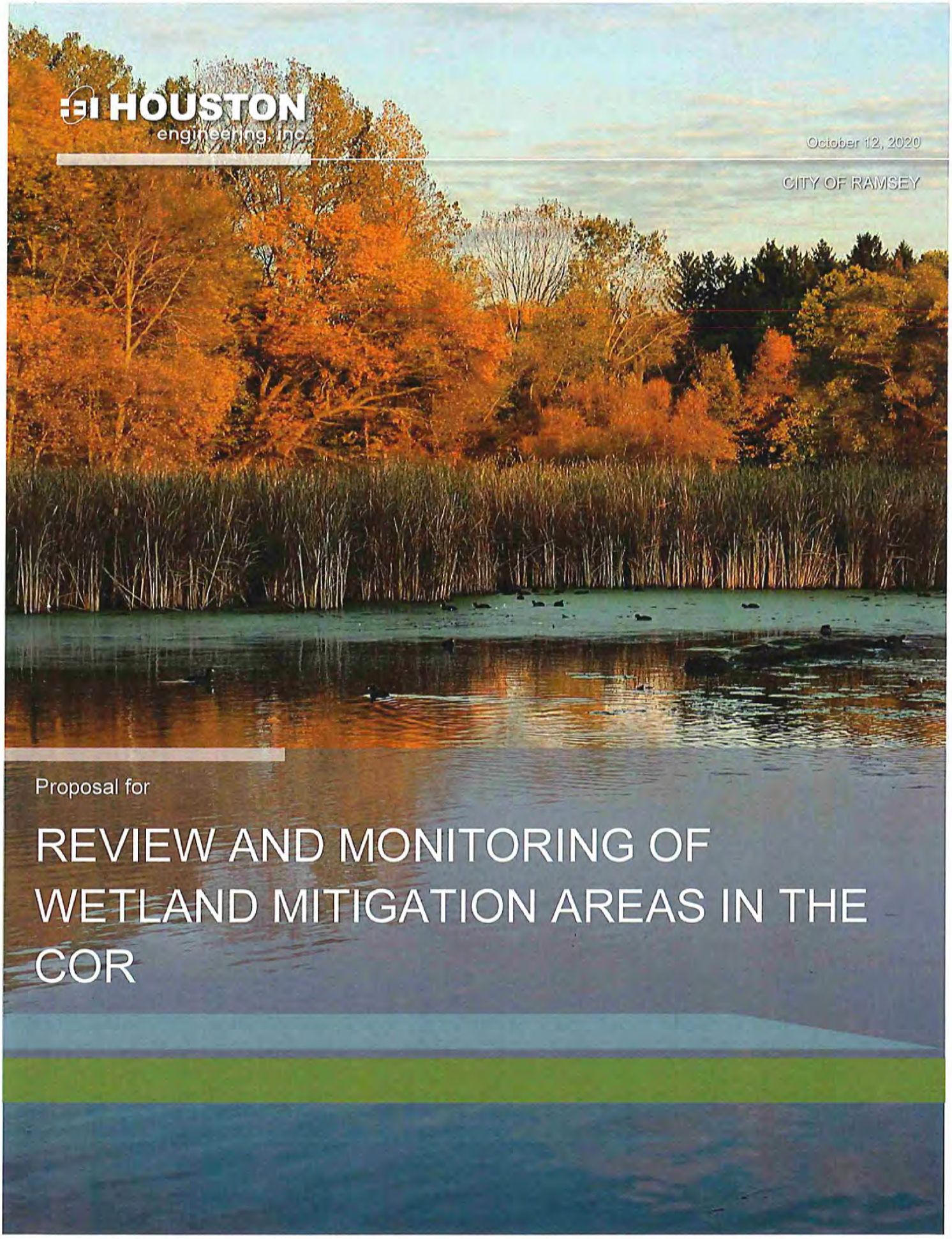

HOUSTON engineering, inc.

October 12, 2020

CITY OF RAMSEY

Proposal for

REVIEW AND MONITORING OF WETLAND MITIGATION AREAS IN THE COR

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Review and Monitoring of Wetland Mitigation Areas in the COR

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HOUSTON engineering, inc.

Maple Grove Office | 763.493.4522 | 763.493.5572

7550 Meridian Circle North, Suite 120 | Maple Grove, MN 55369

A. LETTER OF TRANSMITTAL

October 12, 2020

Leonard Linton, Civil Engineer IV
City of Ramsey
7550 Sunwood Drive NW
Ramsey, MN 55303

Subject: Experienced, Local Firm Prepared to Serve the City of Ramsey

Dear Leonard:

Thank you for providing Houston Engineering, Inc. (HEI) with the opportunity to serve the City of Ramsey properly on your important project to review and monitor wetland mitigation areas in the COR. Our project team is prepared to get to work right away and use the experience we have gained providing like-minded clients with similar project success.

I am excited to serve as your Project Manager on this project alongside Charlie Sawdey, who will serve as Wetland Scientist, and Thomas Moore, who will provide GIS support. Together, we have a combined total of 25 years of relevant experience, including learned expertise of working with regulatory agencies. Charlie and I both serve as Certified Minnesota Wetland Professionals and are eager to work together on this project, serving the City with two sets of eyes in a team-oriented approach.

When it comes to wetland-related work, our project team has you covered. Our team at HEI regularly serves the Rice Creek Watershed District (RCWD) with similar project concerns and assists the RCWD as the Local Government Unit (LGU) in their implementation of the state Wetland Conservation Act (WCA), giving us the experience needed to ensure success on your project. We encourage you to view examples of our related project work included in Section I of this proposal and contact the project references listed. I will call to follow up on our proposal on Thursday, October 15. However, if you have any additional questions on our submittal, please do not hesitate to contact me at the information provided below.

Sincerely,

HOUSTON ENGINEERING, INC.

Emmy Baskerville

Emmy Baskerville, CMWP
Project Manager; Primary Contact
Direct: 763.493.6669
ebaskerville@houstoneng.com

B. FIRM PROFILE AND HISTORY

Primary Contact

Emmy Baskerville, as Project Manager, will serve as your main point-of-contact from proposal evaluation through the life of the project. Emmy is known for her knowledge of wetland ecology and restoration. She is excited for the opportunity to serve the City of Ramsey and help you reach your goal of increased water quality treatments and flood control via wetland creation and restoration.

Email: ebaskerville@houstoneng.com, Phone: 763.493.6669

HOUSTON engineering, inc.

About Houston Engineering, Inc.

Houston Engineering, Inc. (HEI) is a community-focused engineering firm that serves Minnesota clients with a variety of technical services key to natural resource management. Conveniently located with nine offices across the Upper Midwest, we are committed to projects that can lead to visible improvements in the intersection of water quality and land stewardship. Our team includes engineers, scientists, and analysts, all seasoned in wetland restorations and wetland creation. **Our team will serve you out of our Maple Grove office, which is just down the road from the City of Ramsey.**

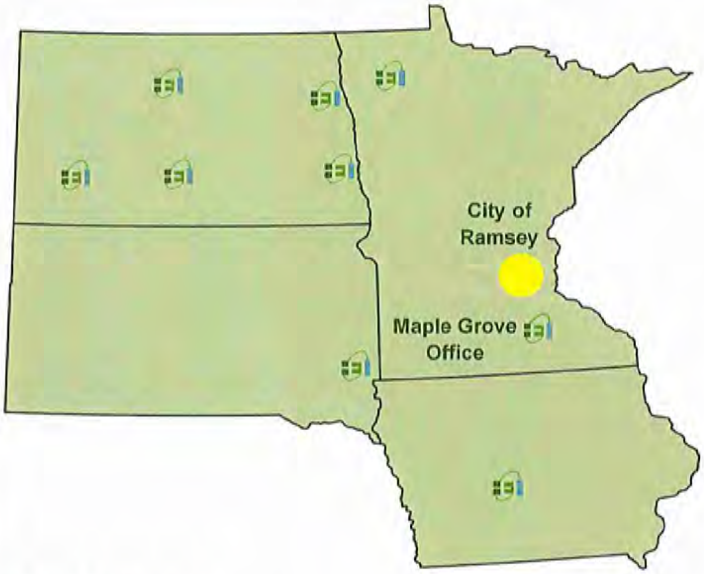
QUICK FACTS:

Website: houstoneng.com
Local Office: Maple Grove, MN
Number of Employees: 225+ professionals
Year Founded: 1968

HEI WILL HELP YOU ASSESS YOUR EXISTING MITIGATION AREAS

Ability to Complete Projects in a Timely and Effective Manner

To successfully complete our services within your timeframe, we have hand-picked talented staff members who will be committed to your project. Projects are kept on budget using strict accounting methods and detailed project management.



Client Contacts

We urge you to contact our references:

Nick Tomczik, Administrator
Rice Creek Watershed District
763.398.3079

Dianne Radermacher, Administrator
Upper Minnesota River Watershed District
320.839.3411

C. PROJECT UNDERSTANDING

We understand that the City of Ramsey needs a wetland consultant to guide the closeout process of the state Wetland Conservation Act (WCA) regulatory obligations associated with the Ramsey Town Center development, now known as the Center of Ramsey (COR).

HEI is ready to assist the City to assess the mitigation wetlands, determine any remaining mitigation obligations, and provide a cost estimate and plan to remedy any mitigation incompliance issues. At the end of our work, the COR development will be in compliance with the obligations of the WCA permit, which was issued in 2005.

With HEI's expertise and experience in wetland regulatory matters, our goal will be to get the City of Ramsey set up with the maximum amount of wetland credits available at the existing wetland mitigation sites, as well as confirm the previously approved and permitted wetland impacts to assess if there may be a reduction in the original permitted mitigation obligation. Once the mitigation obligations are established, HEI will work with the regulatory agencies to make sure the project is in compliance with all state and federally issued permits.

D. WORK PLAN, BUDGETED HOURS, AND PROJECT PERSONNEL

1. Scope of Services

TASK 1: REVIEW EXISTING PERMITS AND PERMITTING IMPACTS

HEI will carefully review all existing permits and associated previously permitted wetland impacts related to the COR Wetland Replacement Plan approved in 2005. **This critical first step is paramount in developing an understanding of the natural and regulatory history of the site to ensure subsequent tasks can be completed to best accomplish the project goal of WCA compliance and successful compliance monitoring.** HEI's team of wetland specialists scheduled to work on this project have a combined 25 years of experience handling wetland regulatory permitting, and we look forward to the opportunity of sharing this experience with the City of Ramsey.

TASK 2: SITE VISIT

Upon completion of Task 1, HEI will conduct two site visits to investigate current wetland conditions. This will include an updated wetland delineation, upland and wetland plant community mapping, assessment of performance standards (wetland species diversity index), and GPS boundary mapping of the updated wetland boundary. HEI's Certified Minnesota Wetland Professionals work in teams to minimize the amount of time in the field, utilizing the collective experience of two delineators to ensure determinations are made with the highest degree of accuracy, saving headaches in the long-term.

We recommend at least two site visits to assess vegetation. Because the final approval of the wetland mitigation is reliant on indices of number of native species, it will be imperative to visit the site once in the spring and once in the summer to make sure that we capture the full picture of plant species diversity within these mitigation sites.

TASK 3A: PREPARE FINAL MONITORING REPORT AND TASK 3B: CLOSEOUT COORDINATOR

HEI has broken these tasks up into parts A and B. After the updated wetland delineation investigation and performance standard assessment have been completed, HEI will begin part A of this task by consolidating all information and generating a technical memorandum that will define the status of the site's current condition in relation to the originally permitted wetland impacts. The memorandum will describe either a mitigation credit surplus or shortfall relative to what was originally required. This will set the stage for the City to take action to ensure the COR is compliant with conditions of the 2005 WCA permit. Part B of this task will include miscellaneous coordination with the agencies for closeout.

OPTIONAL TASK 4: FEASIBILITY ASSESSMENT AND COST ESTIMATE FOR ALTERNATIVE MITIGATION OPTIONS (IN CASE OF CREDIT SHORTAGE)

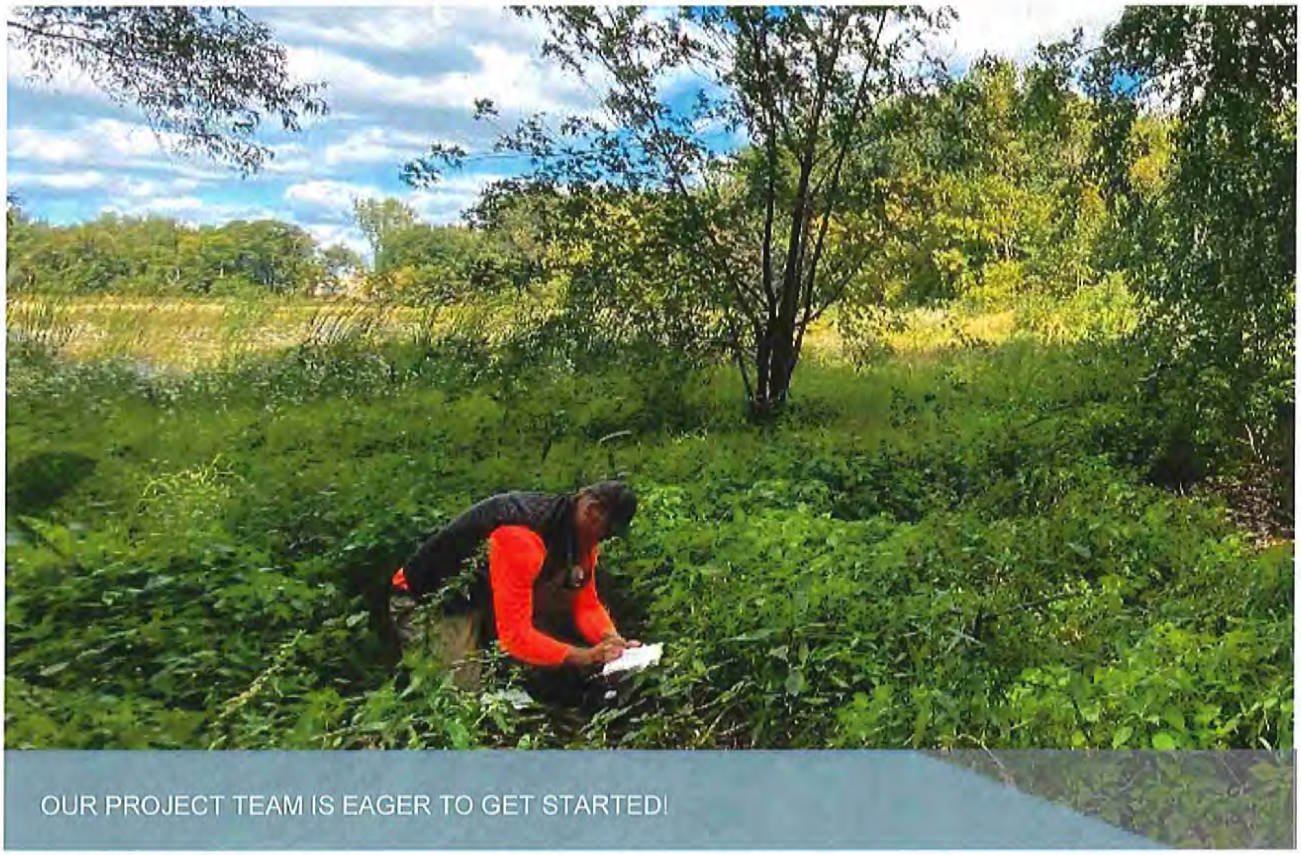
Task 3 will result in a determination of either a mitigation credit surplus or shortfall. In the event of a mitigation credit shortfall, HEI is providing an optional Task 4, which includes the preparation of an additional technical memorandum that: (1) outlines the feasibility of alternative mitigation options, and (2) assigns a cost

estimate for alternative mitigation options for the City to consider.

2. Budgeted Hours

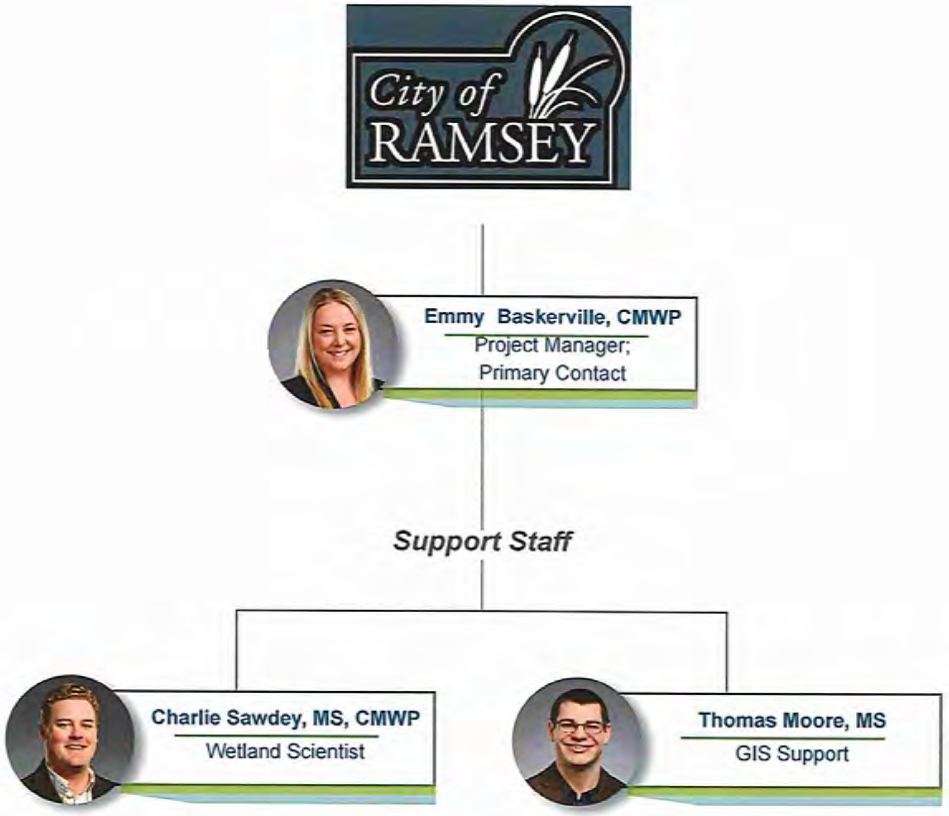
HEI has budgeted the following hours for our project team to complete this project.

Staff Member	Hours
Emmy Baskerville	40
Charlie Sawdey	89
Thomas Moore	12
Total	141



OUR PROJECT TEAM IS EAGER TO GET STARTED!

3. Organizational Chart



4. Staff Resumes

EMMY BASKERVILLE, CMWP
Project Manager; Primary Contact

Education
BS in Biology with an Emphasis in Plant Science and a Minor in Environmental Science, Minnesota State University Mankato

Registration
Certified Minnesota Wetland Professional—1181

University of Minnesota—Certificate in Ecological Restoration

Professional Experience
Houston Engineering, Inc.—2008-Present

Total Years of Experience—15 Years

Emmy is a skilled wetland scientist experienced with monitoring wetland regulations and navigating the permitting process in Minnesota.

Emmy Baskerville will serve as your Project Manager and Primary Contact for this project. Emmy has significant experience with Minnesota wetlands and water resource regulations. Her primary duties include environmental permitting and regulatory assessments, wetland delineations and restorations, preparing permit application materials, wetland restorations, mitigation wetland design and monitoring, and other natural resource-themed projects.

- **Brown's Preserve Wetland Restoration and Wetland Bank, Rice Creek Watershed District, Anoka County, MN.** As a Wetland Ecologist, was responsible for gathering all baseline data for the purposes of designing a wetland restoration plan and banking application. This included designing and implementing a hydrology study, installing hydrology monitoring equipment, performing a wetland delineation, completing plant community mapping, performing wetland functional assessments, and preparing the Wetland Restoration and Banking Application for local, state, and federal approval. Project involvement included participation in many agency coordination meetings to facilitate various regulatory approvals. The project is finished, with the final closeout on monitoring completed in the spring of 2019. The long-term management plan began in 2019 to ensure the restoration maintains its improved condition.
- **Wetland Mitigation Site Feasibility, Rice Creek Watershed District, Blaine, MN.** Project Manager in the identification and analysis of potential wetland restoration/mitigation sites. Fourteen potential sites were identified, measured, and screened to score and rank. Screening criteria included an analysis of restorability, long-term sustainability, and credit potential/cost, among other criteria. Through this project, three sites were identified to have the best potential, and this information will be used to move forward with projects in the future.
- **Wetland Conservation Act (WCA) Permit Reviews, Rice Creek Watershed District, Blaine, MN.** As Environmental Scientist, on behalf of the Rice Creek Watershed District, reviews wetland permit applications, no loss applications, plan submittals, and environmental review documents to ensure environmental compliance with the state WCA and District Rule F. HEI performs technical reviews of permit applications to ensure compliance with WCA and District rules for stormwater, erosion control, floodplain ordinances, and drainage systems. HEI communicates clearly with District staff and permit applicants on technical items and rule clarification to resolve any potential issues.
- **Wetland Monitoring, City of Maple Grove, MN.** As a Wetland Ecologist, conducted wetland monitoring activities as outlined in the Administrative Manual for the Wetland Conservation Act for several monitoring sites throughout the year. Provided a yearly monitoring report for each development characterizing the hydrology and plant communities of the sites. Also determined recommendations for modifications or corrective actions for each site based on the designed wetland types and existing conditions. Activities involved monitoring water levels during the growing season and the identification of plant species and communities
- **Wetland Delineations, Kittson County Highway Department, MN.** As a Wetland Ecologist, completed wetland delineations on approximately 20 miles of roadway within agricultural lands in the Red River Valley. ■

CHARLIE SAWDEY, MS, CMWP
Wetland Scientist

Education
MS in Water Resources, University of Minnesota

BA in Political Science with an Emphasis in Environmental Policy, Saint John's University

Registration
Certified Minnesota Wetland Professional—1362

Professional Experience
Houston Engineering, Inc.—2017-Present

Total Years of Experience—10 Years

Charlie Sawdey will serve as Wetland Scientist for this project. His skills include wetland delineation, permitting, regulatory consultation, capital improvement project management, and comprehensive watershed planning. This knowledge, combined with his previous experience with the Carver County Water Management Organization, allows Charlie to personally relate to client needs and deliver high quality products tailored specifically to local units of government. He has the experience to view projects from the prospective of local clients.

- **Wetland Delineation and Regulation, Various Clients, Statewide Minnesota.** As a Wetland Scientist, Charlie has conducted several wetland delineations across Minnesota. As a trained field hydrologist, his ability to work accurately and efficiently is a strong asset to our clients. Unique to Charlie's delineation ability is his extensive knowledge of urban stormwater and administration of local water rules/ordinances in addition to WCA.
- **Comprehensive Wetland Protection and Management Plan Reporting, Rice Creek Watershed District, Blaine, MN**. Charlie has worked for the Rice Creek Watershed District to compile annual Comprehensive Wetland Protection and Management Plan reports for submittal to the Minnesota Board of Water and Soil Resources. These plans have a strict permit tracking requirement to ensure a no-net-loss of wetlands from new development while enhancing wetland easement area to the Rice Creek Watershed District's Wetland Management Corridor.
- **Watershed Management Plan Update, Rice Creek Watershed District, Blaine, MN.** As a Scientist, Charlie helped the District update their watershed management plan by developing plan content and maps and providing in-person consultation to the District staff. The plan includes extensive wetland delineation components furnished by information gained in past environmental projects completed by HEI. Charlie helped keep all deadlines on track, guiding the plan to 60-day review. The updated plan was approved in 2020.
- **Stormwater Reuse Feasibility Targeting, City of Eagan and Washington County, MN.** As a Scientist, Charlie has performed stormwater reuse feasibility targeting efforts and assessments for the City of Eagan and Washington County. These analyses have allowed clients to prioritize and target technically feasible reuse practices and mitigate reliance on potable groundwater.

Experience Prior to HEI

- **Carver County Water Management Organization, Chaska, MN.** Charlie previously served the Carver County Water Management Organization (WMO) in the roles of Water Resources Program Specialist, Water Analyst, and Water Resources Technician. He had several responsibilities during his time with the WMO, including organizational administration, wetland permitting, delineation, and monitoring. ■

Charlie's experience working for a local unit of government, coupled with his wetland and regulatory skill set, will ensure this project is a success for the City of Ramsey.

THOMAS MOORE, MS
GIS Support

Education

MS in Environmental Science, Oklahoma State University

BS in Environmental Science, Baylor University

Professional Experience

Houston Engineering, Inc.—2019-Present

Total Years of Experience—5 Years

Thomas is talented in the multi-faceted areas of GIS and is prepared to serve the City of Ramsey on this project.

Thomas Moore will provide GIS support for this project. Thomas brings a perfect blend of GIS expertise and environmental insights to his role. He understands the subject matters being analyzed, and he knows how to present information in a way that technical and laypeople alike can understand.

- **Targeting Conservation Practices in the East Branch Chippewa River Watershed, Pope County Soil and Water Conservation District, MN.** GIS Analyst. Thomas completed hydro-conditioning of the Chippewa River Watershed to better model water flow across the watershed. He then used the conditioned data to run the Prioritize, Target, and Measure Application (PTMApp) to identify possible locations for conservation practices. The team used this information to target the best locations for conservation practices.
- **Buffalo-Red River One Watershed, One Plan, Buffalo-Red River Watershed District, MN.** GIS Analyst. Thomas performed prioritization of HUC 12s and catchments within the Buffalo-Red River Watershed based on water quality, erosion potential, altered hydrology, and habitat concerns. The team used this information to determine the best locations to implement best management practices (BMPs) within the watershed. Thomas also created maps for the prioritized subwatersheds, feasible BMPs, targeted BMPs, and land use within the watershed.
- **Bois-de-Sioux-Mustinka One Watershed, One Plan, Bois de Sioux Watershed District, MN.** GIS Analyst. Thomas performed prioritization of HUC 12s and catchments within the Bois-de-Sioux-Mustinka watershed based on water quality, erosion potential, and habitat concerns. The team used this information to determine the best locations to implement best management practices (BMPs) within the watershed. Thomas also created maps for resource concerns and targeted BMP locations within the watershed.
- **Dubuque County ACPF/PTMApp, City of Dubuque, Dubuque County, IA.** GIS Analyst. Thomas completed hydro-conditioning of the Dubuque Watershed to better model water flow across the watershed. The team used the conditioned data to target the best locations for conservation practices. HEI is identifying technically feasible conservation practices, assessing the nutrient and sediment load reduction of each practice, and estimating practice costs to identify the most cost-efficient practices to meet the local water quality goals. The project integrates the Agricultural Conservation Planning Framework (ACPF) and the Prioritize, Target, and Measure Application (PTMApp)—together called IAPA—to develop information to facilitate outreach to achieve water quality goals in a cost- and time-efficient manner.
- **Burleigh County RiskMAP, North Dakota State Water Commission, Burleigh County, ND.** GIS Analyst. Thomas mapped areas of inundation for 100- and 500-year flood events for six stream and river reaches within the county. These mapped areas will be used to create Digital Flood Insurance Rate Map panels for Burleigh County, which will be distributed to communities across the county for flood planning. ■

E. SCHEDULE

Tasks	Dates (2021)
Task 1: Review Existing Permits and Permitting Impacts	Early 2021
Task 2: Site Visits (Wetland Delineation, Plant Community Mapping, Vegetative Sampling [two site visits], Assessment of Performance Standards)	May 15 – June 30
Task 3A: Prepare Final Mitigation Monitoring Report and Closeout Recommendations and Team Meeting with City	June 30 – July 30
Task 3B: Miscellaneous Coordination with Agencies for Closeout	July 30 – September 15
Optional Task 4: Prepare Feasibility Assessment and Cost Estimate for Alternative Mitigation Options (in case of credit shortage) and Present to City	September 30

F. STATEMENT OF FEES

1. Cost Breakdown

Task Description	Total Dollars
Task 1: Review Existing Permits and Permitting Impacts	**$1,000**
Task 2: Site Visits	**$6,250**
Task 3A and 3B: Prepare Final Mitigation Monitoring Report and Recommendations for Closeout, Team Meeting with City, Coordination with Agencies to Finalize Closeout	**$10,250**
Project Total	**$17,500**

Task Description	Total Dollars
Optional Task 4: Prepare Feasibility Assessment and Cost Estimate for Alternative Mitigation Options (in case of credit shortage) and Present to City	**$5,000**
Project Total with Optional Task 4	**$22,500**

OUR PROJECT TEAM WILL WORK CAREFULLY TO KEEP YOUR PROJECT ON BUDGET

HOUSTON engineering, inc.

2021 FEE SCHEDULE

The following is a schedule of hourly rates and charges for engineering and surveying services offered by Houston Engineering, Inc. These rates are subject to a modest increase on January 1st of each year (typically no more than 5%).

Category	2021 Rates
Engineer I	$129
Engineer II	142
Engineer III	161
Project Engineer	179
Project Manager	196
Sr Project Manager	215
Scientist I	$129
Scientist II	142
Scientist III	162
Project Mgr – Environmental	190
Sr Project Mgr – Environmental	215
Hydrogeologist I	$129
Hydrogeologist II	143
Hydrogeologist III	162
Sr Hydrogeologist	202
Construction Engineer	$148
Sr Construction Engineer	175
Land Surveyor I	$129
Land Surveyor II	148
Land Surveyor III	163
Project Mgr – Land Surveying	175
Sr Project Manager – Land Surveying	196
Survey Crews:	
1-Person Crew (+ equipment)	$157
2-Person Crew (+ equipment)	191
3-Person Crew (+ equipment)	237
4-Person Crew (+ equipment)	265
Landscape Architect	$137
CAD Technician I	$88
CAD Technician II	101
CAD Supervisor	116
Designer I	$135
Designer II	145
Sr Designer	156
Engineering Specialist	165
Technician Intern (all areas)	$88
Technician I	$101
Technician II	116
Sr Technician	129

Category	2021 Rates
Right-of-Way Technician	$118
Right-of-Way Specialist	196
GIS Analyst I	$96
GIS Analyst II	112
GIS Analyst III	129
Sr GIS Analyst	148
Project Manager – GIS	163
Sr Project Manager – GIS	190
Software Engineer I	$112
Software Engineer II	129
Software Engineer III	148
Sr Software Engineer	162
Computer Technician	$156
Communications Specialist	$88
Sr Communications Specialist	98
Administrative Assistant	$83
Sr Administrative Assistant	88
Planner	$142
Senior Planner	196
Legislative/Grant Specialist	$182
Expert Witness	236
Drone Pilot	$137
Drone Visual Observer	54

Chargeable Expenses	Rate
Subsistence	Actual Cost
Mileage-Vehicles:	
2-Wheel Drive	IRS Standard Rate
4-Wheel Drive	IRS Standard Rate + $0.20/Mile
GPS Equipment	$25/hour/unit
Robotic Total Station	$40/hour
ATV/Snowmobile/Boat	$15/hour
ATV with Tracks	$30/hour
Hydrone RCV	$50/hour
Small UAS/Large UAS	$25/hour / $50/hour
Delivery, Postage, Printing	Actual Cost
Surveying Materials, Special Equipment, and other Materials required	Actual Cost
Subconsultants	Actual Cost + 10%

Standard

HOUSTON engineering, inc.

General Terms and Conditions

1. **STANDARD OF CARE**
Houston shall perform its Services in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances in the region where the Project is located.

2. **PAYMENT TERMS**
Invoices will be submitted periodically (customarily on a monthly basis) and are due and payable upon receipt. Client agrees to pay a service charge on all accounts 30 days or most past due at a rate equal to one percent (1%) each month but in no event shall such service charge exceed the maximum amount allowed by law. Acceptance of any payment from Client without accrued service charges shall not be deemed to be a waiver of such service charges by Houston. In the event Client is past due with respect to any invoice Houston may, after giving five (5) days written notice to Client, suspend all services without liability until Client has paid in full all amounts owing Houston on account of services rendered and expenses incurred, including service charges on past due invoices. Payment of invoices is not subject to discount or offset by Client.

3. **CHANGES OR DELAYS**
If the Project requires conceptual or process development services, such services often are not fully definable in the initial planning. If, as the Project progresses, facts develop that in Houston's judgment dictate a change in the Services to be performed, Houston shall inform Client of such changes and the parties shall negotiate, in good faith, with respect to any change in scope and adjustment to the time of performance and compensation and modify the Agreement accordingly. In the event the parties are unable to reach an agreement, either party may terminate this Agreement without liability by giving fourteen (14) days written notice to the other party. In the event of termination, the final invoice will include all Services and expenses associated with the Project up to the effective date of termination, and will also include equitable adjustment to reimburse Houston for any termination settlement costs incurred relating to commitments that had become firm before termination plus a 10 percent markup on those settlement costs.

4. **PAYMENT**
Where the method of payment under the Agreement is based upon cost reimbursement (e.g., hourly rate, time and materials, direct personnel expense, per diem, etc.), the following shall apply: (a) the minimum time segment for charging work is one-quarter hour; (b) labor (hours worked) and expenses will be charged at rates commensurate with the attached fee schedule or, if none is attached, with Houston's current fee schedule (at the time of the work); (c) when applicable, rental charges will be applied to cover the cost of pilot-scale facilities or equipment, apparatus, instrumentation, or other technical machinery. When such charges are applicable, Client will be advised at the start of an assignment, task, or phase; and (d) invoices based upon cost reimbursement will be submitted showing labor (hours worked) and total expense. If requested by Client, Houston shall provide supporting documentation at Client's cost, including labor and copying costs.

5. **TERMINATION**
Either party may terminate this Agreement, in whole or in part, by giving fourteen (14) days written notice to the other party, if the other party fails to fulfill its obligations under this Agreement through no fault of the terminating party. In such event, and subject to the limitations set forth in this Agreement, the non-defaulting party may pursue its rights and remedies as contemplated by this Agreement and as allowed by law.

6. **LIMITATION OF LIABILITY**
In no event shall Houston be liable for incidental, indirect or consequential damages of any kind. Houston's maximum cumulative liability with respect to all claims and liabilities under this Agreement, whether or not insured, shall not exceed the greater of $50,000 or the total compensation received by Houston under this Agreement. The disclaimers and limitations of liability set forth in this Agreement shall apply regardless of any other contrary provision set forth and regardless of the form of action, whether in contract, tort or otherwise. Each provision of this Agreement which provides for a limitation of liability, disclaimer of warranty or condition or exclusion of damages is severable and independent of any other provision and is to be enforced as such. Client hereby releases Houston from any and all liability over and above the limitations set forth in this paragraph.

7. **INSURANCE**
Houston shall obtain and maintain during the term of this Agreement, at its own expense, workers' compensation insurance and comprehensive general liability insurance in amounts determined by Houston and will, upon request, furnish insurance certificates to Client. The existence of any such insurance shall not increase Houston's liability as limited by paragraph 6 above.

8. **HAZARDOUS SUBSTANCES**
Client shall furnish or cause to be furnished to Houston all documents and information known by Client that relate to the identity, location, quantity, nature, or characteristics of any asbestos, pollutant or hazardous substance, however defined ("Hazardous Substances") at, on or under the Project site. Houston is not, and has no responsibility as a handler, generator, operator, treater, storer, transporter, or disposer of Hazardous Substances found or identified at the Project. Client agrees to bring no claim for fault, negligence, breach of contract, indemnity, or other action against Houston, its principals, employees, agents, and consultants, if such claim in any way would relate to Hazardous Substances in connection with the Project. Client further agrees, to the fullest extent permitted by law, to defend, indemnify, and hold harmless Houston, its principals, employees, agents, and consultants from and against all claims, damages, losses, and expenses, direct or indirect, or consequential damages, including but not limited to fees and charges for attorneys and court and arbitration costs, arising out of or resulting from the performance of Houston's Services hereunder, or claims brought against Houston by third parties arising from Houston's Services or the services of others and/or work in any way associated with Hazardous Substance activities. This indemnification shall survive termination of this Agreement.

9. **INDEMIFICATION**
Client shall indemnify, and hold harmless Houston, together with its officers, directors, agents, consultants and employees from and against any and all claims, costs, losses and damages, including attorneys' fees and other costs of litigation or dispute resolution arising directly or indirectly from Client's breach of this Agreement or Client's fault, negligent acts or omissions or intentional misconduct in connection with this Agreement or the Project. Subject to the limitations set forth in this Agreement, Houston shall indemnify and hold harmless Client, together with its officers, directors, agents, consultants and employees from and against any and all claims, costs, losses and damages, including attorneys' fees and other costs of litigation or dispute resolution arising directly or indirectly from Houston's breach of this Agreement or Houston's fault, negligent acts or omissions or intentional misconduct in connection with this Agreement or the Project. The indemnification obligations set forth in this paragraph shall survive termination of this Agreement.

10. **WARRANTY**
Except as specifically set forth in this Agreement, Houston has not made and does not make any warranties or representations whatsoever, express or implied, as to Services performed or products provided including, without limitation, any warranty or representation as to: (a) the merchantability or fitness or suitability of the Services or products for a particular use or purpose whether or not disclosed to Houston; and (b) delivery of the Services and products free of the rightful claim of any person by way of infringement (including, but not limited to, patent or copyright infringement) or the like. Houston does not warrant and will not be liable for any design, material or construction criteria furnished or specified by Client and incorporated into the Services provided hereunder.

January 24, 2017

11. **PROJECT SITE**
Client shall furnish such reports, data, studies, plans, specifications, documents, and other information regarding surface and subsurface site conditions required by Houston for proper performance of its Services. Houston shall be entitled to rely upon Client provided documents and information in performing the Services required under this Agreement. Houston assumes no responsibility or liability for the accuracy or completeness of any such documents or information. Houston will not direct, supervise, or control the work, means or methods of contractors or their subcontractors in connection with the Project. Houston's Services will not include a review or evaluation of the contractor's or subcontractor's safety measures. The presence of Houston, its employees, agents or subcontractors on a site shall not imply that Houston controls the operations of others nor shall it be construed to be an acceptance by Houston of any responsibility for job-site safety.

12. **CONFIDENTIALITY**
Houston shall maintain as confidential and not disclose to others without Client's prior consent all information obtained from Client that was not otherwise previously known to Houston or in the public domain and is expressly designated by Client in writing to be "CONFIDENTIAL." The provisions of this paragraph shall not apply to information in whatever form that (a) is published or comes into the public domain through no fault of Houston, (b) is furnished by or obtained from a third party who is under no obligation to keep the information confidential, or (c) is required to be disclosed by law on order of a court, administrative agency, or other authority with proper jurisdiction. Client agrees that Houston may use and publish Client's name and a general description of Houston's services with respect to the Project in describing Houston's experience and qualifications to other clients or potential clients.

13. **RE-USE OF DOCUMENTS**
All documents, including drawings and specifications, prepared or furnished by Houston (and Houston's affiliates, agents, subsidiaries, independent professional associates, consultants, and subcontractors) pursuant to this Agreement are instruments of service in respect of the Project, and Houston shall retain ownership thereof, whether or not the Project is completed. Client may make and retain copies for information and reference in connection with the Project; however, such documents are not intended or represented to be suitable for re-use by Client or others on extensions of the Project or on any other project. Any re-use without written verification or adaptation by Houston for the specific purpose intended will be at Client's sole risk and without liability to Houston or Houston's affiliates, agents, subsidiaries, independent professional associates, consultants, and subcontractors with respect to any and all costs, expenses, fees, losses, claims, demands, liabilities, suits, actions, and damages whatsoever arising out of or resulting therefrom. Any such verification or adaptation will entitle Houston to further compensation at rates to be agreed upon by Client and Houston.

14. **REMEDIES**
Subject to the limitations set forth in this Agreement, in the event any party is in default of this Agreement, the non-defaulting party shall be entitled to pursue all rights and remedies available to it under this Agreement or as allowed by law.

15. **PROPRIETARY DATA**
The technical and pricing information in connection with the Services provided by Houston is confidential and proprietary and is not to be disclosed or otherwise made available to third parties by Client without the express written consent of Houston.

16. **GOVERNING LAW**
The validity, construction and performance of this Agreement and all disputes between the parties arising out of or related to this Agreement shall be governed by the laws, without regard to the law as to choice or conflict of law, of the State of North Dakota. Client consents to jurisdiction as to all issues concerning or relating to this Agreement or the Project with the federal or state district courts designated for Cass County, North Dakota.

17. **DATA PRACTICES ACT REQUESTS**
Houston considers certain information developed during the execution of services as "not public" and "protected" from public disclosure under the various local, state and federal data practices laws. Client shall reimburse Houston for any and all costs and expenses, including attorneys' fees associated with any requests for release of information under any such laws.

18. **FORCE MAJURE**
Houston shall not be liable for any loss, damage or delay resulting out of its failure to perform hereunder due to causes beyond its reasonable control including, without limitation, acts of nature or the Client, acts of civil or military authority, terrorists threats or attacks, fires, strikes, floods, epidemics, quarantine restrictions, war, riots, delays in transportation, transportation embargos, extraordinary weather conditions or other natural catastrophe or any other cause beyond the reasonable control of Houston. In the event of any such delay, Houston's performance date(s) will be extended for that length of time as may be reasonably necessary to compensate for the delay.

19. **WAIVER OF JURY**
In the interest of expediting any disputes that might arise between Houston and Client, Client hereby waives its rights to a trial by jury of any dispute or claim concerning this Agreement, the Services, the Project and any other documents or agreements contemplated by or executed in connection with this Agreement.

20. **NOTICES**
Any and all notices, demands or other communications required or desired to be given under this Agreement shall be in writing and shall be validly given or made if personally served; sent by commercial carrier service; or if deposited in the United States Mail, certified or registered, postage prepared, return receipt requested. If such notice or demand is served personally, notice shall be deemed constructively made at the time of such personal service. If such notice, demand or other communication is given by mail or commercial carrier service, such notice shall be conclusively deemed given three (3) days after deposit thereof in the United States Mail or with a commercial carrier service. Notices, demand or other communications required or desired hereunder shall be addressed to the individuals indicated in this Agreement at the addresses indicated in this Agreement. Any party may change its address or authorized recipient for purposes of this paragraph by written notice given in the manner provided above.

21. **MISCELLANEOUS**
This Agreement shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice-to-proceed, or like document regarding the Services. If any provision of this Agreement is determined to be invalid or unenforceable in whole or part by a court of competent jurisdiction, the remaining provisions hereof shall remain in full force and effect and be binding upon the parties hereto. The parties agree to reform this Agreement to replace any such invalid or unenforceable provision with a valid and enforceable provision that as closely as possible expresses the intention of the stricken provision. This Agreement, including but not limited to the indemnification provisions, shall survive the completion of the Services under this Agreement and the termination of this Agreement. This Agreement gives no rights or benefits to anyone other than Houston and Client and has no third party beneficiaries except as may be specifically set forth in this Agreement. This Agreement constitutes the entire agreement between the parties and shall not in any way be modified, varied or amended unless in writing signed by the parties. Prior negotiations, writings, quotes, and understandings relating to the subject matter of this Agreement are merged herein and are superseded and canceled by this Agreement. Headings used in this Agreement are for the convenience of reference only and shall not affect the construction of this Agreement. This Agreement and the rights and duties hereunder may not be assigned by Client, in whole or in part, without Houston's prior written approval. No failure or delay on the part of Houston in exercising the right, power or remedy under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any rights, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. The remedies provided in this Agreement are cumulative and not exclusive of any remedies provided by law.

H. ADDITIONAL INFORMATION

HEI would be pleased to provide any additional information at the request of the City of Ramsey.

BROWN'S PRESERVE WETLAND RESTORATION
ANOKA COUNTY, MINNESOTA

Background

Public drainage systems often impact wetlands, even when well-managed, and these impacts require mitigation under both state and federal law.

The Rice Creek Watershed District (RCWD) manages several public drainage systems within the lands it serves. As a result, the RCWD developed an interest in an ambitious and pro-active approach to creating wetland credits for the future, streamlining the management of the public drainage systems while bringing additional ecological benefits at the same time.

The Project

Investigation

The RCWD began this process by engaging Houston Engineering, Inc. (HEI), who serves as District Engineer. The RCWD and HEI agreed that the proposed 110-acre wetland restoration project would not only provide wetland credits but also restore and improve the native ecosystem.

HEI and our team launched an extensive study of the project area, studying current hydrologic conditions, investigating past conditions, and analyzing plant communities for diversity. All the while, the team sought to understand how the site interacted with the surrounding landscape. The team used drone flights to capture images to determine where restoration activities were needed most.

Restoring and Controlling Hydrology

The project prioritized the creation and banking of wetland credits. With this in mind, HEI designed the necessary structures, including a weir, to restore and control the site's hydrology. Construction of these features was completed in the fall of 2012 for which HEI performed construction management.

These features have significantly contributed to the successful and continued restoration of 110 acres of wetlands.

A Self-Sufficient Ecosystem

The RCWD wanted to create a native, self-sufficient ecosystem that would contribute to a high-quality wetland.

» Location
Anoka County, Minnesota

» Client
Rice Creek Watershed District

» Contact
Nick Tomczik
Administrator
763.398.3079

Dennis Rodacker
Senior Wetland Specialist (BWSR)
651.296.6736

» Client Benefits

- Thorough baseline data regarding site hydrology and wetland plant communities and vegetation.
- HEI coordinated with local, state, and federal agencies to facilitate the permitting and approval process.
- Banked wetland credits that instantly add value to land and enhance the RCWD's investment.
- Receiving ongoing monitoring data as the site responds to restoration and management activities.

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This meant developing a vegetation restoration and monitoring plan. HEI and our partners evaluated, classified, and mapped the existing plant communities and used this information to design and implement a rigorous vegetation monitoring program. This included long-term vegetation monitoring plots and transects, which allowed for the collection of baseline vegetation information and helped measure the success of the restoration plan over time.

Our ecologists return to each relevé plot annually to assess and describe the current condition of the vegetation and to track project success. In 2013, a total of 112 vascular plant species were detected within the 19 relevé plots. Of these species, 97 (86.6%) were native and 15 (13.4%) were non-native to the state of Minnesota.

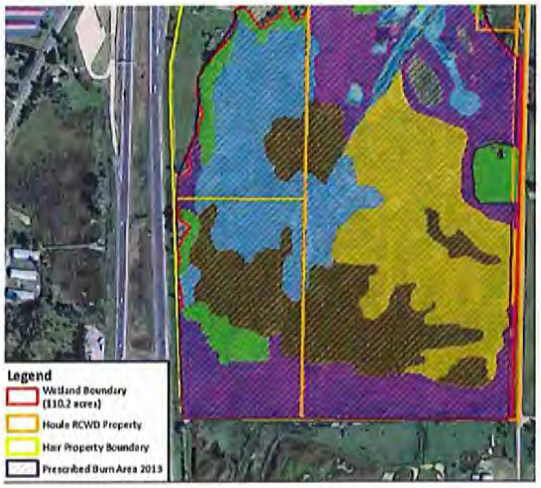
Ongoing Success

The wetland restoration and banking process can be detailed and lengthy, requiring coordination with state and federal agencies for design and implementation approval. Because of HEI's and our partner's—Critical Connections Ecological Services, Inc. (CCES)—diligent work, the restoration plan and banking application were accepted by state and federal agencies. Our team of ecologists prescribed plant communities to restore the community to a native, self-sufficient ecosystem that will result in the creation of high-quality wetland and wetland credit. Long-term management activities are ongoing and will likely continue for several more years.

The final outcome of the project is a restored, highly functioning wetland ecosystem and a large amount of valuable wetland credits deposited into the Minnesota State Wetland Bank. The initial wetland credit deposit occurred in the spring of 2013. This project represents the best in collaborative efforts and illustrates real potential for wetland enhancement through ecological restoration. ■

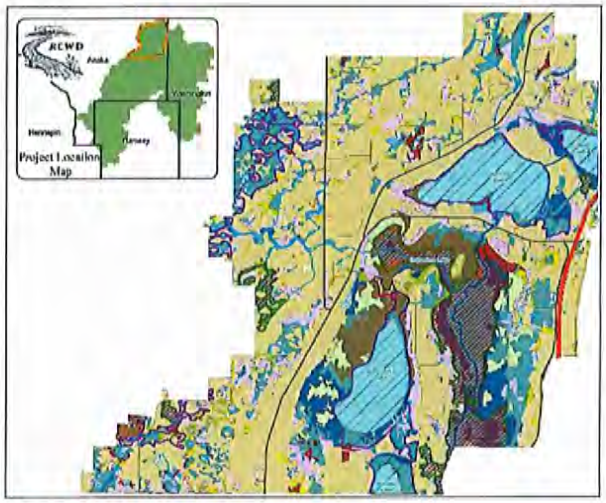
The northern control structure shown above performs as intended after a recent rainfall.

Monitoring will continue to secure credits beyond the typic five-year period.



2013 management areas.

COLUMBUS COMPREHENSIVE WETLAND PROTECTION AND MANAGEMENT PLAN
COLUMBUS, MINNESOTA



Background

The Rice Creek Watershed District (RCWD) is working to solve and prevent surface-water-related problems within its boundaries. The City of Columbus, which is located on the northern fringe of the Minneapolis/St. Paul metropolitan area, is in a rather difficult situation. Due its proximity to a growing metropolitan area, and easy access to and from a major freeway in close proximity, the area is slated for more intensified urban development in the next 20 years. The planning area also contains a relatively large amount of wetland and contains three public drainage systems.

The RCWD is responsible for the maintenance of these public drainage systems, and as the acting Local Government Unit for the Minnesota Wetland Conservation Act, is also responsible for the enforcement of state wetland law within their boundaries. This necessitated the development of a planning document to manage the public drainage systems and natural resources within the City of Columbus while recognizing the future development plans within the Columbus Comprehensive Wetland Protection and Management Plan (CWPMP) Boundary.

The Project

Development of the Columbus CWPMP began in late 2008 and included coordination with the Minnesota Board of Water and Soil Resources, Minnesota DNR, US Army Corps of Engineers, City of Columbus, and other local agencies. Over a year and a half, the CWPMP was developed with the main goal of balancing the development needs of the City of Columbus and the goals of the RCWD to achieve the goal of the Minnesota Wetland Conservation Act—no-net-loss of wetland acreage and ecological function.

The plan directs wetland management to preserve and restore existing contiguous areas containing high-quality natural resources and restore degraded wetland (while mitigating wetland impacts from development) along contiguous corridors, ultimately improving connectivity of ecological systems. The plan incorporates flood damage reduction and floodplain management efforts by establishing a management corridor adjacent to riparian areas with the intent of improving water quality by managing areas immediately adjacent to public drainage systems, Rice Creek, and select private drainage systems.

The development process included a complete wetland inventory and wetland functional analysis as well as the development of a landscape-scale natural resource corridor, which encourages wetland mitigation efforts in priority areas. The goal is increased ecological connectivity and reduced habitat fragmentation.

The final outcome of this plan was the development of the regional rule (referred to as Rule RMP-4), which implements the intended outcomes of the CWPMP. For example, the regional rule implements the process for establishing and adjusting the natural resource corridor boundary, the wetland impact and replacement ratios, and the requirements for sequencing and demonstration and achievement of no-net loss of wetland. ■

» Location
Columbus, Minnesota

» Client
Rice Creek Watershed District

» Contact
Nick Tomczik
Administrator
763.398.3079

» Client Benefits

- Completion of the CWPMP, meeting the goals of the City, the RCWD, and state and federal law.
- Completion of a regional rule, implementing the CWPMP, and technical aspects of the public drainage system repair reports
- Establishment of a preliminary natural resource corridor to direct where wetland impact and replacement will take place at the site level at the time of permitting
- Improved wetland management for the planning area, including a permitting process for land subject to the greatest likely development pressure (commercial and industrial development corridors).

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BROWNS VALLEY FLOOD MITIGATION PROJECT
BROWNS VALLEY, MINNESOTA

Background

The March 2007 spring flood caused substantial damages to the City of Browns Valley, Minnesota, placing severe social and economic hardship on the residents and the community.

The Project

The Upper Minnesota River Watershed District (UMRWD) retained Houston Engineering, Inc. (HEI) to provide technical assistance for the planning, design, and completion of the Browns Valley Flood Mitigation Project in August of 2007. Construction for a diversion dam and floodway bypass channel began in 2009 and was completed in 2012.

The constructed flood mitigation project resulted in 5.9 acres of wetland impact which required mitigation under the Federal Clean Water Act and the Minnesota State Wetland Conservation Act. The UMRWD authorized HEI to initiate plans for the restoration of a large 55-acre drained and cultivated basin. The wetland basin had been drained by surface ditches and subsurface tiles with a pumping station outlet to promote conditions conducive to agricultural production.

HEI performed field visits, surveys, and hydrologic analyses to determine the most effective methods for hydrologic and vegetative restoration. Termination of the pumping and construction of a clay ditch plug, culvert outlet, and overflow spillway began in 2011 and was completed in 2012.

Field vegetation surveys indicated that the drained wetland was generally free of any naturally occurring wetland vegetation. HEI prescribed a detailed mix of wetland plants and seed mixes that matched what would occur in a natural Type 3, 4, 5 wetland basin. Site preparation, planting, and seeding methods were developed. The upland areas adjacent to the basin were also prescribed a native upland prairie seed mix. Scheduled management activities, performance standards, and monitoring activities were prescribed to ensure the ongoing success of this restoration project. ■

» Location
Browns Valley, Minnesota

» Client
Upper Minnesota River Watershed District

» Contact
Dianne Radermacher
Administrator
320.839.3411

» Client Benefits

- Hydrologic restoration returned the basin to its pre-drained conditions.
- One year after restoration, the wetland and upland complex was well on its way to becoming a high quality, functioning Type 3, 4, 5 wetland basin.
- The restoration project restored approximately 58 acres of wetland basin as well as 25 acres of upland buffer.
- UMRWD secured permanent easements for the total project area of approximately 83 acres.
- As a result of this effort, 42 acres of wetland credits were banked.

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WATERSHED DISTRICT PERMIT REVIEW
MULTIPLE LOCATIONS WITHIN THE RICE CREEK WATERSHED DISTRICT

Background

The Rice Creek Watershed District operates a permit program related to floodplain management, controlling the rate and volume of runoff associated with development and redevelopment, wetland impacts, and water quality.

The Project

HEI has administered this program in its role as District Engineer, working cooperatively with District staff. Our approach has been to provide a measured level of guidance and technical support to permit applicants to minimize the frustration sometimes associated with permit processes. Activities completed include developing the technical aspects of rules, reviewing permit applications for technical completeness, working with legal counsel to ensure compliance with the rules, preparing engineer reports to document conclusions, and assisting District staff with permit compliance following project construction.

Internal fiscal procedures implemented by HEI greatly assisted the District with managing permit-related costs.

Communication is also an important key to success with permit review. Our measured level of guidance and technical support minimizes applicant frustration. We also clearly document the permitting processes and procedures for use by others in the future. ■

» Location
Multiple Cities within the District

» Client
Rice Creek Watershed District

» Contact
Nick Tomczik
Administrator
763.398.3079

» Client Benefits

- The District receives expertise in hydrology, hydraulics, water quality, and watershed management in the permit review process.

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houstoneng.com