
USACE / NAVFAC / AFCEC / NASA UFGS-31 11 00 (August 2008)
Change 1 - 11/16

Preparing Activity: USACE Superseding
UFGS-31 11 00 (April 2006)

UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated October 2017

SECTION TABLE OF CONTENTS

DIVISION 31 - EARTHWORK

SECTION 31 11 00

CLEARING AND GRUBBING

08/08

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 QUALITY CONTROL
 - 1.3.1 Regulatory Requirements
 - 1.3.2 Qualifications
- 1.4 DELIVERY, STORAGE, AND HANDLING
 - 1.4.1 Storage
 - 1.4.2 Handling

PART 2 PRODUCTS

- 2.1 MATERIALS
 - 2.1.1 Tree Wound Paint
 - 2.1.2 Herbicide

PART 3 EXECUTION

- 3.1 PREPARATION
 - 3.1.1 Herbicide Application Plan
 - 3.1.2 Protection
 - 3.1.2.1 Roads and Walks
 - 3.1.2.2 Trees, Shrubs, and Existing Facilities
 - 3.1.2.3 Utility Lines
- 3.2 Application
 - 3.2.1 Herbicide Application
 - 3.2.1.1 Clean Up, Disposal, And Protection
 - 3.2.1.1.1 Disposal of Herbicide
- 3.3 CLEARING
 - 3.3.1 Tree Removal
 - 3.3.2 Pruning
 - 3.3.3 Grubbing
- 3.4 DISPOSAL OF MATERIALS
 - 3.4.1 Saleable Timber

3.4.2 Nonsaleable Materials
3.5 CLOSEOUT ACTIVITIES
3.5.1 Herbicides

-- End of Section Table of Contents --

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SECTION 31 11 00

CLEARING AND GRUBBING 08/08

NOTE: This guide specification covers the requirements for clearing and grubbing.

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specification sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable item(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).

PART 1 GENERAL

NOTE: When this specification is used for hazardous waste site remediations, define what materials generated from clearing, grubbing, and tree removal are contaminated and what materials are non-contaminated. The decision on how to define contaminated and non-contaminated materials must be made by the appropriate regulatory authorities and documented in the design analysis.

The following information must be shown on the project drawings:

1. Limits of clearing
2. Limits of grubbing

3. Trees and shrubs to remain in area to be cleared

4. Trees to be removed in areas which are not to be cleared

5. Describe size, density, and type of trees to be cleared and grubbed.

1.1 REFERENCES

NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a RID outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. DEPARTMENT OF DEFENSE (DOD)

DODI 4150.07

DOD Pest Management Program

1.2 SUBMITTALS

NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project.

The Guide Specification technical editors have designated those items that require Government approval, due to their complexity or criticality, with a "G." Generally, other submittal items can be reviewed by the Contractor's Quality Control System. Only add a "G" to an item, if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army

projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

Use the "S" classification only in SD-11 Closeout Submittals. The "S" following a submittal item indicates that the submittal is required for the Sustainability eNotebook to fulfill federally mandated sustainable requirements in accordance with Section 01 33 29 SUSTAINABILITY REPORTING.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for [Contractor Quality Control approval.][information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submittals with an "S" are for inclusion in the Sustainability eNotebook, in conformance to Section 01 33 29 SUSTAINABILITY REPORTING. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Herbicide Application Plan

SD-03 Product Data

Nonsaleable Materials; G[, [_____]]

Herbicides; G[, [_____]]

SD-04 Samples

Tree Wound Paint

SD-07 Certificates

Qualifications; G[, [_____]]

SD-11 Closeout Submittals

Pest Management Report

1.3 QUALITY CONTROL

1.3.1 Regulatory Requirements

NOTE: Herbicides are a type of pesticide. Contact regional pest management consultant to obtain service specific reporting requirements for the use of herbicides.

For Navy projects, contact the cognizant NAVFAC Applied Biologist. Contact information can be found at

<https://hub.navfac.navy.mil/webcenter/faces/oracle/webcenter/page/scopedMD/s>

For Army projects, contact the cognizant Army Applied Biologist. Contact information can be found at

<http://www.aec.army.mil/services/conservation/pestmanagement.aspx>.

Comply with DODI 4150.07 for requirements on Contractor's licensing, certification, and record keeping. Maintain daily records using the Pest Management Maintenance Record, DD Form 1532-1, or a computer generated equivalent. These forms may be obtained from the main web site:
<http://www.dtic.mil/whs/directives/forms/eforms/dd1532-1.pdf>

1.3.2 Qualifications

For the application of herbicides, use the services of an applicator who is commercially certified in the state where the work is to be performed as required by DODI 4150.07. Submit a copy of the pesticide applicator certificates.

1.4 DELIVERY, STORAGE, AND HANDLING

Deliver materials to the site, and handle in a manner which will maintain the materials in their original manufactured or fabricated condition until ready for use.

1.4.1 Storage

Storage of herbicides on the installation will not be permitted unless it is written into the contract.

1.4.2 Handling

Handle herbicides in accordance with the manufacturer's label and Safety Data Sheet (SDS), preventing contamination by dirt, water, and organic material. Protect herbicides from weather elements as recommended by the manufacturer's label and SDS. Spill kits must be maintained on herbicide control vehicles. Mixing of herbicides on the installation will not be permitted unless it is written into the contract.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Tree Wound Paint

Submit samples in cans with manufacturer's label of bituminous based paint of standard manufacture specially formulated for tree wounds.

2.1.2 Herbicide

**NOTE: The herbicide must be pre-approved by
regional pest management consultant.**

Provide herbicides currently registered by the EPA or approved for such use by the appropriate agency of the host county and approved by the Contracting Officer. Select a herbicide that is suitable for the climatic conditions at the project site. Submit manufacturer's label and SDS for herbicides proposed for use.

PART 3 EXECUTION

3.1 PREPARATION

3.1.1 Herbicide Application Plan

Prior to commencing application of herbicide, submit a herbicide application plan with proposed sequence of treatment work including dates and times of application. Include the herbicide trade name, EPA registration number, chemical composition, formulation, application rate of active ingredients, method of application, area or volume treated, and amount applied. Include a copy of the pesticide applicator certificates.

3.1.2 Protection

3.1.2.1 Roads and Walks

Keep roads and walks free of dirt and debris at all times.

3.1.2.2 Trees, Shrubs, and Existing Facilities

[Provide protection in accordance with Section 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS.] [Protect trees and vegetation to be left standing from damage incident to clearing, grubbing, and construction operations by the erection of barriers or by such other means as the circumstances require.]

3.1.2.3 Utility Lines

Protect existing utility lines that are indicated to remain from damage. Notify the Contracting Officer immediately of damage to or an encounter with an unknown existing utility line. The Contractor is responsible for the repair of damage to existing utility lines that are indicated or made known to the Contractor prior to start of clearing and grubbing operations. When utility lines which are to be removed are encountered

within the area of operations, notify the Contracting Officer in ample time to minimize interruption of the service. Refer to Section 01 30 00 ADMINISTRATIVE REQUIREMENTS and Section 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS for additional utility protection.

3.2 Application

3.2.1 Herbicide Application

Adhere to safety precautions as recommended by the manufacturer concerning handling and application of the herbicide.

3.2.1.1 Clean Up, Disposal, And Protection

Once application has been completed, proceed with clean up and protection of the site without delay. Clean the site of all material associated with the treatment measures, according to label instructions, and as indicated. Remove and dispose of excess and waste material off Government property.

3.2.1.1.1 Disposal of Herbicide

Dispose of residual herbicides and containers off Government property, and in accordance with the approved disposal plan, label instructions and EPA requirements.

3.3 CLEARING

NOTE: Any clearing which requires the removal and disposal of structures that obtrude, encroach upon, or otherwise obstruct the work should be indicated and specified in the Section 02 41 00 {DEMOLITION} {AND} {DECONSTRUCTION}.

When grubbing is included as part of the contract, delete requirements for herbicides.

Where loose rocks, boulders, or rock piles are present on the surface of the areas designated to be cleared, appropriate provisions will be inserted to provide for the disposal of such material. Where stone occurs that can be economically used in the project, provision will be made for the proper stockpiling of such stone in a designated area adjacent to the location of its intended use.

If only minor structures will be encountered, such work may be included. Where large structures are to be demolished, the requirements of this work will be covered in Section 02 41 00 {DEMOLITION} {AND} {DECONSTRUCTION}.

Herbicides intended for controlling vegetative growth should be specified and used with caution on hazardous waste sites to avoid contributing to site contamination.

Clearing shall consist of the felling, trimming, and cutting of trees into

sections and the satisfactory disposal of the trees and other vegetation designated for removal, including downed timber, snags, brush, and rubbish occurring within the areas to be cleared. [Clearing shall also include the removal and disposal of structures that obtrude, encroach upon, or otherwise obstruct the work.] Trees, stumps, roots, brush, and other vegetation in areas to be cleared shall be cut off flush with or below the original ground surface, except such trees and vegetation as may be indicated or directed to be left standing. Trees designated to be left standing within the cleared areas shall be trimmed of dead branches 40 mm 1-1/2 inches or more in diameter and shall be trimmed of all branches the heights indicated or directed. Limbs and branches to be trimmed shall be neatly cut close to the bole of the tree or main branches. Cuts more than 40 mm 1-1/2 inches in diameter shall be painted with an approved tree-wound paint. Apply herbicide [at the rate of [____]] [in accordance with the manufacturer's label] to the top surface of stumps designated not to be removed.

3.3.1 Tree Removal

Where indicated or directed, trees and stumps that are designated as trees shall be removed from areas outside those areas designated for clearing and grubbing. This work shall include the felling of such trees and the removal of their stumps and roots as specified in paragraph GRUBBING. Trees shall be disposed of as specified in paragraph DISPOSAL OF MATERIALS.

3.3.2 Pruning

[Prune] [Trim] trees designated to be left standing within the cleared areas of dead branches 38 mm 1-1/2 inches or more in diameter; and trim branches to heights and in a manner as indicated. Neatly cut limbs and branches to be trimmed close to the bole of the tree or main branches. Paint cuts more than 32 mm 1-1/4 inches in diameter with an approved tree wound paint.

3.3.3 Grubbing

NOTE: Delete the second sentence when this work is included under another section or sections of the project specification.

For hazardous waste sites, the amount of grubbing performed in contaminated areas should be minimized due to potential added costs for disposal of contaminated materials and health and safety concerns.

Grubbing consists of the removal and disposal of stumps, roots larger than 75 mm 3 inches in diameter, and matted roots from the designated grubbing areas. Remove material to be grubbed, together with logs and other organic or metallic debris not suitable for foundation purposes, to a depth of not less than 455 mm 18 inches below the original surface level of the ground in areas indicated to be grubbed and in areas indicated as construction areas under this contract, such as areas for buildings, and areas to be paved. Fill depressions made by grubbing with suitable material and compact to make the surface conform with the original adjacent surface of the ground.

3.4 DISPOSAL OF MATERIALS

3.4.1 Saleable Timber

NOTE: Do not include this article in NAVFAC SE projects. Instead, notify the Project Manager, obtain an estimated value if timber is saleable, and include the following in the BASIS OF BIDS statement: "Bidders are advised that there is marketable standing timber, having fair market value which the Government appraises to be \$_____, within the limits of construction. The Contractor is required to pay the appraised amount to the Government within 30 days after notice to proceed has been given. This is to be deposited in the Navy's forestry account."

Verify with the natural resources office for the installation the most appropriate option.

1. The first option should be used when the Contractor will be required to cut and stack saleable lumber for the Government.
2. The second option should be used when the Government will harvest saleable timber prior to award of the contract.
3. The third option should be used when the Contractor will be required to pay the Government an appraised amount for the saleable timber on the project site. Use of the third option must be approved by EFD/EFA legal counsel for NAVFAC projects. When the felled timber has a distinct commercial value, the disposal of such timber may be left to the Contractor provided the Contracting Officer has reasonable assurance that the bidders will consider the value of the salvageable timber in estimating their bids. An applicable length will be inserted in the blank. At hazardous waste sites, timber removed from areas of contamination is normally not salable due to liability concerns.
4. The fourth option should be used when the disposition of cleared materials is left to the Contractor's discretion. When the timber that can be obtained from felled trees is not of sufficient commercial value to warrant salvaging, this paragraph may be deleted, and the Contractor permitted either to make use of or to dispose of such timber in an approved manner.

When this specification is being used for the remediation of hazardous waste sites, this paragraph should define how both contaminated and non-contaminated materials will be disposed of. As an alternative, disposal requirements could be outlined in a separate section. The design analysis

**should document how both contaminated and
non-contaminated materials will be disposed of.**

1. [Consider felled timber from which saw logs, pulpwood, posts, poles, ties, or fuelwood can be produced as saleable timber. Trim limbs and tops, and saw into saleable lengths of [_____] meters feet for saw logs, [_____] meters feet for pulpwood, [_____] meters feet for poles, [_____] meters feet for ties, and [_____] meters feet for fuelwood, and stockpile adjacent to the site. The stockpile timber will remain the property of the Government.]

2. [The Government will, by separate contract, harvest all saleable timber from the project site. All remaining timber, limbs, tops, stumps, and debris shall be cleared and disposed of by the Contractor as specified.]

3. [All timber removed from the project site shall become the property of the Contractor. Reimburse the Government for the value of the timber (which the Government has appraised at \$[_____]). Submit payment to the Contracting Officer by cashier's or certified check in the amount of \$[_____] , made payable to the U.S. Treasury. Payment shall be made within 30 days of the Notice to Proceed. The Contracting Officer shall deposit the check into the [Navy Forestry] [_____] account.]

4. [All timber on the project site noted for clearing [and grubbing] shall become the property of the Contractor, and shall be removed from the project site and disposed of off stations.]

3.4.2 Nonsaleable Materials

Written permission to dispose of such products on private property shall be filed with the Contracting Officer. Logs, stumps, roots, brush, rotten wood, and other refuse from the clearing and grubbing operations, except for salable timber, shall be disposed of [in the designated waste disposal area] [outside the limits of Government-controlled land at the Contractor's responsibility] [by burning], except when otherwise directed in writing. Such directive will state the conditions covering the disposal of such products and will also state the areas in which they may be placed. [Burn refuse to be burned at specified locations and in a manner to prevent damage to existing structures and appurtenances, construction in progress, trees, and other vegetation. Comply with all Federal and State laws and regulations and with reasonable practice relative to the building of fires. Burning or other disposal of refuse and debris and any accidental loss or damage attendant thereto shall be the Contractor's responsibility.]

3.5 CLOSEOUT ACTIVITIES

3.5.1 Herbicides

Upon completion of this work, submit the Pest Management Report DD Form 1532, or an equivalent computer product, to the Integrated Pest Management Coordinator. This form identifies the type of operation, brand name and manufacturer of herbicide, formulation, concentration or rate of application used.

-- End of Section --