



**US Army Corps
of Engineers®**
Seattle District

RFQ No. W912DW-04-Q-0024

**PROJECT: Beaver Creek Bridge
Helena Ranger District**

LOCATION: Helena, MT

Construction Solicitation

UNRESTRICTED: Open to large and Small Business

**Award to be made pursuant to the Small Business
Competitiveness Demonstration Program**

Closing Date: 12 January 2004

Closing Time: 10:00 AM LOCAL TIME PST

**REMARKS: Quotes may be faxed to (206) 764-6817, Attention: Scott Britt, or emailed to
scott.w.britt@usace.army.mil**

REQUEST FOR QUOTATIONS <i>(THIS IS NOT AN ORDER)</i>		THIS RFQ <input type="checkbox"/> IS <input checked="" type="checkbox"/> IS NOT A SMALL BUSINESS SET-ASIDE			PAGE 1 OF 46 PAGES	
1. REQUEST NO. W912DW-04-Q-0024	2. DATE ISSUED 18-Dec-2003	3. REQUISITION/PURCHASE REQUEST NO. W68MD9-3323-5779	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1		RATING	
5a. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT 4735 EAST MARGINAL WAY SOUTH SEATTLE WA 98134-2329			6. DELIVER BY (Date) SEE SCHEDULE			
			7. DELIVERY <input checked="" type="checkbox"/> FOB DESTINATION <input type="checkbox"/> OTHER (See Schedule)			
5b. FOR INFORMATION CALL: (Name and Telephone no.) (No collect calls) SCOTT W BRITT 206-764-3517			9. DESTINATION (Consignee and address, including ZIP Code) SEE SCHEDULE FOR FURTHER INFORMATION. US ARMY CORPS OF ENGRS SEATTLE WA 98124-3755 TEL: FAX:			
8. TO: NAME AND ADDRESS, INCLUDING ZIP CODE			10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE IN BLOCK 5a ON OR BEFORE CLOSE OF BUSINESS: (Date) 12-Jan-2004			
IMPORTANT: This is a request for information, and quotations furnished are not offers. If you are unable to quote, please so indicate on this form and return it to the address in Block 5a. This request does not commit the Government to pay any costs incurred in the preparation of the submission of this quotation or to contract for supplies or services. Supplies are of domestic origin unless otherwise indicated by quoter. Any representations and/or certifications attached to this Request for Quotations must be completed by the quoter.						
11. SCHEDULE (Include applicable Federal, State, and local taxes)						
ITEM NO. (a)	SUPPLIES/ SERVICES (b)		QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)
SEE SCHEDULE						
12. DISCOUNT FOR PROMPT PAYMENT		a. 10 CALENDAR DAYS %	b. 20 CALENDAR DAYS %	c. 30 CALENDAR DAYS %	d. CALENDAR DAYS No. %	
NOTE: Additional provisions and representations <input type="checkbox"/> are <input type="checkbox"/> are not attached.						
13. NAME AND ADDRESS OF QUOTER (Street, City, County, State, and ZIP Code)			14. SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION		15. DATE OF QUOTATION	
			16. NAME AND TITLE OF SIGNER (Type or print)		TELEPHONE NO. (Include area code)	

Section B - Supplies or Services and Prices

INSTRUCTIONS TO BIDDERS

1. INQUIRIES: All questions concerning this project must be directed to the Contract Administrator:

Scott Britt – Contract Administrator
Email: scott.w.britt@usace.army.mil
Phone: 206 764-3517
Fax: 206 764-6817

Mailing Address:
ATTN: Scott Britt
CENWS-CT-PR
PO BOX 3755
Seattle WA 98124-3755

2. Responses may be emailed, faxed or mailed to the Contract Administrator until the date and time set for closing.
3. Marking of Quotes:

Quotes shall be plainly marked as follows:

**QUOTE FOR: Beaver Creek Bridge
Helena Ranger District
Helena, MT**

Request for Quote No. W912DW-04-Q-0024

CLOSING DATE AND TIME: January 12 2004, 10:00 AM. Local Time

AMENDMENTS NUMBERED _____ HAVE BEEN RECEIVED

4. **PROSPECTIVE OFFERORS**: The Director of Defense Procurement has issued a final rule amending the Defense Federal Acquisition Regulations Supplement (DFARS) to require contractors to be registered in the DOD Central Contractor Registration (CCR) for awards resulting from solicitations issued after May 31, 1998.

This rule more efficiently implements the Debt Collection Improvement Act of 1996, as it requires contractors to be registered in CCR for consideration of future solicitations, awards, and payment. Registration is required prior to award of any contract, basic agreement, basic ordering agreement, or blanket purchase agreement from a solicitation issued after May 31, 1998.

**LACK OF REGISTRATION IN THE CCR DATABASE
WILL MAKE AN OFFER INELIGIBLE FOR AWARD.**

The web site may be accessed at www.ccr.gov. You may call 1-888-227-2423 to obtain a Registration Packet or to register On Line at www.acq.osd.mil/ec.

5. Unless stated otherwise, award will be made to the responsive responsible offer with the lowest total price.
6. **ELECTRONIC FUNDS TRANSFER (EFT)**: Effective 99 Jun 01, the Government will make all payments by EFT (unless the Government VISA credit card is accepted). The only exceptions are: 1) Foreign Vendors; 2) Government Agencies, and 3) One time payments. The EFT forms and instructions are on the USACE Finance Center (UFC) Web Page; www.fc.usace.army.mil The UFC points of contact for this action are Ms. Nita Clower, 901/874-8542 and Mr. Michael Rye, 901/874-8543.
7. Please provide the following information:

Federal Taxpayer's ID Number: _____
DUNS Number: _____
Remit to Address:
Company Name: _____

Address: _____
City/State/Zip: _____

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
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0001

BEAVER CREEK BRIDGE PROJECT CONSTRUCTION
FFP

NOTE: This is an original project solicitation - only information incorporated either in full text or by reference in this document applies to this project.

Provide all supplies, services, and labor necessary to complete Beaver Creek Bridge Project Construction at Helena Ranger District in Helena, Montana in accordance with the incorporated Statement of Work, Specifications, Drawings, and Wagerates.

Notice to Proceed will be granted to the awarded Contractor upon receipt of payment bond for 100% of the awarded contract amount.

Award is to be made pursuant to the Small Business Competitiveness Demonstration Program.

PURCHASE REQUEST NUMBER: W68MD9-3323-5779

NET AMT

FOB: Destination

SCHEDULE

Item	Description	Method		Quantity	Unit Cost	Cost
		Meas	Unit			
175(06)	Staking Major Structures, Type Bridge, Precision A	AQ	EA	1		
202(05)	Removal of Existing Timber Bridge	LSQ	LS	1		
203(11)	Embankment, Placement Method 3	DQ	CY	404		
204(05)	Straw/Hay Bales	AQ	EA	30		
204(19)	Soil Erosion & Pollution Control	LSQ	LS	1		
206(07)	Structural Excavation	LSQ	LS	1		
251(01)	Placed Riprap, Class 5 Method A	DQ	CY	150		
260(01)	Geocell Abutment Stabilization 6" Depth	DQ	SY	43		
304(10)	Crushed Aggregate, Type Surfacing Grading G Compaction B	AQ	CY	65		
552(01)	Structural Concrete Class A(AE)	DQ	CY	11		
554(03)	Reinforcing Steel	LSQ	LS	1		
560(01)	Bridge Superstructure	LSQ	LS	1		
601(01)	Mobilization (Including Temp Bypass Bridge)	LSQ	LS	1		
633(01)	Wood Posts	AQ	LF	32		
633(17)	Object Markers	AQ	EA	4		
637(01)	Hydraulic Excavator With Thumb Minimum 150 Flywheel HP AQ	HR	16			
Total Construction Costs =						

Section C - Descriptions and Specifications

STATEMENT OF WORK

SECTION 01000
STATEMENT OF WORK
BEAVER CREEK BRIDGE - 138-11.0
HELENA RANGER DISTRICT
HELENA, MONTANA
(LEWIS & CLARK COUNTY)

12 DECEMBER 2003

A. DESCRIPTION OF WORK: This project is for the removal and replacement of the existing treated timber bridge over Beaver Creek. The superstructure for the replacement bridge is to be a Glu-Lam deck on steel or wood stringers on a concrete grade beam substructure with geocell abutment stabilization. The work includes but is not limited to removal and disposal of an existing treated timber bridge, excavation, riprap, construction approach roadways, foundations, installation and removal of a temporary bridge, the bridge superstructure and all other incidental items necessary to complete the project in accordance with the plans and specifications. During construction, a temporary bypass bridge will be required to maintain traffic in the location designated on the plan and profile sheet. Work within the stream channel will not be allowed to begin prior to July 1, and must be completed prior to October 10, 2004. The project is located approximately 11 miles Northwest of Hauser Dam in the Helena National Forest in Section 27, Township 13 North, Range 1 West, Lewis and Clark County, Montana.

B. DRAWINGS & SPECIFICATIONS

Title Sheet

Sheet 1 of 11 - PLAN & PROFILE

Sheet 2 of 11 - GENERAL LAYOUT

Sheet 3 of 11 - ABUTMENT DETAILS

Sheet 4 of 11 - TYPICAL SECTION & ESTIATED QUANTITIES

Sheet 5 of 11 - STEEL / TIMBER STRUCTURE DETAILS

Sheet 6 of 11 - TIMBER ALTERNATIVE TYPICAL SECTION & EST. QUANTITY

Sheet 7 of 11 - TIMBER ALTERNATIVE STEEL STRUCTURE DETAIL

Sheet 8 of 11 - CURB DETAILS

Sheet 9 of 11 - FIELD SPLICE DETIALS

Sheet 10 of 11 - ROAD X-SECTION DETAILS

Sheet 11 of 11 - BORROW SITE DETAIL

Special Project Specification – 96 SPS 101- Abbreviations, Acronyms, & Terms

Special Project Specification – 96 SPS 102 - Definitions

Special Project Specification – 96 SPS 103 - Intent of Contract

Special Project Specification – 96 SPS 104 - Maintenance of Traffic

Special Project Specification – 96 SPS 105 - Control of Materials

Special Project Specification – 96 SPS 106 - Measurement & Payment

Special Project Specification – 96 SPS 160 - Quality Control & Quantity Measurement

Special Project Specification – 96 SPS 175 - Construction Staking

Special Project Specification – 96 SPS 204 - Soil Erosion & Water Pollution Control

Special Project Specification – 96 SPS 206 - Structural Excavation for Major Structures

Special Project Specification – 96 SPS 251 - Riprap

Special Project Specification – 96 SPS 260 - Geocell Abutment Stabilization

Special Project Specification – 96 SPS 552 - Structural Concrete

Special Project Specification – 96 SPS 555 - Steel Structures

Special Project Specification – 96 SPS 557 - Timber Structure

Special Project Specification – 96 SPS 560 - Bridge Superstructure

Special Project Specification – 96 SPS 601 - Mobilization
Special Project Specification – 96 SPS 637 - Equipment Rental
Special Project Specification – 96 SPS 703 - Aggregate
Special Project Specification – 96 SPS 726 - Geocell

1. “Forest Service Specifications for Construction of Roads & Bridges, Revised August, 1996, EM-7720-100” are included in this solicitation by reference. The requirements contained in these specifications are hereby made part of this solicitation and any resultant contract. Measurement and payment for all work in this contract will be paid for in Imperial (English) units, ie., pay units in the Schedule of Items are Imperial, converted from the corresponding Metric Pay Units in the Specifications. Also see Section 106 Special Project Specification.
2. The publication “Forest Service Specifications for Construction of Roads & Bridges, Revised August, 1996, EM-7720-100” is available for purchase from the Superintendent of Documents, US Government Printing Office (GPO), Washington, DC 20402-9328; they are also available on the internet: <http://www.gpo.gov>. The GPO stock number is ISBN 0-16-048801-X. Call (202) 512-1800 for pricing and orders.

C. CONSTRUCTION PHASING AND RESTRICTIONS

1. The following phasing and restriction related issues might affect the work.
 - a. The Contractor shall observe all local, state, and federal regulations while performing this contract. All construction shall meet or exceed applicable industry standards.
 - b. The contractor shall be responsible for obtaining any permits, approvals, or licenses (not provided by the Government) required to perform the work.
 - c. U.S. Army Corps of Engineers, Safety and Health Requirements Manual, EM 385-1-1 shall be considered a part of this contract and will be enforced as such. A site-specific safety plan shall be submitted for approval prior to the beginning of construction.
 - d. The contractor shall attend a pre-construction meeting presided by the C.O.E. Project Lead prior to commencing construction activities. The contractor shall contact the C.O.E. Project Lead within 5-days of issuance of contract NTP to establish a date and time for the pre-work meeting. The contractor shall indicate the start and finish date for each item at the pre-construction meeting.

D. CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1. A staging area shall be provided for the contractor as directed by the Project Lead.
2. Work shall be performed between the hours of 7:00 AM and 5:30 PM Monday through Friday unless the Project Lead approves an alternate work schedule.
3. The Contractor is responsible for security of his own property and security of government property when construction activities affect existing security measures.
4. Government Furnished Materials - Riprap and borrow source for Embankment (see Special Project Specification No. 105).

E. SUBMITTALS

As required in the Statement of Work and Special Project Specifications.

F. CONTRACT COMPLETION REQUIREMENTS

N/A

G. PERFORMANCE PERIOD

The Contractor shall be required to commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed and complete all work under this contract, including final cleanup of the premises, within 106 calendar days after the Notice to Proceed. Actual fieldwork must be completed within one field season within the time frame of July 1 to October 15 and the new bridge must be in operation by October 15, 2004.

H. POINTS OF CONTACT – POST AWARD

Send all correspondence to:

U.S. Army Corps of Engineers
Small Projects Office
ATTN: Nilo Bonifacio
PO Box 92146
Tillicum, WA 98429 – 0146

Project lead

Kurt A. Anderson, P.E.
Office (406) 541-4845
Cell (406) 370-6938

Quality Assurance Representative

Terry Hoffman
Office (406) 541-4845

Others to be determined

POSTSCRIPT:

ADDITIONAL INFORMATION:

Suppliers of treated timber products are Permapost, Timberworks, and McCormick. AISC Certified plants are Allied (Lewistown MT), Midwest Industries (Bozeman MT), Selway (Stevensville MT), Rosco Steel (Billings & Missoula MT). Kadrmas Lee & Jackson (Helena MT), completed the original survey, contact is Mike Wagner, 406-449-7764.

A temporary bridge is available for contractor use. The temporary bridge is located at Rimini, approximately 50 miles from the Beaver Creek site. Bridge sills are located at the Helena District Office. Awarded Contractor will be responsible for temporary bridge and sill transportation, as well as the assembly of the temporary bridge on the sills at the project site..

At the project's completion, the temporary bridge must be disassembled and returned, with the sills, to the Helena District Office

SPS 101

SECTION 101 - ABBREVIATIONS, ACRONYMS, & TERMS

101.01 Terms, Organizations, & Standards.

(a) Acronyms. Add:

BMP	Best Management Practice
EPA	Environmental Protection Association
FPL	Forest Products Laboratory
SSPC	Steel Structures Painting Council
WCLIB	West Coast Lumber Inspection Bureau
WWPA	Western Wood Products Association
USN	United States Navy
LSQ	Lump Sum Quantity

SPS 102

SECTION 102 – DEFINITIONS

Add the following:

Noxious Weeds or Weeds. Any exotic plant species established or that may be introduced in the State which may render land unfit for agriculture, forestry, livestock, wildlife, or other beneficial uses and which is designated by the State’s Department of Agriculture, or by the County’s weed management district, or by other appropriate agencies having jurisdiction, or as listed on the current “All States Noxious Weed List.”

Shop Drawings. Incidental design sheets and/or drawings which the Contractor is required to submit to the Government. Shop drawings shall conform to the contract requirements, but they are not part of the contract drawings. They may be drawings, diagrams, schedules, performance charts, brochures, and similar data prepared by the Contractor, subcontractor, manufacturer, suppliers, or distributors that illustrate how specific portions of the work are to be fabricated or installed.

Weed Management District. A weed management district is any area of land identified for the purpose of weed management or control. Such an identified land area may be, but is not limited to, one of the following: a project or job site, a County, two or more Counties, or a National Forest.

SPS 103

SECTION 103 – INTENT OF CONTRACT

Add the following:

This project is for the removal and replacement of the existing treated timber bridge over Beaver Creek. The superstructure for the replacement bridge is to be a Glu-Lam deck on steel or wood stringers on a concrete grade beam substructure with geocell abutment stabilization. The project is located approximately 11 miles Northwest of Hauser Dam in the Helena National Forest in Section 27, Township 13 North, Range 1 West, Lewis and Clark County, Montana.

During construction, a temporary bypass bridge will be required to maintain traffic in the location designated on the plan and profile sheet.

Work within the stream channel will not be allowed to begin prior to July 1, and must be completed prior to October 10 of the year designated by the Government.

The work includes but is not limited to removal and disposal of an existing treated timber bridge, excavation, riprap, construction approach roadways, foundations, installation and removal of a temporary bridge, the bridge superstructure and all other incidental items necessary to complete the project in accordance with the plans and specifications.

SPS 104

SECTION 104 – MAINTENANCE OF TRAFFIC

104.01 Roads to Be Constructed

Delete the last two paragraphs of this subsection and add the following:

“The Contractor shall be responsible for the safe passage of normal use traffic (passenger cars, RV’s, horse trailers) through the construction site during construction and outside work hours.” The Contractor will install a detour and temporary bypass bridge to allow public access through the project site during construction. Contractor will not be permitted to operate equipment in the stream as a means of access for equipment and materials. The temporary bypass bridge installed by the contractor must meet the following requirements:

- a. Temporary bypass bridge shall meet AASHTO “Standard Specification for Highway Bridge,” 16th Edition, with all current interim specifications and the following criteria:

- | | |
|---------------------------|--|
| (1) Design Live Load: | HS20 Loading or greater |
| (2) Current load ratings: | Adequate to carry all Montana State Highway legal loads |
| (3) Traffic: | Single Lane; 14-foot curb-to-curb width. |
| (4) Railing | 15-inch-high curbs (no approach rail). |
| (5) Span | Temporary bridge location will determine span required to keep approach road embankment out of the stream channel (Estimated at 28’ min.). |
| (1) Clear Height | Maintain 2 ft. clear height from bottom of bridge to water surface at time of construction. |

No railroad flat cars will be permitted for use as the temporary bypass bridge. The Helena NF has a portable bridge meeting the above requirements that will be made available at the Contractor’s request. The bridge is a 28 foot, glu-lam slab panel bridge (4 panels, 4-ft wide each, total bridge weight approximately 30,000 lbs). The bridge is currently in place at a site near Rimini, MT. Contractor will be required to disassemble, haul and install to Beaver Creek. Sills for the bridge are located at the Helena District Office. Once the temporary bypass bridge is no longer needed, the Contractor must remove and return the bridge to the Helena District Office.

Temporary bypass bridge to be installed and left in place only during period of July 1 through October 10 of the year designated by Government.

Contractor shall be responsible for construction and maintenance of temporary bypass bridge and approach roads to safely pass public traffic through road No. 138. Contractor shall prevent sediment from being introduced into Beaver Creek during construction and maintenance of approach roads for the temporary bridge. No excavation will be allowed for placement of the temporary bridge due to utility line in the area (Shown on attached Plan and Profile Drawing 1).

Temporary bridge location shall be approved by Project Lead.

Contractor shall be responsible for removal of temporary bypass bridge, approach roads and restoration of the site.

Borrow material for construction of temporary bridge and road base course will be obtained from within road No. 138 approximately 2.25 miles Southwest of the bridge location as shown on attached site map and approved by the Government. Borrow material will be extracted according to detail in attached drawing 11. All borrow material must be extracted within a single 5-day workweek (no weekends). Fill may be stockpiled near bridge site as approved by Project Lead.

A maximum traffic delay of one (1) hour will be allowed during borrow extraction. Traffic delay periods begin when the first traffic vehicle arrives at the closure site. This traffic delay period is the maximum delay traffic should experience within the entire construction area.

Contractor is responsible for installing and maintaining all necessary signing. Signing shall be in conformance with Manual on Uniform Traffic Control Devices (MUTCD). Contractor shall submit a traffic control and sign plan to Project Lead for approval.

Payment

104.03 Basis

“Payment for any work described under this section shall be paid for under item **601 (01) “Mobilization”**

SPS 105

SECTION 105-CONTROL OF MATERIALS

105.06 Material Sources

Under (a) Designated Sources, Add the following after the first sentence of the second paragraph.

Riprap Source – Government Furnished – A material source for riprap has been designated approximately 2.5 miles Southwest of the Beaver Creek #3 Bridge as shown on attached site map.

Under (b) Contractor-Furnished Sources add the following:

Prior to any pit development or use of materials, the pit site shall be approved by the engineer that the pit site is free of noxious weed as listed on the “All States Noxious Weeds List.”

SPS 106

SECTION 106 – MEASUREMENT & PAYMENT

106.03 Units of Measurement

Delete this subsection and add the following:

“Forest Service Specifications for Construction of Roads and Bridges (Revised August 1996) are based on Modern Metric units of measurement. The dimensions and units of measure SHOWN ON THE DRAWINGS and used to develop SPECIAL PROJECT SPECIFICATIONS for this contract, utilize U.S. Standard English units of measure. All measurements referenced in the August 1996 Forest Service Standard Specifications (EM-7720-100) shall be converted to U.S. Standard English units of measure. Appendix A – Engineering

Conversion Factors and Appendix B – SI (Modern Metric) Conversion Factors, are included on pages 611 – 614 of the Standard Specification Appendices to assist with any required conversions.

Work required by the contract will be paid based on PAY UNIT (U.S. Standard English measure) as DESIGNATED IN THE SCHEDULE OF ITEMS.

Under each Specification Section with PAY ITEMS of work DESIGNATED IN THE SCHEDULE OF ITEMS for measurement and payment under this contract, the last subsection “Payment – Basis,” shall have the following format:

- | | |
|--------------------------|---|
| <u>Pay Item</u> – | Numbering system and work description to remain the same. |
| <u>Pay Unit</u> – | Pay unit(s) DESIGNATED IN THE SCHEDULE OF ITEMS have been changed from metric to the corresponding unit of U.S. Standard English measure. |

Payment will be by units defined and determined according to U.S. Standard English measure and by the following:

B. **Cubic Yard in Place.** Measure solid volumes by the average end area method as follows:

- (a) Measure cross sections of the original ground and use with design or staked templates, or take other comparable measurements to determine the end area. Do not measure work outside of the established lines or slopes.
- (b) If any portion of the work is acceptable, but is not completed to the established line and slopes, remeasure cross sections or comparable measurements of that portion of the work. Deduct any quantity outside the designated or staked limits. Use these measurements to calculate new end areas.
- (c) Compute the quantity using the average end areas multiplied by the horizontal distance along a centerline or reference line between the end areas. Deduct any quantity outside the designed or staked limits.

Where it is impractical to measure material by the average end area method, other approved methods involving three-dimensional measurements may be used.

Measure liquid volumes in accordance with SPS Subsection 106.03(h).

B. **Cubic Yard in the Hauling Vehicle.** Measure the cubic yard volume in the hauling vehicle using three-dimensional measurements at the point of delivery. Use vehicles bearing a legible identification mark with the body shaped so the actual contents may be readily and accurately determined. Before use, mutually agree in writing upon the volume of material to be hauled by each vehicle. Vehicles carrying less than agreed volume may be rejected or accepted at the reduced volume.

Level selected loads. If leveling reveals that the vehicle was hauling less than the approved volume, reduce the quantity of all material received since the last leveled load by the same ratio as the ratio of the current leveled load volume to the agreed volume. Payment will not be made for material in excess of the agreed volume.

Material measured in the hauling vehicle may be weighed and converted to cubic yards for payment purpose if the conversion factors are mutually agreed to in writing.

Compute measurement using measurements of material in the hauling vehicles at the point of delivery. Load vehicles to at least their water-level capacity. Leveling of the loads may be required when vehicles arrive at the delivery point.

- C. Cubic Yard Mile. A combination of linear and volumetric measurement meaning the movement of a cubic yard of material one (1) mile.
- D. Hour. Measurement will be for the actual number of hours ordered and performed by the Contractor.
- E. Each. One complete unit, which may consist of one or more parts.
- F. Lump Sum. Do not measure directly. The bid amount is complete payment for all work described in the contract and necessary to complete the work for that item.
- G. MFBM. One thousand feet board measure based on nominal widths, thickness, and extreme usable length of each piece of lumber or timber actually incorporated in the job. For glued laminate timber, 1,000 board feet based on actual width, thickness, and length of each piece actually incorporated in the job.
- H. Gallon. The quantity may be measured by any of the following methods:
 - 1. Measured volume container.
 - 2. Metered volume. Use an approved metering system.
 - 3. Commercially packaged volumes.
- I. Station. One hundred linear feet measured horizontally.
- J. Station Yard. Measure on a plane parallel to the surface being measured or horizontal.
- K. Square Yard. Measure on a plane parallel to the surface being measured or horizontal.
- L. Thousand Gallons Mile. A combination of linear and volumetric measurement meaning the movement of 1,000 gallons of material one (1) mile.
- M. Ton. Short ton consisting of 2,000 pounds. Use net certified scale weights based on certified volumes.
- N. Ton Mile. A combination of linear and weight measurement meaning the movement of one (1) ton of material one (1) mile.

SPS 160

SECTION 160 - QUALITY CONTROL & QUANTITY MEASUREMENT

Construction

160.02 Quality Control and Quantity Measurement System

Under (a) Quality Control Plan," add the following:

- (3) Description of the testing facilities and information on when and where each of the required materials tests will be performed.
- (4) Random sampling and/or measurement plan prepared in accordance with requirements in Table 160."
- (5) A log of all samples that are taken by the Contractor shall be maintained for the duration of the contract, and provided to the Project Lead upon request. Test results on all samples shall be given directly to the Project Lead within 8 hours of test completion.

160.03 Sampling, Testing, Inspection, and Measurement of Quantities

Add the following:

Minimum sampling and testing FREQUENCY is defined in Table 160.

Sampling and testing by the contractor shall meet the applicable AASHTO and ASTM Standards. Unless waived by the Project Lead, the Project Lead will inspect both sampling and testing equipment and procedures prior to production. The testing laboratory (including equipment and personnel) shall be operational and available for inspection at least 2 days prior to producing aggregate for acceptance. The testing facility shall be located far enough from construction machinery to avoid harmful vibrations.

TABLE 160

SAMPLING, TESTING AND MEASUREMENT REQUIREMENTS

A soil type is defined such that all soil in the represented volume shall have the same group symbol in the Unified Soil Classification system (ASTM D 2487) and the percent passing the No. 4 sieve shall not vary more than 10 percent between samples.

Wherever a AASHTO T99 or T180 moisture density curve is required, gradation data will be provided as shown below. The moisture density sample shall maintain the same percentage of coarse material (passing 50 mm and retained on a number 4 sieve) as in the original field sample. Field density testing of soil will normally require the use of AASHTO T224, Coarse Particle Correction.

<u>Field Sample</u>	<u>Moisture Density Test Material</u>
Percent plus 19 mm	Percent plus No. 4
Percent 19 mm to No. 4 sieve	
Percent minus No. 4 sieve	

Where random sample or random measurement is specified, it shall be a stratified statistically random sample. Random numbers are to be determined by ASTM D3665 Section 5.1 thru 5.7, or a computer generated random number program approved by the Project Lead. The sampling must be stratified to eliminate the possibility of sample points being "clustered". Stratification is done by dividing the total quantity for the applicable bid item by the sample FREQUENCY. This process divides the total project quantity of one lot into sublots. The random number is used to obtain a random sampling point within each subplot. The contractor may terminate a lot, and start a new lot when approved by the Project Lead. Once a lot is terminated it may not be combined with any other lot. If material within a subplot fails to meet specification requirement, the Project Lead may allow the contractor to rework the subplot materials and resample at a different randomly selected location.

Key to symbols used in table:

CT: Sampling and testing by contractor's personnel identified by name on the approved contractor's Q/C plan. Interim approval of personnel submitted will be based on specified training or experience requirements. Final approval will be based on observation of work performance on the project.

PE: Sampling and testing under the direction of and certification by a registered engineer retained by the contractor and specifically identified on the approved contractor's Q/C plan.

FS: Sampling, testing, measuring and/or data furnished by the Government.

Note: The minimum FREQUENCY shown in this table is for contractor Quality Control sampling and testing. The contractor can run additional samples over the minimum number specified in the table. These additional samples can be taken in any manner, at any time desired by the contractor. Quality assurance sampling and testing by the Forest Service may be done at any time or location.

304.03 and 304A.03 Gradation

Gradation and percent fracture	CT/CT	One random sample per 1,000 tons. The FREQUENCY may be increased by the CO to one sample per day if less than 1,000 tons is produced per day. Minimum of three samples per project.
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304.04 and 304A.04 Quality (For both designated and contractor furnished sources)

Los Angles Abrasion, Coarse and Fine Durability Index	CT/PE	Composite of random gradation samples taken during production or random samples taken from finished product.
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Tests shall be completed within one week of sampling date

The number of samples depends on project size:

To 15,000 tons-3/project or source
Over 15,000 tons-3/project or source,
Plus 1/10,000 tons thereafter.

Liquid Limit, Plasticity Index	CT/PE	Same as gradation sample if fines are plastic. If PE determines fines in source are non-plastic, no further tests are necessary.
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304.12 and 304A.11 Thickness & Width Requirements

Measurement of Aggregate thickness and width	CT/CT	Random measurements: 5 per km minimum of 10 per project. For non-highway projects: 10 tests per
--	-------	---

Composition (Concrete Mix Design)

Concrete mix design & aggregate tests	PE/PE	One mix design submittal for each concrete class, including all the required tests on mix and aggregate for each source.
Aggregate moisture content	CT/CT	One test per day on fine and coarse aggregate

552.10 Quality Control of Mix

Mixing	CT/CT	As required per Specifications
Delivery and Sampling – Acceptance Tests (Concrete slump, air content, unit weight and test cylinders)	PE/PE	One set of tests per truck Four acceptance test cylinders per truck (two QC & two QA – 28 day breaks) Contractor shall be responsible for any additional field cure test cylinders to determine concrete strengths for construction progress.
Testing (Compressive Strength)	--/PE	Two cylinders per truck Two remaining test cylinders for each Truck to be supplied to Government For QA testing.

SPS 175

SECTION 175 – CONSTRUCTION STAKING

Description

175.01 Work.

Construction staking shall be completed by the Contractor after the notice to proceed and will include staking for the roadway and bridge. The Contractor is responsible for maintaining construction staking after notice to proceed, as required to construct the roadway and bridge.

Measurement

175.05 Method

“Payment for any work described under this section shall be paid for under item **175(06) Staking Major Structures, Type Bridge, Precision A.**”

SPS 204

SECTION 204-SOIL EROSION & POLLUTION CONTROL

Measurement

204.14 Method. Add the following:

Quantities shown for item 204(05) Straw Bales are for the discretionary use of the Government and are in addition to any bales that the Contractor intends to incorporate into the project as a part of the permanent and temporary erosion control measures as required under this specification.

Payment

204.15 Basis. Add the following:

Payment for straw bales furnished and erected by the Contractor as a part of the Soil Erosion and Pollution Control Plan will be paid for under item 204(19) Soil Erosion and Pollution Control.

SPS 206

SECTION 206 - STRUCTURAL EXCAVATION FOR MAJOR STRUCTURES

DESCRIPTION

206.01 Work

Add the following to this subsection:

This work shall include all excavation required to remove existing bridge fills and create the new channel configuration.

CONSTRUCTION

(1) Backfill.

Replace the second sentence of the first paragraph with the following:

Compaction shall be attained with a minimum of (3) passes of approved mechanical compaction equipment or until there is no visible deflection under load.

Replace the third paragraph with the following:

“Backfill or embankment material shall be placed on both abutments of a spill-through type abutment so that not more than two (2) feet of elevation difference exists between the backfill or embankment of the two abutments. No embankment or backfill shall be placed higher than one (1) foot below the top of the cap until after the superstructure has been placed.

MEASUREMENT

1. Method.

Replace the second paragraph with the following:

“Measure structural excavation by Lump Sum. Include all excavation removal described and structural backfill for the bridge. Placement of excess suitable material for embankment shall be measured and paid for under item 203(11), Embankment.

SPS 251

SECTION 251 - RIPRAP

Payment

251.13 Basis. Add the following:

“The cost of excavation and embankment required for placement of riprap is incidental to this pay item and no separate payment will be made.”

SPS 260

SECTION 260 – GEOCELL ABUTMENT STABILIZATION

Description

260.01 Work. Construct geocell abutment stabilization at each abutment using Presto Geoweb Cellular Confinement System, Webtec TerraCell, or approved equal in accordance with the plans and manufacturer’s recommendations.

Materials

260.02 Requirements. Ensure that material conforms to specifications in the following subsections:

Coarse Granular Backfill	703.03
Geocell	726

Construction

260.03 General. Perform the work specified in Section 206. Use ditches, grading or similar methods to prevent surface runoff that may occur during inclement weather from ponding in the foundation excavation.

260.04 Geotextile Installation. Place the geotextile according to Section 221 or AS SHOWN ON THE DRAWINGS. Ensure that the surface upon which the geotextile is to be placed is uniform and is reasonably smooth and free of obstructions, depressions, and debris that could damage the geotextile. Have the surface approved by the Project Lead prior to placing geotextile.

Lay the geotextile without tension, stress, wrinkles or creases. Sew or overlap adjacent strips a minimum of 12" at joints. Insert securing pins through both strips of overlapped geotextile at minimum intervals of 3 feet, but no closer than 2 inches to each edge, to prevent the geotextile from being displaced.

Have the installed geotextile approved by the Project Lead prior to setting the geocells.

260.05 Geocell Installation. Place the geocell sections directly on the prepared subgrade. Expand the geocell sections into position at the grades and lines AS SHOWN ON THE DRAWINGS. Hold the expanded geocell sections with suitable "stretcher frames," steel stakes driven inside selected outer cell walls, or other similar methods as allowed by the geocell manufacturer prior to filling. Ensure that the individual cells have been expanded to the minimum dimensions required by the manufacturer. If necessary, field cut sections as per the manufacturer's recommendations to the lines SHOWN ON THE PLANS.

Connect geocell panels in accordance with the manufacturer's recommendations.

260.06 Infill Placement. Furnish the Project Lead with the manufacturer's specific recommendations for backfilling prior to placement of the geocells.

Place coarse granular backfill meeting subsection 703.03 into the expanded cells with equipment appropriate for the site conditions such as a backhoe or a front-end-loader. Do not drop infill material more than 3 feet to avoid damage or displacement of the cell walls.

Overfill the geocell cells and level to a minimum of 2 inches above the top of the cell walls. A front-end loader may be used to place the infill provided that it only traffics above geocell sections that have been filled and covered with the minimum 2 inches of additional material. Compact the infill material with a vibratory plate compactor. Operate compaction equipment over the full width of the geocell until visible deformation of the infill ceases. Make at least three complete passes. Grade the surface to be ½ inch above the top of the cells. Ensure that the cell walls are not exposed after fine grading is completed.

Use the geocell manufacturer's specific recommendations for backfilling if they are more stringent than stated above.

Measurement

260.07 Method. Use the method of measurement that is DESIGNATED IN THE SCHEDULE OF ITEMS.

Payment will be based on the contract unit price of geocell material placed and accepted. This will be exclusive of wastage and material placed outside the neat lines SHOWN ON THE PLANS.

Payment

260.08 Basis. The accepted quantities will be paid for at the contract unit price for the PAY ITEM DESIGNATED IN THE SCHEDULE OF ITEMS.

The cost for furnishing and placing the Coarse Granular Backfill and geotextile required for geocell infill is incidental to this pay item and no separate payment will be made.

Payment will be made under:

Pay Item	Pay Unit
260 (01) Geocell abutment stabilization, 6 inch depth	Square Yard

SPS 552

SECTION 552 – STRUCTURAL CONCRETE

Description

Construction

552.03 Composition (Concrete Mix Design). Delete the following subsections for Class A concrete only:

"(n), (p), (r) except for material finer than the 75 mm sieve, and (s)."

Construction

552.03 Composition (Concrete Mix Design).

(x) Change the last sentence of this subsection to:

"The maximum air content shall be 8 percent."

552.09 Delivery. Change the third sentence of the second paragraph to:

"Never allow the time interval between placement to exceed 30 minutes (20 minutes under hot weather conditions.)"

(a) Truck Mixer/Agitator. Delete the last sentence of the second paragraph.

552.10 Quality Control of Mix.

(b) Delivery & Sampling.

(3) Replace the first sentence of the second paragraph with the following:

"Sampling shall be done in accordance with AASHTO T 141."

(4) Delete the second sentence of the subsection.

(c) Testing. Add the following:

"Unless SHOWN ON THE DRAWINGS, all structural concrete elements will have been designed by the strength method."

552.12 Temperature and Weather Conditions.

(a) Cold Weather. Replace the last two sentences of the second paragraph with:

"Submit to the Project Lead a cold weather plan for approval 21 days in advance of anticipated need. No placement of concrete shall be made if cold weather conditions are anticipated within 7 days without an approved plan."

SPS 555

SECTION 555 - STEEL STRUCTURES

Construction

555.03 General

Change the first sentence to read,

Fabricate the structural steel in a fabricating plant that is certified as "Category II or Simple Steel Bridges," under the American Institute of Steel Construction (AISC) Quality Certification Program.

555.17 Connections Using High-Strength Bolts.

(c) Installation.

(1) Rotational-Capacity Tests.

Change 'AASHTO M 164M, subsection 8.5' to 'ASTM A 325M, Test Method'.

SPS 557

SECTION 557 - TIMBER STRUCTURE.

Description

557.01 Work. Furnish, fabricate, erect, and paint structural timber, including all required yard lumber and hardware.

557.02 Requirements. Furnish material that conforms to specifications in the following section and subsections:

Hardware & Structural Steel.....	716.02
Painting.....	563
Structural Glued Laminated Timber.....	716.04
Treated Structural Timber & Lumber.....	716.03
Untreated Structural Timber & Lumber.....	716.01

Furnish, the following compliance certificates to the Project Lead upon delivery of the materials to the jobsite:

(a) Verification of compliance with grading rules and species of timber and lumber. Provide certification by an agency accepted as competent by the American Lumber Standards Committee (ALSC).

(b) Lot certification of each charge for preservative, penetration in millimeters, and retention in kilograms per cubic meter (assay method) by a qualified independent inspection and testing agency. In addition, have the producer of the treated products provide written certification that Best Management Practices (BMP's) in accordance with "Best Management Practices for Treated Wood in Western Aquatic Environments,"

published by the Western Wood Preservation Institute (WWPI) and Canadian Institute of Treated wood, were followed, including a description and appropriate documentation of the applicable BMP's used.

(c) Certification from a qualified inspection and testing agency indicating that all glued laminated members are in accordance with the requirements of American National Standard for Wood Products, "Structural Glued Laminated Timber" (ANSI/AITC A190.1) modified as SHOWN ON THE DRAWINGS.

(d) Such other certifications as SHOWN ON THE DRAWINGS or called for in the SPECIAL PROJECT SPECIFICATIONS.

Incise all glued laminated and solid sawn members thicker than 50 mm in accordance with AWWPA standard C1, unless otherwise SHOWN ON THE DRAWINGS.

Provide shop drawings for all timber 21 days in advance of fabrication when SHOWN ON THE DRAWINGS or in the SPECIAL PROJECT SPECIFICATIONS. Show all dimensions and fabrication details for all cut, framed, or bored timbers.

Construction

557.03 General. Perform the work under Section 206. Furnish structural lumber and timber of the required stress grade.

Clear stacks of weeds, rubbish, or other objectionable material from the ground under and in the vicinity of all stored material. Place the bottom layer of material at least 200 mm above the ground level. Provide sufficient support to prevent sagging.

Open-stack untreated material to shed water. Stack material in layers on spacers (stickers) that extend across the full width of the stack to allow for free air circulation. Align all stickers vertically and space them at regular intervals.

Close-stack treated material to shed water.

Protect material from the weather. If covered, used sheet material such as water-resistant paper or opaque polyethylene film. Do not cover with impervious membranes, such as polyethylene film, during dry weather. Slit individual wrappings full length or puncture on the lower side to permit drainage of water.

Store and protect glued laminated timber in accordance with the recommendations for Loading and Handling, Job Site Storage, and Erection in "Recommended Practice for Protection of Structural Glued Laminated Timber During Transit, Storage, and Erection," published by the American Institute of Timber Construction, AITC 111.

Use slings or other devices to protect corners of heavy construction timbers and banded packages of heavy construction timber

557.04 Treated Timber. Fabricate timbers before treatment. Handle treated timber according to the Consumer Information Sheet published by AWWPA. Do not cut, frame, or bore treated timber after treatment unless approved by the Project Lead. Handle treated timbers carefully and do not drop, damage outer fibers, or penetrate the surface with tools. Do not use cant dogs, hooks or pike poles. In coastal waters, do not cut or bore timber below the highwater mark.

Field treat all cuts, abrasions, bolt holes, and recesses that occur after treatment in accordance with the requirements specified in AWWPA standard M4, Standard for the Care of Pressure-Treated Wood Products. Plug all unused holes with preservative-treated plugs. Perform all field-applied preservation treatment with necessary precautions so as to prevent and soil and/or water contamination.

557.05 Untreated Timber. Field treat the following untreated timber surfaces in accordance with AWWPA standard M4.

- (a) All ends and Tops, and all contact surfaces of posts, sills, and caps.
- (b) All ends, joints, and contact surfaces of bracing and truss members.
- (c) All surfaces of timber bumpers and the back faces of bulkheads.
- (d) All other timber that will be in contact with earth.

557.06 Workmanship. Cut and form all lumber and construction timbers so all joints will have even bearing over the entire contact surface. Do not use shims in making joints. Construct all joints to be closed. Drive nails and spikes to set the heads flush with the wood surface. Use the same end, face, and edge of the timber member for all layout dimensions. Bore all holes from mating faces.

557.07 Holes for Bolts, Dowels, Rods & Lag Screws. Bore holes for machine bolts with a bit 1.5 mm larger than the diameter, except when galvanized bolts are specified. In this case, drill all holes 3 mm greater than the bolt size. Drill the depth of lag screw bolt holes 25 mm less than the length of the screw head and with a diameter approximately 75 percent of the shank diameter.

557.08 Hardware. Furnish the hardware as SHOWN ON THE DRAWINGS, as specified below.

(a) Bolts & Washers. Final tighten all nuts to provide proper bearing, and cut off excess bolt lengths of more than 25 mm. After final tightening, check or burr all bolts effectively with a pointing tool to prevent loosening of the nuts.

Use malleable iron washers with a diameter approximately four times the bolt diameter under all bolt heads or nuts in contact with wood, unless otherwise SHOWN ON THE DRAWINGS.

(b) Galvanizing. Unless otherwise SHOWN ON THE DRAWINGS, ensure that all hardware for timber structures is galvanized. Ensure that all fasteners, including nails, spikes, bolts, washers, and timber connectors, other than malleable iron, are galvanized.

557.14 Stringers. Glued-laminated stringers shall be positioned so that the camber is up for simply supported stringers.

557.15 Glued Laminated Panel Decks. Do not drag or skid panels. When lifted, support panels in the weak-moment plane at a sufficient number of points to avoid overstressing, and protect the edges from damage.

Follow erection procedures given in FPL-263, Forest Service, Forest Products Laboratory (FPL), Madison, Wisconsin.

Measurement

(2) Method

Measure and payment for all work under this section shall be included in and considered incidental to the lump sum contract price for Item 560(01) – “Bridge Superstructure.”

SPS 560

SECTION 560 – BRIDGE SUPERSTRUCTURE

Description

**560.01
Work.**

This work shall consist of furnishing and erecting the bridge superstructure. The bridge superstructure shall include the following:

- Bridge Girders
- Diaphragms
- Timber Deck Panels
- Bearing w/Anchorage Devices
- Timber Backing Planks
- Timber Bridge Curbs and

All connection hardware, equipment, tools and other incidental materials needed to complete the work as shown in the plans.

Materials

**560.02
Requirements.**

Materials shall meet the requirements designated on the drawings and in the specifications.

**560.04
Submittals.**

No shop drawings are required for the steel superstructure if constructed as shown on the drawings. Optimal prefabricated steel bridge superstructure shall require shop drawings as outlined below.

Construction

**560.05
Performance**

The work shall conform to the applicable construction provision of the following subsections of the Standard Specifications and These Special Project Specifications.

Structural Concrete.....	552
Steel Structures.....	555
Timber Structures.....	557
Bearing Devices.....	564

**560.03
Bridge Superstructure – Optional Prefabricated Bridge Superstructure
Design Requirements.**

An optional prefabricated bridge superstructure shall be designed for HS-20 loading in accordance with the AASHTO Standard Specifications for Highway Bridges, 17th, except deflections shall not exceed L/360 for live loads. The superstructure geometry and general configuration shall be as shown on the drawings. The timber glued-laminated deck and curbs are to be maintained as shown on the drawings. An alternative deck system will not be allowed. Total depth of superstructure from top of running surface to bottom of steel stringers may vary by not more than –3 inches or +3 inches from that shown on the drawings. The profile grade shown on the drawings shall be maintained. The bottom of footing elevations shown on the drawings shall be adjusted to account for any difference in superstructure depth. All costs associated with additional excavation,

approach roadway work or removal of excess material due to a different superstructure depth shall be included in the lump sum cost for Structural Excavation.

A prefabricated bridge superstructure shall consist of a single or two major longitudinal components. A positive means of attaching components together with steel cross-bracing or diaphragms, placed at a minimum of 1/3 span points along the span, is required and may vary from the details shown on the drawings.

An alternative prefabricated bridge superstructure shall be designed by a licensed professional engineer. Design calculations and detail drawings shall bear the signature, date and seal of a professional engineer and be submitted to the engineer for approval. Drawings shall provide complete details of the bridge superstructure. All detail changes to elevations, backing planks or abutments, from those shown on the drawings, are the responsibility of the contractor and shall be identified and shown on the drawings for approval.

Measurement & Payment

560.06

Method and Basis

Measurement and payment for fabrication, furnishing and installation the bridge superstructure shall be included in and considered incidental to the lump sum contract price for Item 560(01) – “Bridge Superstructure”. This price shall include all materials, labor, tools, equipment and incidental items necessary to complete the work.

SPS 601

SECTION 601 – MOBILIZATION

Description

601.01 Work. Add the following:

Noxious Weed Control Requirements:

Clean all construction equipment prior to entry onto the project area. Remove all dirt and plant parts and material that could carry noxious weed seeds into the project area. Only construction equipment so cleaned and inspected by the Forest Service will be allowed to operate within the project area. Treat all subsequent move-ins of construction equipment in the same manner as initial move-ins. “Construction equipment” does not include personal vehicles, paving equipment or support equipment that remains on the main travel route.

Prior to the initial move-in, the contractor shall make all construction equipment available for inspection by the Government at an agreed upon location. Provide the Government at least 24 hours advance notification when equipment is ready for inspection.

Payment

601.03 Basis. Add the following:

Include all costs associated with the cleaning of equipment in the unit price bid for Mobilization.

SPS 637

SECTION 637 – EQUIPMENT RENTAL

Payment

Add the following pay item:

<u>Pay Item</u>	<u>Pay Unit</u>
637(01) Hydraulic Excavator with Thumb, Minimum 150 Flywheel HP	Hour

SPS 703

SECTION 703 - AGGREGATE

703.01 Fine Aggregate for Portland Cement Concrete

- (a) Change 'AASHTO M 6, class B' to 'AASHTO M 6, Class A'.

SPS 726

SECTION 726 – GEOCELL

Furnish geocell panels consisting of sheet strips fabricated from high-density polyethylene (H.D.P.E.), which are connected in series at offset, full-depth ultrasonic seams, aligned perpendicular to the longitudinal axis of the strips. When expanded, the interconnected strips form the walls of a flexible, three-dimensional cellular confinement structure into which the specified infill materials can be placed.

Ensure that the polyethylene material used to fabricate the geocell sections is treated to resist ultraviolet degradation and that it conforms to the following:

- (d) Density.....0.935-0.965 g/cm³ per ASTM D1505
- (b) Environmental Stress
Crack Resistance (ESCR).....2000 hour per ASTM D1693

Use strips with a sheet thickness, of 1.27 mm –5% +10% (50 mil –5% +10%) tested per ASTM D5199. Thickness shall be determined in the flat, before any surface texturing or other surface disruption.

Ensure that cell seam strength is uniform over the full depth of the cell. Test short-term peel strength per U.S. Army Corps of Engineers Technical Report GL-86-19, Appendix A. Provide a minimum seam peel strength of 2000 N (450 lb) for the 203 mm (8.0 in) depth cell.

Test seam hang-strength for a period of 30 days minimum at room temperature. Room temperature is defined in ASTM E41. Use test samples made by welding two 102 mm (4 in) wide polyethylene strips together. Ensure that a test sample consisting of two carbon black stabilized strips supports a 72.5 kg (160 lb) load for the test period that a test sample consisting of carbon black stabilized strip and HALS stabilized strip supports a 63.5 kg (140 lb) load for the test period.

Furnish the Project Lead with a certificate signed by legally authorized official from the company that manufactured the geocell. Ensure that the certificate attests the geocell meets the chemical, physical, material and manufacturing requirements stated in the specification. When requested by the Project Lead, furnish a sample of the geocell from each lot for verification testing.

During shipment and storage, wrap the geocell in heavy-duty protective covering. Protect the geocell from mud, soil, dust, debris and sunlight prior to installation.

The following products meet this specification:

GEOWEB manufactured by Presto Products Company, P.O. Box 2399, Appleton, WI 54913-2399, telephone 920-738-1222.

TERRACELL manufactured by Webtec, Inc., P.O. Box 19729, Charlotte, NC 28219, telephone 704-398-0954.

WAGE RATE: HEAVY

GENERAL DECISION: **MT20030001** 11/28/2003 MT1

Date: November 28, 2003

General Decision Number: **MT20030001** 11/28/2003

Superseded General Decision Number: MT020001

State: Montana

Construction Types: Heavy

Counties: Montana Statewide.

HEAVY CONSTRUCTION PROJECTS

ZONE DEFINITIONS

CARPENTERS, *CEMENT MASONS, LABORERS, POWER EQUIPMENT OPERATORS
AND TRUCK DRIVERS

The zone hourly rates applicable to each project shall be determined by measuring the road miles over the shortest practical maintained route from the nearest County Court House of the following listed towns to the center of the job:

BILLINGS, BOZEMAN, BUTTE, GREAT FALLS, HAVRE, HELENA,
KALISPELL, LEWISTOWN, MILES CITY, MISSOULA

Zone 1: 0 to 30 miles - Base Pay

Zone 2: 30 to 60 miles - Base Pay + \$2.20

Zone 3: Over 60 miles - Base Pay + \$3.70

*CEMENT MASONS ZONES: The above cities plus DILLON, GLASGOW,
GLENDDIVE, SIDNEY

Modification Number	Publication Date
0	06/13/2003
1	11/07/2003
2	11/28/2003

CARP0028-002 05/01/2003

STATEWIDE EXCEPT BEAVERHEAD AND SILVER BOW COUNTIES

	Rates	Fringes
Carpenters: (Zone 1)		
Carpenter.....	\$ 19.85	5.83
Millwright.....	\$ 21.85	5.83

Piledrivermen.....\$ 19.85 5.83

CARP0028-004 06/01/2000

STATEWIDE EXCEPT BEAVERHEAD AND SILVER BOW COUNTIES

	Rates	Fringes
Diver.....	\$ 54.93	5.70
Diver Tender.....	\$ 26.25	5.70

CARP0112-001 05/01/1998

BEAVERHEAD AND SILVER BOW COUNTIES

	Rates	Fringes
Carpenters: (Zone pay not applicable)		
Carpenter.....	\$ 16.71	4.82
Millwright.....	\$ 17.21	4.82
Pile Driver.....	\$ 17.71	4.82

ELEC0044-001 06/01/2002

BEAVERHEAD, BIG HORN, BLAINE, BROADWATER, CARBON, CARTER, CASCADE, CHOUTEAU, CUSTER, DANIELS, DAWSON, DEER LODGE, FALLON, FERGUS, GALLATIN, GARFIELD, GLACIER, GOLDEN VALLEY, GRANITE, HILL, JEFFERSON, JUDITH, BASIN, LEWIS AND CLARK, LIBERTY, MADISON, MCCONE, MEAGHER, MINERAL, MISSOULA, MUSSELSHELL, PARK, PETROLEUM, PHILLIPS, PONDERA, POWDER RIVER, POWELL, PRAIRIE, RAVALLI, RICHLAND, ROOSEVELT, ROSEBUD, SHERIDAN, SILVER BOW, STILWATER, SWEET GRASS, TETON, TOOLE, TREASURE, VALLEY, WHEATLAND, WIBAUX, AND YELLOWSTONE COUNTIES

	Rates	Fringes
Line Construction		
(1) Lineman.....	\$ 25.79	4.25%+6.71
(2) Equipment Operator.....	\$ 20.63	4.25%+6.34
(3) Experienced Groundman.....	\$ 16.76	4.25%+6.07

ELEC0233-001 06/01/2003

Blaine, Cascade, Chouteau, Fergus, Glacier, Hill, Judith Basin, Liberty, Petroleum, Phillips, Pondera, Teton, Valley, and Wheatland Counties

Rates Fringes

Electrician.....\$ 22.36 4.25%+7.70

ELEC0233-002 06/01/2003

BEAVERHEAD, DEER LODGE, GRANITE, JEFFERSON, MADISON, POWELL, AND SILVER BOW COUNTIES

Rates Fringes

Electrician.....\$ 22.73 4.25%+7.77

ELEC0233-006 06/01/2003

BROADWATER, LEWIS AND CLARK, AND MEAGHER COUNTIES

Rates Fringes

Electrician.....\$ 22.36 4.25%+7.70

ELEC0532-001 06/01/2002

GALLATIN, PARK, AND SWEET GRASS COUNTIES

Rates Fringes

Electrician.....\$ 21.36 4.25%+6.84

ELEC0532-003 06/01/2002

BIG HORN, CARBON, CARTER, CUSTER, DANIELS, DAWSON, FALLON, GARFIELD, GOLDEN VALLEY, McCONE, MUSSELSHELL, POWDER RIVER, PRAIRIE, RICHLAND, ROOSEVELT, ROSEBUD, SHERIDAN, STILLWATER, TREASURE, WIBAUX AND YELLOWSTONE COUNTIES

Rates Fringes

Electrician.....\$ 22.80 4.25%+7.48

ELEC0768-001 06/01/2001

FLATHEAD, LAKE, LINCOLN, MINERAL, MISSOULA, RAVALLI, AND SANDERS COUNTIES

Rates Fringes

Electrician.....\$ 23.00 7.28

ELEC0768-003 04/01/2003

FLATHEAD, LAKE, AND LINCOLN COUNTIES

	Rates	Fringes
Line Construction		
(1) Cable Splicer.....	\$ 27.03	9.81
(2) Lineman.....	\$ 24.85	9.84
(3) Groundman.....	\$ 16.48	9.07

ENGI0400-001 05/01/2001

	Rates	Fringes
Power Equipment Operator (Zone 1)		
Group 1.....	\$ 17.74	4.90
Group 2.....	\$ 18.16	4.90
Group 3.....	\$ 18.53	4.90
Group 4.....	\$ 18.78	4.90
Group 5.....	\$ 19.76	4.90
Group 6.....	\$ 20.27	4.90
Group 7.....	\$ 21.81	4.90

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Air Compressor; Auto Fine Grader; Belt Finishing Machine; Boring Machine, small; Cement Silo; Crane, A-Frame Truck Crane; Crusher Conveyor; DW-10, 15, and 20 Tractor Roller; Farm Tractor; Forklift; Form Grader; Front-end Loader under 1 cu yd; Heavy Duty Drills; Herman Nelson Heater; Mulching Machine; Oiler, all except Cranes. & Shovels; Pumpman.

GROUP 2: Air Doctor; Backhoe/Excavator/Shovel to and including 3 cu yd; Bit Grinder; Bituminous Paving Travel Plant; Boring Machine, large; Broom, self-propelled; Concrete Travel Batchers; Concrete Float & Spreader; Concrete Bucket Dispatcher; Concrete Finish Machine; Concrete Conveyor; Distributor; Dozer, Rubber-Tired, Push & Side Boom; Elevating Grader/Gradall; Field Equipment Serviceman; Front-end Loader 1 cu yd to including 5 cu yd; Grade Setter; Heavy Duty Drills, all types; Hoist/Tugger, all; Hydralift & similar; Industrial Locomotive; Motor Patrol, except Finish; Mountain Skidder; Oiler - Cranes & Shovels; Pavement Breaker, EMSCO; Power Saw, self-propelled; Pugmill; Pumcrete/Grout Machine; Punch Truck; Roller, other than Asphalt; Roller, Sheepsfoot, self-propelled; Roller, 25 tons and over; Ross Carrier; Rotomill under 6 ft; Trenching Machine; Washing/Screening Plant.

GROUP 3: Asphalt Paving Machine; Asphalt Screed; Backhoe/Excavator/Shovel over 3 cu yd; Cableway Highline; Concrete Batch Plant; Concrete Curing Machine; Concrete Pump; Cranes, Creter; Cranes, Electric Overhead; Cranes, 24 tons and under; Curb Machine/Slip Form Paver; Finish Dozer; Front-end Loader over 5 cu yd; Mechanic/Welder; Pioneer Dozer; Roller, Asphalt (Breakdown & Finish); Rotomill, over 6 ft; Scraper, single, twin, or pulling Belly Dump; Yo-Yo Cat.

GROUP 4: Asphalt/Hot Plant Operator; Cranes, 25 tons to 44 tons; Crusher Operator; Finish Motor Patrol; Finish Scraper.

GROUP 5: Cranes, 45 tons to including 74 tons; Crane, Tower, all.

GROUP 6: Cranes, 75 tons to including 149 tons; Crane, Whirley, all.

GROUP 7: Cranes, 150 tons to including 250 tons (add \$1.00 for every 100 tons over 250 tons); Crane, Stiff-Leg or Derrick; Helicopter Hoist.

IRON0014-002 07/01/2003

FLATHEAD, GLACIER, LAKE, LINCOLN, MINERAL, MISSOULA, AND SANDERS COUNTIES

	Rates	Fringes
Ironworker.....	\$ 21.62	11.63

IRON0841-002 07/01/2002

REMAINING COUNTIES

	Rates	Fringes
Ironworker.....	\$ 18.80	11.86

LABO0098-001 05/01/2000

	Rates	Fringes
Laborers: (Zone 1)		
Group 1.....	\$ 13.41	4.40
Group 2.....	\$ 16.19	4.40
Group 3.....	\$ 16.33	4.40
Group 4.....	\$ 17.05	4.40

LABORERS CLASSIFICATIONS

GROUP 1: Flagperson

GROUP 2: All General Labor work; Burning Bar; Bucket man; Carpenter Tender; Caisson Worker; Cement Mason Tender; Cement Handler (dry); Chuck Tender; Choker Setter; Concrete worker; Curb Machine-Lay Down; Crusher and Batch worker; Fence Erector; Form Setter; Form Stripper; Heater Tender; Landscaper; Pipe Wrapper; Pot Tender; Powderman Tender; Rail and Truck Loaders and Unloaders; Riprapper; Sealants for concrete and other materials; Sign Erection, Guard Rail and Jersey Rail; Stake Jumper; Spike Driver; Signalman; Tail Hoseman; Tool Checker and Houseman; Traffic Control worker.

GROUP 3: Concrete Vibrator; Dumpman (Grademan); Equipment Handler; Geotextile and Liners; High-Pressure Nozzleman; Jackhammer (Pavement Breaker); Laser Equipment; Non-Riding Rollers; Pipelayer; Posthole Digger (Power); Power Driven Wheelbarrow; Rigger; Sandblaster; Sod Cutter-Power; Tampers

GROUP 4: Asphalt Raker; Cutting Torch; Grade Setter; High-Scaler; Power Saws (Faller & Concrete); Powderman (\$1.00 per hour above Group 4 rate); Rock & Core Drill; Track or Truck mounted Wagon Drill; Welder including Air Arc

PAIN0260-001 07/01/2002

BLAINE, BROADWATER, CASCADE, CHOUTEAU, DANIELS, FERGUS, GARFIELD, GLACIER, GRANITE (South of a line running East & West through the Southern city limits of Phillipsburg), HILL, JEFFERSON, JUDITH BASIN, LEWIS AND CLARK, LIBERTY, McCONE, MEAGHER, PETROLEUM, PHILLIPS, PONDERA, POWELL (South of a line running East & West through the Southern City limits of Helmsville), RICHLAND, ROOSEVELT, SHERIDAN, TETON, TOOLE, VALLEY, AND WHEATLAND COUNTIES

	Rates	Fringes
Painter.....	\$ 13.85	1%+3.45

PAIN0260-002 07/01/2002

FLATHEAD, GRANITE (North of a line running East & West through the Southern city limits of Phillipsburg), LAKE, LINCOLN, MINERAL, MISSOULA, POWELL (North of a line running East & West through the Southern city limits of Helmsville), RAVALLI, AND SANDERS COUNTIES

	Rates	Fringes
Painter.....	\$ 16.85	1%+3.45

PAIN1922-001 08/01/2003

BEAVERHEAD, BIG HORN, CARBON, CARTER, CUSTER, DAWSON, DEER LODGE, FALLON, GALLATIN, GOLDEN VALLEY, JEFFERSON, MADISON, MUSSELSHELL, PARK, POWDER RIVER, PRAIRIE, ROSEBUD, SILVER BOW, STILLWATER, SWEET GRASS, TREASURE, WIBAUX, AND YELLOWSTONE COUNTIES

Rates Fringes

Painter
 Industrial (Includes
 Industrial Plants,
 Tanks, Pipes, Bridges).....\$ 18.00 a+b

PLAS0119-001 05/01/2000

STATEWIDE (except Deer Lodge, Jefferson, Powell, and Silver Bow Counties)

Rates Fringes

Cement Masons: (Zone 1)
 Area 1.....\$ 16.23 5.10
 Area 2.....\$ 17.30 5.10

AREA 1: STATEWIDE (except Deer Lodge, Jefferson, Powell, and Silver Bow Counties)

AREA 2: DEER LODGE, JEFFERSON, POWELL, AND SILVER BOW COUNTIES

PLUM0030-003 09/01/2003

BIGHORN, BLAINE, CARBON, CARTER, CASCADE, CHOUTEAU, CUSTER, DANIELS, DAWSON, FALLON, FERGUS, GARFIELD, GLACIER, GOLDEN VALLEY, HILL, JUDITH BASIN, LIBERTY, McCONE, MEAGHER, MUSSELSHELL, PETROLEUM, PHILLIPS, PONDERA, POWDER RIVER, PRAIRIE, RICHLAND, ROOSEVELT, ROSEBUD, SHERIDAN, STILLWATER, TETON, TOOLE, TREASURE, VALLEY, WHEATLAND, WIBAUX AND YELLOWSTONE COUNTIES

Rates Fringes

Plumber.....\$ 24.20 10.05

* PLUM0041-001 07/01/2002

BEAVERHEAD, BROADWATER, DEER LODGE, GALLATIN, GRANITE, JEFFERSON, LEWIS AND CLARK, MADISON, PARK, POWELL, SILVER BOW, AND SWEET GRASS COUNTIES

Rates Fringes

Plumber.....\$ 24.30 7.55

PLUM0459-001 07/01/2003

FLATHEAD, GLACIER, LAKE, LINCOLN, MINERAL, MISSOULA, RAVALLI,
AND SANDERS

Rates Fringes

Plumber.....\$ 22.86 8.90

TEAM0002-001 06/01/1999

Rates Fringes

Truck drivers: (Zone 1)

Group 1.....\$ 13.31 4.96

Group 2.....\$ 17.34 4.96

TRUCK DRIVERS CLASSIFICATIONS:

GROUP 1: Pilot Car

GROUP 2: All Combination Trucks and Concrete Mixers;
Distributor Driver; All Dry Batch Trucks; Dumpman, Gravel
Spreader Box Operator; All Dump Trucks and similar equipment
including DW 20, DW 21, or Euclid Tractor; Dumpsters; Flat
Trucks; Servicemen; Lowboys, Four-Wheel Trailers; Float
Semi-Trailer; Lumber Carriers, Lift Trucks & Fork Lifts;
Pick-up Driver hauling material; Powder Truck (Bulk Unloader
type); Power Boom; Service Truck Drivers, Fuel Truck Drivers,
Tiremen; All Water Tank Drivers; Petroleum Products Drivers;
Trucks with Power Equipment such as Winch, A-Frame Truck,
Crane, Hydralift, Gout-Crete Truck, and Combination Mulching,
Seeding & Fertilizing Truck; Truck Mechanic

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates
listed under the identifier do not reflect collectively
bargained wage and fringe benefit rates. Other designations
indicate unions whose rates have been determined to be

prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor

200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

WAGE RATE: HIGHWAY

GENERAL DECISION: **MT20030002** 11/07/2003 MT2

Date: November 7, 2003

General Decision Number: **MT20030002** 11/07/2003

Superseded General Decision Number: MT020002

State: Montana

Construction Types: Highway

Counties: Montana Statewide.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number Publication Date

0 06/13/2003

1 11/07/2003

* SUMT2001-001 09/04/2003

ZONE PAY

CARPENTERS, CEMENTS MASONS, IRON WORKERS, LABORERS, POWER
EQUIPMENT OPERATORS, TRUCK DRIVERS

The hourly wage rates applicable to each project shall be determined by measuring the road miles over the shortest practical maintained route from the County Court House of the following towns to the center of the job:

BILLINGS, BOZEMAN, BUTTE, GREAT FALLS, HAVRE, HELENA,
KALISPELL, LEWISTOWN, MILES CITY, MISSOULA

ZONE 1: 0 to 30 miles

ZONE 2: 30 to 60 miles - Base Pay +\$2.95

ZONE 3: Over 60 miles - Base Pay + \$4.75

Rates Fringes

Carpenters:

Carpenter.....\$ 19.55 5.85

Piledriverman.....\$ 19.55 5.85

Cement Mason.....\$ 17.37 5.50

Electricians:

Area 1.....\$ 18.74 2.93+3.8%

Area 2.....\$ 20.13 4.76+3.8%

Area 3.....\$ 19.98 3.44+3.8%

Area 4.....	\$ 19.84	3.51+3.8%
Area 5.....	\$ 20.54	3.54+3.8%
Area 6.....	\$ 18.02	3.44+3.8%

ELECTRICIANS AREA DESCRIPTIONS

AREA 1: Beaverhead, Deer Lodge, Granite, Jefferson, MZdison, Silver Bow, and Powell Counties

AREA 2: Big Horn, Carbon, Carter, Custer, Dawson, Fallon, Garfield, Golden Valley, Musselshell, Powder River, Prairie, Rosebud, Stillwater, Treasure, Wibaux, and Yellowstone counties

AREA 3: Blaine, Cascade, Chouteau, Daniels, Fergus, Glacier, Hill, Judith Basin, Liberty, McCone, Petroleum, Pondera, Phillips, Richland, Roosevelt, Sheridan, Teton, Toole, Valley, and Wheatland Counties

AREA 4: Broadwater, Lewis and Clark, and Meagher Counties

AREA 5: Flathead, Lake, Lincoln, Mineral, Missoula, Ravalli, and Sanders Counties

AREA 6: Gallatin, Park, and Sweet Grass Counties

Ironworker

Flathead, Glacier, Lake, Lincoln, Mineral, Missoula and Sanders Cos.....	\$ 20.43	10.00
Remaining Counties.....	\$ 18.97	10.87

Laborers:

Group 1.....	\$ 13.68	5.50
Group 2.....	\$ 16.18	5.50
Group 3.....	\$ 16.35	5.50
Group 4.....	\$ 17.18	5.50

LABORERS CLASSIFICATIONS

GROUP 1: Flag person

GROUP 2: All General Labor work; Burning Bar; Bucket man; Carpenter Tender; Caisson Worker; Cement Mason Tender; Cement Handler (dry); Chuck Tender; Choker Setter; Concrete worker; Curb Machine-Lay Down; Crusher and Batch Plant Worker; Fence Erector; Form Setter; Form Stripper; Heater Tender; Landscaper; Pipe Wrapper; Pot Tender; Powderman Tender; Rail and Truck Loaders and Unloaders; Riprapper; Sealants for Concrete and other materials; Sign Erection, Guard Rail and Jersey Rail; Stake Jumper; Spike Driver; Signalman; Tail Hoseman; Tool Checker and Houseman; Traffic Control worker

GROUP 3: Concrete Vibrator; Dumpman (Grademan); Equipment

Handler; Geotextile and Liners; High-Pressure Nozzle men; Jackhammer (Pavement Breaker); Laser equipment; Non-riding Rollers; Pipelayer; Posthole Digger (power); Power Driven Wheelbarrow; Rigger; Sandblaster; Sod Cutter-power; Tampers

GROUP 4: Asphalt Raker; Cutting Torch; Grade Setter; High-Scaler; Power Saws (Faller & Concrete); Powderman (\$1.00 per hour above Group 4 rate); Rock & Core Drill; Track or Truck mounted Wagon Drill; Welder including Air Arc

Line Construction

Equipment Operator.....	\$ 19.16	5.05
Groundman.....	\$ 15.40	5.05

Painters:.....\$ 19.55 5.50

Pavement marking and related work. Includes operating marking and all other equipment and all work involved in traffic marking including removal, surface preparation and application of pavement markings including epoxies, paints, tape, buttons, thermo - plastics and any other products applied for traffic marking purposes and for directing and regulating traffic

Power Equipment Operator

Group 1.....	\$ 17.51	5.50
Group 2.....	\$ 18.38	5.50
Group 3.....	\$ 19.12	5.50
Group 4.....	\$ 19.71	5.50
Group 5.....	\$ 20.85	5.50
Group 6.....	\$ 21.44	5.50
Group 7.....	\$ 23.22	5.50

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: A-Frame Truck Crane; Air Compressor; Auto Fine Grader; Belt Finishing Machine; Boring Machine (small); Cement Silo, Crane; Crusher Conveyor, DW-10, 15, and 20 Tractor Roller; Farm Tractor; Forklift; Form-Grader; Front-end Loader under 1 cu yd; Oiler, Heavy Duty Drills; Pumpman; Oiler (All, except Cranes and Shovels)

GROUP 2: Air Doctor; Backhoe/Excavator/Shovel to & incl 3 cu yd Bit Grinder; Bituminous Paving Travel Plant; Boring Machine, large; Broom, Self-Propelled; Concrete Bucket Dispatcher; Concrete Conveyor; Concrete Finish Machine; Concrete Float and Spreader; Concrete Travel Batcher; Distributor; Dozer, Rubber tired, Push, and Side Boom; Drills, Heavy Duty (all types); Elevating Grader/Gradall; Field Equipment Serviceman; Front-end Loader 1 cu yd to and incl. 5 cu yd; Grade Setter; Hoist/Tugger (All Hydralift & Similar); Industrial Locomotive; Motor Patrol (Except Finish); Mountain Skidder; Oiler, Cranes & Shovels; Pavement Breaker, EMSCO; Power Saw, Self-Propelled; Pugmill; Pumpcrete/ Grout Machine; Punch Truck; Rollers (All except Asphalt Finish and Breakdown); Ross Carrier; Rotomill under 6

ft; Trenching Machine; Washing/Screening Plant

GROUP 3: Asphalt Finish Roller; Asphalt Breakdown Roller; Asphalt Paving Machine; Backhoe/Excavator/Shovel larger than 3 cu yd; Asphalt Screed; Concrete Batch Plant; Cableway Highline; Concrete Curing Machine; Cranes, 24 tons & under; Cranes, Creter; Cranes, Electric Overhead; Concrete Pump; Curb Machine/Slip Form Paver; Finish Dozer; Mechanic/Welder; Pioneer Dozer; Rotomill 6 ft and over; Scraper, Single Engine; Scraper Twin or pulling Belly Dump; Yo Yo Cat Front-end Loader over 5 cu yd;

GROUP 4: Asphalt/Hot Plant Operator; Cranes, 25 tons to 44 tons; Crusher Operator; Finish Motor Patrol; Finish Scraper

SPECIAL OPERATORS:

GROUP 5: Cranes, 45 tons to and including 74 tons

GROUP 6: Cranes, 75 tons to and including 149 tons

GROUP 7: Cranes, 150 tons to and including 250 tons; Cranes over 250 tons: add \$1.00 for every 100 tons over 250 tons; Crane, Stiff-Leg or Derrick; Crane, Tower all); Crane, Whirley (all); Helicopter Hoist

Truck drivers:

Group 1.....	\$ 14.96	5.50
Group 2.....	\$ 19.55	5.50

GROUP 1: Pilot Car

GROUP 2: Combination Truck and Concrete Mixer and Transit Mixer; Dry Batch Trucks; Distributor Driver; Dumpman; Dump Trucks and similar equipment; Dumpster; Flat Trucks; Lumber Carriers; Lowboys; Pickup; Powder Truck Driver; Power Boom; Serviceman; Service Truck/Fuel Truck/Tireperson; Truck Mechanic; Trucks with Power Equipment; Warehouseman, Partsman, Cardex and Warehouse Expeditor; Water Trucks

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

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U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

Section I - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	DEC 2001
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-7	Anti-Kickback Procedures	JUL 1995
52.204-3	Taxpayer Identification	OCT 1998
52.204-6	Data Universal Numbering System (DUNS) Number	OCT 2003
52.204-7	Central Contractor Registration	OCT 2003
52.222-1	Notice To The Government Of Labor Disputes	FEB 1997
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation	SEP 2000
52.222-6	Davis Bacon Act	FEB 1995
52.222-7	Withholding of Funds	FEB 1988
52.222-8	Payrolls and Basic Records	FEB 1988
52.222-9	Apprentices and Trainees	FEB 1988
52.222-11	Subcontracts (Labor Standards)	FEB 1988
52.222-12	Contract Termination-Debarment	FEB 1988
52.222-13	Compliance with Davis -Bacon and Related Act Regulations.	FEB 1988
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	FEB 1988
52.222-17	Labor Standards for Construction Work--Facilities Contracts	FEB 1988
52.222-26	Equal Opportunity	APR 2002
52.223-6	Drug-Free Workplace	MAY 2001
52.225-9	Buy American Act--Construction Materials	JUN 2003
52.228-3	Worker's Compensation Insurance (Defense Base Act)	APR 1984
52.228-8	Liability and Insurance - Leased Motor Vehicles	MAY 1999
52.232-23	Assignment Of Claims	JAN 1986
52.232-27	Prompt Payment for Construction Contracts	OCT 2003
52.232-33	Payment by Electronic Funds Transfer--Central Contractor Registration	OCT 2003
52.233-1	Disputes	JUL 2002
52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-5	Material and Workmanship	APR 1984
52.236-6	Superintendence by the Contractor	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991
52.236-8	Other Contracts	APR 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	APR 1984
52.236-10	Operations and Storage Areas	APR 1984
52.236-11	Use and Possession Prior to Completion	APR 1984
52.236-12	Cleaning Up	APR 1984
52.236-13	Accident Prevention	NOV 1991
52.242-14	Suspension of Work	APR 1984
52.242-15	Stop-Work Order	AUG 1989
52.242-17	Government Delay Of Work	APR 1984
52.243-1	Changes--Fixed Price	AUG 1987
52.243-5	Changes and Changed Conditions	APR 1984
52.246-21	Warranty of Construction	MAR 1994

52.249-1	Termination For Convenience Of The Government (Fixed Price) (Short Form)	APR 1984
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.249-13	Failure To Perform	APR 1984
52.249-14	Excusable Delays	APR 1984
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	MAR 1999
252.204-7004 Alt A	Required Central Contractor Registration Alternate A	NOV 2003
252.217-7015	Safety and Health	DEC 1991
252.219-7011	Notification to Delay Performance	JUN 1998

CLAUSES INCORPORATED BY FULL TEXT

Successor Contracting Officers (52.201-4001)

The Contracting Officer who signed this contract is the primary Contracting Officer for the contract. Nevertheless, any Contracting Officer assigned to the Seattle District and acting within his/her authority may take formal action on this contract when a contract action needs to be taken and the primary Contracting Officer is unavailable.

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (APR 2002)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 237310.

(2) The small business size standard is \$28.5 million.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) Representations. (1) The offeror represents as part of its offer that it () is, () is not a small business concern.

(2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it () is, () is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a women-owned small business concern.

(4) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it () is, () is not a veteran-owned small business concern.

(5) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.) The offeror represents as part of its offer that it () is, () is not a service-disabled veteran-owned small business concern.

(6) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, as part of its offer, that--

(i) It () is, () is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material

change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It () is, () is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture:_____.) Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(c) Definitions. As used in this provision--

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern," means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern," means a small business concern --

(1) That is at least 51 percent owned by one or more women; in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice.

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

- (i) Be punished by imposition of fine, imprisonment, or both;
- (ii) Be subject to administrative remedies, including suspension and debarment; and
- (iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

52.219-19 SMALL BUSINESS CONCERN REPRESENTATION FOR THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (OCT 2000)

(a) Definition.

"Emerging small business" as used in this solicitation, means a small business concern whose size is no greater than 50 percent of the numerical size standard applicable to the North American Industry Classification System (NAICS) code assigned to a contracting opportunity.

(b) [Complete only if the Offeror has represented itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.] The Offeror [] is, [] is not an emerging small business.

(c) (Complete only if the Offeror is a small business or an emerging small business, indicating its size range.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees Avg. Annual Gross Revenues

- ___ 50 or fewer ___ \$1 million or less
- ___ 51 - 100 ___ \$1,000,001 - \$2 million
- ___ 101 - 250 ___ \$2,000,001 - \$3.5 million
- ___ 251 - 500 ___ \$3,500,001 - \$5 million
- ___ 501 - 750 ___ \$5,000,001 - \$10 million
- ___ 751 - 1,000 ___ \$10,000,001 - \$17 million
- ___ Over 1,000 ___ Over \$17 million

(End of provision)

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its

quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>

<http://farsite.hill.af.mil>

<http://www.dtic.ni/dfars>

(End of provision)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>

<http://farsite.hill.af.mil>

<http://www.dtic.ni/dfars>

(End of clause)

INDEX TO SHEETS	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN AND PROFILE
3	GENERAL LAYOUT
4	ABUTMENT DETAILS
5	TYPICAL SECTION & ESTIMATED QUANTITIES
6	STEEL/TIMBER STRUCTURE DETAILS
7	TIMBER ALTERNATE TYPICAL SECTION & EST. QUANTITY
8	CURB DETAILS
9	FIELD SPLICE DETAILS
10	ROAD X-SECTION DETAILS
11	BORROW SITE

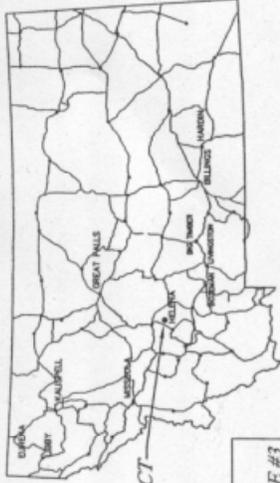


U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION ONE

PLANS FOR PROPOSED

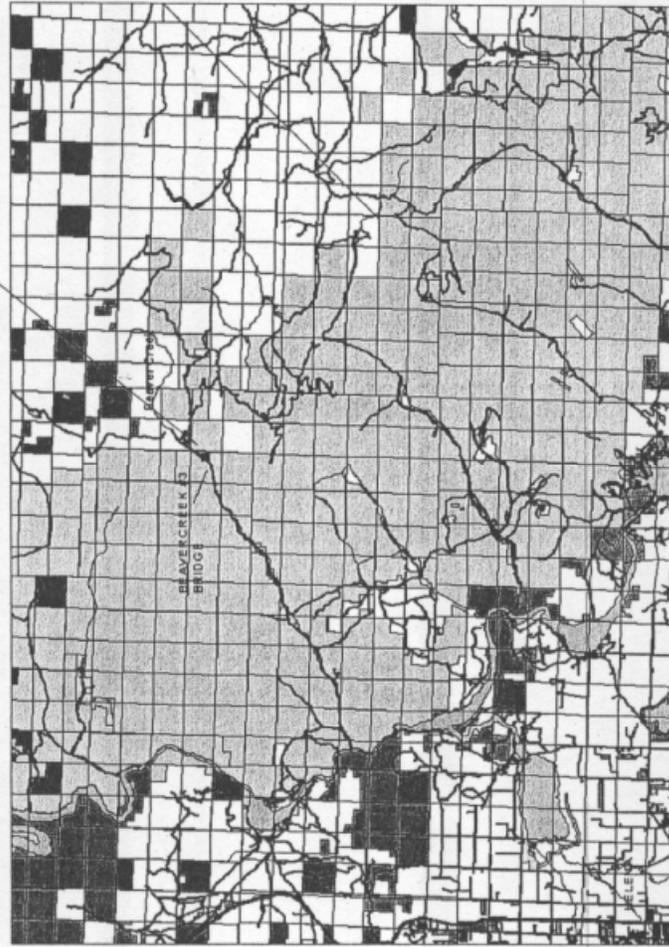
BEAVER CREEK BRIDGE #3 BRIDGE NO. 138-11.0

HELENA NATIONAL FOREST
HELENA RANGER DISTRICT
LEWIS & CLARK COUNTY, MONTANA

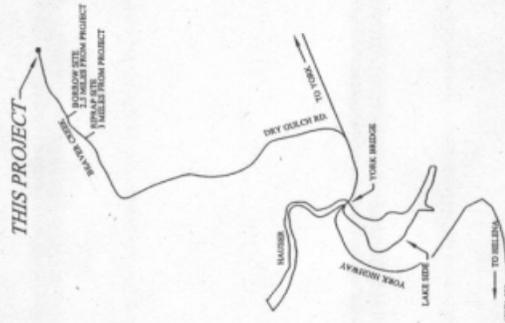


MONTANA INDEX MAP

THIS PROJECT
BEAVER CREEK BRIDGE #3



VICINITY MAP



GEOCELL INFILL
Commercial Source
CRUSHED SURFACING
Commercial Source

EMBANKMENT MATERIAL

From Structural Excavation and source designated on site map

RIPRAP

From Structural Excavation and source designated on site map

APPROVED:

DATE _____
DIRECTOR OF ENGINEERING
NORTHERN REGION

REVIEWED:

DATE 3/13/03
FOREST ENGINEER
HELENA NATIONAL FOREST

RECOMMENDED:

DATE 4-1-03
DISTRICT RANGER
HELENA NATIONAL FOREST

APPROVED:

DATE 4-1-03
FOREST SUPERVISOR
HELENA NATIONAL FOREST



Lee & Jackson
Professional Engineers
and Surveyors

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GENERAL NOTES

SPECIFICATIONS: Materials And Construction Of This Structure Shall Be In Accordance With The 1996 USDA - Forest Service Specifications For Construction Of Roads And Bridges, As Modified For This Contract.

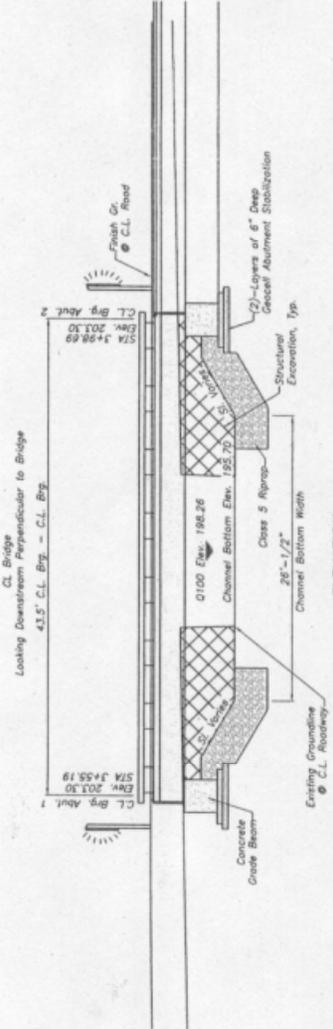
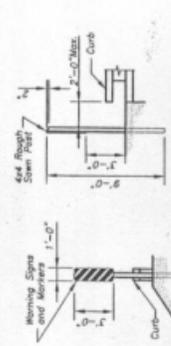
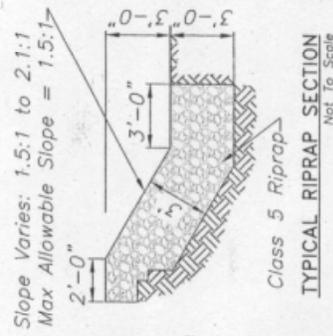
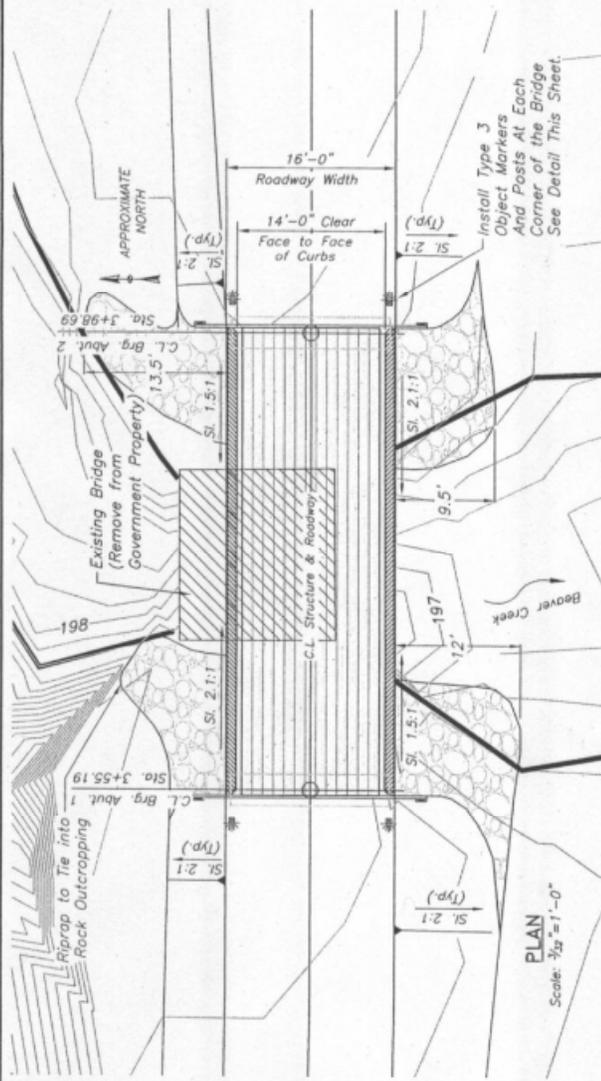
DESIGN: This Structure Is Designed For HS20-44 Loading In Accordance With AASHTO Standard Specifications For Highway Bridges, 16th Edition, 1996 Plus 1997, 1998 And 1999 Interim.

HYDROLOGY AND HYDRAULICS: This Structure Is Designed To Pass A 100-Year Frequency Flood With Two Feet Of Minimum Freeboard. The Design Volumes Are As Follows:
 $Q_{100} = 496 \text{ CFS}$, $Q_2 = 84 \text{ CFS}$

CONCRETE: All Concrete Shall Be CLASS A Concrete, $F'_c = 4000 \text{ Psi}$ At 28 Days. Concrete Shall Be Given A CLASS 1 "Ordinary Surface Finish". Concrete Shall Be Air Entrained $5\% \pm 1\%$.

All Concrete Shall Be Made In Accordance With An Approved Mix Design. Chamber All Exposed Edges Of Concrete And Filler All Re-entrant Angles $\frac{3}{4}$ " Unless Noted Otherwise.

REINFORCING STEEL: All Reinforcing Shall Be Of The Deformed Bar Type Conforming To AASHTO M31 (ASTM A615). Curved Bars Shall Be Reinforced As Shown Otherwise On The Plans. Bending And Splicing Of Reinforcement Shall Be In Accordance With ACI 318-89.



UAS
 REGION ONE

Revised _____ Date _____
 Revised _____ Date _____
 Revised _____ Date _____

BEAVER CREEK BRIDGE #3
 HELENA NATIONAL FOREST
 GENERAL LAYOUT

Designed_BMK Design Checked_MAW
 Drawn_DJK Drawing Checked_BAK

DRAWING NO. R1897
 SHEET 2 OF 11

Kadmas
 Lee &
 Jackson
 Consulting Engineers
 and Surveyors

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STEEL SUPERSTRUCTURE NOTES

LUMBER: Backing Plank And Running Plank Shall Be Rough Sawn And Shall Be Coastal Region Douglas Fir No. 2 Grade Or Better, Conforming To Current WMPA Grading Rules For Western Lumber Or Current WCLB Standard Grading Rules For Western Coast Lumber.

GLUED-LAMINATES: Deck Panels, Curbs And Curb Blocks Shall Be Glued-Laminated Members Of Coast Region Douglas Fir, Conforming To The American Institute Of Timber Construction (AITC) 117-93, Combination Symbols 3, 4, Or 5. Members Shall Be Manufactured For Wet Condition Use And Industrial Appearance.

TREATMENT: After Fabrication, All Lumber Shall Be Incised And Pressure Treated In Accordance With WMPA C-2 (Soil & Fresh Water Use), For Solid Sawn Members And C-2B (Soil Contact), For Glued-Laminates (Using WMPA P-1).

A) Pentachlorophenol Meeting WMPA P-8, Using WMPA P-9 Type A Solvent.

B) Creosote Meeting WMPA P-1.

C) Copper Naphthenate Meeting WMPA P-8, Using WMPA P-9 Type A Solvent Containing A Minimum Of 2% Copper Metal.

Treatment Will Comply With The Requirements Of The Current Edition Of WMPA's Best Management Practices For The Use Of Treated Wood In Aquatic Environments.

FIELD TREATMENT: Copper Naphthenate (2% Solution) Shall Be Furnished For Field Treating Of Wood. All Abrasions And Field Cuts - Approved By The C.O. - Shall Be Carefully Trimmed And Given Three Push Coats Of The Field Treatment Solution. Holes Drilled In The Field Shall Be Poured Full Of Preservative And Plugged With Tight Fitting, Treated, Hardwood Dowels.

INSPECTION AND CERTIFICATION: The Following Compliance Certificates Shall Be Furnished Upon Delivery:

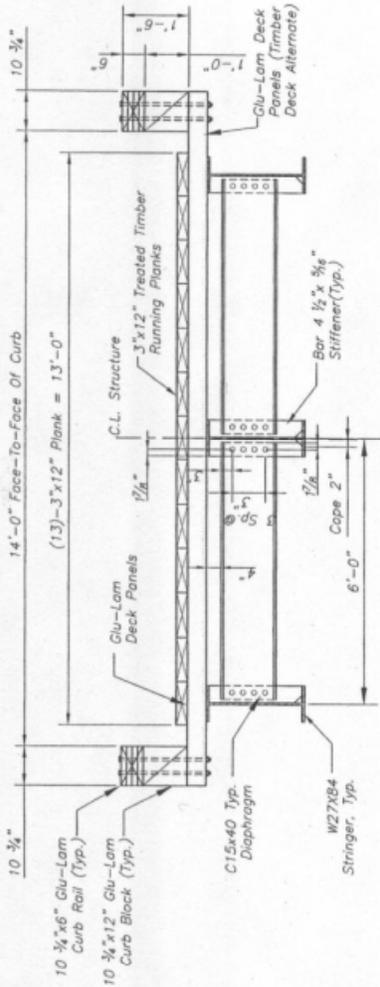
- Supplier Certification, From A WMPA Or WCLB Approved Supplier, That All Wood Materials Meet Requirements As To Species And Grade.
- Certification Of Preservative, Penetration In Inches, And Retention In Pounds Per Cubic Foot Assay, In Accordance With Either A Qualified Testing And Inspection Agency Or Supplier Certification. Supplier Certification Requires Each Solid Piece To Be Stamped Or Branded With The AISC Quality Mark.
- Certification From A Qualified Inspection And Testing Agency Indicating Conformance Of All Glued-Laminated Members With AITC 117-93.
- Supplier Certification That All Treated Wood Materials Were Treated In Accordance With And Meet The Requirements Of WMPA's Best Management Practices For The Use Of Treated Wood In Aquatic Environments.

HARDWARE AND STRUCTURAL STEEL: All Structural Steel Shall Be AASHTO M270, Grade 50W, (ASTM 709, Grade 50) Weathering Steel, All Structural Steel Members Shall Be AISC Type 3, Bolts, All Other Bolts And Nuts Shall Conform To A307, And Need Not Be Galvanized. Use Malleable Iron Washers Against Wood.

STEEL FABRICATION: Submit Shop Drawings For All Structural Steel Elements. All Welding Shall Be In Accordance With AISC D1.3, Bridge Welding Code. All Electrodes Shall Be E70XX. Steel Stringers Shall Be Cambered 1".

OPTIONAL PREFABRICATED STEEL SUPERSTRUCTURE:

1) Prefabricated Steel Bridge Superstructure May Be Substituted For The Superstructure Design Shown. See Special Provisions For Design And Submittal Requirements.



TYPICAL DECK SECTION

Scale: 3/8" = 1'-0"

INFORMATIONAL ONLY - NOT FOR BIDDING PURPOSES - REFER TO BID SCHEDULE

ESTIMATED QUANTITIES (Steel Alternate)

SPECIFICATION SECTION	DESCRIPTION	UNIT	QUANTITY
170	STAKING MAJOR STRUCTURES	LS	1
202	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
203	EMBANKMENT PLACEMENT METHOD 3	CY	404
204	STRAW/HAY BALES	EA	30
204	SOIL EROSION AND POLLUTION CONTROL	LS	1
206	STRUCTURAL EXCAVATION	CY	300
251	PLACED RIPRAP, CLASS 5, METHOD A	CY	150
260	GEOCELL ABUTMENT STABILIZATION, 6 INCH DEPTH	SY	43
304	CRUSHED AGGREGATE, TYPE SURFACING, GRADING G, COMPACTION B	CY	65
552	STRUCTURAL CONCRETE, CLASS A(AE)	CY	11
554	REINFORCING STEEL	LB	804
560	BRIDGE SUPERSTRUCTURE (Steel Alternate)	LB	13,434
565	STRUCTURAL STEEL	MBF	1,736
557	TREATED STRUCTURAL TIMBER AND LUMBER	MBF	4,504
601	MOBILIZATION	LS	1
633	WOOD POSTS	LF	32
633	OBJECT MARKERS	EA	4
637	HYDRAULIC EXCAVATOR WITH THUMB, MINIMUM 150 FLYWHEEL HP	HR	16



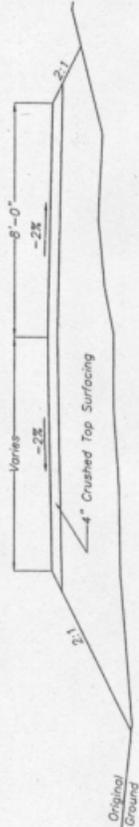
REGION ONE

BEAVER CREEK BRIDGE #3
HELENA NATIONAL FOREST
TYPICAL SECTION &
ESTIMATED QUANTITIES

Designed_BAK_Design Checked_MAM
Drawn_DJK_Drawing Checked_BAK SHEET 4 OF 11

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Lee &
Jackson
Consulting Engineers
and Surveyors

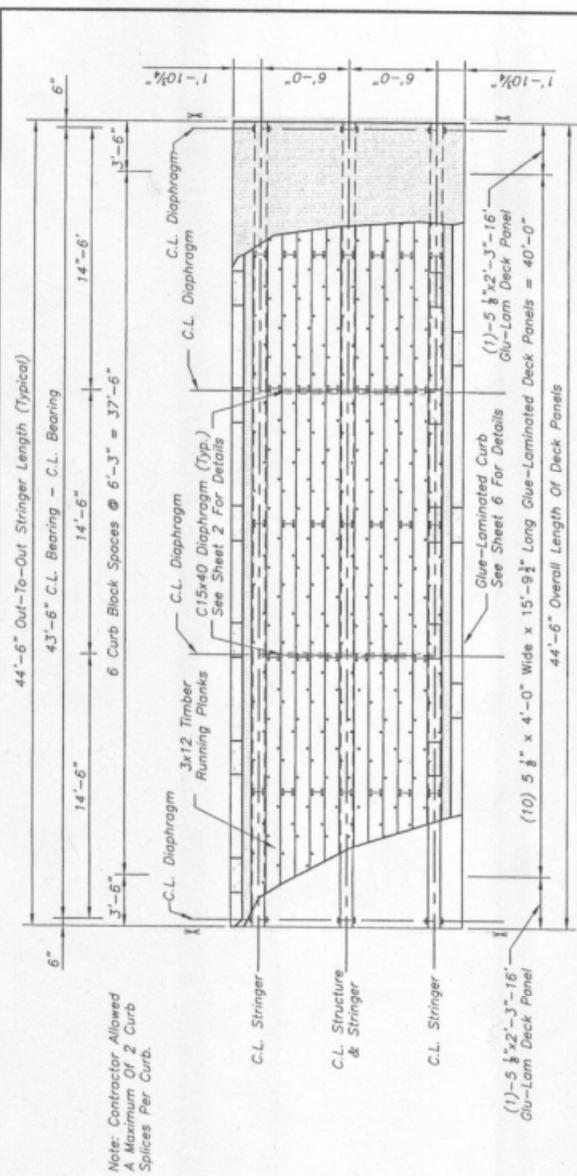
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△	Revised	Date



TYPICAL ROAD SECTION

Scale: 1/4" = 1'-0"

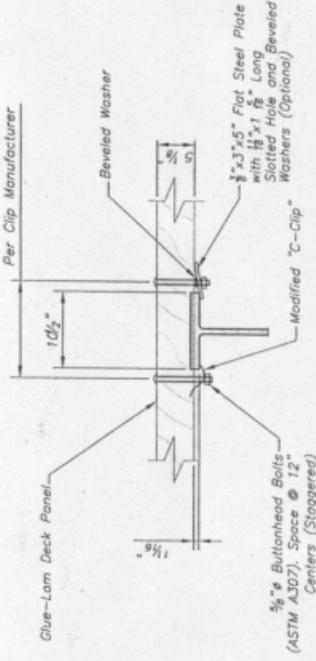
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Note: Contractor Allowed A Maximum Of 2 Curb Splices Per Curb.

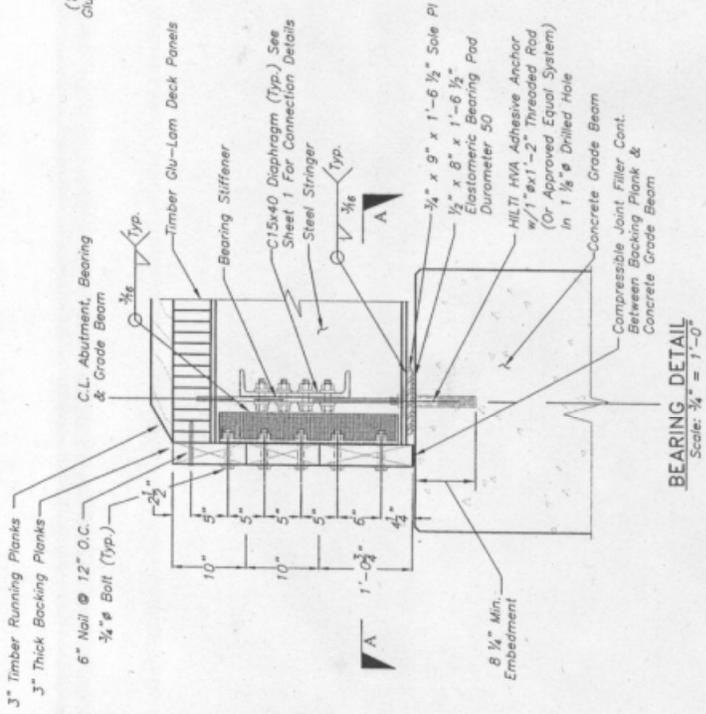
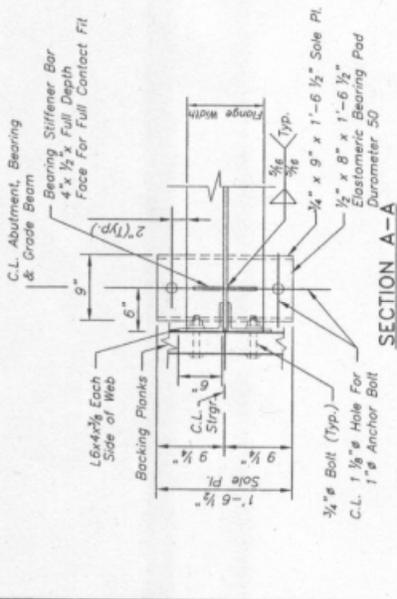
SUPERSTRUCTURE PLAN

- Notes:**
1. Fasten Timber Deck Panels To Stringers w/ C-Clip, Flat Steel Plate, Or Approved Equal. Submit For Review Prior To Fabrication.
 2. Fasten Running Planks To Timber Deck With Two Rows Of 6" Ring Shank Nails Per Plank @ 24" Centers. Alternate Centers With Nails At Each End Of Plank.
 3. Prepare Deck And Running Plank Spike Lead Holes Using A Hole Equal To 75% Of Spike Diameter. Treat Ho. With Copper Naphthenate (2% Solution) Before Placing Spike.



TYPICAL DECK TO BEAM CONNECTION DETAIL

Scale: 3/4" = 1'-0"



Kadrmas Lee & Jackson
Consulting Engineers and Surveyors

Revised	Date
Revised	Date
Revised	Date

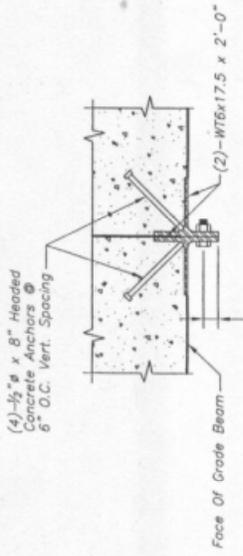
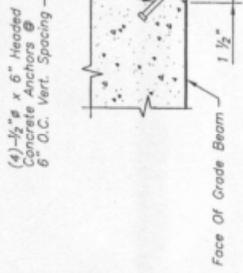
BEAVER CREEK BRIDGE #3
HELENA NATIONAL FOREST
STEEL STRUCTURE DETAILS
Designed_BJK Design Checked_MAW
Drawn_DJK Drawing Checked_BJK
REGION ONE
DRAWING NO. R1897
SHEET 5 OF 11

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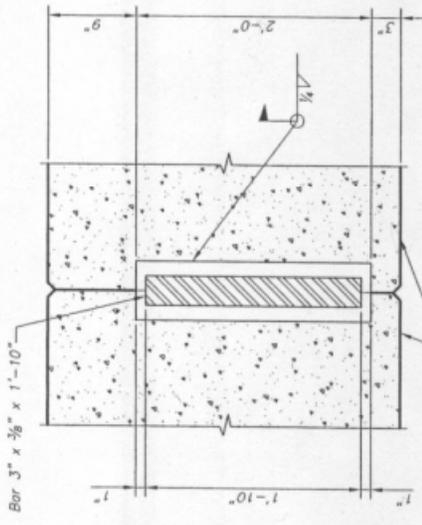
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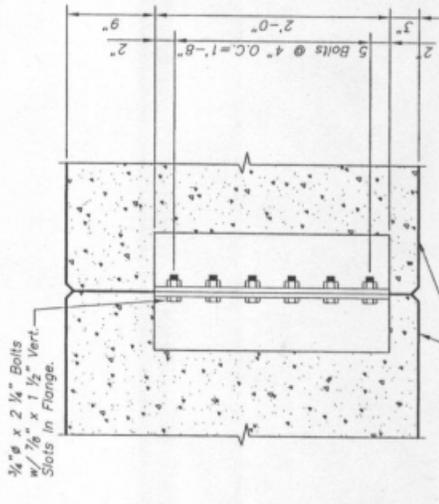
PLAN SECTION

PLAN SECTION



ELEVATION

FIELD WELD ALTERNATE



ELEVATION

FIELD BOLT ALTERNATE

PRECAST GRADE BEAM
OPTIONAL FIELD SPICE DETAILS

Scale: 1" = 1'-0"

△	Revised	Date
△	Revised	Date
△	Revised	Date

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REGION ONE

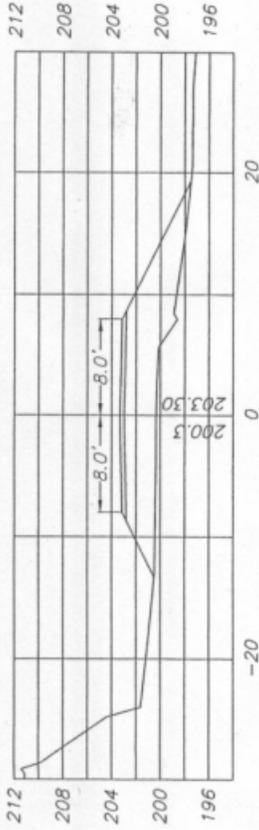
BEAVER CREEK BRIDGE #3
HELENA NATIONAL FOREST
FIELD SPICE DETAILS

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Drawn: D.K. Drawing Checked: B.K.

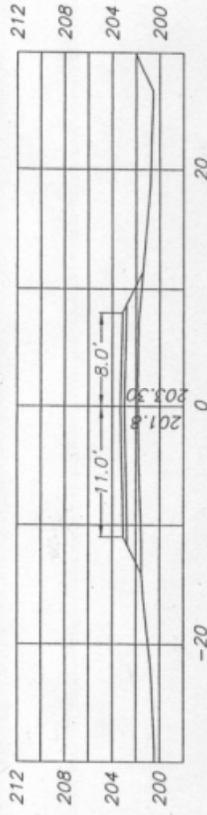
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SHEET 9 OF 11

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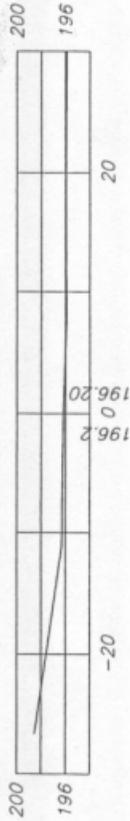
Bridge End
3+54.69



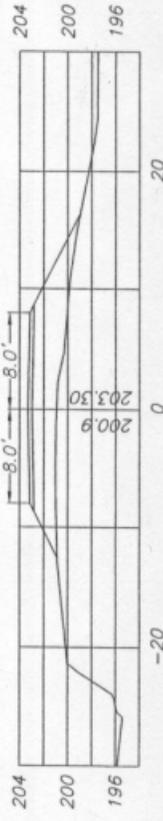
Curve Widening Transition
4+48.66



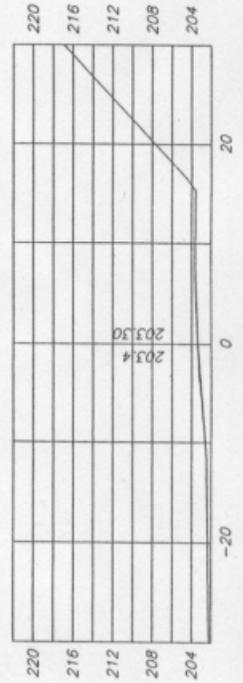
Match Existing
2+00



Begin Curve Widening
Bridge End
3+99.19



Match Existing
End Curve Widening
5+30.24



REGION ONE

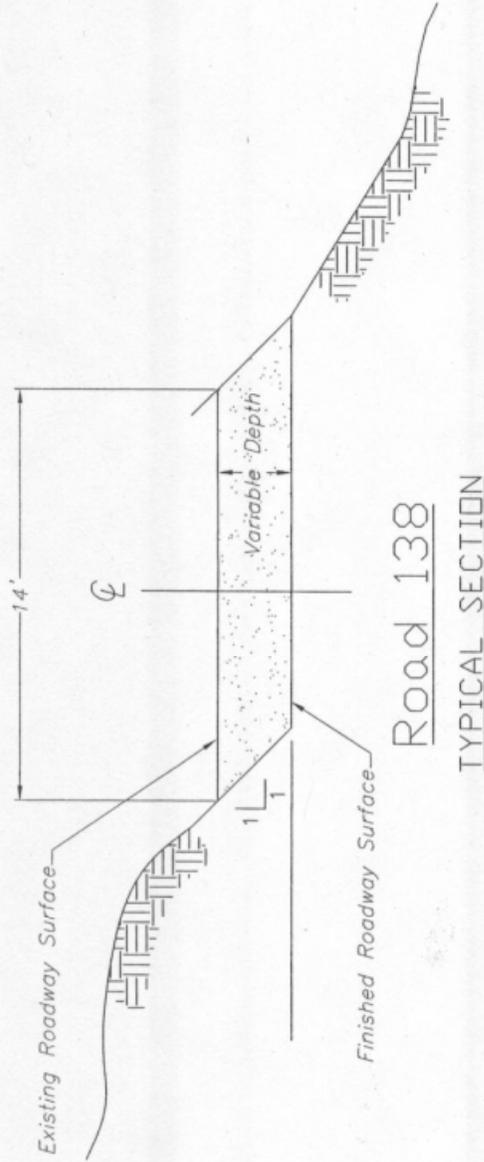
BEAVER CREEK BRIDGE #3
HELENA NATIONAL FOREST
ROAD CROSS SECTIONS

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Drawn_DAK_Drawing Checked_BAK
DRAWING NO. R1897
SHEET 10 OF 11

Revised	Date

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NOTES: FINISHED SURFACE ROAD 138

1. Road Width is 14'
2. Inslope of 2%
3. After borrow material is removed the roadway shall be finished in accordance with specification 306. Payment incidental to embankment, item 203 (11)

△	Revised	Date
△	Revised	Date
△	Revised	Date



REGION ONE

BEAVER CREEK BRIDGE #3
HELENA NATIONAL FOREST
BORROW SITE DETAIL

Designed_BJK_Design_Checked_MAM_Drawing No. R1897
Drawn_DK_Drawing_Checked_BJK_SHEET 11 OF 11

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and Surveyors