



TranSystems

1475 East Woodfield Road
Suite 600
Schaumburg, IL 60173
Tel 847.605.9600
Fax 847.463.0565

www.transystems.com

November 25, 2020

Mr. Andy Hynes, P.E.
Deputy City Engineer / Transportation, Engineering and Development Business Group
City of Naperville
400 South Eagle Street
P.O. Box 3020
Naperville, IL 60566-7020

Reference: North Aurora Road Underpass
From Pennsbury Lane to Frontenac Road
DuPage County
P.O. No. 163096
RFP No. 16-135
SUPPLEMENT No. 2

Dear Mr. Hynes,

We are pleased to submit for your review and approval Supplement No. 2 for the North Aurora Road Underpass project. We have included the following items:

- Exhibit A - Scope of Engineering Services
- Exhibit B - Cost Estimate of Consultant Services
- Exhibit C - Cost Estimate of Subconsultant Services

This supplement includes several items required to complete the project. The first item is additional project coordination and project management due to the extension of the project schedule. The second item is for additional land acquisition services for BNSF temporary easement and extending the term of the temporary easements previously acquired due to the extension of the project schedule. Also included is additional engineering services for 2nd Pre-Final submittal to IDOT, BNSF retaining wall modifications, design for temporary PTZ camera, and roadway profile revision in the event that Enbridge pipeline is lowered or relocated. Jorgensen and Associates, Inc. will be performing the work on the plats and legals for the additional easement required. Mathewson Right of Way Company will be providing the ROW acquisition services. Wang Engineering will be performing additional geotechnical services for the BNSF retaining wall modification. The cost for completing these items in Supplement No. 2 is \$183,150

If you have any questions or require additional information please call me at (847) 407-5300.

Very truly yours,

A handwritten signature in black ink, appearing to read "Matthew J. Smith".

Matthew J. Smith, P.E.
enclosures



TranSystems

1475 East Woodfield Road
Suite 600
Schaumburg, IL 60173
Tel 847.605.9600
Fax 847.463.0565

www.transystems.com

EXHIBIT A – Scope of Engineering Services - Supplement No. 2 **North Aurora Road Underpass at CN Railroad (Pennsbury Lane to Frontenac Road)** **Section No. 06-00133-00-BR**

This supplement consists of Phase II engineering and land acquisition services to perform additional work in seven areas to complete the North Aurora Road Underpass at CN Railroad project as described in detail below. The following tasks are included to complete this work:

1.0 Additional Project Coordination (194 Hours)

The original scope of this contract, dated December 2016, assumed the project would be completed in February 2019. The project will now extend until January 2022 and will require additional project coordination.

- a. Coordination with Naperville (overall project coordination = 20 hours)
- b. Meetings with Naperville, Aurora, and Naperville Township (4 meetings @ 10 hours/meeting = 40 hours)
- c. Meetings with IDOT (2 meetings @ 10 hours/meeting = 20 hours)
- d. Meetings with Railroads (4 meetings @ 10 hours/meeting = 40 hours)
- e. Meetings with Enbridge Pipeline [(3 meetings @ 10 hours/meeting) + (3 meetings @ 8 hours of meeting prep per meeting) = 54 hours]
- f. DuPage County Stormwater (2 meetings @ 10 hours/meeting = 20 hours)

2.0 Additional Project Management – Extended Project Timeline (100 Hours)

The original scope of this contract, dated December 2016, assumed the project would be completed in February 2019. The project will now extend until January 2022 (35 months) and will require additional project management. Since there have been periods of time with limited activity on the project, and 2021 will likely follow a similar pattern, only a portion of the 35 months is considered in this supplement. Therefore additional project management is intended to cover the period from May 2020 through January 2022 in the following manner for a total of 19 months.

- May 2020 – December 2020 (8 months)
 - January 2021 – December 2021 (assume 10 months)
 - January 2022 (1 month)
- a. Project scheduling, monitoring, and management (19 months @ 4.33 hours/month = 81 hours)
 - b. Project administration and invoicing (19 months @ 1 hour/month = 19 hours)



3.0 Additional Land Acquisition for BNSF Temporary Easement (16 Hours)

- a. Revision to the plat of highways to include a temporary easement from the BNSF as detailed in the attached proposal from Jorgensen & Associates.
- b. Appraisals, negotiations, and review appraisals for the BNSF easement will be performed by Mathewson Right of Way Company as detailed in the attached proposal.
- c. The temporary construction easements already secured by the project will expire in 2022 and must be re-negotiated to extend their term an additional 3 years, as detailed in the attached proposal by Mathewson Right of Way Company.
- d. TranSystems project management and coordination with the subconsultants. (16 hours)

4.0 Additional Pre-Final Submittal to IDOT (116 Hours)

The scope for this item includes submitting a 2nd Pre-Final submittal of the plans, specifications and estimates to IDOT on August 13, 2021. This additional Pre-Final submittal is required by IDOT since it will have been more than 1 year since the original Pre-Final submittal (June 26, 2020), which was required to allow coordination efforts to move forward with ComEd (land acquisition), other utilities and the railroads.

- a. Update IDOT check sheets, BDE and District 1 Special Provisions for January 2022 letting (16 hours)
- b. Verify correct use of all pay items for January 2022 letting and update estimate of time (16 hours)
- c. Update cost estimate with latest average unit prices from bid tabs from recent contracts (16 hours)
- d. Repackage plans, specifications, estimates and disposition of comments (16 hours)
- e. Perform QA/QC review (12 hours). Includes 6 hours for civil plans, 3 hours for structural plans and 3 hours for rail plans.
- f. Address and dispose of comments prior to the Final submittal (40 hours)

5.0 BNSF Retaining Wall Modifications (62 Hours)

Due to further detailed engineering in response to the profile design comment received from BNSF, it was determined that railroad embankment would impact the critical wetland on the west side of the BNSF lead track. To avoid impacts, the existing retaining wall will be modified and lengthened. The scope of work for the structural design of the retaining wall includes the following:

- a. Geotechnical services for soil borings as detailed in the attached proposal from Wang Engineering
- b. Perform a site visit to verify existing wall dimensions in the field (8 hours)
- c. Analyze the existing wall for an additional concrete cap and track raise (12 hours)
- d. Design the proposed retaining wall extension for approximately 180 feet (18 hours)
- e. Coordinate with the BNSF Railway to obtain approval of the wall design (4 hours)
- f. Prepare contract drawings, specifications and estimate of cost (20 hours)



North Aurora Road Underpass at CN Railroad
Scope of Work – Supplement No. 2
September 30, 2020
Page 3

6.0 Pennsbury Lane PTZ Camera (16 Hours)

The scope of work for this item includes modifying traffic signal plans to maintain operation of the existing PTZ camera on the existing combination signal mast arm pole located at the southeast corner of North Aurora Road and Pennsbury Lane. This camera is maintained by the City of Aurora and was installed sometime in the fall of 2019.

- a. Coordinate with City of Aurora Traffic Department and DuPage Division of Transportation (signal at Eola Road and North Aurora Road under DuDOT jurisdiction)
- b. Create new plan sheet for temporary interconnect schematic to show temporary PTZ camera and associated equipment attached to a temporary signal pole
- c. Evaluate and specify maintenance of the PTZ camera through wireless connection to the signal controller at Eola Road.

7.0 Roadway Profile Re-Design for Enbridge (418 Hours)

Work under this item will not be required in the event that Enbridge accepts the current protection slab design. If it is determined that Enbridge pipeline is lowered and/or relocated, then the re-design of the roadway profile is recommended to provide for a more desirable geometric design with flatter profile grades and softer sag curve. Work under this item will not begin until a decision on the Enbridge pipeline is confirmed. Updates to the following items are anticipated for this revision:

- a. Roadway plan and profiles & details (2 sheets @ 8 hours/sheet = 16 hours)
- b. Drainage schedules (2 sheets @ 16 hours/sheet = 32 hours)
- c. Drainage plan and profiles (2 sheets @ 24 hours/sheet = 48 hours)
- d. Erosion control plans (8 sheets @ 2 hours/sheet = 16 hours)
- e. Landscaping plans (2 sheets @ 2 hours/sheet = 4 hours)
- f. Retaining Walls A, B, C, D & E (120 hours total)
 - i. Plan & Elevations (13 sheets @ 4 hours/sheet = 52 hours)
 - ii. Sections & Details (7 sheets @ 4 hours/sheet = 28 hours)
 - iii. Structural quantity calculations (40 hours)
- g. Cross Sections (19 sheets @ 6 hours/sheet = 114 hours)
- h. Drainage design calculations (20 hours)
- i. Civil quantity calculations (48 hours total)
 - i. Roadway/earthwork (20 hours)
 - ii. Drainage (20 hours)
 - iii. Erosion control (4 hours)
 - iv. Landscaping (4 hours)

EXHIBIT B

COST ESTIMATE OF CONSULTANT SERVICES

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME TranSystems Corporation
 PRIME/SUPPLEMENT Prime
 Prepared By _____

DATE 11/25/2020
 PTB-ITEM# 180-1

CONTRACT TERM 15 MONTHS
 START DATE 11/1/2020
 RAISE DATE 4/17/2021
 END DATE 1/31/2022

OVERHEAD RATE 148.69%
 COMPLEXITY FACTOR 0
 % OF RAISE 3%

ESCALATION PER YEAR

year	First date	Last date	Months	% of Contract
0	11/1/2020	4/17/2021	6	40.00%
1	4/18/2021	1/17/2022	9	61.80%

The total escalation = 1.80%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PTB-ITEM #

TranSystems Corporatio DATE
Prime
180-1

11/25/2020

ESCALATION FACTOR 1.80%

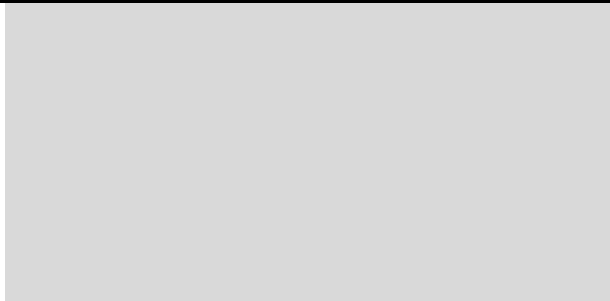
Note: Rates should be capped on the AVG 1 tab as necessary

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Engineer 5 (E5)	\$70.00	\$70.00
Engineer 4 (E4)	\$70.00	\$70.00
Engineer 3 (E3)	\$58.55	\$59.60
Engineer 2 (E2)	\$45.68	\$46.50
Engineer 1 (E1)	\$34.92	\$35.55
Technician 3 (T3)	\$36.00	\$36.65
Technician 1 (T1)	\$20.34	\$20.71
Administrative 2 (A2)	\$37.53	\$38.21

Subconsultants

FIRM NAME TranSystems Corporation DATE
PRIME/SUPPLEMENT Prime
PTB-ITEM # 180-1

NAME	Direct Labor Total	Contribution to Prime Consultant
------	--------------------	----------------------------------



Total 0.00 0.00

AVERAGE HOURLY PROJECT RATES

FIRM TranSystems Corporation
PTB-ITEM# 180-1
PRIME/SUPPLEMENT Prime

DATE #####

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Additional Project Coordi			Additional Project Mgmt -			Additional Land Acquisitio			Additional Pre-Final Submit			BNSF Retaining Wall Modificat		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer 5 (E5)	70.00	44.0	4.77%	3.34	20	10.31%	7.22	12	12.00%	8.40	4	25.00%	17.50	4	3.45%	2.41			
Engineer 4 (E4)	70.00	100.0	10.85%	7.59	38	19.59%	13.71							20	17.24%	12.07	10	16.13%	11.29
Engineer 3 (E3)	59.60	300.0	32.54%	19.39	76	39.18%	23.35	88	88.00%	52.45	8	50.00%	29.80	32	27.59%	16.44	24	38.71%	23.07
Engineer 2 (E2)	46.50	228.0	24.73%	11.50	40	20.62%	9.59							28	24.14%	11.22	28	45.16%	21.00
Engineer 1 (E1)	35.55	154.0	16.70%	5.94							4	25.00%	8.89	20	17.24%	6.13			
Technician 3 (T3)	36.65	58.0	6.29%	2.31	20	10.31%	3.78							6	5.17%	1.90			
Technician 1 (T1)	20.71	38.0	4.12%	0.85										6	5.17%	1.07			
Administrative 2 (A2)	38.21	0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
TOTALS		922.0	100%	\$50.92	194.0	100.00%	\$57.64	100.0	100%	\$60.85	16.0	100%	\$56.19	116.0	100%	\$51.25	62.0	100%	\$55.36

EXHIBIT C

COST ESTIMATE OF SUBCONSULTANT SERVICES

JORGENSEN AND ASSOCIATES, INC.



JORGENSEN & ASSOCIATES, INC.

LAND SURVEYORS

Est. 1990

July 14, 2020

Mr. Mathew J. Smith, P.E.
TranSystems Corporation
1475 East Woodfield Road
Suite 600
Schaumburg, Illinois 60173-5440

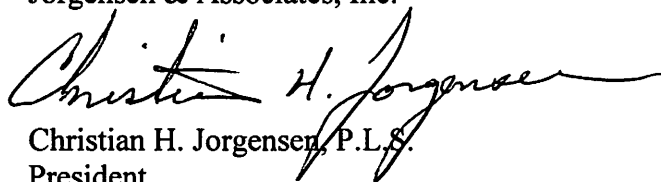
Re: City of Naperville – North Aurora Road Survey Proposal

Dear Mr. Smith:

Enclosed, please find our proposal to prepare an additional parcel and legal description to the existing statutory plat of highways for the referenced project. Our proposal is based on your email of June 26th and our telephone conversations.

Should you have any questions, comments or require any further information concerning our proposal, please feel free to call me at (847)356-3371.

Respectfully submitted,
Jorgensen & Associates, Inc.



Christian H. Jorgensen, P.L.S.
President

CHJ/pt

Enclosures

E:\Transystems\Naperville\North Aurora Rd\Additional\2nd Addition\Letter

Route: North Aurora Road
Section: @ Frontenac Court
County: DuPage
Job No.:

Exhibit "A"

Payroll Burden & Fringe Costs

	<u>% of Direct Productive Payroll</u>
Federal Insurance Contributions Act _____	11.81%
State Unemployment Compensation _____	0.47%
Federal Unemployment Compensation _____	0.11%
Workmen's Compensation Insurance _____	0.95%
Paid Holidays, Vacation, Sick Leave, Personal Leave _____	9.83%
Bonus _____	11.78%
Pension _____	0.98%
Group Insurance _____	<u>37.83%</u>
Total Payroll Burden & Fringe Costs	73.76%

Route: North Aurora Road
Section: @ Frontenac Court
County: DuPage
Job No.:

Exhibit "B"

Overhead and Indirect Costs

	<u>% of Direct Productive Payroll</u>
Business Insurance _____	4.72%
Depreciation _____	11.00%
Indirect wages and salaries _____	42.74%
Reproductive and printing costs _____	0.23%
Office Supplies _____	2.99%
Computer Costs _____	2.19%
Professional Fees _____	1.94%
Telephone _____	1.89%
Fees, license & dues _____	0.88%
Repairs and maintenance _____	1.77%
Business space rent _____	4.94%
Facilities - capital _____	0.72%
Travel - Meals _____	0.26%
Survey Supplies _____	2.60%
Automobile/travel expense _____	0.41%
Miscellaneous Expense _____	0.76%
State Income Tax _____	1.67%
Postage _____	0.20%
Educational & Professional Registrations _____	0.23%
Gain on Sale of Asset _____	<u>(1.33%)</u>
 Total Overhead	 80.81%

**PAYROLL ESCALATION TABLE
FIXED RAISES**

FIRM NAME Jorgensen & Associates, Inc.
PRIME/SUPPLEMENT Prime

DATE 07/14/20
PTB NO. _____

CONTRACT TERM 12 MONTHS
START DATE 7/15/2020
RAISE DATE 1/15/2021

OVERHEAD RATE 154.57%
COMPLEXITY FACTOR _____
% OF RAISE 0.00%

ESCALATION PER YEAR

7/15/2020 - 1/15/2021

1/16/2021 - 7/15/2021

6
12

6
12

= 50.00%
= 1.0000

50.00%

The total escalation for this project would be:

0.00%

AVERAGE HOURLY PROJECT RATES

FIRM Jorgensen & Associates, Inc.
 PSB _____
 PRIME/SUPPLEMENT Prime

DATE 07/14/20

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			(1) Pre-Survey			(3) Project Survey Plan			(4) First Submittal Plat of Hwys. & Descriptions			(5) Survey (Field)			(6) Survey (Office)		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Supervisor, P.L.S.	43.00	18	34.62%	14.88							2	9.09%	3.91				6	100.00%	43.00
Survey Party Chief, P.L.S.	29.50	4	7.69%	2.27										4	50.00%	14.75			
Instrument Operator	23.00	4	7.69%	1.77										4	50.00%	11.50			
Cadd Supervisor	33.00	25	48.08%	15.87	1	100.00%	33.00	1	100.00%	33.00	20	90.91%	30.00						
Administrative Assistant	23.25	1	1.92%	0.45															
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
TOTALS		52	100%	\$35.24	1	100.00%	\$33.00	1	100%	\$33.00	22	100%	\$33.91	8	100%	\$26.25	6	100%	\$43.00

AVERAGE HOURLY PROJECT RATES

FIRM Jorgensen & Associates, Inc.
PSB _____
PRIME/SUPPLEMENT Prime

DATE 07/14/20
SHEET 2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	(7) Final Submittal Plat of Hwys. & Descriptions			(8) QC/QA											
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Supervisor, P.L.S.	43.00	1	33.33%	14.33	9	81.82%	35.18									
Survey Party Chief, P.L.S.	29.50															
Instrument Operator	23.00															
Cadd Supervisor	33.00	1	33.33%	11.00	2	18.18%	6.00									
Administrative Assistant	23.25	1	33.33%	7.75												
TOTALS		3	100%	\$33.08	11	100%	\$41.18	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

3.	Project Survey Plan		$\pm 2,640'$ /sheet-1 sheet	
a.	Alignment info)		
)		
b.	Existing R.O.W. info)		
)		
c.	Land line data)		
d.	Subdivision data)	1 hour/sheet x 1 =	<u>1 MH</u>
			Sub-total Item #3	1 MH
4.	First Submittal Plat of Highways & Descriptions			
a.	Ownership info)		
)		
b.	Total holding boundaries)		
)		
c.	Total holding area listing)		1 MH
)		
d.	Private survey info)		
)		
e.	Deed calculated closures)		
f.	Layout and drafting		$\pm 800'$ /sht. ± 2 sheets	
	18 hours x 1 man =			18 MH
	Revise existing sheets		3 sheets =	2 MH
g.	Legal descriptions		1 description	<u>1 MH</u>
			Sub-total Item #4	22 MH
5.	Survey (Field)			
a.	Monument center line alignments			0 MH
b.	Measure existing R.O.W. & property lines			0 MH
c.	Appraisal topography			
	4 hours x 2 men =			4 MH
d.	Monument Proposed right of way			<u>0 MH</u>
			Sub-total Item #5	8 MH

6.	Survey (Office)	
a.	Compute traverse	0 MH
b.	Compute existing R.O.W. & property lines 2 hours x 1 man =	2 MH
c.	Compute center line alignments 2 hours x 1 man =	2 MH
d.	Compute proposed easement 2 hours x 1 man =	<u>2 MH</u>
	Sub-total Item #6	6 MH
7.	Final Submittal Plat of Highways & Descriptions	
a.	Final drafting \pm 5 sheets 1 hour x 1 man =	1 MH
b.	Final descriptions 1 description	1 MH
c.	Assembly of final papers	<u>1 MH</u>
	Sub-total Item #7	3 MH
8.	QC/QA	
a.	Check preliminary plats 5 sheets	8 MH
b.	Check preliminary legal descriptions 1 legal description	1 MH
c.	Check final plats 5 sheets	1 MH
d.	Check final legal descriptions 1 legal description	<u>1 MH</u>
	Total All Items	52 MH

Route: North Aurora Road
Section: @ Frontenac Court
County: DuPage
Job No.:

**Breakdown of
In House Direct Costs**

Item

5. Survey (Field)

a. Trips to project site – 1 each
± 120 miles/trip x 1 trip = ± 120 miles
± 120 miles @ \$0.57/mile = \$ 68.40

7. Final Submittal Plat of Highways & Descriptions

a. Plat of Highways Mylars
5 sheets @ \$5.00/sheet = \$ 25.00

b. Deliver Final Papers to District One office
± 60 miles/trip x 1 trip = ± 60 miles
± 60 miles @ \$0.57/mile = \$ 34.20

Total All Items \$ 127.60

Route: North Aurora Road
Section: @ Frontenac Court
County: DuPage
Job No.:

**Breakdown of
Services By Others**

Item

1. Pre-Survey Phase

a. Commitments for Title Insurance	
1 Commitment @ \$950.00 each =	\$ 950.00

MATHEWSON RIGHT OF WAY COMPANY

SECOND CONTRACT SUPPLEMENT

**AGREEMENT FOR
RIGHT OF WAY CONSULTING SERVICES**

**City of Naperville / TranSystems
North Aurora Road**

AGREEMENT between Mathewson Right of Way Company (MROWCO) whose address is 30 North LaSalle Street, Suite 2400, Chicago, Illinois 60602 and TranSystems Corporation (TRANSYSTEMS), whose address is 1475 East Woodfield Road, Suite 600, Schaumburg, Illinois 60173.

MROWCO shall provide to TRANSYSTEMS, on behalf of City of Naperville (CITY), consulting services for the acquisition of right of way for the North Aurora Road (PROJECT).

The PROJECT shall consist of the acquisition of approximately 10 parcels.

MROWCO shall perform the following services:

1. Appraisal
2. Appraisal Review
3. Negotiation
4. Closing Costs
5. Title Commitments

All of the above are described as specified in Exhibit A: Scope of Services attached hereto.

TRANSYSTEMS shall compensate MROWCO for the services provided on behalf of the CITY under this AGREEMENT as provided in Exhibit B: Compensation attached hereto. The original amount of compensation authorized by this agreement was not to exceed \$58,375.00. The first contract supplement authorized by this agreement was not to exceed \$13,975.00. The total amount of compensation authorized by this second contract supplement is not to exceed \$35,225.00.

Exhibit C: Terms and Conditions is attached hereto and made a part hereof.

Submitted this 22nd day of July, 2020.

Accepted this ___ day of _____, 20__.

Mathewson Right of Way Company

TranSystems Corporation

By: _____

Mark D. Mathewson
Vice President

By: _____

EXHIBIT A: SCOPE OF SERVICES

MROWCO agrees to perform, at the direction of TRANSYSTEMS, the following services:

1. Appraisal
2. Appraisal Review
3. Negotiation
4. Closing Costs
5. Title Commitments

All services called for in this AGREEMENT will be conducted by an individual or individuals whose qualifications have been approved by the Illinois Department of Transportation, when applicable.

All services within the scope of this AGREEMENT shall be performed, where applicable, in accordance with the Land Acquisition Policies and Procedures Manual, hereinafter referred to as the LAPPM.

APPRAISALS

Determinations of fair market value performed by the Appraiser shall be in accordance with the LAPPM.

The Appraiser shall make a detailed inspection of the properties and make such investigations and studies as are necessary to derive sound conclusions for the preparation of appraisal reports.

Valuations shall be prepared as outlined in the LAPPM. The format to be used shall be one of the following types as described in the LAPPM:

- Non-Complex Appraisal Report
- Complex Appraisal Report

The Appraiser is to determine which type of appraisal format should be used for each parcel and obtain the CITY'S concurrence. MROWCO shall provide a copy of an appraisal of each parcel together with Improvement Disposition Values form to be submitted to the CITY for approval.

Property needed shall be acquired by fee simple, dedication, permanent easement, temporary use permit, or temporary easement as determined and shown on the right of way plan furnished by the CITY.

It may be necessary for a completed appraisal to be updated for condemnation purposes or revised due to a change in the ROW plat or due to new information provided by the CITY. These updates or revisions will be assigned to the Appraiser in a separate work order as the need arises. An Appraiser's revision of the appraisal due to the Review Appraiser's comments or corrections does not constitute an update or revision that would necessitate a separate work order.

On parcels that require the acquisition of a residence, it may be necessary for the Appraiser to perform an additional analysis to determine an allocated value for the residence and home site as separate from the whole parcel to be acquired. This would be needed for relocation purposes and is not to be included in the appraisal report. The cost for the additional appraisal analysis will be established in the work order for that appraisal.

The Appraiser shall prepare a comparable sales brochure in accordance with the LAPPM for each project and as directed by the CITY.

The Appraiser shall prepare grids that compare comparable sales to the subject parcel, where appropriate.

The Appraiser shall include land and improvement allocations in the comparable sales data section of all appraisals.

The Non-Complex Appraisal Report and Complex Appraisal Report, and an updated or revised appraisal report, shall be deemed complete when an acceptable appraisal report is submitted by MROWCO and approved by the CITY.

Appearances in court and/or pretrial conferences, which include depositions and preparation time for depositions and court, may be required for the appraisal services requested herein. The time spent at such appearance or appearances shall be made upon request of the CITY or its trial counsel and shall be paid for as specified in Exhibit B.

Appraiser may be asked to perform a Cost Analysis for budgetary purposes.

Appraiser may be asked to provide a Comparable Sales Book as an on-going assignment independent of individual appraisals.

MROWCO staff may assist in the preparation of appraisal work.

REVIEW APPRAISALS

All appraisals must be reviewed and certified by a Review Appraiser. Appraisal reviews performed by the Review Appraiser must be in accordance with the LAPPM. It is the Review Appraiser's responsibility to ensure that all items affecting the value of the property have been considered in the appraisal. A study of the comparable sales brochure is considered as part of the appraisal review.

The Review Appraiser must complete an Appraisal Review Certification for all appraisal reviews.

It may be necessary for a completed appraisal review to be updated due to a change in the ROW plat or due to new information provided by the CITY. These updates or revisions will be assigned to MROWCO in a separate work order as the need arises. A Review Appraiser's second or other subsequent review of an appraisal, rewritten by the appraiser due to the Review

Appraiser's comments or corrections, does not constitute an update or revision to the appraisal review that would necessitate a separate work order.

The Appraisal Review for the Non-Complex Appraisal Report and Complex Appraisal Report, and an updated or revised appraisal review, shall be deemed complete when an acceptable Appraisal Review is submitted by MROWCO and approved by the CITY.

Appearances in court and/or pretrial conferences, which include depositions, may be required for the review appraisal services requested herein. The time spent at such appearance or appearances shall be made upon request of the CITY or its trial counsel and shall be paid for as specified in Exhibit B.

The Review Appraiser may be asked to perform a Cost Analysis for budgetary purposes.

The Review Appraiser may be asked to review a Comparable Sales Book as an on-going assignment independent of individual appraisals.

MROWCO staff may assist in the preparation of review appraisal work.

NEGOTIATIONS

The Negotiator is responsible for all land acquisition negotiations conducted under this AGREEMENT. Negotiations shall be in accordance with the LAPPM. The negotiator shall:

- Be the CITY's representative to the property owner.
- Work with the Project Manager to receive and understand the scope of work for each work order and the associated deadlines/time frames involved.
- Establish schedules for each activity and report the progress to the Project Manager to assure a quality product.
- Assure that the deadlines assigned are met.
- Maintain channels of communication.
- Provide a quality product.

Before the initiation of negotiations for each parcel, the CITY must approve the amount of just compensation. The Negotiator shall fully document on an ongoing basis all efforts made to acquire the parcel in the Negotiator's Report. Said report shall be available to the CITY as reasonably requested

The Negotiator may recommend administrative settlements as outlined in the LAPPM. Administrative settlements will be determined by the CITY on an individual parcel basis.

In the event MROWCO, after having made every reasonable effort to negotiate with the owner of a parcel, is unable to obtain a settlement on the approved appraisal amount, MROWCO shall prepare and submit a written report summarizing the progress of negotiations to date together with a copy of MROWCO'S Negotiator's Report completed to date with the names and addresses of all interested parties. MROWCO'S written report shall also include its

recommendation for further procedure towards acquiring the parcel. The CITY may elect to prepare and forward a Final Offer letter (with copy to MROWCO) to the owner of the parcel and thereafter refer the matter to the State's Attorney's Office to proceed with preparation of a condemnation petition. In any case, the CITY reserves the right to require MROWCO to make additional negotiation contacts with the parcel owner up until the actual date of filing a petition to condemn the parcel.

The negotiation for a parcel will be deemed complete when all required documents necessary to obtain title approval are submitted and approved by the CITY. If a negotiated settlement cannot be reached, the negotiation for a parcel will be deemed complete when the documentation for eminent domain action is submitted and approved by the CITY, and the complaint is filed.

If requested to do so, MROWCO shall provide title review and an attorney's approval letter provided by Mathewson & Mathewson, P.C. for no additional cost.

Each Updated Negotiation or Revised Negotiation shall be paid for at the per parcel fee as specified in Exhibit B. An updated negotiation or revised negotiation is defined as additional negotiation work requested by the CITY due to new parcel information supplied by the CITY to MROWCO after first contact with the property owner. New parcel information could include, but is not limited to, significant changes in the area of the acquisition; updated (and modified) appraisal amounts that require revised negotiation documents; updated (and modified) title information that requires negotiations with additional property owner(s). Any additional work required to obtain title approval does not constitute an update or revision that would necessitate a separate work order.

Where the acquisition of a parcel involves the displacement of an owner or tenant occupant from a residence or any personal property thereof, MROWCO shall coordinate the offering of relocation assistance any payments to each displaced owner-occupant simultaneously with initiation of negotiations and to each displaced tenant-occupant within seven (7) days following initiation of negotiations for the parcel.

Appearances in court and/or pretrial conferences, which include depositions, may be required for the negotiation services requested herein. The time spent at such appearance or appearances shall be made upon request of the CITY or its trial counsel and shall be paid for as specified in Exhibit B.

EXHIBIT B: COMPENSATION

The services to be provided by MROWCO under this agreement shall be assigned and compensated as provided in the table below.

This SUPPLEMENT to the AGREEMENT contains an additional one (1) parcel, increasing the scope to contain ten (10) parcels, and includes the following services and the respective fees:

PIN	Negotiation Fee	Appraisal Fee	Appraisal Review Fee	Closing Costs	Total
TBD (BNSF RR)	\$5,000.00	\$3,150.00	\$1,575.00	\$2,000.00	\$11,725.00
Totals:	\$5,000.00	\$3,150.00	\$1,575.00	\$2,000.00	\$11,725.00

*MROWCO will assist with the construction & maintenance agreement with Burlington Northern Santa Fe Railway.

The SUPPLEMENT also includes extension of the temporary easements acquired for Parcels 0001 – 0004 and assumes Parcel 0004 will be donated. MROWCO will provide title commitments as required for the temporary easement extensions.

PIN	Negotiation Fee	Appraisal Fee	Appraisal Review Fee	Closing Costs & Title Commitments	Total
07-17-113-022	\$2,000.00	\$2,500.00	\$1,000.00	\$1,250.00	\$6,750.00
07-17-200-005	\$2,000.00	\$2,500.00	\$1,000.00	\$1,250.00	\$6,750.00
07-17-200-006	\$2,000.00	\$2,500.00	\$1,000.00	\$1,250.00	\$6,750.00
07-17-202-005	\$2,000.00			\$1,250.00	\$3,250.00
Totals:	\$8,000.00	\$7,500.00	\$3,000.00	\$5,000.00	\$23,500.00

The sum of all services shall not exceed \$35,225.00.

MROWCO shall advance funds to cover direct expenses related to the project. These expenses shall include but not be limited to, title company expenses for title research, title commitments, title later dates, title insurance fees, document copy fees, recording fees, partial release fees, land trustee fees, escrow fees, shipping and the like. TRANSYSTEMS shall reimburse MROWCO for the actual cost of the direct expenses.

The fees for services shall include all transportation, food, lodging, telephone, or any other operating expenses incurred by MROWCO in the performance thereof.

EXHIBIT C: TERMS AND CONDITIONS

1. Parcels

The CITY shall provide MROWCO with relevant plats of highways, legal descriptions and construction plans for each parcel to be acquired. Each parcel shall consist of one or more basic parcels of land required as right of way for highway purposes to be acquired in fee simple title, and such other easements (temporary or permanent) for uses incidental to construction of the highway but which are not considered as part of the highway right of way, all of which are under the same ownership involving a complete contiguous parcel.

2. Termination

TRANSYSTEMS may terminate this AGREEMENT at any time and for any cause by a notice in writing to MROWCO. In the event of such termination, payment will be made to MROWCO for any completed services. Services in the process of completion shall be compensated for on an equitable basis and all incomplete parcel data collected in connection with them shall be turned over and become the property of the CITY; provided, however, this AGREEMENT be terminated solely because the progress or quality of work is unsatisfactory as determined by TRANSYSTEMS accepting this AGREEMENT, then no payment will be made or demanded by MROWCO for any services which have not been completed and delivered to the CITY prior to the date of said termination.

3. Project Materials

- a. It is understood and agreed that the CITY shall be considered the sole owner of all plats, legal descriptions, ownership and occupancy records, forms of deeds and easements, title reports, and any and all other material furnished, prepared or obtained by MROWCO during the course of providing its services for the parcel and shall be maintained in a separate parcel file for the parcel assigned. MROWCO will provide a copy of the original file of the parcel during the course of the project to CITY. MROWCO will provide a timely update of all documents that pertain to the parcel during the course of the project. Upon completion of the project the original file will be delivered to CITY. Upon termination of this AGREEMENT for any cause or upon completion of the acquisition of the parcel or upon request of CITY when acquisition is determined to be by Eminent Domain proceedings, MROWCO's parcel file shall be delivered to the CITY. MROWCO'S parcel files shall be available for inspection or review of its contents by CITY, Illinois Department of Transportation or Federal Highway Administration personnel at any time.
- b. Electronic copies shall be provided unless CITY requests to the contrary.

4. **Records Preservation**

MROWCO shall maintain, for a minimum of five years after the completion of the AGREEMENT, adequate books, records, and supporting documents to verify the amount, recipients, and uses of all disbursements of funds passing in conjunction with the AGREEMENT; the AGREEMENT and all books, records, and supporting documents related to the AGREEMENT shall be available for review and audit by the CITY Auditor; and the MROWCO agrees to cooperate fully with any audit conducted by the Auditor and to provide full access to all relevant materials. Failure to maintain the books, records, and supporting documents required by this Section shall establish a presumption in favor of the CITY for the recovery of any funds paid by the CITY under the AGREEMENT for which adequate books, records, and supporting documentation are not available to support their purported disbursement.

5. **Consultant Certifications and Representations**

- a. MROWCO certifies that MROWCO has read the certifications and assurances described in this AGREEMENT and in the Standard Provisions, and certifies that Mark D. Mathewson's signature on the AGREEMENT constitutes an endorsement and execution of each certification and assurance as though each were individually signed, and made on behalf of the contracting entity and its officers and each individual authorized to do work for the CITY under this AGREEMENT.
- b. MROWCO under penalties of perjury, certifies that 20-3870734 is its correct Federal Taxpayer Identification number. It is doing business as a Corporation.
- c. MROWCO certifies that it is not in default on an educational loan.
- d. MROWCO certifies that it is not barred from bidding on State of Illinois AGREEMENTs because of violations of State law regarding bid rigging or rotating. 720 ILCS 5/33E-3, 33E-4.
- e. MROWCO certifies that it will not engage in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in the performance of this AGREEMENT, or if a corporation, partnership, or other entity with 25 or more employees, have completed and signed a "DRUG-FREE WORKPLACE CERTIFICATION."
- f. MROWCO, under penalty or perjury under the laws of the United States, certifies that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds:
 - i. is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;

- ii. has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three years;
 - iii. does not have a proposed debarment pending; and
 - iv. has not been indicted, convicted, or the subject of a civil judgment by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.
- g. MROWCO certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois nor has MROWCO made admission of guilt of such conduct which is a matter of record, nor has any official, officer, agent, or employee of this company been so convicted nor made such an admission.
- h. MROWCO is hereby notified that the CITY, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and Title 49, Code of Federal Regulations, Part 21, issued pursuant to such Act, will affirmatively insure that any AGREEMENT entered into pursuant to this AGREEMENT will be awarded without discrimination on the grounds of race, color, or national origin.
- i. MROWCO warrants and represents that it is fully qualified to provide the services hereunder provided for in this Agreement.

6. **Disclosures**

- a. MROWCO hereby certifies that if any conflict of interest arises, in any of the parcels subsequently assigned to it, it will immediately, within 5 business days of receipt, inform the CITY accepting this AGREEMENT and return all material furnished to him for reassignment to others.
- b. It is understood and agreed that Appendices A and B shall be a part of this AGREEMENT and MROWCO agrees to be bound by the terms and provisions contained herein.
- c. MROWCO warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for it, to solicit or secure this AGREEMENT, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for it, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the AGREEMENT. For breach or violation of this warranty, the CITY shall have the right to annul this AGREEMENT without liability.

7. Indemnity

MROWCO will indemnify and hold harmless the CITY from all claims and liability due to activities of himself, its agents, and its employees and will comply with all Federal, State, and local laws and ordinances.

8. Insurance

MROWCO shall obtain Commercial General Liability in a broad form, to include but not be limited to, coverage for the following where exposure exists: Bodily Injury and Property Damage, Premises/Operations, Independent contractors, Products/Completed Operations, Personal Injury, Professional Liability and contractual Liability; limits of liability not less than: \$1,000,000.00 per occurrence and \$2,000,000.00 in the aggregate.

Business Auto Liability to include, but not be limited to, coverage for the following where exposure exists: Owned Vehicles, Hired and Non-Owned Vehicles and Employee Non-Ownership; limits of liability not less than: \$1,000,000.00 per occurrence, combined single limit for Bodily Injury and Property Damage Liability. Workers' Compensation Insurance will cover all employees that meet statutory limit in compliance with applicable state and federal laws. The coverage must also include employer's liability with minimum limits of \$100,000.00 for each incident.

TRANSYSTEMS shall be provided with Certificates of Insurance evidencing the above required insurance prior to the commencement of services and thereafter with the certificates evidencing renewals or changes to said policies of insurance at least fifteen (15) days prior to the expiration or cancellation of any such policies. TRANSYSTEMS shall be named as additional insured on all liability policies, and MROWCO acknowledges that any insurance maintained by TRANSYSTEMS shall apply in excess of, and not contribute to, insurance provided by MROWCO. The contractual liability arising out of the AGREEMENT shall be acknowledged on the Certificate of Insurance by the insurance company.

TRANSYSTEMS shall be provided with thirty (30) day prior notice, in writing, of Notice of Cancellation or material change and said notification requirements shall be stated on the Certificate of Insurance.

9. Breach

Nothing herein shall be construed as prohibiting the parties to the AGREEMENT from pursuing any other remedies available to the parties for such breach or threatened breach, including recovery of damages from the parties. This provision shall survive any termination of this AGREEMENT.

10. Governing Law

Terms of this AGREEMENT will be governed by Illinois law.

11. Transferability

MROWCO agrees that this AGREEMENT or any part thereof will not be sublet or transferred without the written consent of the CITY accepting this AGREEMENT.

12. Execution of AGREEMENT

In the event this AGREEMENT is executed, it shall constitute a contract as of the date it is approved by TRANSYSTEMS or its authorized representative and shall be binding on MROWCO, its executors, administrators, successors or assigns, as may be applicable.

WANG ENGINEERING

September 29, 2020

Mr. Joe R. Mickow, P.E., S.E.

Transystems

1475 East Woodfield Road, Suite 600
Schaumburg, IL 60173

Re: Proposal for Geotechnical Engineering Services
North Aurora Road BSNF Retaining Wall and Wetland Investigation
Naperville, Illinois
Wang No. P200910

Dear Mr. Mickow:

Wang Engineering, Inc. (Wang) is pleased to present our proposal to provide geotechnical drilling, laboratory testing, engineering analyses, and recommendations for a new retaining wall as part of the North Aurora Road Project in Naperville, Illinois.

SCOPE OF WORK

Wang understands the BNSF has identified a need for an additional retaining wall on the North Aurora Road Project, as well as an area of concern along the shoofly tracks that will pass through an existing wetland.

There is an existing sheet pile retaining wall along the west side of the BNSF lead track (that spurs to the Eola yard to the West), adjacent to a wetland area. The proposed lead track will be raised, re-aligned, and extended approximately 180 feet. The existing wall will have a cap added to retain the new embankment. The maximum exposed height of the existing wall segment will be about 8.5 feet, and the new segment maximum height will be 6.5 feet, similar to the existing plans but with an added concrete cap.

North of Aurora Road, along the east side of the existing Wisconsin Central Rail embankment, the proposed shoofly widening will overlap with an existing, 500-foot long wetland. This wetland requires investigation to determine if remedial treatment will be necessary.

Soil borings will be taken to characterize the subsurface soil and groundwater conditions and provide geotechnical recommendations for the design and construction of both the proposed retaining wall and the embankment widening. The retaining wall will be investigated by advancing 5 borings to 30 feet below the ground surface, while the wetland area will include an additional 5 borings to 30 feet.

To accomplish the project objectives, Wang expects to complete the following tasks:

Geotechnical Drilling: Wang will provide equipment, labor, and associated materials to drill and sample 10 borings to 30 feet below ground surface (bgs). Soil borings will be taken at 2.5 feet intervals to 30 feet, 5.0 feet intervals thereafter to completion according to ASTM D-1586, "Penetration Test and Split-Barrel Sampling of Soils". The borings will be backfilled with soil cuttings and bentonite chips immediately after completion.

Field Supervision: Prior to drilling, Wang will layout the borings in the field and clear the existing utilities through the JULIE one-call system and the BNSF for the retaining wall area. A field engineer will monitor drilling activities, maintain daily field notes and boring logs, as well as receive, classify, and prepare soil samples for laboratory analysis. Soil samples will be classified in accordance with the Unified Soil Classification System (USCS). The field engineer will perform penetrometer or Rimac unconfined compressive strength tests on cohesive soil samples and observe the groundwater level in boreholes. Wang will survey the boring locations with a mapping-grade GPS.

Laboratory Testing: After the completion of the drilling phase, the soil samples will be transported to our laboratory in Lombard, Illinois. The soil testing program will include natural moisture contents as well as Atterberg limits, particle size, and organic content analyses.

Engineering Analysis and Recommendations: Geotechnical reports will be prepared and will include a detailed description of soil and groundwater conditions, field and laboratory testing procedures and results, and geotechnical engineering analyses. The recommendations for the retaining wall will be included in a full report that can be submitted to, and reviewed by, the BNSF. The wetland area will be prepared as a letter report addendum to the Structure Geotechnical Report prepared by Wang for the Wisconsin Central Railroad Bridge over Aurora Road. The reports will include site location maps, boring location plans, and boring logs.

SCHEDULING

Wang will start the project expediently upon prior authorization to proceed. We anticipate that, after utility clearance, 21 working days will be necessary to complete the drilling phase of the project. The laboratory testing program will be completed within two weeks after the field activity completion. The geotechnical report will be finalized two weeks after the completion of the testing program.

ESTIMATED COST AND ASSUMPTIONS

Wang proposes to provide the above tasks on time and expense basis according to the attached cost estimate. Wang would not exceed the estimated upper limit without the Client approval. The estimate is

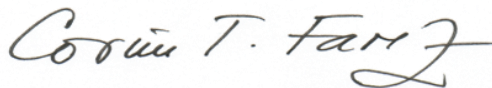
divided into two sections. The first section includes costs that will complete our original contract amount, while the second section includes cost that will require supplemental budget. The supplemental budget items include drilling coordination, anticipated permit fees along the railroad and ComEd, additional railroad liability insurance costs, and flagging costs. In preparing the cost estimate we have assumed the following conditions:

- The site is accessible to a truck mounted drill rig;
- Traffic control will not be necessary and is not included in the cost estimate;
- Railroad permitting, liability insurance, and flagging costs are included; and
- Costs associated with obtaining a right-of-entry agreement with ComEd for access to the boring locations have been included.

Wang Engineering, Inc. appreciates the opportunity to present this proposal. We look forward to working with you on this project. If you have questions, or if you require additional information, please contact us at (630) 953-9928.

Sincerely,

WANG ENGINEERING, INC.

A handwritten signature in black ink that reads 'Corina T. Farez'.

Corina T. Farez, P.E., P.G.
Vice President

A handwritten signature in black ink that reads 'Nathan Davis'.

Nathan Davis
Engineering Geologist

Name: North Aurora Road Retaining Wall and Wetland, Complete Original Task
Client: Transystems Corporation
Scope: 10 Borings to 30 feet bgs

Date: 09/29/2020
Wang No.: P200910

Task Description	Units	Unit Price	Extended Cost
DRILLING, SAMPLING & INSITU TESTING			
Drilling Coordination, Utilities Clearance, Site Access, Permitting	0.0 Hours	\$112.00 /Hour	\$0.00
Mobilization (ATV mounted)	0	\$1,440.00 /Each	\$0.00
Stand-by Hourly Rate	0.0 Hours	\$400.00 /Hour	\$0.00
<u>Drilling & Sampling - Hourly (SPT, Penetrometer, Rimac, Visual Classification Included)</u>			
Two-man crew - normal working hrs	32.0 Hours	\$400.00 /Hour	\$12,800.00
Two-man crew - overtime (2 hrs per day)	8.0 Hours	\$450.00 /Hour	\$3,600.00
Two-man crew and field supervisor- normal working hrs	0.0 Hours	\$495.00 /Hour	\$0.00
Two-man crew and field supervisor - overtime (2 hrs per day)	0.0 Hours	\$543.00 /Hour	\$0.00
<u>Hand Augering, Pavement/ Deck Coring & Testing</u>			
Two-man crew - normal working hrs	0.0 Hours	\$400.00 /Hour	\$0.00
Two-man crew - overtime (2 hrs per day)	0.0 Hours	\$450.00 /Hour	\$0.00
Asbestos content testing on deck cores	0 Tests	\$185.00 /Test	\$0.00
<u>Surveying of Boring Locations (Two-man crew)</u>	0.0 Hours	\$230.00 /Hour	\$0.00
<u>Monitoring Well or Inclinometer Installation</u>			
<u>2.0- or 4-inch monitoring wells</u>			
Two-man crew - normal working hours	0.0 Hours	\$400.00 /Hour	\$0.00
Two-man crew - overtime (2 hours per day)	0.0 Hours	\$450.00 /Hour	\$0.00
<u>Inclinometer casing instalation</u>			
Two-man drilling crew - normal working hours	0.0 Hours	\$400.00 /Hour	\$0.00
Two-man crew - overtime (2 hours per day)	0.0 Hours	\$450.00 /Hour	\$0.00
<u>Other items - at cost</u>			
55-gallon DOT containment drums	0.0 Drums	\$45.00 /Drum	\$0.00
Digital datalogger and barometer	0.0 Each	\$1,450.00 /Each	\$0.00
Well and Casing Materials	At Cost		\$0.00
<u>Boring Location Accessibility, Railroad Fees, State/County/Municipal Fees, Barge Drilling</u>			
Private utility determination	At Cost		\$0.00
Tree clearance	At Cost		\$0.00
Guardrail removal and replacement	At Cost		\$0.00
ComEd ROE Permitting			\$0.00
Railroad permitting			\$0.00
Railroad Drawing Review			\$0.00
Compensation for use of property			\$0.00
Railroad protective insurance	At Cost		\$0.00
Railroad flagman	2 Days	\$1,200.00 /Day	\$0.00
Pavement opening permit	At Cost		\$0.00
State/municipal insurance and bonding	At Cost		\$0.00
Barge drilling on a navigable waterway	At Cost		\$0.00
			\$16,400.00

Name: North Aurora Road Retaining Wall and Wetland, Complete Original Task
Client: Transystems Corporation
Scope: 10 Borings to 30 feet bgs

Date: 09/29/2020
Wang No.: P200910

Task Description			Units	Unit Price	Extended Cost
LABORATORY TESTING					
T265	D2216	Water Content	100 Tests	\$10.50 /Test	\$1,050.00
--	D7263	Unit Weight (Density)	0 Tests	\$38.00 /Test	\$0.00
T100	D854	Specific Gravity	0 Tests	\$69.00 /Test	\$0.00
--	D4972	pH of Soil	0 Tests	\$62.00 /Test	\$0.00
T267	D2974	Organic Content by LOI	0 Tests	\$63.00 /Test	\$0.00
T194	--	Organic Content by Wet Combustion	4 Tests	\$140.00 /Test	\$560.00
<u>Particle Size Distribution</u>					
T88	D422	Sieve Analysis	0 Tests	\$80.00 /Test	\$0.00
T88	D422	Combined Sieve and Hydrometer	4 Tests	\$129.00 /Test	\$516.00
--	D1140	Percent Finer than No. 200 Sieve	0 Tests	\$53.00 /Test	\$0.00
<u>Atterberg Limits</u>					
T89, T90	D4318	Liquid and Plastic Limits	4 Tests	\$80.00 /Test	\$320.00
T92	D427	Shrinkage Factors	0 Tests	\$95.00 /Test	\$0.00
					\$2,446.00

FIELD VEHICLES & MILEAGE					
<u>Field Vehicle</u>					
		Field Vehicle Mileage (>100 Miles per Day)	0.0 Miles	\$0.575 /Mile	\$0.00
		Field Vehicle Daily (<100 Miles per Day)	5 Days	\$65.00 /Day	\$325.00
					\$325.00

ENGINEERING, REPORTING & MANAGEMENT					
<u>Desk Study, Site Access & Permitting (including ComEd)</u>					
		Senior Engineer	0.0 Hours	\$169.78 /Hour	\$0.00
		Project Engineer/Project Geologist	30.0 Hours	\$113.78 /Hour	\$3,413.40
		Assistant Engineer/Assistant Geologist	0.0 Hours	\$74.61 /Hour	\$0.00
<u>Field Activities</u>					
		Project Engineer/Project Geologist	6.0 Hours	\$113.78 /Hour	\$682.68
		Assistant Engineer/Assistant Geologist	35.0 Hours	\$74.61 /Hour	\$2,611.35
<u>Laboratory Testing</u>					
		Project Engineer/Project Geologist	0.0 Hours	\$113.78 /Hour	\$0.00
		Laboratory Technician	0.0 Hours	\$79.70 /Hour	\$0.00
<u>Data Analyses & Engineering</u>					
		Senior Engineer	6.0 Hours	\$169.78 /Hour	\$1,018.68
		Project Engineer/Project Geologist	16.0 Hours	\$113.78 /Hour	\$1,820.48
		Assistant Engineer/Assistant Geologist	8.0 Hours	\$74.61 /Hour	\$596.88
<u>Report Preparation</u>					
		Senior Engineer	8.0 Hours	\$169.78 /Hour	\$1,358.24
		Project Engineer/Project Geologist	12.0 Hours	\$113.78 /Hour	\$1,365.36
		Assistant Engineer/Assistant Geologist	14.0 Hours	\$74.61 /Hour	\$1,044.54
		QC/QA Reviewer	2.0 Hours	\$202.43 /Hour	\$404.86
<u>Project Management</u>					
		Principal in Charge	0.0 Hours	\$202.43 /Hour	\$0.00
		Project Manager	4.0 Hours	\$169.78 /Hour	\$679.12
		Administrative Assistant	0.0 Hours	\$97.14 /Hour	\$0.00
					\$14,995.59



**GEOTECHNICAL SERVICES
UNIT PRICES
2020**



Name: North Aurora Road Retaining Wall and Wetland, Complete Original Task
Client: Transystems Corporation
Scope: 10 Borings to 30 feet bgs

Date: 09/29/2020
Wang No.: P200910

Task Description	Units	Unit Price	Extended Cost
SUMMARY			
<i>DRILLING, SAMPLING & INSITU TESTING</i>			\$16,400.00
<i>LABORATORY TESTING</i>			\$2,446.00
<i>TRAFFIC CONTROL</i>			\$0.00
<i>FIELD VEHICLES & MILEAGE</i>			\$325.00
<i>OUT-OF-TOWN EXPENSES</i>			\$0.00
			\$19,171.00
<i>ENGINEERING, REPORTING & MANAGEMENT</i>			
Principal in Charge	0.0 Hours	\$202.43 /Hour	\$0.00
Project Manager	4.0 Hours	\$169.78 /Hour	\$679.12
Senior Engineer	14.0 Hours	\$169.78 /Hour	\$2,376.92
Project Engineer/Project Geologist	64.0 Hours	\$113.78 /Hour	\$7,281.92
Assistant Engineer/Assistant Geologist	57.0 Hours	\$74.61 /Hour	\$4,252.77
Laboratory Technician	0.0 Hours	\$79.70 /Hour	\$0.00
Administrative Assistant	0.0 Hours	\$97.14 /Hour	\$0.00
QC/QA Reviewer	2.0 Hours	\$202.43 /Hour	\$404.86
	<u>141.0</u>		\$14,995.59
		TOTAL	\$34,166.59

Name: North Aurora Road Retaining Wall and Wetland, Supplement
Client: Transystems Corporation
Scope: 10 Borings to 30 feet bgs

Date: 09/29/2020
Wang No.: P200910

Task Description	Units	Unit Price	Extended Cost
DRILLING, SAMPLING & INSITU TESTING			
Drilling Coordination, Utilities Clearance, Site Access, Permitting	8.0 Hours	\$112.00 /Hour	\$896.00
Mobilization (ATV mounted)	0	\$1,440.00 /Each	\$0.00
Stand-by Hourly Rate	0.0 Hours	\$400.00 /Hour	\$0.00
<u><i>Drilling & Sampling - Hourly (SPT, Penetrometer, Rimac, Visual Classification Included)</i></u>			
Two-man crew - normal working hrs	0.0 Hours	\$400.00 /Hour	\$0.00
Two-man crew - overtime (2 hrs per day)	0.0 Hours	\$450.00 /Hour	\$0.00
Two-man crew and field supervisor- normal working hrs	0.0 Hours	\$495.00 /Hour	\$0.00
Two-man crew and field supervisor - overtime (2 hrs per day)	0.0 Hours	\$543.00 /Hour	\$0.00
<u><i>Hand Augering, Pavement/ Deck Coring & Testing</i></u>			
Two-man crew - normal working hrs	0.0 Hours	\$400.00 /Hour	\$0.00
Two-man crew - overtime (2 hrs per day)	0.0 Hours	\$450.00 /Hour	\$0.00
Asbestos content testing on deck cores	0 Tests	\$185.00 /Test	\$0.00
<u><i>Surveying of Boring Locations (Two-man crew)</i></u>	0.0 Hours	\$230.00 /Hour	\$0.00
<u><i>Monitoring Well or Inclinometer Installation</i></u>			
<u><i>2.0- or 4-inch monitoring wells</i></u>			
Two-man crew - normal working hours	0.0 Hours	\$400.00 /Hour	\$0.00
Two-man crew - overtime (2 hours per day)	0.0 Hours	\$450.00 /Hour	\$0.00
<u><i>Inclinometer casing instalation</i></u>			
Two-man drilling crew - normal working hours	0.0 Hours	\$400.00 /Hour	\$0.00
Two-man crew - overtime (2 hours per day)	0.0 Hours	\$450.00 /Hour	\$0.00
<u><i>Other items - at cost</i></u>			
55-gallon DOT containment drums	0.0 Drums	\$45.00 /Drum	\$0.00
Digital datalogger and barometer	0.0 Each	\$1,450.00 /Each	\$0.00
Well and Casing Materials	At Cost		\$0.00
<u><i>Boring Location Accessibility, Railroad Fees, State/County/Municipal Fees, Barge Drilling</i></u>			
Private utility determination	At Cost		\$0.00
Tree clearance	At Cost		\$0.00
Guardrail removal and replacement	At Cost		\$0.00
ComEd ROE Permitting			\$500.00
Railroad permitting			\$800.00
Railroad Drawing Review			\$1,350.00
Compensation for use of property			\$1,000.00
Railroad protective insurance	At Cost		\$850.00
Railroad flagman	2 Days	\$1,200.00 /Day	\$2,400.00
Pavement opening permit	At Cost		\$0.00
State/municipal insurance and bonding	At Cost		\$0.00
Barge drilling on a navigable waterway	At Cost		\$0.00
			\$7,796.00

Name: North Aurora Road Retaining Wall and Wetland, Supplement
Client: Transystems Corporation
Scope: 10 Borings to 30 feet bgs

Date: 09/29/2020
Wang No.: P200910

Task Description			Units	Unit Price	Extended Cost
LABORATORY TESTING					
T265	D2216	Water Content	0 Tests	\$10.50 /Test	\$0.00
--	D7263	Unit Weight (Density)	0 Tests	\$38.00 /Test	\$0.00
T100	D854	Specific Gravity	0 Tests	\$69.00 /Test	\$0.00
--	D4972	pH of Soil	0 Tests	\$62.00 /Test	\$0.00
T267	D2974	Organic Content by LOI	0 Tests	\$63.00 /Test	\$0.00
T194	--	Organic Content by Wet Combustion	0 Tests	\$140.00 /Test	\$0.00
<u>Particle Size Distribution</u>					
T88	D422	Sieve Analysis	0 Tests	\$80.00 /Test	\$0.00
T88	D422	Combined Sieve and Hydrometer	0 Tests	\$129.00 /Test	\$0.00
--	D1140	Percent Finer than No. 200 Sieve	0 Tests	\$53.00 /Test	\$0.00
<u>Atterberg Limits</u>					
T89, T90	D4318	Liquid and Plastic Limits	0 Tests	\$80.00 /Test	\$0.00
T92	D427	Shrinkage Factors	0 Tests	\$95.00 /Test	\$0.00
					\$0.00
FIELD VEHICLES & MILEAGE					
<u>Field Vehicle</u>					
		Field Vehicle Mileage (>100 Miles per Day)	0.0 Miles	\$0.575 /Mile	\$0.00
		Field Vehicle Daily (<100 Miles per Day)	0 Days	\$65.00 /Day	\$0.00
					\$0.00
ENGINEERING, REPORTING & MANAGEMENT					
<u>Desk Study, Site Access & Permitting (including ComEd)</u>					
		Senior Engineer	0.0 Hours	\$169.78 /Hour	\$0.00
		Project Engineer/Project Geologist	0.0 Hours	\$113.78 /Hour	\$0.00
		Assistant Engineer/Assistant Geologist	0.0 Hours	\$74.61 /Hour	\$0.00
<u>Field Activities</u>					
		Project Engineer/Project Geologist	0.0 Hours	\$113.78 /Hour	\$0.00
		Assistant Engineer/Assistant Geologist	0.0 Hours	\$74.61 /Hour	\$0.00
<u>Laboratory Testing</u>					
		Project Engineer/Project Geologist	0.0 Hours	\$113.78 /Hour	\$0.00
		Laboratory Technician	0.0 Hours	\$79.70 /Hour	\$0.00
<u>Data Analyses & Engineering</u>					
		Senior Engineer	0.0 Hours	\$169.78 /Hour	\$0.00
		Project Engineer/Project Geologist	0.0 Hours	\$113.78 /Hour	\$0.00
		Assistant Engineer/Assistant Geologist	0.0 Hours	\$74.61 /Hour	\$0.00
<u>Report Preparation</u>					
		Senior Engineer	0.0 Hours	\$169.78 /Hour	\$0.00
		Project Engineer/Project Geologist	0.0 Hours	\$113.78 /Hour	\$0.00
		Assistant Engineer/Assistant Geologist	0.0 Hours	\$74.61 /Hour	\$0.00
		QC/QA Reviewer	0.0 Hours	\$202.43 /Hour	\$0.00
<u>Project Management</u>					
		Principal in Charge	0.0 Hours	\$202.43 /Hour	\$0.00
		Project Manager	0.0 Hours	\$169.78 /Hour	\$0.00
		Administrative Assistant	0.0 Hours	\$97.14 /Hour	\$0.00
					\$0.00



**GEOTECHNICAL SERVICES
UNIT PRICES
2020**



Name: North Aurora Road Retaining Wall and Wetland, Supplement
Client: Transsystems Corporation
Scope: 10 Borings to 30 feet bgs

Date: 09/29/2020
Wang No.: P200910

Task Description	Units	Unit Price	Extended Cost
SUMMARY			
<i>DRILLING, SAMPLING & INSITU TESTING</i>			\$7,796.00
<i>LABORATORY TESTING</i>			\$0.00
<i>TRAFFIC CONTROL</i>			\$0.00
<i>FIELD VEHICLES & MILEAGE</i>			\$0.00
<i>OUT-OF-TOWN EXPENSES</i>			\$0.00
			\$7,796.00
<i>ENGINEERING, REPORTING & MANAGEMENT</i>			
Principal in Charge	0.0 Hours	\$202.43 /Hour	\$0.00
Project Manager	0.0 Hours	\$169.78 /Hour	\$0.00
Senior Engineer	0.0 Hours	\$169.78 /Hour	\$0.00
Project Engineer/Project Geologist	0.0 Hours	\$113.78 /Hour	\$0.00
Assistant Engineer/Assistant Geologist	0.0 Hours	\$74.61 /Hour	\$0.00
Laboratory Technician	0.0 Hours	\$79.70 /Hour	\$0.00
Administrative Assistant	0.0 Hours	\$97.14 /Hour	\$0.00
QC/QA Reviewer	0.0 Hours	\$202.43 /Hour	\$0.00
	0.0		\$0.00
		TOTAL	\$7,796.00