

INTENT AND USE GUIDE
SECTION T-803 - Snow Removal (05/07)

INTENT: This Section is for use when it is anticipated that snow removal from roads will be needed during the normal operating season or the Forest determines that Purchaser's normal operations require snow removal.

1. Roads authorized to have snow removed are to be shown in the Special Project Specifications (SPS).
2. Purchaser is not required to plow listed roads, but is authorized to.

Forest should update Sign Plan in the SPS as needed, taking into account requirements in 803.02 B(7) when Purchaser plans to plow.

803.02B(9) Roads that are authorized for snow removal will be coded as either (TS) Removal for Project Use or (JU) Removal for Joint Use, as applicable.

INTENT AND USE GUIDE
Section T-811-Blading (10/07)

INTENT: For use on native and aggregate travelways. Work is to be performed when shown in the SPS.

1. "Crown or slope of Traveled Way" is as shown in the SPS.

811.02B(1) "Cross-sloped" includes inslope, outsloped, crowned or flat and may be as shown in the SPS or determined by the character of the existing surface.

811.02B(5) Coordinate with your local FS invasive plant specialist to determine if invasive species of concern prevention practices are necessary.

811.02D Compaction shall be shown in the SPS under travelway if needed during the blading process. Show method "A" or "B."

Show compaction method A in the SPS, if that compaction obtainable by the maintenance equipment breaking track during work performance is acceptable.

Show compaction method B if the operation of a 7 to 10 ton roller is necessary immediately following blading.

Section T-812 - Dust Abatement (05/07)

INTENT: This section is for use to abate dust. It includes standard materials specifications for applying petroleum and non-petroleum products. It is not intended to use this Section for providing a bituminous running surface.

Coordinating of Documents:

Required by: No other sections.

Requires use of: T-811, when blading is required and T-891, when water is required.

Explanation of Subsections:

A decision needs to be made as to what type of abatement material and the application rate will best work on the existing road surfacing; consider rainfall, temperature and humidity, the availability of water, past performance, the road surface material type and surface condition, and the product cost.

The following specifications may be needed: Water T-891 and Blading T-811. Water T-891 will normally be needed prior to and possibly during product application.

812.02 - Materials must be shown in the Road Listing. Code material as H2O (water), LIGS (Lignin Sulfonate), MG CL2 (Magnesium Chloride), or OPT (Optional). If OPT is shown, then the Purchaser may use any of the previous products. Roads to be dust abated must be shown in the SPS as applicable. If bituminous dust palliative products are specified, they must be shown in Road Listing and coded as shown in Section T-892. If water is specified approved sources will be shown in the Road Listing as specified in Specification T-891 with any restrictions on use.

Anticipated first and sub sequential rates of application must be shown in the Road Listing.

NOTES: Materials may be delivered at a differing percent solids than that stated in this Section. Adjustments in application rates, measurements and payment will be necessary when this occurs.

812.05(B) - Desired application and/or dilution rates for bituminous dust palliative treatments must be shown on the Drawings and/or described in Special Project Specifications. See the table below for some typical guidelines. Very good references include "Guidelines For Cost Effective Use and Application of Dust Palliatives" by Roads and Transportation Association of Canada, 1987 and various R6 informational write-ups by R6 Regional Pavement Engineer. When water is planned for diluting emulsified bituminous products prior to application, the water will normally be incidental.

<u>Product</u>	<u>Typical 1st Time Total Application Rate</u>	<u>Typical Percent Solids</u>	<u>Ideal Percent P 75micro (P#200)</u>	<u>Recommended Surface Condition</u>
Lignin Sulfonate	1gal/sy (diluted 50/50)	50%	10-30%	Need an open or loose surface to get optimum penetration, best to loosen upper portion of surface
Mg Cl Brine	0.5 gal/sy	30%	10-20%	Penetrates reasonably well, might not need to loosen the surface
Ca Cl Brine(0.35 gal/sy	38%	10-20%	Penetrates reasonably well, might not need to loosen the surface
Ca Cl Flake	1.8 lb/sy	77% pure	10-20%	As the flakes absorb water the CaCl penetrates into the surface
Bit. Dust Palliatives	Varies	Varies	5-20%	There are a number of emulsion and non-emulsion products available, some will penetrate into the surface without the upper portion of the surface loosened by blading

Blotter material or any other corrective action needed as a result of Purchaser's improper application of materials may be ordered and is considered incidental.

812.05(D) - Section T-811 (Blading) should be included in the contract when needed. Ideally one wants the road properly shaded (re-establish crown, inslope, or outslope) and the road surface permeable so that it can absorb the dust palliative. Some dust palliatives permeate more readily than others, see the above table for suggested surface conditions.

INTENT AND USE GUIDE
Section T-813 - Surfacing (10/07)

INTENT: For use when limited amounts of aggregate are needed to maintain or protect the road and provide for passage of traffic. The prescribed spot surfacing is not to provide continuous surfacing. The intent of this specification is to replace previously existing surfacing material, not to place new surfacing on roads or portions of roads that have not previously been surfaced. Work is limited to those roads listed in the SPS as applicable. Should not require a crushing setup for this amount of material.

- 813.01 Areas to receive rock will be staked or otherwise designated to reflect location, depth, and width. Total quantities of aggregate are to be shown in SPS and computed as in-place quantities.
- 813.02 "Materials" shall be of the gradations shown in the SPS. Gradation designations shall be the same as used in the current Forest Service specifications for construction of roads existing at the time of appraisal.
- 813.02C Coordinate with your local FS invasive plant specialist to determine if invasive species of concern prevention practices are necessary.
- 813.03B Watering may be required when included under Section T-811 in the Special Requirements.

INTENT AND USE GUIDE
Section T-831 - Ditch Maintenance (10/07)

INTENT: To maintain all types of drainage ditches on all roads when listed in the SPS under the Ditch Maintenance column.

- 831.02 Purchaser has full latitude in determining cleaning method unless it causes road or environmental damage. Purchaser is responsible for any damage due to cleaning operations including end haul resulting from undercutting backslopes.
- 831.02D Material from ditch-cleaning operations is not intended to contaminate aggregate or bituminous-surfaced roads.
- 831.02I Coordinate with your local FS invasive plant specialist to determine if invasive species of concern prevention practices are necessary.

INTENT AND USE GUIDE
Section T-832 - Remove and End Haul Materials (05/07)

INTENT: For removal and disposal of slide or slough or excess materials not needed in the maintenance of the roadway when shown in the SPS (Road Listing) under "Slough & Slide Removal" column. Work does not include that of an extraordinary nature as defined in SPS. Haul of materials directly attributable to Purchaser's operations (maintenance and logging damage) may use the designated sites.

832.02A Slides which are work of an extraordinary nature should be removed by reconstruction or under B(t) 8.3 if applicable.

Forests are to prepare Special Project Specifications and/or drawings showing designated disposal sites and method of placement of the materials.

INTENT AND USE GUIDE
Section T-834 - Drainage Structure Maintenance (10/07)

INTENT: To maintain the uninterrupted flow of water through existing drainage structures. It is not intended to be used to replace structures.

834.02B If feasible, debris and vegetation removed under this Section shall be placed (tossed) within a reasonable distance. Necessary haul of materials to disposal areas shall be performed under Section T-832 requirements. Follow the invasive species of concern prevention practices shown in 834.02E if applicable.

834.02D Reconditioning of the structure is limited to work that can be done by reaching from the outside of the structure. Purchaser's personnel are not required to enter the culvert to perform this work.

834.02E Coordinate with your local FS invasive plant specialist to determine if invasive species of concern prevention practices are necessary.

INTENT AND USE GUIDE
Section T-835 - Roadway Drainage Maintenance (05/07)

INTENT: When listed in the SPS under Routine Maintenance and/or Post Sale column shall be completed prior to seasonal periods of precipitation or runoff and upon completion of use of the road. This Section is to provide drainage on roads to be operated as Maintenance Level I after haul of timber products.

835.01 When listed in the SPS work is intended for both existing closed roads and roads constructed by the sale and to be closed.

835.02C Insert Special Project Specification (SPS) which will show dimensions, materials, etc., for the entrance devices.

INTENT AND USE GUIDE
Section T-836 - Maintenance for Limited Use (05/07)

INTENT: For making road passable for Purchaser's use and high clearance vehicles and to provide for drainage. This Section is applicable to Level II roads where we do not intend to discourage or prohibit recreation traffic during active sale use.

836.02A Purchaser may improve road junction to enable access but must return it to a condition agreed to at the time of improvement. Return to agreed condition is to be done at the end of hauling or during extended periods of Inactivity. If hauling extends into fall runoff periods, some work may need to be done to assure drainage, even though it may make haul slower.

836.02
A,B,C Purchaser must perform listed work prior to hauling or resuming work after extended periods of inactivity.

836.02D Purchaser shall perform protective work after hauling or prior to periods of extended inactivity. In addition to previous comments 02A and 02D, if Purchaser haul is extended into probable snowfall periods, agreement should be documented on what must be done now and what can be deferred until first snowfall.

836.02
B(3) Forest Service may direct slough and slide removal under Section T-832.

836.02
C(3) No material shall be placed on slumped areas unless approved by Forest Service. This is to prevent overloading slumps so they continue to move, as well as to prevent the use of improper materials.

INTENT AND USE GUIDE
Section T-838 - Maintenance for High Clearance Vehicle Use (05/07)

INTENT: To provide drainage and Purchaser/administrative vehicle passage on Level II (accept high clearance) maintenance roads when shown on SPS as prehaul and/or routine maintenance. Section T-838 should normally be adequate for both prehaul and routine maintenance. It is not intended to return the road to maintenance Level III standards. Public access is not planned, but may occur on these roads.

This specification is to be used for existing roads where public access is not planned but may be accepted, and for roads constructed or reconstructed for the sale where public access is not planned but may be accepted. These roads will be left open at the end of project use for some time.

Section T-838 should not be used in lieu of needed reconstruction. Roads that have not been constructed to a 12-foot minimum width in the past, roads that need permanent improvements to existing road junctions, or roads requiring some type of work in excess of minimal work to make roads passable for project use should be included in the contract as a specified road.

838.02

B(3)

Slides and slough not capable of supporting vehicles shall be removed under Section T-832.

INTENT AND USE GUIDE
Section T-839 - Maintenance for Project Use (05/07)

INTENT: To maintain roads which will normally be Maintenance Level I after use and/or listed in the SPS routine maintenance and/or prehaul. Section requires work to protect the road and adjacent resources to be performed and authorizes Purchaser to perform other minimal work as necessary for access. It is not intended to return the road to Maintenance Level III standards. Purchaser would normally keep road blocked or signed to discourage public use.

This specification is to be used for existing Level I roads to be used for sales, and for Level I roads constructed or reconstructed for the sale when the roads are to be closed at the end of project use.

Section T-839 should not be used in lieu of needed reconstruction. Roads that have not been constructed to a 12-foot minimum width in the past, roads that need permanent drainage structures, roads that have a considerable amount of standing trees over approximately 4" diameter within the roadway, or roads requiring some type of work in excess of minimal work as necessary for access should be included in the contract as a specified road.

839.02A Purchaser is "authorized" to perform listed minimum work necessary for Purchaser access. In addition, Purchaser is "authorized" to provide drainage that may be necessary for access such as cleaning ditches and culverts to provide a stable roadbed. The Purchaser is not required to perform this work.

839.02
A(1) Purchaser may improve entrances as mutually agreed, but they shall be reshaped as agreed as part of final requirements.

839.02
A(4) Purchaser is authorized to remove brush from travelway and other areas as needed to perform the maintenance. It is the intent that the road would be brushed only as Purchaser's needs indicate.

839.02B Prior to seasonal periods of anticipated rains and runoff, Purchaser "shall" provide the maintenance work listed.

839.02
B(2) In addition to reinstalling cross ditches and waterbars, Purchaser shall install additional necessary ones when staked and notified.

INTENT AND USE GUIDE
Section T-841 - Vegetation Establishment (05/07)

INTENT: To facilitate establishment of vegetation on roadways, roadsides, and/or disposal areas for roads listed in the SPS.

- 841.01 Show in the Special Project Specifications (SPS) the roads, areas of road, and/or disposal area to be treated.
- 841.02A Show percent of Nitrogen, Phosphorus, Potassium, and Sulfur. Use percentages normally available when purchasing commercial fertilizer and fertilizer with record of success in area. Show application rate in pounds per acre. If there is a concern over fertilizer burn of seed, use additional wording under 841.02D to require separate application or a maximum exposure of seed and fertilizer prior to application.
- 841.02B Specify seed type and application rate in pounds per acre.
- 841.02C Specify mulch type and application rate, if any. If mulch is to be applied after seed and fertilizer application to assure all seeds are in ground contact, use 841.02D to require successive application.
- 841.02D Specify application schedule as necessary. Keep in mind that some seeds will lose viability if applied without reasonable conditions for germination within the season. It may be better to specify ground moisture or certain months of the year instead of "upon completion of earthwork."

INTENT AND USE GUIDE
Section T-842 - Cutting Roadway Vegetation (10/07)

INTENT: To remove vegetation from roads listed in the SPS to provide for a greater degree of safety and facilitate maintenance.

842.01 Use reconstruction when vegetative growth needing to be cut is larger than 4 inches in diameter or grubbing will be required. This Section is neither intended to be used outside the existing cleared roadside nor to widen existing clearing. However, a Special Project Specification (SPS) may be added to include a limited number of larger trees.

842.02
A(1) Brushing need not be continual throughout the road. Brushing Sections may be identified in the SPS (Road Listing) through use of the "termini" column.

842.02B The SPS shall show width and side(s) of road to be cut or insert "as staked" under the "brushing and log out" column.

842.02D Coordinate with your local FS invasive plant specialist to determine if invasive species of concern prevention practices are necessary.

INTENT AND USE GUIDE
Section T-851 - Logging Out (05/07)

INTENT: When shown the SPS, to remove trees which have been deposited within the roadway by natural occurrences. This Section is intended to be used for minor volumes of windfall merchantable material. Large volumes of merchantable timber should be handled through a salvage or small sale.

851.02B Forest may write Special Project Specification to allow cutting of material to a greater width and to prescribe other treatments of the debris and logs.

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Section T-854 Treatment and Disposal of Danger Trees (05/07)

Include “Special Project Specification: “Disposal of Felled Danger Trees on Lands Not Administered by the Forest Service” when sale operations include haul across private.

INTENT AND USE GUIDE
Section T-891 - Water Supply and Watering (05/07)

INTENT: To provide water for maintenance needs.

- 891.01 This section is applicable when Section T-812 requiring water is included in the SPS as a dust palliative. It is also applicable to Section T-811 and T-813 when water is needed for work to be performed under Section T-811
- 891.02 Water source locations and conditions for use must be shown in the Special Project Specification.
- 891.03B Splash plates, circulating bars, or noncirculating spray bars are acceptable under this specification as long as they produce an acceptable job. If a specific application limits the application (such as needing a full circulating spray bar for emulsion/water mixes under Section T-812), use a Special Project Specification showing the affected Section of the Specifications.
- 891.03C Water source improvement is intended to be for road maintenance use and be minimal under this Section. Improvement is not to constitute significant development (construction).

Section T-892 - Bituminous Products (05/07)

INTENT: Bituminous products are to meet established criteria.

Coordinating of Documents:

Required by: 812 for Bituminous dust palliatives

Requires use of: None.

Explanation of Subsections:

892.02 Use the product designations contained in Table 892-1 when including bituminous products in the Road Listing.

If a non-standard bituminous dust palliative not listed in Table 892-1 is desired then a SPECIAL PROJECT SPECIFICATION needs to be issued that addresses the products material requirements. The product should be manufactured for dust abatement purposes. One will find that the amount of solids and dilution ratio of these products varies from manufacture to manufacture. Collect information on the product such as; past performance, location of use, and amount of traffic the product was subjected to during its use.