

Section 02220**SITE DEMOLITION****1.0 GENERAL****1.01 SECTION INCLUDES**

- A Demolishing and removing existing pavements, structures, equipment and materials only to the extent as indicated on the Plans.
- B Removing concrete paving, asphaltic concrete pavement, and base courses.
- C Removing concrete curbs, concrete curb and gutters, sidewalks and driveways.
- D Removing pipe culverts and sewers.
- E Removing miscellaneous structures of wood, plastics, metals, concrete, masonry, or combination of concrete and masonry, etc.
- F Disposing of demolished materials and equipment.
- G References to Technical Specifications:
 - 1. Section 01200 – Measurement and Payment Procedures
 - 2. Section 01350 – Submittals
 - 3. Section 01500 – Temporary Facilities and Control
 - 4. Section 01100 – Summary of Work
 - 5. Section 01730 – Cutting and Patching
 - 6. Section 01140 – Contractor’s Use of Premises
 - 7. Section 01562 – Waste Material Disposal

1.02 MEASUREMENT AND PAYMENT

- A Unless indicated as a Bid Item, no separate payment will be made for removing and disposing of existing pavement and structures under this Section. Include cost for removing and disposing of existing pavement and structures in Bid Items for which this Work is a component.
- B If indicated as a Bid Item, measurement will be as follows:
 - 1. Measurement for removing and disposing of concrete base and surfacing, and removing asphaltic surfacing, is on a square yard basis measured between lips of gutters.
 - 2. Measurement for removing and disposing of cement stabilized shell base course, with or without asphalt surfacing, is on a square yard basis.
 - 3. Measurement for removing and disposing of concrete base and surfacing with curbs, is on a square yard basis measured from back to back of curbs. Payment includes removal of all base, asphaltic surfacing, concrete pavement, esplanade curbs, curb and gutters, and paving headers.

4. Measurement for removing and disposing of concrete pavement is on a square yard basis measured from back to back of curbs.
 5. Measurement for removing and disposing of monolithic curb and gutter, removing monolithic concrete curb, and removing concrete curb, is on a lineal foot basis measured along the face of the curb.
 6. Measurement for removing and disposing of concrete sidewalk and driveway is on a square yard basis.
 7. Measurement for removing and disposing of miscellaneous concrete and masonry removal is on a cubic yard basis of the structure in place.
 8. Measurement for removing and disposing of pipe culverts and sewers is on a lineal foot basis for each diameter of type of pipe removed.
 9. Measurement for removing and disposing of unlisted materials shall be on the lump sum basis.
- C No payment will be made for work outside maximum payment limits indicated on Plans, or in areas removed for Contractor's convenience.
- D Refer to Section 01200 – Measurement and Payment Procedures.

1.03 SUBMITTALS

- A Make Submittals required by this Section under the provisions of Section 01350 – Submittals.
- B Submit proposed methods, equipment, materials and sequence of operations for demolition. Describe coordination for shutting off, capping, and removing temporary 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 Engineer in writing at least 48 hours before starting demolition.
- D Submit an approved copy of demolition schedule to Engineer prior to commencement of demolition operations.
- E Obtain a permit for building demolition, as required.

1.04 PROTECTION OF PEOPLE AND PROPERTY

- A Contractor shall conduct all construction operations under this Contract in conformance with the practices described in Section 01500 – Temporary Facilities and Controls.
- B 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.

1.05 OWNERSHIP OF MATERIAL AND EQUIPMENT

- A Materials and equipment designated for reuse or salvage are listed in Section 01100 – 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.

1.06 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 Plans.
- 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.

2.0 PRODUCTS**2.01 EQUIPMENT AND MATERIALS FOR DEMOLITION**

- A Use equipment and materials approved as prescribed in this Section, 1.03 “Submittals”.
- B Use of a “drop hammer” must have the Engineer’s prior approval.

3.0 EXECUTION**3.01 EXAMINATION**

- A Prior to demolition, make an inspection with Engineer to determine the condition of existing structures and features adjacent to items designated for demolition.
- B Engineer 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 Engineer.
- D Stop demolition and notify Engineer if underground fuel storage tanks, asbestos, PCB's, contaminated soils, or other hazardous materials are encountered.

3.02 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.

- C When required by the Work, cutting, patching, and fitting of Work to existing facilities, accommodating installation or connection of Work with existing facilities, or uncovering Work for access, inspection, or testing shall be performed in accordance with Section 01730 – Cutting and Patching

3.03 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. Piping less than 15 inches in diameter may be plugged and abandoned in place. For piping 15 inches in diameter and greater to be abandoned, fill with sand, pressure grout or other approved method and plug with concrete or brick masonry bulkhead.
- 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.

3.04 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 Plans. 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.

3.05 CLEAN-UP AND RESTORATION

- A Perform clean-up and restoration in and around construction zone in accordance with Section 01140 – Contractor’s Use of Premises.
- B Remove from the site all items contained in or upon the structure not designated for reuse or salvage in accordance with this Section and Section 01562 – Waste Material Disposal.
- C Follow method of disposal as required by regulatory agencies.

END OF SECTION