

## SECTION 202—TOTAL DEMOLITION OR PARTIAL DEMOLITION OF BUILDINGS AND OTHER STRUCTURES

**202.1 DESCRIPTION**—This work is total or partial demolition of buildings and other structures, as indicated. The following definitions apply:

**(a) Total Demolition.** Total demolition and removal of indicated buildings and other structures located wholly within the right of way.

**(b) Partial Demolition.** Partial demolition and removal of indicated buildings and other structures located partly within the right of way. Demolish and remove only the portion within the right of way, unless the owner of the remaining portion requests and authorizes total demolition in writing.

**(c) Refinishing Party Walls.** Demolition of indicated buildings or other structures to the party wall that separates them from another building or structure outside the right of way. Refinishing of the exposed portion of the party wall, including the party wall foundation.

### 202.2 MATERIAL—

**(a) Cement, Type IS, IP, or II.** [Section 701](#)

**(b) Fine Aggregate, Type A.** [Section 703.1](#)

**(c) Lime.** [Section 723](#)

**(d) Water.** [Section 720.1](#)

**(e) Emulsified Asphalt, Class E-1 or E-2.** [Section 702](#)

**(f) Caulking Compound.** [Section 705.8](#)

**(g) Other Material.** Certify as specified in [Section 106.03\(b\)3](#).

- Metal Mesh Lath, 1.8 kg/m<sup>2</sup> (3.4 pounds per square yard)—FSS QQ-L-101a
- Roofing Material, 29.5 kg (65 pounds) per roll—[ASTM D 224](#)
- Insulating Board—[ASTM C 578](#), Types I and II, Grades 2 and 3
- Asphalt Mastic—FSS SS-C-153

### 202.3 CONSTRUCTION—

**(a) General.** Confine movements and operations to the existing right-of-way limits. Do not deposit construction material, junk, debris, or rubbish on private property. Do not enter private property without first obtaining the written consent of the property owner or owners, and filing a copy of the consent with the Department.

The Department will obtain the vacation of all buildings or structures to be demolished as expeditiously as possible. The Department does not guarantee that all facilities will be vacated and available in sufficient time to allow systematic operations.

The Department does not assume responsibility for the condition of the various buildings or loss of fixtures, equipment, material, or other objects between submittal of the proposal and actual possession of the buildings.

Remove and dispose of material taken from within the project limits as well as debris and rubbish, except items of personal property belonging to owners or tenants and material required for backfilling. Remove material from the project limits as it accumulates, or as directed. Conduct no sale of material while within the project limits.

Comply with the requirements, outlined in Pennsylvania's Asbestos Occupations Accreditation and Certification Act of 1990 (Acts 194 and 161) as well as Federal National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations, for providing notification to all State and County agencies having regulatory enforcement responsibility for demolition and asbestos abatement projects prior to the start of any such work. Such notification should be made using the "Asbestos Abatement and Demolition/Renovation Notification Form," which may be obtained by contacting the DEP Asbestos Office at (717) 787-9257, or the nearest DEP regional office. The form may also be [obtained here](#).

**(b) Safety Regulations.** Furnish, erect, and maintain barricades, steady burn lights, flashing warning lights, and warning and "Keep Out" signs where the placing of such protective devices is warranted, or as directed.

Provide, erect, light, and maintain suitable footway shelter platforms, as required by law or as directed.

Control dust resulting from demolition.

Comply with the [National Emission Standard for Asbestos](#), as contained in the Federal Register, Vol. 55, No. 224.

**(c) Utility Disconnections.** Before starting work, make arrangements with the proper authorities for turning off and disconnecting utilities in connection with demolition operations. Perform the work according to local requirements.

When only a portion of an occupied building is to be demolished, conduct demolition and related operations without interrupting utility service to the remaining portion of the building.

Make permanent reconnections where it is necessary to reconnect facilities to the un-demolished portion of the building.

**(d) Demolition.** Submit a demolition plan to the Representative at least 2 weeks before beginning demolition. Provide a rodent control plan if directed. Before beginning demolition, pump out and clean wells, cesspools, and outbuildings, within the areas to be cleared, in a sanitary manner. Disinfect all such structures as required by the appropriate health authorities, then backfill to the adjacent ground level.

Do not interfere with functioning wells, cisterns, cesspools, or other ground openings outside the condemned area. Securely and permanently cap well casings. Cut off and cap pipes leading into or out of abandoned wells or wells to be demolished.

Where the uncondemned portion of a property has been abandoned, cover, backfill, or treat wells and other openings that constitute a hazard or dangerous condition. Before proceeding with this work, obtain the consent of the owner or owners in writing.

Leave contiguous buildings in a safe condition. Do not deface, mar, or jeopardize them. Repair damage and restore them as directed.

Remove existing fences and guide rail posts, unless otherwise directed. Do not disturb existing curbs, sidewalks, and street paving unless directed.

Do not use a swinging ball immediately adjacent to any public thoroughfare or in any area where its use may create a public hazard.

Do not set fire to any structure. Burn debris only with written permission of local police or fire authorities and if the burning conforms to State Air Pollution Control Commission regulations. Do not begin burning debris until the Department receives a copy of the written permission.

Ensure that the demolition work is strictly confined within the limits of the indicated temporary construction area without hazard to adjacent properties or to the public.

Do not demolish chimneys common to adjacent properties. Do not disturb these chimneys other than to give them support as necessary for continued stability. Repoint and cap as directed.

Restrict partial demolition to horizontal operations, one floor of each structure at a time. Progressively demolish a structure(s), except for the stripping of fixtures, from top to bottom, one floor at a time. The Contractor may perform bay or sectional-type demolition provided a detailed plan, including the building's structural framework, is submitted and accepted before beginning the work. Progressively demolish bay or sectional-type structures from top to bottom as well. Completely demolish each bay or section before starting operations on any adjacent bay or section. Remove each bay or section in a manner that maintains the integrity and proper support of adjacent bays or sections.

If only a portion of a building is to be demolished, adequately shore, brace, and support the remaining part to maintain the integrity of remaining walls, floors, and roofs and their supporting members. Construct shoring, bracing, and supports to be outside the right of way. Tightly board up and seal the remaining portion of a partially demolished building along the right-of-way line. Construct the new closure and connections to the remaining portion of the building in a satisfactory manner and make them weatherproof. Provide a closure of adequately braced lumber studding placed not more than 400 mm (16 inches) apart, with plywood or equal facing, without holes, tightly and securely nailed to the studding. Cover the plywood facing with two layers of smooth finished roofing material. Overlap the roofing material by not less than 100 mm (4 inches).

Where demolition involves severance through a cellar or other subsurface opening, immediately erect a 450 mm (18-inch) thick cement masonry wall adjacent to and wholly outside the right of way. Provide a wall extending from 450 mm (18 inches) below the existing cellar floor to the elevation of the top of adjacent cellar walls. Integrally connect the new wall to the existing adjacent walls.

Demolish wall portions above the first floor that are located immediately adjacent to and parallel to any street. Remove walls and foundations, except required party walls as indicated, to an elevation 1.2 m (4 feet) below the adjacent sidewalk elevation. Clear partition walls and columns of any nature, in cellars or in other subsurface openings, to their floor elevations.

Fill in and repair holes, breaks, or depressions in remaining walls with brick and cement mortar.

Rough cast repaired areas with cement mortar so that they are left in a safe and weatherproof condition.

Remove floor construction above cellars. Remove basement partitions, furnaces, heating apparatus, piping, fuel tanks, miscellaneous fixtures, and stairways from the demolition area.

Store material suitable for backfill that may be encountered in the demolition, until the walls are down.

**(e) Refinishing Party Walls.** Where indicated or directed, cap party walls and restore by insulating and plastering to an acceptable finish. Before work, thoroughly clean the party wall of old plaster, sand, and dirt. Rake pit joints in the brickwork to a minimum depth of 6 mm (1/4 inch), as directed. Water joints, and repoint while damp.

**1. Insulating Coating.** If the wall has an average thickness of less than 150 mm (6 inches), apply an insulating coating as follows:

- Evenly spread a heavy coating of cold asphalt mastic over the entire wall surface.
- Fit, press in place, and securely bond insulating boards (25 mm x 610 mm x 2438 mm stock (1-inch by 2-foot by 8-foot stock)) to the asphalt mastic.
- Caulk joints between the insulating boards with emulsified asphalt or caulking compound to obtain a uniform and finished appearance.

**2. Cement Plaster Coating.**

**2.a Metal Mesh Lath.** Place metal mesh lath against the insulating coating, and securely attach with acceptable devices.

If an insulating coating is not required, securely attach the metal mesh lath directly to the wall, using acceptable devices penetrating the mortar and not the brick. Repair damage to the mortar bond or interior of the wall to the satisfaction of the Representative.

**2.b Cement Plaster.** Do not plaster until the preceding operations have been inspected and accepted. Do not plaster when the outside air temperature is below 7 °C (45F). Extend the plaster from the roofline or wall top to the established ground line, or as directed. Provide a total thickness of finished plaster not less than 22 mm (7/8 inch).

Mix plaster in a suitable mixer with water to obtain a plastic composition. Proportion the mix as follows:

**Cement Plaster  
Scratch and Brown Coats**

Cement—1 bag (42.6 kg (94 pounds))  
Lime—1 bag (22.7 kg (50 pounds))  
Natural Sand—0.14 m<sup>3</sup> (5 cubic feet)

**Cement Plaster  
Finish Coat**

Cement—1 bag (42.6 kg (94 pounds))  
Lime—1 bag (22.7 kg (50 pounds))  
Natural Sand—0.17 m<sup>3</sup> (6 cubic feet)

Immediately before scratch coat application, evenly wet the wall surface but do not saturate. Apply a 10 mm (3/8-inch) scratch coat, heavily cross-hatched to integrate with the metal mesh lath.

After the scratch coat dries thoroughly, again, evenly wet the wall surface but do not saturate. Apply a 10 mm (3/8-inch) brown coat.

After the brown coat dries thoroughly, again, evenly wet the wall surface but do not saturate. Apply a 3 mm (1/8-inch) finish coat. Provide color and finish type as directed.

Protect each coat of plaster from sun and wind to prevent rapid drying. Keep each coat moist by sprinkling for at least 3 days after application or as directed. Allow each coat to dry thoroughly before placing the succeeding coat.

Upon completion of the plastering, install suitable matching wood trim along the border of the roof. Paint new wood trim to conform to the trim color of the remainder of the structure or as directed.

**(f) Backfilling.** Backfill subsurface areas as specified in [Section 206.3](#) and as follows:

Before starting backfilling operations, submit the method of backfill and compaction for review and acceptance.

Furnish additional embankment material for backfilling subsurface areas. Have the quality, nature, and source of any additional embankment material accepted before use. Do not use unsuitable or unstable material in the backfill.

Break-up existing cellar floors and other surface areas to ensure adequate subsurface drainage. Backfill cellars and other subsurface spaces, and grade to the adjacent ground level or as directed.

Clean party wall foundations against which backfill material is to be placed, point brick or block walls with mortar, and waterproof with two coats of emulsified asphalt.

**(g) Treatment of Disturbed Areas.** Treat disturbed areas resulting from demolition with seeding and soil supplements as specified in [Section 804](#). Use a seeding type as indicated or directed. When directed, mulch as specified in [Section 805](#).

**202.4 MEASUREMENT AND PAYMENT—**

**(a) Demolition.** Lump Sum

If a structure is set afire, the amount bid for this item will be deducted from the total amount due.

**(b) Refinishing Party Walls.** Lump Sum

**(c) Utility Disconnections/Reconnections.** Utility disconnections/reconnections are incidental to demolition. The Contractor shall pay all expenses resulting from utility disconnections/reconnections, including fees to utility companies or other agencies.

**(d) Treatment of Disturbed Areas.** Treatment of disturbed areas is incidental to this work.