

AMENDMENT NO. 6 TO THE CONTRACT
BETWEEN THE CITY OF RACINE (MUNICIPALITY),
THE WISCONSIN DEPARTMENT OF TRANSPORTATION
AND AYRES ASSOCIATES INC (CONSULTANT) FOR

2703-00-02
West 6th Street
Bridge over Root River (P-51-0709)
Local Road
Racine County

The contract made and entered into by and between the MUNICIPALITY, DEPARTMENT and CONSULTANT, dated July 8, 2015 is hereby amended as set forth on the following pages.

The primary reason(s) for this amendment:

- Addition of an Incidental Take Permit required for Queensnake which is present within the project limits.
- Racine Water and Wastewater Utilities is installing a water main within the projects limits to provide water for the Foxconn Development in Mount Pleasant. Additional utility coordination is required with the installation of this new utility. After coordination began the water main was decided not be installed.
- Racine Water and Wastewater Utilities is relocating the sanitary sewer utility within the project limits. Additional utility coordination is required with the relocation of this new utility.
- Prepare a design justification memo for Horlick Park Drive documenting the reason for not installing 42-inch barrier wall between shared use path and Horlick Park Drive.
- Recent changes to the FDM no longer allow the use of vertical face curb and gutter with sidewalk to protect parapet ends. Additional coordination with the DEPARTMENT to allow the use of vertical face and gutter to protect parapet ends at the request of the MUNICIPALITY.
- Additional coordination and design justification for sight distance on the Horlick Park Drive shared use path not meeting current design standards.
- The WDNR is requiring a signed portage route be included in the plan when the Root River is closed. A signed portage route is requiring separate traffic control sheets and Fixed Message Sign detail sheets.
- WisDOT required the curb ramp at the southeast corner of Horlick Park Drive and Kinzie Avenue to be reconstructed where the shared use path connects into it. This required the sidewalk along the east side of Kinzie Avenue between West 6th Street and Horlick Park Drive to be replaced. This required a sidewalk plan and profile sheet and cross sections.
- Due to the age of the project, the project was updated from AutoCAD Civil 3D 2014 to AutoCAD Civil 3D 2016 due to Windows 10 no longer being able to support AutoCAD Civil 3D 2014.
- An additional soil boring and geotechnical analysis are needed for the proposed retaining walls.
- The WDNR is requiring that detailed plans for temporary causeways be included in the construction plans instead of temporary causeways being included as conceptual exhibits attached to permits.
- The WDNR changed the instream work restrictions, which required additional coordination meetings and changes to schedule and special provisions. The change in restrictions was due to the Door County Spawning facility not operating/functioning in 2021 due to Lake Michigan high water levels, which affected harvesting of Chinook (King) Salmon. Racine County (Root River) spawning facility will be taking on Chinook Salmon spawning in 2021.
- Assist the City of Racine in preparing the draft zoning variance for the temporary causeway impacts on upstream flood elevations.

- Assist the City of Racine in preparing and the “WisDOT STP-Urban, STP-Rural, Local Bridge, TAP and CMAQ Programs Project Change Form”.
- Addition of a Mandatory Pre-Bid Meeting to the contract.
- The Project Completion Date will remain as December 31, 2022 (no change).

The CONSULTANT will be compensated by the DEPARTMENT for services provided under this CONTRACT on the following basis:

- a. For design services for the reconstruction of the West 6th Street bridge over the Root River, including design reports, environmental documentation, agency/utility coordination, public involvement, survey, preliminary roadway/structures design, final roadway/structures design, and PS&E submittal performed by CONSULTANT the CONSULTANT's actual cost up to \$446,258.60 (An Increase of \$34,295.43) plus a fixed fee of \$33,719.18 (An Increase of \$2,420.15) not to exceed \$479,977.78 (An Increase of \$36,715.58).
- b. For archaeological surveys/studies subcontracted to UW Milwaukee – Cultural Resource Management, the CONSULTANT’s actual cost paid to UW Milwaukee – Cultural Resource Management based on UW Milwaukee – Cultural Resource Management’s actual cost up to \$125,712.77 (No Change) plus fixed fee of \$0.00 (No Change) not to exceed \$125,712.77 (No Change) in total.
- c. For architectural/historical surveys/studies subcontracted to Mead & Hunt, the CONSULTANT’s actual cost paid to Mead & Hunt based on Mead & Hunt’s actual cost up to \$93,073.33 (No Change) plus fixed fee of \$7,085.10 (No Change) not to exceed \$100,158.43 (No Change) in total.
- d. For soil borings and soils report subcontracted to PSI, Inc., the CONSULTANT’s actual cost paid to PSI, Inc. based on PSI, Inc.’s actual cost up to \$20,808.52 (An Increase of \$11,028.90) plus fixed fee of \$1,240.46 (An Increase of \$707.61) not to exceed \$22,048.98 in total (An Increase of \$11,736.51).
- e. For lighting design and plan preparation subcontracted to Powrtek Engineering, Inc., the CONSULTANT’s actual cost paid to Powrtek Engineering, Inc. not to exceed \$13,439.29 (No Change) using the total direct labor costs and total on-labor direct costs listed below.

Specific hourly rates to be used for hours in which Powrtek Engineering, Inc.’s employees are directly engaged in performing the work or services required by this CONTRACT:

Employee	Employee Classification	Rate
Greg Sadowski	Engineer	\$127.82
Brian Fuller	Technician	\$68.48

Classifications or employees not listed above cannot be invoiced unless added to the contract through an amendment.

Total Direct Labor Costs are \$13,366.54 (No Change).

The following non-labor direct costs will be reimbursed based on Powrtek Engineering, Inc.'s actual cost:

Item Description	Unit Type	Rate	Unit Cost
Travel	Mile	90	\$0.575
Plotting	Sheet	20	\$1.00
Printing	Sheet	10	\$0.10

Non-labor direct costs not listed above cannot be invoiced unless added to the contract through an amendment.

Total Non-Labor Direct Costs are: \$72.75 (No Change).

- f. For title search work (60-year title search) for all properties/parcels subcontracted to Knight Barry Title Group, the CONSULTANTS actual cost paid to Knight Barry Title Group not to exceed \$1,450 (No Change) using the cost per unit listed in the table below.

Item Description	Unit Type	Unit Cost
60-year title search (Tax Key #s 2760000006073000, 2760000006453000, 2760000007326000)	Each	\$250.00
60-year title search (Tax Key # 276000007346002)	Each	\$500.00
Title Search Updates	Each	\$50.00

Compensation for all SERVICES provided by the CONSULTANT under the terms of the CONTRACT shall be for an amount not to exceed \$742,787.25 (An Increase of \$48,452.09).

The DEPARTMENT representative is: *Kathleen Kramer, P.E.; SE Local Program Design Project Manager; 141 NW Barstow Street, P.O. Box 798, Waukesha, WI 53187; kathleen1.kramer@dot.wi.gov; 262-548-8772.*

The MUNICIPALITY representative is: *John Rooney, P.E.; City Engineer/Assistant Commissioner of Public Works; 730 Washington Avenue, Room 304, Racine, WI 53403; John.Rooney@cityofracine.org; 262-636-9460.*

The CONSULTANT representative is: *David Pantzlaff, P.E.; Manager – Structural Engineering; 3433 Oakwood Hills Parkway, Eau Claire, WI 54701; PantzlaffD@AyresAssociates.com; 715-831-7580.*

In witness whereof, the parties hereto have caused this amendment to be executed and approved on the date signed by their authorized officers or representatives.

For the CONSULTANT

For the DEPARTMENT

By: _____

By: _____

Title: Transportation Manager _____

Title: _____

Date: _____

Date: _____

For the MUNICIPALITY

By: _____

Title: _____

Date: _____

AMENDMENT NO. 6

D. AGENCY COORDINATION

Section D. is amended to add the following:

(6) Incidental Take Permit

The CONSULTANT shall prepare for submittal the application for An Incidental Take Permit/Authorization (ITP/A), including a Habitat Conservation Plan, for the Queensnake.

(7) WDNR Instream Work Restrictions

Adjust contract to change fall instream timeout dates from September 30th - November 1st to September 1st – November 15th.

(8) City of Racine Zoning Variance Application

Assist the City of Racine in preparing the application to request a zoning variance for in preparing the draft zoning variance for the temporary causeway impacts on upstream flood elevations.

(9) “WisDOT STP-Urban, STP-Rural, Local Bridge, TAP and CMAQ Programs Project Change Form”.

Assist the City of Racine in preparing and the “WisDOT STP-Urban, STP-Rural, Local Bridge, TAP and CMAQ Programs Project Change Form”.

E. RAILROAD/UTILITY INVOLVEMENTS

Section E. (4) is amended to add the following:

(q) Racine Water and Wastewater Utilities is installing a water main within the project limits to provide water for the Foxconn development in Mount Pleasant. Coordinate the project with this new utility.

(r) Racine Water and Wastewater Utilities is relocating the sanitary sewer utility within the project limits. Coordinate the project with this new utility location.

H. SOILS AND SUBSURFACE INVESTIGATION

Section H. is amended to add the following:

(10) Field exploration consisting of drilling and sampling of the subsurface materials and observation of current groundwater levels at the site. As specified by the WisDOT in the Geotechnical Manual, soil exploration will be attempted to be extended to a minimum depth of 2 times the exposed wall height below the base of the wall. One (1) machine powered boring near structure R-51-88 to a depth of 50 feet. An engineering evaluation will be performed to include external stability evaluations at retaining walls R-51-87 and R-51-88 and provide geotechnical recommendations in written report format.

I. ROAD PLANS

Section I. is amended to add the following:

- (14) Prepare a design justification memo for Horlick Park Drive that documents the reason for not installing 42-inch barrier wall between the shared used path and Horlick Park Drive.
- (15) Changes to the FDM no longer allow the use of vertical face curb and gutter with sidewalk to protect parapet ends. Document and facilitate coordination between the DEPARTMENT and the MUNICIPALITY on using vertical face curb and gutter with sidewalk to protect parapet ends.
- (16) Prepare design justification for required sight distance not being met on the Horlick Park Drive shared use path.
- (17) Prepare a detour plan in accordance with the MANUAL for the Root River Portage Route, which was requested by the WDNR.
- (18) Prepare a plan & profile sheet and cross sections in accordance with the MANUAL for the replacement of the sidewalk along the east side of Kinzie Avenue between West 6th Street and Horlick Park Drive.
- (19) Update the project from AutoCAD Civil 3D 2014 to AutoCAD Civil 2016.
- (20) Prepare temporary causeway plans for two stages and include details in the plans as requested by the WDNR.

J. MEETINGS

Section J. is amended to add the following:

- (16) Add attendance at one (1) Mandatory Pre-Bid meeting for the project. The meeting will be virtual and the DEPARTMENT will coordinate scheduling the digital platform.



Amendment #6 - 2703-00-02

West 6th Street

Bridge over Root River (P-51-0709)

Local Road

Racine County

Revised: 3-Mar-2021

Project Manager: Dave Pantzlaff

Revised: 03/03/21

CONSULTANT DIRECT LABOR RATES

Amendment #6 - 2703-00-02
 West 6th Street
 Bridge over Root River (P-51-0709)
 Local Road
 Racine County

Contract Start Date: 3/15/2021
Contract Complete Date: 12/31/2022

Revised: 03/03/21

Employee Identification	Classification	Current Rate	% Labor Increase	New Labor Rate	Date of Increase	% Labor Increase	New Labor Rate	Date of Increase	% Labor Increase	New Labor Rate	Date of Increase	% Labor Increase	New Labor Rate	Date of Increase	% Labor Increase	New Labor Rate	Date of Increase
Emp. No. 00380	Project Manager	\$ 67.22	0.10%	\$ 67.29	1/1/22	0.10%	\$ 67.35	1/1/23	0.10%	\$ 67.42	1/1/24	0.10%	\$ 67.49	1/1/25	0.10%	\$ 67.56	1/1/26
Emp. No. 02794	Engineer 3	54.50	0.10%	54.55	1/1/22	0.10%	54.61	1/1/23	0.10%	54.66	1/1/24	0.10%	54.72	1/1/25	0.10%	54.77	1/1/26
Avg. Selected Individuals	Engineer 2	44.04	0.10%	44.08	1/1/22	0.10%	44.13	1/1/23	0.10%	44.17	1/1/24	0.10%	44.22	1/1/25	0.10%	44.26	1/1/26
Emp. No. 03017	Engineer 1	31.25	0.10%	31.28	1/1/22	0.10%	31.31	1/1/23	0.10%	31.34	1/1/24	0.10%	31.38	1/1/25	0.10%	31.41	1/1/26
Emp. No. Company Average	Clerical	25.66	0.10%	25.69	1/1/22	0.10%	25.71	1/1/23	0.10%	25.74	1/1/24	0.10%	25.76	1/1/25	0.10%	25.79	1/1/26
Emp. No. 02250	Structural Engineer	61.60	0.10%	61.66	1/1/22	0.10%	61.72	1/1/23	0.10%	61.78	1/1/24	0.10%	61.85	1/1/25	0.10%	61.91	1/1/26
		-	0.10%	-	1/1/22	0.10%	-	1/1/23	0.10%	-	1/1/24	0.10%	-	1/1/25	0.10%	-	1/1/26
		-	0.10%	-	1/1/22	0.10%	-	1/1/23	0.10%	-	1/1/24	0.10%	-	1/1/25	0.10%	-	1/1/26
		-	0.10%	-	1/1/22	0.10%	-	1/1/23	0.10%	-	1/1/24	0.10%	-	1/1/25	0.10%	-	1/1/26
		-	0.10%	-	1/1/22	0.10%	-	1/1/23	0.10%	-	1/1/24	0.10%	-	1/1/25	0.10%	-	1/1/26
		-	0.10%	-	1/1/22	0.10%	-	1/1/23	0.10%	-	1/1/24	0.10%	-	1/1/25	0.10%	-	1/1/26

Employee Identification	Classification	% Work at 03/21 to 12/21 Rate	% Work at 01/22 to 12/22 Rate	% Work at 01/23 to 12/23 Rate	% Work at 01/24 to 12/24 Rate	% Work at 01/25 to 12/25 Rate	% Work at 01/26 to 12/26 Rate	Weighted Average Hourly Rate
Emp. No. 00380	Project Manager	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 67.22
Emp. No. 02794	Engineer 3	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	54.50
Avg. Selected Individuals	Engineer 2	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	44.04
Emp. No. 03017	Engineer 1	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	31.25
Emp. No. Company Average	Clerical	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.66
Emp. No. 02250	Structural Engineer	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	61.60
		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-
		100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-

DESIGN ENGINEERING SUMMARY OF STAFF HOURS AND DIRECT LABOR COSTS

Amendment #6 - 2703-00-02
West 6th Street
Bridge over Root River (P-51-0709)
Local Road
Racine County

Revised: 03/03/21

Class Average Hourly Wage TASK	ACT. CODE	Project Manager		Engineer 3		Engineer 2		Engineer 1		Clerical		Structural Engineer	
		\$67.22		\$54.50		\$44.04		\$31.25		\$25.66		\$61.60	
		Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars
Administration	740	2	134.44	8	436.00	-	-	-	-	3	76.98	-	-
Reports	748	-	-	-	-	-	-	-	-	-	-	-	-
Environmental	767	-	-	-	-	-	-	-	-	-	-	-	-
Agency, Utility & Railroad	746	21	1,411.62	34	1,853.00	24	1,056.96	-	-	-	-	-	-
Public Involvement	743	-	-	-	-	-	-	-	-	-	-	-	-
Survey	729	-	-	-	-	-	-	-	-	-	-	-	-
Soils Investigation	644	-	-	-	-	-	-	-	-	-	-	-	-
Preliminary Roadway	741	-	-	-	-	-	-	-	-	-	-	-	-
Preliminary Structure	1,001	-	-	-	-	-	-	-	-	-	-	-	-
Final Roadway	742	-	-	24	1,308.00	56	2,466.24	70	2,187.50	-	-	-	-
Final Structure	1,002	-	-	-	-	-	-	-	-	-	-	8	492.80
P S & E	794	-	-	-	-	-	-	-	-	-	-	-	-
Right-of-Way	745	-	-	-	-	-	-	-	-	-	-	-	-
Meetings & Conferences	747	8	537.76	8	436.00	-	-	3	93.75	-	-	-	-
Management of Subconsultants	773	-	-	-	-	-	-	-	-	-	-	-	-
Real Estate	267	-	-	-	-	-	-	-	-	-	-	-	-
Traffic	785	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS		31	2,083.82	74	4,033.00	80	3,523.20	73	2,281.25	3	76.98	8	492.80

DESIGN ENGINEERING SUMMARY OF STAFF HOURS AND DIRECT LABOR COSTS

Amendment #6 - 2703-00-02
West 6th Street
Bridge over Root River (P-51-0709)
Local Road
Racine County

Revised: 03/03/21

Class Average Hourly Wage TASK	ACT. CODE	0		0		0		0		0		Total	
		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		Direct Labor	
		Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars
Administration	740	-	-	-	-	-	-	-	-	-	-	13	647.42
Reports	748	-	-	-	-	-	-	-	-	-	-	-	-
Environmental	767	-	-	-	-	-	-	-	-	-	-	-	-
Agency, Utility & Railroad	746	-	-	-	-	-	-	-	-	-	-	79	4,321.58
Public Involvement	743	-	-	-	-	-	-	-	-	-	-	-	-
Survey	729	-	-	-	-	-	-	-	-	-	-	-	-
Soils Investigation	644	-	-	-	-	-	-	-	-	-	-	-	-
Preliminary Roadway	741	-	-	-	-	-	-	-	-	-	-	-	-
Preliminary Structure	1,001	-	-	-	-	-	-	-	-	-	-	-	-
Final Roadway	742	-	-	-	-	-	-	-	-	-	-	150	5,961.74
Final Structure	1,002	-	-	-	-	-	-	-	-	-	-	8	492.80
P S & E	794	-	-	-	-	-	-	-	-	-	-	-	-
Right-of-Way	745	-	-	-	-	-	-	-	-	-	-	-	-
Meetings & Conferences	747	-	-	-	-	-	-	-	-	-	-	19	1,067.51
Management of Subconsultants	773	-	-	-	-	-	-	-	-	-	-	-	-
Real Estate	267	-	-	-	-	-	-	-	-	-	-	-	-
Traffic	785	-	-	-	-	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS		-	-	-	-	-	-	-	-	-	-	269	12,491.05

DIRECT COSTS BY ITEM

Amendment #6 - 2703-00-02

West 6th Street

Bridge over Root River (P-51-0709)

Local Road

Racine County

Revised: 03/03/21

[illegible]

SUBCONSULTANT SUMMARY

Amendment #6 - 2703-00-02

West 6th Street

Bridge over Root River (P-51-0709)

Local Road

Racine County

Revised: 03/03/21

Sub Number	Name	Task	Basis of Payment	Total Contract Amount	DBE (Y/N)
1	PSI, Inc.	Soil Borings and Report	ACPPF	\$ 11,736.51	N
2					
3					
4					
5					
6					
7					
8					
9					
10					
Total				\$ 11,736.51	

FEE COMPUTATION BY ENGINEERING TASK

Amendment #6 - 2703-00-02

West 6th Street
 Bridge over Root River (P-51-0709)
 Local Road
 Racine County

Revised: 03/03/21

TASK	ACTIVITY CODE	Direct Labor Costs	Indirect Costs	Direct Costs	Fixed Fee	TOTAL
Administration	740	647.42	1,130.14	-	125.44	1,903.00
Reports	748	-	-	-	-	-
Environmental	767	-	-	-	-	-
Agency, Utility & Railroad	746	4,321.58	7,543.75	-	837.31	12,702.64
Public Involvement	743	-	-	-	-	-
Survey	729	-	-	-	-	-
Soils Investigation	644	-	-	-	-	-
Preliminary Roadway	741	-	-	-	-	-
Preliminary Structure	1001	-	-	-	-	-
Final Roadway	742	5,961.74	10,406.81	-	1,155.09	17,523.64
Final Structure	1002	492.80	860.23	-	95.48	1,448.51
P S & E	794	-	-	-	-	-
Right-of-Way	745	-	-	-	-	-
Meetings & Conferences	747	1,067.51	1,863.45	-	206.83	3,137.79
Management of Subconsultants	773	-	-	-	-	-
Real Estate	267	-	-	-	-	-
Traffic	785	-	-	-	-	-
	0	-	-	-	-	-
	0	-	-	-	-	-
	0	-	-	-	-	-
	0	-	-	-	-	-
	0	-	-	-	-	-
	0	-	-	-	-	-
	0	-	-	-	-	-
TOTALS		12,491.05	21,804.38	-	2,420.15	36,715.58

Indirect Home Office Cost Rate 174.56%
 Fixed Fee: 7.75%

CONSULTANT CONTRACT TOTAL FEE COMPUTATION

Amendment #6 - 2703-00-02
West 6th Street
Bridge over Root River (P-51-0709)
Local Road
Racine County

Revised: 03/03/21

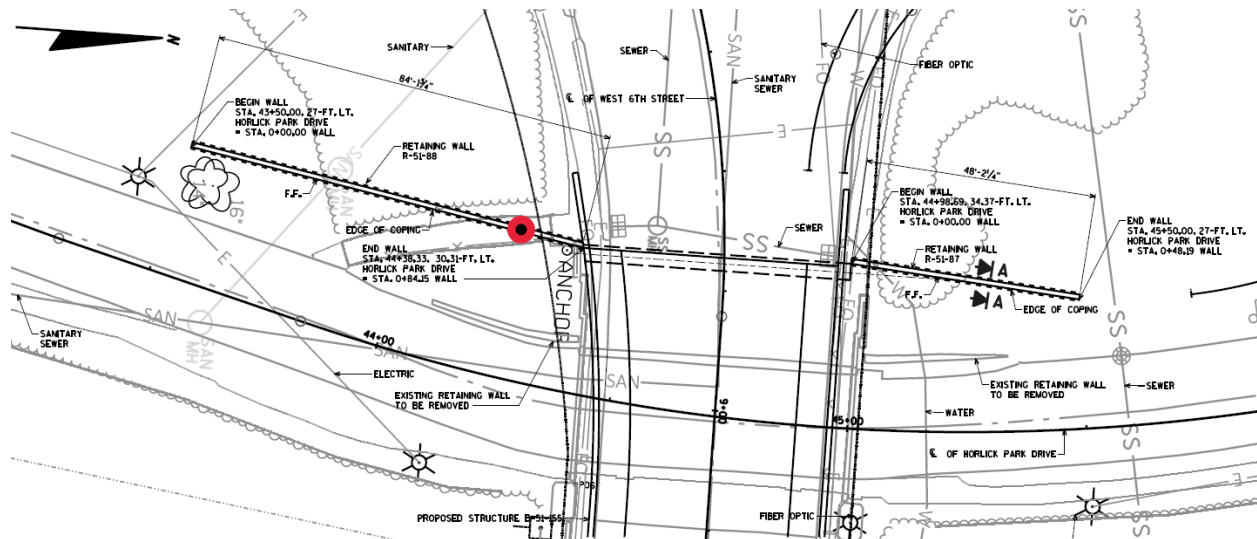
	Project I.D. 2703-00-02	Amendment #1 2703-00-02	Amendment #2 2703-00-02	Amendment #3 2703-00-02	Amendment #4 2703-00-02	Amendment #5 2703-00-02	Amendment #6 2703-00-02	TOTAL CONTRACT
Number of Staff Hours	3,092	0	67	39	0	806	269	4,273
Total Direct Labor	\$ 105,498.73	\$ -	\$ 2,966.35	\$ 1,960.12	\$ -	\$ 33,514.55	\$ 12,491.05	\$ 156,430.80
Indirect Home Office Cost Rate 174.56%	193,727.33	-	5,323.71	3,517.83	-	57,350.10	21,804.38	281,723.35
Fixed Fee (% of Labor * 2.5) 7.75%	23,190.01	-	642.48	424.54	-	7,042.00	2,420.15	33,719.18
Non-Labor Direct Charges	7,445.55	-	218.40	417.30	-	23.20	-	8,104.45
Sub-Total Ayres Associates	\$ 329,861.62	\$ -	\$ 9,150.94	\$ 6,319.79	\$ -	\$ 97,929.85	\$ 36,715.58	\$ 479,977.78
UWM - CRT	\$ 21,546.41	\$ -	\$ -	\$ 14,771.75	\$ -	\$ 89,394.61	-	\$ 125,712.77
Mead & Hunt	22,292.34	21,587.85	13,057.54	8,247.81	-	34,972.89	-	100,158.43
PSI, Inc.	10,312.47	-	-	-	-	-	11,736.51	22,048.98
Powrtek Engineering, Inc.	13,439.29	-	-	-	-	-	-	13,439.29
Knight Barry Title Group	1,450.00	-	-	-	-	-	-	1,450.00
	-							-
	-							-
	-							-
	-							-
	-							-
Sub-Total Subconsultants	\$ 69,040.51	\$ 21,587.85	\$ 13,057.54	\$ 23,019.56	\$ -	\$ 124,367.50	\$ 11,736.51	\$ 262,809.47
Total	\$ 398,902.13	\$ 21,587.85	\$ 22,208.48	\$ 29,339.35	\$ -	\$ 222,297.35	\$ 48,452.09	\$ 742,787.25

February 3, 2021

Ayres Associates Inc.
3433 Oakwood Hills Parkway
Eau Claire, WI 54701Attn: Mr. Dan Sydow, P.E.
Project Manager**Re: Proposal for Geotechnical Engineering Services**
Proposed MSE Retaining Walls (R-51-87 and R-51-88)
Amendment 6 - Project ID: 2703-00-02
W. 6th Street Bridge over the Root River
Racine County, WI
PSI Proposal No. 324737-R3

Dear Mr. Sydow:

Professional Service Industries, Inc. (PSI), an Intertek company, is pleased to submit our proposal to conduct a geotechnical exploration for the proposed MSE Retaining Walls in Racine County, WI. PSI thanks you for the opportunity to propose these geotechnical services. A review of project information, along with a proposed scope of services and fee are provided herein. A plan of the site with the proposed additional boring location is shown below:

**PROJECT UNDERSTANDING**

Based on information provided by the Client, a summary of our understanding of the proposed project is provided below in the following Project Description table.

TABLE 1: PROJECT DESCRIPTION AND PROPOSAL BASIS

Project Items	Proposed project includes the construction of 2 new retaining walls (R-51-87 and R-51-88) which will retain soils to the north and south of the west abutment of the new bridge on W. 6 th Street over the Root River.
Wall Descriptions	The new walls will be MSE block walls up to 15 feet tall.
Requested or Anticipated Foundation Types	The walls will be constructed upon leveling pads.

The above description was provided in the project RFP. The following table provides a generalized description of the existing site conditions based on available information.

TABLE 2: SITE DESCRIPTION

Site Location	W. 6 th Street over the Root River and Horlick Park Drive
Existing Site Ground Cover	The site includes the existing slope from W. 6 th Street down to Horlick Park Drive. These are grassed areas and concrete steps.
Ground Surface Soil Support Capability for Operational Stability and Site Access	Boring will be performed with an all-terrain vehicle (ATV) mounted drill rig.

Should the above information or assumptions be inconsistent with planned construction, the Client must contact the PSI office and allow necessary modifications to be made to the proposal.

SCOPE OF SERVICES

The geotechnical engineering scope of services will include the following items.

- Field exploration consisting of drilling and sampling of the subsurface materials and observation of current groundwater levels at the site. As specified by the WisDOT in the Geotechnical Manual, soil exploration will be attempted to be extended to a minimum depth of 2 times the exposed wall height below the base of the wall. One additional boring will be performed near R-51-88, and the previous subsurface information (PSI Project No. 00521721-R2) will be used to evaluate R-51-87
- Limited laboratory testing of the subsurface materials.
- Performing an engineering evaluation to include external stability evaluations at each of the walls and providing geotechnical recommendations in written report format.

Field Exploration

PSI proposes that the subsurface conditions be explored by soil borings following the provided PSI drilling program. The table below summarizes the exploratory boring program, including approximate locations and depths.



TABLE 3: SUMMARY OF BORINGS

Design Element	Number of Borings	Boring Depth (ft)	Drilling Footage (feet)
Retaining Wall R-51-88	1	50	50
TOTAL:	1	--	50

The boring will be located in the field using conventional taping procedures referencing existing site features. This locating method will be accurate to about 5 feet. Surveying of the boring location to obtain surface coordinates and MSL elevations is beyond the scope of work. References to elevations or depths of various subsurface strata will be based on a site survey provided.

- During the field activities, the subsurface conditions will be observed and logged by the crew.
- Final depth of the boring may be extended or reduced depending on the subsurface materials encountered during field activities with any additional footage approved by the owner prior to performance.
- PSI will contact Digger's Hotline prior to the start of drilling activities. This proposal is based on private utility lines and other subsurface appurtenances being located in the field by others prior to field activities (no cost for such is included herein).
- PSI will exercise reasonable caution to avoid damage to underground utilities by contacting Digger's Hotline prior to the field activities. However, private utility locations are often unknown by public utility companies and by the utility owners. Therefore, PSI will not be responsible for damage to the site or any buried utilities that are not made known to us.
- Some damage to the ground surface may result from the drilling operations near the work areas and along ingress/egress pathways. The field crew will attempt to limit such damage, but no restoration other than backfilling the boring is included in this proposal. Excess auger cuttings and drilling spoils would be thin spread in an appropriate area of the site.
- The costs herein do not include any necessary brush removal or tree cutting services. When requested, PSI can subcontract these services for an additional charge.

TABLE 4: ANTICIPATED FIELD EXPLORATION DESCRIPTION

Drilling Equipment	ATV Mounted Drilling Equipment
Drilling Method	Hollow-Stem Auger
Field Testing	Hand Penetrometer and Standard Penetration Testing (ASTM D1586)
Sampling Procedure	Soils: ASTM D1587/1586
Sampling Frequency	At 2.5-foot intervals to a depth of 10 feet and 5-foot intervals thereafter
Frequency of Groundwater Level Measurements	During auger advancement and upon removal
Boring Backfill Procedures	Bentonite
Sample Preservation and Transportation Procedure	General Accordance with ASTM D4220



The field exploration program will be performed in general accordance with the designated ASTM procedures considering local and regional standard of care practices.

Laboratory Testing

Representative soil samples obtained during the field exploration program will be transported to the PSI laboratory for testing. The nature and extent of this laboratory testing program will be dependent upon the subsurface conditions observed during the field exploration program. The laboratory program will be performed in general accordance with the applicable ASTM procedures considering local and regional standard of care practices. The laboratory program may include the following tests.

TABLE 5: LABORATORY TESTING GENERAL PROCEDURES

Laboratory Test	Applicable ASTM Procedures
Visual Classification	ASTM D2488
Moisture Content	ASTM D2216
Atterberg Limits	ASTM D4318
Material Finer than No. 200 Sieve	ASTM D1140
Unconfined Compression Strength	ASTM D2166

Portions of any samples that are not altered or consumed by laboratory testing will be retained for 30 days after the issuance of the geotechnical report and will then be discarded.

Engineering Analyses and Report

The results of the field exploration and laboratory testing will be used in the engineering analysis and in the formulation of the recommendations.

The scope of PSI's geotechnical services for this project include conducting an evaluation of the soils encountered within the test borings for use by the client in performing the wall designs. Included in this evaluation is a global (overall) stability analysis at/near the apparent critical wall cross-section for each wall. Additionally, bearing resistance and external wall stability analyses including sliding and overturning will be performed for these walls. The analyses will follow LRFD methodology per the requirements of the current WisDOT Bridge Manual.

It must be recognized that global (overall) failure for the retaining walls occurs when failure surfaces pass behind and underneath all elements of the retaining wall structure, including the retained zone of the wall system. In analyzing global stability for this project, the wall system is modeled as an intact, impenetrable unit (that is structurally designed by others), forcing the shear surfaces completely outside of the overall structure. Failure surfaces will not be allowed to propagate through the walls. Global stability, as provided for in this proposal for the retaining walls depends on the conditions of the foundation and retained soils, and the geometry of structure and slope in front of and behind the structures. Global/overall stability is independent of the wall system internal strength and structural characteristics. Verification of the suitability of the internal stability components of the wall to accommodate the proposed project is beyond the scope of services in this proposal and will not be provided but should be performed by a qualified wall designer.



The results of the subsurface exploration, including the recommendations and the data on which they are based, will be presented in a written geotechnical report. The geotechnical report may include the following items:

- Logs of test borings including soil layers classified in accordance with Unified Soil Classification System (USCS).
- Evaluation of soil and groundwater conditions within the influence zone of the shallow foundation system of each wall, including allowable soil bearing capacity.
- Results of groundwater monitoring well readings.
- Soil parameters at each of the borings.
- External stability analysis at the critical section of each retaining wall.
- Recommendations for construction of the new retaining walls including lateral earth pressures, backfill materials, and drainage.
- Construction considerations relating to foundation and subgrade preparation, improvement of unstable subgrade, placement and compaction of fill, site drainage and groundwater control, and excavations.
- Seismic design site classification per the International Building Code 2018.

A pdf version of the geotechnical report will be prepared and submitted by email to the Client. If requested by the Client, hard copies can be provided. The geotechnical report will be reviewed, signed, and sealed by a registered Professional Engineer in the State of Wisconsin.

FEE

It is proposed that the fee for the performance of the outlined scope of services be charged on a cost plus fixed fee basis. **Based on the scope of services outlined above, the actual costs to the CONSULTANT are up to \$11,028.90 plus a fixed fee of \$707.61 (based on 7.75% fixed fee), add up to a maximum combined amount of \$11,736.51.** The invoice amount will be based on the actual services performed.

Depending on project schedule, partial billing may be performed monthly based on progress to date prior to the completion of the final report. The estimated fee is based on the boring locations being accessible to ATV mounted drilling equipment and the client obtaining and providing permission for PSI to enter and access the site. It should be noted that fees associated with locating private underground utilities, rock coring, reviewing construction drawings, obtaining permits, preparing construction specifications, attending special conferences, providing environmental consulting, and any other work requested after submittal of the report are not included in the proposed fee.

AUTHORIZATION

PSI will proceed with the work based on written authorization. The work will be performed pursuant to the attached General Conditions, enclosed and incorporated into this proposal. The current project completion date is December 31, 2022.



Please sign and return one copy of this proposal. When returning the proposal, please complete the attached Project Data Sheet, and provide a scaled site plan so that PSI may best serve the project. By executing this authorization, permission is being provided for PSI to access the project site.

CLOSING

We at PSI appreciate the opportunity to offer professional services for this project and look forward to being part of the design team. If there are any questions, please feel free to contact us at your convenience.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Bradley J. Broback, P.E.
Department Manager - Geotechnical Services

Dr. Shailendra Endley, Ph.D.
Chief Engineer

Attachments: Proposal Authorization and Payment Instructions
Project Data Sheet
General Conditions



Contract Direct Labor Detail

Project ID: **2703-00-02**

Employee Name(a)	Classification(b)	Current Rate(c)	% Pay Increase(d)	New Pay Rate(e)	Date of Increase(f)	% Work at Current Rate(g)	% Work at Increased Rate(h)	Weighted Average Hourly Rate(i)
Tim Ebert	Driller	\$25.32		\$25.32	na	100.00%		\$25.32
Catherine Vnuk	Project Engineer I	\$30.29		\$30.29	na	100.00%		\$30.29
Brad Broback	Principal Consultant	\$48.08		\$48.08	na	100.00%		\$48.08
Sanjay Dahkal	Project Engineer II	\$40.00		\$40.00	na	100.00%		\$40.00
Dr. Shailendra Endley	Chief Engineer	\$65.00		\$65.00	na	100.00%		\$65.00
Molly Porter	Administrative Assistant	\$16.26		\$16.26	na	100.00%		\$16.26
Average of Selected Individuals	Flagger/Drill Helper	\$16.67		\$16.67	na	100.00%		\$16.67

Contract Completion Date: **12/31/2022**

Weighted Average Direct Labor Rates

Project ID: **2703-00-02**

Classification: **Flagger/Drill Helper**

Employee Name(a)	Current Rate(b)	Percent Contribution(c)	(b*c)
Alex Salinas	\$17.50	33.00%	\$5.78
Noah Canning	\$17.00	33.00%	\$5.61
Dylan Buchman	\$16.00	33.00%	\$5.28
TOTAL		99.00%	\$16.67

Summary by Engineering Task

Project ID: **2703-00-02**

Task	Activity Code	Direct Labor Costs	Overhead Costs	Fixed Fee	Direct Expenses	Total
Data Gathering & Borings, Soil Engineering	644	\$3,587.15	\$5,027.39	\$695.01	\$2,258.17	\$11,567.72
Administration	740	\$65.04	\$91.15	\$12.60		\$168.79
TOTAL:		\$3,652.19	\$5,118.54	\$707.61	\$2,258.17	\$11,736.51

Fixed Fee Indirect Rate;	150.00		
Home Office Overhead Rate;	140.15	Percent Fixed Fee:	<u>7.75</u>

Summary of Staff Hours and Direct Labor Costs

Project ID: 2703-00-02

Classification		Driller		Project Engineer I		Project Engineer II		Chief Engineer		Administrative Assistant		Principal Consultant		Flagger/Driller Helper			
Avg. Hourly Wage		\$25.32		\$30.29		\$40.00		\$65.00		\$16.26		\$48.08		\$16.67		Total Direct Labor	
Task	Activity Code	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars	Hours	Dollars
Data Gathering & Borings, Soil Engineering	644	10	\$253.20	45	\$1,363.05	15	\$600.00	6	\$390.00			10	\$480.80	30	\$500.10	101	\$3,587.15
Administration	740				\$0.00		\$0.00		\$0.00	4	\$65.04					4	\$65.04
TOTAL:		10	\$253.20	45	\$1,363.05	15	\$600.00	6	\$390.00	4	\$65.04	10	\$480.80	30	\$500.10	120	\$3,652.19

Direct Expenses

Project ID: **2703-00-02**

Item	No. of Units	Unit	Unit Cost	Total Cost
Drill Rig - Company Machine (ATV drill rig)	1	Day	\$ 337.00	\$ 337.00
Cones (Traffic Control and Protection)	1	Day	\$ 43.03	\$ 43.03
Drill Rig Mileage (Company Vehicle Mileage)	80	Mile	\$ 0.56	\$ 44.80
Company Owned Vehicle Mileage (Company Vehicle Mileage)	80	Mile	\$ 0.56	\$ 44.80
Road Signs (Traffic Control and Protection)	1	Day	\$ 47.54	\$ 47.54
Moisture Content/Hand Penetrometer Test	13	Each	\$ 5.00	\$ 65.00
Atterberg Limits	2	Each	\$ 88.00	\$ 176.00
Triaxial Test	1	Each	\$ 1,500.00	\$ 1,500.00
Total:				\$ 2,258.17

Contract Total Fee Computation

Project ID	2703-00-02		Total for Contract
	Original Contract	Amendment 6	
Number of Staff Hours	120	120	240
Total Direct Labor	\$2,482.93	\$3,652.19	\$6,135.12
Total Overhead Costs	\$4,392.56	\$5,118.54	\$9,511.10
Fixed Fee	\$532.85	\$707.61	\$1,240.46
Direct Expenses	\$2,904.13	\$2,258.17	\$5,162.30
Subtotal	\$10,312.47	\$11,736.51	\$22,048.98
Subcontract 1			\$0.00
Subcontract 2			\$0.00
Subcontract Subtotal	\$0.00	\$0.00	\$0.00
TOTAL COST	\$10,312.47	\$11,736.51	\$22,048.98
Home Office Overhead Rate	140.15%	140.15%	
Fixed Fee%	7.75%	7.75%	