

SECTION 02110 – DEMOLITION AND REMOVAL

1.1 Related Documents:

The General and Special Conditions apply to the work specified in this Section.

1.2 Section Includes:

- A. Protection of work to remain in place
- B. Demolition of existing designated work except for items indicated to remain, to be salvaged or to be relocated. Demolition includes the selective wrecking of existing asphalt or concrete pavement, concrete walkways and concrete slabs, wherever exists, and the removal and disposal of all demolished materials, as shown on the drawings and herein specified.
- C. Disconnection and termination of existing electric work, as indicated on drawings & contract documents, shall be performed by the Contractor in compliance with local governing codes.

1.3 References:

- A. ANSI A10.6 – Demolition Operation Safety Requirements
- B. OSHA 29 CFR 1926 – Construction Industry Subpart T: Demolition.

1.4 Submittals:

- A. Record of Existing Conditions: The Contractor shall record, in the presence of the designated Owner's On Site Representative, the condition of structures and other facilities adjacent to areas of alteration or removal. Such record shall contain the location and extent of cracks and other damage and description of surface conditions that exist prior to the start of work. Copies of the record, signed by the Contractor and co-signed by the Owner's On Site Representative shall be submitted and the stated conditions before starting work shall be verified.
- B. Submit two (2) copies of proposed methods and operations of demolition to the PBA for review prior to the start of work. Include in the schedule the coordination for shut-off, capping and continuation of utility services as required.

1.5 Regulatory Requirements:

- A. Conform to applicable codes (federal, state and local) for demolition of structures, safety of adjacent structures, dust control, runoff control and disposal.

- B. Conform to applicable codes regulatory procedures when discovering hazardous or contaminated materials.

1.6 Job Conditions:

- A. Inspect project work and check conditions under which work will be done.
- B. The Owner assumes no responsibility for the actual condition of structures to be demolished.

Conditions existing at the time of inspection for bidding purposes will be maintained by the Owner in so far as practicable. However, variations within the structure may occur by Owner's removal and salvage of some electrical fixtures prior to the start of the demolition work.

- C. Items of salvable value to the Contractor may be removed from the structure as the work progresses. Salvaged items must be transported from the site as they are removed. Storage or sale of removed items on the site will not be permitted.
- D. The use of explosives will not be permitted.
- E. Structural and other conditions shall be verified with the Owner's On Site Representative before proceeding with the work. Notify the Owner's On Site Representative in writing of any conditions detrimental to the execution and timing of the work.
- F. The Contractor shall ensure coordination of his work with the Owner and all concerned so that all entrances and exits to adjacent areas of building remain accessible at all times.
- G. Proceeding with the work shall be evidence of the acceptance by the Contractor of job conditions.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.1 Preparation:

- A. Provide, erect, and maintain temporary barriers and security devices.
- B. Protect existing appurtenances and structures which are not to be demolished.

- C. Prevent movement or settlement of adjacent structures. Provide bracing and shoring.
- D. Mark location of utilities.

3.2 Demolition Requirements:

- A. Conduct demolition operations and the removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
- B. Do not close or obstruct streets, walks or other occupied or used facilities without permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- C. Promptly repair damages caused to adjacent facilities by demolition operations, as directed by the P.B.A. and at no cost to the Owner.
- D. Maintain existing utilities, keep in service, and protect against damage during demolition operations.
- E. The Contractor will disconnect and seal the utilities serving each structure to be demolished, prior to the start of demolition.

3.3 Dust and Debris Control:

- A. Prevent the spread of dust and debris to occupied portions of the building and avoid the creation of a nuisance or hazard in the surrounding area.
- B. Take precautions to maintain cleanliness on roadways and other public areas used by equipment. Contractor will be held responsible for immediate removal of all spillage on these pavings.
- C. Use water sprinkling, temporary enclosures, and other suitable methods as necessary to limit the amount of dust and dirt rising and scattering in the air, to the lowest level of air pollution practical for the condition of work. Comply with the governing regulations.
- D. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, flooding or pollution.
- E. Clean adjacent structures and improvements of all dust, dirt, and debris caused by demolition operations, as directed by governing authorities. Return areas to condition existing prior to the start of the work.

3.4 Protection:

- A. Existing Work: Protect existing work which is to remain in place, be reused, or remain the property of the Owner. Repair items which are to remain or which are to be salvaged and which are damaged during performance of the work to their original condition, or replace with new. Do not overload structural elements. Provide new supports and reinforcement for existing construction weakened by demolition or removal work. Repairs, reinforcement or structural replacement shall have Owner's approval.
- B. Facilities: Protect electrical and mechanical services and utilities. Where removal of existing utilities and pavement is specified or indicated, provide approved barricades, temporary covering of exposed areas, and temporary services or connections for electrical and mechanical utilities.
- C. Provide enclosed dust chutes with control gates from each floor to carry debris to truck beds and govern flow of materials into truck. Provide overhead bridges of tight board or prefabricated metal construction at dust chutes to protect persons and property from falling debris.
- D. Hydrants shall be accessible at all times. No debris shall be permitted to accumulate within a radius of 20 feet of fire hydrants.

3.5 Demolition – General:

- A. Disconnect and cap designated utilities within demolition areas.
- B. Backfill areas excavated open pits and holes caused as a result of demolition.
- C. Remove demolished materials from site.
- D. Do not burn or bury materials on site. Leave site in clean condition.
- E. Remove temporary work.

3.6 Patching:

- A. Where removals leave holes and damaged surfaces exposed in the finished work, patch repair these holes and damaged surfaces to match adjacent finished surfaces.
- B. Where new is to be applied to existing surfaces, perform removals and patching in manner to produce surfaces suitable for receiving new work.

- C. Finished surfaces of patched area shall be flush with the adjacent existing surface and shall match the existing adjacent surface as closely as possible as to texture and finish.
- D. Holes and depressions caused by previous physical damage or left as a result of removals in existing masonry walls to remain shall be completely filled with an approved masonry patching material, applied in accordance with the manufacturer's printed instructions.

3.7 Disposal of Demolished Materials:

A. General:

Remove from the site all debris, rubbish, and other materials resulting from demolition operations.

B. Removal:

Transport all materials removed from demolished structures and dispose off the site.

3.8 Cleanup:

- A. Debris and Rubbish: Remove and transport debris and rubbish in a manner that will prevent spillage on pavements, streets or adjacent areas. Limit to 3/8 – cubic yard capacity buggies or other conveyances used on roofs and within the building to transport removed debris to chute locations. Clean up spillage from pavements, streets and adjacent areas.