PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Second Amendment to the Agreement between Nebraska Community Foundation, Inc., Platte River Recovery Implementation Program, and Ayres Associates, Inc.

This Second Amendment to the Agreement dated December 15, 2008 between the Nebraska Community Foundation, Inc. ("Foundation") of Lincoln, Nebraska, representing all signatories to the Platte River Recovery Implementation Program ("Program") and Ayres Associates, Inc. ("Consultant") is made and entered into effective on the date of signing below and the final date of this Amendment will be December 31, 2011.

The purpose of this Amendment is to:

- Expand the Scope of Work of the original Agreement to include the FY 2011 tasks described below.
- Stipulate the cost of these additional tasks.

Amendment to Consultant's 2011 Scope of Work and Cost

A. The Consultant's Fiscal Year **2011 Scope of Work** is modified, as per tasks below and described in **Attachments A** and **B**, to include the following:
  - 2011 annual geomorphology/in-channel vegetation monitoring as described in Attachment A.
  - 2011 atlas-related tasks as described in Attachment B.
  - Data analysis tasks to be developed with and requested by the ED Office related to annual reporting and the 2007-2010 Synthesis Report; also includes participation in 2011 and 2012 AMP Reporting Sessions.

B. The Consultant's Fiscal Year **2011 Budget** is modified to **$447,500** to cover the tasks described above and in **Attachments A** and **B**, allocated as follows:
  - $347,500 for 2011 annual geomorphology and in-channel vegetation monitoring tasks (Attachment A).
  - $25,000 for atlas-related tasks (Attachment B).
  - Up to $75,000 for data analysis tasks and participation in 2011 and 2012 AMP Reporting Sessions.

All other terms of the original Agreement remain in effect as originally written.

IN WITNESS WHEREOF, the Parties have executed this Amendment.

Nebraska Community Foundation	Ayres Associates, Inc.
By_____	By_____
DIANE M. WILSON, Chief Financial and Administrative Officer	JAMES D. SCHALL, Vice President
Date: _____	Date: _____

ATTACHMENT A

Ayres/Olsson FY 2011 Geomorphology/In-Channel Vegetation Monitoring Task and Cost Estimate

Ayres Associates Inc Cost Estimate - Year 3 (2011)

PRRIP Central Platte River Channel Geomorphology and In-Channel Vegetation Monitoring Protocol Implementation

LABOR COSTS (*Based on 2010 Labor Rates)

Task #	Description	Principal-In-Charge (Dr. James Schall) $185	Project Manager / Senior Scientist (William Spitz) $130	Senior Associate (Drs. Lagasse & Richardson) $185	Senior Env. Scientist (*Dr. Joan Darling) $157	GIS Supervisor (Anthony Alvarado) $130	Geotech. Engineer (*Ryan Beckman) $118	Project Scientist (*Nathan Van Meter) $78	*Assistant Scientist $51	Survey Crew Chief / Eng. Tech. (Joseph Robinson) $74	2-Man Survey Crew $135	Technician / Clerical / *Student Tech $48/$25*	Task Hours	Task Subtotal	Comments/Assumptions
#	**Year 3 Channel Geomorphology and In-Channel Vegetation Monitoring Protocol Implementation**														
1	Finalize Year 3 Monitoring Plan with ED Office and Discuss Landowner/Access Issues	2	4		4	2		2					14	$1,934	*Finalize Year 3 monitoring activities with ED Office.*
2	Obtain, Prep, and Mobilize Project Equipment		2			2		2	2	16	14		38	$3,852	*Obtain, prepare, and mobilize all equipment necessary to conduct project tasks*
3	Conduct Cross Section Surveys of Active Channel Topography and Geomorphology and Surveys of In-Channel Vegetation Belt Transects and Related Topography at 25 Anchor Points (29 sites)	2	40		32	24		388	360	428	458	2	1734	$155,936	*Conduct detailed survey of channel topography, channel geomorphology, and in-channel vegetation for 7 transects at 25 anchor points. Total number of sites to be surveyed, including split flow and J-2 channel sites = 30.*
4	Bed and Bar Material Sampling of Cross Sections at Anchor Points (282 samples), Compare with Year 1 and 2 data.		36			4	12			72			124	$11,944	*A total of 10 bed/bar material samples will be collected at each of the 25 anchor points (plus 3 J-2 channel sites and 2 split flow sites) using the methodologies described in the SOW. All samples will be transported to the lab for appropriate analyses.*
5	Survey Data Reduction, Update and Merge LiDAR Data with Ground Survey Data; Vegetation Data Analysis		16		16	36		64	64	80		120	396	$26,208	*Once all survey work is completed, final post-processing and data reduction will be accomplished. Active channel survey data will be merged with LiDAR data from outside the active channel area for each cross section. Includes detailed analysis of surveyed vegetation data.*
6	Conduct 6 Bedload Samplings, 1 Depth-Integrated Suspended Sediment Sampling, and 1 Bed Material Sample at 5 Bridge Locations in Year 3, Perform Total Load Computations	4	40	2		36	6			216	110	2	416	$42,628	*The bedload sampling using the Helley-Smith bedload sampler will be conducted 6 times and the depth-integrated sampling will be conducted once during the year using the methodologies and flow requirements described in the protocol. In addition, bed material samples will be collected at all 5 bridge sites. All samples will be transported to the lab for analysis.*
7	Compile Topographic, Geomorphic, Vegetation, and Sediment Data in GIS Database		32			24		2	28	64	4	2	156	$14,236	*All topographic, geomorphic, and vegetation data collected in the field will be compiled in the Project GIS database. All cross section data developed from survey and LiDAR measurements will be compiled in Excel spreadsheets and incorporated in the database. The project atlas will also be updated with the Year 3 survey data.*
8	Meet With ED Office and TAC to Discuss Results of Year 3 Effort, Draft and Final Summary Report on Year 3 Data Collection Efforts and Monitoring Activities	6	40		8	8		2		12		16	92	$10,418	*A meeting will be held with the ED Office/TAC to discuss the results of the Year 3 effort and development of the Year 4 monitoring plan and budget. A draft and final report will be submitted to the ED Office/TAC for review and comments. The reports will include alll survey data collected during the Year 3 effort.*
9	Development of Year 3 Monitoring Plan and Budget	2	12		4			2				2	22	$2,810	*A monitoring plan and budget for the next year's field data collection and survey effort will be provided and will incorporate any suggestions and/or recommendations from the Project Team, the ED Office/TAC, and/or the Peer Review Panel.*
10	Year 3 Project Management and Coordination, Conduct Project QA/QC, Administration	4	16	4	2							12	38	$4,450	*This task includes time for project management, coordination, and administration as well as QA/QC of all field data and project reports.*
	Hours	20	238	6	66	136	18	462	454	888	586	156	**3030**		***Olsson Associates Personnel***
	Cost	$3,700	$30,940	$1,110	$10,362	$17,680	$2,124	$36,036	$23,154	$65,712	$79,110	$4,488		**$274,416**	

DIRECT COSTS											
Task	**Description**	Sample Analysis	Mileage Truck/car	Boat and / or ATVs	Trimble / Camera	GPS Surv. Eq.	Food & Lodging	Field Supplies	Misc. Expenses	Sub Total	**Comments/Assumptions**
#	**Year 2 Channel Geomorphology and In-Channel Vegetation Monitoring Protocol Implementation**										
1	Finalize Year 3 Monitoring Plan with ED Office and Discuss Landowner/Access Issues								$10	$10	*Assume conference call/email to finalize monitoring plan and discuss landowner issues.*
2	Obtain, Prep, and Mobilize Project Equipment							$75		$75	*Misc. expenses include office supplies, copies, fax, postage, and other incidentals*
3	Conduct Cross Section Surveys of Active Channel Topography and Geomorphology and Surveys of In-Channel Vegetation Belt Transects and Related Topography at 25 Anchor Points (29 sites)		$7,790	$11,930	$2,380	$8,265	$16,274	$478	$25	$47,142	*Costs related to the field effort include travel expenses, survey equipment costs, mileage for field vehicles ($0.88/mi for 4WD), rental costs for boat and ATV, and field supplies necessary to conduct the field effort. (Rate for lodging and per diem is $103 pp/day total. Boat = 28 days use at $310/day. ATV = 14 days at $210/day. GPS survey equipment = 28 days x $285/day.*
4	Bed and Bar Material Sampling of Cross Sections at Anchor Points (282 samples), Compare with Year 1 and 2 data.	$12,690	$200				$600	$375	$50	$13,915	*Costs associated with this task include materials and equipment required to collect the bed and bank material samples and lab costs to process and analyze the samples. Total = sieve analysis ($45/sample) of 282 samples. Mileage included for transport of samples to Olsson lab in Lincoln.*
5	Survey Data Reduction, Update and Merge LiDAR Data with Ground Survey Data; Vegetation Data Analysis								$25	$25	*Other expenses include office supplies, copies, fax, and other incidentals*
6	Conduct 6 Bedload Samplings, 1 Depth-Integrated Suspended Sediment Sampling, and 1 Bed Material Sample at 5 Bridge Locations in Year 3, Perform Total Load Computations	$2,675	$4,224				$3,024	$1,250	$50	$11,223	*Costs associated with this task include travel, materials and equipment required to collect the bedload and suspended sediment samples, and lab costs to process and analyze the samples. Total = 5 bedload samples x 6 times + 5 depth-integrated suspended sediment samples + 5 bed samples = 40 samples. Includes rental of Helley-Smith bedload sampler at $40/day.*
7	Compile Topographic, Geomorphic, Vegetation, and Sediment Data in GIS Database								$25	$25	*Misc. expenses include office supplies, copies, fax, and other incidentals*
8	Meet With ED Office and TAC to Discuss Results of Year 3 Effort, Draft and Final Summary Report on Year 3 Data Collection Efforts and Monitoring Activities		$525				$69		$25	$619	*Includes travel costs for meeting. Other expenses include office supplies, copies, fax, and other incidentals. Mileage is at Govt rate of $0.50/mi.*
9	Development of Year 4 Monitoring Plan and Budget								$25	$25	*Misc. expenses include office supplies, copies, fax, and other incidentals*
10	Year 3 Project Management and Coordination, Conduct Project QA/QC, Administration								$25	$25	*Misc. expenses include office supplies, copies, fax, and other incidentals*
	Cost	$15,365	$12,739	$11,930	$2,380	$8,265	$19,967	$2,178	$260	**$73,084**	

Total Estimated Costs = $347,500

ATTACHMENT B

Atlas-Related Tasks Scope of Work and Cost Estimate

Scope of Work & Cost Estimate

Atlas of Channel Geomorphology and In-Channel Vegetation Monitoring of the Central Platte River Year 1 (2009) and Year 2 (2010) Results

Ayres Associates will develop an atlas displaying the results of the first (2009) and second (2010) year of the Channel Geomorphology and In-Channel Vegetation Monitoring of the Central Platte River. The atlas will consist of 11"x17" sheets. The following tasks will be completed as part of the Scope of Work:

1. Plan & Profile Maps - The sheets would show the Platte River along the entire 100 mile reach at a 1":1500' scale along with the profile for the corresponding stretch per sheet. The maps will include the current aerial photography showing the raw longitudinal profile path, control points, anchor points, streets, gages, and any other pertinent GIS information. We estimate this to consist of approximately 30 sheets.

2. Anchor Point Maps - Each anchor point will be displayed individually in plan view on the current aerial photography showing the geomorphology and vegetation transect locations, monuments, river miles, vegetation points that are color-coded based on the presence or absence of any species of interest at that point, and any other pertinent GIS information. This will comprise 25 sheets.

3. Geomorphology and Vegetation Transects - This includes displaying the 3 geomorphology transects and 4 vegetation transects for each anchor point on the current aerial photography along with another sheet showing 2 vegetation bar graphs provided by Olsson Associates for each anchor point. One bar graph will show frequency of species of interest and per sample year and the second will show percent cover per species of interest and per sample year. This will comprise 50 sheets.

4. Draft Map Set Deliverables - Ayres Associates will combine Tasks 1, 2, and 3 into a single map set with a cover, legend, and table of contents and deliver 2 hard copies and 2 digital PDF copies on CDs to the Program for review.

5. Final Map Set Deliverables - Ayres Associates will incorporate review comments from the Program and produce a final map set. Ayres will deliver 5 hard copies along with 5 digital PDF copies on CDs to the Program for the final deliverable.

The total cost of the effort will be **$21,500** for Ayres Associates and **$3,500** for Olsson Associates for a total of **$25,000** (see attached cost estimate). The project will be completed within 90 days of Notice to Proceed (NTP), which was provided via email on February 15, 2011. Therefore, project completion will be May 16, 2011 unless specified otherwise by the Program. This includes one month for review of the draft report and receipt of review comments from the Program.

AYRES ASSOCIATES

Atlas of Channel Geomorphology and In-Channel Vegetation Monitoring of the Central Platte River Year 1 (2009) and Year 2 (2010) Results

Project: PRRIP
Prepare by: Anthony Alvarado, PE
Date Prepared: 2/16/2011

Category	Rate	Task 1. Plan & Profile		Task 2. Anchor Points		Task 3. Transects & Veg		Task 4. Draft Map Set		Task 5. Final Map Set		TOTALS	
		Hrs/Qty	Dollars	Hrs/Qty	Dollars	Hrs/Qty	Dollars	Hrs/Qty	Dollars	Hrs/Qty	Dollars	Hrs/Qty	Dollars
Labor													
Program Manager (JDS)	$185.00		$0		$0		$0	2	$370		$0	2	$370
Project Manager (Spitz)	$130.00	1	$130	1	$130		$0	2	$260	2	$260	6	$780
GIS Supervisor (Alvarado)	$130.00	8	$1,040	24	$3,120	6	$780	16	$2,080	12	$1,560	66	$8,580
GIS Technician (Robinson)	$74.00	36	$2,664	36	$2,664	36	$2,664	24	$1,776	24	$1,776	156	$11,544
Assistant Scientist (Van Meter - Olsson)	$78.00		$0		$0	32	$2,496		$0	8	$624	40	$3,120
Engineering Technician (Olsson)	$48.00		$0		$0	6	$288		$0	2	$96	8	$384
Total Labor Costs		45	$3,834	61	$5,914	80	$6,228	44	$4,486	48	$4,316	278	$24,778

Expenses								**2 copies**		**5 copies**			
Color Copies (ea)	$0.16							400	$64	1000	$160	**0**	$224
Shipping	Var.												
Total Expenses									$64		$160		$224
TOTAL FEES			$3,834		$5,914		$6,228		$4,550		$4,476		**$25,000**

AMRES ASSOCIATES