Washington State Department of Transportation

SUPPLEMENTAL AGREEMENT		ORGANIZATION AND ADDRESS Dr. Anthony P. Clevenger c/o Western Transportation Institute Montana State University PO Box 174250 Bozeman, MT 59717-4250
AGREEMENT NUMBER GCA 4281 Supplement 4		SECTION/LOCATION Interstate 90 Snoqualmie Pass East
STATE ROUTE NUMBER 90	CONTROL SECTION NUMBER 1901	DESCRIPTION OF WORK This Supplement #4 will authorize and pay for development of a Wildlife Monitoring and Site Management Plan.
REGION: SOUTH CENTRAL		

This Supplement #4 to Agreement GCA 4281 is made and entered into on the 8th day of May, 2007 between the State of Washington, Department of Transportation, acting by and through the Secretary of Transportation, by virtue of Title 47 RCW, hereinafter called the "STATE," and Western Transportation Institute/Montana State University hereinafter called the "WTI" or "Research Agency."

WHEREAS, the parties desire to further supplement AGREEMENT GCA 4281 originally executed on January 25, 2005, amended by Supplement # 1, executed on January 10, 2006, Supplement #2, executed on May 11, 2006 and Supplement # 3, executed on April 24, 2007.

The changes to the agreement are described as follows:

Section III-PERIOD OF PERFORMANCE is revised to extend the agreement completion date from "December 31, 2007, unless terminated sooner, or modified as provided herein" to "June 30, 2008, unless terminated sooner, or modified as provided herein."

Section V – PAYMENT is revised to increase the maximum payment by the STATE from $ 78,882.00 to $190,718.00 as detailed in Exhibit "B-3," Estimate of Cost, attached and incorporated by this reference.

Section XXI – EXHIBITS is amended as follows:

Exhibit "B-2" Project Costs is supplemented with Exhibit "B-3" attached hereto and by this reference made a part of this AGREEMENT. Exhibit "B-3" covers the additional expenses for development of the Wildlife Monitoring and Site Management Plan.

Exhibit "C-2" Scope of Work is supplemented with Exhibit "C-3" attached hereto and by this reference made a part of this AGREEMENT. Exhibit "C-3" describes task work to develop a Wildlife Monitoring and Site Management Plan.

All other terms and conditions if the original agreement and executed supplements shall remain in full force and effect except as modified by this Supplement #4.

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT as of the day and year first above written.

MONTANA STATE UNIVERSITY

By: Sandy L. Seward

Title: SANDRA L. SWARD Director MSU Office of Sponsored Programs

Date: 5.8.07

STATE OF WASHINGTON DEPARTMENT OF TRANSPORTATION

By: Don Whitehouse

Title: Regional Administrator, Don Whitehouse

Date: 5/3/07

APPROVED AS TO FORM:

By: E Salonga

Assistant Attorney General

Date: April 27, 2007

I-90 Snoqualmie Pass East
Agreement No. GCA-4281
Supplement 4 Exhibit "C-3"
Scope of Work for a
Wildlife Monitoring and Site Management Plan

1. PURPOSE

Describe the Scope of Work (Scope) for the involvement of the WTI in the development and completion of the Wildlife Monitoring and Site Management Plan (Monitoring Plan) and Final Environmental Impact Statement (EIS)-ready Abstract (Abstract). The Monitoring Plan will include the following additional components:

a) Funding Opportunities Matrix;
b) Grant Partnership Plan Matrix; and
c) Process for Research Control(s) Assistance.

2. SERVICES TO BE PROVIDED BY THE WTI

The WTI shall provide the following deliverables, identified by the appropriate Work Breakdown Structure (WBS) codes.

2.1. WBS: PC-18.557.01 – Draft Monitoring Plan and Draft Abstract: Develop and provide, simultaneously, the Draft Monitoring Plan and Draft Abstract for the STATE's review, comments, and approval, including the following:

2.1.1. Compile Information and Develop Monitoring Plan and Abstract

2.1.1.1. The WTI shall use ***Attachment 1*** as the basis for developing the Monitoring Plan.

2.1.1.2. Assumes that no new fieldwork will be necessary.

2.1.1.3. Coordinate as necessary with the STATE and primary stakeholder agencies during the development of the Monitoring Plan.

2.1.1.3.1. Primary stakeholder agencies and contacts are: Bryan Dillon, Federal Highways Administration; Patty Garvey-Darda; U.S. Forest Service; and Karl Halupka, U.S. Fish and Wildlife Service.

2.1.2. The STATE and the Project's Wildlife Monitoring Technical Committee (Technical Committee) will review the Draft Monitoring Plan.

2.1.2.1. Only the STATE will comment on the Draft Monitoring Plan.

2.1.3. The STATE will review and comment on the Draft Abstract.

2.1.4. Interagency Coordination and Meetings

2.1.4.1. Work with the STATE to provide coordination and consultation with primary stakeholder agencies.

2.1.4.2. Participate in up to 11 full work-day meetings. Some of the meetings could take the form of a Technical Committee.

2.1.4.2.1. Up to six of the meetings could be held with the STATE in the Project office in Yakima, Washington.

2.1.4.2.2. Up to five of the meetings could be held with the STATE and other agencies in Cle Elum or Ellensburg, Washington.

2.1.4.2.2.1. One of the meetings will be to provide the Technical Committee with an annual update.

2.1.4.2.3. Up to three WTI staff members may be required to participate in each meeting.

2.1.4.2.3.1. The STATE and the WTI will communicate with each other prior to the meeting to determine how many WTI staff members will be required to attend the meeting.

2.1.4.3. Provide the STATE with electronic copies of all interagency correspondence and email messages.

2.2. WBS: PC-18.557.02 – Final Monitoring Plan and Final Abstract: Update and revise the Draft Monitoring Plan and Draft Abstract into the Final Monitoring Plan and Final Abstract, including the following:

2.2.1. Incorporate the STATE's comments from the Draft Monitoring Plan and Draft Abstract, including any new data provided, and consider the Technical Subcommittee's input, and finalize the documents.

2.2.2. Assumes that no additional fieldwork will be necessary if any design changes are made.

3. SERVICES TO BE PROVIDED BY THE STATE

3.1. The STATE will provide the following:

3.1.1. A current project description, including maps, preliminary, and conceptual drawings.

3.1.2. Existing documentation and designs on the Project, including the I-90 Snoqualmie Pass East Environmental Document Production URS Quality Assurance/Quality Control Plan.

3.1.3. Printing authorization for the Monitoring Plan.

3.1.4. Access to STATE staff in order to respond to the WTI's inquiries.

3.2. The STATE will review the Draft Monitoring Plan and Draft Abstract, and provide an electronic copy of each reviewer's comments/ response tracking table (CRTT) to the WTI.

3.2.1. The STATE will have 20 business days to review the Draft Monitoring Plan and Draft Abstract, and provide comments.

3.2.2. The STATE will provide each reviewer with an electronic CRTT.

3.3. The STATE will arrange on-site meetings with the WTI and/or other interested parties on an as-needed basis.

4. ROLES, RESPONSIBILITIES, AND EXPECTATIONS

4.1. The WTI shall develop and provide all required documents in compliance with the I-90 Snoqualmie Pass East Environmental Document Production URS Quality Assurance/Quality Control Plan.

4.2. The WTI shall monitor and manage activities within this Scope, and inform the STATE of any changes that shall affect the scope, schedule, or budget for this work.

4.3. The WTI shall prepare a monthly progress report, which includes an earned value section, for submittal to the STATE.

4.3.1. The progress report shall graphically represent earned value utilizing the WBS codes from this Scope and shall include the following elements:

4.3.1.1. Planned Value (PV): that portion of the cost estimate planned to be spent on a given activity during a given period

4.3.1.2. Actual Costs (AC): the total of the costs incurred in accomplishing work on the activity in a given period

4.3.1.3. Earned Value (EV): the value of the work actually completed

4.4. WTI Task Management and Coordination

4.4.1. Develop a Monitoring Plan for the Project, which begins at Hyak (Milepost [MP] 55.1) and ends at the West Easton Interchange (MP 70.3).
4.4.2. Coordinate with the STATE to ensure efficient issue resolution and decision making occurs.
4.4.3. Ensure that the WTI works cooperatively with STATE staff to meet project demands.
4.4.4. Establish clear roles for team members, set schedules, and monitor timing.
4.4.5. Coordinate with Final EIS Task Manager Dale Bennett, URS Corporation (URS), for direction on developing the Abstract.
4.4.6. The STATE and the Project's Wildlife Monitoring Technical Subcommittee will review and comment on the Draft Monitoring Plan.
4.4.7. After reviewing the comments received under Section 2.1:
4.4.7.1. Identify conflicting comments, and prepare a summary/table of conflicts and proposed resolutions.
4.4.7.2. Coordinate with the STATE's Environmental Manager or his designee to address the conflicts.
4.4.7.3. Provide the STATE with an updated single CRTT showing how each comment was resolved. The CRTT will be sequentially collated and include:
4.4.7.3.1. Each comment by page and line number.
4.4.7.3.2. The original comment, including the original comment number and individual who provided the comment.
4.4.7.3.3. How the comment was resolved.

5. SAFETY

5.1. If field work is required in order to perform any of the work in this Scope, the WTI shall provide the STATE with a Job Specific Safety Plan (Safety Plan) prior to conducting any field work. The Safety Plan shall cover key issues such as, but is not limited to:
5.1.1. Pre-activity meeting requirements
5.1.2. Discussion of work activities
5.1.3. Identification of potential hazards associated with performing the work, and steps that shall be taken to mitigate each hazard
5.1.4. Review of the traffic control plan, set-up and take-down strategy, and specific individual assignments
5.1.5. Communication plan, including internal and external notification requirements
5.1.6. Review of the appropriate personal protective equipment
5.1.7. Review of procedures to follow in the case of an accident or injury involving oneself or others
5.1.8. Review of emergency medical providers, and locations of nearest medical facilities

5.2. Prior to developing a Safety Plan, the WTI should review the Safety Plan on file from URS to determine whether it meets the criteria required under this Scope, and adopt it if it does.

6. DELIVERABLES

6.1. WBS: PC-18.557.01 – Draft Monitoring Plan and Draft Abstract

6.1.1. Up to 15 bound, line-numbered, color, double-sided hard copies of the Draft Monitoring Plan
6.1.2. 1 unbound, line-numbered, color, double-sided hard copy of the Draft Monitoring Plan

6.1.3. 1 electronic color copy of the Draft Abstract in Microsoft® Word format for inclusion in the Final EIS, plus electronic versions of all figures, maps, and/or appendices in their native format

6.1.4. 1 electronic, bookmarked, line-numbered, color copy of each draft document, including any maps, figures, and/or appendices, in Adobe® pdf format

6.1.5. 1 editable electronic copy of each draft document, including all graphics, and/or appendices

6.1.6. Draft and final copies of all meeting minutes, and/or notes, including email messages and correspondence

6.2. WBS: PC-18.557.02 – Final Monitoring Plan and Final Abstract

6.2.1. Up to 25 bound, color, double-sided hard copies of the Final Monitoring Plan

6.2.2. 1 unbound, color, double-sided hard copy of the Final Monitoring Plan

6.2.3. 1 electronic, color copy of the Final Abstract in Microsoft® Word format for inclusion in the Final EIS, plus electronic versions of all figures, maps, and/ or appendices in their native format

6.2.4. 1 electronic, bookmarked, color copy of each final document, including any maps, figures, and/or appendices, in Adobe® pdf format

6.2.5. 1 editable electronic copy of each final document, including all graphics, and/or appendices

6.3. Safety Plan

6.3.1. If field work is required to perform the work of this Scope, then the WTI shall provide the STATE with a Job Site Specific Safety Plan as described in Section 5.

7. SCHEDULE

7.1. The WTI will supply the STATE with a schedule that meets the following two milestone dates for this Scope:

7.1.1. Version B of the Final EIS (Version B), which is currently scheduled for issuance on August 10, 2007;

7.1.1.1. The Draft Monitoring Plan shall be submitted prior to the issuance of Version B.

7.1.1.2. The Draft Abstract shall be submitted no later than 10 business days prior to the issuance of Version B.

7.1.2. Preliminary Final EIS, which is currently scheduled for issuance on December 7, 2007.

7.1.2.1. The Final Monitoring Plan shall be submitted prior to the issuance of the Preliminary Final EIS.

7.1.2.2. The Final Abstract shall be submitted no later than 10 business days prior to the issuance of the Preliminary Final EIS.

7.1.3. The anticipated completion dates are based on the assumption that the notice to proceed, critical project activities, and information, comments on documents, and meetings will occur in a timely manner to meet the project schedule. These dates may need to be revised if unanticipated or unreasonable delays occur.

7.2. This Scope has an anticipated completion date of June 30, 2008.

Attachment 1

1. PURPOSE

1.1. Prepare a Wildlife Monitoring and Site Management Plan (Monitoring Plan) with clear objectives to obtain wildlife monitoring baseline information prior to construction, and also post-construction monitoring.

1.2. Be able to describe how pre-construction and post-construction monitoring results will be used to determine the effectiveness of the placement of wildlife crossings[1] and fencing.

1.3. The Monitoring Plan should focus on monitoring in the vicinity of the Connectivity Enhancement Areas (CEAs), wildlife crossings, and at appropriate spatial scales to meet research and monitoring objectives.

1.4. The Monitoring Plan should describe monitoring requirements based on the following anticipated funding availability:

1.1.1. **Tier 1 (*mandatory*)**: Baseline monitoring (i.e., road mortality, wildlife use of wildlife crossings, wildlife crossing design) that would address proposed wildlife crossings throughout the Project corridor. Basic monitoring, which is needed to answer basic management questions regarding mitigation performance assessment.

1.1.2. **Tier 2 (*optional*)**: Additional monitoring that complements the baseline monitoring, and advances the state of knowledge of wildlife crossing design and performance. The STATE would partner with other agency(ies) and/ group(s).

1.1.3. Develop a funding opportunities matrix based on Tiers 1 and 2.

2. BACKGROUND

2.1. Summarize information from the Project Draft EIS and the MDT's Recommendation Package.

2.2. Describe how this information is relevant to the Monitoring Plan.

3. MONITORING PLAN

3.1. Methodological Framework

3.1.1. ***Conceptual Approach.*** The STATE will review and approve the WTI's recommendations for **defining** and **determining** performance criteria, and consider input from primary stakeholders.

3.1.1.1. **Identify** the conceptual criteria to be used for assessing the effectiveness of highway mitigation measures for terrestrial wildlife populations (e.g., road kill reduction, barrier effects, population connectivity) in the Project area, which may include, but is not limited to:

3.1.1.1.1. Characteristics/attributes of the wildlife crossings themselves, including site habitat conditions.

3.1.1.1.2. Indicator species, or species groups using the wildlife crossings.

3.1.1.1.3. A comparison of wildlife movements and activity in the area with and without wildlife crossings.

3.1.1.2. **Describe** cost effective, practical means to evaluate the Project using the following criteria:

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[1] For the purposes of this Scope, "wildlife crossing" will have the following definition: "Wildlife crossings are passage structures that allow animals to connect habitats and populations bisected by roads. Wildlife crossings consist of a range of types, from large wildlife overpasses and underpass structures, to smaller culverts and tunnels."

3.1.1.2.1. Consider a range of funding scenarios and level of effort/ investment, including potential partnerships.
3.1.1.2.2. Establish standards of success/ suggested performance criteria to meet a range of ecological and taxonomic objectives.
3.1.1.2.3. Propose monitoring methods needed to assess performance at a range of taxonomic scales.

3.1.2. ***Methods***

3.1.2.1. Study area
3.1.2.1.1. Study area size will be dependent upon the performance criteria being monitored.
3.1.2.2. Techniques
3.1.2.2.1. Consideration of current state-of-the-art methodology that addresses connectivity research.
3.1.2.3. Duration
3.1.2.3.1. What is the time required for answering longer-term monitoring (Tier 2) to address more complex questions regarding ecological connectivity and mitigation performance?
3.1.2.4. Research Partnerships and Coordination
3.1.2.4.1. Provide guidance on how to develop potential partnerships with agencies and educational institutions for carrying out the Monitoring Plan (e.g., federal and state agencies, universities).
3.1.2.4.1.1. Develop a process for a research control(s) assistance plan.
3.1.2.4.2. Provide guidance on how to develop potential partnerships with non-governmental organizations, private and corporate foundations, and others to help carry out the Monitoring Plan.
3.1.2.4.2.1. Develop a grant partnership plan matrix.
3.1.2.5. Costs/Overall Yearly Budget (Estimates) for Tier 1 and Tier 2 Monitoring
3.1.2.5.1. Recommendations for different amounts per year.

3.1.3. ***Results***

3.1.3.1. Performance Criteria
3.1.3.1.1. Road Mortality
3.1.3.1.1.1. After construction, has number of recorded road kill along project area decreased compared to baseline pre-construction?
3.1.3.1.1.2. Was fencing adequate (keeping wildlife away from the highway)?
3.1.3.1.2. Connectivity
3.1.3.1.2.1. Is wildlife using the wildlife crossings?
3.1.3.1.2.2. Did new wildlife crossings restore movement and population connectivity (gene flow)?
3.1.3.1.2.3. If not, investigate why.
3.1.3.1.3. Wildlife Crossing Design
3.1.3.1.3.1. Does human use of the wildlife crossings or disturbance in adjacent areas discourage wildlife use?
3.1.3.1.3.2. What are the attributes (e.g., structural, landscape/ habitat) that influence passage by wildlife species?
3.1.3.1.3.3. Did wildlife crossing design (allowance of four feet of snow) adequately accommodate clearance for wildlife crossing during the winter months?
3.1.3.1.3.3.1. Does the presence of a high snowpack discourage wildlife use of the wildlife crossings?

3.1.3.1.3.4. Have we achieved the habitat conditions at the site that we expected?

3.1.3.1.3.4.1. If not, investigate why.

3.1.3.1.3.5. Was the fencing installed according to specifications?

3.1.3.1.3.5.1. Is it still performing?

3.1.3.2. Communication and Reporting

3.1.3.2.1. Develop a regular reporting and communication tool or mechanism for findings that is coordinated among collaborating groups and stakeholders (partners).

3.1.3.2.2. Develop a regular reporting and communication tool or mechanism for transfer of technology to other transportation and natural resource agencies.

3.1.3.2.3. Develop a communication and outreach tool or mechanism on the project for the general public.

3.1.3.3. Adaptive Management

3.1.3.3.1. Describe a long-term adaptive management system to address the application of new knowledge, environmental change, and unexpected events to future phases of the Project.

3.1.3.3.2. Recommend methods to apply lessons learned from the first-built wildlife crossings, and to adapt mitigation in other phase(s) of the Project.

4. SUMMARY OF RECOMMENDATIONS

4.1. Provide benefits, pros/cons of different research and monitoring scenarios.

4.1.1. Short-term and long-term;

4.1.2. Different wildlife taxa and ecological objectives;

4.1.3. Cost benefit analysis and prioritization of research and monitoring scenarios.

4.2. Suggested next steps for initiating monitoring beginning the summer of 2007.

4.2.1. Get funding in place to begin monitoring the summer of 2007.

4.2.2. Coordinate on-going research activities with new research initiatives in the summer of 2007.

4.2.3. Find at how we can actively engage/involve new partners in the monitoring project.

APPENDIX A.
Reference Materials

Clevenger, A.P., B. Churszcz, and K.E. Gunson. 2001. Highway mitigation fencing reduces wildlife-vehicle collisions. *Wildlife Society Bulletin* 29:646-53.

Clevenger, A.P., J. Wierzchowski, B. Chruszcz, and K. Gunson. 2002. GIS-Generated, Expert-Based Models for Identifying Wildlife Habitat Linkages and Planning Mitigation Passages. *Conservation Biology* 16 (2):503.

Clevenger, A.P., and N. Waltho. 2000. Factors influencing the effectiveness of wildlife underpasses in Banff National Park, Alberta, Canada. *Conservation Biology* 14(1):47-56.

Clevenger, A.P., and N. Waltho. 2005. Performance indices to identify attributes of highway crossing structures facilitating movement of large mammals. *Biological Conservation* 121 (3): 453-464.

Clevenger, A.P. 2005. Interstate 90 Snoqualmie Pass East Project, Sufficiency Report, Wildlife Section. Western Transportation Institute, Montana State University.

Forman, Richard T.T., et al. Road Ecology Science and Solutions (Ch. 6), (December 2002)

Harrington, Conover. 2006. Characteristics of Ungulate Behavior and Mortality Associated with Wire Fences. Wildlife Society Bulletin 34(5):1295-1305

Interstate 90 Snoqualmie Pass East Mitigation Development Team Recommendation Package (July 2006)

I-90 Snoqualmie Pass East Draft Environmental Impact Statement and Section 4(f) Evaluation (June 2005)

I-90 Aquatic Species Discipline Report

I-90 Terrestrial Species Discipline Report

Koehler, G.M. 1990. Population and habitat characteristics of lynx and snowshoe hares in north-central Washington. *Canadian Journal of Zoology* 68:845-851.

Koehler, G.M., and K.B. Aubry. 1994. Lynx. The scientific basis for conserving forest carnivores: American marten, fisher, lynx, and wolverine in the western United States. General Technical Report RM-254, USDA Forest Service.

Singleton, P.H., and J.F. Lehmkuhl. 2000. *Final Report on the I-90 Snoqualmie Pass Wildlife Habitat Linkage Assessment.* WA-RD 489.1. Prepared for Washington State Department of Transportation. Revised May 16, 2000.

Singleton, P.H., W.L. Gaines, and J.F. Lehmkuhl. 2002. Landscape Permeability for Large Carnivores in Washington: A Geographic Information System Weighted-Distance and Least-Cost Corridor Assessment. Research Paper PNW-RP-549. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 89pp.

Western Transportation Institute, Montana State University. 2007. US 93 Preconstruction Wildlife Monitoring Field Methods Handbook. FHWA/MT-06-008/1744-2

WSDOT Environmental Procedures Manual Ch. 436: Wildlife, Fish and Vegetation
http://www.wsdot.wa.gov/fasc/EngineeringPublications/Manuals/EPM/436.pdf

I-90 Snoqualmie Pass East
Agreement No. GCA-4281
Supplement 4 Exhibit "B-3" Cost
Develop the Wildlife Monitoring and Site Management Plan

Budget - WTI TEAM		WTI Team										Other Direct Expenses			Totals
		Tony Clevenger	Dan Smith	Rob Ament	Marcel Huijser	Robbi Colvin	Jeralyn Brodowy	Carol Diffendaffer	Carla Little	Neil Hetherington	Total Hours/Total Costs	Travel	Operations/Communications	Minor Equipment (<5000)	Total Costs
Task #	Task Title - Hourly Cost Rates	$80.16	$62.85	$61.54	$62.85	$31.82	$49.91	$32.52	$36.10	$31.65					
1		208	160	80		16	10				474				
	Outline & Draft Monitoring Plan (1May07)	$16,673.28	$10,056.00	$4,923.20	$0.00	$509.12	$499.10	$0.00	$0.00	$0.00	$32,661	$7,325.00	$0.00	$ 2,500.00	$42,486
2		280	240	200	16	16	10	20	60	40	882				
	Final Monitoring Plan (1Jul07)	$22,444.80	$15,084.00	$12,308.00	$1,005.60	$509.12	$499.10	$650.40	$2,166.00	$1,266.00	$55,933	$2,600.00	$1,500.00	$2,500.00	$62,533
	TOTAL HOURS	488	400	280	16	32	20	20	60	40	1356	$ 9,925.00	$ 1,500.00	$ 5,000.00	
	TOTAL DIRECT COSTS (includes ben.)	$39,118.08	$25,140.00	$17,231.20	$1,005.60	$1,018.24	$998.20	$650.40	$2,166.00	$1,266.00	$88,594	$ 9,925.00	$ 1,500.00	$ 5,000.00	$105,019
	Indirect Costs at 41.5%	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$4,118.88	$622.50	$2,075.00	$6,816
	Total Project Costs	$39,118.08	$25,140.00	$17,231.20	$1,005.60	$1,018.24	$998.20	$650.40	$2,166.00	$1,266.00	$88,594	$ 14,043.88	$ 2,122.50	$ 7,075.00	$111,835

The hourly cost rates shown above include benefits and indirect costs at 41.5%.

Total STATE obligation under this AGREEMENT:

GCA 4281	Original	$37,903
GCA 4281	S-1	$0
GCA 4281	S-2	$30,000
GCA 4281	S-3	$10,980
GCA 4281	S-4	$111,835
	TOTAL	**$190,718**

Any reimbursement over **$ 190,718** must be approved by written amendment.

Agreement GCA 4281 Sup#4; Exh "B-3"