

## SECTION 02 41 19 - SELECTIVE STRUCTURE DEMOLITION

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section includes:

1. Demolition and removal of selected portions of building or structure.
2. Demolition and removal of selected site elements.

#### 1.2 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes the property of Contractor.
- B. The Owner reserves the right to retain ownership of existing fixtures, equipment, and other items (assets). Remove and handle existing assets deemed sold or retained by Owner in such a manner that will prevent damage and loss including but not limited to safeguarding the items from theft.

#### 1.3 SUBMITTALS

- A. Inventory: Submit a list of assets to be retained by the Owner that have been removed and salvaged.

#### 1.4 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Standards: Comply with ANSI A10.6 and NFPA 241.

#### 1.5 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will be minimally disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: The Owner has conducted an asbestos survey and has identified that there is asbestos containing material present in the facility. Perform asbestos removal as specified in Division 02 Section "Asbestos Abatement."
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
  - 1. Maintain fire-protection facilities in service during selective demolition operations.

#### 1.6 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

#### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

##### 3.1 GENERAL

##### 3.2 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.

##### 3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
- B. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.

1. Engage a qualified underground detection services company to located and identify all mechanical and electrical utilities and other hidden potentially dangerous mechanical and electrical items inside and outside the building to reduce the risk of injury.
2. Owner will arrange to shut off indicated services/systems when requested by Contractor.
3. If services/systems are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
4. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.

### 3.4 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
  3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  4. Cover and protect furniture, furnishings, and equipment that have not been removed.
  5. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary enclosures as specified in Division 00 Section "General Conditions."
  6. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner, tenants and the public from fumes and noise. Provide temporary partitions as specified in Division 00 Section "General Conditions."
- C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  1. Strengthen or add new supports when required during progress of selective demolition.

### 3.5 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations.

- B. Removed and Salvaged Items (Assets):
  - 1. Clean salvaged items.
  - 2. Pack or crate items as required after cleaning. Identify contents of containers, if any.
  - 3. Store items in a secure area until received by the Owner.
- C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Owner's Representative, items may be removed to a suitable, protected storage location during selective demolition and reinstalled after selective demolition operations are complete.

### 3.6 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Below-Grade Construction: Demolish foundation walls and other below-grade construction that are within footprint of new construction and extending **5 feet (1.5 m)** outside footprint indicated for new construction. Abandon below-grade construction outside this area
  - 1. Remove below-grade construction, including basements, foundation walls, and footings, to at least **8 inches (203 mm)** below top of finished floor slab as required for installation of HVAC, plumbing, electrical, refrigeration, fire protection piping, and storm piping systems, and appurtenances associated with those systems.
- B. Existing Utilities: Demolish existing utilities and below-grade utility structures that are within **5 feet (1.5 m)** outside footprint indicated for new construction. Abandon utilities outside this area. Fill abandoned utility structures with satisfactory soil materials according to backfill requirements in Contract Documents.
- C. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, then remove masonry between saw cuts.
- D. Concrete Slabs-on-Grade: Locate and mark concrete where underground utilities and other items are to be located. Saw-cut into **2 by 2 foot (610 by 610 mm)** sections. Limit depth of cut to depth of existing concrete slab-on-grade to prevent hitting potentially dangerous unidentified buried mechanical and electrical services. Remove concrete without jack hammering.
- E. Resilient Floor Coverings: Remove floor coverings and adhesive according to recommendations in RFCI-WP and its Addendum.
  - 1. Remove residual adhesive and prepare substrate for new floor coverings by one of the methods recommended by RFCI.
- F. Roofing: Remove no more existing roofing than can be covered in one day by new roofing and so that building interior remains watertight and weathertight.
- G. Air-Conditioning Equipment: Reclaim all refrigerant per EPA regulations and Federal Regulation 40 CFR Section 82 prior to demolition. Tag equipment prior to removal.

**3.7 DISPOSAL OF DEMOLISHED MATERIALS**

- A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn demolished materials.

**3.8 CLEANING**

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 02 41 19

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