering trenches and other excavations. Excavations shall be kept dry until the structures, pipes and appurtenances to be built therein have been completed to such extent that they will not be floated or otherwise damaged.
- B. All water pumped or drained from the work shall be disposed of in a suitable manner without undue interference with other work or damage to pavements, other surfaces or property. If such water is to be discharged to a stream or storm drainage system, the Contractor shall be responsible for removing all particulate matter which may be deposited in the stream or storm drainage system. The Contractor shall submit his proposed methods or procedures to the Engineer and shall maintain compliance with applicable laws and regulations.

### 3.06 EXCAVATION NEAR EXISTING FACILITIES

- A. Attention is directed to the fact that there are storm drains, water mains and services, sanitary sewer mains and laterals, gas mains and services, and other utilities in certain locations. Some of these have been indicated on the plans, but no attempt has been made to show all of the existing conditions, and the completeness or accuracy of the information given is not guaranteed. In advance of normal machine excavation, location of services shall be investigated and the expected location marked. It shall be the responsibility of the Contractor to contact the appropriate utility company and "Call-Before-You-Dig" (1 (800) 922-4455) at least 72 hours in advance of any excavation to have utility locations marked out. As the excavation approaches these services and other expected pipes, conduits or other underground structures, digging by machinery shall be discontinued, and the excavation shall be done by means of hand tools.

### 3.07 UNAUTHORIZED EXCAVATION

- A. If the bottom of any excavation is inadvertently taken out beyond the limits indicated or prescribed, the resulting void shall be backfilled at the Contractor's expense with gravel fill, sand, pipe bedding, or concrete as deemed appropriate by the Engineer.

### 3.08 ELIMINATION OF UNSUITABLE MATERIAL

- A. If material unsuitable for foundation (in the opinion of the Engineer) is found at or below the grade to which excavation would normally be carried in accordance with the plans and specifications, the Contractor shall remove such material to the required width and depth and replace it with granular fill, pipe bedding, sand, or concrete as directed by the Engineer. All unsuitable excavated material shall become the property of the Contractor and shall be disposed of at no additional cost to the Owner.

### 3.09 DISPOSAL OF SURPLUS MATERIAL

- A. All surplus excavated material shall become the property of the Contractor and shall be disposed of at no additional cost to the Owner.

### 3.10 BACKFILL

- A. Backfill for utility work, above the line of narrow trench limit, shall be compacted in layers not more than six (6) inches compacted thickness. No stones larger than two (2) inches shall be placed within two (2) feet of the utility in backfilling. When any stone is used in the remainder of backfilling, each piece shall be embedded in dirt, and no stone weighting over fifty pounds shall be included in the trench. Nesting of stones will not be allowed.

### 3.11 COMPACTION

- A. The entire area of each layer of fill shall be uniformly compacted to at least the required minimum density by use of compaction equipment consisting of rollers, compactors or a combination thereof. Earth moving and other equipment not specifically manufactured for compaction purposes will not be considered as compaction equipment.
- B. The compaction of backfill shall not be less than 98 percent of the dry density for that soil when tested in accordance with AASHTO T180, Method D.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

4.02 PAYMENT

- A. This work shall be paid for under the applicable contract lump sum price for “Trenching and Backfilling” which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

**SECTION 31 23 35**  
**BEDDING FOR PIPES & STRUCTURES**

**PART 1 - GENERAL**

1.01 DESCRIPTION

- A. Work under this specification covers furnishing and installing bedding materials for all pipes and structures as shown on the plans or as directed by the Engineer. Also, work under this specification includes furnishing and installing associated detectable warning tape and filter fabric.

1.02 RELATED WORK

- A. Section 31 23 33 – Trenching and Backfilling
- B. Section 33 42 00 – Stormwater Drainage – Piping and Structures
- C. Section 33 70 00 – Underground Conduit

1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications to January 2021.

1.04 SUBMITTALS

- A. Submit certified test results from a testing laboratory to the Engineer for approval. Test results must indicate characteristics of materials, including: gradation, plasticity and compaction. The cost of all testing shall be borne by the Contractor.

**PART 2 - PRODUCTS**

2.01 BEDDING MATERIALS

- A. Bedding materials for ductile iron (DI) and copper water services shall be sand conforming to Form 818, Article M.11.04, **Fine Aggregate for Mortar Note.**
- B. Bedding materials for polyvinyl chloride (PVC) gravity sanitary sewer pipe and precast concrete sanitary manholes shall be ¾" crushed stone conforming to Form 818, Article M.01.01, No. 6.
- C. Bedding materials for high density polyethylene (HDPE) pressure sewer pipe shall be sand conforming to Form 818, Article M.11.04, **Fine Aggregate for Mortar Note.**

- D. Bedding materials for precast concrete sanitary manhole shall be ¾" crushed stone conforming to Form 818, Article M.01.01, No. 6.
- E. Bedding materials for storm drain shall be ¾" crushed stone conforming to Form 818, Article M.01.01, No. 6.
- F. Bedding materials for high density polyethylene (HDPE) pressure storm drainage pipe shall be sand conforming to Form 818, Article M.11.04, **Fine Aggregate for Mortar Note.**
- G. Bedding materials for storm drainage structures shall be ¾" crushed stone conforming to Form 818, Article M.01.01, No. 6.
- H. Bedding materials for conduits shall be sand conforming to Form 818, Article M.11.04, **Fine Aggregate for Mortar Note.**

## 2.02 DETECTABLE WARNING TAPE

- A. Detectable warning tape shall be proprietary product consisting of continuously printed metallic detection tape intended for direct burial service, not less than 6" wide x 4mils thick. Printed words shall read "Caution (appropriate utility) Line Buried Below". Color shall be appropriate for the utility.

## 2.03 FILTER FABRIC

- A. Filter Fabric material shall be geotextile conforming to Form 818, Article M.08.01-19.

# PART 3 - EXECUTION

## 3.01 CONSTRUCTION METHODS

- A. Materials shall be provided by the Contractor from sources outside the project limits in the quantities required for completion of the work and shall be approved by the Engineer prior to use in the work. Laboratory testing to establish sieve analysis and conformance to material gradations will be the responsibility of the Contractor.
- B. The bottoms of excavations and trenches shall be thoroughly compacted and in approved condition prior to placing the bedding.
- C. Filter fabric shall be installed as shown on the plan or as directed by the Engineer.
- D. The bedding shall be placed in layers not exceeding six (6") inches in loose depth. Each layer shall be thoroughly compacted, by tamping or other approved method, to achieve the compaction specified below.

- E. The pipe bedding shall be carefully graded and shaped so that the full length of pipe barrel shall have complete and uniform bearing and the bedding compacted in a careful and thorough manner along both sides of pipes to provide proper support and bedding for the pipes. Bell holes and depressions for joints shall be dug after the bedding has been graded and compacted and shall be a size suitable for the proper jointing of the pipe. The Contractor shall exercise care in all placing and compacting operations so as to prevent disturbing joints, displacement or damage to the pipes.
- F. Detectable warning tape shall be installed as shown on the plan or as directed by the Engineer.

### 3.02 INSPECTION

- A. As the work progresses, the pipe will be checked by the Engineer to determine whether any disturbing of joints, displacement or damage to the pipes has occurred. If the inspection of pipe shows poor alignment, displaced pipe, disturbed joints, damage to pipe or any other defects, the Contractor shall correct all deficiencies in a satisfactory manner, at no added expense to the Owner.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 MEASUREMENT

- A. There shall be no separate measurement for "Bedding for Pipes and Structures".

### 4.02 PAYMENT

- A. There shall be no separate payment for "Bedding for Pipes and Structures".

**END OF SECTION**

## SECTION 32 11 23 PROCESSED AGGREGATE BASE COURSE

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work under this specification covers furnishing and installing processed aggregate base materials consisting of a clean mixture of broken stone as shown on the plans or as directed by the Engineer.

#### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 01 57 26 – Dust Control
- C. Section 32 12 16 – Bituminous Concrete
- D. Section 03 30 00 – Concrete Pads & Sidewalks

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

#### 1.04 SUBMITTALS

- A. Submit material certification and gradation with specifications for processed aggregate base to the Engineer for approval.
- B. Submit a weight ticket for material at time of delivery.

### PART 2 - PRODUCTS

- A. Processed aggregate base materials shall conform to the requirements of Form 818, Article M. 05.01. **Coarse aggregate shall be broken stone, gravel or reclaimed. Miscellaneous aggregate shall not be allowed.**

### PART 3 - EXECUTION

#### 3.01 CONSTRUCTION METHODS

- A. Processed aggregate base installation shall conform to Form 818, Article 3.04.03.

**PART 4 - MEASUREMENT AND PAYMENT**

4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

4.02 PAYMENT

- A. This work shall be paid for under the applicable contract lump sum price for "Processed Aggregate Base Course", complete in place which price shall include all materials, equipment, tools, and labor incidental thereto.

**END OF SECTION**

## SECTION 32 12 16 BITUMINOUS CONCRETE

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work under this specification covers furnishing and installing bituminous concrete pavement as shown on the plans or as directed by the Engineer.

#### 1.02 RELATED WORK

- A. Section 03 81 13 – Flat Concrete Sawing
- B. Section 33 49 00 – Stormwater Drainage - Structures
- C. Section 32 11 23 – Processed Aggregate Base Course
- D. Section 32 16 13 – Bituminous Concrete Curb
- E. Section 32 91 19 – Topsoil Placement and Grading

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

#### 1.04 SUBMITTALS

- A. Submit mix design and job mix formula for all bituminous concrete, including all coarse aggregate, fine aggregate, mineral filler and liquid bituminous materials to the Engineer for approval.
- B. Submit material delivery tickets for all bituminous concrete and tack coat materials.
- C. Submit material certificate for all bituminous concrete and tack coat.

### PART 2 - PRODUCTS

#### 2.01 BITUMINOUS CONCRETE

- A. The bituminous concrete materials and mixtures shall conform to the requirements Form 818, Article M.04 **and shall be of the class specified on the plans.**

### PART 3 - EXECUTION

### 3.01 CONSTRUCTION METHODS

- A. Bituminous concrete installation shall conform to Form 818, Article 4.06.03.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

### 4.02 PAYMENT

- A. This work shall be paid for under the applicable contract lump sum price for “Bituminous Concrete Class 1” which price shall include materials, equipment, tools, labor and all incidentals thereto.
- B. This work shall be paid for under the applicable contract lump sum price for “Bituminous Concrete Class 2” which price shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

## **SECTION 32 15 40 CRUSHED STONE SURFACING**

### **PART 1 - GENERAL**

#### 1.01 DESCRIPTION

- A. Work under this specification covers furnishing and installing materials to construct a stone dust path as shown on the plans or as directed by the Engineer.

#### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 01 57 26 – Dust Control
- C. Section 01 71 23 – Construction Layout
- D. Section 31 23 00 – Excavation and Fill
- E. Section 31 23 13 – Formation of Subgrade
- F. Section 32 91 19 – Topsoil Placement and Grading
- G. Section 32 92 00 – Turf and Grasses

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

#### 1.04 SUBMITTALS

- A. Submit certified test results from a testing laboratory to the Engineer for approval. Test results must indicate characteristics of materials including gradations.
- B. Stone Dust will be visually inspected by the Engineer for acceptance prior to installation.

### **PART 2 - PRODUCTS**

#### 2.01 MATERIALS

- A. Gravel / crush stone shall conform to Form 818 Article M1.01.01 No.4 and M.02.03
- B. Subbase material shall conform to Form 818 Article M.02.01.

**PART 3 - EXECUTION**

**3.01 CONSTRUCTION METHODS**

- A. Contractor shall install stone dust path at the locations, to the dimensions and details shown on the plans or as directed by the Engineer.

**PART 4 - MEASUREMENT AND PAYMENT**

**4.01 MEASUREMENT**

- A. This work shall not be measured but will be paid at the contract lump sum price.

**4.02 PAYMENT**

- A. This work shall be paid for under the applicable contract lump sum price for "Crushed Stone Surfacing" which shall include all materials, equipment, tools and labor incidental thereto.

**END OF SECTION**

## **SECTION 32 16 21 CONCRETE CURB**

### **PART 1 - GENERAL**

#### 1.01 DESCRIPTION

- A. Work under this specification covers furnishing and installing concrete curb as shown on the plans or as directed by the Engineer.

#### 1.02 RELATED WORK

- A. Section 03 81 13 – Flat Concrete Sawing
- B. Section 33 42 00 – Stormwater Drainage - Structures
- C. Section 32 12 16 – Bituminous Concrete
- D. Section 32 91 19 – Topsoil Placement and Grading

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

#### 1.04 SUBMITTALS

- A. Submit concrete mix design to the Engineer for approval.

### **PART 2 - PRODUCTS**

#### 2.01 CONCRETE

- A. Concrete mix design shall be based on a minimum compressive strength of 4000 psi.

#### 2.02 REINFORCING STEEL

- A. All reinforcing steel shall conform to the requirements of ASTM A615, Grade 60.

### **PART 3 - EXECUTION**

#### 3.01 CONSTRUCTION METHODS

- A. Concrete installation shall conform to Form 818, Article 6.01.03.
- B. Reinforcing steel installation shall conform to Form 818, Article 6.02.03.

**PART 4 - MEASUREMENT AND PAYMENT**

**4.01 MEASUREMENT**

- A. This work shall not be measured but will be paid at the contract lump sum price.

**4.02 PAYMENT**

- A. This work shall be paid for under the applicable contract lump sum price for "Concrete Curb" which shall include materials, equipment, tools, labor and all incidentals thereto.

**END OF SECTION**

## **SECTION 32 17 23 PAVEMENT MARKINGS**

### **PART 1 - GENERAL**

#### 1.01 DESCRIPTION

- A. Work under this specification covers furnishing and installing painted pavement markings and painted legends, arrows & markings as shown on the plans or as directed by the Engineer.
- B. Work under this specification covers furnishing and installing signage as shown on the plans or as directed by the Engineer.

#### 1.02 RELATED WORK

- A. Section 32 12 16 - Bituminous Concrete
- B. Section 32 16 13 - Bituminous Concrete Curb

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

#### 1.04 SUBMITTALS

- A. Submit paint technical data to the Engineer for approval.
- B. Submit signage components product data to the Engineer for approval.
- C. Submit material certificate for paint.
- D. Submit material certificate for all signage components.

### **PART 2 - PRODUCTS**

#### 2.01 PAINTED PAVEMENT MARKINGS

- A. Painted pavement marking materials shall conform to Form 818, Article 12.09.02, Article M.07.20 for waterborne pavement marking paint.

#### 2.03 SIGNAGE

- A. Signage materials shall conform to the requirements of Form 818, Article 12.08.02.
- B. Facility Sign: Timber posts and bracing shall be 4" x 4" pressure treated wood. The backer board shall be ¾" pressure treated plywood. The sign face shall be encapsulated lens reflective sheeting labels shall conform to Form 818 Article 12.20.02, and the colors shall be a white background with black lettering as shown in the contract plans. Sign mounting bolts shall conform to the requirements of Form 818 Article M.18.15.

### PART 3 - EXECUTION

#### 3.01 CONSTRUCTION METHODS

- A. Painted pavement marking installations shall conform to Form 818, Article 12.09.03.
- B. Signage installations shall conform to Form 818, Article 12.08.03.

### PART 4 - MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

- A. Painted pavement markings shall be measured per linear foot for each type of marking placed and accepted.
- B. Painted legends, arrows & markings shall be measured per square foot of marking placed and accepted.
- C. Signage shall be measured for payment by the number of square feet of sign face-sheet aluminum of this type specified, installed and accepted.
- D. Facility Sign shall be measured for payment per each sign installed and accepted.

#### 4.02 PAYMENT

- A. This work shall be paid for under the applicable contract lump sum price for "Painted Pavement Markings (Width & Color)", which shall include all materials, equipment, labor and incidentals for layout, pavement cleaning, installation and protection during drying.
- B. This work shall be paid for under the applicable contract lump sum price for "Painted Pavement Legends, Arrows & Markings" specified style and color, which shall include all materials, equipment, labor and incidentals for layout, pavement cleaning, installation and protection during drying.
- C. This work shall be paid for under the applicable contract lump sum price for "Sign Face Sheet Aluminum" of the type specified complete in place, which shall include the

completed sign, supports, mounting, hardware, all materials, equipment, labor and work incidentals thereto.

- D. This work shall be paid for under the applicable contract lump sum price for “Facility Sign”, which shall include the completed sign, supports, mounting, hardware, all materials, equipment, labor and work incidentals thereto.

**END OF SECTION**

## SECTION 32 91 19 TOPSOIL PLACEMENT AND GRADING

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Furnish, place and shape topsoil where shown on the plans and as directed by the Engineer. Generally, any disturbed area which is not riprap, bituminous concrete pavement, concrete, or gravel surface shall receive topsoil.
- B. Place and shape any topsoil stockpiled on site during the grading operation to a depth of 4-inches unless otherwise noted on the plans.

#### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 01 57 26 – Dust Control
- C. Section 33 42 00 – Stormwater Drainage - Structures
- D. Section 32 12 16 – Bituminous Concrete
- E. Section 32 92 00 – Turf and Grasses

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

### PART 2 - PRODUCTS

#### 2.01 TOPSOIL

- A. The term topsoil used herein shall mean that portion of the soil profile defined technically as the "A" horizon by Soil Science of America. Topsoil as delivered to the site or stockpiled shall have a pH between 6.0 and 7.0 and shall contain not less than 3 percent organic matter as determined by loss-on-ignition of oven-dried samples at 100 degrees Celsius drawn by the Engineer. Topsoil may include up to 50 percent by volume of composted and cured material.
- B. As determined on the basis of material passing the 20-mesh sieve and subjected to partial mechanical analysis, the following textural classes shall be acceptable:

- Loamy sand, with not more than 80 percent sand
- Sandy loam
- Loam
- Sandy clay loam, with not more than 30 percent clay

Silt loam, with not more than 60 percent silt

- C. The topsoil to be furnished by the Contractor shall be loose, friable, reasonably free of admixtures of subsoil, free from refuse, stumps, roots, brush, weeds, rocks and stones 1-1/4 inch in overall dimension. The topsoil shall also be free from any material that will prevent the formation of a suitable seed bed or prevent seed germination and plant growth.
- D. Any material delivered to the project which does not meet specifications or which has become mixed with undue amounts of subsoil during any operation at the source or during placing or spreading will be rejected and shall be replaced by the Contractor with acceptable material.

### **PART 3 - EXECUTION**

#### 3.01 INSTALLATION

- A. The areas on which topsoil is to be placed shall be graded to a reasonably true surface. Topsoil shall then be spread and shaped to the lines and grades shown on the Drawings, or as directed by the Engineer. No loam shall be spread in water or while frozen or muddy.
- B. The depth stated in the Contract to which the topsoil is to be placed is that required after settlement of the material has taken place.
- C. All stones, roots, debris, sod, weeds and other undesirable material shall be removed. After shaping and grading, all trucks and other equipment shall be excluded from the top soiled area to prevent excessive compaction.
- D. During hauling and spreading operations, the Contractor shall immediately remove any material dumped or spilled on the pavement.
- E. After topsoil has been spread, it shall be carefully prepared by scarifying or harrowing and hand raking. All stiff clods, lumps, roots, litter and other foreign material shall be removed from the loamed area and disposed of by the Contractor. The areas shall also be free of smaller stones in excessive quantities, as determined by the Engineer. During the rolling, all depressions caused by settlement or rolling shall be filled with additional loam and the surface shall be regraded and rolled until a smooth and even finished grade is created.
- F. It shall be the Contractor's responsibility to restore to the line, grade and surface all eroded areas with approved material and to keep top soiled areas in acceptable condition until the completion of the construction work.

### **PART 4 - MEASUREMENT AND PAYMENT**

#### 4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

#### 4.02 PAYMENT

- A. Topsoil shall be paid for at the contract unit price per square yard of "Topsoil Placement and Grading" which shall include all materials, testing, equipment, tools and labor incidental thereto.

**END OF SECTION**

## **SECTION 32 92 00 TURF AND GRASSES**

### **PART 1 - GENERAL**

#### 1.01 DESCRIPTION

- A. Turf establishment shall consist of the application of lime, fertilizer, seed and mulch to all topsoil areas disturbed by the work to provide a uniform stand of established perennial turf grass.

#### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 01 57 26 – Dust Control
- C. Section 31 25 14 – Erosion Control Blanket
- D. Section 33 42 00 – Stormwater Drainage - Structures
- E. Section 32 12 16 – Bituminous Concrete
- F. Section 32 91 19 – Topsoil Placement and Grading

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

#### 1.04 SUBMITTALS

- A. Submit, to the Engineer, affidavits certifying that fertilizer, lime and seed comply with the Specifications.
- B. Submit hydro-seed procedure, manufacturer's data and application rates for approval by Engineer.
- C. Submit testing results from topsoil analysis, to the Engineer.

#### 1.05 PRODUCT HANDLING

- A. Deliver seed, lime and fertilizer in new, clean, sealed containers.

### **PART 2 – PRODUCTS**

#### 2.01 FERTILIZER

Fertilizer shall conform to the requirements of Form 818 Article M.13.03, or an alternative approved by the Engineer to meet the requirements of the topsoil testing.

## 2.02 SEED

Seed mixture shall conform to the requirements of Form 818 Article M.13.04 unless otherwise specified in the contract documents. Slopes greater than 5 to 1, 5 horizontal to 1 vertical, shall have *Conwed Hydromulch*, or approved equal, applied at 1200 # per acre with emulsion tackifier applied at a rate of consistent with manufactures recommendation for these slopes.

## 2.03 LIME

Lime shall conform to the requirements of Form 818 Article 17.13.02.

## 2.04 MULCH

Mulch shall conform to the requirements of Form 818 Article M.13.05.

## **PART 3 – EXECUTION**

### 3.01 GENERAL

- A. Construction methods shall be those established as agronomically acceptable and feasible and which are approved by the Engineer.

### 3.02 SEED BED

- A. The areas shall be made friable and receptive to seeding by approved methods, which will not disrupt the line and grade of the slope surface. In no event will seeding be permitted on hard or crusted soil surface.
- B. All areas to be seeded shall be reasonably free from weeds taller than three (3) inches. Removal of weed growth from the slope areas shall be by approved methods, including hand mowing, which do not rut or scar the slope surface, or cause excessive disruption of the slope line or grade. Seeding on level areas shall not be permitted until substantially all weed growth is removed. Seeding on slope areas shall not be permitted without removal or cutting of weed growth.

### 3.03 SEEDING SEASON

- A. The calendar dates for seeding shall be: August 15 to September 15 & April 15 to June 15. Seeding at other times shall be done when acceptable to the Engineer.

### 3.04 TOPSOIL ANALYSIS

- A. The topsoil placed for turf establishment shall be tested to determine the liming and fertilizing requirements prior to any application of seed, lime or fertilizer. The topsoil shall be tested by a Cooperative Extension Service of the University of Connecticut or other testing facility approved by the Engineer. The Contractor is responsible for testing topsoil from each source utilized or where directed by the Engineer when a distinct change in the topsoil is observed by the Engineer.

### 3.05 SEEDING METHODS

- A. Lime shall be applied at a rate determined from tests conducted by the Contractor and approved by the Engineer. The maximum application rate allowed is 100 lbs./1000 square feet.
- B. The grass seed mixture shall be applied by the hydroseeding method. The rate of application for final turf establishment shall be 120 pounds of seed mixture per acre. Slopes greater than 5 to 1, 5 horizontal to 1 vertical, shall have *Conwed Hydromulch*, or approved equal, applied at 1200 # per acre with emulsion tackifier applied at a rate of consistent with manufactures recommendation for these slopes.
- C. Fertilizer shall be applied at a rate determined from tests conducted by the Contractor and approved by the Engineer.

### 3.06 REPLANTING

- A. The Contractor shall be required to replant areas damaged by water, wind, fire, equipment or pedestrian traffic when ordered by the Engineer at no cost to the Owner.
- B. All areas and spots that do not show a prompt catch shall be reseeded at fifteen day intervals until a growth of grass is established over the entire area at no additional expense to the Owner.

### 3.07 COMPACTION

- A. The Contractor shall keep all equipment and vehicular and pedestrian traffic off areas that have been seeded to prevent excessive compaction and damage to young plants. Where such compaction has occurred, the Contractor shall rework the soil to make a suitable seedbed; then reseed and reline such areas with the full amounts of the specified materials, at no extra expense to the Owner.

### 3.08 STAND OF GRASS

- A. The Contractor shall provide and maintain, using acceptable and appropriate practices and at no additional expense, a uniform stand of established turf grass.

### 3.09 ESTABLISHMENT

- A. The Contractor shall keep all seeded areas free from weeds and debris, such as stones and wire.

- B. Clean up shall include, but not be limited to, the removal of all debris from the turf establishment operations from the site, and/or elsewhere on adjacent properties publicly and privately owned.

### 3.10 MOWING

All seeded areas shall receive at least one (1) mowing before substantial completion or project acceptance. The mower blades shall be set to produce a 2 to 3 inch-mowed height.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

### 4.02 PAYMENT

- A. This work shall be paid for under the applicable contract lump sum price for "Turf and Grasses" and shall include materials, testing, equipment, tools, and labor incidental thereto.

**END OF SECTION**

## SECTION 33 42 00 STORMWATER DRAINAGE - PIPING

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work under this specification covers furnishing and installing new storm drains, consisting of pipe of the type, size and length as shown on the plans or as directed by the Engineer.

#### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 31 23 35 – Bedding for Pipes and Structures
- C. Section 31 23 00 – Excavation and Fill

#### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

#### 1.04 SUBMITTALS

- A. Submit storm drain pipe and flared end materials technical data to the Engineer for approval.
- B. Submit material certification and gradation with specifications for bedding material to the Engineer for approval.
- C. Submit filter fabric geotextile material technical data to the Engineer for approval.

### PART 2 - PRODUCTS

#### 2.01 PIPE

- A. Storm drain pipe shall conform to Form 818, Article M.08.01-25 High Density Polyethylene Pipe (HDPE) shall be smooth interior surface (Type S) unless otherwise noted on the plans.

#### 2.02 FLARED ENDS

- A. Storm drain pipe flared ends shall conform to Form 818, Article M.08.01-11, Reinforced Concrete Culvert End.

**PART 3 - EXECUTION**

**3.01 CONSTRUCTION METHODS**

- A. Storm drain pipe installation shall conform to Form 818, Article 6.51.03.
- B. Storm drain pipe flared end installation shall conform to Form 818, Article 6.52.03

**PART 4 - MEASUREMENT AND PAYMENT**

**4.01 MEASUREMENT**

- A. This work shall not be measured but will be paid at the contract lump sum price.

**4.02 PAYMENT**

- A. This work shall be paid for under the applicable contract lump sum price for “Storm Utility Drainage Piping – 12” HDPE Pipe” of the size specified, complete in place which shall include all materials, equipment, tools and labor incidental thereto.

**END OF SECTION**

## **SECTION 33 42 00**

### **STORMWATER DRAINAGE - STRUCTURES**

#### **PART 1 - GENERAL**

##### 1.01 DESCRIPTION

- A. Work under this specification covers furnishing and installing of storm drainage structures, including catch basins as shown on the plans or as directed by the Engineer.

##### 1.02 RELATED WORK

- A. Section 01 57 13 – Sedimentation Control System
- B. Section 01 57 26 – Dust Control
- C. Section 01 71 23 – Construction Layout
- D. Section 31 23 00 – Excavation and Fill
- E. Section 32 12 16 – Bituminous Concrete
- F. Section 33 42 00 – Stormwater Drainage – Piping
- G. Section 33 46 11 – Stormwater Detention Basin

##### 1.03 QUALITY ASSURANCE

- A. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

##### 1.04 SUBMITTALS

- A. Submit storm drainage structure components shop drawings and technical data to the Engineer for approval.
- B. Submit material certification and gradation with specifications for bedding material to the Engineer for approval.
- C. Submit filter fabric geotextile material technical data to the Engineer for approval.
- D. Submit material certificates for all storm drainage structure components and filter fabric geotextiles. All precast concrete drainage structure components shall be appropriately marked with manufacturer stenciled cast date.

#### **PART 2 - PRODUCTS**

##### 2.01 CATCH BASINS & DETENTION BASIN OUTLET STRUCTURES

- A. Catch basins shall conform to the requirements of Form 818, Article 5.07.02.

## 2.02 BEDDING MATERIAL

- A. Bedding material shall be shall conform to Form 818, Article M.01.01, No. 67 crushed stone.

## 2.03 FILTER FABRIC GEOTEXTILE

- A. Filter fabric shall be a non-woven geotextile. Geotextile shall conform to Form 818 Article M.08.01-19.

## **PART 3 - EXECUTION**

### 3.01 CONSTRUCTION METHODS

- A. Storm drainage structures installation shall conform to Form 818, Article 5.07.03.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

### 4.02 PAYMENT

- A. This work shall be paid for under the applicable contract lump sum price for "Catch Basin" complete in place, which shall include all materials, equipment, tools and labor incidental thereto.

**END OF SECTION**

**SECTION 33 70 00**  
**UNDERGROUND CONDUIT**

**PART 1 - GENERAL**

1.01 DESCRIPTION

- A. Work under this specification covers furnishing and installing underground conduits for telephone, cable, data, concrete handholes, control and power systems as shown on the plans or as directed by the Engineer.

1.02 RELATED WORK

- A. Section 31 23 35 – Bedding for Pipes & Structures
- B. Section 31 23 33 – Trenching and Backfilling

1.03 QUALITY ASSURANCE

- A. All material, equipment and workmanship shall conform to the following standards of the latest edition:

- National Electrical Code
  - Underwriter's laboratories
  - Connecticut Basic Building Code
  - OSHA-U.S. Labor Department
  - NFPA Codes

- B. The contractor shall comply with all requirements of local authorities and utility companies having jurisdiction.
- C. Where Form 818 is referred to, it means "State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 818, 2020" and including all Supplemental Specifications.

1.04 SUBMITTALS

- A. Submit conduit, fittings, material certificates and concrete handhole technical data to the Engineer for approval.

**PART 2 - PRODUCTS**

A. CONDUITS

1. Underground polyvinyl chloride conduit (PVC) and fittings shall be UL listed, and shall conform to the requirements of the latest UL and ANSI standards, **Schedule 40 grade**.
2. Rigid Metal Conduit (RMC) and fittings shall be galvanized steel. Each section of conduit shall be labeled as UL listed, and shall conform to the requirements of the latest UL and ANSI standards for Rigid Metal Conduit.

#### B. HAND HOLES

1. Hand holes shall be proprietary precast concrete with galvanized diamond plate steel covers.

### PART 3 - EXECUTION

#### 3.01 CONSTRUCTION METHODS

- A. All underground conduit shall be installed in conformance with State and Local regulations and Section M.15.09 of form 818.
- B. All underground conduit shall be furnished and installed to the types, sizes and at the locations shown on the plans or as directed by the Engineer.
- C. Trench excavation shall be performed in accordance with Section 2.05.03 of Form 818.
- D. Bedding material and detectable warning tape shall be installed in accordance with Section M.08.03 of Form 818.

### PART 4 - MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

- A. This work shall not be measured but will be paid at the contract lump sum price.

#### 4.02 PAYMENT

- A. Underground Conduit shall be paid for at the contract unit price per linear foot for "Underground Conduit – ( 1", 1 1/2", 3" and 4" ) of the size specified, complete in place which price shall include all materials, equipment, tools and labor incidental thereto.
- B. This work shall be paid for under the applicable contract lump sum price for "Concrete Hand Hole" of the size specified, complete in place which shall include all materials, equipment, tools and labor incidental thereto.

**END OF SECTION**



## **TAB G**

### State Contract Provisions



**Construction Contracts - Required Contract Provisions  
(State Funded Only Contracts)**

**Index**

1. Title VI of the Civil Rights Act of 1964 / Nondiscrimination Requirements
2. Contractor Work Force Utilization / Specific Equal Employment Opportunity
3. Contract Wage Rates
4. Americans with Disabilities Act of 1990, as Amended
5. Connecticut Statutory Labor Requirements
  - a. Construction, Alteration or Repair of Public Works Projects; Wage Rates
  - b. Debarment List - Limitation on Awarding Contracts
  - c. Construction Safety and Health Course
  - d. Awarding of Contracts to Occupational Safety and Health Law Violators Prohibited
  - e. Residents Preference in Work on Other Public Facilities (Not Applicable to Federal Aid Contracts)
6. Tax Liability - Contractor's Exempt Purchase Certificate (CERT – 141)
7. Executive Orders (State of CT)
8. Non Discrimination Requirement (pursuant to section 4a-60 and 4a-60a of the Connecticut General Statutes, as revised)
9. Whistleblower Provision
10. Connecticut Freedom of Information Act
  - a. Disclosure of Records
  - b. Confidential Information
11. Service of Process
12. Substitution of Securities for Retainages on State Contracts and Subcontracts
13. Health Insurance Portability and Accountability Act of 1996 (HIPAA)
14. Forum and Choice of Law
15. Summary of State Ethics Laws
16. Audit and Inspection of Plants, Places of Business and Records
17. Campaign Contribution Restriction

18. Tangible Personal Property
19. Bid Rigging and/or Fraud – Notice to Contractor
20. Consulting Agreement Affidavit

**Index of Exhibits**

- EXHIBIT A – Title VI Contractor Assurances (page 13)
- EXHIBIT B – Contractor Work Force Utilization / Equal Employment Opportunity (page 14)
- EXHIBIT C – Health Insurance Portability and Accountability Act of 1996 (HIPAA) (page 17)
- EXHIBIT D - Campaign Contribution Restriction (page 25)
- EXHIBIT E - State Wage Rates (Attached at the end)

## **1. Title VI of the Civil Rights Act of 1964 / Nondiscrimination Requirements**

The Contractor shall comply with Title VI of the Civil Rights Act of 1964 as amended (42 U.S.C. 2000 et seq.), all requirements imposed by the regulations of the United States Department of Transportation (49 CFR Part 21) issued in implementation thereof, and the Title VI Contractor Assurances attached hereto at Exhibit A, all of which are hereby made a part of this Contract.

## **2. Contractor Work Force Utilization / Equal Employment Opportunity**

- (a) The Contractor shall comply with the Contractor Work Force Utilization / Equal Employment Opportunity requirements attached at Exhibit B and hereby made part of this Contract, whenever a contractor or subcontractor at any tier performs construction work in excess of \$10,000. These goals shall be included in each contract and subcontract. Goal achievement is calculated for each trade using the hours worked under each trade.
- (b) Companies with contracts, agreements or purchase orders valued at \$10,000 or more will develop and implement an Affirmative Action Plan utilizing the ConnDOT Affirmative Action Plan Guideline. This Plan shall be designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex or national origin, and to promote the full realization of equal employment opportunity through a positive continuation program. Plans shall be updated as required by ConnDOT.

## **3. Contract Wage Rates**

The Contractor shall comply with:

The State wage rate requirements indicated in Exhibit E hereof are hereby made part of this Contract.

Prevailing Wages for Work on State Highways; Annual Adjustments. With respect to contracts for work on state highways and bridges on state highways, the Contractor shall comply with the provisions of Section 31-54 and 31-55a of the Connecticut General Statutes, as revised.

As required by section 1.05.12 (Payrolls) of the State of Connecticut, Department of Transportation's Standard Specification for Roads, Bridges and Incidental Construction (FORM 816), as may be revised, every Contractor or subcontractor performing project work on a federal aid project is required to post the relevant prevailing wage rates as determined by the United States Secretary of Labor. The wage rate determinations shall be posted in prominent and easily accessible places at the work site.

## **4. Americans with Disabilities Act of 1990, as Amended**

This provision applies to those Contractors who are or will be responsible for compliance with the terms of the Americans with Disabilities Act of 1990, as amended (42 U.S.C. 12101 et seq.), (Act), during the term of the Contract. The Contractor represents that it is familiar with the terms of this Act and that it is in compliance with the Act. Failure of the Contractor to satisfy this standard as the same applies to performance under this Contract, either now or during the term of the Contract as it may be amended, will render the Contract voidable at the option of the State upon notice to the contractor. The Contractor warrants that it will hold the State harmless and indemnify the State from any liability which may be imposed upon the State as a result of any failure of the Contractor to be in compliance with this Act, as the same applies to performance under this Contract.

## 5. Connecticut Statutory Labor Requirements

**(a) Construction, Alteration or Repair of Public Works Projects; Wage Rates.** The Contractor shall comply with Section 31-53 of the Connecticut General Statutes, as revised. The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in subsection (i) of section 31-53 of the Connecticut General Statutes, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

**(b) Debarment List. Limitation on Awarding Contracts.** The Contractor shall comply with Section 31-53a of the Connecticut General Statutes, as revised.

**(c) Construction Safety and Health Course.** The Contractor shall comply with section 31-53b of the Connecticut General Statutes, as revised. The contractor shall furnish proof to the Labor Commissioner with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 of the Connecticut General Statutes, as revised, on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

Any employee required to complete a construction safety and health course as required that has not completed the course, shall have a maximum of fourteen (14) days to complete the course. If the employee has not been brought into compliance, they shall be removed from the project until such time as they have completed the required training.

Any costs associated with this notice shall be included in the general cost of the contract. In addition, there shall be no time granted to the contractor for compliance with this notice. The contractor's compliance with this notice and any associated regulations shall not be grounds for claims as outlined in Section 1.11 – "Claims".

**(d) Awarding of Contracts to Occupational Safety and Health Law Violators Prohibited.** The Contract is subject to Section 31-57b of the Connecticut General Statutes, as revised.

**(e) Residents Preference in Work on Other Public Facilities. NOT APPLICABLE TO FEDERAL AID CONTRACTS.** Pursuant to Section 31-52a of the Connecticut General Statutes, as revised, in the employment of mechanics, laborers or workmen to perform the work specified herein, preference shall be given to residents of the state who are, and continuously for at least six months prior to the date hereof have been, residents of this state, and if no such person is available, then to residents of other states

## 6. Tax Liability - Contractor's Exempt Purchase Certificate (CERT – 141)

The Contractor shall comply with Chapter 219 of the Connecticut General Statutes pertaining to tangible personal property or services rendered that is/are subject to sales tax. The Contractor is responsible for determining its tax liability. If the Contractor purchases materials or supplies pursuant to the Connecticut Department of Revenue Services' "Contractor's Exempt Purchase Certificate (CERT-141)," as may be revised, the Contractor acknowledges and agrees that title to such materials and supplies installed or placed in the project will vest in the State simultaneously with passage of title from the retailers or vendors thereof, and the Contractor will have no property rights in the materials and supplies purchased.

Forms and instructions are available anytime by:

Internet: Visit the DRS website at [www.ct.gov/DRS](http://www.ct.gov/DRS) to download and print Connecticut tax forms; or Telephone: Call 1-800-382-9463 (Connecticut calls outside the Greater Hartford calling area only) and select Option 2 or call 860-297-4753 (from anywhere).

## 7. Executive Orders

This contract is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of the contract as if they had been fully set forth in it. The contract may also be subject to Executive Order No. 14 of Governor M. Jodi Rell, promulgated April 17, 2006, concerning procurement of cleaning products and services and to Executive Order No. 49 of Governor Dannel P. Malloy, promulgated May 22, 2015, mandating disclosure of certain gifts to public employees and contributions to certain candidates for office. If Executive Order No. 14 and/or Executive Order No. 49 are applicable, they are deemed to be incorporated into and are made a part of the contract as if they had been fully set forth in it. At the Contractor's request, the Department shall provide a copy of these orders to the Contractor.

## 8. Non Discrimination Requirement (pursuant to section 4a-60 and 4a-60a of the Connecticut General Statutes, as revised): References to "minority business enterprises" in this Section are not applicable to Federal-aid projects/contracts. Federal-aid projects/contracts are instead subject to the Federal Disadvantaged Business Enterprise Program.

(a) For purposes of this Section, the following terms are defined as follows:

- (1) "Commission" means the Commission on Human Rights and Opportunities;
- (2) "Contract" and "contract" include any extension or modification of the Contract or contract;
- (3) "Contractor" and "contractor" include any successors or assigns of the Contractor or contractor;
- (4) "Gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender-related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose.
- (5) "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;

- (6) "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;
- (7) "marital status" means being single, married as recognized by the state of Connecticut, widowed, separated or divorced;
- (8) "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;
- (9) "minority business enterprise" means any small contractor or supplier of materials fifty-one percent or more of the capital stock, if any, or assets of which is owned by a person or persons:
  - (1) who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of Connecticut General Statutes § 32-9n; and
- (10) "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this Section, the terms "Contract" and "contract" do not include a contract where each contractor is (1) a political subdivision of the State of Connecticut, including, but not limited to municipalities, unless the contract is a municipal public works contract or quasi-public agency project contract, (2) any other state of the United States, including but not limited to, the District of Columbia, Puerto Rico, U.S. territories and possessions, and federally recognized Indian tribal governments, as defined in Connecticut General Statutes § 1-267, (3) the federal government, (4) a foreign government, or (5) an agency of a subdivision, state or government described in subdivision (1), (2), (3), or (4) of this subsection.

- (b) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut; and the Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Contractor agrees to provide each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which the Contractor has a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Contractor's commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor

agrees to comply with each provision of this Section and Connecticut General Statutes §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes §§ 46a-56, 46a-68e and 46a-68f; and (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this Section and Connecticut General Statutes § 46a-56. If the contract is a public works contract, the Contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works projects.

- (c) Determination of the Contractor's good faith efforts shall include, but shall not be limited to, the following factors: The Contractor's employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.
- (d) The Contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.
- (e) The Contractor shall include the provisions of subsection (b) of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes §46a-56; provided if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.
- (f) The Contractor agrees to comply with the regulations referred to in this Section as they exist on the date of this Contract and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.
- (g) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes § 46a-56; and (4) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor which relate to the provisions of this Section and Connecticut General Statutes § 46a-56.
- (h) The Contractor shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such

provisions including sanctions for noncompliance in accordance with Connecticut General Statutes § 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

Please be aware the Nondiscrimination Certifications can be found at the Office of Policy and Management website:

<https://portal.ct.gov/OPM/Fin-PSA/Forms/Nondiscrimination-Certification>

## 9. Whistleblower Provision

The following clause is applicable if the Contract has a value of Five Million Dollars (\$5,000,000) or more.

**Whistleblowing.** This Contract may be subject to the provisions of Section 4-61dd of the Connecticut General Statutes. In accordance with this statute, if an officer, employee or appointing authority of the Contractor takes or threatens to take any personnel action against any employee of the Contractor in retaliation for such employee's disclosure of information to any employee of the contracting state or quasi-public agency or the Auditors of Public Accounts or the Attorney General under the provisions of subsection (a) of such statute, the Contractor shall be liable for a civil penalty of not more than five thousand dollars for each offense, up to a maximum of twenty per cent of the value of this Contract. Each violation shall be a separate and distinct offense and in the case of a continuing violation, each calendar day's continuance of the violation shall be deemed to be a separate and distinct offense. The State may request that the Attorney General bring a civil action in the Superior Court for the Judicial District of Hartford to seek imposition and recovery of such civil penalty. In accordance with subsection (f) of such statute, each large state contractor, as defined in the statute, shall post a notice of the provisions of the statute relating to large state contractors in a conspicuous place which is readily available for viewing by the employees of the Contractor.

## 10. Connecticut Freedom of Information Act

- (a) Disclosure of Records.** This Contract may be subject to the provisions of section 1-218 of the Connecticut General Statutes. In accordance with this statute, each contract in excess of two million five hundred thousand dollars between a public agency and a person for the performance of a governmental function shall (a) provide that the public agency is entitled to receive a copy of records and files related to the performance of the governmental function, and (b) indicate that such records and files are subject to FOIA and may be disclosed by the public agency pursuant to FOIA. No request to inspect or copy such records or files shall be valid unless the request is made to the public agency in accordance with FOIA. Any complaint by a person who is denied the right to inspect or copy such records or files shall be brought to the Freedom of Information Commission in accordance with the provisions of sections 1-205 and 1-206 of the Connecticut General Statutes.
- (b) Confidential Information.** The State will afford due regard to the Contractor's request for the protection of proprietary or confidential information which the State receives from the Contractor. However, all materials associated with the Contract are subject to the terms of the FOIA and all corresponding rules, regulations and interpretations. In making such a request, the Contractor may not merely state generally that the materials are proprietary or confidential in nature and not, therefore, subject to release to third parties. Those particular sentences, paragraphs, pages or sections that the Contractor believes are exempt from disclosure under the FOIA must be specifically identified as such. Convincing explanation and rationale sufficient to justify each exemption consistent with the FOIA must

accompany the request. The rationale and explanation must be stated in terms of the prospective harm to the competitive position of the Contractor that would result if the identified material were to be released and the reasons why the materials are legally exempt from release pursuant to the FOIA. To the extent that any other provision or part of the Contract conflicts or is in any way inconsistent with this section, this section controls and shall apply and the conflicting provision or part shall not be given effect. If the Contractor indicates that certain documentation is submitted in confidence, by specifically and clearly marking the documentation as "CONFIDENTIAL," DOT will first review the Contractor's claim for consistency with the FOIA (that is, review that the documentation is actually a trade secret or commercial or financial information and not required by statute), and if determined to be consistent, will endeavor to keep such information confidential to the extent permitted by law. See, *e.g.*, Conn. Gen. Stat. §1-210(b)(5)(A-B). The State, however, has no obligation to initiate, prosecute or defend any legal proceeding or to seek a protective order or other similar relief to prevent disclosure of any information that is sought pursuant to a FOIA request. Should the State withhold such documentation from a Freedom of Information requester and a complaint be brought to the Freedom of Information Commission, the Contractor shall have the burden of cooperating with DOT in defense of that action and in terms of establishing the availability of any FOIA exemption in any proceeding where it is an issue. In no event shall the State have any liability for the disclosure of any documents or information in its possession which the State believes are required to be disclosed pursuant to the FOIA or other law.

#### **11. Service of Process**

The Contractor, if not a resident of the State of Connecticut, or, in the case of a partnership, the partners, if not residents, hereby appoints the Secretary of State of the State of Connecticut, and his successors in office, as agent for service of process for any action arising out of or as a result of this Contract; such appointment to be in effect throughout the life of this Contract and six (6) years thereafter.

#### **12. Substitution of Securities for Retainages on State Contracts and Subcontracts**

This Contract is subject to the provisions of Section 3-112a of the General Statutes of the State of Connecticut, as revised.

#### **13. Health Insurance Portability and Accountability Act of 1996 (HIPAA)**

The Contractor shall comply, if applicable, with the Health Insurance Portability and Accountability Act of 1996 and, pursuant thereto, the provisions attached at Exhibit C, and hereby made part of this Contract.

#### **14. Forum and Choice of Law**

Forum and Choice of Law. The parties deem the Contract to have been made in the City of Hartford, State of Connecticut. Both parties agree that it is fair and reasonable for the validity and construction of the Contract to be, and it shall be, governed by the laws and court decisions of the State of Connecticut, without giving effect to its principles of conflicts of laws. To the extent that any immunities provided by Federal law or the laws of the State of Connecticut do not bar an action against the State, and to the extent that these courts are courts of competent jurisdiction, for the purpose of venue, the complaint shall be made returnable to the Judicial District of Hartford only or shall be brought in the United States District Court for the District of Connecticut only, and shall not be

transferred to any other court, provided, however, that nothing here constitutes a waiver or compromise of the sovereign immunity of the State of Connecticut. The Contractor waives any objection which it may now have or will have to the laying of venue of any Claims in any forum and further irrevocably submits to such jurisdiction in any suit, action or proceeding.

## **15. Summary of State Ethics Laws**

Pursuant to the requirements of section 1-101qq of the Connecticut General Statutes, the summary of State ethics laws developed by the State Ethics Commission pursuant to section 1-81b of the Connecticut General Statutes is incorporated by reference into and made a part of the Contract as if the summary had been fully set forth in the Contract.

## **16. Audit and Inspection of Plants, Places of Business and Records**

- (a) The State and its agents, including, but not limited to, the Connecticut Auditors of Public Accounts, Attorney General and State's Attorney and their respective agents, may, at reasonable hours, inspect and examine all of the parts of the Contractor's and Contractor Parties' plants and places of business which, in any way, are related to, or involved in, the performance of this Contract. For the purposes of this Section, "Contractor Parties" means the Contractor's members, directors, officers, shareholders, partners, managers, principal officers, representatives, agents, servants, consultants, employees or any one of them or any other person or entity with whom the Contractor is in privity of oral or written contract and the Contractor intends for such other person or entity to Perform under the Contract in any capacity.
- (b) The Contractor shall maintain, and shall require each of the Contractor Parties to maintain, accurate and complete Records. The Contractor shall make all of its and the Contractor Parties' Records available at all reasonable hours for audit and inspection by the State and its agents.
- (c) The State shall make all requests for any audit or inspection in writing and shall provide the Contractor with at least twenty-four (24) hours' notice prior to the requested audit and inspection date. If the State suspects fraud or other abuse, or in the event of an emergency, the State is not obligated to provide any prior notice.
- (d) The Contractor shall keep and preserve or cause to be kept and preserved all of its and Contractor Parties' Records until three (3) years after the latter of (i) final payment under this Agreement, or (ii) the expiration or earlier termination of this Agreement, as the same may be modified for any reason. The State may request an audit or inspection at any time during this period. If any Claim or audit is started before the expiration of this period, the Contractor shall retain or cause to be retained all Records until all Claims or audit findings have been resolved.
- (e) The Contractor shall cooperate fully with the State and its agents in connection with an audit or inspection. Following any audit or inspection, the State may conduct and the Contractor shall cooperate with an exit conference.
- (f) The Contractor shall incorporate this entire Section verbatim into any contract or other agreement that it enters into with any Contractor Party.

## **17. Campaign Contribution Restriction**

For all State contracts, defined in Conn. Gen. Stat. §9-612(f)(1) as having a value in a calendar year of \$50,000 or more, or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this contract expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice, as set forth in "Notice to Executive Branch State Contractors and Prospective State Contractors of Campaign Contribution and Solicitation Limitations," a copy of which is attached hereto and hereby made a part of this contract, attached as Exhibit D.

## **18. Tangible Personal Property**

- (a) The Contractor on its behalf and on behalf of its Affiliates, as defined below, shall comply with the provisions of Conn. Gen. Stat. §12-411b, as follows:
- (1) For the term of the Contract, the Contractor and its Affiliates shall collect and remit to the State of Connecticut, Department of Revenue Services, any Connecticut use tax due under the provisions of Chapter 219 of the Connecticut General Statutes for items of tangible personal property sold by the Contractor or by any of its Affiliates in the same manner as if the Contractor and such Affiliates were engaged in the business of selling tangible personal property for use in Connecticut and had sufficient nexus under the provisions of Chapter 219 to be required to collect Connecticut use tax;
  - (2) A customer's payment of a use tax to the Contractor or its Affiliates relieves the customer of liability for the use tax;
  - (3) The Contractor and its Affiliates shall remit all use taxes they collect from customers on or before the due date specified in the Contract, which may not be later than the last day of the month next succeeding the end of a calendar quarter or other tax collection period during which the tax was collected;
  - (4) The Contractor and its Affiliates are not liable for use tax billed by them but not paid to them by a customer; and
  - (5) Any Contractor or Affiliate who fails to remit use taxes collected on behalf of its customers by the due date specified in the Contract shall be subject to the interest and penalties provided for persons required to collect sales tax under chapter 219 of the general statutes.
- (b) For purposes of this section of the Contract, the word "Affiliate" means any person, as defined in section 12-1 of the general statutes, that controls, is controlled by, or is under common control with another person. A person controls another person if the person owns, directly or indirectly, more than ten per cent of the voting securities of the other person. The word "voting security" means a security that confers upon the holder the right to vote for the election of members of the board of directors or similar governing body of the business, or that is convertible into, or entitles the holder to receive, upon its exercise, a security that confers such a right to vote. "Voting security" includes a general partnership interest.
- (c) The Contractor represents and warrants that each of its Affiliates has vested in the Contractor plenary authority to so bind the Affiliates in any agreement with the State of Connecticut. The Contractor on its own behalf and on behalf of its Affiliates shall also provide, no later than 30 days after receiving a request by the State's contracting authority, such information as the State may require to ensure, in the State's sole determination, compliance with the provisions of Chapter 219 of the Connecticut General Statutes, including, but not limited to, §12-411b.

## **19. Bid Rigging and/or Fraud – Notice to Contractor**

The Connecticut Department of Transportation is cooperating with the U.S. Department of Transportation and the Justice Department in their investigation into highway construction contract bid rigging and/or fraud.

A toll-free "HOT LINE" telephone number 800-424-9071 has been established to receive information from contractors, subcontractors, manufacturers, suppliers or anyone with knowledge of bid rigging and/or fraud, either past or current. The "HOT LINE" telephone number will be available during normal working hours ( 8:00 am – 5:00 pm EST). Information will be treated confidentially and anonymity respected.

## **20. Consulting Agreement Affidavit**

The Contractor shall comply with Connecticut General Statutes Section 4a-81(a) and 4a-81(b), as revised. Pursuant to Public Act 11-229, after the initial submission of the form, if there is a change in

the information contained in the form, a contractor shall submit the updated form, as applicable, either (i) not later than thirty (30) days after the effective date of such change or (ii) prior to execution of any new contract, whichever is earlier.

The Affidavit/Form may be submitted in written format or electronic format through the Department of Administrative Services (DAS) website.

**EXHIBIT A****TITLE VI CONTRACTOR ASSURANCES**

During the performance of this Contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

1. **Compliance with Regulations:** The Contractor shall comply with the regulations relative to nondiscrimination in federally assisted programs of the United States Department of Transportation (hereinafter, "USDOT"), Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the "Regulations"), which are herein incorporated by reference and made a part of this contract.

2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the Contract, shall not discriminate on the grounds of race, color, national origin, sex, age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Subsection 5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:**

In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, sex, age, or disability.

4. **Information and Reports:** The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Connecticut Department of Transportation (ConnDOT) or the Funding Agency (FHWA, FTA and FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to ConnDOT or the Funding Agency, as appropriate, and shall set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Contract, the ConnDOT shall impose such sanctions as it or the Funding Agency may determine to be appropriate, including, but not limited to:

- A. Withholding contract payments until the Contractor is in-compliance; and/or
- B. Cancellation, termination, or suspension of the Contract, in whole or in part.

6. **Incorporation of Provisions:** The Contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as the ConnDOT or the Funding Agency may -direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the ConnDOT to enter into such litigation to protect the interests of the Funding Agency, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States

**EXHIBIT B**

**CONTRACTOR WORKFORCE UTILIZATION / EQUAL EMPLOYMENT OPPORTUNITY**

**1. Project Workforce Utilization Goals:**

These goals are applicable to all the Contractor’s construction work (whether or not it is Federal or Federally assisted or funded) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where the work is actually performed.

Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications which contain the applicable goals for minority and female participation.

The goals for minority and female utilization are expressed in percentage terms for the contractor’s aggregate work-force in each trade on all construction work in the covered area, are referenced in the Appendix A below.

**STATE FUNDED PROJECTS (only)**  
**APPENDIX A**  
**(Labor Market Goals)**

**LABOR MARKET AREA GOAL**  
**Female**

**Minority**

<b>Bridgeport</b>				<b>22.7%</b>
<b>1.4%</b>				
Ansonia	Beacon Falls	Bridgeport	Derby	
Easton	Fairfield	Milford	Monroe	
Oxford	Seymour	Shelton	Stratford	
Trumbull				
<b>Danbury</b>				<b>10.7%</b>
<b>3.8%</b>				
Bethel	Bridgewater	Brookfield	Danbury	
Kent	New Fairfield	New Milford	Newtown	
Redding	Ridgefield	Roxbury	Sherman	
Washington				
<b>Danielson</b>				<b>4.3%</b>
<b>1.8%</b>				
Brooklyn	Eastford	Hampton	Killingly	
Pomfret	Putnam	Scotland	Sterling	
Thompson	Voluntown	Union	Woodstock	
<b>Hartford</b>				<b>13.7%</b>
<b>2.1%</b>				
Andover	Ashford	Avon	Barkhamsted	

Belin	Bloomfield	Bolton	Bristol
Burlington	Canton	Chaplin	Colchester
Columbia	Coventry	Cromwell	Durham
East Granby	East Haddam	East Hampton	East Hartford
East Windsor	Ellington	Enfield	Farmington
Glastonbury	Granby	Haddam	Hartford
Harwinton	Hebron	Lebanon	Manchester
Mansfield	Marlborough	Middlefield	Middletown
Newington	Plainville	Plymouth	Portland
Rocky Hill	Simsbury	Somers	South Windsor
Southington	Stafford	Suffield	Tolland
Vernon	West Hartford	Wethersfield	Willington
Winchester	Windham	Windsor	Windsor Locks

<b>Lower River</b>				<b>4.3%</b>
<b>1.8%</b>				

Chester	Deep River	Essex	Old Lyme
Westbrook			

**LABOR MARKET AREA GOAL**

**Minority**

**Female**

<b>New Haven</b>				<b>17.9%</b>
<b>3.1%</b>				

Bethany	Branford	Cheshire	Clinton
East Haven	Guilford	Hamden	Killingworth
Madison	Meriden	New Haven	North Branford
North Haven	Orange	Wallingford	West Haven
Woodbridge			

<b>New London</b>				<b>7.4%</b>
<b>3.1%</b>				

Bozrah	Canterbury	East Lyme	Franklin
Griswold	Groton	Ledyard	Lisbon
Montville	New London	North Stonington	Norwich
Old Lyme	Old Saybrook	Plainfield	Preston
Salem	Sprague	Stonington	Waterford
Hopkinton	RI – Westerly Rhode Island		

<b>Stamford</b>				<b>33.2%</b>
<b>2.1%</b>				

Darien	Greenwich	New Canaan	Norwalk
Stamford	Weston	Westport	Wilton

<b>Torrington</b>				<b>4.3%</b>
<b>1.8%</b>				

Canaan	Colebrook	Cornwall	Goshen
Hartland	Kent	Litchfield	Morris
Norfolk	North Canaan	Salisbury	Sharon

Torrington

Warren

<b>Waterbury</b>				<b>12.4%</b>
<b>1.6%</b>				

Bethlehem  
Southbury  
Wolcott

Middlebury  
Thomaston  
Woodbury

Naugatuck  
Waterbury

Prospect  
Watertown

Rev. 4/24/2019

**EXHIBIT C****Health Insurance Portability and Accountability Act of 1996 (“HIPAA”).**

- (a) If the Contactor is a Business Associate under the requirements of the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), the Contractor must comply with all terms and conditions of this Section of the Contract. If the Contractor is not a Business Associate under HIPAA, this Section of the Contract does not apply to the Contractor for this Contract.
- (b) The Contractor is required to safeguard the use, publication and disclosure of information on all applicants for, and all clients who receive, services under the Contract in accordance with all applicable federal and state law regarding confidentiality, which includes but is not limited to HIPAA, more specifically with the Privacy and Security Rules at 45 C.F.R. Part 160 and Part 164, subparts A, C, and E; and
- (c) The State of Connecticut Agency named on page 1 of this Contract (hereinafter the “Department”) is a “covered entity” as that term is defined in 45 C.F.R. § 160.103; and
- (d) The Contractor, on behalf of the Department, performs functions that involve the use or disclosure of “individually identifiable health information,” as that term is defined in 45 C.F.R. § 160.103; and
- (e) The Contractor is a “business associate” of the Department, as that term is defined in 45 C.F.R. § 160.103; and
- (f) The Contractor and the Department agree to the following in order to secure compliance with the HIPAA, the requirements of Subtitle D of the Health Information Technology for Economic and Clinical Health Act (hereinafter the HITECH Act), (Pub. L. 111-5, sections 13400 to 13423), and more specifically with the Privacy and Security Rules at 45 C.F.R. Part 160 and Part 164, subparts A, C, and E.
- (g) Definitions
  - (1) “Breach shall have the same meaning as the term is defined in section 13400 of the HITECH Act (42 U.S.C. §17921(1))
  - (2) “Business Associate” shall mean the Contractor.
  - (3) “Covered Entity” shall mean the Department of the State of Connecticut named on page 1 of this Contract.
  - (4) “Designated Record Set” shall have the same meaning as the term “designated record set” in 45 C.F.R. § 164.501.
  - (5) “Electronic Health Record” shall have the same meaning as the term is defined in section 13400 of the HITECH Act (42 U.S.C. §17921(5))

- (6) "Individual" shall have the same meaning as the term "individual" in 45 C.F.R. § 160.103 and shall include a person who qualifies as a personal representative as defined in 45 C.F.R. § 164.502(g).
  - (7) "Privacy Rule" shall mean the Standards for Privacy of Individually Identifiable Health Information at 45 C.F.R. part 160 and parts 164, subparts A and E.
  - (8) "Protected Health Information" or "PHI" shall have the same meaning as the term "protected health information" in 45 C.F.R. § 160.103, limited to information created or received by the Business Associate from or on behalf of the Covered Entity.
  - (9) "Required by Law" shall have the same meaning as the term "required by law" in 45 C.F.R. § 164.103.
  - (10) "Secretary" shall mean the Secretary of the Department of Health and Human Services or his designee.
  - (11) "More stringent" shall have the same meaning as the term "more stringent" in 45 C.F.R. § 160.202.
  - (12) "This Section of the Contract" refers to the HIPAA Provisions stated herein, in their entirety.
  - (13) "Security Incident" shall have the same meaning as the term "security incident" in 45 C.F.R. § 164.304.
  - (14) "Security Rule" shall mean the Security Standards for the Protection of Electronic Protected Health Information at 45 C.F.R. part 160 and parts 164, subpart A and C.
  - (15) "Unsecured protected health information" shall have the same meaning as the term as defined in section 13402(h)(1)(A) of HITECH. Act. (42 U.S.C. §17932(h)(1)(A)).
- (h) Obligations and Activities of Business Associates.
- (1) Business Associate agrees not to use or disclose PHI other than as permitted or required by this Section of the Contract or as Required by Law.
  - (2) Business Associate agrees to use appropriate safeguards to prevent use or disclosure of PHI other than as provided for in this Section of the Contract.
  - (3) Business Associate agrees to use administrative, physical and technical safeguards that reasonably and appropriately protect the confidentiality, integrity, and availability of electronic protected health information that it creates, receives, maintains, or transmits on behalf of the Covered Entity.
  - (4) Business Associate agrees to mitigate, to the extent practicable, any harmful effect that is known to the Business Associate of a use or disclosure of PHI by Business Associate in violation of this Section of the Contract.

- (5) Business Associate agrees to report to Covered Entity any use or disclosure of PHI not provided for by this Section of the Contract or any security incident of which it becomes aware.
- (6) Business Associate agrees to insure that any agent, including a subcontractor, to whom it provides PHI received from, or created or received by Business Associate, on behalf of the Covered Entity, agrees to the same restrictions and conditions that apply through this Section of the Contract to Business Associate with respect to such information.
- (7) Business Associate agrees to provide access, at the request of the Covered Entity, and in the time and manner agreed to by the parties, to PHI in a Designated Record Set, to Covered Entity or, as directed by Covered Entity, to an Individual in order to meet the requirements under 45 C.F.R. § 164.524.
- (8) Business Associate agrees to make any amendments to PHI in a Designated Record Set that the Covered Entity directs or agrees to pursuant to 45 C.F.R. § 164.526 at the request of the Covered Entity, and in the time and manner agreed to by the parties.
- (9) Business Associate agrees to make internal practices, books, and records, including policies and procedures and PHI, relating to the use and disclosure of PHI received from, or created or received by, Business Associate on behalf of Covered Entity, available to Covered Entity or to the Secretary in a time and manner agreed to by the parties or designated by the Secretary, for purposes of the Secretary determining Covered Entity's compliance with the Privacy Rule.
- (10) Business Associate agrees to document such disclosures of PHI and information related to such disclosures as would be required for Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 C.F.R. § 164.528 and section 13405 of the HITECH Act (42 U.S.C. § 17935) and any regulations promulgated thereunder.
- (11) Business Associate agrees to provide to Covered Entity, in a time and manner agreed to by the parties, information collected in accordance with clause h. (10) of this Section of the Contract, to permit Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 C.F.R. § 164.528 and section 13405 of the HITECH Act (42 U.S.C. § 17935) and any regulations promulgated thereunder. Business Associate agrees at the Covered Entity's direction to provide an accounting of disclosures of PHI directly to an individual in accordance with 45 C.F.R. § 164.528 and section 13405 of the HITECH Act (42 U.S.C. § 17935) and any regulations promulgated thereunder.
- (12) Business Associate agrees to comply with any state or federal law that is more stringent than the Privacy Rule.
- (13) Business Associate agrees to comply with the requirements of the HITECH Act relating to privacy and security that are applicable to the Covered Entity and with the requirements of 45 C.F.R. sections 164.504(e), 164.308, 164.310, 164.312, and 164.316.

- (14) In the event that an individual requests that the Business Associate (a) restrict disclosures of PHI; (b) provide an accounting of disclosures of the individual's PHI; or (c) provide a copy of the individual's PHI in an electronic health record, the Business Associate agrees to notify the covered entity, in writing, within two business days of the request.
- (15) Business Associate agrees that it shall not, directly or indirectly, receive any remuneration in exchange for PHI of an individual without (1) the written approval of the covered entity, unless receipt of remuneration in exchange for PHI is expressly authorized by this Contract and (2) the valid authorization of the individual, except for the purposes provided under section 13405(d)(2) of the HITECH Act,(42 U.S.C. § 17935(d)(2)) and in any accompanying regulations
- (16) Obligations in the Event of a Breach
- A. The Business Associate agrees that, following the discovery of a breach of unsecured protected health information, it shall notify the Covered Entity of such breach in accordance with the requirements of section 13402 of HITECH (42 U.S.C. 17932(b) and the provisions of this Section of the Contract.
- B. Such notification shall be provided by the Business Associate to the Covered Entity without unreasonable delay, and in no case later than 30 days after the breach is discovered by the Business Associate, except as otherwise instructed in writing by a law enforcement official pursuant to section 13402 (g) of HITECH (42 U.S.C. 17932(g)) . A breach is considered discovered as of the first day on which it is, or reasonably should have been, known to the Business Associate. The notification shall include the identification and last known address, phone number and email address of each individual (or the next of kin of the individual if the individual is deceased) whose unsecured protected health information has been, or is reasonably believed by the Business Associate to have been, accessed, acquired, or disclosed during such breach.
- C. The Business Associate agrees to include in the notification to the Covered Entity at least the following information:
1. A brief description of what happened, including the date of the breach and the date of the discovery of the breach, if known.
  2. A description of the types of unsecured protected health information that were involved in the breach (such as full name, Social Security number, date of birth, home address, account number, or disability code).
  3. The steps the Business Associate recommends that individuals take to protect themselves from potential harm resulting from the breach.
  4. A detailed description of what the Business Associate is doing to investigate the breach, to mitigate losses, and to protect against any further breaches.
  5. Whether a law enforcement official has advised either verbally or in writing the Business Associate that he or she has determined that notification or notice to

individuals or the posting required under section 13402 of the HITECH Act would impede a criminal investigation or cause damage to national security and; if so, include contact information for said official.

- D. Business Associate agrees to provide appropriate staffing and have established procedures to ensure that individuals informed by the Covered Entity of a breach by the Business Associate have the opportunity to ask questions and contact the Business Associate for additional information regarding the breach. Such procedures shall include a toll-free telephone number, an e-mail address, a posting on its Web site and a postal address. Business Associate agrees to include in the notification of a breach by the Business Associate to the Covered Entity, a written description of the procedures that have been established to meet these requirements. Costs of such contact procedures will be borne by the Contractor.
  - E. Business Associate agrees that, in the event of a breach, it has the burden to demonstrate that it has complied with all notifications requirements set forth above, including evidence demonstrating the necessity of a delay in notification to the Covered Entity.
- (i) Permitted Uses and Disclosure by Business Associate.
- (1) General Use and Disclosure Provisions Except as otherwise limited in this Section of the Contract, Business Associate may use or disclose PHI to perform functions, activities, or services for, or on behalf of, Covered Entity as specified in this Contract, provided that such use or disclosure would not violate the Privacy Rule if done by Covered Entity or the minimum necessary policies and procedures of the Covered Entity.
  - (2) Specific Use and Disclosure Provisions
    - (A) Except as otherwise limited in this Section of the Contract, Business Associate may use PHI for the proper management and administration of Business Associate or to carry out the legal responsibilities of Business Associate.
    - (B) Except as otherwise limited in this Section of the Contract, Business Associate may disclose PHI for the proper management and administration of Business Associate, provided that disclosures are Required by Law, or Business Associate obtains reasonable assurances from the person to whom the information is disclosed that it will remain confidential and used or further disclosed only as Required by Law or for the purpose for which it was disclosed to the person, and the person notifies Business Associate of any instances of which it is aware in which the confidentiality of the information has been breached.
    - (C) Except as otherwise limited in this Section of the Contract, Business Associate may use PHI to provide Data Aggregation services to Covered Entity as permitted by 45 C.F.R. § 164.504(e)(2)(i)(B).
- (j) Obligations of Covered Entity.

- (1) Covered Entity shall notify Business Associate of any limitations in its notice of privacy practices of Covered Entity, in accordance with 45 C.F.R. § 164.520, or to the extent that such limitation may affect Business Associate's use or disclosure of PHI.
  - (2) Covered Entity shall notify Business Associate of any changes in, or revocation of, permission by Individual to use or disclose PHI, to the extent that such changes may affect Business Associate's use or disclosure of PHI.
  - (3) Covered Entity shall notify Business Associate of any restriction to the use or disclosure of PHI that Covered Entity has agreed to in accordance with 45 C.F.R. § 164.522, to the extent that such restriction may affect Business Associate's use or disclosure of PHI.
- (k) Permissible Requests by Covered Entity. Covered Entity shall not request Business Associate to use or disclose PHI in any manner that would not be permissible under the Privacy Rule if done by the Covered Entity, except that Business Associate may use and disclose PHI for data aggregation, and management and administrative activities of Business Associate, as permitted under this Section of the Contract.
- (l) Term and Termination.
- (1) Term. The Term of this Section of the Contract shall be effective as of the date the Contract is effective and shall terminate when the information collected in accordance with clause h. (10) of this Section of the Contract is provided to the Covered Entity and all of the PHI provided by Covered Entity to Business Associate, or created or received by Business Associate on behalf of Covered Entity, is destroyed or returned to Covered Entity, or, if it is infeasible to return or destroy PHI, protections are extended to such information, in accordance with the termination provisions in this Section.
  - (2) Termination for Cause Upon Covered Entity's knowledge of a material breach by Business Associate, Covered Entity shall either:
    - (A) Provide an opportunity for Business Associate to cure the breach or end the violation and terminate the Contract if Business Associate does not cure the breach or end the violation within the time specified by the Covered Entity; or
    - (B) Immediately terminate the Contract if Business Associate has breached a material term of this Section of the Contract and cure is not possible; or
    - (C) If neither termination nor cure is feasible, Covered Entity shall report the violation to the Secretary.
  - (3) Effect of Termination
    - (A) Except as provided in (1)(2) of this Section of the Contract, upon termination of this Contract, for any reason, Business Associate shall return or destroy all PHI received from Covered Entity, or created or received by Business Associate on behalf of Covered Entity. Business Associate shall also provide the information collected in accordance with clause h. (10) of this Section of the Contract to the Covered Entity

within ten business days of the notice of termination. This provision shall apply to PHI that is in the possession of subcontractors or agents of Business Associate. Business Associate shall retain no copies of the PHI.

(B) In the event that Business Associate determines that returning or destroying the PHI is infeasible, Business Associate shall provide to Covered Entity notification of the conditions that make return or destruction infeasible. Upon documentation by Business Associate that return or destruction of PHI is infeasible, Business Associate shall extend the protections of this Section of the Contract to such PHI and limit further uses and disclosures of PHI to those purposes that make return or destruction infeasible, for as long as Business Associate maintains such PHI. Infeasibility of the return or destruction of PHI includes, but is not limited to, requirements under state or federal law that the Business Associate maintains or preserves the PHI or copies thereof.

(m) Miscellaneous Provisions.

- (1) Regulatory References. A reference in this Section of the Contract to a section in the Privacy Rule means the section as in effect or as amended.
- (2) Amendment. The Parties agree to take such action as is necessary to amend this Section of the Contract from time to time as is necessary for Covered Entity to comply with requirements of the Privacy Rule and the Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191.
- (3) Survival. The respective rights and obligations of Business Associate shall survive the termination of this Contract.
- (4) Effect on Contract. Except as specifically required to implement the purposes of this Section of the Contract, all other terms of the Contract shall remain in force and effect.
- (5) Construction. This Section of the Contract shall be construed as broadly as necessary to implement and comply with the Privacy Standard. Any ambiguity in this Section of the Contract shall be resolved in favor of a meaning that complies, and is consistent with, the Privacy Standard.
- (6) Disclaimer. Covered Entity makes no warranty or representation that compliance with this Section of the Contract will be adequate or satisfactory for Business Associate's own purposes. Covered Entity shall not be liable to Business Associate for any claim, civil or criminal penalty, loss or damage related to or arising from the unauthorized use or disclosure of PHI by Business Associate or any of its officers, directors, employees, contractors or agents, or any third party to whom Business Associate has disclosed PHI contrary to the provisions of this Contract or applicable law. Business Associate is solely responsible for all decisions made, and actions taken, by Business Associate regarding the safeguarding, use and disclosure of PHI within its possession, custody or control.

(7) Indemnification. The Business Associate shall indemnify and hold the Covered Entity harmless from and against any and all claims, liabilities, judgments, fines, assessments, penalties, awards and any statutory damages that may be imposed or assessed pursuant to HIPAA, as amended or the

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HITECH Act, including, without limitation, attorney's fees, expert witness fees, costs of investigation, litigation or dispute resolution, and costs awarded thereunder, relating to or arising out of any violation by the Business Associate and its agents, including subcontractors, of any obligation of Business Associate and its agents, including subcontractors, under this section of the contract, under HIPAA, the HITECH Act, the Privacy Rule and the Security Rule.

## Notice to Executive Branch State Contractors and Prospective State Contractors of Campaign Contribution and Solicitation Limitations

This notice is provided under the authority of Connecticut General Statutes §9-612(g)(2), as amended by P.A. 10-1, and is for the purpose of informing state contractors and prospective state contractors of the following law (*italicized words are defined on the reverse side of this page*).

### CAMPAIGN CONTRIBUTION AND SOLICITATION LIMITATIONS

No *state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor*, with regard to a *state contract or state contract solicitation* with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee (which includes town committees).

In addition, no holder or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of State senator or State representative, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

On and after January 1, 2011, no state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall **knowingly solicit** contributions from the state contractor's or prospective state contractor's employees or from a *subcontractor or principals of the subcontractor* on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

### DUTY TO INFORM

State contractors and prospective state contractors are required to inform their principals of the above prohibitions, as applicable, and the possible penalties and other consequences of any violation thereof.

### PENALTIES FOR VIOLATIONS

Contributions or solicitations of contributions made in violation of the above prohibitions may result in the following civil and criminal penalties:

**Civil penalties**—Up to \$2,000 or twice the amount of the prohibited contribution, whichever is greater, against a principal or a contractor. Any state contractor or prospective state contractor which fails to make reasonable efforts to comply with the provisions requiring notice to its principals of these prohibitions and the possible consequences of their violations may also be subject to civil penalties of up to \$2,000 or twice the amount of the prohibited contributions made by their principals.

**Criminal penalties**—Any knowing and willful violation of the prohibition is a Class D felony, which may subject the violator to imprisonment of not more than 5 years, or not more than \$5,000 in fines, or both.

### CONTRACT CONSEQUENCES

In the case of a state contractor, contributions made or solicited in violation of the above prohibitions may result in the contract being voided.

In the case of a prospective state contractor, contributions made or solicited in violation of the above prohibitions shall result in the contract described in the state contract solicitation not being awarded to the prospective state contractor, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

The State shall not award any other state contract to anyone found in violation of the above prohibitions for a period of one year after the election for which such contribution is made or solicited, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

Additional information may be found on the website of the State Elections Enforcement Commission, [www.ct.gov/seec](http://www.ct.gov/seec). Click on the link to "Lobbyist/Contractor Limitations."

## DEFINITIONS

“State contractor” means a person, business entity or nonprofit organization that enters into a state contract. Such person, business entity or nonprofit organization shall be deemed to be a state contractor until December thirty-first of the year in which such contract terminates. “State contractor” does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

“Prospective state contractor” means a person, business entity or nonprofit organization that (i) submits a response to a state contract solicitation by the state, a state agency or a quasi-public agency, or a proposal in response to a request for proposals by the state, a state agency or a quasi-public agency, until the contract has been entered into, or (ii) holds a valid prequalification certificate issued by the Commissioner of Administrative Services under section 4a-100. “Prospective state contractor” does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

“Principal of a state contractor or prospective state contractor” means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a state contractor or prospective state contractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a state contractor or prospective state contractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a state contractor or prospective state contractor, which is not a business entity, or if a state contractor or prospective state contractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any state contractor or prospective state contractor who has *managerial or discretionary responsibilities with respect to a state contract*, (v) the spouse or a *dependent child* who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the state contractor or prospective state contractor.

“State contract” means an agreement or contract with the state or any state agency or any quasi-public agency, let through a procurement process or otherwise, having a value of fifty thousand dollars or more, or a combination or series of such agreements or contracts having a value of one hundred thousand dollars or more in a calendar year, for (i) the rendition of services, (ii) the furnishing of any goods, material, supplies, equipment or any items of any kind, (iii) the construction, alteration or repair of any public building or public work, (iv) the acquisition, sale or lease of any land or building, (v) a licensing arrangement, or (vi) a grant, loan or loan guarantee. “State contract” does not include any agreement or contract with the state, any state agency or any quasi-public agency that is exclusively federally funded, an education loan, a loan to an individual for other than commercial purposes or any agreement or contract between the state or any state agency and the United States Department of the Navy or the United States Department of Defense.

“State contract solicitation” means a request by a state agency or quasi-public agency, in whatever form issued, including, but not limited to, an invitation to bid, request for proposals, request for information or request for quotes, inviting bids, quotes or other types of submittals, through a competitive procurement process or another process authorized by law waiving competitive procurement.

“Managerial or discretionary responsibilities with respect to a state contract” means having direct, extensive and substantive responsibilities with respect to the negotiation of the state contract and not peripheral, clerical or ministerial responsibilities.

“Dependent child” means a child residing in an individual's household who may legally be claimed as a dependent on the federal income tax of such individual.

“Solicit” means (A) requesting that a contribution be made, (B) participating in any fund-raising activities for a candidate committee, exploratory committee, political committee or party committee, including, but not limited to, forwarding tickets to potential contributors, receiving contributions for transmission to any such committee or bundling contributions, (C) serving as chairperson, treasurer or deputy treasurer of any such committee, or (D) establishing a political committee for the sole purpose of soliciting or receiving contributions for any committee. Solicit does not include: (i) making a contribution that is otherwise permitted by Chapter 155 of the Connecticut General Statutes; (ii) informing any person of a position taken by a candidate for public office or a public official, (iii) notifying the person of any activities of, or contact information for, any candidate for public office; or (iv) serving as a member in any party committee or as an officer of such committee that is not otherwise prohibited in this section.

“Subcontractor” means any person, business entity or nonprofit organization that contracts to perform part or all of the obligations of a state contractor's state contract. Such person, business entity or nonprofit organization shall be deemed to be a subcontractor until December thirty first of the year in which the subcontract terminates. “Subcontractor” does not include (i) a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or (ii) an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

“Principal of a subcontractor” means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a subcontractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a subcontractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a subcontractor, which is not a business entity, or if a subcontractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any subcontractor who has managerial or discretionary responsibilities with respect to a subcontract with a state contractor, (v) the spouse or a dependent child who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the subcontractor.

**EXHIBIT E**

(state wages will be inserted here)



## **TAB H**

### Prevailing Wage Rate Information



## **TAB I**

### **Commission On Human Rights And Opportunities (CHRO) Contract Compliance**



## **Commission On Human Rights And Opportunities (CHRO) Contract Compliance**

The contractor who is selected to perform this project must comply with 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5 of the Connecticut General Statutes (C.G.S.).

For municipal construction contracts valued over \$50,000, state law requires the contractor, general contractor, or construction manager at risk to set a goal of twenty-five per cent (25%) for award to eligible subcontractors holding current small business enterprise (SBE) certification from the DAS under the provisions of C.G.S. 4a-60g. Of the portion of contracts set aside for SBEs, a goal of twenty-five percent (25%) (or 6.25% of the value of the entire contract funded by the state) must be set aside for awards to eligible contractors holding current minority business enterprise certification (i.e.: DAS certified Minority ("MBE"), Women ("WBE") and/or Disabled ("DisBE") owned businesses). The contractor, general contractor, construction manager at risk must make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such projects.

### **For Contracts Equal to or Greater than \$500,000.00**

The contract cannot be awarded until:

The Contractor has submitted an approved Affirmative Action Plan to CHRO

OR

Authorization has been obtained from CHRO to execute contract and retain 2% per month of the total contract value until CHRO approves the Contractor's Affirmative Action Plan.

## Non-Discrimination and Affirmative Action Provisions

- (A)(1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, sexual orientation, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut. The Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the commission; (3) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the commission advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, 46a-68e, 46a-68f and 46a-86; (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this section and section 46a-56.
- (B) Any Contractor who is a party to a municipal public works contract or quasi-public agency project, where any such contract is valued at less than \$50,000 for each year of the contract, shall provide the Commission on Human Rights and Opportunities with a written or electronic representation that complies with the nondiscrimination agreement and warranty under subsection (A)(1) above, provided if there is any change in such representation, the Contractor shall provide the updated representation to the Commission not later than 30 days after such change. Any Contractor who is a party to a municipal public works contract or a quasi-public agency project, where any such contract is valued at \$50,000 or more for any year of the contract, shall provide the Commission with any one of the following: (1) Documentation in the form of a company or corporate policy adopted by resolution of the board of directors, shareholder, managers, members or other governing body of such Contractor that

complies with the nondiscrimination agreement and warranty under subsection (A)(1) of this section; (2) Documentation in the form of a company or corporate policy adopted by a prior resolution of the board of directors, shareholders, managers, members or other governing body of such contractor if (a) the prior resolution is certified by a duly authorized corporate officer of such contractor to be in effect on the date the documentation is submitted, and the executive director of the Commission on Human Rights and Opportunities or designee certifies that the prior resolution complies with the nondiscrimination agreement and warranty under subdivision (A)(1) of this section; or (3) Documentation in the form of an affidavit signed under penalty of false statement by a chief executive officer, president, chairperson or other corporate officer duly authorized to adopt company or corporate policy that certifies that the company or corporate policy of the contractor complies with the nondiscrimination agreement and warranty under subdivision (A)(1) of this section and is in effect on the date the affidavit is signed..

(C) If the Contract is a municipal public works contract or a quasi-public agency project, the Contractor agrees and warrants that s/he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works project. The Contractor shall include the provisions of subdivision (A)(1) of this section in every subcontract or purchase order entered into to fulfill any obligation of a municipal public works contract or contract for a quasi-public agency project, and such provisions shall be binding on a subcontractor, vendor or manufacturer, unless exempted by regulations or orders of the Commission on Human Rights and Opportunities. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance in accordance with section 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission regarding a state contract, the contractor may request the state of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the state and the state may so enter.

(D) "Minority business enterprise" means any small contractor or supplier of materials fifty-one per cent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) Who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise and (3) who are members of a minority, as such term is defined in subsection (a) of section 32-9n; and "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations. "Good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements. Determination of the Contractor's good faith efforts shall include, but shall not be eliminated to, the following factors: The contractor's employment and subcontracting policies, patterns and practices; affirmative advertising recruitment and training; technical assistance activities and such other reasonable activities or efforts as

the Commission on Human Rights and Opportunities may prescribe that are designed to ensure the participation of minority business enterprises in municipal public works contracts or quasi-public agency projects. "Municipal public works project" means that portion of an agreement entered into on or after October 1, 2015, between any individual, firm or corporation and a municipality for the construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, which is financed in whole or in part by the state, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees but excluding any project of an alliance district, as defined in section 10-262u, finance by the state funding in an amount equal to fifty thousand dollars or less. "Quasi-public agency project" means the construction, rehabilitation, conversion, extension, demolition or repair of a building or other changes or improvements in real property pursuant to a contract entered into on or after October 1, 2015, which is financed in whole or in part by a quasi-public agency using state funds, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

## **Commission On Human Rights And Opportunities (CHRO) Contract Compliance**

The contractor who is selected to perform this project must comply with 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5 of the Connecticut General Statutes (C.G.S.).

For municipal construction contracts valued over \$50,000, state law requires the contractor, general contractor, or construction manager at risk to set a goal of twenty-five per cent (25%) for award to eligible subcontractors holding current small business enterprise (SBE) certification from the DAS under the provisions of C.G.S. 4a-60g. Of the portion of contracts set aside for SBEs, a goal of twenty-five percent (25%) (or 6.25% of the value of the entire contract funded by the state) must be set aside for awards to eligible contractors holding current minority business enterprise certification (i.e.: DAS certified Minority ("MBE"), Women ("WBE") and/or Disabled ("DisBE") owned businesses). The contractor, general contractor, construction manager at risk must make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such projects.

### **For Contracts Equal to or Greater than \$500,000.00**

The contract cannot be awarded until:

The Contractor has submitted an approved Affirmative Action Plan to CHRO

OR

Authorization has been obtained from CHRO to execute contract and retain 2% per month of the total contract value until CHRO approves the Contractor's Affirmative Action Plan.

## Non-Discrimination and Affirmative Action Provisions

(A)(1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, sexual orientation, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut. The Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the commission; (3) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the commission advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, 46a-68e, 46a-68f and 46a-86; (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this section and section 46a-56.

(B) Any Contractor who is a party to a municipal public works contract or quasi-public agency project, where any such contract is valued at less than \$50,000 for each year of the contract, shall provide the Commission on Human Rights and Opportunities with a written or electronic representation that complies with the nondiscrimination agreement and warranty under subsection (A)(1) above, provided if there is any change in such representation, the Contractor shall provide the updated representation to the Commission not later than 30 days after such change. Any Contractor who is a party to a municipal public works contract or a quasi-public agency project, where any such contract is valued at \$50,000 or more for any year of the contract, shall provide the Commission with any one of the following: (1) Documentation in the form of a company or corporate policy adopted by resolution of the board of directors, shareholder, managers, members or other governing body of such Contractor that

complies with the nondiscrimination agreement and warranty under subsection (A)(1) of this section; (2) Documentation in the form of a company or corporate policy adopted by a prior resolution of the board of directors, shareholders, managers, members or other governing body of such contractor if (a) the prior resolution is certified by a duly authorized corporate officer of such contractor to be in effect on the date the documentation is submitted, and the executive director of the Commission on Human Rights and Opportunities or designee certifies that the prior resolution complies with the nondiscrimination agreement and warranty under subdivision (A)(1) of this section; or (3) Documentation in the form of an affidavit signed under penalty of false statement by a chief executive officer, president, chairperson or other corporate officer duly authorized to adopt company or corporate policy that certifies that the company or corporate policy of the contractor complies with the nondiscrimination agreement and warranty under subdivision (A)(1) of this section and is in effect on the date the affidavit is signed..

(C) If the Contract is a municipal public works contract or a quasi-public agency project, the Contractor agrees and warrants that s/he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works project. The Contractor shall include the provisions of subdivision (A)(1) of this section in every subcontract or purchase order entered into to fulfill any obligation of a municipal public works contract or contract for a quasi-public agency project, and such provisions shall be binding on a subcontractor, vendor or manufacturer, unless exempted by regulations or orders of the Commission on Human Rights and Opportunities. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance in accordance with section 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission regarding a state contract, the contractor may request the state of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the state and the state may so enter.

(D) "Minority business enterprise" means any small contractor or supplier of materials fifty-one per cent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) Who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise and (3) who are members of a minority, as such term is defined in subsection (a) of section 32-9n; and "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations. "Good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements. Determination of the Contractor's good faith efforts shall include, but shall not be eliminated to, the following factors: The contractor's employment and subcontracting policies, patterns and practices; affirmative advertising recruitment and training; technical assistance activities and such other reasonable activities or efforts as

the Commission on Human Rights and Opportunities may prescribe that are designed to ensure the participation of minority business enterprises in municipal public works contracts or quasi-public agency projects. "Municipal public works project" means that portion of an agreement entered into on or after October 1, 2015, between any individual, firm or corporation and a municipality for the construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, which is financed in whole or in part by the state, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees but excluding any project of an alliance district, as defined in section 10-262u, finance by the state funding in an amount equal to fifty thousand dollars or less. "Quasi-public agency project" means the construction, rehabilitation, conversion, extension, demolition or repair of a building or other changes or improvements in real property pursuant to a contract entered into on or after October 1, 2015, which is financed in whole or in part by a quasi-public agency using state funds, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

**COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES**  
**CONTRACT COMPLIANCE REGULATIONS**  
**NOTIFICATION TO BIDDERS**

(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by Sections 4a-60 and 4a-60a of the Connecticut General Statutes; and, when the awarding agency is the State, Sections 46a-71(d) and 46a-81i(d) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at Section 46a-68j-21 through 43 of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by Sections 4a-60 and 46a-71(d) of the Connecticut General Statutes.

According to Section 46a-68j-30(9) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to “aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials.” “Minority business enterprise” is defined in Section 4a-60 of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: “(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of Section 32-9n.” “Minority” groups are defined in Section 32-9n of the Connecticut General Statutes as “(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . .” An individual with a disability is also a minority business enterprise as provided by Section 4a-60g of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of Section 46a-68j-21(11) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder’s qualifications under the contract compliance requirements:

- (a) the bidder’s success in implementing an affirmative action plan;
- (b) the bidder’s success in developing an apprenticeship program complying with Sections 46a-68-1 to 46a-68-17 of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder’s promise to develop and implement a successful affirmative action plan;
- (d) the bidder’s submission of employment statistics contained in the “Employment Information Form”, indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder’s promise to set aside a portion of the contract for legitimate minority business enterprises. See Section 46a-68j-30(10)(E) of the Contract Compliance Regulations.

---

**INSTRUCTIONS AND OTHER INFORMATION**

The following BIDDER CONTRACT COMPLIANCE MONITORING REPORT must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to Sections 4a-60 and 4a-60a CONN. GEN. STAT., and Sections 46a-68j-23 of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder’s good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

1) **Definition of Small Contractor**

Section 4a-60g CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision 4a-60g CONN. GEN. STAT.

**MANAGEMENT:** Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

**BUSINESS AND FINANCIAL OPERATIONS:** These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

**MARKETING AND SALES:** Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

**LEGAL OCCUPATIONS:** In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

**COMPUTER SPECIALISTS:** Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists.

**ARCHITECTURE AND ENGINEERING:** Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

**OFFICE AND ADMINISTRATIVE SUPPORT:** All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

**BUILDING AND GROUNDS CLEANING AND MAINTENANCE:** This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

**CONSTRUCTION AND EXTRACTION:** This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category..

**INSTALLATION, MAINTENANCE AND REPAIR:** Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

**MATERIAL MOVING WORKERS:** The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

**PRODUCTION WORKERS:** The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

<p><u>White</u> (not of Hispanic Origin)- All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.</p> <p><u>Black</u>(not of Hispanic Origin)- All persons having origins in any of the Black racial groups of Africa.</p> <p><u>Hispanic</u>- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.</p>	<p><u>Asian or Pacific Islander</u>- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa.</p> <p><u>American Indian or Alaskan Native</u>- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.</p>
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**BIDDER CONTRACT COMPLIANCE MONITORING REPORT**

**PART I - Bidder Information**

Company Name Street Address City & State Chief Executive	Bidder Federal Employer Identification Number _____ Or Social Security Number _____
Major Business Activity (brief description)	Bidder Identification (response optional/definitions on page 1)  -Bidder is a small contractor. Yes ___ No ___ -Bidder is a minority business enterprise Yes ___ No ___ (If yes, check ownership category) Black ___ Hispanic ___ Asian American ___ American Indian/Alaskan Native ___ Iberian Peninsula ___ Individual(s) with a Physical Disability ___ Female ___
Bidder Parent Company (If any)	- Bidder is certified as above by State of CT Yes ___ No ___
Other Locations in Ct. (If any)	

**PART II - Bidder Nondiscrimination Policies and Procedures**

1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes ___ No ___	7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes ___ No ___
2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes ___ No ___	8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes ___ No ___
3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes ___ No ___	9. Does your company have a mandatory retirement age for all employees? Yes ___ No ___
4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes ___ No ___	10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes ___ No ___ NA ___
5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes ___ No ___	11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes ___ No ___ NA ___
6. Does your company have a collective bargaining agreement with workers? Yes ___ No ___ 6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes ___ No ___ 6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of Ct? Yes ___ No ___	12. Does your company have a written affirmative action Plan? Yes ___ No ___ If no, please explain.  13. Is there a person in your company who is responsible for equal employment opportunity? Yes ___ No ___ If yes, give name and phone number. _____

1. Will the work of this contract include subcontractors or suppliers? Yes\_\_ No\_\_

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above?

Yes\_\_ No\_\_

**PART IV - Bidder Employment Information**

Date:

JOB CATEGORY *	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	male	female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

\*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification  (X)	3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source		
State Employment Service				Work Experience	
Private Employment Agencies				Ability to Speak or Write English	
Schools and Colleges				Written Tests	
Newspaper Advertisement				High School Diploma	
Walk Ins				College Degree	
Present Employees				Union Membership	
Labor Organizations				Personal Recommendation	
Minority/Community Organizations				Height or Weight	
Others (please identify)				Car Ownership	
				Arrest Record	
				Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)
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## TAB J

### Plans

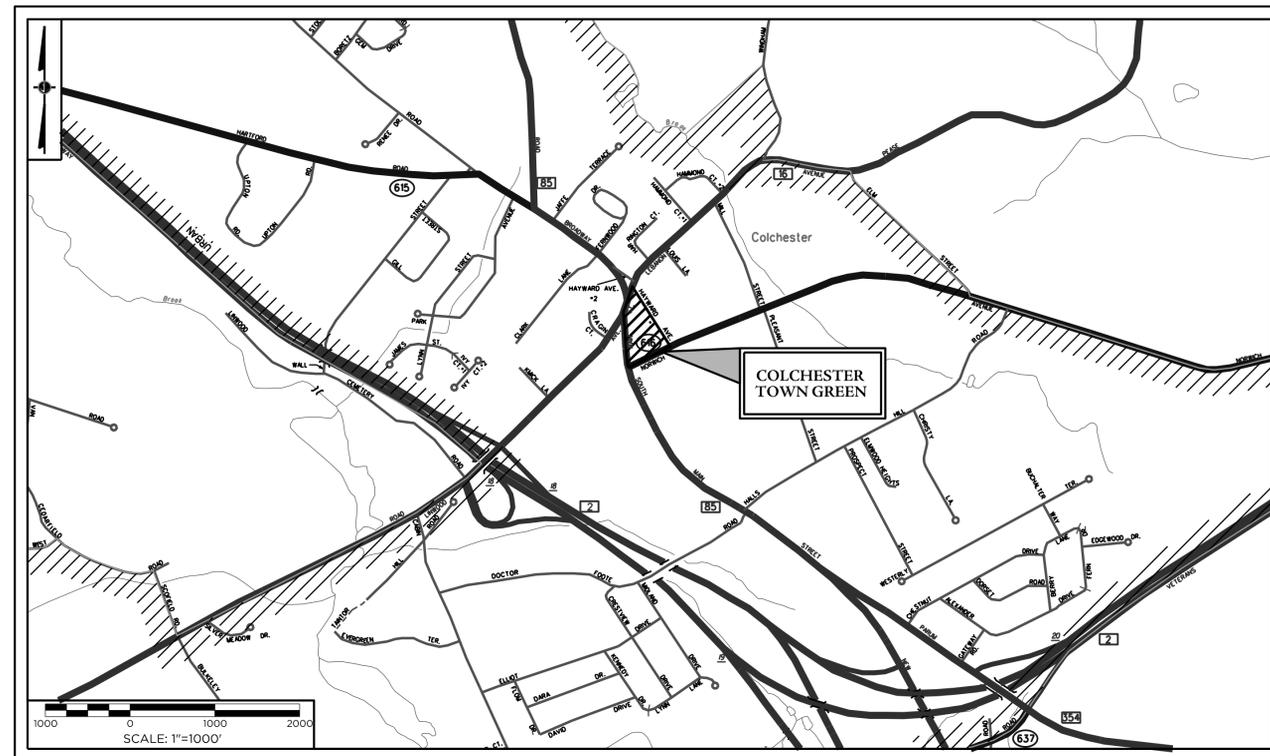
# COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT

FUNDED BY

## COMMUNITY CONNECTIVITY GRANT PROGRAM

PREPARED FOR

TOWN OF COLCHESTER  
127 NORWICH AVENUE  
COLCHESTER, CT 06415



**LOCATION MAP**  
SCALE: 1" = 1000'

### LIST OF SHEETS

DATE: 06/08/21  
REVISED:

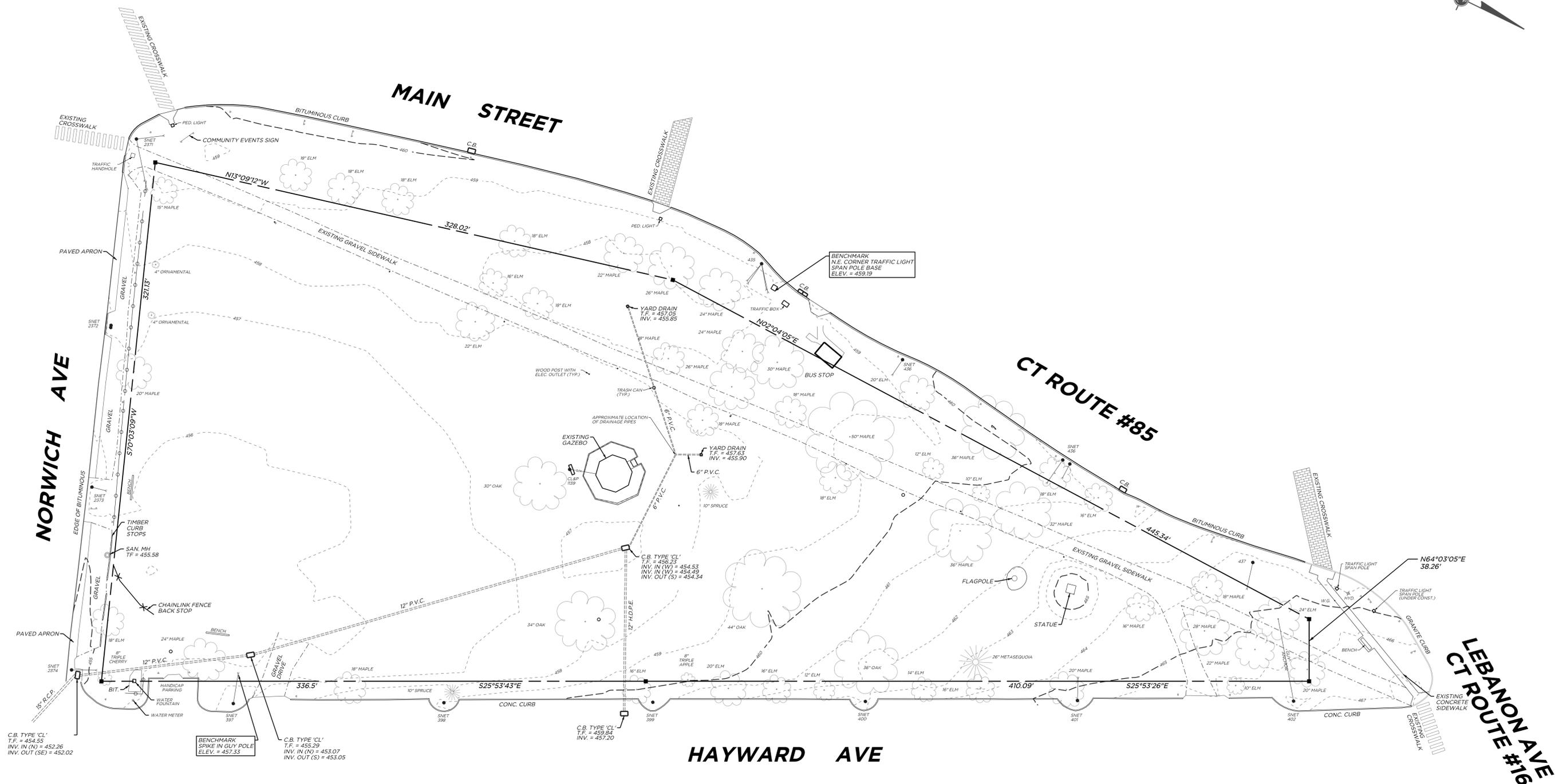
EXISTING CONDITIONS PLAN  
LAYOUT, GRADING & DRAINAGE PLAN  
SITE DETAILS

1  
2  
3

PREPARED BY:

 **Barton & Loguidice**  
ANCHOR  
41 Sequin Drive  
Glastonbury, CT 06033  
Phone: (860) 633-8770  
Fax: (860) 633-5971  
www.bandct.com

Civil Engineering • Environmental Consulting • Land Surveying • Construction Management



**SURVEY NOTES**

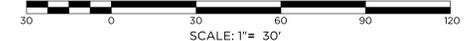
1. FIELD SURVEY WAS PERFORMED BY ANCHOR ENGINEERING SERVICES IN APRIL 2019.
2. BEARINGS, COORDINATES AND ELEVATIONS SHOWN HEREON ARE BASED ON HORIZONTAL DATUM: NAD 83 AND VERTICAL DATUM: NAVD 88 WHICH WERE OBTAINED FROM CT DOT PROJECT NUMBER 172-443-A (MAP REF. 3). HORIZONTAL DATUM OBTAINED FROM CONTROL POINTS 2 THRU 5. VERTICAL DATUM BASED ON CGS MONUMENT 571X (ELEV. 457.49' PER SAID MAP REFERENCE 3).
3. UTILITY NOTE: UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROL TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO BARTON AND LOGUIDICE, LLC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG #811.

**MAP REFERENCES**

- 1) CONNECTICUT STATE HIGHWAY DEPARTMENT - RIGHT OF WAY MAP - TOWN OF COLCHESTER HAYWARD AVENUE & NORWICH AVENUE FROM THE GREEN EASTERLY ABOUT 3,600.0 FEET. ROUTE NO. 17. SCALE: 1"=40'. PROJECT NUMBER 199. SHEET 1 OF 2. APPROVED DATE: 5-24-29.
- 2) CONNECTICUT STATE HIGHWAY DEPARTMENT - RIGHT OF WAY MAP - TOWN OF COLCHESTER HARTFORD - NEW LONDON TURNPIKE IN THE VICINITY OF COLCHESTER CENTER. ROUTES NO. 17 & 102. SCALE: 1"=40'. PROJECT NUMBER 68. SHEET 207-3. APPROVED DATE: 9-27-27. LAST REVISED 7-20-22.
- 3) STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION - TRAFFIC SURVEY - CT 85 AT CT 16 AND SR 616 - INT. #028-203 & #028-205 IN THE TOWN OF COLCHESTER. PROJECT NO. 172-443-A. SCALE: 1"=40'. DATE: MAY 2016. LAST REVISION 11-15-17.
- 4) GENERAL LOCATION SURVEY SHOWING EXISTING CONDITIONS FOR COLCHESTER GREEN PREPARED FOR COLCHESTER BUSINESS ASSOCIATION: HAYWARD, LEBANON & NORWICH AVENUES AND MAIN STREET, COLCHESTER, CONNECTICUT. SCALE: 1"=30'. DATE: MAY, 13, 2005. BY: HEALEY AND ASSOCIATES, LLC.

**LEGEND**

HIGHWAY LINE	—————
MAJOR CONTOUR	-----
MINOR CONTOUR	-----
EDGE OF GRAVEL	-----
WOOD GUARD RAIL	-----
UTILITY POLE	SNET ●
GUY ANCHOR	—
HIGHWAY SIGN	—
CATCH BASIN	C.B. □
WATER GATE	W.G. ●
HYDRANT	HYD. ✕
CT HIGHWAY DEPARTMENT MONUMENT - FOUND	■



THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES. "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT". IT IS AN EXISTING CONDITIONS PLAN, CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC SURVEY 1-2 BOUNDARY DETERMINATION CATEGORY RESURVEY. THE PURPOSE OF THIS SURVEY IS TO DEPICT THE CURRENT CONDITIONS OF THE COLCHESTER TOWN GREEN.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

WILLIAM E. WERTZ, CT. L.S. #70067  
 ANY ORIGINAL OR DUPLICATE OF THIS MAP IS NOT VALID UNLESS IT BEARS THE EMBOSSED SEAL OF THE SURVEYOR WHOSE REGISTRATION APPEARS ABOVE NO OTHER CERTIFICATION OR WARRANTY IS EXPRESSED OR IMPLIED.

**Barton & Loguidice**  
ANCHOR ENGINEERING

41 Sequin Drive  
Glastonbury, CT 06033  
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www.anchorengr.com

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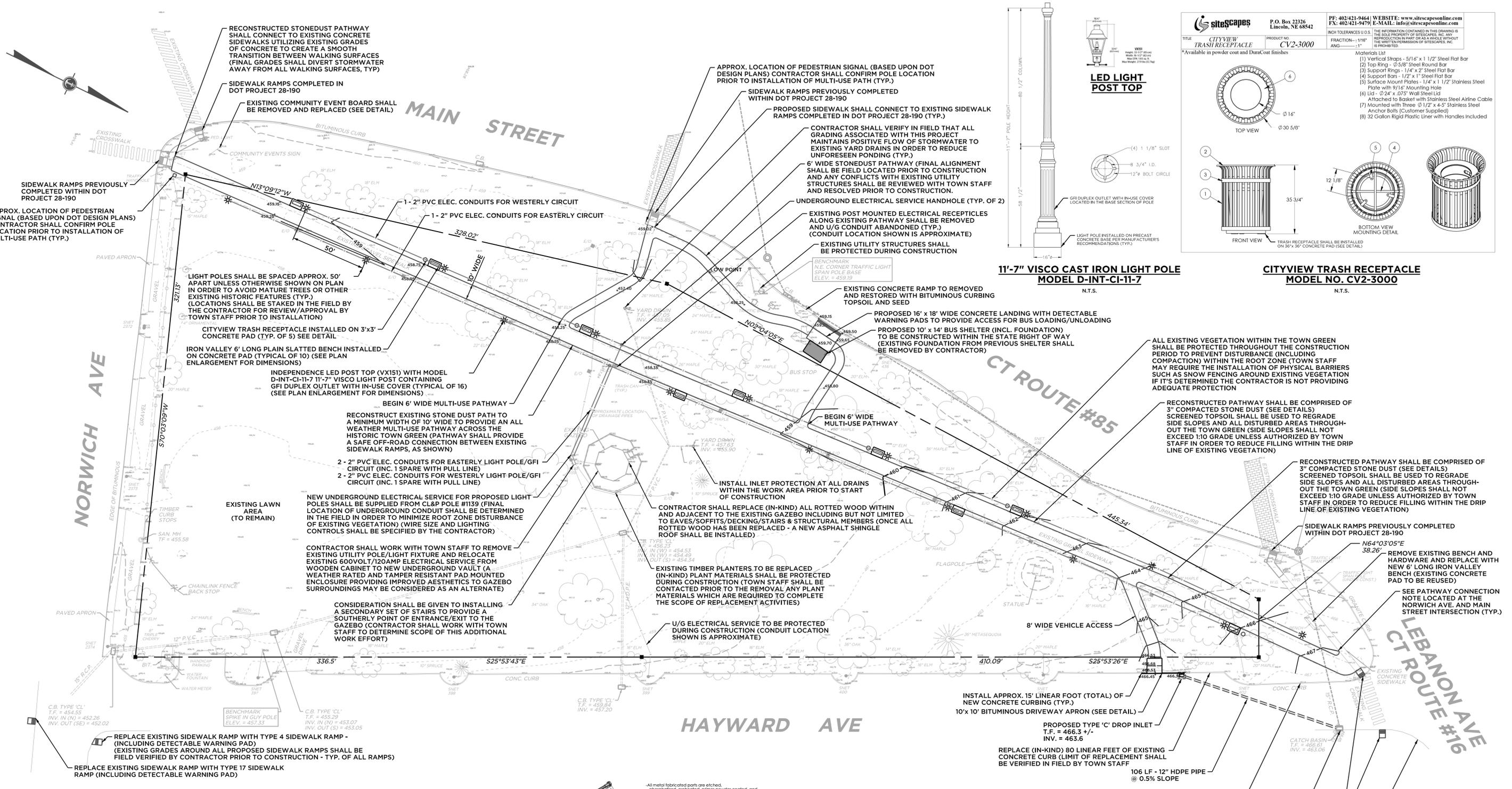
PROJ. ENGINEER MJP  
 PROJ. MANAGER KRK  
 OFFICE REVIEW WEW

**EXISTING CONDITIONS PLAN**  
 PREPARED FOR TOWN OF COLCHESTER  
**COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT**

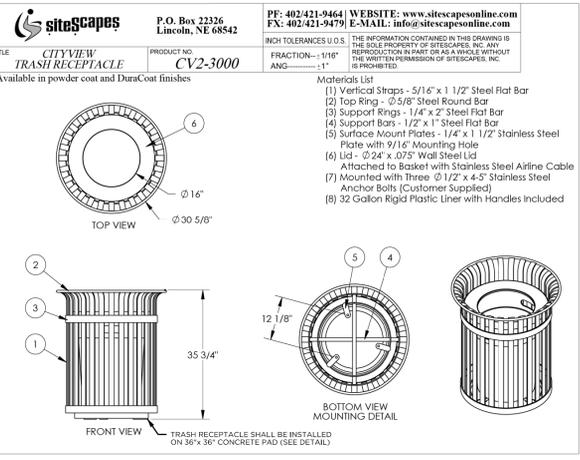
NORWICH AVENUE (RTE. 616) COLCHESTER, CT

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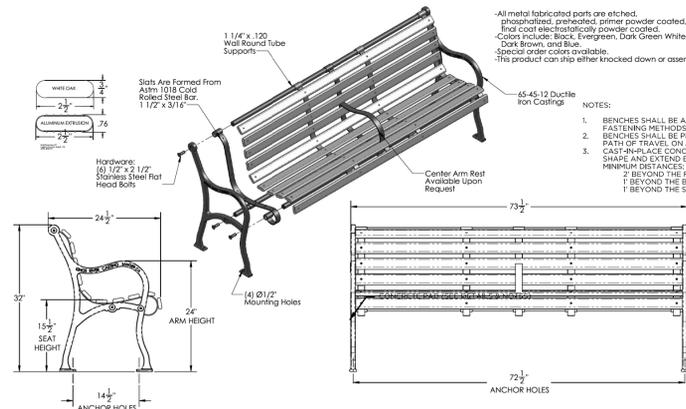
REVISIONS				
PROJECT	DATE	SHEET NO. 1 OF 3		
SCALE: 1"= 30'	084-17	06/08/21		



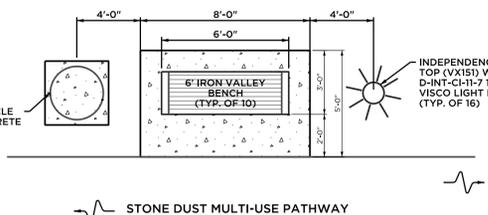
**11'-7" VISCO CAST IRON LIGHT POLE MODEL D-INT-CI-11-7**  
N.T.S.



**CITYVIEW TRASH RECEPTACLE MODEL NO. CV2-3000**  
N.T.S.



**IRON VALLEY 6' LONG PLAIN SLATTED WOOD PEDESTRIAN BENCH DETAIL**  
N.T.S.



**PLAN ENLARGEMENT DEPICTING BENCH/TRASH RECEPTACLE/BIKE RACK & LIGHT**  
1/4" = 1'-0"

- NOTES:**
- ALL WORK WITHIN THE STATE RIGHT OF WAY IS SUBJECT TO REVIEW AND APPROVAL BY CTDOT, INCLUDING BUT NOT LIMITED TO ACQUIRING AN ENCROACHMENT PERMIT.
  - PLANS AND SPECIFICATIONS FOR THE PROPOSED BUS SHELTER SHALL BE PROVIDED BY THE RESPECTED UTILITY COMPANIES OR GOVERNMENT AGENCIES, AND APPROVED BY CTDOT DIVISION II PRIOR TO CONSTRUCTION.
  - UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTED UTILITY COMPANIES OR GOVERNMENT AGENCIES, FROM PAROL TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO BARTON AND LOGUIDICE LLC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG: 1-(800) 922-4455.
  - ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE TOWN OF COLCHESTER'S PUBLIC IMPROVEMENT STANDARDS. ALL MATERIALS AND METHODS OF CONSTRUCTION WITHIN THE STATE OF CONNECTICUT RIGHT-OF-WAY SHALL CONFORM TO STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION (CTDOT) STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION, FORM 818, AS AMENDED.
  - THE SITE SHALL BE DEVELOPED IN SUCH A MANNER AS TO MINIMIZE EROSION, BOTH DURING CONSTRUCTION AND AFTER DEVELOPMENT AND TO PREVENT SEDIMENTATION OF WATERCOURSES AND STORM DRAINAGE SYSTEMS BOTH ON AND OFF THE SITE. DISTURBED AREAS SHALL BE KEPT TO A MINIMUM AND SEEDED AS SOON AS IS PRACTICAL. REASONABLE EROSION/SEDIMENTATION CONTROLS SHALL BE USED INCLUDING, BUT NOT LIMITED TO, STAKED HAY BALES, DRAINAGE DIVERSION, TEMPORARY SEEDING AND INLET PROTECTION.
  - PAVEMENT SAWCUTS SHALL BE LIMITED TO AREAS AROUND REPLACED SIDEWALK RAMPS, CURBING AND NEW CATCH BASIN/STORM DRAINAGE PIPING.



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PROJ. ENGINEER: MJP  
PROJ. MANAGER: KRK  
OFFICE REVIEW: KRK

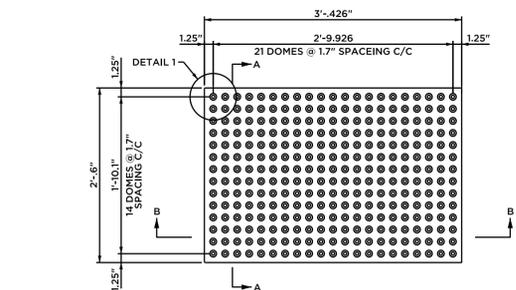
**LAYOUT, GRADING & DRAINAGE PLAN**  
PREPARED FOR TOWN OF COLCHESTER

**COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT**

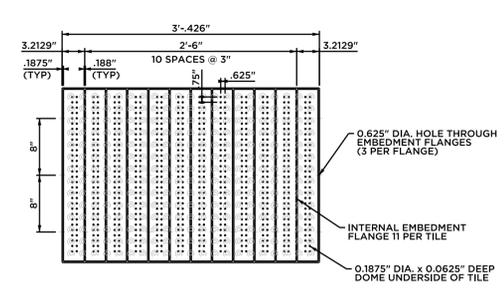
NORWICH AVENUE (RTE. 616) COLCHESTER, CT

PROJECT: 084-17 DATE: 06/08/21 SHEET NO. 2 OF 3

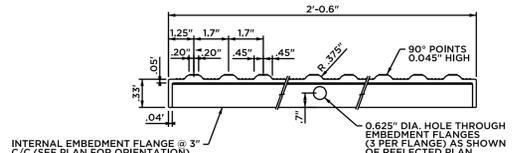
SCALE: 1" = 30'



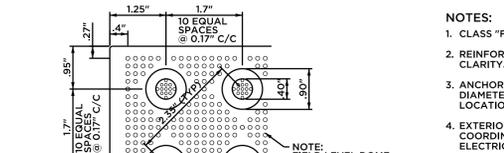
**PLAN - TILE**



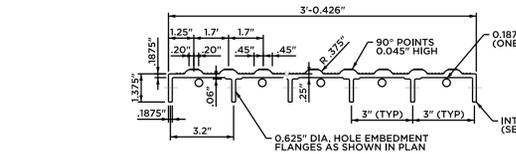
**REFLECTED PLAN - TILE**



**SECTION A-A**



**DETAIL 1**

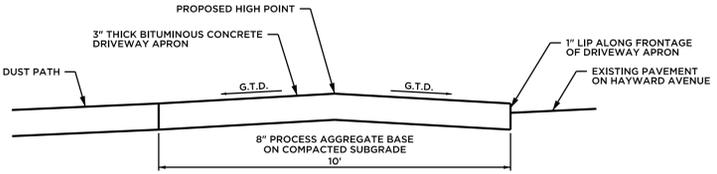


**SECTION B-B**



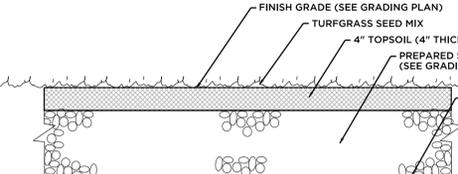
**DETECTABLE WARNING SURFACE**

NOT TO SCALE



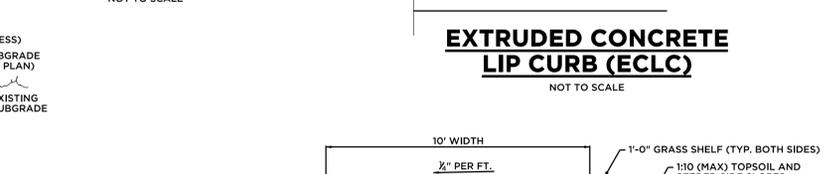
**10' x 10' DRIVEWAY APRON**

NOT TO SCALE



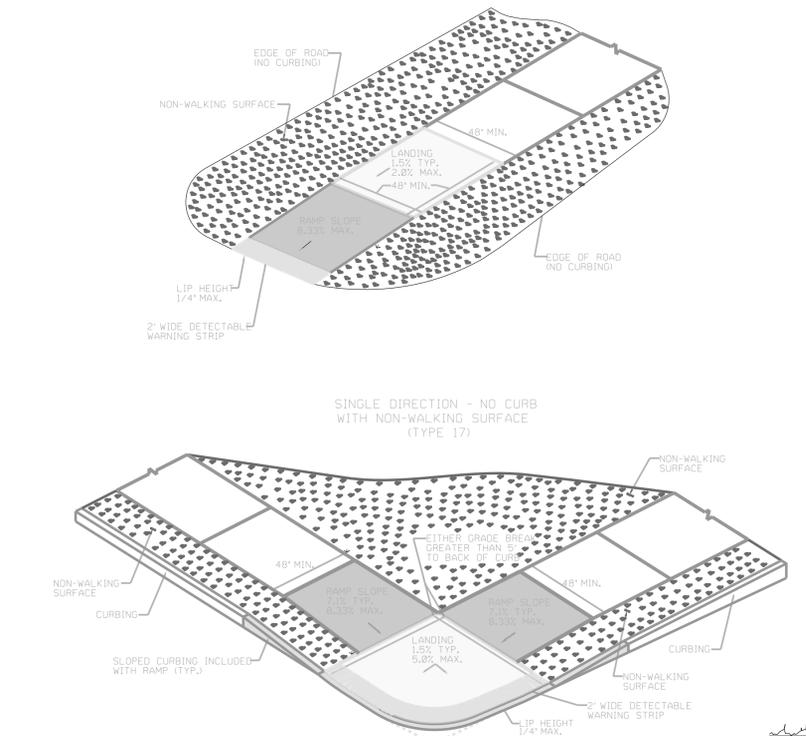
**TURF ESTABLISHMENT**

NOT TO SCALE



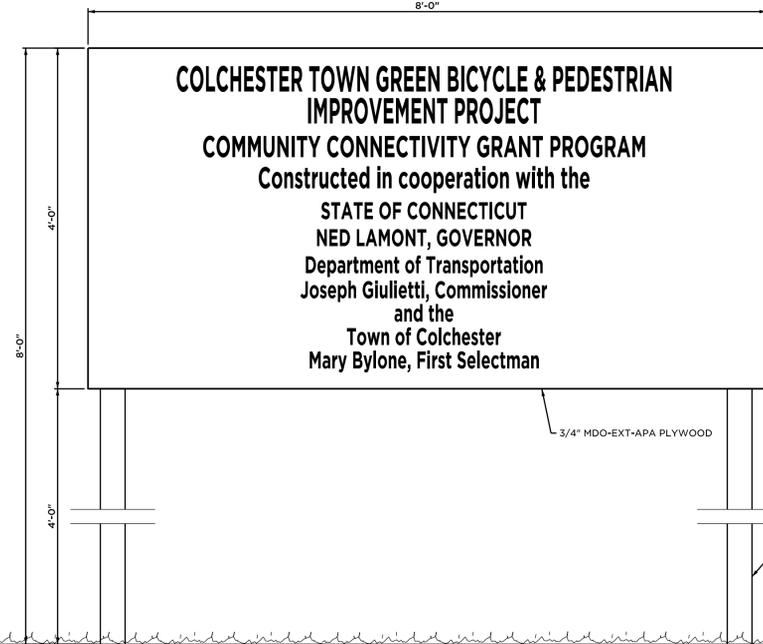
**STONE DUST PATH**

NOT TO SCALE



**TYPICAL SIDEWALK RAMP SECTION**

NOT TO SCALE



**COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT**  
**COMMUNITY CONNECTIVITY GRANT PROGRAM**  
 Constructed in cooperation with the  
**STATE OF CONNECTICUT**  
**NED LAMONT, GOVERNOR**  
 Department of Transportation  
**Joseph Giullietti, Commissioner**  
 and the  
**Town of Colchester**  
**Mary Bylone, First Selectman**

**SIGN NOTES:**

- SIGN PANEL SHALL BE 3/4" MDO-EXT-APA PLYWOOD SUPPORTED WITH (2) 4X4 TREATED WOOD COLUMNS AND SECURED 4' INTO GRADE. TOP OF SIGN AT 8'-0" ABOVE GRADE.
- ALL LETTERS AND SYMBOLS SHALL BE BLUE CODE #0000FF, RGB (0, 0, 255), PANTONE 294, OR APPROVED EQUAL. BACKGROUND SHALL BE WHITE CODE #FFFFFF, RGB (255, 255, 255), OR APPROVED EQUAL. IF PLYWOOD IS USED FOR THE SIGN PANEL, THE BACK OF THE PANEL SHALL BE PAINTED MATTE BLACK.
- TYPE FACE SHALL BE HELVETICA MEDIUM.
- SIGN MUST BE LOCATED TO BE CLEARLY VISIBLE TO THE PUBLIC.
- SIGN SHALL BE INSTALLED AT THE START OF CONSTRUCTION AND REMOVED AT CONSTRUCTION COMPLETION.
- SEE STATE OF CONNECTICUT DEPARTMENT TRANSPORTATION CT CONNECTIVITY CCGP, REQUIREMENTS FOR PROJECT FUNDING SIGNS DOCUMENT FOR MORE DETAILS.
- CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO ORDERING AND INSTALLING.

**STATE OF CONNECTICUT - PROJECT SIGN**

NOT TO SCALE

**TRENCHING & BACKFILLING**

NOT TO SCALE

**TYPE "C" DROP INLET**

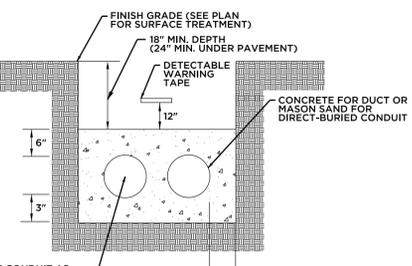
NOT TO SCALE

**HAY BALES AROUND CATCH BASIN**

NOT TO SCALE

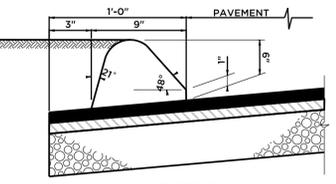
**CONCRETE PAD**

NOT TO SCALE



**TYPICAL UG CONDUIT OR DUCT BANK**

NOT TO SCALE

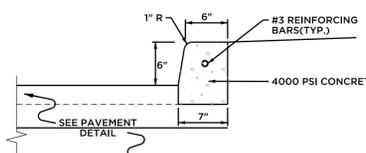


**SECTION**

- CURB NOTES:**
- SURFACE ON WHICH CURBING IS PLACED SHALL BE CLEAN AND AN APPROVED TACK COAT SHALL BE APPLIED JUST PRIOR TO PLACING CURB.
  - CURBING SHALL BE MACHINE EXTRUDED.

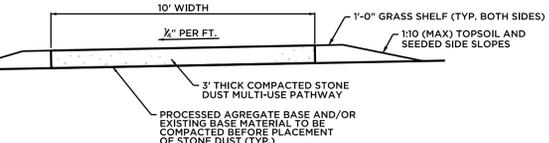
**BITUMINOUS CONCRETE CURB (BCLC)**

NOT TO SCALE



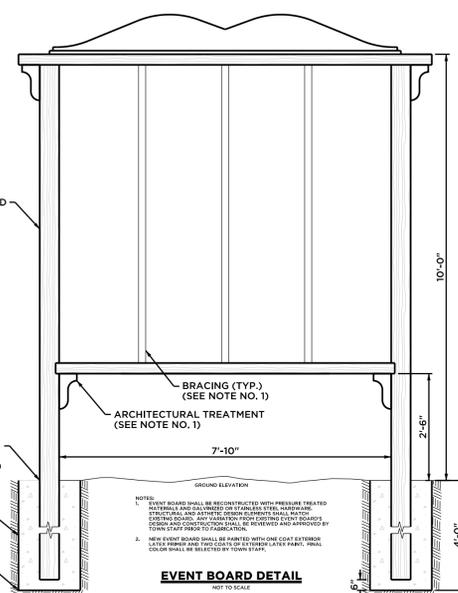
**EXTRUDED CONCRETE LIP CURB (ECLC)**

NOT TO SCALE



**STONE DUST PATH**

NOT TO SCALE



**EVENT BOARD DETAIL**

NOT TO SCALE

**Barton & Loguidice**  
 ANCHOR

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PROJ. ENGINEER: MJP  
 PROJ. MANAGER: KRK  
 OFFICE REVIEW: MMZ

**SITE DETAILS**  
 PREPARED FOR TOWN OF COLCHESTER  
**COLCHESTER TOWN GREEN BICYCLE & PEDESTRIAN IMPROVEMENT PROJECT**  
 NORWICH AVENUE (RT. 616) COLCHESTER, CT

PROJECT: 84-17 DATE: 06/08/21 SHEET NO. 3 OF 3

SCALE: AS NOTED