

Village of Orland Park
143rd Street Widening - Wolf Road to Southwest Highway
Phase II Design Engineering Services
Section No. 14-00072-00-WR
Cook County

Supplement No. 1

1/27/25

Design Scopes and Manhours

- Overall Scope of Services
- Manhour Summary Forms
- Subconsultant Scopes and Manhours



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143rd Street Widening - Wolf Road to Southwest Highway
Phase II Design Engineering Services
Section No. 14-00072-00-WR
Supplement No. 1
January 27, 2025

EXHIBIT A – SCOPE OF ENGINEERING SERVICES

The following scope of services is the first change order to the original Phase II design engineering services contract approved in October 2023 for the proposed improvements along 143rd Street (IL Route 7) from Wolf Road to Southwest Highway in the Village of Orland Park (Village), Cook County for a total project length of 1.7 miles. This change order will include modifications to existing tasks and creation of new tasks:

- Task 4 - Permits
- Task 5 - Metra Parking Lot – Survey, Contract Plans & Construction Management
- Task 9 - Agency Coordination, Meetings & Public Outreach
- Task 10 - Project Funding Assistance
- Task 18 (New Task) - 143rd Street – Mainline Contract Breakout (Wolf to West & West to Southwest) Contract Plans (Pre-Final 95% / Final 100%)
- Task 19 (New Task) – Plats & Legals (Wolf To SW Highway: Contracts 1 & 2)
- Task 20 (New Task) - Right-of-Way Engineering Services (Contract 1 - West to Southwest Highway)
- Task 21 (New Task) – Forest Preserve McGinnis Slough Water Quality Drainage Design, Coordination & IGA Support

Several project development items have occurred which have necessitated a change to the existing contract:

- The Village has secured funding to construct Stage 1 of the overall proposed improvement, which includes reconstruction of 143rd Street from West Avenue to Southwest Highway, including improvements to both intersections. Note, the western limits of Contract 1 will fully reconstruct 143rd Street to Highland Avenue and will have widening and resurfacing to 100 feet west of Woodland Avenue. The reconstruction limits to Highland Avenue will allow the future Contract 2 to be completed without having to impact the West Avenue intersection. The Village has requested that the project be separated into two design contracts, which was identified in the Phase I Engineering Study as a possible phased construction implementation approach to the project.
 - Contract 1 – 143rd Street from West Avenue to Southwest Highway
 - Contract 2 - 143rd Street from Wolf Road to West Avenue

This change order includes additional level of effort to separate the main contract into two contract packages and is reflected in Task 4 (Permits), Task 9 (Agency Coordination, Meetings & Public Outreach), and Task 18 (143rd Street Mainline Alternative Contract Breakout).

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The Village has also requested the inclusion of professional land acquisition services for Contract 1 and Contract 2, which will be performed by subconsultant Mathewson Land Services, Inc. (MLS). The plat of highway and legal descriptions will be prepared for Contract 1 and Contract 2 by subconsultant Christopher B. Burke Engineering, Ltd.

It is understood that the Village is actively seeking state and federal funding for Contract 2. Efforts to complete two future BUILD (formally known as RAISE) and two future STP (Local or Shared) funding application have been included in Task 10 (Project Funding Assistance).

- The Village will renegotiate their agreement with Metra and will not be required to maintain 600 stalls at the 143rd Street Metra station until ridership increases. As such, the Village will not proceed with implementing the proposed expansion to the Southwest Highway commuter lot. This work was to proceed as a lead construction contract prior to the roadway reconstruction project and will be substantially reallocated (Task 4A – Permits & Task 5 - Metra Parking Lot) within Change Order 1 - 143rd Street Mainline. The proposed improvement will still impact the existing Southwest Highway commuter lot. A meeting has been held with Metra on January 15, 2025 to discuss the parking necessary parking lot improvements. Metra indicated at this meeting that additional interim parking lot improvements need to be considered. This requires additional effort to develop and coordinate the agreed upon improvements and the necessary contract plans and documents. This will require survey and coordination with Metra. This also includes civil, maintenance of traffic, drainage, and lighting design. This associated work will be included in Task 18 (Mainline Contract Breakout).
- Since the contract authorization in October 2023, an additional level of effort has been required for Forest Preserve District of Cook County (FPCC) coordination related to the easement acquisition and associated Intergovernmental Agreement (IGA) with the Village. As part of the draft IGA, the FPCC has changed their request for the water quality best management practice (BMP) design objectives abutting the McGinnis Slough Forest Preserve from the Phase I design and associated coordination via the Section 4(f) process. The revised design objective is to capture/filter first flush (1-inch) stormwater contaminants (e.g. total suspended solids, floatables, etc.) from stormwater flow generated within the project corridor to nationally accepted industry standards of approximately 90% removal of pollutants transported within the stormwater runoff. The Village desires to develop a design that IDOT will accept and maintain as 143rd Street and Southwest Highway are under their jurisdiction.

Additional work will be required to re-design the drainage system developed during Phase I Engineering for all stormwater tributary to the McGinnis Slough by developing and incorporating a water quality best management system to achieve the new water quality design objective. The area tributary to McGinnis Slough is approximately 500 feet west of the McGinnis Slough (Sta. 557+00) to the eastern project limits, including Southwest Highway, and contains five (5) general outfalls, four (4) along 143rd Street and one (1) along Southwest Highway. A total of approximately 9,000 feet of the proposed improvement will require a new drainage system to be developed that meets the water quality design requirements and incorporates BMP design elements (Contract 1 – 5,400 feet; Contract 2 – 3,600 feet). The objective is to develop stormwater BMPs within the existing project footprint from the Phase I Engineering design. Wang Engineering will perform additional geotechnical investigations to obtain soil infiltration and water table data along the portions of the revised drainage system that will incorporate a leaky

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system. A separate task (Task 23) has been created for the additional effort associated with this design change to meet the water quality design objectives in the FPCC/Village IGA.

The following is a summary of the proposed scope of work and contract modifications that are included in Change Order 1. Similar to the original contract, subconsultant Christopher B. Burke Engineering, Ltd. will be assisting with permitting, coordination, contract breakout, and plat of highway and legal descriptions. CBBEL's level of effort is documented in Exhibit B (Manhour Estimate) and Exhibit B1 (Contract Plans Manhours Estimates). Mathewson Land Services, Inc. will be performing professional land acquisition services. Wang Engineering will perform additional geotechnical investigations for the revised drainage design abutting McGinnis Slough to obtain soil infiltration and water table data.

4. Permits

This task will include permitting associated with separating out the main contract into two individual contracts (Task 18). Original contract task 4A for the advanced Metra Southwest Highway commuter parking lot advanced contract will be re-allocated as that work is no longer proceeding independently. Any permitting related to the Metra parking lot work will be included in the roadway contract permitting. A new Task 4C will include permitting requirements associated with Contract 1. Task 4B from the original contract will be utilized for permitting for Contract 2. Work to obtain permits for Contract 1 will be performed by TranSystems' sub-consultant Christopher B. Burke, Ltd (CBBEL). Refer to the separate detailed scope document prepared by CBBEL within the original contract for a detailed description of the permitting in the supporting documentation for details for this task.

- A. Metra Parking Lot
This task will be reallocated within Changer Order 1.
- B. 143rd Street (Contract 2)
This task is within the existing contract and will be utilized partially for Contract 1 and all of Contract 2.
- C. 143rd Street (Contract 1)
This includes an additional level of effort to the original scope or work (Task 4B) to complete all other permitting associated with the contract separation into Contract 1 and Contract 2.
 - 3. Threatened and Endangered Specials Coordination
 - 5. Supplemental Tree Survey, Impact Evaluation, and Tree Mitigation Plan
 - 6. Cook County Watershed Management Ordinance (WMO) Permit Application
 - 7. USACE Section 404 Clean Water Act (CWA) Permit Application
 - 8. Coordination with Will-South Cook Soil & Water Conservation District
 - 9. Best Management Practice (BMP) Design
 - 10. Interagency Wetland Policy Act
 - 13. Prepare the Storm Water Pollution Prevention Plan and Notice of Intent
 - 14. Historic Preservation Coordination

Required meetings associated with permitting at included under Task 9.

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5. Metra Parking Lot - Survey, Contract Plans & Construction Management

This task will – at the direction of the Village – will no longer include preparation of contract plans, specifications, and estimates (P,S&E) for the construction of the parking lot, associated drainage, lighting and aesthetic improvements based on the conceptual design that was developed in Phase 1. Topographic survey (Task 5A) for the Metra parking lot along Southwest Highway will still be performed for this task as the proposed improvements to Southwest Highway will require modification to the existing parking lot along Southwest Highway. All associated design modifications to the Metra parking lot along Southwest Highway will be included in Task 18. Tasks 5B and 5C will be reallocated within Change Order 1.

9. Agency Coordination, Meetings and Public Outreach

This includes additional level of effort for project coordination and all other agency coordination related to the contract breakout. The work tasks below include pre-meeting preparation, attendance, and preparation of meeting minutes. Minutes (draft and final) will be distributed via email. Hard copies will not be provided for distribution. Additional coordination with the FPCC, Village, and IDOT related to the IGA and associated design changes are included under Task 23.

- P. USACE Section 404 Pre-Application Meeting (1 meeting)
- Q. USACE, USFWS, USEPA Permitting Meeting (2 meetings)
- R. USFWS/IDNR T&E, migratory birds, and special lands (1 meeting)
- S. IEPA Section 401 WQC Pre-Application Meeting (1 meeting)

10. Project Funding Assistance

This task includes providing assistance to Village staff to identify and develop a strategy to pursue state and federal funding sources.

- A. Complete two (2) applications for funding through the STP Shared Fund and/or Local programs, anticipated to be for years 2025 and 2026.
- B. Strategize and write federal for two (2) BUILD (formally known as RAISE) grant applications, anticipated to be for years 2026 and 2027.

18. 143rd Street - Mainline Breakout (Wolf to West & West to Southwest) Contract Plans – Pre-Final (95%)/Final (100%)

This task will separate the design of 143rd Street from Wolf Road to Southwest Highway into two separate PS&E packages. Contract 1 will include the design of 143rd Street and Southwest Highway intersection, generally from West Avenue to Southwest Highway, including both intersections. Contract 2 will include the design of 143rd Street from Wolf Road to West Avenue. There is approximately 500 feet of temporary transition design between Contract 1 and Contract 2, which occurs from approximately 130 feet west of Woodland Avenue to Highland Avenue.

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19. Plats & Legals (Wolf To SW Highway: Contracts 1 & 2)

TranSystems’ subconsultant, Christopher B. Burke Engineering, Ltd. (CBBEL), will lead the plat and legal preparation for Contract 1 from West Avenue to Southwest Highway and Contract to from Wolf Road to West Avenue. Appraisals, review appraisals, and negotiations will be performed by others (Refer to Task 20). This work will include the following:

Plat and Legal Preparation:

- A. Plats and Legal preparation - 79 parcels as identified in the Phase I Report
 - 1. Preparation of plat of highways and legal descriptions for parcels. Including coordination with IDOT for review and approval of the plats. Title commitments are included as a direct cost.
 - 2. Provide engineering services to clarify questions or comments identified in the negotiation process.
 - 3. The scope reflects the effort to revise sixteen (16) parcels as changes will likely occur during negotiations.
 - 4. Stake ROW for land acquisition support. Five field visits are included.
 - 5. Include the plat of highways as plan sheets in the contract documents.

20. Land Acquisition Services (Contract 1 – West Avenue to Southwest Highway)

TranSystems’ subconsultant, Mathewson Land Services (MLS), will lead the will lead the land acquisition services including the appraisals, review appraisals, and negotiations for Contract 1 from West Avenue to Southwest Highway. 25 parcels of acquisition are included in Contract 1.

Refer to the scope document prepared by MLS in the supporting documentation for a detailed scope for the Land Acquisition Services task.

21. Forest Preserve McGinnis Slough Water Quality Drainage Design, Coordination & IGA Support

The project team will provide support to the Village for review and analysis of the IGA with the FPCC pertaining design related components, specifically the new stormwater water quality design objectives with treatment of the first flush. The draft IGA was initiated in October 2023 and reached a pre-final status in May 2024.

TranSystems’ subconsultant, CBBEL, will lead the drainage design re-evaluation for stormwater tributary to the Forest Preserve District of Cook County (FPDCC) McGinnis Slough with the new design objectives agreed to in the Orland Park/FPDCC Intergovernmental Agreement (IGA). The location of this evaluation will occur from approximately from Old Tamerack Lane to the eastern project limits, which is all tributary to the McGinnis Slough over five (5) different outfalls, four (4) along 143rd Street and one (1) along Southwest Highway. In total, approximately 9,000 feet of the project will need to have the proposed Phase I drainage system re-evaluated. The revised water quality design objective is to capture/filter first flush (1-inch) stormwater contaminants (e.g. total suspended solids, floatables, etc.) from stormwater flow generated within the project corridor to nationally accepted industry standards of approximately 90% removal of pollutants transported within the stormwater runoff. The Village desires to develop a

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design that IDOT will accept and maintain as 143rd Street and Southwest Highway are under their jurisdiction. Water quality Best Management Practice (BMP) design alternatives will be evaluated and modeled using SELDM and coordinated with Illinois Department of Transportation, FPDC, and the Village.

The initial step will be to develop a new drainage design within the existing Phase I footprint to a 30% level and perform water quality modeling to analyze the effectiveness of the proposed BMPs. Several design alternatives may be required depending on soil infiltration rates, water table elevation, and other design considerations. A summary Water Quality Technical Memorandum will be prepared for review by the FPCC. Additional geotechnical information will be required along the revised drainage system to obtain soil infiltration rates and water table elevations, performed by Wang Engineering. The entire drainage design must be approved by IDOT as 143rd Street and Southwest Highway are under their jurisdiction, and will require an addendum to the previously approved Location Drainage Study. Once the revised 30% (Phase I level) drainage design has been agreed to by IDOT and the FPCC, the design will be incorporated into the contract 75% preliminary plans. The roadway and drainage design complexity will be increased within this section of the project where the BMP system will be implemented. The technical memorandum will be updated for the 95% design and will be utilized for permitting.

The following tasks are included:

- A. Phase I Drainage 30% Re-Design & Addendum Phase I Location Drainage Study
 1. Approximately 9,000 feet of the Phase I drainage design will need to be re-designed to achieve the agreed upon water quality objectives of capture/filter first flush (1-inch) stormwater contaminants (e.g. total suspended solids, floatables, etc.) from stormwater flow generated within the project corridor to nationally accepted industry standards of approximately 90% removal of pollutants transported within the stormwater runoff.
 2. The approved Phase I Location Drainage Study will be amended along with supporting documentation and calculations for the proposed drainage plan, detention calculations, release rate calculation, and water quality design elements.
- B. Water Quality Modeling (SELDM) & Technical Memorandum
 1. Three Water Quality design drainage design alternatives will be evaluated to achieve the agreed upon design objectives if the initial design approach of retaining and infiltrating the first flush is not feasible. Open detention or mechanical BMPs would then be evaluated. One outfall will be utilized as a test case to evaluate the feasibility of the BMP system.
 2. Water quality pollutant loading analysis modeling will be performed for the revised 30% drainage design for stormwater tributary to McGinnis Slough. The modeling will be prepared using the Stochastic Empirical Loading and Dilution Model (SELDM) developed by the U.S. Geological Survey (USGS). SELDM will be used to evaluate a pre-construction condition, build improvement (no BMPs) condition, and build improvement (with BMPs) condition to evaluate the incremental water quality impact of the proposed project, for which applicable BMP measures will be considered as appropriate. The initial test outfall will be modeled using SELDM. A total of five outfalls will be modeled for the final 30% design.
 3. A Technical Memorandum along with supporting documents/exhibits will be prepared summarizing the results based on the 30% design. This will be utilized to coordinate the design and associated water quality performance of the 143rd Street improvements with the FPCC and IDOT. The document will also include the BMP design analysis and supporting documentation. A draft Technical Memorandum will be submitted to the Village, FPCC, and IDOT for review and comment. A final Technical Memorandum will address comments received.

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4. The Water Quality Technical Memorandum will be updated with the 95% Pre-Final design and will be utilized for further coordination with the FPCC, IDOT and permitting agencies.
- C. Water Quality Best Management Practices (BMP) Operations & Maintenance Plan
 1. Per the IGA with the FPCC, a BMP Operations & Maintenance Plan shall be developed.
- D. Forest Preserve District of Cook County & Village IGA Support
 1. The project team will provide support during the negotiation with the Forest Preserve District of Cook County for the terms within the IGA related roadway design elements.
 2. Preparation of Technical Memorandum providing relevant project information to the FPCC related to the existing drainage design, proposed drainage design, and stormwater calculations. This documents will assist in the negotiation of the IGA language with the FPCC.
- E. Forest Preserve District of Cook County, IDOT & Village Coordination related to the revised drainage design and water quality/BMP design and implementation.
 1. Forest Preserve District coordination & Meetings (6)
 2. IDOT coordination & Meetings (4)
 3. Village Meetings (6)
- F. Additional Contract 1 & 2 Plan Effort – Preliminary (75%) / Pre-Final (95%) / Final (100%)
 1. The revised drainage design to meet the water quality requirements from the PFDC will require an additional level of effort to complete, which is anticipated to include providing detention, retention and infiltration within the roadway right-of-way that was previously not proposed as part of Phase 1. A total of 5,400 feet of closed roadway drainage system design is included for Contract 1. This task also includes grading and landscape plans for use of up to 1 additional acre of FPCC property. Refer to Exhibit B1 for listing of sub-tasks included.
- G. Geotechnical Investigations
 1. Thirty-six (36) geotechnical tests to determine soil infiltration rates and water table elevations will be performed along the revised drainage system. This information will be utilized to appropriately size the retention volume for the first flush. A summary report will be prepared.
 2. TranSystems' subconsultant, Wang Engineering, will perform the additional geotechnical investigations. Refer to the scope document prepared by Wang Engineering in the supporting documentation for a detailed scope for the additional geotechnical investigations.

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Assumptions

The following tasks or items were not included in this scope of services:

- A. Subsurface Utility Engineering (SUE).
- B. Design of private and public utility relocation (i.e. Village watermain, sanitary sewer, etc) plans for Contract 1 and Contract 2.
- C. Phase III Design Support Services for Contract 1 and Contract 2.
- D. Building demolitions and the associated testing, permitting and remediation necessary.
- E. The scope of work for the revised drainage design system is based on the language in the Village/FPCC IGA dated May 16, 2024.
- F. The scope of work does not include effort to utilize any additional FPCC property outside of what was identified within the Phase I Engineering Study. If any additional FPCC property is utilized, Addendum Phase I documentation would need to be prepared along with revising the Section 4(f) *de minimis* documentation, which requires approval from the FPCC along with IDOT and FHWA.
- G. Final design of the Old Orland Bike Path design is not included the original contract nor this Supplement No. 1. The additional effort to complete this design will be added as part of a future supplement.
- H. The cost of purchasing the necessary right-of-way.

Manhour Summary Forms

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EXHIBIT B - Manhour Estimate

<u>Task and Description</u>	Total Workhours	TS	CBBEL	Teska	Wang	HBK	H&H	MROWCO	SVS
Task 4 - Permits									
A. Metra Parking Lot Permitting									
1. Wetland and Waters Field Delineation Update	(34)	-	(34)	-	-	-	-	-	-
2. USASCE & MWRD Boundary Confirmation and Jurisdictional Determination	(8)	-	(8)	-	-	-	-	-	-
3. Cook County Watershed Management Ordinance (WMO) Permit Application	(120)	-	(120)	-	-	-	-	-	-
4. Prepare the Stormwater Pollution Prevention and Notice of Intent	(28)	-	(28)	-	-	-	-	-	-
5. Historic Preservation Coordination	(15)	-	(15)	-	-	-	-	-	-
6. Supplemental Tree Survey, Impact Evaluation, and Tree Mitigation Plan Illinois Department of Transportation Highway Access Permit and Drainage Connection	(62)	-	(62)	-	-	-	-	-	-
7. Submittal	(56)	-	(56)	-	-	-	-	-	-
C. Contract 1 (West Avenue to Southwest Highway) Permitting									
3. Threatened and Endangered Specials Coordination	20	-	20	-	-	-	-	-	-
5. Supplemental Tree Survey, Impact evaluation, and Tree Mitigation Plan	142	-	142	-	-	-	-	-	-
6. Cook County Watershed management Ordinance permit Application	412	-	412	-	-	-	-	-	-
7. USASCE Section 404 Clean Water Act Permit Application	154	-	154	-	-	-	-	-	-
8. Coordination with Will-South Cook Soil & Water Conservation District	54	-	54	-	-	-	-	-	-
9. Best Management Practice (BMP) Design	104	-	104	-	-	-	-	-	-
10. Interagency Wetland Policy Act	86	-	86	-	-	-	-	-	-
13. Prepare the Storm Water Pollution Prevention Plan and Notice of Intent	56	-	56	-	-	-	-	-	-
14. Historic preservation Coordination	34	-	34	-	-	-	-	-	-
Task 4 Subtotal:	739	-	739	-	-	-	-	-	-
Task 5 - Metra Parking Lot - Survey, Contract Plans & Construction Management									
B. Plans, Specs & Estimates - refer to Exhibit B1 for detail	(1,459)	(650)	(809)	-	-	-	-	-	-
C. Construction Management - refer to Exhibit B2 for detail	(316)	(316)	-	-	-	-	-	-	-
Task 5 Subtotal:	(1,775)	(966)	(809)	-	-	-	-	-	-
Task 9 - Agency Coordination, Meetings & Public Outreach									
P. USACE Section 404 Pre-Application Meeting (1 meeting)	11	4	7	-	-	-	-	-	-
Q. USACE, USFWS, USEPA Permitting Meeting (2 meetings)	22	8	14	-	-	-	-	-	-
R. USFWS/IDNR T&E, migratory birds, and special lands (1 meeting)	11	4	7	-	-	-	-	-	-
S. IEPA Section 401 WQC Pre-Application Meeting (1 meeting)	11	4	7	-	-	-	-	-	-
Task 9 Subtotal:	55	20	35	-	-	-	-	-	-
Task 10 - Project Funding Assistance									
A. 2026 Raise (1 application total)	60	60	-	-	-	-	-	-	-
B. 2027 Raise (1 application total)	60	60	-	-	-	-	-	-	-
C. 2025 STP Shared or Local Fund (1 application total)	40	-	40	-	-	-	-	-	-
D. 2026 STP Shared or Local Fund (1 application total)	40	-	40	-	-	-	-	-	-
Task 10 Subtotal:	200	120	80	-	-	-	-	-	-
Task 18 - 143rd Street - Mainline Alternative Breakout (Wolf to West & West to Southwest) Contract Plans – Pre-Final (95%)/Final (100%)									
A. Plans, Specs & Estimates - refer to Exhibit B1 for detail	1,150	844	306	-	-	-	-	-	-
Task 18 Subtotal:	1,150	844	306	-	-	-	-	-	-

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EXHIBIT B - Manhour Estimate

<u>Task and Description</u>	Total Workhours	TS	CBBEL	Teska	Wang	HBK	H&H	MROWCO	SVS
Task 19 - Plats & Legals (Wolf To SW Highway: Contracts 1 & 2)									
A. Plat and Legal Preparation									
1. Preparation of plat of highways and legals, including coordination with IDOT	2,769	-	2,769	-	-	-	-	-	-
2. Engineering services to support negotiations	60	60	-	-	-	-	-	-	-
3. Parcel revisions due to negotiations	64	-	64	-	-	-	-	-	-
4. Stake ROW for land acquisition support	40	-	40	-	-	-	-	-	-
5. Incorporate Plat of Highways in the contract documents	8	8	-	-	-	-	-	-	-
Task 19 Subtotal:	2,941	68	2,873	-	-	-	-	-	-
Task 20 - Right-of-Way Engineering Services (Contract 1 - West Avenue to Southwest Highway)									
A. Land Acquisition Consulting Services - Refer to Mathewson ROW Company Scope & Fee		-	-	-	-	-	-	-	-
Task 20 Subtotal:	-	-	-	-	-	-	-	-	-
Task 21 - Forest Preserve McGinnis Slough Water Quality Drainage Design, Coordination & IGA Support									
A. Phase I Drainage 30% Re-Design & Addendum Location Drainage Study									
1. 30% Drainage BMP Water Quality Design Alternative Evaluation & Development	420	-	420	-	-	-	-	-	-
2. 30% Drainage Plan & Profile Redesign for Water Quality, Supporting Calculations	364	-	364	-	-	-	-	-	-
3. Ammended Phase I Location Drainage Study	72	-	72	-	-	-	-	-	-
B. Water Quality Modeling (SELDM) & BMP Technical Memorandum									
1. Water quality modeling of BMP alternatives (1 outfall each; 3 Alternatives)	96	-	96	-	-	-	-	-	-
2. Water quality pollutant loading analysis using SELDM for revised 30% Design	200	-	200	-	-	-	-	-	-
3. Technical Memorandum with 30% Design (Draft & Final)	168	-	168	-	-	-	-	-	-
4. Update Technical Memorandum with 95% Design (Draft & Final)	84	-	84	-	-	-	-	-	-
C. Water Quality BMP Operations & Maintenance Plan	24	-	24	-	-	-	-	-	-
D. FPCC & Village IGA Support	92	12	80	-	-	-	-	-	-
E. FPCC, IDOT and Village Coordination									
1. FPCC Coordination & Meetings (6)	72	24	48	-	-	-	-	-	-
2. IDOT Coordination & Meetings (4)	48	16	32	-	-	-	-	-	-
3. Village Coordination & Meetings (6)	66	24	42	-	-	-	-	-	-
F. Additional Contract 1&2 Drainage Design (75% / 95% / 100%)									
1. Plans, Specs & Estimates - refer to Exhibit B1 for detail	491	-	491	-	-	-	-	-	-
G. Geotechnical Investigations									
1. Geotechnical Testing Services - Refer to Wang Engineering Scope & Fee	188	-	-	-	188	-	-	-	-
2. Boring Layout, Coordination & QA/QC	24	-	24	-	-	-	-	-	-
Task 21 Subtotal:	2,409	76	2,145	-	188	-	-	-	-
Total:	5,719	162	5,369	-	188	-	-	-	-

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EXHIBIT B1 - Contract Plans Manhours Estimate

Sheet Description	Task 5						Task 18					
	Contract 1 Metra Parking Lot Contract						Mainline Breakout 143rd St (Wolf to West & West to Southwest) Pre-Final/Final & Retaining Walls					
	Hrs/Sht	Sheets	TSC	Hours		Subtotal	Hrs/Sht	Sheets	TSC	Hours		Subtotal
A. General Sheets												
Cover Sheet	(8)	1	(8)	-	-	(8)	2	1	2	-	-	2
Index of Sheets	(12)	-	-	-	-	-	2	1	2	-	-	2
General Notes	(16)	1	(16)	-	-	(16)	2	1	2	-	-	2
Summary of Quantities	(8)	3	(24)	-	-	(24)	2	12	24	-	-	24
Existing Typical Sections - 143rd St	(16)	1	(16)	-	-	(16)	-	-	-	-	-	-
Existing Typical Sections - Cross Roads	-	-	-	-	-	-	-	-	-	-	-	-
Proposed Typical Sections - 143rd St	(16)	1	(16)	-	-	(16)	-	-	-	-	-	-
Proposed Typical Sections - Cross Streets	-	-	-	-	-	-	-	-	-	-	-	-
Proposed Typical Sections - Cross Streets	-	-	-	-	-	-	-	-	-	-	-	-
Proposed Typical Sections - Details	-	-	-	-	-	-	-	-	-	-	-	-
Schedule of Quantities	(8)	1	(8)	-	-	(8)	2	3	6	-	-	6
Alignment, Ties and Benchmarks	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal:		8	(88)	-	-	(88)		18	36	-	-	36
B. Maintenance of Traffic Plans												
General Notes	-	-	-	-	-	-	2	1	2	-	-	2
Construction Staging Notes	-	-	-	-	-	-	-	-	-	-	-	-
Typical Sections - Prestage	-	-	-	-	-	-	-	-	-	-	-	-
Typical Sections - Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Typical Sections - Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Typical Sections - Stage 3	-	-	-	-	-	-	-	-	-	-	-	-
Temporary Pavement Details	-	-	-	-	-	-	2	2	4	-	-	4
Temporary Informational Signing Details	-	-	-	-	-	-	-	-	-	-	-	-
MOT Plans - Pre-Stage	-	-	-	-	-	-	-	-	-	-	-	-
MOT Plans - Stage 1 (50'=1")	-	-	-	-	-	-	-	-	-	-	-	-
MOT Plans - Stage 2 (50'=1")	-	-	-	-	-	-	-	-	-	-	-	-
MOT Plans - Stage 3 (50'=1")	-	-	-	-	-	-	-	-	-	-	-	-
MOT Plans - Sub-Stages (50'=1")	-	-	-	-	-	-	-	-	-	-	-	-
MOT Plans - Detours	-	-	-	-	-	-	-	-	-	-	-	-
Metra Lot MOT Design & Plans	-	-	-	-	-	-	20	4	80	-	-	80
Winter Shutdown Plans	-	-	-	-	-	-	-	-	-	-	-	-
Intersection Construction Staging Notes	-	-	-	-	-	-	2	2	4	-	-	4
Intersection Construction Detail Sheets	-	-	-	-	-	-	-	-	-	-	-	-
Traffic Control Details	-	-	-	-	-	-	2	2	4	-	-	4
Subtotal:		-	-	-	-	-		11	94	-	-	94
C. Civil Plans												
Removal & Existing Conditions (20"=1')	(24)	2	(48)	-	-	(48)	24	1	24	-	-	24
Roadway Plan & Profile (20"=1')	(16)	-	-	-	-	-	-	-	-	-	-	-
Construction Details	(16)	2	(32)	-	-	(32)	16	6	96	-	-	96
Erosion & Sediment Control - Sequence of Operations & Notes	(16)	1	-	(16)	-	(16)	16	1	-	16	-	16
Erosion & Sediment Control - Stage 1 (50'=1")	(16)	2	-	(32)	-	(32)	16	2	-	32	-	32
Erosion & Sediment Control - Stage 2 (50'=1")	-	-	-	-	-	-	-	-	-	-	-	-
Erosion & Sediment Control - Stage 3 (50'=1")	-	-	-	-	-	-	-	-	-	-	-	-
Erosion & Sediment Control - Details	(8)	2	-	(16)	-	(16)	8	1	-	8	-	8
Drainage Removal (20'=1")	(4)	2	-	(8)	-	(8)	6	2	-	12	-	12
Drainage Plan & Profile (20'=1")	(20)	2	-	(40)	-	(40)	24	2	-	48	-	48

143rd Street Widening - Wolf Road to Southwest Highway
Section 14-00072-00-WR
Phase II Design Engineering Services
EXHIBIT B1 - Contract Plans Manhours Estimate

Sheet Description	Task 5						Task 18					
	Contract 1 Metra Parking Lot Contract						Mainline Breakout 143rd St (Wolf to West & West to Southwest) Pre-Final/Final & Retaining Walls					
	Hrs/Sht	Sheets	TSC	Hours		Subtotal	Hrs/Sht	Sheets	TSC	Hours		Subtotal
			CBBEL	Teska					CBBEL	Teska		
Drainage Plan & Profile (20'=1") Contract 1 BMP Design Incorporation	-	-	-	-	-	-	-	-	-	-	-	-
Drainage Plan & Profile (20'=1") Contract 2 BMP Design Incorporation	-	-	-	-	-	-	-	-	-	-	-	-
Schematic Parking Lot Layout Plan (20'=1")	(40)	2	-	(80)	-	(80)	40	2	80	-	-	80
Metra Lot Civil Design Plan (20'=1")	-	-	-	-	-	-	35	4	140	-	-	140
Proposed Layout & Grading Plan (20'=1")	(36)	2	-	(72)	-	(72)	16	2	32	-	-	32
Drainage Schedules	(16)	1	-	(16)	-	(16)	2	6	-	12	-	12
Drainage Details	(12)	1	-	(12)	-	(12)	12	1	-	12	-	12
Drainage/BMP Details												
Temporary Drainage Plans (20'=1")	(8)	1	-	(8)	-	(8)	12	1	-	12	-	12
Temporary Drainage Schedules	(8)	1	-	(8)	-	(8)	8	1	-	8	-	8
Intersection Details (20'=1")												
ADA Ramp Details (5'=1') (64 ramps @ 4 per sheets)	(24)	2	(48)	-	-	(48)	-	-	-	-	-	-
Pavement Marking Plans (50'=1")	(8)	2	(16)	-	-	(16)	8	1	8	-	-	8
Existing Signing Plans (50'=1")												
Proposed Signing Plans (50'=1")	(8)	2	(16)	-	-	(16)	8	1	8	-	-	8
Signing Details	(4)	6	(24)	-	-	(24)	4	3	12	-	-	12
Existing Signing Schedules							2	4	8	-	-	8
Proposed Signing Schedules	(8)	1	(8)	-	-	(8)	2	4	8	-	-	8
BMP Grading Plan & Details (1-acre area)	-	-	-	-	-	-	-	-	-	-	-	-
Landscaping Plans (50'=1") (1-acre area)	(6)	5		(30)	-	(30)	18	2	-	36	-	36
Landscaping Details (1-acre area)	(8)	1		(8)	-	(8)	2	2	-	4	-	4
Roadway Soil Boring Plans & Logs	(4)	2	(8)	-	-	(8)	-	-	-	-	-	-
Subtotal:		42	(200)	(346)	-	(546)		49	416	200	-	616
D. Traffic Signal & Lighting Plans												
<u>Traffic Signal Plans</u>												
Wolf Rd - Temp & Prop	-	-	-	-	-	-	-	-	-	-	-	-
108th Ave - Temp & Prop	-	-	-	-	-	-	-	-	-	-	-	-
Crystal Tree - Prop only	-	-	-	-	-	-	-	-	-	-	-	-
West Ave - Temp & Prop	-	-	-	-	-	-	-	-	-	-	-	-
Union Ave - Temp only	-	-	-	-	-	-	-	-	-	-	-	-
Southwest Hwy - Temp & Prop	-	-	-	-	-	-	-	-	-	-	-	-
Traffic Signal Interconnect Plans (50'=1")												
<u>Lighting Plans</u>												
Lighting General Notes	(8)	1	-	(8)	-	(8)	2	-	-	-	-	-
Temporary Lighting Plans (50'=1")							8	-	-	-	-	-
Roadway Lighting Plans (50'=1")	(28)	2	-	(56)	-	(56)	8	-	-	-	-	-
Single Line Diagram	(16)	1	-	(16)	-	(16)	12	-	-	-	-	-
Metra Lot Lighting Design Plans							14	4	-	56	-	56
Lighting Details	(4)	4	-	(16)	-	(16)	6	-	-	-	-	-
Subtotal:		8	-	(96)	-	(96)		4	-	56	-	56
E. Structural Plans												
<u>Retaining Wall Plans</u>												
Metra Retaining Walls	(23)	8	(184)	-	-	(184)	-	-	-	-	-	-
Wall No. 1.3												
Wall No. 1.4												
Wall No. 1.5												
Wall No. 1.6												
Wall No. 1.7												
Wall No. 1.8												
Wall No. 1.9												
Wall No. 1.10												
Wall No. 1.11												

143rd Street Widening - Wolf Road to Southwest Highway
Section 14-00072-00-WR
Phase II Design Engineering Services
EXHIBIT B1 - Contract Plans Manhours Estimate

Sheet Description	Task 5						Task 18					
	Contract 1 Metra Parking Lot Contract						Mainline Breakout 143rd St (Wolf to West & West to Southwest) Pre-Final/Final & Retaining Walls					
	Hrs/Sht	Sheets	TSC	Hours		Subtotal	Hrs/Sht	Sheets	TSC	Hours		Subtotal
			CBBEL	Teska					CBBEL	Teska		
Wall No. 1.12	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.13	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.14	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.15	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.16	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.17	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.18	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.19	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.20	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.21	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.22	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.23	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.24	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.25	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 1.26	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 2	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 2.1	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 2.2	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 2.3	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 2.4	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 3	-	-	-	-	-	-	-	-	-	-	-	-
Wall No. 3.1 (Metra))	(23)	9	-	(207)	-	(207)	-	-	-	-	-	-
Wall No. 4.1	-	-	-	-	-	-	-	-	-	-	-	-
Wall No.5.1	-	-	-	-	-	-	-	-	-	-	-	-
<u>Noise Wall Plans</u>												
Wall No. 1	-	-	-	-	-	-	-	-	-	-	-	-
<u>Culverts</u>												
Culvert No. 1	-	-	-	-	-	-	-	-	-	-	-	-
Culvert No. 2	-	-	-	-	-	-	-	-	-	-	-	-
Culvert No. 3	-	-	-	-	-	-	-	-	-	-	-	-
Culvert No. 4	-	-	-	-	-	-	-	-	-	-	-	-
Culvert No. 5	-	-	-	-	-	-	-	-	-	-	-	-
<u>Bridges</u>												
Comp Storage Multi Use Bridge	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal:		17	(184)	(207)	-	(391)						
F. Cross Sections (10H:5V)												
Mainline at 50 ft intervals & Driveway or Critical section every 250' at 2.5 xs/sheet	-	-	-	-	-	-	1	85	85	-	-	85
Major Cross Roads at 50 ft intervals & Driveway or Critical section every 250' at 2.5 xs/sheet	-	-	-	-	-	-	1	44	44	-	-	44
Minor Cross Roads at 50 ft intervals & Driveway or Critical section every 250' at 2.5 xs/sheet	-	-	-	-	-	-	1	5	5	-	-	5
Subtotal:								134	134			134
G. Contract Documents												
<u>Specifications</u>												
60%/75% Submittal			(24)	(12)	-	(36)			36	-	-	36
95% Submittal			(16)	(8)	-	(24)			16	2	-	18
100% Submittal			(12)	(8)	-	(20)			12	2	-	14
<u>Design Calculations</u>												
Guardrail Analysis			-	-	-	-			5	-	-	5
Inlet Spacing Calculations			-	(12)	-	(12)			-	8	-	8
Storm Sewer Design			-	(18)	-	(18)			-	8	-	8
Ditch Design			-	-	-	-			-	6	-	6
Detention Calculations			-	-	-	-			-	-	-	-
Lighting Calculations			-	(64)	-	(64)			-	10	-	10

143rd Street Widening - Wolf Road to Southwest Highway
Section 14-00072-00-WR
Phase II Design Engineering Services
EXHIBIT B1 - Contract Plans Manhours Estimate

Sheet Description	Task 5						Task 18					
	Contract 1 Metra Parking Lot Contract						Mainline Breakout 143rd St (Wolf to West & West to Southwest) Pre-Final/Final & Retaining Walls					
	Hours						Hours					
	Hrs/Sht	Sheets	TSC	CBBEL	Teska	Subtotal	Hrs/Sht	Sheets	TSC	CBBEL	Teska	Subtotal
Quantity Calculations			(40)	(20)	-	(60)			37	6	-	43
<u>Construction Cost Estimates</u>												
60%/75% Submittal			(16)	(8)	-	(24)			-	-	-	-
95% Submittal			(12)	(6)	-	(18)			8	4	-	12
100% Submittal			(8)	(4)	-	(12)			6	4	-	10
<u>Project Schedules</u>												
Design Scheduling			(10)	-	-	(10)			4	-	-	4
Subtotal:			(138)	(160)	-	(298)			124	50	-	174
H. Bid Phase Support												
Prepare Contract Addenda (assume 1 addenda/contract @24 hrs/addendum)			(12)	-	-	(12)			12	-	-	12
Preconstruction Bid Meeting Support			(8)	-	-	(8)			8	-	-	8
Assist in preparing responses to bidder questions			(8)	-	-	(8)			8	-	-	8
Construction Bid review support			(4)	-	-	(4)			4	-	-	4
Analysis of Contractor Bids			(8)	-	-	(8)			8	-	-	8
Subtotal:			(40)	-	-	(40)			40	-	-	40

	MH Total	Sheets	TSC	CBBEL	Teska	Subtotal	Sheets	TSC	CBBEL	Teska	Subtotal
GRAND TOTALS											
A. General Sheets	(52)	8	(88)	-	-	(88)	18	36	-	-	36
B. Maintenance of Traffic Plans	94	-	-	-	-	-	11	94	-	-	94
C. Civil Plans	70	42	(200)	(346)	-	(546)	49	416	200	-	616
D. Traffic Signal & Lighting Plans	(40)	8	-	(96)	-	(96)	4	-	56	-	56
E. Structural Plans	(391)	17	(184)	(207)	-	(391)	-	-	-	-	-
F. Cross Sections	134	-	-	-	-	-	134	134	-	-	134
G. Contract Documents	(124)	-	(138)	(160)	-	(298)	-	124	50	-	174
H. Bid Phase Support	-	-	(40)	-	-	(40)	-	40	-	-	40
TOTALS	(309)	75	(650)	(809)	-	(1,459)	216	844	306	-	1,150



Local Public Agency Village of Orland Park	County Cook	Section Number 14-00072-00-WR
Prime Consultant (Firm) Name TranSystems Corporation	Prepared By Chris Bonus	Date 1/25/2025
Consultant / Subconsultant Name TranSystems	Job Number 	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

Phase II Engineering. 143rd Street (IL Route 7) from Wolf Road to Southwest Highway - Supplement No. 1

PAYROLL ESCALATION TABLE

CONTRACT TERM	24	MONTHS			
START DATE	2/1/2025			OVERHEAD RATE	149.49%
RAISE DATE	4/2/2025			COMPLEXITY FACTOR	0
				% OF RAISE	2.00%
END DATE	1/31/2027				

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	2/1/2025	4/2/2025	2	8.33%
1	4/3/2025	4/2/2026	12	51.00%
2	4/3/2026	2/2/2027	10	43.35%

The total escalation = 2.68%

Local Public Agency	County	Section Number
Village of Orland Park	Cook	14-00072-00-WR
Consultant / Subconsultant Name		Job Number
TranSystems		

PAYROLL RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

MAXIMUM PAYROLL RATE	86.00
ESCALATION FACTOR	2.68%

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Engineer 5 (E5)	\$78.00	\$80.09
Engineer 4 (E4)	\$77.58	\$79.66
Engineer 3 (E3)	\$71.26	\$73.17
Engineer 2 (E2)	\$60.44	\$62.06
Engineer 1 (E1)	\$47.00	\$48.26
Planner 5 (P5)	\$78.00	\$80.09
Planner 4 (P4)	\$69.92	\$71.80
Planner 3 (P3)	\$48.15	\$49.44
Planner 2 (P2)	\$52.31	\$53.71
Architect 4 (AR4)	\$75.11	\$77.13
Architect 3 (AR3)	\$59.70	\$61.30
Architect 2 (AR2)	\$44.13	\$45.31
Architect 1 (AR1)	\$34.14	\$35.06
Environmental Scientist 4 (SC4)	\$78.00	\$80.09
Industry Specialist 3 (IS3)	\$63.21	\$64.91
Construction Services 4 (CS4)	\$57.47	\$59.01
Construction Services 3 (CS3)	\$48.69	\$50.00
Construction Services 2 (CS2)	\$34.24	\$35.16
Technician 3 (T3)	\$41.14	\$42.24
Technician 1 (T1)	\$20.75	\$21.31
Administrative 3 (A3)	\$51.66	\$53.05
Administrative 2 (A2)	\$34.35	\$35.27

Local Public Agency

Village of Orland Park

County

Cook

Section Number

14-00072-00-WR

Consultant / Subconsultant Name

TranSystems

Job Number

DIRECT COSTS WORKSHEET

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum			\$0.00
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			\$0.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			\$0.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utlility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
TOTAL DIRECT COSTS:				\$0.00

Local Public Agency

Village of Orland Park

County

Cook

Section Number

14-00072-00-WR

Consultant / Subconsultant Name

TranSystems

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Task 4A - Permits (Metra)			Task 4C - Permits (Contract 2)			Task 5 - Metra Parking Lot - PS&E and CM			Task 9 - Agency Coordination, Meetings & Outreach			Task 10 - Project Funding Assistance		
		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)	80.09	46.0	28.40%	22.74							-90	9.32%	7.46	14	70.00%	56.07	4	3.33%	2.67
Engineer 4 (E4)	79.66	10.0	6.17%	4.92													10	8.33%	6.64
Engineer 3 (E3)	73.17	172.0	106.17%	77.69							-124	12.84%	9.39	6	30.00%	21.95	30	25.00%	18.29
Engineer 2 (E2)	62.06	258.0	159.26%	98.84							-98	10.14%	6.30				40	33.33%	20.69
Engineer 1 (E1)	48.26	-38.0	-23.46%	-11.32							-368	38.10%	18.39				36	30.00%	14.48
Planner 5 (P5)	80.09	0.0																	
Planner 4 (P4)	71.80	0.0																	
Planner 3 (P3)	49.44	0.0																	
Planner 2 (P2)	53.71	0.0																	
Architect 4 (AR4)	77.13	0.0																	
Architect 3 (AR3)	61.30	0.0																	
Architect 2 (AR2)	45.31	0.0																	
Architect 1 (AR1)	35.06	0.0																	
Environmental Scientist 4 (E)	80.09	0.0																	
Industry Specialist 3 (IS3)	64.91	0.0																	
Construction Services 4 (C)	59.01	0.0																	
Construction Services 3 (C)	50.00	-144.0	-88.89%	-44.44							-144	14.91%	7.45						
Construction Services 2 (C)	35.16	-142.0	-87.65%	-30.82							-142	14.70%	5.17						
Technician 3 (T3)	42.24	0.0																	
Technician 1 (T1)	21.31	0.0																	
Administrative 3 (A3)	53.05	0.0																	
Administrative 2 (A2)	35.27	0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
TOTALS		162.0	100%	\$117.61	0.0	0.00%	\$0.00	0.0	0%	\$0.00	-966.0	100%	\$54.16	20.0	100%	\$78.02	120.0	100%	\$62.77

Local Public Agency

Village of Orland Park

County

Cook

Section Number

14-00072-00-WR

Consultant / Subconsultant Name

TranSystems

Job Number

AVERAGE HOURLY PROJECT RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Task 18 - Mainline Alternative Breakout - Two Contract Plans			Task 19 - Plats & Legals (Wolf To SW Highway: Contracts 1 & 2)			Task 20 - Land Acquisition Services (Contract 1)			Task 21 - FPCC Water Quality Design, Coordination, IGA								
		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	Hours	% Part.	Wgt'd Avg
Engineer 5 (E5)	80.09	50	5.92%	4.74	12	17.65%	14.13				56	73.68%	59.02						
Engineer 4 (E4)	79.66																		
Engineer 3 (E3)	73.17	220	26.07%	19.07	20	29.41%	21.52				20	26.32%	19.26						
Engineer 2 (E2)	62.06	296	35.07%	21.77	20	29.41%	18.25												
Engineer 1 (E1)	48.26	278	32.94%	15.90	16	23.53%	11.36												
Planner 5 (P5)	80.09																		
Planner 4 (P4)	71.80																		
Planner 3 (P3)	49.44																		
Planner 2 (P2)	53.71																		
Architect 4 (AR4)	77.13																		
Architect 3 (AR3)	61.30																		
Architect 2 (AR2)	45.31																		
Architect 1 (AR1)	35.06																		
Environmental Scientist 4 (SC4)	80.09																		
Industry Specialist 3 (IS3)	64.91																		
Construction Services 4 (CS4)	59.01																		
Construction Services 3 (CS3)	50.00																		
Construction Services 2 (CS2)	35.16																		
Technician 3 (T3)	42.24																		
Technician 1 (T1)	21.31																		
Administrative 3 (A3)	53.05																		
Administrative 2 (A2)	35.27																		
TOTALS		844.0	100%	\$61.48	68.0	100%	\$65.26	0.0	0%	\$0.00	76.0	100%	\$78.27	0.0	0%	\$0.00	0.0	0%	\$0.00

Christopher B. Burke Engineering, Ltd. (CBBEL)

Supplement No. 1 Scope and Manhours

CHRISTOPHER B. BURKE ENGINEERING, LTD.
SCOPE OF SERVICES

143rd Street (IL Route 7)
Orland Park, Cook County, Illinois

January 27, 2025
PHASE II – DESIGN ENGINEERING SERVICES
CHANGE ORDER #1

The following scope of work for Changer Order #1 provides supplemental information to the TranSystems scope of work for an additional level effort to separate the 143rd Street (IL Route 7) Wolf Road to Southwest Highway project into two separate contract deliverables. Contract 1 will include 143rd Street from West Avenue to Southwest Highway. Contract 2 will include 143rd Street from Wolf Road to West Avenue. Contract 1 is currently funded for construction and has congressional funding to be committed by FY26. Contract 2 remains unfunded for construction at this time. The Village has requested that this change order provide professional services to acquire the land acquisition services for Contract 1, which includes preparation of the Plat of Highway. Contract 2 Plat of Highway is included with this Change Order but professional land acquisition services will be deferred to a later date. With the splitting of the project into two contracts, an additional level of effort is required for preparation of the preliminary, pre-final and final plans, specifications and estimates. CBBEL will be providing services for drainage design, landscape design, erosion control design, and permitting. Two separate permitting packages will be required for each Contract 1 and Contract 2. The original permitting scope and labor will be utilized for Contract 2 and a new sub-task will be included for additional effort for permitting for Contract 1.

The Village has directed the project team to remove the Southwest Highway Metra commuter parking lot expansion advanced contract from the contract scope. As part of the Phase I Engineering Study, the Southwest Highway Metra commuter parking lot expansion provided a total of 600 stalls at the 143rd Street Metra Station, which planned for future relocation of existing stalls east of the Metra line to the Southwest Highway commuter lot. The Village has a revised agreement with Metra that additional parking stalls are not required until ridership at this Metra station increases. The proposed improvement will still require modification to the Southwest Highway commuter parking lot due to the roadway widening. Topographic survey of the existing parking lot, Metra coordination, and IDOT coordination will still be required as this modifies the design from Phase I Engineering.

Since the contract authorization in October 2023, an additional level of effort has been required for Forest Preserve District of Cook County (FPCC) coordination related to the easement acquisition. The FPCC has changed the water quality best management practice (BMP) design objective for all stormwater tributary to the McGinnis Slough Forest Preserve from the Phase I design and associated coordination via the Section 4(f) process. Based on the draft IGA between the FPCC and the Village, additional work will be required for design and modeling of BMPs, that is much greater than what was anticipated based on the discussions during the Phase I Engineering Section 4(f) review/approval process. The estimated additional work required is based on the most recent IGA, which also includes a potential additional 1-acre of additional property for BMP design, and these additional BMPs

will require an Addendum to the Phase I and will require modification to the Section 4(f) documentation.

Overall, this change order modifies the existing contract tasks and includes additional ones:

- Task 4A – Metra Parking Lot Permitting
 - Credit will be provided for re-allocated scope
- Task 4C – Contract 1 Breakout Permitting
- Task 5 – Metra Parking Lot – Survey, Contract Plans & Construction Management
- Task 9 – Agency Coordination, Meetings & Public Outreach
- Task 10 – Project Funding Assistance
- Task 19 (New Task) – Plat and Legals (Contract 1 & 2)
- Task 20 (New Task) - Right-of-Way Engineering Services (Contract 1 - West to Southwest Highway)
- Task 21 (New Task) – Forest Preserve McGinnis Slough Water Quality Drainage Design, Coordination & IGA Support

The below tasks provides supplemental scope detail for Task 4.

Task 4 – Permits

This task will prepare, submit, and coordinate obtaining permits and other approvals needed for project construction.

Part A: Metra Parking Lot

The Metra Southwest Highway commuter lot will no longer be expanded and proceed as an individual contract. Task 4a labor will be reallocated.

Part C: 143rd Street Contract 1 (West Avenue to Southwest Highway)

CBBEL will prepare, submit, and coordinate obtaining permits and other approvals needed for project construction from the following agencies: U.S. Army Corps of Engineers (USACE), State Historic Preservation Office (SHPO), Illinois Department of Natural Resources (IDNR), U.S. Fish and Wildlife Service (USFWS), Soil & Water Conservation District, Illinois Environmental Protection Agency (IEPA), and the Cook County - Metropolitan Water Reclamation District (MWRD).

This task includes permitting associated with the 143rd Street Reconstruction Contract 1 (from West Avenue to Southwest Highway). Before and during the permit review process, we expect to have meetings with the regulatory agencies and client. We also expect to have to prepare responses to comments received during the review process. We have included budget to cover the cost of submittal of two responses to comments. Time for meetings is covered under Task 9 – Agency Coordination, Meetings and Public Outreach.

Task 4C3 – Threatened and Endangered Species Coordination:

Threatened and Endangered (T&E) species coordination occurred during Phase I. However, T&E species clearances are typically valid for two years or less, and will likely need to be renewed during the permit process and prior to the start of construction. This task will be completed for the overall project corridor. T&E species coordination associated with “split” contracts, if necessary, is included as a contingency item.

This task assumes that the T&E species clearance will be updated by IDOT during Phase II, and that the IDOT T&E species clearance will be sufficient for permitting. This task includes submittal to IDNR to obtain the latest T&E and protected lands GIS shapefiles, and agency coordination pertaining to T&E (or other protected) species or protected lands that may arise during permitting.

This task does not include the following:

- An update to the Biological Clearance through the following:
 - IDNR Ecological Compliance Assessment Tool (EcoCAT) website
 - USFWS Information for Planning and Consultation (IPaC) system
- Preparation of a Technical Memorandum, including the IPaC generated T&E species list and an effects determination for each species (with rationale)
- A detailed search for T&E species
- Incidental Take Authorization
- Biological Assessment

A supplemental task will be required if additional T&E documentation or submittals are required/requested by an agency during permitting.

Task 4C5 – Supplemental Tree Survey, Impact Evaluation, and Tree Mitigation Plan:

Additional tree survey may be required. If necessary, trees will be located using a sub-meter accuracy handheld GPS unit. As part of this task, all identified trees will be tabulated and evaluated with respect to species, condition, and form. This task pertains to the entire project corridor (excluding FPDCC property) where (through additional coordination) it is determined that additional tree data is necessary.

This task assumes that supplemental tree data will not be required at FPDCC property. A supplemental task will be required if additional tree data collection is required/requested by the FPDCC.

Additional tree impact evaluation will be completed as necessary to avoid/minimize impacts with respect to detailed engineering design, and tree mitigation will be discussed in greater detail with the FPDCC and Village of Orland Park. This task also includes preparation of a Tree Protection Plan, if necessary, based on coordination with the FPDCC.

- Trees within FPDCC Property: It is understood that the Village of Orland Park will likely pay an in-lieu fee to the FPDCC for planting trees, restoration, etc. as compensation for impacted trees. The FPDCC would likely plant replacement trees on their property in the vicinity of the impacts or at other suitable locations (as determined by FPDCC).
- Trees outside of FPDCC Property: A Tree Mitigation Plan will be prepared for impacts to trees located outside of FPDCC property. This task involves coordination and preparation of a Tree Mitigation Plan that meets Village of Orland Park requirements. This task will complement the Landscape Design task(s).
- Note: Separate Tree Protection Plans and Tree Mitigation Plans associated with “split” contracts, if necessary, are included as a contingency item.

Task 4C6 – Cook County Watershed Management Ordinance Permit Application:

A Cook County Watershed Management Ordinance (WMO) permit application will be submitted to the Village of Orland Park and the MWRD, as appropriate. CBBEL will prepare and compile the required application forms, schedules, plans, and calculations related to stormwater management, floodplain, wetlands-buffer-riparian areas, outfalls, qualified sewer construction,

and erosion control for submittal. CBBEL will schedule a pre-application meeting with MWRD and Village of Orland Park prior to the permit submittal, if necessary.

No IDNR-Office of Water Resources (OWR) floodway construction permit is required because the drainage area of Long Run-Tributary A is less than one square mile. However, mapped floodplain is regulated under the Cook County WMO.

Task 4C7 – USACE Section 404 Clean Water Act Permit Application:

Based on Phase I engineering, approximately 0.10 acres of wetland and WOUS may be impacted by the proposed improvements within Contract 1, including high quality wetlands. This project is anticipated to be processed by the USACE as a Section 404 Clean Water Act (CWA) Regional Permit. A pre-application meeting will be scheduled with the USACE as an early step in the permitting process to discuss permitting strategy and project corridor characteristics, including cultural resources. Depending on the design of the water quality modeling, additional open detention may be required on FPD property and additional wetland impacts could occur, and an Individual Permit may be required (greater than 0.5 acres), which is included in this task.

The required exhibits, specifications, data, and project information for the overall proposed improvements (i.e., entire project corridor) will be compiled and assembled in a Section 404 CWA Individual Permit application package to the USACE and other regulatory/resource agencies, as necessary. The following information will be required as part of the application:

- Narrative description of proposed Best Management Practices (BMPs)
- Post-construction management and monitoring plan for BMPs (activities to be completed as part of routine site maintenance)
- Plan and profile drawings for road crossings
- Planting plan for wet bottom detention basins
- Alternative Sites Analysis to consider alternative site designs which may be constructed and that may have less impact on aquatic resources

Complete all required wetland mitigation offsite via purchase of credits from a USACE approved wetland mitigation bank for Contract 1. Based on preliminary engineering, it is estimated that Based on recent coordination with local mitigation bankers, the cost to purchase mitigation credits currently varies from approximately \$96,000 - \$180,000 per credit acre based on location, type of mitigation credit, availability, etc.

The project team will coordinate development of the permitting documents with the USACE and other resource agencies, as necessary. This task will likely require meeting(s) with regulatory/resource agencies to coordinate permitting activities.

The Section 401 CWA Water Quality Certification (WQC) from the IEPA will be completed under a separate task. The Section 404 CWA permit application also requires historic preservation and endangered species compliance. Historic preservation and endangered species compliance will also be completed under separate tasks.

The CWA Individual Permit process requires a Public Notice and coordination with other resource agencies. Because McGinnis Slough is a high-quality natural area and considered an “important bird area”, we also expect the USFWS, U.S. Environmental Protection Agency (USEPA), IDNR, and Conservation Groups to comment on the project with respect to migratory birds and other potential downstream impacts. This task includes preparation of two responses to comments.

Task 4C8 – Coordination with the Will-South Cook Soil & Water Conservation District:

This task includes preparation of a submittal to the Will-South Cook Soil & Water Conservation District (SWCD) to obtain approval of the Soil Erosion and Sediment Control Plan for the overall project corridor. This coordination is typically required by the USACE as part of the Section 404 permitting process. Preparation of the Soil Erosion and Sediment Control Plan is included under a separate task. This task also includes response to comments. SWCD coordination associated with “split” contracts, if necessary, is included as a contingency item.

Task 4C9 – Best Management Practice (BMP) Design:

As noted above, McGinnis Slough is a high quality natural area that under proposed conditions will continue to receive storm water runoff from the roadway. As part of the Section 404 CWA review, the USACE requires that (to the greatest extent practicable) proposed activities be designed so that surface water runoff does not directly discharge into wetlands/WOUS, but should pass through BMPs prior to discharge. Therefore, BMP opportunity areas must be evaluated to protect the downstream environment. BMP opportunity areas were identified near McGinnis Slough as part of the Phase I study.

The BMPs would require a permanent drainage easement from the FPDCC for future maintenance. A complete BMP strategy for this project will require additional coordination with the FPDCC and other regulatory/resource agencies. The viability of each BMP opportunity area and type of BMP to be installed will depend on several factors, including but not limited to, site constraints, geology and soil conditions, water table, slope, drainage, final engineering design, target pollutants, and agency coordination.

This task includes a feasibility evaluation of BMP opportunity areas. As part of this evaluation, soils data and topography will be collected and reviewed. This task will require that soil samples be collected (by others) every 50 to 100 feet within and adjacent to the BMP opportunity areas based on each location field conditions and proximity to existing wetland. Existing topography will be surveyed (as part of a separate task) within the BMP opportunity areas and 50 feet beyond the limits of the permanent easements required for the BMPs.

Based on the results of the BMP feasibility evaluation, BMP options will be discussed with the FPCC and coordinated with the USACE through the Section 404 permitting process. A BMP design for the overall project will be submitted as part of the CWA Individual Permit application. BMP design associated with Contract 1 and Contract 2, is included. The final BMP design will be prepared to minimize potential impacts to Long Run, McGinnis Slough, and downstream wetlands from stormwater pollutants. This task also includes the preparation of short and long-term maintenance and monitoring plans, as needed. The initial maintenance and

In addition, this task includes coordination with the Village of Orland Park regarding non-structural BMPs. The non-structural BMPs may include opportunities to reduce pollutant loads in storm water runoff from public roads, parking lots, and sidewalks/public surfaces, as well as coordinating with private property owners, as necessary. BMPs may include enhanced training (e.g., for employees that maintain public surfaces) and public education/outreach (e.g., lawn/garden care, winter deicing material storage and use) specific to the McGinnis Slough sub-watershed area. This task does not include training or implementation of these practices.

Task 4C10 – Interagency Wetland Policy Act Coordination:

Wetland Clearance to address Interagency Wetland Policy Act (IWPA) requirements was coordinated through IDOT during the Phase I study. The IDOT review for compliance under IWPA – Part 1090 clears the project for letting with respect to wetlands.

The IWPA regulates all vegetated wetland areas, but does not regulate the unvegetated portions of WOUS and the open water portions of detention basins. Based on preliminary engineering and coordination during Phase I, approximately 0.10 acres of wetland and WOUS may be impacted by the proposed improvements within Contract 1, and the majority of the wetlands that may be impacted by the project are USACE jurisdictional. During CWA permitting, the project team will look for opportunities to avoid/minimize wetland impacts, and wetland mitigation will be discussed in greater detail.

This task includes agency coordination pertaining to the IWPA, including with respect to proposed mitigation sites (e.g., updated mitigation strategies or documentation of completion), as necessary. This task will be completed for the overall project corridor once final wetland impact totals and mitigation have been determined.

This task does not include re-submittal of a Wetland Impact Evaluation (and exhibits) to IDOT for review/approval. A supplemental task will be required if additional wetland impact documentation or submittals are required/requested by an agency regarding the IWPA during permitting.

Task 4C13 – Prepare the Storm Water Pollution Prevention Plan and Notice of Intent:

This task includes preparation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with Part IV of the General National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10. Completion of this task will require narrative, Soil Erosion and Sediment Control Plans (to be completed under a separate task), and signed certification statements from all contractors, subcontractors, and the operator as identified in the SWPPP.

The SWPPP is part of the Notice of Intent (NOI) submitted to the IEPA to obtain coverage under the General NPDES ILR10 Permit. A NOI will be prepared for the proposed improvements. The NOI requires documentation of historic preservation and endangered species compliance. Historic preservation and endangered species coordination/compliance will be completed under separate tasks. This task will be completed for Contract 1.

Task 4C14 – Historic Preservation Coordination:

Based on the Phase I Cultural Resources Review, IDOT's Cultural Resources Unit approved the project for Design Approval. The SHPO concurred with the IDOT Cultural Resources Unit finding of "No Adverse Effect" for the roadway improvement project. SHPO concurrence was provisional on the following condition: "That the SHPO is given the opportunity to review and approve the Phase II plans and specifications prior to initiation of construction activities." The cultural resources coordination for this project will not be complete until the SHPO has reviewed and approved the final plans and specifications.

The IDOT Cultural Resources Unit will coordinate the review with the SHPO as soon as final plans and specifications are available. This task involves coordination with the IDOT Cultural Resources Unit, including submittal of the Phase II plans and specifications and response to comments. This task will be completed for the 143rd Street Reconstruction Project Contract 1.

Local Public Agency

Village of Orland Park

County

Cook

Section Number

14-00072-00-WR

Prime Consultant (Firm) Name

TranSystems

Prepared By

Matt Huffman

Date

1/27/2025

Consultant / Subconsultant Name

Christopher B. Burke Engineering, Ltd.

Job Number

D-91-180-14

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

Phase II Engineering. 143rd Street (IL Route 7) from Wolf Road to Southwest Highway - Change Order 1

PAYROLL ESCALATION TABLE

CONTRACT TERM	24	MONTHS
START DATE	2/1/2025	
RAISE DATE	1/1/2026	
END DATE	1/31/2027	

OVERHEAD RATE	126.53%
COMPLEXITY FACTOR	0
% OF RAISE	2.00%

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	2/1/2025	1/1/2026	11	45.83%
1	1/2/2026	1/1/2027	12	51.00%
2	1/2/2027	2/1/2027	1	4.34%

The total escalation = 1.17%

Local Public Agency

County

Section Number

Village of Orland Park

Cook

14-00072-00-WR

Consultant / Subconsultant Name

Job Number

Christopher B. Burke Engineering, Ltd.

D-91-180-14

PAYROLL RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

MAXIMUM PAYROLL RATE	86.00
ESCALATION FACTOR	1.17%

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Engineer VI	\$84.21	\$85.19
Engineer V	\$71.16	\$71.99
Engineer IV	\$58.38	\$59.06
Engineer III	\$46.57	\$47.11
Engineer I/II	\$33.60	\$33.99
Survey V	\$81.89	\$82.85
Survey IV	\$74.00	\$74.86
Survey III	\$64.75	\$65.51
Survey II	\$53.00	\$53.62
Survey I	\$37.56	\$38.00
Engineering Technician V	\$70.17	\$70.99
Engineering Technician IV	\$61.81	\$62.53
Engineering Technician III	\$38.25	\$38.70
Engineering Technician I/II	\$23.33	\$23.60
CAD Manager	\$68.83	\$69.63
CAD Technician II	\$51.81	\$52.42
GIS Specialist III	\$56.00	\$56.65
Landscape Architect	\$63.00	\$63.74
Landscape Designer I/II	\$36.50	\$36.93
Environmental Resource Specialist V	\$73.70	\$74.56
Environmental Resource Specialist IV	\$60.58	\$61.29
Environmental Resource Specialist III	\$51.25	\$51.85
Environmental Resource Specialist I/II	\$29.13	\$29.47
Environmental Resource Technician	\$44.00	\$44.51
Engineering Intern	\$18.67	\$18.89

Local Public Agency

Village of Orland Park

County

Cook

Section Number

14-00072-00-WR

Consultant / Subconsultant Name

Christopher B. Burke Engineering, Ltd.

Job Number

D-91-180-14

DIRECT COSTS WORKSHEET

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	10800	\$0.66	\$7,128.00
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day	60	\$65.00	\$3,900.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
Project Specific Insurance	Actual Cost			\$0.00
Monuments (Permanent)	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
2-Way Radio (Survey or Phase III Only)	Actual Cost			\$0.00
Telephone Usage (Traffic System Monitoring Only)	Actual Cost			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)			\$0.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Title Reports	Actual Costs	1	\$70,000.00	\$70,000.00
Report Reproduction/Printing	Actual Costs	1	\$500.00	\$500.00
11x17 Color Laser	Actual Costs	500	\$1.50	\$750.00
				\$0.00
TOTAL DIRECT COSTS:				\$82,278.00

Local Public Agency

Village of Orland Park

County

Cook

Section Number

14-00072-00-WR

Consultant / Subconsultant Name

Christopher B. Burke Engineering, Ltd.

Job Number

D-91-180-14

AVERAGE HOURLY PROJECT RATES
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			4A. Permits (Metra)			4C. Permits (Contract 2)			5. Metra Parking Lot - PS&E and CM			9. Agency Coordination, Meetings & Outreach			10. Project Funding Assistance		
		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 VI	85.19	40.0	0.75%	0.63										2	5.71%	4.87	4	5.00%	4.26
Engineer V	71.99	208.0	3.87%	2.79	-12	3.72%	2.67	48	4.52%	3.25	-90	11.12%	8.01	6	17.14%	12.34	12	15.00%	10.80
Engineer IV	59.06	469.0	8.74%	5.16	-40	12.38%	7.31	168	15.82%	9.34	-90	11.12%	6.57	4	11.43%	6.75	32	40.00%	23.62
Engineer III	47.11	328.0	6.11%	2.88	-52	16.10%	7.58	132	12.43%	5.86	-202	24.97%	11.76	2	5.71%	2.69	16	20.00%	9.42
Engineer I/II	33.99	303.0	5.64%	1.92	-48	14.86%	5.05	159	14.97%	5.09	-226	27.94%	9.50	2	5.71%	1.94	16	20.00%	6.80
Survey V	82.85	127.0	2.37%	1.96															
Survey IV	74.86	460.0	8.57%	6.41															
Survey III	65.51	124.0	2.31%	1.51															
Survey II	53.62	670.0	12.48%	6.69															
Survey I	38.00	670.0	12.48%	4.74															
Engineering Technician V	70.99	0.0																	
Engineering Technician IV	62.53	0.0																	
Engineering Technician III	38.70	0.0																	
Engineering Technician I/II	23.60	0.0																	
CAD Manager	69.63	1,179.0	21.96%	15.29	-8	2.48%	1.72	20	1.88%	1.31									
CAD Technician II	52.42	-128.0	-2.38%	-1.25	-8	2.48%	1.30				-160	19.78%	10.37						
GIS Specialist III	56.65	126.0	2.35%	1.33	-20	6.19%	3.51	62	5.84%	3.31	-8	0.99%	0.56	8	22.86%	12.95			
Landscape Architect	63.74	-25.0	-0.47%	-0.30							-33	4.08%	2.60						
Landscape Designer I/II	36.93	0.0																	
Environmental Resource Specialist V	74.56	379.0	7.06%	5.26	-38	11.76%	8.77	300	28.25%	21.06									
Environmental Resource Specialist IV	61.29	121.0	2.25%	1.38	-85	26.32%	16.13	102	9.60%	5.89				8	22.86%	14.01			
Environmental Resource Specialist III	51.85	148.0	2.76%	1.43	-4	1.24%	0.64	53	4.99%	2.59				3	8.57%	4.44			
Environmental Resource Specialist I/II	29.47	80.0	1.49%	0.44															
Environmental Resource Technician	44.51	90.0	1.68%	0.75	-8	2.48%	1.10	18	1.69%	0.75									
Engineering Item	18.89	0.0																	
		0.0																	
		0.0																	
TOTALS		5369.0	100%	\$59.03	-323.0	100.00%	\$55.80	1062.0	100%	\$58.45	-809.0	100%	\$49.37	35.0	100%	\$60.00	80.0	100%	\$54.90

Local Public Agency

Village of Orland Park

County

Cook

Section Number

14-00072-00-WR

Consultant / Subconsultant Name

Christopher B. Burke Engineering, Ltd.

Job Number

D-91-180-14

AVERAGE HOURLY PROJECT RATES
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Contract Breakout (95%/100%)			19. Plat and Legals (Contract 1 & 2)			21. FPCC Water Quality Design, Coord, IGA											
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg			
Engineer VI	85.19	10	3.27%	2.78				24	1.12%	0.95									
Engineer V	71.99	48	15.69%	11.29	48	1.67%	1.20	148	6.90%	4.97									
Engineer IV	59.06	88	28.76%	16.99	31	1.08%	0.64	276	12.87%	7.60									
Engineer III	47.11	72	23.53%	11.09				360	16.78%	7.91									
Engineer I/II	33.99	40	13.07%	4.44				360	16.78%	5.71									
Survey V	82.85				125	4.35%	3.60	2	0.09%	0.08									
Survey IV	74.86				446	15.52%	11.62	14	0.65%	0.49									
Survey III	65.51				116	4.04%	2.64	8	0.37%	0.24									
Survey II	53.62				646	22.49%	12.06	24	1.12%	0.60									
Survey I	38.00				646	22.49%	8.54	24	1.12%	0.43									
Engineering Technician V	70.99																		
Engineering Technician IV	62.53																		
Engineering Technician III	38.70																		
Engineering Technician I/II	23.60																		
CAD Manager	69.63	40	13.07%	9.10	815	28.37%	19.75	312	14.55%	10.13									
CAD Technician II	52.42							40	1.86%	0.98									
GIS Specialist III	56.65							84	3.92%	2.22									
Landscape Architect	63.74	8	2.61%	1.67															
Landscape Designer I/II	36.93																		
Environmental Resource Specialist V	74.56							117	5.45%	4.07									
Environmental Resource Specialist IV	61.29							96	4.48%	2.74									
Environmental Resource Specialist III	51.85							96	4.48%	2.32									
Environmental Resource Specialist I/II	29.47							80	3.73%	1.10									
Environmental Resource Technician	44.51							80	3.73%	1.66									
Engineering Item	18.89																		
TOTALS		306.0	100%	\$57.36	2873.0	100%	\$60.07	2145.0	100%	\$54.18	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00

Mathewson Land Services, Inc. (MLS)

Supplement No. 1 Scope and Manhours

EXHIBIT A: SCOPE OF SERVICES

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

1. Project Management
2. Appraisal
3. Appraisal Review
4. Specialty Report
5. Negotiation
6. Closings
7. Relocation
8. IDOT Certification
9. Direct Expenses

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.

PROJECT MANAGEMENT

MLS shall establish a Project Manager who will be knowledgeable and responsible for all services performed under this AGREEMENT. The main duties of the Project Manager may include:

- Be the liaison between the VILLAGE, TRANSYSTEMS and MLS and coordinate all daily project activities of MLS.
- Understand the scope of work the associated deadlines/timeframes the VILLAGE needs to meet.
- Assist VILLAGE and TRANSYSTEMS in value engineering by anticipating right of way acquisition costs and issues.
- Assign work to appropriate staff.
- Coordinate all deliverables, keep project on schedule and maintain the channels of communication between the VILLAGE, TRANSYSTEMS and MLS.
- Provide the appropriate staff and SUBCONSULTANTS that have knowledge of and will follow Illinois Department of Transportation's LAPPM.
- Submit accurate invoices that have documentation to support the invoiced amount.
- Ensure SUBCONTRACTORS' prompt and efficient performance.
- Provide QA/QC oversight.
- Provide coordination with IDOT to obtain project right of way, herein referred to as ROW, certification when necessary.

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 VILLAGE'S concurrence. MLS shall provide a copy of an appraisal of each parcel together with Improvement Disposition Values form to be submitted to the VILLAGE 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 VILLAGE.

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 VILLAGE. 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 VILLAGE.

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 MLS and approved by the VILLAGE.

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 VILLAGE 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. Cost Analysis shall be paid as part of Project Management.

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

MLS 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 VILLAGE. These updates or revisions will be assigned to MLS 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 MLS and approved by the VILLAGE.

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 VILLAGE 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 and shall be paid as Project Management.

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

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

SPECIALTY REPORTS

Specialty Reports performed by MLS must be in accordance with the LAPPM. It is MLS's responsibility to ensure that all items affecting the value of the property have been considered in the Specialty Report.

MLS shall make sufficient inspection of the properties and make such investigations and studies as are necessary to derive sound conclusions to support the specialty report.

Work is to be performed by a licensed Engineer, Architect, or appropriately licensed person in that specific field or MLS must certify that a bona fide employee working solely for MLS assisted in preparations of the report. If MLS is not qualified to perform assigned tasks, MLS may then employ the services of a qualified SUBCONTRACTOR.

The Specialty Report, and an updated or revised specialty report, shall be deemed complete when an acceptable Specialty Report is submitted by MLS and approved by the VILLAGE.

Each Specialty Report shall be paid for as specified in Exhibit B.

It may be necessary for a completed specialty report to be updated or revised due to a change in the ROW Plat. Each updated or revised specialty report shall be paid for as specified in Exhibit B.

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

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 VILLAGE'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 VILLAGE 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 VILLAGE as reasonably requested

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

In the event MLS, 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, MLS shall prepare and submit a written report summarizing the progress of negotiations to date together with a copy of MLS's Negotiator's Report completed to date with the names and addresses of all interested parties. MLS's written report shall also include its recommendation for further procedure towards acquiring the parcel. The VILLAGE may elect to prepare and forward a Final Offer letter (with copy to MLS) to the owner of the parcel and thereafter refer the matter to the VILLAGE Attorney's Office to proceed with preparation of a condemnation petition. In any case, the VILLAGE reserves the right to require MLS 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 VILLAGE. 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 VILLAGE, and the complaint is filed.

If requested to do so, MLS 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 VILLAGE due to new parcel information supplied by the VILLAGE to MLS 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, MLS 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 VILLAGE or its trial counsel and shall be paid for as specified in Exhibit B.

CLOSINGS

MLS shall attend or otherwise supervise the actual closing of each acquired parcel. It is anticipated that most closings will not require an escrow transaction but it is understood that certain acquisitions are best facilitated through an escrow closing.

RELOCATION

Relocation work performed by the Relocation Agent must be in accordance with the LAPPM.

The Relocation Agent shall prepare a relocation plan for the full scope of each project in accordance with the LAPPM. All identified relocation units on the project, including advanced acquisitions, must be addressed in the relocation plan. This relocation plan shall be submitted to the VILLAGE for review and approval prior to initiation of negotiations.

It may be necessary for a completed relocation plan to be supplemented due to a change in the VILLAGE's project. These supplements, or relocation plan addenda, will be assigned to the Relocation Agent in a separate work order as the need arises. All relocation plan addenda shall be submitted to the VILLAGE for review and approval prior to initiation of negotiations.

The Relocation Agent shall be required to provide relocation assistance, advisory services, and determine the amount of payments to be provided to a displaced person. The Relocation Agent shall submit all computations for replacement housing payments and requests for housing of last resort payment to the VILLAGE for review and approval prior to initiation of negotiations.

The Relocation Agent shall be required to personally contact the property owner or occupant at the onset of the relocation process, present the appropriate informational letter, and provide information about the relocation advisory assistance and payments that will be made available to them. The Relocation Agent is required to remain in continual personal contact with the displaced person throughout the relocation process to assist in their relocation. A log of each contact will be maintained on an ongoing basis as part of the Relocation Assistance Unit Record.

All relocation claims, along with their necessary supporting documentation, shall be submitted to the VILLAGE for review and final approval.

The Relocation Agent shall maintain an accurate and up-to-date file for each relocation unit, including moving expense records, replacement housing payment records, all relevant correspondence and the Relocation Assistance Unit Record. This file will be provided to the VILLAGE upon completion of the relocation for that unit.

The Relocation Agent shall forward all written requests for review of disputed relocation claims to the VILLAGE.

The Relocation Plan and Relocation Plan Addendum shall be deemed complete when an acceptable Relocation Plan or Relocation Plan Addendum is submitted and approved.

The Residential and Non-Residential Relocation activities shall be deemed complete when the subject property is vacated and able to be utilized for construction of the project, and the displaced person has received all payments.

Each Unit relocated by MLS shall be paid for as specified in Exhibit B.

Each Relocation Plan and Addendum prepared by MLS shall be paid for as specified in Exhibit B.

EXHIBIT B: COMPENSATION

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

<u>Task</u>	<u>Count</u>	<u>Rate</u>	<u>Extension</u>
Project Management			
Mark D. Mathewson	80	\$350.00	\$28,000.00
Staff	50	\$200.00	\$10,000.00
Appraisal			
Residential	0	\$4,500.00	\$0.00
Commercial	13	\$6,000.00	\$78,000.00
Appraisal Review			
Residential	0	\$2,250.00	\$0.00
Commercial	13	\$3,000.00	\$39,000.00
Specialty Report			
Simple	3	\$7,500.00	\$22,500.00
Complex	1	\$15,000.00	\$15,000.00
Negotiation			
Residential	0	\$5,000.00	\$0.00
Non-SF	13	\$8,000.00	\$104,000.00
Closings			
Residential	0	\$1,000.00	\$0.00
Non-SF	13	\$2,500.00	\$32,500.00
Relocation			
	0	\$10,000.00	\$0.00
IDOT Certification			
	13	\$1,000.00	\$13,000.00
Direct Expenses*			
	13	\$1,000.00	\$13,000.00
Contingency**			
			\$21,500.00

Total: \$376,500.00

*Direct Expenses shall include, but not be limited to, recording fees, partial release fees, land trustee fees, escrow fees, recorded document copy fees, later date title commitments, additional title research performed by the title company, real estate transfer tax exemption fees and recording fees. TRANSYSTEMS shall reimburse MLS for the actual cost of the direct expenses. Direct Expenses shall not include the cost of title insurance and escrow closing fees imposed by the title company at closing.

**Contingency shall be used for design changes, new owners, and updated appraisals.

The sum total of all services shall not exceed \$376,500.00.

It is understood that appearances in court and pretrial conferences may be required in relation to the negotiation services called for herein and it is agreed that such appearance or appearances shall be made upon request of VILLAGE or its trial counsel.

In event of such services being requested, they will be provided as follows:

- (a) Rate each half day or fraction thereof for time spent in pretrial conference \$2,500.00.
- (b) Rate each half day or fraction thereof for time spent in court \$2,500.00.

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

Wang Engineering, Inc. (Wang)

Supplement No. 1 Scope and Manhours

July 18, 2024

Chris Bonus

TranSystems Corporation

1475 East Woodfield Road, Suite 600
Schaumburg, IL 60173-5440

Re: Additional Geotechnical Engineering Services
143rd Street Phase II
Wolf Road to Illinois Route 7
Cook County
Wang PKE245246

Dear Mr. Bonus:

Wang Engineering Inc., a Terracon Company (Wang) is pleased to present this proposal for additional geotechnical engineering services to support the Phase II reconstruction of 143rd Street from Wolf Road to Illinois Route 7 in Orland Park, Illinois. The following sections describe our understanding of the scope of work and the assumptions made in developing the attached cost estimate.

SCOPE OF WORK

Wang understands testing is required to determine the field infiltration rate for subgrade soils, up to a maximum depth of 10 feet below the existing grade of the project area. This geotechnical information is required for the evaluation and design of water quality design elements for stormwater tributary to the Forest Preserve District of Cook County McGinnis Slough, which will include in pipe (Storm trap or leaky RCPs) and open vegetated areas (oversized ditches).

Thirty six locations and testing depths along 143rd Street and Southwest Highway have been identified by Christopher B, Burke Engineering, Ltd. (CBBEL) for single ring infiltrometer testing. Please note that infiltration testing cannot be performed below the water table. If groundwater is present above the test depth, the test will be terminated. Since the testing depths exceed 5 feet, a drilling rig will be required to install the testing equipment at all locations.

We estimate a total of three test locations can be installed per rig day and testing can be completed at two locations per day. At this time, testing locations have not been provided. As such, traffic control (roadway flaggers) may be needed for rig access for installation and testing at each location and has been accounted for in the cost estimate.

Geotechnical Drilling Services

Wang's subcontractor, Wang Testing Services (WTS), will provide equipment, labor, and associated materials to drill and install PVC pipes at the 36 test locations that will be provided by TranSystems.

Field Supervision

Prior to drilling, Wang will layout the borings/test locations in the field and clear the existing utilities. A field geologist will monitor drilling activities and maintain daily field notes. Wang will survey as-drilled boring/test locations with a mapping grade GPS. Stations, offsets, and elevations will be provided by TranSystems.

Engineering Analysis and Recommendations

Wang will prepare a geotechnical data report that summarizes the results of the infiltration testing.

SCHEDULING

Wang will start the fieldwork expediently upon prior written authorization to proceed. We anticipate that two days will be required to mark the test locations. After utilities clearance, we estimate 12 rig days will be necessary to install the test locations. The testing will commence concurrently with the test installation and is expected to be completed in about 18 working days. Test results will be provided within one week of the conclusion of testing.

ESTIMATED COST AND ASSUMPTIONS

Wang proposes to provide the above tasks on a time and expense basis according to the attached cost estimate. Wang would not exceed the estimated upper limit without the Client approval. If groundwater is present above the test depth, the test will be terminated. In preparing the cost estimate we have assumed the following conditions:

- Site ground conditions will allow our access with a pickup truck to service test locations with water.
- Tests showing no movement after a duration of one hour will be terminated.
- If necessary, Wang will inform property owners about our work on their lands. We estimate that a permit may be required from the Cook County Forest Preserve District, and that TranSystems, together with the Village, will procure this permit.

- Other additional insurance, beyond our standard coverage, is not included in the cost estimate; if required, it will be considered a reimbursement item.
- No hazardous materials or contaminated soils will be encountered.

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

Sincerely,

Wang Engineering, Inc.

Azza Hamad, PE
Senior Geotechnical Engineer

Liviu Iordache, PG
Department Manager III



Local Public Agency Village of Orland Park	County Cook	Section Number 14-00072-00-WR
Prime Consultant (Firm) Name TranSystems	Prepared By A. Hamad	Date 7/18/2024
Consultant / Subconsultant Name Wang Engineering, Inc.	Job Number 	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

PAYROLL ESCALATION TABLE

CONTRACT TERM	12	MONTHS	OVERHEAD RATE	200.57%
START DATE	8/1/2024		COMPLEXITY FACTOR	
RAISE DATE	4/1/2025		% OF RAISE	2.00%
END DATE	7/31/2025			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	8/1/2024	4/1/2025	8	66.67%
1	4/2/2025	8/1/2025	4	34.00%

The total escalation = 0.67%

Name: 143rd Street, Phase II Supplement-Infiltration Testing
 RFP/PTB/PSB/Item: NA
 Contract/Job: NA

 Date: 07/18/2024
 Wang No.: PKE245246

Task Description	Units	Unit Price	Extended Cost
DRILLING, SAMPLING & INSITU TESTING			
Drilling Coordination, Utilities Clearance, Site Access, Permitting	6.0 Hours	\$150.00 /Hour	\$900.00
Mobilization (ATV mounted)	0	\$1,700.00 /Each	\$0.00
Stand-by Hourly Rate	0.0 Hours	\$485.00 /Hour	\$0.00
<u>Drilling & Sampling - Hourly (SPT, Penetrometer, Rimac, Visual Classification Included)</u>			
Two-man crew - normal working hrs	96.0 Hours	\$485.00 /Hour	\$46,560.00
Two-man crew - overtime (2 hrs per day)	24.0 Hours	\$535.00 /Hour	\$12,840.00
<u>Hand Augering, Pavement/ Deck Coring & Testing</u>			
Two-man crew - normal working hrs	0.0 Hours	\$485.00 /Hour	\$0.00
Two-man crew - overtime (2 hrs per day)	0.0 Hours	\$535.00 /Hour	\$0.00
Asbestos content testing on deck cores	0 Tests	\$200.00 /Test	\$0.00
<u>Surveying of Boring Locations (Two-man crew)</u>			
	0.0 Hours	\$300.00 /Hour	\$0.00
<u>Monitoring Well or Incliner Installation</u>			
<u>2.0- or 4-inch monitoring wells</u>			
Two-man crew - normal working hours	0.0 Hours	\$485.00 /Hour	\$0.00
Two-man crew - overtime (2 hours per day)	0.0 Hours	\$535.00 /Hour	\$0.00
<u>Incliner casing installation</u>			
Two-man drilling crew - normal working hours	0.0 Hours	\$485.00 /Hour	\$0.00
Two-man crew - overtime (2 hours per day)	0.0 Hours	\$535.00 /Hour	\$0.00
<u>Other items - at cost</u>			
55-gallon DOT containment drums	0.0 Drums	\$80.00 /Drum	\$0.00
Digital datalogger and barometer	0.0 Each	\$1,750.00 /Each	\$0.00
Well and Casing Materials	At Cost		\$0.00
<u>Other Insitu Tests</u>			
Pressuremeter testing	0 Days	\$3,750.00 /Day	\$0.00
Vane shear	0 Tests	\$325.00 /Test	\$0.00
Dilatometer testing	At Cost		\$0.00
Cone penetration testing (CPT/CPTu)	At Cost		\$0.00
Photoionization detector (PID)	0 Days	\$125.00 /Day	\$0.00
Double ring infiltrometer test (ASTM D3385)	0 Tests	\$1,500.00 /Test	\$0.00
Single ring infiltrometer test	36 Tests	\$750.00 /Test	\$27,000.00
Single ring infiltrometer test PVC pipes	36 units	\$25.00 /unit	\$900.00
<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
Dozer / equipment rental	At Cost		\$0.00
Railroad permitting	At Cost		\$0.00
Railroad protective insurance	At Cost		\$0.00
Railroad flagman	At Cost		\$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
			\$88,200.00

Name: 143rd Street, Phase II Supplement-Infiltration Testing
 RFP/PTB/PSB/Item: NA
 Contract/Job: NA

Date: 07/18/2024
 Wang No.: PKE245246

Task Description		Units	Unit Price	Extended Cost	
LABORATORY TESTING					
T265	D2216	Water Content	0 Tests	\$14.50 /Test	\$0.00
--	D7263	Unit Weight (Density)	0 Tests	\$45.00 /Test	\$0.00
T100	D854	Specific Gravity	0 Tests	\$82.00 /Test	\$0.00
--	D4972	pH of Soil	0 Tests	\$70.00 /Test	\$0.00
T267	D2974	Organic Content by LOI	0 Tests	\$74.00 /Test	\$0.00
T194	--	Organic Content by Wet Combustion	0 Tests	\$165.00 /Test	\$0.00
<u>Particle Size Distribution</u>					
T88	D422	Sieve Analysis	0 Tests	\$99.00 /Test	\$0.00
T88	D422	Combined Sieve and Hydrometer	0 Tests	\$162.00 /Test	\$0.00
--	D1140	Percent Finer than No. 200 Sieve	0 Tests	\$66.00 /Test	\$0.00
<u>Atterberg Limits</u>					
T89, T90	D4318	Liquid and Plastic Limits	0 Tests	\$99.00 /Test	\$0.00
T92	D427	Shrinkage Factors	0 Tests	\$120.00 /Test	\$0.00
<u>Classification of Soils</u>					
--	D2488	Visual Manual	0 Samples	\$24.00 /Sample	\$0.00
--	D2487	Unified Soil Classification System	0 Samples	\$261.00 /Sample	\$0.00
M145	--	AASHTO Classification	0 Samples	\$261.00 /Sample	\$0.00
--	--	USDA Classification	0 Samples	\$162.00 /Sample	\$0.00
<u>Soil Settlement, Swelling, and Collapse Potential</u>					
T216	D2435	One-Dimensional Consolidation	0 Tests	\$720.00 /Test	\$0.00
--	D4546	One-Dimensional Swell	0 Tests	\$700.00 /Test	\$0.00
--	D5333	Collapse Potential	0 Tests	\$390.00 /Test	\$0.00
<u>Shear Strength of Soil</u>					
		Rimac Unconfined Compressive Strength	0 Tests	\$21.00 /Test	\$0.00
T208	D2166	Unconfined Compressive Strength	0 Tests	\$105.00 /Test	\$0.00
T236	D3080	Direct Shear of Soils (3 points)	0 Tests	\$950.00 /Test	\$0.00
T296	D2850	UU Triaxial Compression (3 points)	0 Tests	\$440.00 /Test	\$0.00
T297	D4767	CU Triaxial Compression (3 points)	0 Tests	\$1,450.00 /Test	\$0.00
T297	D4767	CD Triaxial Compression (3 points)	0 Tests	\$1,450.00 /Test	\$0.00
	D7012	Peak Uniaxial Compressive Strength of Rock Core	0 Tests	\$245.00 /Test	\$0.00
<u>Laboratory Compaction Tests</u>					
T99	D698	Moisture-Density of Soils (Standard Effort)	0 Tests	\$260.00 /Test	\$0.00
T180	D1557	Moisture-Density of Soils (Modified Effort)	0 Tests	\$272.00 /Test	\$0.00
T193	D1883	California/Illinois Bearing Ratio (3 points)	0 Tests	\$1,220.00 /Test	\$0.00
<u>Coefficient of Permeability</u>					
T215	D2434	Hydraulic Conductivity (Constant Head)	0 Tests	\$596.00 /Test	\$0.00
--	D5084	Hydraulic Conductivity (Flexible Wall)	0 Tests	\$625.00 /Test	\$0.00
<u>Additional Sample Preparation Procedures</u>					
		Removal of Organic Matter	0 Samples	\$110.00 /Sample	\$0.00
		Extrusion & Preservation of Undisturbed Samples	0 Samples	\$36.00 /Sample	\$0.00
		Logging & Classification of Undisturbed Samples	0 Samples	\$82.00 /Sample	\$0.00
		Remolding and Trimming of Samples	0 Samples	\$78.00 /Sample	\$0.00
<u>Planting Soil Mix Testing</u>					
<i>Chemical Analyses & Mitigation Recommendations (300 g sample required)</i>					
		pH, CEC, Soluble Salts, OM, P, K, Other Nutrients	0 Tests	\$143.00 /Test	\$0.00
		Residual Chemicals, Herbicides Full Screen	0 Tests	\$812.00 /Test	\$0.00
<i>Mechanical Analyses & Mitigation Recommendations (1,000 g sample required)</i>					
T88	D422	Combined Sieve and Hydrometer	0 Tests	\$162.00 /Test	\$0.00
<u>Analytical Laboratory Services - for CCDD (200% fee for 3-day turn-around rush orders)</u>					
		pH Determination	0 No	\$17.00 /Each	\$0.00
		Volatile Organic Components (VOCs)	0 No	\$121.00 /Each	\$0.00
		SemiVOCs including PNA's	0 No	\$202.00 /Each	\$0.00
		PCBs	0 No	\$83.00 /Each	\$0.00
		TCL Metals (23)	0 No	\$161.00 /Each	\$0.00
		RCRA Total Metals (8)	0 No	\$94.00 /Each	\$0.00
		TCLP/SPLP Extraction	0 No	\$60.00 /Each	\$0.00
		TCLP/SPLP per each metal	0 No	\$37.00 /Each	\$0.00
		Herbicides	0 No	\$202.00 /Each	\$0.00
		Pesticides	0 No	\$115.00 /Each	\$0.00
<u>Corrosion Testing</u>					
		(Resistivity, Chlorides, pH, Redox, and Sulfates)	0 No	\$405.00 /Each	\$0.00
				\$0.00	

Name: 143rd Street, Phase II Supplement-Infiltration Testing
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 07/18/2024
Wang No.: PKE245246

Task Description	Units	Unit Price	Extended Cost
TRAFFIC CONTROL			
<u>Expressway (1/2 mile)</u>			
Shoulder Closure	0.0 No.	\$1,060.00 /Each	\$0.00
One-lane Closure	0.0 No.	\$3,450.00 /Each	\$0.00
Two-lane Closure	0.0 No.	\$3,660.00 /Each	\$0.00
Three-lane Closure-Only Saturday	0.0 No.	\$4,050.00 /Each	\$0.00
Ramp Closure (Exit-Entrance)	0.0 No.	\$1,090.00 /Each	\$0.00
Additional 1/2 mile	0.0 No.	\$100.00 /Each	\$0.00
<u>Arterial (1/2 mile)</u>			
Shoulder Closure	0.0 No.	\$900.00 /Each	\$0.00
One-lane Closure	0.0 No.	\$1,000.00 /Each	\$0.00
Two-lane Closure	0.0 No.	\$1,100.00 /Each	\$0.00
Detour	0.0 No.	\$1,100.00 /Each	\$0.00
U-2	0.0 No.	\$1,300.00 /Each	\$0.00
Standard #701421 (Over 45mph)	0.0 No.	\$1,900.00 /Each	\$0.00
<u>Impact Attenuator with Driver</u>			
Port-to-Port	0.0 Hours	\$245.00 /Hour	\$0.00
<u>Roadway Flagmen (two-man crew)</u>			
Port-to-Port	180.0 Hours	\$250.00 /Hour	\$45,000.00
			\$45,000.00

Note: Prices are for weekday only (Monday through Friday). Weekend rates (Saturdays and Sundays) are higher and will be provided per project

FIELD VEHICLES & MILEAGE			
<u>Field Vehicle</u>			
Field Vehicle Mileage (>100 Miles per Day)	0.0 Miles	\$0.675 /Mile	\$0.00
Field Vehicle Daily (<100 Miles per Day)	20 Days	\$65.00 /Day	\$1,300.00
			\$1,300.00

OUT-OF-TOWN EXPENSES			
Per County	<u>Lodging</u>	0 Days	\$100.00 /Day
	<u>Per Diem</u>	0 Days	\$50.00 /Day
			\$0.00

SUMMARY	
DRILLING, SAMPLING & INSITU TESTING	\$88,200.00
LABORATORY TESTING	\$0.00
TRAFFIC CONTROL	\$45,000.00
FIELD VEHICLES & MILEAGE	\$1,300.00
OUT-OF-TOWN EXPENSES	\$0.00
	\$134,500.00

