

## SECTION 02220

### DEMOLITION

#### PART 1 - GENERAL

##### 1.01 DESCRIPTION:

- A. This section specifies demolition work.
  - 1. Related Work Specified Elsewhere:
  - 2. Clearing, grubbing, removal and protection of trees and shrubs: Section 02230.
  - 3. Removal of concrete and masonry walls and foundations 12 inches below existing grade: Section 02320.
  - 4. Removal and restoration of miscellaneous facilities: Section 02205.
- B. Definitions:
  - 1. Demolition: Complete removal and disposal of existing facilities from areas to be cleared and grubbed and from other areas shown.
  - 2. Existing facilities include, but are not restricted to, buildings, sheds, streetcar tracks, pavements, sidewalks, curbs and gutters, signs, posts, fences, drainage, sewage and other utility facilities located in the area to be cleared and grubbed.
  - 3. Salvage: Section 02205.

##### 1.02 SUBMITTALS:

- A. Submit the following for approval in accordance with the General Requirements and with the additional requirements as specified for each:
  - 1. Certification:
    - a. Submit copy of request to utility companies owning or agency controlling services and appurtenances affected by demolition work for discontinuance of services along with certificates of severance.
  - 2. Documentation:
    - a. Demolition permit from the jurisdictional agency or owner.
    - b. Permits and releases from each owner of property where demolition debris will be deposited absolving the Authority of responsibility in connection with such disposal.

##### 1.03 QUALITY ASSURANCE:

- A. Codes, Regulations, Reference Standards and Specifications:
  - 1. Comply with codes and regulations of the jurisdictional authorities.

##### 1.04 JOB CONDITIONS:

- A. Buildings:
  - 1. Demolish buildings in place.
- B. Street and Road Closures:
  - 1. Make arrangements with appropriate jurisdictional agency for temporary closing of public streets or highways to traffic as necessary.
  - 2. Arrange with the appropriate agency for the rerouting of traffic and comply with its regulations.
  - 3. Furnish and maintain temporary signs, barricades, flashing lights and flag persons necessitated by the work and remove same upon completion of work.

- C. Maintenance of Traffic:
  - 1. Construct, maintain and remove on completion of work, temporary canopies and other structures for protection of the public in accordance with applicable codes to ensure continuous safety of traffic.
  - 2. Bridge cuts in traffic areas with steel plates or by other approved means.
  - 3. Keep traffic areas free from debris and spillage of materials.
  - 4. When demolition work interferes with bus loading facilities, provide and maintain surfaced areas at alternative locations or arrange rerouting with appropriate authorities for duration of work.
  
- D. Protection and Restoration:
  - 1. Prevent damage to pipes, conduits, wires, cables and structures above and below ground which are not designated for removal. Repair or replace damaged items.

## **PART 2 - PRODUCTS**

Not Used.

## **PART 3 - EXECUTION**

### **3.01 PRESERVATION OF REFERENCES:**

- A. Prior to removal, record location and designation of survey markers and monuments located within demolition area. Store markers and monuments during period of work. Restore survey markers and monuments upon completion of work.

### **3.02 BUILDING DEMOLITION:**

- A. Undertake rodent control and extermination program in demolition areas.
- B. Take possession of building materials, fixtures and equipment in, attached to or belonging to, buildings and structures.
- C. Proceed with demolition of building or structure and appurtenances.
- D. Party Walls:
  - 1. Where building wall being demolished is a party wall with another building not to be demolished, prevent damage to other building and avoid interference with its occupants.
  - 2. Restore and waterproof exposed party walls in accordance with applicable building code for exterior walls of particular type of construction involved.
  - 3. Should party wall become unsafe or dangerous because of demolition, effect remedial measures for anchoring, bracing or buttressing. If such work does not correct unsafe or dangerous conditions, remove and replace wall and perform necessary work to properly enclose structure that is to remain standing, at no cost to the owner of such property.
- E. Cellars and Foundation Walls:
  - 1. Break concrete and masonry cellar floors into pieces not exceeding four cubic feet in volume or, where approved, punch holes of not less than one-square-foot area through full thickness of floor approximately at 10-foot centers.
  - 2. Remove wooden cellar floors.
  - 3. Remove foundation and cellar walls 12 inches minimum below final grade.

4. After breaking or removing cellar floors, fill cellar spaces with durable free-draining fill material, consisting of particles no one of which exceeds eight inches in its greatest dimension. Use masonry rubble obtained from demolition work if it meets this requirement. Place fill material in layers each of 12-inch maximum thickness, compact each layer and fill voids in each lift with approved coarse sand.
5. Correct subsidence in filled areas by placing and compacting additional fill.
6. The Engineer may waive the requirement to fill cellar voids where cellar structures will be subsequently excavated for construction.

### **3.03 REMOVAL OF STREETCAR TRACKS, PAVEMENTS, SIDEWALK, CURBS AND GUTTERS:**

- A. Removal of Streetcar Tracks:
  1. Regardless of depth, totally remove and dispose of rails, slot rails, yokes, switches, turnouts, ties, manholes, concrete and masonry encasements, cables, insulators and other related parts and accessories of track installation located within boundaries drawn two feet outside outer rails. Remove materials within such boundaries horizontally and from existing street grade to yoke encasement subgrade, vertically. In double track installations, remove materials in intervening space between inner rails of each track.
  2. Known locations of streetcar tracks are shown.
  3. Remove streetcar tracks as necessitated by the work and as directed, whether tracks are shown or encountered during excavation.
  4. Transport from the site removed or excavated track accessories or parts thereof which will become the property of the Contractor.
  5. Methods of removal and disposal will be at the Contractor's option, subject to approval and meeting the requirements of the Construction Sequence and Maintenance of Traffic Schedule.
- B. Demolish pavement, sidewalks, curbs and gutters within demolition area shown to underside of pavement and dispose of resulting debris. Remove and salvage stone curbing where shown. Dispose of six-inch granite curb.
- C. Fill resulting excavations, holes and depressions to existing grade or alternative grade as shown, using fill material conforming to requirements of Section 02320.
- D. Adequately drain resulting surfaces.

### **3.04 DISPOSAL:**

- A. Remove debris resulting from demolition work to locations outside Authority's right-of-way.
- B. Dispose of debris off site only with permission of property owner where such debris is to be deposited and in accordance with codes and regulations of the jurisdictional authorities.
- C. Do not burn debris at demolition site.

**END OF SECTION**