

APPENDICES

for

CO PFH 80-1(1) & 2(2)
Guanella Pass Road Phase I
7th Street Bridge & Road Improvements
Pike and Arapahoe National Forests
Clear Creek and Park Counties, Colorado

Department of Transportation
Federal Highway Administration
Central Federal Lands Highway Division

A - Department of the Army – Section 404 Permit

B – Certification Requirements – Section 401

C – Stormwater General Permit Application / Guidance Document

D – Timber Sale Contract and Forms

E – Spill Response

F – Laboratory Equipment List

G – Sample Subcontracting Plan and FAR Clause 52.219-9 in Full Text

H – Preshow Meeting Minutes and List of Attendees

Appendix A

Department of the Army – Section 404 Permit



U.S. Department
of Transportation
**Federal Highway
Administration**

Central Federal Lands Highway Division

555 Zang Street, Rm. 259
Lakewood, CO 80228

SEP 20 2003

Refer to: HFHD-16

Mr. Timothy T. Carey
Chief, Denver Regulatory Office
US Army Corps of Engineers
9307 S. Wadsworth Boulevard
Littleton, CO 80128-6901

Dear Mr. Carey:

Subject: CO PFH 80-1(1), Guanella Pass Road Improvement Project
Section 404 Permit Acceptance; Reference File Number 199580927

Find enclosed two signed copies of the Department of the Army Permit No. 199580927 for the Guanella Pass Road Improvement project. I understand that you will sign and return one of the copies to our office. This will constitute final authorization of the permit.

The permit conditions and 401 certification requirements were reviewed and are acceptable. One concern, however, is special condition 2 that implies the project work is limited to that shown on the 19 sheets of the permit. These sheets are copies of the line and grade construction plans and were selected because they show the wetland impact areas. The work also shown on these sheets such as culvert installations, associated riprap aprons, and riprap rundowns on intermittent and ephemeral channels is presumed to be covered. However, plan sheets of roadway sections without wetlands are not included in the permit. These plans show culvert locations, associated inlet riprap aprons, and riprap rundowns that will be constructed in intermittent and ephemeral channels/drainages. Even though this figures are not included, I am assuming this work is covered based on the project description that includes excavation and/or discharge of fill in unnamed intermittent/ephemeral drainages along the 23.6 miles route. The same assumption is made for the construction of box culverts on perennial streams that are not shown in the specific figures of the permit but are named in the project description. Please advise me as soon as possible if these assumptions are incorrect.

The above assumptions are important to meet requirements 8 and 16 of the 401 certification. Requirement 8 limits certification to construction operations within watercourses and water bodies to those areas specified in the permit. Requirement 16 states that discharges to state waters not identified in the permit and not certified in accordance therewith are not allowed, subject to the terms of any certification.



We appreciate Ms. Margaret Langworthy's participation in field reviews, constructive comments on mitigation issues, and overall guidance in complying with Section 404 of the Clean Water Act. If you have any questions, contact Messrs. Bill Jones, Permit Coordinator, at (303) 716-2238, Jim Kerrigan, Design Engineer, at (303) 716-2236, or me at (303) 716-2124.

Sincerely yours,

/s/

John Knowles
Project Manager

Enclosures

bc w/o enclosures:

John Knowles
Jim Kerrigan
Bob Nestel
Jennifer Corwin
Bill Jones

Reading file

Central file- CO PFH 80 -1(1), Guanella Pass Road

BJONES:jm:09/24/03:L/design/ad3/co 80/co 80 1(1) & 2(2) Phase 1/Permit/Guanella 404 permit accept ltr.

BS jm



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
DENVER REGULATORY OFFICE, 9307 S. WADSWORTH BOULEVARD
LITTLETON, COLORADO 80128-6901

October 1, 2003

Federal Highway Administration
c/o Mr. Mark B. Taylor
Central Federal Lands Highway Division (HFHD-165)
555 Zang Street, Suite 259
Lakewood, Colorado 80228

**Re: Department of the Army Permit No. 199580927
Federal Highway Administration**

Dear Mr. Taylor:

Enclosed is Department of the Army permit No. 199580927 to excavate/place fill material into a total of 0.80 acre of wetlands and 0.096 acre of waters of the United States (WUS) for proposed improvements to Colorado Forest Highway 80, Guanella Pass Road. The project is located along a 23.6-mile-long route from Grant, Colorado to Georgetown, Colorado in Clear Creek and Park Counties, Colorado.

In your letter dated September 2, 2003, you expressed concern regarding Special Condition 2, which states that the project would be constructed as shown on the permit drawings. The drawings only reflect the wetland impact points and not the entire road designs. You are correct in your assumption that the entire 23.6-mile route has been reviewed, but since our authority is limited to the impacts to the aquatic resources, it is those segments that are included in the permit drawings. As for Requirement 16 of the 401 Water Quality Certification, as far as this office is concerned, it has no bearing on your project.

Please notify Margaret Langworthy at (303) 979-4120, or the above address, when work on this project is begun and also when completed. She may also be called if you have any questions concerning the permit. When communicating with our office regarding this project please reference File No. 199580927.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy T. Carey".

Timothy T. Carey
Chief, Denver Regulatory Office

Enclosure

DEPARTMENT OF THE ARMY PERMIT

Permittee: Federal Highway Administration

Permit No.: 199580927

Issuing Office: Omaha District, Corps of Engineers

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

In accordance with the terms and conditions of this Department of the Army permit, the **Federal Highway Administration** is granted authorization by the Secretary of the Army to excavate/place fill material into a total of 0.80 acre of wetlands and 0.096 acre of waters of the United States (WUS) involving Geneva Creek, Preacher Gulch, Halfmile Gulch, Scott Gomer Creek, Threemile Creek, Duck Creek, Naylor tributary of South Clear Creek, South Clear Creek, unnamed wetlands and unnamed intermittent/ephemeral drainages for proposed improvements to Colorado Forest Highway 80, Guanella Pass Road (also know as Park County Road 62, Clear Creek County Road 381, Forest Development Road). The location and project details are shown on the attached drawings in 21 Sheets dated 6 June 2003.

Project Location: The project is located along a 23.6-mile-long route from Grant, Colorado to Georgetown, Colorado in:

Sections	Township	Range
17, 20, 29, 30, 31, 32	4 South	74 West
6, 7, 18, 19, 30, 31	5 South	74 West
6, 7, 19, 20, 29, 32	6 South	74 West
4, 5	7 South	74 West
1, 12, 13, 24	6 South	75 West

in Clear Creek and Park Counties, Colorado.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on 17 September 2008. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

See page 6 for a continuation of General Conditions.

Special Conditions:

1. The permittee agrees to submit semi-annual reports (these and all other reports shall be submitted to the Denver Regulatory Office, 9307 South Wadsworth Boulevard, Littleton, Colorado, 80128, and shall reference the permit application number) commencing six months after permit issuance indicating the status of the authorized work and shall include the following information:
 - a. Date permitted activity was begun; if work has not begun on-site, please so indicate.
 - b. Brief description and extent of work (site preparation, mitigation activity, if required) completed since the previous report or since permit was issued. Indicate on copies of the permit drawings those areas where work has been completed.
 - c. Brief description and extent of work anticipated in the next six months. Indicate on copies of the permit drawings those areas where it is anticipated that work will be done.
2. The permittee agrees to construct the project as shown on the attached drawings in 19 Sheets dated 15 September 2003, which are attached to, and made a part of, this permit. As shown on Sheet 19 of 19, the permittee agrees that the temporary segment of the diversion channels shall be lined with plastic to ensure that all of the temporary fill/disturbance is removed.
3. The permittee agrees to follow the Section 401 Certification Requirements that are attached to, and become a part of, this permit. ***To further reinforce the importance of maintaining the silt fencing, the permittee agrees to submit copies of the weekly/24-hour-after-rain-event inspections annually on, or before, 1 December of each year (beginning in 2004) throughout the duration of the permit.***
4. The permittee will purchase 1.2 mitigation credits, corresponding to 0.80 acre of impacted wetland, from a commercial mitigation bank that has been approved by the Denver Regulatory Office. The credits must be purchased prior to impacts authorized by this permit and written proof shall be provided to the Denver Regulatory Office. Upon receipt of such proof, the permittee will have satisfied all mitigation requirements for this permit, unless additional on-site mitigation is a condition of this authorization.
5. The permittee shall contact the United States Fish and Wildlife Service, Office of Migratory Birds, at (303) 236-8171, for permitting requirements dealing with the removal of a raptor nest before removing any trees in areas authorized for work by this permit.

6. After a detailed and careful review of all of the conditions contained in this permit, the permittee acknowledges that, although said conditions were required by the Corps of Engineers, nonetheless the permittee agreed to those conditions voluntarily to facilitate issuance of the permit; the permittee will comply fully with all the terms of all the permit conditions.

Further Information:

1. **Congressional Authorities:** You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. **Limits of this authorization.**

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. **Limits of Federal Liability.** In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. **Reliance on Applicant's Data:** The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. **Reevaluation of Permit Decision.** This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. **Extensions.** General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Mark B. Taylor

(PERMITTEE)

9/29/03

(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Kurt F. Ubbelohde

(DISTRICT ENGINEER)
COLONEL, CORPS OF ENGINEERS

9/30/03

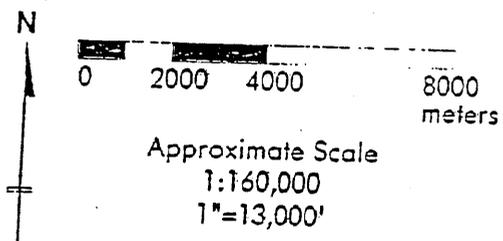
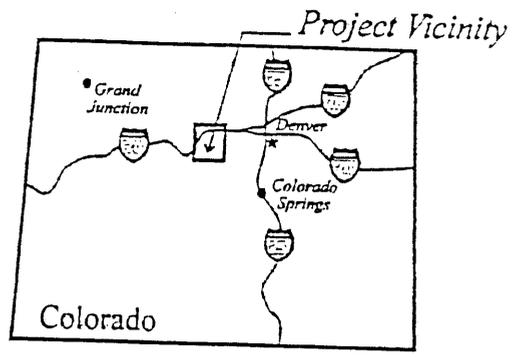
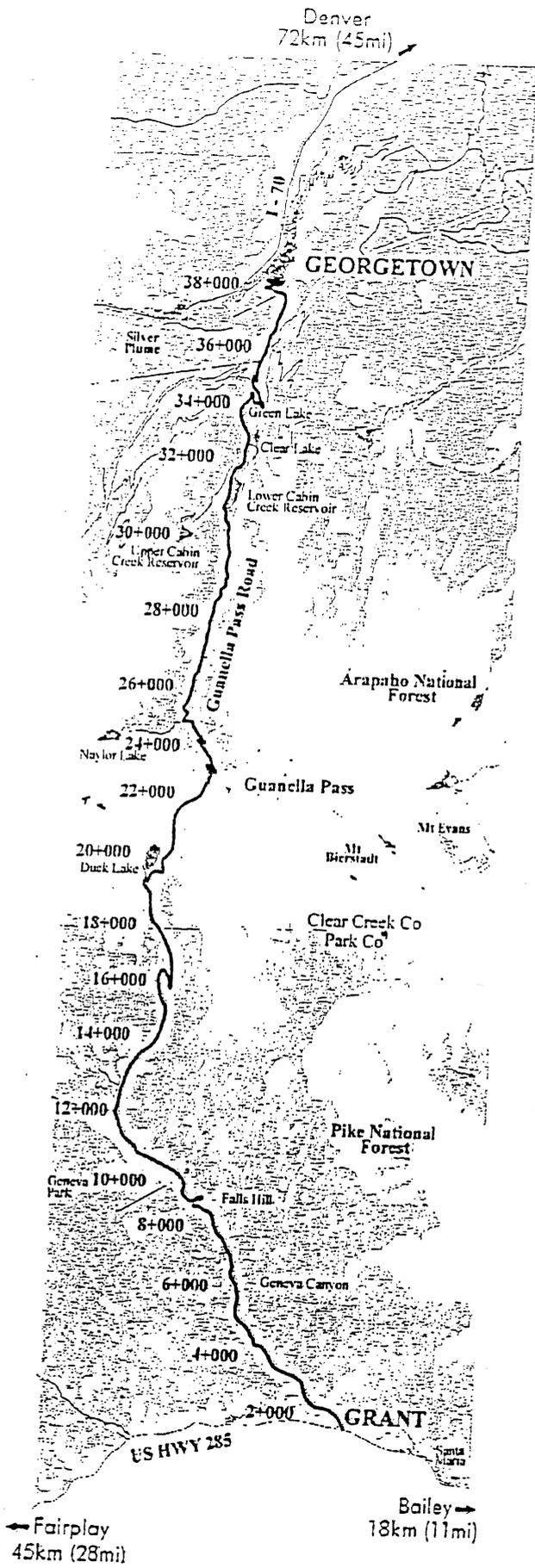
(DATE)

BY:

Timothy T. Carey
TIMOTHY T. CAREY
CHIEF, DENVER REGULATORY OFFICE

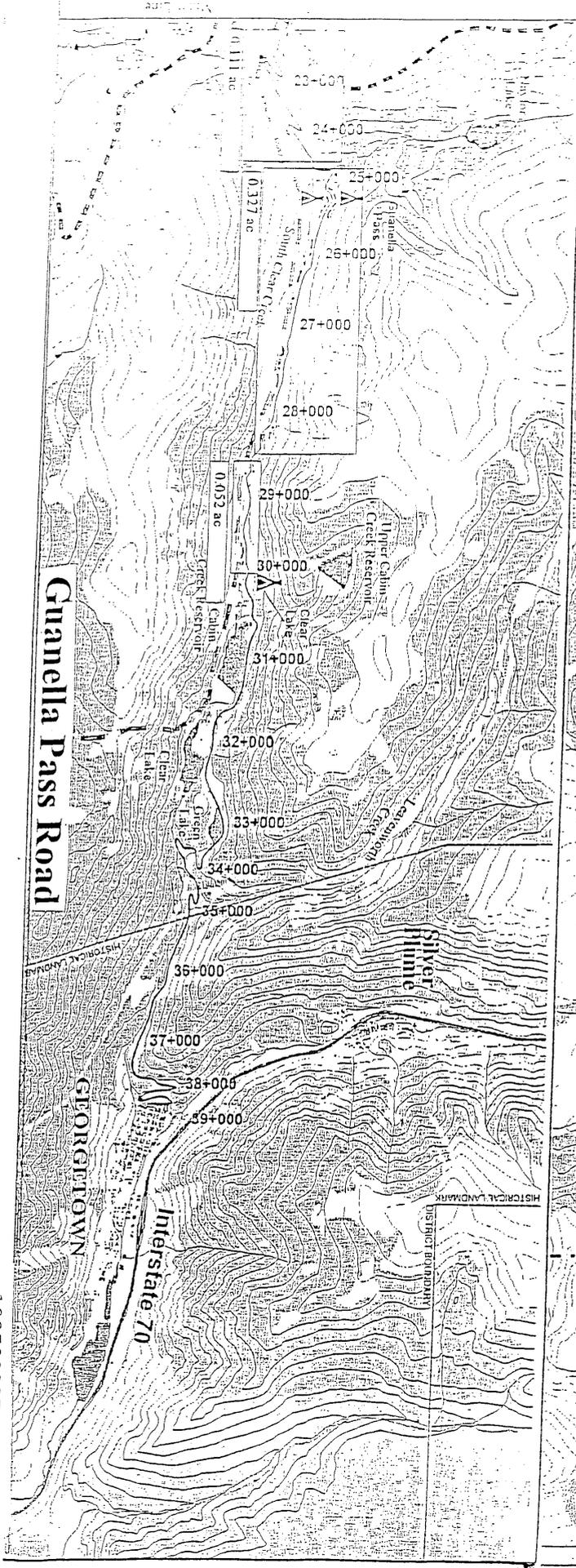
GENERAL CONDITIONS. (continued from page 2)

7. All construction debris will be disposed of on land in such a manner that it cannot enter a waterway or wetland.
8. Equipment for handling and conveying materials during construction shall be operated to prevent dumping or spilling the materials into the water except as approved herein.
9. Care will be taken to prevent any petroleum products, chemicals, or other deleterious materials from entering the water.
10. Steps will be taken to prevent materials spilled or stored on shore from washing into the water as a result of cleanup activities, natural runoff, flooding, and that, during construction, any materials which are accidentally spilled into the water will be retrieved.
11. All work in the waterway will be performed in such a manner so as to minimize increases in suspended solids and turbidity which may degrade water quality and damage aquatic life outside the immediate area of operation.
12. All areas along the bank disturbed or newly created by the construction activity will be seeded with vegetation indigenous to the area for protection against subsequent erosion.
13. The clearing of vegetation will be limited to that which is absolutely necessary for construction of the project.
14. Close coordination will be maintained by the contractor with downstream water users, advising them of any water quality changes to be caused by the construction.
15. All dredged or excavated materials, with the exception of that authorized herein, will be placed on an upland site above the ordinary high water line in a confined area, not classified as a wetland, to prevent the return of such materials to the waterway.
16. Deposition of excavated materials on shore and all earthwork operations on shore will be carried out in such a way that sediment runoff and soil erosion to the water are controlled.
17. Adequate pipes shall be installed in any temporary crossing to carry normal flows and prevent the restriction of expected high flows during construction.
18. Concrete trucks will be washed at a site and in such a manner that wash water cannot enter the waterway.
19. The use of machinery in the waterway will be kept to a minimum.
20. When the District Engineer has been notified that a filling activity is adversely affecting fish or wildlife resources or the harvest thereof and the District Engineer subsequently directs remedial measures, the permittee will comply with such directions as may be received to suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect as required.
21. Fuel storage tanks above ground shall be diked or curbed or other suitable means provided to prevent the spread of liquids in case of leakage in the tanks or piping.



Guanella Pass Road

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15 Sept 2003
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Guanelle Pass Road

GEORGETOWN

Interstate 70

GRANT

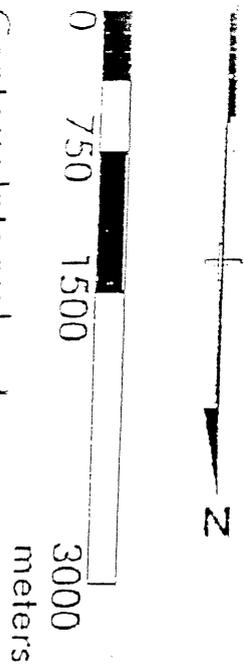
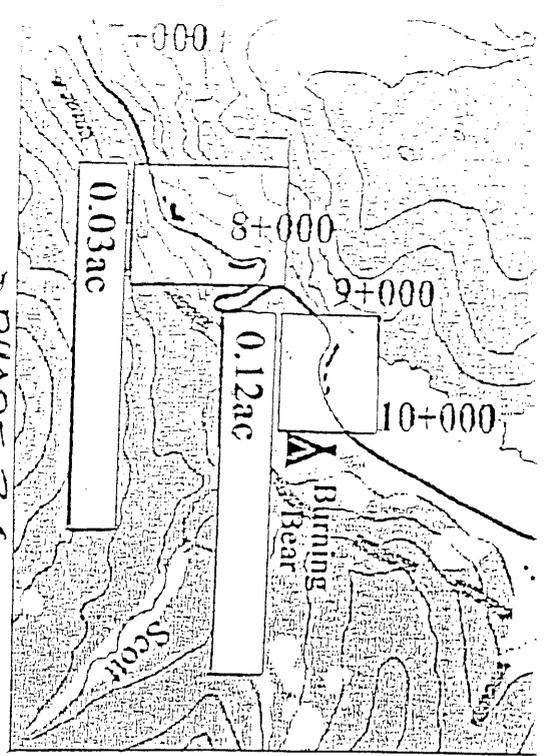
US HWY 285

Park Co
Clear Creek Co

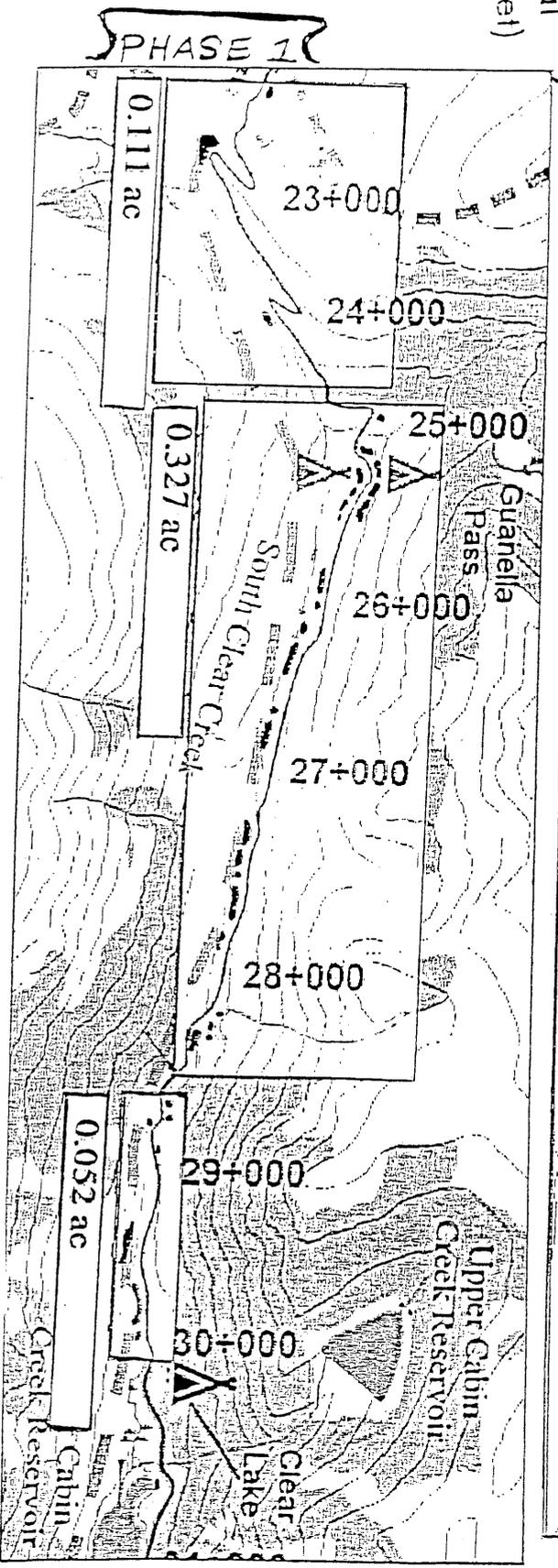
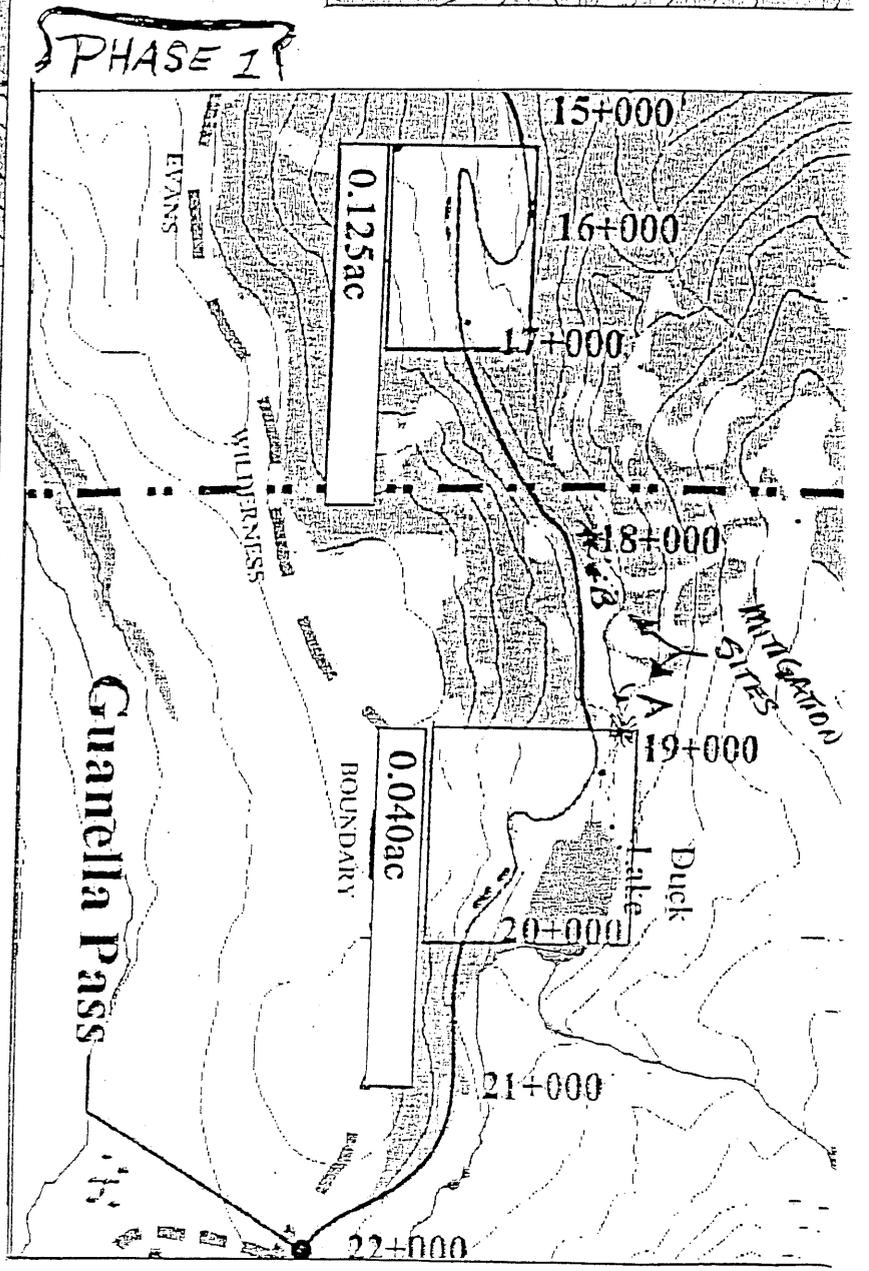
Guanelle Pass

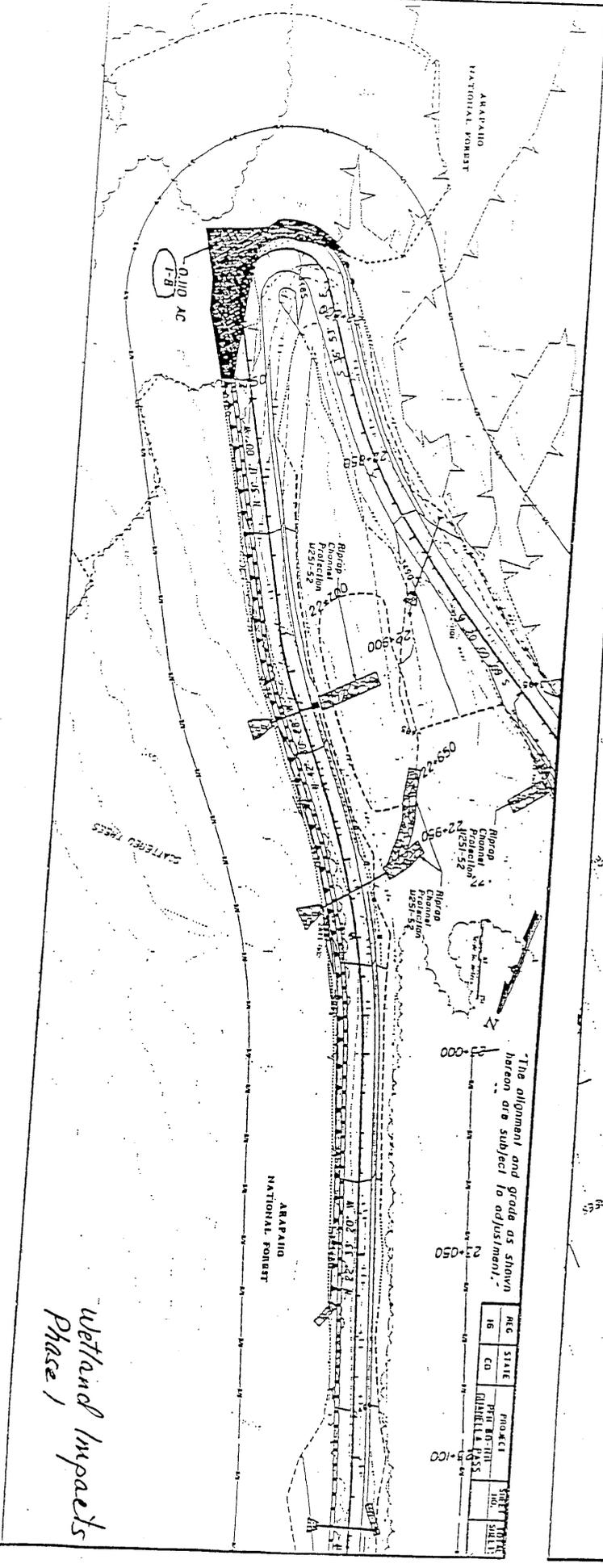
MATCH LINE

199580927
15 Sept 2003
Sheet 2 of 19



Contour Interval
12 meters (40 feet)



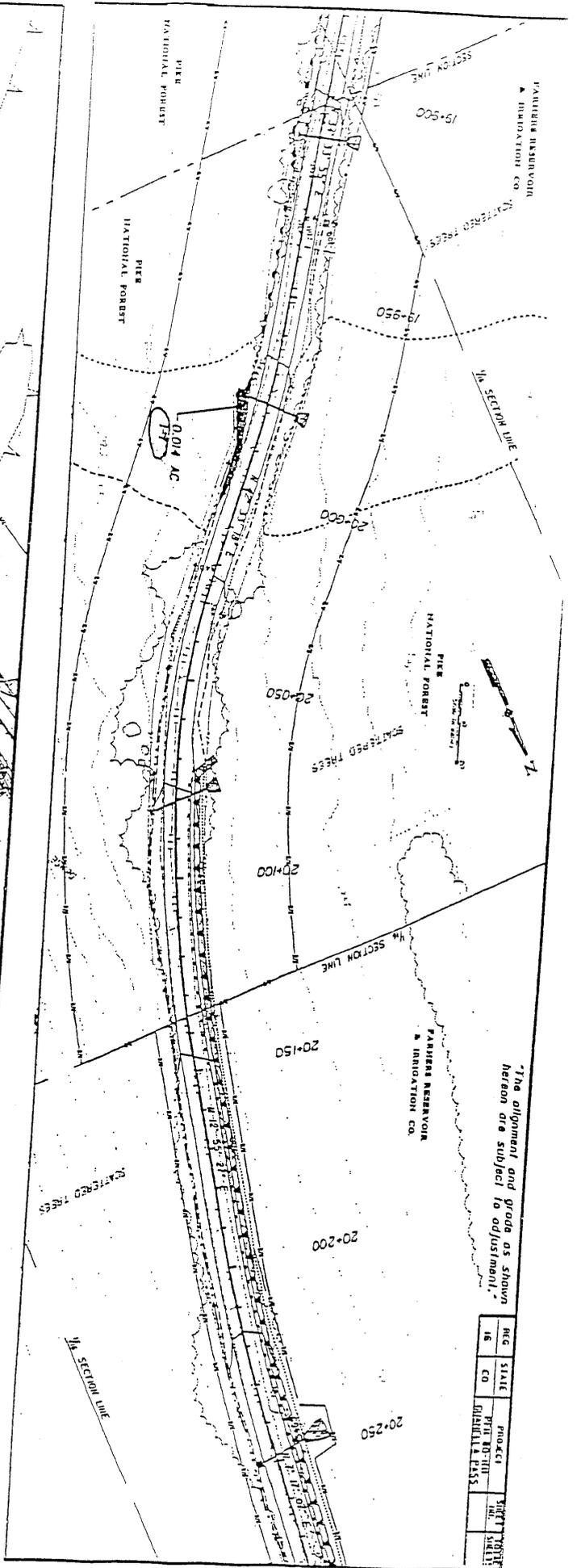


"The alignment and grade as shown hereon are subject to adjustment."

REG	STATE	PROJECT	SHEET NO.
16	CO	PIN BOTTOM	1955
		IMBELL	1055

Wetland Impacts Phase 1

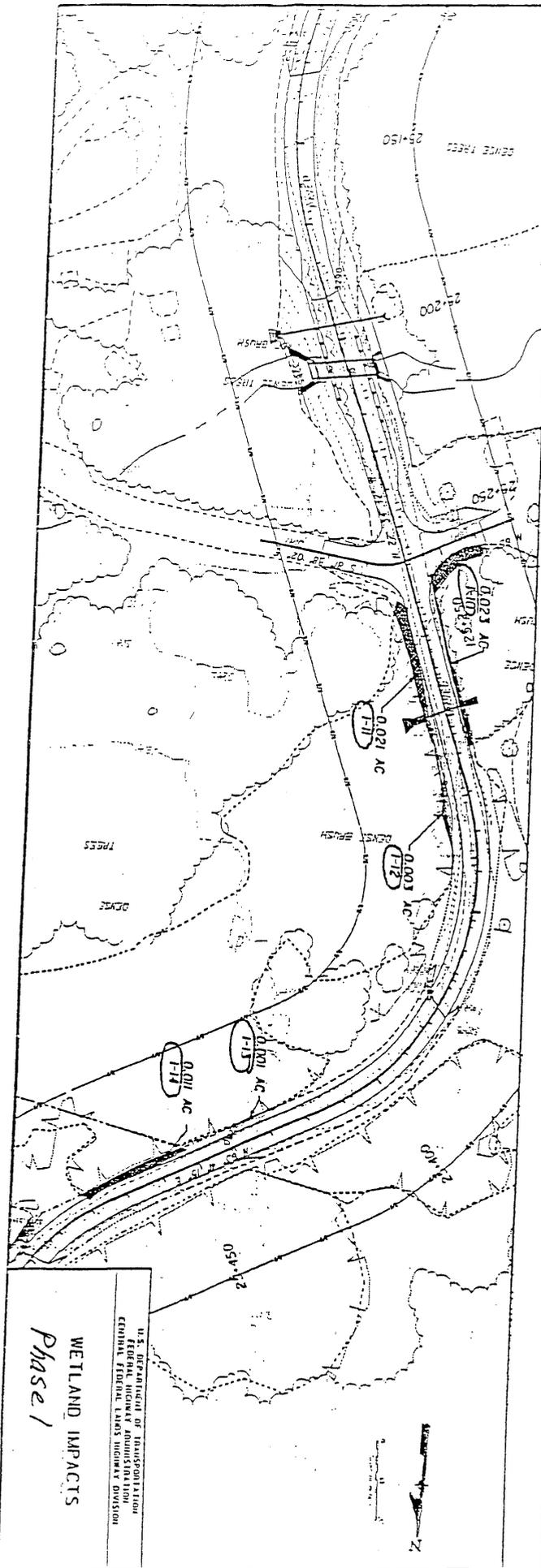
199580927
15 Sept 2003
Sheet 6 of 19



"The alignment and grade as shown hereon are subject to adjustment."

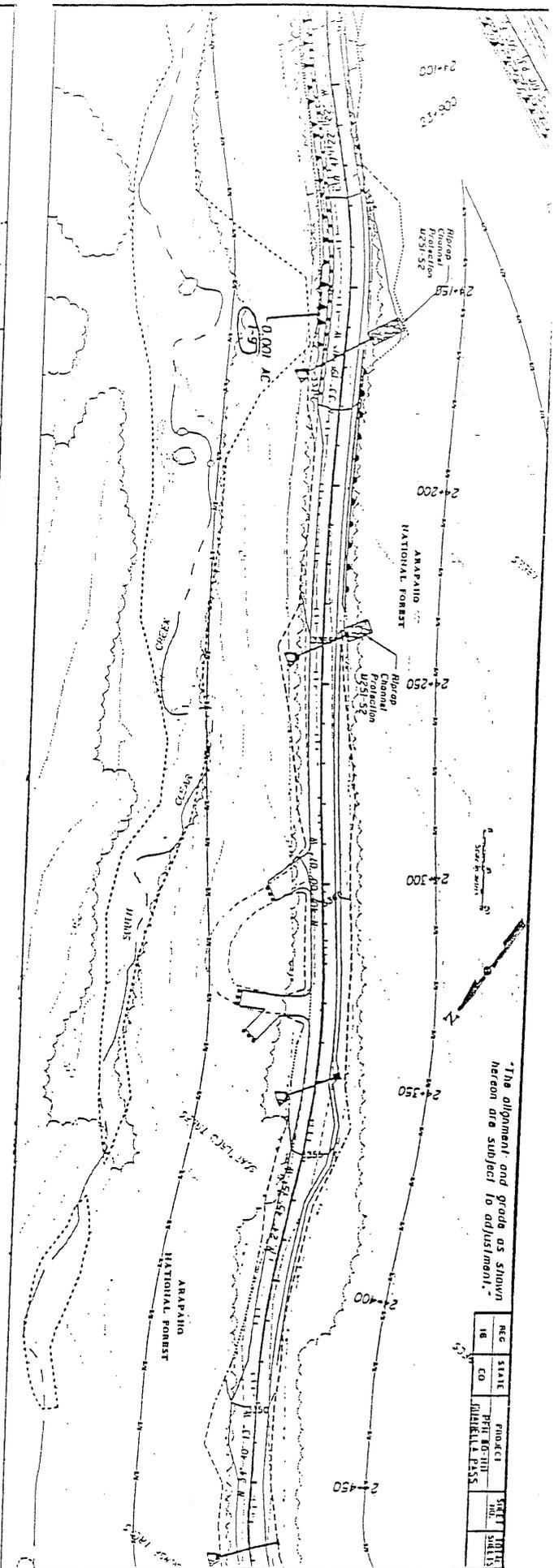
REG	STATE	PROJECT	SHEET NO.
16	CO	PIN BOTTOM	1955
		IMBELL	1055

199580927
15 Sept 2003
Sheet 6 of 19



U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 CENTRAL FEDERAL LANDS INQUIRY DIVISION

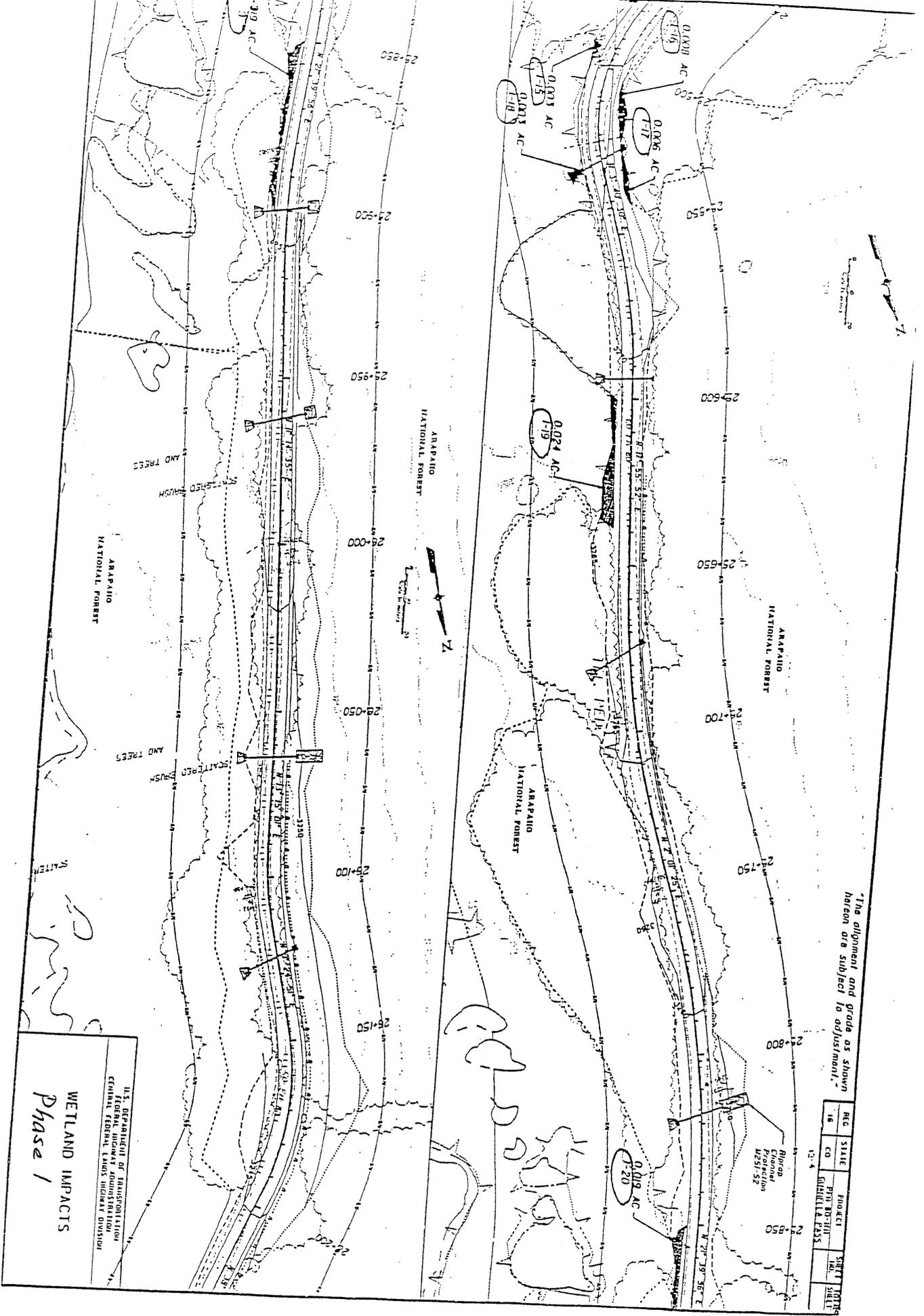
WETLAND IMPACTS
Phase 1



The alignment and grade as shown hereon are subject to adjustment.

REG	STATE	PROJECT	SHEET TITLE
18	CO	PH 10-TH	19
		INDIANELL PASS	

199580927
 15 Sept 2003
 Sheet 7 of 19



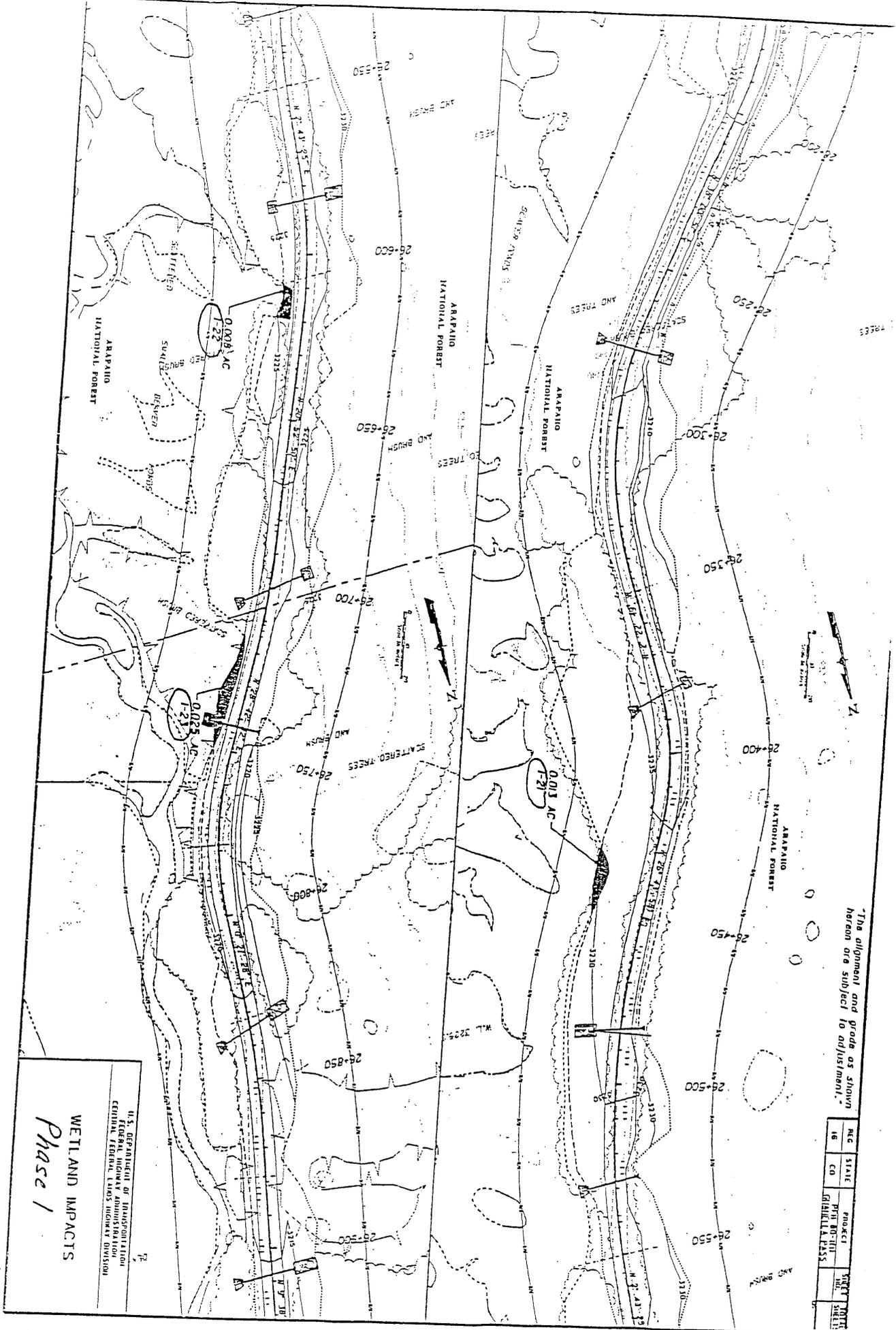
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RC	STATE	PROJECT	SHEET
16	CO	PHASE I	18
		QUINCY PASS	

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 CENTRAL FEDERAL LANDS INQUIRY DIVISION

WETLAND IMPACTS
Phase 1

199580927
 15 Sept 2003
 Sheet 8 of 19



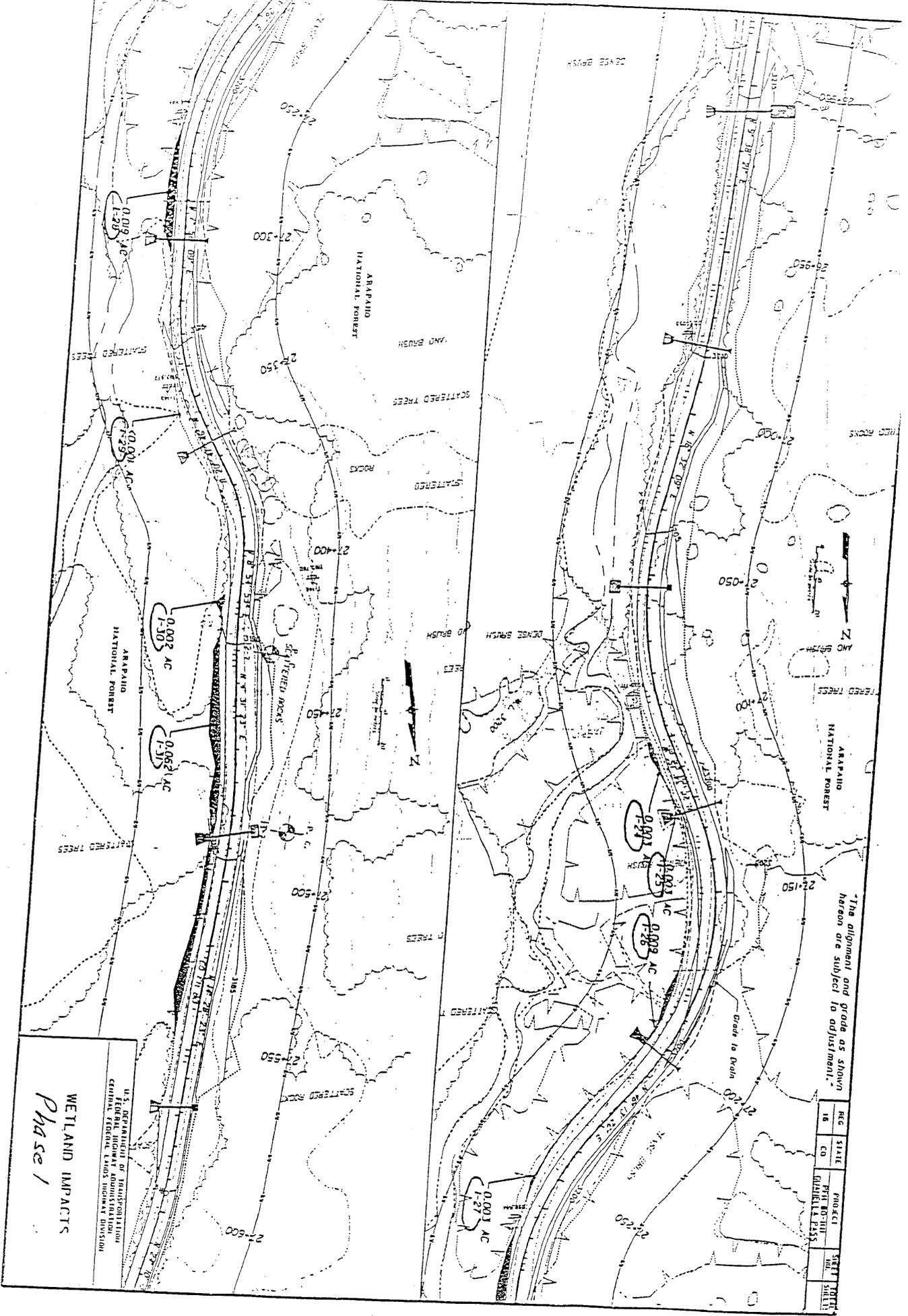
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REC	STATE	PROJECT	SHEET
16	CO	GRANDALLA PASS	11

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 CENTRAL FEDERAL LANDS HIGHWAY DIVISION

WETLAND IMPACTS
Phase 1

199580927
 15 Sept 2003
 Sheet 9 of 19



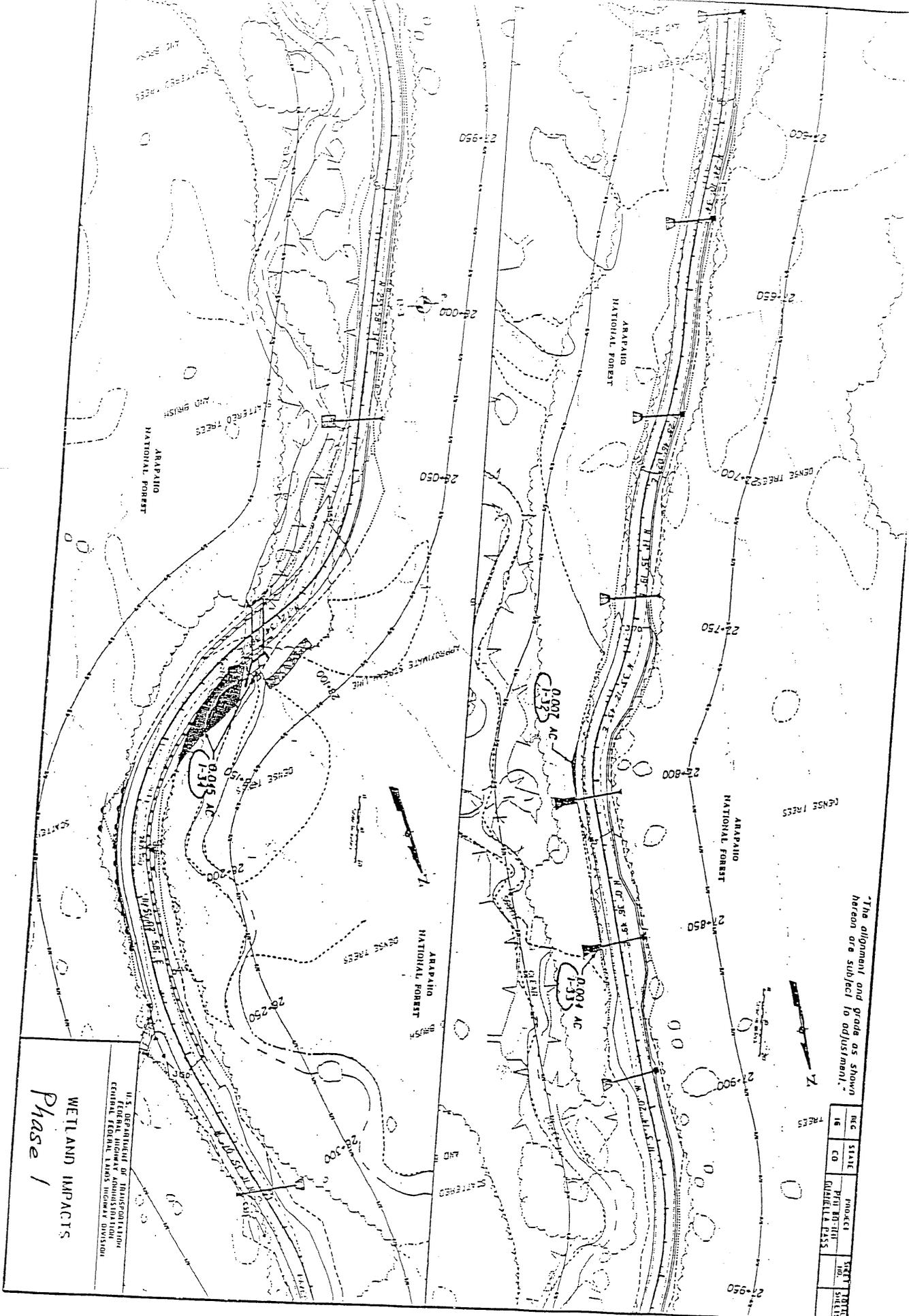
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REC	STATE	PROJECT	SHEET
18	CO	PH 10-111	101
		MINNELL & P.S.S.	SHEET

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 CENTRAL FEDERAL LANDS HIGHWAY DIVISION

WETLAND IMPACTS
Phase 1

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 15 Sept 2003
 Sheet 10 of 19



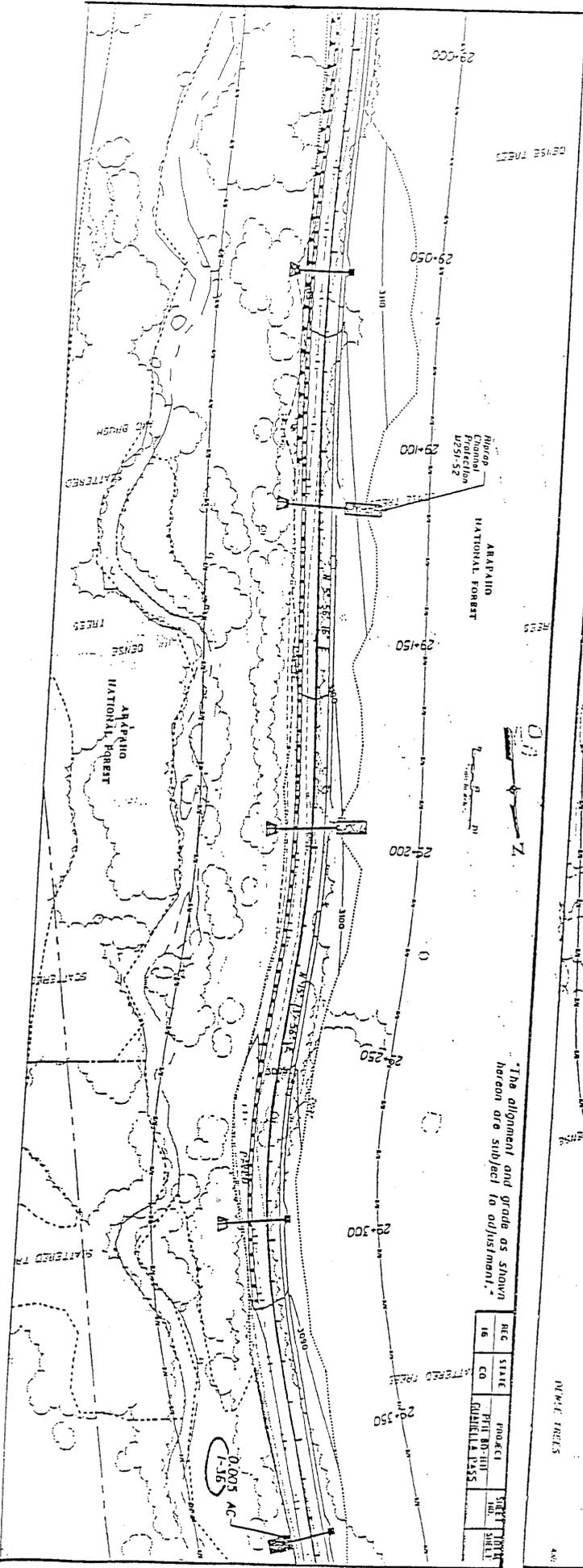
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REG	STATE	PROJECT	SHEET
16	CO	PIEDMONT CANYON PASS	11 OF 19

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 CENTRAL FEDERAL LANDS INQUIRY DIVISION

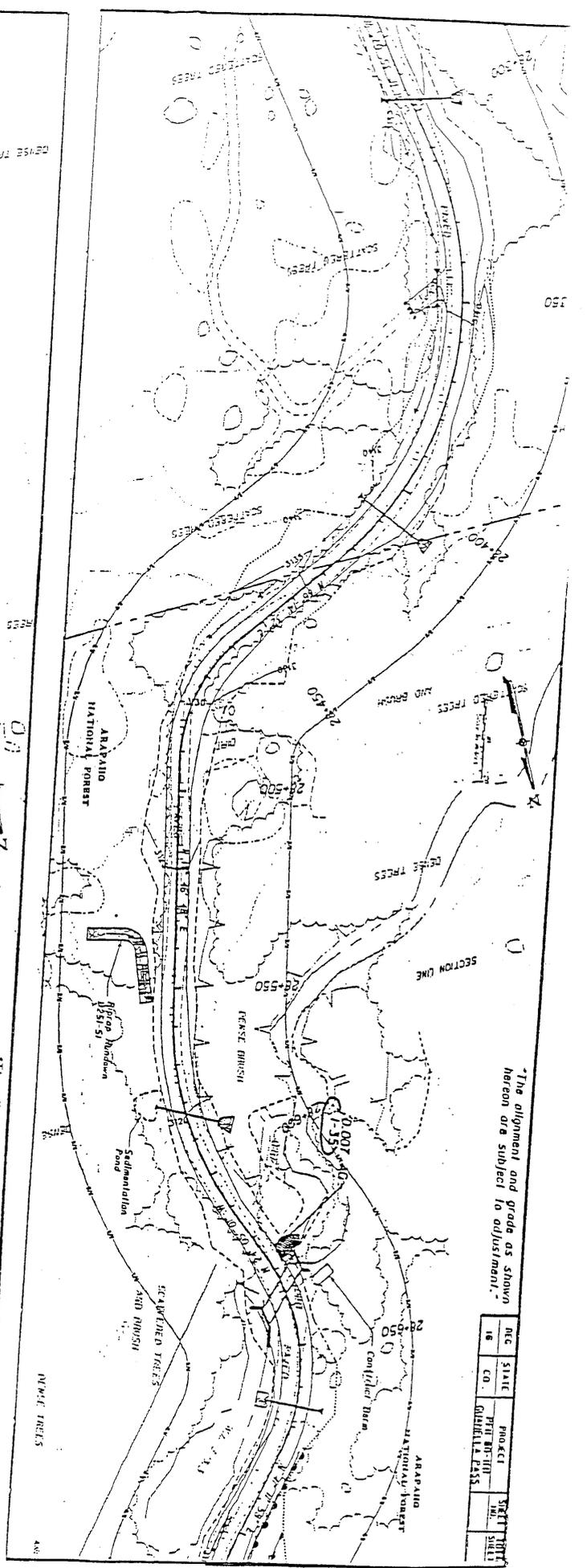
WETLAND IMPACTS
Phase 1

I99580927
 15 Sept 2003
 Sheet 11 of 19



"The alignment and grade as shown hereon are subject to adjustment."

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18	CO	GRAND JUNCTION	1-155

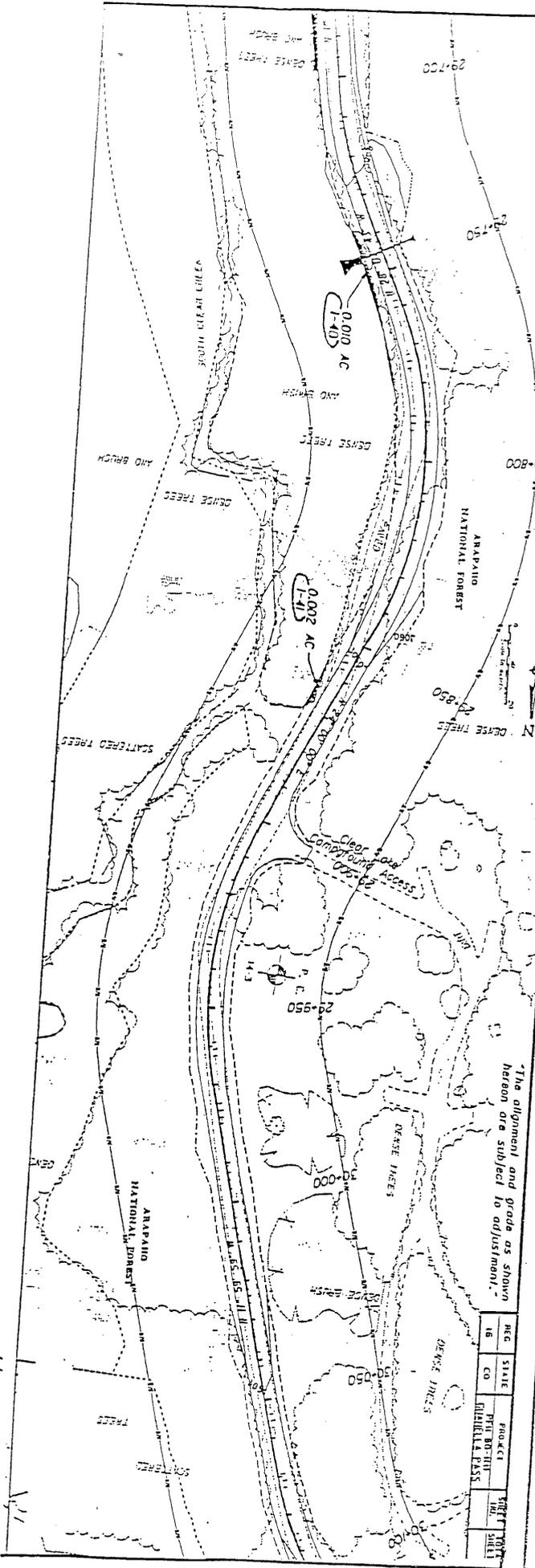


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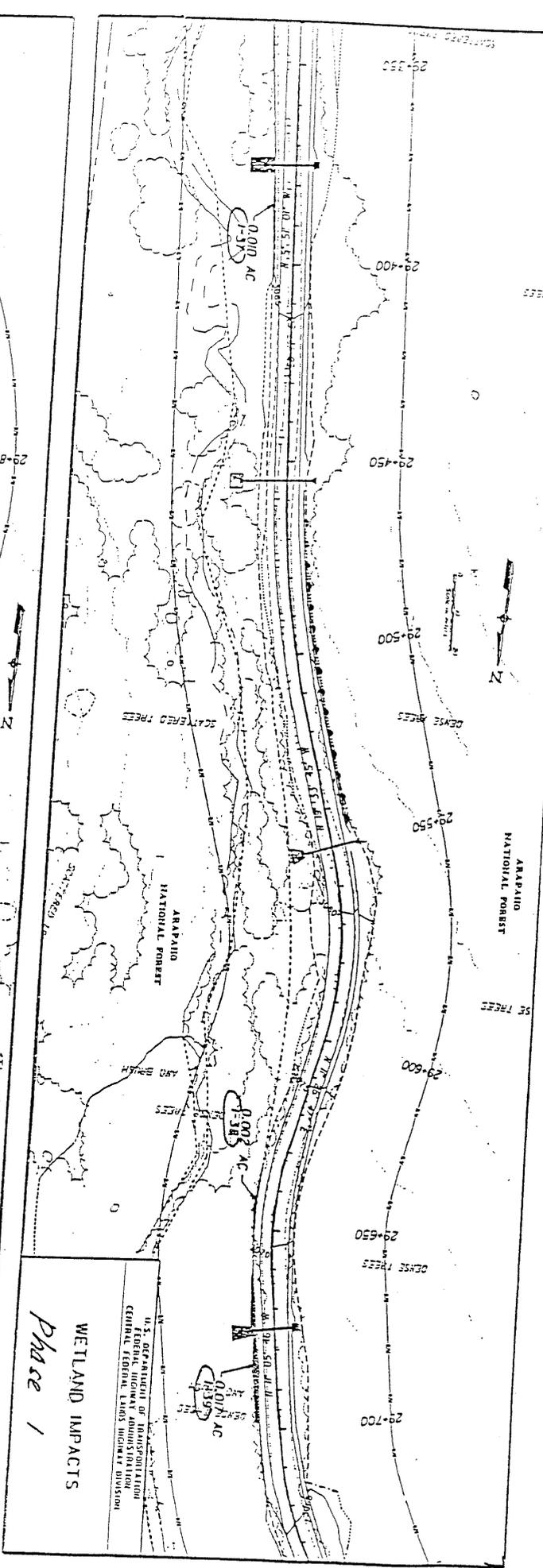
199580927
15 Sept 2003
Sheet 12 of 19

Wetland Impacts
Phase 1



The alignment and grade as shown hereon are subject to adjustment.

REG	STATE	PROJECT	SHEET
18	CO	PHILIPPA PASS	13



U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 CENTRAL FEDERAL LANDS INCREMENT DIVISION

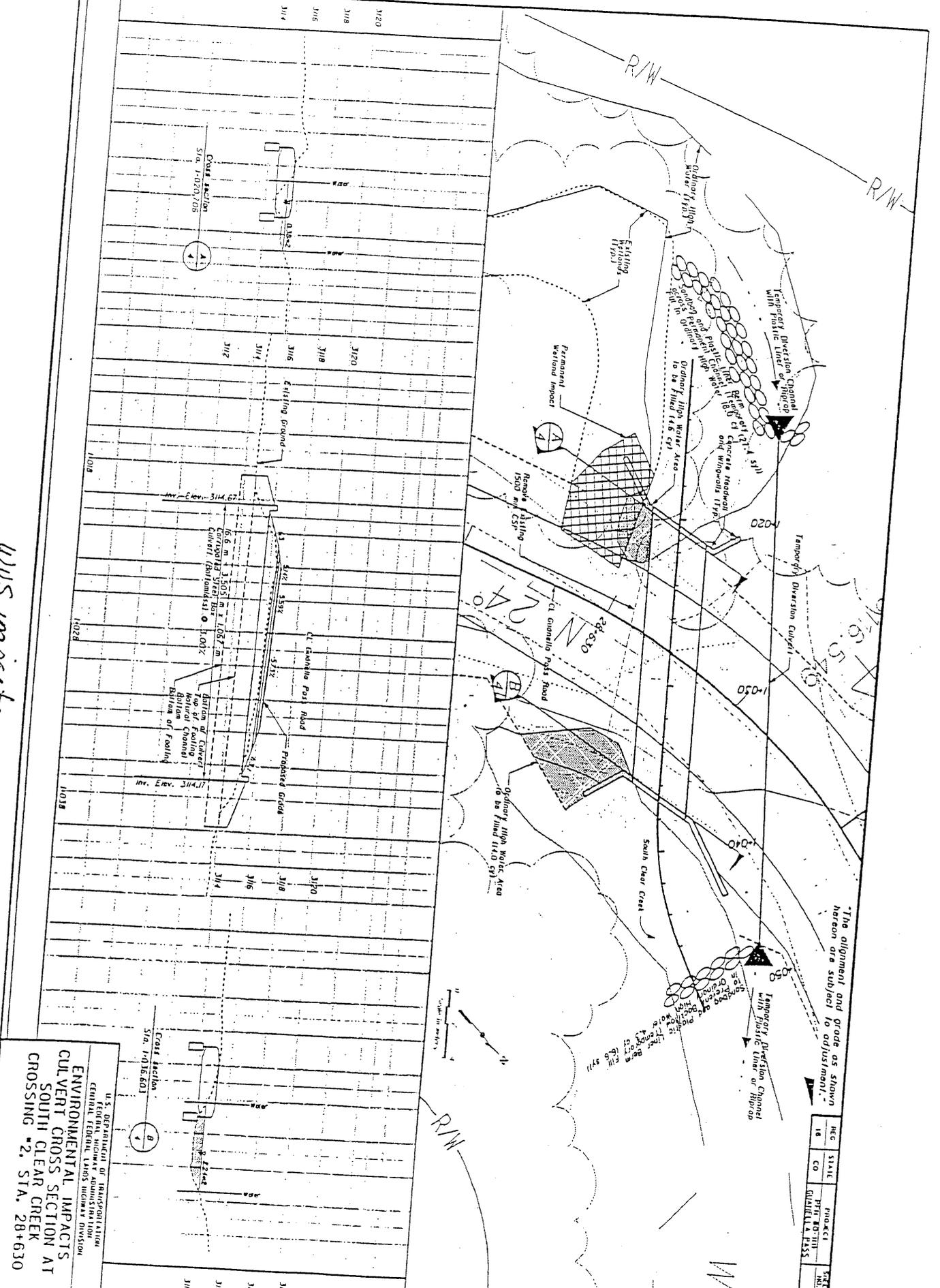
WETLAND IMPACTS
 Phase 1

199580927
 15 Sept 2003
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*Wetland Impacts
 Phase 1*

Wetland Impact (ac) from proposed improvements of Guarella Pass Road, Phase 1

Wetland ID	Station	Side	Acres	Wetland ID	Station	Side	Acres
1-1	16+460	Rt.	0.074	1-23	26+730	Rt.	0.025
1-2	16+560	Rt.	0.042	1-24	27+100	Rt.	0.003
1-3	16+975	Lt.	0.01	1-25	27+125	Rt.	0.003
1-4	19+060	Lt.	0.001	1-26	27+180	Rt.	0.009
1-5	19+065	Lt.	0.001	1-27	27+240	Rt.	0.003
1-6	19+780	Rt.	0.023	1-28	27+270	Rt.	0.019
1-7	19+990	Rt.	0.014	1-29	27+350	Rt.	<0.001
1-8	22+800	Rt.	0.11	1-30	27+415	Rt.	0.002
1-9	24+155	Rt.	0.001	1-31	27+490	Rt.	0.062
1-10	25+270	Lt.	0.023	1-32	27+770	Rt.	0.007
1-11	25+270	Rt.	0.021	1-33	27+850	Rt.	0.004
1-12	25+320	Rt.	0.003	1-34	28+130	Rt.	0.045
1-13	25+430	Rt.	0.001	1-35	28+625	Lt.	0.007
1-14	25+460	Rt.	0.011	1-36	29+365	Lt.	0.005
1-15	25+505	Rt.	0.003	1-37	29+385	Lt.	0.01
1-16	25+510	Lt.	0.008	1-38	29+645	Rt.	0.002
1-17	25+530	Lt.	0.006	1-39	29+680	Rt.	0.017
1-18	25+530	Rt.	0.003	1-40	29+750	Rt.	0.01
1-19	25+610	Rt.	0.024	1-41	29+865	Rt.	0.002
1-20	25+870	Rt.	0.019				
1-21	26+435	Rt.	0.013				
1-22	26+610	Rt.	0.008				
<u>TOTAL</u>							0.65



WUS impacts Phase 1

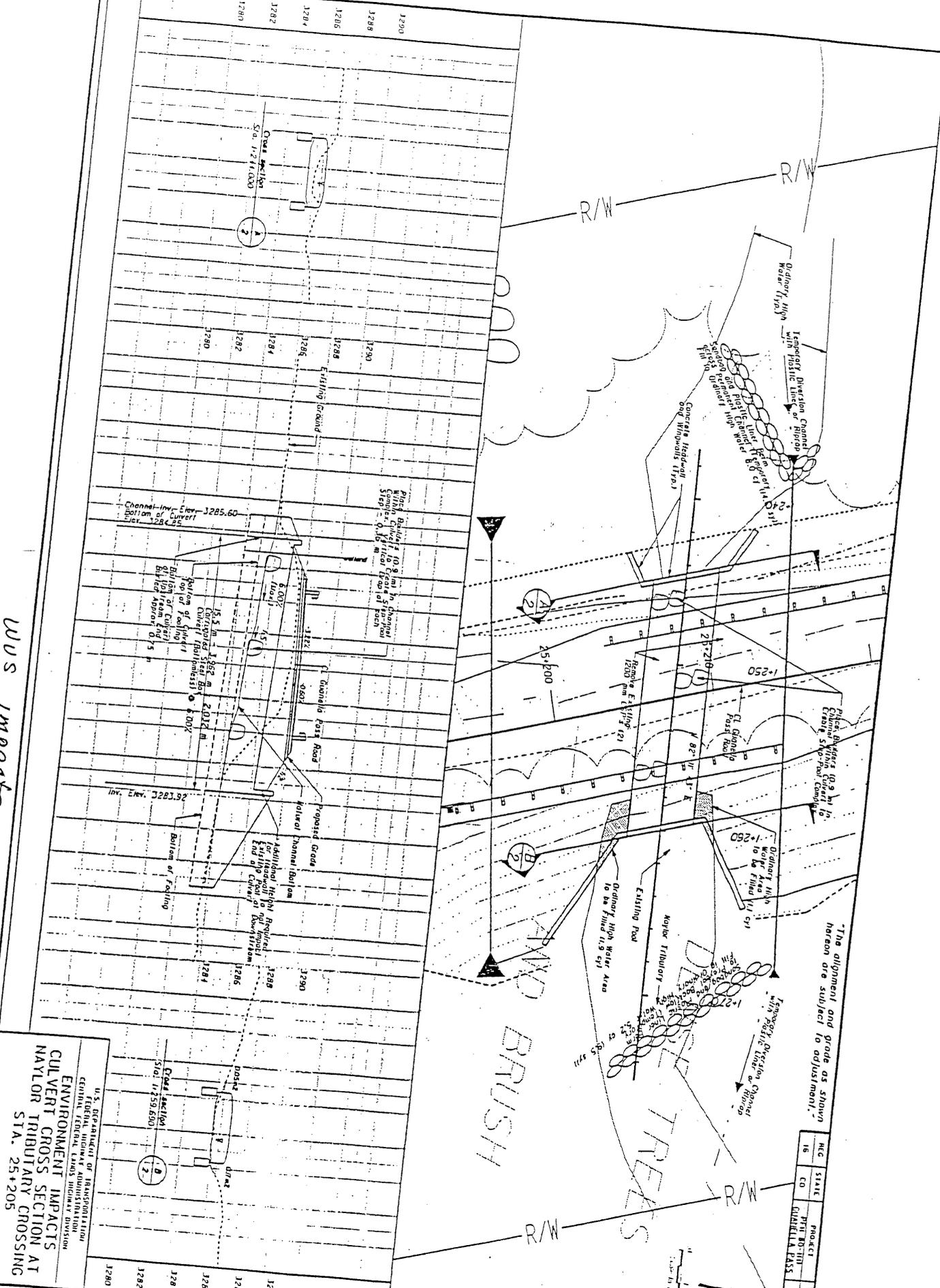
The alignment and grade as shown hereon are subject to adjustment.

REC	STATE	PROJECT	SHEET NO.
16	CO	QUAIL LAKE PASS	16 OF 19

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 CENTRAL FEDERAL LANDS INQUIRY DIVISION
ENVIRONMENTAL IMPACTS
CULVERT CROSS SECTION AT
SOUTH CLEAR CREEK
CROSSING #2, STA. 28+630

199580927
 15 Sept 2003
 Sheet 16 OF 19

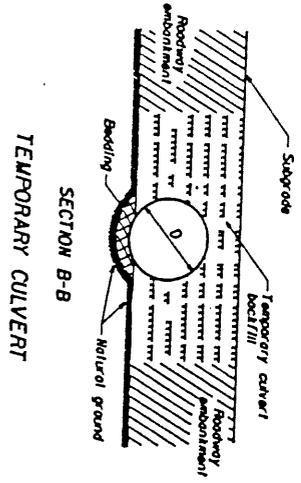
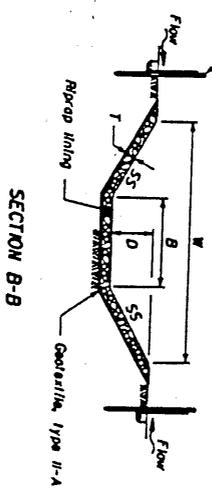
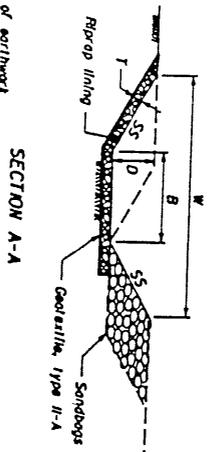
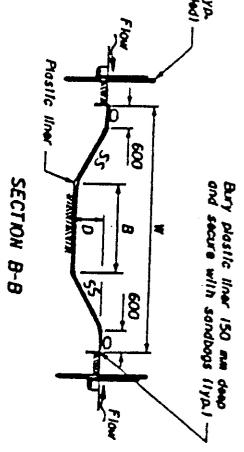
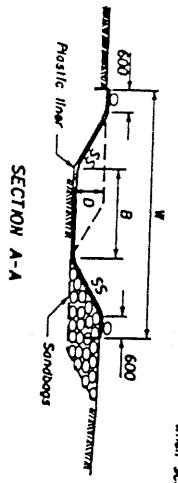
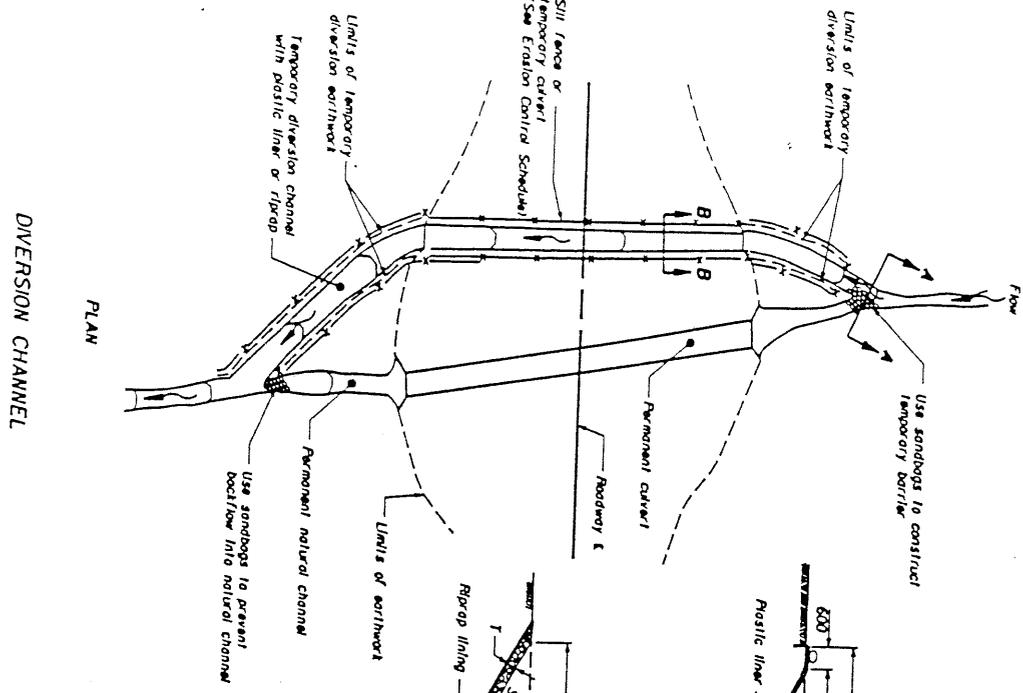
WUS Impacts
Phase 1



The alignment and grade as shown herein are subject to adjustment.

NO.	STATE	PROJECT	SHEET NO.	TOTAL SHEETS
16	CO	QUINCY LAKE		

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
ENVIRONMENTAL IMPACTS
CULVERT CROSS SECTION AT
NAVYLOK TRIBUTARY CROSSING
STA. 25+205



NOTE:

1. Dimensions not labeled are in millimeters.
2. See Erosion Control Schedule for temporary culvert diameter, riprap class, channel dimensions and quantities.
3. Use plastic liner or riprap along the entire length and width of the temporary diversion channel.
4. Construct channel of a minimum grade of 0.5 percent.
5. Do not construct with longitudinal joints if using a plastic liner. Bury the upstream edge of the liner a minimum of 150 mm deep and secure with riprap or sandbags.
6. Compact temporary culvert backfill using one of the methods listed in specification 204.110(f).
7. Place accumulated material from temporary channel in leeward area or on roadway. Do not place material in windward or riprap area.

FIG	SHEET	PROJECT	SHEET TOTAL
		PERMITS	NO. SHEETS
		FIGURE 9	

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 TECHNICAL LANDS PROGRAM
 METRIC STANDARD

TEMPORARY DIVERSION CHANNELS

FIGURE 9

STANDARD DRAWING FOR USE WITH METRIC STANDARD

MIST-5

Appendix B

Certification Requirements – Section 401

STATE OF COLORADO

Bill Owens, Governor
Douglas H. Benevento, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

September 16, 2003

Mark B. Taylor
Federal Highway Administration
Central Federal Lands Highways Division
(HFHD – 165)
555 Zang Street, Suite 259
Lakewood, Colorado 80228

Re: Section 401 Water Quality Certification
Colorado 401 Certification No.: 3065
US Corps of Engineers 404 Permit No.: 199580927
Description: Guanella Pass Road Improvements

Dear Applicant:

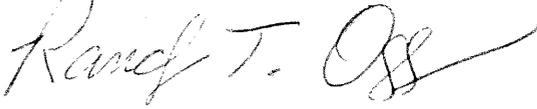
The Colorado Department of Public Health and Environment (CDPHE), Water Quality Control Division (Division) has completed its review of the subject Clean Water Act (CWA) Section 404 Permit Application, and our preliminary determination with the issuance of the State of Colorado 401 Certification Public Notice (5 CCR 1002-82.5(B)). An antidegradation review has also been completed pursuant to Regulation No. 31, Basic Standards and Methodologies for Surface Water (5 CCR 1002-31). The Division's review concluded that only temporary impacts to water quality should occur as a result of this project.

This letter shall serve as official notification that the Division is issuing "Regular Certification" in accordance with 5 CCR 1002-82.5(A)(2).

The 401 Certification issued by the Division pursuant to 5 CCR 1002-82.3(C) shall apply to both the construction and operation of the project for which a federal license or permit is required, and shall apply to the water quality impacts associated with the project. This certification does not constitute a relinquishment of the Division's authority as defined in the Colorado Water Quality Control Act, nor does it fulfill or waive any other local, state, or federal regulations.

If you have any questions or need additional information, please contact Randy T. Ogg at (303) 692-3560.

Sincerely,

A handwritten signature in black ink that reads "Randy T. Ogg". The signature is written in a cursive style with a long, sweeping horizontal line at the end.

Randy T. Ogg
Water Quality Assessor
Water Quality Control Division
Colorado Department of Public Health and Environment

Attachment

cc: US Army Corps of Engineers, Denver Regulatory Office
US Army Corps of Engineers, Omaha District Office
District Engineers, Tom Armitage and Dennis Pontius, Water Quality Control Division
File

Section 401 Certification Requirements
State of Colorado

(A) The following requirements shall apply to all certifications:

(1) Authorized representatives from the Division shall be permitted to enter upon the site where the construction activity or operation of the project is taking place for purposes of inspection of compliance with BMPs and certification conditions.

(2) In the event of any changes in control or ownership of facilities where the construction activity or operation of the project is taking place, the successor shall be notified in writing by his predecessor of the existence of the BMPs and certification conditions. A copy of such notification shall be provided to the Division.

(3) If the permittee discovers that certification conditions are not being implemented as designed, or if there is an exceedance of water quality standards despite compliance with the certification conditions and there is reason to believe that the exceedance is caused, in whole or in part, by the project, the permittee shall verbally notify the Division of such failure or exceedance within two (2) working days of becoming aware of the same. Within ten (10) working days of such notification, the permittee shall provide to the Division, in writing, the following:

(a) In the case of the failure to comply with the certification conditions, a description of (i) the nature of such failure, (ii) any reasons for such failure, (iii) the period of noncompliance, and (iv) the measures to be taken to correct such failure to comply; and

(b) In the case of the exceedance of a water quality standard, (i) an explanation, to the extent known after reasonable investigation, of the relationship between the project and the exceedance, (ii) the identity of any other known contributions to the exceedance, and (iii) a proposal to modify the certification conditions so as to remedy the contribution of the project to the exceedance.

(4) Any anticipated change in discharge location and/or quantities associated with the project which may result in water quality impacts not considered in the original certification must be reported to the Division by submission of a written notice by the permittee prior to the change. If the change is determined to be significant, the permittee will be notified within ten days, and the change will be acknowledged and approved or disapproved.

(5) Any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions herein is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage or runoff would damage any facilities necessary for compliance with limitations and prohibitions herein. The Division shall be notified immediately in writing of each such diversion or bypass.

(6) At least fifteen days prior to commencement of a project in a watercourse, which the Division has certified, or conditionally certified, the permittee shall notify the following:

(a) Applicable local health departments;

(b) Owners or operators of municipal and domestic water treatment intakes which are located within twenty miles downstream from the site of the project; and

(c) Owners or operators of other intakes or diversions which are located within five miles downstream from the site of the project.

The permittee shall maintain a list of the persons and entities notified, including

the date and form of notification.

(7) Immediately upon discovery of any spill or other discharge to waters of the state not authorized by the applicable license or permit, the permittee shall notify the following;

- (a) Applicable local health departments;
- (b) Owners or operators of municipal and domestic water treatment intakes which are located within twenty miles downstream from the site of the project; and
- (c) Owners or operators of other intakes or diversions which are located within five miles downstream from the site of the project.

The permittee shall maintain a list of the persons and entities notified, including the date and form of notification.

(8) Construction operations within watercourses and water bodies shall be restricted to only those project areas specified in the federal license or permit.

(9) No construction equipment shall be operated below the existing water surface unless specifically authorized by the 401 certification issued by the Division.

(10) Work should be carried out diligently and completed as soon as practicable. To the maximum extent practicable, discharges of dredged or fill material shall be restricted to those periods when impacts to designated uses are minimal.

(11) The project shall incorporate provisions for operation, maintenance, and replacement of BMPs to assure compliance with the conditions identified in this section, and any other conditions placed in the permit or certification. All such provisions shall be identified and compiled in an operation and maintenance plan which will be retained by the project owner and available for inspection within a reasonable timeframe upon request by any authorized representative of the Division.

(12) The use of chemicals during construction and operation shall be in accordance with the manufacturers specifications. There shall be no excess application and introduction of chemicals into state waters.

(13) All solids, sludges, dredged or stockpiled materials and all fuels, lubricants, or other toxic materials shall be controlled in a manner so as to prevent such materials from entering state waters.

(14) All seed, mulching material and straw used in the project shall be state certified weed-free.

(15) Discharges of dredged or fill material in excess of that necessary to complete the project are not permitted.

(16) Discharges to state waters not identified in the license or permit and not certified in accordance therewith are not allowed, subject to the terms of any 401 certification.

(17) Except as otherwise provided pursuant to subsection 82.7(C), no discharge shall be allowed which causes non-attainment of a narrative water quality standard identified in the Basic Standards and Methodologies for Surface Waters, Regulation #31 (5 CCR 1002-31), including, but not limited to discharges of substances in amounts, concentrations or combinations which:

- (a) Can settle to form bottom deposits detrimental to beneficial uses;
- or

(b) Form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses; or

(c) Produce color, odor, or other conditions in such a degree as to create a nuisance or harm existing beneficial uses or impart any undesirable taste to significant edible aquatic species, or to the water, or

(d) Are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life; or

(e) Produce a predominance of undesirable aquatic life; or

(f) Cause a film on the surface or produce a deposit on shorelines.

(B) Best Management Practices:

(1) Best management practices are required for all projects for which Division certification is issued except for section 402 permits. Project applicants must select BMPs to be employed in their project. A listing and description of best management practices is located in Appendix I of Regulation Number 82: 401 Certification Regulation 5 CCR 1002-82.

(2) All requests for certifications which require BMPs shall include a map of project location, a site plan, and a listing of the selected BMPs chosen for the project. At a minimum, each project must provide for the following:

(a) Permanent erosion and sediment control measures that shall be installed at the easiest practicable time consistent with good construction practices and that shall be maintained and replaced as necessary throughout the life of the project.

(b) Temporary erosion and sediment control measures that shall be coordinated with permanent measures to assure economical, effective, and continuous control throughout the construction phase and during the operation of the project.

Appendix C

Stormwater General Permit Application/Guidance Document

CDPS GENERAL PERMIT
STORMWATER DISCHARGES ASSOCIATED WITH
CONSTRUCTION ACTIVITY
AUTHORIZATION TO DISCHARGE UNDER THE
COLORADO DISCHARGE PERMIT SYSTEM

In compliance with the provisions of the Colorado Water Quality Control Act, (25-8-101 et seq., CRS, 1973 as amended) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.; the "Act"), this permit authorizes the discharge of stormwater associated with construction activities certified under this permit, from those locations specified throughout the State of Colorado to specified waters of the State. Such discharges shall be in accordance with the conditions of this permit.

This permit specifically authorizes the facility listed on page 1 of this permit to discharge stormwater associated with construction activity, as of this date, in accordance with permit requirements and conditions set forth in Parts I and II hereof. All discharges authorized herein shall be consistent with the terms and conditions of this permit.

This permit and the authorization to discharge shall expire at midnight, **June 30, 2007**.

Issued and Signed this day of

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

J. David Holm, Director
Water Quality Control Division

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PART I

A. COVERAGE UNDER THIS PERMIT

1. **Authority to Discharge**

Under this permit, construction activities, including clearing, grading, and excavation, are granted authorization to discharge stormwater associated with construction activities into waters of the state of Colorado.

- a. **Applicable Sections:** This permit is made up of several parts, not all of which apply to all permittees. The permittee will be responsible for determining and then complying with the applicable sections, depending upon whether or not a Qualifying Local Program covers the site. For sites not covered by a Qualifying Local Program, all Parts of the permit except Part I.A.3 apply.

2. **Industries Covered Under this Permit**

a) **Definitions:**

- 1) **Stormwater:** Stormwater is precipitation-induced surface runoff.
- 2) **Construction activity:** Construction activity includes clearing, grading and excavation activities. Construction does not include routine maintenance performed by public agencies, or their agents to maintain original line and grade, hydraulic capacity, or original purpose of the facility.
- 3) **Small construction activity:** Stormwater discharge associated with small construction activity means the discharge of stormwater from construction activities that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater than one and less than five acres.
- 4) **Qualifying Local Program:** This permit includes conditions that incorporate qualifying local erosion and sediment control program (Qualifying Local Program) requirements by reference. A Qualifying Local Program is a municipal stormwater program for stormwater discharges associated with small construction activity that has been formally approved by the Division.
- 5) **Other Definitions:** Definitions of additional terms can be found in Part I.D. of this permit.

- b) **Types of Activities Covered by this Permit:** This permit may authorize all new and existing discharges of stormwater associated with construction activity. This includes stormwater discharges from areas that are dedicated to producing earthen materials, such as soils, sand and gravel, for use at a single construction site. This permit also includes stormwater discharges from dedicated asphalt batch plants and dedicated concrete batch plants. This permit does not authorize the discharge of mine water or process water from such areas.

3. **Permit Coverage Without Application – for small construction activities under a Qualifying Local Program only**

If a construction site is within the jurisdiction of a Qualifying Local Program, the operator of the construction activity is authorized to discharge stormwater associated with small construction activity under this general permit without the submittal of an application to the Division.

- a) **Applicable Sections:** For sites covered by a Qualifying Local Program, only Parts 1.A.1, 1.A.2, 1.A.3, I.C.1, I.C.2, I.C.3, I.D and Part II of this permit, with the exception of Parts II.A.1, II.B.3, II.B.8, and II.B10, apply.
- b) **Local Agency Authority:** This permit does not pre-empt or supersede the authority of local agencies to prohibit, restrict, or control discharges of stormwater to storm drain systems or other water courses within their jurisdiction.

A. COVERAGE UNDER THIS PERMIT (cont.)

- c) **Permit Coverage Termination:** When a site has been finally stabilized, coverage under this permit is automatically terminated.
- d) **Compliance with Qualifying Local Program:** A construction site operator that has authorization to discharge under this permit under Part I.A.3 shall comply with the requirements of the Qualifying Local Program with jurisdiction over the site.
- e) **Full Permit Applicability:** The Division may require any owner or operator within the jurisdiction of a Qualifying Local Program covered under this permit to apply for and obtain coverage under the full requirements of this permit. The owner or operator must be notified in writing that an application for full coverage is required. When a permit certification under this permit is issued to an owner or operator that would otherwise be covered under Part I.A.3 of this permit, the full requirements of this permit replace the requirements as per Part I.A.3 of this permit, upon the effective date of the permit certification. A site brought under the full requirements of this permit must still comply with local stormwater management requirements, policies or guidelines as required by Part I.C.1.h of this Permit.

4. **Application, Due Dates**

- a) **Application Due Dates:** At least **ten days** prior to the commencement of construction activities, the operator of the construction activity shall submit an application form as provided by the Division, with a certification that the Stormwater Management Plan (SWMP) is complete.

One original completed discharge permit application shall be submitted, by mail or hand delivery, to:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

- b) **Summary of Application:** The application requires, at a minimum, the following:
 - 1) The operator's name, address, telephone number, tax payer identification number (or employer identification number), and the status as Federal, State, private, public or other entity;
 - 2) Name, county and location of the construction site, including the latitude and longitude to the nearest 15 seconds of the approximate center of the construction activity;
 - 3) A brief description of the nature of the construction activity;
 - 4) The anticipated starting date of the project and the anticipated schedule of completion
 - 5) Estimates of the total area of the site, the area of the site that is expected to be disturbed, and the total area of the larger common plan of development or sale to undergo disturbance;
 - 6) The name of the receiving water(s), or the municipal separate storm sewer system and the ultimate (i.e., named) receiving water(s);
 - 7) Certification that the SWMP for the construction site is complete (see Part I.B. below); and
 - 8) The signature of the applicant signed in accordance with Part I.E.1 of this permit.

5. **Permit Certification Procedures**

If the general permit is applicable to the applicant's operation, then a certification will be developed and the applicant will be authorized to discharge stormwater under this general permit.

A. COVERAGE UNDER THIS PERMIT (cont.)

- a) **Request for Additional Information:** The Division shall have up to **ten days** after receipt of the above information to request additional data and/or deny the authorization for any particular discharge. Upon receipt of additional information, the Division shall have an additional **ten days** to issue or deny authorization for the particular discharge. (Notification of denial shall be by letter, in cases where coverage under an alternate general permit or an individual permit is required, instead of coverage under this permit.)
- b) **Automatic Coverage:** If the applicant does not receive a request for additional information or a notification of denial from the Division dated within ten days of receipt of the application by the Division, authorization to discharge in accordance with the conditions of this permit shall be deemed granted.
- c) **Individual Permit Required:** If, after evaluation of the application (or additional information, such as the SWMP), it is found that this general permit is not applicable to the operation, then the application will be processed as one for an individual permit. The applicant will be notified of the Division's decision to deny certification under this general permit. For an individual permit, additional information may be requested, and 180 days will be required to process the application and issue the permit.
- d) **Temporary Coverage:** Notwithstanding Parts I.A.5.a-c, above, the Division reserves the right to **temporarily** cover stormwater discharge from construction activity under general permits, even though individual permit coverage may be more appropriate.

Certification of these activities under a general permit does not in any way infringe on the Division's right to revoke that coverage and issue an individual permit or amend an existing individual permit.

- e) **General vs. Individual Permit Coverage:** Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual CDPS permit. The owner or operator shall submit an individual application, with reasons supporting the request, to the Division at least 180 days prior to any discharge.
- f) **Local Agency Authority:** This permit does not pre-empt or supersede the authority of local agencies to prohibit, restrict, or control discharges of stormwater to storm drain systems or other water courses within their jurisdiction.

6. **Inactivation Notice**

When a site has been finally stabilized in accordance with the SWMP, the operator of the facility must submit an **Inactivation Notice** that is signed in accordance with Part I.E.1. of this permit. The Inactivation Notice form is available from the Division and includes:

- a) Permit certification number;
- b) The permittee's name, address, telephone number;
- c) Name, location, and county for the construction site for which the application is being submitted.
- d) Certification that the site has been finally stabilized, and a description of the final stabilization method(s).

An inactivation form may not be required for small construction activities if application was made for coverage with a completion date less than 12 months from the start of construction activity. In such cases, permit certification may be authorized for a predetermined period from 3 to 12 months. The permit certification will include the automatic expiration date for permit coverage. If permit coverage beyond that date is needed (i.e., the site has not been finally stabilized), the permittee must submit an extension request form to the Division at least 10 days prior to the expiration date.

7. **Transfer of Permit**

When responsibility for stormwater discharges at a construction site changes from one individual to another, the permittee shall submit a completed Notice of Transfer and Acceptance of Terms of a Construction General Stormwater Discharge Permit Certification that is signed in accordance with Part I.E.1. of this permit. The Notice of Transfer form is available from the Division and includes:

A. COVERAGE UNDER THIS PERMIT (cont.)

- a) Permit certification number.
- b) Name, location, and county for the construction site for which the application is being submitted.
- c) The current permittee's name, address, telephone number and the status as Federal, State, private, public or other entity.
- d) The new permittee's name, address and telephone number and the status as Federal, State, private, public or other entity.
- e) Certification that the new permittee has reviewed the permit and SWMP and accepts responsibility, coverage and liability for the permit.
- f) Effective date of transfer.

If the new responsible party will not complete the transfer form, the permit may be inactivated if the permittee has no legal responsibility, through ownership or contract, for the construction activities at the site. In this case, the new operator would be required to obtain permit coverage separately.

8. **Permit Expiration Date**

Authorization to discharge under this general permit shall expire on June 30, 2007. The Division must evaluate and reissue this general permit at least once every five years and must recertify the applicant's authority to discharge under the general permit at such time. Any permittee desiring continued coverage under the general permit must reapply by March 31, 2007. The Division will determine if the applicant may continue to operate under the terms of the general permit. An individual permit will be required for any facility not reauthorized to discharge under the reissued general permit.

9. **Individual Permit Criteria**

Aside from the activity type, the Division may use other criteria in evaluating whether an individual permit is required instead of this general permit. This information may come from the application, SWMP, or additional information as requested by the Division, and includes, but is not limited to, the following:

- a) the quality of the receiving waters (i.e., the presence of downstream drinking water intakes or a high quality fishery, or for preservation of high quality water);
- b) the size of the construction site;
- c) evidence of noncompliance under a previous permit for the operation;
- d) the use of chemicals within the stormwater system.

In addition, an individual permit may be required when the Division has shown or has reason to suspect that the stormwater discharge may contribute to a violation of a water quality standard.

B. CONTENTS OF THE STORMWATER MANAGEMENT PLAN

The SWMP shall be prepared in accordance with good engineering, hydrologic and pollution control practices. (The SWMP need not be prepared by a registered engineer.) The main objective of the plan shall be to identify Best Management Practices (BMPs) which when implemented will meet the terms and conditions of this permit (see Part I.C., below).

The plan shall identify potential sources of pollution (including sediment) which may reasonably be expected to affect the quality of stormwater discharges associated with construction activity from the facility. In addition, the plan shall describe and ensure the implementation of BMPs which will be used to reduce the pollutants in stormwater discharges associated with construction activity. **Construction operations must implement the provisions of the SWMP required under this part as a condition of this permit.**

The SWMP shall include the following items, at a minimum:

B. CONTENTS OF THE STORMWATER MANAGEMENT PLAN (cont.)

1. **Site Description**

Each plan shall provide a description of the following:

- a) A description of the construction activity.
- b) The proposed sequence for major activities.
- c) Estimates of the total area of the site, and the area of the site that is expected to undergo clearing, excavation or grading.
- d) An estimate of the runoff coefficient of the site before and after construction activities are completed and any existing data describing the soil, soil erosion potential or the quality of any discharge from the site.
- e) A description of the existing vegetation at the site and an estimate of the percent vegetative ground cover.
- f) The location and description of any other potential pollution sources, such as vehicle fueling, storage of fertilizers or chemicals, etc.
- g) The location and description of any anticipated non-stormwater components of the discharge, such as springs and landscape irrigation return flow.
- h) The name of the receiving water(s) and the size, type and location of any outfall or, if the discharge is to a municipal separate storm sewer, the name of that system, the location of the storm sewer discharge, and the ultimate receiving water(s).

2. **Site Map**

Each plan shall provide a generalized site map or maps which indicate:

- construction site boundaries
- all areas of soil disturbance
- areas of cut and fill
- areas used for storage of building materials, soils or wastes
- location of any dedicated asphalt or concrete batch plants
- location of major erosion control facilities or structures
- springs, streams, wetlands and other surface waters
- boundaries of 100-year flood plains, if determined.

3. **BMPs for Stormwater Pollution Prevention**

The plan shall include a narrative description of appropriate controls and measures that will be implemented before and during construction activities at the facility.

The plan shall clearly describe the relationship between the phases of construction and the implementation and maintenance of controls and measures. For example, which controls will be implemented during each of the following stages of construction: clearing and grubbing necessary for perimeter controls, initiation of perimeter controls, remaining clearing and grubbing, road grading, storm drain installation, final grading, stabilization, and removal of control measures.

The description of controls shall address the following minimum components:

a) **Erosion and Sediment Controls.**

- 1) **Structural Practices.** A description of structural site management practices which will minimize erosion and sediment transport. Practices may include, but are not limited to: straw bales, silt fences, earth dikes, drainage swales, sediment traps, subsurface drains, pipe slope drains, inlet protection, outlet protection, gabions, and temporary or permanent sediment basins.
- 2) **Non-Structural Practices.** A description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where possible and that disturbed areas are stabilized. Non-structural practices may include, but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, and preservation of mature vegetation.

B. CONTENTS OF THE STORMWATER MANAGEMENT PLAN (cont.)

b) Materials Handling and Spill Prevention.

The SWMP shall identify any procedures or significant materials (see definitions at Part I.D.) handled at the site that could contribute pollutants to runoff. These could include sources such as: exposed storage of building materials, fertilizers or chemicals; waste piles; and equipment maintenance or fueling procedures. Areas or procedures where potential spills can occur shall have spill prevention and response procedures identified.

Measures to control stormwater pollution from dedicated concrete batch plants or dedicated asphalt batch plants covered by this certification, must be identified in the SWMP.

4. Final Stabilization and Longterm Stormwater Management

The plan shall include a description of the measures used to achieve final stabilization and measures to control pollutants in stormwater discharges that will occur **after** construction operations have been completed.

Final stabilization is reached when all soil disturbing activities at the site have been completed, and uniform vegetative cover has been established with a density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed.

For purposes of this permit, establishment of a vegetative cover capable of providing erosion control equivalent to pre-existing conditions at the site can be considered final stabilization. The permittee will be responsible for providing to the Division the documentation to make this comparison. The Division may, after consultation with the permittee and upon good cause, amend the final stabilization criteria for specific operations.

5. Other Controls

The plan shall include a description of other measures to control pollutants in stormwater discharges, including plans for waste disposal and limiting off-site soil tracking.

6. Inspection and Maintenance

The plan shall include a description of procedures to inspect and maintain in good and effective operating condition the vegetation, erosion and sediment control measures and other protective measures identified in the SWMP.

C. TERMS AND CONDITIONS

1. General Limitations

The following limitations shall apply to all discharges covered by this permit:

- a) Stormwater discharges from construction activities shall not cause or threaten to cause pollution, contamination or degradation of State waters.
- b) Concrete wash water shall not be discharged to state waters or to storm sewer systems.
- c) Bulk storage structures for petroleum products and other chemicals shall have adequate protection so as to contain all spills and prevent any spilled material from entering State waters.
- d) No chemicals are to be added to the discharge unless permission for the use of a specific chemical is granted by the Division. In granting the use of such chemicals, special conditions and monitoring may be addressed by separate letter.
- e) The Division reserves the right to require sampling and testing, on a case-by-case basis, in the event that there is reason to suspect that compliance with the SWMP is a problem, or to measure the effectiveness of the BMPs in removing pollutants in the effluent. Such monitoring may include Whole Effluent Toxicity testing.

C. TERMS AND CONDITIONS (cont.)

- f) All wastes composed of building materials must be removed from the site for disposal in licensed disposal facilities. No building material wastes or unused building materials shall be buried, dumped, or discharged at the site.
- g) Off-site vehicle tracking of sediments shall be minimized.
- h) All dischargers must comply with the lawful requirements of municipalities, counties, drainage districts and other local agencies regarding any discharges of stormwater to storm drain systems or other water courses under their jurisdiction, including applicable requirements in municipal stormwater management programs developed to comply with CDPS permits. Dischargers must comply with local stormwater management requirements, policies or guidelines including erosion and sediment control.

2. **Prohibition of Non-Stormwater Discharges**

- a) Except as provided in paragraph b, below, **all discharges covered by this permit shall be composed entirely of stormwater.** Discharges of material other than stormwater must be addressed in a separate CDPS permit issued for that discharge.
- b) Discharges from the following sources that are combined with stormwater discharges associated with construction activity may be authorized by this permit, provided that the non-stormwater component of the discharge is identified in the SWMP (see Part I.B.1.g of this permit):
 - fire fighting activities
 - landscape irrigation return flow
 - springs

3. **Releases in Excess of Reportable Quantities**

This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 or 40 CFR 302. Any discharge of hazardous material must be handled in accordance with the Division's Notification Requirements (see Part II.A.3 of the permit).

4. **Stormwater Management Plans**

Prior to commencement of construction, the stormwater management plan (SWMP) shall be implemented for the construction site covered by this permit.

- a) **Signatory Requirements:** The plan shall be signed in accordance with Part I.E.1., with one retained on site.
- b) **SWMP Review/Changes:** The permittee shall amend the plan whenever there is a significant change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the State, or if the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity.

5. **Inspections**

- a) **Active Sites -** For sites where construction has not been completed, the permittee shall make a thorough inspection of their stormwater management system at least every 14 days and after any precipitation or snowmelt event that causes surface erosion.
 - 1) The construction site perimeter, disturbed areas and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWMP shall be observed to ensure that they are operating correctly.

C. TERMS AND CONDITIONS (cont.)

- 2) Based on the results of the inspection, the description of potential pollutant sources, and the pollution prevention and control measures that are identified in the SWMP shall be revised and modified as appropriate as soon as practicable after such inspection. Modifications to control measures shall be implemented in a timely manner, but in no case more than 7 calendar days after the inspection.
 - 3) The operator shall keep a record of inspections. Any incidence of non-compliance, such as uncontrolled releases of mud or muddy water or measurable quantities of sediment found off the site, shall be recorded with a brief explanation as to the measures taken to prevent future violations, as well as any measure taken to clean up the sediment that has left the site. After adequate measures have been taken to correct any problems, or where a report does not identify any incidents of non-compliance, the report shall contain a signed certification indicating the site is in compliance. This record shall be made available to the Division upon request.
- b) **Completed Sites** - For sites where all construction activities are completed but final stabilization has not been achieved due to a vegetative cover that has been planted but has not become established, the permittee shall make a thorough inspection of their stormwater management system at least once every month. When site conditions make this schedule impractical, permittees may petition the Division to grant an alternate inspection schedule. These inspections must be conducted in accordance with paragraphs 1), 2), and 3) of Part I.C.5.a. above.
- c) **Winter Conditions** - Inspections, as described above in a) and b), will not be required at sites where snow cover exists over the entire site for an extended period, and melting conditions do not exist. This exemption is applicable *only* during the period where melting conditions do not exist. Regular inspections, as described above, are required at all other times.

6. **Reporting**

No regular reporting requirements are included in this permit; however, the Division reserves the right to request that a copy of the inspection reports be submitted.

7. **SWMP Submittal Upon Request**

Upon request, the permittee shall submit a copy of the SWMP to the Division, EPA or any local agency in charge of approving sediment and erosion plans, grading plans or stormwater management plans.

All SWMPs required under this permit are considered reports that shall be available to the public under Section 308(b) of the CWA. The owner or operator of a facility with stormwater discharges covered by this permit shall make plans available to members of the public upon request, unless the SWMP has been submitted to the Division. However, the permittee may claim any portion of a SWMP as confidential in accordance with 40 CFR Part 2.

D. ADDITIONAL DEFINITIONS

For the purposes of this permit:

1. **BAT and BCT:** (Best Available Technology and Best Conventional Technology) Technology based federal water quality requirements covered under 40 CFR subchapter N.
2. **Best management practices (BMPs):** schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, waste disposal, or drainage from material storage.
3. **Dedicated asphalt plants and concrete plants:** portable asphalt plants and concrete plants that are located on or adjacent to a construction site and that provide materials only to that specific construction site.

D. ADDITIONAL DEFINITIONS (cont.)

4. **Final stabilization:** when all soil disturbing activities at the site have been completed, and uniform vegetative cover has been established with a density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed. For purposes of this permit, establishment of a vegetative cover capable of providing erosion control equivalent to pre-existing conditions at the site will be considered final stabilization.
5. **Municipal storm sewer system:** a conveyance or system of conveyances (including: roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains), owned or operated by a State, city, town, county, district, or other public body (created by state law), having jurisdiction over disposal of sewage, industrial waste, stormwater, or other wastes; designed or used for collecting or conveying stormwater.
6. **Operator:** the individual who has day-to-day supervision and control of activities occurring at the construction site. This can be the owner, the developer, the general contractor or the agent of one of these parties, in some circumstances. It is anticipated that at different phases of a construction project, different types of parties may satisfy the definition of 'operator' and that the permit may be transferred as the roles change.
7. **Outfall:** a point source at the point where stormwater leaves the construction site and discharges to a receiving water or a stormwater collection system.
8. **Part of a larger common plan of development or sale:** a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.
9. **Point source:** any discernible, confined and discrete conveyance from which pollutants are or may be discharged. Point source discharges of stormwater result from structures which increase the imperviousness of the ground which acts to collect runoff, with runoff being conveyed along the resulting drainage or grading pattern.
10. **Process water:** any water which during manufacturing or processing, comes into contact with or results from the production of any raw material, intermediate product, finished product, by product or waste product. This definition includes mine drainage.
11. **Receiving Water:** any water of the State of Colorado into which stormwater related to construction activities discharges.
12. **Runoff coefficient:** the fraction of total rainfall that will appear as runoff.
13. **Significant Materials** include but are not limited to: raw materials; fuels; materials such as metallic products; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharge.
14. **Stormwater:** precipitation-induced surface runoff.
15. **Waters of the state of Colorado:** any and all surface waters that are contained in or flow in or through the state of Colorado. This definition includes all water courses, even if they are usually dry.

E. GENERAL REQUIREMENTS

1. **Signatory Requirements**

- a) All reports required for submittal shall be signed and certified for accuracy by the permittee in accordance with the following criteria:
 - 1) In the case of corporations, by a principal executive officer of at least the level of vice-president or his or her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the form originates;
 - 2) In the case of a partnership, by a general partner;

E. GENERAL REQUIREMENTS (cont.)

- 3) In the case of a sole proprietorship, by the proprietor;
 - 4) In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- b) **Changes to authorization.** If an authorization under paragraph a) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph a) of this section must be submitted to the Division, prior to or together with any reports, information, or applications to be signed by an authorized representative.
- c) **Certification.** Any person signing a document under paragraph a) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

2. **Retention of Records**

- a) The permittee shall retain copies of the SWMP and all reports required by this permit and records of all data used to complete the application to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized.
- b) The permittee shall retain a copy of the SWMP required by this permit at the construction site from the date of project initiation to the date of final stabilization, unless another location, specified by the permittee, is approved by the Division.

PART II

A. MANAGEMENT REQUIREMENTS

1. **Change in Discharge**

The permittee shall inform the Division (Permits Unit) in writing of any intent to significantly change activities from those indicated in the permit application (this does not include changes to the SWMP). Upon request, the permittee shall furnish the Division with such plans and specifications which the Division deems reasonably necessary to evaluate the effect on the discharge and receiving stream. The SWMP shall be updated within 30 days of the changes.

The permittee shall submit this notice to the Division within two weeks after making a determination to perform the type of activity referred to in the preceding paragraph.

Any discharge to the waters of the State from a point source other than specifically authorized by this permit is prohibited.

2. **Special Notifications - Definitions**

- a) **Spill:** An unintentional release of solid or liquid material which may cause pollution of state waters.
- b) **Upset:** An exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

A. MANAGEMENT REQUIREMENTS (cont.)

3. **Noncompliance Notification**

- a) If, for any reason, the permittee does not comply with or will be unable to comply with any permit limitations, standards or permit requirements specified in this permit, the permittee shall, at a minimum, provide the Water Quality Control Division and EPA with the following information:
- 1) A description of the discharge and cause of noncompliance;
 - 2) The period of noncompliance, including exact dates and times and/or the anticipated time when the discharge will return to compliance; and
 - 3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.
- b) The permittee shall report the following instances of noncompliance orally within twenty-four (24) hours from the time the permittee becomes aware of the noncompliance, and shall mail to the Division a written report within five (5) days after becoming aware of the noncompliance (unless otherwise specified by the Division):
- 1) Any instance of noncompliance which may endanger health or the environment;
 - 2) Any spill or discharge of oil or other substance which may cause pollution of the waters of the state.
- c) The permittee shall report all other instances of non-compliance to the Division within 30 days. The reports shall contain the information listed in sub-paragraph (a) of this section.

4. **Submission of Incorrect or Incomplete Information**

Where the permittee failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or report to the Division, the permittee shall promptly submit the relevant application information which was not submitted or any additional information needed to correct any erroneous information previously submitted.

5. **Bypass**

The bypass of treatment facilities is generally prohibited.

6. **Upsets**

a) **Effect of an Upset**

An upset constitutes an affirmative defense to an action brought for noncompliance with permit limitations and requirements if the requirements of paragraph b of this section are met. (No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.)

b) **Conditions Necessary for a Demonstration of Upset**

A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed contemporaneous operating logs, or other relevant evidence that:

- 1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;
- 2) The permitted facility was at the time being properly operated;
- 3) The permittee submitted notice of the upset as required in Part II.A.3. of this permit (24-hour notice); and

A. MANAGEMENT REQUIREMENTS (cont.)

4) The permittee complied with any remedial measures required under Section 122.7(d) of the federal regulations.

c) Burden of Proof

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

7. Removed Substances

Solids, sludges, or other pollutants removed in the course of treatment or control of wastewaters shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State.

8. Minimization of Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to waters of the State resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

9. Reduction, Loss, or Failure of Treatment Facility

The permittee has the duty to halt or reduce any activity if necessary to maintain compliance with the permit requirements. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production, or all discharges, or both until the facility is restored or an alternative method of treatment is provided.

It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

10. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

B. RESPONSIBILITIES

1. Inspections and Right to Entry

The permittee shall allow the Director of the State Water Quality Control Division, the EPA Regional Administrator, and/or their authorized representative, upon the presentation of credentials:

- a) To enter upon the permittee's premises where a regulated facility or activity is located or in which any records are required to be kept under the terms and conditions of this permit;
- b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit and to inspect any monitoring equipment or monitoring method required in the permit; and
- c) To enter upon the permittee's premises to investigate, within reason, any actual, suspected, or potential source of water pollution, or any violation of the Colorado Water Quality Control Act. The investigation may include, but is not limited to, the following: sampling of any discharge and/or process waters, the taking of photographs, interviewing permittee staff on alleged violations, and access to any and all facilities or areas within the permittee's premises that may have any effect on the discharge, permit, or alleged violation.

B. RESPONSIBILITIES (cont.)

2. **Duty to Provide Information**

The permittee shall furnish to the Division, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or inactivating coverage under this permit, or to determine compliance with this permit. The permittee shall also furnish to the Division, upon request, copies of records required to be kept by this permit.

3. **Transfer of Ownership or Control**

Certification under this permit may be transferred to a new permittee if:

- a) The current permittee notifies the Division in writing when the transfer is desired; and
- b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and
- c) The current permittee has met all fee requirements of the State Discharge Permit System Regulations, Section 61.15.

4. **Modification, Suspension, or Revocation of Permit By Division**

All permit modification, inactivation or revocation and reissuance actions shall be subject to the requirements of the State Discharge Permit System Regulations, Sections 61.5(2), 61.5(3), 61.7 and 61.15, 5 C.C.R. 1002-61, except for minor modifications.

- a) This permit, and certification under this permit, may be modified, suspended, or revoked in whole or in part during its term for reasons determined by the Division including, but not limited to, the following:
 - 1) Violation of any terms or conditions of the permit;
 - 2) Obtaining a permit by misrepresentation or failing to disclose any fact which is material to the granting or denial of a permit or to the establishment of terms or conditions of the permit;
 - 3) Materially false or inaccurate statements or information in the application for the permit;
 - 4) Promulgation of toxic effluent standards or prohibitions (including any schedule of compliance specified in such effluent standard or prohibition) which are established under Section 307 of the Clean Water Act, where such a toxic pollutant is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.
- b) This permit, or certification under this permit, may be modified in whole or in part due to a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge, such as:
 - 1) Promulgation of Water Quality Standards applicable to waters affected by the permitted discharge; or
 - 2) Effluent limitations or other requirements applicable pursuant to the State Act or federal requirements; or
 - 3) Control regulations promulgated; or
 - 4) Data submitted pursuant to Part I.B or Part I.C.1 indicates a potential for violation of adopted Water Quality Standards or stream classifications.

B. RESPONSIBILITIES (cont.)

- c) This permit, or certification under this permit, may be modified in whole or in part to include new effluent limitations and other appropriate conditions where data submitted pursuant to Part I indicates that such effluent limitations and conditions are necessary to ensure compliance with applicable water quality standards and protection of classified uses.
- d) At the request of the permittee, the Division may modify or inactivate certification under this permit if the following conditions are met:
 - 1) In the case of inactivation, the permittee notifies the Division of its intent to inactivate the certification, and certifies that the site has been finally stabilized;
 - 2) In the case of inactivation, the permittee has ceased any and all discharges to state waters and demonstrates to the Division there is no probability of further uncontrolled discharge(s) which may affect waters of the State.
 - 3) The Division finds that the permittee has shown reasonable grounds consistent with the Federal and State statutes and regulations for such modification, amendment or inactivation;
 - 4) Fee requirements of Section 61.15 of State Discharge Permit System Regulations have been met; and
 - 5) Requirements of public notice have been met.

For small construction sites covered by a Qualifying Local Program, coverage under this permit is automatically terminated when a site has been finally stabilized.

5. **Permit Violations**

Failure to comply with any terms and/or conditions of this permit shall be a violation of this permit.

Dischargers of stormwater associated with industrial activity, as defined in the EPA Stormwater Regulation (40 CFR 122.26(b)(14)), which do not obtain coverage under this or other Colorado general permits, or under an individual CDPS permit regulating industrial stormwater, will be in violation of the federal Clean Water Act and the Colorado Water Quality Control Act, 25-8-101. Failure to comply with CDPS permit requirements will also constitute a violation. Civil penalties for such violations may be up to \$10,000 per day, and criminal pollution of state waters is punishable by fines of up to \$25,000 per day.

6. **Legal Responsibilities**

The issuance of this permit does not convey any property or water rights in either real or personal property, or stream flows, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 (Oil and Hazardous Substance Liability) of the Clean Water Act.

7. **Severability**

The provisions of this permit are severable. If any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the application of the remainder of this permit shall not be affected.

B. RESPONSIBILITIES (cont.)

8. **Renewal Application**

If the permittee desires to continue to discharge, a permit renewal application shall be submitted at least ninety (90) days before this permit expires. If the permittee anticipates that there will be no discharge after the expiration date of this permit, the Division should be promptly notified so that it can inactivate the certification in accordance with Part II.B.4.d.

9. **Confidentiality**

Except for data determined to be confidential under Section 308 of the Federal Clean Water Act and Regulations for the State Discharge Permit System 61.5(4), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division. The permittee must state what is confidential at the time of submittal.

Any information relating to any secret process, method of manufacture or production, or sales or marketing data which has been declared confidential by the permittee, and which may be acquired, ascertained, or discovered, whether in any sampling investigation, emergency investigation, or otherwise, shall not be publicly disclosed by any member, officer, or employee of the Commission or the Division, but shall be kept confidential. Any person seeking to invoke the protection of this section shall bear the burden of proving its applicability. This section shall never be interpreted as preventing full disclosure of effluent data.

10. **Fees**

The permittee is required to submit payment of an annual fee as set forth in the Water Quality Control Act. Failure to submit the required fee when due and payable is a violation of the permit and will result in enforcement action pursuant to Section 25-8-601 et. seq., C.R.S. 1973 as amended.

11. **Requiring an Individual CDPS Permit**

The Director may require any owner or operator covered under this permit to apply for and obtain an individual CDPS permit if:

- a) The discharger is not in compliance with the conditions of this general permit;
- b) Conditions or standards have changed so that the discharge no longer qualifies for a general permit; or
- c) Data become available which indicate water quality standards may be violated.

The owner or operator must be notified in writing that an application for an individual CDPS permit is required. When an individual CDPS permit is issued to an owner or operator otherwise covered under this General Permit, the applicability of the general permit to that owner or operator is automatically inactivated upon the effective date of the individual CDPS permit.

CONSTRUCTION GUIDANCE DOCUMENT:

PREPARING A STORMWATER MANAGEMENT PLAN

A. INTRODUCTION

Stormwater Management Plans (SWMPs) are a required item under the Construction Stormwater Discharge Permit. This document is designed to help you develop a SWMP for your construction project. It explains what each of the SWMP requirements means, and gives some options for you to consider in developing Best Management Practices (BMPs) that are best suited to your site **during construction**.

This guidance document primarily addresses the SWMP requirements in the construction general permit. Other requirements and limitations, such as chemical use, sampling, annual reporting, etc., are detailed in the permit. Also note that the SWMP and the stormwater permit only cover discharges of **stormwater**.

Construction dewatering is a separate issue, and must be covered by the Division's general permit for construction dewatering (regardless of the size of the construction project). Pumping or draining groundwater that has infiltrated into an excavation requires a construction dewatering permit. Stormwater that mixes with groundwater in an excavation is subject to the controls in the construction dewatering permit.

This guidance document assumes that the SWMP will be completed and implemented at the time the project breaks ground, and will be revised if necessary as construction proceeds.

→ **Stormwater Management Plan (SWMP) Goal: to improve water quality by reducing pollutants in stormwater discharges.**

B. GENERAL GUIDANCE

Construction activities produce many different kinds of pollutants which may cause stormwater contamination problems. The main pollutant of concern at construction sites is sediment. Grading activities remove grass, rocks, pavement and other protective ground covers, resulting in the exposure of underlying soil to the elements. The soil is then easily picked up by wind and/or washed away by rain or snow melt. When the water carrying these particles reaches a lake or stream and slows down, the particles fall out and build up layers of sediment in the stream beds. This chokes the river channel and covers the areas where fish spawn and plants grow. These particles also cloud waters, causing aquatic respiration problems, and can kill fish and plants growing in the river.

In addition, the construction of buildings and roads may require the use of toxic or hazardous materials such as petroleum products, fertilizers, pesticides and herbicides, and building materials such as asphalt, sealants and concrete, which may pollute stormwater. These materials can be harmful to humans, plants and aquatic life.

BMPs: Best Management Practices (BMPs) can describe a wide range of management procedures, schedules of activities, prohibitions on practices, and other management practices. BMPs also include operating procedures, treatment requirements and practices to control site runoff, drainage from materials storage, spills or leaks, etc.

Nonstructural BMPs, such as preventive maintenance or preserving natural vegetation, are mainly definitions of operational or managerial techniques. In addition, there are a multitude of structural BMPs which should be considered, depending upon the construction activity. Structural BMPs include physical processes ranging from diversion structures to silt fences to retention ponds.

Most of the BMPs referenced here are widely used in the construction industry. They generally involve a simple and low cost approach, and can be very effective when properly installed and maintained.

The stormwater permit requires the use of self-designed SWMPs. These plans are based on the use of BMPs. For construction sites, there are several types of BMPs: those that prevent erosion, those which prevent pollutants from the construction materials from mixing with stormwater, and those which trap pollutants before they can be discharged.

Sediment controls typically include:

- minimizing the amount of disturbed soil
- preventing runoff from off-site areas from flowing across disturbed areas
- slowing down the runoff flowing across the site
- removing sediment from on-site runoff before it leaves the site

Implementation: While erosion and sediment controls are not new ideas in construction, the timing of installation may now differ. The SWMP focus is primarily on controls used **during** earth disturbing activities. This means that hay bales, silt fences, etc. should be in place **before** grading begins, not after.

Common Sense Approach: Your SWMP is intended to be a usable document, not a paper exercise. Therefore, do not include measures which may sound good, but are unreasonable or not feasible for your site. Failure to implement your SWMP, even if the BMPs listed do not make sense, puts you in automatic violation of your permit. For example, a blanket statement that runoff from **all** disturbed areas will be controlled by silt fences, even if the slope or channels are too steep/narrow for this particular BMP, would be unreasonable.

On the other hand, if a particular BMP is listed in the SWMP, but then later turns out to be impractical or ineffective, the SWMP should be amended to reflect the changes/improvements made.

SWMP Items, Format: When preparing your plan, make sure to **address each item**. If it is not applicable to your site, briefly explain why. A simple "Not Applicable" is not enough.

In addition, your SWMP should follow the same format as the SWMP requirements listed in Part C, below. That is, even if you are using an existing document (such as plans and specs) which includes the SWMP items somewhere within it, you **must** also include a cover sheet that cross-references each of the SWMP items, and indicates where it can be found in your existing document.

Existing Controls: Note that the SWMP should include any existing stormwater controls at your site, not just new or proposed ones. It can also include any erosion, sediment or drainage controls which are required by other regulations, such as local erosion and sediment control ordinances.

SWMP Availability: A copy of the SWMP **must be kept on site**, for ready availability to the operator, and so that Division personnel can review it during an inspection.

SWMP Administrator: It is helpful to have a designated SWMP Administrator, so that dealings with the Division, and changes to the plan, can be coordinated. The SWMP Administrator becomes the contact for all SWMP-related issues and is the person responsible for its accuracy, completeness, and implementation. Therefore, the SWMP Administrator should be a person in an authoritative position.

Additional Items: In this document, the text in **bold italics** is quoted directly from the Construction general permit. The text in standard typeface is provided as guidance in the preparation of your SWMP. The references (Part I.B.1.d, for example) correspond to the location of the item in the Construction general permit.

C. INDIVIDUAL SWMP ITEMS

I.B. STORMWATER MANAGEMENT PLAN - CONTENTS AND REQUIREMENTS

The SWMP shall be prepared in accordance with good engineering, hydrologic and pollution control practices. (The SWMP need not be prepared by a registered engineer.) The main objective of the plan shall be to identify Best Management Practices (BMPs) which when implemented will meet the terms and conditions of the general permit.

The plan shall identify potential sources of pollution (including sediment) which may reasonably be expected to affect the quality of stormwater discharges associated with construction activity from the facility. In addition, the plan shall describe and ensure the implementation of BMPs which will be used to reduce the pollutants in stormwater discharges associated with construction activity. Construction operations must implement the provisions of the SWMP required under this part as a condition of this permit.

Facilities must implement the provisions of the SWMP required under this part as a condition of their permit. The Division reserves the right to review those plans, and to require additional measures to prevent and control pollution as needed.

The SWMP shall include the following items, at a minimum:

I.B.1. Site Description

Each plan shall provide a description of the following:

- a) A description of the construction activity.*
- b) The proposed sequence for major activities.*
- c) Estimates of the total area of the site, and the area of the site that is expected to undergo clearing, excavation or grading.*
- d) An estimate of the runoff coefficient of the site before and after construction activities are completed and any existing data describing the soil, soil erosion potential or the quality of any discharge from the site.*
- e) A description of the existing vegetation at the site and an estimate of the percent vegetative ground cover.*
- f) The location and description of any other potential pollution sources, such as vehicle fueling, storage of fertilizers or chemicals, etc.*
- g) The location and description of any anticipated non-stormwater components of the discharge, such as springs and landscape irrigation return flow.*
- h) The name of the receiving water(s) and the size, type and location of any outfall or, if the discharge is to a municipal separate storm sewer, the name of that system, the location of the storm sewer discharge, and the ultimate receiving water(s).*

This part describes the overall scope and physical characteristics of the project, as follows:

- a) A description of the industrial activities at and final disposition of the site; for example, a summary of the grading activities, installation of utilities, paving, excavation, landscaping, etc.
- b) Describe the sequence of events involved in the construction project, such as grading, excavation, etc.
- c) This information, which is also required in the application, is useful in determining the extent of control measures needed.
- d) The runoff coefficient ("C" value) is the percentage of precipitation volume which will not be absorbed by the surface. For example, for a 1" rainfall onto a paved surface, 85% of the water may run off. Tables with this information are available from the U.S. Soil Conservation Service or hydrology textbooks. Typical "C" values as provided in EPA's guidance manual are shown in Appendix A.
- e) It is necessary to include the percentage of existing vegetative ground cover in order to determine, after construction, when the site has been finally stabilized. See Part I.B.4 of the permit (also page 7 of this document), for final stabilization criteria. Final stabilization of the site is necessary before coverage under the permit can be terminated.
- f) Describe the activities which will take place at the site which may have an impact on stormwater. These may include such things as the following: equipment or vehicle washing; fertilizers, chemicals, or other materials storage; vehicle maintenance or fueling; waste incineration, treatment, storage or disposal; haul roads; off-site vehicle tracking; loading/unloading areas, etc.
- g) Will there be any discharge from the project site, during construction, which is not from stormwater? If so, describe the source and how it will be handled.

- h) This information is also required in the application. For example, "runoff from the east side of the site will go to a roadside ditch which discharges to Jimmy Smith Gulch; runoff from the west side of the site will go to an unnamed tributary to Westerly Creek."

1.B.2. Site Map

Each plan shall provide a generalized site map or maps which indicate:

- construction site boundaries*
- all areas of soil disturbance*
- areas of cut and fill*
- areas used for storage of building materials, soils or wastes*
- location of any dedicated asphalt or concrete batch plants*
- location of major erosion control facilities or structures*
- springs, streams, wetlands and other surface waters*
- boundaries of 100-year flood plains, if determined*

A site map must be developed for each construction project. The site map must show those items listed above. It does not need to be drawn to scale, but it should be legible and easy to read. Two examples of a site map are shown in Appendix B.

The construction plans may be used, if they are amended to include all required information. Local municipalities may also have maps suitable as bases to begin mapping procedures. If no other suitable base maps are available, one must be developed. Regardless of the source of the base map, the site map needs to be of suitable scale to show the construction portion of the site and the features within it.

In addition to the items specifically mentioned above, it is useful to also indicate on the map the following:

- **Drainage basins for each outfall:**
Field inspection can usually accomplish this task with acceptable accuracy. Look for high areas such as crests of hills, parking lots, roads, etc. which would form the division between drainages. Gullies and swales are indicators of stormwater flow direction. Obviously, if runoff is observed during a storm, most uncertainties can be eliminated. The drainage areas shown should include the portions of the site where the activities described in I.B.1.f (above) occur, as well as those portions (such as upslope areas) contributing stormwater that mixes with runoff from the construction area.
- **Surface water bodies (including dry water courses):**
Mark on the site map any surface water bodies, including lakes, streams, springs, wetlands, detention ponds, roadside or irrigation ditches, etc. These do not necessarily need to be within the construction portion of the site, but may be adjacent to it or impacted by stormwater runoff. Also include any existing storm sewers.
- **Existing and planned structural stormwater pollution control measures:**
Show on the map the location of any structural stormwater pollution control measures, such as detention ponds, diversion ditches, covered material storage areas, fuel farm secondary containment structures, etc.
- **Areas where industrial activities take place, as identified in Part I.B.1.a, above.**
- **Paved and unpaved areas where the runoff coefficient may be different.**

In addition, other features could be included to make the SWMP a more comprehensive and usable plan. For example, a later section of the SWMP includes requirements for material handling and spill prevention procedures, which could include a site map showing where materials are stored. By including materials handling, loading and storage areas on the site map, all information would be in one place on a single base map.

1.B.3. BMPs for Stormwater Pollution Prevention

The plan shall include a narrative description of appropriate controls and measures that will be implemented before and during construction activities at the facility. The plan shall clearly describe the relationship between the phases of construction and the implementation and maintenance of controls and measures. For example, which controls will be implemented during

each of the following stages of construction: clearing and grubbing necessary for perimeter controls, initiation of perimeter controls, remaining clearing and grubbing, road grading, storm drain installation, final grading, stabilization, and removal of control measures.

The description of controls shall address the following minimum components:

a) Erosion and Sediment Controls

- 1) *Structural Practices. A description of structural site management practices which will minimize erosion and sediment transport. Such practices may include: straw bales, silt fences, earth dikes, drainage swales, sediment traps, subsurface drains, pipe slope drains, inlet protection, outlet protection, gabions, and temporary or permanent sediment basins.*
- 2) *Non-Structural Practices. A description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where possible and that disturbed areas are stabilized. Non-structural practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, and preservation of mature vegetation.*

Best Management Practices (BMPs)

This is the key part of the SWMP - a narrative description of the appropriate stormwater management practices for the permittee's site.

The first thing to do is assess the potential of various sources at the site to contribute pollutants to stormwater discharges associated with industrial activity. In addition to the actual construction and ground disturbance activities, evaluate the following types of activities for the reasonable potential for contributing pollutants to runoff: loading and unloading operations; outdoor storage activities; vehicle and equipment maintenance and fueling; significant dust or particulate generating processes; and on-site waste disposal practices. Some of the factors to consider include the quantity of chemicals used or discharged, site conditions (slope, soil permeability, etc.), and the likelihood of contact with stormwater.

→ **In each case where stormwater pollution potential exists, appropriate preventive measures (that is, BMPs) must be taken and documented.**

When selecting BMPs, the most important ones to evaluate first are those which limit the source of the pollutant. It is much more efficient, from both a cost and environmental standpoint, to prevent the pollution in the first place than to clean up contaminated stormwater. For example, mulching disturbed ground to reduce erosion, in most cases, is easier and more effective than trying to capture and treat the sediment-laden runoff before it reaches state waters. As another example, a BMP requiring that any vehicle maintenance that involves fluid exchange must take place under a roof, results in the removal of a pollutant source (i.e., oil/hydraulic fluids) from possible contact with stormwater.

Once source reduction BMPs have been evaluated, then more costly options, such as mitigation of impacts, or stormwater treatment through detention storage, should be considered if necessary. The BMPs selected are up to the judgment of the individual permittee, based on the conditions at the site. However, it is important to keep in mind that a fully implemented SWMP will constitute compliance with Best Available Technology (BAT) and Best Conventional Technology (BCT), as mandated under the Federal Clean Water Act. Basically, this means that, in order to comply with your permit, the appropriate measures must be taken in keeping with the pollutant(s) involved and the risk potential at the facility.

Based on an assessment of the potential of various sources at the site to contribute pollutants to stormwater, the plan should describe the control measures that are reasonable and appropriate. Estimated dates of compliance for the chosen BMPs to be implemented and maintained are also needed. Any existing controls should also be discussed. The plan shall identify both structural and non-structural control measures that are necessary to limit erosion.

A list of common BMPs, for construction and other industrial activities, is provided in Appendix C. There are many other BMPs available as well. A list of available documents to help you in selecting BMPs for your site is included in Appendix D.

1.B.3.b) Materials Handling and Spill Prevention

The SWMP shall identify any procedures or significant materials handled at the site that could contribute pollutants to runoff. These could include: exposed storage of building materials, fertilizers or chemicals; waste piles; and equipment maintenance or fueling procedures. Areas or procedures where potential spills can occur shall have spill prevention and response procedures identified.

Measures to control stormwater pollution from dedicated concrete batch plants or dedicated asphalt batch plants covered by this certification, must be identified in the SWMP.

This area will involve all industrial activities at the site (except construction practices covered under the erosion and sediment controls) which have the potential to contaminate stormwater. This includes routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc. It is a good idea to discuss each activity separately. Judge the potential for the material to be found in stormwater using, at a minimum, the following criteria:

- the intensity of the activity (i.e., does it occur every day, or just once a month, etc.) Can it be scheduled to occur only during dry weather?
- the size of the area over which the activity takes place, the surface type (pavement, gravel, vegetation, etc.), and other physical characteristics such as slope
- ability of product storage and loading/unloading facilities (fuel tanks, drum storage, etc.) to contain spills and leaks
- the concentration and toxicity of materials which can be expected to be found in the site's stormwater runoff
- the contamination of storage facilities with the substances being stored (e.g., used oil drums or tanks coated with spilled oil)

(Obviously, if no chemicals, fuels or other materials are stored or handled on site, the part of the SWMP dealing with potential spills is not necessary. The SWMP should then include a statement to this effect.)

Where materials can impact stormwater runoff, existing and planned practices that reduce the potential for contamination shall be described. For example, materials should be stored and handled in covered areas to prevent contact with stormwater, and chemicals should be stored within berms or secondary containment devices to prevent leaks and spills from entering stormwater runoff.

In general, spill prevention and response procedures should include the following:

- notification procedures to be used in the event of an accident. At the very least, the SWMP Administrator should be notified. Depending on the nature of the spill and the material involved, the Colorado Dept. of Health, downstream water users, or other agencies may also need to be notified.
- instructions for clean-up procedures
- provisions for absorbents to be made available for use in fuel areas, and for containers to be available for used absorbents.
- prohibition on the washing of concrete trucks and other equipment into the storm drainage system

1.B.4. Final Stabilization and Longterm Stormwater Management

A description of the measures used to achieve final stabilization and measures to control pollutants in stormwater discharges that will occur after construction operations have been completed.

Final stabilization is reached when all soil disturbing activities at the site have been completed, and uniform vegetative cover has been established with a density of at least 70 percent of pre-disturbance levels or equivalent

permanent, physical erosion reduction methods has been employed. The Division may, after consultation with the permittee and upon good cause, amend the final stabilization criteria for specific operations.

Typically, the stormwater discharge associated with construction activity is eliminated when the site is finally stabilized. As soon as practicable after construction activities have been completed in a disturbed area, permanent stabilization should be started to prevent further erosion of soil from that area. All disturbed areas (except those portions covered by pavement or a structure) should be finally stabilized once all construction activities are completed.

Stormwater management controls to prevent or control pollution of stormwater after construction is completed should be addressed here. They typically include retention or detention ponds, infiltration measures, vegetative swales, and natural depressions.

New developments, buildings, etc., will incorporate elements of stormwater quality control into their design. The SWMP must be prepared consistent with these structural and nonstructural controls. Many of the temporary controls used for sediment control can be modified into permanent structural controls. Where possible, permanent stormwater quality controls can be constructed at the initial stages of construction, or modified at the end of construction. This can increase the efficiency of the controls by using them during both the building and operational phases of the project.

I.B.5. Other Controls

A description of other measures to control pollutants in stormwater discharges, including plans for waste disposal and limiting off site soil tracking.

See the discussion in Appendix C.

I.B.6. Inspection and Maintenance

A description of procedures to inspect and maintain in good and effective operating condition the vegetation, erosion and sediment control measures and other protective measures identified in the SWMP.

The permit requires that a thorough inspection of the stormwater management system be performed at least every 14 days, and after any precipitation or snowmelt event that causes surface erosion. Part I.C.6 of the permit outlines the inspection requirements.

Additionally, this part of the SWMP should also include maintenance of the BMPs which are discussed in Part 4.f. Set up a schedule appropriate to the activity and the BMP. Preventive maintenance should be coupled with periodic inspections. If there are already inspections/preventive maintenance programs or practices or equipment in place, include them here.

Preventive maintenance involves the regular inspection and testing of site equipment and operational systems. These inspections should uncover conditions, such as cracks or slow leaks, which could cause breakdowns or failures that result in discharge of pollutants to storm sewers and surface waters. The program should prevent breakdowns and failures by adjustment, repair or replacement of equipment. An effective preventive maintenance program should include the following elements, at a minimum:

- identification of equipment, sediment and erosion controls, and site areas that should be inspected
- appropriate and timely maintenance, repair or replacement of control measures and equipment
- maintenance of complete records on inspections, equipment, and systems

In order to adequately define a preventive maintenance program, review the information gathered so far in terms of materials handling, risk assessment, etc., to determine where equipment failure could result in spills or leaks of contaminants. This section will be highly specific to each site.

An effective and efficient recordkeeping system is an important item of the SWMP because it will serve many functions. Perhaps the easiest way of setting up a good recordkeeping system is to create a SWMP Daily Log in which all items can be entered. Entries into the log could include anything relating to the SWMP, stormwater contamination, contacts with suppliers, etc.

Keeping accurate and complete records serves several functions. First, keeping records of spills, leaks, SWMP implementation, etc. is a requirement of the general permit; therefore, enforcement action, including fines, could result if records are not adequate. Second, by keeping accurate and detailed records, you will have documentation of events which could prove invaluable should complications arise concerning the permit, lawsuits, etc. And third, it will make compiling your annual report to the Division much easier.

The following list includes the types of activities and information you may want to include in a SWMP Log Book:

- records of spills, leaks, or overflows, including time and date, weather conditions, etc.
- implementation of specific items in the SWMP
- training events (given or attended)
- events involving materials handling and storage
- contacts with regulatory agencies and personnel
- notes of employee activities, contact, notifications, etc.
- maintenance and repair of stormwater management controls
- preventive maintenance activities
- inspection activities

Additional information such as dated photographs, field notebooks, drawings and maps, etc. can also be included where appropriate.

D. REFERENCES

"A Guide to Industrial Stormwater BMPs," William Ruzzo, 1992.

California Stormwater Best Management Practice Handbook - Construction Activity, as prepared for CA Stormwater Quality Task Force, by CDM, 3/93.

Compliance Manual for NPDES Stormwater Permits for Colorado Airports, as prepared for the Colorado Division of Aeronautics, by Resource Consultants & Engineers, Inc., 11/92.

Stormwater Management During Construction, Training Course Student Workbook, Red Rocks Community College, 1993.

Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA Publication No. 832-R-92-005, 9/92.

APPENDIX A

Sample Maps, not available on electronic version.



APPENDIX B

Table 2.1 Typical "C" Values (ASCE 1960)

Description of Area	Runoff Coefficients
Business	
Downtown areas	0.70 – 0.95
Neighborhood areas	0.50 – 0.70
Residential	
Single-family areas	0.30 – 0.50
Multiunits, detached	0.40 – 0.60
Multiunits, attached	0.60 – 0.75
Residential (suburban)	0.25 – 0.40
Apartment dwelling areas	0.50 – 0.70
Industrial	
Light areas	0.50 – 0.80
Heavy areas	0.60 – 0.90
Parks, cemeteries	0.10 – 0.25
Playgrounds	0.20 – 0.35
Railroad yard areas	0.20 – 0.40
Unimproved areas	0.10 – 0.30
Streets	
Asphalt	0.70 – 0.95
Concrete	0.80 – 0.95
Brick	0.70 – 0.85
Drives & walks	0.75 – 0.85
Roofs	0.75 – 0.95
Lawns – coarse textured soil (greater than 85% sand)	
Slope: Flat, 2%	0.05 – 0.10
Average, 2-7%	0.10 – 0.15
Steep, 7%	0.15 – 0.20
Lawns – fine textured soil (greater than 40% clay)	
Slope: Flat, 2%	0.13 – 0.17
Average, 2-7%	0.18 – 0.22
Steep, 7%	0.25 – 0.35

APPENDIX C

BEST MANAGEMENT PRACTICES (BMPs)

Below is a list of typical BMPs for construction sites:

- Sediment and erosion controls
 - temporary or permanent seeding
 - temporary or permanent swales
 - sodding
 - preserve natural vegetation
 - minimize bare soil exposure
 - slope protection (surface roughening, gradient terraces)
 - divert flow around exposed areas (interceptor dikes, swales)
 - mulching, matting, geotextile/netting and chemical soil stabilization
 - reduce surface runoff velocity (channel slope, check dams)
 - stream bank protection
 - pipe slope drains
 - sub-surface drains
 - sewer outlet protection
- Sediment removal from runoff
 - filter (silt) fence
 - straw bale barrier
 - brush barrier
 - gravel/stone filter berm
 - storm drain inlet protection
 - temporary or permanent sediment trap/basin
- Traditional stormwater management practices
 - vegetated swale
 - natural depressions
 - stormwater detention or retention pond
 - constructed wetlands
 - snow removal/storage activities
 - catch basin design
 - oil/water/grit separators
 - buffer zones
 - infiltration (trenches, swales, basins, porous pavement)
 - level spreaders
- Segregating or diverting flow around activity
 - channels (grass, concrete, rock lined)
 - dikes and berms
 - surface grading and paving
- Good housekeeping
 - routine trash/debris removal
 - scheduled maintenance
 - cleaning storm drains, grates and inlets
 - signs and labels
 - security system
- Visual inspec
 - regular inspections and testing
 - identify illegal dumping activities
- Preventive maintenance
 - non-scheduled maintenance
- Spill prevention
 - material handling procedures

APPENDIX C (cont.)

- material storage practices
- loading/unloading by air pressure or vacuum
- preventive monitoring of materials
- vehicle positioning for materials transfer
- Employee training
- Recordkeeping and Reporting
 - inspections
 - maintenance
 - inventory of materials
- Chemical substitution
- Dust control
 - irrigation
 - minimize denuded areas
 - wind breaks
 - tillage
- Covering activity - roofs, tarps
- Containment
 - berming, curbing or diking around activity
- Recycling vehicle/equipment washwater
- Spill response
 - identify procedures and equipment
 - manual clean-up (sweeping, shoveling, etc.)
 - removal of contaminated materials by excavation
 - removal of contaminated materials by vacuum or pump systems
 - sorbents
 - gelling agents
- Drip pans
- Collection basins
- Sumps
- Vehicle/equipment washing

As an example of the level of detail that any of the above categories can generate, the following focuses on the Good Housekeeping aspect of BMPs:

Good Housekeeping/Operation and Maintenance Techniques:

Good housekeeping is an important pollution control measure. It requires the maintenance of a clean, orderly site. This part of the SWMP should address cleaning and maintenance schedules, trash disposal and collection practices, grounds maintenance, etc."

Most construction operations already adhere to some form of "Good Housekeeping" routine, whether they realize it or not. Permittees must now put these practices down in writing and ensure that they are adequate to meet the needs of the site. To prepare this section, begin by summarizing any activities which already take place, such as trash removal, oil recycling, etc.

Most good housekeeping practices involve simple common sense. The basic pollution prevention concept is that a clean site will have less potential for stormwater contamination. The following checklist can serve as a starting point for the assessment of existing or needed good housekeeping practices. Since each project is different, include any additional items pertinent to your site.

- is there evidence of drips or leaks from equipment or machinery at the site?
- is garbage/trash/construction debris removed regularly?

APPENDIX C (cont.)

- are proper clean-up procedures used for spilled materials?
- are there abandoned machinery, parts, etc. around the site?
- is every effort made to order only materials that are required, thus minimizing the amounts of materials stored?
- what other practices routinely performed constitute good housekeeping?
- are signs posted at appropriate locations indicating where to dispose of waste oils and refuse?
- are locations where spill clean-up equipment and materials are stored appropriately marked?
- are fertilizers and other chemicals applied to landscaped areas judiciously applied, using only that quantity required?
- are portable toilet facilities properly maintained?

The following good housekeeping BMPs are recommended methods for the storage of materials, including lubricants, hydraulic fluids, grounds revegetation materials (fertilizers, pesticides, herbicides, etc.), refuse, etc.:

Material Storage and Inventory:

- the centralized used oil tank shall be emptied frequently enough to ensure it never reaches capacity (e.g., at least once per month). This area will be kept free of trash and spilled oil.
- all refuse dumpsters and receptacles shall be equipped with functional lids to prevent precipitation from entering.
- storage containers, drums, and bags shall be stored away from direct traffic routes to prevent accidental spills.
- empty drums shall be covered to prevent collection of precipitation.
- containers shall be stored on pallets or similar devices to prevent corrosion of the containers, which can result when containers come in contact with moisture on the ground.
- all chemical substances present at the site shall be identified.
- all of the chemical substances used in the workplace shall be listed, and the Material Safety Data Sheet (MSDS) obtained for each. The MSDSs will be readily available for use; i.e., posted at the locations where the materials are stored and handled.
- all containers shall be labeled to show the name and type of substance, stock number, expiration date, health hazards, including reactivity, corrosivity, ignitability and toxicity, suggestions for handling, and first aid information. (This information can usually be found on the MSDS. Unlabeled chemicals and chemicals with deteriorated labels are often disposed of unnecessarily or improperly.)

Employee Training: An important non-structural BMP is training of facility personnel. Even the most comprehensive SWMP is useless if no one knows about it. In order to make the SWMP an effective management tool, personnel must be informed of the procedures and how they are to be implemented. Any training session should include actual field observations of the BMPs being discussed.

New or temporary personnel and sub-contractors working at the site also need to be trained in the SWMP procedures as soon as possible. Sub-contractors should be provided with a copy, as well as being informed if they are liable for conditions set forth within it.

APPENDIX D

LIST OF AVAILABLE DOCUMENTS/GUIDANCE

1. Available from EPA - (202) 260-7786

A. Regulations

- ▶ 11/16/90 Federal Register (55 FR 47990) - NPDES Permit Application Requirements for Stormwater Discharges - Final Rule.
-Summary of 11/16/90 Rule
- ▶ 8/16/91 Federal Register (56 FR 40948) - NPDES General Permits and Reporting Requirements for Stormwater Discharges Associated with Industrial Activity - Proposed Rule.
-Summary of 8/16/91 Stormwater Implementation Rule
-8/16/91 Stormwater Implementation Rule Package Fact Sheet
- ▶ 4/2/92 Federal Register (57 FR 11394) - Application Deadlines, General Permit Requirements and Reporting Requirements, Final Rule.
-4/2/92 Stormwater Program Rule Fact Sheet
- ▶ 12/18/92 Federal Register (57 FR 60444) - Permit Issuance and Permit Compliance Deadlines for Phase I Discharges, Final Rule.

B. Program Summaries

- ▶ Overview of the Stormwater Program (11/92)
- ▶ Question and Answer Document (3/92)

C. Guidance

- ▶ Summary: Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices (10/92)
- ▶ Summary: Stormwater Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices (10/92)
- ▶ Draft - Sediment and Erosion Control: an Inventory of Current Practices (EPA, OWEC, 4/20/90)
- ▶ Draft - Construction Site Stormwater Discharge Control: an Inventory of Current Practices (6/26/91)

D. Miscellaneous

- ▶ Ninth Circuit United States Court of Appeals Opinion regarding American Mining Congress v. EPA (5/27/92), and NRDC v. EPA (6/4/92)
-Ninth Circuit Stormwater Decision Fact Sheet (9/3/92)

2. NOT Available from EPA

A. EPA Documents

- ▶▶▶ Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices (EPA-832-R-92-005, 9/92)
 - Call NTIS (703)+487-4650, order number PB 92-235951 (\$35), or
 - Education Resource Information Center/Clearinghouse (614)+292-6717, order number 482N (\$22.50)
- ▶ Stormwater Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices (EPA-832-R-92-006, 9/92)
 - Call NTIS (703)+487-4650, order number PB 92-235969 (\$35), or
 - Education Resource Information Center/Clearinghouse (614)+292-6717, order number 477N (\$26.75)

B. Local and Other Documents

B. Local and Other Documents

- ▶ Urban Storm Drainage Criteria Manual, Vol. 3 - Best Management Practices, Stormwater Quality - Urban Drainage and Flood Control Dist., Denver (11/92)
 - Write to Urban Drainage and Flood Control Dist., 2480 W. 26th Ave., Ste. 156B, Denver, CO 80211-5500, (303)+455-6277 (\$40 plus shipping)
- ▶ Erosion Control and Stormwater Quality Guide (6/95) - Colo. Dept. of Transportation. Call (303)+757-9343
- ▶ California Stormwater Best Management Practice Handbooks (3/93). Municipal Handbook (\$12.50), Construction Handbook (\$12.00), Industrial/Commercial Handbook (\$13.00), plus shipping.
 - Call Alameda County Public Works Agency, (510)+444-6771

3. Class: "Stormwater Management During Construction"

- ▶ Topics:
 - Stormwater Management and Construction
 - Regulatory Requirements
 - Erosion and Sediment Control
 - Best Management Practices
 - Field Trip (second day)
- ▶ Class held at Red Rocks Community College, Lakewood
- ▶ 1½ day training course
- ▶ \$150/person (group discounts available), plus optional \$25 fee for certification
- ▶ Course Information: Scott Olson, Course Instructor, (303) 914-6282

(Note: Other on-going training opportunities will be listed as information becomes available to the Division.)

Appendix D

Timber Sale Contract and Forms

UNITED STATES DEPARTMENT OF AGRICULTURE
Forest Service

TIMBER SALE CONTRACT
DIVISION BT

July 2001
(Date of Issue)

STANDARD PROVISIONS FOR TIMBER SALES TO BE MEASURED BEFORE FELLING

This Division is organized into Parts, Sections, Subsections, and Items. These are numbered in accordance with the following scheme: Part BT1.0, Section BT1.1, Subsection BT1.11, and Item BT1.111. References to a Part include all Sections, Subsections, and Items within that Part; references to a Section include all Subsections and Items within that Section; and references to a Subsection include all Items within that Subsection. Cross references within this contract cite the reference number of the applicable Division, Part, Section, Subsection, and Item. Descriptive headings used

are not to be considered in determining the rights and obligations of the parties hereunder.

The Standard Provisions in this Division are subject to Specific Conditions of the contract stated in Division AT. Wherever appropriate, Specific Conditions established in Division AT are herein cited by reference number. The listing of Sections, Subsections, or Items of this Division in AT24 has the effect of striking or deleting them from Division BT. AT25 lists Special Provisions that comprise Division CT. Where appropriate, references to Special Provisions are made by citing the applicable reference numbers.

INDEX TO TERMS

Term	Reference	Term	Reference
Advertised Rates	AT5	Negligent Fire	BT7.42
Base Index	AT5	Normal Operating Season	BT6.31
Base Rates	AT5	Operations Fire	BT7.41
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BT1.0—SALE AREA

BT1.1 Sale Area Map. The boundaries of "Sale Area" and any Payment Unit thereof, are as shown on the attached "Sale Area Map" that is made a part hereof, and were, before timber sale advertisement, designated on the ground by Forest Service to meet the anticipated needs of the parties. The location of Sale Area and its approximate acreage are stated in AT1. Payment Units may be revised and additional ones may be established only by written agreement. Upon Purchaser's request, Forest Service shall subdivide Payment Units to reduce them to a size that can be logged within 60 days at Purchaser's normal rate of logging. However, the rate of logging used in such adjustment of Payment Unit size shall not be less than a rate necessary for removal of all Included Timber during Normal Operating Seasons prior to Termination Date. Payment Units may be eliminated from Sale Area under conditions described in BT6.36. Catastrophically Damaged areas may be removed from Sale Area under BT8.33.

Where applicable, the following are also identified on Sale Area Map:

- (a) Identified claims limiting Purchaser's rights under BT1.2;
- (b) Payment Units where timber is to be Measured or Marked after date of timber sale advertisement and approximate location of sample Marked timber under BT2.36 and BT2.4;
- (c) Boundaries of Clearcutting Units, Overstory Removal Units, and Understory Removal Units under BT2.3;
- (d) Areas where dead timber shall not be cut or shall be cut and removed under BT2.31;
- (e) Diameter limits for Overstory Removal Units and Understory Removal Units under BT2.33 and BT2.34;
- (f) Areas where leave trees are Marked to be left uncut under BT2.35;
- (g) Specified Roads listed in AT9;
- (h) Sources of base course, surface rock, and rock riprap listed in AT11;
- (i) Roads where log hauling is prohibited or restricted under BT5.12;
- (j) Roads and trails to be kept open under BT6.22;
- (k) Improvements to be protected under BT6.22;
- (l) Locations of known wildlife or plant habitat to be protected under BT6.25;
- (m) Locations of known cave resources to be protected under BT6.26;
- (n) Locations of areas known to be infested with specific noxious weeds under CT6.35;
- (o) Maximum stump heights when more than one height is listed by areas in AT8 under BT6.412;
- (p) Skidding or yarding methods specified under BT6.42;
- (q) Streamcourses to be protected under BT6.5;
- (r) Locations of meadows requiring protection under BT6.61;
- (s) Locations of wetlands requiring protection under BT6.62;

(t) Locations of temporary roads to be kept open under BT6.631; and

(u) Other features required by Division CT.

BT1.2 Claims. Valid claims are excluded from Sale Area, except those on which timber cutting is authorized in writing by the claimant and except mining claims on which cutting is authorized by the Act of July 23, 1955 (30 USC 614). Claims that limit Purchaser's rights to operate under this contract and that Forest Service has been able to identify are shown on Sale Area Map. Purchaser is not obligated to operate contrary to existing claim limitations. Forest Service shall designate boundaries of claims on the ground to the extent necessary to identify Included Timber.

BT2.0—TIMBER SPECIFICATIONS

BT2.1 Included Timber. "Included Timber" consists of:

BT2.11 Standard Timber. Live and dead trees and portions thereof that meet Utilization Standards under BT2.2 and are designated for cutting under BT2.3.

BT2.12 Substandard Timber. Live and dead trees that:

- (a) Do not meet Utilization Standards and
- (b) Are located in Clearcutting Units or construction clearings or are otherwise designated for cutting.

BT2.13 Damaged Timber.

BT2.131 Damaged by Purchaser. Undesignated live trees meeting Utilization Standards:

(a) Within 200 feet slope distance from centerline of roads constructed hereunder that are damaged by Purchaser's construction to the extent that considerable deterioration or mortality is imminent and are designated by Forest Service for felling before the nearest road segment is Substantially Completed or

(b) That are damaged by Purchaser in logging and are subsequently Marked before Purchaser has completed skidding or yarding operations in the immediate area.

By agreement, such trees may be left without charge if their removal would cause undue damage or be grossly uneconomic.

BT2.132 Negligent or Willful Damage. Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Purchaser, if included by Contracting Officer.

BT2.133 Damage by Catastrophe. As provided under BT8.33, undesignated live and dead timber within Sale Area, meeting Utilization Standards, and affected by Catastrophic Damage. "Catastrophic Damage" as used hereunder is major change or damage to Included Timber on Sale Area, to Sale Area, to access to Sale Area, or a combination thereof:

(a) Caused by forces, or a combination of forces, beyond control of Purchaser, occurring within a 12-month period, including, but not limited to, wind, flood, earthquake, landslide, fire, forest pest epidemic, or other major natural phenomenon and

(b) Affecting the value of any trees or products meeting Utilization Standards, within Sale Area and estimated to total either:

(i) More than half of the estimated timber quantity stated in AT2 or

(ii) More than two hundred thousand cubic feet (2,000 CCF) or equivalent.

Catastrophic Damage does not include changes caused by forest pest epidemics if Included Timber was sold for salvage or pest control.

BT2.134 Minor Damage by Natural Causes. Undesignated trees within Sale Area and meeting Utilization Standards, in amounts less than specified in BT2.133, that become insect infested, windthrown, suffer serious damage, or die, as designated by agreement.

BT2.14 Unintentionally Cut Timber. Live trees, within or immediately adjacent to Sale Area or to road construction or other authorized clearing outside Sale Area, not designated for cutting under BT2.3 but that are cut through mistake by Purchaser, when included by Contracting Officer.

BT2.15 Construction Timber. Live trees to be used for construction under BT5.1.

BT2.16 Other Material. Species or products not listed in AT2, upon written approval of Contracting Officer under BT3.41.

BT2.2 Utilization and Removal of Included Timber. "Utilization Standards" for trees and minimum pieces are stated in AT2. To meet minimum tree specifications, trees must equal or exceed tree diameters listed in AT2 and contain at least one minimum piece. Except for timber required or authorized to be left, Purchaser shall fell and buck such trees and shall remove from Sale Area all pieces that:

(a) Meet minimum piece standards in AT2 or

(b) Do not meet such standards, but would have qualified as part of minimum pieces if bucking lengths were varied to include such material.

BT2.3 Timber Designations. Timber designated for cutting shall be confined to Sale Area, except as provided in BT2.131, BT2.14, BT2.15, BT2.32, and BT5.1. Sale Area Map indicates Payment Units, if any, where Marking under BT2.35 is to be done after timber sale advertisement, except for construction clearing under BT2.32, designation changes under BT2.37, and damaged timber.

The boundaries of "Clearcutting Units," "Overstory Removal Units," and "Understory Removal Units" were plainly Marked on ground before timber sale advertisement and are shown on Sale Area Map. Such units where Measuring is to be completed after date of timber sale advertisement are also shown. The number of units and approximate acreage of timber designations are stated in AT3.

BT2.31 Clearcutting Units. All live and dead trees that meet minimum tree diameter specifications in AT2 within Clearcutting Units are designated for cutting.

Dead trees located outside Clearcutting Units and within 200 feet slope distance of any live tree required to be cut within a Clearcutting Unit are designated for felling when they:

(a) Meet the size requirements and number limitations stated in AT4 and

(b) Are not in an area shown on Sale Area Map where such trees are to be left standing to protect soil, water, wildlife, or residual trees.

Dead timber meeting Utilization Standards adjacent to Clearcutting Units shall be removed where indicated on Sale Area Map. Optional dead timber quantities are not included in AT2 or AT5c.

BT2.32 Construction Clearing. All timber is designated for cutting that is within the clearing limits of roads constructed hereunder or is in other authorized clearings. All dead trees are designated for cutting that are sufficiently tall to reach Purchaser's landings or the roadbed of Specified Roads. Other fire-dangerous dead trees or unstable live trees within 200 feet slope distance of the centerline of Specified Roads shall be felled by Purchaser when Marked in advance of felling of timber in the immediate vicinity. Pieces meeting Utilization Standards from such dead or unstable live trees shall be removed, unless there is agreement that to do so could damage the road. Such designation may be revised as part of agreed changes in road location under BT5.2. All dead trees to be felled outside construction clearing limits are subject to the size requirements and number limitations of AT4.

BT2.321 Specified Road Clearings. Timber within the clearing limits of Specified Roads is within separate Payment Units, as shown on Sale Area Map, and the quantities are in AT2. These Payment Units are subject to revision, as specified in BT2.37. The quantities of dead, fire-dangerous, and unstable trees designated outside the clearing limits are not included in AT2.

BT2.322 Other Authorized Clearings. Timber within authorized clearings for Temporary Roads, landings, or other construction clearings is designated for cutting. Quantities of such timber are not included in AT2.

BT2.33 Overstory Removal Units. Live trees within Overstory Removal Units are designated for cutting when they meet Utilization Standards and equal or exceed the d.b.h. limits shown on Sale Area Map. The following trees are also designated for cutting if located within such units and within 200 feet slope distance of any live tree required to be cut:

(a) Any trees windthrown prior to Purchaser's logging in the immediate vicinity that meet Utilization Standards in amounts less than specified in BT2.133 and

(b) Any dead trees meeting the size requirements and number limitations of AT4.

BT2.34 Understory Removal Units. Live trees within Understory Removal Units are designated for cutting when they meet Utilization Standards and are smaller than the d.b.h. limits shown on Sale Area Map. The following trees are also designated for cutting if located within such units and within 200 feet slope distance of any live tree required to be cut:

(a) Any trees windthrown prior to Purchaser's logging in the immediate vicinity that meet Utilization Standards in amounts less than specified in BT2.133 and

(b) Any dead trees meeting the size requirements and number limitations of AT4.

BT2.35 Individual Trees. Trees are "Marked" when individually designated by Forest Service with paint marks above and below stump height. Live trees to be cut, other than in the units described in BT2.31, BT2.32, BT2.33, and BT2.34, are or shall be Marked. The following trees are also designated for cutting within 200 feet slope distance of any live tree required to be cut:

(a) Any trees windthrown prior to Purchaser's logging in the immediate vicinity that meet Utilization Standards in amounts less than specified in BT2.133 and

(b) Any dead trees meeting the size requirements and number limitations of AT4, unless Forest Service gives notice otherwise.

Sale Area Map indicates areas plainly identified on the ground where leave trees are Marked to be left uncut.

BT2.36 Incompletely Measured Payment Units. Live trees within incompletely Measured Payment Units shown on Sale Area Map at time of timber sale advertisement shall be designated in accordance with CT2.36. A representative sample of the timber to be designated has been Marked prior to timber sale advertisement in accordance with such rules. The approximate locations of the representative sample areas are shown on Sale Area Map.

BT2.37 Designation Changes. Within Sale Area, minor adjustments may be made in boundaries of cutting units or in the timber individually Marked for cutting when acceptable to Purchaser and Forest Service.

In event Contracting Officer accepts alternate facilities under BT5.26, Contracting Officer shall revise the affected Payment Units and adjust estimated quantities.

In the event Purchaser does not construct portions of Specified Roads, Payment Units involved shall be revised to eliminate the road portions not to be constructed. Parts of such areas within non-road-related Payment Units shall be added to such Payment Units and the timber thereon shall be designated by the methods provided for said Payment Units. Estimated quantities for Payment Units so revised shall be adjusted as necessary.

BT2.4 Quantity Estimate. The estimated quantities of timber by species designated for cutting under BT2.3 and expected to be cut under Utilization Standards are listed in AT2. Estimated quantity in AT2 does not include the following:

- (a) Damaged timber under BT2.13;
- (b) Unintentionally cut timber under BT2.14;
- (c) Construction timber under BT2.15 cut outside of

Payment Units and removed from construction use for utilization by Purchaser;

(d) Dead timber adjacent to Clearcutting Units and removed at option of Purchaser under BT2.31;

(e) Timber within clearing limits of Temporary Roads or other authorized clearings and that is not designated under BT2.31, BT2.33, BT2.34, or BT2.35;

(f) Fire-dangerous dead trees or unstable live trees within 200 feet slope distance of Specified Roads; or

(g) Trees windthrown prior to Purchaser's logging in immediate vicinity.

Estimated quantities for such timber not included in AT2 shall be determined as stated in CT6.8.

If Sale Area Map shows Payment Units where Marking or Measuring is to be completed after date of timber sale advertisement, the objective of Forest Service shall be to designate for cutting in such Payment Units sufficient timber so that Sale Area shall yield the approximate estimated quantities by species or species groups stated in AT2. However, the estimated quantities stated in AT2 are not to be construed as guarantees or limitations of the timber quantities to be designated for cutting under the terms of this contract.

Quantity adjustments shall not be made under this Section after there is modification for Catastrophic Damage under BT8.33.

BT2.41 Adjustment for Quantity Deficit. If the Sale Area Map shows Payment Units where Marking or Measuring is to be completed after the date of timber sale advertisement and if a deficit in the estimated quantity will cause the quantity designated to be less than 90 percent of the total estimate shown in AT2, Forest Service, upon request by Purchaser, shall designate additional timber within Sale Area. Such additional timber shall be limited to that estimated to be necessary to reach approximately the estimated quantities by species listed in AT2. Any such additional designation shall be consistent with land and resource management plans.

BT2.42 Adjustment for Excess Quantity. If Sale Area Map shows Payment Units where Marking or Measuring is to be completed after date of timber sale advertisement and if there is a determination that the quantity designated will be more than 120 percent of the total estimated quantity listed in AT2, Forest Service, upon request by Purchaser, shall make an adjustment in Marking or cutting unit boundaries with the objective of designating for cutting the approximate estimated quantities by species listed in AT2. Such adjustments in quantities shall be confined to (a) Marking adjustments on Sale Area and (b) reduction in area to be cut over. Such adjustments or reductions shall not conflict with the silvicultural treatment being applied on Sale Area and shall not materially change the average value by species of the timber designated for cutting. Such adjustments may be made notwithstanding the provisions of BT1.1 and BT2.3.

If the timber designated for cutting is not satisfactorily reduced by such adjustments, Purchaser, after cutting 120 percent of the total estimated quantity listed in AT2, may elect to have Sale Area reduced to eliminate Payment Units where felling has not begun.

BT3.0—RATES OF PAYMENT

BT3.1 Current Contract Rates. Included Timber that is Released for Cutting shall be paid for at Current Contract Rates determined under this Section. "Current Contract Rates" shall be (a) Flat Rates and (b) Tentative Rates adjusted by the escalation procedures in BT3.2. Said Flat Rates and Tentative Rates shall be those listed in AT5, unless superseded by rates redetermined under BT3.3 or established for Contract Term Extension under BT8.23.

Current Contract Rates, based on rates redetermined under BT3.3 or established under BT8.23, shall apply to

all Payment Units from which removal of timber from Sale Area has not been completed on the effective date of the revised rates, except Current Contract Rates in effect at the time of Release for Cutting shall be applicable:

(a) On Payment Units for Specified Roads Released for Cutting on which clearing has begun and

(b) For not more than two other Payment Units from which removal from Sale Area has begun.

Notwithstanding the exceptions provided in this Section, rates redetermined under BT3.33 after Catastrophic Damage shall apply to all Included Timber retained or added by agreement under BT8.33.

In event there are more than two Payment Units from which timber removal has not been completed on the effective date, the rates in effect at the time of Release for Cutting shall apply to the two units from which the greatest estimated proportions of Payment Unit quantities have been removed. Otherwise, in released Payment Units, redetermined rates or rates established for Contract Term Extension shall apply to the entire quantity shown in AT5c for those units. In addition, Required Deposits shall be made as listed in AT5 and CT5.32, or established under BT3.3 or BT8.23.

In the event Termination Date is adjusted under BT8.21 or BT8.212, Current Contract Rates shall be continued in the same manner as immediately prior to the adjustment period.

"Current Contract Value" is the sum of the products of Current Contract Rates and estimated remaining quantities by species of Included Timber meeting Utilization Standards.

BT3.2 Escalation Procedure. Tentative Rates for those species and products listed in AT5a are subject to quarterly escalation in accordance with the following procedures: The calendar quarter index average for each price index described in AT6 is the arithmetic average of the three such monthly price indices preceding January 1, April 1, July 1, and October 1. The difference between said calendar quarter index average and Base Index listed in AT5a shall be the basis for quarterly escalation. To arrive at Current Contract Rates for Payment Units Released for Cutting during the preceding calendar quarter, Tentative Rates for each species shall be reduced or increased by such difference, except when the calendar quarter index average is:

(a) Less than the Base Index, the reduction shall not result in a rate below Base Rate or

(b) Greater than the Base Index, the increase shall not exceed the difference between Tentative Rate and Base Rate.

In the event of Contract Term Extension under BT8.23, the escalation procedure will be used during the extension period, except that adjusted payment rates for any calendar quarter cannot be less than Tentative Rates, for each species and product group, established under BT8.23 for the extension period.

BT3.21 Unavailable Index. If an index described in AT6 is no longer available, Contracting Officer may replace that index. If Contracting Officer determines that a replacement index does not exist, Current Contract Rates

for the remainder of the timber sale shall be a Flat Rate. Said Flat Rate will be Tentative Rates adjusted by the arithmetic average of the index described in AT6 for a 12-month period prior to its becoming unavailable using the quarterly adjustment procedure outlined in BT3.2. Contracting Officer will determine availability and a beginning point to average the index for Flat Rates. Such Flat Rates are subject to rate redetermination as provided elsewhere under this contract.

BT3.3 Rate Redetermination. Rates may be redetermined as set forth in this Section. Bid Premium Rates shall be added to all redetermined rates.

BT3.31 Scheduled Rate Redetermination. Contracting Officer shall redetermine rates for timber described at AT7 to be made effective on the date listed in AT7. Said redetermined rates shall be used under BT3.1 for determination of Current Contract Rates. The date for putting the redetermined rates into effect may be adjusted under BT8.21 or BT8.212. However, if rates established by a scheduled rate redetermination result in lower than Current Contract Rates determined from Bid Rates and Base Indices stated in AT5, such lower rates shall become effective only after at least the quantity stated in AT7 has been paid for and Released for Cutting. Contracting Officer may make changes in contractual requirements at the time of scheduled rate redetermination pursuant to BT8.31.

Scheduled rate redeterminations under AT7 to be made within 5 years of award date shall be made by use of a limited procedure. In accordance with standard methods established by Forest Service for such limited rate redetermination procedure, the appraisal used to develop Advertised Rates described in AT5 shall be brought up to date by use of product selling values, operating costs, and development costs in effect 45 days prior to rate redetermination date.

All other rate redeterminations shall be made in accordance with the standard Forest Service methods in effect 45 days prior to rate redetermination. Such methods shall take into consideration all factors that may affect timber value at said rate redetermination date.

Redetermined rates shall not be less than Base Rates listed in AT5. Base Indices and Required Deposits, when applicable, shall be redetermined. Redetermined rates shall be established without cost estimated for construction of Specified Roads needed by Purchaser under BT5.2, except that at the time of each rate redetermination, Contracting Officer shall redetermine cost of such Specified Roads not yet constructed. Such redetermined costs shall be recorded as provided in BT5.24 and BT5.25, and shall establish the redetermined Specified Road construction cost, subject to the limitations of BT5.26.

BT3.32 Rate Redetermination for Environmental Modification. In the event of a contract modification under BT8.3 that is necessary to implement Section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 USC 1601 (note)), Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value

of Included Timber remaining immediately prior to the revision and the appraised unit value of timber to be cut under the modification. The appraisal shall consider the estimated cost of any construction work listed in AT10 that was performed and abandoned.

Flat Rates in effect at the time of the revision shall be adjusted by said differences to become the redetermined rates for the purpose of a contract modification under BT8.3.

Tentative Rates, as adjusted pursuant to BT3.2, will be adjusted by said differences to become Current Contract Rates under BT3.1.

Redetermined rates, or said differences for rates subject to BT3.2, and Required Deposits shall be considered established under BT3.1 for timber Released for Cutting subsequent to the contract revision and prior to any subsequent scheduled rate redetermination.

BT3.33 Rate Redetermination After Catastrophic Damage. In event of Catastrophic Damage and adjustment, if any, of Included Timber, Contracting Officer shall make an appraisal to determine for each species the catastrophe-caused difference between the appraised unit value of Included Timber remaining immediately prior to the catastrophe and the appraised unit value of existing and potential Included Timber immediately after the catastrophe. Said Included Timber is any that would not be eliminated under BT8.33. Said potential included Timber is any that would be added under BT8.33.

Tentative Rates and Flat Rates in effect at the time of catastrophe shall be adjusted by said differences to become the redetermined rates for the purpose of a contract modification under BT8.33. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to new Base Rate limitations of 25 cents per hundred cubic feet or equivalent. However, existing Base Indices shall not be changed under this Subsection. Upon agreement under BT8.33, redetermined rates and Required Deposits shall be considered established under BT3.1 for Included Timber removed subsequent to Catastrophic Damage and prior to any subsequent scheduled rate redetermination.

At time of such appraisal, Specified Road construction cost shall be revised pursuant to BT5.25 to meet the new conditions and include the estimated cost of any construction work listed in AT10 performed and abandoned.

BT3.4 Other Payment Rates.

BT3.41 Material and Quantities Not in AT2. Incidental amounts of products or portions of trees of species listed in AT2 that do not meet Utilization Standards may be removed without charge. Such material from Clearcutting Units and construction clearings may be purposely removed in more than incidental amounts without charge subject to agreement on deposits for road maintenance and use. Such material from other than Clearcutting Units and construction clearings may be purposely removed in more than incidental amounts without charge upon written approval of Contracting Officer, and subject

to agreement on deposits if needed for road maintenance and use.

Other species or products not listed in AT2 may, upon written approval of Contracting Officer, be cut and removed without charge other than Required Deposits established by agreement.

Timber for which the quantity is not included in the estimate listed in AT2, as described in BT2.4, shall be paid for at Current Contract Rates and Required Deposits.

BT3.42 Timber Cut Through Mistake. Undesignated timber meeting Utilization Standards, cut by Purchaser through mistake and included by Contracting Officer under BT2.14, shall be removed and paid for at Current Contract Rates and Required Deposits, unless such material is not listed in AT2. In such event, Contracting Officer, in accord with standard Forest Service methods, shall establish rates to be paid.

BT3.43 Undesignated Timber Damaged Without Negligence. Undesignated timber meeting Utilization Standards, damaged without negligence by Purchaser and designated by Forest Service under BT2.131, shall be cut, removed, and paid for at Current Contract Rates and Required Deposits.

BT3.44 Undesignated Timber Unnecessarily Damaged or Negligently or Willfully Cut. Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Purchaser, if included by Contracting Officer under BT2.132, shall be cut, removed, and paid for at Current Contract Rates and Required Deposits that are in addition to liquidated damages under BT3.45.

If such timber is of a species or size not listed in AT2 or is of a quality different from designated timber, Contracting Officer shall establish payment rates in accord with standard Forest Service methods.

BT3.45 Liquidated Damages. Unnecessary damage to or negligent or willful cutting of undesignated timber, as described in BT3.44, on portions of Sale Area cut over under this contract is likely to cause substantial silvicultural or other damage to the National Forest. It will be difficult, if not impossible, to determine the amount of such damage. Therefore, Purchaser shall pay as fixed, agreed, and liquidated damages an amount equivalent to, and in addition to, the amount payable at Current Contract Rates for such timber. If designated, Purchaser shall remove such damaged or cut timber.

BT4.0—PAYMENTS

BT4.1 Amount Payable for Timber. Except as provided in BT3.1, Current Contract Rates and Required Deposits in effect when a Payment Unit is Released for Cutting shall be applied to the timber quantities to determine the amount Purchaser shall pay. A "Payment Unit" is a portion of Sale Area established for payment purposes.

BT4.11 Adjustment of Quantity. An estimated quantity shown in AT2 shall be revised by correcting identified errors made in determining estimated quantity that result in a change in total timber sale quantity of at least 10 percent or \$1,000 in value, whichever is less, when an

incorrect estimated quantity is caused by computer malfunction or an error in calculations, area determination, or computer input.

No adjustments in quantity shall be made for variations in accuracy resulting from planned sampling and Measuring methods or judgments of timber quality or defect.

For payment purposes, corresponding revisions in quantity and total payment shall be shown in AT5c for each Payment Unit involved. Adjustment in rates will not be made. Adjustment in quantities shall not obligate Forest Service to designate additional quantities when the original quantity estimate is overstated, nor shall the provisions of BT2.41 and BT2.42 apply for changes in quantity, unless Sale Area Map shows Payment Units where Marking or Measuring is to be completed after date of timber sale advertisement.

BT4.2 Timber Sale Account. The "Timber Sale Account" is an account of all Purchaser's deposits, credits, payment guarantees, and the charges for:

- (a) Timber at Current Contract Rates,
- (b) Slash disposal and road maintenance at Required Deposit rates,
- (c) Cooperative work at rates established by specific agreement under BT4.228, and
- (d) Other charges provided in this contract.

Cash deposits and transferred-in purchaser credit, as provided in BT4.21, shall be recorded currently in such account.

Charges for Payment Units Released for Cutting shall be made when Forest Service prepares and furnishes to Purchaser periodic statements of quantity and value of such timber. Charges subject to escalation under BT3.2 shall be made initially on the basis stated in BT4.224 and shall be adjusted at the end of each calendar quarter, as provided in BT3.2. Charges against transferred-in purchaser credit shall be limited to timber value in excess of Base Rates.

Charges shall be made according to BT3.4 when trees are subsequently Marked or designated for cutting.

BT4.21 Transfer of Purchaser Credit. The amount of purchaser credit that may be transferred into this contract is limited to the amount shown in AT22. This limit may be adjusted pursuant to BT8.3. Any such adjustment shall be calculated in a manner consistent with the limit computation when the timber sale was sold.

Purchaser credit transferred to this contract from other contracts may be used to meet charges for timber subject to BT4.2. Transfer of purchaser credit to or from the Timber Sale Account shall be made monthly or at longer intervals, as requested by Purchaser.

Transferred-in purchaser credit shall be considered equivalent to cash for advance deposits, notwithstanding the BT4.2 prohibition on using transferred-in purchaser credit for Base Rate charges.

BT4.22 Cash Deposits. Within the limitations of this Subsection, Purchaser shall make cash deposits to meet Purchaser's obligations within 15 days of billing by Forest Service. Said deposits shall be made to Forest Service, U.S.D.A., by mail or delivery at address to be

furnished by Forest Service. An explanation of billings shall be issued at the time of each request for such deposits.

BT4.221 Downpayment. Notwithstanding BT4.22, Purchaser shall make, at the location designated by Forest Service, a downpayment in the amount shown in AT20 in cash or by application of purchaser credit transferred to this timber sale at the time this contract is executed. Limits established pursuant to BT4.21 apply.

Purchaser's failure to make the downpayment in conformance with the terms, conditions, and requirements contained in Contracting Officer's letter of award shall constitute repudiation of Purchaser's bid pursuant to BT9.41 and will be a breach of this contract pursuant to BT9.3. Purchaser shall have 3 days from the required date of execution to make the downpayment at the location designated by Forest Service. The notice requirements and the time periods for remedy stated in BT9.3 do not apply.

Purchaser shall pay interest on the unpaid downpayment for the period within the 3 days in which the downpayment is late. The rate of interest is stated in AT20. In the event Purchaser fails to make payment within the 3 days, Purchaser's bid guarantee shall be retained by Forest Service and applied toward damages.

Damages shall be determined pursuant to BT9.41. If the amount of the bid guarantee exceeds the amount of damages, the balance will be refunded to Purchaser.

The downpayment may not be applied toward any other payment required under the provisions of this contract, except damages determined pursuant to BT9.4, transferred to other timber sales, or refunded until stumpage value representing 25 percent of the total bid value of the timber sale is shown on the Timber Sale Account to have been cut, removed, and paid for, or if 36 CFR 223.49(e) is applicable, the estimated value remaining to be cut and removed, as shown on the Timber Sale Account, is equal to or less than amount of the downpayment. For lump sum timber sales, the downpayment may be applied to payment for release of the single payment unit (36 CFR 223.49(d)).

If a subsequent final determination is made that this contract should not have been included under increased downpayment requirements (36 CFR 223.49(e)), the downpayment shall be revised and applied in accordance with 36 CFR 223.49(f).

BT4.222 Advance Deposits. Purchaser agrees to make cash deposits or transfer purchaser credit to this timber sale in advance of cutting to meet charges under BT4.2.

Forest Service billings for advance cash deposits shall be in such amounts that, together with transferred-in purchaser credit as described in BT4.21, the Timber Sale Account will maintain an unobligated balance that covers the applicable charges for Payment Units Released for Cutting and designated material not included in AT2 expected to be cut within the next 60 days. This advance cash deposit may be reduced to a smaller amount by the terms of BT4.221, BT4.223, BT4.225, and/or BT4.227. Except for amounts required pursuant to BT4.221,

BT4.223, and BT4.227, Purchaser shall not be required to make advance deposits above those required under this item.

When the credit balance in the Timber Sale Account is exceeded by the charges for timber within Payment Units Released for Cutting and for the estimated quantity to be cut in 10 days of cutting designated material not included in AT2, Contracting Officer will suspend all or any part of Purchaser's Operations until payment or acceptable payment guarantee is received.

BT4.223 Periodic Payment Schedule. Purchaser shall make periodic payments for stumpage value, as shown in AT21.

In the event Purchaser has not paid the amount(s) stated in AT21 as stumpage for quantity removed by the periodic payment determination date(s), Forest Service shall issue a bill for collection for the difference between the required amount and payments made by Purchaser. If payment(s) fall due on a date other than a normal billing date, the payment date shall be extended to coincide with the next Timber Sale Account billing date.

The amount of the periodic payment(s) will be reduced if the payment(s) would result in Purchaser's credit balance for timber charges exceeding the Current Contract Value.

Only cash or transferred-in purchaser credit may be used for this purpose. No other form of payment is acceptable. Such cash will be used to meet subsequent charges on this timber sale under the terms of BT4.222. Transferred-in purchaser credit used to meet this obligation cannot be transferred to another timber sale unless replaced by cash.

Periodic payment determination date(s) that have not been reached shall be adjusted when a Contract Term Adjustment under BT8.21 or a market-related contract term addition under BT8.212 is granted. When a contract is lengthened as a result of market-related contract term additions any subsequent periodic payment determination date(s) shall be delayed 1 month for each month added to the contract's term. Periodic payment determination date(s) will not be adjusted when a Contract Term Extension is granted under BT8.23.

BT4.224 Deposits for Charges Subject to Escalation. Cash deposits requested to cover estimated charges for timber subject to escalation under BT3.2 shall be based upon Current Contract Rates and related deposits in effect during previous calendar quarter, except when the most recent applicable monthly index differs from the previous quarterly index average by more than five (5) percent. In such event, request for said deposits shall be based on a rate adjustment of half of such difference, rounded to the nearest 10 cents.

BT4.225 Deposits When Payment Guaranteed. To the extent payment guarantee is provided under BT4.3, requirements for advance cash deposits under BT4.222 shall be waived for the value of timber on Sale Area that has been Released for Cutting, but not removed, and for the estimated value of products removed from Sale Area for not more than a monthly billing period, subject to the provisions of BT4.4.

BT4.226 Blanket Cash Deposits. Purchaser may make cash deposits under a written agreement to cover charges made under this and other timber sale contracts within the same National Forest. Forest Service shall allocate such deposits to such timber sales. When there is to be no timber cutting hereunder for 30 days or more and payment of current charges has been made, the allocation to this timber sale shall be reallocated to other timber sales at Purchaser's request. Purchaser shall not start cutting hereunder until allocation has again been made to this timber sale.

BT4.227 Extension Deposits. In the event of Contract Term Extension under BT8.23, Forest Service shall divide the difference between Current Contract Value as of the start of any Contract Term Extension and the credit balance of any deposit made pursuant to BT4.223 by the number of whole months remaining in Normal Operating Season(s) within the extension period to determine the amount of each "Extension Deposit."

Purchaser shall make the initial Extension Deposit prior to Forest Service executing the contract modification. In response to Forest Service billing under BT4.22, Purchaser shall make advance cash deposits. Such deposits, together with transferred-in purchaser credit, shall at least equal each Extension Deposit required for each whole month remaining in Normal Operating Season(s) during the extension period. Said deposits shall be due by the last day of each month during Normal Operating Season whether or not any Payment Unit is to be released.

Due dates for Extension Deposits during the extension period may be delayed when Purchaser earns Contract Term Adjustment pursuant to BT8.21 if the Termination Date, as adjusted, results in one or more additional complete months within Normal Operating Season(s).

BT4.228 Cooperative Deposits. On a basis of cooperation or assistance (16 USC 572) and by a written agreement, Forest Service shall perform all or portions of the work that Purchaser is obligated to perform under this contract, as well as furnish other services in connection with activities under this contract. When Forest Service is to perform such work, Purchaser shall make one or more deposits to cover the estimated cost of said work. On request of Purchaser, Forest Service shall render monthly accounts, as may be specified in such agreement.

BT4.23 Temporary Reduction of Downpayment. When, under BT6.02, Contracting Officer requests Purchaser to interrupt or delay Purchaser's Operations for more than 60 days, the downpayment amount being held on deposit may be temporarily reduced upon the written request of Purchaser or at the discretion of Contracting Officer. For the period of the interruption or delay, the downpayment on deposit may be reduced to \$1,000 or two (2) percent of the downpayment amount listed in AT20, whichever is larger.

Purchaser agrees that when the downpayment amount is reduced that Purchaser shall remit, release, and forever discharge the United States from any and all Claims arising from the downpayment deposit under this contract, including, but not limited to, any Claims of inter-

est or other costs. With the exception that Out-of-Pocket Expenses relating to the downpayment, incurred as a direct result of interruption or delay of operations, are paid when such interruption or delay exceeds 30 days and are calculated up to the point the downpayment is returned to Purchaser. Purchaser agrees to provide receipts or other documentation to Contracting Officer that clearly identify and verify actual expenditures.

Any downpayment amount temporarily reduced pursuant to this Subsection may be refunded or transferred at the request of Purchaser. However, if Purchaser has outstanding debt owing the United States, Contracting Officer must apply the amount of downpayment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3701, *et seq.*). If the downpayment is being covered by transferred-in purchaser credit, Contracting Officer may transfer the credit released to other timber sales pursuant to BT4.21.

Upon Purchaser's receipt of bill for collection and written notice from Contracting Officer that the basis for the interruption or delay no longer exists, Purchaser shall restore the downpayment to the full amount shown in AT20 within 15 days after the date the bill for collection is issued. Purchaser shall not resume contract operations until the downpayment amount is fully restored. Purchaser's failure to fully restore the downpayment amount within 15 days after the date the bill for collection is issued is a breach of contract pursuant to BT9.3. Purchaser shall have 30 days to remedy the breach or the contract will be terminated.

Pursuant to the Debt Collection Improvement Act, as amended, if payment restoring the full amount of the downpayment is not received by Forest Service within 15 days after the date the bill for collection is issued, Forest Service shall charge Purchaser interest, administrative charges, and a penalty charge, in addition to the delinquent amount due, at the rates and amounts described in BT4.4.

BT4.24 Refund of Excess Cash. If at any time the credit balance of the Timber Sale Account exceeds the charges for timber within Payment Units Released for Cutting and for designated material not included in AT2 that Forest Service estimates will be cut within the next 60 days, any portion of such excess that is due to cash in the account shall be refunded, if requested by Purchaser, unless deposited under BT4.221, BT4.223, or BT4.227. If no cutting is planned within the next 60 days, refund of the entire unencumbered cash balance, except as provided in this Subsection, may be made. However, said credit balance shall not be reduced below the total value of partially cut Payment Units and designated material not included in AT2 that is cut before operations cease. After a refund for a shutdown, deposits shall be made to meet the requirements of BT4.222 before additional timber may be cut.

BT4.25 Refund After Final Charges for Released Timber. Any cash deposit, in excess of that required to meet charges under BT4.2, shall be refunded or transferred within 15 days of Purchaser's request after fi-

nal charges for Included Timber have been made, except for amounts estimated to be required under BT9.5.

BT4.3 Payment Guaranteed by Bond or Deposited Securities. To guarantee payment, Purchaser may furnish and maintain an acceptable surety bond or deposit in a Federal Depository negotiable securities of the United States. The securities shall be deposited through the Regional Fiscal Agent accompanied by a power of attorney and agreement authorizing the bond-approving officer to sell or collect such securities if payment is not made within 15 days of billing by Forest Service. The penal sum of such surety bond or the market value at time of deposit of such negotiable securities shall be the maximum amount of the payment guaranteed.

For payment purposes, said penal sum of the surety bond or market value at time of deposit of negotiable securities shall be in lieu of the performance bond furnished under BT9.1.

BT4.31 Blanket Bond. If Purchaser furnishes an acceptable bond, or deposits securities, in accordance with BT4.3, to guarantee payment for timber from this and other timber sales within the same National Forest, the amount of such bond or deposited securities shall be allocated to such timber sales by Forest Service. When there is to be no timber cutting hereunder for 30 days or more and payment of current charges has been made, the allocation to this timber sale shall be reallocated to other timber sales at Purchaser's request. Purchaser shall not start cutting hereunder until this timber sale receives an allocation that will, in combination with transferred-in purchaser credit, meet the obligation for payment guarantee.

BT4.32 Letters of Credit for Payment Bond. Notwithstanding the provisions of BT4.3, approved letters of credit may be used in lieu of a surety bond for payment bond purposes. Such letters of credit shall be subject to approval by Contracting Officer.

BT4.4 Payments Not Received. (a) Payments are due and payable on the date of issue, as indicated on the bill for collection. When a payment for timber cut and other charges is not received at the location designated by Forest Service by the date allowed for receipt of payment, as indicated on the bill for collection, Contracting Officer will suspend all or any part of Purchaser's Operations until payment or acceptable payment guarantee is received. Other charges include, but are not limited to:

- (i) Slash disposal and road maintenance deposits;
- (ii) Cooperative work at rates established by specific agreement under BT4.228;
- (iii) Surface rock replacement;
- (iv) Damages pursuant to BT9.4;
- (v) Road use fees;
- (vi) Restoration of downpayment pursuant to BT4.23;
- (vii) Periodic payments pursuant to BT4.223;
- (viii) Extension Deposits pursuant to BT4.227; and
- (ix) Other mandatory deposits.

(b) Failure to pay amounts due by the date allowed for receipt of payment, as indicated on the bill for collec-

tion, shall be considered a breach under BT9.3. The 30 day notice period prescribed therein shall begin to run as of the end of business on the date allowed for receipt of payment, as indicated on the bill for collection. If the performance or payment is guaranteed by surety bond, the surety will receive a copy of the written notification of breach. Ten days after issuance of written notification of the breach, demand will be made on the surety or other institution providing the guarantee or bond instrument for immediate payment.

(c) Pursuant to the Debt Collection Improvement Act, as amended (31 USC 3701, *et seq.*), if payment is not received by Forest Service within 15 days after the date of issue, as indicated on the bill for collection:

(i) Simple interest shall be assessed at the higher of the Current Value of Funds Rate or the Prompt Payment Rate, as established by the Secretary of the Treasury. Interest will begin to accrue as of the date of issue, as indicated on the initial bill for collection.

(ii) Debtors will be assessed administrative charges, in addition to the delinquent amount due. Administrative charges are those additional costs incurred by the Government in processing, handling, and collecting delinquent debts.

(iii) A penalty charge of six (6) percent per annum will be assessed on any portion of a debt delinquent more than 90 days. This penalty charge is in addition to interest and administrative charges under paragraphs (c)(i) and (c)(ii). The penalty charge shall accrue from the date of issue, as indicated on the bill for collection, and shall be assessed on all outstanding amounts, including interest and administrative costs assessed under paragraphs (c)(i) and (c)(ii).

(iv) Payments will be credited on the date received by the Federal Depository or Collection Officer designated on the bill for collection.

(d) Forest Service remedies for Purchaser's failure to make payment for timber cut and other charges when due, except for accrual of interest, suspension of all or any part of Purchaser's Operations, and administrative offset, shall be stayed for so long as:

(i) A bona fide dispute exists as to Purchaser's obligation to make such payment and

(ii) Purchaser files and prosecutes a timely Claim under BT9.2.

BT5.0—TRANSPORTATION FACILITIES

BT5.1 Authorization. Purchaser is authorized to construct and maintain roads, bridges, and other transportation facilities, as needed for harvesting Included Timber on National Forest and other lands where Forest Service has such authority. As used in this contract "construct" includes "reconstruct."

Location and construction of Specified Roads shall be in accordance with BT5.2. Unless otherwise provided herein, construction may be progressive during this contract. Maintenance shall be governed by BT5.3. The location and clearing widths of all Temporary Roads or facilities

shall be agreed to before construction is started. "Temporary Roads" are roads other than Specified Roads that are constructed by Purchaser for the purpose of harvesting Included Timber.

Purchaser is authorized to cut and use for construction without charge construction timber designated by agreement.

BT5.11 Requirements of Rights-of-Way. Purchaser's road construction and use on rights-of-way identified in attached list or CT5.11 shall be confined to said rights-of-way and limited by the related easements and stipulations, if any, unless Purchaser makes other arrangements that will not infringe upon or adversely affect the grantee's rights. Said easements or right-of-way documents are available in the offices of the Forest Supervisor and District Ranger.

BT5.12 Use of Roads by Purchaser. Except as provided herein, Purchaser is authorized to use existing National Forest roads, in addition to Specified Roads listed in AT9, when such use will not cause damage to the roads or National Forest resources and when hauling can be done safely.

If Purchaser's use of an existing temporary or National Forest transportation system road, not listed in AT9, cannot be satisfactorily accommodated without reconstruction, Purchaser shall be authorized to use such road upon agreement as to the minimum reconstruction work that Purchaser shall perform before hauling. When appropriate, such road shall be included in AT9 as an alternate facility under BT5.26.

CT5.12 lists existing temporary or permanent roads shown on Sale Area Map that for such reasons as limitations in structural capacity, safety, and protection of soil, water, and roads:

(a) Cannot be used for log hauling or

(b) May be used only under the restrictive limitations stated therein.

BT5.2 Specified Roads. "Specified Roads" are roads, including related transportation facilities and appurtenances, shown on Sale Area Map and listed in AT9. Purchaser shall construct Specified Roads used under this contract. Construction initiated by Purchaser on any such Specified Road shall be completed to an agreed terminus that meets Purchaser's needs and prevents unnecessary impact on National Forest resources. Construction to such terminus shall be in full accordance with Drawings and specifications identified in AT9 or specifications attached hereto, except for agreed adjustments needed to accommodate such terminus. Record Forest Service estimated cost for the portion constructed as a separate segment in a revised table, designated AT10-1, AT10-2, etc., that shall supersede any prior table as AT10 when it is dated and signed by Contracting Officer and a copy is furnished to Purchaser.

A Temporary Road shall not be constructed substantially on the location for a Specified Road, except by agreement.

In event of agreed substitution or revision of construction design, specifications, or performance responsibility under BT5.212, BT5.25, BT5.26, or CT5.215, a revised

table designated AT9-1, AT9-2, etc. shall supersede any prior table as AT9, when it is dated and signed by Purchaser and Contracting Officer. If Purchaser does not need a Specified Road or a portion of a Specified Road for harvesting Included Timber and the Specified Road is not constructed, the deletion of the road or road segment will be a mutually agreed Design Change under BT5.253 and the Timber Sale Account will be debited for the reduction in cost.

References in the contract to specifications, standards, or test methods adopted by the American Association of State Highway and Transportation Officials (AASHTO), American Society for Testing and Material (ASTM), General Services Administration (GSA), or other recognized national technical associations shall mean specifications, standards, or test methods, including interim or tentative issues, that are in effect on the date of the timber sale advertisement.

BT5.21 Engineering. Forest Service completed survey and design for Specified Roads prior to timber sale advertisement, unless otherwise shown in AT13, or Purchaser survey and design are specified in AT9. On those roads for which Forest Service completes the design during the contract, the design quantities shall be used as the basis for revising estimated costs stated in AT10 and crediting or debiting the Timber Sale Account to reflect the change.

Forest Service engineering shall be completed according to the schedule in AT13. Should Forest Service be unable to perform the designated survey and design by the completion date or other agreed to time, upon written agreement, Purchaser shall assume responsibility for such work. In such event, Contracting Officer shall revise:

(a) AT9 to show Purchaser's performance responsibility.

(b) AT10 to include costs of survey and design, as provided under BT5.24, and credit the Timber Sale Account to accommodate such costs. Forest Service shall calculate such costs, using unit rates comparable with those used in AT10.

Purchaser shall furnish a schedule to Forest Service of specific dates for the start of construction. The schedule of construction shall be submitted to Forest Service for approval within 60 days after contract award and prior to beginning work. Purchaser's construction schedule shall reflect Forest Service survey and design completion dates. Forest Service may agree to Purchaser's request for an alternate date for starting construction.

Purchaser shall perform survey, design, and construction staking of Specified Roads to be engineered by Purchaser in accordance with specifications attached hereto. Based upon the quantities developed by such design, as approved by Forest Service, Contracting Officer shall revise the estimated costs stated in AT10 and the Timber Sale Account shall be credited or debited. The methods of computing such revised costs shall be consistent with the methods that would have been used had the engineering been performed prior to timber sale advertisement.

Total cumulative credits to the Timber Sale Account, under BT5.21, BT5.212, BT5.251, BT5.252, and BT5.253, are subject to a maximum allowance equal to the difference, at timber sale closure using final quantities, between total contract value at Base Rates and total contract value at stumpage rates paid. Payments for increased costs shall be made at the time the cost difference is calculated, subject to adjustment at time of timber sale closure.

BT5.211 Contract Drawings. "Drawings" are documents that show location, details, and dimensions of the work to be performed. On any of the contract Drawings where a portion of the work is drawn out and the remainder is shown in outline, the parts drawn out shall apply to all other like portions of the work.

"Shop Drawings" include Drawings, diagrams, layouts, schematics, descriptive literature, illustrations, lists or tables, performance and test data, and similar materials furnished by Purchaser to explain in detail specific portions of the work required by the contract. Purchaser shall submit a minimum of five (5) sets of required Shop Drawings to Forest Service, three (3) sets of which will be retained by Forest Service. Shop Drawings shall not exceed 24 inches by 36 inches in size. Approval or rejection and date will be noted or stamped on each set. Unless agreed otherwise, Forest Service shall approve or reject the Shop Drawings within 10 days of submission. Such approval of the Shop Drawings shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is satisfactory. If the Shop Drawings are rejected, Purchaser must make the noted revisions and resubmit the Shop Drawings.

Unless working tolerances are specified, all work performed and materials furnished shall be in reasonably close conformity with lines, grades, cross sections, dimensions, and material requirements shown on Drawings, indicated in specifications, or designated on the ground. Reasonably close conformity means compliance with reasonable and customary manufacturing and construction tolerances where working tolerances are not specified. Where working tolerances are specified, reasonably close conformity means compliance with such working tolerances.

A change in the amount of construction work that exceeds construction tolerances specified in the specifications identified in AT9 caused by a Forest Service error in construction staking shall be treated as a Design Change. When incompatible situations arise between Drawings, specifications, and actual conditions on the ground, Purchaser shall make corrections pursuant to BT5.253.

BT5.212 Construction Staking. Purchaser shall avoid careless or negligent damage to construction stakes, flags, or marks. If such damage occurs, Purchaser shall be required to replace stakes necessary to construction or, upon Purchaser's request and under written agreement, Purchaser shall bear costs of such replacement by Forest Service by depositing, with Forest Service in advance, sufficient sums to cover cost of such replacement. Any surplus funds remaining after such work is completed shall be refunded.

When AT9 shows that construction stakes are to be set by Forest Service after clearing, Purchaser shall submit to Forest Service a written schedule for clearing, construction staking, and construction that will provide Forest Service a reasonable period for setting construction stakes. Time for setting construction stakes may be modified by written agreement.

If Forest Service performs construction staking for Specified Roads, timing of such staking shall permit Purchaser's clearing and other construction activity to proceed without hindrance or delay, provided Purchaser's construction activity is reasonably consistent with needs identified in Purchaser's Operating Schedule or amendments thereto.

Should Forest Service be unable to perform construction staking in such reasonable period, upon written agreement, Purchaser shall assume the responsibility for construction staking for agreed upon portions of Specified Roads. In such event, Contracting Officer shall revise:

(a) AT9 to show Purchaser's performance responsibility.

(b) AT10 to include costs of construction staking, as provided under BT5.24, and credit the Timber Sale Account to accommodate such costs. Forest Service shall calculate such costs, using unit rates comparable with those used in AT10.

Total cumulative credits to the Timber Sale Account, under BT5.21, BT5.212, BT5.251, BT5.252, and BT5.253, are subject to a maximum allowance equal to the difference, at timber sale closure using final quantities, between total contract value at Base Rates and total contract value at stumpage rates paid. Payments for increased costs shall be made at the time the cost difference is calculated, subject to adjustment at time of timber sale closure.

BT5.22 Material Delivery. Within 60 days after award date, Purchaser shall provide Forest Service a written schedule showing the desired delivery dates of any material to be supplied by Forest Service. With reasonable notice, said schedule may be amended by agreement. Forest Service agrees to make delivery within 15 days after the scheduled delivery dates that are at least 60 days after the schedule is submitted, unless prevented by causes beyond control of Forest Service.

If Purchaser does not provide Forest Service the written schedule within the period provided in this Subsection, Forest Service agrees to make delivery within 90 days after a late schedule is submitted, unless prevented by causes beyond control of Forest Service. After delivery to and written receipt by Purchaser, Purchaser is responsible for installation of needed material and for any loss of or damage to such material due to Purchaser's negligence prior to installation or return of unused material to Forest Service.

At Purchaser's option, Forest Service deliveries shall be to Purchaser's storage area, as agreed, or to the nearest practicable point to the job site along existing roads. Unused material shall be returned to Forest Service at location of delivery, unless agreed otherwise.

BT5.23 Use of Partially Constructed Roads. Portions of Specified Roads shall be Substantially Completed prior to their use for hauling timber from each established landing, except that Purchaser may be relieved in writing of this requirement if there is justification under existing conditions. When necessary to facilitate construction and protect bridges and roads from damage, timber felled in construction and timber logged directly to the road from areas immediately adjacent thereto may be hauled before road construction is Substantially Completed. Such hauling shall be confined to periods when abnormal soil erosion and damage to National Forest lands will not result.

"Substantially Completed" means:

(a) Completion of grading and installation of drainage structures so they will function effectively and

(b) Laying the specified depth of base course, if any, unless physical conditions make it impractical or ground conditions permit hauling without undue damage.

No more than half of Included Timber to be hauled over such portions of road shall be hauled until the base course has been applied.

Unless agreed otherwise, specified reconstruction shall be completed on any portion of road prior to hauling on that portion.

BT5.24 Estimated Cost. Estimated costs by construction phases for Specified Roads listed in AT9 are stated by segments in AT10. Such estimated costs are subject to adjustment under BT3.3, BT5.2, BT5.21, BT5.212, BT5.25, and BT5.26. Appropriately adjusted costs shall be made a part of a revised AT10 that shall be designated AT10-1, AT10-2, etc. The revised AT10 shall supersede any prior AT10 herein when it is dated and signed by Contracting Officer and a copy is furnished to Purchaser.

BT5.25 Construction Cost Adjustment. Contracting Officer, as provided in BT5.251, BT5.252, and BT5.253, shall adjust cost estimates in AT10.

BT5.251 Variation in Quantities. (a) This Item applies only to differences between contract quantities shown in the Schedule of Items and measured quantities actually constructed and accepted that are not covered under BT5.252 or BT5.253. Only changes in quantities where other than design and lump sum measurement is specified in the Schedule of Items are subject to this Item. The Timber Sale Account shall be credited or debited to reflect differences in costs due to variation in quantities.

(b) Credits and debits to the Timber Sale Account shall be computed at unit rates established in the Schedule of Items for units of work actually constructed and measured in accordance with specified method of measurement shown in the Schedule of Items and described in the specifications identified in AT9, except that:

(i) When quantity of authorized work performed or material furnished by Purchaser, under any item shown in the Schedule of Items and covered by this Item, is more than 115 percent of original quantity, use Current Unit Rates to calculate the credit to the

Timber Sale Account for that portion of work above 115 percent of original quantity.

(ii) When quantity of authorized work performed or material furnished by Purchaser, under any item shown in the Schedule of Items and covered by this Item, is less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work. Any revised estimate shall use the same procedures as those used in original estimates using rates comparable to those used in computing the most recent cost estimate for the timber sale. Any revised cost estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

(c) "Current Unit Rates" are Forest Service estimates of the unit rates for doing the work at the time the adjustment is approved.

(d) Total cumulative credits to the Timber Sale Account, under BT5.21, BT5.212, BT5.251, BT5.252, and BT5.253, are subject to a maximum allowance equal to the difference, at timber sale closure using final quantities, between total contract value at Base Rates and total contract value at stumpage rates paid. Payments for increased costs shall be made at the time the cost difference is calculated, subject to adjustment at time of timber sale closure.

BT5.252 Physical Change. (a) Credit the Timber Sale Account if, prior to acceptance under BT6.36, a physical change, caused by a single event and not due to negligence of Purchaser, results in an increase or decrease in work and/or materials furnished by Purchaser involving additional estimated cost of:

(i) More than \$1,000 or

(ii) More than 10 percent of total Specified Road construction cost, whichever is less.

(b) Credits to the Timber Sale Account shall include cumulative estimated costs of repairing damage from slides, washouts, landslips, fire, etc. caused by said event. Drawings and specifications shall be revised when necessary to meet new conditions. Quantities of work and/or materials determined from such revised Drawings and specifications, together with estimated quantities of work and/or materials abandoned, shall be the basis for the revised Specified Road construction cost.

(c) Forest Service shall determine difference in quantities for portions of Specified Road affected by physical change by comparing most recent previous quantities with total of:

(i) Estimated quantities actually constructed prior to physical change, including work abandoned and

(ii) Estimated quantities to be constructed following physical change.

(d) Calculate the amount of credit to the Timber Sale Account by applying:

(i) Current Unit Rates to differences when quantities increase and

(ii) Unit rates comparable to those used in computing most recent cost estimate for the timber sale when quantities decrease.

(e) When quantity of authorized work to be performed or material furnished by Purchaser, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work and the Timber Sale Account shall be debited to reflect any cost reduction. Any revised estimate shall use the same procedures as those used in the original estimates using rates comparable to those used in the most recent cost estimate for the timber sale. However, the revised estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

(f) Total cumulative credits to the Timber Sale Account, under BT5.21, BT5.212, BT5.251, BT5.252, and BT5.253, are subject to a maximum allowance equal to the difference, at timber sale closure using final quantities, between total contract value at Base Rates and total contract value at stumpage rates paid. Payments for increased costs shall be made at the time the cost difference is calculated, subject to adjustment at time of timber sale closure.

BT5.253 Design Change. (a) "Design Change" is a change in work and/or materials shown in the Schedule of Items and described in Drawings or specifications that has been mutually agreed to in writing or ordered by Contracting Officer. Changes of a minor nature (such as adjustment in horizontal and vertical alignment that do not exceed specified tolerance, necessary to maintain or balance earthwork quantities substantially as designed) and "Variation in Quantities," as described in BT5.251, shall not be considered Design Changes.

(b) Additions, deletions, or changes in types or diameter of culverts shown in Drawings and changes in designated water sources shown on Drawings shall be considered Design Changes.

(c) Forest Service may, by written notice from Contracting Officer, order changes in work to be performed and/or materials to be furnished by Purchaser within general scope of the contract. Such work shall:

(i) Be due to differences between anticipated and actual field conditions,

(ii) Be necessary to construct Specified Roads to design standards, or

(iii) Be necessary to assure stability of Specified Roads.

(d) In addition, work to protect resource values may also be included in Design Changes ordered by Contracting Officer. Such work must be related to construction of Specified Roads and be necessary to prevent damage to soil and water values immediately tributary to Specified Roads. Other Design Changes may be made by mutual written agreement.

(e) Drawings and specifications shall be revised as necessary to meet new conditions. Quantities of work and/or materials determined from such revised Drawings and specifications, together with quantities of work and/or materials abandoned, shall be the basis for crediting or debiting the Timber Sale Account, subject to a maximum credit equal to the difference, at timber sale closure using final quantities, between total contract value at Base

Rates and total contract value at stumpage rates paid. Increases and decreases in road construction cost for both mutually agreed to and ordered Design Changes are included when crediting or debiting the Timber Sale Account.

(f) Forest Service shall determine difference in quantities for portion of Specified Road affected by Design Change by comparing most recent previous quantities with total of:

(i) Estimated quantities actually constructed prior to Design Change and

(ii) Estimated quantities to be constructed following Design Change.

(g) Calculate the amount of credit or debit to the Timber Sale Account by applying:

(i) Current Unit Rates to difference when quantities increase and

(ii) Unit rates comparable to those used in computing most recent cost estimates of the timber sale when quantities decrease.

(h) When quantity of authorized work to be performed or material furnished by Purchaser, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost of such work. Any revised estimate shall use the same procedures as those used in original estimates using rates comparable to those used in the most recent cost estimate for the timber sale. However, the revised estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

(i) Payments for increased costs that cannot be reimbursed by crediting the Timber Sale Account shall be made at completion of each ordered Design Change, subject to adjustment at time of timber sale closure. Final quantities and Current Contract Rates shall be used to determine the final amount of reimbursement. Payments are subject to availability of construction funds for that purpose.

BT5.26 Alternate Facilities. If under Purchaser's Operating Schedule, roads needed for the removal of Included Timber differ substantially from Specified Roads, other roads may be added to AT9. The road routing, location, design, and needed easements shall be such as will make such other roads acceptable as parts of the National Forest transportation system. Purchaser shall provide survey, design, and construction staking for such other roads.

Based on design quantities from such engineering, Forest Service shall estimate Specified Road construction costs of alternate facilities, using methods consistent with those used in the original computation of AT10. If Specified Road construction costs for acceptable alternate facilities are less than the estimated costs of facilities listed in the original AT10 that Purchaser does not construct, the Timber Sale Account shall be debited by Forest Service to reflect the reduction in costs. In event of rate re-determination under BT3.3, such allowed costs shall be the re-determined estimated costs of facilities listed in the original AT10 that Purchaser does not construct.

BT5.3 Road Maintenance. Purchaser shall maintain roads, commensurate with Purchaser's use, in accordance with the Road Maintenance Requirements in CT5.31 and the Road Maintenance Specifications. Performance of road maintenance work by Purchaser may be required prior to, during, or after each period of use. The timing of work accomplishment shall be based on Purchaser's Operating Schedule under BT6.31.

When two or more commercial users are simultaneously using the same road where Forest Service is not requiring maintenance deposits, the commercial users will develop maintenance responsibilities and arrangements for accomplishing the work. Forest Service must agree to this plan. If the commercial users cannot agree on maintenance responsibilities, Forest Service shall resolve the differences.

If Purchaser elects to use different roads than those listed in CT5.31, Forest Service shall determine Purchaser's commensurate share of road maintenance and revise road maintenance deposits in CT5.32.

If Forest Service cannot perform its full commensurate share of road maintenance, Forest Service shall make a cash payment to Purchaser for performance of such work.

Unless agreed in writing, prehaul maintenance shall be completed on any portion of road prior to hauling on that portion. Maintenance, as used in this contract, does not include road reconstruction or repairs of an extraordinary nature.

BT5.4 Use by Others. Forest Service shall have the right to use any road constructed by Purchaser under this contract for any and all purposes in connection with the protection and administration of the National Forest. Other parties, in connection with the logging of tributary National Forest timber, may use roads constructed by Purchaser hereunder when such use will not materially interfere with Purchaser's Operations. Such third party use shall be contingent upon the third party paying a fair share of maintenance cost commensurate with such commercial use.

Unless otherwise provided in CT5.4, Forest Service shall authorize other uses of roads constructed by Purchaser hereunder only if:

(a) Forest Service makes appropriate arrangements to relieve Purchaser of related maintenance costs commensurate with such other uses and

(b) Such other uses will not materially interfere with Purchaser's Operations.

Where Purchaser reconstructs a road having established use, the use during reconstruction and thereafter by Purchaser shall be such as to reasonably accommodate such established use. Purchaser shall have the right to use such reconstructed road without material additional interference from other users.

BT6.0—OPERATIONS

BT6.01 Statutory Compliance. Purchaser agrees to conduct operations under this contract and other related business activities in compliance with Fed-

eral, State, and local statutes, standards, orders, permits, or other regulations.

State and local environmental quality laws are applicable to National Forest lands. The contract shall govern if such laws conflict with or preclude performance of contractual requirements.

A conviction of, or a civil judgment for, any of the following offenses, shall be considered a breach of this Section and may result in termination of this contract pursuant to BT9.3:

(a) Theft, forgery, bribery, embezzlement, falsification or destruction of records, making false statements, or receiving stolen property, which is in any way connected with obtaining, attempting to obtain, selling, trading, or processing public timber;

(b) Fraud, criminal offenses, or violation of Federal or State antitrust laws, any of which occurred in connection with obtaining, attempting to obtain, or performing a public contract or subcontract; or

(c) Threatening, resisting, intimidating, or interfering with Forest Officers engaged in, or on account of, the performance of their official duties involving the protection, improvement, or administration of National Forest lands.

BT6.02 Interruption or Delay of Operations. (a) Purchaser agrees to interrupt or delay operations under this contract, in whole or in part, upon the written request of Contracting Officer:

(i) To prevent serious environmental degradation or resource damage that may require contract modification under BT8.3 or termination pursuant to BT8.24;

(ii) To comply with a court order, issued by a court of competent jurisdiction; or

(iii) Upon determination of the appropriate Regional Forester that conditions existing on this timber sale are the same as, or nearly the same as, conditions existing on timber sale(s) named in such an order, as described in paragraph (a)(ii).

(b) Purchaser agrees that in event of interruption or delay of operations under this Subsection that its sole and exclusive remedy shall be:

(i) Contract Term Adjustment pursuant to BT8.21.

(ii) When such an interruption or delay exceeds 30 days, Contract Term Adjustment pursuant to BT8.21, plus Out-of-Pocket Expenses incurred as a direct result of interruption or delay of operations under this Subsection. Purchaser agrees to provide receipts or other documentation to Contracting Officer that clearly identify and verify actual expenditures.

(c) "Out-of-Pocket Expenses" are unrecovered costs arising directly from performing the contract as a result of an interruption of operations and occurring prior to contract termination. Specifically, Forest Service will only reimburse Purchaser for the following costs:

(i) Costs of maintaining timber sale performance and payment bonds during the period when operations are suspended;

(ii) Costs of maintaining downpayment or other cash deposit bonds during the period when opera-

tions are suspended (measured by interest on the cash amount at the Prompt Payment Rate established by the Secretary of the Treasury);

(iii) Move in and out costs directly related to the interruption of operations or termination;

(iv) Estimated expenditures for felling, bucking, lopping, skidding, and decking any products so processed, but not removed from Sale Area because of termination action (based upon Forest Service appraisal methods in use when operations were interrupted); and

(v) The estimated expenditures for unused Temporary Roads and for Specified Road construction multiplied by the ratio of remaining quantity to advertised quantity.

(d) Forest Service will not reimburse any other costs claimed by Purchaser as Out-of-Pocket Expenses (for example, attorney's fees, lost profits, debt, employee wages, equipment depreciation, manufacturing inefficiencies, replacement cost of timber, or any other anticipatory losses suffered by Purchaser).

BT6.1 Representatives. Unless otherwise agreed, Purchaser shall designate, in writing, a representative who is authorized to receive notices in regard to performance under this contract and take related action. In no case shall Purchaser designate any representative to this contract who is currently debarred, proposed for debarment, or suspended by the Federal Government. Purchaser's representative shall provide a copy of the contract to Purchaser's field supervisor and persons authorized to assume responsibilities in the field supervisor's absence. Prior to initial operations and after shutdowns of 10 days or more, Purchaser's representative shall notify Forest Service 48 hours before any operations begin on the Sale Area.

Purchaser's representative shall designate, in writing, a field supervisor, one of whose responsibilities shall be on-the-ground direction and supervision of Purchaser's Operations. This person shall be readily available to the area of operations when operations are in progress and shall be authorized to receive notices in regard to performance under this contract and take related action. The responsibilities of this person shall include the safeguarding of National Forest resources and performance within the terms of the contract. Purchaser will furnish Forest Service with names of persons authorized to assume responsibilities in field supervisor's absence. Such delegations may be made a part of Purchaser's annual Operating Schedule under BT6.31.

Unless Contracting Officer designates another Forest Service representative and notifies Purchaser in writing, the District Ranger is the representative of Forest Service. Forest Service representative shall:

(a) Receive notice in regard to performance under this contract,

(b) Take action in relation to this contract, and

(c) Be readily available to the area of construction and logging operations.

Contracting Officer or Forest Service representative shall designate other on-the-ground representatives.

These persons shall be named in writing along with their specific contractual responsibilities and authority. Such delegation shall be made within 30 days of receipt of Purchaser's Plan of Operations.

BT6.11 Notices. Notices by either party as to action taken or to be taken by the other respecting this contract shall be made in writing to the other party's designated representative.

BT6.2 Improvements. Purchaser is authorized to construct on National Forest land, buildings, facilities, and other improvements needed to log Included Timber. Such construction shall be located where approved in writing by Forest Service and shall be constructed and used in a manner that will protect National Forest values. Forest Service may authorize Purchaser under special use permit or CT6.2 to establish and operate facilities on National Forest land to manufacture Included Timber.

Purchaser shall comply with the rules and regulations governing the operation of premises that are occupied and shall perform the contract in a manner that will not interrupt or interfere with the conduct of Forest Service business.

Before any camp, quarry, borrow pit, storage, or service area, other than as shown on Drawings, is opened or operated on National Forest land or lands administered by Forest Service, written permission shall be obtained through Forest Service. A camp is interpreted to include the campsite or trailer parking area of any employee working on the project for Purchaser. Such permission, if granted, shall be without charge to Purchaser.

BT6.21 Removal. Unless continued use is authorized, all said improvements shall be removed or disposed of by Purchaser when no longer needed. Should Purchaser fail to remove or dispose of said improvements within 6 months after Termination Date, Forest Service may dispose of said improvements at Purchaser's expense under BT9.5, or in lieu thereof, may, upon written notice to Purchaser, assume title to said improvements in the name of the United States. In the latter event, Purchaser shall not be required to remove such improvements.

BT6.22 Protection of Improvements. So far as practicable, Purchaser shall protect Specified Roads and other improvements (such as roads, trails, telephone lines, ditches, and fences):

- (a) Existing in the operating area,
- (b) Determined to have a continuing need or use, and
- (c) Designated on Sale Area Map.

Roads and trails needed for fire protection or other purposes and designated on Sale Area Map shall be kept reasonably free of equipment and products, slash, and debris resulting from Purchaser's Operations. Purchaser shall make timely restoration of any such improvements damaged by Purchaser's Operations and, when necessary because of such operations, shall move such improvements, as specified in CT6.22.

BT6.221 Protection of Improvements Not Owned by Forest Service. Forest Service will notify all utility companies, or other parties affected, and make ar-

rangements for all necessary adjustments of the public utility fixtures, pipelines, and other appurtenances affected by Purchaser's Operations.

When Purchaser's Operations are adjacent to properties of railway, telegraph, telephone, or power companies, or other property, work shall not begin until all necessary arrangements to prevent damage have been made by Purchaser.

Purchaser shall cooperate with the owners of any underground or overhead utility lines in their removal and/or rearrangement operations in order that these operations may progress in a reasonable manner, utility duplication or rearrangement work may be reduced to a minimum, and services shall not be unnecessarily interrupted.

In the event of interruption to utility services because of accidental breakage or as a result of lines being exposed or unsupported, Purchaser shall promptly notify the proper authority and shall cooperate with that authority in the restoration of service. If utility services are interrupted, cooperation shall be required until the service is restored.

When materials are to be hauled across the tracks of any railway, Forest Service will make arrangements with the railroad for the use of any existing crossing or for any new crossing required. Purchaser shall make arrangements for use of alternate crossings. All construction work to be performed by Purchaser on the railroad right-of-way shall not damage railroad company's property.

BT6.222 Protection of Property. In construction and reconstruction of Specified Roads, Purchaser shall not unnecessarily remove, deface, injure, or destroy trees, shrubs, or other natural features, unless specifically authorized. To the extent practicable, Purchaser shall confine operations to within the clearing limit or other areas designated in the contract and prevent the depositing of rocks, excavated materials, stumps, or other debris outside these limits.

Material that falls outside these limits shall be retrieved, disposed of, or incorporated in the work to the extent practicable and necessary to protect adjacent resource values, unless otherwise agreed.

BT6.23 Protection of Land Survey Monuments. Forest Service shall appropriately designate on the ground all known survey monuments, section corners, and other corner accessories. Forest Service shall post identifying signs on two sides of each known bearing tree.

In authorized clearings, such as Clearcutting Units and road construction, and in other instances where damage to monuments, section corners, and other corner accessories is unavoidable, Forest Service shall arrange protective or perpetuative action that does not cause unnecessary delay to Purchaser.

Purchaser shall protect all known survey monuments, witness corners, reference monuments, and bearing trees against avoidable destruction, obliteration, or damage during Purchaser's Operations. If any known monuments, corners, or accessories are destroyed, obliterated, or damaged by Purchaser's Operations, Purchaser shall hire the appropriate county surveyor or a registered land surveyor to reestablish or restore at the same location the monuments, corners, or accessories. Such surveyors

shall use procedures in accordance with the Bureau of Land Management "Manual of Instructions for the Survey of the Public Lands of the United States" for General Land Office surveys and in accordance with State law for others. Purchaser shall record such survey in appropriate county records.

BT6.24 Protection of Cultural Resources.

Locations of known historic or prehistoric sites, buildings, objects, and properties related to American history, architecture, archaeology, and culture, such as settler or Indian artifacts, protected by American Antiquities Act of 1906 (16 USC 432, 433), National Historic Preservation Act of 1966 (16 USC 470, *et seq.*), and the Archaeological Resources Protection Act of 1979 (16 USC 470aa-470mm), shall be identified on the ground by Forest Service. Contracting Officer may unilaterally modify or terminate this contract to protect an area, object of antiquity, artifact, or similar object that is or may be entitled to protection under these acts, regardless of when the area, object, or artifact is discovered or identified. Discovery of such areas by either party shall be promptly reported to the other party and operations will be suspended at that location until the significance or potential significance of the site is determined.

In the event of contract modification under this Subsection, Purchaser shall be reimbursed for any additional protection required, provided that any work or extra protection required shall be subject to prior approval by Forest Service. Amount of reimbursement shall be determined by Forest Service and shall be in the form of a reduction in stumpage rates, unless agreed otherwise in writing. However, in no event may stumpage rates be reduced below Base Rates.

Purchaser shall protect all known and identified historic or prehistoric sites, buildings, objects, and properties related to American history, architecture, archaeology, and culture against destruction, obliteration, removal, or damage during Purchaser's Operations. Measures needed to protect such areas are provided in CT6.24. Purchaser shall immediately notify Forest Service if disturbance occurs to any known site and shall immediately halt operations in the vicinity of the site until Forest Service authorizes Purchaser to proceed. Purchaser shall bear costs of evaluation and restoration in accordance with 36 CFR 296.14(c), provided that such payment shall not relieve Purchaser from civil or criminal remedies otherwise provided by law.

Wheeled or track-laying equipment shall not be operated within such areas, except on roads, landings, tractor roads, or skid trails approved under BT5.1 or BT6.422. Unless agreed otherwise, trees will not be felled into such areas. Purchaser may be required to backblade skid trails and other ground disturbed by Purchaser's Operations within such areas in lieu of cross ditching required under BT6.6.

BT6.25 Protection of Threatened, Endangered, and Sensitive Species. Locations of areas needing special measures for protection of plants or animals listed as threatened or endangered under the Endangered Species Act of 1973 or as sensitive plant and animal

species on the Regional Forester's list are shown on Sale Area Map and identified on the ground. Measures needed to protect such areas are provided in CT6.25.

If protection measures prove inadequate, if other such areas are discovered, or if new species are listed on the Endangered Species List or the Regional Forester's sensitive plant and animal species list, Contracting Officer may either terminate under BT8.24 or unilaterally modify this contract to provide additional protection, regardless of when such facts become known. Discovery of such areas by either party shall be promptly reported to the other party and operations will be suspended at that location until the significance or potential significance of the area is determined.

In the event of contract modification under this Subsection, Purchaser shall be reimbursed for any additional protection required by the modification, provided that any work or extra protection required shall be subject to prior approval by Forest Service. Amount of reimbursement shall be determined by Forest Service using standard Forest Service rate redetermination methods in effect at time of agreed change and shall be in the form of a reduction in Current Contract Rates, unless agreed otherwise in writing. However, in no event may Current Contract Rates be reduced below Base Rates.

BT6.26 Protection of Cave Resources. Locations of known caves, sinkholes, vertical shafts, and related features protected by the Federal Cave Resources Protection Act of 1988 (16 USC 4301, *et seq.*) are shown on the Sale Area Map and identified on the ground. Purchaser shall protect all known caves, sinkholes, vertical shafts, and related features from damage during Purchaser's Operations. Measures needed to protect such areas are provided in CT6.26. Purchaser shall immediately notify Forest Service if disturbance occurs to any identified feature and shall immediately halt operations in the vicinity of the feature until Forest Service authorizes Purchaser to proceed. Purchaser shall bear costs of resource damage evaluation and restoration, provided that such payment shall not relieve Purchaser from civil or criminal remedies otherwise provided by law. Discovery of caves, sinkholes, vertical shafts, and related features by either party shall be promptly reported to the other party and operations will be suspended at that location until the significance or potential significance of the feature is determined.

If protection measures prove inadequate, or if other caves, sinkholes, vertical shafts, and related features are discovered, Contracting Officer may unilaterally modify or terminate this contract to protect features that are or may be entitled to protection under this act, regardless of when discovered or identified. In the event of contract modification under this Subsection, Purchaser shall be reimbursed for any additional protection required, provided that any work or extra protection required shall be subject to prior approval by Forest Service. Amount of reimbursement shall be determined by Forest Service and shall be in the form of a reduction in stumpage rates,

unless agreed otherwise in writing. However, in no event may stumpage rates be reduced below Base Rates.

BT6.3 Control of Operations. Under this contract, "Purchaser's Operations" shall include activities of or use of equipment of Purchaser, Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents, acting in the course of their employment in operations hereunder on National Forest lands or within Forest Service protection boundary (unless acting under the immediate supervision of Forest Service).

Purchaser's Operations shall be conducted in a workmanlike and orderly manner. The timing of required Forest Service designation of work on the ground and the performance of other Forest Service work shall not be such as to cause unnecessary delay to Purchaser.

"Release for Cutting" is written authorization to Purchaser to begin cutting in a Payment Unit. Upon Purchaser's request for release of a Payment Unit, Forest Service shall either:

(a) Give tentative approval and bill Purchaser as necessary under BT4.22 or

(b) Reject the request, stating reasons for rejection.

When payment or payment guarantee has been confirmed, Forest Service shall issue Release for Cutting within 10 days. Purchaser shall not cut timber in any Payment Unit until it is Released for Cutting.

BT6.31 Operating Schedule. Purchaser shall, before commencing operations, provide in writing an annual Operating Schedule of anticipated major activities and needs for logging Included Timber, such as logging, road maintenance, and construction, including construction and staking schedule under BT5.212 and material delivery under BT5.22. Upon reasonable notice to Forest Service, such schedule shall be subject to modifications necessitated by weather, markets, or other unpredictable circumstances.

Subject to BT6.6 and when the requirements of BT6.66 are met, Purchaser's Operations may be conducted outside Normal Operating Season. "Normal Operating Season" is the period(s) beginning and ending on the dates stated in AT18 of any year.

BT6.311 Plan of Operations. For timber sales with 2 or more years between award date and Termination Date, within 60 days of final award of contract, Purchaser shall furnish Forest Service a written general Plan of Operations that shall be in addition to the annual Operating Schedule required under BT6.31. The Plan shall set forth planned periods for and methods of road construction, timber harvesting, and completion of slash disposal, erosion control measures, and other contractual requirements. Forest Service written approval of the Plan of Operations is prerequisite to commencement of Purchaser's Operations. Purchaser may revise this Plan of Operations when necessitated by weather, markets, or other unpredictable circumstances, subject to the written approval of Forest Service. In the event of delays beyond the control of Purchaser that qualify for Contract Term Adjustment under BT8.21, the Plan of Operations shall be mutually adjusted as necessary to accommodate the adjusted contract period.

BT6.312 Plan of Operations for Road Construction. Annually, prior to start of construction, Purchaser shall submit a supplement to the Plan of Operations that shall include a schedule of proposed progress and a description of planned measures to be taken to provide erosion control for work in progress, including special measures to be taken on any segments of construction not Substantially Completed prior to periods of seasonal precipitation or runoff. Purchaser shall submit a revised schedule when Purchaser proposes a significant deviation from the progress schedule.

Prior to beginning construction on any portion of Specified Roads identified as sensitive on Drawings, Purchaser and Forest Service shall agree on proposed method of construction.

BT6.32 Protection of Residual Trees. Purchaser's Operations shall not unnecessarily damage young growth or other trees to be reserved.

BT6.33 Safety. Purchaser's Operations shall facilitate Forest Service's safe and practical inspection of Purchaser's Operations and conduct of other official duties on Sale Area.

Unless otherwise agreed in writing, when Purchaser's Operations are in progress adjacent to or on Forest Service controlled roads and trails open to public travel, Purchaser shall furnish, install, and maintain all temporary traffic controls that provide the user with adequate warning of hazardous or potentially hazardous conditions associated with Purchaser's Operations. Purchaser and Forest Service shall agree to a specific Traffic Control Plan for each individual project prior to commencing operations. Devices shall be appropriate to current conditions and shall be covered or removed when not needed. Except as otherwise agreed, flagmen and devices shall be as specified in the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD) and as shown on Drawings, Sale Area Map, Traffic Control Plan, or in specifications attached hereto.

BT6.34 Sanitation and Servicing. Purchaser shall take all reasonable precautions to prevent pollution of air and water by Purchaser's Operations. If facilities for employees are established on Sale Area, they shall be operated in a sanitary manner. Refuse resulting from Purchaser's use, servicing, repair, or abandonment of equipment shall be removed from National Forest lands or buried at agreed locations. Purchaser shall not service tractors, trucks, or other equipment on National Forest lands where pollution to lakes, streams, or estuaries is likely to occur.

BT6.341 Prevention of Oil Spills. If Purchaser maintains storage facilities for oil or oil products on Sale Area, Purchaser shall take appropriate preventive measures to ensure that any spill of such oil or oil products does not enter any stream or other waters of the United States or any of the individual States.

If the total oil or oil products storage exceeds 1,320 gallons or if any single container exceeds a capacity of 660 gallons, Purchaser shall prepare a Spill Prevention Control and Countermeasures Plan. Such Plan shall meet

applicable EPA requirements (40 CFR 112), including certification by a registered professional engineer.

BT6.36 Acceptance of Work. Upon Purchaser's written request and assurance that work has been completed, Forest Service shall perform an inspection promptly so as not to delay unnecessarily the progress of Purchaser's Operations. Such a request may be for acceptance of:

(a) Any reasonable portion of Specified Road listed in AT10;

(b) Specific requirements on a Payment Unit (such as logging, slash disposal, erosion control, or snag felling); or

(c) All contract requirements on a Payment Unit.

Forest Service may perform such inspections without request from Purchaser.

Within 5 days of said inspection, Forest Service shall furnish Purchaser with written notice either of acceptance or of work remaining to be done.

In the event that Forest Service is unable to make such inspection within 10 days of Purchaser's request, Purchaser shall be notified in writing of necessity for postponement and time when inspection can be made. The same final approval procedure shall be used at the end of Purchaser's construction period on any completed portion of road.

When all contractual work of Purchaser has been accepted for any Payment Unit, said Payment Unit shall be eliminated from Sale Area on written notice of either party to this contract, unless such Payment Unit is a portion of a larger cutting unit. In the latter circumstance, such Payment Unit may be eliminated only by agreement.

BT6.361 Acceptance of Specified Roads. Specified Road work may be accepted subject to completion of clearing work that does not affect the road structure when completion is delayed for reasons beyond control of Purchaser, such as adverse weather.

Specified Road work may be accepted subject to completion of planting and seeding for soil stabilization when completion is delayed for reasons beyond control of Purchaser, such as seasonal limitations. Purchaser shall complete planting or seeding on such road during the next suitable planting season.

Specified Road work may be conditionally accepted prior to the application of bituminous dust palliatives when application is not necessary to prevent dusting of the road surface due to climatic conditions. Purchaser shall apply bituminous dust palliative on such roads prior to use during periods when dusting may occur.

Prior to request for final inspection of Specified Road work, roadways, borrow pits, and quarries, occupied and no longer needed by Purchaser in connection with Purchaser's Operations, shall be cleared of all rubbish, excess materials, and temporary structures.

BT6.4 Conduct of Logging. Unless otherwise specifically provided herein, Purchaser shall fell trees designated for cutting and shall remove the portions that meet Utilization Standards, as provided in BT2.2, prior to acceptance of Payment Unit for completion of logging under BT6.36. Exception may be made for occasional trees in-

advertently not cut or trees or pieces not removed for good reason, including possible damage to forest resources or gross economic impracticability at the time of removal of other timber. Logging shall be conducted in accordance with the following, unless CT6.4 provisions set forth requirements to meet special or unusual logging conditions:

BT6.41 Felling and Bucking. Felling shall be done to minimize breakage of Included Timber and damage to residual timber. Unless agreed otherwise, felling shall be done by saws or shears. Bucking shall be done to permit removal of all minimum pieces set forth in AT2. Purchaser may buck out cull material when necessary to produce pieces meeting Utilization Standards. Such bucked out material shall contain a minimum amount of sound wood, not in excess of the net Measure in percentage of gross Measure, or based on the merchantability factor, whichever is stated in AT2. If necessary to assess extent of defect, Purchaser shall make sample saw cuts or wedges.

BT6.411 Felling in Clearings. Insofar as ground conditions, tree lean, and shape of clearings permit, trees shall be felled so that their tops do not extend outside Clearcutting Units, construction clearings, and areas of regeneration cutting.

BT6.412 Stump Heights. Stumps shall not exceed, on the side adjacent to the highest ground, the maximum heights set forth in AT8, except that occasional stumps of greater heights shall be acceptable when necessary for safe and efficient conduct of logging. Except for acceptable high stumps provided for in this Item, Purchaser shall re-cut high stumps so they will not exceed heights specified in AT8 and shall dispose of severed portions in the same manner as other logging debris or as otherwise agreed. The stump heights shown in AT8 were selected with the objective of maximum reasonable utilization of the timber, unless Sale Area Map shows special areas where stump heights are lower for aesthetic, land treatment, or silvicultural reasons.

BT6.413 Limbing. When necessary to minimize damage to the residual stand during skidding, exposed limbs shall be cut from products prior to skidding. Such limbs may be left uncut that cannot be cut with reasonable safety.

BT6.42 Skidding and Yarding. Methods of skidding or yarding specified for particular areas, if any, are indicated on Sale Area Map. Outside Clearcutting Units and construction clearings, insofar as ground conditions permit, products shall not be skidded against reserve trees or groups of reproduction and tractors shall be equipped with a winch to facilitate skidding.

BT6.421 Rigging. Insofar as practicable, needed rigging shall be slung on stumps or trees designated for cutting.

BT6.422 Landings and Skid Trails. Location of all landings, tractor roads, and skid trails shall be agreed upon prior to their construction. The cleared or excavated size of landings shall not exceed that needed for safe and efficient skidding and loading operations.

BT6.423 Skidding on Roads. Products may be skidded on permanent roads authorized for hauling under BT5.12 only by prior written agreement.

BT6.424 Arches and Dozer Blades. Unless otherwise specified in CT6.424, skidding tractors equipped with pull-type arches or dozer blades wider than tractor width or C-frame width, whichever is greater, shall not be used in residual timber outside Clearcutting Units and other authorized clearings, except on constructed tractor roads or landings, unless there is written agreement that residual timber will not be damaged materially by such use.

BT6.5 Streamcourse Protection. "Streamcourses" that are subject to provisions of this Section are shown on Sale Area Map. Unless otherwise agreed, the following measures shall be observed to protect Streamcourses:

(a) Purchaser's Operations shall be conducted to prevent debris from entering Streamcourses, except as may be authorized under paragraph (d). In event Purchaser causes debris to enter Streamcourses in amounts that may adversely affect the natural flow of the stream, water quality, or fishery resource, Purchaser shall remove such debris as soon as practicable, but not to exceed 48 hours, and in an agreed manner that will cause the least disturbance to Streamcourses.

(b) Culverts or bridges shall be required on Temporary Roads at all points where it is necessary to cross Streamcourses. Such facilities shall be of sufficient size and design and installed in a manner to provide unobstructed flow of water and to minimize damage to Streamcourses. Trees or products shall not be otherwise hauled or yarded across Streamcourses unless fully suspended.

(c) Wheeled track-laying equipment shall not be operated in Streamcourses, except at crossings designated by Forest Service or as essential to construction or removal of culverts and bridges.

(d) Flow in Streamcourses may be temporarily diverted only if such diversion is necessary for Purchaser's planned construction and Forest Service gives written authorization. Such flow shall be restored to the natural course as soon as practicable and, in any event, prior to a major storm runoff period or runoff season.

BT6.6 Erosion Prevention and Control. Purchaser's Operations shall be conducted reasonably to minimize soil erosion. Equipment shall not be operated when ground conditions are such that excessive damage will result. The kinds and intensity of erosion control work done by Purchaser shall be adjusted to ground and weather conditions and the need for controlling runoff. Erosion control work shall be kept current immediately preceding expected seasonal periods of precipitation or runoff.

If Purchaser fails to do seasonal erosion control work prior to any seasonal period of precipitation or runoff, Forest Service may temporarily assume responsibility for the work and any unencumbered deposits hereunder may be used by Forest Service to do the work. If needed for such work, Purchaser shall make additional deposits on request by Forest Service. Any money deposited or used

for this purpose shall be treated as cooperative deposits under BT4.228.

BT6.61 Meadow Protection. Reasonable care shall be taken to avoid damage to the cover, soil, and water in meadows shown on Sale Area Map. Vehicular or skidding equipment shall not be used on meadows, except where roads, landings, and tractor roads are approved under BT5.1 or BT6.422. Unless otherwise agreed, trees felled into meadows shall be removed by endlining. Resulting logging slash shall be removed where necessary to protect cover, soil, and water.

BT6.62 Wetlands Protection. Wetlands requiring protection under Executive Order 11990 are shown on Sale Area Map. Vehicular or skidding equipment shall not be used in such wetlands, except where roads, landings, and tractor roads are approved under BT5.1 or BT6.422. Additional measures needed to protect such areas are provided in CT6.62.

BT6.63 Temporary Roads. As necessary to attain stabilization of roadbed and fill slopes of Temporary Roads, Purchaser shall employ such measures as out-sloping, drainage dips, and water-spreading ditches.

After a Temporary Road has served Purchaser's purpose, Purchaser shall give notice to Forest Service and shall remove bridges and culverts, eliminate ditches, out-slope roadbed, remove ruts and berms, effectively block the road to normal vehicular traffic where feasible under existing terrain conditions, and build cross ditches and water bars, as staked or otherwise marked on the ground by Forest Service. When bridges and culverts are removed, associated fills shall also be removed to the extent necessary to permit normal maximum flow of water.

BT6.631 Temporary Roads to Remain Open. To maintain short term access to portions of Sale Area for post-sale treatments and other purposes after a Temporary Road has served Purchaser's purpose, pursuant to BT6.63, Purchaser agrees, that on Temporary Roads designated on Sale Area Map as "Remain Open," to construct cross ditches and water bars, as designated, staked, or otherwise directed by Forest Service, that can be traversed by a normal two-wheeled drive pickup truck. On "Remain Open" Temporary Roads, all bridges and culverts shall remain in place and ditches shall not be eliminated.

BT6.64 Landings. After landings have served Purchaser's purpose, Purchaser shall ditch and slope them to permit water to drain or spread. Unless agreed otherwise, cut and fill banks around landings shall be sloped to remove overhangs and otherwise minimize erosion.

BT6.65 Skid Trails and Fire Lines. Purchaser shall construct cross ditches and water-spreading ditches on tractor roads and skid trails, where staked or otherwise marked on the ground by Forest Service. Forest Service shall designate cross ditching on Purchaser-built fire lines prior to or during construction. By agreement, Purchaser may use other comparable erosion control measures, such as backblading skid trails, in lieu of cross ditching.

BT6.66 Current Operating Areas. Where logging or road construction is in progress but not com-

pleted, unless agreed otherwise, Purchaser shall, before operations cease annually, remove all temporary log culverts and construct temporary cross drains, drainage ditches, dips, berms, culverts, or other facilities needed to control erosion.

Such protection shall be provided, prior to end of a Normal Operating Season, for all disturbed, unprotected ground that is not to be disturbed further prior to end of operations each year, including roads and associated fills, tractor roads, skid trails, and fire lines. When weather permits operations after Normal Operating Season, Purchaser shall keep such work on any additional disturbed areas as up to date as practicable.

BT6.67 Erosion Control Structure Maintenance. During the period of this contract, Purchaser shall provide maintenance of soil erosion control structures constructed by Purchaser until they become stabilized, but not for more than 1 year after their construction. Contracting Officer may agree to perform such structure maintenance under BT4.228, if requested by Purchaser, subject to agreement on rates. Purchaser shall not be responsible for repair of such structures damaged by other National Forest users whose activities are not a part of Purchaser's Operations.

BT6.7 Slash Disposal. Purchaser's timing of product removal and preparatory work shall not unnecessarily delay slash disposal. Specific slash disposal measures to be employed by Purchaser are stated in CT6.7 and are in addition to Required Deposits for slash disposal.

BT6.8 Measuring. "Measuring" is the estimation of timber quantities using certain dimensions and applicable volume tables or formulae to determine the contents of trees or stands in a standard manner. Sampling may be on an individual tree or area basis. Examples of standard procedures are tree measurement, sample tree measurement, and area estimate. The quantity of timber designated or to be designated for cutting has been or shall be Measured, as specified in CT6.8.

BT6.81 Product Identification. For timber sales west of the 100th meridian, before removal from the Sale Area, unless Contracting Officer determines that circumstances warrant a written waiver or adjustment, Purchaser shall:

(a) Hammer brand all products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter.

(b) Paint with a spot of highway-yellow paint all domestic processing products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter. Each paint spot must be not less than three (3) square inches in size.

Contracting Officer shall assign brands and, if the Sale Area is within a State that maintains a log brand register, brands shall be registered with the State. Purchaser shall use assigned brand exclusively on logs from this sale until Contracting Officer releases brand. Purchaser will furnish and apply highway-yellow paint of a lasting quality (oil-base or equivalent).

All hammer brands and/or highway-yellow paint must remain on logs until they are domestically processed. If

the identifying marks are lost, removed, or become unreadable, they shall be replaced. Purchaser may remanufacture products into different log lengths. Except for logs remanufactured as part of the mill in-feed process immediately before processing, remanufactured products must be rebranded with the assigned timber sale brand and repainted with highway-yellow paint, unless otherwise agreed to in writing by Contracting Officer. For such remanufactured products, Contracting Officer may approve use of a brand to be used exclusively as a catch brand, in lieu of the assigned timber sale brand.

BT6.9 Records. Upon request, Purchaser shall provide access to appropriate annual records in Purchaser's books and accounts to enable Forest Service to obtain and analyze accurate operating costs and selling price data for appropriate use in appraising Federal timber. However, upon receiving such a request from Contracting Officer, Purchaser may make written notice that such data shall be provided through an independent certified public accountant approved by Contracting Officer. Purchaser agrees that the certified public accountant shall do such work in accordance with specifications provided by Contracting Officer. Purchaser shall pay cost of such services. Data so provided shall be subject to acceptance by Forest Service and subject to review and adjustment, where needed, by Forest Service.

Operating cost and selling price data shall include that applicable for appraising timber obtained from Federal sources in or processed in the Region. Purchaser shall provide access to such data on behalf of subsidiary entities owned or controlled by Purchaser to the extent they participate in harvesting, manufacturing, or marketing said timber into products recognized in National Forest timber appraisals in the area. To a like extent, Purchaser shall request in writing Purchaser's contractors and Subcontractors to make such data available to Forest Service.

Information so obtained shall be treated as confidential, as provided in regulations issued by the Secretary of Agriculture (7 CFR 1.12), and shall be available for review by parties from whom such data are obtained.

BT7.0—FIRE PRECAUTIONS AND CONTROL

BT7.1 Plans. Prior to initiating Purchaser's Operations during Fire Precautionary Period, Purchaser shall file with Forest Service a Fire Prevention and Control Plan providing for the prevention and control of fires on Sale Area and other areas of Purchaser's Operations. Such Plan shall include a detailed list of personnel and equipment at Purchaser's disposal for implementing the Plan. This requirement may be met by preparing a single Plan for more than one timber sale.

BT7.2 Fire Precautions. Specific fire precautionary measures listed in CT7.2 shall be applicable during Purchaser's Operations in "Fire Precautionary Period" described in AT14. Contracting Officer may change the dates of Fire Precautionary Period by advance written notice, if justified by unusual weather or other conditions. Required tools and equipment shall be kept in serviceable condition and immediately available for fire fighting at all

times during Purchaser's Operations in Fire Precautionary Period.

BT7.21 Substitute Precautions. Forest Service may authorize substitute measures or equipment, or waive specific requirements by written notice, if substitute measures or equipment will afford equal protection or some of the required measures and equipment are unnecessary.

BT7.22 Emergency Precautions. Forest Service may require the necessary shutting down of equipment on portions of Purchaser's Operations, as specified by the emergency fire precautions schedule of CT7.22. Under such conditions, after Purchaser ceases active operations, Purchaser shall release for hire by Forest Service, if needed, Purchaser's shutdown equipment for fire standby on Sale Area or other areas of Purchaser's Operations and personnel for fire standby or fire patrol, when such personnel and equipment are not needed by Purchaser for other fire fighting or protection from fire. Equipment shall be paid for at fire fighting equipment rates common in the area or at prior agreed rates and, if Purchaser requests, shall be operated only by personnel approved by Purchaser. Personnel so hired shall be subject to direction and control by Forest Service and shall be paid by Forest Service at fire fighting rates common in the area or at prior agreed rates.

BT7.3 Fire Control. Purchaser shall, both independently and in cooperation with Forest Service, take all reasonable and practicable action to prevent and suppress fires resulting from Purchaser's Operations and to suppress any forest fire on Sale Area. Purchaser's independent initial fire suppression action on such fires shall be immediate and shall include the use of all necessary personnel and equipment at Purchaser's disposal on Sale Area or within the distance of Sale Area stated in AT15.

BT7.31 Purchaser's Reinforcement Obligations. Whenever an Operations Fire or Negligent Fire, whether on or off Sale Area, or any other forest fire on Sale Area, has not been suppressed by initial action and appreciable reinforcement strength is required, Forest Service may require further actions by Purchaser until such fire is controlled and mopped up to a point of safety. Such actions may include any or all of the following as necessary to fight such fire:

BT7.311 Suspend Operations. To suspend any or all of Purchaser's Operations.

BT7.312 Personnel. To release for employment by Forest Service any or all of Purchaser's personnel engaged in Purchaser's Operations or timber processing within the distance of Sale Area stated in AT15. Any organized crew so hired shall include Purchaser's supervisor, if any. Personnel so employed shall be paid at Forest Service standard emergency fire fighting rates.

BT7.313 Equipment. To make available for Forest Service rental at fire fighting equipment rates common in the area or at prior agreed rates any or all of Purchaser's equipment suitable for fire fighting and currently engaged in Purchaser's Operations within the distance of Sale Area stated in AT15. Equipment shall be

operated only by personnel approved by Purchaser, if so requested by Purchaser.

BT7.4 Fire Suppression Costs. Purchaser's obligations for cost of fire suppression vary according to three classifications of fires as follows:

BT7.41 Operations Fire. An "Operations Fire" is a fire caused by Purchaser's Operations other than a Negligent Fire.

Forest Service, except as provided in BT7.3, shall, under 16 USC 572, perform fire suppression activities on Operations Fires. Purchaser agrees to reimburse Forest Service for such cost for each Operations Fire, subject to a maximum of the dollar amount stated in AT16. The cost of Purchaser's actions, supplies, and equipment on any such fire provided pursuant to BT7.3, or otherwise at the request of Forest Service, shall be credited toward such maximum. If Purchaser's actual cost exceeds Purchaser's obligation stated in AT16, Forest Service shall reimburse Purchaser for the excess.

BT7.42 Negligent Fire. A "Negligent Fire" is a fire caused by negligence or fault of Purchaser's Operations, including, but not limited to, one caused by smoking by persons engaged in Purchaser's Operations during the course of their employment, or during rest or lunch periods; or if Purchaser's failure to comply with the requirements of BT7.2 and BT7.3 results in a fire starting or permits a fire to spread. Damages and the cost of suppressing Negligent Fires shall be borne by Purchaser.

BT7.43 Other Fires on Sale Area. Forest Service shall pay Purchaser, at fire fighting rates common in the area or at prior agreed rates, for equipment or personnel furnished by Purchaser pursuant to BT7.3, or otherwise at the request of Forest Service, on any fire on Sale Area other than an Operations Fire or a Negligent Fire.

BT7.5 State Law. Purchaser shall not be relieved by the terms of this contract of any liability to the United States for fire suppression costs recoverable in an action based on State law, except for such costs resulting from Operations Fires. Amounts due Purchaser for fire fighting expenditures in accordance with BT7.41 shall not be withheld pending settlement of any such claim or action based on State law.

BT7.6 Performance by Contractor. Where Purchaser's employees, agents, contractors, subcontractors, or their employees or agents perform Purchaser's Operations in connection with fire responsibilities, Purchaser's obligations shall be the same as if performance was by Purchaser.

BT8.0—OTHER CONDITIONS

BT8.1 Title and Liability.

BT8.11 Title Passage. All right, title, and interest in and to any Included Timber shall remain in Forest Service until it has been Measured, removed from Sale Area or other authorized cutting area, and paid for, at which time title shall vest in Purchaser. For purposes of this Subsection, timber in Payment Units Released for Cutting covered by cash deposit, transferred-in purchaser credit, or payment guarantee under BT4.3 shall be considered to

have been paid for. Title to any Included Timber that has been Measured and paid for, but not removed from Sale Area or other authorized cutting area by Purchaser on or prior to Termination Date, shall remain in Forest Service.

BT8.12 Liability for Loss. If Included Timber is destroyed or damaged by fire, wind, flood, insects, disease, or similar cause, the party holding title shall bear the timber value loss resulting from such destruction or damage, except that such losses caused by insect or disease after felling of timber, shall be borne by Purchaser, unless Purchaser is prevented from removing such timber for reasons that would qualify for Contract Term Adjustment. There shall be no obligation for Forest Service to supply, or for Purchaser to accept and pay for, other timber in lieu of that destroyed or damaged. This Subsection shall not be construed to relieve either party of liability for negligence.

BT8.2 Period of Contract. All obligations of Purchaser shall be discharged not later than "Termination Date" stated in AT17, unless it is adjusted pursuant to BT8.21 or BT8.212 or extended pursuant to BT8.23 or BT8.33, excepting only those obligations for which Forest Service has given written permission to delay performance. Such written permission shall be considered a Contract Term Adjustment for the purpose of Purchaser completing performance of obligations covered by such permission.

BT8.21 Contract Term Adjustment. "Contract Term Adjustment" means adjustment only as provided in BT8.2 and for the three circumstances described in this Subsection. Under said circumstances, the contract term shall be adjusted in writing to include additional calendar days in one or more Normal Operating Seasons equal to the actual time lost, except as limited by paragraph (b) in this Subsection.

To qualify for such adjustment, Purchaser shall give written notice of the lost time not later than 30 days after end of Normal Operating Season in which time was lost and at least 10 days before Termination Date. Contracting Officer shall make prompt written acknowledgment of such notice, indicating concurrence with the number of days in the notice or the number of days Forest Service considers as qualifying for the adjustment. Lost portions of days shall be disregarded in computing time lost. The three circumstances qualifying for a Contract Term Adjustment are:

(a) Purchaser experiences delay in starting scheduled operations or interruptions in active operations, either of which stops removal of Included Timber from Sale Area through curtailment in felling and bucking, yarding, skidding and loading, hauling, or road construction, as scheduled under BT6.31, for 10 or more consecutive days during a Normal Operating Season due to causes beyond Purchaser's control, including, but not limited to, acts of God, acts of the public enemy, acts of Government, labor disputes, fires, insurrections, or floods.

(b) Causes described in paragraph (a) substantially affect the disposition or processing of Included Timber during Normal Operating Season through their effects on primary timber processing facilities, with a resulting delay

of 60 days or more in use of such facilities. In such event, Contract Term Adjustment shall not extend for more than 12 consecutive months.

(c) Purchaser:

(i) Accepts Forest Service written request to interrupt or delay operations for any purpose other than suspension under BT4.4 or BT9.3 or

(ii) Suffers an interruption or delay of Purchaser's Operations affecting skidding, yarding, and loading because of fire emergency closure ordered by Forest Service (or another agency in its behalf), and the total of such lost time is 10 or more days during any Normal Operating Season.

If AT7 shows dates for scheduled rate redeterminations that are later than the beginning date of interruption or delay and Termination Date is eligible for adjustment, as described in this Subsection, prior to said dates, the rate redetermination shall be made as originally scheduled. If redetermined rates, plus Bid Premium Rates, are higher than rates in effect immediately prior to the rate redetermination date, the date on which the redetermined rates shall become effective shall be adjusted by the number of days equal to the days lost prior to said rate redetermination date.

If Termination Date is adjusted, as described in this Subsection, and later extended under BT8.23, the appraisal for the extension shall be made as of the unadjusted Termination Date, but the date on which the new rates become effective, if higher than Current Contract Rates immediately prior to Termination Date, shall be the adjusted Termination Date.

BT8.211 Delay in Reconstruction of Processing Facilities. Notwithstanding the 12-month limitation in BT8.21, if Purchaser demonstrates a diligent effort has been made to replace primary timber processing facilities and that delays in doing so have been beyond Purchaser's control, Contracting Officer may authorize Contract Term Adjustment up to a total of 24 months.

BT8.212 Market-Related Contract Term Addition. The term of this contract may be adjusted when a drastic reduction in wood product prices has occurred in accordance with 36 CFR 223.52. The Producer Price Index used to determine when a drastic reduction in price has occurred is stated in AT23. Purchaser will be notified whenever the Chief determines that a drastic reduction in wood product prices has occurred. If the drastic reduction criteria specified in 36 CFR 223.52 are met for 2 consecutive calendar quarters, after contract award date, Contracting Officer will add 1 year to the contract term, upon Purchaser's written request. For each additional consecutive quarter such a drastic reduction occurs, Contracting Officer will, upon written request, add an additional 3 months to the term during Normal Operating Season. Contracting Officer must receive Purchaser's written request for a market-related contract term addition before the expiration of this contract.

The total amount of contract term addition is limited to the lesser of twice the length of the original contract or 3 years. The revised contract term may not exceed 10 years as a result of market-related contract term addition.

Additional contract time may not be granted for those portions of the contract that have a required completion date or for those portions of the contract where Contracting Officer determines that the timber is in need of urgent removal or that timber deterioration or resource damage will result from delay.

When a contract is lengthened as a result of market-related contract term addition, any subsequent periodic payment date shall be delayed 1 month for each month added to the contract's term.

BT8.213 Delay of Award. If an appeal or lawsuit is filed challenging the decision to award this contract or upon determination by the Regional Forester that conditions existing on this timber sale are the same as, or nearly the same as, conditions existing on other timber sale(s) in appeal or litigation, Contracting Officer may delay award or reject all bids. If delay in award is for 30 days or more during Normal Operating Season after bid opening, Contracting Officer shall, upon award, adjust the contract term to include additional calendar days in one or more Normal Operating Seasons equal to the actual time award is delayed.

BT8.22 Termination for Catastrophe. In event of Catastrophic Damage, this contract shall be either modified under BT8.33, following rate redetermination under BT3.33, or terminated under this Subsection.

BT8.221 Termination by Purchaser. This contract shall be terminated, upon election and written notice by Purchaser, if Catastrophic Damage rate redetermination under BT3.33 shows that the appraised weighted average Indicated Advertised Rate of all Included Timber remaining immediately prior to the catastrophe has been reduced through Catastrophic Damage by an amount equal to or more than the weighted average Current Contract Rate.

"Indicated Advertised Rates" are Forest Service estimates of fair market value of the timber.

BT8.222 Termination by Forest Service. This contract shall be terminated by written notice from Forest Service, if there is Catastrophic Damage and Purchaser does not agree under BT8.33 to one or a combination of the following within 30 days of receipt from Contracting Officer of contract modifications proposed to permit the harvest of the catastrophe-affected timber in areas outlined under BT8.33:

(a) To include Catastrophically-Damaged undesignated timber that normally would be salvaged and cannot reasonably be logged separately from Included Timber,

(b) To permit salvage operations by others, or

(c) To eliminate areas of damaged or devalued timber from Sale Area.

BT8.23 Contract Term Extension. "Contract Term Extension" means an extension of the term of this contract, at the request of Purchaser, other than Contract Term Adjustment under BT8.21 or contract term addition under BT8.212. This Subsection does not obligate Contracting Officer to grant Contract Term Extension.

When such extension is made, Forest Service shall make an appraisal using standard Forest Service methods and appraisal data in effect 45 days prior to the origi-

nal Termination Date. Bid Premium Rates shall be added to such appraised rates to establish Flat Rates or Tentative Rates for the extension period. In event rates so established would develop Current Contract Value immediately prior to such an extension that is less than Current Contract Value at that time, Flat Rates and Tentative Rates in effect immediately prior to extension shall be retained for the extension period.

The cost of unconstructed Specified Roads and facilities shall be calculated, by applying current costs to original quantities used, to establish amounts by construction phases shown in the Schedule of Items. However, except for agreed changes in planned construction, the appraised construction cost shall not be increased by more than the increase in Current Contract Value.

In consideration for granting an extension, Purchaser shall pay the Government for Purchaser's failure to cut and remove timber meeting Utilization Standards prior to Contract Term Extension, an amount that shall be the total of the costs to the Government resulting from the delay in harvest of Included Timber. Such costs will be determined by Forest Service and shall include, but not be limited to, the following:

(a) Interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on Current Contract Value of timber remaining on Sale Area, less the credit balance of any deposit made pursuant to BT4.223, as of the original Termination Date, or as adjusted pursuant to BT8.21 or BT8.212, until the midpoint of the extension period;

(b) Increased costs of regeneration, including nursery stock loss, carryover, or replacement costs; and

(c) Costs of remarking timber on Sale Area or reestablishing cutting unit boundaries.

BT8.231 Conditions for Contract Term Extension. Contracting Officer may grant Purchaser's written request for Contract Term Extension, if Purchaser has met all of the following conditions at time of Purchaser's request:

(a) At least 75 percent of estimated quantity in AT2 has been cut and removed from Sale Area.

(b) Specified Roads needed by Purchaser for removal of all Included Timber, in accordance with the approved Plan of Operations submitted pursuant to BT6.311, were constructed and accepted by Forest Service prior to the applicable road completion date shown in CT5.13.

(c) Purchaser's Operations to date have been in reasonable compliance with contract terms and the approved Plan of Operations under BT6.311.

(d) All contractual requirements have been met by Purchaser and accepted by Forest Service on area cut over at time of Purchaser's request, except for areas where logging is in progress at time of Purchaser's request. Purchaser's burning of current slash or seeding or planting for erosion control may be temporarily waived, if weather or other considerations make such work impractical.

(e) Any payment required under BT4.223 has been made.

Contract Term Extension shall not become effective, unless payments required by BT8.23 have been paid and the initial Extension Deposit required by BT4.227 has been made by the effective date of any extension.

BT8.24 Termination. The Chief, Forest Service, by written notice, may terminate this contract, in whole or in part:

(a) To comply with a court order, regardless of whether this timber sale is named in such an order, upon determination that the order would be applicable to the conditions existing on this timber sale or

(b) Upon a determination by the Chief that the continuation of all or part of this contract would:

(i) Cause serious environmental degradation or resource damage;

(ii) Be significantly inconsistent with land and resource management plans adopted or revised in accordance with Section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended;

(iii) Cause serious damage to cultural resources pursuant to BT6.24; or

(iv) Adversely affect species listed as threatened or endangered under the Endangered Species Act, 16 USC 1531, *et seq.*, or a sensitive species identified by the Regional Forester.

Compensation for termination under this Subsection shall be calculated pursuant to BT9.51, except compensation for termination under paragraph (a) shall be calculated pursuant to BT9.52 and compensation for termination under paragraph (b)(iv) shall be calculated pursuant to BT9.53.

BT8.3 Contract Modification. The conditions of this timber sale are completely set forth in this contract. This contract can be modified only by written agreement of the parties, except as provided under BT8.31.

Except as provided in BT8.24, contract modifications, redeterminations of rates, and termination shall be in writing and may be made on behalf of Forest Service only by Contracting Officer.

(a) By agreement, and with compensating adjustments where appropriate, this contract shall be modified to provide for:

(i) The exercise of any authority hereafter granted by law or regulation of the Secretary of Agriculture, if such authority is then generally being applied to Forest Service timber sale contracts and

(ii) Any other contractual provision then in general use by Forest Service.

(b) Contracting Officer may make modifications in Timber Specifications in BT2.0, Transportation Facilities in BT5.0, or Operations in BT6.0, or in related Special Provisions if, and to the extent that, such changes are reasonably necessary to make the contract consistent with guidelines and standards developed to implement Section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended, and with land and resource management plans developed or revised thereunder. Resulting changes in the value of remaining Included Timber shall be reflected in a rate redetermina-

tion conducted in accordance with BT3.32. Rates so redetermined shall apply to timber Released for Cutting after the effective date of the modification.

(c) This contract may be modified to revise AT9 and AT10 to add Specified Roads not listed in AT9, as necessary to facilitate reconstruction of existing Forest Service roads or accepted Specified Roads, including appurtenances thereto. In accordance with BT5.2, Contracting Officer shall make revisions to AT9 and adjustments to Current Contract Rates. Reductions in Current Contract Value shall be limited to \$100,000 or less. Calculate cost adjustments for increases in Specified Road construction cost for added roads in accordance with BT5.251, BT5.252, and BT5.253. Additions will not be made when reconstruction is made necessary by Purchaser's negligence. Roads or road segments to be added must meet the following conditions:

(i) The required work must be on an actual haul route used by, or scheduled for use by, Purchaser;

(ii) The required work must be the result of unforeseen cause, such as slides, slumps, washouts, subgrade conditions, or similar causes; and

(iii) The work must be necessary for economic, safe, and practical use of the road by Purchaser.

BT8.31 Modification Upon Rate Redetermination. In scheduled rate redeterminations, Contracting Officer may make modifications in minimum specifications for trees or products in AT2, road maintenance requirements or deposits in CT5.31 or CT5.32, logging methods in CT6.4, slash disposal in CT6.7, and fire precautionary measures in CT7.2 if, and to the extent that, such changes are reasonably necessary to protect the interest of the United States. Such modifications shall be limited to requirements generally being made in Forest Service timber sale contracts in the Region at the time of rate redetermination and with which Purchaser can reasonably comply. Such changes shall be reflected in the rate redetermination, but changes affecting rates shall not be implemented until the redetermined rates become effective.

BT8.32 Changed Conditions. When it is agreed that the completion of certain work or other requirements hereunder would no longer serve the purpose intended because of substantial change in the physical conditions of Sale Area or Included Timber since the date of this contract, said requirements shall be waived in writing. The estimated cost of such waived work or other requirement shall be charged to the Timber Sale Account.

BT8.33 Modification for Catastrophe. In event of Catastrophic Damage, Forest Service, in consultation with Purchaser, shall outline on Sale Area Map:

(a) Any areas of catastrophe-affected live and dead timber meeting Utilization Standards and having undesignated timber so situated that it should be logged with the designated timber;

(b) If needed, any such areas where the damaged undesignated timber can reasonably be logged separately; and

(c) Areas of affected or unaffected timber that by agreement are to be eliminated from Sale Area.

By agreement, Purchaser and Forest Service shall locate and post the boundaries of all such areas as needed.

In such event, this contract shall be modified to include rates redetermined under BT3.33 and other related revisions as agreed hereunder, such as revision of Operating Schedule to ensure prompt removal of affected timber when necessary to avoid further loss and acceptance of Contract Term Extension period, if needed.

BT8.4 Performance by Other Than Purchaser. The acquisition or assumption by another party, under an agreement with Purchaser, of any right or obligation of Purchaser under this contract shall be ineffective as to Forest Service, until Forest Service has been notified of such agreement and Contracting Officer has given written approval. In no case shall such recognition or approval:

(a) Operate to relieve Purchaser of the responsibilities or liabilities Purchaser has assumed hereunder or

(b) Be given unless such other party:

(i) Is acceptable to Forest Service as a purchaser of timber and assumes in writing all of the obligations to Forest Service under the terms of this contract as to the uncompleted portion thereof or

(ii) Acquires the rights in trust as security and subject to such conditions as may be necessary for the protection of the public interests.

BT8.5 Sale of Other Materials. Forest Service reserves the right to sell from Sale Area during the period of this contract any materials or products not subject to its terms, but shall not permit removal, possession, or use thereof that will materially interfere with Purchaser's Operations. Purchaser shall not be obligated to do any work made necessary by the action of others.

BT8.6 Provisions Required by Statute.

BT8.61 Covenant Against Contingent Fees.

Purchaser warrants that no person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial agencies maintained by Purchaser for the purpose of securing business. For breach or violation of this warranty, Forest Service shall have the right to annul this contract without liability or to require Purchaser to pay, in addition to the contract price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

BT8.62 Officials Not to Benefit. No member of Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, unless it is made with a corporation for its general benefit (18 USC 431, 433).

BT8.63 Nondiscrimination in Employment. If the total value of this contract is in excess of \$10,000, Purchaser agrees during its performance as follows:

(a) Purchaser will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Purchaser will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, with-

out regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Purchaser agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by Forest Service setting forth the provisions of this Subsection.

(b) Purchaser will, in all solicitations or advertisements for employees placed by or on behalf of Purchaser, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(c) Purchaser will send to each labor union or representative of workers with which Purchaser has a collective bargaining agreement or other contract or understanding, a notice to be provided by Forest Service, advising the said labor union or worker's representative of Purchaser's commitments under this Subsection, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) Purchaser shall comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended by Executive Order No. 11375 of October 13, 1967 and Executive Order No. 12086 of October 5, 1978, and the rules, regulations, and relevant orders of the Secretary of Labor.

(e) Purchaser will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, as amended, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to books, records, and accounts by Forest Service and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In event of Purchaser's noncompliance with this Subsection or with any of such rules, regulations, or orders, this contract may be terminated or suspended, in whole or in part, and Purchaser may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, as amended, and such other sanctions may be imposed and remedies invoked, as provided in said Executive Order or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(g) Purchaser will include the provisions of paragraphs (a) through (f) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, as amended, so that such provisions will be binding upon each Subcontractor or vendor. Purchaser will take such action with respect to any subcontract or purchase order as Forest Service may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event Purchaser becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction by Forest

Service, Purchaser may request the United States to enter into such litigation to protect the interests of the United States.

Nothing in this contract shall be construed to require or permit discrimination based on sex.

BT8.64 Debarment and Suspension Certification. Pursuant to 7 CFR 3017.510, Purchaser shall obtain certifications from its Subcontractors regarding debarment, suspension, ineligibility, and voluntary exclusion, including additional Subcontractors obtained after award of this contract. "Subcontractors" are participants in lower tier covered transactions.

Purchaser may rely upon a certification of a prospective Subcontractor that it is not proposed for debarment under 48 CFR 9.4, debarred, suspended, ineligible, or voluntarily excluded from participating in covered transactions or timber sales, unless Purchaser knows that the certification is erroneous.

Purchaser shall keep the certifications of its Subcontractors on file until timber sale Termination Date and any extensions thereof, and will provide a copy at the written request of Contracting Officer. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this Subsection. The knowledge and information of Purchaser is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

If Purchaser knowingly enters into a timber sale transaction with a person who is proposed for debarment under 48 CFR 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in covered transactions or timber sales, in addition to other remedies available to the Government, Forest Service may pursue available remedies, including suspension and/or debarment.

The Subcontractor for a timber sale shall complete a "Subcontractor Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion." An example of this certification is shown following the instructions for page 101 of this contract.

BT9.0—PERFORMANCE AND SETTLEMENT

BT9.1 Performance Bond. As a further guarantee of the faithful performance of the provisions of this contract, Purchaser delivers herewith and agrees to maintain a surety bond in the dollar amount stated in AT19, unless the amount is adjusted as provided in BT9.11. In lieu of surety bond, Purchaser may deposit into a Federal Depository, as directed by Forest Service under BT4.22, and maintain therein, cash in the dollar amount stated in AT19 or negotiable securities of the United States having market value at time of deposit of not less than the dollar amount stated in AT19.

Any adjustment or extension of time for completion of this contract beyond 1 year may be granted only with the consent of surety on said bond or delivery of a new bond. Should the sureties on the bond delivered herewith, or any bond delivered hereafter in connection with this con-

tract, become unsatisfactory to Forest Service, Purchaser shall, within 30 days of receipt of demand, furnish a new bond with surety satisfactory to Forest Service.

BT9.11 Bond Reduction. Upon Purchaser's written request, Contracting Officer shall redetermine the amount of Purchaser's performance bond to an amount not less than Purchaser's remaining obligations, including the value of the Included Timber remaining on the Sale Area, plus the estimated cost of uncompleted work required of Purchaser and any unpaid billings due on the timber sale. Contracting Officer shall provide written notice of the redetermined amount to Purchaser and to Purchaser's surety. Similarly, Contracting Officer shall report to Purchaser in writing the amount of deposited cash or deposited securities required thereafter, if such deposits exist in lieu of a surety bond.

As soon as security for the performance of this contract or the settlement of Claims incident thereto is no longer necessary, appropriate notice shall be given to surety or deposits that may have been made in lieu of surety bond shall be returned to Purchaser, subject to the conditions in BT9.5.

BT9.12 Letters of Credit. Notwithstanding the provisions of BT9.1, approved letters of credit may be used in lieu of a surety bond for performance bond purposes. Such letters of credit shall be subject to approval by Contracting Officer.

BT9.2 Disputes. This contract is subject to the Contract Disputes Act of 1978 (41 USC 601, *et seq.*). Except as provided in the Contract Disputes Act of 1978, all disputes arising under or relating to this contract shall be resolved in accordance with this Section.

As used herein, "Claim" means a written demand or assertion by one of the parties seeking, as a legal right, the payment of money, adjustment or interpretation of contract terms, or other relief, arising under or relating to this contract. A voucher, invoice, or request for payment that is not in dispute when submitted is not a Claim. However, where such submission is subsequently not acted upon in a reasonable time, or disputed either as to liability or amount, it may be converted to a Claim. A Claim by Purchaser shall be made in writing and submitted to Contracting Officer for decision. A Claim by the Government against Purchaser shall be subject to a decision by Contracting Officer.

For Purchaser Claims of more than \$100,000, Purchaser shall submit with the Claim a certification that the Claim is made in good faith; the supporting data are accurate and complete to the best of Purchaser's knowledge and belief; and the amount requested accurately reflects the contract adjustment for which Purchaser believes the Government is liable. Purchaser, if an individual, shall execute the certification. When Purchaser is not an individual, the certification shall be executed by a senior company official in charge at Purchaser's plant or location involved or by an officer or general partner of Purchaser having overall responsibility for the conduct of Purchaser's affairs.

For Purchaser Claims of \$100,000 or less, Contracting Officer must render a decision within 60 days. For

Purchaser Claims in excess of \$100,000, Contracting Officer must decide the Claim within 60 days or notify Purchaser of the date when the decision will be made.

Contracting Officer's decision shall be final unless Purchaser appeals or files a suit.

The authority of Contracting Officer does not extend to Claims or disputes that by statute or regulation other agencies are expressly authorized to decide.

Interest, at the Prompt Payment Rate established by the Secretary of the Treasury, on the amount found due on Purchaser's Claim shall be paid from the date the Claim is received by Contracting Officer until the date of the payment.

Except as the parties may otherwise agree, pending final resolution of a Claim of Purchaser arising under the contract, Purchaser shall proceed diligently with the performance of the contract in accordance with Contracting Officer's decision.

BT9.21 Submission of Claim. Purchaser Claims under this contract shall be submitted in writing to Contracting Officer. Date of receipt by Contracting Officer shall be considered as the beginning date for determining any interest due on Claims.

Failure by Purchaser to submit a Claim within established time limits shall relinquish the United States from any and all obligations whatsoever arising under said contract or portions thereof. Purchaser shall file such Claim within the following time limits:

(a) When Purchaser constructs Specified Road, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification of acceptance;

(b) When Forest Service constructs Specified Road, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification authorizing use of road;

(c) For Payment Units, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification that Payment Unit has been accepted; and

(d) In all other cases, Purchaser must file any Claim not later than 60 days after receipt of Contracting Officer written notification that timber sale is closed.

BT9.22 Contract Documents. All contract documents are intended to be consistent with each other. In case of discrepancy, the following is the order of precedence:

(a) Special Provisions (CT)

(b) Sale Area Map

(c) Specific Conditions (AT) and Schedule of Items

(d) Standard Provisions (BT)

(e) Special project specifications

(f) Plans, such as slash, erosion control, dust abatement, etc.

(g) Agreements between Purchaser and Forest Service, as authorized under the contract

(h) Drawings:

(i) Figured dimensions over scaled dimensions

(ii) Large scale Drawings over small scale Drawings

(i) Standard specifications

(j) Lists and/or tables in Drawings over any conflicting notations on Drawings

(k) Shop Drawings

BT9.3 Breach. In event Purchaser breaches any of the material provisions of this contract, Forest Service shall give Purchaser notice of such breach and, allowing reasonable time for remedy of such breach and of Forest Service's election to suspend, may give notice to suspend all or any part of Purchaser's Operations. Such notice of breach and notice to suspend Purchaser's Operations shall be written, except oral notices may be given if such breach constitutes an immediate threat to human life or a threat of immediate and irreparable damage to National Forest resources. Notwithstanding Section BT6.1, such oral suspension notice may be given to Purchaser's work supervisor or, in work supervisor's absence, to those performing the operation. An oral suspension notice shall be promptly followed by telephone notice and a written explanation from Forest Service to Purchaser.

Immediately upon oral or written suspension, Forest Service representative shall notify Contracting Officer of the suspension and related circumstances. Contracting Officer shall promptly review the suspension to determine if the suspension should be continued or lifted. Such suspension shall be lifted as early as conditions permit.

Upon receipt of oral or written notice of such breach, Purchaser shall remedy the breach as follows:

(a) If remedying such breach requires on-the-ground action by Purchaser, Purchaser shall have 30 practicable operating days during Normal Operating Season to do so, except under emergency conditions when action should not be delayed to prevent major damage or

(b) If such breach does not require on-the-ground action by Purchaser, such breach shall be remedied within 30 days.

BT9.31 Termination for Breach. Contracting Officer, with the concurrence of the Regional Forester, may terminate this contract for breach in the event Purchaser: Is convicted for violation of criminal statutes, civil standards, or any other offense indicating a lack of business integrity or honesty that seriously and directly affects the responsibility of Purchaser; including, but not limited to:

(i) Theft, forgery, bribery, embezzlement, falsification or destruction of records, making false statements, or receiving stolen property, any of which occurred in connection with obtaining, attempting to obtain, selling, trading, or processing public timber;

(ii) Fraud, criminal offenses, or violation of Federal or State antitrust laws, any of which occurred in connection with obtaining, attempting to obtain, or performing a public contract or subcontract; or

(iii) Threatening, resisting, intimidating, or interfering with Forest Officers engaged in, or on account of, the performance of their official duties involving the protection, improvement, or administration of National Forest lands;

(b) Is convicted for a violation of criminal statutes or civil standards, orders, permits, or other regulations for

environmental protection issued by a Federal agency, State agency, or political subdivision thereof in the conduct of operations hereunder on National Forest lands, pursuant to BT6.01;

(c) Has engaged in a pattern of activity that demonstrates flagrant disregard for the terms of this contract, such as, but not limited to, repeated suspensions for breach pursuant to BT9.3, causing undesignated timber meeting Utilization Standards to be unnecessarily damaged or negligently or willfully cut, or causing other serious environmental degradation or resource damage;

(d) Fails to comply with contract provisions related to nondiscrimination in employment; or

(e) Fails to remedy a breach of contract within time limits stated in BT9.3.

Damages due the United States for termination under this Subsection shall be determined pursuant to BT9.4.

BT9.4 Damages for Failure to Cut or Termination for Breach. In event of (a) Purchaser's failure to cut designated timber on portions of Sale Area by Termination Date or (b) termination for breach under BT9.31, Forest Service shall appraise remaining Included Timber, unless termination is under BT8.22 or BT8.24. Such appraisal shall be made with the standard Forest Service method in use at time of termination.

Damages due the United States for Purchaser's failure to cut and remove Included Timber meeting Utilization Standards shall be the amount by which Current Contract Value, plus costs described in this Section, less any transferred-in purchaser credit remaining at time of termination, exceeds the resale value at new Bid Rates. If there is no resale, damages due shall be determined by subtracting the value established by said appraisal from the difference between Current Contract Value and the estimated expenditures for Specified Road construction multiplied by the ratio of remaining quantity to advertised quantity, plus any of the following applicable costs:

(a) The cost of resale or reoffering.

(b) Any increase in Specified Road construction cost for unconstructed Specified Road facilities that are needed to harvest the remaining uncut quantity. Such increases are limited to costs for constructing the road to the same standard and specifications as required by this contract.

(c) If Purchaser has failed to cut individual trees in the portions of Sale Area cut over and there is no resale of such individual trees, Purchaser shall pay Forest Service for cost of felling and removal or otherwise eliminating such uncut trees, in addition to payment of other damages described in this Section, except for occasional trees not cut for reasons stated in BT6.4.

(d) The Government's loss caused by the delay in receipt of stumpage payments. Such loss will be measured by interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on the unpaid contract value at Termination Date. Interest will be charged for the total number of months, or portions thereof, from Termination Date until midpoint of the contract resale period, less any time in excess of 1 year needed to make the resale.

(e) Any increase in reforestation costs, including site preparation, seeding, and planting caused by Purchaser's failure to harvest Included Timber by Termination Date.

BT9.41 Failure to Execute Contract. Purchaser's failure to execute and return this contract, or to provide the performance bond, within 30 days of the date of Contracting Officer's letter of award constitutes a breach of the contract. Purchaser's failure to correct the breach within any additional time set by Contracting Officer constitutes a repudiation and breach of the contract and terminates the contract without further action by Contracting Officer. Damages due the United States shall be determined in the following manner:

(a) The costs, as described in this Subsection, incurred by Forest Service in contacting the other qualified bidders regarding accepting the award of the contract at the high bidder's repudiated rate or

(b) If another qualified bidder does not accept award of the contract at the high bidder's repudiated rate:

(i) If the repudiated contract is reoffered within 6 months of the date of repudiation, damages shall be the difference between the total resale bid value and the total value of Purchaser's repudiated bid, plus costs described in this Subsection or

(ii) If there are no responsive bids on the reoffered contract, damages shall be the difference between the reoffered appraised value and the total value of Purchaser's repudiated bid, plus costs described in this Subsection or

(iii) If the repudiated contract will not be reoffered or the reoffer is not made within 6 months of Purchaser's repudiation, damages shall be the difference between the appraised value of this contract as of the date of Purchaser's repudiation and the total value of Purchaser's repudiated bid, plus the costs described in this Subsection.

The costs to be included in damages are the costs the Government incurs in making the reoffer, including, but not limited to, salary costs, document preparation and duplication costs, mailing costs, and timber sale advertisement costs.

Damages will also include interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on the difference between Purchaser's retained bid guarantee and the downpayment amount pursuant to BT4.221 and other deposits required at award. Interest will be calculated from the date of Purchaser's repudiation to the date of award of the reoffered contract or to the date a determination is made not to reoffer the repudiated contract or for 6 months, whichever comes first.

Purchaser and Forest Service agree that Purchaser's bid guarantee shall be retained by Forest Service and applied toward damages due the United States for Purchaser's failure to execute this contract.

BT9.5 Settlement. If obligations of Purchaser have not been fully discharged by Termination Date, any money advanced or deposited hereunder shall be retained and applied toward unfulfilled obligations of Purchaser without prejudice to any other rights or remedies of Forest Service. Such funds may be treated as coopera-

tive deposits under BT4.228 for uncompleted work 30 days after receipt of written notice from Forest Service to Purchaser of work to be done and Purchaser's failure to deny the obligation or to do the work.

BT9.51 Settlement for Termination. If Forest Service terminates this contract under BT8.24, Purchaser agrees that the liability of the United States shall be limited to the sum of:

(a) The estimated expenditures for Specified Road construction multiplied by the ratio of remaining volume to advertised volume;

(b) The estimated expenditures for felling, bucking, lopping, skidding, and decking any products so processed, but not removed from Sale Area because of the termination action;

(c) Out-of-Pocket Expenses involved in acquiring and holding the contract, such as maintaining performance bonds and cash deposits; and

(d) The difference between Current Contract Rates for the remaining uncut volume and the rates paid for comparable timber on the same National Forest during the preceding 6-month period multiplied by the remaining uncut volume.

Comparable timber is timber of similar size and quality with similar topography and access. Base cost estimates for items listed in (b) upon Forest Service appraisal methods in use on the date contract is terminated.

BT9.52 Settlement for Administrative Appeal or Litigation. Forest Service may modify or terminate this contract in whole or in part as a result of an administrative appeal or litigation of the decision to sell timber included in this contract.

In the event of modification or partial termination, changes to the contract shall be limited to those determined by Contracting Officer to be necessary for correction of the deficiencies raised by the appeal or lawsuit. Changes to the contract shall be limited to requirements with which Purchaser can reasonably comply.

In the event that this contract is terminated, in whole or in part, under this Subsection, Purchaser agrees that the liability of the United States shall be limited to the sum of:

(a) The estimated expenditures for Specified Road construction multiplied by the ratio of remaining volume to advertised volume and

(b) The estimated expenditures for felling, bucking, lopping, skidding, and decking any products so processed, but not removed from Sale Area because of termination action.

Base these cost estimates upon Forest Service appraisal methods in use on the date contract is modified or terminated.

BT9.53 Settlement for Environmental Termination. In the event of termination of this contract, in whole or in part, by the Chief, based upon the Chief's determination that continuation of all or part of this contract would adversely affect a species listed as threatened or endangered under the Endangered Species Act, 16 USC 1531, *et seq.*, or a sensitive species identified by the Regional Forester, Purchaser agrees that the liability of the United States shall be limited to the express remedies contained within this Subsection.

In the event of termination or partial termination, Purchaser agrees that its sole and exclusive remedy shall be the sum of:

(a) The estimated expenditures for Specified Road construction multiplied by the ratio of remaining volume to advertised volume;

(b) The estimated expenditures for felling, bucking, lopping, skidding, and decking any products so processed, but not removed from Sale Area because of termination action; and

(c) The Out-of-Pocket Expenses involved in acquiring and holding this contract, such as maintaining performance bonds and cash deposits.

Base cost estimates for items listed in (b) upon Forest Service appraisal methods in use on the date contract is terminated. Out-of-Pocket Expenses in (c) do not include lost profits, replacement cost of timber, attorney's fees, or any other anticipatory losses suffered by Purchaser. Purchaser agrees to provide receipts or other documentation to the Contracting Officer that clearly identify and verify actual expenditures.

BT9.6 Contract Closure. Contracting Officer shall give appropriate written notice to Purchaser when Purchaser has complied with the terms of this contract. Purchaser shall be paid refunds due from the Timber Sale Account under BT4.25 and excess cooperative deposits under BT4.228.

DIVISION CT

Special Provisions

In accordance with AT25, the Sections, Subsections, and Items therein listed are attached and made a part hereof. The material is indexed by the numbering system used in Division BT. The numbers after the CT (that identifies material in this Division) indicates the Part, Section, Subsection, or Item of Division BT that is being supplemented or modified by each particular provision included in this Division.

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE		Name of Purchaser	
TIMBER SALE CONTRACT <i>(Applicable to Sales to be Measured Before Felling)</i>			
National Forest Arapaho-Roosevelt	Ranger District Clear Creek	Region 02	Contract Number
Sale Name Guanella Pass Settlement		Subregion	Award Date
			Termination Date

The parties to this contract are The United States of America, acting through the Forest Service, United States Department of Agriculture, hereinafter called Forest Service, and ^{1/} _____

a _____ hereinafter called Purchaser.

^{2/} Forest Service having advertised a sale at which either (1) Purchaser, whose required bid deposit is now held by Forest Service as an initial deposit, was the successful bidder, or (2) no bids were received and Purchaser having subsequently offered at least the minimum advertised price and made an initial deposit in the same amount as the bid deposit specified in the sale advertisement; and the parties hereto desiring to record their agreement; now therefore,

In consideration of the premises and the promises hereinafter contained, unless provided otherwise herein, Forest Service agrees to sell and permit Purchaser to cut and remove and Purchaser agrees to purchase, cut, and remove Included Timber.

This contract consists of three Divisions: AT – Specific Conditions, BT – Standard Provisions, and CT – Special Provisions, together with Sale Area Map, Drawings and specifications for developments (if any), and such attachments as may be provided for in Division CT. Specific Conditions are numbered and apply to the Part, Section, Subsection, or Item of the Standard Provisions, as indicated hereunder. Other conditions of this contract are stated in Division CT – Special Provisions.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the award date.

UNITED STATES OF AMERICA

By: _____
Contracting Officer
(Title)

(Purchaser) ^{4/}

Two Witnesses: ^{3/}

(Name)

(Address)

(Name)

(Address)

By: _____

(Title)

(Business Address)

I, ^{5/} _____, certify that I am the _____ Secretary of the corporation named as Purchaser herein; that _____ who signed this contract on behalf of Purchaser, was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

**CORPORATE
SEAL ^{6/}**

INSTRUCTIONS:

- 1/ If Purchaser is a corporation, state a "corporation organized and existing under the laws of the State of _____" and specify the State; if Purchaser is a partnership, state a "partnership consisting of _____" and specify the names of each partner; and if Purchaser is a sole proprietor doing business under an assumed name, state "(n) individual doing business under the name of _____, City of _____, State of _____."
- 2/ Delete this paragraph for unadvertised administrative use and timber settlement contracts.
- 3/ The signatures and addresses of two witnesses are required if Purchaser is other than a corporation.
- 4/ If Purchaser is a co-partnership, the signatures should be: XYZ Company, by John Doe, a member of the firm. If Purchaser is a corporation, form of signature should be: XYZ Company, by John Doe, President (or other officer or agent) and the seal of the corporation must be impressed or indicated.
- 5/ The certificate must be completed if Purchaser is a corporation.
- 6/ If the corporation has no corporate seal that fact shall be stated, in which case a scroll or adhesive seal shall follow the corporate name.

EXAMPLE 1/	
<i>Subcontractor Certification</i>	
<i>Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion</i>	
Timber Sale Name: _____	
National Forest: _____	
The prospective subcontractor (participants in lower tier covered transactions) certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this timber sale by any Federal department or agency.	
Where the prospective subcontractor is unable to certify to any of the statements in this certification, such prospective subcontractor shall attach an explanation to this proposal.	
Name of Subcontractor: _____	
Business Address: _____	

_____	_____
Date	Signature
1/ It is the Purchaser's responsibility to have subcontractors complete this certification and to maintain a file of completed certifications. This certification does not need to be returned to the Forest Service, except at the written request of the Contracting Officer.	

The following conditions apply to the indicated portions of Division BT – Standard Provisions issued July 2001.

AT1 – Location and Area, applicable to BT1.1

This Sale Area of _____ acres more or less is located in: _____

AT2 – Volume Estimate and Utilization Standards, applicable to BT2.1, BT2.2, BT2.4, and BT6.4

Species	Product	Estimated Quantity *	Unit of Measure	Minimum Specifications				
				Merchantable Tree		Piece Required to be Removed		
				Diameter Breast High (d.b.h.) (inches)	Number of Minimum Pieces per Tree	Length (feet)	Diameter Inside Bark at Small End (inches)	1/
<u>Live</u> Engelmann Spruce, Lodgepole Pine and all other conifers	Sawlogs		CCF	7.0	1	8	6.0	10.67
<u>Dead</u> Lodgepole Pine All other conifer	Sawlogs		CCF	8.0 12.0	1 1	16 16	7.0 10.0	8.0 8.0
Timber Subject to Agreement under CT2.11#								
N/A								
Total Quantity								

1/ Enter Merchantability Factor (Merch. Factor) or Net Scale in % of Gross Scale, whichever is appropriate.

* Quantities not included here are described in BT2.4.

AT3 – Timber Designations, applicable to BT2.3; acres are approximate:

	Number	Acres
Clearcutting Units (BT2.31)	1	_____
Specified Road Clearing (BT2.32)	_____	_____
Overstorey Removal Units (BT2.33)	_____	_____
Understorey Removal Units (BT2.34)	_____	_____
Individual Trees (BT2.35)	_____	_____
Incompletely Measured Payment Units (BT2.36)	_____	_____

AT4 – Dead Trees Required to be Felled, applicable to BT2.12, BT2.3, and BT6.4

Size Requirements: _____ 16 feet high and _____ 8 inches d.b.h.

Number Limitations: Applicable only if Sale Area Map indicates there are subdivisions where timber is to be designated after date of sale advertisement. In addition to dead trees felled within Clearcutting Units, construction clearings, and other authorized development clearings, no more than _____ **N/A** dead trees must be felled within subdivisions, or those portions thereof, where timber is designated after date of sale advertisement. Number limitation does not apply to subdivisions, or portions thereof, designated at time of sale advertisement.

AT5 – Timber Payment Rates, applicable to BT3.1 and BT4.0

AT5a – For Species and Products to be Paid for at Rates Escalated under BT3.2

Species	Product	Unit of Measure	Rates per Unit of Measure				Required Deposits Slash Disposal \$	Base Index
			Base \$	Advertised \$	Bid Premium \$	Bid (Tentative) \$		
<u>Live</u> Engelmann Spruce, Lodgepole Pine and all other conifers	Sawlogs	CCF	10.00	TBD				
			6.00					
<u>Dead</u> Lodgepole Pine All other conifer	Sawlogs	CCF	1.00					

AT5b – For Species and Products to be Paid for at Flat Rates

Species	Product	Unit of Measure	Rates per Unit of Measure				Required Deposits Slash Disposal \$
			Base \$	Advertised \$	Bid Premium \$	Bid (Flat) \$	
N/A							

For purposes of convenience in collection and bookkeeping, Bid Rates stated in AT5 include payment of deposits for sale area betterment required pursuant to 16 USC 576b. Such deposits are not included as Required Deposits defined hereunder.

The following definitions are established for the terms used in AT5:

Base Rates are the lowest rates of payment for timber that are authorized by this contract. Base Rates remain constant throughout the life of this contract and are not subject to change by rate redetermination except for reduction under BT3.33.

Advertised Rates are the minimum acceptable Bid Rates for timber, exclusive of Required Deposits. These rates are those indicated by appraisal, with a cost allowance made for construction of Specified Roads listed in AT9, but are never less than Base Rates.

Bid Premium Rates are the amounts by which Purchaser's bid is in excess of Advertised Rates. The Bid Premium Rates are constant during this contract.

Bid Rates are the rates bid by Purchaser (exclusive of Required Deposits for slash disposal and road maintenance) and are the sum of Advertised Rates and Bid Premium Rates. Until a rate redetermination becomes effective, the Bid Rate for species and products in AT5a is the Tentative Rate that is subject to quarterly adjustment under BT3.2; for species and products in AT5b, the Bid Rate is the Flat Rate.

Required Deposits are deposits that Purchaser may be required to pay for slash disposal (16 USC 490) and road maintenance (16 USC 537). Required Deposits may be adjusted as part of a redetermination or a Contract Term Extension. The table shows only Required Deposits for slash disposal; road maintenance deposits, if any, are given in CT5.32#.

Base Index is the specified average of the lumber or other product selling value index used as the basis for computing adjustment in rates for variance in product selling value as provided in BT3.2. Base Indices shall be redetermined when rate redeterminations are made under BT3.31.

AT6 – Indices Used in Quarterly Adjustment, applicable to BT3.2

Species	Index Name and Date

AT7 – Scheduled Rate Redetermination, applicable to BT3.31

Date for scheduled rate redetermination is _____ . Rate redeterminations shall cover Included Timber in the entire sale unless otherwise specified in CT3.31. Timber quantity required to be paid for and Released for Cutting before lower rates developed from scheduled rate redetermination can become effective is: _____

(Quantity and Unit of Measure, based on estimates in AT5c)

AT8 – High Stumps, applicable to BT6.412

Species	Product	Maximum Stump Height (inches)

AT9 – Specified Roads, applicable to BT5.2

Name and Date of Governing Road Specifications: N/A

Project		Design Class	Approx. Length (mi./km.)	Sheet Numbers and Approval Date	Performance Responsibility		
Road No.	Name				Survey	Design	Const. Staking ^{1/}
	N/A						

^{1/} Indicate timing, i.e., before clearing (BC) or after clearing (AC). Applicable to BT5.212.

AT10 – Estimated Cost of Specified Roads, applicable BT5.24

Project Segment			Construction Phases (Entries in Dollars)											Specified Road Const. Cost \$
Road Number	Station		Survey	Design	Staking	Clearing	Excavation	Culverts	Base Course	Surfacing	Stabilization	Other	Total	
	From	To												
N/A														

AT11 – Base Course, Surface Rock, and Rock Riprap, applicable to BT5.251

Road Number	Section		Type 1/	Source Shown on Sale Area Map		Estimated Quantity and Units	Estimated Rates per Unit				Total Cost Estimated per Unit 7/ \$	Total Cost Estimated \$	
	From	To		Map Key No.	Location		Basic Rock Cost 2/ \$	Load and Apply Cost 3/ \$	Haul Cost				Haul Cost per Unit 6/ \$
									Haul Cost per Unit per Mi./Km. 4/ \$	Estimated Average Haul 5/ (mi./km.)			
N/A													

1/ Show, e.g., pit run, screened, crushed, graded, etc.
 2/ Including pit developments, crush, screen, stockpile, and purchase price, if any.
 3/ Including loading, dumping, spreading, watering, mixing, compacting, loading, and dumping delay, etc.
 4/ Including required maintenance, resurfacing, and road-use charges.
 5/ To nearest 0.1 mile or kilometer.
 6/ Obtain by multiplying Haul Cost per Unit per Mile or Kilometer by Estimated Average Haul.
 7/ Sum of Basic Rock Cost, Load and Apply Cost, and Haul Cost.
 8/ Obtain by multiplying Total Cost per Unit by Estimated Quantity.

AT12 – Culvert Cost Rates, applicable to BT5.253

Culverts				Drainage Accessories					
Diameter or Rise and Span	Gauge & Material		Estimated Cost (Rate per Foot)		Item and Size	Gauge & Material		Estimated Cost (Rate per Unit)	
	(Al)	(Fe)	Furnish & Install \$	Install Only \$		(Al)	(Fe)	Furnish & Install \$	Install Only \$
N/A									

(Material Abbreviation: Al = Aluminum; Fe = Galvanized Steel)

AT13 – Forest Service Engineering Completion Schedule, applicable to BT5.21

Road No.	Road Name	Type of Work	Completion Date
N/A			

AT14 – Fire Precautionary Period, applicable to BT7.2

June 1 to October 15, inclusive

AT15 – Purchaser Responsibility to Furnish Crews and Equipment for:

Initial Fire Suppression, applicable to BT7.3

Within 5 road miles

Fire Suppression Reinforcement, applicable to BT7.312 and BT7.313

Within 100 road miles

AT16 – Maximum Amount of Purchaser's Obligation per Operations Fire, applicable to BT7.41

\$ 5,000

AT17 – Termination Date, applicable to BT8.2

AT18 – Normal Operating Season, applicable to BT6.31, BT6.66, BT8.21, and BT9.3

First Period: June 1 to October 15 Inclusive

Second Period: _____ to _____ Inclusive

AT19 – Performance Bond Amount, applicable to BT9.1

\$ N/A

AT20 – Downpayment, applicable to BT4.221

Downpayment Amount: TBD Annual interest rate applicable to late downpayments: _____ %

AT21 – Periodic Payment Amounts, applicable to BT4.223

	Periodic Payment Determination Date	Amount
Initial Payment:	TBD	\$ _____
Additional Payment:	TBD	\$ _____

AT22 – Purchaser Credit Transfer-in Limit Amount, applicable to BT4.21

\$ 0 _____

AT23 – Market-Related Contract Term Addition Producer Price Index, applicable to BT8.212

Index Name: _____ Index Number: _____

AT24 – Inapplicable Standard Provisions

The following listed Sections, Subsections, or Items of Division BT – Standard Provisions – are hereby made inapplicable. (Instructions: List by reference number and title.)

- BT2.31 Clearcutting Units
- BT2.32 Construction Clearing
- BT2.4 Quantity Estimate
- BT5.2 Specified Roads
- BT6.01 Statutory Compliance
- BT6.34 Sanitation and Servicing
- BT6.341 Prevention of Oil Spills
- BT8.12 Liability for loss
- BT8.24 Termination
- BT8.3 Contract Modification
- BT9.51 Settlement for Termination
- BT9.52 Settlement for Administrative Appeal or Litigation

AT25 – List of Special Provisions

The following listed special provisions are attached to and made a part of this contract as Division CT. Unless listed herein or added by modification pursuant to BT8.23, BT8.3, or BT8.31 no provision of Division CT shall have force or effect. Provisions with reference numbers followed by # contain blanks into which data have been entered for this sale. (Instructions: List by reference number, title, and date.)

- RO-CT2.301# Cutting Unit Boundaries (9/01)
- WO-CT2.31 Clearcutting Units (8/02)
- WO-CT2.32 Clearing (8/02)
- WO-CT2.4 Quantity Estimate (8/02)
- WO-CT5.12# Use of Roads by Purchaser (6/99)
- WO-CT6.01 Statutory Compliance (8/02)
- WO-CT6.34 Sanitation and Servicing (8/02)
- WO-CT6.341 Prevention of Oil Spills (8/02)
- WO-CT6.342 Hazardous Substances (8/02)
- RO-CT6.6# Erosion Prevention and Control (11/98)
- RO-CT6.8# Measuring (9/03)
- RO-CT6.81# Accountability (4/03)
- R2-CT7.2 Fire Precautions (9/93)
- WO-CT8.12 Liability for Loss (9/02)
- RO-CT8.13 Disclaimer of Express or Implied Warranty (12/02)
- WO-CT8.24 Termination (7/01)
- WO-CT8.3 Contract Modification (8/02)
- WO-CT8.65_1# Use of Timber (Option 1) (9/02)
- WO-CT9.51 Settlement for Threatened, Endangered, or Sensitive Species Termination (7/01)
- WO-CT9.52 Settlement for Other Environmental Termination (7/01)
- WO-CT9.53 Settlement for Administrative Appeal or Litigation (7/01)

RO-CT2.301# - CUTTING UNIT BOUNDARIES. (9/01) The boundaries of cutting units are designated as shown in the following table. The trees used for boundary designation are not to be cut.

Cutting Unit Boundary Designation Table

<u>Cutting Unit</u>	<u>Paint Color</u>	<u>Designation</u>
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WO-CT2.31

CT2.31 – CLEARCUTTING UNITS. (8/02) All live and dead trees within Clearcutting Units are designated for cutting that meet Utilization Standards.

WO-CT2.32

CT2.32 – CLEARING. (8/02) All timber is designated for cutting that is within the clearing limits of roads constructed hereunder or is in other authorized clearings. All dead or unstable live trees are designated for cutting that are sufficiently tall to reach Purchaser's landings or the roadbed of Specified Roads when Marked in advance of felling of timber in the immediate vicinity. Pieces meeting Utilization Standards from such dead or unstable live trees shall be removed, unless there is agreement that to do so could damage the road. Such designation may be revised as part of agreed changes in road location under BT5.2. All dead trees to be felled outside construction clearing limits are subject to the size requirements and number limitations of AT4.

WO-CT2.4

CT2.4 – QUANTITY ESTIMATE. (8/02) The estimated quantities of timber by species designated for cutting under BT2.3 and expected to be cut under Utilization Standards are listed in AT2. Estimated quantity in AT2 does not include the following:

- (a) Damaged timber under BT2.13;
- (b) Unintentionally cut timber under BT2.14;
- (c) Construction timber under BT2.15 cut outside of Payment Units and removed from construction use for utilization by Purchaser;
- (d) Timber within clearing limits of Temporary Roads or other authorized clearings and that is not designated under CT2.31, CT2.33, CT2.34, or CT2.35; or
- (e) Dead or unstable live trees that are sufficiently tall to reach Purchaser's landings or the roadbed of Specified Roads under CT2.32.

Estimated quantities for such timber not included in AT2 shall be determined as stated in CT6.8.

If Sale Area Map shows Payment Units where Marking or Measuring is to be completed after date of timber sale advertisement, the objective of Forest Service shall be to designate for cutting in such Payment Units sufficient timber so that Sale Area shall yield the approximate estimated quantities by species or species groups stated in AT2. However, the estimated quantities stated in AT2 are not to be construed as guarantees or limitations of the timber quantities to be designated for cutting under the terms of this contract.

Quantity adjustments shall not be made under this Section after there is modification for Catastrophic Damage under BT8.33.

WO-CT5.12#

CT5.12# – USE OF ROADS BY PURCHASER. (6/99) Purchaser's use of existing roads identified on Sale Area Map by the following codes is prohibited or subject to restrictive limitations, unless agreed otherwise:

<u>Code</u>	<u>Use Limitations</u>
-------------	------------------------

- X Hauling prohibited
- R Hauling restricted
- U Unsuitable for hauling prior to completion of agreed reconstruction
- P Use prohibited
- A Public use restriction
- W Regulation waiver

Roads coded A will be signed by Forest Service to inform the public of use restrictions. Purchaser's use of roads coded R, A, or W shall be in accordance with the following restrictions:

Restricted Road List

Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		

WO-CT6.01

CT6.01 – STATUTORY COMPLIANCE. (8/02) Purchaser agrees to conduct operations under this contract and other related business activities in compliance with Federal, State, and local statutes, standards, orders, permits, or other regulations. The contract shall govern if State and local environmental quality laws conflict with or preclude performance of contractual requirements.

WO-CT6.34

CT6.34 – SANITATION AND SERVICING. (8/02) Purchaser shall take all reasonable precautions to prevent pollution of air, soil, and water by Purchaser's Operations. If facilities for employees are established on Sale Area, they shall be operated in a sanitary manner. In the event that Purchaser's Operations or servicing of equipment result in pollution to soil or water, Purchaser shall conduct cleanup to restore the polluted site to the satisfaction of Forest Service.

Purchaser shall maintain all equipment operating on Sale Area in good repair and free of abnormal leakage of lubricants, fuel, coolants, and hydraulic fluid. Purchaser shall not service tractors, trucks, or other equipment on National Forest lands where servicing is likely to result in pollution to soil or water. Purchaser shall furnish oil-absorbing mats, approved by Forest Service, for use under all stationary equipment or equipment being serviced to prevent leaking or spilled petroleum-based products from contaminating soil and water resources. Purchaser shall remove from National Forest lands all contaminated soil, vegetation, debris, vehicle oil filters (drained of free-flowing oil), batteries, oily rags, and waste oil resulting from use, servicing, repair, or abandonment of equipment.

WO-CT6.341

CT6.341 – PREVENTION OF OIL SPILLS. (8/02) If Purchaser maintains storage facilities for oil or oil products on Sale Area, Purchaser shall take appropriate preventive measures to ensure that any spill of such oil or oil products does not enter any stream or other waters of the United States or any of the individual States.

If the total oil or oil products storage exceeds 1,320 gallons in containers of 55 gallons or greater, Purchaser shall prepare a Spill Prevention Control and Countermeasures Plan. Such Plan shall meet applicable EPA requirements (40 CFR 112), including certification by a registered professional engineer.

Purchaser shall notify appropriate agencies, including Contracting Officer, of all reportable (40 CFR 110) spills of oil or oil products on or in the vicinity of Sale Area that are caused by Purchaser's employees or contractors, directly or indirectly, as a result of Purchaser's Operations. Purchaser will take whatever initial action may be safely accomplished to contain all spills.

WO-CT6.342

CT6.342 – HAZARDOUS SUBSTANCES. (8/02) Purchaser shall notify the National Response Center and Contracting Officer of all releases of reportable quantities of hazardous substances on or in the vicinity of the Sale Area that are

caused by Purchaser's employees or contractors, directly or indirectly, as a result of Purchaser's Operations, in accordance with 40 CFR 302.

RO-CT6.6# - EROSION PREVENTION AND CONTROL. (11/98)

A. Purchaser shall locate Temporary Roads on locations approved by the Forest Service. Such location shall include marking of road centerline or grade-line and the setting of such construction stakes as are necessary to provide a su basis for economical construction and the protection of National Forest lands.

B. Skidding with tractors within 100 feet of live streams shall not be permitted except in places designated in advance by Forest Service, and in no event shall skid roads be located in live or intermittent streamcourses. Skid trails shall be located high enough out of draws, swales, and valley bottoms to permit diversion of runoff water to natural undisturbed forest ground cover.

C. Prior to periods of accelerated water runoff, especially during the spring runoff and periods of heavy rainfall, Purchaser shall inspect and open culverts and drainage structures, construct special cross ditches for road runoff, and take other reasonable measures needed to prevent soil erosion and siltation of streams.

D. Temporary Road surface width shall be limited to truck bunk width plus four (4) feet, except for needed turnouts which shall not exceed two (2) times the bunk width plus four (4) feet. If shovels or cranes with revolving carriage are used to skid or load, Temporary Road surface width equal to track width plus tail swing shall be permitted.

E. Unless otherwise agreed in writing, Purchaser shall keep erosion control work current with his unit or cutting unit.

RO-CT6.8# - MEASURING. (9/03) The estimated quantity of timber in AT2 has been determined by standard procedures described in FSH 2409.12, Timber Cruising Handbook.

The following table describes the type of cruising method used to determine quantities:

Payment Unit/Cutting Unit

Cruising Method

1/

Estimated quantities of timber subsequently included under BT2.13, BT2.14, BT2.31, BT2.32, BT2.33, BT2.34, BT2.35 or BT2.37 not previously measured will be determined using the standard cruise methods as described in FSH 2409.12, Timber Cruising Handbook, or, if attached, using the Additional Volume Calculation Table based on information generated from the timber sale cruise.

RO-CT6.81# - ACCOUNTABILITY. (4/03) The following requirements are applicable to Product Removal Permits:

1. Forest Service will issue to Purchaser or designated representative(s) serially numbered Product Removal Permit books for use only on this sale. Product Removal Permit books, whether used or unused, shall be accountable property of Forest Service and shall be returned to issuing Forest Service Office in accordance with instructions contained in each book. Each book, which is not returned to the Forest Service, will be considered a lost book and liquidated damages of \$100 will be assessed.

2. Purchaser shall require all permits be completed in accordance with the instructions contained on the inside cover of each book.

3. Each load will have the last three digits of the load receipt number painted on both ends of three logs with black paint. All loads that consist of a truck and pup(s) must have the last three digits of the load receipt painted on both ends of three logs on all subunits of the combination.

Purchaser shall require vehicles hauling Included Products to stop at agreed upon locations for purposes of monitoring accountability. The parties shall agree upon the haul route prior to operations.

R2-CT7.2 – FIRE PRECAUTIONS. (9/93)

1. Smoking and Lunch Fires. Smoking is prohibited except inside a building, developed recreation site, vehicle, or while seated in an area of at least three feet in diameter that is barren or cleared of all flammable materials. 36 CFR 261.52(d).

The building of camp, lunch, warming and other fires within the sale area and vicinity is prohibited, except at established camps or at other safe places where all flammable material has been cleared away sufficiently to prevent the start and spread of wildfires. Forest Service may, upon written request of purchaser, designate specific places where campfires may be built for purposes of heating lunches.

2. Spark Arrester and Mufflers. Notwithstanding BT7.2, operating or using any internal combustion engine, on any timber, brush, or grass covered land, including trails and roads traversing such land, without a spark arrester, maintained in effective working order, meeting either (I) Department of Agriculture, Forest Service standard 5100, "SPARK ARRESTERS FOR INTERNAL COMBUSTION ENGINES," (current edition); or (II) the Society of Automotive Engineers (SAE) recommended Practices J335, "MULTIPOSITION SMALL ENGINE EXHAUST SYSTEM FIRE IGNITION SUPPRESSION," (current revision) and J350, 36 CFR 261.52(j), is prohibited.

Passenger carrying vehicles, pickups, medium and large highway trucks (80,000 GVW) will be equipped with a factory designed muffler system which is specified for the make and model of the respective vehicle/truck or with a muffler system that is equivalent or that exceeds factory specifications.

Exhaust systems shall be properly installed and continually maintained in serviceable condition.

3. Fire Extinguishers and Tools on Equipment. While in use, each internal combustion engine including tractors, trucks, yarders, loaders, welders, generators, stationary engines, or comparable powered equipment shall be provided with at least the following:

- (a) One fire extinguisher, at least 5#ABC with an Underwriters Laboratory (UL) rating of 3A - 40BC, or greater.
- (b) One shovel, sharp, size O or larger, round-pointed with an overall length of at least 48 inches.
- (c) One axe, sharp, double bit 3-1/2#, or one sharp pulaski.

Extinguishers, shovels, axes, and pulaskis shall be mounted so as to be readily available from the ground. All tools shall be maintained in a serviceable condition.

4. Power Saws. Each gasoline engine power saw shall be provided with one chemical-pressurized fire extinguisher of not less than 8-ounce capacity by weight, and one size O or larger, round-pointed shovel with an overall length of at least 48 inches. The extinguisher, and shovel shall be maintained in good working order. The extinguisher shall be with the power saw operator and immediately available for use at all times. The extinguisher shall not be affixed to the saw. The shovel shall be readily available to the operator of the saw at all times. Having the shovel with the gas can used to refuel the saw may be considered "readily available" if not more than 200 feet from the saw. During periods of critical fire danger, Forest Service may prescribe other precautionary measures.

Any fueling or refueling of a power saw shall be done in an area which has first been cleared of material which will carry fire. The power saw shall be moved at least 10 feet from the place of fueling or refueling before starting.

5. Blasting and Welding. The use of fuses in blasting shall not be permitted except near power lines where the danger of accidental detonation is present, and then only by special written permission of Forest Service. Whenever the relative humidity falls below 50 percent, Purchaser shall place a watchman at each point where blasting is done who shall remain on duty for at least one hour after blasting is finished, and who shall be equipped with a shovel and a water-filled backpack can equipped with hand pump. During

periods when the relative humidity falls below 20 percent, blasting shall be discontinued unless authorized, with special provisions, in writing by Forest Service. Blasting shall not be permitted in any area not cleared to mineral soil without advance written approval of Forest Service and with such special precautions as may be required.

Prima Cord shall not be used in clearing operations, and in other areas where timber has been felled and slash not burned.

Unless otherwise directed in writing by Forest Service, all flammable material shall be cleared for 10 feet around any piece of equipment being welded. In addition, Purchaser shall provide a fire extinguisher of a size and type designed to extinguish a fire in the flammable materials surrounding the spot being welded.

In order to determine the relative humidity, Purchaser shall either (a) provide and maintain weather instruments, that will measure relative humidity, in the area where blasting will occur; or (b) provide communications to obtain weather data from Forest Service.

Explosives shall be stored at all times in a locked box marked "Explosives. "Powder and blasting caps shall be stored in separate boxes.

6. Storage of Flammables. Gasoline, oil, grease and other highly flammable material shall be stored either in a separate building, or at a site where all debris is cleared within a radius of 25 feet. Storage buildings or sites shall be a minimum distance of 50 feet from other structures. Storage buildings shall be adequately posted to warn of the flammables and to prohibit smoking in or around the building.

7. Camp Fire Protection. The grounds around all trailers, buildings, other facilities constructed or placed on or near Sa under BT6.2 shall be kept free of flammable material for a distance of at least 20 feet from the wall of such structure. Bu such flammable material shall be as prescribed by Forest Service in writing.

Stovepipes of all wood burning stoves shall be equipped with suitable roof jacks and serviceable spark arresters. Stovepip be no closer than 2 feet from any wood or other flammables unless adequately protected by metal or asbestos shield.

WO-CT8.12

CT8.12 – Liability for Loss. (9/02) If Included Timber is destroyed or damaged by an unexpected event that significantly changes the nature of the Included Timber, such as fire, wind, flood, insects, disease, or similar cause, the party holding title shall bear the timber value loss resulting from such destruction or damage; except that such losses caused by insect or disease after felling of timber shall be borne by Purchaser, unless Purchaser is prevented from removing such timber for reasons that would qualify for Contract Term Adjustment. Deterioration of salvage timber is not an unexpected event, except for deterioration due to delay or interruption that qualifies for Contract Term Adjustment or under BT6.02. In the event Included Timber to which the Forest Service holds title is destroyed, Purchaser will not be obligated to remove and pay for such timber. In the event Included Timber to which the Forest Service holds title is damaged, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber immediately prior to the value loss and the appraised unit value of timber after the loss. Current Contract Rates in effect at the time of the value loss shall be adjusted by said differences to become the redetermined rates.

There shall be no obligation for Forest Service to supply, or for Purchaser to accept and pay for, other timber in lieu of that destroyed or damaged. This Subsection shall not be construed to relieve either party of liability for negligence.

RO-CT8.13 – DISCLAIMER OF EXPRESS OR IMPLIED WARRANTY. (12/02) Purchaser and Forest Service hereby agree, acknowledge, and accept that there is no express or implied warranty provided by the Forest Service or the United States Government that guarantees that the Purchaser will be allowed to complete the removal of the products sold under the terms of the contract. Upon signature of this contract, Purchaser hereby acknowledges the acceptance of the risk that this contract is subject to interruption or termination as a result of litigation associated with the environmental documentation process used by the Forest Service in the planning of this timber sale contract. If such interruption or termination occurs due to litigation, Purchaser agrees to accept as full compensation for such interruption or termination the reimbursement of Out-Of-Pocket Expenses as defined in provision BT6.02.

WO-CT8.24

CT8.24 – TERMINATION. (7/01) The Chief, Forest Service, by written notice, may terminate this contract, in whole or in part:

- (a) To comply with a court order, regardless of whether this timber sale is named in such an order, upon determination that the order would be applicable to the conditions existing on this timber sale or
- (b) Upon a determination by the Chief that the continuation of all or part of this contract would:
 - (i) Cause serious environmental degradation or resource damage;
 - (ii) Be significantly inconsistent with land management plans adopted or revised in accordance with Section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended;
 - (iii) Cause serious damage to cultural resources pursuant to BT6.24;
 - (iv) Cause serious damage to cave resources pursuant to BT6.26; or
 - (v) Adversely affect species listed as threatened or endangered under the Endangered Species Act, 16 USC. 1531, *et seq.*, or a sensitive species identified by the Regional Forester pursuant to BT6.25.

Compensation for termination under paragraph (a) shall be calculated pursuant to CT9.53, compensation for termination under paragraphs (b)(i) through (b)(iv) shall be calculated pursuant to CT9.52, and compensation for termination under paragraph (b)(v) shall be calculated pursuant to CT9.51.

WO-CT8.3

CT8.3 – CONTRACT MODIFICATION. (8/02) The conditions of this timber sale are completely set forth in this contract. Except as provided in CT8.24, contract modifications, redeterminations of rates, and termination shall be made on behalf of Forest Service only by Contracting Officer.

(a) By agreement, and with compensating adjustments where appropriate, this contract may be modified to provide for:

(i) The exercise of any authority hereafter granted by law or regulation of the Secretary of Agriculture, if such authority is then generally being applied to Forest Service timber sale contracts and

(ii) Any other contractual provision then in general use by Forest Service.

(b) Contracting Officer may make modifications in Timber Specifications in BT2.0, Transportation Facilities in BT5.0, or Operations in BT6.0, or in related Special Provisions if, and to the extent that, such changes are reasonably necessary to make the contract consistent with guidelines and standards developed to implement Section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended, and with land and resource management plans developed or revised there under. Resulting changes in the value of remaining Included Timber shall be reflected in a rate predetermination conducted in accordance with BT3.32. Rates so redetermined shall apply to timber Released for Cutting after the effective date of the modification.

(c) This contract may be modified to revise AT9 and AT10 to add Specified Roads not listed in AT9, as necessary to facilitate reconstruction of existing Forest Service roads or accepted Specified Roads, including appurtenances thereto. In accordance with BT5.2, Contracting Officer shall make revisions to AT9 and adjustments to Current Contract Rates. Reductions in Current Contract Value shall be limited to \$100,000 or less. Calculate cost adjustments for increases in Specified Road construction cost for added roads in accordance with BT5.251, BT5.252, and BT5.253. Additions will not be made when reconstruction is made necessary by Purchaser's negligence. Roads or road segments to be added must meet the following conditions:

(i) The required work must be on an actual haul route used by, or scheduled for use by, Purchaser;

(ii) The required work must be the result of unforeseen cause, such as slides, slumps, washouts, subgrade conditions, or similar causes; and

(iii) The work must be necessary for economic, safe, and practical use of the road by Purchaser.

WO-CT8.65# (Option 1)

CT8.65# – USE OF TIMBER. (9/02) (a) This contract is subject to the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 USC 620, *et seq.*).

(b) Except for 1/_____ determined pursuant to public hearing to be surplus, unprocessed Included Timber shall not be exported from the United States nor used in direct or indirect substitution for unprocessed timber exported from private lands by Purchaser or any person as defined in the Act (16 USC 620e).

(c) Timber in the following form will be considered unprocessed:

(i) Trees or portions of trees or other roundwood not processed to standards and specifications suitable for end product use;

(ii) Lumber, construction timbers, or cants intended for remanufacturing not meeting standards defined in the Act (16 USC 620e); and

(iii) Aspen or other pulpwood bolts exceeding 100 inches in length.

(d) Unless otherwise agreed in writing, unprocessed Included Timber shall be delivered to a domestic processing facility and shall not be mixed with logs intended for export.

(e) Prior to award, during the life of this contract, and for a period of 3 years from Termination Date, Purchaser shall furnish to Forest Service, upon request, records showing the volume and geographic origin of unprocessed timber from private lands exported or sold for export by Purchaser or affiliates.

(f) Prior to delivering unprocessed Included Timber to another party, Purchaser shall require each buyer, exchangee, or recipient to execute an acceptable agreement that will:

(i) Identify the Federal origin of the timber;

(ii) Specify domestic processing for the timber involved;

(iii) Require the execution of such agreements between the parties to any subsequent transactions involving said timber;

(iv) Require that all hammer brands and/or yellow paint must remain on logs until they are either legally exported or domestically processed, whichever is applicable; and

(v) Otherwise comply with the requirements of the Act (16 USC 620d).

(g) No later than 10 days following the execution of any such agreement between Purchaser and another party, Purchaser shall furnish to Forest Service a copy of each such agreement. Purchaser shall retain, for 3 years from Termination Date, the records of all sales, exchanges, or dispositions of all Included Timber.

(h) Upon request, all records dealing with origin and disposition of Included Timber shall be made available to Contracting Officer.

(i) For breach of this provision, Forest Service may terminate this contract and take such other action as may be provided by statute or regulation, including the imposition of penalties. When terminated by Forest Service under this provision, Forest Service will not be liable for any claim submitted by Purchaser relating to the termination.

WO-CT9.51

CT9.51 – SETTLEMENT FOR THREATENED, ENDANGERED, OR SENSITIVE SPECIES TERMINATION. (7/01) In the event of termination of this contract, in whole or in part, by the Chief pursuant to CT8.24, paragraph (b)(v), and based upon the Chief's determination that continuation of all or part of this contract would adversely affect a species listed as threatened or endangered under the Endangered Species Act, 16 USC. 1531, *et seq.*, or a sensitive species identified by the Regional Forester, Purchaser agrees that its sole and exclusive remedy shall be reimbursement for Out-of-Pocket Expenses, as defined in BT6.02. Purchaser agrees to provide receipts or other documentation to Contracting Officer that clearly identify and verify actual expenditures.

WO-CT9.52

CT9.52 – SETTLEMENT FOR OTHER ENVIRONMENTAL TERMINATION. (7/01) In the event of termination of this contract, in whole or in part, by the Chief pursuant to CT8.24, paragraphs b(i) through (b)(iv), Purchaser agrees that its sole and exclusive remedy shall be limited to:

(a) The difference between Current Contract Rates for the remaining uncut volume and the rates paid for comparable timber on the same National Forest during the preceding 6-month period multiplied by the remaining uncut volume. Comparable timber is timber of similar size and quality with similar topography and access; and

(b) Out-of-Pocket Expenses, as defined in BT6.02. Purchaser agrees to provide receipts or other documentation to the Contracting Officer that clearly identify and verify actual expenditures.

WO-CT9.53

CT9.53 – SETTLEMENT FOR ADMINISTRATIVE APPEAL OR LITIGATION. (7/01) In the event of termination of this contract, in whole or in part, by the Chief as a result of an administrative appeal or litigation of the decision to sell timber included in this contract or pursuant to CT8.24, paragraph (a), Purchaser agrees that its sole and exclusive remedy shall be reimbursement for Out-of-Pocket Expenses, as defined in BT6.02. Purchaser agrees to provide receipts or other documentation to Contracting Officer that clearly identify and verify actual expenditures.

In the event of modification by Contracting Officer or partial termination, changes to the contract shall be limited to those determined by Contracting Officer to be necessary for correction of the deficiencies raised by the appeal or lawsuit. Changes to the contract shall be limited to requirements with which Purchaser can reasonably comply.

Appendix E

Spill Response

SPILL RESPONSE

Initial Response

When fuel, chemicals, or other potentially hazardous substances are spilled, the following actions should be taken immediately:

1. Ensure your personal safety and the safety of those around you. Spills in enclosed areas may require that people leave the area immediately. Special equipment or methods may be required to clean up caustic or flammable materials. Never touch or enter a vapor cloud from an unidentified substance. Safety should be the absolute priority in dealing with spilled substances.
2. Note the date, time, location, setting and substance that has been spilled. The setting should include information concerning the proximity to surface water and/or potential for contamination of ground water resources (e.g., spill occurred within a wetland, adjacent to a spring, etc.) Estimate the quantity spilled.
3. **For all hazardous substance incidents, dial 911 to notify the local emergency response agencies.**
4. Consult the Material Safety Data Sheets (MSDS) maintained by the appropriate contractor (e.g., construction, restoration, etc.) on the job site. The MSDS for the spilled substance should identify the chemical constituents and give general direction concerning personal safety protection, potential for environmental contamination, and materials and procedures required for cleaning up the spill.
5. Consult Appendices C-1 and C-2 to determine reportable quantities of spilled substances.
6. Follow specific notification requirements as identified below.

Important Telephone Numbers

Colorado Department of Public Health and Environment 24-hour Emergency Response (for reporting spills to CDPHE and the Colorado Emergency Planning Commission)
(303) 756-4455

General Information (for general information during regular office hours on spill reporting) (303) 692-3020

Address: Colorado Department of Public Health and Environment

Emergency Management Program
8100 Lowry Blvd
Denver, CO 80220

National Response Center (24-hr) - (800) 424-8802

Local County Health Agency Contact:

Chris Etcheson
Clear Creek Environmental Coordinator
P.O. Box 2000
Georgetown, CO 80444
(303) 679-2335

State Patrol Dispatch Center (24-hr) – (303) 239-4501

EPA Region VIII Emergency Response (24-hr) – (303) 293-1788

CO Office of Emergency Management (Emergency Line) – (303) 279-8855

USFS: Clear Creek Ranger District Front Desk (303) 567-3000
South Platte Ranger District Front Desk (303) 375-5610

Notification Procedures

General Notification Procedures

When a chemical spill or release occurs in Colorado, there are a number of reporting and notification requirements that must be followed by the company responsible for the spill.

For all hazardous substance incidents, the local emergency response agencies must be notified.

Reporting emergency releases from fixed facilities is required by the Superfund Amendments and Reauthorization Act (SARA) Title III, a federal law with which facilities must comply in Colorado. Facilities must immediately report any emergency release that exceeds the reportable quantity for that specific chemical to the agencies listed below. Refer to Appendix VI-C-1 for the reportable quantity.

The party that owns the spilled material must immediately notify the following agencies:

The National Response Center (NRC);

The Colorado Emergency Planning Commission (CEPC), which is represented by the Colorado Department of Public Health and Environment (CDPHE);

The Local Emergency Planning Committee (LEPC).

In addition to telephone notification, the responsible party must also send written notification describing the release and associated emergency response to both the CEPC and the LEPC.

Transportation accidents that result in a spill or release of a hazardous substance in excess of the reportable quantity must immediately be reported to the National Response Center. Refer to VI- C-1 for those substances that have reportable quantities. In addition to the NRC being notified, 911 or the local emergency number must be called. Written notification of any transportation accident involving a release of hazardous materials must be provided to the U.S. Department of Transportation within 30 days (49 CFR 171.16) (see Appendix VI-C-3).

Releases greater than 25 gallons to the ground from above-ground and underground fuel storage tanks must be reported to the CDPHE. This includes spills from fuel pumps. However, **any release to surface water or ground water, no matter how small, must be reported to CDPHE.**

Releases less than 25 gallons are to be cleaned up within twenty-four hours of release. If the spill is not cleaned up within twenty-four hours, it must be reported to the CDPHE.

A release of any chemical, petroleum product, etc., which may enter waters of the State of Colorado, which include surface water, ground water and dry gullies or storm sewers leaking to surface water, must be reported to CDPHE immediately. Written notification to CDPHE must follow verbal notification. Any accidental discharge to the sanitary sewer system must be reported immediately to the local sewer authority and the affected wastewater treatment plant. Releases of petroleum products and certain hazardous substances listed under the Federal Clean Water Act (40 CFR 116) must be reported to the National Response Center as well as to CDPHE as required under the Clean Water Act and the Oil Pollution Act.

Specific Notification Requirements

Reportable discharge or spill. A reportable discharge or spill is a discharge or spill of oil, petroleum product, used oil, hazardous substances, industrial solid waste, or other substances into the environment in a quantity equal to or greater than the reportable quantity (Please see 40 CFR 302.4, contained in Appendix VI-C-1 of this document, for reportable quantity specifications.) listed in any 24-hour period.

Initial notification. Upon the determination that a reportable discharge or spill has occurred, the responsible person shall notify the EPA as soon as possible but not later than 24 hours after the discovery of the spill or discharge.

Method of notification. The responsible person shall notify the EPA in any reasonable manner including by telephone, in person, or by any other method approved by the agency. In all cases, the initial notification shall provide, to the extent known, the information listed below. Notice provided under this section satisfies the federal requirement to notify the State of Colorado. The responsible person shall notify one of the following:

- (1) Colorado Department of Public Health and Environment 24-hour Emergency Response (For reporting spills to CDPHE and the Colorado Emergency Planning Commission) (303) 756-4455.
- (2) During normal business hours only, the regional office for the EPA region in which the discharge or spill occurred, or
- (3) The EPA at the agency's 24-hour spill reporting number.

Information required in initial notification. The initial notification shall provide, to the extent known, the information in the following list. Copies of spill reports prepared for other governmental agencies shall satisfy this requirement if they contain, or are supplemented to contain, all the information required by this subsection. The initial notification shall contain:

- (1) The name, address and telephone number of the person making the telephone report.
- (2) The date, time, and location of the spill or discharge.
- (3) A specific description or identification of the oil, petroleum product, hazardous substances or other substances discharged or spilled.
- (4) An estimate of the quantity discharged or spilled.
- (5) The duration of the incident.
- (6) The name of the surface water or a description of the waters in the state affected or threatened by the discharge or spill.
- (7) The source of the discharge or spill.
- (8) A description of the extent of actual or potential water pollution or harmful impacts to the environment and an identification of any environmentally sensitive areas or natural resources at risk.
- (9) If different from paragraph (1) of this subsection, the names, addresses, and telephone numbers of the responsible person and the contact person at the location of the discharge or spill.
- (10) Description of any actions that have been taken, are being taken, and will be taken to contain and respond to the discharge or spill.
- (11) Any known or anticipated health risks.
- (12) The identity of any governmental representatives, including local authorities or third parties, responding to the discharge or spill, and
- (13) Any other information that may be significant to the response action.

Update notification. The responsible person shall notify the EPA as soon as possible whenever necessary to provide information that would trigger a change in the response to the spill or discharge.

Correction of records. Notifying the EPA that a reportable discharge or spill has occurred shall not be construed as an admission that pollution has occurred. Furthermore, if the responsible person determines, after notification, that a reportable discharge or spill did not occur, the responsible person may send a letter to the agency documenting that determination. If the executive director agrees with that determination, the executive director will note the determination in commission records. If the executive director disagrees with that determination, the executive director will notify the responsible person within 30 days.

Notification of local governmental authorities. If the discharge or spill creates an imminent health threat, the responsible person shall immediately notify and cooperate with local emergency authorities (fire department, fire marshal, law enforcement authority, health authority, or Local Emergency Planning Committee (LEPC), as appropriate). The responsible party will cooperate with the local emergency authority in providing support to implement appropriate notification and response actions. The local emergency authority, as necessary, will implement its emergency management plan, which may include notifying and evacuating affected persons. In the absence of a local emergency authority, the responsible person shall take reasonable measures to notify potentially affected persons of the imminent health threat. Notify the USFS, Clear Creek Ranger District (303) 567-3000, or South Platte Ranger District (303-275-5610 of all hazardous materials incidents affecting National Forest lands or resources.

Notification to property owner and residents. As soon as possible, but no later than two weeks after discovery of the spill or discharge, the responsible person shall reasonably attempt to notify the owner (if identifiable) or occupant of the property upon which the discharge or spill occurred as well as the occupants of any property that the responsible person reasonably believes is adversely affected.

Additional notification required.

- (1) Except as noted in paragraph (2) of this subsection, complying with the notification requirements set forth in this section does not relieve, satisfy, or fulfill any other notification requirements imposed by permit or other local, state, or federal law.
- (2) Notice provided under this section satisfies the federal requirement to notify the State of Colorado.

Reportable Quantities

- (a) Hazardous substances. The reportable quantities for hazardous substances shall be:

- (1) For spills or discharges onto land - the quantity designated as the Final Reportable Quantity (RQ) in Table 302.4 in 40 CFR ' 302.4 (see Appendix VI-C-1), or
 - (2) All spills or discharges directly into water.
- (b) Oil, petroleum product, and used oil.
- (1) The RQ for crude oil and oil other than that defined as petroleum product or used oil shall be:
 - (A) For spills or discharges onto land - 210 gallons (five barrels), or
 - (B) All spills or discharges directly into water.
 - (2) The RQ for petroleum product and used oil shall be:
 - (A) Except as noted in subparagraph (B) of this paragraph, for spills or discharges onto land - 25 gallons.
 - (B) For spills or discharges to land from PST exempted facilities - 210 gallons (five barrels), or
 - (C) All spills or discharges directly into water.
- (b) Industrial solid waste or other substances. All spills or discharges into water in the state must be reported.

Actions Required

- (a) Using appropriate personal safety protection measures, the responsible person shall immediately abate and contain the spill or discharge and cooperate fully with the Forest Service and the local incident command system. The responsible person shall also begin reasonable response actions that may include, but are not limited to, the following actions:
 - (1) Arrival of the responsible person or response personnel hired by the responsible person at the site of the discharge or spill.
 - (2) Initiating efforts to stop the discharge or spill.
 - (3) Minimizing the impact to the public health and the environment.
 - (4) Neutralizing the effects of the incident.
 - (5) Removing the discharged or spilled substances, and
 - (6) Managing the wastes.
- (b) Upon request of the local government responders or the Forest Service, the responsible person shall provide a verbal or written description, or both, of the planned response actions and all actions taken before the local governmental responders or the executive director arrive. When the agency on-scene coordinator requests this information, it is subject to possible additional response action requirements by the executive director. The information will serve as a basis for the executive director to determine the need for:
 - (1) Further response actions by the responsible person.

- (2) Initiating state funded actions for which the responsible person may be held liable to the maximum extent allowed by law, and
 - (3) Subsequent reports on the response actions.
- (c) Except for discharges or spills occurring during the normal course of transportation about which carriers are required to file a written report with the U.S. Department of Transportation under 49 CFR ' 171.16, the responsible person shall submit written information, such as a letter, describing the details of the discharge or spill and supporting the adequacy of the response action, to the appropriate Forest Service regional manager within 30 working days of the discovery of the reportable discharge or spill. The regional manager has the discretion to extend the deadline. The documentation shall contain one of the following items:
- (1) A statement that the discharge or spill response action has been completed and a description of how the response action was conducted. The statement shall include the initial report information required by Notification Requirements. The Forest Service may request additional information. Appropriate response actions at any time following the discharge or spill include use of the Risk Reduction Rules relating to Closure or other appropriate agency risk-based corrective action programs.
 - (2) A request for an extension of time to complete the response action, along with the reasons for the request. The request shall also include a projected work schedule outlining the time required to complete the response action. The executive director may grant an extension up to six months from the date the spill or discharge was reported. Unless otherwise notified by the appropriate regional manager or the Emergency Response Team, the responsible person shall proceed according to the terms of the projected work schedule.
 - (3) A statement that the discharge or spill response action has not been completed nor is it expected to be completed within the maximum allowable six month extension. The statement shall explain why completion of the response action is not feasible and include a projected work schedule outlining the remaining tasks to complete the response action. This information will also serve as notification that the response actions to the discharge or spill will be conducted under the Risk Reduction Rules relating to Closure or other commission risk-based corrective action rules, and shall indicate the appropriate risk-based corrective action program.

Appendix F

Laboratory Equipment List



PROPERTY RECEIPT AND/OR RECEIPT FOR PROPERTY RETURNED

(FHWA Order M 4300.1, Personal Property Management Manual, Chapter 2)

INSTRUCTIONS: Property custodian will prepare this form in duplicate, listing all property issued to an employee. Employee will sign and return the original to the property custodian and retain the duplicate for his records. Upon return of property, the property custodian will sign as acknowledging receipt of item(s) returned. Both

copies will be signed by the receiving official, the original given to the employee, and the copy retained as the official record. Persons signing for receipt of property listed on the form are held responsible for its protection as specified in Chapter 2.

PROPERTY ISSUED TO (Name and location)	INVENTORY CODE	FROM:	INVENTORY CODE
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ITEM	QUANTITY	UNIT	ARTICLES AND DESCRIPTION
1.	1	EA	Trailer, Laboratory,, Size <u>8' x 35'</u> SNR# _____ Trailer Plate # _____ B/C# _____
2.	1	EA	Air Entrainment Meter, ACM Type "A", B/C# _____
3.	1	EA	Balance, Electronic, .01 Readability + or - 5,500 Gram w/Weigh Below Device, Brand Name _____ SNR _____ B/C# _____
4.	1	EA	Balance, Industrial, Electronic, .1 Readability, 22000 Gram w/ Weigh Below Device, Brand Name _____ SNR _____ B/C# _____
5.	1	EA	Balance, Industrial, Electronic, 30,000 Gram Brand Name _____, SNR# _____ BC# _____
6.	1	EA	Compactor, Mechanical, T-99 & T-188 with Hammer & Molds, Ploog , SNR# _____ BC# _____
7.	1	EA	Furnance, NCAT Asphalt Content, 240 Volts SNR# _____ BC# _____
8.	1	EA	Oven Convention, Constant Temperature, VW & R or Yamoto Brand SNR# _____ BC# _____
9.	1	EA	Oven, Convention, Constant Temperature, VW &R or Yamoto Brand SNR# _____ BC# _____

ACKNOWLEDGEMENT OF RECEIPT (To be signed by employee receiving property)

SIGNATURE	TITLE	DATE
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ACKNOWLEDGEMENT OF RETURN OF EQUIPMENT (To be signed by the property custodian)

SIGNATURE	DATE
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PROPERTY RECEIPT AND/OR RECEIPT FOR PROPERTY RETURNED

(FHWA Order M 4300.1, Personal Property Management Manual, Chapter 2)

eral Highway
ministration

INSTRUCTIONS: Property custodian will prepare this form in duplicate, listing all property issued to an employee. Employee will sign and return the original to the property custodian and retain the duplicate for his records. Upon return of property, the property custodian will sign as acknowledging receipt of item(s) returned. Both

copies will be signed by the receiving official, the original given to the employee, and the copy retained as the official record. Persons signing for receipt of property listed on the form are held responsible for its protection as specified in Chapter 2.

PROPERTY ISSUED TO (Name and location) INVENTORY CODE FROM: INVENTORY CODE

ITEM	QUANTITY	UNIT	ARTICLES AND DESCRIPTION
10.	1	EA	Oven, Microwave, 110 Volts, 1000 Watts SNR# _____ BC# _____
11.	1	EA	Scale, Platform, Mechanical, 100 Lb. Capacity SNR# _____ BC# _____
12.	1	EA	Sieve Shaker, 8" Tyler Ro-Tap, Bench Mount SNR# _____ BC# _____
13.	1	EA	Sieve Shaker, 12" Tyler Ro-Tap, Bench Mount SNR# _____ BC# _____
14.	1	EA	Drill Press, (Muller) Brand SNR# _____ BC# _____
15.	1	EA	Liquid Limit Machine, Electric SNR# _____ BC# _____
16.	1	EA	Hot Plate with Pyrex Cover Plate, Electric

ACKNOWLEDGEMENT OF RECEIPT (To be signed by employee receiving property)

SIGNATURE _____ TITLE _____ DATE _____

ACKNOWLEDGEMENT OF RETURN OF EQUIPMENT (To be signed by the property custodian)

SIGNATURE _____ DATE _____

II. SOILS and AGGREGATE TESTING EQUIPMENT and SUPPLIES
Gradation

	Shelf #	Item	Quantity Needed	New	Used
1	4005	Apron	1 each		
2	4009	Balance Weight Set - 1-1000 g	1 each		
3	4015	Beaker - 250 mL	2 each		
4	4027	Bottle - Nalgene - 16 oz	4 each		
5	4043	Brush - Sieve Cleaner, Brass	2 each		
6	4045	Brush - Stencil - 1" x 3/4"	2 each		
7	4049	Brush - 1" wide	2 each		
8	4059	Can - Sample - 8 oz	4 each		
9	4061	Can - Sample - 2 oz	4 each		
10	4063	Can - Sample - 4 oz	4 each		
11	NSN	Calibration Weight, 1,000 g	1 each		
12	4349	Calibration Weight, 4,000 g	1 each		
13	4348	Calibration Weight, 5,000 g (old Sartorius models only)	1 each		
14	4347	Calibration Weight, 15,000 g (old Sartorius models only)	1 each		
15	4105	Dish - Evaporating - 5 3/4"	4 each		
16	4113	Faucet - Barrel - Single	1 each		
17	4125	Gloves - asbestos substitute	3 pair		
18	4131	Grooving Tool	2 pair		
19	4141	Medicine Dropper	2 each		
20	4143	Mortar and Pestle	1 set		
21	4151	Pan - Metal (for tall splitter)	4 each		
22	4154	Pan - Drying, 8" x 8" x 2", round corners	10 each		
23	5057	Rags, white wiping	1 bundle		
24	4163	Plate - frosted glass	1 each		
25	4175	Sack, sample large, 14" x 28"	50 each		
26	4179	Scoop	2 each		
27	NSN	Asphalt Scoop, stainless steel	2 each		

	Shelf #	Item	Quantity Needed	New	Used
28		Sieves - Coarse Aggregate - 12"			
	4203	2 1/2" - Full Height	1 each		
	4205	2" - Full Height	1 each		
	4207	1 1/2" - Full Height	1 each		
	4209	1" - Full Height	1 each		
	4211	3/4" - Half Height	1 each		
	4213	5/8" - Half Height	1 each		
	4215	1/2" - Half Height	1 each		
	4217	3/8" - Half Height	1 each		
	4219	1/4" - Half Height	1 each		
	4221	#4 - Half Height	1 each		
	4223	#8 - Half Height	1 each		
	4225	#10 - Half Height	1 each		
	4227	#16 - Half Height	1 each		
	4229	#20 - Half Height	1 each		
	4231	#30 - Half Height	1 each		
	4233	#40 - Half Height	1 each		
	4235	#50 - Half Height	1 each		
	4237	#80 - Full Height	1 each		
	4239	#100 - Half Height	1 each		
	4241	#200 - Half Height	2 each		
	4242	#200 - Full Height (wash sieve)	2 each		
	4243	Pan - Half Height	1 each		
	4245	Lid	1 each		
29		Sieves - 8"			
	4247	2 1/2"	1 each		
	4249	2"	1 each		
	4251	1 1/2"	1 each		
	4253	1"	1 each		
	4255	3/4"	1 each		
	4257	1/2"	1 each		

	Shelf #	Item	Quantity Needed	New	Used
29		Sieves - 8" <i>Continued)</i>			
	4259	3/8"	1 each		
	4261	1/4"	1 each		
	4263	#4	1 each		
	4265	#8	1 each		
	4267	#10	1 each		
	4269	#16	1 each		
	4271	#20	1 each		
	4273	#30	1 each		
	4275	#40	1 each		
	4277	#50	1 each		
	4279	#80	1 each		
	4281	#100	1 each		
	4283	#200	2 each		
	4285	Pan	1 each		
	4287	Lid	1 each		
30	4293	Spatula - 3" blade	4 each		
31		Splitter, 1/2" - 6" adjustable	1 each		
32		Splitter, P.E. - 1/2" with pans & scoop	1 each		
33	4299	Spoon - 15"	4 each		
34	4301	Spoon - 7"	4 each		
35	4303	Spoon - tea 6"	2 each		
36	4305	Spoon - mixing, hardwood	4 each		
37	4341	Tongs	1 each		
38	7045	Goggles, safety	2 pair		
39	7065	Mask, air filtering	1 box		
40	8079	Grease Gun (for use with Tyler Shaker) & Mechanical Compactor	1 each		
41	8143	Knife, scraping, flexible	1 each		
42	8145	Knife, scraping, rigid	1 each		
43	8081	Grease for grease gun No. 8079	1 each		

III. COMPACTION and DENSITY TESTING EQUIPMENT and SUPPLIES

	Shelf No.	Item	Quantity Needed	New	Used
1	NSN	Compaction Mold - 1/30 cu ft T-99 - 4" (mountable on mechanical compactor)	1 each		
2	NSN	Compaction Mold - 1/13.33 cu ft T-180 - 6" (mountable on mechanical compactor)	1 each		
3	4289	Ejector, soil sample	1 each		
4	4051	Brush - wire, curved handle			
	4053	Brush - wire, shoe handle	2 each		
5	4075	Hammer, compaction - 5.5 lb	1 each		
6	4077	Hammer, compaction - 10 lb	1 each		
7	4095	Dish, Pyrex, microwave, 9 1/2" x 13 1/2"	6 each		
	4097	Dish, Pyrex, microwave, 8" x 8"	6 each		
8	4139	Mallet, rubber, 24 oz	1 each		
9	4145	Oil, hydraulic (for ejector)	1 each		
10	4149	Pan , concrete - 24" x 24" x 3"	2 each		
11	4155	Pan, sample drying, aluminum - 16" x 16" x 4"	8 each		
12	4307	Straight Edge, 12" (beveled)	1 each		
13	8031	Chisel, Cold - 6" with a 5/8" cut	1 each		
14	8203	Screwdriver, flat - 3/8" x 8"	1 each		
15	NSN	Allen Wrenches, small set (to be used with mechanical compactor)	1 set		
16	NSN	Grey-Lab Timer	1 each		

IV. ASPHALT TEST EQUIPMENT

	Shelf No.	Item	Quantity Needed	New	Used
1	4019	Beaker, stainless steel - 4000 mL	4 each		
2	4039	Bowl, stainless steel - 8 qt	6 each		
3	4087	Cylinder, graduated - 1000 mL	1 each		
4	4183	Adapter, Sieve 12", for wash bucket	1 each		
5	NSN	5-8 Gallon Bucket	1 each		
6	4127	Gloves, rubber	2 pair		
7	4297	Spatula - 10"	2 each		
8	4317	Thermometer, maximum-minimum, self registering	2 each		
9	4321	Thermometer, dial - 8" stem, 0-180°F	2 each		
10	4323	Thermometer, dial - 8"stem, 50-400°F	2 each		
11	4295	Spatula - 6"	2 each		
12	4181	Scoop, small (for air meter)	1 each		
13	4291	Spatula - 8"	2 each		
14	4171	Tamping Rod (for air meter)	1 each		

V. PETROLEUM DISTILLATION APPARATUS KIT

	Shelf No.	Item	Quantity Needed	New	Used
1	4085	Cylinder, graduated - 100 mL	2 each		

VI. CONCRETE TESTING EQUIPMENT

	Shelf No.	Item	Quantity Needed	New	Used
		BASIC CONCRETE TESTING EQUIPMENT			
1	4147	Pail, metal - 14 qt	2 each		
2	8069	File, taper, regular - 8"	1 each		
3	8255	Trowel, pointer	1 each		
4	4290	Slump Cone	1 each		
5	NSN	Density Basket	1 each		

VII. TRAILER MAINTENANCE / HOUSEKEEPING / SAFETY EQUIPMENT

	Shelf No.	Item	Quantity Needed	New	Used
1	4107	Dishwashing Liquid	1 bottle		
2	5003	Bag, plastic - 36" x 54"	1 box		
3	5005	Bag, plastic - 9 1/2" x 38 1/2"	1 box		
4	5007	Basket, wastepaper	1 each		
5	5011	Broom, house	1 each		
6	5013	Broom, whisk	1 each		
7	5033	Dustpan	1 each		
8	5037	Hand Cleaner, heavy duty	1 each		
9	5053	Pail, plastic, bail handle - 12 qt	2 each		
10	5069	Vacuum bag	1 package		
11	7027	Fire Extinguisher - 3 lb	2 each		
12	7031	First Aid Kit, office	1 each		
13	7067	Microwave Radiation Leak Detector	1 each		
14	7069	Outlet Tester	1 each		
15	8085	Hammer, hand, carpenters	1 each		
16	8173	Pliers, slip joint - 10"	1 each		
17	8191	Screwdriver, Phillips - #0 - 4"	1 each		
18	8193	Screwdriver, Phillips - #2 - 4"	1 each		
19	8195	Screwdriver, Phillips - #4 - 8"	1 each		
20	8199	Screwdriver, flat - 5/16" x 6"	1 each		
21	8271	Wrench, open end, adjustable - #6	1 each		
22	5059	Sponge, compressed	6 each		
23	NSN	Chair, straight	1 each		
24	9085	Thermometer, wall	2 each		

PART II

SPECIALIZED TESTING EQUIPMENT
FOR
SPECIFICATION TESTING OF
CONCRETE

ALL items to be ordered by Project Engineers when and as needed.

Allow sufficient lead-time for freight shipment to project.

I. CONCRETE TESTING EQUIPMENT

COMPRESSION TESTING EQUIPMENT

	Item	Quantity Needed	Ser. No.
	CONCRETE CAPPING COMPOUND - 50 lb OR PAD-CAP SYSTEM (Includes: 2 stainless steel restraining caps and 6 flange pads - 4" or 6" CHECK WITH DEPOT MANAGER BEFORE SHIPPING EITHER SIZE		
2	Stainless steel restraining caps - 6"	2	NSN
3	Flange pads - 6"	6	NSN
4	Stainless steel restraining caps - 4"	6	NSN
5	Flange pads - 4"	6	NSN

This is for REGULAR
 LAB w/ 1 GIMTION FURNACE
 ADD GYRATORY & RICE
 FOR SUPER PAVES - FIC

Appendix G

Pre-Show Meeting Minutes and List of Attendees

Guanella Pass Pre-Show

Pre-Show Stops

1. 1st Switchback Shelf road

- Plan Set pages C2, C3, & D1 Cross section pages 2-11
- Construct Parking Area
- Sedimentation pond
- Riprap rundowns on cut slope
- Culvert installation
- Construct Rock Buttress
- Rock Scaling
- MSE retaining wall with Form-liner facing
- Erosion and sediment treatments Plan set E1
- Revegetation of slopes, which includes seeding and plantings, see Plan set pages J5 & J6.
- Beginning of roadway paving.

2. Geneva Basin

- Plan Set pages C8, C44, & F1 Cross section pages 59-74
- Rock Scaling
- MSE retaining walls both along the fill side of the main line and the access road to Geneva Basin
- Construction Staging Area
- Erosion and sediment treatments Plan set E4
- Revegetation of slopes which includes seeding and plantings see Plan set pages J5 & J9

3. Duck Lake “Mining Plan”

- Plan Set pages C11, F2 & F3, Cross section pages 99-105
- Mining Plan
- Erosion and sediment treatments Plan set E5
- Sedimentation pond
- Revegetation of slopes which includes seeding and plantings see Plan set pages J5 & J10
- Duck Creek Mitigation site plan J27
- Duck Creek Crossing
- End of Roadway Paving

4. Summit Parking Lots (Tundra Conservation)

- Plan Set pages C19, C20, D2-D7, F2 & F3, Cross section pages 177-187
- Roadway surfacing is gravel
- Upper Summit Parking Lot has a two-lane roadway 220m (722ft) long approach road with 58-car parking lot. Parking lot will include Center Island with plantings, culvert installation, riprap rundown, macadam surface, boulder placement, colored concrete curbing, and Revegetation of slope using reclaimed alpine sod.
- Upper Summit Parking Lot Revegetation plan page J14 & J28.
- Obliterate and reclaim existing gravel parking lot. Using alpine sod. Plan set page J14
- Lower Summit Parking Lot has a two-lane roadway 40m (130ft) long approach road with 48-car parking lot. Parking lot will include Center Island with plantings, culvert installation, riprap rundown, macadam surface, boulder placement, colored concrete curbing and Revegetation of slope using reclaimed alpine sod.
- Lower Summit Parking Lot Revegetation plan page J15.

5. Switchback at Sta. 23+800

- Plan Set pages C24, Cross section pages 217-230
- MSE wall with form-liner facing
- MSE wall without facing
- Soil Nail Cut wall with rockery stone facing detail M22 – M24
- Soil Nail Wall layout G40-G44
- Culvert installation
- Macadam paved section
- Revegetation plan J16
- Erosion and sediment treatments Plan E12

6. Silver Dollar Parking lot

- Plan Set pages C28, D9, D10 Cross section pages 256-262
- Tiered Rockery walls layout G2 & G3
- Road Closure Gate installation
- Culvert installation
- Macadam paved section
- Revegetation plan J19
- Erosion and sediment treatments Plan E14

7. Sta. 25+200 three sided box with Fish passage

- Plan Set pages C29& H2 Cross section pages 264-269
- 3 sided structure layout H2
- Culvert installation
- Macadam paved section
- Revegetation plan J19
- Erosion and sediment treatments Plan E14

8. End Schedule C Cabin Creek

- Plan Set pages C43 Cross section pages 355-357
- Culvert installation
- Macadam paved section
- Revegetation plan J26
- Erosion and sediment treatments Plan E21

9. 7th Street bridge improvements

- Utilities Conflicts
- 7th Bridge structure
- Limits of construction

1

2

3

U.S. DEPARTMENT OF TRANSPORTATION

4

FEDERAL HIGHWAY ADMINISTRATION

5

GUANELLA PASS PRE-SHOW

6

7

8

The following is a verbatim transcript of the

9

U.S. Department of Transportation's Guanella Pass

10

Pre-Show Conference, taken on September 24, 2003, at

11

approximately 2:30 p.m. At the location of the

12

Georgetown Community Center, 613 Sixth Street,

13

Georgetown, Colorado, 80444 by Rosanne M. Stahl,

14

Registered Professional Reporter.

15

16

17

18

A P P E A R A N C E S

19

Panel from Department of Transportation:

James Roller

Donna Mickley

20

Jim Mills

Jim Kerrigan

21

Lori Rivera

Kevin Black

22

John Knowles

Rick Marques

23

Also Present:

24

Audience of Potential Contractors

25

1 PROCEEDINGS

2 MR. KNOWLES: All right. We'll go ahead and get started
3 with the questions and answers if everybody wants to
4 take a seat.

5 Like I said, one thing I did want to kind of go
6 over about hauling, everything that comes in from the
7 Georgetown side, or everything that's used on the
8 Georgetown side of the project, needs to come in from
9 Clear Creek County and through Georgetown.

10 And everything that comes in on the Park County
11 side needs to come in through Grant and up that way.
12 There is only about a mile of roadway that's in Park
13 County. So most of the material is going to be coming
14 in through Georgetown. And I just wanted to make that
15 clear.

16 With that we can just open it up for questions.

17 MR. KERRIGAN: One other thing: On the plan sets
18 you'll see a supplemental set that says just, "7th
19 Street," and that's the 7th Street improvements. That's
20 not included -- that won't -- there is no plans in the
21 actual pass set that applies to 7th Street. And then
22 that's why there are green deviator sheets that separate the
23 two SCR packages. There is separate SCRs for the bridge.

24 MS. RIVERA: Okay. And just to remind you all,
25 speak loud. She is recording. You don't have to state

1 your name. Just, maybe, even stand up, if you want,
2 while you're asking the questions so she can hear you.

3 CONTRACTOR: Concrete, can you bring batched
4 concrete into the job, or does it have to -- does it
5 have to be made on site, the concrete made on site?

6 MR. KNOWLES: Yes.

7 CONTRACTOR: To what?

8 MR. KNOWLES: Yes, you can bring it in.

9 CONTRACTOR: You can bring concrete in?

10 MR. KNOWLES: Yes.

11 CONTRACTOR: But you can't bring any asphalt or
12 gravel or anything else?

13 MR. KNOWLES: No.

14 CONTRACTOR: Asphalt has got to be made on site?

15 MR. KNOWLES: Yes. Asphalt, aggregate base,
16 select material.

17 CONTRACTOR: I was wondering on the stabilized
18 aggregate base, what are you going to -- what are you
19 requiring for strengths, or what kind of material are
20 you using?

21 MR. BLACK: Rick, do you want to answer that?

22 MR. MARQUEZ: For the 304 stabilized base, there
23 are three options in there for contractors to bid on:
24 Foamed asphalt, cement, or lime cement stabilization.
25 And the required specifications will be in the SCRS

1 depending on which method you decide to go with.

2 CONTRACTOR: Will you allow anything else?

3 MR. MARQUEZ: Contractually the way the contract
4 is going to be written, those are the three options that
5 will be in the contract. And to be fair to all
6 perspective bidders, if you want to propose something
7 other than is in the contract, you need to do that --
8 bid the contract according to the way it's written,
9 propose something after the fact. There is a value
10 engineering provision in the contract for you to
11 propose something else, and we'll look at that.

12 MR. KERRIGAN: That's on page 7, the actual
13 surface types everything you're asking about.

14 CONTRACTOR: Yeah.

15 MR. KERRIGAN: In page A-7 of the plans
16 you can see that.

17 CONTRACTOR: Okay. Yeah. Thank you.

18 MR. KNOWLES: Yes.

19 CONTRACTOR: Can we talk a little bit about
20 traffic control through the project as far as delays,
21 length of work areas that we can use, and how many work
22 areas can be opened at one time?

23 MR. BLACK: Not everything is in your current
24 SCRs. We're going to update those. But we're thinking of
25 going with 2 kilometers of any work area. And our

1 erosion control spec is 3 hectares for disturbance for
2 grubbing. And as far as the delays, 30 minutes maximum
3 through the project.

4 CONTRACTOR: You've got some areas where you are
5 taking out the entire road prism, how are you going to
6 do that in 30 minutes?

7 MR. BLACK: Well, you can go half at a time. What
8 areas are you talking about?

9 CONTRACTOR: On some of those steep walls you've
10 got areas where you've got to excavate back the entire
11 width, almost, to the bar ditch on the far side in order
12 to fill the backfill.

13 MR. BLACK: We do have a provision for temporary
14 shoring and bracing. And if you
15 have a narrow area you have to bid that the way you see
16 it. And it's lump sum for shoring and bracing to
17 maintain the traffic.

18 CONTRACTOR: There is nothing to maintain it on.
19 You're down 15, 20 feet.

20 CONTRACTOR: This was specifically at some of the
21 areas around the Old Geneva ski area. If the excavation
22 and backfill prism that you have shown in the
23 cross-sections is correct, then shoring -- there is
24 nothing to shore.

25 CONTRACTOR: Nothing to shore.

1 CONTRACTOR: Basically you are taking up the whole
2 roadway.

3 CONTRACTOR: You don't have any road surface.

4 MR. BLACK: You know we are out in front of
5 existing shoulder with our wall space?

6 CONTRACTOR: Right. But your prism shows that
7 excavation, the tiebacks, coming clear back to the far
8 ditch on the far side of the road.

9 MR. KNOWLES: Could you be specific on what areas
10 you're talking about?

11 CONTRACTOR: The shop road?

12 MR. ROLLER: It's up there by the access to the
13 basin, just south of there, I think, is where he's
14 talking about.

15 CONTRACTOR: Sheet No. 79, look at that one.

16 CONTRACTOR: Do you see where you are taking out
17 the entire road prism back to the cut bank?

18 MR. KNOWLES: Can I answer that concern?

19 MR. BLACK: Yeah, go ahead.

20 MR. KNOWLES: These were -- what we tried to do is
21 tried to estimate the amount of wall excavation needed
22 to construct. And some of these are -- these are not --
23 probably not what are going to be used for
24 construction. Some of them are -- in a situation like
25 this you're probably going to need shoring. You're not

1 going to be able to excavate on this back slope. It's
2 just not possible. And to maintain traffic, it's not
3 possible [WITHOUT SHORING].

4 CONTRACTOR: Yeah, that was the question.

5 MR. KNOWLES: So what -- this was just used at
6 estimating a quantity for wall excavation so that you
7 guys could bid the wall excavation in your wall -- wall
8 bid unit bid price. And in some of these locations the
9 wall excavation is something that's not constructible,
10 because it's more wall excavation than what's needed.
11 Does that make sense?

12 CONTRACTOR: so in that
13 cross-section you show the . . . described . . . length, or
14 the reinforced area, plus you show the back slope at a
15 one-and-a-half to . . . one-in-four ~~tread safety, I guess,~~
16 is what you are showing there.

17 MR. KNOWLES: Yeah. [ACTUALLY A ONE-TO-ONE SHOWN]

18 CONTRACTOR: So if you can't put that
19 one-and-a-half to one in, you've got to shore it in
20 order to get traffic through?

21 MR. KNOWLES: Correct, correct.

22 CONTRACTOR: You know, what about if you have to
23 shore, are you going to have to put up some kind of
24 barrier to protect the traveling public from driving
25 through your deal like a concrete barrier or something?

1 MR. KNOWLES: Yes, you will. Yes. If you will
2 look at the station ahead, I'm looking at -- and for
3 some reason it shows shoring at Station 18 plus 310 and
4 then doesn't show it at 320. It should show -- it
5 probably should show shoring clear through on those
6 sections.

7 CONTRACTOR: What's your planned duration for the
8 job?

9 MR. KERRIGAN: The planned duration of the job:
10 The job will be bid this year, construction season will
11 start on the bridge in January and will continue for
12 three consecutive construction seasons.

13 CONTRACTOR: Is it going to be a best-value
14 proposal?

15 MR. KNOWLES: No.

16 CONTRACTOR: No? Low number.

17 CONTRACTOR: Are you going to try to get your
18 paving in this winter in town here?

19 MR. KERRIGAN: Yes.

20 CONTRACTOR: In January?

21 MR. KERRIGAN: In the spring.

22 MR. ROLLER: May.

23 MR. BLACK: April, May.

24 MR. KERRIGAN: April, May.

25 CONTRACTOR: Is there an available source of water

1 on the project, construction water?

2 MR. KERRIGAN: There is two available sources, and
3 we are still in the process. One source will be at Duck
4 Creek, at the Duck Lake. And then the other source will
5 be coming at the power plant. And we are still going --
6 trying to receive those permits. But we intend on
7 having -- water will be available on site.

8 CONTRACTOR: . . . A further
9 question on the design criteria of your base course --
10 forgetting the terminology -- one was a surfacing base
11 course, and I take it that that's the one that has the
12 high PI, or do they both have high PIs?

13 MR. KNOWLES: Rick will answer that.

14 MR. MARQUEZ: *&* GO OVER PARAGRAPH *&* There are
15 two item 301s. One of them is for base course that is
16 to be used underneath the stabilized section. The other
17 one is a 301 which is -- that's the only one that
18 requires a PI. The 301 standard base course does not
19 require PI under the *&* chips. However, the surfacing
20 aggregate requires a PI or a cementation value.

21 CONTRACTOR: The source for the rockery wall
22 materials?

24 MR. KERRIGAN: The source of the rockery wall
25 materials will be collected on the actual pass. There

1 is no talus slope that will -- that you'll get all the
2 rocks from. The rocks will be collected, they will be
3 received from the actual scaling of the wall, scaling of
4 the cut slopes, and any material that you generate in
5 your actual excavation zone.

6 CONTRACTOR: And the spec says we're responsible
7 to design those walls?

8 MR. KERRIGAN: Yes.

9 CONTRACTOR: Okay.

10 CONTRACTOR: Top soil stripping requirements: Are
11 there any requirements that you can't walk on the top
12 soil prior to stripping?

13 MR. BLACK: There is a lot of reveg requirements,
14 and I'm not familiar with all of them. Donna might be,
15 but I'm not.

16 MS. MICKLEY: I'm not aware of one that pertains
17 to that.

18 MR. BLACK: Just look under 624.

19 MR. KERRIGAN: Are you talking after, before?

20 CONTRACTOR: For stripping it prior to doing the
21 construction. On some of the National Forrest projects
22 in the past, you've had to strip it in an unconventional
23 way as to not walk on the top soil as you are stripping
24 it.

25 MR. KNOWLES: I don't believe that we have any

1 requirements like that.

2 MS. MICKLEY: We haven't called out anything like
3 that.

4 MR. KNOWLES: It's not to say that we won't add
5 anything, but right now we won't.

6 MR. ROLLER: There is tundra replacement from
7 transplanting tundra.

8 MR. KNOWLES: But that's totally different.

9 MR. ROLLER: Yeah, different deal. But there is
10 areas up there where you -- near the upper parking lot
11 where the tundra is to be transplanted from the new
12 parking lot to the old parking lot.

13 MS. MICKLEY: And that would apply on the -- in
14 that tundra they wouldn't want you -- putting your
15 equipment over the top of that before you picked it up.

16 MR. BLACK: And that might take some special
17 equipment to harvest that tundra. There might be some
18 special attachments to plastic cut underneath it to lift it all
19 up at once.

20 CONTRACTOR: Does the clearing & grubbing timber
21 become the property of the contractor?

22 MS. MICKLEY: That will be -- the timber will be
23 -- you'll have to enter into a timber contract with the
24 Forest Service, and you will pay the Forest Service the
25 value of the timber and then it will become your

1 property, yes.

2 CONTRACTOR: And the spec has the value. It says
3 \$12,800 or something; is that the number?

4 MS. MICKLEY: No, that's the estimate at this
5 time.

6 CONTRACTOR: Okay.

7 MS. MICKLEY: Because we don't have clearing
8 limits, so we can't actually do the cruise [measure the
timber].

9 The minute that the contractor -- once you get in there and you
10 establish clearing limits, then we'll come in, we'll do
11 the official cruise, and then we'll make an adjustment on
12 that value. But we wanted to give you an estimate of
13 the value.

14 MR. KNOWLES: [There is] Timber that gets reused back on
15 the project; is that correct?

16 MS. MICKLEY: That's correct. There are some
17 timber that will be reused. There is some barriers,
18 toad barriers that are being constructed. That timber
19 you won't purchase. It won't leave. So we're talking
20 about timber that leaves National Forest Land that will
21 have to be purchased.

22 CONTRACTOR: Can you chip the timber and leave it
23 on site?

24 MS. MICKLEY: No, because of the way that the --
25 we don't have the room to do the chipping. Well, I

1 don't know. You answer that. Can they leave that on
2 site?

3 MR. KERRIGAN: The slash at this time is going to
4 be hauled to a located -- an area, a staging area. It
5 might be Geneva or another area that we will designate
6 on the job. As it reads right now the slash will be
7 stored there and the Forest Service will burn that slash
8 at their time.

9 MS. MICKLEY: Well, he's actually talking about
10 the timber, not just the slash. But in this case this
11 is valuable merchantable timber. You will have people
12 who want to purchase this. It's old growth, some of
13 it. This is [merchantable] Birch timber. It's not just trees
14 that you can't get rid of.

15 MR. KERRIGAN: Any other questions?

16 CONTRACTOR: If it ends up being more than
17 \$12,800, what happens then? Do we get compensated for
18 that, too? I mean it's just an estimated number right
19 now. How does that work?

20 MR. KNOWLES: No, you won't.

21 CONTRACTOR: What if it ends up being \$20,000,
22 what happens then?

23 MS. MICKLEY: We're very confident that that's a
24 high estimate. I mean, that that's not -- I don't think
25 that there is any way that the values would be higher

1 than that. And I guess we'll keep it on site if it
2 happened, I would say we would keep it, we wouldn't let
3 it leave National Forest. We would stop at the value of
4 \$12,800 leaving, and we would keep it on site and then
5 we would deal with it.

6 MR. KERRIGAN: Go ahead.

7 CONTRACTOR: How are you going to handle concrete
8 washout for the trucks, concrete trucks?

9 MR. BLACK: Well, there is a 107 section that
10 deals with, not just erosion control, but clean-out and
11 NPDES requirements. And it's our typical NPDES that you
12 have to contain it. You can't let it get into the
13 streams. And then, other than that, I don't think we
14 don't have too many requirements.

15 CONTRACTOR: And so I guess what I am driving at
16 is do you have any designated area or anything like
17 that?

18 MR. BLACK: No, I think that's going to be up to
19 the contractor to propose, and then we'll evaluate it.
20 Just like any other erosion control, it would be the
21 same type of thing, you propose it and we'll approve
22 it.

23 CONTRACTOR: You stated earlier that we can only
24 open up so much of the road at a time. What if because
25 of the balances of the dirt it doesn't balance right and

1 you got to open up more than what you are saying to get
2 rid of dirt rather than stockpile it?

3 MR. BLACK: We'll look at that. We'll look at
4 balances. We haven't really written that spec yet.
5 We'll look at that and see what we have to do. If we
6 have to adjust, we'll try to get that in a spec.

7 MR. KERRIGAN: It's B-22.

8 CONTRACTOR: On the MSE wall backfill, in certain
9 instances in the past we have been able to use your
10 granular backfill material within a certain distance of
11 the wall, and then from there to the back of the prism
12 you use on-site material. In this case are we going to
13 use granular all through?

14 MR. BLACK: The granular material, if you look on
15 the wall detail -- what sheet is that -- there is a
16 zone for the select granular. And it's 18 inches behind
17 your wall reinforcement straps. And then behind that is
18 a regular embankment.

19 MR. KERRIGAN: Sheet M-20.

20 MR. KERRIGAN: You can see your different zones
21 delineated with the notes that go ahead and respond,
22 clarify the actual drawing of them all.

23 CONTRACTOR: Okay.

24 MR. BLACK: And I was wrong, it's not 18 inches.
25 It's 1 foot, 300 millimeters, behind the straps or

1 reinforcement strips.

2 MR. KERRIGAN: Any other questions?

3 CONTRACTOR: Is there contractor testing on the
4 job?

5 MR. BLACK: Yes, there will be contractor testing
6 154 with verification by the government.

7 CONTRACTOR: And that's all -- that's every day?

8 MR. BLACK: Yeah. Anything else?

9 CONTRACTOR: The cost of shoring these walls is
10 pretty considerable. It's almost more than the walls
11 itself.

12 MR. BLACK: Excuse me?

13 CONTRACTOR: In your traffic control spec it says
14 you can close the road down for 30 minutes unless you
15 submit for approval. So that's kind of a big issue for
16 us to understand when you accrue longer than a 30-minute
17 shutdown, you know, relating back to the shoring issue.

18 MR. KERRIGAN: Are you talking about night work?

19 CONTRACTOR: Yeah.

20 MR. KERRIGAN: Well, you can either propose a
21 solution for night work or --

22 CONTRACTOR: We want to know what your
23 requirements are for longer-than-30-minute road
24 closures.

25 MR. BLACK: We're going to have to stay with the

1 30-minute road closures, as far as I know, unless there
2 is something else. We'll have to shorten the wall
3 section lengths, or whatever.

4 CONTRACTOR: But that's a structural design
5 function, it's not really a function of the -- I mean,
6 you can't just shorten the walls up.

7 MR. BLACK: You can shorten the construction of
8 the wall lengths.

9 CONTRACTOR: Sure.

10 MR. BLACK: Step them down.

11 CONTRACTOR: You can put them back even in the
12 day.

13 MR. KERRIGAN: Well, he was just verifying that.
14 Nighttime work, I mean, we can -- proposals for
15 nighttime work would have to be evaluated along with the
16 duration for the actual work.

17 MR. KNOWLES: I would just assume that there is
18 not going to be any closures longer than 30 minutes.

[After Preshow meeting, a specification was added allowing nighttime closures -
see subsection 156.06.j.]

19 CONTRACTOR: Are there work hours?

20 MR. KNOWLES: Yes, I believe there are.

21 MR. BLACK: Well, there is some weekends that are
22 not permitted.

23 MR. KNOWLES: In section 108 it talks about the

24 restrictions.

25 MR. KERRIGAN: You can look at I-24 gives you the
1 different hauling operations allowed and the time. And
2 subsection F is other requirements.

3 CONTRACTOR: Does that cover the limitations on
4 blasting, too?

5 MR. BLACK: I don't know that -- what are you
6 talking about, the limitations?

7 CONTRACTOR: Generally -- like, for where I am at
8 right now you can blast from 6:30 in the morning to 6
9 o'clock at night.

10 MR. BLACK: Well, we go back to OSHA and daylight
11 hours, half-hour after sunrise, half-hour before
12 sunset. There is -- as far as I know there is no
13 restriction for blasting. This is mostly a wall job. I
14 don't anticipate a whole lot of going into a lot of rock
15 cuts, but --

16 MS. MICKLEY: There are operational restrictions
17 as a material source and at the staging area. It's a
18 mitigation for lengths. That's a dawn to dusk.

19 MR. KNOWLES: Yes. And that's in section 108.

20 CONTRACTOR: Does section -- I'm sorry, I don't
21 have the thing that these guys have. Does -- at the
22 borrow site or gravel area or gravel source, what's the
23 actual limits on that? It's kind of hard to tell. Do
24 we go back in the trees a little ways with that?

25 MR. BLACK: What page is that?

1 MR. KERRIGAN: Page -- well, the delineation of
2 the Duck Lake material source is -- you can see the
3 actual source plan. It's F-2 and F-3 in your plans, and
4 you can actually see the delineated limits.

5 CONTRACTOR: What page did you say?

6 MR. KERRIGAN: F-2 and F-3.

7 MS. MICKLEY: On F-2 that line that looks like a
8 scalloped line is actually the existing vegetation line,
9 if you can see that through the new contours.

10 MR. BLACK: I think when we get the final plan set
11 we'll have northings and eastings so your surveyors can
12 lay that out on the boundary for the Duck Lake.

13 MR. MARQUEZ: If I could just make one comment on
14 the material sources: I encourage all contractors to
15 get a copy and review the geotechnical report
16 thoroughly, because it has very specific information on
17 boring logs and how that is going to have to be
18 developed in order to optimize the materials for
19 production of base course, aggregate surfacing, and
20 paving aggregates. So I encourage everyone to take a
21 look at that geotechnical report, a thorough look at that
22 geotechnical report.

23 MS. RIVERA: And you need to give me a call on
24 that, because we don't automatically distribute those,
25 so give us a call in the contracting section.

1 MR. KNOWLES: On F-2 you can see the borings, and
2 there is quite a few borings that were put up in that
3 source area.

4 CONTRACTOR: Are those reports available now from
5 you or not until the plan --

6 MS. RIVERA: Not until the project comes out,
7 yeah.

8 CONTRACTOR: Also in that area, as far as pit
9 permitting and plant permitting, are you taking care of
10 that or are we going to have to take care of that as a
11 contractor?

12 MR. KERRIGAN: That's been taken care of.

13 CONTRACTOR: It's been taken care of, plant site
14 and gravel?

15 MR. KERRIGAN: The plant site as in what kind of
16 plantings will be --

17 MR. KNOWLES: Asphalt plant.

18 MR. KERRIGAN: Oh, okay. Sorry. That has been
19 cleared by the Forest Service. We have gone through
20 that process.

21 CONTRACTOR: Does that apply to the crushing plant
22 as well?

23 MR. KNOWLES: Yes.

24 MR. BLACK: I think the only thing, though, that
25 we need to ensure, but I think we're talking about two

1 separate things, you still have to comply with the state
2 emissions.

3 CONTRACTOR: So we have to get fugitive dust and
4 all of that?

5 MR. BLACK: Get what?

6 CONTRACTOR: The fugitive dust permits and all
7 this?

8 CONTRACTOR: And NPDES?

9 MR. BLACK: Yes.

10 MR. KNOWLES: Contractor will be required to get
11 the NPDES.

12 CONTRACTOR: Do we have to file the reclamation
13 bond on that, too, or are you guys taking care of that?
14 You guys are taking care of that?

15 MR. KERRIGAN: Yes. It's going to continue through
16 Phase II. We're going to use this source.

17 MS. MICKLEY: I don't believe so. I don't think
18 so. We don't typically -- on Forest Service land I'm
19 not aware of ever having to do a reclamation bond. But
20 I may -- but we may need to clarify that. Is that a
21 state requirement that you are typically --

22 CONTRACTOR: Yeah.

23 MR. KNOWLES: But you won't be required to do a
24 reclamation on this phase of work. We're going to
25 reclaim it on the second phase. I think all we're

1 requiring is you need to leave it in such a condition
2 that we can come back in and reuse it. We're not going
3 to require any type of --

4 MR. KERRIGAN: No. You just need to refer back to
5 plan set and on the J series of your plan set that
6 denotes what the actual reveg plan will be for the
7 area. And that's -- for Phase I that's the way you
8 would leave it for Phase I, in that condition.

9 CONTRACTOR: Are you guys getting a mine safety ID
10 for this as well, or do we have to get a contractor's ID
11 for this particular location as the operator in it?

12 MS. MICKLEY: Because it's on National Forest
13 land, you do not. Is there anybody that has ever had to
14 do that on National Forest land? I'm just asking,
15 because I've never -- that has never been a requirement
16 in any quarry that I've ever used.

17 MR. KERRIGAN: Any other questions?

18 CONTRACTOR: Is there a location that might have
19 power and phone up there for an office site?

20 MR. BLACK: The power stops at the --

21 MR. ROLLER: -- right where our office was going
22 to go in.

23 MR. BLACK: Right where we got held up in traffic.

24 MR. ROLLER: That's the end of the electrical
25 power.

1 MR. KERRIGAN: The only additional area where you
2 would have telephone is at Duck Lake. The telephone
3 goes to Duck Lake.

4 MR. BLACK: But the power doesn't.

5 MR. KERRIGAN: But the power doesn't.

6 CONTRACTOR: And Geneva doesn't have power?

7 MR. KERRIGAN: Geneva doesn't have power. It
8 probably did at one time.

9 CONTRACTOR: Yeah, I understand.

10 MR. KNOWLES: I think they may have had some
11 diesel generators up there at one time.

12 MS. MICKLEY: Yeah, they had generators.

13 CONTRACTOR: But there is phone up there?

14 MR. KERRIGAN: Yes. It's denoted in the plans.

15 MR. ROLLER: That's pretty iffy. There is just
16 two sets of wires going to Duck Lake, right?

17 MR. MILLS: One set.

18 MR. ROLLER: One set of wires going to Duck Lake.

19 CONTRACTOR: A party line, huh?

20 MR. ROLLER: She already owns it, so -- that's
21 something you might want to mention, the fact that the
22 telephone line goes through the project all the way to
23 Duck Lake.

24 MR. KERRIGAN: Yes, it's denoted on the plans. I
25 mean, and the plans do state that. I mean, it's -- we

1 are --

2 MR. ROLLER: It's located in the road.

3 MR. KERRIGAN: We are -- I mean, the actual
4 telephone line was surveyed in to the best of our
5 knowledge, and we are in communication with Qwest on how
6 our construction activities are going to be dealing with
7 the actual phone line, and that will be addressed in the
8 SCRs.

9 CONTRACTOR: Camping on site, contractor camp, is
10 it allowed?

11 MS. MICKLEY: You'll have to work through the
12 Forest Service, but if we can find a suitable site we
13 typically try to accommodate that.

14 MR. BLACK: But the normal law, isn't it two weeks
15 only? That's normally --

16 MS. MICKLEY: Yes. So, I mean, we go through
17 special provisions when we get into a contract
18 situation.

19 MR. KERRIGAN: But as the Federal Highway we have
20 not entered into any of those discussions.

21 MR. KNOWLES: Anything else? If not, we'll close
22 out, and thank you guys for showing up. We appreciate
23 your interest.

24 MS. RIVERA: Just to let you know that these notes
25 will be posted on our web site. I gave you that site

1 earlier in the packet you picked up. Anybody that hasn't
2 turned in their plans, please check in with me. And
3 also if you haven't signed in with me, if you came in
4 late, please let me know so I can put you down on our
5 list.

6 Rosie, how long do you think before we would get

7 --

8 THE REPORTER: A week.

9 MS. RIVERA: Probably the notes will be on the
10 web within a week and half, but I'll put the list of
11 attendees out there as soon as I can get back to the
12 office. Thanks.

13 (The meeting was concluded at 3:04 p.m.)

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REPORTER'S CERTIFICATE

The above and foregoing is a true and accurate transcription of my stenotype notes taken in my capacity as Registered Professional Reporter.

Dated at Breckenridge, Colorado, this 6th day of October, 2003.

Rosanne Stahl
Eagle Summit Reporting & Video
PO Box 4941
Breckenridge, CO 80424
970-468-9415

LIST OF ATTENDEES
PRE SHOW CONFERENCE
 GUANELL PASS ROAD
 CLEAR CREEK AND PARK COUNTIES, CO
 SEPTEMBER 24, 2003

Plan Set #	CONTRACTOR NAME/ADDRESS	Are you:?(U)			CONTACT NAME	PHONE/FAX
		P r i m e	S u b	S u p p l i e		
	Adarand Constructors				Steve Goeglein Rock	719-390-4000 x 3 719-390-4759
	Connell Resources				Ben Connell Dave Simpson Will Welch	970-223-3151 970-223-3191
	Recycled Materials				Mark Wachal	303-431-3701 303-431-3705
	Elk Creek Sand & Gravel				Juliette Weir	303-816-4047 303-697-3001
	American Civil Constructors				Tom Hanke	303-795-2582
	Porta Crushers				Lance Johnson	303-994-0311

LIST OF ATTENDEES
PRE SHOW CONFERENCE
 GUANELL PASS ROAD
 CLEAR CREEK AND PARK COUNTIES, CO
 SEPTEMBER 24, 2003

Plan Set #	CONTRACTOR NAME/ADDRESS	Are you:?(U)			CONTACT NAME	PHONE/FAX
		P r i m e	S u b	S u p p l i e		
	Asphalt Recycling & Stabilization				Kim Harberg	Left message - no phone #
	Yenter Company				Thatius	303-279-4458 303-710-3013 (cell)
	Kelly Trucking				Mike Easley	303-279-4150 303-279-4199
	Tensar Technologies				Scott Sathen Joe Kerrigan	303-429-9511 303-428-6770
	LaFarge West				Scott McGlochline Ryan Yoch	303-657-4462 303-657-4414
	Keyway Curb Company				Bill Harger Mark	719-495-7999 719-495-8805

LIST OF ATTENDEES
PRE SHOW CONFERENCE
 GUANELL PASS ROAD
 CLEAR CREEK AND PARK COUNTIES, CO
 SEPTEMBER 24, 2003

Plan Set #	CONTRACTOR NAME/ADDRESS	Are you:?(U)			CONTACT NAME	PHONE/FAX
		P r i m e	S u b	S u p p l i e		
	Tri Con				John Ramsour	303-688-9568
	PSI				Kirk Johnson	303-424-5578 303-423-5625
	Asphalt Paving				Steve Leach	303-279-6611
	Ideal Fencing				John Bowen	303-772-3819 303-651-0814
	E.H. Oftedahl				Ken Mumbower	307-473-4499 307-473-2633
	Kirkland Construction				Larry	719-489-3385 719-489-2268

LIST OF ATTENDEES
PRE SHOW CONFERENCE
 GUANELL PASS ROAD
 CLEAR CREEK AND PARK COUNTIES, CO
 SEPTEMBER 24, 2003

Plan Set #	CONTRACTOR NAME/ADDRESS	Are you:?(U)			CONTACT NAME	PHONE/FAX
		Prim e	Sub	Suppl ie		
	Flat Irons Surveying				Tom Willis	303-443-7001
	Kiewit Western				Brian Heikes	303-921-4984
	T&B Structural Systems				Scott Bagwell	817-280-9858, x203 817-280-9864
	MTS Construction				Chris Todd	303-906-4460 303-974-3007
	WLH Construction Company				Warren Harrison	303-347-8655
	Edward Kraemer & Sons				John Fenton	303-419-8043

LIST OF ATTENDEES
PRE SHOW CONFERENCE
 GUANELL PASS ROAD
 CLEAR CREEK AND PARK COUNTIES, CO
 SEPTEMBER 24, 2003

Plan Set #	CONTRACTOR NAME/ADDRESS	Are you:?(U)			CONTACT NAME	PHONE/FAX
		P r i m e	S u b	S u p p l i e		
	Geo Cal				John Crystal	303-337-0338
	Armendariz				Dave Armendariz	
	Strait Creek				Kevin Buckley	303-569-2465
	Munchinado				Reed Bennetts	303-940-6642
	Buckley				Lee Johnson	303-790-7007
	Slaton Bros.				David Pacheco	303-806-8160

LIST OF ATTENDEES
PRE SHOW CONFERENCE
 GUANELL PASS ROAD
 CLEAR CREEK AND PARK COUNTIES, CO
 SEPTEMBER 24, 2003

Plan Set #	CONTRACTOR NAME/ADDRESS	Are you:?(U)			CONTACT NAME	PHONE/FAX
		P r i m e	S u b	S u p p l i e		
	Hayward-Baker				Pat West	303-469-1136

Appendix H

Sample Subcontracting Plan FAR Clause 52.219-9 in Full Text

SMALL BUSINESS SUBCONTRACTING PLAN

SOLICITATION OR PROJECT # _____ DATE _____

Contractor's Name and Address:

The following, together with any attachments, is hereby submitted as a Subcontracting Plan to satisfy the applicable requirements of Public Law 95-507.

1. (a) The following goals will be applicable to any contract awarded as a result of this solicitation.

	Dollars	% of (1)
(1) Total dollars planned to be subcontracted	_____	
(2) Total dollars planned to be subcontracted to Small Business Concerns (SB)	_____	_____
(3) Total dollars planned to be subcontracted to Small Disadvantaged Business Concerns (SDB)	_____	_____
(4) Total dollars planned to be subcontracted to Women-owned Small Business Concerns (WBE)	_____	_____
(5) Total dollars planned to be subcontracted to HUBZone Small Business Concerns (HUB)	_____	_____
(6) Total dollars planned to be subcontracted to Veteran-owned/Service-disabled Veteran-owned Small Business Concerns (VET)/(SDVET)	_____	_____

In the event that you are not utilizing any of the above small business concerns, please state reason in section (b) below and describe method of determination.

(b) Principal types of work to be subcontracted.

Type of Work (i.e. paving, fence, etc.)	Proposed Subcontractor _____ If known _____	Type of Concern					Estimated Cost _____
		SB	SDB	WBE	HUB	VET/SDVET	

- (c) Do the above estimated costs include indirect costs? ___ Yes ___ No. If yes, describe the method used to determine the proportionate share of indirect costs to be included with (2) SB, (3) SDB, (4) WBE, (5) HUB, and (6) VET/SDVET concerns.
- (d) The following method was used in developing subcontract goals (i.e., statement explaining how the product and service areas to be subcontracted were established, how the SB, SDB, WBE, HUB, and VET/SDVET small business concerns' capabilities were determined, and identification of source lists and organizations contacted to obtain SB, SDB, WBE, HUB, and VET/SDVET sources.)

2. The following individual will administer the subcontracting program:

Name:

Title:

Address:

Telephone:

This individual's specific duties, as they relate to the firms' subcontracting program, are as follows:

General overall responsibility for review, monitoring, and execution of the plan, including but not limited to:

- (a) Obtaining SB, SDB, WBE, HUB, and VET/SDVET small business sources from all possible sources.
- (b) Assuring inclusion of SB, SDB, WBE, HUB, and VET/SDVET firms in all solicitations where applicable.
- (c) Attending or arranging for attendance at Business Opportunity Workshops, Minority Business Enterprise Seminars, Trade Fairs, etc.
- (d) Conducting or arranging for the conduct of motivational training for purchasing personnel pursuant to the intent of Public Law 95-507.
- (e) Monitoring attainment of proposed goals.

- (f) Reviewing solicitations to delete statements, clauses, and other provisions which may tend to prohibit SB, SDB, WBE, HUB, and VET/SDVET participation.
 - (g) To help develop new suppliers, the following duties are added to or deleted from those specified above:
3. The following efforts will be taken to assure that SB, SDB, WBE, HUB, and VET/SDVET small business concerns will have an equitable opportunity to compete for subcontracts:
- (a) Outreach efforts will be made as follows:
 - (i) contacts with minority and small business trade associations,
 - (ii) contacts with business development organizations;
 - (iii) attendance at small and minority business procurement conferences and trade fairs;
 - (iv) sources will be requested from State highway department source lists and/or SBA's PRO-Net system at www.sba.gov.
 - (b) The following internal efforts will be made to guide and encourage buyers:
 - (i) workshops, seminars, and training programs will be conducted;
 - (ii) activities will be monitored to evaluate compliance with this subcontracting plan.
 - (c) SB, SDB, WBE, HUB, and VET/SDVET small business concern source lists, guides, and other data identifying SB, SDB, WBE, HUB, and VET/SDVET small business concerns will be maintained and utilized by buyers in soliciting subcontracts.
 - (d) Additions to (or deletions from) the above listed efforts are as follows:
4. The bidder (offeror) agrees that the clause entitled "Utilization of Small Business Concerns" will be included in all subcontracts which offer further subcontracting opportunities, and all subcontractors, except small business concerns, which receive subcontracts in excess of \$500,000 or in the case of a contract for the construction of any public facility, \$1,000,000, will be required to adopt and comply with a subcontracting plan similar to this one. Such plans will be reviewed by comparing them with the provisions of Public Law 95-507, and assuring that all minimum requirements of an acceptable subcontracting plan shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of potential small and disadvantaged subcontractors, and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to the subcontractor facilities or reviews of applicable records and subcontracting program progress.
5. The bidder (offeror) agrees to cooperate in any studies or surveys as may be required by the contracting agency or the Small Business Administration in order to determine the extent of compliance by the bidder (offeror) with the subcontracting plan. Additionally, the bidder (offeror) agrees to assure that its subcontractors agree to submit Standard Forms 294 and 295.

6. The bidder (offeror) agrees to maintain at least the following types of records to document compliance with this subcontracting plan:
 - (a) SB, SDB, WBE, HUB, and VET/SDVET small business source lists, guides and other data identifying SB, SDB, WBE, HUB, and VET/SDVET vendors.
 - (b) Organizations contacted for SB, SDB, WBE, HUB, and VET/SDVET small business sources.
 - (c) On a contract-by-contract basis, records on all subcontract solicitations over \$100,000, indicating on each solicitation (1) whether small businesses were solicited, and if not, why not; (2) whether small disadvantaged businesses were solicited, and if not, why not; (3) whether women-owned small businesses were solicited, and if not, why not; (4) whether HUBZone small businesses were solicited, and if not, why not; (5) whether veteran-owned small businesses were solicited and if not, why not; (6) whether service-disabled veteran-owned small businesses were solicited and if not, why not, and reasons for the failure of solicited SB, SDB, WBE, HUB, or VET/SDVET small businesses to receive the subcontract award.
 - (d) Records to support other outreach efforts: contacts with Minority and Small Business Trade Associations, Business Development Organizations, and attendance at small and minority business procurement conferences and trade fairs.
 - (e) Records to support internal activities to guide and encourage buyers: workshops, seminars, training programs, and monitoring activities to evaluate compliance.
 - (f) On a contract-by-contract basis, records to support award data submitted to the Government to include name and address of subcontractor.
 - (g) Records to be maintained in addition to the above are as follows:
7. The bidder (offeror) agrees to:
 - (a) Assist SB, SDB, WBE, HUB, and VET/SDVET small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the bidder's (offeror's) lists of potential SB, SDB, WBE, HUB, and VET/SDVET small business subcontractors are excessively long, reasonable effort shall be made to give all such concerns an opportunity to compete over a period of time.
 - (b) Provide adequate and timely consideration of the potentialities of SB, SDB, WBE, HUB, and VET/SDVET small business concerns in all "make-or-buy" decisions.
 - (c) Counsel and discuss subcontracting opportunities with representatives of SB, SDB, WBE, HUB, and VET/SDVET small business firms.

Plan Prepared by: _____ Date _____
Contract Administration

TYPED NAME:

TITLE:

FIRM:

Plan Accepted by: _____ Date _____
FHWA - CFLHD Contracting Officer

52.219-9 Small Business Subcontracting Plan. (Jan 2002)

(a) This clause does not apply to small business concerns.

(b) Definitions. As used in this clause-

"Commercial item" means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

"Commercial plan" means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

"Individual contract plan" means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

"Master plan" means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

"Subcontract" means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) The offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business concerns, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate the subcontracting plan shall make the offeror ineligible for award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of-

- (i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;
- (ii) Total dollars planned to be subcontracted to small business concerns;
- (iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;
- (iv) Total dollars planned to be subcontracted to service-disabled veteran-owned small business;
- (v) Total dollars planned to be subcontracted to HUBZone small business concerns;
- (vi) Total dollars planned to be subcontracted to small disadvantaged business concerns; and
- (vii) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to-

- (i) Small business concerns;
- (ii) Veteran-owned small business concerns;
- (iii) Service-disabled veteran-owned small business concerns;
- (iv) HUBZone small business concerns;
- (v) Small disadvantaged business concerns; and
- (vi) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with-

- (i) Small business concerns;
- (ii) Veteran-owned small business concerns;
- (iii) Service-disabled veteran-owned small business concerns;
- (iv) HUBZone small business concerns;
- (v) Small disadvantaged business concerns; and
- (vi) Women-owned small business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the offeror will-

- (i) Cooperate in any studies or surveys as may be required;
- (ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;
- (iii) Submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.
- (iv) Ensure that its subcontractors agree to submit SF 294 and SF 295.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

(i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating-

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;

(D) Whether HUBZone small business concerns were solicited and, if not, why not;

(E) Whether small disadvantaged business concerns were solicited and, if not, why not;

(F) Whether women-owned small business concerns were solicited and, if not, why not; and

(G) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact-

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through-

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided-

(1) The master plan has been approved;

(2) The offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer; and

(3) Goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with-

- (1) The clause of this contract entitled "Utilization Of Small Business Concerns;" or
- (2) An approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

(1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

(End of clause)

Alternate I (Oct 2001).

When contracting by sealed bidding rather than by negotiation, substitute the following paragraph (c) for paragraph (c) of the basic clause:

(c) The apparent low bidder, upon request by the Contracting Officer, shall submit a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the bidder is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be submitted within the time specified by the Contracting Officer. Failure to submit the subcontracting plan shall make the bidder ineligible for the award of a contract.