APPENDIX C

C(T)5.31# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary**:**

PRE HAUL							
ROAD	TERMINI		MILES	ROAD MAINTENACE T-SPECIFICATIONS			
	FROM	TO		T-803	T-810	T-812	T-G
NFSR 64 / CR D002/ Auga Chiquita Rd	Transition onto paved NM highway 521 @ cattlegaurd	Junction of NFSR 64 / CR D002/ Auga Chiquita Rd	5.5				C
NFSR 255/ CR D003 Jim Lewis Canyon Rd.	JCT NFSR 64 / CR D002/ Auga Chiquita Rd	Eastern Extent of Contract Area	0.75				C
NFSR 171 / Perk Canyon Rd	JCT NFSR 255/ CR D003 Jim Lewis Canyon Rd.	Northern Extent of Contract Area	0.33		C		C
NFSR 5600	JCT NFSR 255/ CR D003 Jim Lewis Canyon Rd.	Southern Extent of Contract Area	0.1		C		C

DURING HAUL							
ROAD	TERMINI		MILES	ROAD MAINTENACE T-SPECIFICATIONS			
	FROM	TO		T-803	T-810	T-812	T-G
NFSR 64 / CR D002/ Auga Chiquita Rd	Transition onto paved NM highway 521 @ cattlegaurd	Junction of NFSR 64 / CR D002/ Auga Chiquita Rd	5.5			C	C
NFSR 255/ CR D003 Jim Lewis Canyon Rd.	JCT NFSR 64 / CR D002/ Auga Chiquita Rd	Eastern Extent of Contract Area	0.75			C	C
NFSR 171 / Perk Canyon Rd	JCT NFSR 255/ CR D003 Jim Lewis Canyon Rd.	Northern Extent of Contract Area	0.33	C	C		C
NFSR 5600	JCT NFSR 255/ CR D003 Jim Lewis Canyon Rd.	Southern Extent of Contract Area	0.1	C	C		C

POST HAUL							
ROAD	TERMINI		MILES	ROAD MAINTENACE T-SPECIFICATIONS			
	FROM	TO		T-803	T-810	T-812	T-G
NFSR 64 / CR D002/ Auga Chiquita Rd	Transition onto paved NM highway 521 @ cattlegaurd	Junction of NFSR 64 / CR D002/ Auga Chiquita Rd	5.5			C	C
NFSR 255/ CR D003 Jim Lewis Canyon Rd.	JCT NFSR 64 / CR D002/ Auga Chiquita Rd	Eastern Extent of Contract Area	0.75			C	C
NFSR 171 / Perk Canyon Rd	JCT NFSR 255/ CR D003 Jim Lewis Canyon Rd.	Northern Extent of Contract Area	0.33	C	C		C
NFSR 5600	JCT NFSR 255/ CR D003 Jim Lewis Canyon Rd.	Southern Extent of Contract Area	0.1	C	C		C

ROAD MAINTENANCE T-SPECIFICATIONS FOR STEWARDSHIP CONTRACTS

Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

Contractor will be responsible for doing all pre, during and post haul road maintenance with no compensation from the Forest Service.

T-SPECIFICATIONS	
T-SPEC NUMBER	**SPECIFICATION TITLE**
T-803	Surfacing Blading
T-810	Roadway vegetation
T-812	Miscellaneous Structures
T-GEN	General Requirements

T-800 DEFINITIONS

Wherever the following terms or pronouns are used, the intent and meaning shall be interpreted as follows:

Wherever the following terms or pronouns are used in Specifications T-801 through T-GEN, the intent and meaning shall be interpreted as follows:

800-1.1 - Agreement. Maintenance projects require a mutually acceptable method to resolve the problems, which arise when incompatible situations arise between drawings and specifications and actual conditions on the ground to allow orderly and satisfactory progress of the maintenance.

These specifications have been developed in anticipation of those problem areas and have provided that such changes will be by Agreement.

It is intended that drawings and specifications will govern unless "on-the-ground" conditions warrant otherwise, when specifications call for "Agreement", "agreed", or "approval" such Agreement or approval shall be promptly confirmed in writing.

800-1.2 - Annual Road Maintenance Plan. A plan prepared by various users of one or several roads. The plan is an Agreement on maintenance responsibilities to be performed for the coming year.

800-1.3 - Base Course. Material used to reinforce Subgrade or, as shown on drawings, placed on Subgrade to distribute wheel loads.

800-1.4 - Berm. Curb or dike constructed to prevent uncontrolled Roadway runoff water from discharging onto embankment slope.

800-1.5 - Borrow. Select Material taken from designated borrow sites.

800-1.6 - Crown, Inslope, and Outslope. The cross slope of the Traveled Way to aid in drainage and traffic maneuverability.

800-1.7 - Culverts. A conduit or passageway under a road, trail, or other obstruction. A culvert differs from a bridge in that it is usually entirely below the elevation of the Traveled Way.

800-1.8 - Drainage Dip. A dip in the Traveled Way which intercepts surface runoff and diverts the water off the Traveled Way. A Drainage Dip does not block the movement of traffic.

800-1.9 - Drainage Structures. Manufactured structures which control the runoff of water from the Roadway including Inslope, overside drains, aprons, flumes, downdrains, downpipes, culverts, and the like.

800-1.10 - Dust Abatement Plan. A table which lists the road, dust palliative, application rates, and estimated number of subsequent applications.

800-1.11 - Lead-off Ditches. A ditch used to transmit water from a Drainage Structure or Drainage Dip outlet to the natural drainage area.

800-1.12 - Material. Any substances specified for use in the performance of the work.
800-1.13 – Pre-haul Maintenance. Road maintenance work which must be accomplished to maintain the roads to a

satisfactory condition commensurate with the Contractor 's use, provided Contractor 's Operations do not damage improvements under Cluse 20, or National Forest resources and hauling can be done safely. This work will be shown in the Annual Road Maintenance Plan as provided in CT5.31#. Pre-haul Maintenance work the Contractor elects to perform will be in compliance with the Road Maintenance T-Specifications.

800-1.14 - Roadbed. The portion of a road between the intersection of Subgrade and sideslopes, excluding that portion of the ditch below Subgrade.

800-1.15 - Road Maintenance Plan. A table which shows applicable road maintenance specifications to be performed by Contractor on specific roads.

800-1.16 - Roadside. A general term denoting the area adjoining the outer edge of the Roadway.

800-1.17 - Roadway. The portion of a road within the limits of excavation and embankment.

800-1.18 - Shoulder. That portion of Roadway contiguous with Traveled Way for accommodation of stopped vehicles, for emergency use, and lateral support of base and Surface Course, if any.

800-1.19 - Slide. A concentrated deposit of Materials from above or on backslope extending onto the Traveled Way or Shoulders, whether caused by mass land movements or accumulated ravelling.

800-1.20 - Slough. Material eroded from the backslope which partially or completely blocks the ditch, but does not encroach on the Traveled Way so as to block passage of traffic.

800-1.21 - Slump. A localized portion of the Roadbed which has slipped or otherwise become lower than that of the adjacent Roadbed and constitutes a hazard to traffic.

800-1.22 - Special Project Specifications. Specifications which detail conditions and requirements peculiar to the individual project.

800-1.23 - Subgrade. Top surface of Roadbed upon which Base Course or Surface Course is constructed. For roads without Base Course or Surface Course, that portion of Roadbed prepared as the finished wearing surface.

800-1.24 - Surface Course. The Material placed on Base Course or Subgrade primarily to resist abrasion and the effects of climate. Surface Course may be referred to as surfacing.

800-1.25 - Surface Treatment Plan. A table which lists the roads and surface treatments to be applied.

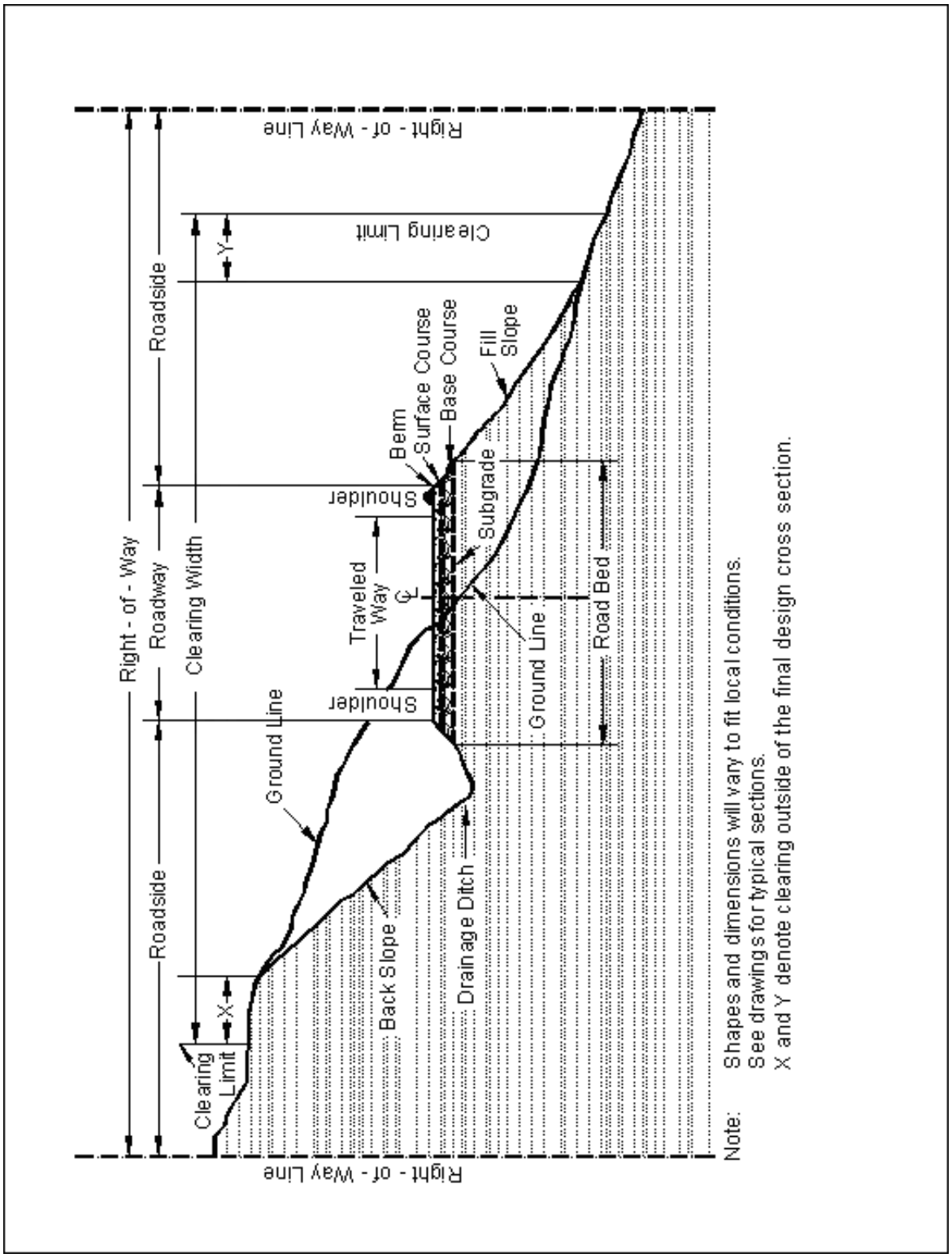
800-1.26 - Traveled Way. That portion of Roadway, excluding Shoulders, used for the movement of vehicles.

800-1.27 - Turnouts. That portion of the Traveled Way constructed as additional width on single lane roads to allow for safe passing of vehicles.

800-1.28 - Water Source. A place designated by the Contracting Officer for acquiring water for road maintenance purposes.

800-1.29 - Waterbar. A dip in the Roadbed which intercepts surface runoff and diverts the water off the Roadway. A Waterbar is not designed to be traversable by logging trucks.

Figure 800-1: ILLUSTRATION OF ROAD STRUCTURE TERMS.



T-803 SURFACE BLADING

DESCRIPTION

1.1 Surface blading consists of keeping a native or aggregate surface Roadbed in a condition to facilitate traffic and provide proper drainage. It includes maintaining the Crown or Slope of the Traveled Way, Shoulders, Drainage Dips, all drainage ditches, Turnouts, Berms, and approach road intersections; also cleaning bridge decks. It also provides a level of smoothness appropriate for the traffic served.

MATERIALS

2.1 Water. When required, water shall be applied according to the requirements in Specification T-807 during scarifying and/or blading if sufficient moisture is not present to cut, mix, or compact the surface Material. Water Sources will be shown on the project area map, or designated by the designated Forest Service official. The requirement will be listed in CT5.31#, when applicable.

REQUIREMENTS

3.1 Surface blading shall be performed immediately before, during, and after Contractor 's use as often as necessary to facilitate traffic and proper drainage.

3.2 Surface irregularities shall be eliminated by scarification and/or blading, and the surface left in a free-draining state and to a smoothness needed to facilitate traffic. The surface blading shall preserve the existing cross-section. Surface Material which has been displaced to the Shoulders or Turnouts shall be returned to the Traveled Way. The blading operation shall be conducted to prevent the loss of surface Material and to provide for a thorough mixing of the Material being worked.

3.3 When directed by the designated Forest Service official, residual bituminous material from previous surface- stabilization treatments shall be scarified and reduced to produce material not exceeding 3 inches (76.2 mm) in greatest dimension.

3.4 Roadway backslopes or Berms shall not be undercut, nor shall new Berms be established unless agreed to, in writing, by the designated Forest Service official.

Berms shall be repaired by placing Material, as needed to restore the Berm, to reasonably blend with existing line, grade, and cross-section. Other berms, which are determined by the designated Forest Service official as unnecessary, shall be removed.

3.5 Intersecting roads shall be bladed for a reasonable distance to assure proper blending of the two riding surfaces.

3.6 Drainage Dips and all Ditches shall be cleaned and maintained to reasonably blend with existing line, grade, and cross-section and to provide positive drainage.

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3.7 On native surfaced roads, Material generated from backslope Sloughing, and ditch cleaning may be blended with the surface Material being worked. On aggregate surfaced roads this Material shall not be blended with Surface or Base Course Material unless agreed to, in writing, by the designated Forest Service official.

3.8 Rocks or other Material remaining on the Traveled Way after the final pass that are larger than 4 inches in diameter or are larger than the maximum size of imported surfacing shall be removed from the Traveled Way. Unless otherwise designated by the designated Forest Service official, the oversized Material shall be disposed of by sidecasting. Sidecasting into streams, lakes, or water courses shall not be permitted.

3.9 Material and/or debris resulting from work under this specification shall not remain on or in structures, such as Culverts, bridge decks, overside drains, cattleguards, ditches, Drainage Dips, and the like.

3.10 Compaction. When required, the roadbed shall be compacted according to one of the following compaction methods, as listed in CT5.31#:

Compaction Method A - Operate equipment over the full-width until there is no visible evidence of further consolidation.

Compaction Method B - Use compression-type or vibratory rollers. Compact, full width, to at least 95 percent of the maximum density. Determine the in-place density and moisture content according to AASHTO T 310 or other approved test procedures. When required, use AASHTO T 224 to correct coarse particles.

3.11 Grid Rolling. When required, the roadbed shall be grid rolled as listed in CT5.31#. Unless otherwise agreed by the designated Forest Service official, grid-rolling will continue until roadbed imported surfacing-materials are reduced to a size not exceeding 3 inches (76.2 mm) in greatest dimension or two-thirds of the depth of the existing surfacing, whichever is greater.

T 810 ROADWAY VEGETATION

DESCRIPTION

1.1 This work shall consist of removal of brush or tree growth or other obstructions to visibility, as shown on the drawings or designated by the Forest Service.

REQUIREMENTS

3.1 All trees that have fallen across the roadway shall be removed, unless otherwise agreed. Merchantable timber, if any, shall be cut in standard log lengths and decked along the roadbed in locations where traveled way width or sight distances will not be impaired.

3.2 Brush and trees that obstruct proper sight distance shall be removed. Low shrubs and brush, which do not restrict sight distance, provides ground cover or reduces erosion, shall not be removed.

Vegetative material consisting of limbs, tops and brush shall be scattered outside of the roadway. Stumps and logs not meeting utilization standards may also be scattered outside of the roadway. Purchaser shall avoid placing vegetative material in concentrations. Disposal of vegetative material will not be permitted in meadows or drainage ways.

T-812 MISCELLANEAOUS STRUCTURES

DESCRIPTION

1.1 Maintenance of miscellaneous structures includes cattleguards, gates, H-braces, fencing, guardrails, signage, and other similar structures that have been previously installed to insure safe and efficient operation of the road.

MATERIALS

2.1 Any Materials needed in the maintenance of miscellaneous structures shall be similar in type and quality to the Material in the structure being maintained.

REQUIREMENTS

3.1 Cattleguards. Loose rail or wing elements shall be straightened and welded or bolted back in place.

Excess Material carried into the cattleguard shall be removed when drainage is blocked or when it reaches 6 inches from the bottom of the cattleguard frame. Drainage into and from the cattleguard shall be kept open.

3.2 Gates. Gates shall be kept in good repair and made to swing easily. Hinges or latches shall be repaired if not operating properly and hinges shall be oiled. Brush and debris shall be removed from within the swinging radius.

Loose wire gate ends and internal stays shall be maintained in good condition. Gate wire shall be maintained as necessary to insure proper operation of the gate both as a vehicle passageway and as a barrier to cattle movement.

3.3 H-braces. Posts, horizontal braces, and diagonal struts or tie wires shall be maintained to provide for tightness of fence and gate or latch posts.

3.4 Fencing. Fencing which has no opening or provisions for gating shall be temporarily braced prior to cutting. Fencing shall be replaced upon completion of use and shall be stretched and securely fastened to conform to its original spacing before cutting.

3.5 Signage. Structure delineators, regulatory and warning signs determined by the designated Forest Service official as necessary, shall be maintained in good, clean condition.

3.6 Guardrails. Guardrails shall be maintained according to the most recent AASHTO standards and specifications.

T-GEN GENERAL REQUIREMENTS

DESCRIPTION

1.1 General requirements consists of requirements that are mandatory for all T-Specs included in the contract.

REQUIREMENTS

3.1 *Equipment Specifications*. The equipment to be used to complete the work in this contract shall meet the following minimum standards:

Road Grader - Motor patrol, self-propelled, tandem drive, with a mold board not more than 14 feet or less than 12 feet with a 3 tooth ripper (scarifier) bar.

Crawler Tractor/Dozer - D4 with a 3 tooth ripper (scarifier) bar and an angle dozer blade (6 way tilt preferred).

3.2 *Equipment Cleaning*. Adhere to the requirements in BPA.

3.3 *Traffic Control*. Adhere to the requirements in provision BT6.33.

3.4 *Bridges*. Clean the deck of any accumulated dirt or gravel and clean deck drains. Protect structures according to the requirements in BPA.