AMENDMENT

to the Contract for Purchase of Services

between the City of Madison and Short Elliott Hendrickson, Inc.

Unit Well 12 Reconstruction

The City of Madison and Contractor listed above agree to amend the Contract for Purchase of Services executed by the City on 5/13/2025 ("Original Contract"), as follows:

1. Section 3, the Scope of Services, is amended to add the following:

   "Attachment B – Unit Well 12 Contract Amendment"

   Attachment B is included with this Amendment.

2. Section 23 is being amended as follows:

   "23. COMPENSATION. It is expressly understood and agreed that in no event will the total compensation under this contract exceed ~~$75,000~~ $400,000 unless the Contract is amended as provided for in Section 9, AMENDMENT."

3. All other provisions of the Original Contract shall remain unchanged and in full force and effect.

4. Authority to Sign. The person signing on behalf of the Contractor represents and warrants that they have been duly authorized to bind the Contractor and sign this amendment on the Contractor's behalf.

IN WITNESS WHEREOF, the parties hereto have set their hands at Madison, Wisconsin.

CONTRACTOR:

_____
(Type or Print Name of Contracting Entity)

By: _____
(Signature)

_____
(Print Name and Title of Person Signing)

Date: _____

CITY OF MADISON, WISCONSIN
a municipal corporation:

By: _____
Satya Rhodes-Conway, Mayor

Date: _____

Approved:

_____
David P. Schmiedicke, Finance Director

Date: _____

By: _____
Michael Haas, Acting City Clerk

Date: _____

Approved as to Form:

_____
Eric T. Veum, Risk Manager

Date: _____

_____
City Attorney

Date: _____

ATTACHMENT B

Building a Better World for All of Us®

May 13, 2025

RE: Madison Water Utility - UW 12 Wellhouse Reconstruction and Reservoir Final Design
SEH No. MADWU UW 12 182222

Pete Holmgren, PE, Chief Engineer
Madison Water Utility
119 East Olin Avenue
Madison, WI 53713

Dear Mr. Holmgren:

Short Elliott Hendrickson Inc. (SEH®) proposes to complete Final Design Services for the UW 12 Wellhouse Reconstruction and Reservoir project. The final design scope includes the following:

- Topographic survey of the project site.
- Geotechnical exploration procurement assistance.
- UW 12 - Wellhouse Reconstruction Final Plans and Specs Preparation
- UW 12 - 1.5 MG Ground Storage Reservoir Final Plans and Specs Preparation
- Project Permitting and Bidding Assistance

The work is proposed for a total fee of $358,900.00. A portion of this (Tasks I-III) was previously contracted for $72,640. The fee breakdown by task and hours is as follows:

TASK	HOURS	FEE
Tasks I-III	406	$ 72,640
Task IV	997	$ 189,600
Task V	507	$ 95,960
Total	**1910**	**$ 358,200**

A proposed detailed project scope of work and Level of Effort (LOE) breakdown is also enclosed for your review. We look forward to working on the UW 12 Wellhouse Reconstruction and Reservoir - Final Design project with Madison Water Utility.

Sincerely,

Jeffrey Nussbaum, PE (WI)
Principal | Sr. Professional Engineer

Enclosure: Project Scope of Work, LOE Breakdown
x:\ko\m\madwu\182222\1-genl\10-setup-cont\03-proposal\final design\madwu uw12 final design_ proposal letter-4.22.2025.docx

ATTACHMENT B

Project Work Scope

MADISON WATER UTILITY – UNIT WELL 12 FINAL DESIGN, PERMITTING, AND BIDDING SERVICES

PROJECT BACKGROUND

SEH originally completed a design for the Unit Well 12 Reconstruction project in 2017. The project plans, specs and estimates were approved by the Common Council on November 17, 2017. Other permits were completed for the project including PSC, WisDNR and Local Permits, but the project was not bid or awarded and was put on hold and related permits have since expired.

A preliminary design phase was completed to review the existing UW 12 wellhouse reconstruction plans and specifications and identify revisions necessary to meet current codes and design practices. Preliminary design also included an evaluation of replacing the existing concrete reservoir at the project site, which is small and nearing the end of its service life. The Utility's water model was utilized to analyze potential advantage of a larger reservoir at the size. The results supported a larger 1.5 MG storage tank provided numerous operational advantages for the Utility in the future.

DETAILED SCOPE OF SERVICES – FINAL DESIGN, PERMITTING, AND BIDDING SERVICES

The following project scope is proposed to complete an initial final design phase of the Unit Well 12 Wellhouse Reconstruction and 1.5 MG reservoir project. Our primary goals include the following:

- Topographic survey and update the existing basemaps for the project site.
- Assist in procurement of a geotechnical exploration and design report.
- UW 12 Wellhouse Reconstruction and Reservoir Preliminary Design
- Utility and Agency Preliminary Reviews
- UW 12 Wellhouse Reconstruction Final Plans and Specification Preparation
- 1.5 MG Ground Storage Reservoir Final Plans and Specifications Preparation
- Project Permitting and Bidding Assistance

The following detailed scope of services outlines the initial final design tasks SEH will perform for the Unit Well 12 Wellhouse Reconstruction and 1.5 MG Reservoir project.

TASK I – PROJECT SITE TOPOGRAPHIC SURVEY

1. Provide a topographic survey of the existing UW 12 property and surrounding area (approximately 3.5 acres). The project is located at the intersection of Whitney Way and W Beltline Hwy. The topo survey will include all features and underground utilities on the site and at a minimum distance of 50 ft. outside the property line. The survey will be completed in Dane County coordinates.
2. Topographic survey work includes calling in locates using Digger's Hotline prior to work, coordinating with the Utility to locate underground features, setting horizontal and vertical control on the project site, topo of the project site, and importing data into Civil 3D software.

3. Drafting of the topographic survey basemap will be completed utilizing Civil 3D. The existing conditions plan sheet for the UW 12 Project site will also be updated, which will be utilized for the UW 12 Wellhouse and Reservoir final plans.
4. While onsite, surveyors will stake the soil boring locations, as described in Task II.

TASK II – GEOTECHNICAL EXPLORATION REQUEST

5. Draft a geotechnical exploration needs request and project description for the UW 12 Ground Storage Reservoir Project.
6. Create a site plan exhibit detailing proposed soil boring locations and coordinates. Stake the soil boring locations in the field.
7. Coordinate proposed soil borings request information with D110 tank manufacturer(s) to ensure sufficient information is obtained for project design and construction.
8. The project description and exhibit documents will be provided to MWU for their use in contracting for geotechnical engineering services.

TASK III – FINAL DESIGN

9. Project design review meetings to be held virtually with the Utility at different points during final design to review and discuss project details with individual design disciplines. The meetings will provide Madison Water Utility with an opportunity to provide detailed input on process design updates, civil plan updates, structural and architectural design updates, mechanical plans, and electrical/SCADA design.
10. Prepare for and facilitate a WisDNR and PSC Project Pre-Plan Submittal Meeting with WisDNR, PSC, SEH, and Utility Staff. Prepare pre-application meeting submittal presentation and facilitate virtual meeting.
11. Prepare preliminary reservoir civil plans. Updated civil plans to detail existing site conditions with improvements made at the site since 2017 and prepare a proposed site layout detailing both the wellhouse and reservoir, proposed utility plan, and grading plan.
12. Prepare preliminary reservoir process plans to detail the proposed reservoir floor plan, elevations, process piping, and construction details.
13. Provide structural review of the ground storage reservoir geotechnical exploration report. Coordinate design requirements and details for foundation preparation, structural fill, foundation design, site drainage, and other applicable design parameters identified in the report.
14. Coordinate reservoir project reviews with regulatory agencies and utilities. Initial project reviews are important to allow early opportunities for the agencies and utilities to comment on site layout and permitting requirements.
    - Submit preliminary plans to City of Madison Zoning Department for initial site plan review and comments.
    - Submit preliminary plans to the City of Madison Engineering Department to determine applicable stormwater requirements for the project.
    - Submit preliminary plans to WisDOT for review and comment.
    - Utility preliminary plan reviews to determine potential utility conflicts and relocations.

15. Coordinate with proposed tank manufacturers for preliminary design review input. Submit preliminary civil and process plans to tank manufacturers for review of plans, reservoir constructability, and project schedule. Also, coordinate preparation of detailed construction cost estimates.
16. UW 12 Wellhouse Reconstruction Plan updates including the following:
    - Revival of existing wellhouse models, updating to current model software formats, repairing references as necessary and plan sheet border updates.
    - Updated construction details to current versions, as necessary.
    - Updating existing infrastructure information for existing site utilities, process equipment, onsite generator, and electrical equipment.
    - Detail salvaged equipment requirements including but not limited to electrically actually valves for Pressure Zone 7 and 8, Booster pump, motor, piping, valves, and other related pump appurtenances. Evaluate salvage potential of other existing equipment at UW 12 well house, as discussed with Utility Staff.
17. UW 12 Process Design Revisions. Revise existing process plans to include reservoir fill piping to allow more efficient water transfer operations, as discussed in preliminary design phase. Other process plan updates include:
    - Detailing additional process piping appurtenances per WisDNR NR 811 Code requirements
    - Review UW 12 deep well and high booster pump design calcs for new hydraulic conditions due to reservoir addition.
    - Revise pump designs and selections, as required.

TASK IV – FINAL DESIGN II

18. Develop regular task reporting and communication methods concerning progress of the work throughout final design and permitting. Reporting shall consist of:
    - Progress reports shall be submitted each month to detail progress made during the previous month, planned work for the coming month and any issues that need to be resolved.
    - Monthly reports shall include an updated project schedule.
    - Monthly reports shall not exceed one type written page not including updated schedules, charts or tables.
19. Assist the Utility in notifying identified stakeholders, residents, and property owners within the vicinity by preparing updated mapping, building plans, and process flow diagrams to aid in communicating the actions being considered for this unit well to the City Departments, committees, neighborhood groups and any other interested parties.
    - Assist the Utility with project Public Information Meeting(s). Attend PIM meeting with Utility to assist with project questions and discussions.
20. Assist the Utility in preparation for Utility Board Meetings. Our team will assist Utility staff to obtain all City of Madison approvals and make presentations as required, meeting the requirements of Planning and Zoning Departments and the Board of Public Works. If necessary, SEH will attend one (1) Utility Board Meeting in person for presentations and project discussions.

21. UW 12 Electrical Plan Updates: Prepare 30% electrical plans for the updated/revised design for UW 12. Design revisions and updates identified in the preliminary design phase include the following:
    - MCC Components: Redesign to wall mount components, where possible, to reduce the amount of MCC cabinets and save costs.
    - Relocate CT cabinet and electrical meters to exterior per MG&E current standards.
    - Remove telephone service and coordinate updated access and security requirements (to current standards and equipment) with Utility for well house.
    - Update existing wellhouse demolition plan to salvage any items to Utility.
    - Prepare for and coordinate a virtual design review meeting with Utility to review details of the 30% electrical plan design. Incorporate Utility comments and feedback into final plans and specifications.
22. Wellhouse Final Design. All engineering disciplines will finalize plans and specifications for WisDNR submittal. Notable final design tasks include the following:
    - Wellhouse Design Calculations – Process, Architecture, Structural, Electrical and Mechanical Disciplines complete design calculations to verify that the existing design meets current code requirements. Calculations are required for various permitting applications. Where applicable, existing calculations from the previous UW 12 project may be utilized and updated as necessary.
    - Wellhouse Structural and Architectural roof design updates. The precast concrete roof utilized in the previous wellhouse design now potentially requires the installation of a concrete topping for warranty compliance for the roofing system. Design details and specification preparation for the concrete topping and verification of existing precast roof design is included in this work.
    - Mechanical Air Handling Unit will be redesigned to current standards.
    - Water process design will finalize piping revisions details for new reservoir fill piping and utilization of existing actuated valves and booster pump.
    - Electrical and SCADA Final Design. Coordinate with City's preferred vendor, new MCC, VFD's and controls equipment, monitoring and security systems, connection to existing onsite backup generator, and utility service coordination.
23. Ground Storage Reservoir Final Design includes the following:
    - Civil Design: Site design will be completed for proposed reservoir location, site improvements, utilities, grading, stormwater, erosion control, and landscape architecture.
    - The City of Madison Engineering Department will require that a stormwater design and report submittal for the entire project be completed and submitted, due to the amount of impervious surfaces added to the site.
    - Drinking water process plans include tank floor plans, elevations views, cross sections, and construction details. Process design calculations to be completed for sizing process piping, overflows, drain piping, venting, etc. Finalize the system modeling, completed in preliminary design, of the proposed reservoir to confirm functionality and proper sizing of reservoir fill piping.

- Structural design review of the reservoir to incorporate geotechnical design requirements for footings, utility piping, structural fill, over excavation, and other elements of the structure.
- Electrical Design of reservoir power, level measurement and mixing systems.

24. Complete 90% UW 12 Wellhouse Reconstruction and Reservoir Plans, Specs, and Construction Cost Estimates for Utility Review.
    - Meet with Utility to discuss project details and review project documents.
    - Incorporate feedback and comments into Final Plans and Specs for WisDNR Submittal.
25. Complete UW 12 Wellhouse Reconstruction and Reservoir Final Design Plans, Specifications, and permit applications for a complete Drinking and Groundwater Plan Review department submittal
    - WisDNR Drinking Water Plan Review Submittal by June 30th to meet SDWLP requirements.
26. All SEH project work is subject to peer reviews as part of SEH's QC program. Each project includes a technical reviewer responsible to ensure quality control plans and peer reviews are properly conducted.

TASK V – PERMITTING AND BIDDING

27. Permit the proposed UW12 Wellhouse Reconstruction and 1.5 MG Ground Storage Reservoir project with WisDNR and PSC for construction.
    - Coordinate WisDNR and PSC joint pre-application meeting and preparation of project presentation.
    - Prepare WisDNR Engineering Report. For the wellhouse portion of the project, portions of the original engineering report will be utilized for efficiency. Design updates will be incorporated and also applicable design information for the added 1.5 MG reservoir. (this task will be completed prior to June 30, 2025 for submittal to meet SDWLP application requirements)
    - Preparation of WisDNR Public Water System Plan Submittal permit applications, checklists, cover letter, design calculations and other supporting information. (this task will be completed prior to June 30, 2025 for submittal to meet SDWLP application requirements)
    - Coordinate review responses with WisDNR. Address reviewer questions and comments. Revise plans and specifications as required, resubmit applicable information for review and approval.
    - Prepare and assist the Utility in making the PSC Construction Authorization Application. Prepare PSC report submittal, schedule submittal for review, address review questions and comments, and obtain construction authorization.
28. Prepare and submit required permit applications with the City of Madison. The anticipated required applications include Zoning and Planning Department, Building Permit Submittal, and City Engineering-Stormwater.
29. Final (100%) Construction Bid Documents preparation. Final Construction Plans and Specs shall include all revisions and updates incorporated during the permitting process.
30. Project bidding assistance including the following:
    - Assist the Utility in preparation of advertisement for bids and coordinate the bid process.

- Provide copies of final UW 12 Wellhouse and Reservoir Bidding Plans for Utility's use in bidding.
- Provide project technical specifications, Division 1 specifications, allowance details, project descriptions, and bid tabs as needed for the Utility's use in their project manual for bidding.
- Participate in a pre-bid meeting with prospective contractors to provide an overview of the project and answer questions.
- Assist Utility with bidding through preparation of addendums and addressing contractor questions. Utility will distribute addenda and receive bidding questions from the potential bidders.
- Attend bid opening meeting virtually if necessary. Evaluate bid results and provide bid a recommendation to Utility.

PROJECT SCHEDULE

The Utility is applying for Safe Drinking Water Loan funding for this project. The deadline for completion and submittal of Wisconsin Department of Natural Resources (WisDNR) Drinking Water permit applications including biddable / approvable plans, is June 30, 2025. Every effort within the control of the Consultant will be made to meet this deadline for final plan and WisDNR submittals. All scope items necessary for WDNR submittal will be completed prior to SDWLP submittal deadline. Final Design will continue after the deadline with PSC Construction Authorization Submittal, WDNR Review Comment Responses, Local Agency Permitting, and Bid Documents preparation.

Scope items 1-30 are anticipated to be completed by February 28th, 2026. See below for anticipated project final design, permitting, and bidding schedule:

TASK	SCHEDULE
Project Kickoff Meeting and Design Team Coordination Meetings	April 28
Topographic Survey of Project Site and Geotech Description	May 5th
Wellhouse Plan Updates – Backgrounds, Design Model, Drawing Files	May 16th
WisDNR/PSC Pre-application Joint Meeting	May 22nd
Reservoir Plans – Prelim. Process and Civil Design (Approx. 60%)	May 23rd
Agency Coordination - WisDOT, City Zoning and Engineering, Utility	May 23rd
Reservoir Plans, Specs, and Costs Due for Review (Approx. 90%)	June 6th
Wellhouse Updated Plans, Specs, Costs Due for Review (Approx. 90%)	June 6th
Client Project Review Meeting	June 9th
WisDNR Engineering Report, Final Plans and Specs Completion	June 20th
WisDNR Drinking Water Plan Review Submittal	June 27th
PSC Construction Authorization Submittal	July 31st
City of Madison Permit Submittals	August 2025
WisDNR Review Comments Addressed	August 2025
WisDNR and City of Madison Approval	October 2025
PSC Construction Authorization	November 2025
Final Bidding Documents Preparation	December 2025
Construction Bidding	Jan./Feb. 2026

ATTACHMENT B

SHORT ELLIOTT HENDRICKSON INC.
MADISON WATER UTILITY
Project: Unit Well 12 Wellhouse Reconstruction and Reservoir - Final Design
Date: May 13,2025

DESIGN SERVICES		CONSULTANT	FINAL DESIGN		TOTAL		
			COST	HOURS	COST	HOURS	COST PER HOUR
BASIC SERVICES	Project Management	SEH	$36,600	170	$36,600	170	$215.29
	Process Engineering	SEH	$64,900	393	$64,900	393	$165.14
	Hydraulics Engineering	SEH	$13,700	80	$13,700	80	$171.25
	Process Drafting	SEH	$34,320	210	$34,320	210	$163.43
	Architecture	SEH	$24,260	142	$24,260	90	$269.56
	Landscape Architecture	SEH	$5,470	36	$5,470	45	$121.56
	Mechanical Engineering	SEH	$35,700	180	$35,700	200	$178.50
	Structural Engineering	SEH	$31,400	143	$31,400	158	$198.73
	Civil Engineering	SEH	$35,900	231	$35,900	231	$155.41
	Electrical Engineering	SEH	$40,500	199	$40,500	199	$203.52
	Survey	SEH	$3,185	24	$3,185	24	$132.70
	QAQC	SEH	$6,200	24	$6,200	24	$258.33
	Administrative	SEH	$12,360	78	$12,360	90	$137.33
	** Expenses*	SEH	$13,705	-	$13,705	-	-
	SUB-TOTAL		**$358,200**	**1,910**	**$358,200**	**1,910**	**$187.54**
	TOTAL		**$358,200**	**1,910**	**$358,200**	**1,910**	**$187.54**