

DIVISION 1

GENERAL REQUIREMENTS

SECTION 01100

SUMMARY

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Contract Description
- B. Contractor's use of site
- C. Work Sequence
- D. Traffic Control and Protection

1.2 CONTRACT DESCRIPTION

- A. Work of the Project includes the Sanitary and Storm Sewer Lining in various individual locations throughout the City of St. Charles. Work shall include the lining of sanitary sewers as well as the reinstatement of service laterals, sanitary sewer cleaning and pre and post construction sanitary sewer televising.
- B. Perform Work of Contract under a unit price contract with Owner in accordance with the Conditions of Contract.

1.3 CONTRACTOR'S USE OF SITE

- A. Construction Operations: Limited to areas noted on Project Location Maps.
- B. Time Restrictions for Performing Work: 7:00 AM to 7:00 PM without authorization from Owner.
 - 1. Work will not be allowed on Saturdays, Sundays, or Holidays without authorization from Owner.
- C. Utility Outages and Shutdowns: No longer than four hours for any single water service. Owner shall be notified of work at least 48 hours in advance.
- D. Contractor shall obtain necessary bond, license, and permits required for construction or maintenance operations on any City street, alley, or roadway by the Municipal Code of the City of St. Charles and IDOT.
- E. Contractor may stage materials at a location designated by the City of St. Charles. The City of St. Charles will not be responsible for coordinating and accepting delivery of materials. The City of St. Charles will not be responsible for the care and safety of materials stored at their site.

1.4 WORK SEQUENCE

- A. Construct Work in order to minimize service outages to less than four hours total for any single service during the construction period, coordinate construction schedule and operations with Owner.

1.5 TRAFFIC CONTROL AND PROTECTION

- A. Local residential traffic occupies premises during entire construction period for conducting normal operations; cooperate with public in all construction operations to minimize conflict, and to facilitate public usage.
- B. Conduct Contractor's operations to ensure least inconvenience to general public.
- C. Contractor shall comply with Municipal Code of the City of St. Charles requiring compliance with Manual on Uniform Traffic Control Devices, Latest Edition with all subsequent amendments.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END 01100

SECTION 01200

PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Applications for Payment.
- B. Change Procedures.
- C. Defect Assessment.
- D. Unit Prices.
- E. Unit Price Schedule.

1.2 APPLICATIONS FOR PAYMENT

- A. Submit three (3) copies of each application on EJCDC 1910-8-E. Contractor's electronic media driven form may be acceptable if approved by Owner.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Submit updated construction schedule with each Application for Payment.
- D. Payment Period: Submit at intervals stipulated in the Agreement.
- E. Submit with transmittal letter as specified for Submittals in Section 01330 – Submittal Procedures.
- F. Submit all waivers.
- G. Substantiating Data: When Owner requires substantiating information, submit data justifying dollar amounts in question. Include the following with the application:
 - 1. Partial release of liens from major subcontractors and vendors.
 - 2. Affidavits attesting to off-site stored products.

1.3 CHANGE PROCEDURES

- A. Submittals: Submit name of the individual authorized to receive change documents, and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. The Owner will advise of minor changes in the Work not involving an adjustment to Contract Price or Contract Time by issuing supplemental instructions in writing.
- C. The Owner may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications. Contractor shall complete the request form indicating any change in Contract Price and changes in

Contract Time for executing the change. Contractor will prepare and submit an estimate within fourteen (14) days.

- D. The Contractor may propose changes by submitting a request for change to the Owner describing the proposed change and its full effect on the Work. Include a statement describing the reason for the change, and the effect on the Contract Price and Contract Time with full documentation and a statement describing the effect on Work by separate or other Contractors. Document any requested substitutions in accordance with Section 01600.
- E. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for Change Order as approved by Owner.
- F. Unit Price Change Order: For contract unit prices and quantities, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of work which are not pre-determined, execute Work under Work Directive Change. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.
- G. Work Directive Change: Owner may issue directive on EJCDC 1910-8-F Work Directive Change signed by Owner, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in Work, and designate method for determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- H. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of Contract. Owner will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
- I. Maintain detailed records of work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.
- J. Document each quotation for change in cost or time with sufficient data to allow evaluation of quotation.
- K. Change Order Forms: See Section 00530 – Change Order.
- L. Execution of Change Orders: Owner will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- M. Correlation of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
 - 3. Promptly enter changes in Project Record Documents.

1.4 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.**
- B. If, in the opinion of the Owner, it is not practical to remove and replace the Work, the Owner will direct appropriate remedy or adjust payment.**
- C. The defective Work may remain, but unit sum/price will be adjusted to a new sum/price at the discretion of the Owner.
- D. The defective Work will be partially repaired to instructions of the Owner, and unit sum/price will be adjusted to a new sum/price at the discretion of the Owner.
- E. Individual specification sections may modify these options or may identify specific formula or percentage sum/price reduction.
- F. The authority of the Owner to assess defects and identify payment adjustments is final.**
- G. Non-Payment for Rejected Products: Payment will not be made for rejected products for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from transporting vehicle.
 - 4. Products placed beyond lines and levels or required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected products.

1.5 UNIT PRICES

- A. Authority: Measurement methods are delineated in the individual specification sections.
- B. Measurement methods delineated in the individual specification sections complement the criteria of this section. In the event of conflict, the requirements of the individual specification section govern.
- C. Take measurements and compute quantities. Owner will verify measurements and quantities.
- D. Unit Quantities: Quantities and measurements indicated in the Bid Form are for contract purposes only. Quantities and measurements supplied or placed in the Work shall determine payment.
 - 1. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit sum/prices contracted.
 - 2. If the actual Work requires a 25 percent or greater change in quantity than those quantities indicated, the Owner or Contractor may claim for a Contract Price adjustment.

- E. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals, erection, application or installation of item of the Work, overhead and profit.
- F. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Owner multiplied by the unit sum/price for Work which is incorporated in or made necessary by the Work.
- G. Measurement of Quantities:
 - 1. Weigh Scales: Inspected, tested and certified by the applicable State Weights and Measures department within the past year.
 - 2. Platform Scales: Of sufficient size and capacity to accommodate the conveying vehicle.
 - 3. Metering Devices: Inspected, tested and certified by the applicable State department within the past year.
 - 4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
 - 5. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
 - 6. Measurement by Area: Measured by square dimension using mean length and width or radius.
 - 7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
 - 8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

1.6 UNIT PRICE SCHEDULE

A. MOBILIZATION

- 1. Unit of Measure: Lump Sum.
- 2. Method of Measurement: Lump sum as directed by OWNER.
- 3. Basis of Payment: Shall be paid for at the Contract Unit Price for Mobilization.

B. TRAFFIC CONTROL AND PROTECTION

- 1. Unit of Measure: Lump Sum.
- 2. Method of Measurement: Lump sum as directed by Owner.
- 3. Basis of Payment: Shall be paid for at the Contract Unit Price for Traffic Control and Protection.

C. TELEWISE, CLEAN & LINE SANITARY SEWERS

- 1. Unit of Measure: Lineal Foot.
- 2. Method of Measurement: By lineal foot measured along the pipe centerline from manhole wall to manhole wall for sewers lined. When lining operations are to pass through an intermediate manhole, payment lengths shall exclude length through manhole.
- 3. Basis of Payment: At the Contract Unit Price per lineal foot of diameter specified for Telewise, Clean and Line Sanitary Sewers.
- 4. Includes Costs of:
 - a. Product data for lining specialties.
 - b. All labor, equipment and materials.
 - c. All dewatering.

- d. All bypass pumping.
- e. Installation.
- f. Cutting of Protruding Taps.
- g. Pre and Post Lining Television Inspection and Reports.
- h. Sanitary Sewer Cleaning **and Heavy Cleaning including root cutting.**
- i. Clean up and disposal of excess materials.
- j. Final inspection.
- k. Restoration of disturbed areas.
- l. All other work or appurtenances needed to complete the project.

D. REINSTATE LATERALS

1. Unit of Measure: Each.
2. Method of Measurement: By each number of existing laterals reinstated.
3. Basis of Payment: At the Contract Unit Price per each lateral reinstated.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END 01200

SECTION 01300

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Coordination and project conditions.
- B. Preconstruction meeting.
- C. Progress meetings.

1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals and Work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation and interdependent construction elements.
- B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service operating equipment.
- C. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion.
- D. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRECONSTRUCTION MEETING

- A. Owner will schedule a preconstruction meeting after Notice of Award.
- B. Attendance Required: Owner and Contractor.
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing the parties involved.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal requests, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
- D. Record minutes and distribute copies within two days after meeting to participants with two copies to Owner, participants and those affected by decisions made.

1.4 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at intervals requested by the Owner.
- B. Owner will make arrangements for meetings, prepare agenda with copies for participants and preside at meetings.
- C. Attendance Required: Job superintendent, major subcontractors and suppliers, and Owner, as appropriate to agenda topics for each meeting.
- D. Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of Work progress.
 - 3. Field observations, problems and decisions.
 - 4. Identification of problems which may impede planned progress.
 - 5. Review of submittals schedule and status of submittals.
 - 6. Review of off-site fabrications and delivery schedules.
 - 7. Maintenance of progress schedule.
 - 8. Corrective measures to regain projected schedules.
 - 9. Planned progress during succeeding work period.
 - 10. Coordination of projected progress.
 - 11. Maintenance of quality and work standards.
 - 12. Effect of proposed changes on progress schedules and coordination.
 - 13. Other business relating to Work.
- E. Record minutes and distribute copies within one week after meeting to participants, with two copies to Owner, participants and those affected by decisions made.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END 01300

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This section expands administrative and procedural requirements for submittals for review, information, or for project closeout, each described to permit direct reference from individual specification sections. These requirements include:
 - 1. Submittal procedures.
 - 2. Construction progress schedules.
 - 3. Proposed products list.
 - 4. Product data.
 - 5. Shop drawings.
 - 6. Samples.
 - 7. Design data.
 - 8. Test reports.
 - 9. Certificates.
 - 10. Manufacturer's instructions.
 - 11. Manufacturer's field reports.

1.2 SUBMITTAL PROCEDURES

- A. Transmit each submittal with Owner accepted form.
- B. Submittals should not be marked with a highlighter. Instead, use arrows to denote specific selections throughout the submittal.
- C. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- D. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, as appropriate.
- E. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- F. Schedule submittals to expedite the Project, and deliver to OWNER at business address. Coordinate submission of related items.
- G. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- H. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of the completed Work.
- I. Allow space on the submittals for Contractor and Owner review stamps or comments.

- J. When revised for submission, identify all changes made since previous submission.
- K. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- L. Submittals not requested may not be recognized or processed.

1.3 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit preliminary outline Schedules within 15 days after date established in Notice to Proceed for coordination with Owner's requirements. After review, submit detailed schedules within 15 days modified to accommodate revisions recommended by Owner.**
- B. Submit revised Progress Schedules with each Application for Payment.**
- C. Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other concerned parties.
- D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.
- E. Submit a computer generated horizontal bar chart with separate line for each section of Work, identifying first work day of each week.
- F. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.
- G. Indicate estimated percentage of completion for each item of Work at each submission.
- H. Provide separate schedule of submittal dates for shop drawings, product data, and samples, including products identified under Allowances, and dates reviewed submittals will be required from OWNER. Indicate decision dates for selection of finishes.
- I. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
- J. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- K. Provide narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect including the effect of changes on schedules of separate contractors.

1.4 PROPOSED PRODUCTS LIST

- A. Within 15 days after date of Notice to Proceed, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.

- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.5 PRODUCT DATA

- A. Product Data: Submit to Owner for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- B. Submit the number of copies which the Contractor requires, plus three copies which will be retained by the Owner.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. After review, distribute in accordance with the Submittal Procedures article above and provide copies for record documents described in Section 01700 – Execution Requirements.

1.6 SHOP DRAWINGS

- A. Shop Drawings: Submit to Owner for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.
- B. Submit the number of opaque reproductions which Contractor requires, plus three copies which will be retained by Owner.
- C. After review, distribute in accordance with the Submittal Procedures article above and provide copies for record documents described in Section 01700 – Execution Requirements.

1.7 SAMPLES

- A. Samples: Submit to Owner for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.
- B. Samples for Selection as Specified in Product Sections:
 - 1. Submit to Owner for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes from the full range of manufacturers' standard colors, in custom colors selected, textures, and patterns for Owner selection.
- C. Include identification on each sample, with full Project information
- D. Submit the number of samples specified in individual specification sections; one of which will be retained by Owner.
- E. Reviewed samples which may be used in the Work are indicated in individual specification sections

- F. Samples will not be used for testing purposes unless specifically stated in the specification section.
- G. After review, distribute in accordance with the Submittal Procedures article above and provide copies for record drawings described in Section 01700 – Execution Requirements.

1.8 DESIGN DATA

- A. Submit for Owner’s knowledge as contract administrator.
- B. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the Contract Documents.

1.9 TEST REPORTS

- A. Submit for Owner’s knowledge as contract administrator.
- B. Submit test reports for information for the limited purpose of assessing conformance with information given and the design concept expressed in the Contract Documents.

1.10 CERTIFICATES

- A. When specified in individual specification sections, submit certification by the manufacturer, installation/application subcontractor, or the Contractor to Owner, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product, but must be acceptable to Owner.

1.11 MANUFACTURER’S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting and finishing to Owner in quantities specified for Product Data
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.12 MANUFACTURER’S FIELD REPORTS

- A. Submit reports for Owner’s benefit as contract administrator.
- B. Submit report in duplicate within 30 days of observation to Owner for information.
- C. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the Contract Documents.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END 01330

SECTION 01400

QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality control and control of installation.
- B. Tolerances.
- C. References.
- D. Testing and inspection services.
- E. Examination.

1.2 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturer's instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Owner before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on Shop Drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion and/or disfigurement.

1.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Owner before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where a specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. Should specified reference standards conflict with Contract Documents, request clarification from the Owner before proceeding.
- E. The contractual relationships, duties, or responsibilities of the parties in Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.5 TESTING AND INSPECTION SERVICES

- A. Contractor shall employ and pay for services of an independent testing agency or laboratory acceptable to Owner to perform specified testing.
 - 1. Prior to start of Work, submit testing laboratory name, address, telephone number, and names of full time and responsible officer.
 - 2. Submit a copy of the report of laboratory facilities most recent inspection with memorandum of remedies of deficiencies reported by inspection.
- B. The independent firm will perform tests, inspections and other services specified in individual specification sections and as required by Owner.
 - 1. Laboratory: Authorized to operate in the State of Illinois.
 - 2. Laboratory Staff: Maintain full time registered engineer or specialist on staff to review services.
 - 3. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to National Bureau of Standards or accepted values of natural physical constants.
- C. Reports shall be submitted by independent firm to Owner and Contractor, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
 - 1. Submit final report indicating correction of Work previously reported as non-compliant.
- D. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - 1. Notify Owner and independent firm 24 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.
- E. Testing and employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

- F. Re-testing or re-inspection required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the Owner. Payment for re-testing or re-inspection will be charged to the Contractor at no additional compensation.
- G. Agency Responsibilities:
1. Test samples of mixes submitted by Contractor.
 2. Provide qualified personnel at site. Cooperate with Owner and Contractor in performance of services.
 3. Perform specified sampling and testing of products in accordance with specified standards.
 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 5. Promptly notify Owner and Contractor of observed irregularities or non-conformance of Work or products.
 6. Perform additional tests required by Owner.
- H. Agency Reports: After each test, promptly submit two copies of report to Owner and to Contractor. When requested by Owner, provide interpretation of test results. Include the following:
1. Date issued.
 2. Project title and number.
 3. Name of inspector.
 4. Date and time of sampling or inspection.
 5. Identification of product and specifications section.
 6. Location in the Project.
 7. Type of inspection of test.
 8. Date of test.
 9. Results of test.
 10. Conformance with Contract Documents.
- I. Limits on Testing Authority:
1. Agency or laboratory may not release, revoke, alter or enlarge on requirements of Contract Documents.
 2. Agency or laboratory may not approve or accept any portion of Work.
 3. Agency or laboratory may not assume any duties of Contractor.
 4. Agency or laboratory has no authority to stop the Work.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.

D. Verify that utility services are available, of the correct characteristics, and in the correct locations.

END 01400

SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Construction Facilities:
 - 1. Vehicular access.
 - 2. Parking.
 - 3. Progress cleaning and waste removal.
 - 4. Traffic regulation.
- B. Temporary Controls:
 - 1. Barriers.
 - 2. Water control.
 - 3. Dust control.
 - 4. Erosion and sediment control.
- C. Removal of utilities, facilities and controls.

1.2 VEHICULAR ACCESS

- A. Extend and relocate vehicular access as Work progress requires, provide detours as necessary for unimpeded traffic flow.
- B. Provide unimpeded access for emergency vehicles. Maintain 20-foot wide driveways with turning space between and around combustible materials.
- C. Provide and maintain access to fire hydrants and control valves free of obstructions.
- D. Provide and maintain access to driveways.
- E. Provide means of removing mud from vehicle wheels before entering streets.
- F. Designated existing on-site roads may be used for construction traffic.

1.3 PARKING

- A. Arrange for temporary parking areas to accommodate construction personnel.
- B. Locate as approved by Owner.
- C. When site space is not adequate, provide additional off-site parking.
- D. Use of existing on-site streets and driveways used for construction traffic is permitted. Tracked vehicles not allowed on paved areas.
- E. Do not allow heavy vehicles or construction equipment in parking areas.

F. Maintenance:

1. Maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, products, mud, snow, and ice.
2. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

G. Removal, Repair:

1. Remove temporary materials and construction before Substantial Completion.
2. Remove underground work and compacted materials to a depth of 2 feet. Fill and grade site as specified.
3. Repair existing facilities damaged by use, to original condition.

H. Mud From Site Vehicles: Provide means of removing mud from vehicle wheels before entering streets.

1.4 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Collect and remove waste materials, debris, and rubbish from site periodically and dispose off-site.

1.5 TRAFFIC REGULATION

A. Signs, Signals, and Devices:

1. Post Mounted and Wall Mounted Traffic Control and Informational Signs: As approved by local jurisdictions.
2. Automatic Traffic Control Signals: As approved by local jurisdictions.
3. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.
4. Flagperson Equipment: As required by local jurisdictions.

B. Flag Persons: Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.

C. Flares and Lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

D. Haul Routes:

1. Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access.
2. Confine construction traffic to designated haul routes.
3. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.

E. Traffic Signs and Signals:

1. At approaches to site and on site, install at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.

2. Install and operate traffic control signals to direct and maintain orderly flow of traffic in areas under Contractor's control and areas affected by Contractor's operations.
3. Relocate as Work progresses to maintain effective traffic control.

F. Removal:

1. Remove equipment and devices when no longer required.
2. Repair damage caused by installation.

1.6 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades and covered walkways required by authorities having jurisdiction for public rights-of-way.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.7 WATER CONTROL

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.8 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

1.9 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize amount of bare soil exposed at one time.
- C. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

1.10 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.

B. Clean and repair damage caused by installation or use of temporary work.

C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END 01500