

City of Saint John

TENDER

Tender # 2023-082302T SAINT JOHN TRANSIT BUILDING LIGHTING RETROFIT

Sealed tenders, hand delivered or couriered, addressed to Monic MacVicar, CCLP, CPPB, Supply Chain Management, 1st Floor – 175 Rothesay Avenue, Saint John, NB, E2J 2B4, and marked on the envelope:

"Tender # 2023-082302T SAINT JOHN TRANSIT BUILDING LIGHTING RETROFIT"

will be received until 2:30:00 pm, Tuesday, May 23rd, 2023 for the supply of all materials, labor and equipment necessary to complete a lighting retrofit at the Saint John Transit Building in accordance with the enclosed specifications, drawings, terms and conditions.

In light of the current Covid-19 pandemic, there will be no public opening. Tenders will be opened by the Tender Opening Committee, in the first-floor boardroom, 175 Rothesay Avenue, Municipal Operations Complex, immediately following the tender closing time. Registered bidders may attend remotely via Teams invitation.

The lowest or any tender not necessarily accepted.

Monic MacVicar, CCLP, CPPB **Supply Chain Management**

Issued: Tuesday, May 2nd, 2023

T E N D E R Tender # 2023-082302T SAINT JOHN TRANSIT BUILDING LIGHTING RETROFIT

SCOPE OF WORK:

The City of Saint John is soliciting tenders from qualified bidders to supply all materials, labor and equipment necessary to complete a lighting retrofit at the Saint John Transit Building, as per the specifications, drawings, terms and conditions outlined in this document.

A pre-bid site visit will be held on Monday, May 8th, 2023, at 11:00:00AM. We will meet at the front entrance of the Transit Building located at 55 McDonald Street. PPE must be worn as this is an active construction site. All bidders are strongly urged to attend.

SPECIFICATIONS:

See Appendix A.

TERMS AND CONDITIONS

Governing Law, Trade Treaties and Policies

This procurement will be in accordance with the laws of the province of New Brunswick and the federal laws of Canada.

This procurement is also subject to the following Policies, Legislation and Internal Trade Agreement(s) including:

- Atlantic Trade and Procurement Partnership (ATAPP)
- New Brunswick Procurement Act and Regulation 2014-93
- City of Saint John Policy for the Procurement of Goods, Services and Construction

Submission Instructions

Sealed tenders, hand delivered or couriered, addressed to Monic MacVicar, CCLP, CPPB, Supply Chain Management, 1st Floor – 175 Rothesay Avenue, Saint John, NB, E2J 2B4, and marked on the envelope:

"2023-082302T SAINT JOHN TRANSIT BUILDING LIGHTING RETROFIT"

will be received until 2:30:00 pm, Tuesday, May 23rd, 2023 for the work contemplated in this document and in accordance with the enclosed specifications, drawings, terms and conditions.

Enquiries

Bidders shall promptly examine the bid documents and report any errors, omissions or ambiguities and may direct enquiries or seek additional information in writing by email before the deadline for enquiries to the Authorized Enquiries Contact as set out below. No such communications are to be directed to anyone other than the Authorized Enquiries Contact.

Authorized Enquiries Contact

Monic MacVicar, CCLP, CPPB Supply Chain Management City of Saint John

Email: supplychainmanagement@saintjohn.ca

It is the Bidder's responsibility to seek clarification from the City on any matter it considers unclear. The City shall not be responsible for any misunderstanding on the part of the Bidder concerning this bid document or its process.

The City intends to confirm receipt of a bidder's communication by way of an email or facsimile in reply. If a bidder has not received a reply, the bidder may wish to resend its communication as the lack of reply may have resulted from a technical problem. The City is under no obligation to respond to enquiries or provide additional information but may do so at its sole discretion.

Responses to inquiries may be distributed to all bidders on the invitation list as having received the bid documents as of the date the response is prepared. The source of the question will not be identified in the response. Verbal information shall not be binding upon the City. Inquiries received after the deadline for enquiries will not receive a response.

Tender to be Submitted on Prescribed Form

Bidders are to submit their tender on the prescribed form contained in this document. Failure to submit on this form may result in the disqualification of the bid.

Taxes

The bid price shall be all taxes extra. The City of Saint John shall be invoiced for and pay all applicable taxes related to this bid.

Schedule for the Bid Process

Issue Date	Tuesday, May 2 nd , 2023
Pre-Bid Site Visit	Monday, May 8 th , 2023 at 11:00AM ADT
Deadline for Enquiries	Monday, May 15 th , 2023 at 4:00:00 pm, ADT
Deadline for Issuing Addenda	Tuesday, May 16 th , 2023 at 4:00:00 pm, ADT
Submission Deadline	Tuesday, May 23 rd , 2023 at 2:30:00 pm, ADT
Date of Award	TBD

The Schedule for the bid process is tentative only and may be changed by the City in its sole discretion.

Advisory Notice(s)

Periodically, the City of Saint John is required to issue clarification notices to a bid document in the form of Advisory Notices. Normally these notifications will not have a direct bearing on the cost of a project and will not influence bidding.

Bidders are responsible for obtaining all advisory notice(s) issued by the City. Advisory Notice(s) may be obtained from the City's website (www.saintjohn.ca) under the Menu option, City Hall header, then "Tender and Proposals".

Bidders are instructed to sign the Advisory Notice and return it either by fax to (506) 658-4742 or email to supplychainmanagement@saintjohn.ca prior to the closing date. Failure to comply with the instructions on an advisory may result in rejection of the bid.

Addenda

Periodically, the City of Saint John is required to issue notification of changes or corrections to a bid document by way of addenda. Normally these notifications will have direct bearing on the cost of a project and will influence bidding. Therefore, it is important that the City have assurances that bidders have in-fact received the notification(s).

Bidders are responsible for obtaining all addenda issued by the City. Addenda may be obtained from the City's website (www.saintjohn.ca) under the Menu option, City Hall header, then "Tender and Proposals".

Bidders are required to sign and include all addenda with their bid submission.

Failure to include a copy of all signed addenda with the bid submission may result in rejection of the bid regardless of whether or not the changes noted in the addendum are included in the bid submission.

Mandatory Requirements

Each submission will be evaluated to ensure that it complies with the mandatory requirements and may be rejected if it does not comply. The evaluation of mandatory requirements will confirm that:

- the submission was received prior to the applicable Submission Deadline;
- the bid submission is signed;
- the bid submission is legible;
- the bid submission does not contain a substantive qualification or conditions that are contrary to the terms of the bid document;
- the bid submission does not contain a change in price that was not initialled by the person who signed the submission; and
- the bid submission is in English;

Payment

Payment shall be based on Net 45 Days from date of invoice or receipt of goods/services, whichever is later. Invoices can either be mailed to: City of Saint John, Accounts Payable Department, P.O. Box 1971, Saint John, NB, E2L 4L1, or by email to the Accounts Payable department (accountspayable@saintjohn.ca). Vendors are to ensure invoices are not sent both ways.

Pricing

The tender prices shall include all installation wages, fringe benefits, insurance, transportation, delivery, duty, working tools, equipment costs, and any other charges incurred in order to provide required materials and/or services.

Holdback

A Hold back of 10% of all monies due to the contractor will be retained by the City until 60 days after the substantial completion date of the work, approved by the project manager, and receipt of a statutory declaration.

Substitutes

Substitute products will not be considered (where applicable).

Verbal Agreement

No verbal agreement or conversation with any officer, agent or employee of the owner either before or after execution of the contract shall effect or modify any of the terms or obligations contained in any of the documents comprising the said contract.

Fax Tenders

Tenders received by fax WILL NOT be accepted.

Late Bids

Bids received after the time and date as shown in this document shall not be considered.

Cancelation Clause

In the event that the successful bidder does not comply with the specifications and terms and conditions of this tender, at any time throughout the duration of the contract, the City of Saint John reserves the right to cancel the contract in its entirety.

Basis for Award

A The city does not limit itself to accepting the lowest, or any tender submitted, but reserves the right to award the tender in any manner deemed to be in the City's best interest. It is the City of Saint John's intention to award this agreement to one Vendor.

No guarantee

The City makes no guarantee as to the volume of the Deliverables.

Acceptance, Revocation and Rejection Of Tenders

The bidder agrees that his tender is a firm offer to supply the goods and/or services specified herein at the quoted price, and in accordance with the terms and conditions herein contained. The bidder may revoke his tender at any time prior to the time fixed for tender opening by delivering, or causing to be delivered, written notice of revocation to the designated official at the City of Saint John. Revocation will take effect from the time the notice is actually received. A notice of revocation will not be accepted after the time fixed for tender opening.

The bid shall not be restricted by a statement added to the Tender Form, or by a covering letter, or by alterations to the tender form as supplied, unless otherwise provided herein and further, a tender form that has been altered in any way may be deemed to be a non-confirming bid and, therefore, rejected. Bidders shall be allowed to attach descriptive literature; whose sole purpose is to amplify the bid.

Due Diligence

In the event that a health and safety offence is committed, the onus falls on the employer to prove that it exercised due diligence (i.e. did everything it reasonably could) in order to avoid the offence.

When hiring contractors, the City of Saint John is responsible for ensuring compliance with Health and Safety Legislation and must make sure that the appropriate accident prevention systems are implemented in the workplace.

Therefore, if any contractor is found to be working in an unsafe manner, or outside of current legislation, he will be made to stop work immediately. Any losses which may arise as a result of this work stoppage are the responsibility of the contractor.

Failure to comply with current legislation on the part of the contractor, may lead to cancellation of this contract and any bid deposits that may be in place.

Insurance

The successful contractor shall provide evidence of the following insurance coverage:

General Liability with minimum limits of two million dollars, (\$2,000,000.00). The policy shall include:

- *operations of the contractor in connection with this tender;
- *products and completed operations coverage;
- *contractual liability with respect to this tender;
- *the City of Saint John added as an additional insured;
- *a cross liability clause;
- *non-owned automobile;
- *thirty (30) days notice of cancellation of this policy "will" be given to the City of Saint John, by the insurers;

Standard automobile insurance for owned automobiles with at least the minimum limits allowed by law. This coverage is to remain in effect for the entire time frame of the contract.

WorksafeNB Certificate and Business Corporations Act Certificate

New Brunswick Tenderers shall provide to the City a WorkSafeNB certificate which confirms proper registration and good standing with WorkSafeNB and a Business Corporations Act Certificate which confirms proper registration and good standing with the Province of New Brunswick - Corporate Affairs within five (5) Working Days following the City's notice of selection.

Out-of-province Tenderers shall provide to the City a WorkSafeNB certificate which confirms proper registration and good standing with WorkSafeNB or a letter or certificate issued under the equivalent applicable legislation in the province of origin of the Tenderer confirming extension of coverage from said legislation to the Province of New Brunswick for the term of the Contract. Subject to paragraph c), out-of-province Tenderers shall also provide a Business Corporations Act Certificate which confirms proper registration and good standing with the Province of New Brunswick - Corporate Affairs within five (5) Working Days following the City's notice of selection.

Tenderers from Nova Scotia may submit the appropriate Business Corporations Act Certificate from the Province of Nova Scotia.

Reserved Rights

The City reserves the right to:

a) Reject an unbalanced bid submission. For the purpose of this section, an unbalanced bid submission is a bid submission containing a unit price which deviates substantially from, or does not fairly represent reasonable and proper compensation for the unit of work bid or one that contains prices which appear to be so unbalanced as to adversely affect the interests of the City. The City reserves the right to use other bids submitted in response to this bid solicitation or for other like or similar work as a guideline in determining if a bid is unbalanced.

- b) Amend or modify the scope of the Work, and/or cancel or suspend the bid award, at any time for any reason;
- c) Require bidders to provide additional information after the submission deadline to support or clarify their bid submission;
- d) Not accept any or all bids;
- e) Not accept a bid submission from a bidder who is itself, or whose principals, owners or directors are also principals, owners or directors of another entity which is, involved in litigation, arbitration or any other similar proceeding against the City;
- f) Reject any or all bid submissions without any obligation, compensation or reimbursement to any bidder or any of its team members;
- g) Withdraw this bid solicitation and cancel or suspend the bid process;
- h) Extend, from time to time, any date, any time period or deadline provided in this bid solicitation (including, without limitation, the submission deadline), upon written notice to all bidders;
- i) Assess and reject a bid submission on the basis of:
 - (i) information provided by references;
 - (ii) the bidder's past performance on previous contracts;
 - (iii) the information provided by a bidder pursuant to the City exercising its clarification rights under this bid process;
 - (iv) the bidder's experience with performing the type and scope of work specified;
 - (v) other relevant information that arises during this procurement process;
- j) Waive formalities and accept bids which substantially comply with the requirements of this bid solicitation;
- k) Verify with any bidder or with a third party any information set out in a bid submission;
- Disqualify any bidder whose bid submission contains misrepresentations or any other inaccurate or misleading information;
- m) Disqualify any bidder who has engaged in conduct prohibited by the bid solicitation;
- n) Make changes, including substantial changes, to the bid solicitation provided that those changes are issued by way of addenda in the manner set out in this bid document;
- Select any bidder other than the bidder whose bid submission reflects the lowest cost to the City;

- p) Cancel this procurement process at any stage, for any reason;
- q) Cancel this procurement process at any stage and issue a new bid solicitation for the same or similar deliverables;
- r) Accept any bid submission in whole or in part;
- s) Waive minor non-compliance with the mandatory requirements of the bid solicitation and accept the bid submission; or
- t) Accept a bid submission which contains the following errors:
 - (i) error in mathematics whether this involves the extension of a unit price or an error in addition, the mistake will be corrected and the correct total will be used for evaluation purposes and will be binding on the bidder.
 - (ii) conflict between the written and numerical bid prices. In all cases, the total bid price will be corrected to reflect the written bid price, whether lump sum or unit price (where applicable).
 - (iii) failure to include the contingency allowance in the total bid price (where applicable). If the contingency allowance was not included in the addition, the bid price shall be corrected to reflect its inclusion.

and these reserved rights are in addition to any other express rights or any other rights which may be implied in the circumstances and the City shall not be liable for any expenses, costs, losses or any direct or indirect damages incurred or suffered by any bidder or any third party resulting from the City exercising any of its express or implied rights under this bid solicitation.

By submitting a bid, the bidder authorizes the collection by the City of the information set out at paragraph i) in the manner contemplated in that subparagraph.

Limitation of Liability and Waiver

Each bidder, by submitting a bid, agrees that:

- a) Neither the City nor any of its employees, agents, advisors or representatives will be liable, under any circumstances, for any Claim arising out of this procurement process including but not limited to costs of preparation of the bid submission, loss of profits, loss of opportunity or for any other Claim; and
- b) The bidder waives any Claim for any compensation of any kind whatsoever, including Claims for cost of preparation of the bid submission, loss of profit or loss of opportunity by reason of the City's decision to not accept the bid submitted by the bidder, to award a Contract to any other bidder or to cancel this procurement process, and the bidder shall be deemed to have agreed to waive such right or Claim.

Validity Period

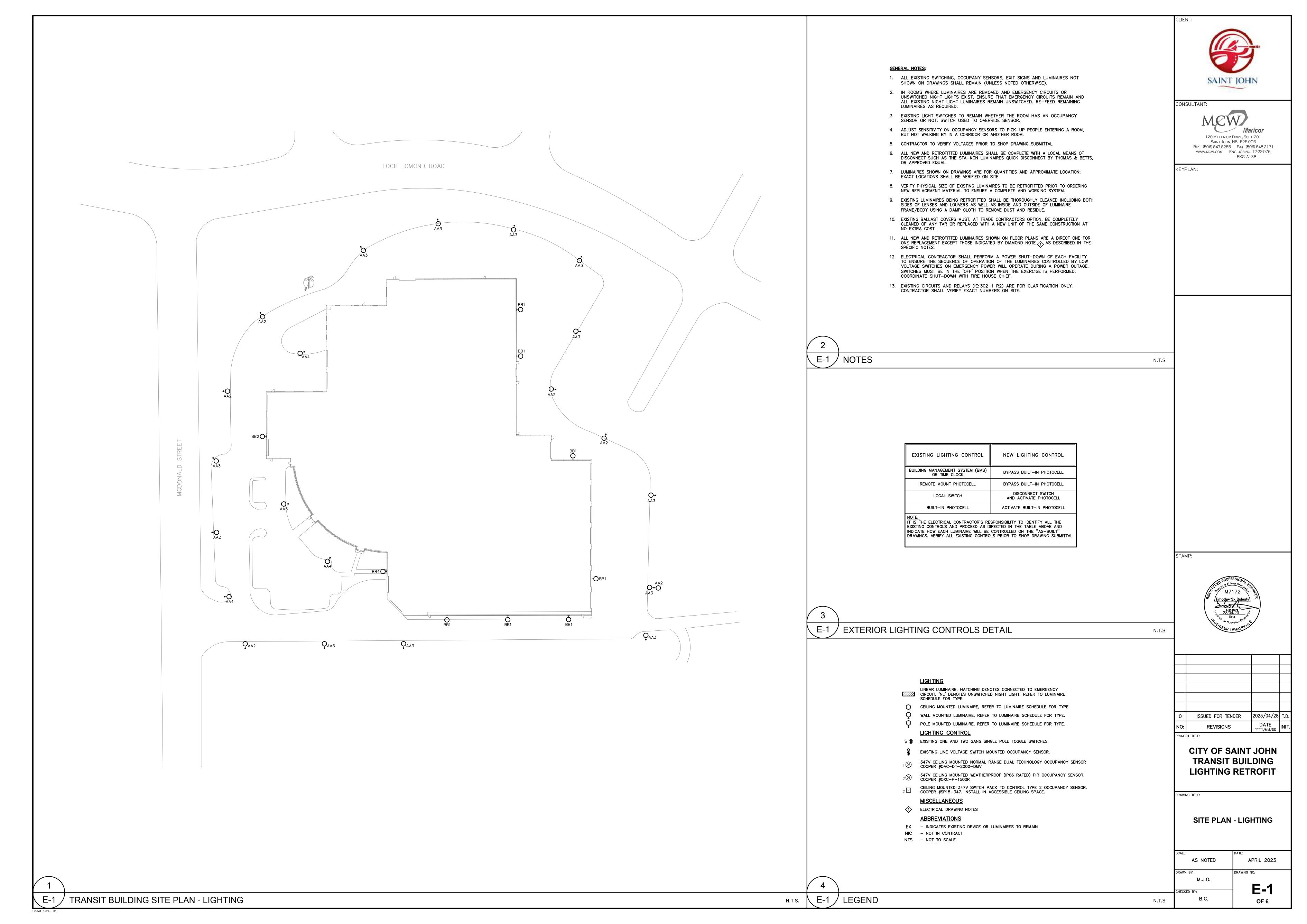
The bid submission constitutes an offer which shall remain open and irrevocable until 90 days after the submission deadline.

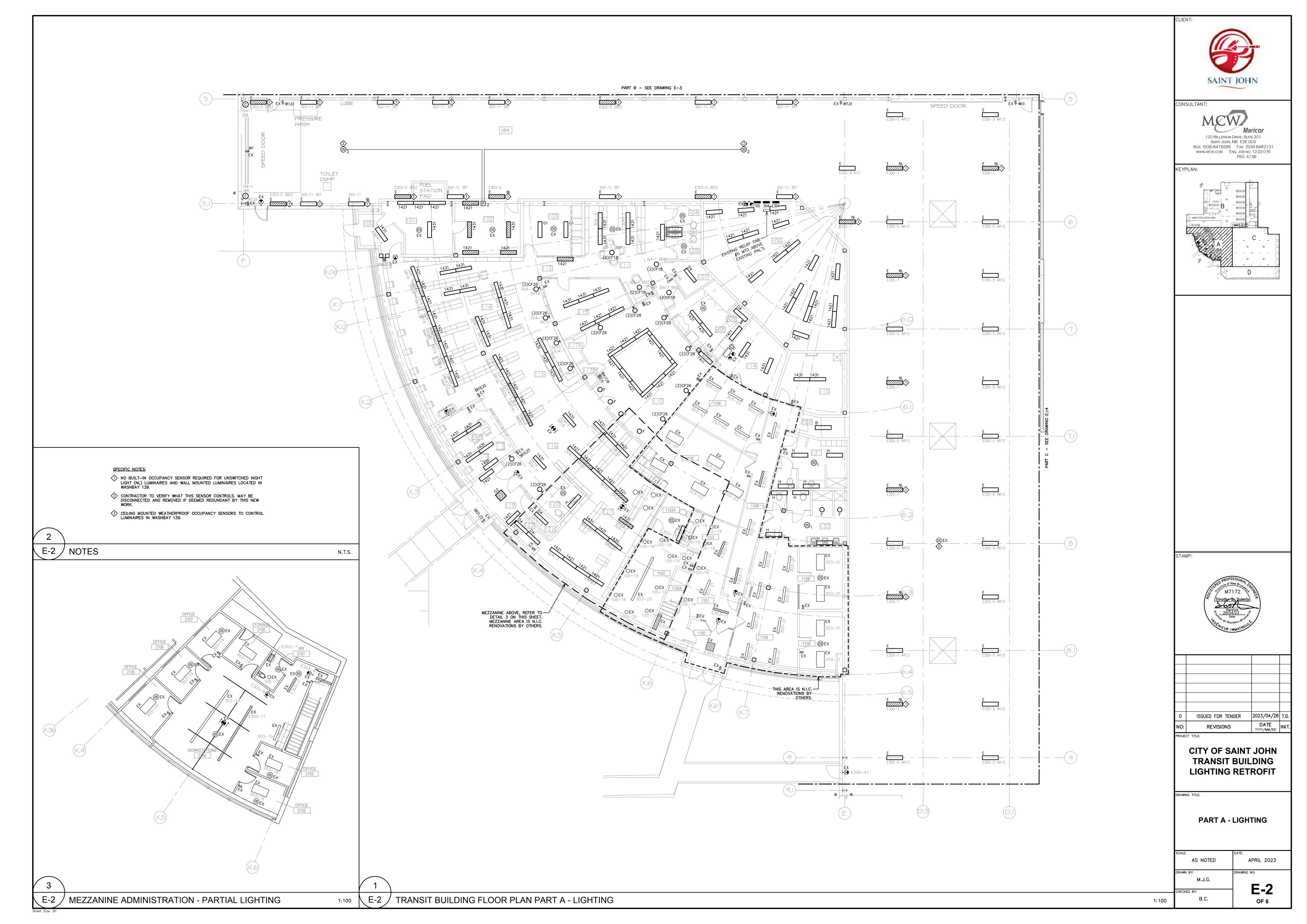
Minor Irregularities

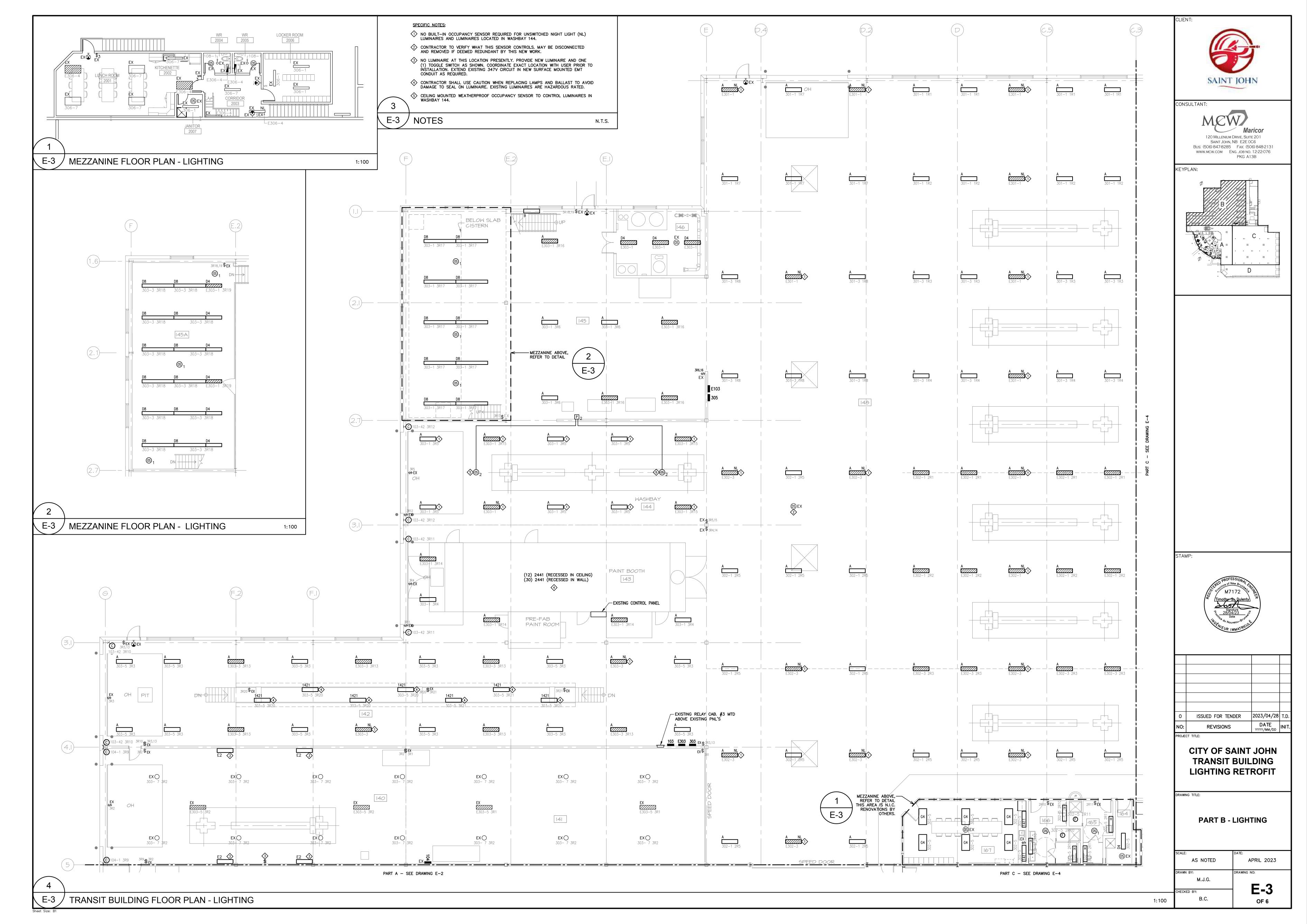
The City of Saint John reserves the right to waive minor non-compliances in accordance with Section 120 of the Province of New Brunswick's Regulation 2014-93 under the Procurement Act.

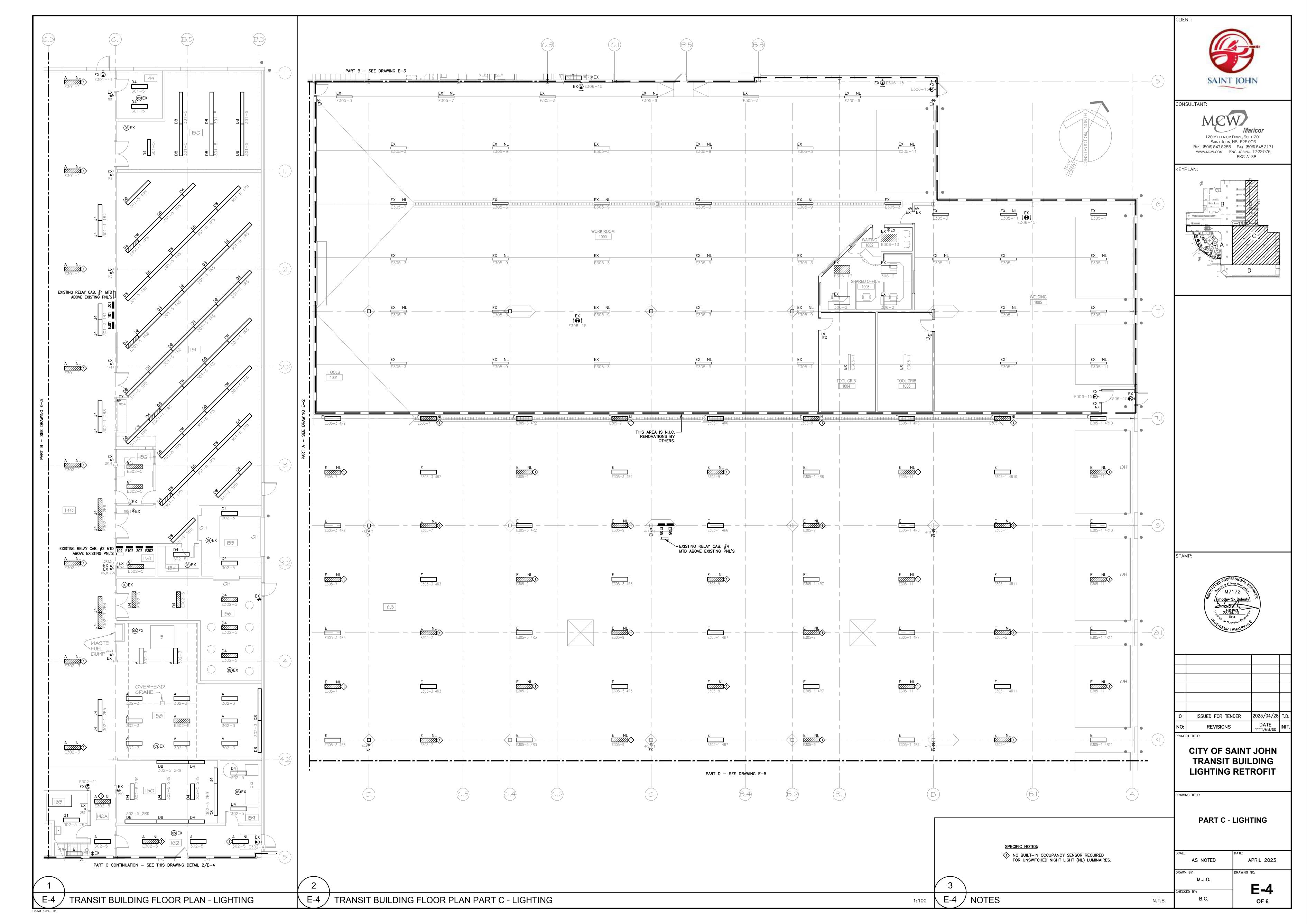
APPENDIX A – SPECIFICATIONS

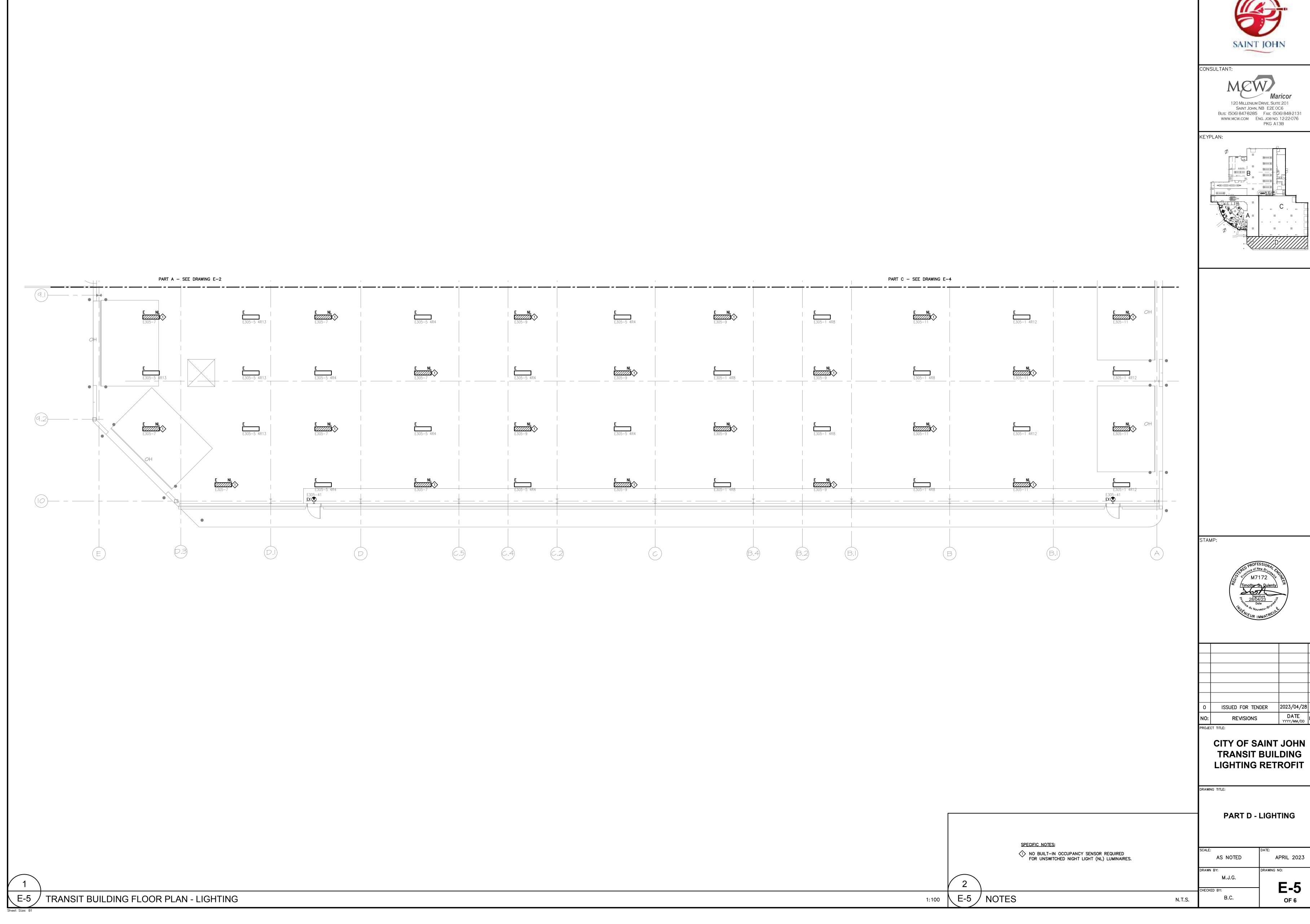
TENDER No. 2023-082302T SAINT JOHN TRANSIT BUILDING LIGHTING RETROFIT

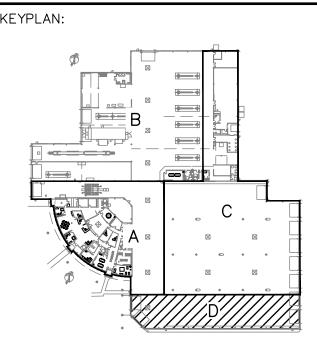












0	ISSUED FOR TENDER	2023/04/28	T
NO:	REVISIONS	DATE YYYY/MM/DD	IN
PROJEC	CT TITLE:		

TYPE	MANUFACTURER	DESCRIPTION	VOLTAGE	MOUNTING	LAMP/SOURCE	NOTES
Α	COOPER #VHB-1824-W-UNC-L840- CD-GRY-ZW-SWPD3-10KV C/W Y-TOGGLE-30-2PK	LED HIGH BAY LUMINAIRE. EXTRUDED ALUMINUM HOUSING WITH HIGH IMPACT POLYCARBONATE LENS AND EMBEDDED HIGH/LOW(OFF) OCCUPANCY SENSOR. LUMEN SELECTABLE, RATED L70/100,000HRS.	347	SUSPEND FROM DECK AT EXISTING LOCATION AND ELEVATION	125W 18406 LUMENS 4000K 80 CRI	1,5,6,7,9,10
В	COOPER #4SWLED-36SL-LW-347V- L835-CD-SVPD2	4' LINEAR SURFACE MOUNTED LED WRAP/WALL BRACKET WITH ACRYLIC FROSTED CENTER DIFFUSER c/w INTEGRATED DUAL TECHNOLOGY SENSOR. 0-10 VOLT DIMMING DRIVER DIMS TO 10%. RATED L80/60,000HRS.	347	SURFACE TO CEILING OR WALL	32W 3501 LUMENS 3500K 80 CRI	1,5,10
С	COOPER #NFFLD-S-C15-D-UNV- 66-T/KNC-CB	WALL MOUNTED LED FLOOD LUMINAIRE. RUGGED DIE—CAST ALUMINUM CONSTRUCTION. IP66 RATED. DARK BRONZE POWDER COAT FINISH. 0—10 VOLT DIMMING DRIVER DIMS TO 10%. RATED L85/100,000HRS.	120	WALL MOUNTED AT EXISTING LOCATION.	51W 5797 LUMENS 4000K 70 CRI	1,5,10
D4	METALUX #4SNLED-LD5-37SL-LN- 347-L840-CD-U- WG/SNF4FT	4' LINEAR LED STRIPLIGHT. DIFFUSED ACRYLIC LENS WITH WELDED END CAPS AND WIRE GUARD. SWITCHABLE LUMEN OUTPUT AND COLOR TEMPERATURE. 0-10 VOLT DIMMING DRIVER DIMS TO 10%. RATED L70/60,000HRS.	347	INSTALL AT EXISTING LOCATION AND ELEVATION	28W 3809 LUMENS 4000K 80 CRI	1,5,10
D8	METALUX# 8TSNLED-LD5-75SL-LN- 347-L840-CD1-U- WG/SNF4FT	8' LINEAR LED STRIPLIGHT. DIFFUSED ACRYLIC LENS WITH WELDED END CAPS AND WRE GUARD. SWITCHABLE LUMEN OUTPUT AND COLOR TEMPERATURE. 0—10 VOLT DIMMING DRIVER DIMS TO 10%. RATED L70/60,000HRS.	347	INSTALL AT EXISTING LOCATION AND ELEVATION	55W 7619 LUMENS 4000K 80 CRI	1,5,10
E	AIMLITE #VPLA-LA4-32/3C	4' LINEAR LED VAPOUR TIGHT LUMINAIRE. LIGHT GRAY POLYCARBONATE HOUSING, WITH PC/UV FROSTED ETCHED POLYCARBONATE LENS, STAINLESS STEEL CLIPS. RATED IP65. 0-10V STANDARD DIMMING. L70/180,000 HRS.	347	INSTALL AT EXISTING LOCATION AND ELEVATION	65W 8450 LUMENS 4000K 80 CRI	1,5,10
E2	AIMLITE #VPLA-LA3-32/3C- CAS060-LATCH-SS2	4' LINEAR LED VAPOUR TIGHT LUMINAIRE. LIGHT GRAY POLYCARBONATE HOUSING, WITH PC/UV FROSTED ETCHED POLYCARBONATE LENS, STAINLESS STEEL CLIPS. RATED IP65. 0-10V STANDARD DIMMING. L70/180,000 HRS.	347	INSTALL AT EXISTING LOCATION AND ELEVATION	42W 5450 LUMENS 4000K 80 CRI	1,5,10
F	COOPER #PR6R-FS12-D010 / PR6M-12-MD-MW / H347	6" DIAMETER RECESSED LED DIMMABLE DOWNLIGHT RETROFIT KIT WITH ADJUSTABLE LUMEN OUTPUT AND SELECTABLE COLOR TEMPERATURE. MEDIUM WIDE DISTRIBUTION. RATED FOR L80/60,000HRS.	347	INSTALL IN EXISTING DOWNLIGHT HOUSING	13W 1500 LUMENS 3500K 80 CRI	1,3,5
G1	COOPER #14FP4235C-347	1'x4' LED FLAT PANEL LUMINAIRE WITH DEEP DRAWN BACKPLATE AND INTEGRAL T—BAR CLIPS. EXTRUDED ALUMINUM FRAME, SATIN WHITE LENS. 0—10 VOLT DIMMING DRIVER DIMS TO 10%. RATED L70/50,000HRS.	347	RECESSED IN T-BAR CEILING	38W 4259 LUMENS 3500K 80 CRI	1,5,10
G2	COOPER #22FP4235C-347	2'x2' LED FLAT PANEL LUMINAIRE WITH DEEP DRAWN BACKPLATE AND INTEGRAL T—BAR CLIPS. EXTRUDED ALUMINUM FRAME, SATIN WHITE LENS. 0—10 VOLT DIMMING DRIVER DIMS TO 10%. RATED L70/50,000HRS.	347	RECESSED IN T-BAR CEILING	38W 4330 LUMENS 3500K 80 CRI	1,5,10
G4	COOPER #24FP4735C-347	2'x4' LED FLAT PANEL LUMINAIRE WITH DEEP DRAWN BACKPLATE AND INTEGRAL T—BAR CLIPS. EXTRUDED ALUMINUM FRAME, SATIN WHITE LENS. 0—10 VOLT DIMMING DRIVER DIMS TO 10%. RATED L70/50,000HRS.	347	RECESSED IN T-BAR CEILING	40W 4712 LUMENS 3500K 80 CRI	1,5,10
Н	COOPER #4BCLED-LD4-32SL-F- 347V-L835-CD-1-U	4' LINEAR SURFACE MOUNTED LED WRAP/WALL BRACKET WITH ACRYLIC FROSTED CENTER DIFFUSER c/w FIELD ADJUSTABLE LUMEN OUTPUT. 0-10 VOLT DIMMING DRIVER DIMS TO 10%. RATED L80/60,000HRS.	347	SURFACE TO CEILING OR WALL	32W 3200 LUMENS 3500K 80 CRI	1,5,10
J4	ABOVE ALL #STR12-D-30LED-40- 8-F-SE / STRP12-RF / STRP-QSMK	4' LOW PROFILE LED STRIP LUMINAIRE. HIGH GLOSS, WHITE FINISH. FLAT DIFFUSE LENS WITH A 4' SOLID, ASYMMETRICAL WIDE REFLECTORS. 0-10 VOLT DIMMING DRIVER DIMS TO 10%. RATED L70/100,000HRS.	347	SURFACE TO CEILING/WALL OR SUSPENDED FROM STRUCTURE	30W 4050 LUMENS 4000K 80 CRI	1,5,6,10
AA2	COOPER #PRV-PA2A-740-9- T2U-SA-BZ-PR-MS/DIM- L40	POLE MOUNTED, HIGH LUMEN LED AREA LUMINAIRE. RUGGED DIE—CAST ALUMINUM			113W 15811 LUMENS 4000K 70 CRI TYPE II URBAN DIST.	1,5,8
AA3	COOPER #PRV-PA2A-740-9- T3-SA-BZ-PR-MS/DIM-L40	HOUSING WITH HOUSING COMPLETELY SEALED AGAINST MOISTURE (IP66) c/w nLIGHTAIR CAPABILITY FOR BI-LEVEL MOTION/AMBIENT SENSOR AND ON-BOARD PHOTOCELL WITH FIELD-ADJUSTABLE PROGRAMING SUITABLE FOR MOUNTING HEIGHTS UP TO 40 FEET. ZINC-INFUSED THERMOSET DARK BRONZE	347	MOUNT ON EXISTING POLE	113W 15749 LUMENS 4000K 70 CRI TYPE III DIST.	1,5,8,10
AA4	COOPER #PRV-PA2A-740-9- T4W-SA-BZ-PR-MS/DIM- L40	POWDER COAT FINISH TO RESIST CORROSION AND WEATHERING. LIGHT ENGINES RATED IP66. MINIMUM 70 CRI, RATED L92/100,000HRS.			113W 15560 LUMENS 4000K 70 CRI TYPE IV WIDE DIST.	1,5,8,10
BB1	COOPER #WPMLED15S	WALL MOUNTED EXTERIOR LED WALL PACK. RUGGED DIE—CAST ALUMINUM HOUSING WITH DARK BRONZE FINISH. PRISMATIC GLASS LENS, BUTTON TYPE PHOTOCELL AND ADJUSTABLE LUMEN OUTPUT. RATED L90/100,000HRS.	347	MOUNT ON BUILDING FAÇADE AT EXISTING LOCATION.	29W 4122 LUMENS 4000K 70 CRI	1,5,10
BB2	COOPER # IST-PA1A-740-9-T2R- GM-BPC	WALL MOUNTED EXTERIOR LED WALL PACK. DIE—CAST ALUMINUM HOUSING. TRAPAZOID SHAPE WITH ROUNDED FRONT FACE. IP65 RATED. DARK BRONZE FINISH C/W PHOTOCELL. MINIMUM 70 CRI, RATED L90/100,000HRS.	347	MOUNT ON BUILDING FAÇADE AT EXISTING LOCATION.	31W 4123 LUMENS 4000K 70 CRI TYPE II MED. DIST.	1,5,10
BB4	COOPER #IST-PA1A-740-9-T4W- GM-BPC	WALL MOUNTED EXTERIOR LED WALL PACK. DIE—CAST ALUMINUM HOUSING. TRAPAZOID SHAPE WITH ROUNDED FRONT FACE. IP65 RATED. DARK BRONZE FINISH C/W PHOTOCELL. MINIMUM 70 CRI, RATED L90/100,000HRS.	347	SUSPEND FROM DECK AT EXISTING LOCATION AND ELEVATION	31W 4083 LUMENS 4000K 70 CRI TYPE IV WIDE DIST.	1,5,10
1411	SYLVANIA LAMP #LED10T8-L48-DIM-835- SUB-G8 SYLVANIA BALLAST #QHE1x32T8-347-ISN-SC	1×T8-4' GLASS LED TUBE AND NORMAL BALLAST FACTOR INSTANT START ELECTRONIC BALLAST. <10% THD. 5 YEAR MANUFACTURER'S WARRANTY.	347	INSTALL IN EXISTING LUMINAIRE	10W 1600 LUMENS 3500K 80 CRI	1,2
1421	SYLVANIA LAMP #LED10T8-L48-DIM-835- SUB-G8 SYLVANIA BALLAST #QHE2x32T8-347-ISN-SC	2×T8-4' GLASS LED TUBE AND NORMAL BALLAST FACTOR INSTANT START ELECTRONIC BALLAST. <10% THD. 5 YEAR MANUFACTURER'S WARRANTY.	347	INSTALL IN EXISTING LUMINAIRE	10W 1600 LUMENS (PER LAMP) 3500K 80 CRI	1,2
1431	SYLVANIA LAMP #LED10T8-L48-DIM-835- SUB-G8 SYLVANIA BALLAST #QHE3x32T8-347-ISN-SC	3xT8-4' GLASS LED TUBE AND NORMAL BALLAST FACTOR INSTANT START ELECTRONIC BALLAST. <10% THD. 5 YEAR MANUFACTURER'S WARRANTY.	347	INSTALL IN EXISTING LUMINAIRE	10W 1600 LUMENS (PER LAMP) 3500K 80 CRI	1,2
(2)CF18	SYLVANIA LAMP #LED7-PB-G24Q-O- DIM841-SUB	PLUG-IN COMPACT FLUORESCENT STYLE LED REPLACEMENT LAMP FOR 18W, 4 PIN CFL. 360 DEGREE OMNI-DIRECTIONAL DESIGN. SUITABLE FOR DAMP ENVIRONMENTS AND SEMI-ENCLOSED LUMINAIRES. RATED L70/50,000 HRS.	347	PLUG INTO EXISTING 4-PIN GX24q BASE	7W 820 LUMENS 4100K 80 CRI	1,3,4
(2)CF26	SYLVANIA LAMP #LED9.5-PB-G24Q-O- DIM835-SUB	PLUG-IN COMPACT FLUORESCENT STYLE LED REPLACEMENT LAMP FOR 26W, 4 PIN CFL. 360 DEGREE OMNI-DIRECTIONAL DESIGN. SUITABLE FOR DAMP ENVIRONMENTS AND SEMI-ENCLOSED	347	PLUG INTO EXISTING 4—PIN GX24q BASE	9.5W 1200 LUMENS 4100K	1,3,4

LUMINAIRE SCHEDULE

- VERIFY EXISTING VOLTAGE PRIOR TO SHOP DRAWINGS SUBMITTAL. . SUPPLY AND INSTALL NEW MEDIUM G13 BI-PIN, LOW PROFILE, SLIDE-ON, TURN-TYPE, SHUNTED, QUICK CONNECT STANDARD FLUORESCENT LAMP HOLDERS.
- I FVITON #23351 OR APPROVED EQUAL. CONTRACTOR TO ENSURE RETROFIT KIT AND/OR LAMP IS COMPATIBLE WITH THE LUMINAIRE
- NUMBER IN PARENTHESES DENOTES QUANTITY OF LAMPS, REFER TO FLOOR PLAN FOR TYPE.
- PROVIDE TWO (2) SPARE DRIVERS FOR ATTIC STOCK. PROVIDE ALL NECESSARY HANGERS, SAFETY CABLES AND CORD SETS REQUIRED FOR A FULL AND COMPLETE WORKING SYSTEM. PROGRAM LUMINAIRES TO "DIM" TO 40% LIGHT OUTPUT AFTER 30 MINUTES OF VACANCY AND "DIM TO OFF" AFTER WORK HOURS. COORDINATE "WORK HOURS'
- . ONE (1) REMOTE CONTROL FOR TYPE AA LUMINAIRES. COOPER #SHH-01 9. SET LUMINAIRE TYPE 'A' LUMEN SELECT SWITCH TO 'LOW'. 10. PROVIDE DLC PRODUCT I.D. NUMBER ON SHOP DRAWINGS.

1. GENERAL REQUIREMENTS

- 1.1. THESE ELECTRICAL SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH: GENERAL REQUIREMENTS, ELECTRICAL DRAWINGS AND OTHER CONTRACT
- 1.2. SCOPE OF WORK 1.2.1. THIS CONTRACTOR SHALL PROVIDE ALL LABOUR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE INSTALLATION OF COMPLETELY FINISHED, TESTED, BALANCED AND PROPERLY OPERATING ELECTRICAL SYSTEMS AS SPECIFIED HEREIN AND AS INDICATED ON DRAWINGS. THE INTENT IS TO PROVIDE FOR FINISHED WORK COMPLETE IN ALL ESSENTIALS AS CALLED FOR BY THE CONTRACT DOCUMENTS, IN A MANNER CONSISTENT WITH GOOD WORKMANSHIP.
- 1.3. CODES AND STANDARDS 1.3.1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH CSA C22.1-21, CANADIAN ELECTRICAL CODE, PART 1. (2021 EDITION) AND THE
- NATIONAL BUILDING CODE OF CANADA 2015. 1.4. PERMIT AND BY-LAWS

STANDARDS AND THEIR AMENDMENTS.

- 1.4.1. OBTAIN PERMITS AND CERTIFICATIONS PRIOR TO START OF WORK. SUBMIT DRAWINGS TO INSPECTION AUTHORITY. COORDINATE SERVICES WITH SAINT JOHN ENERGY. PAY ALL ASSOCIATED FEES. 1.4.2. ALL WORK PERFORMED BY THIS CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES, LOCAL BY-LAWS,
- 1.5.1. PRIOR TO TENDER CLOSE, THIS CONTRACTOR SHALL VISIT SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND VOLTAGES, NO ALLOWANCE SHALL BE MADE FOR PROBLEMS THAT MAY ARISE DUE TO LACK OF KNOWLEDGE OF EXISTING CONDITIONS THAT COULD REASONABLY HAVE BEEN ASCERTAINED BY A CAREFUL
- 1.6. COORDINATION OF WORK 1.6.1. THIS CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE GENERAL CONTRACTOR AND WITH ALL OTHER SUB-CONTRACTORS 1.6.2. SCHEDULE AND PERFORM ALL WORK IN EXISTING PREMISES WITH OWNER SO AS NOT TO INTERFERE WITH NORMAL OPERATIONS OF BUILDING OCCUPANTS. ANY DISRUPTIVE WORK SHALL BE SCHEDULED OUTSIDE OPERATING HOURS AND AS APPROVED BY OWNER.
- 1.6.3. COOPERATE WITH OTHER TRADES, OWNER AND OWNER'S FORCES IN CARRYING OUT WORK. REPORT ANY DEFICIENCIES OR DEFECTS IN WORK PERFORMED BY OTHERS THAT AFFECT THIS CONTRACT'S WORK TO ENGINEER IMMEDIATELY. 1.6.4. WHERE WORK IS CARRIED OUT IN EXISTING PREMISES, NOTIFY OWNER AT LEAST 72 HOURS IN ADVANCE OF ANY NECESSARY
- 1.7. GUARANTEE 1.7.1. THIS CONTRACTOR SHALL PROVIDE, IN WRITING, A GUARANTEE COVERING ALL LABOR AND MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION. REPAIR AND MAKE GOOD ALL DEFECTS DURING THE GUARANTEE PERIOD, INCLUDING ANY DAMAGE TO BUILDING INCURRED AS A RESULT OF FAILURE OF ELECTRICAL WORK AND/OR EQUIPMENT INSTALLED.

INTERRUPTIONS IN SERVICES OR ACCESS.

- 1.8.1. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. MAINTAIN ONE SET OF PLANS ON WHICH SHALL BE CLEARLY NOTED ALL CHANGES OR DEVIATIONS FROM THE CONTRACT, AND SUBMIT THEM AT THE END OF THE PROJECT MARKED 'AS-BUILT', SIGNED AND DATED BY THIS CONTRACTOR. THESE DRAWINGS SHALL BE KEPT ON SITE DURING CONSTRUCTION, UPDATED, AND MADE AVAILABLE FOR REVIEW BY ENGINEER, IF REQUESTED.
- 1.9.1. NO ALLOWANCE SHALL BE MADE BEYOND CONTRACT PRICE UNLESS CONTRACTOR RECEIVES SIGNED APPROVAL IN ACCORDANCE WITH GENERAL CONDITIONS.
- 1.10. CUTTING, PATCHING AND FIRESTOPPING 1.10.1. ALL CUTTING, PATCHING AND FIRESTOPPING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. THIS CONTRACTOR SHALL LOCATE THE EXACT DIMENSIONS AND POSITIONS OF OPENINGS AND HOLES WHERE CUTTING IS REQUIRED.
- 1.11. SHOP DRAWINGS 1.11.1. THIS CONTRACTOR SHALL SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE GENERAL REQUIREMENTS. WORK SHALL NOT PROCEED AND EQUIPMENT/MATERIAL SHALL NOT BE ORDERED UNTIL THE SHOP DRAWINGS HAVE BEEN RETURNED STAMPED AND SIGNED. THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE OBLIGATION OF CHECKING THE DRAWINGS THEMSELVES OR FURNISHING THE MATERIALS SPECIFIED.
- 1.11.2. WHEN SUBMITTED, SHOP DRAWING MUST BEAR CONTRACTOR'S STAMP REPRESENTING THAT THEY HAVE DETERMINED AND VERIFIED ALL VOLTAGES, FIELD MEASUREMENTS, FIELD CONSTRUCTION CRITERIA, MATERIALS, CATALOGUE NUMBERS AND SIMILAR DATA AND THAT THEY HAVE CHECKED AND COORDINATED EACH SHOP DRAWING WITH REQUIREMENTS OF WORK AS INDICATED ON DRAWINGS AND SPECIFICATIONS.
- 1.11.3. SHOP DRAWINGS REQUIRED FOR: LUMINAIRES, LAMPS, BALLASTS, CONTROLS AND WIRING DEVICES. INFORMATION REQUIRED: MANUFACTURER, MODEL, DIMENSIONS, CONSTRUCTION DETAILS, ACCESSORIES, INSTALLATION DETAILS, CAPACITIES, PERFORMANCE DATA, FINISHES. INCLUDE WIRING SINGLE LINE AND SCHEMATIC DIAGRAMS WHERE APPLICABLE.
- 1.11.4. ALL MATERIAL SUPPLIED SHALL BE NEW AND CARRY C.S.A. CERTIFICATION OR OTHER CERTIFICATIONS APPROVED BY LOCAL INSPECTION AUTHORITY.
- 1.12.1. THIS CONTRACTOR SHALL, AT ALL TIMES, KEEP THE SITE NEAT, CLEAN AND FREE FROM ACCUMULATION OF WASTE MATERIALS.
- 1.13. OPERATION AND MAINTENANCE INSTRUCTIONS 1.13.1. THIS CONTRACTOR SHALL INSTRUCT THE OWNER IN OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND SYSTEMS INSTALLED SUCH AS DIMMING SYSTEM AND LIGHTING CONTROL SYSTEM. ALL CONTROL FEATURES SHALL BE THOROUGHLY EXPLAINED. THREE COPIES OF OPERATION AND MAINTENANCE INSTRUCTIONS, TOGETHER WITH ALL APPROVED SHOP DRAWINGS AND SPARE PARTS LIST FASTENED IN A BINDER, AND ONE ELECTRONIC COPY, SHALL BE SUBMITTED TO THE OWNER. MANUALS COMPLETE WITH: -DETAILS OF DESIGN ELEMENTS, CONSTRUCTION FEATURES
 - COMPONENT FUNCTION AND MAINTENANCE REQUIREMENTS, 1 PERMIT EFFECTIVE START-UP, OPERATION, MAINTENANCE, REPAIR, MODIFICATION, EXTENSION AND EXPANSION OF ANY PORTION OR FFATURE OF INSTALLATION. -TECHNICAL DATA, PRODUCT DATA, SUPPLEMENTED BY BULLETINS DESCRIPTIONS OF ITEMS, AND PARTS LISTS. ADVERTISING OR SALES LITERATURE IS NOT ACCEPTABLE. -WIRING AND SCHEMATIC DIAGRAMS AND PERFORMANCE CURVES. -NAME AND ADDRESS OF LOCAL SUPPLIERS. -COPY OF REVIEWED SHOP DRAWINGS.
 - -COPY OF ALL TEST CERTIFICATES. -WARRANTY CERTIFICATE. -PROVIDE ONE HARD COPY OF THE OPERATION AND MAINTENANCE MANUAL TO THE ENGINEER FOR REVIEW PRIOR TO SUBMISSION TO
- 1.14.1. ADVISE OWNER OF AVAILABILITY OF SURPLUS MATERIAL. TURN OVER ITEMS REQUESTED BY OWNER AND DISPOSE OF REMAINDER IN ACCORDANCE WITH ALL BY LAWS AND LOCAL AUTHORITIES HAVING
- 1.15. DEMOLITION 1.15.1. DISCONNECT AND REMOVE ALL DEVICES, COMPONENTS, EQUIPMENT AND EXPOSED RACEWAYS. WIRES AND CABLES, BACK TO SOURCE OF SUPPLY, MADE REDUNDANT BY THIS WORK INCLUDING THOSE WITHIN WALLS AND SUSPENDED CEILINGS. MAKE SAFE ANY REMAINING LIVE CONNECTIONS. LEAVE POLYPROPYLENE PULL CORD IN EACH EMPTY
- CONDUIT. TAG EACH EMT CONDUIT AT EACH END WITH LOCATION OF 1.15.2. ELECTRICAL CONTRACTOR SHALL ENSURE ELECTRICAL CONTINUITY TO EXISTING DEVICES REMAINING.
- 1.15.3. RELOCATE EXISTING WIRING, RACEWAYS, FIXTURES AND DEVICES AS REQUIRED TO MAINTAIN REASONABLE ACCESSIBILITY AND TO FACILITATE INSTALLATION OF TOTAL PROJECT WORK
- 1.15.4. REVIEW LOADING ON EACH AFFECTED CIRCUIT PRIOR TO START OF CONSTRUCTION AND ADJUST AS REQUIRED. 1.15.5. WHERE NEW DRYWALL COVERS EXISTING JUNCTION OR PULL BOXES, INSTALL ACCESS HATCHES. 1.15.6. REMOVE CONTAMINATED OR DANGEROUS MATERIALS AS DEFINED BY
- AUTHORITIES HAVING JURISDICTION RELATING TO ENVIRONMENTAL PROTECTION FROM SITE AND DISPOSE OF IN A SAFE MANNER TO MINIMIZE DANGER AT SITE OR DURING DISPOSAL.

2. BASIC MATERIAL AND METHODS

PRACTICABLE

- 2.1.1. ANY ALTERNATE PRODUCT PROPOSED SHALL MEET SAME STANDARDS AS PRODUCT SPECIFIED BUT SHALL BE CONSIDERED ACCEPTABLE ONLY IF APPROVED PRIOR TO INSTALLATION BY ENGINEER. SUCH APPROVAL WILL NOT BE UNREASONABLY WITHHELD. 2.1.2. SPECIFIED PRODUCTS PROVIDED BY THIS CONTRACTOR SHALL BE NEW AND CAPABLE OF PROPER OPERATION. UNSPECIFIED PRODUCTS
- PROVIDED SHALL BE OF QUALITY BEST SUITED TO THEIR PURPOSI CSA OR LOCAL INSPECTION AUTHORITY APPROVED AND CAPABLE OF PROPER OPERATION. 2.1.3. REUSE EXISTING PRODUCTS WHICH MEET SPECIFICATIONS WHEREVER
- 2.1.4. CLEAN VISIBLE PORTIONS OF ALL DEVICES AND COVER PLATES AS RECOMMENDED BY MANUFACTURER TO RESTORE FACTORY FINISH. 2.1.5. PROTECT WORK AND OWNER'S PROPERTY FROM DAMAGE THAT MAY ARISE AS A RESULT OF THIS CONTRACTOR'S PERFORMANCE OF WORK. PROMPTLY MAKE GOOD ANY DAMAGES TO WORK AND OWNER'S PROPERTY ARISING FROM THIS CONTRACTOR'S PERFORMANCE OF WORK.

- 2.1.6. ARRANGE DELIVERIES AND STORAGE WITH OWNER AND AUTHORITIES HAVING JURISDICTION AS APPROPRIATE. PROTECT NEW AND REUSED MATERIALS FROM ABUSE, DAMAGE AND ENVIRONMENTAL CONDITIONS WHICH THEY ARE NOT INTENDED TO WITHSTAND, NOTWITHSTANDING FOREGOING, FOLLOW MANUFACTURER'S RECOMMENDATIONS.
- 2.2.1. FOR POWER WIRING, MAINTAIN PHASE SEQUENCE AND COLOR CODING THROUGHOUT, COLOR CODING TO CSA C22.1. 2.2.2. LOCATE, DIMENSION AND MAKE ELECTRICAL SERVICES OPENINGS. PROVIDE NECESSARY SLEEVES. ESCUTCHEONS AND COVERS. 2.2.3. DRILL AND PROVIDE ANCHORS AS REQUIRED FOR EXPANSION BOLTS,
- 2.3.1. MEGGER CIRCUITS UP TO 350V WITH A 500V INSTRUMENT. 2.3.2. MEGGER CIRCUITS BETWEEN 350V TO 600V WITH A 1000V

HANGER RODS, BRACKETS AND SUPPORTS.

- INSTRUMENT 2.3.3. CHECK RESISTANCE TO GROUND BEFORE ENERGIZING ANY PART OF
- 2.3.4. TEST ALL LUMINAIRES, CONTROLS, CIRCUIT BREAKERS, AND EMERGENCY LIGHTING UNIT EQUIPMENT FOR CORRECT OPERATION AND ABSENCE OF SHORTS OR GROUNDS. 2.3.5. PUT EQUIPMENT AND SYSTEMS IN SERVICE AS MAY BE REQUESTED
- BY ENGINEER FOR TRIAL USE PROVIDED NO HAZARD OR DAMAGE WILL RESULT NOR GUARANTEES VOIDED. 2.3.6. MEASURE PHASE VOLTAGES AT LOADS AND ADJUST TRANSFORMER TAPS TO ACHIEVE A LOAD VOLTAGE OF 115-120V.

3. CONDUIT AND FITTINGS

- 3.1. WHERE NEW FEEDERS ARE REQUIRED, EMT CONDUIT WITH STEEL SET-SCREW CONNECTORS AND COUPLINGS SHALL BE USED THROUGHOUT
- 3.2. ALL EMPTY CONDUITS SHALL BE COMPLETE WITH PULL CORD.
- 3.3. SUPPORT ALL BOXES INDEPENDENTLY OF CONNECTING CONDUITS. 3.4. DO NOT USE SUPPORTS OR EQUIPMENT INSTALLED FOR OTHER TRADES
- FOR CONDUIT (OR CABLE) SUPPORT, EXCEPT WITH PERMISSION OF OTHER TRADES AND APPROVAL OF ENGINEER. 3.5. DO NOT USE WIRE LASHING OR PERFORATED STRAPPING TO SUPPORT OR
- SECURE RACEWAYS (OR CABLES). 3.6. PROVIDE ADEQUATE SUPPORT FOR RACEWAYS (AND CABLES) DROPPED

VERTICALLY TO EQUIPMENT, WHERE THERE IS NO WALL SUPPORT.

- 3.7. FASTEN EXPOSED CONDUIT (OR CABLES) TO BUILDING CONSTRUCTION OR SUPPORT SYSTEM USING ONE OR TWO HOLE STEEL STRAPS.
- 3.8. INSTALL CONNECTORS ON SURFACE CONDUITS, SO THAT SCREW HEADS DO NOT POSE A DANGER TO OCCUPANTS.

- 4.1. ALL WIRING SHALL BE RUN IN CONDUIT CONCEALED IN FINISHED AREAS AND SHALL BE RUN PARALLEL TO BUILDING LINES. NO HORIZONTAL CONDUITS SHALL BE RUN IN WALLS.
- 4.2. ALL EXPOSED WIRING SHALL BE RUN PARALLEL TO BUILDING LINES
- (SERVICE AREAS ONLY). 4.3. ALL EXPOSED WIRING ON FINISHED DRYWALL SHALL BE RUN IN

NON-METALLIC RACEWAY (WIREMOLD OR APPROVED EQUAL).

- 4.4.1. ARMOURED CABLE (BX) SHALL NOT BE USED. 4.4.2. USE FLEXIBLE CONDUIT C/W ANTI-SHORT BUSHINGS FOR LUMINAIRE
- DROPS IN T-BAR CEILINGS, MECHANICAL EQUIPMENT AND IN WALLS WHERE CONDUIT IS NOT POSSIBLE. 4.4.3. RW90 IN EMT CONDUIT, C/W STEEL SET-SCREW CONNECTORS AND 4.4.4. CONDUCTORS; #12 RW90, 600V, CU, MINIMUM, IN EMT CONDUIT.
- 4.5. ASSURE THAT ALL CONDUCTORS ARE SIZED FOR MAXIMUM VOLTAGE DROP: 4.5.1. BRANCH CIRCUITS - MAX. 2% 4.5.2. PANEL FEEDERS - MAX. 2% 4.5.3. DISTRIBUTION - MAX. 1%
- 4.6. ALL SOLID COPPER CONDUCTORS WITH THERMOPLASTIC INSULATION (TYPE RW90, 600V) BRANCH WIRING SHALL BE MINIMUM #12 AWG (MAXIMUM 70 [21.4m]): #10 AWG (MAXIMUM 120' [36.6m]); FOR RUNS EXCEEDING 120' 36.6m] VOLTAGE DROP SHALL BE CALCULATED AT THE MAXIMUM OF 2%. #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED COPPER. USE CONNECTORS, CLAMPS AND SUPPORTS TO SUIT.

OUTLET. PULL & JUNCTION BOXES

- PROVIDE ELECTRO-GALVANIZED STEEL SINGLE OR MULTIPLE GANG BOXES FOR FLUSH INSTALLATION FOR ALL DEVICES AS INDICATED. BOXES SHALL BE CODE GAUGE AND SIZED TO MEET THE CANADIAN ELECTRICAL CODE REQUIREMENTS. EQUIP ALL BOXES WITH EXTENSION AND TILE RINGS AS
- 5.2. PROVIDE 4"(100mm) SQUARE OR OCTAGONAL OUTLET BOXES FOR FLUSH LIGHTING FIXTURES.
- 5.3. PROVIDE WELDED STEEL JUNCTION/PULL BOXES WITH HINGED COVERS FOR SURFACE MOUNTING AS REQUIRED TO FACILITATE CONDUCTOR INSTALLATION. GENERALLY SUCH BOXES WILL BE LOCATED SO AS NOT TO EXCEED 100' (30.5m) OF CONDUIT RUN AND 2-90 DEGREE BENDS BETWEEN PULL BOXES. PROVIDE ADDITIONAL JUNCTION/PULL BOXES AS REQUIRED. ENSURE ALL JUNCTION/PULL BOXES ARE ACCESSIBLE WHEN ALL WORK IS COMPLETE.
- 5.4. SUPPORT ALL BOXES INDEPENDENTLY OF CONNECTING CONDUITS.

6. <u>WIRING DEVICES</u> . EQUIPMENT MOUNTING HEIGHT IS FROM FINISHED FLOOR TO EQUIPMENT

- CENTERLINE UNLESS SPECIFIED OR INDICATED OTHERWISE.
- 6.2. IF EQUIPMENT MOUNTING HEIGHT IS NOT INDICATED, VERIFY WITH ENGINEER BEFORE PROCEEDING WITH INSTALLATION.
- 6.3. INSTALL ELECTRICAL EQUIPMENT AT FOLLOWING HEIGHTS UNLESS INDICATED OTHERWISE; 6.3.1. LOCAL SWITCHES: MATCH EXISTING
- 6.3.2. WALL MOUNTED EXIT LIGHTS: 98" (2450mm), 12" (300mm) ABOVE DOOR FRAME, 9' (2700mm) GYM 6.3.3. WALL MOUNTED OCCUPANCY SENSORS: 98" (2450mm)
- 6.4. SWITCHES: TOGGLE TYPE 15A & 20A, 347V OR 120V AS INDICATED SINGLE POLE, 3-WAY MANUALLY OPERATED SPECIFICATION GRADE AS INDICATED. COLOR AND TYPE TO MATCH EXISTING.
- 6.5. ACCEPTABLE SWITCH MANUFACTURERS: COOPER, BRYANT, HUBBELL, LEVITON, PASS AND SEYMOUR.
- 6.6. ACCEPTABLE SENSOR MANUFACTURERS: SENSORSWITCH, WATTSTOPPER, LEVITON, HUBBELL.
- 6.7. PROVIDE COVER PLATES FROM ONE MANUFACTURER FOR EACH TYPE OR ASSEMBLY OF OUTLETS THROUGHOUT PROJECT. OPENINGS TO SUIT TYPE AND GANGING OF DEVICES. COLOR AND STYLE TO MATCH EXISTING.
- 6.8. SHEET STEEL UTILITY BOX COVERS FOR WIRING DEVICES INSTALLED IN
- SURFACE-MOUNTED UTILITY BOXES ('FS' TYPE). 6.9. THERMOPLASTIC COVER PLATES FOR WIRING DEVICES MOUNTED IN A
- FLUSH-MOUNTED OUTLET BOX. COLOR: TO MATCH DEVICE. 6.10. PROVIDE SURFACE MOUNTED NON-METALLIC RACEWAY FOR EXPOSED RUNS WHERE INDICATED WITH ALL NECESSARY FITTINGS. PAINT TO MATCH SUPPORTING SURFACES. ACCEPTABLE MANUFACTURERS: HUBBELL,
- 6.11. WIRING DEVICES IN LEGEND ARE INTENDED TO SET A STANDARD BELOW WHICH EQUIPMENT WILL NOT BE ACCEPTED.
- 6.12. MOUNTING HEIGHTS TO MATCH EXISTING AREAS.
- 6.13. LOCATE NEW LIGHT SWITCHES AS INDICATED. VERIFY EXACT LOCATIONS WITH OWNER PRIOR TO ROUGHING-IN.

- 7.1. THE ENTIRE ELECTRICAL SYSTEM, AS PERTAINS TO THIS INSTALLATION, SHALL, BE GROUNDED IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE SECTION 10 AND LOCAL AUTHORITY HAVING JURISDICTION OVER INSTALLATION.
- 7.2. MAKE GROUNDING CONNECTIONS IN RADIAL CONFIGURATION ONLY, WITH CONNECTIONS TERMINATING AT SINGLE GROUNDING POINT. AVOID LOOP
- 7.3. ALL METAL PIPING SUCH AS, BUT NOT LIMITED TO, WATER, SEWAGE AND GAS, SHALL BE BONDED WITH MINIMUM #6 AWG TO THE MAIN SYSTEM

8. PANELBOARDS

- 8.1. UPDATE REVISED PANEL DIRECTORIES AT END OF CONSTRUCTION WITH NEW TYPE WRITTEN DIRECTORIES.
- 8.2. ALL CIRCUITS WHICH BECOME REDUNDANT BY THIS WORK SHALL BE MARKED 'SPARE'.

- 9. LIGHTING (SEE LUMINAIRE SCHEDULE AND LEGEND)
- 9.1. PROVIDE LUMINAIRES AS INDICATED ON THE LUMINAIRE SCHEDULE AND/OR AS SPECIFIED UNDER THIS SECTION. THESE SHALL BE, COMPLETE WITH ALL NECESSARY PLASTER FRAMES. HANGERS, DRIVERS, LED BOARDS, LUMEN OUTPUT. COLOUR TEMPERATURE, CRI, LAMPS, BALLASTS, LOUVERS, DIFFUSERS, CANOPIES, SUPPORTS, BRACKETS, AND REQUIRED HARDWARE FOR A COMPLETE AND FINISHED INSTALLATION. LUMINAIRES IN SCHEDULE AND LEGEND ARE INTENDED TO SET A STANDARD BELOW WHICH EQUIPMENT WILL NOT BE ACCEPTED.
- 9.2. CONTRACTOR SHALL INCLUDE IN HIS TENDER, THE LUMINAIRE(S) THAT ARE BEING SPECIFIED. IF AN ALTERNATE MANUFACTURER IS NAMED, IT IS MANDATORY THAT THE LUMINAIRE BE EQUIVALENT IN ALL RESPECTS, I.E. SAME LENS, EQUIVALENT FRAME, PERFORMANCE, PAINT FINISH, DRIVERS AND LED'S. CONSTRUCTION QUALITY. ETC. ALTERNATE MANUFACTURERS OR ALTERNATE LUMINAIRE TYPES MUST BE OFFERED AS AN ALTERNATIVE ONLY, TO THE BASE BID, WITH A SEPARATE PRICE STATED IN THE TENDER. LOW BIDDER WILL BE DETERMINED ON THE BASIS OF THE SPECIFIED ITEMS, NOT ON "ALTERNATE SAVINGS".
- 9.3. POSITION LIGHTS AS INDICATED. ADJUST LOCATIONS OF LUMINAIRES TO SUIT CEILING GRID AS INDICATED. ADVISE ENGINEER IF LOCATIONS SHOWN TO CHANGE MORE THAN 6"(150mm).
- 9.4. ALL LUMINAIRES WHICH ARE LOCATED IN SUSPENDED CEILINGS SHALL BE INDEPENDENTLY SUPPORTED BY APPROVED CHAINS, WHICH SHALL ALLOW THE LUMINAIRES TO BE SUPPORTED INDEPENDENT OF THE CEILING SYSTEM. A 1'x4' (304mmx1220mm) FLUORESCENT LUMINAIRE SHALL BE SUPPORTED WITH TWO (2) CHAINS AND A 2'x4' (610mmx1220mm) LUMINAIRE SHALL BE SUPPORTED WITH FOUR (4) CHAINS TO THE ROOF STRUCTURE OR SLAB ABOVE. ANCHOR CHAINS TO JOIST AND BRIDGING WHERE POSSIBLE. WHEN CONNECTING TO STEEL DECK. ANCHOR TO SIDE FLUTES (CONFIRM CONNECTIONS TO DECK WITH STRUCTURAL ENGINEER PRIOR TO
- 9.5. LUMINAIRES SHOWN ON DRAWINGS ARE A (1) FOR (1) REPLACEMENT,
- 9.6. THIS CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL LIGHTING NOT BEING RE-USED UNDER NEW WORK WHETHER SHOWN ON DRAWING OR NOT.
- 9.7. ALIGN LUMINAIRES MOUNTED IN CONTINUOUS ROWS TO FORM STRAIGHT UNINTERRUPTED LINE.
- 9.8. ACCEPTABLE MANUFACTURERS: COOPER, PHILIPS, CREE, LITHONIA.
- 9.9. ATTIC STOCK 9.9.1. PROVIDE LISTED SPARE PARTS FOR EACH DIFFERENT RETROFIT OR LAMP TYPE: 9.9.1.1. BALLASTS (347V); 3 OR 5% WHICHEVER IS GREATER.
- 9.9.1.2. T8 LED LAMPS: 12 OR 5% WHICHEVER IS GREATER. 9.9.1.3. PLUG-IN CFL STYLE LED REPLACEMENT LAMPS; 3 OR 5% WHICHEVER IS GREATER.

9.9.1.4. TWO (2) SPARE LED DRIVERS AS NOTED IN LUMINAIRE SCHEDULE.

10. LIGHTING CONTROL DEVICES

INSTALLATION) WITH 'BRAK-IT' FASTENERS.

UNLESS NOTED OTHERWISE.

- 10.1. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO LOCATE AND AIM SENSORS IN THE CORRECT LOCATION REQUIRED FOR COMPLETE AND PROPER VOLUMETRIC COVERAGE WITHIN THE RANGE OF COVERAGE(S) OF CONTROLLED AREAS PER THE MANUFACTURER'S RECOMMENDATIONS. ROOM SHALL HAVE NINETY (90) TO ONE HUNDRED (100) PERCENT COVERAGE TO COMPLETELY COVER THE CONTROLLED AREA TO ACCOMMODATE ALL OCCUPANCY HABITS OF SINGLE OR MULTIPLE OCCUPANTS AT ANY LOCATION WITHIN THE ROOM(S). THE LOCATIONS AND QUANTITIES OF SENSORS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE ONLY THE ROOMS WHICH ARE TO BE PROVIDED WITH SENSORS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ADDITIONAL SENSORS IF REQUIRED TO PROPERLY AND COMPLETELY COVER THE RESPECTIVE ROOM.
- 10.2. IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO ARRANGE A PRE-INSTALLATION MEETING WITH THE MANUFACTURER'S FACTORY AUTHORIZED REPRESENTATIVE. AT THE OWNER'S FACILITY. TO VERIFY PLACEMENT OF SENSORS AND INSTALLATION CRITERIA.
- 10.3. PROPER JUDGEMENT MUST BE EXERCISED IN EXECUTING THE INSTALLATION SO AS TO ENSURE THE BEST POSSIBLE INSTALLATION IN THE AVAILABLE OR INTERFERENCE OF STRUCTURAL OR FURNITURE COMPONENTS. THE ELECTRICAL CONTRACTOR SHALL ALSO PROVIDE, AT THE OWNER'S FACILITY. THE TRAINING NECESSARY TO FAMILIARIZE THE OWNER'S PERSONNEL WITH THE OPERATION, USE, ADJUSTMENT AND PROBLEM SOLVING DIAGNOSIS OF THE OCCUPANCY SENSING DEVICES AND SYSTEMS.
- 10.4. REFER TO SENSOR MANUFACTURER'S SPECIFICATION FOR PRODUCT SPECIFIC INFORMATION. 10.5. SENSORS INSTALLED IN FINISHED AREAS SHALL BE MOUNTED TO FINISHED
- CEILING. FEED SENSOR THROUGH FINISHED CEILING TO AN OUTLET BOX SUPPORTED FROM STRUCTURAL SYSTEM. 10.6. SENSORS INSTALLED IN OPEN CEILING AREAS SUCH AS GYMNASIUMS AND UTILITY ROOMS SHALL BE MOUNTED TO A JUNCTION BOX MOUNTED TO A
- NEW STEEL STRUT WHICH SHALL BE SECURED TO THE UNDERSIDE OF STRUCTURAL MEMBERS. 10.7. WRE EXISTING SWITCHES IN SERIES WITH SENSORS. ALL EXISTING SWITCHES
- SHALL BE POWERED FROM THE SECONDARY SIDE OF THE POWER PACK. SWITCH MUST CONTROL THE LIGHTING LOAD, NOT THE POWER PACK. 10.8. ELECTRICAL CONTRACTOR SHALL UTILIZE THE LIGHT LEVEL FUNCTION ON
- THE SENSOR IN AREAS WHERE AMBIENT LIGHT IS PRESENT 10.9. WALL MOUNTED SENSORS SHALL BE FASTENED TO WALL WITH MANUFACTURER'S RECOMMENDED BRACKET, MOUNT SENSOR 8" FROM
- CEILING UNLESS NOTED OTHERWISE ON DRAWINGS. 10.10.MOUNT SWITCH SENSOR IN SWITCH BOX. REMOVE EXISTING SWITCH AND REUSE EXISTING WIRING WHEREVER POSSIBLE. ENSURE SENSOR IS COMPATIBLE TO EXISTING VOLTAGE FOR A FULL AND COMPLETE WORKING
- 10.11. EXTEND HOT WIRE AS REQUIRED FOR SENSOR'S POWER PACKS. WIRING TO MATCH EXISTING. EXTEND HOT WIRE TO SENSORS WITH BUILT-IN POWER
- 10.12.PROVIDE POWER PACK QUANTITIES AS REQUIRED TO MEET MANUFACTURER'S RECOMMENDATIONS.
- 10.13.CEILING MOUNTED ULTRASONIC SENSORS SHALL NOT BE INSTALLED WITHIN 4' (1200mm) OF AN AIR SUPPLY DIFFUSER.
- 10.14. FACTORY REPRESENTATIVE FOR COMMISSIONING
- 10.14.1. UPON COMPLETION OF THE INSTALLATION, THE SYSTEM SHALL BE COMPLETELY COMMISSIONED BY THE MANUFACTURER'S FACTORY AUTHORIZED TECHNICIAN WHO WILL VERIFY ALL ADJUSTMENTS AND SENSOR PLACEMENTS TO ENSURE A TROUBLE-FREE OCCUPANCY-BASED LIGHTING CONTROL SYSTEM.
- 10.14.2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE BOTH THE MANUFACTURER AND THE CONSULTANT WITH TEN WORKING DAYS WRITTEN NOTICE OF THE SCHEDULED COMMISSIONING DATE. UPON COMPLETION OF THE SYSTEM FINE TUNING THE FACTORY AUTHORIZED TECHNICIAN SHALL PROVIDE THE PROPER TRAINING TO THE OWNER'S PERSONNEL IN THE ADJUSTMENT AND MAINTENANCE OF THE
- 10.14.3. A SIGNED LETTER FROM THE FACTORY AUTHORIZED TECHNICIAN MUST BE PROVIDED STATING THE DATE OF TRAINING AND THE NAMES OF THE PERSONNEL WHO WERE PRESENT TO RECEIVE THE TRAINING. INSERT THE SIGNED LETTER IN THE OPERATIONS AND

11. QUALITY ASSURANCE

MAINTENANCE MANUALS

- 11.1. ALL COMPONENTS SHALL BE CSA AND/OR ULC APPROVED/LISTED AND
- 11.2. ALL COMPONENTS SHALL BE ENERGY STAR LISTED AND/OR DLC LISTED COMPLETE WITH PRODUCT I.D. NUMBER SHOWN ON SHOP DRAWING.
- 11.3.1. LED LUMINAIRES, T5 AND T8 LED LAMPS AND ELECTRONIC BALLASTS SHALL BE PROVIDED WITH A MINIMUM FIVE (5) YEAR WARRANTY COVERING BUT NO LIMITED TO: LED'S, DRIVERS, PARTS AND

COMPONENTS.

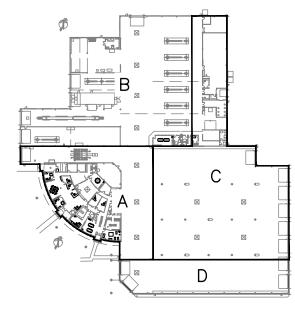
12.1. UNDER NO CIRCUMSTANCES SHALL WORK OCCUR ON ENERGIZED CIRCUITS.



ONSULTANT:



EYPLAN:





|2023/04/28| 1 ISSUED FOR TENDER REVISIONS YYYY/MM/DD

> CITY OF SAINT JOHN TRANSIT BUILDING LIGHTING RETROFIT

ROJECT TITLE:

LUMINAIRE SCHEDULE **AND SPECIFICATIONS**

AS NOTED	APRIL 2023
DRAWN BY: M.J.G.	DRAWING NO:
CHECKED BY:	— ⊢- 6

SPECIFICATIONS

N.T.S.

B.C.

OF 6

APPENDIX B – FORM OF TENDER

TENDER No. 2023-082302T SAINT JOHN TRANSIT BUILDING LIGHTING RETROFIT

FORM OF TENDER

2023-082302T SAINT JOHN TRANSIT BUILDING LIGHTING RETROFIT

The undersigned bidder has carefully examined the specifications and scope of work, and also visited the premises to become familiar with the conditions, character and extent of work.

The undersigned bidder has determined the quality and quantity of labour, materials and equipment required, and has the capability to comply with the terms and conditions herein described.

The undersigned bidder further agrees to provide all necessary equipment, tools, labour and materials which are necessary to complete the work in accordance with the contract and agrees to accept, therefore, in payment in full, in accordance with the terms, conditions, specifications, and drawings, the sum of:

\$
Total Cost (All Taxes Extra)

*Pricing is to be bid in Canadian Funds and FOB Saint John, NB prepaid. The tender pricing shall include all installation wages, fringe benefits, insurance, transportation, delivery, duty, working tools, equipment costs, and any other charges incurred in order to provide required materials and/or services.

COMPANY:	SIGNATURE:	
E-MAIL:	NAME:(prin	
Date:	Tel #	Fax #
H.S.T. Reg.#	Remarks:	

APPENDIX C – FORM OF AGREEMENT

TENDER No. 2023-082302T SAINT JOHN TRANSIT BUILDING LIGHTING RETROFIT

AGREEMENT BETWEEN OWNER AND CONTRACTOR

THIS AGREEMENT made in triplicate between	THE CITY OF SAINT JOHN he	erein (and in the
Specifications) called the "Owner" or the "City"		

	AND		
hereir	n (and in the Specifications) called the "Contractor".		
WITN	ESSETH: That the Owner and the Contractor agree as follows:		
(a)	The Contractor shall provide all the materials and perform all the work shown on the drawings and described in the Contract Specifications titled:		
	Contract No:2023-082302T		
	Title: Saint John Transit Building Lighting Retrofit		
(b)	The Contractor shall do and fulfill everything indicated by this Agreement; and		
(c)	The Contractor shall Substantially Complete the Work no later thanNA		
CON	TRACT DOCUMENTS		
	General Specifications		
	General Specifications, City of Saint John, New Brunswick, with all applicable divisions, as updated and as listed in the Table of Contents of the Contract Specifications.		
	Contract Specifications		
	Contract specifications for		
	Contract No:2023-082302T		
	Title: Saint John Transit Building Lighting Retrofit		
	City of Saint John, New Brunswick,		

Drawings

- E-1 Saint John Transit Building Lighting Retrofit - Site Plan - Lighting Saint John Transit Building Lighting Retrofit - Part A - Lighting E-2
- E-3
- Saint John Transit Building Lighting Retrofit Part B Lighting
- Saint John Transit Building Lighting Retrofit Part C Lighting E-4
- E-5 Saint John Transit Building Lighting Retrofit - Part D - Lighting
- E-6 Saint John Transit Building Lighting Retrofit - Luminaire Schedule and Specification

ADDENDA

The Contractor agrees that he has received addenda ___ to ___ inclusive, and that the tender price includes the provisions set out in the addenda.

CONTRACT PRICE

The Owner shall pay to the Contractor, in lawful money of Canada for the performance of
the Contract, the amounts determined for each of the items of work completed at the unit prices
as listed in the Schedule of Quantities and Unit Prices, plus applicable taxes, submitted with the
tender, which is to be attached with this Agreement, for the total tender price of:

If the Engineer orders in writing the performance of any work not covered by the drawings or included in the specifications that cannot be classified as coming under any of the contract units and for which a unit price can be agreed upon, then such additional work shall be paid for as described under the General Administration of Contract, Division 6.

PAYMENT

The Owner shall pay on account of thereof upon the Engineer's Certificate, as invoiced by the Contractor and approved by the Engineer, in the manner described in the Specifications.

AGREEMENT DOCUMENTS

The General Administration of Contract, Division 6 and the aforesaid Specifications and Drawings are all to be read into and form part of this Agreement and the whole shall constitute the Contract between the parties and it shall inure to the benefit of and be binding upon them and their successors, executors, administrators, and subject to the General Administration of Contract, their assigns.

EXECUTION OF AGREEMENT

In Witness Whereof the parties hereto have executed this Agreement.

) SIGNED, SEALED AND DELIVERED
) this,,,
) by) (Contractor)
(Witness))) (Signature)
(Name and Title)) (Name and Title)
)) (Signature)
)) (Name and Title))
) PLACE SEAL HERE
))
) SIGNED, SEALED AND DELIVERED)
) this, day of,,,
) by THE CITY OF SAINT JOHN.))
)
) COMMON CLERK)
)) PLACE SEAL HERE

AFFIDAVIT OF CORPORATE EXECUTION

CANA	IADA	
PRO\	VINCE OF NEW BRUNSWICK	
CITY	OF SAINT JOHN	
l,	, of	the
	e County of	
	(E OATH AND SAY:	
(1)		of, and
	is the	of the said Company, as such I
	am/we are duly authorized officer(s) of the sa	aid Company to execute the foregoing instrument.
(2)	THAT the signature	subscribed to the within
	instrument is my signature and in my	own proper handwriting and that the signature
	so sub	scribed is his signature made thereto by him in my
	presence.	
(3)	THAT the Seal affixed to the said instrum	ent purporting to be the Corporate Seal of the said
		is the Corporate Seal of the said
	Company and was affixed to the said instrum	nent by me and by order of the Board of Directors of the
	Company.	
SWO	ORN TO BEFORE ME at the)	
)	
of)	
)	
in the	e Province of)	
)	
this _	day of A.D.,)	
)	
)	
COMI	MMISSIONER OF OATHS)	CONTRACTOR
)	

Note: The blank spaces are to be filled in with the name or names of the signing officer(s).