

Memorandum

To: Programs, Projects and Operations Subcommittee

Re: Missouri River Trail – N.P. Dodge Park to Douglas/Washington County Line Professional Services Contract Amendment

Date: October 4, 2010

From: Jim Becic

The engineering and consulting firm HGM Associates, Inc, was selected by the P-MRNRD Board in April of 2004, to provide professional engineering services necessary to plan and design the approximately 2.8 mile Missouri River Trail – following John J, Pershing Road and North River Drive from N. P. Dodge Park, north to the Washington County Line at Dutch Hall Road.

An amended professional services contract with HGM Associates, Inc. for both the Design and Construction Engineering for Phase 1 and 2 of the Missouri River Trail project was signed in February of 2005 for a maximum not to exceed amount of \$589,879. Phase 1 construction was completed in 2006 and Design and Construction Engineering fees totaled \$195,526. HGM completed the Design Engineering for Phase 2 and was paid a total of: \$203,982.53 as of September of 2006. To date, Construction Engineering costs (which include bid document preparation, special provisions, etc.) of \$34,568.15 of the estimated \$195,612 needed for Phase 2 have also been billed and paid. So, total professional services costs to date are \$434,076.68 leaving \$155,802.32 to complete the project. However, considerable expense has been incurred by HGM over the past four years (attached 1 October, 2010 correspondence) for which they are seeking reimbursement.

In 2007, the estimated Phase 2 project cost estimate was approximately \$3.0 million and the project was to be cost shared under the federal Transportation Enhancement (TE) program through the Nebraska Department of Roads (NDOR) at their maximum amount of \$500,000 or approximately 17 percent of the total project cost. The District's cost would be nearly \$2.5 million. Since 2006, the Phase 2 project cost estimates have increased to over \$4.8 million.

Since 2007, and prior to receiving final design approval and project bid letting by the NDOR, significant changes in the TE program took place. These changes put virtually every trail project in the state on hold for nearly four years and initiated substantial alterations in the program requirements. In those four years, HGM provided all of the additional information and materials requested by NDOR and Federal Highway Administration (FHWA) as detailed in the attached 1 October, 2010 letter to the General Manager. These additional materials included re-design, meetings, NEPA document revisions and multiple comment responses.

This additional work by HGM was always thought to be just one more "simple response" to be submitted and then we would receive approval to proceed. Over time, these piecemeal requests from FHWA/NDOR for more work to be submitted, added up. The bulk of this work was completed in the past 10 months at an accelerated rate, in order to take advantage of the promised larger cost share amount following the Transportation Summit held earlier this year in Lincoln. The deadline for final project approvals by both the NDOR as well as FHWA was finally set at 24 September, 2010.

The additional costs being requested, incurred by HGM over these past four years for Engineering Services (plan modifications, coordination and review, etc.) was \$195,446 and Environmental Services (NEPA, EA, etc.) amounted to another \$104,017, totaling \$299,463. HGM is also requesting an additional \$49,962 which reflects increases in both man-hour rates and project scope for future Construction Engineering services. These additional costs of \$299,463 and \$49,962 would increase the original estimate for Phase 1 and 2 Professional Services from \$589,879 to \$938,304. Management is recommending that these increases be approved.

Now the good news. All comments and concerns by FHWA and the NDOR were adequately addressed by HGM and the deadlines were met with time to spare. This resulted in Phase 2 of the project being approved late last month and with an 80% cost share (up from 17%) and with no maximum amount (previously \$500,000). This means that even though the itemized, additional costs incurred by HGM to get the District to this final "approval", results in an original service estimate increase request of \$349,425, the District's portion for the Phase 2 project at the new 80% project cost share rate will reduce the District's out of pocket, local taxpayer portion from approximately \$2.5 million (2006 cost estimate) to approximately \$1.4 million.

Bid letting is currently scheduled by the NDOR for 21 October, 2010. Prior to awarding a construction contract, a supplemental agreement reflecting the new cost sharing agreement with NDOR will need to be executed to reflect the 80% cost share arrangement. Management is recommending authorization to sign that agreement when it becomes available.

- **Management recommends that the Programs, Projects and Operations Subcommittee recommend to the Board that the General Manager be authorized to execute the proposed addendum to the February 10, 2005 Amended Professional Services Agreement between the Papio-Missouri River Natural Resources District and HGM Associates Inc., to complete the final design, right of way acquisition and construction services for the Missouri River Trail (N.P. Dodge Park North to Douglas /Washington County Line) Project for a not to exceed amount of \$938,304; and further that the General Manager be authorized to execute a supplemental agreement with NDOR, both subject to changes deemed necessary by the General Manager and approved as to form by the District Legal Counsel.**



October 2, 2010

Mr. John Winkler
Papio-Missouri River Natural Resources District
8901 S 154th Street
Omaha, NE 68138-3621

Subject: **Missouri River Trail Phase 2
Fee Amendment**

Dear Mr. Winkler,

Since the original completion of construction documents for Phase 2 of the Missouri River Trail in 2007, the NEPA requirements and submittal process for Federal-Aid funding has been changed. This required significant effort by HGM Associates Inc. to address requests for additional documentation and revisions to construction documents to conform to new requirements and formats for the NEPA Environmental Assessment review and approval process. This has included;

- NEPA and CE meetings, coordination and approvals
- ADA Variance request and approvals
- Archeological Site (Cabanne Trading Post) Coordination and Approvals
- Douglas County Permitting and STIP Coordination
- OPPD and Qwest Utility Meetings and Coordination
- Construction Document Revisions

A detailed breakdown of additional tasks and coordination required can be found in the attached Exhibit A, for the NEPA and Environmental Assessment and Exhibit B for the Construction Document Revisions.

The efforts of these activities have resulted in the Federal-Aid for the project being increased from a partial funding of \$500,000 to an 80% participation in total project costs for Construction, Right of Way and Construction Engineering.

HGM Associates Inc. had been paid for the design effort in accordance with our contract dated February 2005 in the amount of \$198,741.00. HGM then began work on the finalization of construction documents which was under the contract for Construction

Period Services with an total amount of \$195,612.00. In addition to the final construction documents, the scope of the contract included the bidding of the project, construction inspection and management and construction staking. HGM completed the construction documents for the trail in 2007. As the Federal Aid NEPA Documentation submittal, review and revision process progressed though the past several years HGM incurred additional costs to address the requests.

The cost for HGM to provide the Additional Services for the NEPA and Environmental Assessment is \$104,017 and for the Construction Document Revisions is \$195,446 with a total cost for Additional Services of \$299,463.

In addition, with the delay in construction on the project, the salary rates for 2005 used in the contract do not reflect our current 2010 salary costs. HGM would like to request a revision in the hourly rates to our current costs which would increase the construction period services cost \$49,962 from \$195, 612 to \$245,574. A breakdown of tasks and man-hours is included in the attached is Exhibit C. Also, this includes a reduction for the Bid Letting Task man-hours which have been deleted from the fee because NDOR is now providing the bid letting services.

As previously mentioned these efforts have resulted in an increase in federal funding for the project and a net decrease in costs for the NRD. Below is a summary of the previous estimated total costs for the project and the current estimated total costs.

Summary of Original Project Costs – 2007

Design Engineering	\$198,741
Construction Engineering	\$195,612
ROW	\$81,258
Construction	<u>\$2,520,733</u>
Total Cost	\$2,996,344
Federal-Aid	\$500,000
NRD Cost	\$2,496,344

Summary of Updated Project Costs – 2010

Design Engineering	\$198,741
Addition Services for Federal Aid	\$299,463
Construction Engineering	\$245,574
ROW	\$81,258
Construction	<u>\$4,002,479</u>
Total Cost	\$4,827,515
Federal-Aid (80% - Const Eng., ROW, Const.)	\$3,463,449
NRD Cost	\$1,364,066



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A COMMITMENT TO CREATIVE SOLUTIONS

If you have any questions or require additional information, please contact me at your earliest convenience.

Yours very truly,
HGM ASSOCIATES INC.

A handwritten signature in black ink, appearing to read "Dennis L. Wilson". The signature is fluid and cursive, with the first name "Dennis" being more prominent.

Dennis L. Wilson P.E.
Operations Manager

hgm

A TRADITION OF EXCELLENCE
A COMMITMENT TO CREATIVE SOLUTIONS

EXHIBIT A

NEPA/CE/PS&E Meetings, Coordination and Approval

- December 28, 2009 – Revise NEPA/CE in accordance with comments received on December 28, 2009 from NDOR/FHWA (1-page General Comment +1-page NEPA Document comments +1-page CE Document comments + 8-pages NEPA reviewer checklist + 22pages CE review checklist). Revision to include updating or adding the following document:
 - Farmland Protection Policy Act
 - Farmland Conversion Impact Rating Corridor Projects
 - Farmland Classification
 - NDEQ Programs Map and listing
 - Wellhead Protection
 - RCRA Sites
 - Superfund Sites
 - Section 106 Concurrence
 - NDOR Checklist
- January 4-19, 2010 – in house HGM meetings and coordination to revise NEPA/CE and environmental documents. Compile documents into presentation binder to present at Jan 20 “Open House” meeting in Lincoln.
- January 20, 2010 – Attended “Open House” on Lincoln with FHWA/NDOR/NeSHS/PMRNRD/HGM to discuss revised NEPA/CE and environmental documents.
- February 4, 2010 – Receive NEPA/CE comments from FHWA/NDOR
- April 13, 2010 - Meeting at PMRNRD with Larry Legg to discuss project and project issues. NDOR provided checklist of NEPA/CE reviews.
- May 4, 2010 – Provide NEPA/CE and environmental document revisions to FHWA/NDOR
- June 15, 2010 – Attended “Open House” meeting in Lincoln to discuss NEPA/CE and environmental documents.
 - Received revision comments to NEPA/CE revisions
 - Received revisions comments to ADA Variance letter and plans
 - Received revisions comments to 106 Concurrence – Cabanne trading Post
- June 16, 2010 – Plan-in-Hand meeting and Plan-in-hand Report
- June 16 - 28, 2010 – in house HGM CE/NEPA and ADA Variance meetings and coordination to revise NEPA/CE in accordance with June 15 comments.
- June 29, 2010 – Attended “Open House” meeting in Lincoln to discuss NEPA/CE revisions, ADA Variance, and 106 Concurrence. Provided 90% plan set to Sinclair – Hille to forward to Snyder Assoc.
- July 13, 2010 – Receive 90% plan comments and red-line mark up from Snyder Assoc. Plan revisions, Special Provisions, Plan Quantities, Probable Cost Estimate, and Green Sheet to be completed and received at PS&E NO LATER than July 30, 2010. (7-pages comment + plan revisions).

- July 29, 2010 – NEPA/CE revised and submitted to NDOR/FHWA
- July 30, 2010 – Provide plan set and Special Provisions to NDOR PS&E Lincoln, NE.
- August 13, 2010 – Receive NEPA/CE comments to NEPA/CE submitted on July 29, 2010 from FHWA/NDOR
- August 19, 2010 – Receipt of comments from FHWA/NDOR of NEPA/CE
- August 20, 2010 – Receive NDOR Erosion Control Section comments and Special Provisions to Landscape and SWPPP drawings
- August 25, 2010 – NDOR additional comments to landscaping and SWPPP environmental plan from NDOR Erosion Control Section. Coordination meeting with Big Muddy Workshop.
- August 26, 2010 – Landscaping and Environmental document submittal directly to PS&E Lincoln
- September 7, 2010 – PS&E Comments
- September 9, 2010 – PS&E revised drawing submittal directly to Lincoln
- September 21, 2010 – FHWA comments to plan set and Special Provisions
- September 23, 2010 – FHWA submittal directly to Lincoln

ADA Variance Request and Approvals

- February 12, 2010 – ADA Variance letter and documentation to Jim Knott.
- February 23, 2010 – Attended meeting in Lincoln with FHWA/NDOR Roadway Design/PMRNRD to discuss ADA design Variance. Design variance letter and documentation to be revised to include the following:
 - 3-4 Landings/rest areas
 - Measures of safety to include handrails
 - Review of present trail users
 - Design of possible overlooks
 - Review of past trail alignment options
 - Probable construction costs
 - Signage and safety
 - Accident and traffic history
- June 28, 2010 – ADA Variance letter and drawing revisions submittal to Jim Knott – NDOR
- July 8, 2010 – ADA Variance response letter and documentation revisions to NDOR Roadway Design

Archeological (Cabanne Trading Post) Coordination and Approvals

- April 19, 2010 – Coordination with Ne State Historical Society to obtain Cabanne Trading Post boundary documentation and mapping
- April 22, 2010 – Phone conference call with Rob Bozel to discuss Cabanne Trading Post and construction activity.
- June 28, 2010 – 106 Concurrence request and NDOR Activity checklist to Allison Zach - NDOR
- June 30, 2010 – Coordination meeting with Melissa Dirr – Historic Resources Group, Dave Jordon – Terracon PMRNRD to coordinate 106 Concurrence, MOA and Data Recovery Plan and Area
- July 7, 2010 – Attended meeting in Lincoln to discuss Archeological Data Recovery Process and revised Memorandum of Agreement - Cabanne Trading Post
- August 10, 2010 – Coordination of Data Recovery Area Cabanne Trading Post
- September 1, 2010 – Attended meeting in Lincoln to discuss Data Recovery Plan, Plan Area, and Memorandum of Agreement

Douglas County Permitting and STIP Coordination and Approvals

- April 29, 2010 – Provide Douglas County North River Roadway section and cross-section
- May 13, 2010 – Attended meeting with Douglas County Dan Kutilek and Jeff Scherzberg to discuss North River Road improvements and re-permitting. Douglas County requests revised roadway section and cross-sections prior to re-approval of permit.
- May 13, 2010 – Re-design ditch section and roadway section per DCE request
- June 8, 2010 – Re-design ditch section and roadway section per DCE request
- July 9, 2010 – Plan submittal revised roadway cross-section
- August 2, 2010 – Provide Douglas County final roadway section and cross-sections for permitting
- August 8 -13, 2010 – Coordination with MAPA Greg Youell and NDOR Larry Legg to revise STIP and provide documentation for TTAC meeting

OPPD and Qwest Utility Meetings and Coordination

- June 21- 25, 2010 – HGM survey OPPD 2007 pole relocation
- July 30, 2010 - Provide plan set to OPPD and Qwest to review status of Utility
- August 16, 2010 – Utility coordination documentation between Qwest and Douglas County. No cost to project for Qwest relocation.
- August 19, 2010 – Attended meeting with Qwest- Jack Dodendorf on-site to discuss utility relocation and Status of Utility
- August 23, 2010 – Attended meeting with OPPD Steve Fanslau and Steve Kojdecki to OPPD relocations and Status of Utility
- September 13 - 17, 2010 – ROW staking per request of Qwest for utility relocation

EXHIBIT B

Construction Document Revisions

HGM Associates Inc. has been requested through the NEPA review process to make revisions to the drawings and special provisions. The following is a list of some of the changes that have been made to the documents.

- Revised trail profile through all driveway intersections to more closely conform to current NDOR driveway grade criteria.
- Revised driveway geometrics as requested by NDOR.
- Revised Duda driveway horizontal and vertical geometrics as requested for work within the designated historical area.
- Revised storm sewer within the historical area as directed to lessen grading impacts.
- Addressed new ADA variance requirements from FHWA to add several landings adjacent to the trail.
- Added handrail/fence along trail to accommodate ADA accessibility requirements.
- Revised drawings to NDOR format and frame sheet.
- Revised and calculated all project quantities to NDOR Standard Items.
- Added NDOR Standard Build Notes to drawings.
- Revised special provisions to address any construction items which did not conform to NDOR standard specifications.
- Revised Asphalt Paving as directed by NDOR.
- Mapped Historical Area information onto drawings including "Development of Data Recovery Area" as addressed in Memorandum of Agreement between NESHPO, FHWA and the PMRNRD.
- Surveyed and revised drawings to address changes in utilities within the project area since the original design documents were completed.
- Revised realigned portion of North River Drive to obtain current Minimum Roadway Design Standard Safety Requirements for lane width and clear zone.
- Revised erosion control measures on SWPPP drawings as directed by NDOR.
- Reprocessed trail and drive cross sections and created new cross section drawings to reflect all changes made to alignments and grading.
- Revised retaining walls to address impacts from comments affecting trail typical cross section, grading, drainage and limits of construction.
- Addressed NDOR comments from Design review (7/13/2010), Environmental Section review (8/20/2010) and PS&E review (9/7/2010).
- Addressed Comments from FHWA review (9/21/2010)

Papio Missouri Natural Resource District
Missouri River Trail
N.P. Dodge Park No. to Douglas/Washington County Line
Consultant Fee Proposal

PHASE 2 TRAIL (NORTH SEGMENT) ENGINEERING COSTS

Prepared by HGM Associates Inc.
October 1, 2010

CONSTRUCTION ENGINEERING							
DESCRIPTION OF WORK ITEMS AND TASKS	CLASSIFICATIONS						TOTAL
	PM	CADD	OBS	TS	SURVEY CREW	CLERICAL	
Project Management	150	0	0	0	0	0	150
Bid Phase							
Contract Documents	80	16	0	0	0	40	136
Bid Letting - DELETED	0	0	0	0	0	0	0
Construction Management							
Pre-Construction Meeting	4	0	4	0	0	0	8
Weekly Coordination Meetings	54	0	54	0	0	0	108
Process Weekly Quantity/Payrolls	72	0	72	0	0	72	216
Construction Observation	72	0	1500	0	0	0	1572
Utility Coordination - On Site	8	0	0	0	0	0	8
Public/Contractor Coordination - On Site	8	0	0	0	0	0	8
Prepare as Builts	4	40	16	0	0	0	60
Prepare Final Punchlist/Closeout	8	0	32	0	0	0	40
Final Measurements	0	0	40	0	0	0	40
Survey							
Stake Horizontal Alignment	0	8	0	2	40	0	50
Establish Bench Circuit	0	0	0	2	6	0	8
Stake Right of Way & Easements	0	8	0	0	64	0	72
Stake Grading	0	8	0	4	64	0	76
Stake Storm Sewer	0	16	0	6	72	0	94
Stake Paving	0	8	0	4	56	0	68
Subtotal M.H.	460	104	1718	18	302	112	2714
Subtotal M.D.	57.5	13.0	214.8	2.3	37.8	14.0	339.3

Base Rate :	\$45.24	\$23.10	\$25.75	\$47.00	\$46.75	\$13.50	
Base Rate \$:	\$20,810	\$2,402	\$44,239	\$846	\$14,119	\$1,512	\$83,928
(0.4402) Payroll Additives (%) :							\$36,945
(0.9963) Indirect Costs (%) :							\$83,617
Subtotal :							\$204,490
(13%) Profit :							\$26,584
Subtotal :							\$231,074

Direct Costs: Construction Testing

\$14,500

Total, Phase 2 Trail (North Segment) Construction Engineering

\$245,574

SUMMARY OF PHASE 2 (NORTH SEGMENT) ENGINEERING COSTS

Total, Phase 2 Trail (North Segment) Design Engineering	\$198,741
Total, Phase 2 Trail (North Segment) NEPA Documentation and Revisions	\$299,463
Total, Phase 2 Trail (North Segment) Construction Engineering	\$245,574
Total, Phase 2 Trail (North Segment) Engineering Costs	\$743,778.00



