


Municipality	LOCAL AGENCY	 Illinois Department of Transportation	CONSULTANT	Name DLZ Illinois, Inc.
Township				Address 8430 W. Bryn Mawr Ave., Ste 100
County Lake County – Division of Transportation		Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds		City Chicago
Section 21-00268-24-TL				State Illinois

THIS AGREEMENT is made and entered into this _____ day of _____, 2020 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Non-Motor Fuel Tax Funds, allotted to the LA, ~~by the State of Illinois~~ under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely ~~or in part~~ to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

Section Description

Name 2021 PASSAGE Field Elements

Route Various Length _____ Mi. _____ FT (Structure No. _____)

Termini _____

Description:

Agreement Provisions

The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
 - a. ☒ Make such detailed surveys as are necessary for the preparation of detailed roadway plans
 - b. ☐ Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
 - c. ☐ Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
 - d. ☐ Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
 - e. ☐ Prepare Army Corps of Engineers Permit, **Lake County Stormwater Management Commission Permit**, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
 - f. ☐ Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
 - g. ☒ Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with **one (1) copy of each document in both hardcopy and electronic format**. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at the ENGINEER's actual cost for reproduction.
 - h. ☐ Furnish the LA with survey and drafts in **duplicate** of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.
 - i. ☐ Assist the LA in the tabulation and interpretation of the contractors' proposals.

- j. ☐ Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
 - k. ☐ Prepare the Project Development Report when required by the DEPARTMENT.
 - l. ☒ **Services as included and/or defined in the attached Scope of Services.**
2. That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies **of the LA and** of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA ~~and the DEPARTMENT.~~
 3. To attend conferences at any reasonable time when requested to do so by representatives of the LA ~~or the Department.~~
 4. In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that the ENGINEER will perform such work without expense to the LA, even though final payment has been received by the ENGINEER. The ENGINEER shall give immediate attention to these changes so there will be a minimum delay to the CONTRACTOR.
 5. That basic survey notes and sketches, charts, computations and other data prepared or obtained by the ENGINEER pursuant to this AGREEMENT will be made available, upon request, to the LA ~~or the DEPARTMENT~~ without cost and without restriction or limitations as to their use.
 6. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will show the ENGINEER's professional seal where such is required by law.

The LA Agrees,

1. ~~To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT according to the following method indicated by a check mark:~~
 - a. ☐ A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
 - b. ☐ A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost		
Awarded Cost	Percentage Fees	(see note)
Under \$50,000	_____	%
	_____	%
	_____	%

Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.

2. To pay for all services rendered in accordance with this AGREEMENT at the actual cost of performing such work plus ****** percent to cover profit, overhead and readiness to serve - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at the ENGINEER's actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided in section 1 of the ENGINEER AGREES. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus an additional service charge of up to five (5) percent.

"Cost to Engineer" to be verified by furnishing the LA ~~and the DEPARTMENT~~ copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed. ****See the CECs**

The Total Not-to-Exceed Contract Amount shall be \$74647.45

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed. ~~in accordance with the following schedule:~~

- ~~a. Upon completion of detailed plans, special provisions, proposals and estimate of cost - being the work required by section 1 of the ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.~~
- ~~b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.~~

By Mutual agreement, partial payments, ~~not to exceed 90 percent of the amount earned~~, may be made from time to time as the work progresses.

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in sections 1 and 3 of the ENGINEER AGREES and prior to the completion of such services, the LA shall reimburse the ENGINEER for the ENGINEER's actual costs plus ** percent incurred up to the time the ENGINEER is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of the LA AGREES.
5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of the ENGINEER AGREES, ~~after they have been approved by the DEPARTMENT~~, the LA will pay the ENGINEER for such changes on the basis of actual cost plus ** percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of the LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of the ENGINEER's responsibility to prepare a complete and adequate set of plans and specifications.

****See the CECs**

It is Mutually Agreed,

1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at the ENGINEER's last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with section 4 of the LA AGREES.
3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA ~~and their approval by the DEPARTMENT~~, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA ~~and the DEPARTMENT~~.
4. That the ENGINEER warrants that the ENGINEER has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that the ENGINEER has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in quintuplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

ATTEST:

By

Lake County

Clerk

(Seal)

County of Lake

(Municipality/Township/County)

of the

State of Illinois, acting by and through its

County Board

By

Title

Chair, Lake County Board

RECOMMENDED FOR EXECUTION

Shane E. Schneider, P.E.
Director of Transportation/County Engineer
Lake County

Executed by the ENGINEER:

ATTEST:

By

Title

Engineering Firm

Street Address

City, State

By

Title

Note: Three (3) Original Executed Contracts – (2) LCDOT; (1) Consultant

2021 PASSAGE Field Elements
LDOT # 21-00268-24-TL
DLZ Job # 2182-2172-00

SCOPE OF SERVICES

December 15, 2020

The scope of services for this project includes work at the following locations. Tasks A through E are included for each of these locations.

- Lewis Ave at 21st St
- IL 137 at IL 83
- IL 120 at IL 83
- IL 176 at Main St
- IL 132 at US 41
- IL 132 at Belle Plaine Ave
- IL 132 at IL 131
- IL 134 at Hart Rd
- Hart Rd at Cedar Lake Rd
- IL 134 at Fairfield Rd
- Fairfield Rd at Nippersink Rd
- US 41 at Casimer Pulaski Dr
- IL 83 at Robert Parker Coffin Rd
- Winchester Rd at Technology Way
- US 45 at Grass Lake Rd

It has been assumed that there will be three project submittals: 1) preliminary submittal after field reviews are completed and recommendations on required equipment modification have been developed, 2) pre-final plans and 3) final plans. Submittals of the pre-final and final plans will also be made to IDOT. As part of the project it has also been assumed that two review meetings will be held with the County – after the preliminary submittal and after the pre-final plan submittal. The hours for all submittals and meetings have been included with the following work items.

- A. Field Visits – Conduct field inspection of existing traffic signal installations and field verification of existing signal plans. Inventory and photograph existing controller cabinet and traffic signal equipment (including inventory of fiber terminations). For proposed interconnect segments, field verification of Google Earth aerials and any available existing plans will be completed. This will include wheel survey as necessary to located additional topographic features that would be critical to the design and construction of the proposed interconnect.
- B. Prepare traffic signal and cable plans to show the proposed modifications to the installation (itemized list of improvements at each intersection was provide via email from LCDOT on 10-14-20, Exhibit A). The

plan sheets will be done using the existing signal and cable plans as a base and superimposing the proposed equipment over the existing plan. For intersections where the existing plan is poor quality, a new base sheet will be prepared by redrawing the existing plan or using aerial imagery.

- C. For locations where new interconnect is proposed, base sheets will be prepared using aerial photography provided by the County and existing roadway and right-of-way plans where available. The proposed interconnect equipment will be added to these base sheets. This work will also include preparation of new or modified interconnect schematics to show the new fiber network.
- D. Quantities will be calculated for each location and specifications will be prepared as necessary.
- E. Bid documents and plan sets will be prepared. The plan sets will include a cover sheet, location map, summary of quantities, signal and cable modification plans, and interconnect plans and schematics, and standard details. Alternate bidding is not anticipated for this project. This item will also include coordination with existing utility companies including providing plan sets for identifying potential utility conflicts.
- F. LCDOT will coordinate the proposed scope of work with PARSONS to obtain the equipment connection and Fiber Splicing Diagram sheets. These sheets will be incorporated into the plan set by DLZ.
- G. DLZ will complete a QA/QC review for all signal and interconnect plans and quantities.
- H. Project management will include internal project scheduling, project invoicing and internal project team meetings.

No other services or responsibilities are inferred or implied in the Scope of Services except those expressly set forth above. Consultant shall not be obligated to provide nor entitled to compensation for any services except those set forth above or as otherwise agreed to in writing.

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME DLZ Illinois
PRIME/SUPPLEMENT Prime

DATE 12/15/20
PTB NO. 2021 ITS PASSAGE Elements

CONTRACT TERM 6 MONTHS
START DATE 12/1/2020
RAISE DATE 1/1/2021

OVERHEAD RATE 160.99%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

12/1/2020 - 1/1/2021

1/2/2021 - 6/1/2021

1
6

5
6

= 16.67%
= 1.0250

85.83%

The total escalation for this project would be:

2.50%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PSB NO.

DLZ Illinois _____ **DATE**
Prime _____
2021 ITS PASSAGE Elements

12/15/20

ESCALATION FACTOR **0.00%**

[illegible]

AVERAGE HOURLY PROJECT RATES

FIRM DLZ Illinois
PSB 2021 ITS PASSAGE Elements
PRIME/SUPPLEMENT Prime

DATE 12/15/20

SHEET 1 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			1. Lewis Ave at 21st St			2. IL 137 at IL 83			3. IL 120 at IL 83			4. IL 176 at Main St			5. IL 132 at US 41		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00	5	0.89%	0.62															
Senior Engr/Civil Eng	54.10	228	40.43%	21.87	6	37.50%	20.29	6	37.50%	20.29	6	37.50%	20.29	6	37.50%	20.29	6	37.50%	20.29
Engineer II	46.50	174	30.85%	14.35	5	31.25%	14.53	5	31.25%	14.53	5	31.25%	14.53	5	31.25%	14.53	5	31.25%	14.53
CAD Designer/Tech	26.00	150	26.60%	6.91	5	31.25%	8.13	5	31.25%	8.13	5	31.25%	8.13	5	31.25%	8.13	5	31.25%	8.13
Administrative	28.00	7	1.24%	0.35															
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TOTALS		564	100%	\$44.10	16	100.00%	\$42.94	16	100%	\$42.94	16	100%	\$42.94	16	100%	\$42.94	16	100%	\$42.94

DATE 12/15/20

SHEET 2 **OF** 3

Printed 12/15/2020 10:55 AM

DATE	<u>12/15/20</u>		
SHEET	3	OF	3

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TODAY'S DATE: **12/15/2020**

**If other allowable costs are needed and not listed, please add in the above spaces provided.*

W.O. = Work Order
J.S. = Job Specific

2021 ITS PASSAGE Elements
Scope of Work and Manhour Estimate
Prepared by DLZ Illinois; December 15, 2020

Scope of Work by Task	Manhours
1 Lewis Ave at 21st St	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 1	16
2 IL 137 at IL 83	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 2	16
3 IL 120 at IL 83	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 3	16
4 IL 176 at Main St	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 4	16
5 IL 132 at US 41	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 5	16
6 IL 132 at Belle Plaine Ave	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 6	16
7 IL 132 at IL 131	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 7	16
8 IL 134 at Hart Rd w/ Long Lake/Round Lake Rd Interconnect	
Field Visit (1 intersections @ 1hr. and 4000' interconnect)	6
Modify signal and cable plans (1 location, Assume 1 need to be redrawn)	20
Interconnect plan (Includes creating base sheet)	50
Quantities/Specifications	8
Subtotal Task 8	84
9 Hart Rd at Cedar Lake Rd	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 9	16
10 Fairfield Rd Corridor	
IL 134 at Fairfield Rd	
Fairfield Rd at Nippersink Rd	
Field Visit (2 intersections @ 1hr. and 5000' interconnect)	6
Modify signal and cable plans (2 locations, Assume 1 need to be redrawn)	34
Interconnect plan (Includes creating base sheet)	65
Quantities/Specifications	8
Subtotal Task 10	113
11 US 41 at Casimer Pulaski Dr	
Field visit	1
Create PTZ plan sheet	20
Service Coordination	20
Quantities/Specifications	1
Subtotal Task 11	42
12 IL 83 at Robert Parker Coffin Rd	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 12	16
13 Winchester Rd at Technology Way	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 13	16
14 US 45 at Grass Lake Rd	
Field visit	1
Modify signal and cable plan (1 location @ 14 hrs)	14
Quantities/Specifications	1
Subtotal Task 14	16
15 Bid Documents and Utility Coordination	
Cover sheet and location map	10
Summary of Quantities	20
Compile project specifications, list of standards, bid forms, etc.	10
Utility coordination	30
IDOT Permits Coordination	30
Subtotal Task 15	100
16 QA/QC	
Provide QA/QC for project	23
Subtotal Task 16	23
17 Project Management	
Project scheduling, invoicing, etc.	26
Subtotal Task 17	26
TOTAL MANHOURS	564

Location	Notes	PTZ	Layer 2 Switch	Conduit	Hand holes	Fiber + Tracer	Cell Modem	PTP Radio	Wireless Radio	Camera Mtg Assy	Maint. of TS	Controller	Term/ Splice	ONC	Modify Cabinet	M/C	TC&P
Lewis/21st	New PTZ	1								1	1			200	1		1
IL137/IL 83	New PTZ, Wireless P2P	1	1					2		1	1			600	1		1
IL 176/Main	Wireless/New PTZ	1	1						2	1	1	1		400	1		1
IL 132 (Belle Plaine to 41)	IL 132 (Belle Plaine to US 41 - 2 PTZs on at US 41/IL 132), New controller	2	2					4		2	3	1		600	1		1
IL 134/Hart	Wireless to Cedar Lake/Hart, New PTZ/controllers	1	1					2		1	2	1		600	1		1
IL 134/Fairfield	IL 134/Farifield to IL 134/Hart - Fiber, new PTZ/controller	1	1	4200	8	4440				1	1	1		200	1		1
Fairfield/Nippersink	Farifield/Nippersink to IL 134/Fairfield - Fiber			5900	10	6200					1				1		1
US 41/Pulaski	US 41/Pulaski - Fiber (short run) w/CCTV cabinet	1	1	200		230				1	1			200	1		1
IL 83/Robert Parker Coffin	New PTZ	1	1							1	1		12	200	1	1	1
Winchester/Technology	New PTZ	1	1							1	1			200	1		1
US 45/Grass Lake	New PTZ	1	1				1			1	1			200	1		1

EXHIBIT A
2021 PASSAGE Field Elements
LCDOT # 21-00268-24-TL
DLZ Job # 2082-2172-00