

## SECTION 02 01 10

### EXISTING UTILITIES

#### PART 1: GENERAL

##### 1.01 NOTIFICATION

- A. The Contractor shall notify public utility companies and municipalities as to which of their properties (such as pole lines, conduits, gas pipes, water pipes, sewers and tile lines) must be removed or relocated to complete the work. This notice shall note the locations to where their properties could be relocated. However, no warranty is made or implied that the utility owners will remove or relocate their properties prior to commencement of construction operations or in sufficient time or manner to prevent interference with the Contractor's operations.
- B. The Contractor shall give notice to the owners of all known utilities at least 48 hours before starting any operations affecting those properties. If during the course of his operations, the Contractor discovers utility property whose existence was not known, he shall immediately notify the owner thereof and the Engineer.
- C. Construction operations adjacent to utility property shall not be commenced until arrangements satisfactory to the utility owner have been made for the protection of said property and continuation of service. Should any of the Contractor's equipment come in contact with or damage utility property in any way, even though there may be no apparent evidence of breakage or harm, the Contractor shall promptly notify the proper authorities and cooperate with them in determining damage and restoring interrupted services as may be needed. Where contact is made with a utility, operations shall be suspended immediately, and the area vacated, until it has been determined by the utility owner that it is safe to resume operations.

##### 1.02 COMPENSATION

- A. It is understood and agreed that the Bidder has considered in his bid the relative locations of existing utilities, as shown on the Plans and that no additional compensation will be allowed for any delays, inconveniences or damages sustained due to interference which may result from those utilities or the operations of moving them.
- B. If the Contractor is required to perform any special work or use special construction methods in prosecuting work adjacent to underground utility property whose existence was not indicated in the Contract, equitable compensation will be made for the additional costs incurred.
- C. The Contractor shall employ the local utility companies to relocate existing utilities which are affected by the proposed construction. **No additional compensation will be provided for relocation of existing utilities, as shown on the Drawings.**
- D. The Contractor is responsible to hire the services of a utility locator company to locate all privately owned utilities that may be disturbed by construction operations.

##### 1.03 CARE AND RESPONSIBILITY

- A. The Contractor shall employ special equipment or construction methods (including hand labor, if necessary) to accomplish the work as planned adjacent to utility properties without damage thereto. At no time shall the Contractor interfere with any persons engaged in protecting or moving utility property or in the operation of the utility.
- B. The Contractor shall assume full responsibility for reimbursing the utility owners for any damages caused to utility properties whose existence and approximate locations were made known to him before the damage was done. Nothing in this Section shall make the Contractor liable for damage to utility property located below the ground surface, in the absence of negligence, if the owner of the utility, after reasonable notice from the Contractor, fails to advise the Contractor of its location and approximate depth below the ground surface.

**PART 2: PRODUCTS – Not Applicable.**

**PART 3: EXECUTION – Not Applicable.**

**END OF SECTION 02 01 10**

## SECTION 02 41 19

### SELECTIVE DEMOLITION

#### PART 1: GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings, Details of Construction and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to work specified in this section.

##### 1.02 SUMMARY

- A. This Section requires the selective removal of the following:
1. Portions of existing building indicated on drawings and as required, to be removed and disposed of off site, to accommodate new construction.
  2. Removal and protection of existing fixtures, materials, and equipment items indicated "salvage."
- B. Related work specified elsewhere:
1. Remodeling construction work and patching are included within the respective sections of specifications.
  2. Construction Dust Control: Section 01 56 00.
  3. Removal of mechanical and electrical systems and equipment is specified in Divisions 23 and 26.
  4. Cutting or drilling nonstructural concrete floors and masonry walls for piping, ducts, and conduits is specified in Divisions 23 and 26.
- C. Related work by others:
1. Removal of movable furnishings and equipment is by Owner.
  2. Removal of asbestos containing materials is by Owner.

##### 1.03 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Schedule indicating proposed sequence of operations for selective demolition work to Owner's Representative/Construction Manager for review prior to start of work. Include coordination for shutoff, capping, and continuation of utility services as required, together with details for dust and noise control.
1. Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner's on-site operations.
  2. Coordinate with Owner's continuing occupation of portions of existing building and with Owner's partial occupancy of completed new construction areas.
- C. Photographs of existing conditions of structure surfaces, equipment, and adjacent improvements that might be misconstrued as damage related to removal operations. File with Owner's Representative/Construction Manager prior to start of work.

- D. Product data and Material Safety Data Sheets for any hazardous, highly odoriferous, or high volatile materials to be used, along with procedure and safeguards to be followed during the use of each.

#### **1.04 JOB CONDITIONS**

- A. Occupancy: Owner will occupy portions of the building immediately adjacent to areas of selective demolition. Conduct selective demolition work in manner that will minimize need for disruption of Owner's normal operations. Provide minimum of 72 hours advance notice to Owner's Representative of demolition activities that will affect Owner's normal operations.
- B. Condition of Structures: Owner assumes no responsibility for actual condition of items or structures to be demolished.
1. Conditions existing at time of inspection for bidding purposes will be maintained by Owner insofar as practicable. However, minor variations within structure may occur by Owner's removal and salvage operations prior to start of selective demolition work.
- C. Partial Demolition and Removal: Items indicated to be removed but of salvageable value to Contractor may be removed from structure as work progresses. Transport salvaged items from site as they are removed.
1. Storage or sale of removed items on site will not be permitted.
- D. Protection: Provide temporary barricades and other forms of protection to protect Owner's personnel, students and general public from injury due to selective demolition work.
1. Coordinate protective measures with those to be performed or constructed for asbestos abatement work. Avoid duplication of work where practical.
  2. Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to occupied portions of building.
  3. Erect temporary covered passageways as required by authorities having jurisdiction.
  4. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to be demolished and adjacent facilities or work to remain.
  5. Protect from damage existing finish work that is to remain in place and which becomes exposed during demolition operations.
  6. Protect floors with suitable coverings when necessary.
  7. Construct temporary insulated dustproof partitions where required to separate areas where noisy, dirty or dusty operations are performed. Construct partitions out of metal stud, poly and gypsum board and provide dustproof doors and security locks.
  8. Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces and installation of new construction to ensure that no water leakage or damage occurs to structure or interior areas of existing building.
- E. Damages: Promptly repair damages caused to adjacent facilities by demolition work.

- F. Traffic: Conduct selective demolition operations and debris removal to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
  - 1. Do not close, block, or otherwise obstruct streets, walks, or other occupied or used facilities without written permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- G. Flame Cutting: Do not use cutting torches for removal until work area is cleared of flammable materials. At concealed spaces, flame cutting will not be allowed. Maintain portable fire suppression devices during flame-cutting operations.
- H. Utility Services: Maintain existing utilities indicated to remain in service and protect them against damage during demolition operations.
  - 1. Do not interrupt utilities serving occupied or used facilities or spaces, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to Owner.
  - 2. Maintain fire protection services during selective demolition operations.
  - 3. Maintain HVAC functions in occupied spaces, in so far as possible. Provide temporary heating and ventilation as required to maintain acceptable working conditions. Do not interrupt functions to occupied spaces, except as shown on the demolition plans or when authorized in writing by the Owner.
- I. Environmental Controls: Use temporary enclosures, and other methods to limit dust and dirt migration. Comply with governing regulations pertaining to environmental protection.
  - 1. Do not use water when it may create hazardous or objectionable conditions such as ice, flooding, and pollution, or damage to finishes or occupied spaces.
- J. Do not use highly odoriferous, hazardous or highly volatile chemicals during demolition without the approval of the Owner. Provide appropriate safeguards during the use of such approved materials.
- K. Lead Containing Materials: The existing building may contain lead-containing materials, including lead paint. It is the Contractor's responsibility to meet all governmental regulations when dealing with and disposing of lead containing materials.

**PART 2: PRODUCTS** (Not Applicable)

**PART 3: EXECUTION**

**3.01 PREPARATION**

- A. General: Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of areas to be demolished and adjacent facilities to remain.
  - 1. Cease operations and notify Architect immediately if safety of structure appears to be endangered. Take precautions to support structure until determination is made for continuing operations.
  - 2. Cover and protect furniture, equipment, and fixtures from soilage or damage when demolition work is performed in areas where such items have not been removed.

3. Erect and maintain dust-proof partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.
  - a. Where selective demolition occurs immediately adjacent to occupied portions of the building, construct dust-proof partitions of minimum 3-5/8" metal studs, 5/8-inch drywall (joints taped) on occupied side, 1/2-inch fire-retardant plywood on demolition side. Fill partition cavity with insulation. Provide lockable dustproof doors.
  - b. Provide similar weatherproof closures for exterior openings resulting from or immediately adjacent to demolition work.
4. Locate, identify, stub off, and disconnect utility services that are not indicated to remain.
  - a. Provide bypass connections as necessary to maintain continuity of service to occupied areas of building. Provide minimum of 72 hours advance notice to Owner if shutdown of service is necessary during changeover.
5. Asbestos containing materials shall be removed only by a licensed asbestos abatement contractor. In the event that asbestos containing materials are encountered during the demolition process, implement the following procedures:
  - a. If the materials are not disturbed, stop work in the immediate area and notify the Owner/Construction Manager who will arrange for abatement of the material.
  - b. If the material has been disturbed by demolition operation, or is otherwise loose or damaged, evacuate the immediate area and restrict access to all personnel. Shut off or isolate HVAC to the area. Notify the Owner/Construction Manager and do not re-enter space until abatement is complete and permission has been received.
  - c. Rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.

### **3.02 DEMOLITION**

- A. General: Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.
  1. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain using power-driven masonry saw or hand tools.
  2. For interior slabs on grade, use removal methods that will not crack or structurally disturb adjacent slabs or partitions. Use power saw where possible.
  3. Completely fill below-grade areas and voids resulting from demolition work. Use compacted backfill as specified in Section 31 00 00.
  4. Provide for effective air and water pollution controls as required by local authorities having jurisdiction.
- B. If unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure both nature and extend of the conflict. Submit report to Architect in written, accurate detail. Pending receipt of directive from Architect, rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.
- C. If carpet to be removed is glue applied over vinyl asbestos tile. Use power carpet stripper or other device known to remove carpet with minimal damage to or loosening of, underlying tile.

- D. Leave all surfaces and work ready and acceptable to the next trade. Use only materials and techniques that are acceptable to subsequent trades to remove materials from surfaces to remain.
1. Remove adhesive and other materials where wall and floor coverings are removed.
  2. Patch or repair demolition in excess of that shown on drawings.

### **3.03 SALVAGED MATERIALS**

- A. Salvaged Items: Where indicated on Drawings as "Salvage", carefully remove indicated items, clean and store.
1. Furniture/building contents, not scheduled for reuse, remain property of Owner. Notify Architect if such items are encountered and obtain approval regarding method of removal and salvage for the Owner.
  2. Store salvaged items to be reused off the ground in a clean, dry location, away from uncured concrete or masonry. Cover with waterproof material in a manner that permits air circulation within covering.
  3. For items to be reused, inventory, label with previous location and new location.

### **3.04 DISPOSAL OF DEMOLISHED MATERIALS**

- A. Remove from building site debris, rubbish, and other materials resulting from demolition operations. Transport and legally dispose of off site.
1. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution.
  2. Burning of removed materials is not permitted on project site.

### **3.05 CLEANUP AND REPAIR**

- A. General: Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Leave interior areas broom clean.
1. Repair demolition performed in excess of that required. Return elements of construction and surfaces to remain to condition existing prior to start operations. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.
  2. Remove protection when no longer required by demolition and remodeling work.

**END OF SECTION 02 41 19**

