

**SECTION 01 1100**  
**SUMMARY OF WORK**

**PART 1 - GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

**1.02 SECTION INCLUDES**

- A. The Work of this section includes all labor, materials, equipment and services necessary to complete the Summary of Work as shown on the drawings and/or specified herein.
  - 1. General description.
  - 2. Contractor's duties.
  - 3. Codes.

**1.03 CONTRACTOR'S DUTIES**

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

**1.04 APPLICABLE CODES**

- A. All references to codes, specifications, and standards referred to in the Specification Sections and on the Drawings shall mean, and are intended to be,

the latest edition, amendment, and/or revision of such reference standard in effect as of the date of these Contract Documents.

#### **1.05 CONTRACTS**

- A. Site construction shall be accomplished by a single phase, single prime contract.

#### **1.06 WORK SCHEDULES**

- A. All Work: The Contractor shall submit a detailed Work Schedule in accordance with the contract documents to the Owner.
- B. The Contractor shall coordinate work with the Owner, its subcontractors, and other Contractors (if any) at the site. The Site Contractor shall prepare a Master Schedule to be updated for the duration of construction.
- C. Location of trailers, storage areas, parking areas, and staging areas shall be coordinated with the Owner and Engineer.
- D. It is the responsibility of the Contractor to carefully interface all construction operations until they reach their final completion, and so the Owner's programs and service can be carried on without interruptions so that a smooth flow of all operations by all individual trades will be achieved within the allotted time.

#### **1.07 CONTRACTOR'S USE OF PREMISES**

- A. General:
  - 1. During the construction period, the Contractor will have full use of the premises within the contract limit line for construction operations.
  - 2. Confine operations to areas within Contract limits indicated. Portions of the site beyond areas in construction operations are not to be disturbed.
- B. Site Access: Keep driveways and entrances serving the premises clear and available to the Owner, Owner's employees and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
- C. Do not unreasonably encumber site with materials or equipment.
- E. Each Contractor is responsible for delivery/receipt, unloading, protection and safekeeping of their materials, products and equipment stored on the premises or incorporated into the construction, until their contract is complete and accepted by the Owner.

#### **1.08 LINE AND LEVELS**

- A. Contractor shall layout all work prior to construction and will be held responsible for accuracy. Layout approval of Owner and Architect is required prior to construction.

- B. Contractor shall establish and maintain a datum or benchmark(s) at convenient location(s) which will remain throughout the Work, for convenience and constant reference for use of all contractors and subcontractors.

#### **1.09 TIME FOR COMPLETION**

- A. It is understood and mutually agreed that the time for Substantial Completion is an essential condition of their Contract.
- B. Contractor agrees that work shall be prosecuted diligently and uninterruptedly at such rates as will insure Substantial Completion of all work before the date stated on the Contract.
- C. It is expressly understood and agreed by Contractor and Owner that the time for Substantial Completion is reasonable, taking into consideration average climatic range, restrictions concerning user of the site, and other conditions prevailing.
- D. Contractor shall schedule work accordingly.

#### **1.10 COORDINATION OF CONTRACTORS' WORK**

- A. The works under their proposal includes labor, materials, equipment, and expenses to produce the construction required by the bidding and contract documents, complete in all respects. Their summary of work section takes precedence over information contained elsewhere in bid documents.
- B. Preparation of shop drawings, coordination drawings, and submittals for all systems is a specific requirement of their proposal and bidders are to include in their proposal the provisions for their requirement.
- C. Any and all surveys, layouts, etc. required to accomplish the work is to be provided by the Site Contractor. The Site Contractor will provide coordinate bench marks and coordinates for all trades, but it is a specific requirement that each contract provide their own layouts, surveys, etc. from those points. Damage to any existing survey points is the responsibility of the Contractor and must be replaced in a timely manner at no additional cost to the Owner.
- D. The Contractor will be required to prepare and actively implement a proper safety program throughout the duration of the project. The Contractor will provide all necessary signs, bracing, special lighting, etc. for their own work at all individual locations as may be applicable.
- E. Contractor will be responsible for providing drinking water for their own personnel.
- F. The Contractor will provide temporary toilet facilities at the project site as to provide convenience and accessibility to all craft and for the use of all contractors.
- G. The Contractor will provide all dumpsters and disposal required for the duration

of the project. Contractor will be responsible for their own waste pickup, cleaning, separation, and loading of waste.

- H. The Contractor is expected to review all the plans and specifications for all work as it may affect their work and/or trade jurisdiction and to include in their proposal all costs necessary to make connections with or coordinate with those requirements whether expressly stated herein or implied.
- I. Excavation, backfill, and compaction are the responsibility of the Contractor. Their responsibility is to include any necessary dewatering, shoring, temporary protection, etc. required to completed scope of work.
- J. Contractor shall restore all areas disrupted in the performance of their work to existing conditions prior to the completion of that work.
- K. The Contractor will be responsible for the installation, maintenance, and removal of the onsite staging area as approved by the Owner.
- L. The Contractor shall take into account weather conditions for their project. Contractor shall include in its bid all costs required to provide any and all required weather protection for their work including temporary enclosures, heat, scheduling, material, additives or protection.

#### **1.11 CONTRACTOR USE OF PREMISES**

- A. Confine operations to areas within construction areas. Portions of the site beyond areas in which construction operations are indicated are not to be disturbed.
- B. The Contractor shall limit work to the areas affected by their Contract and shall coordinate their work with the contiguous works of the Building Contract.

#### **1.12 PROJECT SCHEDULE**

- A. The Contractor is encouraged to complete the project in as short a period of time as is practicable. The Contractor shall submit a detailed bar type project schedule to include the following project milestones:

|                         |                         |
|-------------------------|-------------------------|
| Site Construction Start | Monday, May 5, 2025     |
| Substantial Completion  | Friday, August 15, 2025 |
| Project Closeout        | Friday, August 29, 2025 |

#### **1.13 WARRANTY/GUARANTEE**

- A. General: Warranties/Guarantees specified in their Section shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and are in addition to and run concurrent with other warranties/guarantees made by the Contractor under requirements of the Contract Documents.

- B. Guarantee: Provide a “Full System Guarantee” agreement. The President the Contracting Company shall sign guarantee. Provide a guarantee for repairing or replacement of project materials and workmanship as indicated in these Contract Documents for the following period of time:
1. 1-year guarantee from date of Substantial Completion.
- C. Experience Requirements:
- The Contractor and/or their Subcontractor(s) performing the aforementioned work shall meet the following experience requirements:
1. They shall be, and have been, actively and directly engaged in constructing similar project types and components for a minimum period of 3 or more years.
- D. The Contractor’s Project Superintendent assigned to the project, and who will be responsible for overseeing the work items identified above, shall possess at a minimum the following experience requirements:
1. Shall be, and have been, actively and directly engaged as a Superintendent in constructing similar types of site construction projects for a minimum period of 3 or more years.

#### **1.14 STAGED STOCKPILE PROTECTION**

- A. The Contractor shall take all necessary precautions to prevent sediment migration from staged soil stockpiles. All soil stockpiles shall be surrounded by perimeter controls to prevent sediment migration. Inlet protection shall also be installed at all storm structures. Stockpiles that are un-worked for greater than 14 calendar days shall be covered with tarps. Refer to *NYS Standards and Specifications for Erosion & Sediment Control* (Blue Book).

**END OF SECTION 01 1100**

**SECTION 0 1110**

**GENERAL WORK CONDITIONS**

**PART 1 - GENERAL**

**1.01 INTENT OF CONTRACT DOCUMENTS**

- A. The intent of the Contract Documents is to provide for the work herein outlined to be complete in every detail for the purpose designated and the Contractor hereby agrees to furnish everything necessary for such construction, notwithstanding any omission in the Contract Documents.
- B. The Contract Documents comprise the entire agreement between the Owner and the Contractor concerning the work. The Contract Documents are complementary; what is called for by one is binding as if called for by all. The Contract Documents will be construed and governed in accordance with the laws of the State of New York.
- C. The locations, character, and many details of the work are shown on the Contract Drawings. The work shall be constructed in accordance with these Drawings, and such other drawings as may be furnished from time to time by the Site Engineer. Should a dimension or detail be omitted, the Contractor shall request an interpretation from the Site Engineer in writing.
- D. Any error or discrepancy in the Contract Drawings or Specifications discovered by the Contractor shall be brought to the attention of the Site Engineer by the Contractor before proceeding with the work affected by such error or discrepancy so that the error or discrepancy can be rectified.

**1.02 PUBLISHED STANDARDS AND SPECIFICATIONS**

- A. References in the Contract Documents to published regulations, specifications, codes or standards of private and governmental technical, societies and agencies shall mean the latest edition of the referenced publication. Where referred to in these Contract Documents, published regulations, specifications, codes or standards shall be followed or complied with as if they were incorporated herein, in their entirety, as applicable to the work of their Contract and to the extent that they do not conflict with specified requirements contained in these Contract Documents.

**1.03 CARE AND PROTECTION OF WORK**

- A. From the commencement until the completion of the work, the Contractor shall be solely responsible for the care of the work covered by the Contract and for the materials, supplies and equipment delivered at the site intended to be used in the work; and all injury or damage to the same from whatever cause, shall be made good at the Contractor's expense before the final payment is made. The Contractor shall provide suitable means of protection for and shall protect all materials

intended to be used in the work, all work in progress, and all completed work. The Contractor shall take all necessary precautions to prevent injury or damage to the work by flood, fire, freezing or from inclement weather.

**1.04 ACCESS TO WORK**

- A. The Owner, their Architect, Inspectors, Agents and other employees, shall for any purpose, and any other parties who may enter into contracts with the Owner for doing work within the territory covered by their Contract shall, for all purposes which may be required by their contracts, have access to the work and the premises used by the Contractor, and the Contractor shall provide a safe and proper facilities therefor.

**1.05 WORK IN INCLEMENT WEATHER**

- A. Work which is subject to damage by inclement weather or extremes of temperature shall not be performed during such weather or if such weather is imminent unless approved protective measures are in place. The Contractor shall provide all means and methods necessary to protect vulnerable work from damage due to weather and shall replace any work damaged by weather, at no additional cost to the Owner.

**1.06 WORKING HOURS**

- A. Unless arranged for in advance and approved by the New York State Department of Labor and the Owner, working hours shall be 8 hours per day, 5 days a week, during daylight hours on weekdays only, except in the event of emergency. The Contractor shall be responsible for complying with all applicable Federal and State Labor Standards and Requirements.
- B. Work after dark will not be permitted, unless with special direction/permission of the Owner's Representative. Secure permission and coordinate with the Owner's Representative prior to proceeding.

**1.07 COLD WEATHER**

- A. No materials shall be placed in freezing weather or when freezing weather is forecast by the Weather Bureau to occur within 36 hours, unless special measures and approved precautions are taken to protect the material from freezing after deposition.
- B. In the event that freezing weather occurs before the material has acquired a sufficient set to prevent damage from freezing, the material shall be immediately protected by the Contractor in a manner fully acceptable to the Site Engineer and such protection shall be effectively maintained until final set has been obtained. All material damaged by freezing shall be removed and replaced in satisfactory condition, at the sole expense of the Contractor.

**1.08 DISRUPTION OF OWNER'S OPERATIONS**

- A. The Contractor shall notify the Owner a minimum of 48 hours in advance of any work which may affect or disrupt the operation of the existing utilities, services, or facilities.

#### **1.09 RECORD DRAWINGS**

- A. As a part of the work of their Contract, record drawings shall be prepared and maintained by the Contractor and shall show the precise, as-built locations of all buried, embedded, or concealed piping or conduit, including piping or conduit fixtures, fittings and accessories, and other buried features installed by the Contractor. Piping, conduit, or other architectural, structural and mechanical features shall also be shown on the record drawings. The Contractor shall affix their identification stamp on the record drawings along with the label "Record Drawings."
- B. Upon Substantial Completion of the Contract, and as a condition of reduction of retainage, the Contractor shall deliver 1 complete, accurate and legible set of record drawings to the Owner's Representative in AutoCAD and PDF formats. The Certificate of Substantial Completion will not be issued until the record drawings have been received by the Site Engineer.

#### **1.10 MATERIALS AND WORKMANSHIP**

- A. All materials and workmanship shall be subject to inspection and testing by the Site Engineer, including work already completed but not yet finally accepted. No work shall be covered or otherwise concealed without the Site Engineer being afforded an opportunity to inspect same.

#### **1.11 DELIVERY AND STORAGE OF MATERIALS AND EQUIPMENT**

- A. Materials and equipment, including Contractor's equipment and tools, shall be delivered and stored on site in such a manner as to not block or disrupt access to public or private property, disrupt Owner's access for operation or maintenance of the facility, disrupt zoo patron's access or interfere with safety access or equipment.
- B. Equipment and materials stored on site shall be protected by the Contractor from loss or damage, shall be maintained by the Contractor in accordance with manufacturer's instructions and shall at all times be available for inspection by the Owner's Representative.
- C. Unless stated otherwise, the Owner has no indoor space available for storage of material or equipment.
- D. The Contractor shall provide facilities for safe and secure storage of all equipment and materials, and for protection from the elements and extremes of heat or cold, in accordance with manufacturer's recommendations.
- E. The location of any on-site storage facilities shall be coordinated with the Owner. The Contractor shall be responsible for unloading and moving materials and



equipment and shall not assume that the Owner has equipment available for that purpose.

- F. Prior to delivery to the site of any material listed as toxic or hazardous, the Contractor shall submit to the Owner 1 copy of the Material Safety Data Sheet (MSDS) for the material. In addition, 1 copy of the MSDS for each item of material shall be prominently posted on the outside of the storage area in a manner which protects the sheets from the weather.
- G. The Contractor shall maintain the storage area, and any other area where materials are being used, in a safe, orderly, neat and clean condition. Materials shall be kept covered and only approved containers shall be used for storage, transport, mixing or cleaning. Empty containers shall be disposed of off-site on a regular basis. Cleaning materials and dirty rags shall not be permitted to accumulate on site or in the storage area.

#### **1.12 CONSTRUCTION TESTING**

- A. The Owner will select a prequalified independent testing laboratory and inspection professional. Unless otherwise noted, the Owner will pay for initial services of the testing laboratory and inspection professionals as described in Section 014523.
- B. The Contractor may provide their own testing at their expense, but the Owner's testing service shall be the sole basis for determining acceptability of materials or compliance with the specifications.
- C. The Contractor shall provide reasonable (48-hour minimum) notice to the Owner's Representative of the Contractor's intent to place concrete or perform other work requiring field testing so that the testing can be arranged. The Contractor shall coordinate their operations with the needs of the testing personnel and shall provide access to the work or material as required by the testing personnel.
- D. If the Contractor fails to provide adequate notice to the Owner's Representative of the Contractor's intent to place material requiring field testing, and as a result thereof the Owner's Representative is unable to arrange for the testing to accommodate the Contractor's schedule, the Owner's Representative may require that the proposed work be deferred or rescheduled until the required testing services are available. The Contractor shall make no claim for damages or delay as a result of any such deferral or rescheduling, or otherwise in connection with or arising from testing by the Owner or the Owner's testing services.
- E. In the event that initial testing indicates the placed material does not comply with the specifications, the Owner may arrange for retesting or additional testing by the Owner's testing service. If the retesting or additional testing confirms that the material does not meet the specifications, the cost of the retesting, additional testing, or subsequent testing of replacement material shall be charged to the Contractor.
- F. The testing paid for by the Owner shall not include testing or analysis of materials for pre- installation approval, such as concrete mix designs or granular materials

gradations soil analysis or proctors. These types of testing or analytical services shall be provided by the Contractor.

- G. Any specialized testing of manufactured materials or equipment, such as pipe certifications, steel certifications, pump certifications, etc. shall be provided by the Contractor or the manufacturer of the material or equipment.

### **1.13 DISPOSAL OF SPOILS**

- A. Unless otherwise noted, any and all spoils or excess material resulting from Contractor's excavations shall be disposed of off-site at the Contractor's expense. All costs associated with spoil disposal shall be included in applicable payment items, and no separate or additional payment will be made therefor. Spoil shall be disposed of in accordance with applicable federal or state regulations at sites approved for such disposal by applicable federal or state agencies. The Contractor shall be responsible for locating and providing access to such approved disposal sites and for obtaining required approvals from applicable agencies.

### **1.14 PROTECTION, SECURITY AND MAINTENANCE OF SITE**

- A. The Contractor shall be responsible for protecting and securing the site of the work from trespass, entry, malicious mischief and vandalism, and shall erect and maintain fences, lights, barricades, signs or other devices as necessary to warn the public of hazards, and secure the site from accidental or unauthorized entry. On a multi-prime contract project, the General Contractor shall be responsible for providing the means and methods for maintaining site protection and security.
- B. The Contractor shall maintain the site in a safe, neat and orderly condition and shall promptly remove on a regular basis and at their expense all dirt, rubbish and debris resulting from their operation. Prior to removal, rubbish shall be placed and stored in approved containers, such as "dumpsters," provided by the Contractor. The Owner's facilities shall not be used. On-site burning or burying of rubbish will not be permitted.
- C. The Contractor is responsible for ensuring the safety of the site for the Contractor's personnel, Owner's representatives, other officials and the general public. Barricades, fencing, cones, barrels and equipment shall be maintained in a safe manner.
- D. The Contractor shall also continuously maintain the site to prevent and/or remove any and all litter, mud, dirt, and loose materials from the site and adjacent areas. Streets shall be maintained in a clean, non-muddy, non-dusty condition by sweeping and/or water cleaning on a daily basis.

### **1.15 TEMPORARY CONSTRUCTION FENCE**

- A. The Contractor shall install and maintain, as necessary, temporary construction fencing to delineate construction areas from public usage areas for safety purposes. Temporary construction fencing shall be installed at any and all locations where it

is necessary to restrict public access to the work area, storage and field office trailer areas, and any other potential hazards for safety reasons. Fence shall be in place, complete and secured, prior to adjacent construction activity and shall be maintained throughout the work. The fence shall be removed when adjacent work has been completed.

#### **1.16 STORAGE OF FLAMMABLE OR EXPLOSIVE MATERIALS ON-SITE**

- A. In no case shall the Contractor store any flammable or explosive materials at the project site, in excess of materials needed for work to be undertaken during the current working day. At the end of the working day, all such materials shall be removed from the project site and secured at an off-site location.

#### **1.17 ACCIDENT PREVENTION**

- A. Precautions shall be exercised at all times for the protection of persons and property. The safety provisions of applicable laws, building and construction codes shall be observed. Machinery, equipment, and all hazards shall be guarded or eliminated in accordance with safety provisions of the *Manual of Accident Prevention in Construction*, published by Associated General Contractors of America, to the extent that such provisions are not in contravention of applicable law.
- B. The Contractor shall keep upon the site, at each location where work is in progress, a completely equipped first aid kit and shall provide ready access thereto at all times when persons are employed on the work.

#### **1.18 CLEANING SITE**

- A. As the work progresses, all rubbish, refuse, unused materials and tools shall be removed from the site, and the site left in a neat and orderly condition. Whenever the clearing of rubbish from, or the repairing of streets, roadways, passageways to areas, or the repairing of fences or damages is neglected, the Site Engineer will give notice to that effect to the Contractor, and if such rubbish is not removed or if said repair work is not done within 5 days thereafter, or if the Contractor does not at once take the necessary precaution to insure the safety of travel, the Owner may employ other parties to do such work and the expense thereby incurred shall be deducted from any moneys due or that may become due to the Contractor.
- B. On completion of the Contract, all structures shall be left clean and free from obstructions. All rubbish, refuse, unused materials, and contractor's equipment and tools shall be removed and the site shall be left in a neat and orderly condition for use.

#### **1.19 CONTRACTOR TO PROTECT CONTROL**

- A. The Contractor shall protect and safeguard all points, stakes, grade marks, monuments, and benchmarks at the site of the work, shall re-establish, at their own expense, any marks which are moved or destroyed due to their construction operations. The Contractor shall bear the entire expense of rectifying work

improperly installed due to not maintaining or protecting marks, or to removing, without the Site Engineer's written approval, any such established points, stakes, or marks.

**1.20 MOBILIZATION**

- A. Contractor shall coordinate with other Contractors, Village of Hamilton, and utility providers, and notify Dig Safely New York (DSNY). Contractor shall also adhere to all Occupational Safety and Health Administration (OSHA) compliance measures, and provide any traffic control necessary during construction.

**END OF SECTION 01 1110**

## SECTION 01 2200

### UNIT PRICES

#### PART 1 - GENERAL

##### 1.01 SUMMARY

- A. A unit price is an amount proposed by Bidders and stated on the Bid Form as a price per unit of measurement for materials and/or services that will be added to or deducted from the Contract Sum by Change Order in the event the estimated quantities of Work required by the Contract Documents are increased or decreased.
- B. Unit prices include all necessary material plus cost for delivery, installation, overhead, profit, insurance and applicable taxes.
- C. Refer to individual Specification Sections for construction activities requiring the establishment of unit prices.
- D. It is required that Contractors include a "Unit Price Schedule" as a bid submittal for this project. Refer to Attachment A, Section 00 4113.
- E. The Owner reserves the right to reject the Contractor's measurement of work-in-place that involves use of established unit prices, and to have this work measured by an independent surveyor acceptable to the Contractor at the Owner's expense.
- F. The Owner reserves the right to accept or reject any or all unit prices, and to negotiate if deemed to be in the Owner's best interest.

##### 1.02 UNIT PRICES

###### A. UNIT PRICE No. 01 - UNDERCUTTING:

- 1. Description: Undercutting where unsatisfactory soils are discovered. This includes excavation, removal and haul away of unsuitable material, backfill and compaction with suitable granular material as specified in Section 311201.
- 2. Unit of Measurement: Cubic yard, removed & installed.

###### B. UNIT PRICE NO. 02 - ROCK EXCAVATION:

- 1. Description: Rock excavation and removal off site as described in Section 312201.
- 2. Unit of Measurement: Cubic yard, removed.

C. **UNIT PRICE No. 03 - CONCRETE SIDEWALK:**

1. Description: Concrete sidewalk including subbase stone, reinforcement, and sealants as described in Section 321301 and as detailed on the plans.
2. Unit of Measurement: Square foot, installed.

D. **UNIT PRICE No. 04 - MEDIUM DUTY ASPHALT:**

1. Description: Medium-duty asphalt, stabilization fabric and stone subbase as described in Section 321201 and as detailed on the plans. This includes excavation and removals for placement of medium-duty asphalt.
2. Unit of Measurement: Square yard, installed.

E. **UNIT PRICE No. 05 - LIGHT DUTY ASPHALT:**

1. Description: Light-duty asphalt, stabilization fabric and stone subbase as described in Section 321201 and as detailed on the plans. This includes excavation and removals for placement of light-duty asphalt.
2. Unit of Measurement: Square yard, installed.

F. **UNIT PRICE No. 06 - GRANITE CURB:**

1. Description: Granite stone curbing as described in Section 321601 and as detailed on the plans. This includes site preparation, excavation, disposal of spoils and backfill. (Note: Restoration of adjacent pavement(s) and lawn type shall be by unit price.)
2. Unit of Measurement: Linear foot, installed.

G. **UNIT PRICE No. 07 - SEEDED LAWN:**

1. Description: Seeded lawn as described in Section 329201. This includes providing 4-inches (4") of screened topsoil, and seed. Unit Price includes lawn maintenance requirements.
2. Unit of Measurement: Square yard, installed.

H. **UNIT PRICE No. 08 - SODDED LAWN:**

1. Description: Sodded lawn as described in Section 329201. This includes providing 4-inches (4") of screened topsoil, and commercially grown sod. Unit Price includes lawn maintenance requirements.
2. Unit of Measurement: Square yard, installed.

**I. UNIT PRICE No. 09 - ONE INCH CONDUIT:**

1. Description: Provide and install 1" Schedule 40 PVC conduit as described in Section 260010. This includes trenching, bedding, backfill, compaction, and site restoration.
2. Unit of Measurement: Linear foot, installed.

**J. UNIT PRICE No. 10 - TWO INCH CONDUIT:**

1. Description: Provide and install 2" Schedule 40 PVC conduit as described in Section 260010. This includes trenching, bedding, backfill, compaction, and site restoration.
2. Unit of Measurement: Linear foot, installed.

**K. UNIT PRICE No. 11 - TELECOM INFRASTRUCTURE at LIGHT POLE:**

1. Description: Cost to provide and install a 1" telecom conduit stub and fully functional duplex GFCI outlet inside light pole base to support future security cameras or wireless access ports. This includes all required fittings and junction boxes to bring telecom into light poles. Installation of main telecom pathways outside of light poles are not included in unit price.
2. Unit of Measurement: Each, installed.

**END OF SECTION 01 2200**

## **SECTION 01 2300**

### **ALTERNATES**

#### **PART 1 - GENERAL**

##### **1.01 GENERAL REQUIREMENTS**

- A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

##### **1.02 SECTION INCLUDES**

- A. To allow the Owner to compare total costs where alternate materials and methods might be used, and to enable the Owner's decision prior to awarding the Contract, certain alternates have been established as described in this section of these specifications.

##### **1.03 RELATED SECTIONS**

- A. Where noted herein, pertinent sections of these specifications describe the materials and methods required under the various alternates.

##### **1.04 SUBMITTALS**

- A. Alternates described in this Section are required to be submitted on appropriate form as approved by the Owner.
- B. Any additional costs to the Contractor due to the inclusion of alternates shall be included in the amount to be added to the Contract Sum, so that no additional costs shall be borne by the Owner due to the inclusion of the additive alternates.
- C. Any deductive costs to the Contractor due to the inclusion of alternates shall be included in the amount to be deducted from the Contract Sum, so that all deductive costs will accrue to the Owner due to the inclusion of deductive alternates.

##### **1.05 PROCEDURES FOR ALTERNATE BIDS**

- A. Each Bidder shall submit on the Proposal Form all Alternate Bids stated herein. Alternate Bids shall state the difference in price as "additions to" or "deductions from" the Base Bid, unless otherwise noted, for the substitution, omission, or addition to the alternate materials, items or construction from that shown and specified.
- B. The Alternate Bids, when accepted, become part of the Contract.
- C. Bidder shall carefully check the drawings and specifications to determine the extent of each Alternate Bid required.



- D. Alternate Bids shall include all overhead and profit applicable thereto.
- E. Alternate Bids shall reflect the increase or decrease in cost of all work of every name and nature which may be affected thereby and no subsequent claims for extras by reason of the Contractor's failure to observe this requirement will be considered.
- F. The description herein for each Alternate Bid is recognized to be incomplete and abbreviated, but implies that each change must be complete for the scope of the work affected. Refer to the applicable specification sections, and to applicable drawings, for the specific requirements of the work, regardless of whether references are so noted in the description of each Alternate. Coordinate related work and modify surrounding work as required to properly integrate with the work of each Alternate. It is recognized that the descriptions of Alternate Bids are primarily scope definitions, and do not necessarily detail the full range of materials and processes needed to complete the work as required. Any change of details, construction, etc., as required to accommodate the Alternate shall be the responsibility of the Contractor and shall be included in his Alternate Bid Price.
- G. Except as otherwise described or approved, materials and workmanship of the Alternate Bids shall conform to the requirements specified under the various sections of the specifications for similar items of work.
- H. Where methods of construction, materials, finishes, or details of installation required by the various Alternate Bids differ from the requirements shown on drawings or specified for corresponding items, the Alternate construction, materials, etc., will be subject to approval by the Engineer.
- I. The Contractor shall submit shop drawings and samples for the work under each accepted Alternate Bid for approval in conformance with requirements of Specification Section 01 3300 - Submittals.

## **PART 2 - EXECUTION**

### **2.01 ADVANCE COORDINATION**

- A. Immediately after award of Contract, and to the maximum extent practicable, thoroughly and clearly advise all necessary personnel and suppliers as to the nature and extent of Alternates as selected by the Owner; use all means necessary to alert those personnel and suppliers involved as to all changes in the work caused by the Owner's selection of alternates.

### **2.02 SURFACE CONDITIONS**

- A. Prior to installation of the Alternate items, verify that all surfaces have been modified as necessary to accept the installation and the item or items may be installed in complete accordance with their manufacturer's current recommendations; in the event of discrepancy, immediately notify the Engineer, and proceed as they direct.

**2.03 APPROVAL OF ALTERNATE**

- A. Approval of the Alternate makes all requirements of scope, performance, submissions, service and guarantee binding as if that material name appeared in the Specifications for the Base Bid. All necessary changes in building design or construction to accommodate the alternate materials shall be the sole responsibility of the Contractor without extra cost to the Owner. Alternate #1 (Deduct) – Delete Performance and Payment Bonds: Bidder shall state the amount to be deducted from the Base Bid to delete Performance and Payment Bond requirements from the Contract, per AIA Document A312-2010 Payment Bond/Payment Bond specified in Section 006113.

**2.04 SCHEDULE OF ALTERNATES**

- A. **ALTERNATE L-1: SODDED LAWN**  
The bidder shall state the amount to be ADDED to the Base Bid Contract Sum to install sodded lawn as described in Section 329201 in lieu of seeded lawn. This includes providing 4-inches (4”) of screened topsoil, commercially grown sod, and lawn maintenance.

**END OF SECTION 01 2300**

**SECTION 01 2500**

**SUBSTITUTION PROCEDURES**

**PART 1 - GENERAL**

**1.01 ACCEPTABLE MANUFACTURERS**

- A. Where one certain kind, type, brand or manufacture or material is specified, it shall be regarded as the required standard of quality. The absence of the "or equal" clause is not meant to exclude competition in any way; similar products of other manufacturers which are equal in quality, performance and equally adaptable for the intended purposes, as determined by the Landscape Architect, are submitted as specified herein will be considered and may be accepted.

**1.02 SUBSTITUTIONS**

- A. Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by the Contractors after Award of the Contract are considered requests for "substitutions". The following are not considered substitutions:
1. Substitutions requested by Bidders during the bidding period, and accepted prior to Award of Contract, are considered as included in the Contract Documents and are not subject to requirements specified in this section for substitutions.
  2. Revisions to Contract Documents requested by the Owner or Landscape Architect, and approved by the Landscape Architect.
  3. Specified options of products and construction methods included in Contract Documents.

**1.03 SUBSTITUTION REQUEST SUBMITTAL**

- A. Requests for substitution will be considered if received in a timely manner allowing adequate duration for processing and review so as not to delay any portion of the Project, and no later than 5 days after Award of Contract may be considered or rejected at the discretion of the Landscape Architect and shall be submitted as follows:
1. Identify the date of request for substitution. Identify the product, or the fabrication or installation method to be replaced in each request. Include related specification section and drawing numbers. Provide complete documentation showing compliance with the requirement for substitutions, and the following information as appropriate:
    - a. Product Data, including drawing and description of products, fabrication, and installation procedures.
    - b. Samples, where applicable or requested.
    - c. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant

- d. qualities may include elements such as size, weight, durability, performance and visual effect.  
Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate contractors that will become necessary to accommodate the proposed substitutions.
  - e. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution.
  - f. Accurate cost data on proposed substitution in comparison with product or method specified.
  - g. Certification by the Contractor that the substitution proposed is equal to or better in every significant respect to that required by the Contract Documents, and that it will perform adequately in the application indicated. Include the Contractor's written waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
  - h. Name and address of similar projects on which product was used and date of installation.
- B. Landscape Architect's Action: Within 1 week of receipt of the request for substitution, the Landscape Architect will request additional information or documentation necessary for evaluation of the request. Within 2 weeks of receipt of the request, or one week of receipt of the additional information or documentation, whichever is later, the Landscape Architect will notify Contractor of acceptance or rejection of the proposed substitution. If a decision on use of a proposed substitute cannot be made or obtained within the time allocated, use the product specified by name.

#### **1.04 CONDITIONS FOR SUBSTITUTIONS**

- A. The Contractors' substitution request will be received and considered by the Landscape Architect when one or more of the following conditions are satisfied, as determined by the Site Engineer; otherwise requests will be returned without action except to record non-compliance with these requirements.
- 1. Extensive revisions to Contract Documents are not required.
  - 2. Proposed changes are in keeping with the general intent of Contract Documents.
  - 3. The request is timely, fully documented and properly submitted.
  - 4. The request is directly related to an "or equal" clause or similar language in the Contract Documents.
  - 5. The specified product or method of construction cannot be provided within the Contract Time. The request will not be considered if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.

6. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
  7. A substantial advantage is offered to the Owner, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting responsibilities the Owner may be required to bear. Additional responsibilities for the Owner may include additional compensation to the Landscape Architect for redesign and evaluation services, increased cost of other construction by the Owner or separate Contractors, and similar considerations.
  8. The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the incompatibility,
  9. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution can be coordinated.
  10. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provides the required warranty.
  11. Where a proposed substitution involves other Contractors, Contractor shall coordinate the work, provide uniformity and consistency, and to assure compatibility of products.
- B. In making request for substitution, Contractors represent:
1. They will provide the same or greater guarantee for substitution as for product or method specified.
  2. They will coordinate installation of accepted substitution into work, making such changes as required for work to be completed.
  3. They waive all claims for additional costs related to substitution in which it becomes apparent before, during or after installation.
  4. Cost data is complete and includes all related costs under their Contract, but excludes:
    - a. Landscape Architect's redesign
    - b. Costs under separate contract
  5. Contractors requesting substitution shall bear additional costs to all parties due to their substitution including Landscape Architect redesigns and costs associated but under a separate Contract.
- C. The Contractor's submittal and Landscape Architect acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.

**END OF SECTION 01 2500**

**SECTION 01 2600**

**MODIFICATION PROCEDURES**

**PART 1 - GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. Minor Changes in the Work: The Landscape Architect will issue instructions authorizing minor changes in the Work on AIA Form G710.
- B. Owner-Initiated Change Order Proposal Requests: The Landscape Architect will issue a description of proposed changes in the Work that require adjustment to the Contract Sum or Time. The description may include supplemental or revised Drawings and Specifications.
  - 1. Proposal requests are for information only, not instruction to stop work or to execute the proposed change.
  - 2. Within 5 days of receipt, submit an estimate of cost necessary to execute the change for the Owner's review.
    - a. Include an itemized list of products required and unit costs, with the total amount of purchases.
    - b. Indicate delivery charges, equipment rental, and trade discounts.
    - c. Indicate the effect the change will have on the Contract Time.
  - 3. Contractor shall endeavor to solicit reasonable prices from high quality Subcontractors for any additional work required.
- C. Contractor-Initiated Proposals: When unforeseen conditions require modifications, the Contractor may submit a request for a change to the Owner or Landscape Architect.
  - 1. Describe the proposed change, indicate reasons for the change, and the effect of the change on the Contract Sum and Time.
  - 2. Include an itemized list of products required and unit costs, with the total amount of purchases.
  - 3. Indicate delivery charges, equipment rental, and trade discounts.
- D. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. After completing the change, submit an itemized account and supporting data to substantiate Contract adjustments.

**END OF SECTION 01 2600**

**SECTION 01 2613**

**REQUESTS FOR INFORMATION (RFI)**

**PART 1 - GENERAL**

**1.01 REQUEST FOR INFORMATION (RFI) FORM AND LOG**

- A. The Contractor shall use the RFI form at the end of this section or use an alternate form acceptable to the Owner.
- B. Contractor shall carefully study and compare Contract Documents before proceeding with fabrication and installation of Work. Promptly advise Owner or Landscape Architect of any error, inconsistency, omission, or apparent discrepancy discovered.
- C. Contractor shall allot time in construction scheduling for liaison with Landscape Architect for handling queries and clarifications.
- D. If Landscape Architect is able to respond to a request for information by making specific reference to Drawing sheet or Specification Section, the Owner retains the right to require the Contractor to reimburse for charges of Landscape Architect for performing review services for the Contractor.
- E. Contractor shall maintain a copy of the log of RFI's indicating current status of each item onsite.

**END OF SECTION 01 2613**



**REQUEST FOR INFORMATION (RFI)**

**To:** *(Engineer/Owner)*

**Date:**

**RFI No:**

**From:** *(Contractor)*

**Project:**

**Subject:**

**Specification:**

**Drawing No:**

---

**REQUEST:**

The above request has been researched and is not answered by the contract documents.

**Name:**

**Signature:**

**Title:**

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**RESPONSE:**

**Name:**

**Signature:**

**Title:**

**Date:**

**SECTION 01 2900**

**PAYMENT PROCEDURES**

**PART 1 - GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. Applications for Payment shall be consistent with previous applications and payments as certified by the Landscape Architect, and paid for by the Owner.
- B. The Contractor, not less than 30 days prior to first Application for Payment, shall submit an initial Schedule of Values using AIA Document A703 Continuation Sheet for Owner review and approval.
- C. Format: Identify each line item with specification section names and numbers from the project manual index. Provide a separate line item for labor and materials for each work category. Use separate line item for Contractor's fee and contingency.
- D. Payment-Application Forms: Use AIA Document G702 and Continuation Sheets G703 as the forms for Applications for Payment.
- E. Application Preparation: Complete every entry, including notarization and execution by a person authorized to sign on behalf of the Contractor. The Owner or Landscape Architect will return incomplete applications without action.
  - 1. Entries shall match data on the Schedule of Values and the Contractor's Construction Schedule. Use updated schedules if revisions were made.
  - 2. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.
- F. Transmittal: Submit 3 executed original copies of each Application for Payment to the Owner or Engineer. One copy shall be complete, including waivers of lien and similar attachments.
  - 1. Transmit each copy with a transmittal listing attachments and recording appropriate information related to the application.
- G. Waivers of Mechanics Lien: Submit final Applications for Payment with final waivers from every entity involved with performance of the Work covered by the application who may file a lien. Submit waivers of lien on forms, and executed in a manner, acceptable to the Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include the following:
  - 1. List of subcontractors.
  - 2. List of principal suppliers and fabricators.

3. Schedule of Values.
  4. Contractor's construction Schedule.
  5. Copies of building permits.
  6. Copies of licenses from governing authorities.
  7. Certificates of insurance and insurance policies.
- I. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment.
1. Administrative actions and submittals that shall precede or coincide with this application include the following:
    - a. Final cleaning.
- J. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following:
1. Completion or Project close-out requirements.
  2. Completion of items specified for completion after Substantial Completion.
  3. Transmittal of Project construction records to the Owner.

**END OF SECTION 01 2900**

**SECTION 01 3100**

**PROJECT MANAGEMENT and COORDINATION**

**PART 1 – GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

**1.02 SECTION INCLUDES**

- A. Work of this section includes all labor, materials, equipment and services necessary to complete the Project Coordination as specified herein, including but not limited to, the following:
  - 1. General project coordination procedures.
  - 2. Coordination with adjacent construction.
  - 3. Conservation.
  - 4. Coordination Drawings.
  - 5. Administrative and supervisory personnel.
  - 6. General cleaning and protection.

**1.03 RELATED SECTIONS**

- A. Section 01 3119 – Project Meetings
- B. Section 01 3300 – Submittals
- C. Section 01 7700 – Closeout Procedures

**1.04 COORDINATION**

- A. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in the sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to assure maximum accessibility for required maintenance, service, and repair.
  - 3. Make provisions to accommodate items scheduled for later installation
- B. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
  - 1. Prepare similar memoranda for the Owner and separate contractors

where coordination of their work is required.

- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of schedules.
  - 2. Installation and removal of temporary facilities.
  - 3. Delivery and processing of submittals.
  - 4. Progress meetings.
  - 5. Project close-out activities.
- D. Conservation: Coordinate construction operations to assure that operations are carried out with consideration given to conservation of energy, water, and materials.

## **1.05 SUBMITTALS**

- A. Coordination Drawings: Prepare coordination drawings where carefully coordination is needed for installation of products and materials fabricated by separate entities. Prepare coordination drawings where limited space availability necessitates maximum utilization of space for efficient installation of different components.
  - 1. Show the relationship of components shown on separate Shop Drawings.
  - 2. Indicate required installation sequences.
  - 3. Comply with requirements contained in Section 013300 - Submittals.
- B. Crew Names: Within 15 days of commencement of construction operations, submit a list of the Contractor's principal crew assignments, including the superintendent and other personnel in attendance at the Project Site. Identify individuals, their duties, responsibilities, and telephone numbers.

## **PART 2 - EXECUTION**

### **2.01 CLEANING AND PROTECTION**

- A. Clean and protect construction in progress and adjoining materials in place, during handling and installation. Apply protective covering where required to assure protection from damage or deterioration at Substantial Completion.
- B. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period.
- C. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:
  - 1. Excessive static or dynamic loading.
  - 2. Excessive internal or external pressures.

3. Excessively high or low temperatures.
4. Thermal shock.
5. Excessively high or low humidity.
6. Air contamination or pollution.
7. Water or ice.
8. Solvents.
9. Chemicals.
10. Light.
11. Radiation.
12. Puncture.
13. Abrasion.
14. Heavy traffic.
15. Soiling, staining, and corrosion.
16. Bacteria.
17. Rodent and insect infestation.
18. Combustion.
19. Electrical current.
20. High-speed operation.
21. Improper lubrication.
22. Unusual wear or other misuse.
23. Contact between incompatible materials.
24. Destructive testing.
25. Misalignment.
26. Excessive weathering.
27. Unprotected storage.
28. Improper shipping or handling.
29. Theft.
30. Vandalism.

**END OF SECTION 01 3100**

**SECTION 01 3119**

**PROJECT MEETINGS**

**PART 1 - GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

**1.02 SECTION INCLUDES**

- A. To enable orderly review of progress during construction and to provide for systematic discussions of problems, the Contractor will conduct progress meetings throughout the construction period.
- B. In general, progress meetings will be held at the job site in accordance with a mutually acceptable schedule.
- C. The purpose of the progress meetings is analysis of problems that might arise relative to execution of the work.

**1.03 RELATED SECTIONS**

- A. Section 01 3100 – Project Management and Coordination
- B. Section 01 3300 – Submittal Procedures

**1.04 QUALITY ASSURANCE**

- A. Persons designated by the Contractor to attend and participate in progress meetings shall have all required authority to commit the Contractor to solutions as agreed upon in the progress meetings.
- B. The Contractor's relations with his subcontractors and materials suppliers, and discussions relative thereto, are the Contractor's responsibility.

**1.05 PROGRESS MEETINGS**

- A. Contractor and Owner to schedule progress meetings throughout progress of the Work at regular intervals.
- B. Contractor to provide a brief summary, in outline form, of progress since the previous meeting and report on projected work for the next 2 weeks.
- C. Review and correct or approve minutes of the previous progress meeting.
- D. Advise the Landscape Architect at least 24 hours in advance of the project meeting regarding all items to be added to the meeting agenda.

- A. Minimum Agenda
  - 1. Safety, Security and Conduct
  - 2. Schedule
    - a. Review work progress since last meeting.
      - i. Note field observations, problems and decisions.
    - b. Identify problems which impede planned progress.
      - i. Review off-site fabrication problems.
      - ii. Develop corrective measures and procedures to regain schedule.
    - c. Coordinate projected progress with other prime contractors.
    - d. Review submittal schedules, expedite as required to maintain schedule.
  - 3. Requests for Information (RFI)
  - 4. Requests for Proposal (RFP)
  - 5. Change Orders
  - 6. Submittals
  - 7. Coordination Items
- C. Meeting Minutes:
  - 1. The contractor will compile minutes of each project meeting and will distribute copies to the Owner and the Landscape Architect within five (5) business days. The Contractor shall make and distribute such other copies as they wish.
  - 2. Note all meeting attendees and contact information.

## **PART 2 - EXECUTION**

### **2.01 MEETING SCHEDULE**

- A. Coordinate with the Owner as required to establish a mutually acceptable schedule for progress meetings.

### **2.02 MEETING LOCATION**

- A. Progress meetings shall be held at the job site to the greatest extent possible.

### **2.03 ATTENDANCE**

- A. To the maximum extent practicable, assign the same person or persons to represent the Contractor at progress meetings throughout the construction period. Subcontractors, materials suppliers, and others may be invited to attend those progress meetings in which their aspects of the work are involved.

**END OF SECTION 01 3119**



## SECTION 01 3200

### CONSTRUCTION PROGRESS DOCUMENTATION

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

- A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

##### 1.02 SECTION INCLUDES

- A. Work of this Section includes administrative and procedural requirements for documenting the progress of construction during performance of the work, including but not limited to, the following:
  1. Preliminary Construction Schedule.
  2. Contractor's Construction Schedule.
  3. Submittals Schedule.
  4. Daily construction reports.
  5. Material location reports.
  6. Field condition reports.
  7. Special reports.
  8. Construction photographs.

##### 1.03 RELATED SECTIONS

- A. Section 01 3100 – Project Management and Coordination
- B. Section 01 3119 – Project Meetings
- C. Section 01 3300 - Submittals
- D. Section 01 7700 – Execution and Closeout Requirements

##### 1.04 SUBMITTALS

- A. Submit submittals electronically to Owner and Landscape Architect.
- B. Submittals Schedule: Arrange the following information in a tabular format:
  1. Scheduled date for first submittal.
  2. Specification Section number and title.
  3. Submittal category (action or informational).
  4. Name of subcontractor.
  5. Description of the work covered.
  6. Scheduled date for Owner or Landscape Architect's final release.
- C. Preliminary Construction Schedule: Submit electronically to Owner and Landscape Architect.

- D. Contractor's Construction Schedule: Submit an electronic copy of schedule for entire construction period.
- E. Weekly Construction Reports
- F. Material Location Reports
- G. Field Condition Reports
- H. Special Reports

#### **1.05 COORDINATION**

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

### **PART 2 - PRODUCTS**

#### **2.01 SUBMITTALS SCHEDULE**

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.

#### **2.02 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL**

- A. Time Frame: Extend schedule from date established for commencement of the work to date of Final Completion.
  - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
  - 2. Work Restrictions: Show the effect of the following items on the schedule:
    - a. Coordination with building construction.
    - b. Uninterruptible services.
    - c. Partial occupancy before Substantial Completion.
    - d. Use of premises restrictions.
    - e. Provisions for future construction.
    - f. Seasonal variations.
    - g. Environmental control.
  - 3. Work Stages: Indicate important stages of construction for each major portion of the work, including, but not limited to, the following:
    - a. Subcontract awards.

- b. Submittals.
- c. Purchases.
- d. Mockups.
- e. Fabrication.
- f. Sample testing.
- g. Deliveries.
- h. Installation.
- i. Tests and inspections.
- j. Adjusting.
- k. Curing.
- l. Startup and placement into final use and operation.

B. Milestones: Include milestones indicated in the schedule.

### **2.03 PRELIMINARY CONSTRUCTION SCHEDULE**

- A. Bar-Chart Schedule: Submit preliminary horizontal bar-chart-type construction schedule within 7 days of date established for commencement of the work.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first 60 days of construction. Include skeleton diagram for the remainder of the work and a cash requirement prediction based on indicated activities.

### **2.04 REPORTS**

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

fabricated or stored away from project site.

- C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare a detailed report. Submit with a request for information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

## **2.05 SPECIAL REPORTS**

- A. General: Submit special reports directly to Owner within 1 day of an occurrence. Distribute copies of report to parties affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

## **PART 3 - EXECUTION**

### **3.01 CONTRACTOR'S CONSTRUCTION SCHEDULE**

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

### **3.02 CONSTRUCTION PHOTOGRAPHS**

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the work. Photographs with blurry or out-of-focus areas will not be accepted.
  - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.

- B. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
  - 1. Date and Time: Include date and time in the file name for each image.
- C. Preconstruction Photographs: Before starting construction, take color photographs of Project site and surrounding properties from different vantage points. Show existing conditions adjacent to property.
- D. Periodic Construction Photographs: Take color photographs monthly, coinciding with cutoff date associated with each Application for Payment. Photos shall have vantage points to best show status of construction and progress since last photographs were taken.
- E. Final Completion Construction Photographs: Take color photographs after date of Substantial Completion for submission as Project Record Documents. Owner or Engineer may direct photographer for desired vantage points.

**END OF SECTION 01 3200**

## SECTION 01 3300

### SUBMITTAL PROCEDURES

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

- A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

##### 1.02 SECTION INCLUDES

- B. Work of this section includes all labor, materials, equipment and services necessary to complete submittal requirements as specified herein, including, but not limited to, the following:
  - 1. Shop Drawings and Samples.
  - 2. Manufacturer's Literature.
  - 3. Samples.

#### PART 2 - PRODUCTS

##### 2.01 SUBMITTALS

- A. General
  - 1. The Contractor shall be responsible for coordinating the schedule for submittal of shop drawings, manufacturer's literature, and samples with their progress schedule and the requirements of the Contract Schedule, and submit a coordinated schedule of submission of all project submittals to the Landscape Architect within 30 days from Notice to Proceed.
  - 2. Failure of the Contractor to schedule submittals in ample time for checking, correction, and rechecking will not justify any delay in the Contract Schedule. Allow ample time for items to be tested, including time for retesting if the tests or mock-ups fail.
  - 3. Samples, shop drawings, manufacturers' literature, and other required information shall be submitted in sufficient time to permit proper consideration and action on same before any materials and items are delivered on the work. Stagger submissions so that the Landscape Architect can review the documents in an orderly and timely manner. All samples of materials requiring laboratory tests shall be submitted to the laboratory for testing not less than 90 days before such materials are required to be used in the work. All other samples, manufacturers' literature, and other sample information shall be submitted for approval not less than 30 days before such materials are required to be used in the work.
  - 4. Submittals for each section of the work shall be numbered consecutively, and the numbering system shall be retained throughout all revisions. Each drawings shall have a clear space for the stamps of the Contractor, Landscape Architect, and one of the Landscape Architect's consultants.

5. All submittals shall be thoroughly checked by the Contractor for compliance with the Contract Documents before submitting them to the Landscape Architect, and shall bear the Contractor's stamp of approval certifying that they have been so checked. Any shop drawings submitted without this stamp of approval and certification, and shop drawings which, in the Landscape Architect's opinion, are incomplete, contain errors or have not been checked, or only checked superficially, will be returned unchecked by the Landscape Architect for re-submission by the Contractor.
6. In checking shop drawings, the Contractor shall verify all dimensions and field conditions and shall check and coordinate the shop drawings of any Section or trade with the requirements of all other Sections or trades whose work is related thereto, as required for proper and complete installation of the work. The Landscape Architect will review shop drawings. The Engineer's acceptance of shop drawings is for design only and not method of assembly or erection. Acceptance shall in no way be construed as (1) permitting any departure whatsoever from the Contract Documents; (2) relieving the Contractor of full responsibility for any error in details, dimensions, omissions, or otherwise that may exist; (3) relieving the Contractor of full responsibility for adequate field connections, erection techniques, bracing, or deficiencies in strength; (4) relieving the Contractor of full responsibility for satisfactory performance of all work and coordination with the work of all subcontractors and other contractors; or (5) permitting departure from additional details or instructions previously furnished by the Owner or Landscape Architect. Acceptance of such drawings shall not be construed as a complete check, nor shall it relieve the Contractor from responsibility for proper fitting of the work, nor from the necessity of furnishing any work which may not be indicated on shop drawings when approved. The Contractor shall be solely responsible for any quantities which may be shown on the shop drawings.
7. No work shall be fabricated, manufactured, or installed from shop drawings stamped "Revise and Resubmit" or "Rejected", and such shop drawings shall be corrected and resubmitted by the Contractor until accepted by the Landscape Architect. At least one complete set of "No Exceptions Taken" and "Make Corrections Noted" shop drawings shall be kept at the site in the Contractor's field office for reference at all times. "Revise and Resubmit" and "Rejected" shop drawings shall not be permitted at the site.
8. Submittals marked "No Exceptions Taken":
  - a. Submittals which require no corrections by the Landscape Architect will be marked "No Exceptions Taken".
9. Submittals marked "Make Corrections Noted":
  - a. Submittals which require only a minor amount of correcting shall be marked "Make Corrections Noted". This mark shall mean that checking is complete and all corrections are obvious without ambiguity. Fabrication will be allowed on work marked "Make Corrections Noted" provided such action will expedite construction and noted corrections are adhered to. If fabrication is not made strictly in accordance with corrections noted, the item shall be rejected in the field, and the Contractor will be required to replace such work in accordance with corrected submittals.
10. Submittals marked "Revise and Resubmit" or "Rejected":
  - a. When submittals are contrary to contract requirements or too many

corrections are required, they shall be marked "Revise and Resubmit" or "Rejected". No work shall be fabricated under this mark. The Owner or Landscape Architect shall list his reasons for rejection on the submittals or in the transmittal letter accompanying their return. The submittals must be corrected and resubmitted for approval.

11. All submittals shall be identified as follows:
  - a. Date of submittal.
  - b. Title of project.
  - c. Name of Contractor and date of his approval.
  - d. Name of subcontractor or supplier and date of submittal to Contractor.
  - e. Number of submission.
  - f. Any qualification, departure, or deviation from the requirements of the Contract.
  - g. Federal Specification or ASTM number where required.
  - h. Such additional information as may be required by the Specifications for the particular material being furnished.
12. If the Contractor wishes to deviate from the materials or details as shown in Specifications or Drawings, he shall submit the proposed deviation with shop drawings and/or samples stating the extent and the materials or details being replaced. The Contractor shall also submit information on the allowed credit or extra cost required for the proposed deviation, and also all information relating to the work of other Sections revised by the proposed deviation.
13. Incomplete shop drawings will be returned without checking for proper submission, and this shall not be considered as cause for delay of the work or extra compensation to the Contractor.
14. The Contractor shall submit appropriate transmittal forms with every submittal of shop drawings, manufacturer's literature, and samples. All reproducibles shall be rolled on cardboard tubes for resubmittal. The Contractor shall submit all required shop drawings, manufacturer's literature and samples in accordance with the procedures specified herein.
15. Unless otherwise specifically directed by the Owner or Landscape Architect, make all shop drawings accurately to a scale sufficiently large to show all pertinent features of the item and its method of connection to the work.
16. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
17. The Contractor shall submit 1 copy of each standard referred to in the Specifications (ASTM, Fed. Spec., etc.) with the submission of each respective shop drawing, sample, or literature.

**B. Submission of Submittals**

1. Submit electronic pdf of each submittal to the Owner or Landscape Architect for approval. If approved, the Landscape Architect will return pdf stamped "No Exceptions Taken" or "Make Corrections Noted". In the event the Landscape Architect returns pdf stamped "Revise and Resubmit" or "Rejected", the Contractor shall make indicated changes and resubmit electronic pdf to the Landscape Architect.
2. Prints: The Contractor shall provide all prints or shop drawings as reasonably required by subcontractors, material suppliers, superintendents, inspectors, and



others as required for the work, or as directed by the Owner or Landscape Architect. The Contractor shall pay all costs in connection with printing and distribution of shop drawings.

3. Digital File Naming: All digital submittals shall follow the following file naming convention or will be returned to Contractor:

Specification Section Number\_Material or Product Name.pdf  
For example: 321201-01\_AspphaltPaving.pdf

- C. Submission of Manufacturer's Literature, Including Catalog, Catalog Cuts, Brochures, Charts, Test Data, and Similar Information:
  1. Manufacturer's literature will receive consideration only when accompanied by the transmittal form properly filled out, as indicated, and listing each item of literature, as well as the Specification Section and paragraph numbers describing such materials. Any deviations from contract requirements shall be stated on the above form or attached to it.
  2. Submit pdf of manufacturer's literature to the Owner or Landscape Architect for acceptance. If accepted, the Owner or Landscape Architect will return pdf stamped "No Exceptions Taken" or "Make Corrections Noted". The Contractor shall resubmit pdf of correct or corrected literature of all submissions stamped by the Landscape Architect "Revise and Resubmit" or "Rejected".
  3. All copies of manufacturer's literature required to be resubmitted hereunder shall be original printed material. Reproductions of printed material will not receive consideration.
- D. Submission of Samples
  1. Samples will receive consideration only when accompanied by the transmittal form properly filled out, as indicated, and listing each sample, as well as the listing of any ASTM, Federal or other standard references specified or applicable and such additional information as may be required by the Specifications for the materials being submitted. Any deviation from the contract requirements shall be so stated on the above form or attached to it.
  2. The Owner or Landscape Architect shall have the right to require submission of samples of any materials, whether or not specifically indicated in the various Sections of the Specifications.
  3. Unless otherwise specified, samples of sufficient size to indicate general visual effect shall be submitted. Where samples must show a range of color, texture, finish, graining, or other similar property, the Contractor shall submit sets of pairs illustrating the full scope of the range.
  4. One sample of each submission will be returned to the Contractor. Samples stamped "Revise and Resubmit" or "Rejected" by the Landscape Architect shall be resubmitted in triplicate by the Contractor.
  5. All samples stamped "No Exceptions Taken" or "Make Corrections Noted" shall be kept at the site in the Contractor's field office facilities for reference at all times. "Revise and Resubmit" or "Rejected" samples shall not be kept at the site.

## 2.02 SUBMITTAL FORM AND LOG

- A. The Contractor shall create a submittal form and log following a format acceptable to the Owner.

- B. The Landscape Architect will return submittals without processing if they do not contain Contractor's stamp, if they are not initialed or signed by authorized person, if they are not dated, or if it becomes evident that they have not been properly reviewed. Delays resulting therefrom are the responsibility of the Contractor.
- C. Contractor shall maintain a copy of submittal schedule and log of submittals indicating current status of each item onsite.
- D. Contractor shall allot time in construction scheduling for liaison with Owner or Landscape Architect for review of submittals. Except for special submittals, such as those with design calculations and/or detailed shop drawings, submittals will be reviewed in an average time of 5 working days.

### **PART 3 - EXECUTION**

#### **3.01 COORDINATION OF SUBMITTALS**

- A. Prior to submittal for Owner or Landscape Architect's review, use all means necessary to fully coordinate all material, including the following procedures:
- B. Determine and verify all field dimensions and conditions, materials, catalog numbers and similar data.
- C. Coordinate as required with all trades and with public agencies involved.
- D. Secure all necessary approvals from public agencies and others and signify by stamp, or other means, that they have been secured.
- E. Clearly indicate all deviations from the Contract Documents.
- F. Unless otherwise specifically permitted by the Owner or Landscape Architect, make all submittals in groups containing all associated items; the Owner or Landscape Architect may reject partial submittals as not complying with the provisions of the Contract Documents.

**END OF SECTION 01 3300**

## **SECTION 01 4000**

### **QUALITY REQUIREMENTS**

#### **PART 1 - GENERAL**

##### **1.01 GENERAL REQUIREMENTS**

- A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

##### **1.02 SECTION INCLUDES**

- A. This section includes administrative and procedural requirements for quality assurance and quality control.

##### **1.03 RELATED SECTIONS**

- A. Section 01 3100 – Project Management and Coordination
- B. Section 01 4523 – Testing and Inspection

##### **1.04 DEFINITIONS**

- A. **Quality-Assurance Services:** Activities, actions, and procedures performed before and during execution of the work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. **Quality-Control Services:** Tests, inspections, procedures, and related actions during and after execution of the work to evaluate that completed construction complies with requirements. Services do not include contract enforcement activities performed by the Landscape Architect.
- C. **Mockups:** Full-size, physical example assemblies to illustrate finishes and materials. Mockups are used to verify selections made under Sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Mockups establish the standard by which the work will be judged.
- D. **Testing Agency:** An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

##### **1.05 DELEGATED DESIGN**

- A. **Performance and Design Criteria:** Where professional design services or certifications by a design professional are specifically required of Contractor by

the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to the Landscape Architect.

## **1.06 SUBMITTALS**

- A. **Qualification Data:** For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. **Delegated-Design Submittal:** In addition to Shop Drawings, Product Data, and other required submittals, submit a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services.
- C. **Schedule of Tests and Inspections for Owner's Testing Agency:** Prepare in tabular form and include the following:
  1. Specification Section number and title.
  2. Description of test and inspection.
  3. Identification of applicable standards.
  4. Identification of test and inspection methods.
  5. Number of tests and inspections required.
  6. Time schedule or time span for tests and inspections.
  7. Entity responsible for performing tests and inspections.
  8. Requirements for obtaining samples.
  9. Unique characteristics of each quality-control service.
- D. **Permits, Licenses, and Certificates:** For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the work.

## **1.07 QUALITY ASSURANCE**

- A. **Fabricator Qualifications:** A firm experienced in producing products similar to those indicated for this project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- B. **Factory-Authorized Service Representative Qualifications:** An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design,

and extent to those indicated for this project.

- C. **Installer Qualifications:** A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this project, whose work has resulted in construction with a record of successful in-service performance.
- D. **Manufacturer Qualifications:** A firm experienced in manufacturing products or systems similar to those indicated for this project and with a record of successful in-service performance.
- E. **Professional Engineer Qualifications:** A Professional Engineer who is legally qualified to practice in the State of New York and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this project in material, design, and extent.
- F. **Specialists:** Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
  - 1. Requirement for specialists shall not supersede building codes and similar regulations governing the work, nor interfere with local trade-union jurisdictional settlements and similar conventions.
- G. **Preconstruction Testing:** Owner's testing agency shall perform preconstruction testing for compliance with specified requirements for performance and test methods.
  - 1. Contractor responsibilities include the following:
    - a. Provide test specimens and assemblies representative of proposed materials and construction. Provide sizes and configurations of assemblies to adequately demonstrate capability of product to comply with performance requirements.
    - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the work.
    - c. Fabricate and install test assemblies using installers who will perform the same tasks for project.
    - d. When testing is complete, remove assemblies; do not reuse materials on project.
- H. **Mockups:** Before installing portions of the work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed work:
  - 1. Build mockups in location and of size indicated or, if not indicated, as directed by the Engineer.
  - 2. Notify the Engineer 7 days in advance of dates and times when mockups will be constructed.
  - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
  - 4. Obtain the Engineer's approval of mockups before starting work,

- fabrication, or construction.
5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed work.
  6. Demolish and remove mockups, unless otherwise directed by the Engineer.

**PART 2 - EXECUTION**

**2.01 REPAIR AND PROTECTION**

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

**END OF SECTION 01 4000**

**SECTION 01 4523**

**TESTING AND INSPECTION**

**PART 1 - GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

**1.02 SECTION INCLUDES**

- A. Work of this section includes all labor, materials, equipment and services necessary to complete the testing and inspection requirements as specified herein.

**1.03 RELATED SECTIONS**

- A. Requirements for testing and inspection shall be described in various sections of these specifications. Where no testing and inspection requirements are described but the Owner decides that it is required, the Owner may require additional testing and inspection to be performed at his own expense.
- B. Work Not Included
  - 1. Unless otherwise noted in this section or other section of work, the Owner will select a pre-qualified independent testing laboratory and inspection professional.
  - 2. Unless otherwise noted in this section or other sections of work, the Owner will pay for all initial services of the testing laboratory and inspection professionals as further described in Article 2.01 of this section of these Specifications.

**1.04 QUALITY ASSURANCE**

- A. The testing laboratory will be qualified to the Owner's approval in accordance with ASTM E-329- 11b "Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection".
- B. Testing, when required, will be in accordance with all pertinent codes and regulations and with selected standards of the American Society for Testing and Materials.

**1.05 PRODUCT HANDLING**

- A. Promptly process and distribute all required copies of test reports and related instructions to ensure all necessary retesting and/or replacement of materials with the least possible delay in progress of the work.

## **PART 2 - PRODUCTS**

### **2.01 PAYMENTS FOR TESTING AND INSPECTION SERVICES**

- A. Initial Services: The Owner will pay for all initial testing and inspection services.
- B. Retesting: When initial tests and inspections indicate non-compliance with local Codes and the Contract Documents, all subsequent retesting occasioned by the non-compliance shall be performed by the same testing laboratory and inspectors and the costs thereof will be deducted by the Owner from the Contract Sum.

### **2.02 CODE COMPLIANCE TESTING AND INSPECTION**

- A. Inspections and tests required by Codes or Ordinances, or by a plan approval authority, shall be paid for by the Owner unless otherwise noted in this Section or other Sections of work. Retesting or inspection as required shall conform to the requirements of Article 2.01 B of this section.

### **2.03 CONTRACTOR'S TESTING**

- A. Inspection or testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.
- B. Where operating tests are specified, the Contractor shall test his work as it progresses, on his own account, and shall make satisfactory preliminary tests in all cases before applying for official tests.
- C. Tests shall be made in the manner specified, for the different branches of the work. Each test shall be made on the entire system for which such test is required, wherever practical. In case it is necessary to test portions of the work independently, the Contractor shall do so without extra compensation. The Contractor shall furnish all labor, material and apparatus, make corrections and conduct the official test. The test will be conducted in the presence of a representative of the Landscape Architect.
- D. All parts of the mechanical and electrical work and associated equipment shall be tested and adjusted to work properly and be left in perfect operating condition. All defects disclosed by these tests shall be corrected to the satisfaction of the Landscape Architect without any additional cost to the Owner. Tests shall be repeated on this repaired or replaced work if deemed necessary by the Landscape Architect. The Landscape Architect shall be notified at least 48 hours in advance of all tests, and shall be represented at tests that he deems necessary. The Contractor shall furnish all necessary instruments, other equipment, and personnel required for such tests.
- E. Required certificates of inspection, testing or approval shall be secured by the Contractor, and promptly delivered by them to the Owner and Landscape Architect.
- F. If the Landscape Architect is to observe the inspections, tests or approvals



required by the Contract Documents, they will endeavor to do so promptly and, where practicable, at the source of supply.

### **PART 3 - EXECUTION**

#### **3.01 COOPERATION WITH TESTING LABORATORY AND INSPECTORS**

- A. Representatives of the testing laboratory and inspectors shall have access to the work at all times. Provide facilities for such access in order that they may properly perform their functions.

#### **3.02 SCHEDULES**

- A. Establishing Schedule
  - 1. By advance discussions with the inspection service and testing laboratory selected by the Owner, determine the time required to perform inspections and tests and to issue each of its findings.
  - 2. Provide all required time within the construction schedule.
- B. Revising Schedule
  - 1. When changes of construction schedule are necessary during construction, coordinate all such changes of schedule with the inspectors and testing laboratory as required.
- C. Adherence to Schedule
  - 1. When the testing laboratory is ready to test according to the determined schedule but is prevented from testing or taking specimens due to incompleteness of the work, all extra costs for testing attributable to the delay will be back-charged to the Contractor.

#### **3.03 TAKING SPECIMENS**

- A. All specimens and samples for testing, unless otherwise provided in these Contract Documents, will be taken by the testing laboratory; all sampling equipment and personnel will be provided by the testing laboratory; and all deliveries of specimens and samples to the testing laboratory will be performed by the testing laboratory.

**END OF SECTION 01 4523**

**SECTION 01 5000**  
**TEMPORARY FACILITIES**

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

- A. The Contractor shall provide their own temporary facilities in areas designed by the Landscape Architect unless noted otherwise.
- B. Contractor shall pay costs for providing, maintaining, moving, and removing temporary facilities unless otherwise indicated.

**PART 2 - FACILITIES**

**2.01 TEMPORARY SANITARY FACILITIES**

- A. The Contractor will provide and maintain one or more portable toilets as required by onsite workforce.
- B. Maintain in a sanitary and clean condition at all times.
- C. Portable toilet shall be locked when Contractors are not working.

**2.02 TEMPORARY WATER**

- A. Drinking Water: Each Contractor to provide potable drinking water for drinking purposes for their own personnel on the site. Furnish disposable drinking cups. Dispose of properly.
- B. Each Contractor is responsible to adapt existing water sources at the site for their own use.

**2.03 TEMPORARY FIRE PROTECTION**

- A. Contractor shall provide and maintain portable fire-extinguishers for area of its operations. Number to conform to applicable codes.
- B. Fire Extinguishers: Multi-purpose (ABC) dry chemical.
- C. U.L. Labeled.
- D. Current inspection tags affixed.

- E. Take all necessary precautions to insure against fire during construction and be responsible that the area within the contract limit is kept orderly and clean on a daily basis.
  - 1. No fires shall be built on the premises nor shall open flame devices of any kind be employed within the building except for field welding with supervised fire watch.
  - 2. Contractor shall provide shielding for heat and smoke detectors from accidentally going off. Contractors will be back charged for all fines imposed for false fire alarms.

#### **2.04 TEMPORARY FENCING, BARRICADING**

- A. Contractor shall provide and maintain temporary fencing, covers and/or barricading as required for maintenance and protection of traffic and to keep unauthorized persons away from excavations and hazardous areas for which each Contractor is responsible.
  - 1. Covers over openings. Contractors shall provide protection acceptable to Landscape Architect and/or as specified in the Specifications.
  - 2. Contractors are responsible for the security of their materials and/or equipment.
- B. Any Contractor that creates or contributes to an unsafe condition, such as but not limited to a fall hazard, shall correct same immediately.

#### **2.05 DUST AND EROSION PROTECTION**

- A. Erect and maintain dust and erosion protection whenever operations will produce unreasonable amounts of dust, dirt or erosion. Comply with *NYS Standards and Specifications for Erosion and Sediment Control* (Blue Book).

#### **2.06 TEMPORARY STORAGE**

- A. Storage space will be permitted only in areas approved by the Landscape Architect and Owner.
- B. The Owner will not provide security for Contractor's material and/or equipment.

#### **2.07 TEMPORARY POWER AND LIGHTING**

- A. Contractors to provide generators for power when necessary.

#### **2.08 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES**

- A. If required, locate field office, trailers, storage sheds, sanitary facilities and other temporary construction and support facilities for easy access. Coordinate with Owner and Landscape Architect. Maintain temporary construction and support facilities until near Substantial Completion. Remove prior to Substantial Completion.

- B. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to the Owner.

### **PART 3 - EXECUTION**

#### **3.01 GENERAL**

- A. Temporary facilities shall be installed in accordance with applicable codes.
- B. Maintain temporary facilities throughout the construction period.
- C. Remove temporary facilities when they are no longer required or when directed by the Landscape Architect.
- D. Repair damage to the project site caused by the installation of temporary facilities.
- E. Contractors performing welding, cutting or other activities with an open flame or producing sparks shall do the following as a minimum:
  - 1. Protect the surrounding areas from fire and damage.
  - 2. Provide fire extinguishers within reach of the activity and the area where sparks may land.
  - 3. Provide a fire watch during activity and ½ hour after the activity is completed at the locations of the activity and the area where sparks may land.
- F. Notification of all utility interruptions is to be received by the Owner in writing 72 hours prior to interruption.

**END OF SECTION 01 5000**

## SECTION 01 7700

### EXECUTION and CLOSEOUT REQUIREMENTS

#### PART 1 - GENERAL

##### 1.01 GENERAL REQUIREMENTS

- A. Work of this section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

##### 1.02 SECTION INCLUDES

- A. This section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Project Record Documents.
  - 3. Warranties.
  - 4. Instruction of Owner's personnel.
  - 5. Final cleaning.

##### 1.03 SUBSTANTIAL COMPLETION

- A. The Contractor should submit the following with the Substantial Completion:
  - 1. Special Warranty Manual, including maintenance agreements.
  - 2. Operating and Maintenance Manuals.
  - 3. Material Safety Data Sheet Manual.
- B. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request:
  - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the work is not complete.
  - 2. Advise Owner of pending insurance changeover requirements.
  - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Obtain and submit releases permitting Owner unrestricted use of the work and access to services and utilities.
  - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, and damage or settlement surveys, property surveys, and similar final record information.
  - 6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
  - 7. Submit test records.
- C. Inspection: Submit a written request for inspection for Substantial Completion.

On receipt of request, Landscape Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Landscape Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

#### **1.04 FINAL COMPLETION**

- A. The Contractor should submit the following with the Application for Final Payment:
  1. Contractors' waivers of liens and bond rights in full amount of contract sum.
  2. Lien waivers from subcontractors and material suppliers (waivers should be in full amount of contract involved).
  3. Consent of surety for final payment form
  4. Certified Record Survey.
  5. Project Record Documents.
- B. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
  1. Submit a final Application for Payment.
  2. Submit certified copy of Landscape Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Landscape Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  3. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Landscape Architect will either proceed with inspection or notify Contractor of unfulfilled requirements Landscape Architect will notify Contractor of construction that must be completed or corrected before certificate will be issued.
  1. Re-inspection: Request re-inspection when the work identified in previous inspections as incomplete is completed or corrected.

#### **1.05 LIST OF INCOMPLETE ITEMS (PUNCH LIST)**

- A. Preparation: Submit 3 copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  1. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Landscape Architect.

- d. Name of Contractor.
- e. Page number.

## **1.06 PROJECT RECORD DOCUMENTS**

- A. The Contractor should maintain at the project site, 1 copy of Record Documents including, Drawings, Specifications, Addenda, Change Orders, other Modifications to the Contract, the Engineer's Clarifications, other written instructions, reviewed submittals, and test reports to record the actual construction conditions. The documents should be accurately marked by the Contractor on a daily basis.
- B. At the completion of the project, Record Documents should be submitted with the Contractor's Application for Final Payment.
- C. The Landscape Architect shall forward all Record Documents, As-builts, Operation and Maintenance Manuals, and 1 copy of all final approved Shop Drawings, and submittals to the Owner.
- D. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Landscape Architect's reference during normal working hours.
- E. Record Drawings: Maintain and submit 1 set of blue- or black-line white prints of Contract Drawings and Shop Drawings and provide final As-Built plans to the Owner in both AutoCAD (.dwg) and PDF formats.
  - 1. Mark Record Drawings to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is installer, subcontractor, or similar entity, to prepare the As-Built Record Drawings.
    - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
    - b. Accurately record information in an understandable drawing technique.
    - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
    - d. Mark Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Drawings.
  - 2. Mark progress record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
  - 3. Mark important additional information that was either shown schematically or omitted from original drawings.
  - 4. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
  - 5. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize

into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.

- F. Record Specifications: Submit 1 copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
  - 3. Note related Change Orders, Record Drawings and Product Data, where applicable.
  
- G. Record Product Data: Submit 1 copy of each Product Data submittal. Mark 1 set to indicate the actual product installation where installation varies substantially from that indicated in Product Data.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  - 3. Note-related Change Orders, Record Drawings and Record Specifications, where applicable.
  
- H. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

#### **1.07 WARRANTIES**

- A. Submittal Time: Submit written warranties on request of Owner for designated portions of the work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Written one-year guarantee is required for all work completed. Warranty period begins on the date of Substantial Completion.

**END OF SECTION 01 7700**