



DOWD JUNCTION TO MINTURN TRAIL PHASE I

BID SPECIFICATIONS

Issued July 31, 2009

FEDERAL AID PROJECT NO.: ES3 006A-043

FEDERAL PROJECT CODE: 16945

BY: Project Owner: Town of Minturn
Chris Cerimele, Assistant Town Planner
Jim White, Town Manager
PO Box 309
Minturn, Colorado 81645
(970) 827-5645

Project Partner/Manager: ECO Trails
Ellie Caryl, Program Manager
PO Box 1070
Gypsum, CO 81637
(970) 328-3523

FUNDED BY: **UNITED STATES GOVERNMENT AMERICAN RECOVERY
AND REINVESTMENT ACT (ARRA)**
Administered by the Colorado Department of Transportation

**DOWD JUNCTION TO MINTURN TRAIL PHASE I
FEDERAL AID PROJECT NO.: ES3 006A-043
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SECTION A

BIDDING DOCUMENTS

ADVERTISEMENT FOR BIDS

PROJECT: **DOWD JUNCTION TO MINTURN TRAIL PHASE I**
FEDERAL AID PROJECT NO.: ES3 006A-043
FEDERAL PROJECT CODE: 16945

LOCATION: Minturn, Colorado 81645

BY: Project Owner: Town of Minturn
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CONTRACT DRAWINGS AND SPECIFICATIONS

Drawings and specifications can be obtained from the Town of Minturn Planning Office as of Friday, July 31, 2009 at 302 Pine Street, Minturn between 8:00 a.m. and 5:00 p.m., Monday through Friday. Bid information may also be obtained from www.minturn.org.

BRIEF DESCRIPTION OF WORK

The project includes installation of a 1,300 foot long, 10 foot wide asphalt trail along Highway 24 starting at milepost 143.6 and ending at Minturn County Road 14 for purposes of a bike and walking trail. Estimated quantities include 236 tons of asphalt paving, 2,354 square feet of MSE wall and 555 feet of wall railing.

MANDATORY PRE-BID MEETING

A Mandatory Pre-Bid Meeting will be held at the Town of Minturn Planning Office, 302 Pine Street, Minturn, Colorado 81645 at **3:00 p.m., local time, on Monday, August 17, 2009. Bidders are required to attend.**

BID SUBMITTAL

Bids for the work described herein will be received **UNTIL 3:00 P.M. LOCAL TIME ON MONDAY, AUGUST 24, 2009**, at the above office, and at that time opened and read aloud. All bids must be enclosed in a sealed envelope plainly marked:

DOWD JUNCTION TO MINTURN TRAIL PHASE I
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Any bids received after the above specified time will be immediately returned to the Bidder unopened.

BID GUARANTEE

Bid security shall be submitted with made payable to Owner (Town of Minturn) in an amount of five percent (5%) of the bidder's maximum bid price, and in the form of a certified or bank check, or a bid bond issued by a surety meeting the requirements of the General Conditions.

AWARD OF BID

Bids will be opened and tabulated at the above-mentioned date and time and the award of the contract will be made in September, 2009. The Town of Minturn reserves the right to reject any and all bids and to waive informalities herein. Bids may not be withdrawn after opening for a period of thirty (30) days.

REQUIREMENTS OF THE SUCCESSFUL BIDDER

Successful Bidder will be required to execute the Agreement Forms, furnish 100% Performance and Payment Bonds and Certificates of Insurance in accordance with the requirements stated in the General Conditions.

SCHEDULE OF WORK

The successful bidder on this project shall complete the project in seven weeks (49 days) from the date of the Notice to Proceed.

ADVERTISEMENT DATES: Published in the Denver Post on August 1, August 5, August 10, August 17 and the Vail Daily on August 3, August 10 and August 17.

INSTRUCTIONS TO BIDDERS

DEFINED TERMS

Terms used in these Instructions to Bidders which are defined in the General Conditions have the meanings assigned to them in the General Conditions. The term "Successful Bidder" means the lowest, CDOT qualified, responsible bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided makes an award. Town of Minturn may also be listed within these Instructions as "Owner" or "Project Owner". The term "CDOT" shall refer to the Colorado Department of Transportation. "Owner's Representative" or "Project Manager" shall refer to ECO Trails staff, acting as Project Manager for the Town of Minturn.

COPIES OF BIDDING DOCUMENTS

Complete sets of the Bidding Documents stated in the Advertisement or Invitation may be obtained from Town of Minturn, as Project Owner. Complete sets of the Bidding Documents shall be used in preparing bids; neither Owner nor Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining bids on the work, and do not confer a license or grant for any other use.

QUALIFICATIONS OF BIDDERS

To demonstrate qualifications to perform the work, each bidder must be prepared to submit, within five (5) days of Owner's request, written evidence, such as financial data, previous experience, and evidence of authority to conduct business in the jurisdiction where the project is located. Each bid must contain evidence of the bidder's qualification to do business in the state where the project is located, or covenant to obtain such qualification prior to award of the contract.

EXAMINATION OF CONTRACT DOCUMENTS AND SITE

Before submitting a bid, each bidder must (a) examine the Contract Documents thoroughly; (b) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress, or performance of the work; (c) familiarize himself with federal, state, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress, or performance of the work; and (d) study and carefully correlate Bidder's observations with the Contract Documents.

Before submitting his bid, each bidder will, at his own expense, make such investigations and tests as the bidder may deem necessary to determine his bid for performance of the work in accordance with the time, price, and other terms and conditions of the Contract Documents. On request, Owner will provide each bidder access to the site to conduct such investigations and tests as each bidder deems necessary for submission of his bid.

The lands upon which the work is to be performed, rights-of-way for access thereto, and other lands designated for use by Contractor in performing the work are identified in the Drawings.

The submission of a bid will constitute an incontrovertible representation by the bidder that he has complied with every requirement of these Instructions to Bidders, and that the Bid Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.

INTERPRETATIONS AND QUESTIONS

All questions about the meaning or intent of the Contract Documents shall be submitted **IN WRITING** by three o'clock p.m. (3:00 p.m.) on Tuesday, August 18, 2009 by mail, fax or email to Town of Minturn at planner1@minturn.org or PO Box 309, Minturn, CO 81645 or to 302 Pine Street, Minturn. Replies will be issued to all parties recorded by Owner as having received the Bidding Documents and having provided accurate contact mailing address and e-mail address information. Questions received after the deadline will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. A written response will be released on Thursday, August 20, 2009, at 3:00 p.m.

BID SECURITY

Bid security shall be made payable to Owner in an amount of five percent (5%) of the bidder's maximum bid price, and in the form of a certified or bank check, or a bid bond issued by a surety, meeting requirements of paragraph 5.1 of the General Conditions. The bid security of the successful bidder will be retained until such bidder has executed the Agreement, and furnished the required contract security, whereupon it will be returned; if the successful bidder fails to execute and deliver the Agreement and furnish the required contract security within fifteen (15) days of the Notice of Award, Owner may annul the Notice of Award and the bid security of the bidder will be forfeited. The bid security of any bidder whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the thirty-first (31st) day after the bid opening. Bid security of other bidders will be returned within seven (7) days of the bid opening.

SUBSTITUTE MATERIAL AND EQUIPMENT

The Contract, if awarded, will be on the basis of material and equipment described in the Project Plans or specified in the Specifications without consideration of possible substitute or “or-equal” items. Whenever it is indicated in the Project Plans, or specified in the Specifications, that a substitute or “or-equal” item of material or equipment may be furnished or used by Contractor if acceptable to Owner and Engineer and not in conflict with applicable CDOT standards, application for such acceptance will not be considered by Engineer until after the “effective date of the Agreement.” The procedure for submittal of any such application by Contractor and consideration by Engineer is set forth in paragraphs 6.7, 6.7.1, and 6.7.2 of the General Conditions which may be supplemented in the General Requirements.

SUBCONTRACTORS, ETC.

If the Supplementary Conditions require the identity of certain subcontractors and other persons and organizations to be submitted to Owner in advance of the Notice of Award, the apparent successful bidder, and any other bidder so requested, will, within seven (7) days after the day of the bid opening, submit to Owner a list of all subcontractors and other persons and organizations (including those who are to furnish the principal items of material and equipment) proposed for those portions of the work as to which such identification is so required. Such list shall be accompanied by an experience statement with pertinent information as to similar projects and other evidence of qualification for each such subcontractor, person, and organization if requested by Owner. If Owner, after due investigation, has reasonable objection to any proposed subcontractor, other person, or organization, Owner may, before giving the Notice of Award, request the apparent successful bidder to submit an acceptable substitute without an increase in bid price.

If the apparent successful bidder declines to make any such substitution, the contract shall not be awarded to such bidder, but his declining to make any such substitution will not constitute grounds for sacrificing his bid security. Any subcontractor, other person, or organization so listed, and to whom Owner or Engineer does not make written objection prior to the giving of the Notice of Award, will be deemed acceptable to Owner and Engineer.

In contracts where the contract price is on the basis of Cost of the Work Plus a Fee, the apparent successful bidder, prior to the Notice of Award, shall identify in writing to Owner those portions of the work that such bidder proposes to subcontract and, after the Notice of Award, may only subcontract other portions of the work with Owner’s written consent. No contractor shall be required to employ any subcontractor, other person, or organization against whom he has reasonable objection.

BID FORM

The Bid Form is attached hereto; additional copies may be obtained from the Owner or Owner’s Representative. Bid Forms must be completed in ink or by typewriter. Bids by corporations must be executed in the corporate name by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign), and the corporate seal must be affixed and attested by the secretary, or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

Bids by partnerships must be executed in the partnership name, and signed by a partner whose title must appear under the signature, and the official address of the partnership must be shown below the signature. All names must be typed or printed below the signature. The address to which communications regarding the bid are to be directed must be shown.

The bid shall contain an acknowledgement of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).

SUBMISSION OF BIDS

Bids shall be submitted at the time and place indicated in the Invitation to Bid, and shall be included in an opaque, sealed envelope, marked with the project title, and name and address of the bidder, and accompanied by the bid security and other required documents. If the bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation “BID ENCLOSED/DOWD JUNCTION TO MINTURN TRAIL PHASE I, ES3 006A-043, PROJECT NUMBER 16945.”

MODIFICATION AND WITHDRAWAL OF BIDS

Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a bid must be executed), and delivered to the place where bids are to be submitted, at any time prior to the opening of bids.

If, within twenty-four (24) hours after bids are opened, any bidder files a duly signed written notice with Owner, and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of his bid, that bidder may withdraw his bid, and the bid security will be returned. Thereafter, that bidder will be disqualified from further bidding on the work.

OPENING OF BIDS

When bids are opened publicly, they will be read aloud, and an abstract of the amounts of the base bids and major alternates (if any) will be made available after the opening of bids.

BIDS TO REMAIN OPEN

All bids shall remain open for thirty (30) days after the day of the bid opening, but Owner may, in his sole discretion, release any bid and return the bid security prior to that date.

AWARD OF CONTRACT

Owner reserves the right to reject any and all bids, to waive any and all informalities, and to negotiate contract terms with the successful bidder, and the right to disregard all nonconforming, non-responsive, or conditional bids, so long as no conflicts with funding agreements are created through said actions, e.g. Intergovernmental Agreement between CDOT and Owner. The final bid acceptance and award of contract is subject to review and approval by CDOT and Owner.

Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures, and the correct sum thereof, will be resolved in favor of the correct sum. In evaluating bids, Owner shall consider the qualifications of the bidders, whether or not the bids comply with the prescribed requirements, and alternates and unit prices if requested in the bid forms. It is the Owner's intent to accept alternates (if any are accepted) in the order in which they are listed in the bid form, but Owner may accept them in any order or combination.

Owner may consider the qualifications and experience of subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the work as to which the identity of subcontractors and other persons or organizations must be submitted as provided in the Supplementary Conditions. Operating costs, maintenance considerations, performance data, and quantities of materials and equipment may also be considered by Owner. Owner may conduct such investigations as he deems necessary to assist in the evaluation of any bid, and to establish the responsibility, qualifications, and financial ability of the bidders, proposed subcontractors, and other persons and organizations to do the work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.

Owner reserves the right to reject the bid of any bidder who does not pass any such evaluation to Owner's or CDOT's satisfaction. If the contract is to be awarded, it will be awarded to the lowest bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of the project.

When a construction contract for a public project is to be awarded to a bidder, a Colorado resident bidder shall be allowed a preference against a nonresident bidder from a state or foreign country equal to the preference given or required by the state or foreign country in which the nonresident bidder is a resident, unless this requirement is inconsistent with requirements of federal law or may cause the denial of federal moneys. See §8-19-101, 102, CRS, for the complete provisions regarding this preference.

BONDS AND INSURANCE

The General Conditions sets forth Owner's requirements as to bonds and insurance. When the successful bidder delivers the executed Agreement to Owner, it shall be accompanied by the required contract security and insurance documentation. Required Bonds and Insurance must be submitted and approved by Owner prior to issuance of Notice to Proceed. For this project, Colorado Department of Transportation must be noted as an additional insured on the insurance certificates.

SIGNING OF AGREEMENT

When Owner gives a Notice of Award to the successful bidder, it will be accompanied by two (2) unsigned counterparts of the Agreement and all other contract documents. Within ten (10) days thereafter, Contractor shall sign and deliver at least two (2) counterparts of the Agreement to Owner with all contract documents attached. Within ten (10) days thereafter, Owner will deliver a fully signed counterpart to Contractor.

CONTRACT TIME

The successful bidder on this project shall commence work under this contract and complete the work within seven consecutive weeks (49 days), unless a contract time extension is otherwise agreed to and approved by Owner and CDOT, per the General Conditions.

LIQUIDATED DAMAGES

Provisions for liquidated damages, if any, are set forth in the Agreement.

BID FORM

PROJECT IDENTIFICATION:

**DOWD JUNCTION TO MINTURN TRAIL PHASE I
FEDERAL AIDE PROJECT NO.: ES3 006A-043
FEDERAL PROJECT CODE: 16945**

THIS BID IS SUBMITTED TO:

Town of Minturn
PO Box 309
302 Pine Street
Minturn, Colorado 81645

1. The undersigned BIDDER proposes and agrees, if this bid is accepted, to enter into an Agreement with OWNER in the form similar to that included in the Contract Documents and acceptable to Town of Minturn to complete all work as specified or indicated in the Contract Documents for the contract price and within the contract time indicated in this bid and in accordance with the Contract Documents.
2. BIDDER accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of bid security. This bid will remain open for thirty (30) days after the day of bid opening. BIDDER will sign the Agreement and submit the contract security and other documents required by the Contract Documents within fifteen (15) days after the date of OWNER's Notice of Award.
3. In submitting this bid, BIDDER represents, as more fully set forth in the Agreement, that:

(a) BIDDER has examined copies of all the Contract Documents and of the following addenda:

<u>Date</u>	<u>Number</u>
_____	_____
_____	_____

Receipt of all of which is hereby acknowledged and also copies of the Advertisement or Invitation to Bid and the Instructions to Bidders;

(b) BIDDER has examined of the CDOT forms included in the Bid Documents and has attached the following forms in their submittal:

- CDOT FORM 606, Anti-Collusion Affidavit
- CDOT FORM 714, Underutilized DBE Bid Conditions Assurance

(b) BIDDER has examined the site and locality where the work is to be performed, the legal requirements (federal, state, and local laws, ordinances, rules, and regulations), and the conditions affecting cost, progress, or performance of the work, and has made such independent investigations as BIDDER deems necessary;

(c) This bid is genuine, and not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; BIDDER has not, directly or indirectly, induced nor solicited any other bidder to submit a false or sham bid; BIDDER has not solicited nor induced any person, firm, or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for himself any advantage over any other bidder or over OWNER.

4. BIDDER will complete the work for the following lump sum and unit prices.

TOWN OF MINTURN					
DOWD JUNCTION TO MINTURN TRAIL PHASE I					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
626-00000	Mobilization	LS	1		
625-00000	Construction Surveying	LS	1		
207-00210	Stockpile Topsoil (Remove 6")	CY	373		
207-00205	Topsoil (Export or Replace at 20%)	CY	373		
203-00010	Unclassified Excavation (Complete in Place)	CY	615		
203-00060	Embankment (Complete in Place)	CY	325		
304-06000	Class 6 Basecourse	TN	607		
403-34721	Hot Mix Asphalt (Patching)	TN	236		
504-03311	MSE Retaining Wall w/ Geogrid	SF	2,354		
206-00100	Structural Backfill (Class 1)	CY	872		
606-00301	Guardrail Type 3 (6 -3 Spacing)	LF	169		
606-02000	End Anchorage (Non Flared)	EA	2		
202-01300	Remove Flared End Anchorage	EA	2		
202-00301	Remove Guardrail Type 3	LF	72		
606-08300	Replace Existing Guardrail Type 3 (6-3 Spacing) Damaged W-Beam)	LF	48		
514-01030	Timber Rub Rail on Guardrail	LF	430		
514-00201	Pedestrian Railing (Steel) (Special)	LF	555		
614-00011	Sign Panel (Class 1) (Trail Signs)	EA	7		
614-00044	Timber Sign Post 4x4 Inch	LF	56		
202-00810	Reset Ground Sign (Highway)	EA	3		
202-05026	Sawcut Existing Asphalt	LF	70		
212-00006	Seeding (Native)	AC	0.5		
603-10240	24 Inch Corrugated Steel Pipe	LF	3		
603-30024	24 Inch Steel End Section	EA	1		
506-00209	Riprap (9 inch)	CY	2		
208-00007	Erosion Log (8 inch)	LF	838		
208-00070	Stabilized Construction Entrance	EA	2		
210-04010	Adjust Manhole	EA	1		
607-11525	Fence (Plastic) (Construction and Staging)	LF	850		
412-00815	Concrete Pavement (8 Inch) Reinforced (Boat Ramp)	SY	33		
514-01020	Pedestrian Railing (Timber) (Split Rail)	LF	50		
614	Bollards	EA	5		
210	Place Boulders, 2' x 3' Average	EA	20		
630-00012	Traffic Control Management	Day	35		
630-00000	Flagging	Hour	8		
630-80360	Drum Channelizing Device	EA	30		
630-80341	Construction Traffic Sign (Panel Size A)	EA	10		
700-70010	F/A Minor Contract Revisions	FA	1	\$5,000.00	\$5,000.00
700-70011	F/A Partnering	FA	1	\$1,000.00	\$1,000.00
700-70019	F/A Asphalt Cement Cost Adjustment	FA	1	\$3,000.00	\$3,000.00
700-70016	F/A Fuel Cost Adjustment	FA	1	\$3,000.00	\$3,000.00
	TOTAL BID				

	<p>Note 1: Assume: 6" Topsoil Remove and 4" Topsoil Replace (20%), 10% Overage for Basecourse, 10% Compaction factor for Embankment, Pavement Section of 3" asphalt over 6" basecourse, Earthwork Volumes from Field Topo</p>	
	<p>Note 2: CDOT/Federal funds will not reimburse traffic control as lump sum item. Traffic control must be unit price, estimates of needed quantity and type provided above. Contractor to prepare and submit traffic control plan for CDOT review and approval prior to start of construction.</p>	

5. BIDDER agrees that work will be fully complete at or within seven weeks (49 days) from the issuance of a Notice to Proceed.

BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the work on time.

6. The following documents are attached to and made a condition of this bid:

(a) Required bid security in the form of a certified or bank check or bid bond.

7. Communication concerning this bid shall be addressed to the address of BIDDER indicated below:

8. The terms used in this bid which are defined in the General Conditions of the construction contract included as part of the Contract Documents have the meanings assigned to them in the General Conditions.

If BIDDER is:

An Individual

By: _____ (SEAL)
(Individual's Name)

Doing business as:

Business address:

Phone Number:

A Partnership

By: _____ (SEAL)
(Firm Name)

(General Partner)

Business address:

Phone Number:

A Corporation

By: _____
(Corporation Name)

(State of Incorporation)

By: _____
(Name of Person Authorized to Sign)

(Title)

(CORPORATE SEAL)

Attest:

Business address:

Phone Number:

Joint Venture

By: _____

(Name)

(Address)

By: _____

(Name)

(Address)

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above).

AGREEMENT

THIS AGREEMENT is dated as of the _____ day of _____, in the year 2009,
by and between
Town of Minturn, Eagle County, Colorado
(hereinafter called OWNER)

and

(hereinafter called CONTRACTOR)

OWNER and CONTRACTOR, in consideration of the mutual covenants set forth, agree as follows:

ARTICLE 1 – WORK

CONTRACTOR shall complete all work as specified or indicated in the Contract Documents. The work is generally described as follows:

Construction of a 1,300 foot long, 10 foot wide asphalt trail along Highway 24 starting at milepost 143.6 and ending at Minturn County Road 14 for purposes of a bike and walking trail. Estimated quantities include 236 tons of asphalt paving, 2,354 square feet of MSE wall and 555 feet of wall railing.

ARTICLE 2 – OWNER’S REPRESENTIVES and ENGINEER

The Project has been designed by Alpine Engineering Inc., (AEI) who is hereinafter called ENGINEER, and will assume all duties and responsibilities, and will have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the work in accordance with the Contract Documents. The OWNER’s representative is Ellie Caryl of the ECO Trails Department of Eagle County, hereinafter OWNER. Additional OWNER’s representative is Chris Cerimele of the Town of Minturn.

ARTICLE 3 - CONTRACT TIME

- 3.1 The work will be substantially completed on or before _____, 2009, and completed and ready for final payment in accordance with paragraph 14.13 of the General Conditions on or before _____, 2009.
- 3.2 LIQUIDATED DAMAGES: OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the work is not substantially complete within the time specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense, and difficulties involved in proving at a legal or arbitration proceeding the actual loss suffered by OWNER if the work is not substantially complete on time. Accordingly, instead of requiring such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER Five Hundred dollars (\$500.00) for each day that expires after the time specified in paragraph 3.1 for substantial completion until the work is substantially complete.

ARTICLE 4 - CONTRACT PRICE

- 4.1 The funds appropriated for this project are equal to or in excess of the contract amount. OWNER shall pay CONTRACTOR for performance of the work in accordance with the Contract Documents in current funds as follows:

(INSERT ACCEPTED BID HERE)

ARTICLE 5 – PAYMENT PROCEDURES

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

- 5.1 PROGRESS PAYMENTS: OWNER shall make monthly progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payments as recommended by ENGINEER, as provided below. All progress payments will be on the basis of the progress of the work measured by the schedule of values provided for in paragraph 14.1 of the General Conditions.
- 5.1.1 Prior to Substantial Completion, progress payments will be in an amount equal to:
- 90% of the work completed until fifty percent (50%) of the work is performed, after which no additional retainage shall be withheld, and
 - 90% of materials and equipment not incorporated in the work but delivered and suitably stored, less in each case the aggregate of payments previously made.
- 5.1.2 Upon Substantial Completion, OWNER shall pay an amount sufficient to increase total payments to CONTRACTOR to 95% of the Contract Price, less such amounts as ENGINEER shall determine in accordance with paragraph 14.7 of the General Conditions.
- 5.2 FINAL PAYMENT: Upon final completion and acceptance in accordance with paragraph 14.13 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.13. The final payment shall not be made until after final settlement of this contract has been duly advertised at least ten days prior to such final payment by publication of notice thereof at least twice in a public newspaper of general circulation published in Eagle County, and the Town of Minturn has held a public hearing, thereupon and complied with the Revised Statutes 1973, Section 38-26-107 as amended. Final payment shall be made in accordance with the requirements of aforesaid statute.

ARTICLE 6 – CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement, CONTRACTOR makes the following representations:

- 6.1 CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents, work, locality, and with all local conditions, and federal, state, and local laws, ordinances, rules and regulations that in any manner affect cost, progress, or performance of the work.
- 6.2 CONTRACTOR has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress, or performance of the work which were relied upon by ENGINEER in the preparation of the Drawings and Specifications, and which have been identified in the Special Provisions, Project Special Provisions or Supplementary Conditions.
- 6.3 CONTRACTOR has made, or caused to be made, examinations, investigations, and tests and studies of such reports and related data in addition to those referred to in paragraph 6.2 as he deems necessary for the performance of the work at the Contract Price, within the Contract Time, and in accordance with other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports, or similar data are, or will be required by CONTRACTOR for such purposes.
- 6.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports, and data with the terms and conditions of the Contract Documents.

6.5 CONTRACTOR has given ENGINEER written notice of all conflicts, errors, or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

ARTICLE 7 – CONTRACT DOCUMENTS

The contract Documents which comprise the entire Agreement, made a part hereof, and consist of the following:

- 7.1 This Agreement (Pages 1 to 7, inclusive).
- 7.2 Bid Advertisement, consisting of 2 pages.
- 7.3 Instructions to Bidders, consisting of 4 Pages
- 7.4 Performance and other Bonds, identified as exhibits _____, and consisting of _____ pages.
- 7.5 Notice of Award, Notice to Proceed.
- 7.6 General Conditions, consisting of 31 Pages.
- 7.7 Specifications consisting of _____ pages, including:
 - 7.7.1 Colorado Department of Transportation Standard Provisions
 - 7.7.2 Project Special Provisions, as listed in Provisions Index
 - 7.7.3 Subsoil Study for Site Grading and Pavement Design, HP Geotech
 - 7.7.4 MSE Retaining wall design and calculations report, Terracon
- 7.8 Drawings, consisting of _____ sheets.
- 7.9 Addenda numbers ____ to _____, inclusive.
- 7.10 Documentation submitted by CONTRACTOR prior to Notice of Award (Pages _____ to _____, inclusive).
- 7.11 Any modification, including Change Orders, duly delivered after execution of Agreement.

There are no Contract Documents other than those listed above in this Article 7. The Contract Documents may only be altered, amended, or repealed by a Modification (as defined in Section 1 of the General Conditions).

ARTICLE 8 – MISCELLANEOUS

- 8.1 The terms used in this Agreement which are defined in Article 1 of the General Conditions shall have the meanings indicated in the General Conditions.
- 8.2 No assignment by a party hereto of any rights under, or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically, but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 8.3 OWNER and CONTRACTOR each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, in respect to all covenants, agreements, and obligations contained in the Contract Documents.

- 8.4 ATTORNEY'S FEES: In the event of litigation between the parties hereto regarding the interpretation of this Agreement, or the obligations, duties or rights of the parties hereunder, or if suit otherwise is brought to recover damages for breach of this Agreement, or an action be brought for injunction or specific performance, then and in such events, the prevailing party shall recover all reasonable costs incurred with regard to such litigation, including reasonable attorney's fees.
- 8.5 APPLICABLE LAW: This Agreement shall be governed by the laws of the State of Colorado. Jurisdiction and venue of any suit, right, or cause of action arising under, or in connection with this Agreement shall be exclusive in Eagle County, Colorado.
- 8.6 INTEGRATION: This Agreement supersedes all previous communications, negotiations and/or contracts between the respective parties hereto, either verbal or written, and the same not expressly contained herein are hereby withdrawn and annulled. This is an integrated agreement and there are no representations about any of the subject matter hereof except as expressly set forth in the Contract Documents.
- 8.7 NOTICE: Any notice and all written communications required under this Agreement shall be (i) personally delivered, (ii) mailed in the United States mails, first class postage prepaid, or (iii) transmitted by facsimile machine together with a hard copy conveyed by delivery or mail, to the appropriate party at the following addresses:

Owner:

Town of Minturn

P.O. Box 309

Minturn, CO 81645

Telephone: (970) 827-5645

Fax: (970) 827-5545

Contractor:

Mailed notices will be deemed given three business days after the date of deposit in a regular depository of the United States Postal Service, and Fax notices will be deemed given upon transmission, if during business hours, or the next business day. Either party can change its address for notice by notice to the other in accordance with this paragraph.

- 8.8 PROHIBITIONS ON PUBLIC CONTRACT FOR SERVICES: If Contractor/Consultant has any employees or subcontractors, Contractor/Consultant shall comply with C.R.S. § 8-17.5-101, *et seq.*, regarding Illegal Aliens – Public Contracts for Services, and this Contract. By execution of this Contract, Contractor or Consultant certifies that it does not knowingly employ or contract with an illegal alien who will perform Under this Contract and that Contractor/Consultant will participate in the E-verify Program or other Department of Labor and Employment program (“Department Program”) in order to confirm the eligibility of all employees who are newly hired for employment to perform work under this Contract.
- 8.8.1 Contractor/Consultant shall not:
- (a) Knowingly employ or contract with an illegal alien to perform work under this contract for services; or
 - (b) Enter into a contract with a subcontractor that fails to certify to the Contractor/Consultant that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under the public contract for services.
- 8.8.2 Contractor/Consultant has confirmed the employment eligibility of all employees

who are newly hired for employment to perform work under this Contract through participation in the E-verify Program or Department Program, as administered by the United States Department of Homeland Security. Information on applying for the E-verify program can be found at http://www.dhs.gov/xprevprot/programs/gc_1185221678150.shtm

- 8.8.3 The Contractor/Consultant shall not use either the E-verify program or other Department Program procedures to undertake pre-employment screening of job applicants while the public contract for services is being performed.
- 8.8.4 If the Contractor obtains actual knowledge that a Subcontractor performing work under the public contract for services knowingly employs or contracts with an illegal alien, the Contractor shall be required to:
- a. Notify the Subcontractor and the County within three days that the Contractor has actual knowledge that the Subcontractor is employing or contracting with an illegal alien; and
 - b. Terminate the Subcontract with the Subcontractor if within three days of receiving the notice required pursuant to subparagraph (i) of the paragraph (d) the Subcontractor does not stop employing or contracting with the illegal alien; except that the Contractor shall not terminate the contract with the Subcontractor if during such three days the Subcontractor provides information to establish that the Subcontractor has not knowingly employed or contracted with an illegal alien.
- 8.8.5 The Contractor/Consultant shall comply with any reasonable request by the Department of Labor and Employment made in the course of an investigation that the department is undertaking pursuant to its authority established in C.R.S. § 8-17.5-102(5).
- 8.8.6 If a Contractor/Consultant violates these prohibitions, the County may terminate the contract for a breach of the contract. If the contract is so terminated specifically for a breach of this provision of this Contract, the Contractor/Consultant shall be liable for actual and consequential damages to the County as required by law.
- 8.8.7 The County will notify the office of the Colorado Secretary of State if Contractor/Consultant violates this provision of this Contract and the County terminates the Contract for such breach.

(The remainder of this page left intentionally blank)

IN WITNESS WHEREOF, the parties hereto have signed this Agreement in triplicate. One counterpart each has been delivered to OWNER and CONTRACTOR, and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR.

This Agreement will be effective on _____, 2009.

OWNER:

TOWN OF MINTURN, COUNTY OF EAGLE, STATE OF COLORADO,
By and Through Its TOWN COUNCIL

ATTEST:

By: _____
Gordon Flaherty , Mayor

CONTRACTOR:

By: _____

Name: _____

Title: _____

STATE OF COLORADO)

)

County of)

The foregoing was acknowledged before me this ____ day of _____, 2009 by _____ as _____ of _____.

WITNESS my hand and official seal.

My commission expires _____.

Notary Public

GENERAL CONDITIONS

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GENERAL CONDITIONS

ARTICLE 1 – DEFINITIONS

Wherever used in these general conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

ADDENDA: Written or graphic instruments issued prior to the opening of bids which clarify, correct, or change the bidding documents or the contract documents.

AGREEMENT: The written agreement between OWNER and CONTRACTOR covering the work to be performed; other contract documents are attached to the agreement and made a part thereof as provided therein.

APPLICATION FOR PAYMENT: The form accepted by ENGINEER which is to be used by CONTRACTOR in requesting progress or final payment, and which is to include such supporting documentation as is required by the contract documents.

BID: The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the work to be performed.

BONDS: Bid, performance, and payment bonds, and other instruments of security.

CHANGE ORDER: A written order to CONTRACTOR signed by OWNER authorizing an addition, deletion, or revision in the work, or an adjustment in the contract price or the contract time issued after the effective date of the agreement.

CONTRACT DOCUMENTS: Those documents set forth in Article 7 of the Agreement.

CONTRACT PRICE: The monies payable by OWNER to CONTRACTOR under the contract documents as stated in the agreement.

CONTRACT TIME: The number of days (computed as provided in paragraph 16.2), or the date stated in the agreement for the completion of the work.

CONTRACTOR: The person, firm, or corporation with whom OWNER has entered into the agreement.

DAY: A calendar day of twenty-four hours measured from midnight to the next midnight.

DEFECTIVE: An adjective which, when modifying the word “work,” refers to work that is unsatisfactory, faulty or deficient, or does not meet the requirements of any inspection, test, or approval referred to in the contract documents, or has been damaged prior to ENGINEER’S recommendation of final payment or prior to the guarantee period under paragraph 13.12.

DRAWINGS: The drawings which show the character and scope of the work to be performed, and which have been prepared or approved by ENGINEER, and are referred to in the contract documents.

EFFECTIVE DATE OF THE AGREEMENT: The date indicated in the agreement on which it becomes effective, but, if no such date is indicated, it means the date on which the agreement is signed and delivered by the last of the two parties to sign and deliver.

ENGINEER: The person, firm or corporation named as such in the Agreement. The Engineer may be a department employee of OWNER, but in such case shall exercise his duties in conformance with the standards applicable to independent professional engineers.

FIELD ORDER: A written order issued by ENGINEER which orders minor changes in the work in accordance with paragraph 10.2, but which does not involve a change in the contract price or the contract time.

MODIFICATION: (a) A written amendment of the contract documents signed by both parties, (b) a change order, or (c) a field order. A modification may only be issued after the effective date of the agreement.

NOTICE OF AWARD: The written notice by OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the agreement.

NOTICE TO PROCEED: A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the contract time will commence to run, and on which CONTRACTOR shall start to perform his obligation under the contract documents.

OWNER: The public body or authority, corporation, association, partnership, or individual with whom CONTRACTOR has entered into the agreement, and for whom the work is to be provided.

PROJECT: The total construction of which the work to be provided under the contract documents may be the whole or a part, as indicated elsewhere in the contract documents.

RESIDENT PROJECT REPRESENTATIVE: The authorized representative of ENGINEER who is assigned to the site or any part thereof.

SHOP DRAWINGS: All drawings, diagrams, illustrations, schedules, and other data which are specifically prepared by CONTRACTOR, a subcontractor, manufacturer, fabricator, supplier, or distributor to illustrate some portion of the work, and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams, and other information prepared by a manufacturer, fabricator, supplier, or distributor and submitted by CONTRACTOR to illustrate material or equipment for some portion of the work.

SPECIFICATIONS: Those portions of the contract documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the work, and certain administrative details applicable thereto.

SUBSTANTIAL COMPLETION: The work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER as evidenced by his definitive certificate of substantial completion, it is sufficiently complete, in accordance with the contract documents, so that the work (or specified part) can be utilized for the purposes for which it was intended; or if there be no such certificate issued, when final payment is due in accordance with paragraph 14.13. The terms “substantially complete” and “substantially completed” as applied to any work refer to substantial completion thereof.

WORK: The entire completed construction or the various separately identifiable parts thereof required to be furnished under the contract documents. Work is the result of performing services, furnishing and incorporating materials and equipment into all construction, all as required by the contract documents.

ARTICLE 2 – PRELIMINARY MATTERS

DELIVERY OF BONDS:

- 2.1 When CONTRACTOR delivers the executed agreements to OWNER, CONTRACTOR shall also deliver to OWNER such bonds as CONTRACOR may be required to furnish in accordance with paragraph 5.1.

COPIES OF DOCUMENTS:

- 2.2 OWNER shall furnish to CONTRACTOR up to ten copies (unless otherwise specified in the general requirements) of the contract documents as are reasonable necessary for the execution of the work. Additional copies will be furnished, upon request, at the cost of reproduction.

COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED:

- 2.3 The Contract Time will commence upon issuance of a Notice to Proceed. A Notice to Proceed may be given at any time within thirty days after the effective date of the Agreement.

STARTING THE PROJECT:

- 2.4 CONTRACTOR shall start to perform the work on the date when the Contract Time commences to run, but no work shall be done at the site prior to the date on which the Contract Time commences to run.

BEFORE STARTING CONSTRUCTION:

- 2.5 Before undertaking each part of the work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, or discrepancy which CONTRACTOR may discover; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error, or discrepancy in the Drawings or Specifications, unless CONTRACTOR had actual knowledge thereof, or should reasonable have known thereof.
- 2.6 Within ten days after the effective date of the Agreement (unless otherwise specified in the general requirements) CONTRACTOR shall submit to ENGINEER for review and acceptance an estimated progress schedule indicating the starting and completion dates of the various stages of the work, a preliminary schedule of shop drawings submissions, and a preliminary schedule of values of the Work.
- 2.7 Before any work at the site is started, CONTRACTOR shall deliver to OWNER, with a copy to ENGINEER, certificates of insurance (and other evidence of insurance requested by OWNER) which CONTRACTOR is required to purchase and maintain in accordance with paragraphs 5.3, 5.4, 5.5, 5.6, and 5.7.

PRE-CONSTRUCTION CONFERENCE:

- 2.8 Within twenty days after the effective date of the Agreement, but before CONTRACTOR starts the work at the site, a conference will be held for review and acceptance of the schedules referred to in paragraph 2.6, to establish procedures for handling shop drawings and other submittals, and for processing applications for payment, and to establish a working understanding among the parties as to the Work.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT AND REUSE

INTENT:

- 3.1 The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the work. They may be altered only by a Modification.
- 3.2 The Contract Documents are complementary; what is called for by one is as binding as if called for by all. If during the performance of the Work, CONTRACTOR finds a conflict, error, or discrepancy in the Contract Documents, he shall report it to ENGINEER in writing at once and before proceeding with the Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflicts, error, or discrepancy in the Specifications or Drawings unless CONTRACTOR had actual knowledge thereof, or should reasonably have known thereof.
- 3.3 The Contract documents include those documents set forth in Article 7 of the Agreement.
- 3.3 It is the intent of the specifications and drawings to describe a complete project (or part thereof) to be constructed in accordance with the contract documents. Any work that may reasonably be inferred from the specifications or drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. When words which have a well known technical or trade meaning are used to describe work, materials, or equipment, such words shall be interpreted in accordance with such meaning. References to codes of any technical society, organization, or association, or to the code of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, or code in effect at the time of opening of bids (or on the effective date of the agreement if there were no bids), except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual, or code (whether or not specifically incorporated by reference in the contract documents) shall change the duties and responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their agents or employees from those set forth in the contract documents. Clarifications and interpretations of the contract documents shall be issued by ENGINEER as provided for in paragraph 9.3.
- 3.4 The contract documents will be governed by the law of the place of the project.

REUSE OF DOCUMENTS:

- 3.5 Neither CONTRACTOR nor any subcontractor, manufacturer, fabricator, supplier, or distributor shall have or acquire any title to or ownership rights in any of the drawings, specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER; and they shall not reuse any of them on extensions of the project, or any other project, without written consent of OWNER and ENGINEER, and specific written verification or adaptation by ENGINEER.

ARTICLE 4 – AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

AVAILABILITY OF LANDS:

- 4.1 OWNER shall furnish, as indicated in the contract documents, the lands upon which the work is to be performed, rights-of-way for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures, or permanent changes in existing facilities, will be obtained and paid for by OWNER, unless otherwise provided in the contract documents. If CONTRACTOR believes that any delay in OWNER'S furnishing these lands or easements entitles him to an extension of the contract time, CONTRACTOR may make a claim therefore as provided in Article 12. CONTRACTOR may make a claim therefore as provided in Article 12. CONTRACTOR shall provide for all additional lands and access hereto that may be required for temporary construction facilities or storage of materials and equipment.

PHYSICAL CONDITIONS – INVESTIGATIONS AND REPORTS:

- 4.2 Reference is made to the supplementary conditions for identification of those reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress, or performance of the work which have been relied upon by ENGINEER in the preparation of the drawings and specifications. Such reports are not part of the contract documents.

UNFORESEEN PHYSICAL CONDITIONS:

- 4.3 CONTRACTOR shall promptly notify OWNER and ENGINEER in writing of any subsurface or latent physical conditions at the site or in an existing structure differing materially from those indicated or referred to in the contract documents. ENGINEER will promptly review those conditions and advise OWNER in writing if further investigation or tests are necessary. Promptly thereafter, OWNER shall obtain the necessary additional investigations and tests, and furnish copies to ENGINEER and CONTRACTOR. If ENGINEER finds that the results of such investigations or tests indicate that there are subsurface or latent physical conditions which differ materially from those intended in the contract documents, and which could not reasonably have been anticipated by CONTRACTOR, a change order shall be issued incorporating the necessary revisions.

REFERENCE POINTS:

- 4.4 OWNER shall provide engineering surveys for construction to establish reference points which in his judgment are necessary to enable CONTRACTOR to proceed with the work. CONTRACTOR shall be responsible for laying out the work (unless otherwise specified in the general requirements), shall protect and preserve the established reference points, and shall make no changes nor relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for replacement or relocation of such reference points by professional qualified personnel.

ARTICLE 5 – BONDS AND INSURANCE

PERFORMANCE AND OTHER BONDS:

- 5.1 CONTRACTOR shall furnish performance and payment bonds, each in an amount at least equal to the contract price as security for the faithful performance and payment of all CONTRACTOR'S obligations under the contract documents. These bonds shall remain in effect at least until two years after the date of final payment, except as otherwise provided by law. CONTRACTOR shall also furnish other bonds as are required by the Contract Documents. All bonds shall be in the forms prescribed by the Contract Documents, and be executed by such sureties as (a) are licensed to conduct business in the state where the project is located, and (b) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the authority to act.
- 5.2 If the surety on any bond furnished by CONTRACTOR is declared bankrupt, or becomes insolvent, or its right to do business is terminated in any state where any part of the project is located, or it ceases to meet the requirements of clauses (a) and (b) of paragraph 5.1, CONTRACTOR shall within five days thereafter substitute another bond and surety, both of which shall be acceptable to OWNER.

INSURANCE:

- 5.3 CONTRACTOR'S Liability Insurance: The CONTRACTOR shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S operations under the contract, whether such operations be by himself, or by any subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.

All such insurance shall remain in effect until final payment, and at all times thereafter when CONTRACTOR may be correcting, removing, or replacing defective work in accordance with paragraph 13.12. In addition, CONTRACTOR shall maintain such completed operations insurance for at least two years after final payment, and furnish OWNER with evidence of continuation of such insurance at final payment and one year thereafter.

- 5.3.1 Claims under Workmen's Compensation, disability benefits, and other similar employee benefit acts;
- 5.3.2 Claims for damage because of bodily injury, occupational sickness or disease, or death of his employees, and claims insured by usual personal injury liability coverage;
- 5.3.3 Claims for damage because of bodily injury, sickness or disease, or death of any person other than his employees, and claims insured by usual personal injury liability coverage; and
- 5.3.4 Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

Workmen's Compensation insurance shall provide coverage as required by the laws of the State of Colorado.

Insurance covering claims for damages to persons or property required by the preceding paragraph (except subparagraph 5.3.1) shall be in the following minimum amounts:

Bodily Injury Liability:

Each Person:	\$1,000,000
Each Accident or Occurrence:	\$2,000,000

Property Damage Liability:

Each Accident or Occurrence:	\$1,000,000
Aggregate:	\$2,000,000

and shall be furnished in types specified as follows:

- 5.3.5 CONTRACTOR'S Liability Insurance issued to and covering the liability for damage imposed by law upon the CONTRACTOR and each subcontractor with respect to all work performed by them under the agreement (construction contract).
- 5.3.6 CONTRACTOR'S Protective Liability Insurance issued to and covering the liability for damages imposed by law upon the CONTRACTOR and each subcontractor with respect to all work under the agreement (construction contract) performed for the CONTRACTOR by subcontractors.
- 5.3.7 Completed Operations Liability Insurance issued to and covering the liability for damage imposed by law upon the CONTRACTOR and each subcontractor arising between the date of final cessation of the work, and the date of final acceptance thereof out of that part of the work performed by each.
- 5.3.8 Comprehensive Automobile Insurance shall be carried in the amount of \$500,000/\$1,000,000 for bodily injury and \$500,000 for property damage, each occurrence. All liability and property damage insurance required hereunder shall be Comprehensive General and Automobile Bodily Injury and Property Damage form of policy.
- 5.3.9 The CONTRACTOR shall in addition, and in the amounts required under the above, obtain Protective Liability Insurance issued to and covering the liability for damages imposed by law upon the OWNER with respect to all operations under the construction contract by the CONTRACTOR or his subcontractors, including omissions and supervisory acts by the OWNER.

- 5.4 Comprehensive Risk Policy Option: In lieu of the several policies specified for CONTRACTOR'S Liability Insurance, a comprehensive liability and property damage insurance policy inclusive of all the insurance and

requirements hereinafter set forth, with an umbrella covering of \$2,000,000, subject to the approval of the OWNER, will be permissible.

- 5.5 Subcontractor's Insurance: Before permitting any of his subcontractors to perform any work under this contract, CONTRACTOR shall either (a) require each of his subcontractors to procure and maintain during the life of his subcontracts, Subcontractor's Public Liability and Property Damage Insurance of the types and in the amounts as may be applicable to his work, which type and amounts shall be subject to the approval of the OWNER, or (b) insure the activities of his subcontractors in his own policy.
- 5.6 Builder's Risk Insurance: Insofar as the work to be performed under this contract consists entirely of new construction removed and separated from any existing facility used by OWNER, CONTRACTOR shall procure and maintain, for the duration of the work of this project, Builder's Risk Insurance, including the perils of fire, extended coverage (loss due to vehicles, explosion, wind, flood, riot, etc.), vandalism and malicious mischief, and special extended coverage (loss due to falling objects, collapse, water damage from faulty or leaking systems, etc.) in the full amount of the contract price plus the cost of authorized extras. Said amount of insurance coverage shall be considered to cover the insurable value of the work under this contract which is considered not to exceed one hundred percent (100%) of the amount of this contract and authorized extras. Such policy shall not insure any tools or equipment, or temporary structures erected at the site and belonging to any person or persons, or their subcontractors who are obliged by contract with the OWNER to do work on the projects.

Such insurance shall be placed jointly in the names of the OWNER, CONTRACTOR, and any and all subcontractors, and any and all others obliged by contract with the OWNER to do work on this project and at the OWNER'S option, any other person or persons whom the OWNER deems to have an insurable interest in said property, or any part thereof, payable as their several interests may appear. CONTRACTOR shall furnish OWNER with certification of said insurance prior to commencement of any work. Any proceeds obtained from insurance provided for by this paragraph shall be paid to and held by the OWNER as trustee. The OWNER shall have the right to withhold payment of such proceeds until such time as the work destroyed or damaged and covered by such insurance shall be reconstructed and shall pay such proceeds on an installment basis similar to that provided for by progress payments covering the original work.

- 5.7 Certificates of Insurance: Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the work. These Certificates shall contain provisions naming the OWNER as an additional insured under CONTRACTOR'S insurance, as more fully required by the General Conditions herein, and that coverage afforded under the policies will not be cancelled until at least thirty days prior written notice has been given the OWNER. CONTRACTOR and his subcontractors shall not permit any of his subcontractors to start work until all required insurance have been obtained and certificates with the proper endorsements have been filed with the OWNER. Failure of the CONTRACTOR to comply with the foregoing insurance requirement shall in no way waive the OWNER'S rights hereunder.
- 5.8 Owner's Liability Insurance: The OWNER, at his option, may purchase and maintain such liability insurance as will protect him against claims which may arise from operations under this contract. Purchasing and maintaining such insurance, however, will not relieve the CONTRACTOR from purchasing and maintaining the insurance hereinbefore specified.
- 5.9 Loss of Use of Insurance: The OWNER, at his option, may purchase and maintain such insurance as will insure him against loss of use of his property due to fire or other hazards, however caused.

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

SUPERVISION AND SUPERINTENDENCE:

- 6.1 CONTRACTOR shall supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the contract documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but CONTRACTOR shall not be solely responsible for the negligence of others in the

design or selection of a specific means, method, technique, sequence, or procedure of construction which is indicated in and required by the contract documents. CONTRACTOR shall be responsible to see that the finished work complies accurately with the contract documents.

- 6.2 CONTRACTOR shall keep on the work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR'S representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR.

LABOR, MATERIALS AND EQUIPMENT:

- 6.3 CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the work, and perform construction as required by the contract documents. CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons, or the work, or property at the site or adjacent thereto, and except as otherwise indicated in the supplementary conditions, all work at the site shall be performed during regular working hours and CONTRACTOR will not permit overtime work or the performance of work on Saturday, Sunday, or any legal holiday without OWNER'S written consent given after prior written notice to ENGINEER.
- 6.4 Colorado labor shall be employed to perform the work to the extent of not less than eighty percent of each type or class of labor in the several classifications of skilled and common labor employed on the project. "Colorado labor" means any person who is a resident of the state of Colorado, at the time of employment, without discrimination as to race, color, creed, sex, age, or religion except when sex or age is a bona fide occupational qualification.
- 6.5 CONTRACTOR shall furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, and sanitary facilities, and all other facilities and incidentals necessary for the execution, testing, initial operation, and completion of work.
- 6.6 All materials and equipment shall be of good quality and new, except as otherwise provided in the contract documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required test) as to the kind and quality of materials and equipment.
- 6.7 All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier, or distributor, except as otherwise provided in the contract documents.

EQUIVALENT MATERIALS AND EQUIPMENT:

- 6.8 Whenever materials or equipment are specified or described in the drawings or specifications by using the name of a proprietary item, or the name of a particular manufacturer, fabricator, supplier, or distributor, the naming of the item is intended to establish the type, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other manufacturers, fabricators, suppliers, or distributors may be accepted by ENGINEER if sufficient information is submitted by CONTRACTOR to all ENGINEER to determine that the material or equipment proposed is equivalent to that named. The procedure for review by ENGINEER will be as set forth in paragraphs 6.8.1 and 6.8.2 below as supplemented in the general requirements.
- 6.8.1 Requests for review of substitute items of material and equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to ENGINEER for acceptance thereof, certifying that the proposed substitute will perform adequately the functions called for by the general design, be similar and of equal substance to that specified and be suited to the same use and capable of performing the same function as that specified. The application will state whether or not acceptance of the substitute for use in the work will require a change in the drawings or specifications to adapt the design to the substitute and whether or not incorporation or use of the substitute in connection with the work I

subject of payment of any license fee or royalty. All variations of the proposed substitute from that specified shall be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs or savings that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by ENGINEER in evaluating the proposed substitute. ENGINEER may require CONTRACTOR to furnish, at CONTRACTOR'S expense, additional data about the proposed substitute. ENGINEER will be the sole judge of acceptability, and no substitute will be ordered or installed without ENGINEER'S prior written acceptance. OWNER may require CONTRACTOR to furnish, at CONTRACTOR'S expense, a special performance guarantee or other surety with respect to any substitute.

- 6.8.2 ENGINEER will record time required by ENGINEER and ENGINEER'S consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the drawings or specifications occasioned thereby, whether or not ENGINEER accepts a proposed substitute. CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER'S consultants for evaluating any proposed substitute.

CONCERNING SUBCONTRACTORS:

- 6.9 CONTRACTOR shall not employ any subcontractor or other person or organization (including those who are to furnish the principal items of materials or equipment), whether initially or as a substitute, against whom OWNER or ENGINEER may have reasonable objection. A subcontractor or other person or organization identified in writing to OWNER and ENGINEER by CONTRACTOR prior to the Notice of Award, and not objected to in writing by OWNER or ENGINEER prior to the Notice of Award, will be deemed acceptable to OWNER and ENGINEER. Acceptance of any subcontractor, other person or organization by OWNER or ENGINEER shall not constitute a waiver of any right of OWNER or ENGINEER to reject defective work. If OWNER or ENGINEER, after due investigation, has reasonable objection to any subcontractor, or other person or organization proposed by CONTRACTOR after the Notice of Award, CONTRACTOR shall submit an acceptable substitute, and the contract price shall be increased or decreased by the difference in cost occasioned by such substitution, and an appropriate change order shall be issued. CONTRACTOR shall not be required to employ any subcontractor, other person or organization against whom CONTRACTOR has reasonable objection.
- 6.10 CONTRACTOR shall be fully responsible for all acts and omissions of his subcontractors, and of persons and organizations directly or indirectly employed by them, and of persons and organizations for whose acts any of them may be liable to the same extent that CONTRACTOR is responsible for the acts and omissions of persons directly employed by CONTRACTOR. Nothing in the contract documents shall create a contractual relationship between OWNER or ENGINEER and any subcontractor or other person or organization having a direct contract with CONTRACTOR, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any monies due any subcontractor, or other person or organization, except as may otherwise be required by law. OWNER or ENGINEER may furnish to any subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to CONTRACTOR on account of specific work done.
- 6.11 The divisions and sections of the specifications and the identifications of any drawings shall not control CONTRACTOR in dividing the work among subcontractors, or delineating the work to be performed by any specific trade.
- 6.12 All work performed for CONTRACTOR by a subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the subcontractor which specifically binds the subcontractor to the applicable terms and conditions of the contract documents for the benefit of the OWNER and ENGINEER. CONTRACTOR shall pay each subcontractor a just share of any insurance monies received by CONTRACTOR on account of losses under policies issued pursuant to paragraph 5.6.

PATENT FEES AND ROYALTIES:

- 6.13 CONTRACTOR shall pay all license fees and royalties, and assume all costs incident to the use in the performance of the work, or the incorporation in the work of any invention, design, process, product, or device which is the

subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the contract documents for use in the performance of the work, and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the contract documents. CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses, and expenses (including attorney's fees) arising out of any infringement of patent rights or copyrights incident to the sue in the performance of the work, or resulting from the incorporation in the work of any invention, design, process, product, or device not specified in the contract documents, and shall defend all such claims in connection with any alleged infringement of such rights.

PERMITS:

6.14 Unless otherwise provided in the Contract Documents, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the work, which are applicable at the time of opening of bids. CONTRACTOR shall pay all charges of utility service companies for connections to the work, and OWNER shall pay all charges of such companies for capital costs related thereto.

LAWS AND REGULATIONS:

6.15 CONTRACTOR shall give all notices and comply with all laws, ordinances, rules, and regulations applicable to the work. If CONTRACTOR observes that the specifications or drawings are at variance therewith, CONTRACTOR shall give ENGINEER prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate modification. If CONTRACTOR performs any work knowing, or having reason to know, that it is contrary to such laws, ordinances, rules, and regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all costs arising therefrom; however, it shall not be CONTRACTOR'S primary responsibility to make certain that the specifications and drawings are in accordance with such laws, ordinances, rules, and regulations.

TAXES:

6.16 CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by him in accordance with the law of the place of the project.

USE OF PREMISES:

- 6.17 CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workmen to areas permitted by law, ordinances, permits, or the requirements of the contract documents, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment.
- 6.18 During the progress of the work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish, and other debris resulting from the work. At the completion of the work, CONTRACTOR shall remove all waste materials, rubbish, and debris from and about the premises as well as all tools, appliances, construction equipment, and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by OWNER. CONTRACTOR shall restore to their original condition those portions of the site not designated for alteration by the contract documents.
- 6.19 CONTRACTOR shall not load, nor permit any part of any structure to be loaded, in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the work or adjacent property to stresses or pressures that will endanger it.

RECORD DOCUMENTS:

6.20 CONTRACTOR shall keep one record copy of all specifications, drawings, addenda, modifications, shop drawings, and samples at the site in good order and annotated to show all changes made during the construction process.

These shall be available to ENGINEER for examination and shall be delivered to ENGINEER for OWNER upon completion of the work.

SAFETY AND PROTECTION:

- 6.21 CONTRACTOR shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
- 6.21.1 all employees on the work and other persons who may be affected thereby,
 - 6.21.2 all the work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and
 - 6.21.3 other property at the site, or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction. CONTRACTOR shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property, or to protect them from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and utilities when prosecution of the work may affect them. All damage, injury, or loss to any property referred to in paragraph 6.21.2 or 6.21.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any subcontractor, or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of drawings or specifications, or to the acts or omissions of OWNER or ENGINEER, or anyone employed by either of them, or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR). CONTRACTOR'S duties and responsibilities for the safety and protection of the work shall continue until such time as all the work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR, in accordance with paragraph 14.13, that the work is acceptable.
- 6.22 CONTRACTOR shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR'S superintendent, unless otherwise designated in writing by CONTRACTOR to OWNER.

EMERGENCIES:

- 6.23 In emergencies affecting the safety or protection of persons, or the work, or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER to OWNER, is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice of any significant changes in the work, or deviations from the contract documents caused thereby.

SHOP DRAWINGS AND SAMPLES:

- 6.24 After checking and verifying all field measurements, CONTRACTOR shall submit to ENGINEER for review and approval, in accordance with the accepted schedule of shop drawing submissions, five copies (unless otherwise specified in the general requirements) of all shop drawings, which shall have been checked by, and stamped with the approval of, CONTRACTOR, and identified as ENGINEER may require. The data shown on the shop drawings will be complete with respect to dimensions, design criteria, materials of construction, and like information to enable ENGINEER to review the information as required.
- 6.25 CONTRACTOR shall also submit to ENGINEER for review and approval, with such promptness as to cause no delay in work, all samples required by the contract documents. All samples will have been checked by, and stamped with the approval, of CONTRACTOR, identified clearly as to material, manufacturer, and any pertinent catalog numbers, and the use for which intended.

- 6.26 At the time of each submission, CONTRACTOR shall, in writing, call ENGINEER'S attention to any deviations that the shop drawings or samples may have from the requirements of the contract documents.
- 6.27 ENGINEER will review and approve, with reasonable promptness, shop drawings and samples, but ENGINEER'S review and approval shall be only for conformance with the design concept of the project, and for compliance with the information given in the contract documents, and shall not extend to means, methods, sequences, techniques, or procedures of construction, or to safety precautions of programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make any corrections required by ENGINEER, and shall return the required number of corrected copies of shop drawings, and resubmit new samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals. CONTRACTOR'S stamp of approval on any shop drawing or sample shall constitute a representation to OWNER and ENGINEER that CONTRACTOR has either determined and verified all quantities, dimensions, field construction criteria, materials catalog numbers, and similar data, or assumes full responsibility for doing so, and that CONTRACTOR has reviewed or coordinated each shop drawing or sample with the requirements of the work and the contract documents.
- 6.28 Where a shop drawing or sample is required by the specifications, no related work shall be commenced until the submittal has been reviewed and approved by ENGINEER.
- 6.29 ENGINEER'S review and approval of shop drawings or samples shall not relieve CONTRACTOR from responsibility for any deviations from the contract documents unless CONTRACTOR has, in writing, called ENGINEER'S attention to such deviation at the time of submission, and ENGINEER has given written concurrence and approval to the specific deviation, nor shall any concurrence or approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the shop drawings.

CONTINUING THE WORK:

- 6.30 CONTRACTOR shall carry on the work and maintain the progress schedule during all disputes or disagreements with OWNER. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as CONTRACTOR and OWNER may otherwise agree in writing.

INDEMNIFICATION:

- 6.31 To the fullest extent permitted by law, CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER, and their agents and employees, from and against all claims, damages, losses, and expenses including, but not limited to, attorney's fees arising out of, or resulting from, the performance of the work, provided that any such claim, damage, loss, or expense (a) is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom, and (b) is caused, in whole or in part, by any negligent act or omission of CONTRACTOR, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Nothing in the contract shall be interpreted that the OWNER waives its sovereign immunity granted under C.R.S. 24-10-105.
- 6.32 In any and all claims against OWNER or ENGINEER, or any of their agents or employees, by any employee of CONTRACTOR, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.31 shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CONTRACTOR or any subcontractor under worker's or workmen's compensation acts, disability benefit acts, or other employee benefit acts.
- 6.33 The obligations of CONTRACTOR under paragraph 6.31 shall not extend to the liability of ENGINEER, his agents, or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specifications.

ARTICLE 7 – WORK BY OTHERS

- 7.1 OWNER may perform additional work related to the project by himself, or have additional work performed by utility service companies, or let other direct contracts therefore which shall contain general conditions similar to these. CONTRACTOR shall afford the utility service companies and the other contractors who are parties to such direct contracts (or OWNER, if OWNER is performing the additional work with OWNER'S employees) reasonable opportunity for the introduction and storage of materials and equipment, and the execution of work, and shall properly connect and coordinate his work with theirs.
- 7.2 If any part of CONTRACTOR'S work depends, for proper execution or results, upon the work of any such other contractor or utility service company (or OWNER), CONTRACTOR shall inspect and promptly report to ENGINEER in writing any patent or apparent defects or deficiencies in such work that render it unsuitable for such proper execution and results CONTRACTOR'S failure to so report shall constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR'S work, except for latent or nonapparent defects and deficiencies in the other work.
- 7.3 CONTRACTOR shall do all cutting, fitting, and patching of his work that may be required to make its several parts come together properly and integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work, and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected.
- 7.4 If the performance of additional work by other contractors or utility service companies or OWNER was not noted in the contract documents, written notice thereof shall be given to CONTRACTOR prior to starting any such additional work. If CONTRACTOR believes that the performance of such additional work by OWNER or others involves additional expense to CONTRACTOR, or requires an extension of the contract time, CONTRACTOR may make a claim therefore as provided in Articles 11 and 12.

ARTICLE 8 – OWNER'S RESPONSIBILITIES

- 8.1 OWNER shall issue all communications to CONTRACTOR through ENGINEER.
- 8.2 In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer whose status under the contract documents shall be that of the former ENGINEER.

ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION

OWNER'S REPRESENTATIVE:

- 9.1 ENGINEER will be OWNER'S representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER'S representative during construction are set forth in the contract documents, and shall not be extended without written consent of OWNER and ENGINEER.

VISITS TO SITE:

- 9.2 ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed work and to determine, in general, if the work is proceeding in accordance with the contract documents. ENGINEER will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work. ENGINEER'S efforts will be directed toward providing for OWNER a greater degree of confidence that the completed work will conform to the contract documents. On the basis of such visits and on-site observations, as an experienced and qualified design professional, ENGINEER will keep OWNER informed of the progress of the work, and will endeavor to guard OWNER against defects and deficiencies in the work.

CLARIFICATIONS AND INTERPRETATIONS:

- 9.3 ENGINEER will issue, with reasonable promptness, such written clarifications or interpretations of the contract documents (in the form of drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with, or reasonably inferable from, the overall intent of the contract documents.

If CONTRACTOR believes that a written clarification or interpretation justifies an increase in the contract price or contract time, CONTRACTOR may make a claim therefore, as provided in Article 11 or Article 12.

REJECTING DEFECTIVE WORK:

- 9.4 ENGINEER will have authority to disapprove or reject work which is defective, and will also have authority to require special inspection or testing of the work as fabricated, installed, or completed.

SHOP DRAWINGS, CHANGE ORDERS, AND PAYMENTS:

- 9.5 In connection with ENGINEER'S responsibility for shop drawings and samples, see paragraphs 6.24 through 6.29 inclusive.
- 9.6 In connection with ENGINEER'S responsibilities as to change orders, see Articles 10, 11, and 12.
- 9.7 In connection with ENGINEER'S responsibilities in respect to applications for payment, etc., see Article 14.

PROJECT REPRESENTATION:

- 9.8 ENGINEER may utilize Resident Project Representative to assist ENGINEER in observing the performance of the work. The duties, responsibilities, and limitations of authority of any such Resident Project Representative and assistants will be as provided in the supplementary conditions. If OWNER designates another agent to represent him at the site who is not ENGINEER'S agent, the duties, responsibilities, and limitations of authority of such other person will be as provided in the supplementary conditions.

DECISIONS ON DISAGREEMENTS:

- 9.9 ENGINEER will be the initial interpreter of the requirements of the contract documents and judge of the acceptability of the work thereunder. Claims, disputes, and other matters relating to the acceptability of the work, or the interpretation of the requirements of the contract documents pertaining to the execution and progress of the work, shall be referred initially to ENGINEER in writing with a request for a formal decision which ENGINEER will render in writing within a reasonable time.

LIMITATIONS ON ENGINEER'S RESPONSIBILITIES:

- 9.10 Neither ENGINEER'S authority to act under this Article 9, or elsewhere in the contract documents, nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any subcontractor, any manufacturer, fabricator, supplier, or distributor, or any of their agents or employees, or any other person performing any of the work.
- 9.11 Whenever, in the contract documents, the terms "as ordered", "as directed", "as required", "as allowed", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper", or "satisfactory", or adjectives of like effect or import are used to describe requirement, direction, review, or judgment of ENGINEER as to the work, it is intended that such requirement direction, review, or judgment will be solely to evaluate the work for compliance with the contract documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective never indicates that ENGINEER shall have authority to supervise or direct performance of the work, or authority to undertake responsibility contrary to the provisions of paragraphs 9.12 or 9.13.

- 9.12 ENGINEER will not be responsible for CONTRACTOR'S means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR'S failure to perform the work in accordance with the contract documents.
- 9.13 ENGINEER will not be responsible for the acts or omissions of CONTRACTOR, or of any subcontractor, or of the agents or employees of any CONTRACTOR or subcontractor, or of any other persons at the site or otherwise performing any of the work.

ARTICLE 10 – CHANGES IN THE WORK

- 10.1 Without invalidating the agreement, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the work; these will be authorized by change orders. Upon receipt of a change order, CONTRACTOR shall proceed with the work involved. All such work shall be executed under the applicable conditions of the contract documents. If any change order causes an increase or decrease in the contract price, or an extension or shortening of the contract time, an equitable adjustment will be made as provided in Article 11 or Article 12 on the basis of a claim made by either party.
- 10.2 ENGINEER may authorize minor changes in the work, not involving an adjustment in the contract price or the contract time, which are consistent with the overall intent of the contract documents. These may be accomplished by a field order, and shall be binding on OWNER, and also on CONTRACTOR who shall perform the change promptly. If CONTRACTOR believes that a field order justifies an increase in the contract price or contract time, CONTRACTOR may make a claim therefore as provided in Article 11 or Article 12.
- 10.3 Additional work performed without authorization of a change order will not entitle CONTRACTOR to an increase in the contract price, or an extension of the contract time, except in the case of an emergency as provided in paragraph 6.23, and except as provided in paragraphs 10.2 and 13.9.
- 10.4 OWNER shall execute appropriate change orders prepared by ENGINEER covering changes in the work which are required by OWNER, or required because of unforeseen physical conditions or emergencies, or because of uncovering work found not to be defective, or as provided in paragraphs 11.10 or 11.11.
- 10.5 If notice of any change affecting the general scope of the work or change in the contract price is required by the provisions of any bond to be given to the surety, it will be CONTRACTOR'S responsibility to so notify the surety, and the amount of each applicable bond shall be adjusted accordingly. CONTRACTOR shall furnish proof of such adjustment to OWNER.

ARTICLE 11 – CHANGE OF CONTRACT PRICE

- 11.1 The contract price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the work. All duties, responsibilities, and obligations assigned to or undertaken by CONTRACTOR shall be at his expense without change in the contract price.
- 11.2 The contract price may only be changed by a change order. Any claim for an increase in the contract price shall be based on written notice delivered to OWNER and ENGINEER within ten days of the occurrence of the event giving rise to the claim. Any change in the contract price resulting from any such claim shall be incorporated in a change order.
- 11.3 No change orders or other form of order or directive which requires additional compensable work to be performed may be issued or be effective unless accompanied by a written assurance to the CONTRACTOR that lawful appropriations to cover the costs of the additional work have been made.
- 11.4 The value of any work covered by a change order, or of any claim for an increase or decrease in the contract price, shall be determined in one of the following ways:

- 11.4.1 Where the work involved is covered by unit prices contained in the contract documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.10).
- 11.4.2 By mutual acceptance of a lump sum.
- 11.4.3 On the basis of the cost of the work (determined as provided in paragraphs 11.5 and 11.6), plus a contractor's Fee for overhead and profit (determined as provided in paragraph 11.7).
- 11.5 The term "Cost of the Work" means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.6:
- 11.5.1 Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the work shall be apportioned on the basis of their time spent on the work. Payroll costs shall include, but not be limited to, salaries and wages, plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, worker's or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing work after regular working hours, or on Sunday or legal holidays, shall be included in the above only to the extent authorized by OWNER.
- 11.5.2 Cost of all materials and equipment furnished and incorporated in the work, including costs of transportation and storage thereof, and manufacturers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case, the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.
- 11.5.3 Payments made by CONTRACTOR to the subcontractors for work performed by subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from subcontractors acceptable to CONTRACTOR, and shall deliver such bids to OWNER, who will then determine, with the advice of ENGINEER, which bids will be accepted. If a subcontract provides that the subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the subcontractor's Cost of the Work shall be determined in the same manner as CONTRACTOR'S Cost of the Work. All subcontracts shall be subject to the other provisions of the contract documents insofar as applicable.
- 11.5.4 Supplemental costs including the following:
- 11.5.4.1 The proportion of necessary transportation, travel, and subsistence expenses of CONTRACTOR'S employees incurred in discharge of duties connected with the work.
- 11.5.4.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machines, appliances, office and temporary facilities at the site, and hand tools not owned by the workmen, which are consumed in the performance of the work, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.
- 11.5.4.3 Rentals of all construction equipment and machinery, and the parts thereof, whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof, all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the work.
- 11.5.4.4 Sales, use, or similar taxes related to the work, and for which CONTRACTOR is liable, imposed by any governmental authority.

- 11.5.4.5 Deposits lost for causes other than CONTRACTOR'S negligence, royalty payments, and fees for permits and licenses.
- 11.5.4.6 Losses and damages (and related expenses), not compensated by insurance or otherwise, to the work otherwise sustained by CONTRACTOR in connection with the execution of the work, provided they have resulted from causes other than the negligence of CONTRACTOR, any subcontractor, or anyone directly or indirectly employed by any of them, or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's Fee. If, however, any such loss or damage requires reconstruction, and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.7.2.
- 11.5.4.7 The cost of utilities, fuel, and sanitary facilities at the site.
- 11.5.4.8 Minor expenses such as telegrams, long distance calls, telephone service at the site, expressage and similar petty cash items in connection with the work.
- 11.5.4.9 Cost of premiums for additional bonds and insurance required because of changes in the work.
- 11.6 The term "Cost of the Work" shall not include any of the following:
- 11.6.1 Payroll costs and other compensation of CONTRACTOR'S officers, executives, principals (of partnership and sole proprietorship), general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by CONTRACTOR whether at the site or in his principal or a branch office for general administration of the work, and not specifically included in the agreed upon schedule of job classifications referred to in subparagraph 11.5.1, all of which are to be considered administrative costs covered by the Contractor's Fee.
- 11.6.2 Expenses of CONTRACTOR'S principal and branch office, other than CONTRACTOR'S office at the site.
- 11.6.3 Any part of CONTRACTOR'S capital expenses including interest on CONTRACTOR'S capital employed for the work, and charges against CONTRACTOR for delinquent payments.
- 11.6.4 Cost of premiums for all bonds and for all insurance whether or not CONTRACTOR is required by the contract documents to purchase and maintain the same (except for additional bonds and insurance required because of changes in the work).
- 11.6.5 Costs due to the negligence of CONTRACTOR, any subcontractor, or anyone directly or indirectly employed by any of them, or for whose acts any of them may be liable, including, but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 11.6.6 Other overhead or general expense costs of any kind, and the costs of any item not specifically and expressly included in paragraph 11.5.

CONTRACTOR'S FEE:

11.7 The Contractor's Fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

- 11.7.1 a mutually acceptable fixed fee; or, if none can be agreed upon,

- 11.7.2 a fee based on the following percentages of the various portions of the Cost of the Work:
- 11.7.2.1 for costs incurred under paragraphs 11.5.1 and 11.5.2, the Contractor's Fee shall be ten percent,
- 11.7.2.2 for costs incurred under paragraph 11.5.3, the Contractor's Fee shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to the subcontractor as a fee for overhead and profit shall be ten percent, and
- 11.7.2.3 no fee shall be payable on the basis of costs itemized under paragraphs 11.5.4 and 11.6.
- 11.8 The amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost, will be the amount of the actual net decrease. When both additions and credits are involved in any one change, the combined adjustment to overhead and profit shall be figured on the basis of the net increase or decrease in allowable costs, if any.

ADJUSTMENT OF UNIT PRICES:

- 11.9 Whenever the cost of any work is to be determined pursuant to paragraphs 11.5 and 11.6, CONTRACTOR will submit, in form acceptable to ENGINEER, an itemized cost breakdown together with supporting data.
- 11.10 Where the quantity of work with respect to any item that is covered by a unit price differs materially and significantly from the quantity of such work indicated in the contract documents, an appropriate change order shall be issued on recommendation of ENGINEER to adjust the unit price.

CASH ALLOWANCES:

- 11.11 It is understood that CONTRACTOR has included in the contract price all allowances so named in the contract documents, and shall cause the work so covered to be done by such subcontractors, manufacturers, fabricators, suppliers, or distributors, and for such sums within the limit of the allowances as may be acceptable to ENGINEER. Upon final payment, the contract price shall be adjusted as required, and an appropriate change order issued. CONTRACTOR agrees that the original contract price includes such sums as CONTRACTOR deems proper for costs and profit on account of cash allowances. No demand for additional cost or profit in connection therewith will be valid.

ARTICLE 12 – CHANGE OF THE CONTRACT TIME

- 12.1 The contract time may only be changed by a change order. Any claim for an extension in the contract time shall be based on written notice delivered to OWNER and ENGINEER within ten days of the occurrence of the event giving rise to the claim. Any change in the contract time resulting from any such claim shall be incorporated in a change order.
- 12.2 All time limits stated in the contract documents are of the essence of the agreement. The provisions of Articles 11 and 12 are CONTRACTOR'S sole remedies for delay by any cause whatsoever, including acts of OWNER.

ARTICLE 13 – WARRANTY AND GUARANTEE; TESTS AND INSPECTION; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

WARRANTY AND GUARANTEE:

- 13.1 CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all work will be in accordance with the contract documents and will not be defective. Prompt notice of all defects shall be given to CONTRACTOR. All defective work, whether or not in place, may be rejected, corrected, or accepted as provided in this Article 13.

ACCESS TO WORK:

- 13.2 ENGINEER, ENGINEER'S representatives, other representatives of OWNER, testing agencies, and governmental agencies with jurisdictional interests will have access to the work at reasonable times for their observation, inspection and testing. CONTRACTOR shall provide proper and safe conditions for such access.

TESTS AND INSPECTIONS:

- 13.3 CONTRACTOR shall give ENGINEER timely notice of readiness of work for all required inspections, tests or approvals.
- 13.4 If any law, ordinance, rule, regulation, code, or order of any public body having jurisdiction requires any work (or part thereof) to specifically be inspected, tested, or approved, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection, testing, or approval. CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with OWNER'S or ENGINEER'S acceptance of a manufacturer, fabricator, supplier or distributor of materials or equipment

proposed to be incorporated in the work, or of materials or equipment submitted for approval prior to CONTRACTOR'S purchase thereof for incorporation of the work. The cost of all other inspections, tests, and approvals required by the contract documents shall be paid by OWNER (unless otherwise specified).

- 13.5 Any inspections, tests, or approvals, other than those required by law, ordinance, rule, regulation, code, or order of any public body having jurisdiction, shall be performed by organizations acceptable to OWNER and CONTRACTOR (or by ENGINEER if so specified).
- 13.6 If any work that is to be inspected, tested, or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at CONTRACTOR'S expense, unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR'S intention to cover such work and ENGINEER has not acted with reasonable promptness in response to such notice.
- 13.7 Neither observations by ENGINEER nor inspections, tests, or approvals by others shall relieve CONTRACTOR from his obligations to perform the work in accordance with the contract documents.

UNCOVERING WORK:

- 13.8 If any work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER'S observation and replaced at CONTRACTOR'S expense.
- 13.9 If ENGINEER considers it necessary or advisable that covered work be observed by ENGINEER, or inspected or tested by others, CONTRACTOR, at ENGINEER'S request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the work in question, furnish all necessary labor, material, and equipment. If it is found that such work is defective, CONTRACTOR shall bear all the expenses of such uncovering, exposure, observation, inspection, and testing of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive change order shall be issued. If, however, such work is not found to be defective, CONTRACTOR shall be allowed an increase in the contract price, or an extension of the contract time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction.

OWNER MAY STOP THE WORK:

- 13.10 If the work is defective, or CONTRACTOR fails to supply sufficient skilled workmen or suitable materials or equipment, OWNER may order CONTRACTOR to stop the work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any other party.

CORRECTION OR REMOVAL OF DEFECTIVE WORK:

- 13.11 If required by ENGINEER, CONTRACTOR shall promptly, without cost to OWNER and as specified by ENGINEER, either correct any defective work, whether or not fabricated, installed, or completed, or, if the work has been rejected by ENGINEER, remove it from the site and replace it with nondefective work in a manner acceptable to the ENGINEER.

TWO YEAR CORRECTION PERIOD:

- 13.12 If, within two years after the date of substantial completion, or such longer period of time as may be prescribed by law, or by the terms of any applicable special guarantee required by the contract documents, or by any other specific provision of the contract documents, any work is found to be defective,

CONTRACTOR shall promptly, without cost to OWNER, and in accordance with OWNER'S written instructions, either correct such defective work, or, if it has been rejected by OWNER, remove it from the site, and replace it with nondefective work. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective work corrected or the rejected work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be paid by CONTRACTOR.

ACCEPTANCE OF DEFECTIVE WORK:

- 13.13 If, instead of requiring correction or removal and replacement of defective work, OWNER (and, prior to ENGINEER'S recommendation of final payment, also ENGINEER) prefers to accept it, OWNER may do so. In such case, if acceptance occurs prior to ENGINEER'S recommendation of final payment, a change order shall be issued incorporating the necessary revisions in the contract price; or, if the acceptance occurs after such recommendation, an appropriate amount shall be paid by CONTRACTOR to OWNER.

OWNER MAY CORRECT DEFECTIVE WORK:

- 13.14 If CONTRACTOR fails, within a reasonable time after written notice of ENGINEER, to proceed to correct defective work, or to remove and replace rejected work as required by ENGINEER in accordance with paragraph 13.11, or if CONTRACTOR fails to perform the work in accordance with the contract documents (including any requirements of the progress schedule), OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising his rights under this paragraph OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may exclude CONTRACTOR from all part of the site, take possession of all or part of the work, and suspend CONTRACTOR'S services related thereto, take possession of CONTRACTOR'S tools, appliances, construction equipment, and machinery at the site, and incorporate in the work all materials and equipment stored at the site, or for which OWNER has paid CONTRACTOR, but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER'S representatives, agents, and employees such access to the site as may be necessary to enable OWNER to exercise his rights under this paragraph. All direct and indirect costs of OWNER in exercising such rights shall be charged against CONTRACTOR in an amount verified by ENGINEER, and a change order shall be issued incorporating the necessary revisions in the contract documents and a reduction in the contract price. Such direct and indirect costs shall include, in particular but without limitation, compensation for additional professional services required, and all costs of repair and replacement of work of others destroyed or damaged by correction, removal, or replacement of CONTRACTOR'S defective work. CONTRACTOR shall not be allowed an extension of the contract time because of any delay in performance of the work attributable to the exercise by OWNER of OWNER'S rights hereunder.

ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION

SCHEDULES:

- 14.1 At least ten days prior to submitting the first application for a progress payment, CONTRACTOR shall (except as otherwise specified in the general requirements) submit to ENGINEER a progress schedule, a final schedule of shop drawing submissions, and, where applicable, a schedule of values of the work. These schedules shall be satisfactory in form and substance to ENGINEER. The schedule of values shall include quantities and unit prices aggregating the contract price, and shall subdivide the work into component parts in sufficient detail to serve as the basis for progress payments during construction. Upon acceptance of the schedule of values by ENGINEER, it shall be incorporated into a form of application for payment acceptable to ENGINEER.

APPLICATION FOR PROGRESS PAYMENT:

- 14.2 At least ten days before each progress payment falls due (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an application for payment filled out and signed by CONTRACTOR covering the work completed as of the date of the application, and accompanied by such supporting documentation as is required by the contract documents, and also as ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the work, but delivered and suitably stored at the site or at another location agreed to in writing, the application for payment shall also be accompanied by such data, satisfactory to OWNER, as will establish OWNER'S title to the material and equipment, and protect OWNER'S interest therein, including applicable insurance. Each subsequent application for payment shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the work have been applied to discharge in full all of CONTRACTOR'S obligations reflected in prior applications for payment. The amount of retainage with respect to progress payments will be as stipulated in the agreement.

CONTRACTOR'S WARRANTY OF TITLE:

- 14.3 CONTRACTOR warrants and guarantees that title to all work, materials, and equipment covered by any application for payment, whether incorporated in the project or not, will pass to OWNER at the time of payment free and clear of all liens, claims, security interests, and encumbrances (hereafter in these General Conditions referred to as "Liens").

REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT:

- 14.4 ENGINEER will, within ten days after receipt of each application for payment, either indicate in writing a recommendation of payment and present the application to OWNER, or return the application to CONTRACTOR indicating in writing ENGINEER'S reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the application. OWNER shall, within twenty days of presentation to him of the application for payment with ENGINEER'S recommendation, pay CONTRACTOR the amount recommended.
- 14.5 ENGINEER'S recommendation of any payment requested in an application for payment will constitute a representation by ENGINEER to OWNER that, based on ENGINEER'S on-site observations of the work in progress as an experienced and qualified design professional, and on ENGINEER'S review of the application for payment, and the accompanying data and schedules, the work has progressed to the point indicated; that, to the best of ENGINEER'S knowledge, information, and belief, the quality of the work is in accordance with the contract documents (subject to an evaluation of the work as a functioning project upon substantial completion, and to the results of any subsequent tests called for in the contract documents and any qualifications stated in the recommendation); and, that CONTRACTOR is entitled to payment of the amount recommended. However, by recommending any such payment, ENGINEER will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to check the quality or the quantity of work, or that the means, methods, techniques, sequences, and procedures of construction have been reviewed, or that any examination has been made to ascertain how or for what purpose CONTRACTOR has used the monies paid or to be paid to

CONTRACTOR on account of the contract price, or that title to any work, materials, or equipment has passed to OWNER free and clear of any Liens.

- 14.6 ENGINEER'S recommendation of final payment will constitute an additional representation by ENGINEER to OWNER that the conditions precedent to CONTRACTOR'S being entitled to final payment as set forth in paragraph 14.13 have been fulfilled.
- 14.7 ENGINEER may refuse to recommend the whole, or any part of any payment if, in his opinion, it would be incorrect to make such representations to OWNER. He may also refuse to recommend any such payment, or, because of subsequently discovered evidence, or the results of subsequent inspections or tests, nullify any such payment previously recommended to such extent as may be necessary in ENGINEER'S opinion to protect OWNER from loss because:
- 14.7.1 the work is defective, or completed work has been damaged requiring correction or replacement,
 - 14.7.2 written claims have been made against OWNER, or Liens have been filed in connection with the work,
 - 14.7.3 the contract price has been reduced because of modifications,
 - 14.7.4 OWNER has been required to correct defective work, or complete the work in accordance with paragraph 13.14,
 - 14.7.5 of CONTRACTOR'S unsatisfactory prosecution of the work in accordance with the contract documents, or
 - 14.7.6 CONTRACTOR'S failure to make payment to subcontractors, or for labor, materials, or equipment.

SUBSTANTIAL COMPLETION:

- 14.8 When CONTRACTOR considers the entire work ready for its intended use, CONTRACTOR shall, in writing to OWNER and ENGINEER, certify that the entire work is substantially complete, and request that ENGINEER issue a certificate of substantial completion. Within a reasonable time thereafter, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of the work to determine the status of completion. If ENGINEER does not consider the work substantially complete, ENGINEER will notify CONTRACTOR in writing giving his reasons therefor. If ENGINEER considers the work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of substantial completion which shall fix the date of substantial completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which he may make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the work is not substantially complete, ENGINEER will, within fourteen days after submission of the tentative certificate to OWNER, notify CONTRACTOR in writing stating his reasons therefor. If, after consideration of OWNER'S objections, ENGINEER considers the work substantially complete, ENGINEER will, within said fourteen days, execute and deliver to OWNER and CONTRACTOR a definitive certificate of substantial completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as he believes justified after consideration of any objections from OWNER. At the time of delivery of tentative certificate of substantial completion, ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, heat, utilities, and insurance. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER prior to his issuing the definitive certificate of substantial completion, ENGINEER'S aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.
- 14.9 OWNER shall have the right to exclude CONTRACTOR from the work after the date of substantial completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

PARTIAL UTILIZATION:

- 14.10 Use by OWNER of completed portions of the work may be accomplished prior to substantial completion of all the work subject to the following:
- 14.10.1 OWNER, at any time, may request CONTRACTOR in writing to permit OWNER to use any part of the work which OWNER believes to be substantially complete and which may be so used without significant interference with construction of the other parts of the work. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER and ENGINEER that said part of the work is substantially complete, and request ENGINEER to issue a certificate of substantial completion for that part of the work. Within a reasonable time thereafter, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the work to determine its status of completion. If ENGINEER considers that part of the work to be substantially complete, ENGINEER will execute, and deliver to OWNER and CONTRACTOR, a certificate to that effect, fixing the date of substantial completion as to that part of the work, attaching thereto a tentative list of items to be completed or corrected before final payment. Prior to issuing a certificate of substantial completion as to part of the work, ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to the division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, utilities, and insurance for that part of the work which shall become binding upon OWNER and CONTRACTOR at the time of issuing the definitive certificate of substantial completion as to that part of the work, unless OWNER and CONTRACTOR shall have otherwise agreed in writing. OWNER shall have the right to exclude CONTRACTOR from any part of the work which ENGINEER has so certified to be substantially complete, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.
- 14.10.2 In lieu of the issuance of a certificate of substantial completion as to part of the work, OWNER may take over operation of a facility constituting part of the work, whether or not it is substantially complete, if such facility is functionally and separately usable; provided that prior to any such takeover, OWNER and CONTRACTOR have agreed as to the division of responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, correction period, heat, utilities, and insurance with respect to such facility.
- 14.10.3 No occupancy of part of the work, or taking over of operations of a facility will be accomplished before the insurers providing the property insurance have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be cancelled or permitted to lapse on account of any such partial use or occupancy.

FINAL INSPECTION:

- 14.11 Upon written notice from CONTRACTOR that the work is complete, ENGINEER will make a final inspection with OWNER and CONTRACTOR, and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

FINAL APPLICATION FOR PAYMENT:

- 14.12 After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER, and delivered all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, marked-up record documents, and other documents, all as required by the contract documents, and after ENGINEER has indicated that the work is acceptable (subject to the provisions of paragraph 14.14), CONTRACTOR may make application for final payment following the procedure for progress payments. The final application for payment shall be accompanied by all documentation called for in the contract documents, and such other data and schedules as ENGINEER may reasonably require, together with complete and legally effective releases or waivers (satisfactory to OWNER) of all liens arising out of, or filed in connection with the work. In lieu

thereof, and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full; an affidavit of CONTRACTOR that the releases and receipts include all labor, services, material, and equipment for which lien could be filed, and that all payrolls, material, and equipment bills, and other indebtedness connected with the work, for which OWNER or his property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any subcontractor, manufacturer, fabricator, supplier, or distributor fails to furnish a release or receipt in full, CONTRACTOR may furnish a bond or other collateral satisfactory to OWNER to indemnify OWNER against any lien.

FINAL PAYMENT AND ACCEPTANCE:

14.13 If, on the basis of ENGINEER'S observation of the work during construction and final inspection, and ENGINEER'S review of the final application for payment and accompanying documentation, all as required by contract documents, ENGINEER is satisfied that the work has been completed and CONTRACTOR has fulfilled all of his obligations under the contract documents, ENGINEER will, within ten days after receipt of the final application for payment, indicate in writing his recommendation of payment, and present the application to OWNER for payment. Thereupon, ENGINEER will give written notice to OWNER and CONTRACTOR that the work is acceptable subject to the provisions of paragraph 14.15. Otherwise, ENGINEER will return the application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections, and resubmit the application. If the application and accompanying documentation are appropriate as to form and substance, OWNER shall, within thirty days after receipt thereof, pay CONTRACTOR the amount recommended by ENGINEER.

CONTRACTOR'S CONTINUING OBLIGATION:

14.14 CONTRACTOR'S obligation to perform and complete the work in accordance with the contract documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of substantial completion, nor any payment by OWNER to CONTRACTOR under the contract documents, nor any use or occupancy of the work or any part thereof by OWNER, nor any act of acceptance by OWNER, nor any failure to do so, nor the issuance of a notice of acceptability by ENGINEER pursuant to paragraph 14.13, nor any correction of defective work by OWNER shall constitute an acceptance of work not in accordance with the contract documents or a release of CONTRACTOR'S obligation to perform the work in accordance with the contract documents.

WAIVER OF CLAIMS:

14.15 The making and acceptance of final payment shall constitute:

14.15.1 a waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled liens, from defective work appearing after final inspection pursuant to paragraph 14.11, or from failure to comply with the contract documents or the terms of any special guarantees specified therein; however, it shall not constitute a waiver by OWNER of any rights in respect of CONTRACTOR'S continuing obligations under the contract documents; and

14.15.2 a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

OWNER MAY SUSPEND WORK:

15.1 OWNER may, at any time and without cause, suspend the work, or any portion thereof, for a period of not more than ninety days, by notice in writing to CONTRACTOR and ENGINEER which shall fix the date on which work shall be resumed. CONTRACTOR shall resume the work on the date so fixed. CONTRACTOR may, at the

OWNER'S sole discretion, be allowed an increase in the contract price, or an extension of the contract time, or both, directly attributable to any suspension, if he makes a claim therefor as provided in Articles 11 and 12.

- 15.2 Upon the occurrence of any one or more of the following events:
- 15.2.1 if CONTRACTOR is adjudged bankrupt or insolvent,
 - 15.2.2 if CONTRACTOR makes a general assignment for the benefit of creditors,
 - 15.2.3 if a trustee or receiver is appointed for CONTRACTOR or for any of CONTRACTOR'S property,
 - 15.2.4 if CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws,
 - 15.2.5 if CONTRACTOR repeatedly fails to supply sufficient skilled workmen, or suitable materials or equipment,
 - 15.2.6 if CONTRACTOR repeatedly fails to make prompt payments to subcontractors, or for labor, materials, or equipment,
 - 15.2.7 if CONTRACTOR disregards laws, ordinances, rules, regulations, or orders of any public body having jurisdiction,
 - 15.2.8 if CONTRACTOR disregards the authority of ENGINEER, or
 - 15.2.9 if CONTRACTOR otherwise violates, in any substantial way, any provisions of the contract documents,

OWNER may, after giving CONTRACTOR and his surety seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site, and take possession of the work and of all CONTRACTOR'S tools, appliances, construction equipment, and machinery at the site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the work all materials and equipment stored at the site, or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the contract price exceeds the direct and indirect costs of completing the work, including compensation for additional professional services, such excess shall be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER shall be verified by ENGINEER and incorporated in a change order, but in finishing the work, OWNER shall not be required to obtain the lowest figure for the work performed.

- 15..3 Where CONTRACTOR'S services have been so terminated by OWNER, the termination shall not affect any rights of OWNER against CONTRACTOR then existing, or which may thereafter accrue. Any retention or payment of monies due CONTRACTOR by OWNER will not release CONTRACTOR from liability.
- 15.4 Upon seven days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the work and terminate the agreement. In such case, CONTRACTOR shall be paid for all work executed and expenses sustained through the date of termination.

CONTRACTOR MAY STOP WORK OR TERMINATE:

- 15.5 If, through no act or fault of CONTRACTOR, the work is suspended for a period of more than ninety days by OWNER, or under an order of court or other public authority, or ENGINEER fails to act on any application for payment within thirty days after it is submitted, or OWNER fails for thirty days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days written notice to OWNER and ENGINEER, terminate the agreement and recover from OWNER payment for all work executed through the date of termination.

ARTICLE 16 – MISCELLANEOUS

GIVING NOTICE:

- 16.1 Whenever any provision of the contract documents requires the giving of written notice, it shall be deemed to have been validly given if delivered in person to the individual, or to a member of the firm, or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

COMPUTATION OF TIME:

- 16.2 When any period of time is referred to in the contract documents by days, it shall be calendar days and be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday, or on a day made a legal holiday by the law of the applicable jurisdiction, such day shall be omitted from the computation.

GENERAL:

- 16.3 Should OWNER or CONTRACTOR suffer injury or damage to his person or property because of any error, omission or act of the other party or of any of the other party's employees or agents, or others for whose acts the other party is legally liable, claim shall be made in writing to the other party within a reasonable time of the first observances of such injury or damage.
- 16.4 The duties and obligations imposed by these general conditions and the rights and remedies available hereunder to the parties hereto, and, in particular, but without limitation, the warranties, guarantees, and obligations imposed upon CONTRACTOR by paragraphs 6.30, 13.1, 13.11, 13.14, 14.3, and 15.2, and all of the rights and remedies available to OWNER and ENGINEER thereunder, shall be in addition to, and shall not be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by law or contract, by special warranty or guarantee, or by other provisions of this paragraph shall be as effective as if repeated specifically in the contract documents in connection with each particular duty, obligations, right and remedy to which they apply. All representations, warranties, and guarantees made in the contract documents shall survive final payment and termination or completion of this agreement.

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SECTION B

**COLORADO DEPARTMENT OF TRANSPORTATION
PROVISIONS**

COLORADO DEPARTMENT OF TRANSPORTATION
PROJECT SPECIAL PROVISIONS
DOWD JUNCTION TO MINTURN TRAIL PHASE I
FEDERAL AID PROJECT NO.: ES3 006A-043
FEDERAL PROJECT CODE: 16945

The 2005 Standard Specifications for Road and Bridge Construction control construction of this project.

The following Special Provisions supplement or modify the Standard Specifications and take precedence over the Standard Specifications and plans. When specifications or special provisions contain both English units and SI units, the English units apply and are the specification requirement.

PROJECT SPECIAL PROVISIONS
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**COLORADO DEPARTMENT OF TRANSPORTATION
DOWD JUNCTION TO MINTURN TRAIL PHASE I
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COLORADO DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISIONS
DOWD JUNCTION TO MINTURN TRAIL PHASE I
FEDERAL AID PROJECT NO.: ES3 006A-043
FEDERAL PROJECT CODE: 16945

REQUIRED CDOT FORMS

1. THE FOLLOWING FORMS AND INFORMATION ARE INCLUDED IN THE BID PACKAGE, AND ARE ATTACHED:
 - 1.1 CDOT FORM 605, Contractors Performance Capability Statement
 - 1.2 CDOT FORM 606, Anti-Collusion Affidavit
 - 1.3 CDOT FORM 621, Assignment of Anti-Trust Claims
 - 1.4 CDOT FORM 714, Underutilized DBE Bid Conditions Assurance
 - 1.6 FHWA FORM 1273, Required Contract Provisions Federal Aid Construction Projects

2. The following forms WILL BE SUBMITTED AS PART OF ALL BIDS SUBMITTED:
 - 2.1 CDOT FORM 606, Anti-Collusion Affidavit
 - 2.2. CDOT FORM 714, Underutilized DBE Bid Conditions Assurance

3. IMMEDIATELY AFTER BID OPENING, Town of Minturn will provide the Apparent Low Bidder the following CDOT Forms:
 - 3.1 CDOT FORM 605, Contractors Performance Capability Statement
 - 3.2 CDOT FORM 621, Assignment of Anti-Trust Claims
 - 3.3 CDOT FORM 715 – Certificate of Proposed Underutilized DBE Participation, if UDBE goals are greater than zero
 - 3.4 CDOT FORM 718 - Underutilized DBE Good Faith Effort Documentation, if UDBE goals are not met

NOTE: REVIEW THE ENTIRE BID PACKAGE FOR ALL FORM AND SPECIFICATIONS REFERENCES. ADDITIONAL FORMS MAY BE REQUIRED BY THE COLORADO DEPARTMENT OF TRANSPORTATION DURING THE LIFE OF THE PROJECT. THE FORMS REFERENCED ABOVE AND PROVIDED IN THE BID PACKAGE ARE THE MOST CURRENT VERSION OF THE FORM AVAILABLE AT THE TIME OF BID ADVERTISEMENT.

DOWD JUNCTION TO MINTURN TRAIL PHASE I
FEDERAL AID PROJECT NO.: ES3 006A-043
FEDERAL PROJECT CODE: 16945

CONTRACT GOAL (COMBINED)

The Department has determined that Underutilized Disadvantaged Business Enterprises (UDBEs) will participate by contracting for a part of the work of this Contract. The contract goal for participation in this Contract by certified DBEs who have been determined to be underutilized has been established as follows:

UDBE* 0 Percent

The percentage will be calculated from proposals received for this project according to the following formula:

$$\text{Percentage} = 100 \times \frac{** \$ 0.00}{\text{Total dollar amount of the original Contract}}$$

* All DBEs will be considered to be UDBEs.

** Based on DBE contract unit prices rather than prime contract unit prices.

NOTE: Specific Good Faith Efforts required to meet the Contract Goal specified above are defined in the Standard Special Provisions. In addition, the Transportation Commission has determined an overall 12.69 percent annual goal for the participation of all DBEs.

DOWD JUNCTION TO MINTURN TRAIL PHASE I
FEDERAL AID PROJECT NO.: ES3 006A-043
FEDERAL PROJECT CODE: 16945

ON THE JOB TRAINING CONTRACT GOAL

The Department has determined that on-the-job training shall be provided to trainees with the goal of developing full journey workers in the types of trade or classification involved. The contract goal for on-the-job trainees working in an approved training plan in this Contract has been established as follows:

Minimum number of total On-the-Job training hours required 0 hours

DOWD JUNCTION TO MINTURN TRAIL PHASE I

FEDERAL AID PROJECT NO.: ES3 006A-043

FEDERAL PROJECT CODE: 16945

FORCE ACCOUNT ITEMS

DESCRIPTION

This special provision contains the estimate for force account items included in the Contract. The estimated amounts marked with an asterisk (*) will be added to the total bid to determine the amount of the performance and payment bonds. Force Account work shall be performed as directed by the Engineer.

BASIS OF PAYMENT

Payment will be made in accordance with subsection 109.04. Payment will constitute full compensation for all work necessary to complete the item.

Force account work valued at \$5,000 or less, that must be performed by a licensed journeyman in order to comply with federal, state, or local codes, may be paid for after receipt of an itemized statement endorsed by the Contractor.

<u>Force Account Item</u>	<u>Estimated Quantity</u>	<u>Amount</u>
F/A Minor Contract Revisions	FA	\$5,000.00
F/A Partnering	FA	\$1,000.00
F/A Fuel Cost Adjustment	FA	\$3,000.00
F/A Asphalt Cement Cost Adjustment	FA	\$3,000.00

SECTION C

SUPPLEMENTARY PROJECT INFORMATION

CDOT Forms per Section B: 8 pages
HP Geotech Subsoil Study: 15 pages
Terracon MSE Wall Report: 12 pages
Construction Plan Set: 51 sheets

COLORADO DEPARTMENT OF TRANSPORTATION
CONTRACTORS PERFORMANCE CAPABILITY STATEMENT

Project #

1. List names of partnerships or joint ventures none

2. List decreases in the contractors fiscal or workmanship qualifications compared to the last prequalification statement submitted to CDOT. (Attach additional sheets if necessary.)

a. Key personnel changes none

b. Key equipment changes none

c. Fiscal capability changes (legal actions, etc.) none

d. Other changes that may effect the contractors ability to perform work. none

I DECLARE UNDER PENALTY OF PERJURY IN THE SECOND DEGREE, AND ANY OTHER APPLICABLE STATE OR FEDERAL LAWS, THAT THE STATEMENTS MADE ON THIS DOCUMENT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE

Contractor's firm or company name

By

Date

Title

2nd Contractor's firm or company name (if joint venture)

By

Date

Title

**COLORADO DEPARTMENT OF TRANSPORTATION
ASSIGNMENT OF ANTITRUST CLAIMS**

PROJECT NO.

Contractor and Colorado Department of Transportation (CDOT) recognize that in actual economic practice antitrust violations ultimately impact on CDOT. Therefore, for good cause and as consideration for executing this contract and for receiving payments hereunder:

1. Contractor hereby irrevocably assigns to CDOT any and all claims it may now have or which may hereafter accrue to it under federal or state antitrust laws in connection with the particular project, goods or services purchased or acquired by CDOT pursuant to this contract.
2. Contractor hereby expressly agrees:
 - a. That, upon becoming aware that a third party has commenced a civil action asserting on Contractor's behalf an antitrust claim which has been assigned to CDOT hereunder, Contractor shall immediately advise in writing:
 - (1) Such third party that the antitrust claim has been assigned to CDOT, and
 - (2) CDOT that such civil action is pending and of the date on which, in accordance with subparagraph a. (1) above, Contractor notified such third party that the antitrust claim had been assigned to CDOT;
 - b. To take no action which will in any way diminish the value of the claims or rights assigned or dedicated to CDOT hereunder; and
 - c. Promptly to pay over to CDOT its proper share of any payment under an antitrust claim brought on Contractor's behalf by any third party and which claim has been assigned to CDOT hereunder.
3. Further, Contractor agrees that in the event it hires one or more subcontractors to perform any of its duties under the contract, Contractor shall require that each such subcontractor:
 - a. Irrevocably assign to CDOT (as a third party beneficiary) any and all claims that such subcontractor may have or which may thereafter accrue to the subcontractor under federal or state antitrust laws in connection with any goods or services provided by the subcontractor in carrying out the subcontractor's obligations to Contractor;
 - b. Upon becoming aware that a third party has commenced a civil action on the subcontractor's behalf asserting an antitrust claim which has been assigned to CDOT hereunder, shall immediately advise in writing:
 - (1) Such third party that the antitrust claim has been assigned to CDOT, and
 - (2) Contractor and CDOT that such civil action is pending and of the date on which, in accordance with subparagraph b. (1) above, the subcontractor notified such third party that the antitrust claim had been assigned to CDOT;
 - c. Take no action which will in any way diminish the value of the claims or rights assigned or dedicated to CDOT hereunder; and
 - d. Promptly pay over to CDOT its proper share of any payment under an antitrust claim brought on the subcontractor's behalf by any third party and which claim has been assigned or dedicated to CDOT pursuant hereto.

I, acting in my capacity as officer of a bidder (bidders if a joint venture) do agree to the above assignment of antitrust claims.

Contractor's firm or company name	By	Date
	Title	
2nd contractor's firm or company name. (If joint venture.)	By	Date
	Title	

**COLORADO DEPARTMENT OF TRANSPORTATION
 BIDDERS LIST DATA and UNDERUTILIZED
 DBE (UDBE) BID CONDITIONS ASSURANCE**

Project #:

 Location:

Prime Contractor Instructions: This form has two sections, both must be completed and submitted with your bid. Complete **Section I** to list **all** subcontract quotes received (non-DBE **and** DBE). Complete **Section II** to report only Underutilized DBE (UDBE) participation percentages which qualify under the contract goal specification for this project. **Please review CDOT Form #715 instructions before completing Section II.** Attach additional sheets as necessary.

POLICY

It is the policy of the Colorado Department of Transportation that underutilized disadvantaged business enterprises have equal opportunity to participate on projects financed with federal, state or local entity funds. Consistent with 49 Code of Federal Regulations (CFR) Part 26.11, the Bidders List data provided by the Contractors will provide CDOT as accurate data as possible about the universe of DBE and non-DBE firms actively seeking work on its highway construction contracts, for use in setting overall DBE goals.

SECTION I: CDOT BIDDERS LIST INFORMATION (Non-DBEs and DBEs)

- 1) Are all subcontract bids (quotes) received by your firm for this project listed below? **Yes** **No**
- 2) **If No**, make certain any additional subcontract bidding information is submitted to the CDOT Business Programs Office before 4:00 pm on the day after bids are opened to ensure CDOT has the best data possible for setting future DBE goals (use the same table format as below):
 CDOT Business Programs Office
 4201 E. Arkansas Ave., Room 200
 Denver, Colorado 80222 **FAX:** 303-757-9019 **EMAIL:** eo@dot.state.co.us
- 3) The most recent CDOT Bidders List will be posted online at: www.dot.state.co.us/EEO/DBEProgramPage.htm

Name of firm submitting Bid/Quote	Certified DBE firm?		Work item(s) description	Firm being used?		
	Yes	No		Yes	No	Maybe
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						

Name of firm submitting Bid/Quote	Certified DBE firm?		Work item(s) description	Firm being used?		
	Yes	No		Yes	No	Maybe
15.						
16.						
17.						
18.						
19.						
20.						

SECTION II: UNDERUTILIZED DBE (UDBE) PARTICIPATION COMMITMENT

- 1) Total eligible Underutilized DBE (UDBE) percentage amount from **Box A** below: . %
- 2) Will your company's Underutilized DBE (UDBE) participation commitment meet the contract goal? Yes No
- 3) List the UDBE firms, committed work items, and eligible UDBE percentage of your bid committed to each.

UDBE Firm name	Certification #	Committed work item(s)	% Commitment toward DBE Goal*
1.			. %
2.			. %
3.			. %
4.			. %
5.			. %

BOX A: TOTAL ELIGIBLE UDBE PERCENTAGE AMOUNT (Round to nearest hundredth)  . %

* Detailed instructions on how to calculate DBE commitment amounts are available on CDOT Form #715 and in the "Counting DBE Participation Toward Contract Goals and CDOT's annual DBE goal" section of the "DBE - Definitions and Requirements" in the *Standard Special Provisions*.

I understand that, if my company is determined to be the low bidder for the contract on this project, I must submit a completed CDOT Form #715 CERTIFICATION OF UNDERUTILIZED DBE PARTICIPATION for each firm listed in **Section II** of this form to the Transportation Department by 4:00 pm on the **third** work day after the day bids are opened. **The actual amounts submitted on each CDOT Form #715 must equal or exceed the DBE percentage commitments documented on this form. In addition, if my company does not meet the DBE/UDBE goal for this project, I must submit a completed CDOT Form #718 DBE GOOD FAITH EFFORT DOCUMENTATION before 4:00 pm on the day after bids are opened. CDOT Form #715s submitted for firms not included on this form, OR for amounts exceeding those listed on this form, will be accepted but NOT counted as Good Faith Efforts. Only the efforts the contractor made prior to the bid opening will count as Good Faith Efforts.**

I understand my obligation to abide by the **Policy** stated above **Section I**. I shall not discriminate on the basis of race, color, age, sex, national origin, or handicap in the bidding process or the performance of contracts.

I DECLARE UNDER PENALTY OF PERJURY IN THE SECOND DEGREE, AND ANY OTHER APPLICABLE STATE OR FEDERAL LAWS, THAT THE STATEMENTS MADE IN THIS DOCUMENT ARE TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Company Name:	Date: / /
Company Officer Signature:	Title:

COLORADO DEPARTMENT OF TRANSPORTATION CERTIFICATE OF PROPOSED UNDERUTILIZED DBE (UDBE) PARTICIPATION	Project No.:	
	Project Code (SA#):	
	Location:	Form #: of

Prime Contractor – Send completed/signed form to the Business Programs Office (instructions on second page). The “Eligible UDBE Amounts” submitted on this form must equal or exceed the commitment(s) documented on the **CDOT Form 714** you submitted with your bid. For the complete list of certified DBE/UDBE firms and their DBE work codes go to http://www.dot.state.co.us/app_ucp/

NOTE: See 49 CFR part 26.55, and the “DBE - Definitions and Requirements” in the *Standard Special Provisions*, for further information concerning counting DBE participation of truckers, subcontractors, suppliers and service providers toward the project’s UDBE goal.

PART 1a – TRUCKING CONTRACT

If the UDBE is being used as a trucker for one or more “trucking” DBE work codes (25500, 25505 etc.) then:

- **ACTUAL UDBE AMOUNT** = Actual contract amount for the transportation services provided by the UDBE firm and any UDBE lessees.
- **ELIGIBLE UDBE TRUCKING AMOUNT** = [(ACTUAL UDBE AMOUNT) – (Any non-UDBE lessee amounts in this contract)*]

* For work done on this UDBE contract with non-UDBE lessees, credit toward the project UDBE goal is given only for the broker fees or commissions the UDBE trucker receives for arranging the transportations services, because the services themselves are being performed by non-UDBEs.

NAME OF UDBE FIRM	CERTIFICATION #	EXPIRATION DATE	ELIGIBLE UDBE TRUCKING AMOUNT
		/ /	\$
DBE WORK CODE NUMBER(S) THIS UDBE IS BEING USED FOR : Complete list of work codes is at http://www.dot.state.co.us/app_ucp/			

PART 1b – SUBCONTRACT

- **ELIGIBLE UDBE SUBCONTRACT AMOUNT** = [(Actual UDBE contract amount) – (Any non-UDBE lower tier amounts in this contract)*]

* Work that a UDBE subcontracts to a lower tier non-UDBE firm does not count toward the project UDBE goal.

NAME OF UDBE FIRM	CERTIFICATION #	EXPIRATION DATE	ELIGIBLE UDBE SUBCONTRACT AMOUNT
		/ /	\$
DBE WORK CODE NUMBER(S) THIS UDBE IS BEING USED FOR : Complete list of work codes is at http://www.dot.state.co.us/app_ucp/			

PART 1c – SUPPLY CONTRACT

If the supplier is a UDBE with a “Type” field of “**Manufacturer**” for the item(s):

- **ELIGIBLE UDBE SUPPLY AMOUNT** = [(Actual UDBE contract amount) X 100%]

If the supplier is a UDBE with a “Type” field of “**Regular Dealer**” for the item(s):

- **ELIGIBLE UDBE SUPPLY AMOUNT** = [(Actual UDBE contract amount) X 60%]

NOTE: If the supplier is a UDBE with a “Type” field of “**Broker**” for the item(s) use **PART 1d – BROKER / SERVICE CONTRACT**.

NAME OF UDBE FIRM	CERTIFICATION #	EXPIRATION DATE	ELIGIBLE UDBE SUPPLY AMOUNT
		/ /	\$
DBE WORK CODE NUMBER(S) THIS UDBE IS BEING USED FOR : Complete list of work codes is at http://www.dot.state.co.us/app_ucp/			

PART 1d – BROKER / SERVICE CONTRACT

If purchasing materials or supplies through a UDBE with a “Type” field of “**Broker**”, count **only** the amount of brokerage commission and/or delivery service fees included in the contract. Other examples of services to include in this section are bonding, brokering, consulting, security guards, and insurance etc.

- **ELIGIBLE UDBE SERVICE FEE AMOUNT** = Actual compensation retained by the UDBE broker/agent for services rendered*

* The amounts that count toward UDBE goals are limited to the compensation retained by the UDBE broker/agent for services rendered, provided the fee/commission is determined by CDOT to be reasonable and not excessive as compared with fees customarily charged for similar services.

NAME OF UDBE FIRM	CERTIFICATION #	EXPIRATION DATE	ELIGIBLE UDBE SERVICE FEE AMOUNT
		/ /	\$
DBE WORK CODE NUMBER(S) THIS UDBE IS BEING USED FOR : Complete list of work codes is at http://www.dot.state.co.us/app_ucp/			

PART 2 – UDBE PARTICIPATION SUMMARY

<p>A) What is the total dollar value of this proposed trucking, subcontract, supply, OR broker/service contract that is eligible for counting toward contract goals?</p> <p>A = [TOTAL FROM "ELIGIBLE" COLUMNS IN PART 1]</p> <p>NOTE: Provide in actual subcontractor dollars and not prime contract prices.</p>	<p>A> \$</p>
<p>B) What is the total dollar value of proposed subcontracts that are eligible for counting towards contract goals from prior sheets/forms?</p>	<p>B> \$</p>
<p>C) What is the accumulative value of proposed subcontracts that are eligible for counting towards contract goals?</p> <p>C = [A + B]</p>	<p>C> \$</p>
<p>D) What is the original contract bid total?</p>	<p>D> \$</p>
<p>E) What is the accumulative percent of contract bid total subcontracted to all underutilized DBEs?</p> <p>E = [(C ÷ D) X 100]</p>	<p>E> %</p>

PART 3 – UDBE CONFIRMATION

<p>I confirm that my company is participating in this contract as documented in the Prime Contractor's commitment(s) in PART 1 of this form. Only the value of the work that my company is <u>actually performing</u> is being counted on this form.</p>	
<p>UDBE Firm Name:</p>	<p>Date: / /</p>
<p>UDBE Representative Signature and Title:</p>	

PART 4 – PRIME CONTRACTOR CERTIFICATION

<p>I certify that:</p> <ul style="list-style-type: none"> my company has met the contracted UDBE goals or has submitted a completed CDOT Form #718. my company has accepted a proposal from the UDBE named above. my company has notified the proposed UDBE of the contracted UDBE commitment. my company has ensured that the proposed UDBE has signed PART 3 of this form. my company's use of the proposed UDBE for the items of work listed above is a condition of the contract award. my company will invite the proposed UDBE to attend the preconstruction conference. my company will not use a substitute UDBE for the proposed UDBE's failure to perform under a fully executed subcontract, unless my company complies with the definitions and requirements section of the DBE Special Provisions. I understand that failure to comply with the information shown on this form will be considered grounds for contract termination. <p>I declare under penalty of perjury in the second degree, and any other applicable state or federal laws, that the statements made on this document are true and complete to the best of my knowledge.</p>	
<p>Prime Contractor Name:</p>	<p>Date: / /</p>
<p>Officer Signature and Title:</p>	

FORM INSTRUCTIONS

<p>Prime Contractor:</p> <ol style="list-style-type: none"> An officer of the contractor(s) must complete this form. Include only DBE firms which meet the underutilized criteria in the contract goal specification for this project (i.e., UDBE firms). Complete only relevant section(s) for PART 1. Ensure that the proposed UDBE has signed PART 3 of this form. Complete ALL sections of PART 2 and PART 4. Submit a separate CDOT Form #715 for EACH proposed UDBE. 	<ol style="list-style-type: none"> Retain a photocopy for your records. Send original to: Colorado Department of Transportation Business Programs Office 4201 E. Arkansas Ave. Denver, Colorado 80222 FAX: (303) 757-9019
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**COLORADO DEPARTMENT OF TRANSPORTATION
UNDERUTILIZED DBE (UDBE) GOOD FAITH
EFFORT DOCUMENTATION**

Project No.:	Project Code (SA#):
Location:	
Date:	No. Of Sheets Attached To Form:

The Contractor who is the apparent low bidder on a CDOT construction project, and has failed to meet the Underutilized DBE (UDBE) contract goal, shall use this form to document all good faith efforts that were made prior to bid opening by said Contractor to meet the goal. **FAILURE TO FULLY / CLEARLY COMPLETE THIS FORM MAY RESULT IN REJECTION OF THE BID.**

Each portion of this form is to be addressed in the space provided, or on supplemental sheets that follow the same tabular structure and format outlined below. Attach supporting documentation as required by CDOT. This completed form and required attachments are to be submitted to the Business Programs Office in the Center for Equal Opportunity prior to 4:00 p.m. on the day after the day bids are opened. This form may be submitted by FAX (303 -757-9019) with an original copy to follow. An extension may be granted by the DBE Liaison. Only the efforts the Contractor made prior to bid opening will count as Good Faith Efforts consistent with the instructions on CDOT Form #714.

I. Complete the following table to document sufficient bid items identified as subcontract work to be performed by UDBEs to achieve the contract goal. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces. The total percentage of subcontract items identified for UDBE participation must equal or exceed the percentage UDBE goal set by CDOT.

DBE Work Code From DBE Directory	DBE Work Code Description	Closest Matching CDOT Bid Item #	Actual % Amount Of Final Contract
UDBE CONTRACT GOAL %: _____		TOTAL CONTRACT %: _____	

DBE DIRECTORY WORK CODES

The DBE Directory can be found online at:
http://www.dot.state.co.us/app_ucp/

- DBE work codes are 5 digit numbers where the 1st digit corresponds to the overall section the code belongs to
- The 1st 3 digits of a DBE work code identify its category
- DBE work codes ending in "00" represent certification for the entire work code category
- DBE work codes NOT ending in "00" represent certification in a specific sub-category only

II. Complete the following table to summarize all outreach efforts made to UDBE firms. For each subcontract item identified, contact by mail, fax, phone and/or email **100%** of the Colorado certified UDBEs whose DBE work codes match the type of work being solicited and who are marked as "CDOT GFE Eligible" on the DBE Directory. The Contractor shall ensure that initial solicitations allow UDBEs at least 10 calendar days to participate effectively in the bidding process. In order to determine with certainty which UDBEs are interested, the Contractor is also required to take appropriate steps to follow-up initial solicitations (e.g., regional follow-up phone calls etc.). If soliciting by telephone, attach a summary telephone log of calls, including topic of discussion, date, time, name of person contacted, and the response received. If soliciting by mail, fax, and/or email, attach one example copy of the letter, fax, and/or email sent to UDBEs along with a summary log that documents all dates and responses received. Letters, faxes and/or emails must specifically identify the project, the items to be subcontracted, and the bid date. Letters, faxes and/or emails must also provide an address and phone number where specific quantities or details will be available to bidders.

DBE Work Code From DBE Directory	DBE Work Code Description	# Of UDBEs Contacted	# Of UDBEs "Eligible"	% Of UDBEs Contacted

DBE DIRECTORY UPDATES

Go to http://www.dot.state.co.us/app_ucp/ and use the "**Directory Updates**" button on the DBE Directory to submit any of the following documented updates on UDBE firms:

- Contact information changes (e.g., phone and address etc.)
- "CDOT GFE Eligibility" status changes (e.g., UDBE firm says they don't want to be contacted via GFE solicitations etc.)

Note: In order to verify all updates submitted, CDOT may request additional information from contractors and/or UDBE firms before posting requested changes to the Directory.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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ATTACHMENTS

- A. Employment Preference for Appalachian Contracts
(Included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2;
- Section IV, paragraphs 1, 2, 3, 4, and 7;
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6 Selection of Labor: During the performance of this contract, the contractor shall not:

- a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
- b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: 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, preapprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made

or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification

from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by

engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation, or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 *et seq.*, as amended by Pub. L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 *et seq.*, as amended by Pub. L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and

frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. 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 clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification, and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. 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 clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transactions:

1. The prospective lower tier participant 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 transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT PREFERENCE FOR
APPALACHIAN CONTRACTS**

(Applicable to Appalachian contracts only.)

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph 1c shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph 4 below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification,

(c) the date on which he estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, he shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within 1 week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph 1c above.

5. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.



Hepworth-Pawlak Geotechnical, Inc.
5020 County Road 154
Glenwood Springs, Colorado 81601
Phone: 970-945-7988

Fax: 970-945-8454
email: hpgeo@hpgeotech.com

July 14, 2008

Town of Minturn
Attn: Chris Cerimele
302 Pine Street
Minturn, Colorado 81645

Proposal No. 096-08

Subject: Proposal for Subsoil Study, Proposed Recreation Path, Section 2 of Eagle Valley Regional Trail, adjacent Highway 24 north of Minturn, Colorado

Dear Mr. Cerimile:

As requested by Gary Brooks with Alpine Engineering, we are providing this proposal to perform a subsoil study for the subject project. The proposal is based on our recent site meeting and discussions with Gary, and our experience in the area.

Project Data: The pathway will be about 1150 feet in length and be located between Highway 24 and the Eagle River extending to the northwest of the Minturn Road North Bridge. The path will be asphalt paved. The terrain along the northwestern 600 feet of the alignment is relatively flat and limited grading will probably be needed. The terrain along the southeastern 550 feet of the alignment is steeply sloping down from the highway to the river and a mechanically stabilized earth (MSE) retaining wall is planned along the down slope side of the path. There is apparently a sewer trunk line along at least the southeastern portion of the pathway alignment and some underground utilities.

The path alignment is at least partially within CDOT ROW and a permit will probably be needed to perform the subsurface exploration. We understand Alpine Engineering will obtain the permit from CDOT. Access for the subsurface exploration in the southeastern 550 feet of the project will be somewhat difficult and this area is within CDOTROW, and traffic control along Highway 24 will be needed.

Scope of Services: We propose to excavate 4 or 5 pits along the proposed path alignment where access and utilities allow. We expect to encounter fill over relatively dense, coarse granular soils and assume the borings will be about 5 to 6 feet deep or to refusal. The pits will be logged by a representative of our office and monitored for groundwater level. We will provide traffic control as needed for the field exploration.

Laboratory testing of samples taken from the borings will be performed to determine their engineering characteristics. The information obtained from the field and laboratory testing will be analyzed and a report prepared discussing our findings and providing recommendations for site grading including parameters for the MSE wall design subsurface drainage, compaction of earthwork, and asphalt pavement section thickness.

Cost: The total cost to perform the scope of services is estimated to be from \$4,000 to \$4,500. The fee will be based on the unit costs and other costs presented in the attached Fee Schedule. We will not exceed the total maximum fee without justification and prior authorization.

Schedule: We propose to initiate our services within about 1 week of notice to proceed and when the CDOT permit has been obtained which will may take 30 days time. Preliminary design information should be available within about 1 week after completion of the field exploration and the report should be completed within another 1 to 2 weeks. We will coordinate the field exploration and report preparation with Gary Brooks and keep you advised of our progress and any changes that are encountered.

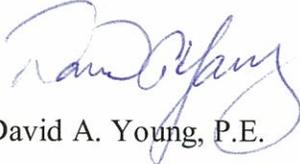
Terms and Conditions: On the reverse side of the Fee Schedule are our normal terms and conditions for performing professional services. **Please note there is a limitation of liability clause included.**

Acceptance: If this proposal meets with your approval, please sign a copy and return it to us. If you have any questions, please contact the undersigned.

Thank you for the opportunity of submitting this proposal. We are looking forward to working with you.

Sincerely,

HEPWORTH - PAWLAK GEOTECHNICAL, INC.



David A. Young, P.E.

DAY/vam

Accepted this date: _____
by: _____

Signed

cc: Alpine Engineering – Attn: Gary Brooks (brooks@alpinecivil.com)
ECO Trails – Attn: Ellie Caryl (ellie.caryl@eaglecountyl.us)

**2008
FEE SCHEDULE
GLENWOOD SPRINGS
PROFESSIONAL SERVICES**

FIELD EXPLORATION

Truck-mounted drill rig (Longyear BK-51HD or CME-45B)	\$150/hour
Mobilization	\$5.00/mile
All-terrain drill rig	Cost + 20%
Crew travel.....	\$75/man/hour
Special equipment (backhoe, drill bits, well supplies, etc.).....	Cost + 20%
Field Engineer or Technician	\$75/hour
Overtime (over 8 hours/day, Saturday, Sunday and Holidays)	1.5 x hourly rate

LABORATORY TESTING

Fee schedule available on request.

CONSTRUCTION OBSERVATION AND MATERIALS TESTING

Fee schedule available on request.

ENGINEERING

(Includes project planning, administration, analysis, consultation, report preparation, field and travel time
Expert witness service has a 50% premium hourly rate.)

Principal.....	\$160/hour
Project Manager.....	\$130/hour
Senior Project Engineer/Geologist.....	\$110/hour
Project Engineer/Geologist.....	\$100/hour
Staff Engineer/Geologist.....	\$90/hour
CAD/Drafting	\$75/hour
Word Processing	\$55/hour

OTHER DIRECT CHARGES

Auto or pickup mileage	\$.90/mile
Out of town living expenses, equipment rental, supplies, etc.	Cost + 20%

REMARKS

Late fee of \$30.00 or 1.5% per month (whichever is the greater) charged 30 days from invoice date plu collection costs, bank charges and reasonable attorney's fees. Up to 3 copies of report provided for each project. Minimum 2 hour trip charge per day for field engineer or technician.

TERMS AND CONDITIONS

STANDARD OF CARE: Services performed by HEPWORTH-PAWLAK GEOTECHNICAL, INC. (also referred to as HP GEOTECH) under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. No warranty, express or implied, is made or intended by the proposal for consulting services or by furnishing oral or written reports of the findings made. The client recognizes that subsurface conditions may vary from those encountered at the location where borings, tests or explorations are made by HP GEOTECH and that the data, interpretations and recommendations of HP GEOTECH are based solely upon the data available to HP GEOTECH. HP GEOTECH will be responsible for those data, interpretations, and recommendations, but shall not be responsible for the interpretations by others of the information developed.

LIMITATION OF LIABILITY: The client agrees to limit the liability of HP GEOTECH and its employees, directors, officers and subconsultants (collectively "HP GEOTECH") to the client, arising from or in any way related to the Project, the Agreement or the services performed, such that the total aggregate liability of HP GEOTECH to the client shall not exceed the greater of \$50,000 or HP GEOTECH's total fee received for the services rendered on this Project. Client hereby releases HP GEOTECH from any liability above such amount. This limitation of liability shall apply to any and all claims for relief made or which could be made.

CORPORATE PROTECTION: Client agrees its sole and exclusive remedy, if any, for any claim arising out of the services of HP GEOTECH shall be against HEPWORTH-PAWLAK GEOTECHNICAL, INC. and not against any individual employees, officers, owners or directors of HEPWORTH-PAWLAK GEOTECHNICAL, INC.

SITE ACCESS: Unless otherwise agreed, the client will furnish HP GEOTECH with right-of-access to the site in order to conduct the planned exploration. While HP GEOTECH will take reasonable precautions to limit damage to the property, it is understood by the client that in the normal course of services some damage may occur, the restoration of which is not part of this Agreement and shall not be the obligation of HP GEOTECH. Unless otherwise agreed, the client will secure all necessary approvals, permits, licenses and consents necessary to the performance of the services hereunder.

UTILITIES: In the performance of its services, HP GEOTECH will take reasonable precautions to avoid damage or injury to subterranean structures or utilities. The client agrees to hold HP GEOTECH harmless and indemnify HP GEOTECH for any claims, payments or other liability, including attorney's fees and costs, incurred by HP GEOTECH for any damages to subterranean structures or utilities which are not called to HP GEOTECH's attention and correctly shown on the plans furnished to HP GEOTECH.

UNANTICIPATED HAZARDOUS MATERIALS: It shall be the duty of the owner, the client, or their representative to advise HP GEOTECH of any known or suspected hazardous substances which may exist on or near any premises upon which services are to be performed by HP GEOTECH's employees, agents or subcontractors. If HP GEOTECH observes or suspects the existence of unanticipated hazardous materials during the course of providing services, HP GEOTECH may at its option terminate further services on the project and notify client of the condition. Services will be resumed only after a renegotiation of scope of services and fees. In the event that such renegotiation cannot occur to the satisfaction of HP GEOTECH, HP GEOTECH may at its option terminate this contract.

MOLD or OTHER BIOLOGICAL CONTAMINANTS (MOBC): HP GEOTECH's services do not include determining the presence, prevention or possibility of MOBC developing in the future. If the client is concerned about MOBC, then a professional in this special field of practice should be consulted.

INVOICES: HP GEOTECH will submit invoices to the client monthly and a final bill upon completion of services. Unless otherwise noted, fees will be based on the prevailing Fee Schedule in effect when the services are performed. Payment is due upon presentation of invoice and is past due thirty (30) days from the invoice date. Client agrees to pay a late fee of \$30.00 or one and one half percent (1½%) per month (whichever is the greater) on past due accounts. Client also agrees to pay, in addition to judgement or settlement sums due, all costs and expenses including court costs, reasonable attorney's fees and staff time computed according to HP GEOTECH's prevailing Fee Schedule incurred by HP GEOTECH relating to collection procedures on overdue accounts.

OWNERSHIP OF DOCUMENTS: All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by HP GEOTECH as instruments of service shall remain the property of HP GEOTECH. HP GEOTECH shall retain all common law, statutory and other reserved rights, including the copyright thereto.

SAMPLES: HP GEOTECH will retain all soil and rock samples that are transported to HP GEOTECH's laboratories until submission of the project report. Further storage or transfer of samples can be made at client's expense upon written request.

DISPUTE RESOLUTION: All claims and disputes between HP GEOTECH and client arising out of or in any way related to this Agreement will be submitted to mediation before and as a condition precedent to other remedies provided by law.

VENUE: If a dispute at law arises related to the services provided under this Agreement then the claim will be brought and tried in a Court of competent jurisdiction in the county where HP GEOTECH's principal place of business is located.

NO THIRD PARTY BENEFICIARIES: Nothing contained in this agreement shall create a contractual relationship with or a cause of action in favor of any third party against either HP GEOTECH or client.

TERMINATION: In the event of termination of the Agreement by either party, the client shall within fifteen (15) calendar days of termination pay HP GEOTECH for all services rendered and all reimbursable costs incurred by HP GEOTECH up to date of termination, in accordance with the payment provisions of this Agreement. HP GEOTECH shall have no liability to the client and the client agrees to make no claim for any delay or damage as a result of such termination caused by any breach of this Agreement by the client.

March 4, 2009.

Eco Trails of Eagle County
P.O. Box 1070
Gypsum, CO. 81637

Attn: Mr. Harry Taylor
Director

Re: **Engineering Design Services
Proposed MSE Retaining Wall
Eco Regional Trail
Dowd Junction to Minturn Road
Minturn, Colorado
Terracon Project No 65095802**

At your request, Terracon Consultants, Inc. (Terracon) has completed engineering design of the proposed MSE retaining walls for the referenced project. Our design services have been completed subject to the Terracon Proposal No G081287 dated December 19, 2008. Engineering plans and calculations used in the design of the retaining walls are attached. Supporting design documentation, including geogrid and connection strength data are also attached. Sheet RW-2 of the project plans provides the Technical Scope of Work, along with material requirements and specifications for construction of the retaining walls.

The engineering design has been completed on the basis of information provided to Terracon as outlined in Section 1.03 of the Technical Scope of Work as shown on Sheet RW-2 of the project plans. The engineering design has been based on the following assumed geotechnical parameters:

Wall Area	Cohesion, c psf	Internal Friction (ϕ)	Unit Weight (γ) pcf
Reinforced (CDOT Class 1)	--	34	130
Retained	--	28	125
Foundation	--	28	125
Foundation (global analyses)	100	30	125

The Geotechnical Engineer shall confirm that the actual foundation conditions meet or exceed assumed design assumptions. Scour protection should be provided to avoid erosion at the base of the wall.

With this submittal, our engineering design services for the project are complete. The Technical Scope of Work also calls for certain testing, inspection and post design engineering services. Terracon is available to discuss the scope of work that you may require of us for post design services on this project.

Terracon Consultants, Inc. 4685 S. Ash Avenue, Tempe, Arizona 85282
P [480] 897 8200 F [480] 897 1133 terracon.com

Geotechnical



Environmental



Construction Materials



Facilities

NCMA DESIGN METHOD Eco Regional Trail

PROJECT IDENTIFICATION

Title: Eco Regional Trail
Project Number: 65095802
Client: Eco Trails of Eagle County
Designer: AMV
Station Number: Wall A, Sta 1+15

Description:

Company's information:

Name: Terracon Consultants
Street: 4685 S. Ash Ave. Suite H-4

Tempe, AZ 85282
Telephone #: 480-897-8200
Fax #: 480-897-1133
E-Mail: amvieira@terracon.com

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Original date and time of creating this file: Thu Feb 12 09:41:27 2009

PROGRAM MODE:

ANALYSIS
of a SIMPLE STRUCTURE
using GEOGRID as reinforcing material.

SOIL DATA**REINFORCED SOIL**

Unit weight, γ 130.0 lb/ft³
Design value of internal angle of friction, ϕ 34.0°

RETAINED SOIL

Unit weight, γ 125.0 lb/ft³
Design value of internal angle of friction, ϕ 28.0°

FOUNDATION SOIL (Considered as an equivalent uniform soil)

Equivalent unit weight, γ_{equiv} 125.0 lb/ft³
Equivalent internal angle of friction, ϕ_{equiv} 28.0°
Equivalent cohesion, c_{equiv} 0.0 lb/ft²

Water table is at wall base elevation

LATERAL EARTH PRESSURE COEFFICIENTS

K_a (internal stability) = 0.2543
Inclination of internal slip plane, $\psi = 58.35^\circ$.
 K_a (external stability) = 0.3189

BEARING CAPACITY

Bearing capacity coefficients (calculated by MSEW): $N_c = 0.00$ $N_\gamma = 3.51$

SEISMICITY

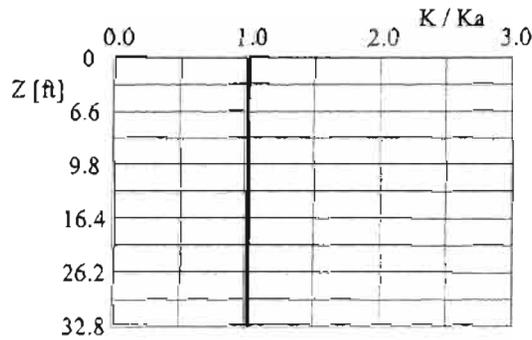
Not Applicable

INPUT DATA: Geogrids
(Analysis)

D A T A	Geognd type #1	Geognd type #2	Geognd type #3	Geognd type #4	Geogrid type #5
Tult (lb/ft)	3500.0				
Durability reduction factor, RFd	1.10				
Installation-damage reduction factor, RFid	1.20				
Creep reduction factor, RFc	1.58	N/A	N/A	N/A	N/A
Fs-overall for strength	N/A				
Coverage ratio, Rc	1.000				
Cds = $\tan(\alpha) / \tan(\Phi_{hi, reinforced})$	0.58				
Ci	0.80	N/A	N/A	N/A	N/A

Variation of Lateral Earth Pressure Coefficient With Depth

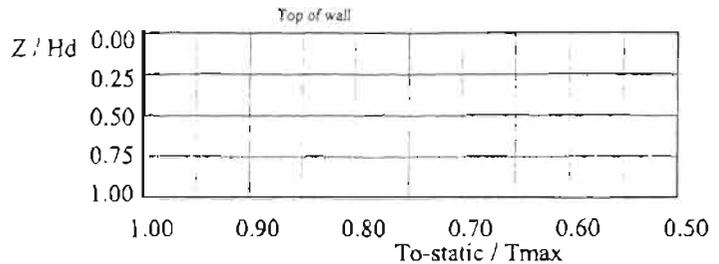
Z	K / Ka
0 ft	1.00
3.3 ft	1.00
6.6 ft	1.00
9.8 ft	1.00
13.1 ft	1.00
16.4 ft	1.00
19.7 ft	1.00



**INPUT DATA: Facia and Connection
(Analysis)**

FACIA type: Facing enabling frictional connection of reinforcement (e.g., modular concrete blocks, gabions)
 Depth/height of block is 1.00/0.67 ft. Horizontal distance to Center of Gravity of block is 0.50 ft.
 Average unit weight of block is $\gamma_f = 125.00 \text{ lb/ft}^3$

Z / Hd	To-static / Tmax
0.00	1.00
0.25	1.00
0.50	1.00
0.75	1.00
1.00	1.00



Peak Strength Criterion

Geogrid Type #1		Geogrid Type #2		Geogrid Type #3		Geogrid Type #4		Geogrid Type #5	
Weight of blocks	Tultconn								
0.0	1000.00								
3476.9	1997.00	N/A		N/A		N/A		N/A	

Service Strength Criterion @ 3/4"

Geogrid Type #1		Geogrid Type #2		Geogrid Type #3		Geogrid Type #4		Geogrid Type #5	
Weight of blocks	Tconn @ 3/4"								
0.0	700.00								
3476.5	1313.00	N/A		N/A		N/A		N/A	

Ultimate Strength Criterion

Weight of blocks	Vu
0.0	770.00
3984.1	2800.00

Service Strength Criterion

Weight of blocks	Vu'
0.0	770.00
3984.1	2800.00

(1) (2) (3) (4) (5) Weight of blocks, Tultconn., Tconn@3/4", Vu and Vu' are in [lb/ft]

D A T A (for connection only)	Type #1	Type #2	Type #3	Type #4	Type #5
Product Name	Strata SG..	N/A	N/A	N/A	N/A
Durability reduction factor, RFd	1.00	N/A	N/A	N/A	N/A
Creep reduction factor, RFc	1.00	N/A	N/A	N/A	N/A
Overall factor of safety: connection break, Fs	N/A	N/A	N/A	N/A	N/A
Overall factor of safety: connection pullout, Fs	N/A	N/A	N/A	N/A	N/A

ANALYSIS: CALCULATED FACTORS (Static conditions)

Bearing capacity, $F_s = 2.44$, Meyerhof stress = 1097 lb/ft².

Foundation Interface: Direct sliding, $F_s = 2.342$, Eccentricity, $e/L = 0.0881$, F_s -overturning = 5.53

GEOGRID				CONNECTION			Geogrid strength F_s	Pullout resistance F_s	Direct sliding F_s	Eccentricity e/L	Product name
#	Elevation [ft]	Length [ft]	Type #	F_s @ 3/4" [service criterion]	F_s -peak [failure criterion]	F_s -overall [geogrid strength]					
1	1.33	6.00	1	1.90	2.76	3.97	3.974	6.484	3.162	0.0602	Strata SG ..
2	2.67	6.00	1	3.61	5.23	7.84	7.842	7.319	4.254	0.0365	Strata SG ..
3	4.00	6.00	1	2.81	4.05	6.34	6.342	2.686	6.653	0.0175	Strata SG ..

GLOBAL/COMPOUND STABILITY ANALYSIS (Using Bishop method and ROR = 0.0)

For the specified search grid, the calculated minimum F_s is 1.616

(it corresponds to a critical circle at $X_c = -3.00$, $Y_c = 10.47$ and $R = 13.47$ [ft]).

BEARING CAPACITY for GIVEN LAYOUT

	STATIC	SEISMIC	UNITS
(Water table is at wall base elevation)			
Ultimate bearing capacity, q_{ult}	2253	N/A	[lb/ft ²]
Meyerhof stress, σ_v	1123.9	N/A	[lb/ft ²]
Eccentricity, e	0.28	N/A	[ft]
Eccentricity, e/L	0.041	N/A	
Fs calculated	2.00	N/A	
Base length	7.00	N/A	[ft]



SCALE:

0 2 4 6 [ft]

DIRECT SLIDING for GIVEN LAYOUT
(for GEOGRID reinforcements)

Along reinforced and foundation soils interface: F_s -static = 2.342

#	Geogrid Elevation [ft]	Geogrid Length [ft]	F_s Static	F_s Seismic	Geogrid Type #	Product name
1	1.33	6.00	3.162	N/A	1	Strata SG 200
2	2.67	6.00	4.254	N/A	1	Strata SG 200
3	4.00	6.00	6.653	N/A	1	Strata SG 200

ECCENTRICITY for GIVEN LAYOUT

At interface with foundation: e/L static = 0.0881; Overturning: F_s -static = 5.53

#	Geogrid Elevation [ft]	Geogrid Length [ft]	e/L Static	e/L Seismic	Geogrid Type #	Product name
1	1.33	6.00	0.0602	N/A	1	Strata SG 200
2	2.67	6.00	0.0365	N/A	1	Strata SG 200
3	4.00	6.00	0.0175	N/A	1	Strata SG 200

RESULTS for STRENGTH

Live Load included in calculating Tmax

#	Geogrid Elevation [ft]	Tavailable [lb/ft]	Tmax [lb/ft]	Tmd [lb/ft]	Specified minimum Fs-overall static	Actual calculated Fs-overall static	Specified minimum Fs-overall seismic	Actual calculated Fs-overall seismic	Product name
1	1.33	1678	442.45	N/A	N/A	3.793	N/A	N/A	Strata SG ..
2	2.67	1678	275.98	N/A	N/A	6.081	N/A	N/A	Strata SG ..
3	4.67	1678	263.93	N/A	N/A	6.358	N/A	N/A	Strata SG ..

RESULTS for PULLOUT

Live Load included in calculating Tmax

NOTE: Live load is not included in calculating the overburden pressure used to assess pullout resistance.

#	Geogrid Elevation [ft]	Coverage Ratio	Tmax [lb/ft]	Tmd [lb/ft]	Le [ft] (see NOTE)	La [ft]	Avail. Static Pullout, Pr [lb/ft]	Specified Static Fs	Actual Static Fs	Avail. Seism. Pullout, Pr [lb/ft]	Specified Seismic Fs	Actual Seismic Fs
1	1.33	1.000	442.4	N/A	5.18	0.82	3632.8	N/A	8.211	N/A	N/A	N/A
2	2.67	1.000	276.0	N/A	4.35	1.65	2235.7	N/A	8.101	N/A	N/A	N/A
3	4.67	1.000	263.9	N/A	3.12	2.88	727.0	N/A	2.754	N/A	N/A	N/A

RESULTS for CONNECTION (static conditions)
 Live Load included in calculating Tmax

#	Geogrid Elevation (ft)	Connection force, To (lb/ft)	FS - Bulging		Available connection strength, T _{cl} -failure criterion (lb/ft)	Available connection strength, T _{cs} -service criterion (lb/ft)	Available Geogrid strength, T _{available} (lb/ft)	Fs-overall connection peak		Fs-overall connection service		Fs-overall Geogrid strength		Product name
			Peak	Deformation				Specified	Actual	Specified	Actual	Specified	Actual	
1	1.33	422	8.35	8.35	1167	803	1678	N/A	2.76	N/A	1.90	N/A	3.97	Strata SG ..
2	2.67	214	9.84	9.84	1119	773	1678	N/A	5.23	N/A	3.61	N/A	7.84	Strata SG ..
3	4.00	265	5.03	5.03	1072	744	1678	N/A	4.05	N/A	2.81	N/A	6.34	Strata SG ..

GLOBAL/COMPOUND STABILITY ANALYSIS (Using Bishop method and ROR = 0.0)

For the specified search grid, the calculated minimum F_s is 1.608

(it corresponds to a critical circle at $X_c = -3.17$, $Y_c = 11.56$ and $R = 14.43$ [ft] where $(x=0, y=0)$ is taken at the TOE or $X_c = 13.50$, $Y_c = 111.56$ and $R = 14.43$ [ft] when the terrain coordinate system is used as shown in the table below)

TERRAIN/WATER PROFILE

Point	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11
Soil layer #1:	$\gamma = 125.00$ [lb/ft ³]		$\phi = 30.0^\circ$		$c = 100.00$ [lb/ft ²]						
x [ft]	0.0	1.0	2.6	3.0	4.0	16.6	43.0	44.0	45.0	47.5	50.0
y [ft]	95.4	95.4	95.4	95.4	95.4	101.7	100.0	100.0	100.0	120.0	120.0
Water table:											
x [ft]	0.0	2.0	4.0	5.0	6.0	8.0	9.9	10.1	12.0	19.0	20.0
y [ft]	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5