PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the administrative and procedural requirements for cutting and patching and general alterations of the Project including, but not limited to, preparations, products, transitions and adjustments, and repairs and disposal.

B. Related Sections:

1. 01 11 01 “Summary of Work – Regulated Materials”
2. 01 35 23 “Owner’s Safety Requirements”
3. 01 71 23 “Field Engineering”

1.2 CONTRACTOR RESPONSIBILITY

A. The Contractor shall bear all cost of correcting damaged or destroyed work, indicated to remain on the Contract Documents, which is caused from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care by the Contractor and/or the Subcontractors’ work.

1.3 SUBMITTALS

A. Notice:

1. Submit written request two (2) weeks in advance of cutting or alteration which affects:

    a. Structural integrity of any element of the Project;
    b. Integrity of weather-exposed or moisture-resistant elements;
    c. Efficiency, maintenance, or safety of any operational element;
    d. Visual qualities of sight exposed elements; and
    e. Work of Owner or separate contractor.

2. Include in request:

    a. Project name
    b. Location and description of affected work
    c. Description of proposed work
    d. Reason for cutting or alteration
    e. Alternatives to cutting and patching
    f. Effect on work of Owner or separate contractor
    g. Written permission to affect separate contractor
    h. Date and time work will be executed, including duration of work
    i. Utility Shutdown Request form, as appropriate

3. Owner will respond in writing to the submitted request.

B. Visual Matching: When indicated to "match existing," submit products and/or finishes to match existing adjacent finishes for Owner's review and approval or, for patching new work, use the specified materials and finishes in the Contract Documents.

PART 2 - PRODUCTS

2.1 PATCHING AND EXTENDING WORK

A. The Contractor shall provide products specified in the Contract Documents and/or match existing products with an alternate product of the most suitable grade for the intended purpose.

B. The Contractor shall determine the type and quality of existing products and finishes by inspection and/or testing, where necessary.

1. Remove samples of existing installed work for testing only when approved by Owner.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Prior to commencing work:

1. The Contractor shall inspect existing conditions to ascertain elements subject to damage or movement and to determine the need for temporary bracing during cutting and patching work; and

2. Verify that materials to be worked on or removed have been evaluated in the Owner's Regulated Materials "Good Faith" Survey report.

3. Unless otherwise noted, Ground Penetration Radar or Ultra-Sound of all concrete and masonry structural elements is required.

B. Beginning of cutting or patching means acceptance of existing conditions.

C. After cutting and/or removing existing work:

1. The Contractor shall inspect conditions affecting performance of new work and notify Owner of any unforeseen physical conditions; and

2. Verify that demolition is complete and areas are ready for installation of new work.

3.2 PREPARATION

A. Move, or remove, items as necessary for access to cutting and patching work.

B. For Owner occupied facilities, prepare a noise and vibration control plan in accordance with Section 01 50 00 "Temporary Facilities and Controls."

C. Schedule shut-downs and obtain permits required for performance of the Work.

D. Provide temporary supports to ensure structural integrity of the Work.

E. Provide temporary enclosures, shielding devices and/or other methods to protect the following from damage:

1. Existing conditions that are to remain
2. Owner occupied areas
3. Owner's building systems, including HVAC systems

F. Establish "hot-works" fire safety precautions required for performance of the Work.

3.3 PERFORMANCE

A. Execute cutting and patching work in a manner to:

1. Avoid damage to other work;
2. Provide proper surfaces for installation of new work; and
3. Provide a neat transition from existing finishes to new work.

a. Fit new work to existing pipes, sleeves, ducts, conduit and other penetrations through surface

B. For all new work made to existing work under warranty, employ original installer or fabricator to perform cutting and patching unless otherwise approved by the Owner.

C. For additional cutting and patching requirements in medical centers, see Section 01 35 33 "Infection Control."

D. Prepare surfaces to provide for the specified installation of new work and finishes.

1. Remove and replace or repair unsuitable substrate materials (e.g., rotted wood, water damaged materials, corroded metals and deteriorated concrete) for new applications.

E. Restore existing building systems that are impacted by cutting and patching work to original operating conditions.

F. For penetrations cut in existing fire-rated separations, completely seal new work with fire-stopping materials to full thickness of the penetrated element.

1. Replace existing fire-stopping materials when disturbed by new work.

G. Unless otherwise indicated in the Contract Documents, cut concrete and masonry materials using a diamond saw in accurately located straight lines. Pneumatic tools are not allowed without Owner's prior approval.

1. Concrete walls: Core drill pipe penetrations. Saw both sides of wall and break out remainder. Minimize overcuts.

2. Concrete floors: Provide temporary support of elevated floor areas requiring removal and saw-cut. Core-drill pipe penetrations.

3. Masonry walls: Saw-cut along mortar joints. Remove all mortar adhering to edges. Overcuts are not allowed.

4. Wood and/or metal frames walls: Cut wall finish materials in straight uniform lines and remove wall framing as required.

H. Remove debris and abandoned items from the work area, including from concealed spaces.

END OF SECTION