**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 73 29 Cutting and Patching includes requirements for incidental cutting, fitting and patching required to complete the Work or to make its several parts fit together properly. This section is NOT intended to be as comprehensive as may be required for an extensive alteration or renovation project. 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

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

## SUMMARY

### This Section includes administrative and procedural requirements for cutting and patching.

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

#### Division 01 Section 01 31 00 "Project Management and Coordination" for procedures for coordinating cutting and patching with other construction activities.

#### Division 01 Section 01 35 16 "Alteration Project Procedures" for procedures for coordinating cutting and patching with other construction activities.

NOTE: Insert "Selective Demolition" or “Minor Demolition” or other section title as appropriate for demolition section title used in Division 2. Delete the subparagraph below if demolition for alterations are not required.

#### Division 02 Section **[02 41 19 "Selective Structure Demolition"] [****Insert]** for demolition of selected portions of the building for alterations.

#### Division 02 Section **[02 42 93 "Building Deconstruction"]** for deconstruction of selected portions of the building for alterations.

NOTE: The subparagraph below is appropriate to items in many other sections.

#### Refer to other Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.

NOTE: Delete the subparagraph below if specials cutting and patching requirements by mechanical and electrical trades are not required.

##### Requirements of this Section apply to mechanical and electrical installations. Refer to Division 22, 23, and 26 Sections for other requirements and limitations applicable to cutting and patching mechanical and electrical installations.

## SUBMITTALS

NOTE: Modify the paragraphs below to include other desired submittal requirements. Revise if Owner Representative or Architect/Engineer approval of cutting and patching procedures is not required.

### **A. Cutting and Patching Proposal:** Submit a proposal to the Construction Administrator describing procedures well in advance of the time cutting and patching will be performed and if the Owner’s Representative and/or Architect/Engineer requires approval of these procedures before proceeding. Request approval to proceed. Include the following information, as applicable, in the proposal:

#### Describe the extent of cutting and patching required. Show how it will be performed and indicate why it cannot be avoided.

#### Describe anticipated results in terms of changes to existing construction. Include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.

#### Describe affects to integrity of weather exposed or moisture resistant element.

#### Describe affects to efficiency, maintenance, or safety of any operational element.

#### Describe affects to Work of Owner or separate contractor.

#### List products to be used and firms or entities that will perform Work.

#### Indicate dates when cutting and patching will be performed.

NOTE: Delete the subparagraph below if utilities are not affected by cutting and patching. Amplify with sub-paragraphs to include special requirements if necessary to suit project requirements.

#### **Utilities:** List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.

NOTE: The subparagraphs below shift responsibility for cutting and patching structural Work to the contractor. Revise as necessary to suit project requirements. Be careful not to violate State Building Codes on structural engineering responsibility.

#### Where cutting and patching involves adding reinforcement to structural elements, submit details and engineering calculations sealed by an Engineer registered in the State of Connecticut showing integration of reinforcement with the original structure.

#### Approval by the Construction Administrator to proceed with cutting and patching does not waive the Architect/Engineer of Record’s rights to later require complete removal and replacement of unsatisfactory Work.

## QUALITY ASSURANCE

NOTE: Modify the paragraphs below to include other desired submittal requirements. Revise if Architect/Engineer approval of cutting and patching procedures is not required.

### **Requirements for Structural Work:** Do not cut and patch structural elements in a manner that would change their load-carrying capacity or load-deflection ratio.

#### **1.** Obtain approval from the Architect/Engineer of the cutting and patching proposal before cutting and patching the following structural elements:

NOTE: Revise the listed examples below to reflect the project's structural elements.

##### **Foundation construction.**

##### **Bearing and retaining walls.**

##### **Structural concrete.**

##### **Structural steel.**

##### **Lintels.**

##### **Structural decking.**

##### **Miscellaneous structural metals.**

##### **Exterior curtain-wall construction.**

##### **Equipment supports.**

##### **Piping, ductwork, vessels, and equipment.**

##### **Structural systems of special construction in Division 13 Sections.**

### **Operational Limitations:** Do not cut and patch operating elements or related components in a manner that would result in reducing their capacity to perform as intended. Do not cut and patch operating elements or related components in a manner that would result in increased maintenance or decreased operational life or safety.

NOTE: Modify the paragraphs below to include other desired submittal requirements. Revise if Architect/Engineer approval of cutting and patching procedures is not required.

#### **1.** Obtain Architect/Engineer’s approval of the cutting and patching proposal before cutting and patching the following operating elements or safety related systems:

NOTE: Revise the listed examples below to reflect the project's operating systems.

##### **Primary operational systems and equipment.**

##### **Air or smoke barriers.**

##### **Water, moisture, or vapor barriers.**

##### **Membranes and flashings.**

##### **Fire protection systems.**

##### **Noise and vibration control elements and systems.**

##### **Control systems.**

##### **Communication systems.**

##### **Conveying systems.**

##### **Electrical wiring systems.**

##### **Operating systems of special construction in Division 13 Sections.**

### **Visual Requirements:** Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities. Do not cut and patch construction in a manner that would result in visual evidence of cutting and patching. Remove and replace construction cut and patched in a visually unsatisfactory manner.

## WARRANTY

### **A.** **Existing Warranties:** Replace, patch, and repair material and surfaces cut or damaged by methods and with materials in such a manner as not to void any warranties required or existing.

# PART 2 - PRODUCTS

## 2.1 MATERIALS, GENERAL

### Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible if identical materials are unavailable or cannot be used. Use materials whose installed performance will equal or surpass that of existing materials.

### The Contractor shall install sleeves, inserts and hangers furnished by the trades needing same.

# PART 3 - EXECUTION

## INSPECTION

### Examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed before cutting. If unsafe or unsatisfactory conditions are encountered, notify the Construction Administrator and Architect, before proceeding with corrective action.

### Openings and chases may not be shown on the Drawings. It is the responsibility of the Contractor to examine the Architectural, Electrical, Heating, Cooling, Ventilating and Plumbing Drawings and to provide chases, channels or openings where needed.

#### **1.** After installing Work into openings, channels and/or chases, the Contractor shall close same. If finishes are to be restored, the new Work shall match the original and shall be done by the trade customarily responsible for the particular kind of Work.

### The Contractor shall verify dimensions for built-in Work and/or Work adjoining that of other trades before ordering any material or doing any Work. Discrepancies shall be submitted to the Construction Administrator before proceeding with the Work.

### See also General Conditions Article 23 “Cutting, Fitting, Patching & Digging”.

## PREPARATION

### Temporary Support: Provide temporary support of Work to be cut.

### Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Work that might be exposed during cutting and patching operations.

### Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

### Avoid cutting existing pipe, conduit, or ductwork serving the building but scheduled to be removed or relocated until provisions have been made to bypass them.

## PERFORMANCE

### **General:** Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.

#### Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.

#### DO perform cutting and patching to integrate elements of Work. Provide penetrations of existing surfaces. Provide samples for testing. Seal penetrations through floors, walls, ceilings and roofs, as applicable; restore or preserve fire-rated and smoke-barrier construction. Construction and finishes shall match original Work.

### **Cutting:** Cut existing construction using methods least likely to damage elements retained or adjoining construction. Where possible, review proposed procedures with the original Installer; comply with the original Installer's recommendations.

#### In general, where cutting, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.

#### To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.

#### Cut through concrete and masonry using a cutting machine, such as a Carborundum saw or a diamond-core drill.

#### Comply with requirements of applicable Division 32 Sections where cutting and patching requires excavating and backfilling.

NOTE: Coordinate the subparagraph below with Divisions 23 and 26 to avoid duplication or conflicts. Delete if requirements are included in Divisions 23 and 26. Modify to suit project requirements if retained.

#### Where services are required to be removed, relocated, or abandoned, by-pass utility services, such as pipe or conduit, before cutting. Cut-off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and cutting.

### **Patching:** Patch with durable seams that are as invisible as possible. Comply with specified tolerances.

#### Where feasible, inspect and test patched areas to demonstrate integrity of the installation.

#### Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

NOTE: Insert specific refinishing requirements for floors, walls, and ceilings. Revise subparagraphs below to suit project requirements.

#### Where removing walls or partitions extends one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform color and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

##### Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing the patch after the area has received primer and second coat.

NOTE: Delete or modify the subparagraph below as necessary to suit project requirements.

#### Patch, repair, or re-hang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

## CLEANING

### **A.** Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar items. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing materials. Restore damaged pipe covering to its original condition.

END OF SECTION 01 73 29