TORONTO PARKING AUTHORITY

INTERNAL MEMORANDUM
CONTRACT AWARD

DATE: April 17, 2024

TO: President, Toronto Parking Authority

FROM: Vice President, Operations, Toronto Parking Authority

SUBJECT: **Project No. 2023-CS-CP29-B10.01**
75 Holly Street – CP29 Garage Restoration

WARDS: 12 (Toronto-St. Paul's)

SUMMARY

As part of the Toronto Parking Authority's (TPA) plan to ensure continued safe operation of existing parking facilities, TPA is planning to undertake a comprehensive garage restoration project at Car Park 29 located at 75 Holly Street, Toronto.

In early 2022, TPA completed a Building Condition Assessment at Carpark 29. Based on the findings in the building condition assessment report, it was identified that the parking garage requires rehabilitation, including structural repairs to slabs, columns, walls, complete slab waterproofing system replacement and traffic topping repair. Concurrently, mechanical and electrical systems, such as lighting, drainage, sprinklers, and exhaust fans, require upgrades and repairs.

A Request for Proposals (RFP) for the required consulting services was issued on October 27, 2023. Five approved bidders were invited from which all five proposals were received and deemed to be compliant.

Based on a detailed evaluation of the proposals, it is recommended that a contract in the amount of $335,290 for the base scope of work, and $70,000 as a contingency allowance, being the sum total of $405,290 excluding Harmonized Sales Tax (HST) be awarded to Engineering Link Ltd. having scored the highest and meeting all requirements in conformance with the Request for Proposal.

RECOMMENDATIONS

The Vice President, Operations, recommends that:

1) **The President of the Toronto Parking Authority grant authority to award the contract for the CP29 Garage Restoration at 75 Holly Street (Car Park 29) to Engineering Link Incorporated, in the amount of $335,290 for the base scope of work, and $70,000 as a contingency allowance, being the sum total of $405,290 excluding Harmonized Sales Tax (HST).**

FINANCIAL IMPACT

The amount to award the contract for 2023-CS-CP29-B10.01: 29 Holly Street (Carpark 29) – CP29 Garage Restoration is $335,290 in base scope, and $70,000 as a contingency allowance, being the sum total of $405,290 excluding Harmonized Sales Tax (HST).

Funding for the Garage Restoration at CP 29 is available in the approved TPA 2024 Capital Budget under TPA909081-1, internal order 700513.

CALL SUMMARY COMMENTS

On October 27, 2023, TPA issued an RFP for the consultant services needed to carry out the garage restoration at Carpark 29. The RFP for these services was issued to 5 bidders with the experience and.

The RFP closed on November 17,2023. Five (5) proposals were received and are listed below in the ascending order of their total base bid cost amount quoted without HST. The Consultants were required to base their proposal on TPA's RFP which details the scope of service required, the duration of service required and fee schedules to be included in the proposal.

Total Proposed Fees

	Proponent	Total Base Scope Fees
1	**Engineering Link**	**$335,290**
2	Sense Engineering (GTA)	$367,030
3	WSP Canada Inc.	$435,100
4	RJC Engineers	$453,500
5	Morrison Hershfield Ltd.	$468,620

Evaluation of the proposals consisted of three phases. Phase 1 required proponents to correctly submit all mandatory forms and submission requirements. All five proponents passed Phase 1. Phase 2 consisted of the evaluation of proponents' technical submissions. Proponents were graded out of 80 points in Phase 2 and required a minimum score of 75% or 56.25 points to proceed to Phase 3. Five of the five proponents passed Phase 2. In Phase 3, proponents' financial costs were evaluated out of 20 points. Proponents Phase 2 scores were added with their Phase 3 scores to form a total score out of 100 points. The proponent who successfully passed all three phases and obtained the highest total score is being recommended for the contract award. The evaluation results were as follows:

Evaluation Results

	Company	Phase 1: Mandatory Submission Requirements	Phase 2: Technical Submission Score (Out of 80)	Phase 2: Technical Submission Result	Phase 3: Financial Costs Score (Out of 20)	Total Score (Out of 100)
1	**Engineering Link Incorporated**	**Passed**	**67.6**	**Passed**	**20**	**87.6**
2	Sense Engineering (GTA)	Passed	46	Passed	18.27	64.27
3	Morrison Hershfield Ltd.	Passed	58	Passed	14.31	72.31
4	WSP Canada Inc.	Passed	57	Passed	15.41	72.41
5	RJC Engineers	Passed	57	Passed	14.79	71.79

The proposal evaluation table which contains details on the scoring format of this RFP can be found in Attachment 1.

COMMENTS

In early 2022, TPA completed a Building Condition Assessment at Carpark 125. Based on the findings in the building condition assessment report, it was identified that the parking garage requires rehabilitation, including structural repairs, slabs, columns, complete slab waterproofing system replacement and traffic topping repair. Concurrently, mechanical and electrical systems, such as lighting, drainage, sprinklers, and exhaust fans, require upgrades and repairs.

All five proponents who provided submissions are capable of providing the services required based upon their company profiles. The evaluation process was guided by the fee quoted, technical analysis of the bid and acceptance of the terms and conditions noted in the RFP. The proponents' submission was evaluated and scored based upon criteria identified in Attachment 1, Proposal Evaluation Table. The following are key comments and observations of the evaluated bids:

1. Engineering Link. scored the highest technical score, and highest total score with a score of 87.60 out of a possible 100 points.

2. Engineering Link. submitted a reasonable and competitive cost proposal amongst proponents who passed all three phases of the evaluation with a total base bid cost of $335,290.

3. Engineering Link. is prepared to accept the terms and conditions of the RFP and meet the proposed schedule.

Based upon our evaluation of the bid package, it is recommended that the **CP29 Garage Restoration** contract be awarded to Engineering Link Incorporated.

CONTACT

Howard Jung
Director of Parking Infrastructure and Asset Management,
(416) 393-7335,
Howard.Jung@toronto.ca

Jarrett McDonald
Vice President, Operations, Toronto Parking Authority,
(437) 833-3363
Jarrett.McDonald@greenpmobility.com

SIGNATURE

W. Scott Collier
President, Toronto Parking Authority

ATTACHMENTS

Attachment 1: Proposal Evaluation of CP 29

TORONTO PARKING AUTHORITY

INTERNAL MEMORANDUM
CONTRACT AWARD

DATE:	April 17, 2024
TO:	President, Toronto Parking Authority
FROM:	Vice President, Operations, Toronto Parking Authority
SUBJECT:	**Project No. 2023-CS-CP150-B10: 40 Larch Street – CP150 – Garage Restoration**
WARDS:	10 (Spadina-Fort York)

SUMMARY

As part of the Toronto Parking Authority's (TPA) plan to ensure continued safe operation of existing parking facilities, TPA is planning to undertake a comprehensive garage restoration project at Carpark 150 at 40 Larch Street, Toronto.

CP150's structure resides under multi story residential buildings owned and operated by Toronto Community Housing (TCHC). The facility consists of 4 underground parking levels. There are 2 entrances into the Carpark, one from Dundas Street West and the other from Spadina Avenue.

In early 2022, TPA completed a Building Condition Assessment at Carpark 150. Based on the findings in the building condition assessment report, it was identified that the parking garage requires rehabilitation, including wholesale removal and replacement of asphalt wearcourse and waterproofing system, along with required concrete repairs. Concurrently, mechanical and electrical systems, such as lighting, drainage, sprinklers, and exhaust fans were also identified as requiring upgrades and repairs.

A Request for Proposals (RFP) for the required consulting services was issued on November 17, 2023. Five approved bidders were invited from which five proposals were received and deemed to be compliant.

Based on a detailed evaluation of the proposals, it is recommended that a contract in the amount of $391,850 for the base scope of work, and $80,000 as a contingency allowance, being the sum total of $471,850 excluding Harmonized Sales Tax (HST) be awarded to Sense Engineering (GTA) Ltd. having submitted the lowest compliant fee proposal and meeting all requirements in conformance with the Request for Proposal.

RECOMMENDATIONS

The Vice President, Operations, recommends that:

1) **The President of the Toronto Parking Authority grant authority to award the contract for the CP150 Garage Restoration at 40 Larch Street (Car Park 150) to Sense Engineering (GTA) Ltd., in the amount of $391,850 for the base scope of work, and $80,000 as a contingency allowance, being the sum total of $471,850 excluding Harmonized Sales Tax (HST).**

FINANCIAL IMPACT

The amount to award the contract for 2023-CS-CP150-B10: 40 Larch Street (Carpark 150) – CP150 Garage Restoration is $391,850 in base scope, and $80,000 as a contingency allowance, being the sum total of $471,850 excluding Harmonized Sales Tax (HST).

Funding for the Garage Restoration at Carpark 150 is available in the approved TPA 2024 Capital Budget under TPA908374-1.

CALL SUMMARY COMMENTS

On November 17, 2023, TPA issued an RFP for the consultant services needed to carry out the garage restoration at Carpark 150. The RFP for these services was issued to 5 bidders.

The RFP closed on December 8, 2023. Five (5) proposals were received and are listed below in the ascending order of their total base bid cost amount quoted without HST. The Consultants were required to base their proposal on TPA's RFP which details the scope of service required, the duration of service required and fee schedules to be included in the proposal.

Total Proposed Fees

	Proponent	**Total Base Scope Fees**
1	Sense Engineering Ltd.	$391,850
2	WSP Canada Inc.	$444,405
3	Morrison Hershfield Ltd.	$475,343
4	RJC Engineers	$482,495
5	Engineering Link Incorporated	$497,085

Evaluation of the proposals consisted of three phases. Phase 1 required proponents to correctly submit all mandatory forms and submission requirements. All five proponents passed Phase 1. Phase 2 consisted of the evaluation of proponents' technical submissions. Proponents were graded out of 75 points in Phase 2 and required a minimum score of 75% or 56.25 points to proceed to Phase 3. Four of the five proponents passed Phase 2. In Phase 3, proponents' financial costs were evaluated out of 25 points. Proponents Phase 2 scores were added with their Phase 3 scores to form a total score out of 100 points. The proponent who successfully passed all three phases and obtained the highest total score is being recommended for the contract award. The evaluation results were as follows:

Evaluation Results

	Company	Phase 1: Mandatory Submission Requirements	Phase 2: Technical Submission Score (Out of 75)	Phase 2: Technical Submission Result	Phase 3: Financial Costs Score (Out of 25)	Total Score (Out of 100)
1	**Sense Engineering Ltd.**	**Passed**	**66.10**	**Passed**	**25**	**91.10**
2	Morrison Hershfield Ltd.	Passed	69	Passed	20.61	89.61
3	Engineering Link Incorporated	Passed	68.9	Passed	19.71	88.61
4	WSP Canada Inc.	Passed	64.6	Passed	22.04	86.64
5	RJC Engineers	Passed	58.60	Passed	16.24	74.84

The proposal evaluation table which contains details on the scoring format of this RFP can be found in Attachment 1.

COMMENTS

CP150's structure resides under multi story residential buildings owned and operated by Toronto Community Housing (TCHC). The facility consists of 4 underground parking levels. There are 2 entrances into the Carpark, one from Dundas Street West and the other from Spadina Avenue.

In early 2022, TPA retained a consultant to complete a Building Condition Assessment at Carpark 150. Based on the findings in the building condition assessment report received by TPA's consultant, RJC Engineers (RJC), it was identified that the parking garage requires comprehensive rehabilitation, including wholesale removal and replacement of asphalt and waterproofing, along with required concrete repairs. Concurrently, Mechanical and Electrical (M&E) systems, such as lighting, drainage, sprinklers, and exhaust fans, will undergo necessary upgrades.

All five proponents who provided submissions are capable of providing the services required based upon their company profiles. The evaluation process was guided by the fee quoted, technical analysis of the bid and acceptance of the terms and conditions noted in the RFP. The proponents' submission was evaluated and scored based upon criteria identified in Attachment 1, Proposal Evaluation Table. The following are key comments and observations of the evaluated bids:

1. Sense Engineering Ltd. scored the highest technical score, and highest total score with a score of 91.10 out of a possible 100 points.

2. Sense Engineering Ltd. submitted the lowest cost proposal amongst proponents who passed all three phases of the evaluation with a total base bid cost of $391,850.

3. Sense Engineering Ltd. is prepared to accept the terms and conditions of the RFP and meet the proposed schedule.

Based upon our evaluation of the bid package, it is recommended that the **CP150 Garage Restoration** contract be awarded to Sense Engineering Ltd.

CONTACT

Howard Jung
Director of Parking Infrastructure and Asset Management,
(416) 393-7335,
Howard.Jung@toronto.ca

Jarrett McDonald
Vice President, Operations, Toronto Parking Authority,
(437) 833-3363
Jarrett.McDonald@greenpmobility.com

SIGNATURE

W. Scott Collier
President, Toronto Parking Authority

ATTACHMENTS

Attachment 1: Bid Analysis Summary and Detailed Breakdowns

TORONTO PARKING AUTHORITY

INTERNAL MEMORANDUM
CONTRACT AWARD

DATE:	April 17, 2024
TO:	President, Toronto Parking Authority
FROM:	Vice President, Operations, Toronto Parking Authority
SUBJECT:	**Project No. 2024-CS-CP125-B10** **323 Richmond Street E – CP125 Garage Restoration**
WARDS:	13 (Toronto Centre)

SUMMARY

As part of the Toronto Parking Authority's (TPA) plan to ensure continued safe operation of existing parking facilities, TPA is planning to undertake a comprehensive garage restoration project at Carpark 125 at 323 Richmond St E, Toronto.

CP125's structure resides below a multi-story residential building owned and operated by a private condominium corporation (323 Richmond Street East Inc.) for which there is a reciprocal operating agreement with the TPA. The facility consists of 4 underground parking levels of which the 2 uppermost levels are owned and operated by the TPA. There are 2 entrances into the Carpark, one from Richmond St East and the other from Sherbourne St.

In early 2022, the TPA completed a Building Condition Assessment at Carpark 125. Based on the findings, it was identified that the parking garage requires wholesale rehabilitation of the structure, including slabs, columns, complete slab waterproofing system and mastic wearcourse replacement. In addition to the structural repairs, mechanical and electrical systems, such as lighting, drainage, sprinklers, and exhaust fans require upgrades and repairs.

A Request for Proposals (RFP) for the required consulting services was issued on February 20, 2024. Five approved bidders were invited from which all five proposals were received and deemed to be compliant.

Based on a detailed evaluation of the proposals, it is recommended that a contract in the amount of $392,342 for the base scope of work, and $80,000 as a contingency allowance,

being the sum total of $472,342 excluding Harmonized Sales Tax (HST) be awarded to Morrison Hershfield Ltd. having scored the highest and meeting all requirements in conformance with the Request for Proposal.

RECOMMENDATIONS

The Vice President, Operations, recommends that:

1) **The President of the Toronto Parking Authority grant authority to award the contract for the CP125 Garage Restoration at 323 Richmond Street East (Car Park 125) to Morrison Hershfield, in the amount of $392,342 for the base scope of work, and $80,000 as a contingency allowance, being the sum total of $472,342 excluding Harmonized Sales Tax (HST).**

FINANCIAL IMPACT

The amount to award the contract for 2024-CS-CP125-B10: 323 Richmond Street East (Carpark 125) – CP125 Garage Restoration is $392,342 in base scope, and $80,000 as a contingency allowance, being the sum total of $472,342 excluding Harmonized Sales Tax (HST).

Funding for the Garage Restoration at CP 125 is available in the approved TPA 2024 Capital Budget under TPA909081-1, internal order 700514.

CALL SUMMARY COMMENTS

On February 20, 2024, TPA issued an RFP for the consultant services needed to carry out the garage restoration at Carpark 125. The RFP for these services was issued to 5 bidders.

The RFP closed on March 22, 2024. Five (5) proposals were received and are listed below in the ascending order of their total base bid cost amount quoted without HST. The Consultants were required to base their proposal on TPA's RFP which details the scope of service required, the duration of service required and fee schedules to be included in the proposal.

Total Proposed Fees

	Proponent	**Total Base Scope Fees**
1	Engineering Link	$350,640
2	Sense Engineering (GTA)	$371,345
3	**Morrison Hershfield Ltd.**	**$392,342**
4	WSP Canada Inc.	$434,850
5	RJC Engineering	$482,760

Evaluation of the proposals consisted of three phases. Phase 1 required proponents to correctly submit all mandatory forms and submission requirements. All five proponents passed Phase 1. Phase 2 consisted of the evaluation of proponents' technical submissions. Proponents were graded out of 80 points in Phase 2 and required a minimum score of 75% or 56.25 points to proceed to Phase 3. Five of the five proponents passed Phase 2. In Phase 3, proponents' financial costs were evaluated out of 20 points. Proponents Phase 2 scores were added with their Phase 3 scores to form a total score out of 100 points. The proponent who successfully passed all three phases and obtained the highest total score is being recommended for the contract award. The evaluation results were as follows:

Evaluation Results

	Company	**Phase 1: Mandatory Submission Requirements**	**Phase 2: Technical Submission Score (Out of 80)**	**Phase 2: Technical Submission Result**	**Phase 3: Financial Costs Score (Out of 20)**	**Total Score (Out of 100)**
1	Engineering Link Incorporated	Passed	68	Passed	20	88
2	Sense Engineering (GTA)	Passed	64.75	Passed	16.91	81.66
3	**Morrison Hershfield Ltd.**	**Passed**	**72.5**	**Passed**	**18.64**	**91.14**
4	WSP Canada Inc.	Passed	70.8	Passed	15.29	86.09
5	RJC Engineers	Passed	62.3	Passed	14.73	77.03

The proposal evaluation table which contains details on the scoring format of this RFP can be found in Attachment 1.

COMMENTS

CP125's structure resides under a multi-story residential condo owned and operated by a private condominium corporation. The facility consists of 4 underground parking levels, of which TPA is responsible for the first 2 levels. There are 2 entrances into the Carpark, one from Richmond Street East and the other from Sherbourne St.

In early 2022, TPA retained a consultant to complete a Building Condition Assessment at Carpark 125. Based on the findings in the building condition assessment report received by TPA's consultant, RJC Engineers (RJC), it was identified that the parking garage requires wholesale parking garage rehabilitation, including structural repairs, slabs, columns, complete slab waterproofing system replacement and any detrimental structural repairs. Concurrently, Mechanical and Electrical (M&E) systems, such as lighting, drainage, sprinklers, and exhaust fans, will undergo necessary upgrades and repairs.

All five proponents who provided submissions are capable of providing the services required based upon their company profiles. The evaluation process was guided by the fee quoted, technical analysis of the bid and acceptance of the terms and conditions noted in the RFP. The proponents' submission was evaluated and scored based upon criteria identified in Attachment 1, Proposal Evaluation Table. The following are key comments and observations of the evaluated bids:

1. Morrison Hershfield Ltd. scored the highest technical score, and highest total score with a score of 91.14 out of a possible 100 points.

2. Morrison Hershfield Ltd. is prepared to accept the terms and conditions of the RFP and meet the proposed schedule.

Based upon our evaluation of the bid package, it is recommended that the **CP125 Garage Restoration** contract be awarded to Morrison Hershfield Ltd.

CONTACT

Howard Jung
Director of Parking Infrastructure and Asset Management,
(416) 393-7335,
Howard.Jung@toronto.ca

Jarrett McDonald
Vice President, Operations, Toronto Parking Authority,
(437) 833-3363
Jarrett.McDonald@greenpmobility.com

SIGNATURE

W. Scott Collier
President, Toronto Parking Authority

ATTACHMENTS

Attachment 1: Proposal Evaluation of CP 125

TORONTO PARKING AUTHORITY

Memorandum

DATE: August 6, 2024

TO: Scott Collier, President, Toronto Parking Authority

FROM: Jarrett McDonald, Vice President, Operations

SUBJECT: **Purchase of 160 E-Fit Bicycles (Electric Pedal-Assist Bikes)**

REQUEST

A Purchase Order (PO) is being requested for issuance to PBSC Urban Solutions in the amount of $449,678.40 plus HST for the purchase of 160 e-fit bicycles (electric pedal-assist bikes).

TPA (Bike Share Toronto) is using its supplier agreement with PBSC for the exclusive purchase of e-fits. All 160 e-fits will be deployed into the bike share system to support e-bike ridership growth and e-bike ridership revenue.

RECOMMENDATIONS

The Director of Bike Share, Toronto Parking Authority recommends that:

1. The President, Toronto Parking Authority grant authority to160 e-fit bicycles (electric pedal-assist bikes) in the amount of $449,678.40 plus HST.

FINANCIAL IMPACT

The amount of the quotation submitted for 160 e-fit bicycles (electrical pedal-assist bikes), is $449,678.40 exclusive of taxes.

The breakdown of costs as per PBSC Urban Solutions net all taxes are identified in Attachment 1 of this Internal Memorandum.

Funds for this work are included in the approved 2024 Toronto Parking Authority Capital Budget Account #TPA908904-2 for bike share equipment purchase.

SUMMARY

TPA (Bike Share Toronto) is using its supplier agreement with PBSC for the exclusive purchase of e-fit bicycles (electrical pedal-assist bikes). The breakdown of costs as per PBSC Urban Solutions net all taxes are identified in Attachment 1 of this Internal Memorandum.

CONTACT

Cristina Valente
Senior Planner, Bike Share Toronto

Toronto Parking Authority
33 Queen Street East
Toronto, Ontario M5C 1R5
cristina.valente@greenpmobility.com
(437) 229-6392

SIGNATURE

Justin Hanna
Director, Bike Share
Toronto Parking Authority

Approved By:

W. Scott Collier
President
Toronto Parking Authority

Concurred By:

Jarrett McDonald
Vice President, Operations
Toronto Parking Authority

ATTACHMENTS

Attachment 1: PBSC Urban Solutions Quote for 160 e-fit bicycles (electric pedal-assist bikes).

PBSC

TPA Expansion 2024 - 3

Date; July 31, 2024.

TPA Equipment Pricing				
	Units	Price Per Unit (CDN)	Total Price	Comments
Initial Bicycle/Kiosk Purchase Order				
E-FIT Bicycles (3 speed with Fender, one color,)	160	$2,754.24	$440,678.40	
Total Bike Price			$440,678.40	
Shipping	1	$9,000.00	$9,000.00	
Total equipment price			**$449,678.40**	
HST			**$58,458.19**	
Total Price			**$508,136.59**	

Terms & Conditions

1) As per Supply Agreement.

TORONTO PARKING AUTHORITY

Internal Memorandum

DATE:	July 19, 2024
TO:	Scott Collier, President, Toronto Parking Authority
FROM:	Justin Hanna, Director, Bike Share Toronto
SUBJECT:	Purchase of Two Solar-Powered E-Stations

REQUEST

Approval to use budget from Internal Order (IO) # 700400 is being requested in the amount of $100,972 excluding HST for the purchase of two solar-powered electric charging stations (e-stations) in 2024.

Funding for the purchase of two solar-powered e-stations is available in TPA908904-2, CPK439-01, IO 700400.

RECOMMENDATIONS

The Director of Bike Share Toronto, Toronto Parking Authority recommends that:

1. The President, Toronto Parking Authority grant authority to use budget in IO# 700400 to purchase two solar-powered e-stations in the amount of $100,792 excluding HST.

FINANCIAL IMPACT

The total cost to purchase two solar-powered electric charging stations (e-stations) is $100,792. This includes shipping, duty fees, and remote siting / deployment support charges from the vendor, Skyhook Solar Corporations.

Funding for the purchase of two solar-powered e-stations is available in TPA908904-2, CPK439-01, IO 700400.

SUMMARY

Description:

The purchase of solar-powered e-station equipment will allow Bike Share Toronto to increase e-bike charging opportunities and the supply of e-bikes that are available to bike share users. This equipment is intended to be deployed in high casual ridership areas where there is no power or where it is cost-prohibitive to bring power on-site.

The equipment consists of two stand-alone solar generators that are compatible with, and power electric charging docks (e-docks) supplied by PBSC Urban Solutions Inc. (PBSC). The TPA has already purchased these e-docks, which are currently in storage awaiting installation.

By purchasing new equipment and installing more e-stations, we will expand the coverage area to potential new users and give more choice to bike share users on how they travel through the city. This not only supports TPA's mission of creating a seamless customer experience that delivers on choice, ease and speed, but this will support TPA's Strategic Priority #3 to Accelerate Sustainable Growth.

COMMENTS

The purchase of solar-powered e-station equipment will allow Bike Share Toronto to increase e-bike charging opportunities and the supply of e-bikes that are available to bike share users. The TPA has already purchased the e-stations, which are currently in storage awaiting installation. The purchase of this equipment will support the TPA's stretch goal of installing 325+ e-docking points by the end of 2024.

CONTACT

Cristina Valente
Senior Planner, Bike Share Toronto
437-229-6392
cristina.valente@greenpmobility.com

SIGNATURE

Justin Hanna
Director, Micro Mobility, Bike Share Program
Toronto Parking Authority

Jarrett McDonald
Vice President, Operations
Toronto Parking Authority

Scott Collier
President,
Toronto Parking Authority

SALES ORDER AGREEMENT

Quote # Toro-001

PREPARED FOR
Bike Share Toronto, Attention: Cristina Valente

PREPARED DATE
July 17, 2024

PREPARED BY
Amber Nolan

EXPIRATION DATE
August 21, 2024

Skyhook Solar Station® | D4.v10 | 120V AC | 11 kWh | DC-DC battery backup	
Base Unit Price CA$44500 x 2	89,000
Shipping	6,920
Import Duty (5%)	4,420
Remote Siting/Deployment Support Charge	632
Total (Before Any Applicable Canadian Taxes)	**CA$100,972**

NOTES: All prices are in Canadian Dollars with payment due 15 days after delivery. Ship date will be approximately 90 days and no later than 120 days after a signed sales order. On-site deployment support is available on request. Upgrades/customization including 240V option will be invoiced at cost plus 20%. A software support/monitoring charge will be invoiced quarterly at a non-profit/municipality rate of CA$69/month/unit.

SALE OFFERED & ACCEPTED by:

SELLER

Daniel Delano — July 17, 2024
(Date)

Daniel Delano
President & CEO

SkyHook Solar Corp
740 Scarlet Street
Grand Junction, CO 81505

BUYER

__________ ______
(Date)

Name: __________
Title: __________

Address:

INTERNAL MEMORANDUM

Request to Award: Update to 2022 EV Deployment Plan Report

Date: August 07, 2024
To: Scott Collier – President
From: Jarrett McDonald, Vice President - Operations
Wards: All

SUMMARY

As part of its vision to become the world's best provider of sustainable parking, bike share and last mile mobility experiences, Toronto Parking Authority (TPA) has executed an ambitious rollout plan for Electric Vehicle (EV) charging across the City of Toronto. Over the past two (2) years and consistent with our strategy, the TPA has designed and built Canada's largest municipally owned EV charging network with 407 charging ports at over 80 locations.

TPA began its EV program in 2021 by issuing a Request for Proposals (RFP) for electric vehicle charging strategy and deployment consultant services. A joint submission from IBI Group and Dunsky Energy + Climate Advisors was awarded the contract and required to develop a deployment plan which would guide the initial development of TPA's EV charging network. The plan was finalized in 2022 and has been used by TPA staff to select off-street car parks for EV charger installations from 2022-2024.

Given the fast-changing nature of the electric vehicle business, much of the modelling and recommendations of the 2022 report are now out of date. To ensure optimal future expansion of its EV network and adjust its existing plans, TPA would like to retain Dunsky Energy + Climate Advisors to update the 2022 report with current data and modelling. This new updated report will help guide EV deployment by TPA from 2026 onwards. Upon approval of the recommendations made in this report, TPA will award the study to the recommended vendor to complete this scope of work.

RECOMMENDATIONS

The Vice President of Operations, Toronto Parking Authority recommends that:

1) The Toronto Parking Authority to award the contract for updating of the 2022 EV Deployment Plan Report to the recommended vendor (Dunsky Energy + Climate Advisors) to complete this scope of work.

FINANCIAL IMPACT

Funding is included in the approved 2024 TPA Capital Budget within the Off-Street EV Charging section.

Reference is made to Table 1 for list of quotes received for this project

Table 1: Summary of quotes received (excluding HST)

Contractor	Ranking	Quote for Work
Dunsky Energy + Climate Advisors	1	$69,582.00

Recommended Vendor:

TPA recommends the selection of Dunsky Energy + Climate Advisors via sole source procurement. As per TPA Policy 5-7, a non-competitive or sole source procurement can be undertaken where additional deliveries by an original supplier of good and services that were not included in the original procurement are required, but a change cannot be made for economic or technical reasons without causing significant inconvenience or substantial duplication of costs for the TPA.

If TPA selected another vendor for this work, the new vendor would need to complete all the modelling and analysis undertaken to complete the initial report. The cost of that work was $430,751.69 in 2022. Given the high costs and duplication of work associated with this option, it is more prudent for TPA to engage Dunsky to update their original report from 2022.

DECISION HISTORY

At its meeting on May 28, 2024, TPA Board of Directors (Item PA9.12) received an informational update on TPA's electric vehicle charging program and the EV charging partnership EOI opportunity.
https://secure.toronto.ca/council/agenda-item.do?item=2024.PA9.12

COMMENTS

Dunsky Energy + Climate Advisors will undertake the following scope of work and deliverables.

1) Review of city-wide demand and customer quantification. This will involve updating Sections 4.1 – 4.3.3 and Exhibit 34 of the 2022 report.
2) Updating the deployment plan. This will involve updating Sections 4.3.4 – 4.3.7, Section 5.3.2 and Exhibit 44 of the 2022 report.
3) Pricing strategy update. This will involve updating Sections 6.1 – 6.3 and Exhibit 65 of the 2022 report.
4) Public charging network benchmarking. This is new analysis not contained in the 2022 report.

The work undertaken will update roughly 30% of the 2022 report and also add some new analysis to the report. This new updated report will be used to guide TPA EV deployment from 2026 onwards. The final copy of the updated report will be submitted to TPA in Q1 2025.

CONTACT

Cullen Lee
Senior Manager, EV Development
(437) 995-7696
cullen.lee@greenpmobility.com

SIGNATURE

Scott Collier
President

ATTACHMENTS

Attachment 1: Proposal from Dunsky Energy + Climate Advisors for Deployment Plan and Pricing Strategy Update and Benchmarking Support

ATTACHMENT 1: PROPOSAL FROM DUNSKY ENERGY + CLIMATE ADVISORS FOR DEPLOYMENT PLAN AND PRICING STRATEGY UPDATE AND BENCHMARKING SUPPORT

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To: **Cullen Lee – Toronto Parking Authority (TPA)**

From: **Lindsay Wiginton – Dunsky Energy + Climate Advisors (Dunsky)**

Date: **2024-07-22**

Re: **Deployment Plan and Pricing Strategy Update and Benchmarking Support**

1. Context

TPA has an ambitious mandate to supply public EV charging in support of the City of Toronto's goals to reach net zero by 2040. Already, TPA has made considerable progress toward its EV charging deployment goals, having implemented over 400 ports over the last two years.

In 2021-22, Dunsky, in partnership with Arcadis/IBI, contributed to the development of the first iteration of TPA's EV charging deployment plan. This plan identified the number and type of ports to be deployed across the agency's parking properties. It proposed the installation of 384 DCFC and 3,643 Level 2 chargers over a 10-year period and was aligned with the City's target to electrify 30% of all light-duty vehicles by 2030. It incorporated future-proofing (building for demand that would materialize in subsequent years) and a reserved network of fast chargers for taxis and transportation network companies (TNCs).

TPA's program has already reached key milestones. In March 2023, TPA issued an Expression of Interest (EOI) for implementation and operation partners for its public EV charging network. Having reviewed the submissions, staff expect to make a final recommendation to the TPA Board in Fall 2024. Recently, staff reported to the TPA Board and Audit and Risk Committee with actuals showing utilization, revenue and costs of the TPA's 407 ports. These results provide valuable information that will support TPA in refining its plan for the coming years.

As implementation proceeds, TPA needs to adjust its plans to incorporate insights from the data it is collecting and account for lessons learned, changing site priorities, and the continued acceleration of EV adoption in Toronto. Key priorities for the TPA in the coming year include completing deployment to Tier 1 sites, implementing mechanisms to capture Clean Fuel Regulation credits, and, crucially, adjusting its pricing structure to incorporate the new ability to charge by kWh.

TPA is seeking support from Dunsky to update its understanding of Toronto's EV market and potential charging customers, to update its deployment plan, and to support the development of benchmarks to measure the performance of TPA's growing network.

2. Proposed Scope and Deliverables

Specifically, the scope of work entails updating key sections originally contributed by Dunsky to the 2022 EV Charging Strategy and Deployment Plan, as well as conducting select new analysis. The tasks and deliverables are summarized below.

Task	Description	Output
1	City-wide demand and customer quantification	Updates to **Sections 4.1 to 4.3.3 and Exhibit 34** of the 2022 report + new analysis
2	Deployment plan update	Updates to **Sections 4.3.4 to 4.3.7, 5.3.1, and 5.3.2 (including Exhibit 44)** of the 2022 report
3	Pricing strategy update	Updates to **Sections 6.1 to 6.3, including Exhibit 65** of the 2022 report
4	Public charging network benchmarking	New analysis

3. Approach

Task 1. City-wide demand and customer quantification

The goal of Task 1 is to confirm the scale of charging required in Toronto and the extent to which TPA can contribute to filling the gap. To complete this task, we will:

- **Create updated citywide charging demand forecasts** for the City of Toronto under a range of possible EV adoption scenarios, including reaching the City's 2030 goal and reaching Canada's targets under the zero-emission vehicle (ZEV) mandate, for the horizons of 2025, 2030, 2035 and 2040.
- **Characterize and quantify the presence of potential customers** in different user groups, including B2C groups (residents without access to home parking/charging, commuters/workers) and B2B groups (commercial fleets, taxi and TNC drivers).
- **Compare future demand to today's level of deployment** to quantify the citywide gap.
- **Comment on the share of this gap** that the TPA may be able to address given the expected contributions of other networks and actors in the Toronto landscape.

We will begin by working with TPA to choose up to three policy and market scenarios under which to quantify charging demand. Next, we will use our in-house EV Adoption (EVA) and charging needs assessment tool to generate updated demand forecasts specific to the City of Toronto under these scenarios, for 2025, 2030, 2035 and 2040. We will account for Toronto-specific circumstances including the City's mandate for vehicle-for-hire electrification, the federal government's ZEV mandate, provincial policy, resident purchasing power and travel behaviour, and market factors. Since we completed this exercise for TPA in 2021-22, and more recently for Natural Resources Canada for the Toronto CMA, we will be ready to hit the ground running and can complete this exercise efficiently. We will report charging needs in terms of the number of ports by type (fast charging versus Level 2).

While our tool will produce overall charging demand in the City of Toronto, the market share that TPA can capture is largely a function of the level of investment and ambition that TPA and the City choose to take. We will capture the range of possibilities in our outputs.

Next, we will characterize and quantify demand from the specific customer groups that TPA can target in its infrastructure deployment plans. We propose to study:

1. **Residents without access to parking/charging at home**, who could use TPA charging as overnight charging near home.
2. **Workers who commute to, or work within, the City of Toronto** who could use TPA charging as daytime workplace charging.
3. **Taxi and TNC drivers** who could use TPA charging for a mid-day top-up or for all charging needs, if they do not have access to charging at home.
4. **Commercial fleets** who could use TPA charging for a mid-day top-up or for all charging needs, if they do not have access to depot charging.

Given the limited time available for this task, these customer groups will be quantified to 2030 (not 2040) at a high level based on available data. We will report charging needs in terms of number of ports by type (fast charging versus Level 2).

OPTIONAL DATA REQUEST

While we can conduct this Task based on publicly available data (Census, Transportation Tomorrow Survey) and internal tools, additional data supplied by the TPA and the City that would supplement our analysis includes:

- Current number of taxi and TNC licences distributed in the City, and share of each that are full-time drivers (from City of Toronto Municipal Licencing & Standards)
- Number of on-street parking permits distributed (from City of Toronto Transportation Division)
- Annual number of users, parking sessions, and monthly parking passes in the TPA system

Deliverables

These activities will result in updates to **Sections 4.1 to 4.3.3 and Exhibit 34** of the 2022 report, along with a discussion of the current state of deployment in Toronto and the expected level of investment from private actors in Toronto in the next five to ten years. Rather than edit the previous report, we will provide the updated information in a new deliverable (Deployment Plan and Pricing Strategy Report).

Task 2. Deployment plan update

The goal of Task 2 is to translate our understanding of overall charging demand to the optimal level of investment at specific TPA sites over the next five to 10 years. To complete this task, we will:

- Obtain from TPA the target number of ports to be constructed over the next five to 10 years and the target list of TPA sites for investment.
- **Prioritize TPA's target sites according to their anticipated local demand**, using spatial analysis to determine the relative presence of the TPA's four key customer groups (e.g. residents without home parking/charging, ridehailing traffic, etc.), and allocate the planned ports according to the site's performance against our factors. At this stage, we have the option to incorporate equity criteria or coverage standards as well.
- Identify the optimal number of ports (and relative share of each charging speed) for **each TPA parking site**.
- **Comment on the opportunities for load sharing** to ensure TPA's investment is cost-effective and minimizes unnecessary electrical upgrades.

We will leverage spatial analysis tools (e.g. GIS) and Dunsky's in-house charging needs assessment tool to complete this analysis.

Deliverables

These activities will result in updates to **Sections 4.3.4 to 4.3.7, 5.3.1, and 5.3.2 (including Exhibit 44)** of the 2022 report. These results will be added to the same draft report identified in Task 1 (Deployment Plan and Pricing Strategy Report).

Task 3. Pricing strategy update

The goal of this task is to support TPA in setting its fees for charging for the coming years, and determining how/whether to integrate these fees with parking fees. Recently, Measurement Canada enabled billing by the amount of energy dispensed (by kWh), rather than only by time. This, along with the availability of credits under the federal Clean Fuels Regulation, opens new pricing and revenue-generation opportunities that TPA must consider. To complete the work, we will:

- Revisit and revise, as needed, the **pricing principles**, in collaboration with the client team.
- **Update the scan of competitors' pricing strategies** in Toronto, as well as strategies in other jurisdictions.
- **Develop new pricing options** for TPA that incorporate **kWh-based pricing**, either in whole or in combination with time-based pricing.
- **Update the pricing model inputs**, to incorporate Clean Fuel credits, changes to Ontario's electricity rates, and other factors and **re-run the Dunsky pricing model** to determine portfolio performance under aggressive and breakeven pricing scenarios.
- **Recommend a pricing structure** for TPA.

We will leverage Dunsky's charging site business case tool for this analysis.

Deliverables

These activities will result in updates to **Sections 6.1 to 6.3, including Exhibit 65** of the 2022 report. These results will be added to the same draft report identified in Tasks 1 and 2 (Deployment Plan and Pricing Strategy Report).

Task 4. Public charging network benchmarking

The goal of this task is to identify the key performance indicators against which TPA should measure the performance of its charging network over time. As one of the largest parking operators in North America, TPA is also set to become a very significant charging network; given the investment involved, measurement and continuous improvement is crucial. In this Task, we will:

- **Identify peer public charging networks** that are also led by public agencies.
- **Identify relevant benchmarks** for comparing TPA to other public charging networks, including factors to measure reliability/downtime, pricing, utilization, accessibility, access to credit markets, and other relevant factors.
- **Compare TPA's EV charging infrastructure and operations** to these networks using the benchmarks developed.
- If applicable, **make recommendations for additional tracking and monitoring approaches** that TPA can adopt to support continuous improvement.

The results of Task 4 will be provided in a separate report (Benchmarking Report).

4. Timeline & Deliverables

The table below summarizes the expected project timeline for key milestones and deliverables, assuming project approval is received from TPA by **August 9, 2024.** Taking into consideration Dunsky's near-term availability and the scope of work, we believe it is preferable to align for a report to the TPA Board in November.

We propose to organize biweekly 30-minute check-in meetings with the TPA team to provide a status update and discuss any issues and questions. We will also take advantage of these meetings to present interim findings for client feedback to minimize comments on the draft reports.

Lead	Milestone/Deliverable	Approximate Due Date
TPA	Proposal approval from TPA	August 9, 2024
Dunsky	Tasks 1-3 kickoff meeting & data request	August 26, 2024
Dunsky	Report outline	September 6, 2024
Dunsky	Completion of Tasks 1 and 2 analysis	October 4, 2024
Dunsky	Completion of Task 3 analysis	October 18, 2024
Dunsky	Draft Deployment Plan and Pricing Strategy Report	October 18, 2024
TPA	*Consolidated comments*	*November 1, 2024*
Dunsky	Final Deployment Plan and Pricing Strategy Report	November 15, 2024
TPA	*Board Meeting*	*November 29, 2024*
Dunsky	Task 4 kickoff meeting	December 9, 2024
Dunsky	Draft Benchmarking Report	January 24, 2025
TPA	*Consolidated comments*	*February 7, 2025*
Dunsky	Final Benchmarking Report	February 21, 2025

5. Dunsky Team

Lindsay Wiginton will be the Project Manager and day-to-day contact for TPA. She will be supported by **Jeff Turner** as Project Director, **Léa Simon-de-Kergunic**, as Analyst, and other Dunsky team members as required. Lindsay, Jeff and Léa's CVs are included as an attachment.

6. Budget

Our fees to conduct the work as described above are $69,582 before applicable taxes. We propose to invoice this work using milestone billing (Tasks 1-3 will be billed after the submission of the Deployment Plan and Pricing Strategy Report; Task 4 will be billed after the submission of the Benchmarking Report).

Task	Fees
Tasks 1-3. (Deployment Plan and Pricing Strategy Report)	$53,167
Task 4. (Benchmarking Report)	$16,415
TOTAL	**$69,582**