

**AMENDMENT NO. 23
TO
AGREEMENT FOR ENGINEERING SERVICES
CITY OF BILLINGS AVIATION AND TRANSIT DEPARTMENT**

DATED April 9, 2012

This Amendment No. 23 made and entered into this _____ day of January, 2016 by and between the following:

City of Billings, Montana, a Municipal Corporation, PO Box 1178
Billings, Montana 59103, hereinafter designated the OWNER

and

Morrison-Maierle, Inc., 315 N. 25th Street, Suite 102, Billings, Montana 59102,
a private Montana Corporation, hereinafter designated as the ENGINEER

W I T N E S S E T H:

WHEREAS, the OWNER and the ENGINEER have entered into a contract dated April 9, 2012 for ENGINEER to provide engineering services to OWNER for AIP 050 Pond D Storm Water System Design.

WHEREAS, the OWNER has a need for additional engineering services;

WHEREAS, the ENGINEER represents that he is qualified to perform such services, is in compliance with the Montana Statutes relating to the registration of professional engineers and is willing to furnish such services to the OWNER;

NOW, THEREFORE, in consideration of the terms, conditions, covenants and performance contained herein, or attached and incorporated herein, the parties hereto agree to amend the April 9, 2012 Agreement, corresponding amendments to this Agreement, and all related exhibits as follows:

ARTICLE 1 - SCOPE OF SERVICES. The following items of work listed below are added and amended by the Amendment 23 to Phase I – Design Plans and Specifications, Design Surveys, Design testing and AGIS survey.

For Phase II – Construction Phase, Amendment 23 includes all of the items defined in the original Agreement, plus the following item of work: The ENGINEER shall provide Construction Layout services in accordance with the Master Agreement. Construction Layout includes, but is not limited to, field marking of the following: lines, offsets, pipe inverts, material quantities, preliminary grades, and finished grades, and their associated staking notes. The ENGINEER shall provide the Contractor with a copy of the staking notes in a timely manner.

Engineering fees for providing the scope of work are based on the methods described in Article II of the original agreement.

Scope of Work is amended to include the following Item description:

ITEMS DESCRIPTION

Items for Amendment 23 (Twenty-Three):

1. **Pond D Storm Water System Construction.** Provide plans and specifications for the construction of the storm water system. This project includes;
 - a. **Storm Water Pipe construction using the Sun Valley drainage.** The storm water pipe construction includes design survey along the pipe alignment, tunnel boring design, geotechnical rock testing along the boring alignment, plunge pool/distilling basin, and discharge pipe design within the City of Billings right-of-way.
 - b. **Pond D Construction.** The Pond D construction includes two detention ponds for the 100-year, 24-hour storm event; design survey of the Pond D and storm water berms; weir design; outlet structure design; and overflow design.
 - c. **Airfield Storm Water Pipe Construction.** The airfield storm water construction includes connecting storm water pipe to the north and south side manholes of the 2015 Tunnel Boring project. The storm drain connection will carry the storm water from the south side of Runway 10L-28R under the runway to the north side system. This schedule of the project also includes new inlet installation, storm pipe, surface grading, seeding, and energy dissipater design on the north side of the runway.
 - d. **West and East Side Open Channel.** The trapezoidal open channel is on the southeast and southwest side of Pond D. The open channel is designed to collect surface water on the north side of Runway 10L-28R, collect water from 2015 Tunnel Boring project, and carry the storm water to Pond D. The open channel construction includes design survey from Runway 10L-28R to Pond D area, an open channel design sized to carry the 100 year-24 hour storm event to Pond D, culvert design under the security fence, security design for the culvert, and erosion control design along the open channel
 - e. **Northeast Drainage Modifications.** The drainage modifications and construction is north and east of the business park. The construction includes design survey of the east area, survey of the existing drainage features, and storm water design options to assist the storm water from the Business Park to enter the Sun Valley drainage on the west end. This schedule of the project also includes surface grading, seeding, culvert analysis, and ditch regrading.

Phase I

Phase I work items listed above:

It included preparation of design plans, specifications, FAA design report, 7460-1 reporting and forms, FAA construction operation phasing plan, and FAA AGIS as built survey for the proposed construction projects as described above.

Phase I also included a preliminary analysis of the glycol at the airport and options for remediation or modification to Pond D system at a future date.

Phase II

Phase II work will include providing Construction Administration, Construction Layout, Resident Project Representative (Inspector), and Project Closeout for items identified as Phase I design work.

ARTICLE II - ENGINEERING FEES

The items discussed above are finalized items of work that the Owner and AIP will fund.

Phase I – Design Specifications

Preparation of design plans and specifications for Phase I, for Amendment 23 will be accomplished for a lump sum fee of **\$294,205** as per the Method A - Fee Determination as outlined in the original Agreement dated **April 9, 2012**. See Table 1A for engineering budgets.

Phase II - Construction Phase.

The items discussed above involve the Phase II, Items for Amendment 23 scope of services and will not be included.

The items discussed above involve the Phase II, Items for Amendment (Future Number to be determined) scope of services and will be negotiated at a later date which will be accomplished at a cost plus fixed fee with a ceiling price not to exceed \$ (To be determined at a later negotiation date) as per Method B - Fee Determination outlined below. Table 2A for engineering budgets shall be attached after later negotiations.

**COST SUMMARY OF
Amendment No. 23**

Description		Labor & Expenses	Fixed Fee	Total Phase I	Total Phase II
Amendment No. 23					
<u>AIP 050 Pond D Storm Water System</u>					
PHASE 1 - Design - ITEM 1	TABLE 1A	\$257,789	\$36,416	\$294,205	
PHASE II - Construction Admin. - ITEM 1	TABLE 2A	\$0	\$0		\$0
Subtotal Item 1		\$257,789	\$36,416		
Total This Amendment					\$294,205

TABLE 1A

**Amendment No. 23
ENGINEERING BUDGET
PHASE 1 - Design - ITEM 1**

Engineering Services PHASE 1 - Design - ITEM 1	Total Man-hours	Labor Rate	Total
Professional Services for AIP 050 Pond D Storm Water System	2,312	\$105.01	\$242,776
Total MU Labor			\$242,776
Expenses			
Company Vehicle		\$752	
Commuting, Travel		\$0	
Technology Charge		\$10,605	
Vehicle		\$2,610	
Per diem		\$0	
Per diem		\$0	
Equipment Charges		\$1,045	
Professional Charges		\$0	
Printing, Copies		\$0	
Telephone, FAX		\$0	
Photos, Etc		\$0	
Freight, Postage		\$0	
Project Supplies		\$0	
SUBTOTAL		\$15,012	
Total MU Labor			\$242,776
Total Direct Expenses			\$15,012
Total MU Labor & Expenses			\$257,789
Fixed Fee			\$36,416
Total Lump Sum for Design Phase			\$294,205

* Figure is rounded

IN WITNESS WHEREOF, the parties hereto have made and executed the Amendment No. 23 this _____ day of January, 2016.

CONSULTANT

Morrison-Maierle, Inc.

BY: Carl J. Anderson

DATE: 12/10/15

OWNER

City of Billings

BY: _____

DATE: _____

ATTEST:

BY: _____
City Clerk

APPROVED AS TO FORM:

BY: _____
City Attorney

Summary of Agreements for Professional Engineering Services				
Description		Labor & Expenses	Fixed Fee	Total
Amendment No. 1 <u>Plunge Pool & Lot Survey</u>				
PHASE I - DESIGN - ITEM 1	TABLE 1a	\$55,252	\$6,101	\$61,353
PHASE II - CONSTRUCTION - ITEM 1	TABLE 2a	\$44,237	\$5,455	\$49,692
		\$99,489	\$11,556	
Amendment No. 1 <u>Ponds A, B, and C Ponds</u>				
PHASE I - DESIGN - ITEM 2	TABLE 1b	\$23,164	\$3,212	\$26,376
PHASE II - CONSTRUCTION - ITEM 2	TABLE 2b	\$23,984	\$3,259	\$27,243
Subtotal Item 2		\$47,148	\$6,471	
TOTAL Amendment No. 1		\$146,637	\$18,027	\$164,664
Amendment No. 2 <u>Airfield Maintenance Equipment</u>				
PHASE I - DESIGN - ITEM 1	Table 1a	\$28,706	\$3,953	\$32,659
PHASE II - CONSTRUCTION - ITEM 1	Table 2a	\$0	\$0	\$0
Pavement Condition Index Study				
PHASE I - Design - ITEM 1	TABLE 1A	\$47,071	\$6,539	\$53,609
PHASE II - Construction Admin. - ITEM 1	TABLE 2A	\$0	\$0	\$0
TOTAL Amendment No. 2		\$75,777	\$10,492	\$86,268
Amendment No. 3 <u>2012 Miscellaneous Improvements</u>				
PHASE I - DESIGN - ITEM 1	TABLE 1a	\$37,713	\$5,229	\$42,942
PHASE II - CONSTRUCTION - ITEM 1	TABLE 2a	\$43,240	\$5,750	\$48,990
TOTAL Amendment No. 3		\$80,952	\$10,979	\$91,931
Amendment No. 4 <u>PFC Airport Wheel Loader</u>				
PHASE I - Design - ITEM 1	TABLE 1A	\$3,352	\$417	\$3,769
PHASE II - Construction Admin. - ITEM 1	TABLE 2A	\$0	\$0	\$0
TOTAL Amendment No. 4		\$3,352	\$417	\$3,769
Amendment No. 5 <u>2013 AIP-44 CA</u>				
PHASE I - DESIGN - ITEM 1	TABLE 1a	\$69,317	\$9,246	\$78,562
PHASE II - CONSTRUCTION - ITEM 1	TABLE 2a	\$415,893	\$53,995	\$469,888
TOTAL Amendment No. 5		\$485,209	\$63,241	\$548,450
Amendment No. 6 <u>Slot 4 - PCC Construction</u>				
PHASE I - DESIGN - ITEM 1	TABLE 1a	\$163,094	\$22,453	\$185,547
PHASE II - CONSTRUCTION - ITEM 1	TABLE 2a	\$135,941	\$18,061	\$154,003
TOTAL Amendment No. 6		\$299,035	\$40,515	\$339,550
Amendment No. 7 <u>2014 Miscellaneous Improvements</u>				
PHASE I - DESIGN - ITEM 1	TABLE 1a	\$24,228	\$3,040	\$27,268
PHASE II - CONSTRUCTION - ITEM 1	TABLE 2a	\$28,954	\$3,872	\$32,826
TOTAL Amendment No. 7		\$53,182	\$6,911	\$60,094
Amendment No. 8 <u>Pond D Expand - Outfall Routing Study</u>				
PHASE I - DESIGN/STUDY - ITEM 1	TABLE 1a	\$50,635	\$7,065	\$57,700
PHASE II - CONSTRUCTION - ITEM 1	TABLE 2a	\$0	\$0	\$0
TOTAL Amendment No. 8		\$50,635	\$7,065	\$57,700
Amendment No. 9 <u>Employee P-Lot</u>				
PHASE I - DESIGN - ITEM 1	TABLE 1a	\$44,581	\$5,980	\$50,561
PHASE II - CONSTRUCTION - ITEM 1	TABLE 2a	\$69,893	\$9,384	\$79,277
TOTAL Amendment No. 9		\$114,474	\$15,364	\$129,838
Amendment No. 10 <u>AIP 046-2014 Apron Construction</u>				
PHASE I - DESIGN - ITEM 1	TABLE 1a	\$83,709	\$11,868	\$95,577
PHASE II - CONSTRUCTION - ITEM 1	TABLE 2a	\$85,259	\$11,442	\$96,701
TOTAL Amendment No. 10		\$168,968	\$23,310	\$192,278

Amendment No. 11	West Transfer Parking Lot & Terminal Circle Road			
PHASE I - Design - ITEM 1	TABLE 1A	\$49,919	\$6,573	\$56,492
PHASE II - Construction Admin. - ITEM 1	TABLE 2A	\$65,110	\$8,622	\$73,732
TOTAL Amendment No. 11		\$115,029	\$15,195	\$130,224
Amendment No. 12	AIP 048 - Land, Runway 10R EA			
PHASE I - Design - ITEM 1	TABLE 1A	\$0	\$0	\$0
PHASE II - EA - ITEM 1	TABLE 2A	\$131,204	\$17,782	\$148,986
TOTAL Amendment No. 12		\$131,204	\$17,782	\$148,986
Amendment No. 13	Wetland, Survey & Flood Plane Analysis			
PHASE I - Design - ITEM 1	TABLE 1A	\$38,869	\$5,378	\$44,247
PHASE II - EA - ITEM 1	TABLE 2A	\$0	\$0	\$0
TOTAL Amendment No. 13		\$38,869	\$5,378	\$44,247
Amendment No. 14	Lights-Fence Transfer Lot			
PHASE I - Design - ITEM 1	TABLE 1A	\$13,774	\$1,876	\$15,650
PHASE II - EA - ITEM 1	TABLE 2A	\$17,749	\$2,339	\$20,088
TOTAL Amendment No. 14		\$31,523	\$4,215	\$35,738
Amendment No. 15	Ponds A, B, C Fence			
PHASE I - Design - ITEM 1	TABLE 1A	\$12,820	\$1,731	\$14,551
PHASE II - EA - ITEM 1	TABLE 2A	\$10,818	\$1,404	\$12,222
TOTAL Amendment No. 15		\$23,638	\$3,135	\$26,773
Amendment No. 16	2015 Parking Lot Improvements			
PHASE I - Design - ITEM 1	TABLE 1A	\$33,173	\$4,591	\$37,764
PHASE II - EA - ITEM 1	TABLE 2A	\$64,600	\$8,683	\$73,283
TOTAL Amendment No. 16		\$97,773	\$13,274	\$111,047
Amendment No. 17	Pond D Permitting for Storm Drainage Improvements			
PHASE I - Design - ITEM 1	TABLE 1A	\$27,579	\$3,948	\$31,527
PHASE II - EA - ITEM 1	TABLE 2A	\$0	\$0	\$0
TOTAL Amendment No. 17		\$27,579	\$3,948	\$31,527
Amendment No. 18	AIP 049-2015 Ramp Construction			
PHASE I - Design - ITEM 1	TABLE 1A	\$82,152	\$11,626	\$93,778
PHASE II - EA - ITEM 1	TABLE 2A	\$85,694	\$11,605	\$97,299
TOTAL Amendment No. 18		\$167,846	\$23,231	\$191,077
Amendment No. 19	Pavement Condition Index			
PHASE I - Design - ITEM 1	TABLE 1A	\$53,018	\$7,392	\$60,410
PHASE II - EA - ITEM 1	TABLE 2A	\$0	\$0	\$0
TOTAL Amendment No. 19		\$53,018	\$7,392	\$60,410
Amendment No. 20	AIP 050-2015 Storm Drain Tunneling			
PHASE I - Design - ITEM 1	TABLE 1A	\$105,414	\$14,930	\$120,344
PHASE II - EA - ITEM 1	TABLE 2A	\$60,695	\$8,260	\$68,955
TOTAL Amendment No. 20		\$166,109	\$23,190	\$189,299
Amendment No. 21	AIP 050-2015 Taxilane Construction			
PHASE I - Design - ITEM 1	TABLE 1A	\$41,816	\$5,908	\$47,724
PHASE II - EA - ITEM 1	TABLE 2A	\$38,545	\$5,302	\$43,847
TOTAL Amendment No. 21		\$80,361	\$11,210	\$91,571
Amendment No. 22	AIP 050-2015 Storm Drain Tunneling CA			
PHASE I - Design - ITEM 1	TABLE 1A	\$0	\$0	\$0
PHASE II - EA - ITEM 1	TABLE 2A	\$32,116	\$4,369	\$36,485
TOTAL Amendment No. 22		\$32,116	\$4,369	\$36,485
Amendment No. 23	AIP 050-2015 Pond D Storm Sytem			
PHASE I - Design - ITEM 1	TABLE 1A	\$257,789	\$36,416	\$294,205
PHASE II - EA - ITEM 1	TABLE 2A	\$0	\$0	\$0
TOTAL Amendment No. 23		\$257,789	\$36,416	\$294,205
Sum Total All Amendments				\$3,066,131