Memorandum

To: Programs, Projects and Operations Subcommittee
From: Lori Ann Laster, Stormwater Management Engineer

Date: May 27, 2021

Re: Contract Amendment with Felsburg Holt & Ullevig for the Papillion Creek Watershed

Partnership

In March 2020, the Papillion Creek Watershed Partnership voted to retain the services of Felsburg Holt & Ullevig (FHU) to provide analysis of stream degradation in the Papillion Creek Watershed to support a change in the current stream setback policy. Observations of the Partnership members since 2009, when the current policy was implemented, have shown that the policy does not adequately address stream bank erosion and stream bed degradation issues. As the Administering Agent of the Partnership, the District signs contracts on behalf of the Partnership. The original contract with FHU was approved by District management in accordance with District Policy 15.2-F-1 as the professional services fee was under \$50,000.

FHU concluded the scope of the original contract in March 2021. However, while developing the proposed stream setback policy the Partnership identified additional items where professional services support is required.

First, stakeholders have identified concerns about permit requirements from the U.S. Army Corps of Engineers for installation of grade control structures. The Partnership first must coordinate with USACE to determine what requirements are necessary to make sure that any recommended designs for grade control are acceptable to USACE.

Second, the updated policy will require development of standards, guidelines, and a checklist for design of grade control structures. These will be incorporated into the Omaha Regional Stormwater Design Manual to ensure that the proposed policy is applied consistently throughout the watershed.

Also, additional stakeholder coordination is needed as the design and development community have concerns about the timing of instituting a policy change and how it may affect current development patterns. The Partnership will convene a working group with engineers and developer representatives to discuss the proposed policy and address concerns.

The additional work will require a contract amendment with FHU. The original contract amount was \$49,945. The proposed amendment is \$68,872 bringing the total contract amount to \$118,817. This contract is funded through the Papillion Creek Watershed Partnership Fund which consists of the partnership dues each member pays to complete the work of the Partnership. As the Administering Agent, the District signs contracts and contract amendments on behalf of the Partnership. At their May 27, 2021 the Partnership voted to approve the contract amendment.

Management recommends that the Subcommittee recommend to the Board that the General Manager, as the representative of the Administering Agent of the Papillion Creek Watershed Partnership, be authorized to execute the Stream Degradation Analysis Agreement for Professional Services Amendment 1 with Felsburg Holt & Ullevig in the amount of \$68,872 bringing the total contract amount to \$118,817, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.



Meeting Minutes May 27, 2021 – 10:00 AM Via Zoom Meeting

Attendants:

Jim Kee (Omaha), Andy Szatko (Omaha), Selma Kessler (Omaha), Marlin Petermann (P-MRNRD), Eric Williams (P-MRNRD), Lori Laster (P-MRNRD), Mark Stursma (Papillion), Aaron Hirsh (FHU), Dan Giittinger (Gretna), Zach Hergenrader (Sarpy County), Matt Knight (Bellevue), Lisa Smith (Omaha), Jim Theiler (Omaha), Emily Holtzclaw (Jacobs), Alex Evans (Papillion), Bruce Fountain (La Vista), Marisa Gibb (Offut), Doug Dreessen (TD2), Lianee Daugherty (Jacobs), Jason Kubicek (Sarpy County), Adam Wilmes (Omaha), Derek Miller (Omaha), Chris Solberg (La Vista)

The meeting began at 10:02 am.

1. Introductions

 An agenda was distributed via email. Marlin Petermann (P-MRNRD) facilitated introductions.

2. Proposed Stream Setback Policy Status

- Lori Laster (P-MRNRD) briefed the group on the May 10 stakeholder meeting. Many concerns about the new policy were raised by developers, SID engineers, and SID attorneys.
- The biggest concern noted was the potential for significant delays in implementation of new
 development projects due to U.S. Army Corps of Engineers permitting for grade control
 structures. At this time, the proposed policy is not something stakeholder will support due
 to the permitting issue and the potential for significant setback distances if grade control is
 not implemented.
- The City of Omaha and P-MRNRD will be meeting with USACE regulatory office to discuss some of the permitting concerns and try to find a solution.
- A smaller stakeholder group will be formed to address other issues of the policy.

3. VOTE – Contract with FHU for Stream Setback Policy Support

- Lori Laster stated that the contract with FHU to prepare the initial stream degradation
 analysis and proposed policy has been completed. During the project, several other tasks
 were identified as necessary, including additional stakeholder coordination, USACE
 coordination, and development of design guidelines for the new policy.
- Lori reviewed the scope and fee for these additional tasks. The proposed total cost for these tasks is \$68,872. Lori showed the expected Partnership Fund balance through the current five-year interlocal agreement. The fund is sufficient to cover the cost of this contract.

















- Jim Theiler stated that the timeline in the contract should be changed so that coordination with USACE is the first task completed. Other Partnership members agreed.
- Jim Theiler (Omaha) made the motion to approve the FHU contract amendment with the change to the project timeline. Marlin Petermann (P-MRNRD) seconded.
 - Voting Yea Matt Knight (Bellevue), Dan Giitinger (Gretna), Chris Solberg (La Vista),
 Alex Evans (Papillion), Jim Theiler (Omaha), Marlin Petermann (P-MRNRD)
 - Abstain Jason Kubicek (Sarpy County)
 - Absent Ralston, Boys Town
- 4. VOTE Sediment & Erosion Control Seminar Sponsorship (notice provided at December 3, 2020 meeting)
 - Lori Laster stated that a notice to approve \$2,500 to help cover the cost of the annual Sediment & Erosion Control Seminar was given in December, but a vote was not taken in January.
 - The seminar was held virtually on February 4, 2021.
 - All communities with an approved Stormwater Management Plan for their MS4 permit use the seminar to meet the education and outreach requirements.
 - Mark Stursma (Papillion) made the motion to approve the \$2,500 sponsorship. Marlin Petermann (P-MRNRD) seconded.
 - Voting Yea Matt Knight (Bellevue), Dan Giitinger (Gretna), Chris Solberg (La Vista),
 Mark Stursma (Papillion), Jim Theiler (Omaha), Jason Kubicek (Sarpy County), Marlin
 Petermann (P-MRNRD)
 - Absent Ralston, Boys Town
- 5. Next Meeting Date
 - The next regular meeting is scheduled for June 24, 2021.
- 5. Adjourn
 - The meeting adjourned at 10:43 am. An agenda and the emailed handouts are available upon request.

Please contact Lori Laster at 444-6222 regarding any questions or comments concerning these meeting minutes.



May 27, 2021

Lori Laster, PE, CFM
Papio-Missouri River Natural Resources District
8901 South 154th Street
Omaha, Nebraska 68138

RE: Stream Degradation Analysis - Amendment #1 Agreement

Felsburg Holt & Ullevig (FHU) appreciates the opportunity to present our qualifications for continued work on the Stream Degradation Analysis project for the Papillion Creek Watershed Partnership (PCWP). FHU proposes to conduct the supplemental tasks on a time and expense basis with a not to exceed fee of \$68,872.00 based on the hours, labor rates, and direct expenses shown in Attachment A. Other direct expenses incurred on this project were estimated at 1.0% of labor. These may include items such as travel expenses, reproduction charges, postage, telephone, etc. Vehicle usage will be charged at the current Federal rate at the time of usage.

If additional services are required outside the Scope of Services, these would be handled as a contract amendment on a time and materials basis. Additional work would not be performed without written authorization from the client.

We have also attached the FHU Standard Provisions for Letter Agreements (**Attachment B**). If the terms of this letter agreement and Standard Provisions are acceptable, please sign in the space below and return a copy of the signed document for our files. A scanned pdf file is acceptable.

Please contact me at 402-445-4405 or <u>dave.lampe@fhueng.com</u> if you have any questions regarding our submittal. Thank you for your consideration.

Sincerely,

FELSBURG HOLT & ULLEVIG

Dave Lampe, PE Principal-In-Charge Aaron Hirsh, PE, CFM Project Manager

Accepted By: John Winkler, General Manager of the Papio-Missouri River Natural Resources District, as Administrative Agent for the Papillion Creek Watershed Partnership

_____ Date

Understanding

As of March 31, 2021, FHU has completed the full original scope of the Stream Degradation Analysis project (**Attachment C**). This project included the analysis of existing stream slopes and setbacks, future stream slopes and setbacks, as well as recommendations for modifications to the current Papillion Creek Watershed Partnership stream setback policy. The Technical Memorandum from the study and the Stream Setback Policy recommendations can be found at http://papiopartnership.org/stream-setback/.

The next steps discussed within the Technical Memorandum included the following:

- <u>Design/Review Checklist</u> To ease implementation of the setback policy across the numerous communities within the PCWP, it would be beneficial to establish a common design/review checklist. The checklist would help developers, consultants, and reviewers during the platting and design of properties with stream setbacks. The first step of the checklist could be a pre-application meeting wherein the developer, consultant, and reviewer meet to discuss the setback policy implementation, existing stream condition, and any concerns.
- Grade Control Standards To aid in the design and permitting of grade control structures it is
 recommended that grade control standards be developed and incorporated into the Omaha Regional
 Stormwater Design Manual (ORSDM). Some potential types of grade control standards that could be
 developed include bridge floors and sheet pile or other grade control structures for culverts and
 sanitary sewer crossings. By establishing these standards, it would help to ensure adequate protection
 against degradation as well as help reduce future repair and maintenance issues.
- <u>US Army Corps of Engineers Coordination</u> Installing grade control can have significant implications on the stream and Waters of the United States. In conjunction with the development of grade control standards it is recommended that coordination with the US Army Corps of Engineers (USACE) Regulatory Office be conducted to ensure that the proposed grade control standards would be acceptable and adhere to USACE criteria.

Approach

The list above outlines the general tasks for the proposed work under this agreement, with a more detailed scope of services on the following pages. Our approach to finalizing the stream setback policy would be to assist the P-MRNRD and PCWP with ongoing coordination efforts with the development community task force that was established during the Stakeholders Meeting on March 17, 2021. Based upon the forthcoming comments from the development community the Stream Setback Policy and Technical Memorandum would be finalized and issued. Additionally, we would assist the P-MRNRD and PCWP with the draft stream setback ordinance language for planned codification in Fall of 2021.

Our general approach to developing the grade control structure guidelines would be to conduct a literature review of existing programs and standards in regional communities (i.e., Iowa DNR, Colorado Urban Drainage & Flood Control District, etc.); provide an assessment of existing grade control features throughout the Papillion Creek basin to investigate what is working and what is not; discuss results and recommendations with PCWP community stakeholders for input; discuss grade control structure permitting with the USACE; develop draft guidance on grade control structures; solicit input from PCWP and community stakeholders on the draft guidance; and refine the draft guidance based on input from the development community.

Scope of Services

The following scope of services provides a general outline of the anticipated tasks that will be undertaken; recognizing that the scope of work will be determined through forthcoming discussions with the P-MRNRD.

Task I - Project Management

This task includes general coordination with the P-MRNRD as well as general management activities including monitoring of project budget and schedule, workload assignments, and invoicing. This task would also include one (I) presentation of the Stream Degradation Analysis to the P-MRNRD Board of Directors, if required.

Task 2 - Stream Setback Policy Finalization

During the Stakeholders Meeting with the development community on March 17, 2021 a development community task force was created for the P-MRNRD to coordinate with moving forward. The development community and their engineers were encouraged to run the numbers on the stream setback policy recommendations and provide comments. The Stream Setback Policy Finalization task will include assisting the P-MRNRD with any coordination efforts with the development community including up to two (2) stakeholder meetings and two (2) PCWP meetings. This task also includes updating the stream setback policy recommendations and technical memorandum to account for any changes stemming from the comments. Additionally, this task includes the development of a design/review checklist to add both reviewers and developers in navigating the new stream setback policy process. Lastly, this task includes assisting the PCWP with the development of draft stream setback ordinance language for codification by the PCWP partners.

Task 3 - Lateral Migration Analysis

During PCWP meeting presentations over the course of the Stream Degradation Analysis project several PCWP partners asked whether the policy updates take the stream's lateral migration into account. To determine the impact that lateral migration may have upon local streams, a change detection analysis will be conducted using available LiDAR and aerial imagery to determine the annual rate at which local streams' belt widths are changing. The analysis will be focused upon the three sub-watersheds of the original Stream Degradation Analysis study. Through the change detection analysis an average annual lateral migration rate will be determined, which will help inform the ultimate stream setback policy updates.

Task 4 - Grade Control Structure Assessment

FHU will begin the grade control structure assessment with a literature review to evaluate existing programs and community standards of surrounding municipalities or governmental agencies that have been developed that address grade control (i.e., Iowa DNR, Colorado Urban Drainage and Flood Control District, etc.). An initial screening will be done to narrow down up to five (5) sample programs and design standards from other entities that will be used as the framework for the development of PCWP grade control structure guidance.

In addition, this task will include an assessment of existing grade control structures used in the PCWP area. The existing grade control structures to be assessed will be determined through in-depth discussions with the P-MRNRD. The assessment would investigate up to twelve (12) grade control structures throughout the Papillion Creek watershed and include both a desktop review and field assessment of each structure to assess their design and long-term performance. The intent of the investigation is to determine the types of grade control structures that perform best for the local geomorphology and hydraulic conditions, and those

structure that do not. As-built plans for the grade control structures will be acquired and reviewed, geomorphology and hydrology will be investigated, and field visits will then be conducted to assess the long-term performance of the different designs. A scoring will be provided for each structure.

This task also includes coordination with the USACE Wehrspann Regulatory office to first discuss grade control permitting issues and second to determine which types of grade control structures may or may not fall under existing Section 404 Nationwide Permits within the current regulatory environment. The goal would be to identify which types of grade control require the least amount of permitting effort, and which may require more lengthy permitting review. This would help in the preferential ranking of the grade control structure types to carry forward to the guidance phase.

The findings of the grade control review and assessment will be presented to PCWP partners for their input on design, long-term performance, and preferences regarding grade control structure types.

Task 5 - Grade Control Structure Guidelines

From this information, grade control structure guidelines will be developed to help designers determine which grade control type works best for their situation. Design standards will also be developed to show the minimum design criteria for some of the most common grade control structures, including (a) culvert crossings, (b) bridge crossings, (c) sewer/water line crossings, and (d) standalone grade control structures.

The grade control standards would include a description of grade control design guidelines, wherein the suitability of the different grade control types would be determined. Standards may reference other design manuals, but we anticipate that figures will be developed for up to five (5) grade control types to illustrate the minimum design standards for commonly used structures.

Throughout this task it is anticipated that there will be up to two (2) presentations of the guidelines to the PCWP partners and one (1) presentation to the development community for input. Any comments received during these meetings would then be incorporated into the guidelines. The finalized grade control structure guidelines would be summated into a memorandum document with the intent to incorporate the guidelines into the Omaha Regional Stormwater Design Manual.

Assumptions

The following assumptions have been made during preparation of the schedule and fee.

- Grade control structure as-builts will be provided by P-MRNRD or PCWP partners
- Only grade control structures with as-built plans will be included in the assessment
- Geomorphic data will be generalized by regional watershed, soil type, etc.
- Detailed survey is excluded from the scope of this project
- Maps and documents will be submitted electronically

Schedule and Availability

We will ultimately work with the P-MRNRD to develop a timeline for the proposed Scope of Services, assuming a contract is negotiated with the P-MRNRD and Notice to Proceed is issued by mid-June we would anticipate the following timeline:

Notice to Proceed mid-June 2021

USACE Coordination early July 2021 – late September 2021

Lateral Migration Analysis mid-June – mid-July 2021

Stream Setback Policy Finalization mid-June – early September 2021

Draft Stream Setback Ordinance Language mid-September 2021

Grade Control Structure Assessment Kickoff Meeting mid-July 2021

Grade Control Structure Assessment mid-July – late October 2021

Grade Control Structure Assessment Presentation late October 2021

Grade Control Structure Guidelines Development late October 2021 – early February 2022

Grade Control Structure Guidelines Memo Finalization late March 2022

Schedule and Availability

FHU proposes to conduct the tasks on a time and expense basis with a not to exceed fee of \$68,872.00 based on the hours, labor rates, and direct expenses shown in **Attachment A**. Other direct expenses incurred on this project were estimated at 1.0% of labor. These may include items such as travel expenses, reproduction charges, postage, telephone, etc. Vehicle usage will be charged at the current Federal rate at the time of usage.

If additional services are required outside the Scope of Services, these would be handled as a contract amendment on a time and materials basis. Additional work would not be performed without written authorization from the client.

ATTACHMENT A FEE PROPOSAL

for Papillion Creek Watershed Partnership Stream Degradation Analysis - Amendment #I

The fee is based on the following assumptions for labor and expenses:

100	FELSBURG					
	HOLT &					
	ULLEVIG	Principal I	Eng IV	Eng II	Hours	Tota
connec	ting & enhancing communities	\$220	\$155	\$115	Subtotal	Cost
TASK I-	PROJECT MANAGEMENT					
Task I.I	Project Management and Administration	4	20		24	\$3,980
TASK 2 -	STREAM SETBACK POLICY FINALIZATION	į.				
Task 2.1	PCWP Meetings (two meetings)	4	8		12	\$2,120
Task 2.2	Stakeholder Meetings (two meetings)	4	8		12	\$2,120
Task 2.3	Stream Setback Policy/Tech Memo Updates	4	12	8	24	\$3,660
Task 2.4	Design/Review Checklist	2	8		10	\$1,680
Task 2.5	Prepare Draft Stream Setback Ordinance Langauge	4	8		12	\$2,120
TASK 3 -	LATERAL MIGRATION ANALYSIS					
Task 3.1	Change Detection Analysis	2	24	16	42	\$6,000
TASK 4 -	GRADE CONTROL STRUCTURE ASSESSME	NT				
Task 4.1	P-MRNRD Kick-off Meeting	2	4		6	\$1,060
Task 4.2	Literature/Program Review	4	16	12	32	\$4,740
Task 4.3	Desktop Review	2	16	12	30	\$4,300
Task 4.4	Field Assessments and Scoring	6	30	16	52	\$7,810
Task 4.5	USACE Coordination	4	16	8	28	\$4,280
Task 4.6	PCWP Presentations (one meeting)	2	4		6	\$1,060
TASK 5 -	GRADE CONTROL STRUCTURE GUIDELIN	ES				
Task 5.1	Grade Control Structure Guidelines Development	8	44	40	92	\$13,180
Task 5.2	Grade Control Structure Guidelines Memo	4	24	20	48	\$6,900
Task 5.3	PCWP Presentations (two meeting)	4	8		12	\$2,120
Task 5.4	Stakeholders Meeting (one meeting)	2	4		6	\$1,060
	SUBTOTAL Labor:	62	254	132	448	\$68,190
EXPENSES at 1.0% of Labor:						\$682
TOTAL PROJECT:						\$68,872

Letter Agreement Standard Provisions

A. SERVICES BY THE CONSULTANT

The **CONSULTANT** agrees to perform all services, hereunder, using reasonable skill and judgment in accordance with applicable professional standards. **CONSULTANT** agrees to keep the **CLIENT** informed on its progress through periodic reports, and to maintain accurate records relating to its services for this project.

The **CONSULTANT** agrees to provide, directly or by association with such other Consultants or Contractors as it may deem necessary to further the interest of the **CLIENT**, the basic services as described in the Scope of Work provided in the signed Letter Proposal or Letter Agreement.

B. RESPONSIBILITIES OF THE CLIENT

The **CLIENT** shall provide and make available to the **CONSULTANT**, for his use, all maps, property descriptions, surveys, previous reports, historical data, and other information within its knowledge and possession relative to the services to be furnished hereunder. Data so furnished to the **CONSULTANT** shall remain the property of the **CLIENT** and will be returned upon completion of its services

The **CLIENT** shall make provisions for the **CONSULTANT** to enter upon public and private properties as required for the **CONSULTANT** to perform its services hereunder.

C. EXTRA WORK

The **CLIENT** may desire to have the **CONSULTANT** perform work or render services other than those provided in Scope of Work. This will be Extra Work. Work shall not proceed until so authorized by the **CLIENT**. Payment for all work under this Agreement shall be on an hourly basis plus expenses in accordance with the attached rate schedule. Charges for outside services, expenses, and subconsultant work will be billed at 1.10 times the invoice amount.

D. TIME OF BEGINNING AND COMPLETION

Execution of the Letter Proposal is authorization by the **CLIENT** for the **CONSULTANT** to proceed with the work (Time of Beginning). The original Time of Completion is as noted in the Letter Agreement.

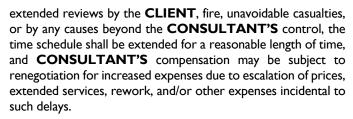
E. PAYMENT

Unless otherwise provided herein, **CONSULTANT** shall submit monthly invoices for Basic, Additional or Special Services and for Reimbursable Expenses each month for work that has been performed. If hourly, invoices will be based on labor and expenses incurred. If lump sum, invoices will be based on the percentage of work completed.

Payments not made within 60 days of the billing date shall bear interest at the rate of 1% per month which is an annual interest rate of 12%. If any portion of, or an entire account remains unpaid 90 days after billing, the **CLIENT** shall pay all costs of collection, including reasonable attorney's fees.

F. DELAYS

If the **CONSULTANT** is delayed at any time in the progress of work by any act or neglect of the **CLIENT** or its agents, employees or contractors, or by changes in the work, or by



G. OWNERSHIP OF DOCUMENTS

All drawings, specifications, reports, records, and other work products developed by the CONSULTANT associated with this project are instruments of service for this project only and shall remain the property of the **CONSULTANT** whether the project is completed or not. The **CONSULTANT** shall furnish originals or copies of such work product to the CLIENT in accordance with the services required hereunder. Reuse of any of the work product of the CONSULTANT by the CLIENT on an extension of this project or on any other project without the written permission of the CONSULTANT shall be at the **CLIENT'S** risk and the **CLIENT** agrees to defend, indemnify, and hold harmless the CONSULTANT from all claims, damages, and expenses including attorney's fees arising out of such unauthorized reuse by the CLIENT or by others acting through the CLIENT. Any reuse or adaptation of the CONSULTANT'S work product shall **CONSULTANT** to equitable compensation.

H. INSURANCE

During the course of the services, the **CONSULTANT** shall maintain Workmen's Compensation Insurance in accordance with the Workmen's Compensation laws of the State of Nebraska; Professional Liability Insurance with a minimum coverage of \$1,000,000 per occurrence, \$2,000,000 aggregate; Automobile Liability with a combined single limit coverage of \$1,000,000; and Commercial General Liability of \$1,000,000 per occurrence, \$2,000,000 aggregate. Upon request, the **CONSULTANT** shall provide certificates of insurance to the **CLIENT** indicating compliance with this paragraph.

I. TERMINATION

Either the **CLIENT** or the **CONSULTANT** may terminate this Agreement at any time with or without cause upon giving the other party fourteen (14) calendar days prior written notice. The **CLIENT** shall within sixty (60) calendar days of termination pay the **CONSULTANT** for all services rendered and all costs incurred up to the date of termination, in accordance with the compensation provisions of this contract.

J. DISPUTES

Any claim, dispute, or other matter in question between the **CLIENT** and the **CONSULTANT**, arising out of or relating to either's obligations to the other under this Agreement, shall, if possible, be resolved by negotiation between the **CLIENT'S** representative and the **CONSULTANT** Principal-in-Charge for the Project. **CLIENT** and **CONSULTANT** each commit to seeking resolution of such matters in an amicable, professional, and expeditious manner. If a matter cannot be resolved by these parties, no later than thirty (30) calendar days after either party submits an issue in writing for resolution,



representatives from executive management of the **CLIENT** and **CONSULTANT** shall attempt to resolve the matter through additional good faith negotiations. If resolution cannot be reached within an additional thirty (30) calendar days, the **CLIENT** and **CONSULTANT** agree that all such unresolved disputes shall be submitted to nonbinding mediation.

Pending final resolution of the dispute, the **CONSULTANT** shall proceed diligently with the performance of the Basic Services as described in Article A, as directed by the **CLIENT**, and the **CLIENT** shall continue to pay the undisputed payments due to the **CONSULTANT** for such services in accordance with the payment provisions of this Agreement.

K. GOVERNING LAW

Unless otherwise agreed in writing, this Agreement and the interpretation thereof shall be governed by the law of the State of Nebraska.

L. SUCCESSORS AND ASSIGNS

The **CLIENT** and the **CONSULTANT** each binds itself and its partners, successors, executors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators and assigns of such other party with respect to all covenants of this Agreement. Neither party shall assign or transfer its interest in this Agreement without the written consent of the other.

M. EXTENT OF AGREEMENT

This Agreement represents the entire and integrated agreement between the parties and supersedes all prior negotiations and representations. Nothing herein shall be deemed to create any contractual relationship between the **CONSULTANT** and any other consulting business, or contractor, or material supplier on the project, nor obligate it to furnish any notices required under other such contracts, nor shall anything herein be deemed to give anyone not a party to this Agreement any right of action against a party which does not otherwise exist without regard to this Agreement.

N. NOTICES

All notices and instructions given by either party to the other shall be in writing, and shall be deemed to be properly served if delivered to the address of record shown below, or if deposited in the United States Mail properly stamped with the required postage and addressed to such party at the address in the Letter Proposal or Letter Agreement. The date of service of a notice sent by mail shall be deemed to be the day following the date on which said notice is so deposited. Either party hereto shall have the right to change its address by giving the other party written notice thereof.

O. ACCURACY OF SERVICES AND LIMITATION OF LIABILITY

The **CONSULTANT** shall use reasonable professional skill and judgment in providing the services, hereunder, but does not warrant that such services are without errors and/or omissions. If, during the authorized use and prudent interpretation of documents or advice furnished by the **CONSULTANT**, an error or omission is discovered within a reasonable time, the **CONSULTANT** shall be responsible for correction of any work which must be removed or altered to meet the project requirements, provided the **CONSULTANT** is given a



reasonable opportunity to make remedial recommendations and to correct or arrange for the correction of the work itself. The **CONSULTANT** will not be liable for the cost of procurement of work or services performed in correcting such errors and/or omissions where such work or services result in a value to the Project over and above that which the original work or services provided.

In providing opinions of probable construction cost, the **CLIENT** understands that the **CONSULTANT** has no control over costs or the price of labor, equipment, or materials, or the Contractor's method of pricing, and that the opinions of probable construction costs provided herein are to be made based on the **CONSULTANT'S** qualifications, and experience. The **CONSULTANT** makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.

The **CONSULTANT** agrees, to the fullest extent permitted by law, to indemnify and hold the **CLIENT** harmless from any damage, liability or cost (including reasonable attorneys' fees and costs of defense) to the extent caused by the **CONSULTANT'S** negligent acts, errors or omissions in the performance of professional services under this Agreement and those of his or her subconsultants or anyone for whom the **CONSULTANT** is legally liable.

The **CLIENT** agrees, to the fullest extent permitted by law, to indemnify and hold the **CONSULTANT** harmless from any damage, liability or cost (including reasonable attorneys' fees and costs of defense) to the extent caused by the **CLIENT'S** negligent acts, errors or omissions and those of his or her contractors, subcontractors or consultants or anyone for whom the **CLIENT** is legally liable, and arising from the project that is the subject of this Agreement. **CLIENT'S** amount of indemnity or costs incurred in providing the indemnity shall be limited to the same amount as the **CONSULTANT'S** liability is listed below.

As negotiated as a part of this Agreement, to the fullest extent permitted by law, and not withstanding any other provision of this Agreement, the total liability, in the aggregate, of the CONSULTANT and the CONSULTANT'S officers, directors, partners, employees, agents and subconsultants, to the CLIENT and anyone claiming by, through or under the CLIENT, for any and all claims, losses, costs or damages of any nature whatsoever arising out of, resulting from or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability, breach of contract or warranty, express or implied, of the CONSULTANT or the CONSULTANT'S officers, directors, employees, agents or subconsultants, or any of them, shall not exceed the total amount of \$100,000.

Upon execution of the Letter Agreement or Letter Proposal, the **CLIENT** thereby agrees to the terms of these Special Provisions.





April 3, 2020

Lori Laster, PE, CFM
Papio-Missouri River Natural Resources District
8901 South 154th Street
Omaha, Nebraska 68138

RE: Stream Degradation Analysis Agreement

Felsburg Holt & Ullevig (FHU) appreciates the opportunity to present our qualifications for the stream degradation study within the Papillion Creek watershed. Our interest in this project stems from our team's passion for stream work which includes stream restoration, natural channel design, habitat restoration, and bank stabilization projects. Additionally, we are well versed in current stream policy through our experience with watershed planning, MS4 program planning, in-lieu fee programs, and stream mitigation banks.

For this project we would like to bring you an FHU team that will apply innovative thought processes and great attention to detail:

Aaron Hirsh, a Water Resources Engineer, will serve as your Project Manager. Aaron has an extensive background in geographic information systems (GIS) modeling including seven peer-reviewed journal publications focusing upon surface water hydrology, groundwater contamination, and nutrient modeling.

Dave Lampe will serve as Principal-In-Charge. Dave has over 20 years in the industry and is the Water Resources Manager for FHU's Great Plains Region. His responsibilities will be to serve as a liaison with the Partnership for contracting; support the project team; and provide additional senior technical expertise in stream degradation and stream policy.

FHU proposes to conduct the tasks on a time and expense basis with a not to exceed fee of \$49,945.00 based on the hours, labor rates, and direct expenses shown in **Attachment A**. Other direct expenses incurred on this project were estimated at 3 percent of labor. These may include items such as travel expenses, reproduction charges, postage, telephone, etc. Vehicle usage will be charged at the current Federal rate at the time of usage.

If additional services are required outside the Scope of Services, these would be handled as a contract amendment on a time and materials basis. Additional work would not be performed without written authorization from the client.

We have also attached the FHU Standard Provisions for Letter Agreements (**Attachment B**). If the terms of this letter agreement and Standard Provisions are acceptable, please sign in the space below and return a copy of the signed document for our files. A scanned pdf file is acceptable.

Sincerely,

FELSBURG HOLT & ULLEVIG

Dave Lampe, PE

Principal-In-Charge

Aaron Hirsh, PE, CFM

Project Manager

Accepted By: John Winkler, General Manager of the Papio-Missouri River Natural Resources District, as Administrative Agent for the Papillion Creek Watershed Partnership

4-13-2020

Date

Understanding

We understand that the Papillion Creek Watershed Partnership has experienced some ongoing issues with the current stream setback policy resulting in inadequate stream setbacks thereby creating potential threats to properties, structures, and infrastructure. Due to this the Partnership is interested in analyzing the stream setbacks for both the existing stream bed slopes and assumed future stream bed slopes in select undeveloped areas within the Papillion Creek watershed. The Papio-Missouri River Natural Resources District ("P-MRNRD") serves as the Partnership's Administrative Agent and will enter into this Agreement in its capacity as the Administrative Agent on behalf of the Partnership.

This study would entail (a) mapping the approximate areas of stream setbacks using existing stream slopes and current setback policy, (b) analysis of the assumed stable channel slopes under full buildout conditions, (c) mapping approximate areas of stream setbacks based on future stream slopes and current setback policy, and (d) recommendations for improvements to the current setback policy.

Based upon discussions with the P-MRNRD on March 3, 2020 it was determined that there are select watersheds which are of higher priority for the study. The focus areas are depicted in Figure 1 on the following page and include:

- 1. South Papillion Creek and tributaries upstream of 168th and Briar Street (27 miles of stream)
- 2. Wehrspann Creek and tributaries upstream of Highway 370 (18 miles of stream)
- 3. North Branch West Papillion Creek and tributaries upstream of Flanagan Lake (13 miles of stream)

As shown in Figure 1, this study overlaps with the concurrent stream degradation study being completed by the U.S. Army Corps of Engineers (USACE). There is approximately 10 miles of stream overlap between the proposed USACE study streams and this study, although based upon correspondence with the USACE on March 5, 2020 they may not have enough funding to study all streams as proposed.

The USACE study is focusing upon main stem reaches and does not include analysis of tributaries. This study will focus upon all USGS National Hydrography Dataset (NHD) mapped streams and tributaries within the focus areas all the way up through the smaller first order streams. Since this study focuses upon the upstream reaches of the main stems, the USACE results for future stream slopes will be utilized to determine the downstream tie in elevations.

Due to dependency of this study upon the future stream slope analysis conducted by the USACE there will be substantial coordination efforts throughout the project. This study will employ similar methodologies being utilized in the USACE study in order to ensure cohesive results and products. Redundancies in the analyses will be minimized, although some reaches may be analyzed by both parties in order to ensure similar results.

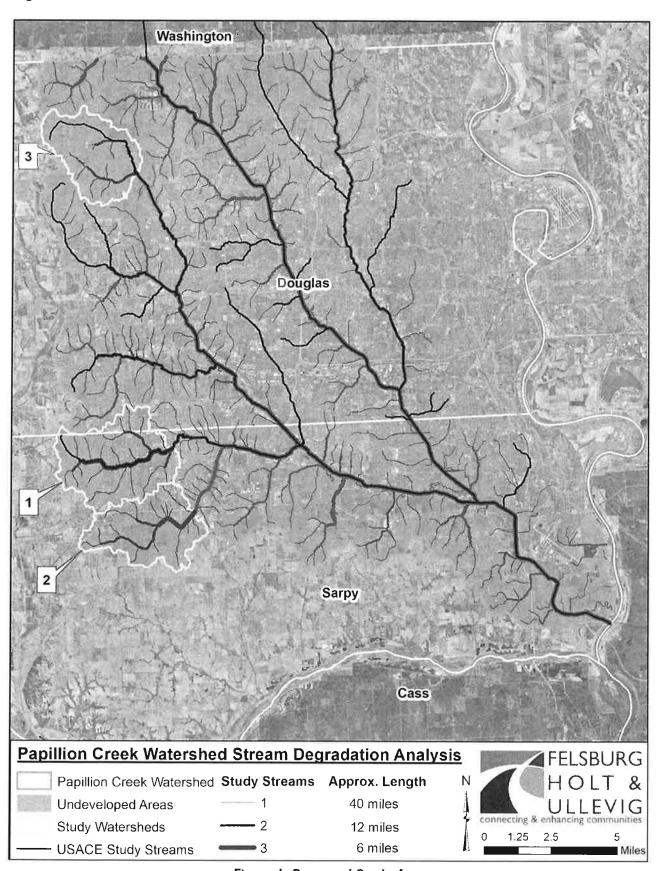


Figure 1. Proposed Study Area

Approach

FHU's general approach is centered around recurrent communication with the P-MRNRD to make sure we are aligned with the Partnership's vision and goals, an investigative phase to further understand the issues, and an in-depth geospatial analysis of both existing and future stream conditions.

The initial findings and proposed parameters/methodology will be brought to the Partnership's Executive Committee for collective discussion. The intent is to share information with the Partnership that has been gathered and produced in order to clarify and focus in on the main concerns and issues. Results stemming from the U.S. Army Corps of Engineers Stream Planning Study as well as other similar work done within the area will be fully integrated in order to align the collaborative efforts and reduce unneeded redundancies in the analyses.

The preliminary proposed methodology for the geospatial analysis is laid out below. The process will be iterative and will incorporate numerous datasets. FHU often uses ArcGIS model builder to help automate the processing and would likely do so on this project. Such model building would utilize publicly available datasets as much as possible and therefore could be replicated by other GIS analysts on other stream systems.

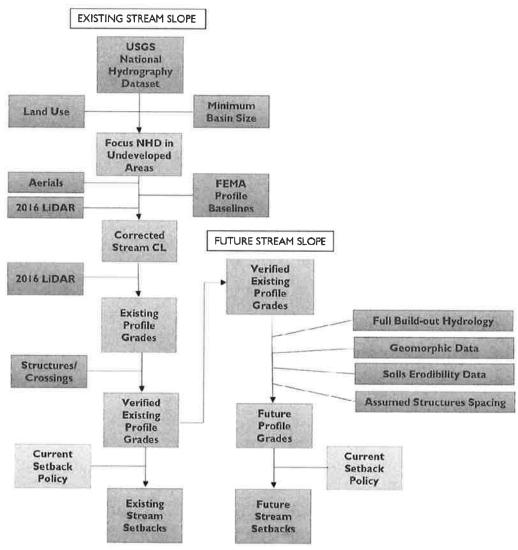


Figure 2. Preliminary Proposed Methodology

Scope of Services

The following scope of services provides a general outline of the anticipated tasks that will be undertaken; recognizing that the scope of work will be determined through forthcoming discussions with the P-MRNRD.

Task I - Project Management

FHU will meet with the P-MRNRD (Kick-off Meeting) to review the project goals and hold discussions on the concerns and issues faced. Prior to the future setback analysis and following review by the P-MRNRD, FHU will meet with the Partnership's Executive Committee to present the results of the existing setbacks analysis and discuss the applicable parameters and proposed methodology for the analysis of future stream degradation. After completion of the analysis and following review by P-MRNRD, FHU will meet with the Partnership's Executive Committee to present the findings and discuss recommendations for setback policy. Following this discussion FHU will present the setback policy to development stakeholders and will finalize the setback policy recommendations.

Task 2 - Data Collection and Review

FHU will acquire all pertinent GIS/LiDAR data, aerials, survey data, structure record drawings and existing studies that may be available to help during the investigative phase. FHU will compile available data and review any available stream planning and degradation studies provided by the P-MRNRD. Field verification is included as part of this investigation to assess conditions and document areas which were flagged during initial analysis. Field data will include documentation of observed site conditions at select locations, including the geomorphological features. Information obtained will assist in the determination of the future stream slopes.

Task 3 - Stream Degradation Analysis

Desktop geospatial analysis will be conducted to analyze the existing stream slopes using the 2016 LiDAR elevation data. Information on existing structures acting as grade control will be incorporated into the existing stream profiles. The existing setback policy will be implemented on the existing stream slopes to produce the existing stream setback boundaries. This existing setback analysis results will then be reviewed with the P-MRNRD and then presented to the Partnership's Executive Committee along with the proposed parameters/methodology for future stream slope determination.

Additional field investigation data, soil erodibility data, full build out hydrology, and geomorphic data will be integrated with the existing stream profile analysis to project the future stream slopes after degradation. An assumed crossing structure spacing (¼ mile, ½ mile, etc.) may be implemented to control grades throughout the future stream profile. These future stream profiles will be used to determine the future setback boundary limits using the current setback policy.

Detailed maps will be provided to illustrate the differences between the current setbacks and the future setbacks to help identify problem areas, aiding in the prioritization of stream reaches. As mentioned in Task I, a meeting will be held with the Partnership's Executive Committee to discuss the findings from the geospatial analysis and to present the initial stream setback recommendations. The Partnership's Executive Committee will then determine the stream setback policy recommendations to take forward to the development stakeholders. After meeting with development stakeholders, the stream setback policy recommendations will be finalized and submitted to the P-MRNRD for distribution to the Partnership's Executive Committee.

Assumptions

The following assumptions have been made during preparation of the schedule and fee.

- Streams to be analyzed will be based upon USGS National Hydrography Dataset mapped streams
- USACE future stream slopes will be utilized to determine downstream tie in elevations
- Streams with existing FEMA, USACE, or local levees are excluded from the scope of this project
- Structures information will be inferred from desktop analysis when as-builts are not available
- Structure spacing for future stream profiles will be at an assumed increment
- Geomorphic data will be generalized by regional watershed, soil type, etc.
- Detailed survey is excluded from the scope of this project
- Maps and documents will be submitted electronically

Schedule and Availability

We will ultimately work with the P-MRNRD to develop a timeline for the proposed Scope of Services, assuming a contract is negotiated with the P-MRNRD and Notice to Proceed is issued by early April we would anticipate the following timeline:

Notice to Proceed early April 2020 Kickoff Meeting mid April 2020

Data Collection early April – early May 2020 Existing Setback Analysis early May – early July 2020

Parameters/Methodology Meeting early July 2020

Proposed Setback Analysis *mid July – late September 2020

Presentation of Findings early October 2020
Stakeholder Meeting late October 2020
Finalized Recommendations mid November 2020

*Note: This schedule is dependent upon the anticipated completion of the USACE future stream slope analysis in late May, early June 2020.

Fee Proposal

FHU proposes to conduct the tasks on a time and expense basis with a not to exceed fee of \$49,945.00 based on the hours, labor rates, and direct expenses shown in **Attachment A**. Other direct expenses incurred on this project were estimated at 3 percent of labor. These may include items such as travel expenses, reproduction charges, postage, telephone, etc. Vehicle usage will be charged at the current Federal rate at the time of usage.

If additional services are required outside the Scope of Services, these would be handled as a contract amendment on a time and materials basis. Additional work would not be performed without written authorization from the client.

ATTACHMENT A FEE PROPOSAL

for Papillion Creek Watershed Partnership Stream Degradation Analysis

The fee is based on the following assumptions for labor and expenses:

	FELS	BUF	₹G
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connecting 8	& enhancing	commur	nities
SK I- PRO	JECT MAI	NAGE	MEN

	ULLEVIG	Principal I	Eng III	Eng I	Hours	Total
conne	cting & enhancing communities	\$2IO	\$130	\$105	Subtotal	Cost
TASK I-	PROJECT MANAGEMENT		Ψ130	Ψ105	Judiotal	Cost
Task I.I	Project Management and Administration	2	16		18	\$2,500
Task 1.2	Kick-off Meeting	2	2		4	\$680
Task 1.3	USACE Coordination	2	12		14	\$1,980
Task I.4	Parameters/Methodology Meeting	2	2		4	\$680
Task 1.5	Findings Presentation	2	2		4	\$680
Task 1.6	Stakeholders Meeting	2	2		4	\$680
TASK 2 -	DATA COLLECTION AND REVIEW					
Task 2.1	Data Collection	ı	24	12	37	\$4,590
Task 2.2	Field Verification/Field Data	2	12	6	20	\$2,610
TASK 3 -	STREAM DEGRADATION ANALYSIS					, , , , , ,
Task 3.1	Study Area Refinement	1	2		3	\$470
Task 3.2	Existing Profile Grades	2	32	8	42	\$5,420
Task 3.2a	Add Structures/Crossings	1	12	2	15	\$1,980
Task 3.2b	Generate Existing Setback Boundary	2	16	6	24	\$3,130
Task 3.3	Proposed Profile Grades	4	40	4	48	\$6,460
Task 3.3a	Evaluate Soils/Geomorphic Data	2	16	2	20	\$2,710
Task 3.3b	Generate Proposed Setback Boundary	4	24	6	34	\$4,590
Task 3.4	Setback Policy Modifications	4	12	2	18	\$2,610
Task 3.5	Technical Memorandum	2	42	8	52	\$6,720
	SUBTOTAL Labor:	37	268	56	361	\$48,490
	EXPENSES at 3% of Labor:					\$1,455
TOTAL PROJECT:						

Letter Agreement Standard Provisions

A. SERVICES BY THE CONSULTANT

The **CONSULTANT** agrees to perform all services, hereunder, using reasonable skill and judgment in accordance with applicable professional standards. **CONSULTANT** agrees to keep the **CLIENT** informed on its progress through periodic reports, and to maintain accurate records relating to its services for this project.

The **CONSULTANT** agrees to provide, directly or by association with such other Consultants or Contractors as it may deem necessary to further the interest of the **CLIENT**, the basic services as described in the Scope of Work provided in the signed Letter Proposal or Letter Agreement.

B. RESPONSIBILITIES OF THE CLIENT

The **CLIENT** shall provide and make available to the **CONSULTANT**, for his use, all maps, property descriptions, surveys, previous reports, historical data, and other information within its knowledge and possession relative to the services to be furnished hereunder. Data so furnished to the **CONSULTANT** shall remain the property of the **CLIENT** and will be returned upon completion of its services

The **CLIENT** shall make provisions for the **CONSULTANT** to enter upon public and private properties as required for the **CONSULTANT** to perform its services hereunder.

C. EXTRA WORK

The **CLIENT** may desire to have the **CONSULTANT** perform work or render services other than those provided in Scope of Work. This will be Extra Work. Work shall not proceed until so authorized by the **CLIENT**. Payment for all work under this Agreement shall be on an hourly basis plus expenses in accordance with the attached rate schedule. Charges for outside services, expenses, and subconsultant work will be billed at 1.10 times the invoice amount.

D. TIME OF BEGINNING AND COMPLETION

Execution of the Letter Proposal is authorization by the **CLIENT** for the **CONSULTANT** to proceed with the work (Time of Beginning). The original Time of Completion is as noted in the Letter Agreement.

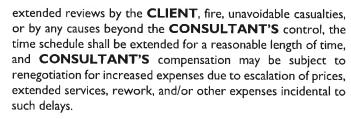
E. PAYMENT

Unless otherwise provided herein, **CONSULTANT** shall submit monthly invoices for Basic, Additional or Special Services and for Reimbursable Expenses each month for work that has been performed. If hourly, invoices will be based on labor and expenses incurred. If lump sum, invoices will be based on the percentage of work completed.

Payments not made within 60 days of the billing date shall bear interest at the rate of 1% per month which is an annual interest rate of 12%. If any portion of, or an entire account remains unpaid 90 days after billing, the **CLIENT** shall pay all costs of collection, including reasonable attorney's fees.

F. DELAYS

If the **CONSULTANT** is delayed at any time in the progress of work by any act or neglect of the **CLIENT** or its agents, employees or contractors, or by changes in the work, or by



G. OWNERSHIP OF DOCUMENTS

All drawings, specifications, reports, records, and other work products developed by the CONSULTANT associated with this project are instruments of service for this project only and shall remain the property of the CONSULTANT whether the project is completed or not. The CONSULTANT shall furnish originals or copies of such work product to the CLIENT in accordance with the services required hereunder. Reuse of any of the work product of the CONSULTANT by the CLIENT on an extension of this project or on any other project without the written permission of the CONSULTANT shall be at the **CLIENT'S** risk and the **CLIENT** agrees to defend, indemnify, and hold harmless the CONSULTANT from all claims, damages, and expenses including attorney's fees arising out of such unauthorized reuse by the CLIENT or by others acting through the CLIENT. Any reuse or adaptation of the CONSULTANT'S work product shall entitle the **CONSULTANT** to equitable compensation.

H. INSURANCE

During the course of the services, the **CONSULTANT** shall maintain Workmen's Compensation Insurance in accordance with the Workmen's Compensation laws of the State of Nebraska; Professional Liability Insurance with a minimum coverage of \$1,000,000 per occurrence, \$2,000,000 aggregate; Automobile Liability with a combined single limit coverage of \$1,000,000; and Commercial General Liability of \$1,000,000 per occurrence, \$2,000,000 aggregate. Upon request, the **CONSULTANT** shall provide certificates of insurance to the **CLIENT** indicating compliance with this paragraph.

I. TERMINATION

Either the **CLIENT** or the **CONSULTANT** may terminate this Agreement at any time with or without cause upon giving the other party fourteen (14) calendar days prior written notice. The **CLIENT** shall within sixty (60) calendar days of termination pay the **CONSULTANT** for all services rendered and all costs incurred up to the date of termination, in accordance with the compensation provisions of this contract.

I. DISPUTES

Any claim, dispute, or other matter in question between the **CLIENT** and the **CONSULTANT**, arising out of or relating to either's obligations to the other under this Agreement, shall, if possible, be resolved by negotiation between the **CLIENT'S** representative and the **CONSULTANT** Principal-in-Charge for the Project. **CLIENT** and **CONSULTANT** each commit to seeking resolution of such matters in an amicable, professional, and expeditious manner. If a matter cannot be resolved by these parties, no later than thirty (30) calendar days after either party submits an issue in writing for resolution,



ATTACHMENT C

representatives from executive management of the **CLIENT** and **CONSULTANT** shall attempt to resolve the matter through additional good faith negotiations. If resolution cannot be reached within an additional thirty (30) calendar days, the **CLIENT** and **CONSULTANT** agree that all such unresolved disputes shall be submitted to nonbinding mediation.

Pending final resolution of the dispute, the **CONSULTANT** shall proceed diligently with the performance of the Basic Services as described in Article A, as directed by the **CLIENT**, and the **CLIENT** shall continue to pay the undisputed payments due to the **CONSULTANT** for such services in accordance with the payment provisions of this Agreement.

K. GOVERNING LAW

Unless otherwise agreed in writing, this Agreement and the interpretation thereof shall be governed by the law of the State of Nebraska.

L. SUCCESSORS AND ASSIGNS

The **CLIENT** and the **CONSULTANT** each binds itself and its partners, successors, executors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators and assigns of such other party with respect to all covenants of this Agreement. Neither party shall assign or transfer its interest in this Agreement without the written consent of the other.

M. EXTENT OF AGREEMENT

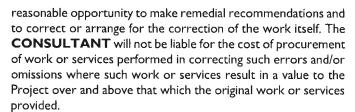
This Agreement represents the entire and integrated agreement between the parties and supersedes all prior negotiations and representations. Nothing herein shall be deemed to create any contractual relationship between the **CONSULTANT** and any other consulting business, or contractor, or material supplier on the project, nor obligate it to furnish any notices required under other such contracts, nor shall anything herein be deemed to give anyone not a party to this Agreement any right of action against a party which does not otherwise exist without regard to this Agreement.

N. NOTICES

All notices and instructions given by either party to the other shall be in writing, and shall be deemed to be properly served if delivered to the address of record shown below, or if deposited in the United States Mail properly stamped with the required postage and addressed to such party at the address in the Letter Proposal or Letter Agreement. The date of service of a notice sent by mail shall be deemed to be the day following the date on which said notice is so deposited. Either party hereto shall have the right to change its address by giving the other party written notice thereof.

O. ACCURACY OF SERVICES AND LIMITATION OF LIABILITY

The **CONSULTANT** shall use reasonable professional skill and judgment in providing the services, hereunder, but does not warrant that such services are without errors and/or omissions. If, during the authorized use and prudent interpretation of documents or advice furnished by the **CONSULTANT**, an error or omission is discovered within a reasonable time, the **CONSULTANT** shall be responsible for correction of any work which must be removed or altered to meet the project requirements, provided the **CONSULTANT** is given a



In providing opinions of probable construction cost, the **CLIENT** understands that the **CONSULTANT** has no control over costs or the price of labor, equipment, or materials, or the Contractor's method of pricing, and that the opinions of probable construction costs provided herein are to be made based on the **CONSULTANT'S** qualifications, and experience. The **CONSULTANT** makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.

The **CONSULTANT** agrees, to the fullest extent permitted by law, to indemnify and hold the **CLIENT** harmless from any damage, liability or cost (including reasonable attorneys' fees and costs of defense) to the extent caused by the **CONSULTANT'S** negligent acts, errors or omissions in the performance of professional services under this Agreement and those of his or her subconsultants or anyone for whom the **CONSULTANT** is legally liable.

The **CLIENT** agrees, to the fullest extent permitted by law, to indemnify and hold the **CONSULTANT** harmless from any damage, liability or cost (including reasonable attorneys' fees and costs of defense) to the extent caused by the **CLIENT'S** negligent acts, errors or omissions and those of his or her contractors, subcontractors or consultants or anyone for whom the **CLIENT** is legally liable, and arising from the project that is the subject of this Agreement. **CLIENT'S** amount of indemnity or costs incurred in providing the indemnity shall be limited to the same amount as the **CONSULTANT'S** liability is listed below.

As negotiated as a part of this Agreement, to the fullest extent permitted by law, and not withstanding any other provision of this Agreement, the total liability, in the aggregate, of the CONSULTANT and the CONSULTANT'S officers, directors, partners, employees, agents and subconsultants, to the CLIENT and anyone claiming by, through or under the CLIENT, for any and all claims, losses, costs or damages of any nature whatsoever arising out of, resulting from or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability, breach of contract or warranty, express or implied, of the CONSULTANT or the CONSULTANT'S officers, directors, employees, agents or subconsultants, or any of them, shall not exceed the total amount of \$100,000.

Upon execution of the Letter Agreement or Letter Proposal, the **CLIENT** thereby agrees to the terms of these Special Provisions.

