**NOTES TO ARCHITECT/ENGINEER (A/E) & DAS/CS PROJECT MANAGER:**

This version of the Division 01 General Requirements is for **ALL** CT Department of Administrative Services (DAS) Construction Services (CS) **Design-Bid-Build (DBB) AND Construction Manager at Risk (CMR) Capital Construction Projects.**

IMPORTANT NOTE: Section 01 77 00 Closeout Procedures includes requirements regarding contract closeout procedures, final cleaning, adjusting, Project records, operation and maintenance data, warranties. Revise paragraphs carefully to reflect specific project requirements, or delete them if they do not apply.

**EDITING:** To Show the Editing Notes in this MS Word document the show/hide symbol (¶) button must be must turned on in the MS Word Toolbar. To print this document show/hide symbol (¶) must be turned off in the MS Word Toolbar, this will enable the document to indicate the correct number of total pages.

**TEXT:** The below **blue text** are project specific information that must be completed by the A/E as applicable to the specific project. When complete change **blue text** to **black text.** The ***bold and italicized text*** is for example purposes only and must be modified and edited by the A/E to make it project specific. For **text boxes**, left click on **Insert** and then insert project specific information over the word **Insert** in the underlined space.

**TABLES:** To view the Table Grid in this MS Word document, click inside any table, then go to the **Table Tools > Layout** tab, **Table** group, and click **View Gridlines.**

**HEADERS: The header** for each page of the Project Manual shall match the format, font (Arial), size (9 pt), font style (BOLD & CAPITALIZED) and line borders, of the header shown herein. The header of each page shall contain the Section Number, the Section Title, and the page number & number of pages as shown herein.

**FOOTERS: The footer** for each page of the Project Manual shall match the format, font (Arial), size (9 pt), font style (BOLD & CAPITALIZED) and line borders, of the footer shown herein. The footer shall contain the project number in the right hand side as shown herein. The revision date in the left side of the footer is to remain as it is for Department informational purposes only and should not be altered by the Architect/Engineer.

**SECTIONS AND PARAGRAPHS:** If a **Section** is not part of the project scope, **do not use** the Section in the General Requirements. Check “**NOT USED**” in the Table of Contents. **DO NOT delete** the Section title from the Table of Contents.

If a **Paragraph** is not applicable to the project, **delete the contents** of the Paragraph and renumber the subsequent Paragraphs. Edit **Paragraphs** carefully to reflect specific project requirements. DO NOT include Paragraphs or parts of Paragraphs in the project manual, which have no applicability to the specific project. KEEP IN NUMERICAL SEQUENCE and re-number as necessary.

**GENERAL CONDITIONS:** Please review the General Conditions carefully and coordinate the requirements of those Articles including the Definitions.

**DIVISION 01 SECTIONS** are the organizational key of the Project Manual. All revisions to this Division are the responsibility of the A/E. Division 01 must be closely coordinated with Division 00, Divisions 02 through 49, Division 50 (Project-Specific Available Information), the Drawings, and the Department’s Consultant Bid Data Statement (Form 6005, to be filled out by the A/E for bidding).

**IMPORTANT NOTE REGARDING “HIDDEN TEXT”:**

Each document contains Editing Notes in the form of “hidden text”. The Editing Notes assist the Architect in modifying and editing the document to make it project-specific. In order to show the “hidden text”, click the **Home** tab, and in the **Paragraph** group, click the **Show/Hide** symbol (¶). **Turn off** the Show/Hide symbol (¶) **before printing the document** in order to indicate the correct number of pages. **DELETE THIS NOTE.**

**IMPORTANT NOTE REGARDING FORMATTING:**

Insert a blank page at the end of all *odd numbered* specification sections that states “THIS PAGE INTENTIONALLY LEFT BLANK”. **DELETE THIS NOTE.**

# PART 1 - GENERAL

## RELATED DOCUMENTS

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

NOTE: Delete items from list below that are not applicable or modify items retained to suit project.

## SUMMARY

### This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:

#### Inspection procedures.

#### Project record document submittal.

#### Operation and maintenance manual submittal.

#### Submittal of warranties.

#### Final cleaning.

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

#### Division 01 Section 01 11 00 "Summary of Work".

#### Division 01 Section 01 29 76 "Progress Payment Procedures".

### Closeout requirements for specific construction activities may be included in the appropriate Sections in Divisions 02 through 49.

## SUBSTANTIAL COMPLETION

### **General:** Basic contract definitions are included in Article 1 of the General Conditions of the Contract for Construction.

### **Preliminary Procedures:** Before requesting inspection for Certification of Substantial Completion, complete the following. List exceptions in the request.

#### In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete.

##### Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.

##### If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.

#### Advise the Owner of pending insurance changeover requirements.

#### Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.

#### Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, certificates of compliance, operating certificates, and similar releases.

NOTE: Delete subparagraph below if submittal of this material is delayed until final acceptance.

#### Submit record drawings, maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.

#### Deliver tools, spare parts, extra stock, and similar items.

#### Make final changeover of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of changeover in security provisions.

#### Demonstrate, thru operation and testing, the functions of all systems and/or equipment to the satisfaction of the Owner for compliance to the Contract. Complete testing of systems and instruction of the Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.

NOTE: Delete 2 subparagraphs below if project does not include these items or if they are delayed until Acceptance of the Work.

#### Complete final cleanup requirements.

#### Certify that required training of personnel is complete.

NOTE: Modify paragraph below to comply with Department policy and project requirements.

### **Inspection Procedures:** The Contractor shall be ready and prepared when they request a Substantial Completion inspection. If the inspection reveals that the work is not complete, that there are extensive punchlist items that will take more than **ninety** **(90)** days to complete and as the items listed in Article 1.3 above are not complete, the Construction Administrator, Architect, and Owner will determine the inspection has failed.

### The Contractor is responsible for all costs to re-inspect due to a failed inspection. The Owner will issue a deduct change order to cover all costs for re-inspection.

#### The Architect will repeat inspection when requested and assured that the Work is substantially complete.

#### Results of the completed inspection will form the basis of requirements for final acceptance.

## ACCEPTANCE

### **Preliminary Procedures:** Before requesting final inspection for "Certificate of Acceptance" and final payment, complete the following. List exceptions in the request.

NOTE: If Supplementary Conditions are added to the General Conditions then revise subparagraphs below as necessary.

#### Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.

#### Submit an updated final statement, accounting for final additional changes to the Contract Sum.

#### Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, endorsed and dated by the Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Architect.

#### Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion or when the Owner took possession of and assumed responsibility for corresponding elements of the Work.

#### Submit consent of surety to Final Payment.

#### Submit evidence of final, continuing insurance coverage complying with insurance requirements.

#### Touch up and otherwise repair and restore marred, exposed finishes, including touchup painting.

NOTE: Modify paragraph below to comply with Department of Construction Services policy and project requirements.

### **Re-inspection Procedure:** The Inspection Group will re-inspect the Work upon receipt of notice from the Construction Administrator that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Owner.

#### Upon completion of re-inspection, the Construction Administrator will prepare a Certificate of Acceptance. If the Work is incomplete, the Construction Administrator will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.

## AS-BUILT DOCUMENT SUBMITTALS

### **General:** The Contractor shall not use As-built Drawings for construction purposes. Protect contractor As-built Drawings from deterioration and loss in a secure, fire-resistant location. Provide access to As-built Drawings for the Architect's reference during normal working hours. Keep documents current; do not permanently conceal any work until required information has been recorded. **IMPORTANT NOTE:** **Failure to keep As-built Documents current is sufficient cause to withhold progress payments.**

#### The Contractor shall also hire the services of a Surveyor registered in the State of Connecticut to conduct a final survey to determine the location of exterior underground utility lines and to record the results, and update existing electronic media.

#### The record of exterior underground utilities shall be made at the time of installation on Mylar film drawing and AutoCAD (latest version) compatible disks. The drawing shall bear the seal of the Land Surveyor and a statement of accuracy.

### **As-built Drawings:** The Contractor shall maintain **one (1)** clean, complete undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark which drawing is most capable of showing conditions fully and accurately. Where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date. Update As-built Drawings on a monthly basis coincident with the submittal of the Application for Payment.

#### Mark record sets with erasable pencil to distinguish between variations in separate categories of the Work.

#### Mark all new information that is not shown on Contract Drawings.

#### Note related change-order numbers where applicable.

#### Organize record drawing sheets into manageable sets. Bind sets with durable-paper cover sheets; print suitable titles, dates, and other identification on the cover of each set.

#### Upon completion of the work, the Contractor shall submit Record Drawings to the Construction Administrator for the Owner's Records who will pass them on to the Architect or Engineer for transferring the changes to the Record Drawing Mylar Tracings.

#### Submit electronic format data of all Coordination Drawings as required by the Owner, at no additional cost.

#### Refer to Section 01 45 00 "Quality Control" Article 1.3 for required as-built drawings and specifications for fire alarm systems.

NOTE: Consider deleting paragraph below on small projects.

### **Record Specifications:** The Contractor shall maintain one (1) complete copy of the Project Manual, including Addenda. Include with the Project Manual one (1) copy of other written construction documents, such as Change Orders and modifications issued in printed form during construction.

#### Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications.

#### Give particular attention to equals and substitutions and selection of options and information on concealed construction that cannot otherwise be readily discerned later by direct observation.

#### Note related record drawing information and Product Data.

#### Upon completion of the Work, submit Record Specifications to the Construction Administrator for the Owner's records.

NOTE: Consider deleting paragraph below on small projects. If change-order proposals include resubmittal of updated product data, the need to mark up the previous submittal is eliminated.

### **Record Product Data:** The Contractor shall maintain one (1) copy of each Product Data submittal. Note related Change Orders and markup of record drawings and Specifications.

#### Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site and from the manufacturer's installation instructions and recommendations.

#### Give particular attention to concealed products and portions of the Work that cannot otherwise be readily discerned later by direct observation.

#### Upon completion of markup, submit complete set of Record Product Data to the Construction Administrator for the Owner's records.

NOTE: Paragraph below represents the normal disposition of samples. Revise as required.

### **Record Sample Submitted:** Immediately prior to Substantial Completion, the Contractor shall meet with the Construction Administrator, Architect and the Owner's personnel at the Project Site to determine which Samples are to be transmitted to the Owner for record purposes. Comply with the Owner's instructions regarding delivery to the Owner's Sample storage area.

NOTE: Paragraph below contains requirements for handling miscellaneous record submittals, such as foundation depths, special measurements, tests, surveys, mix records, and inspections by government authorities. If more detailed requirements are necessary, add a summary of miscellaneous record submittals.

### **Miscellaneous Record Submittals:** Refer to other Specification Sections for requirements of miscellaneous record keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order. Identify miscellaneous records properly and bind or file, ready for continued use and reference. Submit to the Construction Administrator for the Owner's records.

NOTE: Revise and add or delete items from listed examples below that are not applicable or modify items retained to suit project.

### **Maintenance Manuals:** Organize operation and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual, heavy-duty, **2-inch**, 3-ring, vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder according to Division 01 Section 01 78 23 "Operation & Maintenance Data". Included but not limited to the following types of information:

#### Emergency instructions.

#### Spare parts list.

#### Copies of warranties.

#### Wiring diagrams.

#### Recommended "turn-around" cycles.

#### Inspection procedures.

#### Shop Drawings and Product Data.

#### Fixture lampingschedule.

# PART 2 - PRODUCTS (Not Applicable)

# PART 3 - EXECUTION

## 3.1 CLOSEOUT PROCEDURES

NOTE: Retain paragraph below unless project uses Division 1 supplemental section "operation and maintenance data."

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

**NOTE:** Modify list below to suit project.

#### Maintenance manuals.

#### Record documents.

#### Spare parts and materials.

#### Tools.

#### Lubricants.

#### Fuels.

#### Identification systems.

#### Control sequences.

#### Hazards.

#### Cleaning.

#### Warranties and bonds.

#### Maintenance agreements and similar continuing commitments.

NOTE: A/E to identify video taping of demonstration.

### As part of instruction for operating equipment, demonstrate the following procedures:

**NOTE:** Modify list below to suit project.

#### Startup.

#### Shutdown.

#### Emergency operations.

#### Noise and vibration adjustments.

#### Safety procedures.

#### Economy and efficiency adjustments.

#### Effective energy utilization.

## 3.2 FINAL CLEANING

NOTE: Delete this article when using Division 1 supplemental section "final cleaning" or if owners prefer to use their own forces. Cleaning provisions in the general conditions are limited to rubbish removal and similar activities.

### **General:** The General Conditions require general cleaning during construction. Regular site cleaning is included in Division 01 Section 01 50 00 "Temporary Facilities and Controls."

### **Cleaning:** Employ professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.

NOTE: If final cleaning is delayed until final acceptance, modify subparagraph below.

#### Complete the following cleaning operations before requesting inspection for Certification of Substantial Completion and Certification of Occupancy.

#### Interior:

##### Remove labels that are not permanent labels.

##### Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Remove paint spots; wash and polish glass.

##### Clean exposed interior hard-surfaced finishes to a dust-free condition, free of stains, films, and similar foreign substances. Restore reflective surfaces to their original condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.

##### Wash washable surfaces of mechanical, electrical equipment and fixtures and replace filters, clean strainers on mechanical equipment. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.

##### Clean and polish finish hardware.

##### Clean and polish tile and other glazed surfaces.

##### Clean floors; wax and buff resilient tile. Clean vinyl or rubber base.

##### Vacuum and/or dust walls, ceilings, lighting fixtures, ceiling diffusers and other wall and ceiling items.

##### Remove defacements, streaks, fingerprints and erection marks.

#### Exterior:

##### Clean the site, including landscape development areas, of rubbish, litter, and other foreign substances. Sweep paved areas broom clean; remove stains, spills, and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth, even-textured surface.

##### Clean exposed exterior hard-surfaced finishes to a dust-free condition, free of stains, films, and similar foreign substances.

##### Clean roofs, gutters and downspouts.

##### Remove waste and surplus materials, rubbish and construction equipment and facilities from the site, and deposit it legally elsewhere.

##### Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Remove paint spots; wash and polish glass.

NOTE: First two paragraphs below represent the end of work specified in Division 1 Section "Construction Facilities And Temporary Controls." Most projects require these actions at completion of construction. Insert a paragraph on termite inspection where required for specific project.

### **Pest Control:** Engage an experienced, licensed exterminator to make a final inspection and rid the work of rodents, insects, and other pests. Provide results of final inspection in writing.

### **Removal of Protection:** Remove temporary protection and facilities installed for protection of the Work during construction.

### **Compliance:** Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from the site and dispose of lawfully.

#### Where extra materials of value remain after completion of associated Work, they become the Owner's property. Dispose of these materials as directed by the Construction Administrator.

#### Leave building clean and ready for occupancy. If the Contractor fails to clean up, the Owner may do so, with the cost charged to the Contractor. The Owner will issue a credit change order to cover the costs.

NOTE: Consider adding an article on continuing inspections or consultations by the contractor. Possibly insert a schedule of approximate times for inspections.

END OF SECTION 01 77 00