

Road Management Objective

Project		System		Land Use Designation	
Central Kupreanof EIS		Kake			
Route No	Route Name		Begin Terminus	End Terminus	
45888			6040 MP 13.60		
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos	
0.00	0.40	Planned			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Log truck	Log truck

Intended Purpose/Future Use

Local road used for silvicultural activities, will be opened periodically, closed during times of inactivity.

Maintenance Criteria			
Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)
0.00	0.40	2	1

Maintenance Narrative

Road will be maintained in "Active" status while road is open during timber haul; post timber haul road will be stored and maintained in "Inactive" status.

AFR&P Regs. "Active" status: Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

AFR&P Regs. "Inactive" status: Road is stored. Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and seed and fertilize disturbed soils. The road will be placed in a self maintaining state.

Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest ownership
Traffic Management Strategies	Encourage:	Hikers, bicycles	
	Accept:	High clearance vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	Motorized vehicles on closed section	

Travel Management Narrative

All newly constructed NFS road will be managed as a maintenance level 2 open to motorized vehicle traffic during the life of these timber sale activities. They may remain open from five to ten years after this timber sale for other activities including fire wood removal; these roads would be constructed or placed in a self maintaining hydrologic status. This would include the placement of drivable water bars or dips at all drainage culvert locations to direct water across the road in event that the culvert plugs. Other design elements like oversized culverts may be used to help reduce the need for routine drainage maintenance.

These roads would be intermittent service roads (maintenance level one) within ten years of timber harvest and physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored. A review will be conducted at the time of closure for any additional resource concerns.

Approved _____
District Ranger

Date

Site Specific Design Criteria

Road 45888

ROAD LOCATION: The road located on flat timbered area between the beginning point at the existing Road 6040. The first 13+00 feet is flat and no sideslope through timber. The remainder of the road location is rolling along the contour with no appreciable gain in elevation with 20 to 30% sideslopes, also going through timber.

WETLANDS: The proposed road crosses about 137 feet of forested wetland in Alternatives 2 and 3. Minimize the road footprint through the wetlands and provide adequate hillslope drainage (33 CFR BMPs 1, 3). Wetlands were unavoidable on some portions of the location due to safety, engineering design constraints and consideration for other resources. Alternatives to the location on wetlands would mean longer higher cost roads that may have impacted similar areas of wetlands (BMP 14.2). Overlay construction is recommended to minimize disturbance to the wetland and ensure hydraulic connectivity of the roaded wetland with the surrounding areas (BMPs 12.5 and 14.17). This road meets silviculture exemption for 404 permitting through Army Corps of Engineers.

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: Possible rock pit is located at west of road intersection 6040 @ MP 12.40 road 6040. During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Also during these periods, road construction that requires rock supplied from quarries shall be suspended in high risk areas on roads where rock hauling would increase the risk of mass failure (BMP 14.7). Follow BMP 14.18 for development and rehabilitation of rock sources.

STREAM CROSSINGS: There are no stream crossings that require site-specific design consideration for volume of flow, fish habitat, or other design complexity.

Road Management Objective

Project		System		Land Use Designation	
Central Kupreanof EIS		Kake			
Route No	Route Name		Begin Terminus	End Terminus	
6334			6334 MP 2.14		
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos	
2.14	0.35	Planned			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Log truck	Log truck

Intended Purpose/Future Use

Local road used for silvicultural activities, will be opened periodically, closed during times of inactivity.

		Maintenance Criteria	
Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)
2.14	2.49	2	1

Maintenance Narrative

Road will be maintained in "Active" status while road is open during timber haul; post timber haul road will be stored and maintained in "Inactive" status.

AFR&P Regs. "Active" status: Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

AFR&P Regs. "Inactive" status: Road is stored. Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and seed and fertilize disturbed soils. The road will be placed in a self maintaining state.

Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest ownership
Traffic Management Strategies	Encourage:	Hikers, bicycles	
	Accept:	High clearance vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	Motorized vehicles on closed section	

Travel Management Narrative

All newly constructed NFS road will be managed as a maintenance level 2 open to motorized vehicle traffic during the life of these timber sale activities. They may remain open from five to ten years after this timber sale for other activities including fire wood removal; these roads would be constructed or placed in a self maintaining hydrologic status. This would include the placement of drivable water bars or dips at all drainage culvert locations to direct water across the road in event that the culvert plugs. Other design elements like oversized culverts may be used to help reduce the need for routine drainage maintenance.

These roads would be intermittent service roads (maintenance level one) within ten years of timber harvest and physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored. A review will be conducted at the time of closure for any additional resource concerns.

Approved _____
District Ranger

Date

Site Specific Design Criteria

Road 6334

ROAD LOCATION: The road location is rolling along the contour with no appreciable gain in elevation with 40 to 60% sideslopes, skirting along old clearcut.

WETLANDS: The proposed road does not cross wetlands.

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: Possible rock pit is located at MP 1.40 of road 6334. During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Also during these periods, road construction that requires rock supplied from quarries shall be suspended in high risk areas on roads where rock hauling would increase the risk of mass failure (BMP 14.7). Follow BMP 14.18 for development and rehabilitation of rock sources.

STREAM CROSSINGS:

1) **AHMU: III Channel Type: HC5 BF Width: 5.1ft Incision: 19ft Gradient: 61% Structure:**
40ft log stringer bridge

2) **AHMU: III Channel Type: HC5 BF Width: 3.4ft Incision: 10ft Gradient: 80% Structure:**
30ft log stringer bridge

These stream crossings may require site-specific design consideration for volume of flow, fish habitat, or other design complexity. Follow 14.14, 14.17 to minimize stream channel disturbances and related sediment production.

Road Management Objective

Project		System		Land Use Designation	
Central Kupreanof EIS		Kake			
Route No	Route Name		Begin Terminus	End Terminus	
45889			MP 4.15 Road 6326		
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos	
0.00	0.63	Planned			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Log truck	Log truck

Intended Purpose/Future Use

Local road used for silvicultural activities, will be opened periodically, closed during times of inactivity.

		Maintenance Criteria	
Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)
0.00	0.63	2	1

Maintenance Narrative

Road will be maintained in "Active" status while road is open during timber haul; post timber haul road will be stored and maintained in "Inactive" status.

AFR&P Regs. "Active" status: Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

AFR&P Regs. "Inactive" status: Road is stored. Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and seed and fertilize disturbed soils. The road will be placed in a self maintaining state.

Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest ownership
Traffic Management Strategies	Encourage:	Hikers, bicycles	
	Accept:	High clearance vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	Motorized vehicles on closed section	

Travel Management Narrative

All newly constructed NFS road will be managed as a maintenance level 2 open to motorized vehicle traffic during the life of these timber sale activities. They may remain open from five to ten years after this timber sale for other activities including fire wood removal; these roads would be constructed or placed in a self maintaining hydrologic status. This would include the placement of drivable water bars or dips at all drainage culvert locations to direct water across the road in event that the culvert plugs. Other design elements like oversized culverts may be used to help reduce the need for routine drainage maintenance.

These roads would be intermittent service roads (maintenance level one) within ten years of timber harvest and physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored. A review will be conducted at the time of closure for any additional resource concerns.

Approved _____
District Ranger

Date

Site Specific Design Criteria

Road 45889

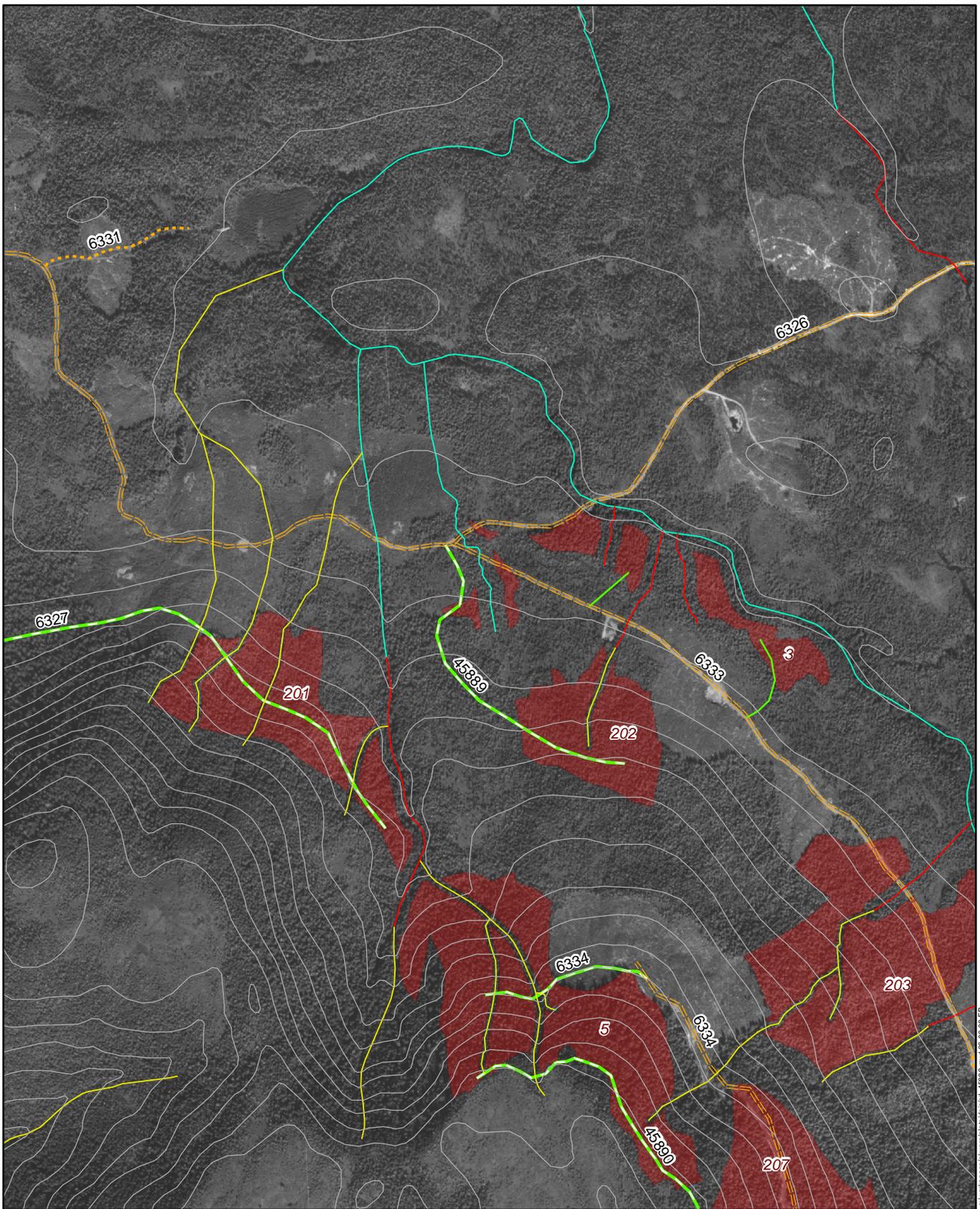
ROAD LOCATION: The road steadily gains elevation between the beginning point at the existing Road 6326. The first 20+00 feet is a steady climb @ 15% through timber with 40 to 50% sideslopes. The remainder of the road location is rolling along the contour with no appreciable gain in elevation with 40 to 50% sideslopes, also going through timber.

WETLANDS: The proposed road crosses about 779 feet of wetland in Alternatives 2 and 3. The wetland is both muskeg/forested mosaic wetland and forested wetland. Minimize the road footprint through the wetlands and provide adequate hillslope drainage (33 CFR BMPs 1, 3). Wetlands were unavoidable on some portions of the location due to safety, engineering design constraints and consideration for other resources. Alternatives to the location on wetlands would mean longer higher cost roads that may have impacted similar areas of wetlands (BMP 14.2). Overlay construction is recommended to minimize disturbance to the wetland and ensure hydraulic connectivity of the roaded wetland with the surrounding areas (BMPs 12.5 and 14.17). This road meets silviculture exemption for 404 permitting through Army Corps of Engineers.

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: Possible rock pit is located about 0.3 mile up road 6333. During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Also during these periods, road construction that requires rock supplied from quarries shall be suspended in high risk areas on roads where rock hauling would increase the risk of mass failure (BMP 14.7). Follow BMP 14.18 for development and rehabilitation of rock sources.

STREAM CROSSINGS: There are no stream crossings that require site-specific design consideration for volume of flow, fish habitat, or other design complexity.

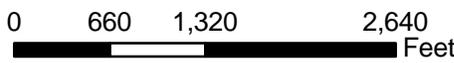


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Legend

- Proposed Unit
- Road Suitable for Passenger Vehicles (ML3)
- High Clearance Vehicle Road (ML2)
- Basic Custodial Care (Closed Road) (ML1)
- New NFS Designated Road Construction (ML2)
- Reconstructed Road
- Stream Class I
- Stream Class II
- Stream Class III
- Contours 100 ft.

Road 45889



Road Management Objective

Project		System		Land Use Designation	
Central Kupreanof EIS		Kake			
Route No	Route Name		Begin Terminus	End Terminus	
6040			6040 MP 17.14		
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos	
17.14	0.35	Planned			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Log truck	Log truck

Intended Purpose/Future Use

Local road used for silvicultural activities, will be opened periodically, closed during times of inactivity.

Bmp	Emp	Operational Maintenance Level (Current Condition)	Maintenance Criteria Objective Maintenance Level (Desired Future Condition)
17.14	17.49	2	1

Maintenance Narrative

Road will be maintained in "Active" status while road is open during timber haul; post timber haul road will be stored and maintained in "Inactive" status.

AFR&P Regs. "Active" status: Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

AFR&P Regs. "Inactive" status: Road is stored. Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and seed and fertilize disturbed soils. The road will be placed in a self maintaining state.

Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest ownership
Traffic Management Strategies	Encourage:	Hikers, bicycles	
	Accept:	High clearance vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	Motorized vehicles on closed section	

Travel Management Narrative

All newly constructed NFS road will be managed as a maintenance level 2 open to motorized vehicle traffic during the life of these timber sale activities. They may remain open from five to ten years after this timber sale for other activities including fire wood removal; these roads would be constructed or placed in a self maintaining hydrologic status. This would include the placement of drivable water bars or dips at all drainage culvert locations to direct water across the road in event that the culvert plugs. Other design elements like oversized culverts may be used to help reduce the need for routine drainage maintenance.

These roads would be intermittent service roads (maintenance level one) within ten years of timber harvest and physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored. A review will be conducted at the time of closure for any additional resource concerns.

Approved _____
District Ranger

Date

Site Specific Design Criteria

Road 6040

ROAD LOCATION: The road location is rolling along the contour with no appreciable gain in elevation with 40 to 60% sideslopes, area is timbered

WETLANDS: The proposed road crosses about 23 feet of wetland in Alternatives 2 and 3. The wetland type is muskeg/forested mosaic. Minimize the road footprint through the wetlands and provide adequate hillslope drainage (33 CFR BMPs 1, 3). Wetlands were unavoidable on some portions of the location due to safety, engineering design constraints and consideration for other resources. Alternatives to the location on wetlands would mean longer higher cost roads that may have impacted similar areas of wetlands (BMP 14.2). Overlay construction is recommended to minimize disturbance to the wetland and ensure hydraulic connectivity of the roaded wetland with the surrounding areas (BMPs 12.5 and 14.17). This road meets silviculture exemption for 404 permitting through Army Corps of Engineers.

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: Possible rock pit is located at MP 15.80 of road 6040. During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Also during these periods, road construction that requires rock supplied from quarries shall be suspended in high risk areas on roads where rock hauling would increase the risk of mass failure (BMP 14.7). Follow BMP 14.18 for development and rehabilitation of rock sources.

STREAM CROSSINGS: There are no stream crossings that require site-specific design consideration for volume of flow, fish habitat, or other design complexity.

Road Management Objective

Project		System		Land Use Designation	
Central Kupreanof EIS		Kake			
Route No	Route Name		Begin Terminus	End Terminus	
45800			45800 MP 1.033	2.093	
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos	
1.033	1.06	Planned			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Log truck	Log truck

Intended Purpose/Future Use

Local road used for silvicultural activities, will be opened periodically, closed during times of inactivity.

		Maintenance Criteria	
Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)
1.033	2.093	2	1

Maintenance Narrative

Road will be maintained in "Active" status while road is open during timber haul; post timber haul road will be stored and maintained in "Inactive" status.

AFR&P Regs. "Active" status: Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

AFR&P Regs. "Inactive" status: Road is stored. Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and seed and fertilize disturbed soils. The road will be placed in a self maintaining state.

Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest ownership
Traffic Management Strategies	Encourage:	Hikers, bicycles	
	Accept:	High clearance vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	Motorized vehicles on closed section	

Travel Management Narrative

All newly constructed NFS road will be managed as a maintenance level 2 open to motorized vehicle traffic during the life of these timber sale activities. They may remain open from five to ten years after this timber sale for other activities including fire wood removal; these roads would be constructed or placed in a self maintaining hydrologic status. This would include the placement of drivable water bars or dips at all drainage culvert locations to direct water across the road in event that the culvert plugs. Other design elements like oversized culverts may be used to help reduce the need for routine drainage maintenance.

These roads would be intermittent service roads (maintenance level one) within ten years of timber harvest and physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored. A review will be conducted at the time of closure for any additional resource concerns.

Approved _____
District Ranger

Date

Site Specific Design Criteria

Road 45800

ROAD LOCATION: The road location from beginning to 0+400 is in a 8 year old clearcut with 20% sideslope. Location enters timber with 20 - 50% sideslope and is rolling along the contour with no appreciable gain in elevation. Enter muskeg @ 25+00, need 48" culvert @ 28+00, @ 35+00 12' deep "V" notch, need 48" culvert, @ 38+00 10' deep "V" notch, need 48" culvert. Area is timbered rolling along the contour with no appreciable gain in elevation. @ 43+00 15' deep "V" notch, 48" culvert, @ 48+00 6' "V" notch, 36" culvert, 50% sideslope, timbered. Road end this 60% sideslope and timbered area.

WETLANDS: The proposed road crosses about 370 feet of wetland in Alternative 3. The wetland type is moss muskeg. Minimize the road footprint through the wetlands and provide adequate hillslope drainage (33 CFR BMPs 1, 3). Wetlands were unavoidable on some portions of the location due to safety, engineering design constraints and consideration for other resources. Alternatives to the location on wetlands would mean longer higher cost roads that may have impacted similar areas of wetlands (BMP 14.2). Overlay construction is recommended to minimize disturbance to the wetland and ensure hydraulic connectivity of the roaded wetland with the surrounding areas (BMPs 12.5 and 14.17). This road meets silviculture exemption for 404 permitting through Army Corps of Engineers.

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: Possible rock pit is located at 40+00. During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Also during these periods, road construction that requires rock supplied from quarries shall be suspended in high risk areas on roads where rock hauling would increase the risk of mass failure (BMP 14.7). Follow BMP 14.18 for development and rehabilitation of rock sources.

STREAM CROSSINGS:

1) **AHMU: III Channel Type: HC5 BF Width: 5.7ft Incision: 12.5ft Gradient: 15% Structure: 30ft log stringer bridge**

This stream crossing may require site-specific design consideration for volume of flow, fish habitat, or other design complexity. Follow 14.14, 14.17 to minimize stream channel disturbances and related sediment production.

Road Management Objective

Project		System		Land Use Designation	
Central Kupreanof EIS		Kake			
Route No	Route Name		Begin Terminus		End Terminus
45803			45803 MP 4.608		
Begin MP	Length	Status	Map Quarter Quad		Photo year, roll, photos
4.608	3.74	Planned			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Log truck	Log truck

Intended Purpose/Future Use

Local road used for silvicultural activities, will be opened periodically, closed during times of inactivity.

		Maintenance Criteria	
Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)
4.608	8.348	2	1

Maintenance Narrative

Road will be maintained in "Active" status while road is open during timber haul; post timber haul road will be stored and maintained in "Inactive" status.

AFR&P Regs. "Active" status: Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

AFR&P Regs. "Inactive" status: Road is stored. Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and seed and fertilize disturbed soils. The road will be placed in a self maintaining state.

Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest ownership
Traffic Management Strategies	Encourage:	Hikers, bicycles	
	Accept:	High clearance vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	Motorized vehicles on closed section	

Travel Management Narrative

All newly constructed NFS road will be managed as a maintenance level 2 open to motorized vehicle traffic during the life of these timber sale activities. They may remain open from five to ten years after this timber sale for other activities including fire wood removal; these roads would be constructed or placed in a self maintaining hydrologic status. This would include the placement of drivable water bars or dips at all drainage culvert locations to direct water across the road in event that the culvert plugs. Other design elements like oversized culverts may be used to help reduce the need for routine drainage maintenance.

These roads would be intermittent service roads (maintenance level one) within ten years of timber harvest and physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored. A review will be conducted at the time of closure for any additional resource concerns.

Approved _____
District Ranger

Date

Site Specific Design Criteria

Road 45803

ROAD LOCATION: The road location is rolling along the contour with no appreciable gain in elevation with 20 to 50% sideslopes, area is timbered.

WETLANDS: The proposed road crosses about 328 feet of wetland in Alternative 3. The wetland is both muskeg/forested mosaic wetland and forested wetland. Minimize the road footprint through the wetlands and provide adequate hillslope drainage (33 CFR BMPs 1, 3). Wetlands were unavoidable on some portions of the location due to safety, engineering design constraints and consideration for other resources. Alternatives to the location on wetlands would mean longer higher cost roads that may have impacted similar areas of wetlands (BMP 14.2). Overlay construction is recommended to minimize disturbance to the wetland and ensure hydraulic connectivity of the roaded wetland with the surrounding areas (BMPs 12.5 and 14.17). This road meets silviculture exemption for 404 permitting through Army Corps of Engineers.

SOILS: Road location moved downslope to the 500-foot contour and away from MMI-4 soils (BMP 14.2).

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: Possible rock pit is located at MP 4.02 of road 45803. During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Also during these periods, road construction that requires rock supplied from quarries shall be suspended in high risk areas on roads where rock hauling would increase the risk of mass failure (BMP 14.7). Follow BMP 14.18 for development and rehabilitation of rock sources.

STREAM CROSSINGS: Stream crossing data was not field verified along segments of this road located between the southern boundary of Unit 261 and the northeastern boundary of Unit 265. The most recent GIS stream layer and aerial photo interpretation was used to determine stream class along these segments. These segments will be field verified during layout should this alternative be chosen, and the State of Alaska will conduct Title 16 review of all proposed fish crossings prior to implementation.

1) MP: 0.27 AHMU: II Channel Type: MM1 BF Width: 13.5ft Incision: 3ft Gradient: 2% Structure: 40ft
log stringer bridge

Narrative: Maintain fish migration and avoid diverting surface drainage channels. (BMPs 14.6, 14.14, 14.17)

2) MP: 2.53 AHMU: III Channel Type: HC5 BF Width: 10ft Incision: 25ft Gradient: 25% Structure: 40ft
log stringer bridge

3) MP: 2.59 AHMU: III Channel Type: HC5 BF Width: 5.3ft Incision: 40ft Gradient: 20% Structure: 60ft
modular bridge

4) MP: 2.66 AHMU: III Channel Type: HC5 BF Width: 5.2ft Incision: 27ft Gradient: 28% Structure: 40ft
log stringer bridge

There are an additional 3 Class III stream crossings at MP: 0.30, 2.25 and 3.24 that may require site-specific design consideration for volume of flow, fish habitat, or other design complexity. Follow BMP 14.6, 14.14, 14.15, 14.17 for timing restrictions on Class I streams, and to minimize stream channel disturbances and related sediment production.

Road Management Objective

Project		System		Land Use Designation	
Central Kupreanof EIS		Kake			
Route No	Route Name	Begin Terminus		End Terminus	
45805		45805 MP 0.387			
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos	
0.387	0.50	Planned			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Log truck	Log truck

Intended Purpose/Future Use

Local road used for silvicultural activities, will be opened periodically, closed during times of inactivity.

Bmp	Emp	Operational Maintenance Level (Current Condition)	Maintenance Criteria Objective Maintenance Level (Desired Future Condition)
0.387	0.887	2	1

Maintenance Narrative

Road will be maintained in "Active" status while road is open during timber haul; post timber haul road will be stored and maintained in "Inactive" status.

AFR&P Regs. "Active" status: Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

AFR&P Regs. "Inactive" status: Road is stored. Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and seed and fertilize disturbed soils. The road will be placed in a self maintaining state.

Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest ownership
Traffic Management Strategies	Encourage:	Hikers, bicycles	
	Accept:	High clearance vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	Motorized vehicles on closed section	

Travel Management Narrative

All newly constructed NFS road will be managed as a maintenance level 2 open to motorized vehicle traffic during the life of these timber sale activities. They may remain open from five to ten years after this timber sale for other activities including fire wood removal; these roads would be constructed or placed in a self maintaining hydrologic status. This would include the placement of drivable water bars or dips at all drainage culvert locations to direct water across the road in event that the culvert plugs. Other design elements like oversized culverts may be used to help reduce the need for routine drainage maintenance.

These roads would be intermittent service roads (maintenance level one) within ten years of timber harvest and physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored. A review will be conducted at the time of closure for any additional resource concerns.

Approved _____
District Ranger

Date

Site Specific Design Criteria

Road 45805

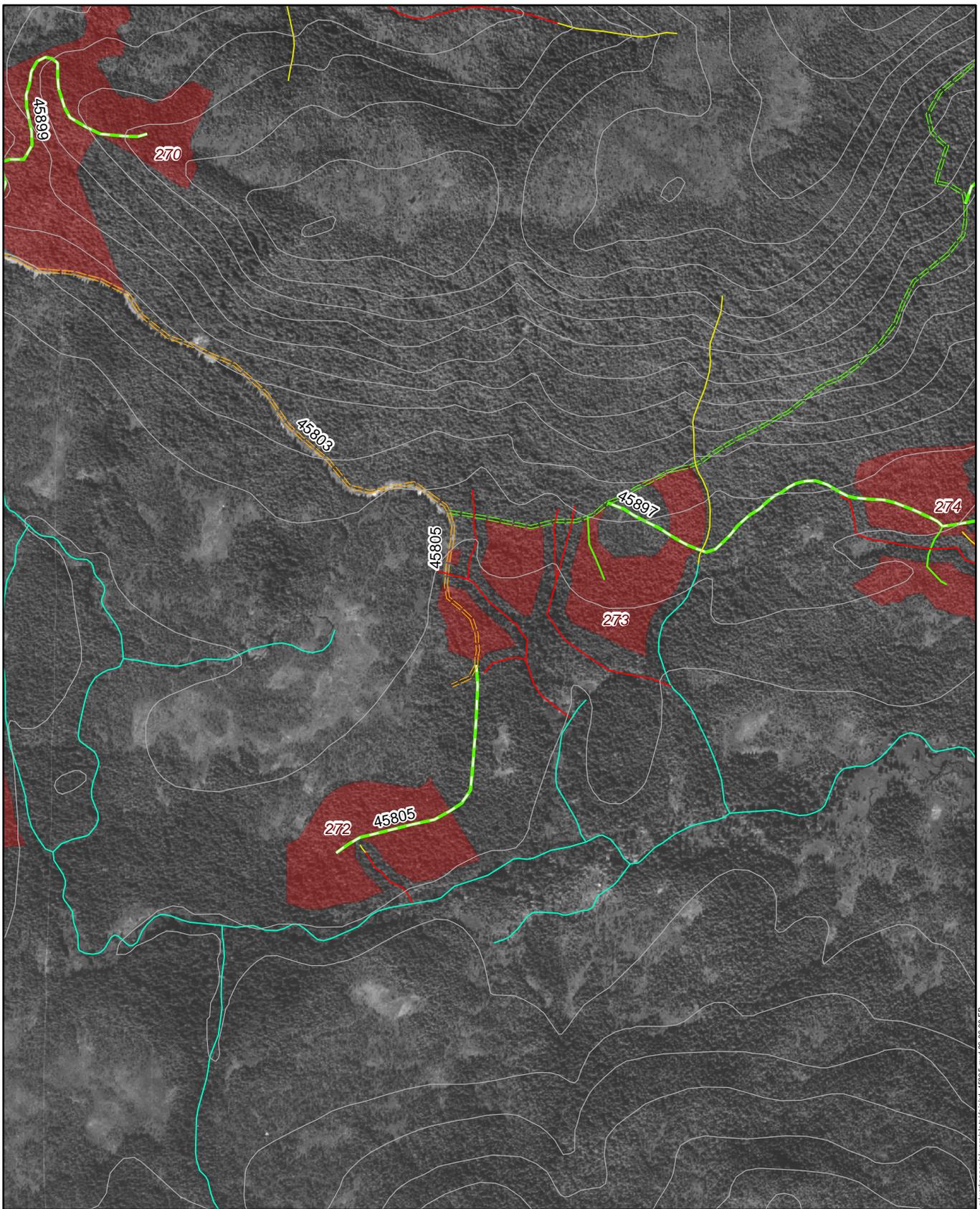
ROAD LOCATION: The road location is rolling along the contour with no appreciable gain in elevation with 20 to 50% sideslopes, area is timbered

WETLANDS: The proposed road does not cross wetlands.

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: Possible rock pit is located at MP 0.05 of road 45805. During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Also during these periods, road construction that requires rock supplied from quarries shall be suspended in high risk areas on roads where rock hauling would increase the risk of mass failure (BMP 14.7). Follow BMP 14.18 for development and rehabilitation of rock sources.

STREAM CROSSINGS: There are no stream crossings that require site-specific design consideration for volume of flow, fish habitat, or other design complexity.



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Legend

- Proposed Unit
- Contours 100 ft.
- Road Suitable for Passenger Vehicles (ML3)
- High Clearance Vehicle Road (ML2)
- Basic Custodial Care (Closed Road) (ML1)
- New NFS Designated Road Construction (ML2)
- Reconstructed Road
- New Temporary Road Construction
- Stream Class I
- Stream Class II
- Stream Class III

Road 45805



Road Management Objective

Project		System		Land Use Designation	
Central Kupreanof EIS		Kake			
Route No	Route Name	Begin Terminus		End Terminus	
45808	Screwdriver	45808 MP 3.883			
Begin MP	Length	Status	Map Quarter Quad	Photo year, roll, photos	
3.883	0.29	Planned			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Log truck	Log truck

Intended Purpose/Future Use

Local road used for silvicultural activities, will be opened periodically, closed during times of inactivity.

Bmp	Emp	Operational Maintenance Level (Current Condition)	Maintenance Criteria Objective Maintenance Level (Desired Future Condition)
3.883	4.173	2	1

Maintenance Narrative

Road will be maintained in "Active" status while road is open during timber haul; post timber haul road will be stored and maintained in "Inactive" status.

AFR&P Regs. "Active" status: Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

AFR&P Regs. "Inactive" status: Road is stored. Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and seed and fertilize disturbed soils. The road will be placed in a self maintaining state.

Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest ownership
Traffic Management Strategies	Encourage:	Hikers, bicycles	
	Accept:	High clearance vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	Motorized vehicles on closed section	

Travel Management Narrative

All newly constructed NFS road will be managed as a maintenance level 2 open to motorized vehicle traffic during the life of these timber sale activities. They may remain open from five to ten years after this timber sale for other activities including fire wood removal; these roads would be constructed or placed in a self maintaining hydrologic status. This would include the placement of drivable water bars or dips at all drainage culvert locations to direct water across the road in event that the culvert plugs. Other design elements like oversized culverts may be used to help reduce the need for routine drainage maintenance.

These roads would be intermittent service roads (maintenance level one) within ten years of timber harvest and physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored. A review will be conducted at the time of closure for any additional resource concerns.

Approved _____
District Ranger

Date

Site Specific Design Criteria

Road 45808

ROAD LOCATION: The road location is rolling along the contour with no appreciable gain in elevation with 20% sideslopes, area is timbered. Need a 30ft log stringer bridge @ 2+00.

WETLANDS: The proposed road does not cross wetlands.

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: Possible rock pit is located at MP 3.05 of road 45808. During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Also during these periods, road construction that requires rock supplied from quarries shall be suspended in high risk areas on roads where rock hauling would increase the risk of mass failure (BMP 14.7). Follow BMP 14.18 for development and rehabilitation of rock sources.

STREAM CROSSINGS:

**1) MP: 0.04 AHMU: II Channel Type: HC2 BF Width: 7.2ft Incision: 6ft Gradient: NA
Structure: 30ft log stringer bridge**

Narrative: The crossing will be designed for fish passage and to minimize soil runoff to the channel, retain natural drainage pattern, and minimize changes to the natural sediment transport. Follow BMP 14.14, 14.17 to minimize stream channel disturbances and related sediment production.

Road Management Objective

Project		System		Land Use Designation	
Central Kupreanof EIS		Kake			
Route No	Route Name		Begin Terminus		End Terminus
45892			MP 4.55 Road 6314S		
Begin MP	Length	Status	Map Quarter Quad		Photo year, roll, photos
0.00	4.13	Planned			

General Design Criteria and Elements

Functional Class	Service Life	Surface	Width	Design Speed	Critical Vehicle	Design Vehicle
Local	LI	Shot rock	14'	10	Log truck	Log truck

Intended Purpose/Future Use

Local road used for silvicultural activities, will be opened periodically, closed during times of inactivity.

		Maintenance Criteria	
Bmp	Emp	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)
0.00	4.13	2	1

Maintenance Narrative

Road will be maintained in "Active" status while road is open during timber haul; post timber haul road will be stored and maintained in "Inactive" status.

AFR&P Regs. "Active" status: Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

AFR&P Regs. "Inactive" status: Road is stored. Remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and seed and fertilize disturbed soils. The road will be placed in a self maintaining state.

Operation Criteria

Highway Safety Act:	No	Jurisdiction:	National Forest ownership
Traffic Management Strategies	Encourage:	Hikers, bicycles	
	Accept:	High clearance vehicles	
	Discourage:	N/A	
	Prohibit:	N/A	
	Eliminate:	Motorized vehicles on closed section	

Travel Management Narrative

All newly constructed NFS road will be managed as a maintenance level 2 open to motorized vehicle traffic during the life of these timber sale activities. They may remain open from five to ten years after this timber sale for other activities including fire wood removal; these roads would be constructed or placed in a self maintaining hydrologic status. This would include the placement of drivable water bars or dips at all drainage culvert locations to direct water across the road in event that the culvert plugs. Other design elements like oversized culverts may be used to help reduce the need for routine drainage maintenance.

These roads would be intermittent service roads (maintenance level one) within ten years of timber harvest and physically blocked or natural vegetation allowed to eliminate motorized access. Drainage structures would remain in place with additional cross drains (water bars and dips), and the road would be considered stored. A review will be conducted at the time of closure for any additional resource concerns.

Approved _____
District Ranger

Date

Site Specific Design Criteria

Road 45892

ROAD LOCATION: The road location is steep 12 – 18% to gain the elevation @ 53+00 the area is timbered with sideslopes of 40-60%. Once on the ridge, road follows contour with no appreciable gain in elevation. There are numerous “V” notches that will require log stringer bridges. Options to locate road at apex of alluvial fan will be explored during implementation. All applicable Forest Plan Standards and Guidelines, Forest Service Manual and Handbooks and (BMPs) will be incorporated during design, construction and maintenance of roads. Best Management Practices (BMPs) are used to assure soil and water resources are considered in transportation planning activities. Any side slopes of greater than 67% would be mitigated by full bench construction and slope stabilization, if necessary.

WETLANDS: The proposed road crosses about 1,125 feet of wetland in Alternative 3. The wetland is muskeg/forested mosaic wetland and forested wetland. Minimize the road footprint through the wetlands and provide adequate hillslope drainage (33 CFR BMPs 1, 3). Wetlands were unavoidable on some portions of the location due to safety, engineering design constraints and consideration for other resources. Alternatives to the location on wetlands would mean longer higher cost roads that may have impacted similar areas of wetlands (BMP 14.2). Overlay construction is recommended to minimize disturbance to the wetland and ensure hydraulic connectivity of the roaded wetland with the surrounding areas (BMPs 12.5 and 14.17). This road meets silviculture exemption for 404 permitting through Army Corps of Engineers.

SOILS: Proposed road initially crossed steep slopes. The road was re-routed to avoid these slopes (BMP 14.2).

EROSION CONTROL: An erosion control plan for construction and maintenance will be developed by the contractor and approved by the Contracting Officer (BMP 14.5). All areas of organic or mineral soil exposed during construction shall be grass seeded and fertilized (BMP 12.17, 14.8)

ROCK PITS: Possible rock pit is located at MP 17+00. During periods of high rainfall (as defined in current Regional specifications), blasting operations will be suspended at quarries near potentially unstable sites where ground vibration may induce mass movement (BMP 14.6). Also during these periods, road construction that requires rock supplied from quarries shall be suspended in high risk areas on roads where rock hauling would increase the risk of mass failure (BMP 14.7). Follow BMP 14.18 for development and rehabilitation of rock sources.

STREAM CROSSINGS: There are two Class III streams at MP: 0.45 and 1.52 that will require log stringer bridges and site-specific design consideration for volume of flow, fish habitat, or other design complexity. Follow BMP 14.14, 14.17 to minimize stream channel disturbances and related sediment production.

