WHITE RIVER NATIONAL FOREST
COMMERCIAL ROAD USE RULES
AND
ROAD USE PERMIT REQUIREMENTS

May 2015

Prepared By:

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Date: 07 May 2015

Recommended By:

Gregg Rosenmerkel – Forest Engineer

Date: 14MAY15

Approved By:

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Date: May 15, 2015

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LIST OF ATTACHMENTS

TRANSPORTATION SYSTEMS MANAGEMENT DIRECTORY

Supervisor's Office - White River National Forest		
Forest Supervisor	Scott Fitzwilliams	(970) 945-2521
Forest Engineer	Greg Rosenmerkel	(970) 945-3205
Forest Transportation Engineer	Miles Barkhurst	(970) 945-3205
District Rangers		
Aspen/Sopris Ranger District	Karen Schroyer	(970)-963-2266
Blanco Ranger District	Ken Coffin	(970) 878-4039
Dillon Ranger District	Bill Jackson	(970)-468-5400
Eagle/Holy Cross Ranger District	David Neely	(970) 328-6388
Rifle Ranger District	Sarah Hankens	(970)-625-2371
Adjacent Forests		
Pike/San Isabel	Supervisor's Office	(719) 553-1400
Medicine Bow/Routt	Supervisor's Office	(307) 745-2300
Arapaho/Roosevelt	Supervisor's Office	(970) 498-1211
Grand Mesa/Uncompahgre/Gunnison	Supervisor's Office	(970) 874-6600

WHITE RIVER NATIONAL FOREST COMMERCIAL ROAD USE RULES

INTRODUCTION:

By authority of 36 CFR Part 212.5 and 36 CFR Part 261.54, the White River National Forest Commercial Road Use Rules govern commercial use of White River National Forest System Roads.

The purpose of the White River National Forest Commercial Road Use Rules is to:

- Provide commercial users with a uniform and timely policy concerning use requirements on National Forest System Roads in advance of applying for permits or bidding on contracts.
- Implement a responsive system for uniformly issuing permits or making other arrangements for authorizing road use to meet the special needs unique to commercial users.
- Provide a system for displaying road use requirements on White River National Forest System Roads.
- To inform other agencies and forests about requirements concerning use of White River National Forest System Roads.

GENERAL ROAD RULES:

Pursuant to 16 USC Part 551, and 36 CFR Part 261.50(a) and (b), the attached Regional Order #R2-2014-02 (Occupancy and Use Restrictions, Rocky Mountain Region) (or most recent revision) is applicable to all Forest Service roads on the White River National Forest (WRNF). The order is enforceable by Federal, State, and County law enforcement officers.

Pursuant to 36 CFR Part 261.54(c) and Regional Order #R2-2014-02(or most recent revision), using a National Forest System Road (NFSR) for commercial hauling without a permit or written authorization from the Forest Service is prohibited.

- Application for a commercial road use permit or special use authorization shall be made to the appropriate White River National Forest District Ranger Office.
- Application criteria are as shown in Appendix B.

Pursuant to 36 CFR Part 261.12 (a) violating the load, weight, height, length or width limitations prescribed by State law except by special use authorization or written agreement or by order issued under 36 CFR 261.54 is prohibited.

- The load weight, height, length, and width limitations of vehicles on National Forest System roads shall be in accordance with Colorado Revised Statutes (“CRS”) Title 42, Article 4, Part 5 or the Colorado Model Traffic Code Part 5.
- Waivers to weight, height, length, and width requirements may be allowed when such permission is authorized by contract or in writing. Permission may be granted and documented using the proper format established in contracts, permits or authorizations.
    - Application for waivers or variances from vehicle weight and dimensional limitations must be made through the White River National Forest Road Manager or designated contract or permit administrator.
    - Allow at least thirty (30) days after submittal to allow time for processing applications for variance permits depending upon the haul route and the complexity of bridges or other sensitive structures involved.
    - A listing of White River National Forest bridges and the overweight application process are as shown in Appendix C.

Pursuant to 36 CFR 261.53 and 36 CFR 261.54(b) commercial use of National Forest System roads shall be suspended when a closure order is issued or is currently in place.

- All White River National Forest System Roads are subject to short-term travel restrictions and/or closures due to seasonal or unusual weather conditions (such as freeze/thaw cycles, heavy precipitation, etc.), wet or saturated soils, for wildlife protection, for emergency traffic (such as fire-related business), when necessary to permit reconstruction and maintenance, when use will result in unsafe conditions to others, or when use causes damage to roads,.
- Such suspension shall be effective when the user is notified verbally, in writing or by road closures posted on the road. Verbal suspensions are to be followed by notification in writing.

Pursuant to 36 CFR 261.12(c) damaging and leaving in a damaged condition any road or segment thereof is prohibited.

- The commercial user is responsible for repairing all damage caused by their use at no cost to the government.
- Damage is exclusive of ordinary road maintenance described in the contract or permit, and includes, but is not limited to contamination, disturbance, or loss of aggregate or asphalt surfacing which cannot be repaired with typical road maintenance activities.
- Repairing road damage and restoration of the road to its original condition or permit required standard shall be done prior to resumption of use, unless otherwise agreed to in writing by the Forest Service.

All commercial users, including timber purchasers, are authorized to use only those roads identified in the permit, contract, or other legal authorization. All commercial road use is subject to limitations and specific rules imposed by the White River National Forest Commercial Road Use Rules, applicable permit or contract provisions and any outstanding orders issued by the White River National Forest Supervisor.

Not all roads will be available for commercial use, and use of some roads may be permitted with certain restrictions or requirements such as reconstruction, maintenance or submittal of a traffic control plan.

- Reconstruction or road maintenance may be necessary to accommodate the commercial hauling of forest products over many roads on the White River National Forest. This must be evaluated on a case-by-case basis. A final determination of the scope of such work, or the waiving of such, must be made by a White River National Forest Line Officer based on data included in the application package, and recommendations presented by the White River National Transportation Engineer or designated representative.
- For use of roads not authorized in a contract, permit, or other written agreement, the commercial user and Forest Service must agree to the required reconstruction or road maintenance for safety, investment protection, structural support, and resource protection prior to granting use. This work may include roadway clearing, reconditioning, culvert installation or replacement, slump repair, surfacing, and roadbed widening or realignment. See Appendix D for Design Criteria
- Any alteration of a NFSR or road under jurisdiction of the Forest Service, or new construction shall be conducted in accordance with the terms and conditions set forth in the written authorization and in accordance with all reqirements in environmental documents such as NEPA, consultation, and in accordance with all other environmental regulations.
- National Forest timber purchasers are authorized to use only those National Forest roads identified in C (T) 5.31 and/or C (T) 5.32, and are subject to included limitations and specific rules imposed on those roads in provision C (T) 5.12, C (T) 6.35, and these Road Rules.
- Road maintenance deposits shall be required for any commercial use or haul on National Forest System Roads (36 CFR 212.5 (d) (3)). On roads with surfacing, these deposits would also include

surface rock replacement. In lieu of deposits, commercial users may perform maintenance or provide materials proportionate to their share of the collections (36 CFR 212.5 (c)).

In accordance with 36 CFR 261.12(d), no road shall be blocked by any vehicle or other object in a manner that is an impediment or hazard or conflicts with other users unless otherwise provided in a permit, contract, or written authorization. Impediments include, but are not limited to, the following:

- Slow moving logging, construction, or road maintenance equipment operated without posting proper warning signs.
- Light or heavy equipment or vehicles operating or parked within the traveled way or turnouts without proper warning signs posted. This includes parking in front of road closure devices, effectively blocking emergency or permitted access to and through the device.
- Slash or debris within, or protruding into the traveled way or turnouts without proper warning signs posted.
- Logs lying or decked upon, or protruding into the traveled way or turnouts without proper warning signs posted.
- Falling trees onto the roadway without permit and proper warning signs and/or flaggers.

Application for permission to block roads or use them as landings or other uses must be made to the authorized officer at least five (5) days in advance of need.

The following policies may be enforced on White River National Forest System roads through regulations written under 36 CFR 261.54(a).

- Using a vehicle equipped with other than pneumatic tires, except snowmobiles (i.e. vehicles with lugs - grousers on tracks etc.) are prohibited on paved roads, crushed aggregate surfaced roads and bridges unless specifically authorized by permit, contract, or other written agreement.

Snow removal is subject to official authorization (contract, road use permit or special use authorization), to the provisions of that authorization and the White River National Forest Commercial Road Use Rules.

- Snowplowing permits will be issued in accordance with requirements and restrictions specified in Appendix E.
- For situations not covered by a contract, District Rangers are authorized to issue snowplowing permits upon recommendation of the Forest Road Manager.
- There are many roads designated as snowmobile routes on National Forest land. No snowplowing or use by vehicles other than over-snow vehicles will be authorized when the road has been groomed and posted for over-snow vehicles on the ground, unless approved in writing by the Forest Service. This occurs annually, normally between December and May, but some variations can be expected.

When nonskid materials are used on slippery surfaces, the residual material will be removed from the pavement surface in the spring by the commercial user placing the material. The use of de-icing materials must be authorized in writing.

Chemical dust abatement materials (excluding water) shall only be used when approved in writing by the Forest Service prior to placement. Approved dust abatement palliatives are listed in the specific provision or specification included with each permit, contract provision, or other written agreement. Approved dust abatement palliatives (other than water) include lignon sulfonate, magnesium chloride, and calcium chloride. Other chemicals may be considered when approved by the Forest Service upon receipt of manufacturer's documentation of chemical composition, recommended application procedures, and

Material Safety Data Sheets. The use of used oil as a dust suppressant is prohibited in any concentration (40 CFR 279).

Compliance with applicable sections of the Endangered Species Act and the Clean Water Act is required at all times.

Compliance with applicable State and local laws and regulations is required, unless specifically superseded by the White River National Forest Supervisor Special Orders.

All signing requirements on roads open for public use on the Forest shall meet current Manual on Uniform Traffic Control Devices (MUTCD) standards.

All commercial users shall comply with applicable fire restrictions and precautions (Appendix F for examples).

PERMIT PROCESSING

Requests for authorization of commercial road use are subject to requirements established under the Endangered Species Act (ESA). These requirements may result in a longer process for authorizing commercial road use and issuing permits or special use authorizations than might be expected. Each request for commercial road use will stand on its own. The White River National Forest will endeavor to help move each application through the process as quickly as possible. Additional information on this process may be obtained through the Forest Road Manager or District Ranger.

The ESA requires the Forest Service to complete and/or approve a Biological Assessment (BA) of all proposed federally funded, contracted, or permitted activities where species listed as threatened, endangered, or proposed for federal listing are known or suspected to exist, or designated or proposed critical habitats for these species are present. If the BA determines that the proposed activity may have a detrimental effect on a federally listed or proposed species or critical habitat (may affect) then consultation has to take place with the U.S. Fish and Wildlife Service (USFWS). Consultation may result in a biological opinion (BO), under which specific mitigation measures (reasonable and prudent alternatives or reasonable and prudent measures with terms and conditions) must be taken to ensure the protection of the species or critical habitats, as the proposed activity is implemented. When a request for the use of a Forest System road is received, it will have to go through the above process, unless the associated road activity has already been through the process and a determination has been made part of the evaluation of ongoing activities. In this case, the permittees use may be considered part of the ongoing use.

If the proposed activity has been previously addressed in a BA, consultation with USFWS may already have been made relative to the ongoing activities. This may expedite an authorization for commercial road use, subject to any mitigation measures agreed upon.

Commercial use of a road that is open to other ongoing public use may be authorized in a minimal amount of time. However, it may take up to 6 months to complete the consultation process and up to two years to complete the NEPA process to determine if commercial use will be authorized if there is a proposal for a substantial change such as opening a closed road, snowplowing a road traditionally closed by seasonal snow accumulations, or to determine if reconstruction or new construction activities necessary to facilitate the commercial use comply with applicable environmental laws and regulations.

If commercial use of a National Forest System Road is requested to transport federal or non- federal products from private lands within or adjacent to National Forest System boundaries, a BA is required to assess the effects of the proposed private land activities on Threatened, Endangered, and Proposed Species and designated and proposed critical habitats, based upon the information provided by the landowner. If the BA indicates there will be no effects resulting from the proposed activities, the commercial road use may be authorized. In all other cases, the party requesting the authorization and the Forest Service are required to initiate the consultation process with USFWS. The result of the consultation process will determine whether the commercial use may be authorized, and stipulate the conditions that shall apply to that authorization.

The authority for issuing any grant of access is subject to 36 CFR 251.54, and 36 CFR 251.110. These regulations provide for granting special-use authorizations for access purposes, but such authorizations are made subject to the requirements of all other laws, which include the ESA by regulation, in 36 CFR 251.56. The time frame involved in this procedure could be as much as 6 months for an activity that results in a "may effect, likely to adversely affect" determination on a federally listed species. This period is based on the Forest Service doing all of the evaluation and formal consultation resulting in completion of a Biological Opinion (BO) by USFWS documenting the expected effects of the proposed activities. The corresponding NEPA process could take as long as two years to complete.

If the Forest Service is unable to complete a BA and NEPA in time to meet the needs of the applicant, the applicant may opt to pay for a private consultant to complete the BA and NEPA to acceptable standards through a Memorandum of Understanding (MOU) with the Forest Service. Once the BA is completed a determination would be made by the Forest Service as to the effect of the proposed activities on federally listed and proposed species and designated or proposed critical habitats. If it is determined that the proposed activities may affect federally listed species or designated critical habitats, consultation with USFWS would be necessary.

Permits or authorizations cannot be issued until the consultation and NEPA has been completed. If formal consultation has occurred, USFWS will issue a Biological Opinion (BO). Permits or authorizations must include provisions that are consistent with requirements of the BO (reasonable and prudent alternatives or reasonable and prudent measures with terms and conditions). Any provisions in the BO that address planned activities on private land are subject to resolution by the landowner and the regulatory agencies.

Requirements and estimated costs that may be associated with a proposed activity may be informally discussed prior to submitting the application. Please contact the White River National Forest Road Manager for further information.

Completion and submission of the attached application (Appendix B) constitutes an official request for authorization for commercial use of a National Forest System Road on the White River National Forest. Such a request is significant, as it will have an impact on a limited Forest Service workforce, and may impact workforces of the regulatory agencies as well. Considering the potential time frames that could be encountered, requests for commercial road use should be made well in advance of the time when the actual use is planned, especially for large scale commercial operations.

Definitions

- Arterial Roads: A forest road that provides service to large land areas and usually connects with other arterial roads or public highways.
- ATM Plan: Motorized Access and Travel Management Plan that each ranger district has developed to manage motorized travel over the roads, trails, and areas under their jurisdiction.
- CFR: Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government.
- Collector Roads: A forest road that provides service to smaller land areas than an arterial road. Usually connects forest arterial roads to forest local roads or terminal facilities.
- Commensurate Share: The proportion of maintenance and reconstruction associated with an NFS road that is assignable to a commercial hauler for purposes of cost recovery under FSM 7730 (16 U.S.C. 537). (FSM 7730.5)
- Commercial Hauler: A person or entity engaging in commercial hauling. (FSM 7730.5)
- Commercial Hauling: For purposes only of cost recovery under FSM 7730, commercial use of NFS roads to transport:
  - Federal or non-federal products from Federal, State, or private lands;
  - Livestock, other than livestock authorized to use NFS lands, feed for livestock authorized to use NFS lands, and livestock from farms and ranches in or adjacent to the NFS; or
  - Goods for, supplies for, or customers of commercial uses or activities on NFS lands pursuant to a special use authorization or other written authorization issued by the Forest Service, other than:
    - A Forest Service contract;
    - An agreement between the Forest Service and another Federal agency, unless the agreement specifically provides for cost recovery;
    - A grazing permit;
    - An authorization for a concession involving federally-owned facilities; and
    - A special recreation permit issued under the Federal Lands Recreation Enhancement Act (16 U.S.C. 6802(d)(2)). (FSM 7730.5)
- Commercial Use or Activity: Any use or activity on National Forest System lands (a) where an entry or participation fee is charged, or (b) where the primary purpose is the sale of a good or service, and in either case, regardless of whether the use or activity is intended to produce a profit. (36 CFR 251.51, FSM 7730.5)
- Cooperator: An individual or entity that is a party to an investment sharing agreement or is granted an easement for acquisition, construction, or maintenance of a NFS road pursuant to Title 16, U.S.C.535. (FSM 7730.5)
- Damage – to injure, mutilate, deface, destroy, cut, chop, girdle, dig, excavate, kill or in any way harm or disturb.
- Danger Tree: A standing tree that presents a hazard to people due to conditions such as, but not limited to, deterioration or physical damage to the root system, trunk, stem, or limbs, and the direction and lean of the tree.
- ESA: Endangered Species Act, which is the legislation requiring protection of federally listed species.
- Forest Road: A road, wholly or partly within or adjacent to and serving the National Forest System, that the Forest Service determines is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources (36 CFR 212.1). These roads may be under the jurisdiction of the Forest Service (see definition of National Forest System

Road) OR other public or private entities, and may be identified under more than one numbering system (i.e. may be posted with Forest Service and/or county road numbers).

- Local Roads: A forest road that connects terminal facilities with forest collector roads, forest arterial roads, or public highways. Usually forest local roads are single purpose transportation facilities.
- MUTCD: Current edition of the Manual on Uniform Traffic Control Devices, published by the U.S. Dept. of Transportation's Federal Highway Administration, providing direction for the uniformity of sign use, size, color, and placement.
- MVUM: Motor Vehicle Use Map, that displays roads designated for motorized travel (with the exception of over-snow travel) by vehicle type, and the season during which this travel may occur.
- National Forest System Road (NFSR): A forest road other than a road which has been authorized by a legally documented right-of-way held by a state, county, or other local public road authority (36 CFR 212.1, 36 CFR 251.51, 36 CFR 261.2). These roads are under the jurisdiction of the Forest Service**.**
- Official Authorization: Authorization granted by a contract easement, or modification of a contract easement, signed by the Contracting Officer with designated authority in the applicable contract; or authorization granted in writing by a White River National Forest Line Officer, usually through a permit or waiver instrument.
- Operating Plan: A plan of operations as provided for in 36 CFR Part 228, subpart A, and a surface use plan of operations as provided for in 36 CFR Part 228, subpart E.
- Open Roads: Roads where permits may be granted for commercial haul.
- Permit:
  - A special use authorization which provides permission, without conveying an interest in land, to occupy and use National Forest System land or facilities for specified purposes, and which is both revocable and terminable. (36 CFR 251.51)
  - Authorization in writing by a forest officer. (36 CFR 261.2)
  - A written license or warrant issued by one party to a second party granting the second party permission to do some act that is not forbidden by law but is forbidden without such license or warrant.
  - A permit gives permission but does not vest a right. In some States a permit may become non-revocable after a statutory period of time. (FSM 5460.5)
- Prohibited Use Roads: Roads where no use will be authorized. For timber sales and stewardship contracts, these roads will be listed as "X" (all commercial haul is prohibited) or as "P" (all use is prohibited).
- Restricted Use Roads: Roads where certain types of commercial use may not be permitted or use may be permitted with limitations. For timber sales and stewardship contracts, these roads will be listed as "R" (and the description of the type of restriction shall be shown in C(T)5.12#).
- Road Subject to the Highway Safety Act: An NFS road that is open to public use in a standard passenger car, including a road with access restricted on a seasonal basis and a road closed during extreme weather conditions or for emergencies, but which is otherwise open to public travel. (FSM 7705)
- Road Use Order: An order that institutes or terminates traffic rules on NFS roads (36 CFR 261.54; FSM 5330.13) (FSM 7730.5)
- Road Rules: All traffic rules, as regulated by 36 CFR Part 212.5 and 36 CFR Part 261. A statement defining traffic conduct required by commercial users (or their agents) of a National Forest System Road. Road rules include General Road Rules and Specific Road Rules.
  - General Road Rules: Rules applicable to all commercial users of Forest Service roads. The rules apply to all roads unless modified by written waiver, permit, contract, easement, etc., or by a Specific Road Rule.

    - Specific Road Rules - Rules that modify the General Road Rules and will apply only to selected roads and bridges.
- Road Use Permit: A written authorization issued pursuant to 36 CFR Part 212, Subpart A, that allows an act or omission on an NFS road or NFS road segment and associated transportation facilities that would otherwise be in violation of a traffic rule in effect on the road, including:
    - Use of a closed road to access non-federal property (36 CFR 212.6(b)
    - Commercial hauling on a road where that use is otherwise restricted (36 CFR 212.9(d) and 261.54)
    - Motor vehicle use on an NFS road that is not designated for that purpose (36 CFR 212.51(a)(8) & (FSM 7730.5)
- Roadway: The portion of the road within the limits of excavation and embankment (top of cut to toe of fill) consisting of cut and fill slopes, drainage ditches, and the roadbed including surfacing and all widening.
- Roadway and Structure Damage: The unplanned reduction in the ability of the road or road structures to support traffic, provide drainage, or provide safe transportation.
    - Examples of damage are:
        - Marring or gouging of surfaces of bridges or cattleguards with vehicles or equipment having metal lugs.
        - Any bending or breaking of bridge rails, guardrails, culverts, signs, or other structures.
        - Lowering the support value or safety of a roadway by allowing:
        - Soil, mud, debris, or oversize rocks incorporated into or onto the roadway that may affect drainage, normal maintenance activities, or the strength of the surface structure.
        - Intermixing of slash or subgrade soil with aggregate, or mixing between layers of aggregate.
        - Allowing potholes or washboard surfaces that may cause saturation of the subgrade, mixing of aggregate layers, or intermixing of subgrade soil with aggregate.
        - Severe alteration of drainage that may result in the unacceptable loss of surface rock, changes in the character of ditches or drain dips, or concentrations of water that erode fill slopes.
        - Allowing use on asphalt or concrete surfaces which may result in a breakdown of the asphalt or concrete layer.
- Special-Use Authorization: A permit, term permit, lease or easement which allows occupancy, or use rights or privileges of National Forest System land.
- Structures: Constructed or installed sections and materials to provide safety, increase strength, or control drainage on, within, or through the roadway.
- Traveled Way: The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.
- Unsuitable Roads: Roads that shall not be hauled upon prior to completion of reconstruction as agreed to by the Forest Service. For timber sales and stewardship contracts, these roads will be listed as “U” (unsuitable for hauling prior to completion of agreed reconstruction).
- Waiver - Authorization under a permit, contract, fire order, formal letter, etc., signed by an Authorized Forest Officer, granting approval to modify a General or Specific Road Rule.

Order #R2-2014-02

REGIONAL ORDER
Occupancy and Use Restrictions
Rocky Mountain Region

Pursuant to Title 16 United States Code ("USC") § 551, and Title 36 Code of Federal regulations ("CFR") § 261.50(a) and (b), the following acts are prohibited on all National Forest System lands administered as National Forests or National Grasslands within the Rocky Mountain Region (Region 2) of the United States Department of Agriculture - Forest Service in the states of Colorado, Kansas, Nebraska, South Dakota, and/or Wyoming. This Regional Order is supplemental to and does not rescind or replace those restrictions at 36 CFR 261 Subpart A, and/or any Forest Supervisor Order issued under 36 CFR 261 Subpart B. This Regional Order is necessary to protect public health and safety and to provide the public with consistent public health and safety restrictions in the Rocky Mountain Region.

National Forest	National Grassland
Arapaho & Roosevelt	Pawnee
Bighorn	Thunder Basin
Black Hills	Buffalo Gap
Grand Mesa, Uncompahgre and Gunnison	Fort Pierre
Medicine Bow & Routt	Oglala
Nebraska & Samuel R. McKelvie	Cimarron
Pike & San Isabel	Comanche
Rio Grande	
San Juan	
Shoshone	
White River	

PROHIBITIONS

1. Operating any motor vehicle on National Forest System roads in violation of applicable state, county, or local government law, regulation and/or ordinance relating to the use and possession of motor vehicles. 36 CFR § 261.54(d).

2. Operating a vehicle carelessly, recklessly or without regard for the rights or safety of other persons or in a manner or at a speed that would endanger or be likely to endanger any person or property on National Forest System roads. 36 CFR § 261. 54(f)

3. Parking or leaving a vehicle in violation of posted instructions. 36 CFR § 261.58(g)

4. Using a National Forest System road for commercial hauling without a permit or written authorization from the Forest Service. 36 CFR § 261.54(c)

5. Possessing or consuming a beverage which is defined as an alcoholic beverage by applicable state law. 36 CFR § 261.58 (bb)

6. Possessing, storing or transporting Cannabis plant/s or part thereof or any controlled substance derived from the manufacture of Cannabis plant/s as defined or classified under Title 21 USC § 802 (16) as Marijuana. 36 CFR §261.58(t)

7. Possessing, discharging, or using any kind of firework or pyrotechnic device. 36 CFR § 261.52(f)

8. Operating or using any internal or external combustion engine without a spark arresting device properly installed, maintained, and in effective working order, meeting either; (1) Department of Agriculture, Forest Service Standard 5100-1a (as amended); or (2) Appropriate Society of Automotive Engineers (SAE) recommended practice J335(b) and J350(a). 36 CFR § 261.52(j)

EXEMPTIONS

Pursuant to 36 CFR § 261.50(e), the following persons are exempt from this Order:

1. Persons with a Forest Service permit specifically authorizing the otherwise prohibited act or omission.

2. Persons utilizing motorized vehicles to provide incidental services for holders of National Forest System in-holdings, for holders of Forest Service recreational special use authorizations, and/or for authorized public services are exempt from Prohibition 4.

3. Persons who have attained the age of 21 years are exempt from Prohibition 5 to the extent not otherwise restricted by applicable Federal, State, or local law.

4. Any Federal, State, or local officer, or member of an organized rescue, or fire fighting force in the performance of an official duty.

In the event that any provision of this Order is deemed unenforceable by a court of competent jurisdiction, the remainder of this Order shall remain in force and effect.

This Regional Order shall be in effect from January 1, 2014 until December 31, 2015, or until rescinded, whichever event occurs first.

Done at Golden, Colorado this 21 day of , 2013.

DANIEL J. JIRON
Regional Forester
Rocky Mountain Region

Violation of Title 36 Code of Federal Regulations ("36 CFR") are punishable as a Class B misdemeanor, by a fine of not more than $5,000 for an individual or $10,000 for a legal entity other than an individual, or imprisonment for not more than six (6) months, or both (16 U.S.C. § 551 and 18 U.S.C. §§ 3559 and 3571).

Appendix B

USDA Forest Service

FS-7700-0040
OMB 0596-0016(Exp.1/13)

APPLICATION FOR PERMIT
NON-FEDERAL COMMERCIAL USE OF ROADS RESTRICTED BY ORDER
(Reference to FSM 7730)

NOTE: This report is authorized by Acts of June 10, 1914; April 24, 1950; June 12, 1960, and October 13, 1964 (USC 478,572,530 and 532-38). No permit may be issued unless a completed Form 7700-40 is received.

For Official Use Only					DATE OF APPLICATION
REGION	STATE	COUNTY	FOREST	RANGER DISTRICT	

1. APPLICANT (Name, address, and Zip Code) **TELEPHONE NUMBER**

____ ( ) -

____

____

2. DESCRIPTION AND MILEAGE OF ROAD(S) OR ROAD SEGMENT(S) TO BE USED (as shown on attached map) (Exhibit A)

3. PURPOSE OF USE

HAULING LOGS OR LUMBER ____ MBF
(Quantity)

HAULING OTHER MATERIALS ____ TONS
(Quantity)

DESCRIBE MATERIALS ____

4. USE SCHEDULE – Complete Exhibit B

SEASON	NUMBER OF DAYS OF USE	TYPE OF TRUCKS TO BE USED	TYPE OF LOADING TO BE USED

5. PLANS FOR FUTURE USE (Not applied for on this application)

HAULING LOGS OR LUMBER ____ MBF
(Estimated Quantity)

HAULING OTHER MATERIALS ____ TONS
(Estimated Quantity)

DESCRIBE MATERIALS ____

ESTIMATED PERIOD OF USE FROM ____ TO ____

SIGNATURE OF APPLICANT	DATE

Appendix B

FS-7700-40

USDA Forest Service MB 0596-0016(Exp. 1/13)

REPORT ON APPLICATION

(To Be Completed By District Ranger)

1. GENERAL DESCRIPTION AND ADAPTABILITY OF ROAD(S) FOR PROPOSED USE. (Show road(s) on 1/2" Forest Transportation Map)

2. IMPROVEMENTS FOR BETTERMENT WORK NEEDED ON ROAD(S) TO SAFELY ACCOMMODATE THE ADDITIONAL TRAFFIC

3. IMPROVEMENTS OR BETTERMENT WORK DESIRED

4. RECOMMENDATION OR COMMENTS (Include any factors which might affect the granting of the hauling permit or future use of the road(s).)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0016. The time required to complete this information collection is estimated to average 15 minutes per response, including the time reviewing for the instructions, searching existing data sources, gathering, and maintaining the data needed, and completing and reviewing the collection of information.

REPORT SUBMITTED	**NAME AND SIGNATURE**	**TITLE**	**DATE**
_____		_____	_____
REPORT APPROVED	**NAME AND SIGNATURE**	**TITLE**	DATE
_____		_____	_____

As part of the Road Use Permit application process Company Name shall submit the following information for the Road Number or Project from (MP xx) description located in the xx ¼ of Section xx, T.xS., R.xW., xth P.M. to (MP xx) description located in the xx ¼ of Section x, T.x S., R.xW., xth P.M. as depicted on Exhibit A (the Map).

VEHICLE CLASSIFICATION AND ESTIMATED TRAFFIC VOLUMES

The attached spreadsheet (Exhibit B) or equivalent prepared by a Professional Civil or Transportation Engineer licensed in the State of Colorado will be completed and submitted by Company Name.

The submitted data will be utilized for the following:

- to determine if the geometric standard and structural surfacing of the existing road is adequate for the estimated use
- to calculate Surface Rock Replacement Deposits or Surface Rock Replacement Quantities
- to calculate Commensurate Share of Maintenance
- to determine Bonding for Road or Resource Damages
    - For Drilling Projects include Road, Pad and Pipeline Construction, Road and Pad Surfacing, Drilling, Fracking, Completion, and Production (including all supply and support traffic).
    - For Pipeline Projects include Mob and Demob, ROW Construction, Layout, Trenching, Backfilling and Reclamation (including all supply and support traffic)
    - Include estimates for all phases of the project.

GEOMETRIC ANALYSIS

The current edition of the AASHTO "Green Books" as applicable (either <400ADT=Low Volume Design Guide OR 400+ ADT = "Green Book") will be utilized to determine if any geometric standards and/or geometric upgrades will be required as a result of projected activity. The geometric analysis must be prepared and signed by a Professional Civil or Transportation Engineer licensed in the State of Colorado.

The following data must be included in the analysis:

- Current Traffic Counts for all Forest System Roads intended for use – if data is not available.
- A detailed estimate of traffic counts/vehicle data, over-legal vehicle counts/data for each phase of the project for all Forest System Roads intended for use (Exhibit B):

STRUCTURAL SURFACING ANALYSIS

Structural Surfacing Designs must be prepared and stamped by a Professional Civil or Transportation Engineer licensed in the State of Colorado. A completed surfacing section design and surfacing requirements breakdown for each route will be submitted and shall include the following information:

- Current Traffic Counts for all Forest System Roads intended for use– if data is not available.
- A detailed estimate of traffic counts/vehicle data, over-legal (over-weight) vehicle counts/data for each phase of the project for all Forest System Roads intended for use (Exhibit B)
- The total (existing + projected) Equivalent Single Axle Load (ESAL) broken down for each route intended for use during operations
- A breakdown of seasons of operation (Dry/Frozen subgrade or all-weather access)
- Sub-grade structural values broken down for each route with testing results (CBR/R-Values/Resilient Modulus).
- A statistically valid sample must be taken and an AASHTO recognized test performed, depending on the surfacing section design method – AASHTO 1993 Pavement Design Guideline will be adhered to.
- A standard 20 year design life for all transportation facilities, and the duration of activity (ex - 1 season, 2 years, 5 years, etc) is to be used for all submittals.

PLAN OF OPERATIONS

For Pipeline Projects the Plan of Development (POD) may be submitted.

TRAFFIC CONTROL PLAN

See Attached Supplemental Specification for Traffic Control Plan Details (Exhibit C).

Appendix B

WHITE RIVER NATIONAL FOREST
VEHICLE CLASSIFICATION AND ESTIMATED VOLUMES
Exhibit B

Application for Road Use Permit					
Use Schedule	**Company Name/Year**				
Vehicle Classification	**Number of Trips per Vehicle Type per Season**				
	Summer*	Fall **	Winter*	Spring**	**TOTAL**
	June 1 - Sept 30	Oct 1- Nov 30	Dec 1 - Mar 31	Apr 1 - May 31	
FHWA Class 1					0
FHWA Class 2					0
FHWA Class 3					0
FHWA Class 4					0
FHWA Class 5					0
FHWA Class 6					0
FHWA Class 7					0
FHWA Class 8					0
FHWA Class 9					0
FHWA Class 10					0
FHWA Class 11					0
FHWA Class 12					0
FHWA Class 13					0
Over Legal Vehicle List					
Over Weight (Provide List)					0
Over Length (Provide List)					
Over Width (Provide List					0

WHITE RIVER NATIONAL FOREST
VEHICLE CLASSIFICATION AND ESTIMATED VOLUMES
Exhibit B

Appendix 4-C
FHWA Vehicle Types

The classification scheme is separated into categories depending on whether the vehicle carries passengers or commodities. Non-passenger vehicles are further subdivided by number of axles and number of units, including both power and trailer units. Note that the addition of a light trailer to a vehicle does not change the classification of the vehicle.

Automatic vehicle classifiers need an algorithm to interpret axle spacing information to correctly classify vehicles into these categories. The algorithm most commonly used is based on the "Scheme F" developed by Maine DOT in the mid-1980s. **The FHWA does not endorse "Scheme F" or any other classification algorithm.** Axle spacing characteristics for specific vehicle types are known to change from State to State. As a result, no single algorithm is best for all cases. It is up to each agency to develop, test, and refine an algorithm that meets its own needs.

FHWA Vehicle Classes with Definitions

1. ***Motorcycles*** (Optional) -- All two or three-wheeled motorized vehicles. Typical vehicles in this category have saddle type seats and are steered by handlebars rather than steering wheels. This category includes motorcycles, motor scooters, mopeds, motor-powered bicycles, and three-wheel motorcycles. This vehicle type may be reported at the option of the State.
2. ***Passenger Cars*** -- All sedans, coupes, and station wagons manufactured primarily for the purpose of carrying passengers and including those passenger cars pulling recreational or other light trailers.
3. ***Other Two-Axle, Four-Tire Single Unit Vehicles*** -- All two-axle, four-tire, vehicles, other than passenger cars. Included in this classification are pickups, panels, vans, and other vehicles such as campers, motor homes, ambulances, hearses, carryalls, and minibuses. Other two-axle, four-tire single-unit vehicles pulling recreational or other light trailers are included in this classification. *Because automatic vehicle classifiers have difficulty distinguishing class 3 from class 2, these two classes may be combined into class 2.*
4. ***Buses*** -- All vehicles manufactured as traditional passenger-carrying buses with two axles and six tires or three or more axles. This category includes only traditional buses (including school buses) functioning as passenger-carrying vehicles. Modified buses should be considered to be a truck and should be appropriately classified.

   NOTE: In reporting information on trucks the following criteria should be used:

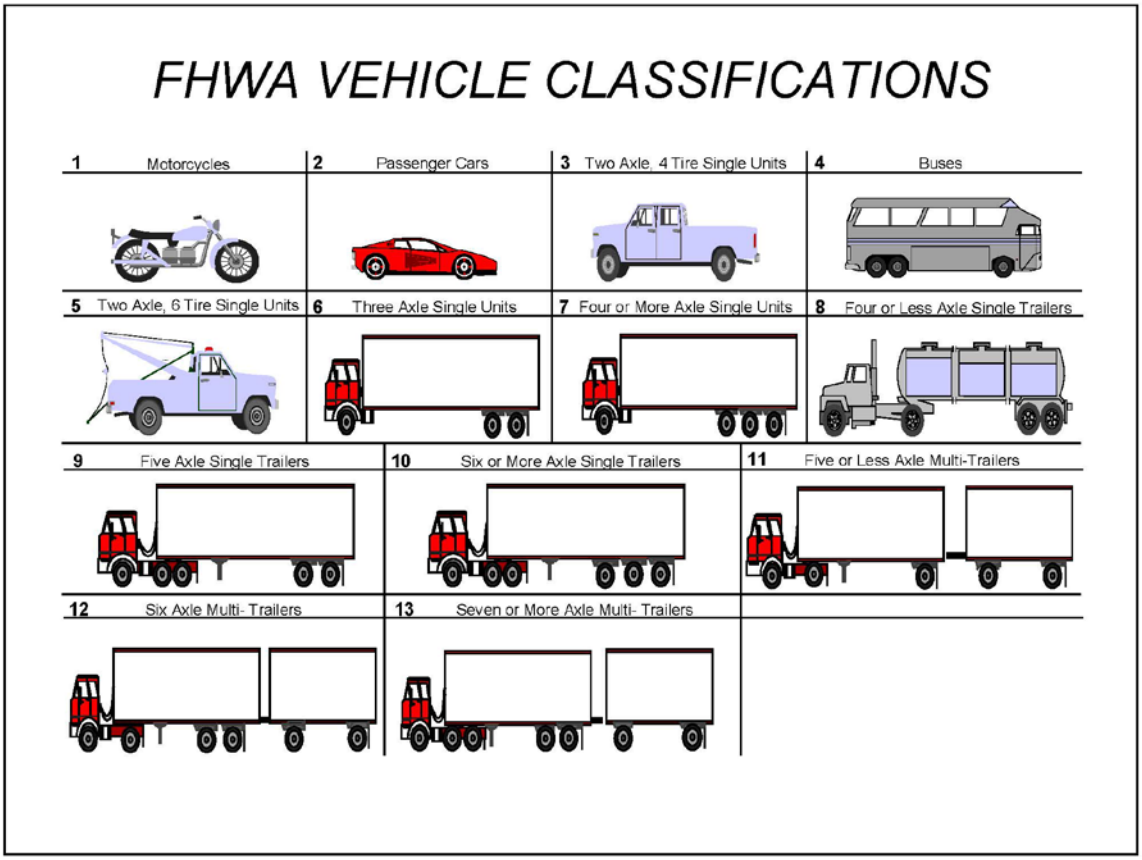
   a. Truck tractor units traveling without a trailer will be considered single-unit trucks.
   b. A truck tractor unit pulling other such units in a "saddle mount" configuration will be considered one single-unit truck and will be defined only by the axles on the pulling unit.
   c. Vehicles are defined by the number of axles in contact with the road. Therefore, "floating" axles are counted only when in the down position.
   d. The term "trailer" includes both semi- and full trailers.

5. ***Two-Axle, Six-Tire, Single-Unit Trucks*** -- All vehicles on a single frame including trucks, camping and recreational vehicles, motor homes, etc., with two axles and dual rear wheels.
6. ***Three-Axle Single-Unit Trucks*** -- All vehicles on a single frame including trucks, camping and recreational vehicles, motor homes, etc., with three axles.
7. ***Four or More Axle Single-Unit Trucks*** -- All trucks on a single frame with four or more axles.

WHITE RIVER NATIONAL FOREST
VEHICLE CLASSIFICATION AND ESTIMATED VOLUMES
Exhibit B

8. ***Four or Fewer Axle Single-Trailer Trucks*** -- All vehicles with four or fewer axles consisting of two units, one of which is a tractor or straight truck power unit.
9. ***Five-Axle Single-Trailer Trucks*** -- All five-axle vehicles consisting of two units, one of which is a tractor or straight truck power unit.
10. ***Six or More Axle Single-Trailer Trucks*** -- All vehicles with six or more axles consisting of two units, one of which is a tractor or straight truck power unit.
11. ***Five or fewer Axle Multi-Trailer Trucks*** -- All vehicles with five or fewer axles consisting of three or more units, one of which is a tractor or straight truck power unit.
12. ***Six-Axle Multi-Trailer Trucks*** -- All six-axle vehicles consisting of three or more units, one of which is a tractor or straight truck power unit.
13. ***Seven or More Axle Multi-Trailer Trucks*** -- All vehicles with seven or more axles consisting of three or more units, one of which is a tractor or straight truck power unit.

WHITE RIVER NATIONAL FOREST
VEHICLE CLASSIFICATION AND ESTIMATED VOLUMES
Exhibit B



WHITE RIVER NATIONAL FOREST SPECIAL PROJECT SPECIFICATION
882 PUBLIC SAFETY AND TRAFFIC CONTROL OPERATIONS
Exhibit C

882.01
Services Required

This work applies to National Forest System lands and easements only, and consists of controlling and protecting public traffic adjacent to and within the project. Perform work in a manner that ensures the safety and convenience of the public and protects improvements, natural resources and/or facilities adjacent to the site. Accommodate public traffic on roads adjacent to and within the project until the project is accepted by the Agency. Coordination with the Contracting Officer or Forest Service Designated Representative will be required.

882.02
General

The Operator/Contractor shall prepare a Transportation Management Plan (TMP) for each phase of the project, and provide it to the agency for review and approval a minimum of 20 working days prior to the start of construction. The Transportation Management Plan shall consist of a Temporary Traffic Control Plan (TTC plan) and Public Information Strategy. The Operator/Contractor shall manage the work zone impacts of the project in accordance with the Transportation Management Plan.

A. The TTC Plan addresses traffic safety and control through the work zone and addresses sustained operations and management of the work zone impact area.
B. The Public Information component requirements address communication with the public and concerned stakeholders.

882.03
Temporary Traffic Control Plan

This work consists of furnishing, maintaining, relocating and moving temporary traffic control devices for the control and protection of traffic through the project, and shall be provided in writing and must be prepared and signed by a qualified Professional Civil Engineer or Transportation Engineer licensed in the State of Colorado.

A. The TTC Plan shall include as a minimum the following:
    1. The proposed project phasing and proposed traffic control devices consistent with the Temporary Traffic Control Plan for each phase.
    2. A detailed diagram, conforming to the most current edition of the MUTCD or FS EM 7100-15, which shows the location of all traffic control devices, including advance construction and speed limit signs; method, length and time duration for road and/or lane closures; location of flaggers and time duration of the flagging operation; locations of intersections; etc.
    3. All devices and signs shall be type III, VII, VIII retroreflective sheeting.
    4. Supporting references from documents such as the MUTCD or Forest Service Manual EM 7100-15, for all devices and plans.
    5. Road closures are not allowed without agency approval. Full closures shall be kept to a minimum in both length and duration, and cause a minimum of interference to the traveling public, consistent with the work being performed.
    6. An access maintenance plan for all properties requiring FSDR access during construction.
    7. Proposed staging map for the storage of equipment, vehicles parked, and construction signs and materials stored, if within the project limits.
    8. Staging areas must be approved by the agency.
    9. Communications Plan
    10. A plan for maintaining and controlling pedestrian, bicycle and other non-vehicular traffic, if determined necessary by the agency.
    11. An emergency action plan.
B. Qualifications:
    1. Traffic and Safety Supervisor. Provide a traffic and safety supervisor who is certified by a state highway agency or other acceptable certification program. Furnish the supervisor's name, address, 24-hour telephone number prior to the start of the work. At all times, during the project, including periods of suspension and shutdown, perform all of the following:
        a. Implement traffic control plan.
        b. Ensure the condition and placement of traffic control devices in use.
        c. Immediately correct deficiencies.
        d. Coordinate traffic control operations with the Contracting Officer.
    2. Flaggers, if required, shall be certified by ATTSA, NSC, a state agency, or other acceptable organization.
    3. Use type III, VII or VIII retroreflective sheeting on flagger panels. Do not use flags.
    4. All devices and signs shall be type III, VII, VIII retroreflective sheeting.

882.04

Appendix B

Public Information Strategy

This work will include a written plan, approved by the agency, which provides information the agency may use for media releases to inform the public of the start and completion dates, expected delays, any lane or full closures, detours, if applicable, and any special accommodations for users other than vehicular.

The plan shall be updated whenever there is a change from the original Public Information Strategy, and provided to the agency for public release.

The written Public Information Strategy requirement may be waived for small projects if the agency determines that verbal updates are sufficient.

882.05

Maintaining roadway during work.

A. Maintain a dust-free traveled way such that visibility and air quality are not affected. This work shall be considered incidental to the project.
B. Maintain the roadways in a safe and acceptable condition, during work and during periods when work is not in progress.

Appendix C

On White River National Forest roads over-legal permits are required for vehicles that exceed Colorado state legal height, width or length requirements. Many roads on the White River National Forest cannot geometrically or structurally carry vehicles that meet CDOT requirements for length, width, weight or height. Therefore, geometric and structural analysis such as described in Appendix A will be required prior to issuance of an over-legal permit.

- Colorado's legal height is 13' except where designated 14'6" by CDOT (CRS 42-4-504(1))
- Colorado's maximum allowed vehicle width is 8'6" (CRS 42-4-504(1),(5))
- No single motor vehicle shall exceed a length of forty-five feet extreme overall dimension, inclusive of front and rear bumpers. C.R.S. 42-4-504(2)
- Colorado's maximum combined gross vehicle weight for interstate haulers is 80,000 pounds on Interstate (CRS 42-4-508 (1)(c)(III)) and 85,000 pounds on Non-Interstate highways. (CRS 42-4-508(1)(b))
- There is no overall length requirement for truck tractor semitrailer combinations as long as the trailer does not exceed 57'4". C.R.S. 42-4-504(4)
- A combination of vehicles coupled together cannot exceed four units and is limited to 70 feet in length. (CRS 42-4-504(2))

Overweight Permits and Bridge Restrictions:

Bridge overload permits are required based on the lesser of Colorado state legal load limits or the Forest Service bridge inventory load limit. Bridge overload permits are subject to approval by the Regional Bridge Engineer.

The overweight permit may specify provisions to limit the number of trips and speed while traversing a bridge. Vehicles may not exceed the operating load limit of a bridge, unless special measures are taken to mitigate the load. The anticipated timeline for processing an overweight permit for a bridge is approximately thirty (30) days. Depending upon expected use and timing, permits by class may be issued (i.e. – an overweight permit for access to the area by 5 tractor/lowboy units hauling a D8 at separate times) based on input from operators.

In addition to completing the attached Overload Permit (Attachment A) the following information needs to be provided to the Forest Service by the commercial user:

- If the bridge is posted, a load rating analysis for each vehicle being driven over the bridge needs to be provided. See Attachment B for a listing of bridges and restrictions.
- If the bridge is not posted, a load rating analysis for any vehicle that does not conform to CDOT's three typical trucks (Attachment C) or exceeds the state legal load limits at the inventory load limit of the bridge needs to be provided.
- Axle weight limitations (CRS 42-4-507) A single axle shall not exceed 20,000 pounds. Tandem axles shall not exceed 36,000 pounds (interstate) or 40,000 pounds non-interstate.
- The load rating would include the axle spacing and wheel spacing or the track dimensions and anticipated wheel/axle/track loadings.
- The analysis should determine the inventory and operating ratings for each vehicle that uses the bridge.
- Any load rating analysis should be sealed, signed and dated by the Colorado Professional Engineer (CO PE) who either prepared the analysis or had it prepared under their direction.

The Forest will submit all bridge related documents to the Regional Office for review and acceptance, unless other arrangements have been made.

Appendix C

The commercial user should provide a method for monitoring and documenting vehicle overloads crossing a bridge. Vehicle loads shall be verified prior to crossing the bridge. Any vehicle monitoring activities and records shall be available to the Forest Service upon request. It is recommended that the commercial user pay for a Forest Service Engineer to monitor vehicle loads crossing the bridge. The commercial user will pay for any damage to the existing bridge, including but not limited to, any rehabilitations or total replacement. Bonding and insurance may be required prior to use.

If vehicle load monitoring indicates that a vehicles load exceeds the inventory rating, the vehicle will need an overload permit from the Forest.

The overload permit would specify provisions to limit the number of trips and speed going across the bridge. If a vehicle load exceeds the operating rating of the bridge, the vehicle should not be allowed to cross. Vehicle restrictions can be reduced if they use an alternate route/detour, shore the bridge to increase its capacity, construct and use a ford, or construct a temporary bridge over the existing bridge.

Bridge shoring will require a CO PE design. The shoring analysis would need to look at existing and proposed conditions. The shoring design would require all engineering design drawings, specifications and calculations. All engineering shoring design documents should be sealed, signed and dated by a CO PE. The commercial user should pay for the installation and removal of the shoring.

A temporary bridge could also be installed over the existing bridge. The railings on the existing bridge may need to be removed prior to installing the temporary bridge and reinstalled after the temporary bridge is removed. The temporary bridge would need to span over the existing bridge. The distance from each existing abutment would be based on how high the existing bridge is from the deck to the ground under the bridge near the abutment. Bridge manufacturers can provide temporary precast concrete sills or steel base plates. Fill ramps can be constructed on each approach. Back walls, backer planks or headwalls should be installed between the fill dirt and bridge to retain the soil off the bridge bearings. Fill ramps should be removed with the temporary bridge. Any temporary bridge will require a CO PE design including but not limited to engineering drawings, specifications, and calculations. All engineering design documents should be sealed, signed and dated by a CO PE. The commercial user should cover all expenses for the temporary bridge.

Depending on anticipated commercial use for a project White River National Forest Engineers and the Regional Bridge Engineer could determine that bridge replacement is required.

Appendix C

ATTACHMENT A
WHITE RIVER NATIONAL FOREST OVERLOAD PERMIT APPLICATION

U.S. DEPARTMENT OF AGRICULTURE – FOREST SERVICE
APPLICATION AND PERMIT FOR ROAD OPERATIONS
36CFR 261.10(a), 261.12 and 261.50

DATE RECEIVED: _____
PERMIT NO. _____
EFFECTIVE DATES OF PERMIT:
BEGINNING: _____
TERMINATING: _____
EXCLUDING: _____

PERMITTEE/APPLICANT: _____ PHONE: _____
ADDRESS: _____
IF PERMIT IS FOR A TIMBER SALE, SALE NAME: _____
DESIRED TRAVEL DATES: BEGIN: _____ END: _____ (ALLOW 7 DAYS MIN FOR APPROVAL)
DESIRED TRAVEL ROUTE: _____
_____
_____
ATTACH MAP AND LIST BRIDGES

==========

TYPE OF VEHICLE: _____
TOTAL GROSS WEIGHT: _____ POUNDS LICENSE NO. _____ STATE _____
MAXIMUM DIMENSIONS: LENGTH: _____ WIDTH: _____ HEIGHT: _____

VEHICLE DESCRIPTION

AXLE NO.	AXLE SPACING FEET & INCHES	AXLE LOAD POUNDS	AXLE WIDTH (OUT – OUT) FEET INCHES	TIRE WIDTH (OUT-OUT) PER WHEEL LINE INCHES	NO. OF TIRES PER AXLE	TIRE SIZE
1		P1_____	____ ' ____ "	_____"	____	_____
	D1 ____ ' ____ "					
2		P2_____	____ ' ____ "	_____"	____	_____
	D2 ____ ' ____ "					
3		P3_____	____ ' ____ "	_____"	____	_____
	D3 ____ ' ____ "					
4		P4_____	____ ' ____ "	_____"	____	_____
	D4 ____ ' ____ "					
5		P5_____	____ ' ____ "	_____"	____	_____
	D5 ____ ' ____ "					
6		P6_____	____ ' ____ "	_____"	____	_____
	D6 ____ ' ____ "					
7		P7_____	____ ' ____ "	_____"	____	_____
	D7 ____ ' ____ "					
8		P8_____	____ ' ____ "	_____"	____	_____
	D8 ____ ' ____ "					
9		P9_____	____ ' ____ "	_____"	____	_____
	D9 ____ ' ____ "					
10		P10_____	____ ' ____ "	_____"	____	_____

SIGNATURE OF APPLICANT:

SIGNATURE: _____

TITLE: _____

DATE: _____

REGIONAL ENGINEER & BRIDGE ENGINEER RECOMMENDATION

THIS PERMIT IS RECOMMENDED FOR APPROVAL, SUBJECT TO THE PROVISIONS AND ATTACHMENTS INCLUDED HEREIN

SIGNATURE: _____ DATE: _____
REGIONAL ENGINEER

SIGNATURE: _____ DATE: _____
BRIDGE ENGINEER

APPROVAL OF PERMIT

PERMISSION IS HEREBY GIVEN TO THE ABOVE APPLICANT FOR THE USE OF THE DESIGNATED ROADS AND BRIDGES IN THE MANNER DESCRIBED, SUBJECT TO THE PROVISIONS AND ATTACHMENTS INCLUDED WITH THIS PERMIT.

SIGNATURE: _____ DATE: _____

TITLE: FOREST SUPERVISOR _____

Appendix C

ATTACHMENT B
WHITE RIVER NATIONAL FOREST BRIDGE LIST WITH RESTRICTIONS
Note: Check with WRNF Roads Manager for updates to list

Rte No	MP	Structure Name	Location	Restricted Bridge	Inventory Rating (Posting)				Operating Rating			
					HS	3	3S2	3-3	HS	3	3S2	3-3
Aspen/Sopris Ranger District												
15.1	8.8	CASTLE CR #2**		N	22	/	/	/	42	/	/	/
15.1	3.5	CASTLE CR #1**		N	23	/	/	/	44	/	/	/
18.1	8.8	LENADO #2**		Y	Pitkin County							
23.1** 106.1	0.1	LINCOLN CR #1**	T11S R83W SEC 5	Y		21	33	35				
121.1	0.2	COOPER BASIN	T12S R84W SEC 7	N	36	/	/	/	40	/	/	/
151.1	0.0	PEARL PASS #2**		Y	Gunnison County							
15C.1	0.2	TAYLOR PASS **	T11S R84W SEC 29	Y		23	36	37				
4.1	12.8	FRYINGPAN #3**		N	14	/	/	/	19	/	/	/
4.1	12.8	FRYINGPAN #2**		N	37	/	/	/	46	/	/	/
310.1	0.0	AVALANCHE CG	T9S R88W SEC 29	N	31	/	/	/	45	/	/	/
314.1	7.9	CRYSTAL RV #2 **	T11S R87W SEC 19	N	36	/	/	/	50	/	/	/
314.1	13.8	CRYSTAL RV #3	T11S R87W SEC 35	Y		22	34	36				
314.1	14.8	CRYSTAL RV #4	T12S R87W SEC 02	CLOSED								
314.1	15.6	CRYSTAL RV #5	T12S R87W SEC 01	N	34	/	/	/	45	/	/	/
314.1	16.7	CRYSTAL RV #6		N	36	/	/	/	40	/	/	/
315.1	1.2	LEAD KING BASIN	T11S R87W SEC 27	N	41	/	/	/	54	/	/	/
400.2	20.8	E-T**		N	25	/	/	/	36	/	/	/
504.1	0.1	S FK #1		N	43	/	/	/	57	/	/	/
105.1B	0.0	CHAPMAN CG	T8S R83W SEC 34	y		23	36	36				
105.4A	0.8	HORSESHOE BEND RD	T9S R82W SEC 6	N	26	/	/	/	37	/	/	/
105.6C	0.0	ROCKY FK	T8S R85W SEC 18	N	36	/	/	/	40	/	/	/
1C.1	3.8	S THOMPSON #2 **	T9SR89WSEC1	Y		22	34	34				
Blanco Ranger District												
205.1	7.6	TRAPPERS LK #2	T5S, R88W, SEC 2	N	86	/	/	/	110	/	/	/
208.1	0.0	BLUE LAKE	T1N R88W SEC 35	Y		11	18	18				
238.1	0.9	UTE CR SHG #2	T1N R90W SEC 28	Y		8	12	12				
Eagle/HolyCross Ranger District												
307.1	8.2	E-T #1**		N	24	/	/	/	43	/	/	/
416.1	0.1	HAT CR (E. BRUSH CREEK)	T6S R83W SEC 27	Y		15	24	24				
600.1	28.7	COFFEE POT #2	T3S R88W SEC 19	N	40	/	/	/	67	/	/	/
600.1	35.8	COFFEE POT #3	T2S R89W SEC 25	N	HS 25 Design Loading - Temp. Structure							
630.1	0.6	HEART LK	T3S R88W SEC 30	Y		11	18	18				
701.1	2.4	PINEY	T4S R81W SEC 14	N	44	/	/	/	60	/	/	/
702.1	0.3	RESOLUTION #1	T7S R80W SEC 9	Y		20	20	20				
703.1	0.5	HOMESTAKE #1	T7S R80W SEC 6	N	42	/	/	/	54	/	/	/
709.1	0.5	REDCLIFF # 1		Y								
745.1	0.3	LIME CREEK	T6S R80W SEC 16	Y		6	9	9				
747.1	0.0	WEARYMAN #1 (Turkey Creek)	T6S R80W SEC 15	Y		9	14	14				
25A.1	0.2	W LK CR**		N	41	/	/	/	55	/	/	/
711.5J	0.0	CHINA BOWL BRIDGE		N	41	/	/	/	55	/	/	/
711.5K	0.0	PETE'S BRIDGE		N	43	/	/	/	58	/	/	/
711.5L	1.6	EARL'S BRIDGE		N	38	/	/	/	50	/	/	/
711.5M	0.0	TEA CUP BRIDGE		N	43	/	/	/	57	/	/	/
714.1D	0.3	13TH STREET BAILEY BRIDGE		N	35	/	/	/	48	/	/	/
Rifle Ranger District												
603.1	1.0	CLINE TOP #2**		Y		26	42	42				
801.1	17.9	E DIVIDE/UNCLE BOB	T7S R91W SEC 32	N	44	/	/	/	74	/	/	/
814.1	0.0	CAYTON FSS	T8S R91W SEC 33	Y		16	24	25				
Dillon Ranger District												
6.1	2.6	TIGER (N. FORK SWAN RIVER)	T6S R77W SEC 24	N	92	/	/	/	155	/	/	/
355.1	0.9	S. FORK SWAN RIVER BRIDGE	T6S R77W SEC 25	N	57	/	/	/	95	/	/	/

Appendix C

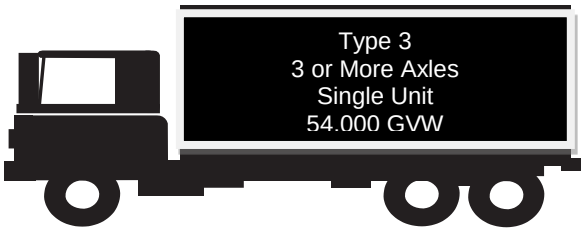
ATTACHMENT C
CDOT VEHICLE CONFIGURATIONS

Note: The following figures are typical of those traveling on National Forest System Roads – for more information visit the Colorado Department of Transportation Permitting Website.

Type 3 – Single Unit Truck

2 Axle - Single Unit - Maximum gross weight allowed on any Colorado highway is 36,000 pounds. Total weight must be distributed so that no axle exceeds the maximum gross weight for single axles. (CRS 42-4-508(1)(a)(II), (1)(c)(I))

3 or more Axles - Single Unit - Maximum gross weight allowed on any Colorado highway is 54,000 pounds. Total weight must be distributed so that no single or tandem axle exceeds the maximum gross weight limits allowed on the road where they are weighed. CRS 42-4-508(1)(a)(III), (1)(c)(II)



Type 3S2 Truck Tractor and Semi-Trailer

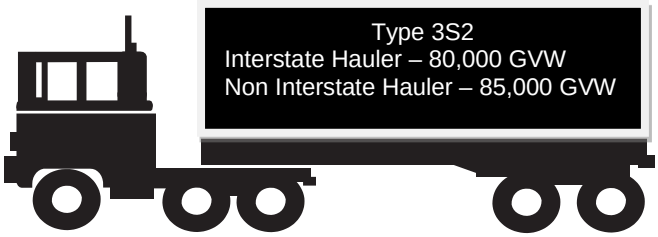
Interstate Hauler Unit - Maximum gross weight allowed on any Colorado Interstate highway is 80,000 pounds (36,288 kg). In addition vehicles traveling on interstate highways must comply with the Federal Bridge Formula. (CRS 42-4-508 (1)(c)(III))

FEDERAL BRIDGE FORMULA
Gross weight = 500 (LN/N-1 + 12N + 36)

L = Distance in feet between the extremes of any group of two or more consecutive axles.
N = Number of axles being considered. In computations of this formula no gross vehicle weight shall exceed 80,000 pounds except as may be authorized under CRS 42-4-510(II).

Non-Interstate Unit - Maximum gross weight allowed on any Colorado non-interstate highway is 85,000 pounds. In addition vehicles must comply with the axle weight limitations and the Colorado Bridge Formula. (CRS 42-4-508(1)(b))

COLORADO BRIDGE FORMULA
(Length + 40) x 1,000 = Gross Weight



Appendix D

Company Name – Lease # COC-xxxxx
Access Roads to Proposed Well Pad Sites located in Section xx
Township xx South, Range xx West, 6th PM,
xx County, Colorado

ROAD MANAGEMENT DECISION AND DESIGN CRITERIA WORKSHEET
New Road Construction or Road Reconstruction
Design Criteria – Subject to change upon onsite visits, project review and release of Final EA/EIS

The purpose of this worksheet is to reach agreement for design, construction, maintenance, and management standards for the following roads which are expected to be used during the implementation of the XXX project.

Forest: White River			District: XXX		
Road Name	Road Number	Construction -C Reconstruction - R Maintenance - M	Access to Well #	Length (Approx)	Functional Class

Description of project
(Example:Access will be provided to National Forest Lands that are currently under a legal and binding Oil and Gas Lease Agreement. Authorization and administration of access roads will be as outlined and in accordance with the following documents; Project Design Criteria, Surface Use Plan of Operations (SUPO), Application for Permit to Drill (APD) Conditions of Approval (COA) for XXX Project.)
DRAFT

PREPARED BY:	x	x
	Title	**Date**
REVIEWED BY:	This review required only for O&G Projects	
	Oil and Gas Resource Specialist	**Date**
REVIEWED BY:		
	Hydrologist or other specialist	**Date**
RECOMMENDED BY:		
	Transportation Engineer	**Date**
APPROVED BY:		
	District Ranger	**Date**
APPROVED BY:		
	Forest Engineer	**Date**

DESIGN CRITERIA - See FSH 7709.56, CHAPTER 4.

DESCRIPTION OF THE PROJECT:

Road # – Access Road Name – MP to MP

- Description of road location – beginning location, ending location, intersections, current management (maintenance level),
- Description of Travelway – geometric alignment, surfacing type, subgrade conditions, unique design requirement, suitability for commercial use,
- Description of user type and expectations

Snowmobile Routes

- Description of winter use – marked snowmobile routes…

Material Sources and Waste Areas

- Description of existing material sources including past use, geotechnical analysis etc

PLANNED WORK:

Project Access Roads (Open to Public Motorized Use) and Single Purpose Roads (Oil and Gas Roads or other temp road type – Administrative Use Only)

Proposed road construction/reconstruction is designed to provide safe and efficient access to well pads located in Section xx, Township xx South, Range xx West, xxth PM, xx County, Colorado**.**

Proposed access roads are located in Sections xx Township xx South, Range xx West, xxth PM, xx County, Colorado.

Project Access Roads will be constructed or reconstructed to standards as determined by Geometric and Structural Design (see G - Design Standards below) and according to Forest Service Standard Specifications. Construction activities may include but are not limited the following:

- A video or photos of the existing conditions of the proposed travelway will be furnished by the proponent prior to commencement of construction activities.
- All disturbed areas outside of the travelway will be seeded according to reclamation criteria provided in approved SUPO, APD or COA's.
- Construction, realignment or widening of the travelway may be required to accommodate vehicle types and volume and to meet geometric design requirements
- Construction or reconstruction of turnouts and curve widening may be required to accommodate vehicle types and volume and to meet geometric design requirements
- Clearing, grubbing and windrowing of tops, limbs and brush for placement on cut & fill slopes after construction/reconstruction for erosion control
- Windrowing of topsoil for placement on cut and fill slopes after construction/reconstruction
- Placement of erosion control matting and other sediment control devices on cut and fill slopes before, during or after construction per Stormwater Management Plan (CDPHE) and Forest Service requirements
- Construction of retaining structures on slopes greater than 50% (as approved by the Forest Service)
- Construction of ditches and construction of reinforced rolling dips and grade dips (where feasible) to reduce erosion of traveled way
- Installation of culverts in ditched sections and side drainages to provide ditch relief and sediment control
- Grade dips or low water crossings may be preferred over culvert placement under certain conditions
- Under/French Drains and other subgrade structures will be installed or replaced as needed.
- Installation of geotextile fabric with subgrade reinforcement material as needed
- Creek crossings and riparian crossings will be designed according to hydrologists recommendations. Aquatic Organism Passage Design will be adhered to.
- The location any pipelines will be approved by the Forest Service prior to placement along the travelway.
- Any pipeline construction shall commence only when ground conditions are favorable, and prior to placement of final course of aggregate surfacing.

- Subgrade, base and surface course aggregate shall be placed to provide support for lease operational traffic and to provide a facility that will be in place for 30 or more years with minimal maintenance needs per structural design requirements
- Subgrade materials may be purchased from Forest Service material sources, if material is suitable and available.
- All pit run, base and surface course aggregate shall be purchased by the operator from a commercial source.
- Road rehabilitation at end of project will be required for single purpose roads. Rehabilitation includes removal of culverts, obliteration of the travelway, recontouring of slopes, restoring natural drainage patterns, revegetation and associated activities to Forest Service Standards.

Road # – Access Road Name – MP to MP

Brief description of planned construction/reconstruction required to provide access to project.

DESCRIPTION OF EXISTING ROADS:

A. - USER TRAFFIC TYPE and TRAFFIC MANAGEMENTS REQUIREMENTS

User types of existing local and collector roads consist of recreation, range, commercial and administrative.

Road # – Access Road Name – MP to MP

- Description of road i.e. road is an all weather road passable by passenger vehicle with no consideration given to user comfort; passable by 2 wheel drive high clearance pickup when dry, but requires high clearance four-wheel drive during periods of wet weather; currently managed as closed to motorized use during the summer months; winter access by the public can be motorized.
- Who uses the road

Traffic Control and Public Safety

- A traffic control plan, prepared by a qualified traffic control specialist and meeting criteria established in Attachment XX, will be required prior to approval of a plan of operations for this project.
- During the road construction phase of the operation roads may be closed to all public motorized use. A Supervisor's Order may be required for road closures greater than one hour in duration.
- Traffic control will be provided by the proponent during all operational phases, as determined by the traffic control plan and/or when required by the Forest Service
- Installation of road closure gates at beginning of single use systems will be required.
- Public safety shall be maintained by appropriate traffic control mechanisms utilizing MUTCD standards and flagging protocols during maintenance, reconstruction and drilling/completion operations roads open to public motorized use.
- The critical vehicle (drilling rig component/lowboy(RGN type/crane) may require closing roads to other users while critical vehicle is brought onto the site.
    - All vehicles requiring escort by pilot car under Colorado State Law will be required to be piloted by operators licensed, insured and certified in the State of Colorado. All traffic control operations will be managed by personnel licensed, insured, and certified by the State of Colorado.
    - The use of certified flaggers is required during completion and other high traffic volume.

Snowplowing

Discussion of existing winter use and mitigation requirements to provide for winter access (groomed snow mobile route, road not currently plowed, wild life restrictions etc.

Permitting

- An approved Road Use Permit or Special Use Authorization will be required prior to use of an access road. Some single purpose access roads will not be subject to this requirement.
- Surface Rock Replacement and road maintenance will be required as well as other requirements outlined in a Road Use Permit.
- Over-legal permits and bridge permits (if applicable) are required for over-legal vehicles.

- A written maintenance agreement between multiple operators will be required as well as other requirements outlined in a Road Use Permit.

B. - RESOURCE MANAGEMENT OBJECTIVES

The 2002 Forest Plan includes management area prescriptions with specific standards and guidelines for particular areas. The management area prescriptions for this area include: Brief description of Management Areas for proposed Project

Travel Management Strategies by Management Prescription Area

Management Area	Travel Management Strategy
Management Area	Brief description
	Standards
	Guidelines

C. - ENVIRONMENTAL CONSTRAINTS Examples:

Soils are very erosive and have the potential to contribute sediment to wetlands, riparian areas, and stream courses.

- Reduce/minimize erosion sediment from travelway into erodible areas and reduce erosion potential by proper construction of travelway and installation of drainage structures.
- Install reinforced rolling dips where feasible, grade dips and culverts to provide drainage relief.
- The road design will include an insloped travelway with ditches and culverts where designed.
- Cross drainage will be properly sized, placed and installed culverts.
- Construction of rolling dips may not be viable in many locations, but will be constructed where terrain allows.
- Design travelway in such a manner so as to eliminate wasting of excess material during construction. Side casting of excess material will not be authorized.
- To the extent possible, design travelway such that excavation and embankment are balanced with economically feasible haul distances.

D. - PHYSICAL/ENVIRONMENTAL FACTORS: Examples:

Steep side slopes in erodible soils provide potential for mass wasting and gully erosion before, during and after construction/reconstruction.

- Drainages in erodible soils and proximity to live streams provide potential for excessive sedimentation before, during and after construction/reconstruction.
- Portions of the road system have wet subgrade soils. Excessive use without subgrade reinforcement causes rutting and erosion. The road can become impassible.
- Proximity to live stream (cutthroat trout stream) will require mitigation in order to meet Watershed requirements. Follow hydrologist recommendations.
- Steep sideslopes showing evidence of past mass movement eliminate the option of road relocation near XX Creek.
- Steep road grades in erodible soil create rutting and erosion and sediment movement into live streams.
- Raptor nests in area may require timing limitations for construction.
- Maintenance of road system after wells are brought into production may be extensive in order to maintain compliance with Forest Plan Standards.

E. DESIGN CRITICAL VEHICLE

Description of Critical vehicle Examples:

- Lowboy hauling construction equipment
- Crane
- Drilling equipment including lowboys hauling over-weight, over-length and over-sized equipment.
- Critical vehicle is estimated to be 90 feet in length (tractor/trailer combination) and 12 – 14 feet in width.
- Critical vehicle may require closure of travelway to others during transit.

F. - MAINTENANCE REQUIREMENTS - FSH 7709.58, Section 12.32, Paragraph a-c.

- All Roads – Maintenance Level 3 during drilling and production activities.
- Single Purpose Roads - Rehabilitate after resource management objectives (well abandonment timber removal) are met.
- Maintenance may include but is not limited to replacement of aggregate surface course, culvert replacement, routine blading of travelway and other routine maintenance items.
- Gates and signs will be maintained at entry points to single purpose roads and private lands (if applicable).

G. - DESIGN STANDARDS – summary

GEOMETRIC STANDARDS

Company Name shall provide the following information:

- Current Traffic Counts for all Forest System Roads intended for use – if data is not available.
- A detailed estimate of traffic counts/vehicle data and overweight vehicle counts and overweight vehicle data for each phase of the project for all Forest System Roads intended for use:
- Include Road and Pad Construction, Road and Pad Surfacing, Drilling, Fracing, Pipeline Construction, Completion and Production.
- Include estimates for entire project

The current edition of the AASHTO "Green Books" as applicable (either <400ADT=Low Volume Design Guide OR 400+ ADT = "Green Book") will be utilized to determine any geometric standards and/or geometric upgrades needed as a result of projected activity

STRUCTURAL SURFACING STANDARDS

Company Name shall provide the following information:

- The total (existing + projected) Equivalent Single Axle Load (ESAL) broken down for each route intended for use during operations
- A breakdown of season of operations (Dry/Frozen subgrade or all-weather access)
- Sub-grade structural values broken down for each route with testing results (CBR/R-Values/Resilient Modulus). A statistically valid sample must be taken and an AASHTO recognized test performed, depending on the surfacing section design method – AASHTO 1993 Pavement Design Guideline will be adhered to.
- A completed Surfacing Section design and surfacing requirements breakdown for each route will be submitted based upon ESAL projections.

A standard 30 year design life for all transportation facilities, and the duration of activity (ex - 1 season, 2 years, 5 years, etc) is to be used for all submittals. Road Geometric and Structural Surfacing Designs will need to be completed and stamped by a Professional Civil Engineer licensed in the State of Colorado and incorporated into road construction/reconstruction plans.

The submitted data will be utilized for the following:

- to determine if the geometric design and structural surfacing of the existing road is adequate for the estimated use
- to calculate Surface Rock Replacement Deposits
- to calculate Commensurate Share of Maintenance
- to determine Bonding for Road or Resource Damages

TRAFFIC CONTROL PLAN

See Attached White River National Forest Supplemental Specification for Traffic Control Plan Details

Road Construction Plans

- Refer to the Forest Service Specifications for Construction of Roads and Bridges – FP03
- Construction plans shall be prepared by or under the supervision of a Professional Civil Engineer licensed in the State of Colorado, and shall be signed and stamped prior to submittal to the

Forest Service for final review. The PE shall utilize Low Volume Road Design and Construction experience.

- Forest Service shall review the road construction plan package for completeness prior to commencement of construction.
- In addition to typical drawings, which will be provided by the Forest Service, plans shall include sheets containing plan and profile drawings for the project, and details for any other structures or techniques to be included in the road construction project.
- Plan and profile drawings shall show locations for all construction items including, but not limited to:
  - Road widths, centerline stationing, top of cut and toe of fill and edge of road shown on plan view, curve data including widening, turnouts, drainage structure locations, culvert size, length, skew and location, retaining structure locations and type, road construction templates, estimated haul quantities and direction of push, ground line and grade line with construction grades, approximate borrow and waste areas.
  - Cross sections shall be provided every 100 feet or closer (50 feet maximum in areas of geologic concern).
  - A mass haul diagram will be provided to assure that a balanced road design can be achieved (new construction or realignments).
  - Areas of geologic concern shall be determined as outlined in the Geotechnical Assessment and/or EA.

Construction Phasing

- Construction of road system and associated facilities may be phased at the discretion of Company Name. It is recommended that road construction be phased in such a manner that wells at the beginning of the road project are brought into production before wells at the end of the road project.
- Construction Phasing shall be approved in writing by the Forest Service.
- Consideration should be given to placing pipelines concurrently with road construction to reduce disturbance, and protect investment in surfacing, especially across areas of geologic or watershed concern.
- Signing shall be installed for safety and traffic control during construction activities. Signing shall be in compliance with MUTCD.
- A traffic control plan for construction activities, prepared by a qualified traffic control specialist shall be submitted.
- Water sources are not available on site. It is the responsibility of the contractor to obtain water necessary for construction operations. The contractor shall be responsible for obtaining the right to use water, including any royalty costs.

Road Prism

- Design speed - as determined by Geometric Design
- Road widths - XX ft. minimum subgrade width - or as determined by Geometric and Structural Design to accommodate critical vehicle (Low boy, crane, Frac Tank or drilling/work-over rig) or subgrade and base reinforcement.
- Turn radii as determined by Geometric Design. Horizontal curve radius not less than 50 ft.
- Add curve widening to accommodate critical vehicle wheel off tracking.
- Outslope and crown where applicable.
- The basic road prism may be single lane, insloped with ditches and turnouts, unless Geometric Design determines that double lane width is required.
- Turnouts shall be intervisible when feasible or rely on naturally occurring opportunities. Maximum turnout road width shall be 28 feet. Minimum turnout road width shall be 24 feet. Maximum turnout length shall be 100 feet with 50 foot transitions each side. Minimum turnout length shall be 60 feet with 50 foot transitions each side When feasible, provide turnouts not more than 1000 feet apart.
- Sustained grades of constructed segments are not to exceed 8-10%.

Excavation

- Cut and fill slopes shall be 1½:1 or flatter unless in solid rock where they can be up to ¼:1.
- In areas of geologic concern, cut and fill slopes and construction methods shall be as recommended in the Geotechnical Assessment, approved by the Forest Service and designated in the EA.
- On slopes in excess of 55%, or along areas identified in the Geotechnical Assessment, full bench construction and end hauling of material or construction of retaining structures will be required.
- On slopes between 45% and 55%, layer placement from a constructed bench is acceptable.
- Side casting of material on slopes greater than 45% will be not be authorized.
- Locations for stockpiling of waste to be utilized in later construction shall be shown on construction plans. Field verification and written approval of locations will be required.
- Excavated material deemed unsuitable for use in fills may be disposed of adjacent to the roadway in locations approved by the Engineer.
- On slopes greater than 10%, but less than 50% the top 4 inches of topsoil shall be stripped, mixed with construction slash and windrowed at top of cut slope. Excess topsoil may be mixed and windrowed at toe of fill.

Clearing Limits/Construction Staking

- Construction Staking shall be completed and approved 10 days in advance of commencement of initial construction and 10 days in advance of ongoing construction segments.
- Clearing limits shall be clearly marked by hanging red flagging on brush - 36 foot minimum total width.
- In areas with minimal brush or vegetation construction limits will be located by placing lathe with red flagging. On slopes less than 30%, construction can commence by placing clearing limit and centerline flags only.
- On slopes greater than 30% but less than 40%, clearing limit flags and centerline alignment flagging can be placed prior to clearing operations. After clearing operations have been completed construction stakes can be placed.
- On slopes greater than 40% centerline stakes, construction stakes and clearing flags shall be placed prior to construction.
- All culvert and rolling/grade dip locations, turnout and retaining structures shall be construction staked. They may be staked after clearing, but before excavation begins.
- At a minimum culvert inlet and outlet locations, rolling dip sag, crest and transition points and location of entire length of any turnout location shall be staked. Retaining structures will require centerline cut and fill stakes with offset information.

Clearing

- Clearing can be accomplished with written agreement by the following methods: cutting with chain saws by hand crews, utilizing a brush hog, utilizing an excavator with brush head, chipping or other method. Slash will not be incorporated into the fill.
- Clearing limits - Clear to 10 ft. above cut catch point and 10 feet beyond toe of fill catch point to allow for windrowing of clearing debris for later use on completed cut and fill slopes. Construction slash may not be incorporated into fill on slopes greater than 20%. Stumps shall be placed at the toe of the fill with the root wad facing down.
- Timber may be considered Merchantable. Region 2 Utilization Standards and Tree Merchantability Specifications will be maintained
- Cut and scatter at base of fill slopes or top of cut slopes. Windrow tops and limbs and brush with topsoil at top of cut and toe of fill for use at end of construction to slash cut and fill slopes.
- A valid timber sale contract may be required prior to clearing activities. Allow up to 45 days for this contract to be processed.

Drainage

- Rolling dips, grade dips, ditches with culverts and culverts in live streams and side drainages will be utilized to provide drainage.
- Cross drainage spacing shall be based on soils, and as shown in the following table.

Maximum Cross-Drain Spacing in Feet Based on Soil Types

These are maximum spacings. They should be reduced if warranted by onsite factors such as expected road use, historical drainage, downslope stability and erosion hazards, and filter strip capability to trap.

Road Grade (%)	ML, SM Extr. Erodible Silts-sands with little or no binder (d.g.)	MH, SC, CL Highly Erodible Silts-sands with moderate binder
1-3	600	1000
4-6	300	540
7-9	200	360
10-12	150	270
13-15	120	220

- Minimum culvert diameter shall be 18 inches for ditch relief and 24 inches for side drainage relief. All culverts in side drainages will be sized to determine that 24 inches is adequate to provide for passage of flow and sediment. Culverts shall generally match the active width of the channel and be designed to withstand a 100 year flood event.
- Skew culvert pipe to the extent necessary to achieve a drainage gradient equal to or greater than the grade of the road, but not greater than 10%. Culvert lengths will be such that the outlet is placed on native soil. On road grades in excess of 10%, energy dissipation structures may be needed at the ends of ditch relief culverts.
- Culvert inlets in side drainages will be armored or a culvert inlet bell installed.
- Sediment traps and filter strips shall be placed at culvert outlets that drain onto slopes 20% or greater to provide energy dissipation. Culvert outlets in cross drainages will be armored a distance of 10 feet along the drainage.
- Culverts in cross drainages will be installed as work progresses.
- Provide ditch relief culverts at intervals that reduce volume and velocity and which minimizes rill formation in ditch bottoms.
- Skew ditch relief culvert pipe to the extent necessary to achieve a drainage gradient equal to or greater than the grade of the road.
- Creek crossings and riparian crossings to be designed according to hydrologists recommendations. Aquatic Organism Passage Design will be adhered to.
- The entire length of all rolling dips and grade dips will be reinforced with a minimum of 6 inches (compacted depth) of pit run aggregate (minimum size 3 inches). Reinforcement will be added a minimum of 75 feet each side of any culvert locations.

Aggregate Base or Surface Course

- Pit Run Material and Crushed Aggregate shall come from a commercial source. Pit Run Material for subgrade reinforcement may be purchased from the Forest Service.
- Base course material (CDOT Class 6) shall be placed to a minimum compacted depth of 6 inches (maximum size 3 inches) or as determined by the structural surfacing study. Base course material shall be placed the entire length and width of all roads.
- Crushed Aggregate shall be Grading C (maximum size 1 ½ inches). With written approval from the Engineer a material of the same size and meeting the specifications of another Public Road Agency, or locally available gradation may be used.
- Crushed Aggregate shall be placed to a minimum compacted depth of 4 inches, or as determined by the structural surfacing study.

- Crushed Aggregate may be required within 100 feet of drainage channels in order to be consistant with conclusions in EA and Watershed Conservation Practices.

Pipeline

- The location of pipelines and associated construction will be approved by the Forest Service prior to placement along the travelway.
- Temporary above ground lines will not be allowed to be placed in ditch lines, and shall be placed such that road maintenance and winter recreation activities will not be impeded.
- Pipeline construction shall occur only when ground conditions are favorable, and prior to placement of final course of aggregate surfacing.
- Roads utilized for pipeline access may require upgrading in order to support traffic loads.
- Access for pipeline construction may be allowed only during times of dry road conditions. The proponent should plan for weather and road related delays.
- Any surfacing or drainage structures damaged during pipeline placement will be replaced by the proponent.

Road Rehabilitation After Production Ends

- Road rehabilitation at end of project includes:
- Removal of culverts, pipelines, and any other associated structures
- Pulling cut and fill slopes back to as near normal contours as possible
- Restoring natural drainage patterns
- Slashing of rehabilitated road
- Placement of erosion control matting and erosion control devices as determined by onsite inspection
- Topsoil replacement and seeding/revegetation to Forest Service Standards of all disturbed areas (ie. 75% of adjacent vegetative cover after 2 growing seasons)

General

- Compliance with construction and design specifications is the responsibility of Company Name. The Forest Service shall give written Final Approval of the construction project.
- All disturbed areas shall be scarified, drained and seeded/fertilized or treated by method agreed to in the field. Seed mixture and application rate will be included in the Conditions of Approval (COAs) for the Surface Use Plan of Operations (SUPO).
- All construction equipment shall be cleaned and inspected prior to moving onto national forest lands to prevent the spread of noxious weeds.
- Forest service personnel or designated company representative shall inspect all construction equipment for cleanliness and for presence of fire prevention equipment.
- Fire precautions (see attached) shall be followed at all times.
- Snow removal (see attached) shall be performed as shown.
- The contractor shall obtain a permit from the Rifle District Ranger, USFS, Rifle, Colorado for any construction or temporary worker camp located on National Forest Land. Permission from private landowners shall be obtained for any camp on private land.
- A planned road maintenance schedule for the road system will be submitted on a yearly basis, as outlined in the Road Use Permit.
- Road contractor shall be responsible for obtaining off site water or obtaining the right to use on site water, including any royalty costs.

Appendix E

Snow removal shall be done in a manner to preserve and protect the roads to insure safe and efficient transportation and to prevent unacceptable erosion damage to roads, streams, and adjacent lands.

A. Description. Snow removal work by Contractor shall include:

1. Removal of snow from entire road surface width including turnouts.
2. Removal of snow slides, earth slides, fallen timber and boulders that obstruct normal road surface width including turnouts.
3. Removal of snow, ice, and debris from culverts so that the drainage system will function efficiently at all times.

B. Performance. All items of snow removal shall be done currently as necessary to insure safe, efficient transportation. Work shall be done in accordance with the following minimum standards of performance.

1. All debris, except snow and ice, which is removed from the road surface and ditches, shall be deposited away from stream channels at agreed locations. Spoil or wasted snow shall be stockpiled at pre-approved locations on Forest Land.
2. During snow removal operations, banks shall not be undercut nor shall gravel or other selected surfacing material be bladed off the roadway surface.
3. Ditches and culverts shall be kept functional during and following roadway use.
4. Snow berms shall not be left on the road surface. Berms left on the shoulder of road shall be removed and/or drainage holes shall be opened and maintained. Drainage holes shall be spaced as required to obtain satisfactory surface drainage without discharge on erodible fills.
5. Dozers and other large equipment shall not be used to plow snow on system roads without written approval of Forest Service. Upon approval, equipment must be equipped with shoes or runners to keep the plow blade a minimum of 3-4 inches above the road surface unless specifically removed from the requirements in writing. Shoes shall be attached to blades on snow removal equipment.
6. Snow must not be removed to the road surface. A minimum three to four inch depth must be left to protect the roadway.
7. Contractor's damage from, or as a result of, snow removal shall be restored in a timely manner.
8. Deposit plowed snow past the edge of the road shoulder.
9. Do not push snow outside the clearing limits.
10. Operator shall be responsible for flagging or staking drainage structures, as well as the inlets & outlets of culverts, crests and outlet ditches of cross drainages.
11. The crest portion of rolling dips shall not be bladed off.
12. The outlet ditch shall be free draining to at least the clearing limits.
13. Culvert inlets and outlets shall be flagged or staked to ensure protection against damage.
14. Do not remove compacted snow on roadway surface and drainages in turn around areas.
15. There shall not be any damage to residual trees when removing or plowing snow off the road.
16. When operations have ceased for the winter the following must occur:
    - All drainage structures will function effectively.
    - Snow berms (if any) shall be spread back across the roadway to facilitate filling in of snow.
    - If the road cannot be protected by constructing a closure berm constructed of snow or using a permanent road closure device, then the Contractor shall be responsible for placing temporary road closure devices (Type III Movable Barricades) to prevent wheeled vehicle traffic from using the road.
    - Road closure devices shall meet the requirements of MUTCD.

Appendix F

Road maintenance, reconstruction and construction operations include activities that could potentially start fires. Unless a fire prevention plan specific to the project is submitted and approved the following fire prevention plan shall be followed:

Company Name shall do everything reasonable within its power and shall require its employees, contractors, and employees of contractors to do everything reasonable within their power, both independently and upon request of the Forest Service to prevent fires on or near lands to be occupied under this operating plan. The operator is responsible for all suppression costs and resource damage for any fire resulting from its operations and/or practices. In case of fire started by the operator, the operator shall report the occurrence as soon as possible to 911.

> Company Name *shall implement measures to prevent fires on public and private land and will be held responsible for the costs of suppressing fires on public lands that result from the actions of its employees, contractors, or subcontractors. Range or forest fires caused or observed by the operator's employees, contractors, or subcontractors shall be immediately reported to the 911 System. All fires or explosions that cause damage to property or equipment, loss of oil or gas, or injuries to personnel shall immediately be reported to the 911 System. During conditions of extreme fire danger, surface-use operations may be restricted or suspended in specific areas, or additional measures may be required by the White River National Forest.*

The operator is responsible for ensuring that each employee, contractor, subcontractor, or any other individual or company working on the project site is aware of the provisions of this fire plan, is familiar with the location and proper use of firefighting equipment, and that operations are conducted in a fire-safe manner.

Exhaust systems of all vehicles shall have an acceptable muffler and shall be in proper working condition. All motorized equipment and machinery shall be equipped with spark arresters that meet Forest Service standard 5100-1a. An equipment inspection might be performed to assure compliance.

Chemical pressurized fire extinguishers with an Underwriters Laboratory (UL) rating of 3A - 40BC are required as follows:

- One 2 lb per pickup
- One 5 lb per truck over 1 ton gross weight
- One 10 lb per dozer, motor grader, or other earth moving equipment.
- Fire extinguishers are to be used for vehicle /equipment fires only.

Vehicles shall only be parked in cleared approved areas.

All smoking shall be done inside of vehicles or in areas cleared of flammable materials.

Any fuel or flammable liquids must be stored in an area cleared of all vegetation and flammable substances for a radius of 30 feet. Further, fuels, oils, lubricants, etc. shall be stored in approved containers. Fuel storage shall be at least 200 feet from any stream.

Slash and stump disposal shall be as outlined in contract, permit or authorization. No material shall be disposed of by burning in open fires without written authorization from the Forest Service

Appendix F

Welding

Welding is herein used to mean electric arc welding; arc or gas cutting or heating; gas welding; grinding of metal; use of any flammable gas, carbon or hydrocarbon fuel for heating or forging metal

No welding shall be conducted within 30 feet of fuel storage areas.

Each welding crew shall have immediately available a water storage tank of not less than 300 gal. capacity with a pump capable of pumping 20 gallons per minute at 100 PSI and not less than 250 feet of hose. Exception: hand held propane torches may be used without the above referenced water tank and pump; provided that all other requirements are met, and that a shovel and a full 4 or 5 gallon backpack type water pump is immediately available for use.

There shall be no welding when winds exceed 15 mph or when the predicted fire danger for the day as determined by the White River National Forest is greater than “3”.

All welding shall be done within an area cleared of all flammable vegetation and material for a minimum radius of 30 feet from the welding operation. Areas must be cleared to mineral soil or bare rock.

A fire watch person (lookout) shall be at the site of any/all welding, fueling, tractor or other mechanized equipment operation, etc. This person shall have no other duty than to watch for fire starts and be ready to take immediate fire suppression action. The fire watch person shall remain on site observing for smoke or fire for a minimum of one half hour after cessation of operations requiring a fire watch person. The fire watch person will carry a shovel and have a 4 or 5 gallon backpack water pump (full and in good working condition) immediately available.

Exception: A fire watch person(s) will not be required when the predicted fire danger for the day as determined by the White River National Forest to be “3” or less. A fire watch person(s) is required when the predicted fire danger is “3+ high” or more. It is the operator’s responsibility to contact the Upper Colorado Interagency Fire Management Dispatch (970-257-4800) to determine what the predicted fire danger is.

BLASTING

Use of explosives is authorized, subject to the following provisions:

- Operator must have a valid, current Explosives Permit from the State of Colorado
- Overnight storage of explosives is not authorized on National Forest lands.
- There shall be no blasting when winds exceed 15 mph or when the predicted fire danger for the day, as determined by the White River National Forest, is greater than “3”.
- Adequate safety lookouts and traffic control person(s) shall be provided to insure public safety during all blasting operations.
- A shovel and a full 4 or 5 gallon backpack water pump (full and in good working condition) shall be immediately available.

Appendix F

SPECIAL REQUIREMENTS FOR STAGE I FIRE RESTRICTIONS

Welding, sawing, or grinding operations will include spark shields to surround work and will be limited to the period between 1:00 AM and 1:00 PM. If such work must be conducted outside this time period, then the work supervisor shall notify the appropriate line officer by phone and request approval. The work area shall be wetted down immediately prior to and after the completion of any such work.

Any work requiring welding or the use of power equipment must be conducted within 100 feet of adequate suppression equipment and must be accompanied by pumper equipment with a minimum water tank capacity of 300 gallons and a minimum of 250 feet of hose.

When welding or power equipment is used, a fire-watch patrol with a minimum of a 2-person crew must be conducted for two hours after all operations have ceased.