

| REVIEW OF NEW SPECIFICATION OR SPECIFICATION CHANGE   |  | 201-1  |
|---|--|--|
| <b>Specification Section No.:</b> 201   |  | <b>Item:</b> Clearing and Grubbing   |
| <b>Originating Office:</b> MAC  |  | <b>By:</b> Christopher Russell   |
| <b>Date Sent For Review:</b> 09.26.16   |  | <b>Date Comments Due:</b> 10.24.16   |
| <b>Submit response to: STANDARDS AND SPECIFICATIONS UNIT, DIVISION OF PROJECT SUPPORT<br/>4<sup>TH</sup> FLOOR, CDOT HEADQUARTERS</b> |  |  |
| <b>Vote<br/>Y/N</b>   | <b>Concurrent Reviews – Others<br/>Commenting</b>                  | <p>The attached Draft Specification is submitted for your review and comments. If not returned by Date Comments Due, the draft specification will be considered to be approved unless the Standards and Specifications Unit of the Project Development Branch [(303) 757-9474, (303) 757-9402] is advised otherwise.</p> <p><b>REMARKS:</b></p> <p>If these proposed modifications are approved, our unit will issue them in a new Standard Special Provision.</p> |
|   | <b>Spec Committee Members:</b> <input checked="" type="checkbox"/> |  |
|   | Co-Chairman: Lacey <input type="checkbox"/>                        | <p><b>REVIEWER COMMENTS:</b></p> <p>( ) Approved ( ) Disapproved ( ) Modified</p> <p>If disapproved or modified, give reason why and show any modifications on the attached draft copy:</p> <p>_____</p> <p>Name/Signature<br/>Date</p>  |
|   | Region 1: Quirk <input type="checkbox"/>                           |  |
|   | Region 1: Stratton <input type="checkbox"/>                        |  |
|   | Region 2: Phillips <input type="checkbox"/>                        |  |
|   | Region 3: Jean <input type="checkbox"/>                            |  |
|   | Region 4: Boespflug <input type="checkbox"/>                       |  |
|   | Region 5: Valentinelli <input type="checkbox"/>                    |  |
|   | Project Development: Vacant <input type="checkbox"/>               |  |
|   | Specifications: Brinck <input type="checkbox"/>                    |  |
|   | Bridge: Hasan <input type="checkbox"/>                             |  |
|   | Contracts & Market Analysis: Eddy <input type="checkbox"/>         |  |
|   | Materials: Schiebel <input type="checkbox"/>                       |  |
|   | Traffic Engineering: Matthews <input type="checkbox"/>             |  |
|   | Maintenance: Weldon <input type="checkbox"/>                       |  |
|   | FHWA: Feery <input type="checkbox"/>                               |  |
|   | Attorney General: Milan <input type="checkbox"/>                   |  |
|   | <b>Others:</b>   |  |
|   | Colorado Contractors Assoc.: Moody <input type="checkbox"/>        |  |
|   | <b>Technical Committees:</b>                                       |  |
|   | PDAC <input type="checkbox"/>                                      |  |
|   | Drainage Advisory Committee (DAC) <input type="checkbox"/>         |  |
|   | Water Quality Advisory Committee (WQAC) <input type="checkbox"/>   |  |

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| <b>COLORADO DEPARTMENT OF TRANSPORTATION</b><br><b>SUBMITTAL OF NEW SPECIFICATION OR</b><br><b>SPECIFICATION CHANGE</b>   |                               | Log No. (Assigned by Standards<br>and Specifications Unit)<br>201-1                   |
| TO: Standards and Specifications<br>Unit, Project Development,<br>Suite 290   |                               | FROM: Materials Advisory Committee<br><br>(Region, Branch or Technical Committee)     |
| SPECIFICATION SECTION<br>NO.<br>201   | ITEM<br>Clearing and Grubbing | Priority<br>Routine <input checked="" type="checkbox"/> Fast <input type="checkbox"/> |
| Reason for this new or changed specification:<br>The specification was updated to require that clearing and grubbing and removal of organics occur beneath all embankment foundations regardless of height. The changes were developed under a Materials Advisory Committee (MAC) Task Force TF 2015-01 involving the Colorado Contractors Association. The specification changes were approved by the MAC. |                               |   |
| New or Revised Specification:<br>See Attached.  |                               |   |
| NOTE: See Procedural Directive 513.1 for a description of appropriate specification development procedures.   |                               |   |

**CONSTRUCTION DETAILS  
DIVISION 200  
EARTHWORK**

**SECTION 201  
CLEARING AND GRUBBING**

**DESCRIPTION**

**201.01**

This work consists of clearing, grubbing, removing, and disposing of vegetation, and debris within the limits of the right of way, easement areas, borrow pits, and other areas shown in the Contract or required by the work. Vegetation and objects designated to remain shall be preserved free from injury or defacement.

**CONSTRUCTION REQUIREMENTS**

**201.02**

The Engineer will designate all trees, shrubs, plants, and other objects to remain. Every object that is designated to remain and is damaged shall be repaired or replaced as directed, at the Contractor's expense.

Clearing and grubbing shall extend to the toe of fill or the top of cut slopes, unless otherwise designated.

All surface objects, trees, stumps, roots, and other protruding obstructions not designated to remain shall be cleared and grubbed, including mowing, as required. In areas to be rounded at the tops of backslopes, stumps shall be removed to at least 2 feet below the surface of the final slope line.

Except in areas to be excavated, all holes resulting from the removal of obstructions shall be backfilled with suitable material and compacted in accordance with subsection 203.06.

Burning of perishable material will not be permitted without the written approval of the Engineer. If permitted, perishable material shall be burned under the constant care of the Contractor, at times and in a manner that will not endanger the surrounding vegetation, adjacent property, or objects designated to remain. Burning shall be done in accordance with applicable laws and ordinances.

No material or debris shall be disposed of within the project limits without the written permission of the Engineer. Material or debris that is disposed of within the project limits shall be buried to a depth of at least 2 feet and the surface shall be reshaped to match the adjacent ground line. The Contractor shall make all arrangements to obtain written permission from property owners for disposal locations outside the limits and view of the project. Copies of this written agreement shall be furnished to the Engineer before the disposal area is used.

All cleared merchantable timber shall be removed from the project and shall become the property of the Contractor.

Branches on trees or shrubs shall be removed as directed. Branches of trees extending over the roadbed shall be trimmed to give a clear height of 20 feet above the roadbed surface. All trimming shall be done in accordance with good tree surgery practices.

The Contractor shall scalp the areas within the excavation or embankment grading limits. Mowed sod need not be removed where the embankment to be constructed is 4 feet or more in height. Scalping shall

**Commented [RCP1]:** The original specification allowed for roots, stumps, etc. located more than 2 feet below subgrade elevation to remain in place. We are not allowing this anymore. All organics must be removed from the embankment foundation.

**Commented [RCP2]:** The Original Specification also allowed sod, and top soil to remain in the embankment foundation if the proposed embankment would exceed 4 feet in height. All organics and top soil must be removed from all embankment foundations now.

include the removal from the ground surface of brush, roots, sod, grass, residue of agricultural crops, sawdust, and other vegetable matter. See subsection 208.04(e) for disturbed area limits.

### METHOD OF MEASUREMENT

#### 201.03

Measurement will be by one of the following methods:

- (a) *Area Basis.* The work to be paid for will be the number of acres acceptably cleared and grubbed, including scalping, within the limits shown on the plans or staked by the Engineer.
- (b) *Lump Sum Basis.* When the Contract contains a clearing and grubbing lump sum item, no measurement will be made.
- (c) *Volume Basis.* When payment is specified on a volume basis, all accepted clearing and grubbing will be measured in a stock-piled position by cross-sectioning.

**Commented [RCP3]:** Contractor's requested an option that clearing and grubbing be paid on a volume basis.

### BASIS OF PAYMENT

#### 201.04

The accepted quantities of clearing and grubbing will be paid for at the contract unit prices as follows:

- (a) *Area Basis.* The quantities will be paid for at the contract unit price bid per acre for each pay item that appears in the bid schedule.
- (b) *Lump Sum Basis.* When the bid schedule contains a lump sum item, the lump sum price so bid will be paid and shall be full compensation for clearing and grubbing the entire project.
- (c) *Volume Basis.* The quantities will be paid for at the contract unit price bid per cubic yard for each pay item that appears in the bid schedule.

Clearing and grubbing beyond the limits designated under this item will be paid for as Extra Work in accordance with subsection 104.03.

Payment will be made under:

| Pay Item              | Pay Unit                   |
|-----------------------|----------------------------|
| Clearing              | Acre, Cubic Yard, Lump Sum |
| Grubbing              | Acre, Cubic Yard, Lump Sum |
| Clearing and Grubbing | Acre, Cubic Yard, Lump Sum |

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- (d) *Exclusions.* When the bid schedule does not contain an estimated quantity or a lump sum item for clearing and grubbing, the work will not be paid for separately, but shall be included in the work.

REVISION OF SECTION 201  
CLEARING AND GRUBBING

Section 201 of the Standard Specifications is hereby revised for this project as follows:

In subsection 201.02, delete the third paragraph and replace with the following:

All surface objects, trees, stumps, roots, and other protruding obstructions not designated to remain shall be cleared and grubbed, including mowing, as required. In areas to be rounded at the tops of backslopes, stumps shall be removed to at least 2 feet below the surface of the final slope line.

Subsection 201.03 shall include the following:

(c) Volume Basis. The quantities will be paid for at the contract unit price bid per cubic yard for each pay item that appears in the bid schedule.

Subsection 201.04 shall include the following:

(c) Volume Basis. The quantities will be paid for at the contract unit price bid per cubic yard for each pay item that appears in the bid schedule.