

SECTION 02050

DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Demolishing and removing existing structures, equipment and materials only to the extent as required in the execution work detailed in the contract documents.
- B. Disposing of demolished materials and equipment.

1.02 UNIT PRICES

- A. Measurement for demolition is on a lump sum basis for each contiguous area, including submittal of proposed demolition and removal schedule.

1.03 SUBMITTALS

- A. Submittals shall conform to requirements of all provisions and sections within these specifications.
- B. Submit proposed methods, equipment, materials and sequence of operations for demolition of structures. Describe coordination for shutting off, capping, and removing utilities. Plan operations to minimize temporary disruption of utilities to existing facilities or adjacent property.
- C. Submit proposed demolition and removal schedule for approval. Notify Owner's Representative in writing at least 72 hours before starting demolition.
- D. Submit an approved copy of demolition schedule to Fire Department prior to commencement of demolition operations.
- E. Obtain a permit for building demolition, as required.

1.04 OWNERSHIP OF MATERIAL AND EQUIPMENT

- A. Materials and equipment designated for reuse or salvage are listed in Section 01010 - Summary of Work. Protect items designated for reuse or salvage from damage during demolition, handling and storage. Restore damaged items to satisfactory condition.
- B. Materials and equipment not designated for reuse or salvage become the property of the Contractor.

1.05 STORAGE AND HANDLING

- A. Store and protect materials and equipment designated for reuse until time of installation.
- B. Deliver and unload items to be salvaged to storage areas indicated on Drawings.
- C. Remove equipment and materials not designated for reuse or salvage and all waste and debris resulting from demolition from site. Remove material as work progresses to avoid clutter.

1.06 ENVIRONMENTAL CONTROLS

- A. Minimize spread of dust and flying particles. If required by governing regulations, use temporary enclosures and other suitable methods to prevent the spread of dust, dirt and debris.
- B. Use appropriate controls to limit noise from demolition to levels designated in local ordinances.
- C. Do not use water where it can create dangerous or objectionable conditions, such as localized flooding, erosion, or sedimentation of nearby ditches or streams.
- D. Stop demolition and notify Owner's Representative if underground fuel storage tanks, asbestos, PCB's, contaminated soils, or other hazardous materials are encountered.
- E. Dispose of removed equipment, materials, waste and debris in a manner conforming to applicable laws and regulations.

PART 2 PRODUCTS

2.01 EQUIPMENT AND MATERIALS FOR DEMOLITION

- A. Use equipment and materials approved under Paragraph 1.03, Submittals.
- B. Fires are not permitted.
- C. Do not use a "drop hammer" where the potential exists for damage to underground utilities, structures, or adjacent improvements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Prior to demolition, make an inspection with Owner's Representative to determine the condition of existing structures and features adjacent to items designated for demolition. Provide photographs of adjacent properties prior to demolition.
- B. Owner's Representative will mark or list existing equipment to remain the property of the Owner.

- C. Do not proceed with demolition or removal operations until after the joint inspection and subsequent authorization by Owner's Representative.

### 3.02 PROTECTION OF PERSONS AND PROPERTY

- A. Provide safe working conditions for employees throughout demolition and removal operations. Observe safety requirements for work below grade.
- B. Maintain safe access to adjacent property and buildings. Do not obstruct roadways, sidewalks or passageways adjacent to the work.
- C. Perform demolition in a manner to prevent damage to adjacent property. Repair damage to City property, public right of way or adjacent property and facilities at no cost to the owner.
- D. The Contractor shall be responsible for safety and integrity of adjacent structures and shall be liable for any damage due to movement or settlement. Provide proper framing and shoring necessary for support. Cease operations if an adjacent structure appears to be endangered. Resume demolition only after proper protective measures have been taken.
- E. Erect and maintain enclosures, barriers, warning lights, and other required protective devices.

### 3.03 UTILITY SERVICES

- A. Follow rules and regulations of authorities or companies having jurisdiction over communications, pipelines, and electrical distribution services.
- B. Notify and coordinate with utility company and adjacent building occupants when temporary interruption of utility service is necessary.

### 3.04 DISPOSAL

- A. Remove from the site all items contained in or upon the structure not designated for reuse or salvage. Conform to requirements of Section 01500 - Temporary Facilities and Controls or Section 01564 - Waste Material Disposal.
- B. Follow method of disposal as required by regulatory agencies.

### 3.05 MECHANICAL WORK ITEMS

- A. Mechanical removals consist of dismantling and removing existing piping, pumps, motors, water tanks, equipment and other appurtenances. It includes cutting, capping, and plugging required to restore use of existing utilities.
- B. Remove existing process, water, chemical, gas, fuel oil and other piping not required for new work. Take out piping to the limits shown or to a point where it will not interfere with the new work. Piping not indicated to be removed or which does not

interfere with new work shall be removed to the nearest solid support, capped, and the remainder left in place. Purge chemical and fuel lines and tanks. Verify that such lines are safe prior to removal or capping.

- C. Where piping that is to be removed passes through existing walls, cut and cap piping on each side of the wall. Use cap appropriate for pipe material to be capped. Provide fire-rated sealant for walls classified as fire-rated.
- D. When underground piping, which is not located in the public right-of-way, is to be altered or removed, cap the remaining piping. Abandoned underground piping may be left in place unless it interferes with new work or is shown or specified to be removed. For piping to be abandoned, fill with sand, pressure grout or other approved method and plug with concrete or brick masonry bulkhead unless otherwise approved by the Owner.
- E. Remove waste and vent piping to points shown. Plug pipe and cleanouts and plugs. Where vent stacks pass through an existing roof that is to remain, remove the stack and patch the hole in the roof, making it watertight. Comply with requirements of existing roof installer so as to maintain roof warranty.
- F. Conform to applicable codes when making any changes to plumbing and heating systems.

### 3.06 ELECTRICAL WORK ITEMS

- A. Electrical removals consist of disconnecting and removing existing switchgear, distribution switchboards, control panels, bus duct, conduits and wires, panel boards, lighting fixtures, and miscellaneous electrical equipment.
- B. Remove existing electrical equipment and fixtures to prevent damage to allow continued operation of existing systems and to maintain the integrity of the grounding systems.
- C. Remove poles and metering equipment, if designated for removal on the Drawings. Coordinate electrical removals with the power company, as necessary. Verify that power is properly de-energized and disconnected.
- D. Where shown or otherwise required, remove wiring in underground duct systems. Verify function of wiring before disconnecting and removing. Plug ducts which are not to be reused at entry to buildings.
- E. Changes to electrical systems shall conform to applicable codes.

END OF SECTION