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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
NASA-02225 (June 2004)  
NASA  
Superseding NASA-02225  
(September 1999)  
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06/04

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SECTION 02225

BUILDING DEMOLITION  
06/04

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NOTE: Delete, revise, or add to the text in this section to cover project requirements. Notes are for designer information and will not appear in the final project specification.

This section covers the wrecking of structures to be demolished completely and the disposal of removed materials.

Drawings must indicate the following:

Structures to be demolished

Facilities adjacent to structures to be demolished that are to remain

Existing utilities that must be maintained for occupied facilities or for permanent service

Location of disconnection and sealing of utilities serving each structure to be demolished

Spoil areas on government property

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PART 1 GENERAL

1.1 REFERENCES

\*\*\*\*\*  
NOTE: The following references should not be manually edited except to add new references. References not used in the text will automatically be deleted from this section of the project specification.  
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The publications listed below form a part of this section to the extent referenced:

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS  
(AASHTO)

AASHTO M 145 (1991; R 2003) Classification of Soils and Soil-Aggregate Mixtures for Highway

Construction Purposes

AASHTO T 180 (2001) Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

ASTM INTERNATIONAL (ASTM)

ASTM D 3740 (2001) Standard Practice for Evaluation of Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used In Engineering Design and Construction

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1926 (2001) Safety and Health Regulations for Construction

1.2 SUBMITTALS

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NOTE: Review submittal description (SD) definitions in Section 01330, "Submittal Procedures," and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control. Include a columnar list of appropriate products and tests beneath each submittal description.
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The following shall be submitted in accordance with Section 01330, "Submittal Procedures," in sufficient detail to show full compliance with the specification:

SD-01 Preconstruction Submittals

- A Construction Equipment List shall be submitted.
Contractor shall submit Utility Outage Request in accordance with the paragraph entitled, "Disconnecting Utilities," of this section.
Contractor shall record Existing Conditions prior to starting work in accordance with the paragraph entitled, "Existing Conditions," of this section.

SD-07 Certificates

- Contractor shall submit a detailed Demolition Plan of the work procedures and safety precautions to be used prior to the beginning of work.
A Safety Plan shall be submitted prior to the beginning of work.

1.3 OCCUPANCY OF STRUCTURES TO BE DEMOLISHED

Government will vacate buildings and other structures to be demolished prior to the start of the work under this Contract.

1.4 DISCONNECTING UTILITIES

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**NOTE: Delete the first of the following paragraphs when the Contractor shall disconnect and seal utilities. Delete the second of the following paragraphs when the Government will disconnect and seal utilities.**  
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[Government will disconnect and seal the utilities serving each structure to be demolished prior to the start of demolition.]

[Utilities serving each structure to be demolished will be shut off by the Government and shall be disconnected and sealed by the Contractor, prior to the start of demolition.]

Existing utilities serving facilities occupied and used by the Government shall not be interrupted except when approved in writing and then only after temporary utility services have been provided and approved.

1.5 PRECAUTIONS AGAINST MOVEMENT

Shoring and bracing or other support shall be provided as necessary to prevent movement, settlement, or collapse of a structure to be demolished and of facilities to remain that are adjacent to a structure to be demolished.

1.6 RODENT AND VERMIN EXTERMINATION

Rodents and vermin shall be exterminated in the buildings to be demolished in accordance with local health laws and regulations. Exterminator shall be licensed or certified by the state or local government to provide extermination services.

1.7 CONSTRUCTION EQUIPMENT LIST

A Construction Equipment List of all major equipment to be used in this section shall be submitted to the Contracting Officer prior to construction.

1.8 DEMOLITION PLAN

Contractor shall prepare and submit a detailed Demolition Plan of the work procedures to the Contracting Officer at least [1] [\_\_\_\_\_] day prior to the commencement of any demolition work. The plan shall be according to OSHA regulations 29 CFR 1926, Subpart T.

1.9 SAFETY PLAN

Contractor shall submit a Safety Plan in accordance with Section 01411, "General Safety Requirements."

1.10 EXISTING CONDITIONS

Existing Conditions shall be recorded by the Contractor, in the presence of the Contracting Officer, showing the condition of structures and other facilities adjacent to areas of alteration or removal. Such record shall contain the elevation of the top of foundation walls, 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 shall be submitted and the stated conditions before starting work shall be verified. Submit utility interruption request in accordance with paragraph entitled, "Disconnecting Utilities," of this section.

PART 2 PRODUCTS

2.1 FILL MATERIAL

Fill material shall conform to the definition of satisfactory soil material as defined in AASHTO M 145, Soil Classification Groups A-1, A-2-4, A-2-5, and A-3. In addition, fill material shall be free from roots and other organic matter, trash, debris, frozen materials, and stones larger than 2 inches 50 millimeter in any dimension.

Proposed fill material shall be sampled and tested by a certified independent lab in accordance with ASTM D 3740 for soil testing, as follows:

Soil classification	AASHTO M 145
Moisture-density relations	AASHTO T 180, Method [B] [D]

PART 3 EXECUTION

3.1 CONCURRENT EARTH-MOVING OPERATIONS

Excavation, filling, and other earth-moving operations that are sequential to demolition work shall not be started in areas occupied by structures to be demolished until all demolition in the area has been completed and debris has been removed.

3.2 DUST ABATEMENT

Dust and dirt rising during demolition operations shall be effectively controlled by water sprinkling or other approved method.

3.3 BUILDINGS

Demolition shall proceed in a systematic manner from the top of the structure to the ground.

3.4 BELOW-GRADE CONSTRUCTION

Foundations, basement concrete slabs on ground, footings, and other below-grade construction shall be demolished to a depth of not less than 12 inches 300 millimeter below the existing [ground surface] [structural element] and removed.

3.5 FILLING BASEMENTS AND VOIDS

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**NOTE: Delete paragraph heading and the following paragraphs when excavation, fill, backfill, or other earthwork is included in this contract.**  
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Basements and voids, resulting from the demolition of structures, shall be completely filled with acceptable fill material and graded.

Prior to filling, basements and voids shall be free of standing water, frost, frozen material, trash, and debris.

Fill material shall be placed in horizontal layers not to exceed 12-inches 300 millimeter in loose depth. Each layer shall be compacted to a minimum of [95] [\_\_\_\_\_] percent of the maximum density as determined by AASHTO T 180, Method D, at optimum moisture content.

After fill has been placed, the surface of the fill shall be graded to meet adjacent contours and to provide surface water drainage.

### 3.6 DISPOSAL OF REMOVED MATERIALS

#### 3.6.1 General

Contractor shall remove debris, rubbish, and other materials resulting from demolition operations. Removed materials shall not be stored on the project site nor sold on Government property.

#### 3.6.2 Removal to Spoil Areas on Government Property

Noncombustible materials removed from demolished structures shall be transported to, and disposed in, designated spoil areas on Government property, as directed by the Contracting Officer.

#### 3.6.3 Removal from Government Property

Waste materials, including excavated material classified as unsatisfactory soil material, trash, and debris, shall be removed from Government property and legally disposed of by the Contractor.

-- End of Section --