

n v i t a t i o n  
t o t e n d e r

**FOR**

**EXTERIOR LIGHTING UPGRADE – PHASE 4  
ON GRANVILLE ISLAND**

Date Issued: January 4, 2021

Tender Closes: 11:00 A.M. PST, February 8,  
2021

Tender File #: RFX-000207

Contracting Authority:  
Canada Mortgage and Housing Corporation  
(CMHC)

Inquiries: Tim Webster

Tel: 613-748-5680

Originating Department:  
Granville Island

Email: [tjwebste@cmhc-schl.gc.ca](mailto:tjwebste@cmhc-schl.gc.ca)

*Security Classification: PROTECTED*

*Ce document est aussi disponible en français sur demande*

Canada



CANADA MORTGAGE AND HOUSING CORPORATION  
Granville Island Administration Office, 1661 Duranleau Street, 2<sup>nd</sup> Floor,  
Vancouver, British Columbia, V6H 3S3

**TENDER, ACCEPTANCE AND CONTRACT**  
**CONSTRUCTION, ALTERATIONS AND REPAIRS**

**PROJECT TITLE**

RFX-000207, ITT – Exterior Lighting Upgrades – Phase 4 (Granville Island)

<b>Date Issued</b> January 4, 2021	<b>Date Tender Closes</b> February 8, 2021	<b>CMHC File #</b> RFX-000207
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**MANDATORY SITE VISIT**

<b>Date</b>  January 19, 2021	<b>Time</b>  11:00AM (PST)	<b>Location</b> Granville Island Administration Office 1661 Duranleau St., 2 <sup>nd</sup> Floor Vancouver, British Columbia V6H 3S3
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<b>Inquiries:</b> Tim Webster Procurement Officer	<b>Email:</b> tjwebste@cmhc-schl.gc.ca	<b>Phone:</b> 613-748-5680
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CMHC is subject to the Privacy Act. Individuals have a right of access to CMHC controlled information about themselves.

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**The meanings of all defined terms used in this document shall be as set out in clause 1 of the Contract and General Conditions.**

## **PART 1**

### **INSTRUCTIONS TO TENDERERS**

#### **1. GENERAL REQUIREMENTS**

##### **Delivery Instructions and Deadline**

Timely and correct delivery of tenders to the exact specified tender delivery address is the sole responsibility of the tenderer. All risks and consequences of incorrect delivery of tenders are the responsibility of the tenderer. CMHC will not assume or have transferred to it those responsibilities. All registered times will be in accordance with the time CMHC computer servers **receive** the submission, not the time the tender was sent by the tenderer.\*

\* Please be advised that E-BID has a size limitation 10 MB. It is advisable and recommended that tenderers submit their tender in multiple smaller files.

It is recommended that the tenderer send an e-mail as soon as possible after the EBID tender has been sent, notifying the contact person named listed on page one that a tender has been submitted to EBID, including the company name and e-mail address, with the date and time the submission was sent.

Upon receipt of tenders, an automated confirmation will be issued to the sender's e-mail address. It is strongly recommended that tenders follow up with the contact person listed on page one should they not receive said confirmation within 30 minutes of submission.

**\* Please be advised that electronic transmissions may not necessarily be immediate and can experience lengthy delivery delays. Tenderers should ensure that sufficient delivery time is allowed for tenders to be received.**

##### **Address for Delivery**

##### **Mandatory**

Tenders, including all supporting documentation, are to be sent electronically to the following e-mail address:

**EBID@cmhc-schl.gc.ca**

**The subject line of the transmission must state: RFX-000207, ITT – Exterior Lighting Upgrades – Phase 4 (Granville Island)**

##### **Format**

Tenderers may submit their tender in multiple smaller files indicating the number of emails submitted (for example: email 1/3, 2/3, 3/3) in the body of the email. Individual files are to be submitted in Microsoft Word or Acrobat PDF in English or in French.

NOTE: In certain email programs the “Send” format may need to be specified as either “HTML” or “Plain Text”. Rich Text formatted or Compressed (Zipped) documents cannot be opened by CMHC.

### **Tender Opening and Verification Period**

All EBID tenders received on or before the closing date and time specified in this ITT, will be opened for evaluation purposes and verified by CMHC. If at that time, CMHC is unable to open a tender, the tenderer will be so advised and provided an opportunity to resubmit an openable version within 2 hours from notification.

### **Submission Deadline**

### **Mandatory**

Your tender must be **received** at the exact location as specified above on or before the submission deadline set as:

***11:00 A.M. PST, on February 8, 2021***

Tenders arriving late will be automatically rejected, and the sender will be so notified by e-mail.

All tenders, shall be carefully completed, signed and submitted (including any applicable appendices and supplements on the accompanying Tender and Acceptance).

All tenders must be complete. All spaces of the Tender and Acceptance, supplement material and any accompanying Appendices must be completed.

The tenderer may revise its tender by email or letter, provided it is received before Tender Closing Time, as such term is defined in the Tender and Acceptance.

### **Inquiries**

All questions regarding this ITT must be sent by e-mail to the following contact person:

Tim Webster  
Procurement Officer  
[tjwebste@cmhc-schl.gc.ca](mailto:tjwebste@cmhc-schl.gc.ca)

Changes to this ITT document will only be effective if issued by CMHC in writing as described below.

Tenderers are therefore strongly cautioned to request that all clarification, direction and changes be provided in writing, as information given orally by any person within CMHC shall not be binding upon CMHC.

All written questions submitted, which in the opinion of CMHC raise an issue that has the potential to affect all Tenderers, will be answered by CMHC in writing and distributed to all Tenderers by addendum published on buyandsell.gc.ca (GETS). The identity of the Tenderer making the inquiry will not be included in the response. Any questions of a proprietary nature must be clearly marked as such.

In the event that it becomes necessary to revise any part of the ITT as a result of any inquiry or for any other reason, an addendum to this ITT will be published for Tenderers on GETS.

CMHC has no obligation to respond to any inquiry, and will determine, at its sole discretion, whether it will respond to inquiries that are submitted. CMHC cannot guarantee a reply to inquiries received after the question deadline.

## 2. PROCUREMENT BUSINESS NUMBER

CMHC utilizes the Supplier Registration Information (“SRI”) database maintained by Public Services and Procurement Canada (“PSPC”) as the official CMHC source list. All tenderers should be registered with PSPC prior to submitting a tender. The Procurement Business Number (“PBN”) provided by this registration must be included with the tenderer’s tender. If tenderers are not registered and wish to do so, please access <https://buyandsell.gc.ca/for-businesses/selling-to-the-government-of-canada/register-as-a-supplier>

## 3. TENDERER’S MANDATORY SITE VISIT

It is mandatory that the tenderer visit the site and examine the scope of the work required and the existing conditions in order to bid on the work. Arrangements have been made for a mandatory tour of the work site. All attendees must follow Provincial Health Officer (PHO) guidelines and restrictions for the site visit meeting. Depending on the number of attendees, the site visit meeting may be divided into several sessions. The site visit will be held on Tuesday, **January 19, 2021** at 11:00 AM (PST). The site is located at the CMHC Granville Island Administration Office, 1661 Duranleau St, Vancouver, BC. The tenderer **must send confirmation** of attendance by 1:00 PM (PST) on Friday, **January 15, 2021**, including the name(s) of the person(s) who will be attending, via email to Tim Webster at [tjwebste@cmhc-schl.gc.ca](mailto:tjwebste@cmhc-schl.gc.ca). A maximum of two (2) representatives from each firm will be allowed to attend. The tenderer who, for any reason, cannot attend at the specified date and time, **will not be given an alternative appointment** to view the site. Tenderers are asked to meet outside the Administration Office on Duranleau Street for an introduction to the project, an escorted site walk, followed by a question and answer period. Tenderer’s can submit written questions after their site visit which will be responded to as per the Inquiries Section.

#### **4. UNACCEPTABLE TENDERS**

- (1) Tenders not submitted on the accompanying Tender and Acceptance forms will not be considered.
- (2) Tenders received after the Tender Closing Time will not be considered.
- (3) The inclusion of an escalation clause or conditional letter will invalidate the bid and no alternative bid will be permitted.
- (4) Unless otherwise permitted in the Tender and Acceptance, tenders on part of the work only will not be accepted.
- (5) Tenders not accompanied by the required bid security will not be considered.
- (6) Tenders without confirmation of at least three (3) comparable projects completed
- (7) Tenders without confirmation of five (5) years of projects completed
- (8) Tenders without confirmation of ten (10) years of related experience for the project supervisor / superintendent assigned to this project.
- (9) Tenders submitted by Tenderers who have not attended a Mandatory Site Visit specified above.
- (10) Incomplete or non-compliant tenders.

#### **5. BID AND CONTRACT SECURITY**

- (1) The tender must be accompanied by bid security in an amount equal to ten percent (10%) of the tender price in one of the following forms:
  - (a) A surety (bid) bond, or
  - (b) A certified cheque drawn on a bank to which the Bank Act or Quebec Savings and Credit Union Act applies, or
  - (c) Bearer or negotiable bonds issued or guaranteed by the Government of Canada, or
  - (d) An irrevocable letter of credit, or
  - (e) A money order or bank draft.

Any bond submitted with this tender must be obtained from the list of Treasury Board approved bonding companies. For a listing of acceptable bonding companies, go to the Treasury Board Secretariat's [Contracting Policy](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494) webpage (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494> ) and scroll down to “Appendix L – Acceptable Bonding Companies”.

- (2) Immediately following advice of award, the successful tenderer must provide contract security by replacing or supplementing the bid security to provide:
- (a) A labour and material payment bond and a performance bond each in the amount of fifty percent (50%) of the contract price, or
  - (b) A labour and material payment bond in the amount of fifty percent (50%) of the contract price, together with either the security outlined in paragraph (b) or (c) or (d) of sub-section (1) preceding, or
  - (c) The security outlined in either (1)(b) or (1)(c) or (1)(d) preceding converted to contract security plus an additional amount equal to ten percent (10%) of the contract price in the form of a certified cheque, bearer or negotiable bonds, irrevocable letter of credit, money order or bank draft.

Note: For information regarding holdbacks to progress payments refer to clause 23 of General Conditions.

Certified cheques provided as contract security shall be cashed and deposited in a trust account and will be returned to the tenderer once the contract has been properly executed or expires. Variable interest accumulated in the trust account shall be returned to the tenderer, as per CMHC policy.

- (3) Information on companies whose bonds are acceptable is available for examination at all CMHC offices.
- (4) CMHC may require of any tenderer proof of financial and technical capability to undertake the work for which its tender is submitted.

## **6. ACCEPTANCE OF TENDER**

**The lowest cost or any bid will not necessarily be accepted and CMHC reserves the right to accept or reject any or all bids in whole or in part.**

CMHC reserves the right to reject any submission that does not demonstrate, to the sole satisfaction of CMHC, that the Tenderer's submission meets the requirements of the Tender document.

CMHC shall conduct the ITT process in a visibly fair manner and will treat all tenders equitably. To this end, it has established objective ITT standards and criteria which will be

applied uniformly to all tenderers. Therefore, no tenderers shall have any cause of action against CMHC arising out of a failure to award a contract, the failure to evaluate any tender, or the methods by which tenders are assessed.

## **7. COMPLETION OF TENDER AND ACCEPTANCE**

(1) Fill out Schedule 1 as follows:

For unit price items, insert the price per unit against each item, multiply by the respective estimated quantity and extend the answers in the “amount” column to the right of the page.

The amount to be entered in clause 4 (I) Base Bid of the Tender and Acceptance (Page 12) is the sub-total of all areas listed in Schedule 1. The figure will correspond to the “Sub-Total of All Areas (Base Bid) on Page 18 of Schedule 1.

(2) Calculate and insert the Grand Total from Schedule 1 in 4(II). Calculate GST on 4(II).

(3) The Total Tender Price will be the total of 4(II) and GST.

(4) Type or legibly print the tenderer's full business name and address under the spaces provided for Tenderer's full business name and Tenderer's business address respectively.

(5) Sign the tender form in the space provided on Page 13 and Page 22 as indicated below:

### **Sole Proprietorship:**

Signature under seal of sole proprietor in the presence of a witness who will sign where indicated. Insert the words “sole proprietor” under Title(s).

### **Partnership:**

Signature under seal of one of the partners in the presence of a witness who will sign where indicated. Insert the word “partner” against signature.

### **Limited Company:**

If this tender is made by a Limited Company, the tender must be signed by duly authorized signing officers of the Company in their normal signatures designating against each signature the official capacity in which the signing officer acts. The corporate seal of the company must also be affixed to the tender. If the tender is signed by officials other than the President and Secretary of the company or the President and Secretary Treasurer of the company, a copy of a by-law or resolution of the Board of Directors authorizing them to do so must be submitted with the tender documents.

Note: In the Province of Quebec the signature of a witness should appear opposite the signature of company-authorized signing authority.

## PART 2

### TENDER AND ACCEPTANCE

Granville Island Administration Office 1661 Duranleau Street, 2 <sup>nd</sup> Floor Vancouver, British Columbia V6H 3S3	Date: January 4, 2021
	File No. RFX-000207
Project Exterior Lighting Upgrades – Phase 4 (Granville Island)	Location Granville Island, Vancouver, BC

Designated CMHC Representative  Tim Webster, Procurement Officer	Telephone  613-748-5680	<b>DELIVER TENDERS TO:</b>  <a href="mailto:EBID@cmhc-schl.gc.ca">EBID@cmhc-schl.gc.ca</a>  <b>The subject line of the transmission must state:</b> RFX-000207, ITT – Exterior Lighting Upgrades – Phase 4 (Granville Island)
<b>TENDER CLOSING TIME</b>		
<b>DATE</b> February 8, 2021	<b>HOURL</b> 11:00 AM (PST)	

#### SITE VISIT

<b>Date</b> January 19, 2021	<b>Time</b> 11:00 AM (PST)	<b>Location</b> Granville Island Administration Office 1661 Duranleau Street, 2 <sup>nd</sup> Floor Vancouver, British Columbia V6H 3S3
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### GENERAL DESCRIPTION OF WORK TO BE PERFORMED

Canada Mortgage and Housing Corporation (CMHC) requires a qualified tenderer to undertake the replacement of outdoor fixtures and luminaires along roadways, public spaces, and in covered parkades on Granville Island.

This 4<sup>th</sup> phase of the project includes, but is not limited to, the following:

- Removal of existing fixtures for disposal offsite
- Removal of redundant wire, conduits, etc.
- Installation of new fixtures and luminaires
- Retrofit/weatherproofing of existing fixtures

- Installation of new wiring, junction boxes, conduits as necessary or as directed
- Reuse existing wiring and conduits where possible
- Remove and replace existing pavers; handle with care
- Regular clean-up of any debris
- Comply with drawings and specifications issued by Nemetz (S/A) & Associates Ltd.

Removal, storage, and re-installation of existing pavers to be done with care to minimize damage or loss. Existing pavers no longer available.

Tenderer shall tie all proposed works into existing circuits and panels as noted on the drawings. Assess connected load to existing kiosks.

There will be no substitutes for any of the specifications outlined in the tender document, specifications, and drawings. Permits will be required and to be procured by the tenderer from the City of Vancouver.

The tenderer will supply all items, articles, and materials and execute all operations listed, mentioned or scheduled as herein specified, including all tools, labour, supervision and incidentals necessary and required for their completion. The tenderer will ensure that all employees and sub-contractors are certified and have the required licences, permits, and training for the operation of machinery/equipment required for installation and removal.

The tenderer will consult the Granville Island Operations and Maintenance Departments to ensure a safe work area. Signs, flags, cones, barriers, etc. must be used at all times.

All work must accommodate the existing tenants and visitors of Granville Island. The tenderer will work under the direction of the managing consultant, Nemetz (S/A) & Associates Ltd.

**Please see Part 4 of the tender documents for detailed drawings and specifications.**

## 1. BID AND CONTRACT SECURITY

The successful tenderer must replace or supplement its bid security as specified in Clause 5 of the Instructions to Tenderers.

## 2. QUALIFICATIONS

The Tenderer must demonstrate the following:

<b>Mandatory Criteria</b>	<b>Response (Yes/No)</b>	<b>Initials</b>	<b>Date</b>
Minimum of five (5) years of experience in electrical maintenance, repair and construction			
Project supervisor assigned must have a minimum of ten (10) years of experience supervising comparable projects (Tenderers must provide detailed resumé of supervisor assigned to this project).			
Three (3) comparable projects successfully completed (Tenderers must provide detailed project information in the forms provided in Appendix B)			

If a response of “NO” is given to any of the above, the Tenderers submission will be deemed non-compliant and eliminated from further consideration.

## 3. TENDER DOCUMENTS

The Tender Documents shall consist of the following (collectively, the “Tender Documents”):	<b>DATE</b>	<b>PAGES</b>
1. Letter to Tenderers	January 4, 2021	
2. Tender and Contract	January 4, 2021	Pages 2 to 23
• Instructions to Tenderers (Part 1)	January 4, 2021	
• Tender and Acceptance (Part 2)	January 4, 2021	
• Schedule 1 – Labour, Material, Plant, and/or Equipment	January 4, 2021	
• General Conditions (Part 3)	January 4, 2021	
3. Sub-Contractors (Appendix “A”)		Page 24
4. Comparable Projects Form (Appendix “B”)		Pages 25 to 27
5. Tenderer’s Rates (Appendix “C”)		Page 28

5. Résumé of Project Supervisor		
6. Addenda		
7. Contract Specifications and Drawings (Part 4)	January 4, 2021	

#### 4. OFFER

The undersigned tenderer having made, or caused to be made, an inspection of the site of the work and an examination of all the Tender Documents and having satisfied itself as to site conditions and all conditions surrounding or affecting the proper execution of the work, offers to CMHC to provide the necessary labour, materials, transportation, tools, plant and equipment required, including all sub-trades (if any) and to **pay all Federal, Provincial and Municipal taxes, permits and fees** and to carry out the work as described in a sound, careful and workmanlike manner complete in all respects to the entire satisfaction of CMHC on the terms and conditions contained in the Tender Documents.

(I) Sub-Total of All Areas from Schedule 1 (Base Bid) \$ \_\_\_\_\_

(II) Grand Total from Schedule 1 \$ \_\_\_\_\_

GST (II x 5%) \$ \_\_\_\_\_

**TOTAL TENDER PRICE (II + GST)** \$ \_\_\_\_\_

<b>Date</b>	<b>Signature (Tenderer)</b>	<b>Witness</b>
<b>Name &amp; Title:</b>		

### **SCHEDULE 1 - LABOUR, MATERIAL, PLANT, AND/OR EQUIPMENT**

1. Enter Unit Prices into column below, multiply Unit Price by Quantity to determine Extended Price and enter amount.
2. Sheet numbers correspond to sheet/drawing numbers contained in **Part 4 – Specifications and Drawings**. In case of discrepancies, Part 4 – Specifications and Drawings shall take precedence.

<b>DRAWING E2.1 - ZONE F1</b>				
<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>UNIT PRICE</b>	<b>EXTENDED PRICE</b>
Type AA - Re & Re old fixture and rewire	Each			
Type AA - Install on Lintel including mounting	Each			
Type AB - Re & Re old fixture and rewire	Each			
Type BEL - Re & Re old fixture	Each			
Type BA - Modify BAU to BA and rewire	Each			
Type BA - Upgrade downlight	Each			
Type EC - Install to include Shepard Arm and mounting	Each			
Type GC - Clean fixture and replace lamp	Each			
Luminaire removals including redundant conduit/wiring/clean up	Each			
Removal of Type PL (Drawing E2.0)	Each			
Trench and backfill	1m			
Re & Re paver stones	1m			
27mm RPVC	1m			
Inground junction boxes	Each			
27mm Rigid galvanized steel	1m			
16mm Rigid galvanized steel	1m			
No. 10 Cu stranded Conductors	1m			
No. 12 Cu stranded Conductors	1m			
			Sub-Total	

DRAWING E3.1 - ZONE F2				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
Type AA - Re & Re old fixture and rewire	Each			
Type AA - Install on Lintel including mounting	Each			
Type AB - Re & Re old fixture and rewire	Each			
Type BEL - Re & Re old fixture	Each			
Type BA - Modify BAU to BA and rewire	Each			
Type BA - Upgrade downlight	Each			
Type EA - Install pole, shepard arm and fixture	Each			
Type EC - Install to include shepard arm and mounting	Each			
Type GB - Install	Each			
Type GM - Install including mounting arm	Each			
Type GI - Install including mounting arm	Each			
Luminaire removals including redundant conduit/wiring/clean up	Each			
Trench and backfill	1m			
Re & Re paver stones	1m			
Supply and install concrete pole bases	Each			
27mm RPVC	1m			
Inground junction boxes	Each			
27mm Rigid galvanized steel	1m			
16mm Rigid galvanized steel	1m			
No. 10 Cu stranded Conductors	1m			
No. 12 Cu stranded Conductors	1m			
			Sub-Total	

DRAWING E4.1 - ZONE H				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
Type AA - Re & Re old fixture and rewire	Each			
Type AB - Re & Re old fixture and rewire	Each			
Type BEL - Re & Re old fixture	Each			
Type BA - Modify BAU to BA and rewire	Each			
Type BA - Upgrade downlight	Each			
Type CC - Install including junction boxes	Each			
Type EC - Install to include shepard arm and mounting	Each			
Type EAp - Install including pole, mounting arm and fixture	Each			
Type GB - Install	Each			
Type GG - Re & Re old fixture and rewire	Each			
Luminaire removals including redundant conduit/wiring/clean up	Each			
Trench and backfill	1m			
Re & Re paver stones	1m			
Supply and install concrete pole bases	Each			
27mm RPVC	1m			
Inground junction boxes	Each			
27mm Rigid galvanized steel	1m			
16mm Rigid galvanized steel	1m			
No. 10 Cu stranded Conductors	1m			
No. 12 Cu stranded Conductors	1m			
2c No. 12 Teck Cable	1m			
			Sub-Total	

<b>DRAWING E5.1 - ZONE I1</b>				
<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>UNIT PRICE</b>	<b>EXTENDED PRICE</b>
Type AA - Re & Re old fixture and rewire	Each			
Type AA - Install on Lintel including mounting	Each			
Type BA - Modify BAU to BA and rewire	Each			
Type BA - Upgrade downlight	Each			
Type EC - Install to include shepard arm and mounting	Each			
Type GA - Install	Each			
Type GI - Install including mounting arm	Each			
Luminaire removals including redundant conduit/wiring/clean up	Each			
Trench and backfill	1m			
27mm RPVC	1m			
Inground junction boxes	Each			
27mm Rigid galvanized steel	1m			
16mm Rigid galvanized steel	1m			
No. 10 Cu stranded Conductors	1m			
No. 12 Cu stranded Conductors	1m			
			Sub-Total	

<b>DRAWING E6.1 - ZONE I2</b>				
<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>UNIT PRICE</b>	<b>EXTENDED PRICE</b>
Type AA - Re & Re old fixture and rewire	Each			
Type AA - Install on Lintel including mounting	Each			
Type BEL - Re & Re old fixture	Each			
Type BA - Modify BAU to BA and rewire	Each			
Type EC - Install to include shepard arm and mounting	Each			
Type ED - Install including pole dual mount arms and fixtures	Each			
Type EE - Install including pole, mounting arm and fixture	Each			
Type GM - Install including mounting arm	Each			
Luminaire removals including redundant conduit/wiring/clean up	Each			
Trench and backfill	1m			
Re & Re paver stones	1m			
Supply and install concrete pole bases	Each			
27mm RPVC	1m			
Inground junction boxes	Each			
27mm Rigid galvanized steel	1m			
16mm Rigid galvanized steel	1m			
No. 10 Cu stranded Conductors	1m			
No. 12 Cu stranded Conductors	1m			
			Sub-Total	

DRAWING E7.1 - ZONE J1				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
Type AA - Install on Lintel including mounting	Each			
Type BEL - Re & Re old fixture	Each			
Type BA - Modify BAU to BA and rewire	Each			
Type BA - Upgrade downlight	Each			
EAp - Install pole, shepard arm and fixture	Each			
EA2p - Install pole, dual mounting arms and fixtures	Each			
Type GI - Install including mounting arm	Each			
Luminaire removals including redundant conduit/wiring/clean up	Each			
Removal of Type PL (Drawing E2.0)	Each			
Trench and backfill	1m			
Re & Re paver stones	1m			
Supply and install concrete pole bases	Each			
27mm RPVC	1m			
Inground junction boxes	Each			
27mm Rigid galvanized steel	1m			
16mm Rigid galvanized steel	1m			
No. 10 Cu stranded Conductors	1m			
No. 12 Cu stranded Conductors	1m			
			Sub-Total	

DRAWING E8.1 - ZONE J2				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
Type AA - Install on Lintel including mounting	Each			
Type AB - Re & Re old fixture and rewire	Each			
Type BEL - Re & Re old fixture	Each			
Type BEL - Install in new location including mounting	Each			
Type BA - Modify BAU to BA and rewire	Each			
Type EAp - Install including pole, mounting arm and fixture	Each			
Type GB - Install	Each			
Type GI - Install including mounting arm	Each			
Luminaire removals including redundant conduit/wiring/clean up	Each			
Trench and backfill	1m			
Re & Re paver stones	1m			
Supply and install concrete pole bases	Each			
27mm RPVC	1m			
Inground junction boxes	Each			
27mm Rigid galvanized steel	1m			
16mm Rigid galvanized steel	1m			
No. 10 Cu stranded Conductors	1m			
No. 12 Cu stranded Conductors	1m			
			Sub-Total	

<b>Granville Island Phase 4 Summary</b>	
Drawing E2.1 Sub-Total	
Drawing E3.1 Sub-Total	
Drawing E4.1 Sub-Total	
Drawing E5.1 Sub-Total	
Drawing E6.1 Sub-Total	
Drawing E7.1 Sub-Total	
Drawing E8.1 Sub-Total	
SUB TOTAL OF ALL AREAS (Base Bid)	
GRAND TOTAL FOR SCHEDULE 1	

The tenderer further understands and agrees that the items and quantities listed in the schedule for unit price items in the Tender and Acceptance preceding (and any attached sheets of supplement) are estimates only and may be increased or decreased in accordance with the requirements of the work. All payments for these items shall be based upon the actual quantities of materials supplied and work performed, as authorized and certified by the Designated Corporate Representative.

## 5. GENERAL AGREEMENT

The tenderer agrees:

1. To complete the work within: \_\_\_\_\_ WORKING DAYS from the date of notification of acceptance of this tender. This agreement will end on \_\_\_\_\_.

The date of notification of acceptance of tender is: \_\_\_\_\_;

including \_\_\_\_\_ days for ordering and delivery of product, and \_\_\_\_\_ days for completing the work. The estimated total time for completion is 60 working days, tenderers may provide their own schedule within reason. CMHC reserves the right to review the proposed schedule.

2. To start work within \_\_\_\_\_ working days of notification.
3. That the documentation listed in clause 2 of the Tender and Acceptance is the complete tender and this offer is made subject to all provisions contained in these documents, which provisions are accepted by the tenderer.
4. That this tender supersedes and cancels all communications, negotiations and agreements relating to the work other than that contained in the completed tender.
5. That this tender may not be withdrawn for a period of 60 calendar days following the Tender Closing Time.
6. That if this tender is duly accepted and the tenderer refuses to enter into a contract, bid security will be forfeited.
7. That the complete tender together with and subject to all the provisions contained in the Tender Documents shall, when accepted and executed on behalf of CMHC, constitute a binding contract between the tenderer and CMHC.
8. That the following insurance will be maintained:

### **Insurance**

The *Contractor* shall procure, supply and maintain, at its own expense, the designated insurance, or cause to be procured and maintained such insurance in force for the duration of this Agreement. On the Effective Date, all insurance coverage(s) of Contractor shall be issued by financially sound and responsible regulated insurance companies and shall have an A.M. Best Company, Inc. rating of "A-" or better (or such other debt rating agencies and/or rating as approved at the sole discretion of Canada Mortgage and Housing Corporation)

**A) Commercial General Liability Insurance**

The Contractor shall provide, maintain and pay for Commercial General Liability insurance with an insurer licensed to do business in Canada with a limit of not less than **\$5,000,000** inclusive for personal injury, bodily injury (including death) and property damage for any one occurrence or series of occurrences arising from one cause. The policy shall provide coverage for, but not be limited to, all premises and operations of the Contractor, liability for products and completed operations, broad form coverage, Contractor's liability, non- owned automobile, employer's liability, contractual liability and liability specifically assumed under this Agreement. Canada Mortgage and Housing Corporation shall be added to the policy as an additional insured and the policy shall contain cross liability, and severability of interest clauses.

**B) Automobile**

The *Contractor* shall provide, maintain and pay for Automobile Liability Insurance in respect of vehicles that are required by law to be insured under a contract by a Motor Vehicle Liability Policy. The policy shall have limits not less than **\$2,000,000** inclusive per occurrence for bodily injury, death, and damage to property, covering all vehicles owned or leased by the *Contractor*. Where the policy has been issued pursuant to a government-operated automobile insurance system, the *Contractor* shall provide Canada Mortgage and Housing Corporation with confirmation of automobile insurance coverage for all automobiles registered in the name of the Contractor.

**C) Workers Compensation**

Worker's compensation coverage for all employees engaged in the Services in accordance with the statutory requirement of the province, territory or state in which the Services are being performed.

**D) Contractor's Equipment Insurance**

The Contractor will provide and maintain Contractor's Equipment Insurance with an insurer licensed to do business in Canada covering all equipment/tools owned or rented by the Contractor and its servants, agents or employees against all risks of loss or damage in an amount not less than the value of the equipment/tool.

**E) Installation Floater**

Broad form Installation Floater with an insurer licensed to do business in Canada covering the property of the Insured or the property of others for which the Insured is legally liable, while such property is in transit to premises of installation or while thereat awaiting installation or while being installed in an amount not less than the value of the equipment being installed.

**Other Conditions**

If there are material changes in the scope of Services provided under this Agreement, CMHC may request changes to the minimum insurance coverages set out above. All required insurance policies shall be with insurers licensed to underwrite insurance in the

jurisdiction of the *Place of the Work*. All insurance policies required to be maintained by contractor pursuant to this insurance clause shall be primary with respect to this Agreement and any valid and collectible insurance of CMHC shall be excess of Contractor's insurance and shall not contribute to it. All Certificate of Insurance shall mention that insurers will provide CMHC with at least thirty (30) days' written notice prior to cancellation of any insurance referred to under this insurance clause. In addition Contractor shall provide written notice to CMHC forthwith upon learning that an insurer described in this insurance clause intends to cancel, or intends to make or has made a material change to, any insurance referred to in this insurance clause. A Certificate of Insurance meeting the above requirements shall be delivered to CMHC upon execution of this Agreement and for each renewal thereafter.

Without in any way restricting CMHC's discretion to grant or withhold its consent to a request to subcontract pursuant to this Agreement or any other contract, the Contractor agrees that it shall contractually obligate any sub-contractor or independent Contractor retained in connection with this Agreement and any other contract to maintain insurance against such risks and in such amounts that having regard to such sub-contractors or independent contractor's involvement in the provision of the Services could reasonably be expected to be carried by persons acting prudently and in a similar business to that of such sub-contractor or independent contractor. It shall be the sole responsibility of the contractor to decide whether or not any other insurance coverage, in addition to the insurance requirements stipulated herein, is necessary for its own protection or to fulfill its obligation under the contract.

## 6. ADDENDA

The tenderer acknowledges receipt of the following addenda:

Addenda No. / Date received

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## 7. TENDERER'S INFORMATION

Please fill out the following form, naming one person to be the tenderer's contact for the ITT process and for any clarifications or communication that might be necessary.	
Procurement Business Number (PBN):	
Full Legal Name of tenderer:	

Any Other Relevant Name under which tenderer Carries on Business:	
Street Address:	
City, Province/State:	
Postal Code:	
Phone Number:	
Company Website (if any):	
Tenderer Contact Name and Title:	
Tenderer Contact Phone:	
Tenderer Contact Email:	

Legal Structure of Tenderer (mark one <input 3"="" checked="" type="checkbox&gt;):&lt;/td&gt; &lt;td&gt;Limited Company&lt;/td&gt; &lt;td&gt;Partnership&lt;/td&gt; &lt;td&gt;Sole Proprietorship&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;Names and titles/positions of officers, partners, principal&lt;/td&gt; &lt;td colspan="/>			
Year Established:			

## 8. FINANCIAL REFERENCES

Bank Name:			
Address:			
Contact Name & Title:			
Phone #:		E-mail:	
Fax: #			

I/We agree and consent that you may make credit inquiries at any time in connection with my/our financial status or otherwise

<b>Date</b>	<b>Signature (Tenderer)</b>	<b>Witness</b>
<b>Name &amp; Title:</b>		

CMHC accepts the above tender and undertakes and agrees subject to compliance of the tenderer with all terms and provisions of the Tender Documents to pay the tenderer for the work at the price(s) set out above and in accordance with the terms and conditions stated herein, in the Working Drawings, Specifications and in the Tender Documents.

**CMHC USE ONLY**

<b>Date</b>	<b>Authorized Signatory</b>	<b>Witness</b>
<b>Name &amp; Title:</b>		

## Appendix “A”

### List of Sub-Contractors

The tenderer shall list below the name and address of all sub-contractors it proposes to employ for any portion of the work. When work for trades other than those listed is sub-contracted, the work shall be identified in the blank spaces provided.

Where a sub-contractor is not named, it will be assumed that the Tenderer intends to use its own forces; and it is understood and agreed that no substitution of sub-contractors may be made, and that additional work may not be sub-contracted, without consent of the Designated Corporate Representative having been previously obtained in writing, as indicated in clause 3 of the General Conditions.

WORK SUB- CONTRACTED	NAME	ADDRESS

## Appendix “B”

### COMPARABLE PROJECT FORM

PROJECT #1

Project Name:			
Name of the Client:			
Client Contact Person and Contact Information:			
<b>Description of the project and relevance to present requirements:</b>			
Awarded Contract Cost:		Final Contract Cost:	
Scheduled Completion Date:		Actual Completion Date:	

PROJECT #2

Project Name:			
Name of the Client:			
Client Contact Person and Contact Information:			
<b>Description of the project and relevance to present requirements:</b>			
Awarded Contract Cost:		Final Contract Cost:	
Scheduled Completion Date:		Actual Completion Date:	

PROJECT #3

Project Name:			
Name of the Client:			
Client Contact Person and Contact Information:			
<b>Description of the project and relevance to present requirements:</b>			
Awarded Contract Cost:		Final Contract Cost:	
Scheduled Completion Date:		Actual Completion Date:	

## Appendix “C”

### Tenderer’s Rates

The following are the unit prices to be used to calculate adjustments to the Contract Price (**Article 4 – Total Tender Price**) for work to be undertaken outside of *Part 4 – Specifications and Drawings*. Any work undertaken outside of the specifications and drawings must first be approved in writing by the Consultant and the Designated Corporate Representative and documented via signed change orders or amendments.

For additional unit prices/labour rates not included in the list below, fill in item name and rate (include type of unit) in the blank rows provided. **Include additional copies of Appendix C for all subcontractors, if any, and if rates differ from Tenderer’s Rates (be sure to label each copy with subcontractor’s company name).**

Item	Hourly Rate
<b>Journeyman</b> - Regular Business Hours (Monday to Friday 8AM to 5PM)	\$ _____ /hr
<b>Journeyman</b> - Outside Business Hours (After 5PM, Saturdays, Sundays, Statutory Holidays)	\$ _____ /hr
<b>Apprentice</b> - Regular Business Hours (Monday to Friday 8AM to 5PM)	\$ _____ /hr
<b>Apprentice</b> - Outside Business Hours (After 5PM, Saturdays, Sundays, Statutory Holidays)	\$ _____ /hr
<b>General Labour</b> - Regular Business Hours (Monday to Friday 8AM to 5PM)	\$ _____ /hr
<b>General Labour</b> - Outside Business Hours (After 5PM, Saturdays, Sundays, Statutory Holidays)	\$ _____ /hr
<b>Rate for materials / equipment / supplies</b> (not included in Schedule 1) <b>Cost + %</b> <sup>1</sup>	_____ %

<sup>1</sup> Items listed on Schedule 1 will be applied at that unit rate and not cost + % will be applied.

## **PART 3**

### **CONTRACT - GENERAL CONDITIONS**

#### **1. DEFINITIONS OF TERMS**

The following definitions shall apply to the tender and contract documents:

- (a) "CMHC" means Canada Mortgage and Housing Corporation.
- (b) "Contract" means the undertaking by the parties to perform their respective duties, responsibilities and obligations as prescribed in the Tender Documents listed in clause 3 of the Tender and Acceptance, and represents the entire agreement between the parties.
- (c) "Contractor" means the person, firm or corporation whose tender offer has been accepted by CMHC and is identified as the tenderer in the Tender and Acceptance document.
- (d) "DCR" or the "Designated Corporate Representative" means the person specially authorized by CMHC from time to time to perform on its behalf functions under the Contract.
- (e) "General Conditions" means the terms and conditions contained herein.
- (f) "Holdback Monies" or "Holdback" means such percentage of the progress payment payable to the Contractor as CMHC may determine.
- (g) "Instruction to Tenderers" means the direction given to tenderers on how to respond to the Tender, Acceptance and Contract for Construction, Alterations and Repairs document.
- (h) "Specifications" means written documentation associated with Working Drawings to provide information on the type and quality of materials and workmanship required for a project.
- (i) "Tender Closing Time" means the date and time indicated in the Tender and Acceptance.
- (j) "Tender Documents" shall have the meaning set out in clause 3 of the Tender and Acceptance.
- (k) "Work" means the total construction and related services required by the Contract and includes the materials, matters and things to be done, furnished and performed by the Contractor under the Contract.

- (l) “Working Drawings” means the architectural and / or engineering mechanical and electrical tender drawings associated with a project such as, but not limited to, vicinity maps, site plans, foundation plans, demolition plans, construction plans, reflected ceiling plans, finishing plans, power and communication plans, roof plans, cross sections, interior elevations, exterior elevations and details; and may also include schedules, general notes and specifications associated with such drawings/plans.

## **2. INTERPRETATION**

In the event of discrepancies or conflicts:

- (a) between Working Drawings, Specifications and General Conditions, General Conditions shall govern.
- (b) between Working Drawings and Specifications, Specifications shall govern.
- (c) between Working Drawings, the working drawing drawn with the largest scale shall govern.
- (d) between figured dimensions and scaled dimensions, the figured dimensions shall govern.

## **3. ASSIGNMENT AND SUBCONTRACTING**

This Contract may not be assigned without the written consent of CMHC, which consent will not be unreasonably withheld, and neither the whole nor any part of the Work may be subcontracted by the Contractor without the prior consent of the DCR. The Contractor shall enter into contracts and written agreements with its subcontractors to require them to perform their work in accordance with and subject to the terms and conditions of the Contract.

## **4. MEMBERS OF THE HOUSE OF COMMONS**

No Member of the House of Commons shall be admitted to any share or part of the Contract or to any benefit arising from the Contract.

## **5. INDEMNIFICATION**

The Contractor shall indemnify and save harmless CMHC, its agents and employees from and against all claims, losses, demands, costs, damages, suits, proceedings or actions by third parties arising out of or related to or attributable to the Contractor's (and any subcontractor's) performance of the Contract and the Contractor's (and any subcontractor's) activities in executing the Work, including those resulting from the Contractor's (and any subcontractor's) omissions, improper acts or delays in executing the Work under the Contract, and whether such actions suits or proceedings are brought in the name of CMHC or in the name of the Contractor.

## **6. PROTECTION OF WORK AND PROPERTY**

The Contractor shall protect the Work and CMHC's property adjacent to the site of the Work from damage and shall be responsible for any damage which may arise as the result of the Contractor's operations under the Contract except damage which occurs as the result of:

- (a) errors in the Tender Documents, or
- (b) acts or omissions by CMHC or the DCR which the Contractor cannot reasonably be expected to prevent by the exercise of ordinary prudence. The Contractor shall use CMHC's property only at such times and in such a manner as may be directed by the DCR and the Contractor shall, at the DCR'S request, account to the DCR, for the use of CMHC's property.

Should the Contractor, (or any subcontractor) in the performance of this Contract or, in the case of a subcontractor, any subcontracting agreement, damage the Work, or CMHC's property or property adjacent to the site of the Work, the Contractor shall be responsible for the making good of such damage at the Contractor's expense.

## **7. PERMITS AND BY-LAWS**

The Contractor shall comply with the most current version of the applicable provincial building code, the National Building Code, and all applicable federal, provincial and municipal laws and regulations and shall apply for, obtain and pay for all permits and certificates required in respect of the execution of the Work. No act or omission by CMHC or the DCR shall constitute a waiver of the Contractor's obligations to apply for, obtain and pay for such permits.

## **8. PUBLICITY**

The Contractor will neither permit any public ceremony nor erect or permit the erection of any sign or advertising, in connection with the Work without the prior written approval of CMHC.

## **9. CONTRACTOR'S SUPERINTENDENT**

The Contractor will employ a competent superintendent and necessary assistants who shall be in attendance on the site of the Work at all times during the progress of the Work unless otherwise authorized by the DCR. The superintendent and necessary assistants must be acceptable to the DCR and have the authority to receive on behalf of the Contractor any order or communication in respect of the Contract. The Contractor shall remove from the site and replace any superintendent and workmen not acceptable to the DCR because of incompetence or improper conduct, as determined by the DCR in its sole discretion.

## **10. COOPERATION WITH OTHER CONTRACTORS**

The Contractor will cooperate fully with other contractors or workmen sent onto the site of the Work by the DCR. If the sending onto the site of such other contractors and workmen could not have been reasonably foreseen by the Contractor when entering into the Contract, and if in the opinion of the DCR the Contractor has incurred additional expense by such action, and if the Contractor gives written notice of claim within thirty days of such action CMHC will pay the cost of such additional expense to the Contractor calculated in accordance with clause 17 of the General Conditions.

## **11. CLAIMS AGAINST AND OBLIGATIONS OF THE CONTRACTOR OR SUBCONTRACTOR**

The Contractor shall ensure that all the lawful obligations and lawful claims against the Contractor or subcontractor(s) arising out of the execution of the Work are discharged and satisfied at least as often as this Contract requires CMHC to discharge its obligations to the Contractor and the Contractor shall supply the DCR with a Statutory Declaration deposing to the existence and condition of such claims and obligations when called upon to do so. In the event that the Contractor or any subcontractor fails to discharge and satisfy said lawful obligations and claims at the request of CMHC, CMHC may, in order to discharge lawful obligations of and satisfy lawful claims against the Contractor or a subcontractor arising out of the execution of the Work, pay any amount which is due and payable to the Contractor under the Contract or derived from a conversion or a negotiation of the surety bonds or other security, if any, directly to the obligees of and the claimants against the Contractor or the subcontractor.

## **12. EXECUTION OF WORK UNDER DIRECTION OF DESIGNATED CORPORATE REPRESENTATIVE**

The Contractor will permit the DCR to have complete and full access to the Work at all times during the execution of the Work, will provide the DCR with full information concerning what is being done to execute the Work and will give the DCR every possible assistance in respect of the performance of his/her duty to see that the Work is executed in accordance with the Contract.

## **13. DCR MAY ORDER ADDITIONAL WORK OR CHANGES**

The DCR may at any time by written notice order work or material deleted from or added to the Work provided for in the Working Drawings and Specifications, and the Contractor will execute the Work in accordance with such orders. The costs of work deleted or additional work required by the DCR shall be calculated in accordance with clause 17 of the General Conditions.

#### **14. TAKING WORK OUT OF CONTRACTOR'S HAND**

- (a) CMHC may take all or part of the Work out of the Contractor's hands and may employ such means as it sees fit to complete the Work, including without limitation, in the following circumstances:
- (i) if the Contractor has made default or delayed in the commencement or execution of the Work and CMHC has given notice thereof to the Contractor and has by such notice required the Contractor to put an end to such default or delay, and such default or delay continues for six days after such notice was given to the Contractor;
  - (ii) if the Contractor makes a voluntary assignment into bankruptcy or is adjudged insolvent or bankrupt or commits an act of insolvency or bankruptcy or makes a general assignment for the benefit of its creditors or if a receiver is appointed on account of its insolvency;
  - (iii) if, in the opinion of the DCR, the Contractor has abandoned the Work;
  - (iv) if the Contractor assigns the Work without the consent of CMHC; or
  - (v) if the Contractor fails to comply with any of the provisions of the Contract.
- (b) Where the Work has been taken out of the Contractor's hands, the Contractor shall not be entitled, except as provided in subsection (c), to any further payments, and CMHC's obligation to make payments as provided for in clause 23 of the General Conditions shall be at an end, and the Contractor shall be liable for, and upon demand shall pay to CMHC an amount equal to all loss and damage arising out of or caused by non-completion.
- (c) Where the Work has been taken out of the Contractor's hands, CMHC shall determine the amount of claims and holdbacks unpaid at the time of taking the Work out of the hands of the Contractor and to the extent that any portion of that amount is not required by CMHC for the purposes of completing the Work, CMHC shall authorize payment to the Contractor of that portion of the amount. The taking of work out of the Contractor's hands does not relieve or discharge the Contractor of any legal or contractual obligation excepting only the obligation to physically execute that portion of the Work taken out of the Contractor's hands pursuant to this paragraph.
- (d) If the Work or any part of it is taken out of the Contractor's hands under this clause, all material, plant and interest of the Contractor in all real property, permits, certificates, licences or privileges acquired, used or provided by the Contractor for the purposes of the Work shall be the property of CMHC without compensation to the Contractor, except that any interest in the property of CMHC which the DCR has certified is no longer required for purposes of the Work and is not in the interest of CMHC to retain shall become the property of the Contractor.

- (e) In adopting its remedies or rights under either clause 13 or this clause, CMHC is in no way assuming any of the Contractor's liabilities or responsibilities pursuant to the applicable provincial lien legislation which may have arisen or may arise as a result of this Contract and those liabilities and/or responsibilities remain with the Contractor regardless of CMHC's exercise of its discretion under these clauses.

## **15. DELAY BY CMHC**

No extra payment will be made to the Contractor for any extra cost, expense, loss or damage arising out of or attributable to unreasonable delay by CMHC unless the DCR shall certify that such extra cost, expense, loss or damage arises out of or is directly attributable to unreasonable delay by CMHC occurring after the execution of the Contract in providing any information or doing any act which is expressly required to be done by CMHC by the Contract, and the Contractor has, within 30 days of the commencement of such delay, given written notice to the DCR of a claim for such extra cost, expense, loss or damage. The amount of extra payment to be made pursuant to this clause will be calculated in accordance with clause 17 of the General Conditions.

## **16. TERMINATION OF CONTRACT**

- (1) CMHC may terminate the Contract without cause and without penalty at any time by giving notice of such termination in writing, and the Contractor shall immediately upon receipt of such notice, cease all operations. Following such termination, no material or any part of the work may be removed from the site without the written permission of the DCR.
- (2) If the Contract that is terminated without cause pursuant to this clause is a firm lump sum arrangement, CMHC shall pay to the Contractor an amount equal to the lesser of
  - (a) the cost agreed upon by the Contractor and the DCR of all Contractor supplied labour, plant and material to the date of termination or, if the Contractor and the DCR cannot agree, the cost shall be the total of all reasonable and proper amounts actually expended or payable by the Contractor in respect of labour, plant or material costs directly attributable to the execution of the work and less all amounts which the Contractor is liable to pay to CMHC, and
  - (b) the amount calculated in accordance with clause 23(1)(a) of the General Conditions which would have been payable to the Contractor had it completed the Work.
- (3) If the Contract terminated is a unit price arrangement, CMHC will pay to the Contractor an amount equal to the cost as agreed upon by the Contractor and DCR of all labour, material and plant supplied by the Contractor as of the date of termination; failing agreement between the DCR and the Contractor, CMHC will pay to the Contractor an amount calculated in accordance with paragraph (2) preceding.

- (4) Any termination of this Contract and any payments out which may be made as a result of this clause or other provisions of this Contract shall be made subject always to the proviso that CMHC shall retain any and all holdback monies necessary to satisfy lawful claims against the Contractor or a subcontractor arising out of the execution of the Work.

## **17. DETERMINATION OF COSTS**

For the purposes of clauses 10, 13 and 15 of the General Conditions the amount payable to the Contractor shall, subject to the provisions of clause 23 (1) (b) (ii) following, be based upon the unit prices, if any are set out in clause 4 of the Tender and Acceptance. If such unit prices are not applicable, the DCR and the Contractor may mutually agree on the amount payable. Failing such agreement, the amount payable shall be the reasonable and proper expenses paid or legally payable by the Contractor directly attributable to the Work plus 10% of such expenses to cover overhead and profit, as certified by the DCR.

## **18. RECORDS TO BE KEPT**

The Contractor shall for a period of two years from the date of the Final Certificate of Completion, maintain and keep full records, vouchers, other writings and information in respect of its estimates and actual cost of the Work and upon request shall immediately make them available for copy, audit or inspection by CMHC or persons acting on its behalf.

## **19. AUDIT**

The Contractor shall keep proper and detailed records and statements of account, including receipts, vouchers and all other documents relating to the cost of carrying out the Work, and shall at all reasonable times permit inspection and audit of such records and statements by CMHC and/or its internal or external auditors. While any such audit may be conducted without prior notice, CMHC agrees to cooperate with the Contractor in the course of conducting any audit in order to avoid disruption in day-to-day operations and to preserve confidentiality.

## **20. EXTENSION OF THE TIME**

CMHC may, on the application of the Contractor made before the day fixed for the completion of the Work, extend the time for completion of the Work. The Contractor shall pay to CMHC an amount equal to CMHC's expenses, damages incurred or suffered by reason of the delay in completion of the Work unless in the opinion of CMHC such delay was due to causes beyond the control of the Contractor.

## **21. CLEANING OF WORK**

The Contractor will, upon completion of the Work, clear and clean the Work and its site to the satisfaction of and in accordance with any directions of the DCR.

## **22. RECTIFICATION OF DEFECTS**

The Contractor will, upon notice from the DCR or CMHC and within such reasonable time as is specified in said notice, rectify at the Contractor's own expense any defect or fault, however caused, which appears in the Work. Notwithstanding any such rectification, the Contractor shall remain liable for all loss or damage to CMHC arising from such defects, faults or rectifications.

## **23. PAYMENT**

(1) Subject to clause 16 of the General Conditions, CMHC will, subject to and in accordance with subsections (2) and (3), pay to the Contractor and the Contractor will accept as full consideration for the work performed and executed,

(a) in the case of a firm lump sum arrangement:

- (i) the tender amount stated in clause 4 of the Tender and Acceptance;
- (ii) any extra calculated in accordance with General Conditions clauses 10, 13, 15 and,
- (iii) less amounts calculated in accordance with General Conditions clauses 5, 6, 13, 14, 16, 22.

(b) in the case of a unit price contract:

- (i) the amount referred to in Clause 4(I) of the Tender and Acceptance will be deemed to be the amount computed by totalling the products of the unit prices set out in the unit price schedule and the actual quantities of such units as set out in the DCR's Final Certificate of Measurement, subject to any adjustment provided for in subparagraph (ii) of this subsection;
- (ii) the DCR and the Contractor may by agreement in writing add to the aforesaid unit price table other classes of labour, material, plant, etc., units of measure, estimated quantities and prices per unit, and may, if the actual quantities as set out in the aforesaid Final Certificate of Measurement exceed or fall short of the estimated quantities in respect of any item(s) shown in the aforesaid unit price table by more than 15%, amend the unit prices shown in the unit price table for such items. Where the DCR and the Contractor fail to agree on the amount of any adjustment as contemplated by this sub-section, the revised or new prices per unit shall be determined in accordance with clause 17 of the General Conditions.

(2) Progress Payments

- (a) The Contractor shall be entitled to receive progress payments based upon progress certificates issued by the DCR at monthly intervals.

- (b) Applications for payment shall be dated the last day of the agreed monthly payment period and the amount claims shall set out the value, proportionate to the amount of the Contract, of work performed and, where applicable, of materials delivered to the site by that date.
- (c) The Contractor shall submit to CMHC, at least fourteen (14) days before the first application for payment, a schedule of values of the various parts of the Work, aggregating the total amount of the Contract price and divided so as to facilitate evaluation of applications for payment.
- (d) This schedule shall be made out in the appropriate CMHC form and supported by such evidence as to its correctness as CMHC may reasonably direct and when approved by CMHC shall be used as the basis for applications for payment, unless it is found to be in error.
- (e) When making applications for payments, the Contractor shall submit a statement based upon this schedule. Where applicable, claims for materials delivered to the site but not yet incorporated into the Work shall be supported by such evidence as CMHC may reasonably require to establish the value and delivery and payments made to the suppliers in relation to the said materials or products.
- (f) Applications for release of Holdback Monies following substantial performance of the Work and the application for final payment shall be made at the time and in the manner set forth in subsection 3.
- (g) The Contractor shall submit a statutory declaration with each progress claim declaring that all wages and account for materials, subcontractors and suppliers, as well as all payments required by the applicable provincial Worker's Compensation legislation, have been paid up to the date of the preceding progress claim.
- (h) The Contractor shall submit with its final application for payment a letter from the Worker's Compensation Board stating that the Contractor is in good standing and that all assessments have been paid.

### (3) Payments Following Substantial Performance

- (a) The DCR will, no later than fifteen (15) days after receipt of the claim for substantial performance of the Work from the Contractor, make an inspection and assessment of the Work to verify the validity of the claim and shall, no later than ten (10) days after the inspection, notify the Contractor of the approval or the reasons for the disapproval of the application. When the DCR finds that the Contractor's claim for substantial performance of the Work is valid, the DCR shall issue, to the Contractor, confirmation that the substantial performance of the work is valid. Following confirmation, the DCR, in consultation with the Contractor, shall establish a reasonable date for the total performance of the Work.

- (b) Immediately following the issuance of confirmation, the DCR will issue, to the Contractor, an interim payment of Holdback Monies statement. The Holdback Monies shall become due and payable on the day following the expiration of the holdback period stipulated by CMHC, providing that CMHC may retain out of such Holdback Monies any sums it considers necessary to satisfy the lawful monetary claims against the Contractor or subcontractor arising out of the execution of the Work and that the Contractor has submitted to CMHC a sworn statement that all accounts for labour, subcontracts, materials, construction machinery and equipment and other indebtedness which may have been incurred by the Contractor in the substantial performance of the Work have been paid in full except Holdback Monies properly retained.
- (c) Where legislation permits and where, upon application by the Contractor, the DCR has certified that the work of a subcontractor has been totally performed to CMHC's satisfaction prior to the substantial performance of the Work, CMHC shall pay the Contractor the Holdback Monies retained for such subcontractor on the day following the expiration of the holdback period for such subcontractor stipulated by CMHC, and the DCR shall issue an interim payment of Holdback Monies statement.
- (d) The Contractor shall ensure that such work is protected pending the total performance of the Work and shall be responsible for the correction of defects in it regardless of whether or not they were apparent when such certificates were issued.
- (e) The DCR shall within fifteen (15) days of receiving an application for payment upon total performance of the Work and Statutory Declaration by the Contractor before a Notary Public or Commissioner for Oaths that to the best of the Contractor's knowledge, opinion and belief, the Work has been performed in its entirety and to the requirements of the Contract, make an inspection and assessment of the Work to verify the validity of the application. No later than seven (7) days following the inspection, the DCR will notify the Contractor of the approval or the reasons for the disapproval of the application for payment. When the DCR finds that the Contractor's claim for total performance of the Work is valid, the DCR shall issue confirmation that the total performance of the Work is valid - and certify for payment the remaining monies due to the Contractor under the Contract, less Holdback Monies which are required to be retained. Subject to the provisions of clause 28(a) of the General Conditions, CMHC shall, no later than five (5) days after the issuance of the final payment of Holdback Monies statement, make payment to the Contractor in accordance with the provisions of subsection (1).
- (f) The release of the remaining Holdback Monies shall become due and payable on the day following the expiration of the holdback period stipulated by CMHC providing that CMHC may further retain out of such Holdback Monies any sums required to satisfy any monetary claims against the Contract.

- (g) If because of conditions reasonably beyond the control of the Contractor there are items of work that cannot be performed, payment in full for work which has been performed as certified by the DCR shall not be withheld or delayed by CMHC on account thereof, but CMHC may withhold until the remaining work is finished such monies as CMHC determines are sufficient and reasonable to cover the costs and expenses of performing such remaining work.
- (h) No certificate issued by the DCR, no payment made by CMHC under this Contract and no partial or entire use or occupancy of the Work by CMHC shall constitute an acceptance of work or products which are not in accordance with the requirements of the Contract.
- (i) The issuance of the final payment of Holdback Monies statement and payment of all monies due under the Contract shall not constitute a waiver by CMHC of claims against the Contractor respecting defects and deficiencies in the Work:
  - (i) made in writing prior to the issuance of the final payment of Holdback Monies statement and still unsettled;
  - (ii) made in writing within a period of six (6) years from the date of substantial performance of the Work or within such shorter period as may be prescribed by any limitation statute of the province or territory of the Work.
- (j) The acceptance by the Contractor of the final payment of Holdback Monies statement or of the payment due thereunder shall constitute a waiver of all claims against CMHC under this Contract except those made in writing prior to the Contractor's application for payment upon total performance of the Work and still unsettled.
- (k) Prior to issuing the final payment of Holdback Monies statement, the DCR may, in addition to the matters described in the interim payment Holdback Monies statement, require the Contractor to rectify any other portions of the Work not completed to the satisfaction of the DCR and to do any other things necessary for the completion of the Work.

## **24. SET OFF**

CMHC may set off against any amount payable or any debt due by CMHC to the Contractor under this contract the amount of any amount payable or any debt due by the Contractor to CMHC under this contract or any other contract between CMHC and the Contractor.

## **25. NO ADDITIONAL PAYMENTS**

The amount payable to the Contractor under this contract will not be increased or decreased by reason of any increase or decrease in the cost of labour, material, or plant except that an adjustment to the Contract price may be made in the event of a change in any tax that affects the cost of the work to the Contractor imposed under the Excise Act, the Excise Tax Act, the Old Age Security Act, the Customs Act or Customs Tariff made public after date of the submission of the tender by the Contractor.

## **26. INSURANCE**

The Contractor will at its expense maintain insurance coverage as in clause 5.8 of the Tender and Acceptance.

## **27. CONTRACT SECURITY**

- (a) The Contractor shall promptly provide to CMHC contract security pursuant to clause 5(1) of the Instructions to Tenderers.
- (b) The contract security must be delivered by the successful bidder to CMHC before the contract documents are executed by CMHC.
- (b) Where the contract security is a bearer or negotiable bond, the bond shall provide that in the event that CMHC or the DCR determine that the Contractor is in breach or default under the contract, CMHC may convert or negotiate the bond to its own use. If a Labour and Material Payment Bond is provided pursuant to the Contract, the Contractor shall post on the site of the work a notice that a Labour and Material Payment bond is provided pursuant to the Contract and the notice shall include the name and address of the Surety, a definition of those persons protected thereunder and an outline of the procedure for submitting a claim.

## **28. WORKER'S COMPENSATION**

- (a) Prior to commencing the Work and prior to receiving payment on substantial and total performance of the Work, the Contractor shall provide evidence of compliance with the requirements of the province or territory of the site of the Work with respect to Workers' Compensation, including payments due thereunder.
- (b) At any time during the term of the Contract, when requested by CMHC, the Contractor shall provide such evidence of compliance by himself and his subcontractors.

## **29. INSTRUCTIONS FOR PERFORMANCE OF THE WORK**

Notwithstanding any provision to the contrary in this Contract, the DCR will give to the Contractor such instructions as in the DCR's opinion are necessary for the proper performance of the Work and to prevent delays pending settlement of any dispute, and the parties shall act immediately according to such instructions, it being understood and agreed that such action shall not constitute a waiver of any claim by either party against the other party if it is subsequently determined that such instructions were in error or at variance with the Contract CMHC shall pay the Contractor costs incurred by the Contractor in carrying out such instructions which the Contractor was required to do beyond what the Contract correctly understood and interpreted would have required the Contractor to do, including costs resulting from interruption of the Work.

### **30. CLOSURE OF CMHC OFFICE**

- (a) Where services are being provided by the Contractor pursuant to this Contract on CMHC premises and the premises become inaccessible due to evacuation or closure because of events or circumstances beyond the control of CMHC, and where the health and / or safety of persons on the premises may be reasonably determined by CMHC, in its sole judgment, to be at risk, payment to the contractor hereunder may be suspended or modified. Payment will be suspended in full after 48 hours written notice unless the Contractor provides satisfactory evidence to CMHC that the Contractor will continue to incur monetary obligations to others directly as a result of its undertakings under this Contract and is unable to mitigate its losses due to such obligations. Based on such evidence and the extent to which the Contractor is able to mitigate, CMHC may continue payment in full (subject to subsection (b) below), or at a reduced amount, or suspend payment completely.
- (b) Notwithstanding subsection (a) above, if closure is continued beyond one calendar week, payment under this Contract may be suspended in full immediately, on further written notice by CMHC to the Contractor, until reopening permits the services to continue.

### **31. CONFLICT OF INTEREST**

The Contractor and its principals, employees and agents shall avoid any conflict of interest during the term of this Contract and shall immediately declare any existing, potential or apparent conflict and shall, upon direction of CMHC, take steps to eliminate any conflict or perception that a conflict of interest exists.

The Contractor must not provide any services to any third party in circumstances that might reasonably give rise to a conflict of interest, including a conflict between the Contractor's duties to that third party and the Contractor's duties to CMHC.

In the event that a conflict of interest, real or perceived, cannot be resolved to the satisfaction of CMHC, CMHC shall have the right to immediately terminate the Contract. All portions of any work which have been completed at the date of termination shall be forwarded to CMHC and CMHC shall be liable for payment to the Contractor of an amount which, in the sole opinion of CMHC, constitutes reasonable payment for the partial performance of the Contractor's obligations under the Contract. Upon such payment, CMHC shall have no further obligation of any nature or kind to the Contractor.

### **32. SECURITY CLEARANCE**

CMHC may require the Contractor and any persons who are to perform the Work to be security cleared. Any and all information requested by CMHC's Security and Risk Management Centre must be provided immediately upon request. Should the Contractor or any other person who is to perform the Work fail to receive such a security clearance, CMHC may in its sole discretion exclude such person from performing any services under this Contract, or terminate this Contract immediately.

### **33. INDEPENDENT CONTRACTOR**

The Contractor shall act as an independent contractor for the purposes of this Contract. It and its employees, officers and agents are not engaged as employees of CMHC. The Contractor agrees to so advise its employees, officers, and agents. Without limiting the generality of the foregoing, the Contractor shall retain complete control of and accountability for its employees and agents. The Contractor shall prepare and process the payroll for its employees directly, and shall withhold and/or pay all applicable employment taxes and payroll deductions required in respect of its employees. All personnel shall, at all times, and for all purposes, be solely in the employment of the Contractor.

### **34. CONTRACTOR'S AUTHORITY**

The Contractor agrees that it has no authority to give any guarantee or warranty whatsoever expressed or implied on behalf of CMHC and that it is in no way the legal representative or agent of CMHC and that it has no right or authority to create any obligation on behalf of CMHC or to bind CMHC in any way.

### **35. CONFIDENTIALITY**

- (a) The Contractor and its employees and agents will treat as confidential during and following the term of this Contract all information relating to the affairs of CMHC of which it acquires knowledge as a result of its engagement hereunder.
- (b) The Contractor shall, at the request of CMHC, provide an Oath of Secrecy for each of its employees or persons engaged in carrying out the Work, in a form prescribed by CMHC.
- (c) Upon termination or expiration of this Contract for any reason, the Contractor shall promptly (and in no event later than 10 days thereafter) return all writings and materials whatsoever which contain information which is confidential or proprietary to CMHC, including all copies thereof, and the Contractor shall certify in writing to CMHC that all such materials have been returned (or, at the option of CMHC, destroyed).

### **36. WAIVER**

No waiver by either party of any delay, default or omission by the other party shall affect or impair the rights of the non-defaulting party in respect of any subsequent delay, default or omission of the same or different kind.

### **37. SEVERABILITY**

If any covenant or provision of this Contract is determined to be void or unenforceable in whole or part, it shall not be deemed to affect or impair the validity of any other covenant or provision.

### **38. SURVIVAL OF TERMS**

The Contractor's obligations under clauses 5, 18, 19, 22 and 35 of the General Conditions shall survive the expiry or termination of this Contract regardless of the method or manner in which it is terminated.

## **PART 4**

### **SPECIFICATIONS AND DRAWINGS**

Please refer to the attached for drawings and specifications.

CMHC SCHL  
GRANVILLE ISLAND OFFICE

GRANVILLE ISLAND  
PHASE 4  
EXTERIOR LIGHTING UPGRADE



1 AERIAL VICINITY MAP  
E0.0 SCALE : N.T.S.

CIVIC ADDRESS:  
GRANVILLE ISLAND, VANCOUVER, BRITISH COLUMBIA

DRAWING LIST:		SCALE
E0.0	- COVER PAGE / SCHEDULE	N.T.S.
E1.1	- ISLAND ZONE PLAN	1:1000 M
E1.2	- LUMINAIRE SCHEDULE	N.T.S.
E2.0	- ZONE F1 PLAN - EXISTING	1:250 M
E2.1	- ZONE F1 PLAN - NEW	1:250 M
E3.0	- ZONE F2 PLAN - EXISTING	1:250 M
E3.1	- ZONE F2 PLAN - NEW	1:250 M
E4.0	- ZONE H PLAN - EXISTING	1:250 M
E4.1	- ZONE H PLAN - NEW	1:250 M
E5.0	- ZONE I1 PLAN - EXISTING	1:250 M
E5.1	- ZONE I1 PLAN - NEW	1:250 M
E6.0	- ZONE I2 PLAN - EXISTING	1:250 M
E6.1	- ZONE I2 PLAN - NEW	1:250 M
E7.0	- ZONE J1 PLAN - EXISTING	1:250 M
E7.1	- ZONE J1 PLAN - NEW	1:250 M
E8.0	- ZONE J2 PLAN - EXISTING	1:250 M
E8.1	- ZONE J2 PLAN - NEW	1:250 M
E9.0	- SPECIFICATIONS	N.T.S.

NOTE:  
SITE CONDITIONS WHICH MAY PROHIBIT THE EXACT POSITIONING OF LIGHT FIXTURES AND OTHER ELECTRICAL DEVICES SHALL BE REPORTED TO THE APPROPRIATE CONSULTANT IMMEDIATELY FOR FURTHER INSTRUCTIONS.

CONSULTANT  
**NEMETZ (S/A) & ASSOCIATES LTD.**  
CONSULTING ENGINEERS  
2009 WEST 4TH AVENUE, VANCOUVER, BC V6J1N3  
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214 KING ST. WEST, SUITE 214 TORONTO, ON M5H3S6  
TEL: (647) 253-0086 FAX: (647) 253-2085  
525 11th AVENUE SW, SUITE 305, CALGARY, AB T2R 0C9  
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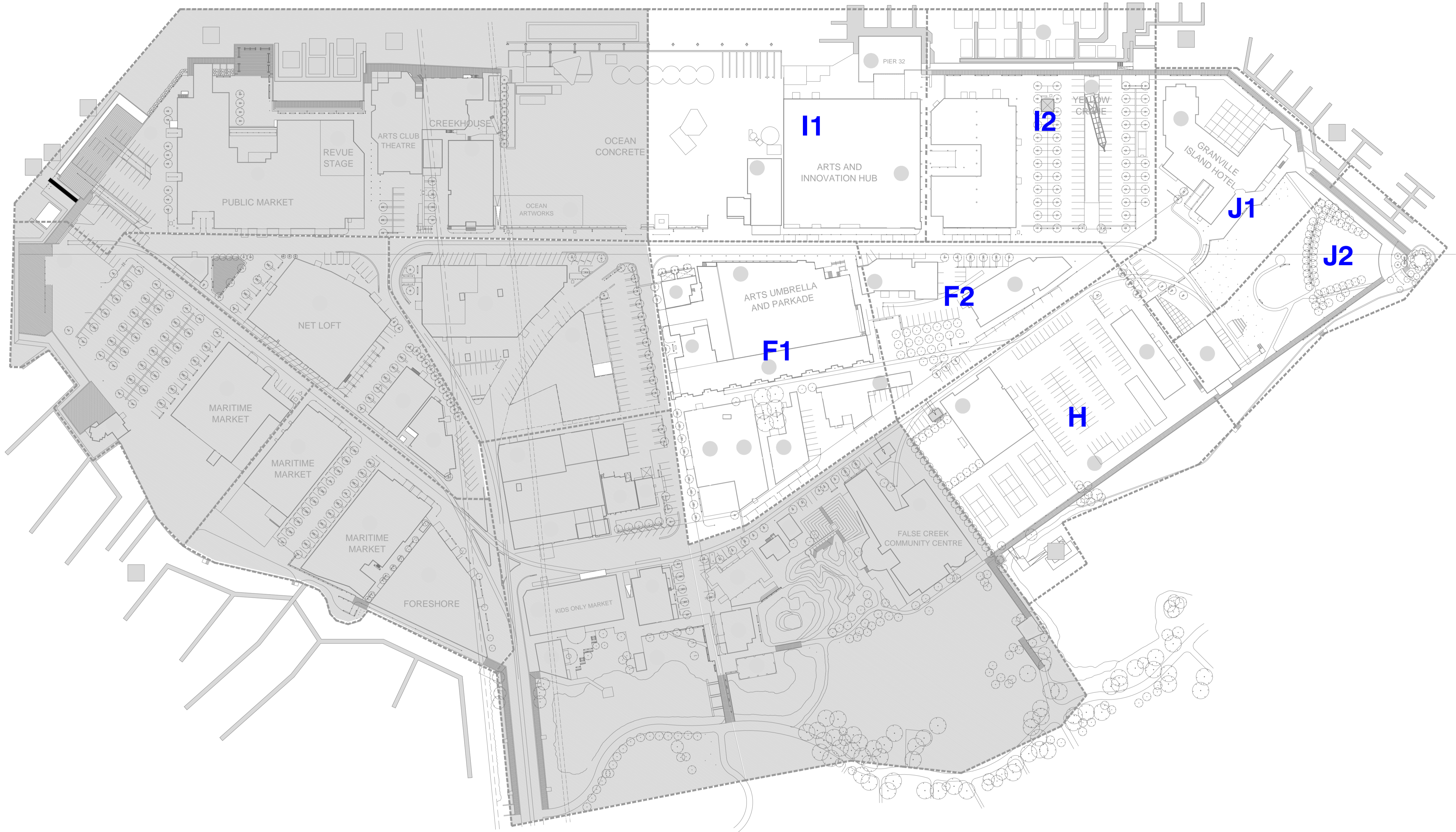
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Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE

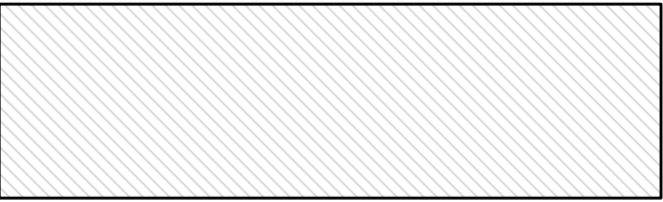
VANCOUVER BC CANADA

Title  
COVER PAGE

Project No. 14440	Scale 1:1000 M
Drawn By DM	Checked By KK/DN
Drawing NO. E0.0	Date 07 OCT. 2020



**LEGEND**



SHADED AREA NOT IN CONTRACT

CONSULTANT



2009 WEST 4TH AVENUE, VANCOUVER, BC V6J1N3  
TEL: (604) 736-6562 FAX: (604) 736-9805  
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Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE

VANCOUVER BC CANADA

Title  
ISLAND ZONE PLAN

Project No. 14440	Scale 1:1000
Drawn By DM	Checked By KK/DN
Drawing NO.	Date 07 OCT. 2020

E1.0

		LUMINAIRE SCHEDULE		PROJECT NO: 14440	
		GRANVILLE ISLAND - PHASE 4		Date: OCTOBER 2020	
LANDSCAPE AND EXTERIOR					
Landscape Type	Nemetz Type	Description	Location	Lamp	Mounting
	AA	RAB DESIGN DVAKS-LED14-B-3000K-GL100-GD100CGS-3000K	THROUGHOUT	LED	SURFACE
	AB	RAB DESIGN DVBKS-LED14-B-3000K-GL100-GD100CGS-3000K	THROUGHOUT	LED	SURFACE/WALL
	BEL	RAB DESIGN DVAKS-LED14-B-3000L-GL-100-GD100CGS-3000K	UNDER BENCH	LED	SURFACE (UNDER BENCH)
	BA	RAB DESIGN DVCKS-LED14-B-3000K-GL100	THROUGHOUT	LED	BOLLARD
	C	LITHONIA OLSR-DOB (EXISTING WHERE SHOWN UNLESS OTHERWISE NOTED)	THROUGHOUT	LED	SURFACE/WALL
	EA	ANTIQUE STREET LAMPS EML17-ST-49LED350MA-3K-GCF-MVOLT-R3-SF-DWH / EAJ4/1 (GALVANIZED STEEL) C/W POLE (HEIGHT TO MATCH PHASE 3)	THROUGHOUT	LED	FINAL POLE HEIGHT TO MATCH EXISTING ON SITE
	EAp	ANTIQUE STREET LAMPS EML17-ST-49LED350MA-3K-GCF-MVOLT-R3-SF-DWH / EAJ4WB (GALVANIZED STEEL) C/W 14' POLE	THROUGHOUT	LED	14' POLE
	EAp2	ANTIQUE STREET LAMPS EML17-ST-49LED350MA-3K-GCF-MVOLT-R3-SF-DWH / EAJ4/2 (GALVANIZED STEEL) C/W 14' POLE	PARK	LED	14' POLE
	EC	ANTIQUE STREET LAMPS EML17-ST-49LED350MA-3K-GCF-MVOLT-R3-SF-DWH / EAJ4WB (GALVANIZED STEEL)	THROUGHOUT	LED	SURFACE/WALL
	ECp	ANTIQUE STREET LAMPS EML17-ST-49LED350MA-3K-GCF-MVOLT-R3-SF-DWH / EAJ4WB (GALVANIZED STEEL)	THROUGHOUT	LED	SURFACE/WALL
	ED	ANTIQUE STREET LAMPS EML17-ST-49LED350MA-3K-GCF-MVOLT-R3-SF-DWH / EAJ4/2 (GALVANIZED STEEL) C/W POLE (HEIGHT TO MATCH PHASE 3), TO BE PROVIDED WITH PROVISIONS FOR IN POLE DIMMING/OCCUPANCY FOR ADDITION AT LATER DATE IF REQUIRED.	THROUGHOUT	LED	POLE
	EE	LED LAMP POST TO MATCH EXISTING. DETAILS TBC	PARKING LOT	LED	POLE
	GA	HOLOPHANE PHZ-18L-3K-20-P-K-W (MATCH EXISTING)	COVERED WALKWAY	LED	SURFACE/SUSPENDED CEILING
	GB	LUMARK XTOR6ARL-N	THROUGHOUT - FAÇADE	LED	SURFACE/WALL
	GC	LED RECESSED DOWNLIGHT. REPLACE LAMP ONLY WITH LED LAMP. LAMP SPECIFICATION TO BE APPROVED PRIOR TO ORDERING.	SOFFITS	LED	RECESSED/SOFFT
	GG	LUMENPULSE LBS-XXX-30K-FL-SI-NO-KN		LED	SURFACE
	GI	BOCK 6208-G16/E42/LAC01-13W-35K-120/GN23A-G16	SIGNAGE	LED	SURFACE/WALL
	GK	INVUE VFS-K-B20-LED-E1-NSR-B2-SG	PIER 32	LED	SURFACE/WALL
	GM	BOCK 110B-G16/LAC01-13W-30K-120V/640-50-G16/ST2-6-G16 C/W TYPE AA STYLE GLASS AND CAGE. MOUNTING ACCESSORIES TO SUIT.	THROUGHOUT - SOFFITS	LED	RECESSED/CEILING

ALL GM TO BE MODIFIED WITH RAB AND CAGE REFLECTOR.

NOTE: ALL FIXTURE FINISHES TO BE CONFIRMED WITH CMHC PRIOR TO ORDERING.

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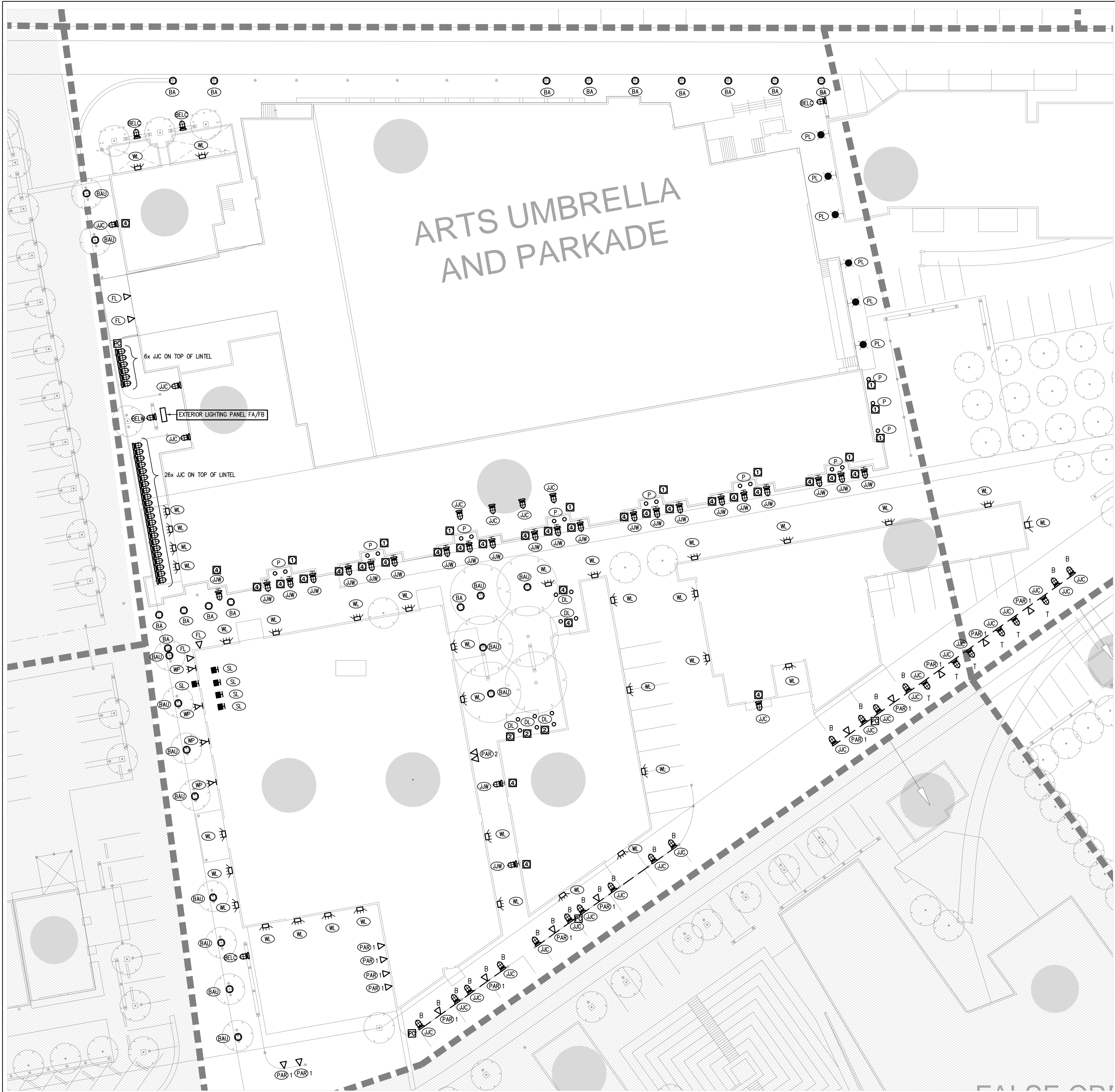
Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE

VANCOUVER BC CANADA

Title  
SCHEDULES

Project No. 14440	Scale N.T.S.
Drawn By DM	Checked By KK/DN
Drawihng NO.	Date 01 DEC. 2020

E1.2



EXISTING LUMINAIRE SYMBOL SCHEDULE:		
		JAM JAR CEILING MOUNT
		JAM JAR WALL MOUNT
		UNDERBENCH JAM JAR CEILING MOUNT
		UNDERBENCH JAM JAR WALL MOUNT
		WALL PACK EXISTING VARIOUS TYPES
		FLOODLIGHT VARIOUS TYPES
		WALL LIGHT VARIOUS ON RIGID PIPE
		SINGLE HEAD PAR LAMP HOLDER
		DOUBLE HEAD PAR LAMP HOLDER
		GRANVILLE ISLAND BOLLARD C/W UPLIGHT & DOWNLIGHT
		GRANVILLE ISLAND BOLLARD C/W DOWNLIGHT ONLY
		POLELIGHT EXISTING
		PHOTOCELL
		POTLIGHTS VARIOUS TYPES
		DOWNLIGHTS VARIOUS TYPES
	T	DENOTES MOUNTED ON TOP OF LINTEL
	B	DENOTES MOUNTED ON BOTTOM OF LINTEL

DRAWING KEY NOTES:	
	REMOVE EXISTING POTLIGHTS. REPLACE W/ SPECIFIED NEW LED RECESSED LIGHTING AT EXISTING LOCATIONS.
	EXISTING LIGHT FIXTURE TO REMAIN.
	SPARE NOTE
	REMOVE EXISTING FIXTURE AND RETURN TO CMHC. INSTALL NEW SPECIFIED FIXTURE IN EXISTING LOCATION.

GENERAL NOTES:	
A. ALL TYPICAL GRANVILLE ISLAND BOLLARDS TO BE REVISED AS FOLLOWS:	
1.	EXISTING TYPE 'BA' - REMOVE DOWNLIGHT RETURN TO CMHC AND INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE.
2.	EXISTING TYPE 'BAU' - REMOVE UPLIGHT AND SHROUD. DISCARD SHROUD OFFSITE AND RETURN FIXTURE TO CMHC. INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE. REWIRE AS REQUIRED.
B. ALL EXISTING UNDER BENCH FIXTURES (BELC,BELW) TO BE REPLACED WITH NEW SPECIFIED FIXTURES. RETURN OLD FIXTURES TO CMHC. REPLACE DAMAGED WIRING, CONDUIT AND OUTLET BOXES REQUIRED.	
C. ALL LINTEL LIGHTING TO BE AS FOLLOWS:	
1.	REMOVE AND DISCARD OFFSITE ALL TYPE 'PAR' FIXTURES. PATCH ALL UNUSED HOLES IN LINTELS.
2.	REMOVED ALL EXISTING TYPE 'JUC' FIXTURES AND RETURN TO CMHC. REVISE WIRING, CIRCUITRY AND CONTROLS TO SUIT NEW LAYOUTS. OBSERVE TOP OR BOTTOM MOUNTING NOTES. PATCH UNUSED HOLES REQUIRED.
3.	ALL LIGHTING FIXTURES NOT NOTED AS EXISTING TO REMAIN ARE TO BE REMOVED AND DISCARDED OFFSITE. ALL REDUNDANT WIRING, CONDUIT AND OUTLET BOXES ARE TO BE REMOVED AND BUILDING FINISHES TO BE REPAIRED TO MATCH SURROUNDING CONDITIONS.

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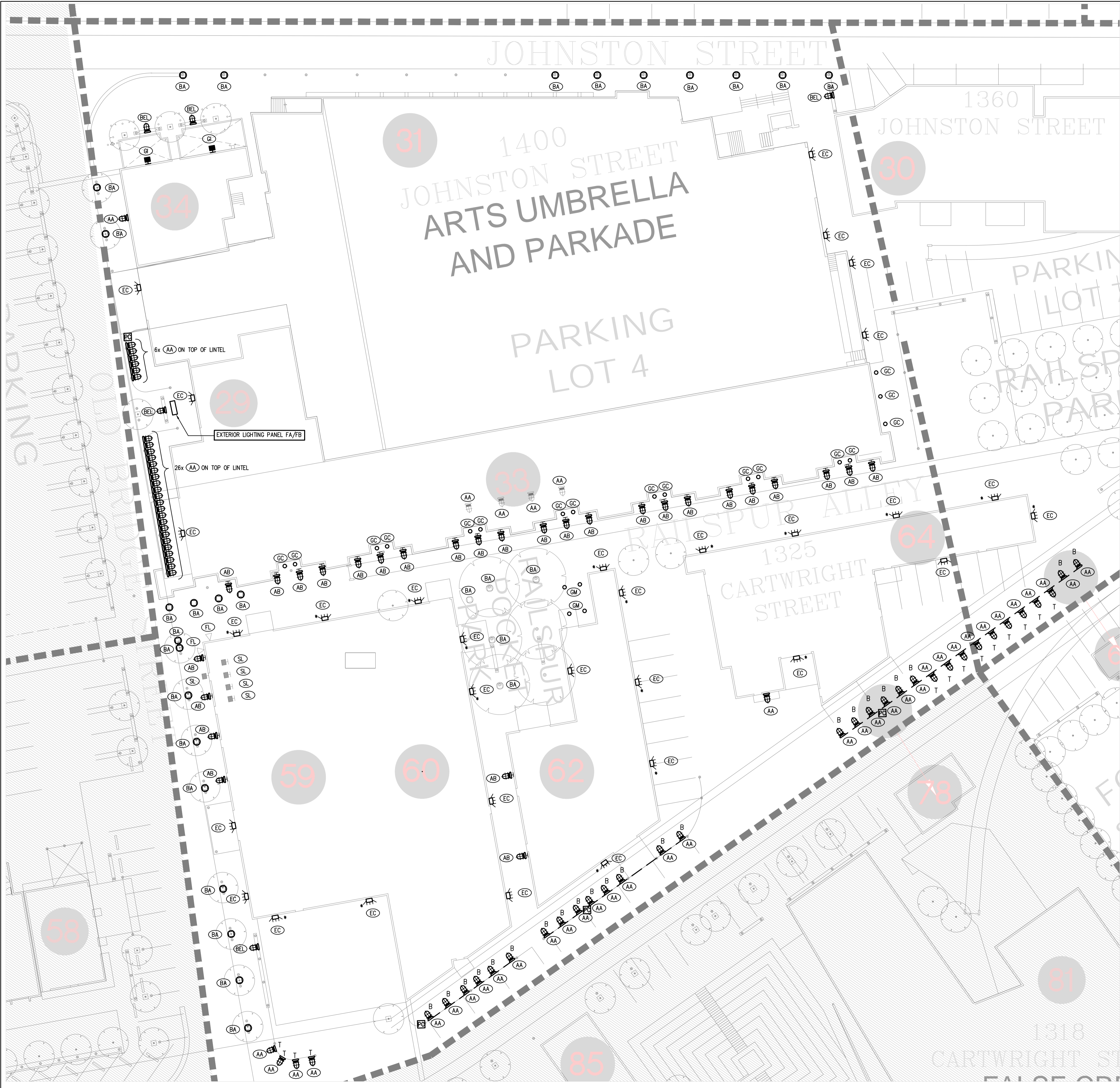
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Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE  
EXISTING CONDITIONS  
VANCOUVER BC CANADA

Title  
ZONE F1 PLAN - EXISTING

Project No. 14440	Scale 1:SCALE
Drawn By DM	Checked By KK/DN
Drawing No.	Date 01 DEC. 2020

E2.0



**NOTE:**  
IN ADDITION TO CHANGES ON DRAWINGS, ALL LUMINAIRES TO BE REPLACED 1 FOR 1 AS PER LUMINAIRE SCHEDULE.

- GENERAL NOTES:**
- A. ALL LINTEL LIGHTS TO BE INSTALLED TO MATCH SPACING. ALL LIGHTS ARE TO FACE DOWN UNLESS OTHERWISE NOTED OR INVOLVE RUNNING OVER A VEHICULAR DRIVEWAY/PATH.
  - B. CONFIRM MOUNTING HEIGHTS OF ALL FIXTURES THAT ARE NOT INDICATED TO BE REPLACED AT EXISTING LOCATIONS.
  - C. REMOVE ALL REDUNDANT WIRING , CONDUIT AND OUTLET BOXES NOT REQUIRED FOR NEW LIGHTING LAYOUTS.
  - D. ENSURE ALL EXTERIOR LIGHTING IS CIRCUITED AND CONTROLLED BY CMHC DISTRIBUTION KIOSK PANELS. REVISE IF NECESSARY.
  - E. PROVIDE NEW WIRING AND RACEWAYS PER SPECIFICATIONS TO ACCOMMODATE NEW LIGHTING LAYOUTS.
  - F. ALL FIXTURES IN BOLD ARE NEW.
  - G. ALL DIMMED LIGHTS ARE TO REMAIN AS IS. NO REPLACEMENT REQUIRED.

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Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE

VANCOUVER BC CANADA

Title  
**ZONE F1 PLAN**

Project No. 14440	Scale 1:250
Drawn By DM	Checked By KK/DN
Drawing No. <b>E2.1</b>	Date 01 DEC. 2020

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		-	JAM JAR CEILING MOUNT
		-	JAM JAR WALL MOUNT
		-	UNDERBENCH JAM JAR CEILING MOUNT
		-	WALL PACK EXISTING VARIOUS TYPES
		-	WALL LIGHT VARIOUS ON RIGID PIPE
		-	SINGLE HEAD PAR LAMP HOLDER
		-	GRANVILLE ISLAND BOLLARD C/W UPLIGHT & DOWNLIGHT
		-	GRANVILLE ISLAND BOLLARD C/W DOWNLIGHT ONLY
		-	POLELIGHT EXISTING
		-	NEW POLE
		-	PHOTOCELL
T		-	DENOTES MOUNTED ON TOP OF LINTEL
B		-	DENOTES MOUNTED ON BOTTOM OF LINTEL

- 2 REMOVE EXISTING POTLIGHTS. REPLACE W/ SPECIFIED NEW LED RECESSED LIGHTING AT EXISTING LOCATIONS.
- 2 EXISTING LIGHT FIXTURE TO REMAIN.
- 3 SPARE NOTE
- 3 REMOVE EXISTING FIXTURE AND RETURN TO CMHC. INSTALL NEW SPECIFIED FIXTURE IN EXISTING LOCATION.

- A. ALL TYPE GRANVILLE ISLAND BOLLARDS TO BE REVISED AS FOLLOWS:
  1. EXISTING TYPE 'BA' - REMOVE DOWNLIGHT RETURN TO CMHC AND INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE.
  2. EXISTING TYPE 'BAU' - REMOVE UPLIGHT AND SHROUD. DISCARD SHROUD OFFSITE AND RETURN FIXTURE TO CMHC. INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE. REWIRE AS REQUIRED.
- B. ALL EXISTING UNDER BENCH FIXTURES (BELC,BELW) TO BE REPLACED WITH NEW SPECIFIED FIXTURES. RETURN OLD FIXTURES TO CMHC. REPLACE DAMAGED WIRING, CONDUIT AND OUTLET BOXES REQUIRED.
- C. ALL LINTEL LIGHTING TO BE AS FOLLOWS:
  1. REMOVE AND DISCARD OFFSITE ALL TYPE 'PAR' FIXTURES. PATCH ALL UNUSED HOLES IN LINELS.
  2. REMOVED ALL EXISTING TYPE 'JJC' FIXTURES AND RETURN TO CMHC. REVISE WIRING, CIRCUITRY AND CONTROLS TO SUIT NEW LAYOUTS. OBSERVE TOP OR BOTTOM MOUNTING NOTES. PATCH UNUSED HOLES REQUIRED.
  3. ALL LIGHTING FIXTURES NOT NOTED AS EXISTING TO REMAIN ARE TO BE REMOVED AND DISCARDED OFFSITE. ALL REDUNDANT WIRING, CONDUIT AND OUTLET BOXES ARE TO BE REMOVED AND BUILDING FINISHES TO BE REPAIRED TO MATCH SURROUNDING CONDITIONS.

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3	ISSUED FOR TENDER	DM 2020.11.26
2	ISSUED FOR CONSTRUCTION	DM 2020.11.12
1	ISSUED FOR COORDINATION	DM 2020.11.05
No.	Issued	By yy/mm/dd

Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE  
EXISTING CONDITION  
VANCOUVER BC CANADA

Title  
ZONE F2 PLAN - EXISTING

Project No. 14440	Scale 1:1:250
Drawn By DM	Checked By KK/DN
Drawing No. 500	Date 07 OCT. 2020



- A. ALL LINTEL LIGHTS TO BE INSTALLED TO MATCH SPACING. ALL LIGHTS ARE TO FACE DOWN UNLESS OTHERWISE NOTED OR INVOLVE RUNNING OVER A VEHICULAR DRIVEWAY/PATH.
- B. CONFIRM MOUNTING HEIGHTS OF ALL FIXTURES THAT ARE NOT INDICATED TO BE REPLACED AT EXISTING LOCATIONS.
- C. REMOVE ALL REDUNDANT WIRING , CONDUIT AND OUTLET BOXES NOT REQUIRED FOR NEW LIGHTING LAYOUTS.
- D. ENSURE ALL EXTERIOR LIGHTING IS CIRCUITED AND CONTROLLED BY CMHC DISTRIBUTION KIOSK PANELS. REVISE IF NECESSARY.
- E. PROVIDE NEW WIRING AND RACEWAYS PER SPECIFICATIONS TO ACCOMMODATE NEW LIGHTING LAYOUTS.
- F. ALL FIXTURES IN BOLD ARE NEW.
- G. ALL DIMMED LIGHTS ARE TO REMAIN AS IS. NO REPLACEMENT REQUIRED.

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1	ISSUED FOR COORDINATION	DM 2020.11.05
No.	Issued	By yy/mm/dd

Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE

VANCOUVER BC CANADA

---

Title

ZONE F2 PLAN

Project No. 14440	Scale 1:1:250
Drawn By DM	Checked By KK/DN
Drawing No. 501	Date 01 DEC. 2020



**EXISTING LUMINAIRE SYMBOL SCHEDULE:**

- (JJC) [Symbol] - JAM JAR CEILING MOUNT
- (JJCW) [Symbol] - JAM JAR WALL MOUNT
- (BELC) [Symbol] - UNDERBENCH JAM JAR CEILING MOUNT
- (W) [Symbol] - WALL MOUNT LIGHT FIXTURE
- (WP) [Symbol] - WALL PACK EXISTING VARIOUS TYPES
- (FL) [Symbol] - FLOODLIGHT VARIOUS TYPES
- (WL) [Symbol] - WALL LIGHT VARIOUS ON RIGID PIPE
- (PAR 2) [Symbol] - DOUBLE HEAD PAR LAMP HOLDER
- (BAU) [Symbol] - GRANVILLE ISLAND BOLLARD C/W UPLIGHT & DOWNLIGHT
- (BA) [Symbol] - GRANVILLE ISLAND BOLLARD C/W DOWNLIGHT ONLY
- (PL) [Symbol] - POLE LIGHT EXISTING
- (EC) [Symbol] - WALL MOUNTED 49 LED LUMINAIRE C/W SHEPHERD HOOK STYLE ARM WALL BRACKET GALVANIZED STEEL)
- (EA) [Symbol] - NEW POLE
- DENOTES MOUNTED ON BOTTOM OF LINTEL

**DRAWING KEY NOTES:**

- ① REMOVE EXISTING POTLIGHTS. REPLACE W/ SPECIFIED NEW LED RECESSED LIGHTING AT EXISTING LOCATIONS.
- ② EXISTING LIGHT FIXTURE TO REMAIN.
- ③ SPARE NOTE
- ④ REMOVE EXISTING FIXTURE AND RETURN TO CMHC. INSTALL NEW SPECIFIED FIXTURE IN EXISTING LOCATION.

**GENERAL NOTES:**

- A. ALL TYPICAL GRANVILLE ISLAND BOLLARDS TO BE REVISED AS FOLLOWS:
  - 1. EXISTING TYPE 'BA' - REMOVE DOWNLIGHT RETURN TO CMHC AND INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE.
  - 2. EXISTING TYPE 'BAU' - REMOVE UPLIGHT AND SHROUD. DISCARD SHROUD OFFSITE AND RETURN FIXTURE TO CMHC. INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE. REWIRE AS REQUIRED.
- B. ALL EXISTING UNDER BENCH FIXTURES (BELC,BELW) TO BE REPLACED WITH NEW SPECIFIED FIXTURES. RETURN OLD FIXTURES TO CMHC. REPLACE DAMAGED WIRING, CONDUIT AND OUTLET BOXES REQUIRED.
- C. ALL LINTEL LIGHTING TO BE AS FOLLOWS:
  - 1. REMOVE AND DISCARD OFFSITE ALL TYPE 'PAR' FIXTURES. PATCH ALL UNUSED HOLES IN LINTELS.
  - 2. REMOVED ALL EXISTING TYPE 'JJC' FIXTURES AND RETURN TO CMHC. REVISE WIRING, CIRCUITRY AND CONTROLS TO SUIT NEW LAYOUTS. OBSERVE TOP OR BOTTOM MOUNTING NOTES. PATCH UNUSED HOLES REQUIRED.
  - 3. ALL LIGHTING FIXTURES NOT NOTED AS EXISTING TO REMAIN ARE TO BE REMOVED AND DISCARDED OFFSITE. ALL REDUNDANT WIRING, CONDUIT AND OUTLET BOXES ARE TO BE REMOVED AND BUILDING FINISHES TO BE REPAIRED TO MATCH SURROUNDING CONDITIONS.

CONSULTANT

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No.	Issued	By yy/mm/dd

Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE  
EXISTING CONDITION  
VANCOUVER BC CANADA

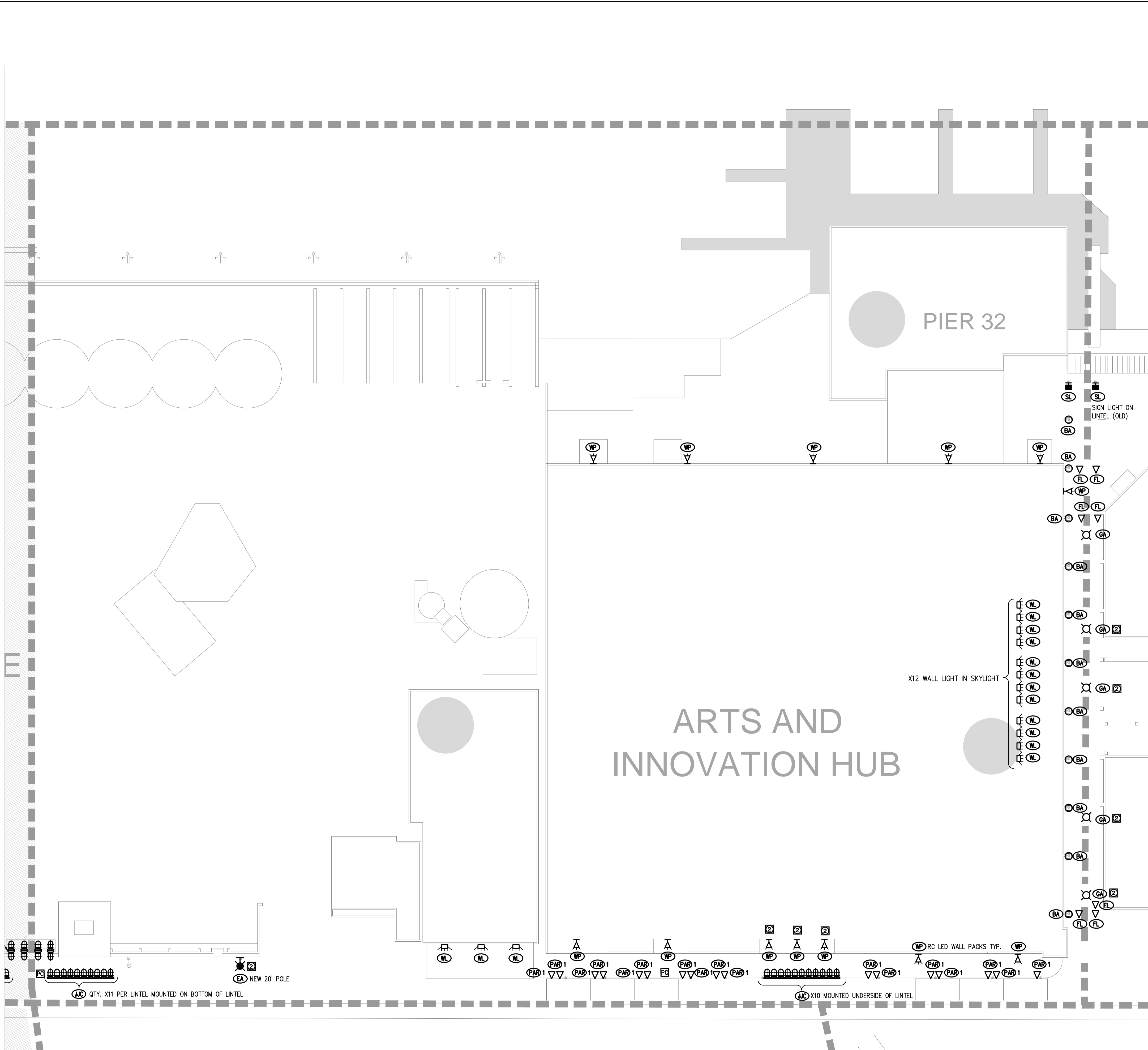
Title  
**ZONE H PLAN - EXISTING**

Project No. 14440	Scale 1:1:250
Drawn By DM	Checked By KK/DN
Drawing No. E4.0	Date 25 NOV. 2020



- G. ALL DIMMED LIGHTS ARE TO REMAIN AS IS.  
NO REPLACEMENT REQUIRED.**

Drawihng NO.	Date
E 1.1	25 NOV. 2020



EXISTING LUMINAIRE SYMBOL SCHEDULE:		
		JAM JAR CEILING MOUNT
		JAM JAR WALL MOUNT
		UNDERBENCH JAM JAR CEILING MOUNT
		UNDERBENCH JAM JAR WALL MOUNT
		WALL PACK EXISTING VARIOUS TYPES
		FLOODLIGHT VARIOUS TYPES
		WALL LIGHT VARIOUS ON RIGID PIPE
		SINGLE HEAD PAR LAMP HOLDER
		DOUBLE HEAD PAR LAMP HOLDER
		GRANVILLE ISLAND BOLLARD C/W UPLIGHT & DOWNLIGHT
		GRANVILLE ISLAND BOLLARD C/W DOWNLIGHT ONLY
		POLELIGHT EXISTING
		POLELIGHT NEW SPEC
		PHOTOCELL
		HOLOPHANE
		POTLIGHT VARIOUS
		SIGNLIGHT ON RIGID PIPE

DRAWING KEY NOTES:	
	REMOVE EXISTING POTLIGHTS. REPLACE W/ SPECIFIED NEW LED RECESSED LIGHTING AT EXISTING LOCATIONS.
	EXISTING LIGHT FIXTURE TO REMAIN.
	SPARE NOTE
	REMOVE EXISTING FIXTURE AND RETURN TO CMHC. INSTALL NEW SPECIFIED FIXTURE IN EXISTING LOCATION.

GENERAL NOTES:	
A. ALL TYPICAL GRANVILLE ISLAND BOLLARDS TO BE REVISED AS FOLLOWS:	
1. EXISTING TYPE 'BA' - REMOVE DOWNLIGHT RETURN TO CMHC AND INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE.	
2. EXISTING TYPE 'BAU' - REMOVE UPLIGHT AND SHROUD. DISCARD SHROUD OFFSITE AND RETURN FIXTURE TO CMHC. INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE. REWIRE AS REQUIRED.	
B. ALL EXISTING UNDER BENCH FIXTURES (BELC,BELW) TO BE REPLACED WITH NEW SPECIFIED FIXTURES. RETURN OLD FIXTURES TO CMHC. REPLACE DAMAGED WIRING, CONDUIT AND OUTLET BOXES REQUIRED.	
C. ALL LINTEL LIGHTING TO BE AS FOLLOWS:	
1. REMOVE AND DISCARD OFFSITE ALL TYPE 'PAR' FIXTURES. PATCH ALL UNUSED HOLES IN LINTELS.	
2. REMOVED ALL EXISTING TYPE 'JJC' FIXTURES AND RETURN TO CMHC. REVISE WIRING, CIRCUITRY AND CONTROLS TO SUIT NEW LAYOUTS. OBSERVE TOP OR BOTTOM MOUNTING NOTES. PATCH UNUSED HOLES REQUIRED.	
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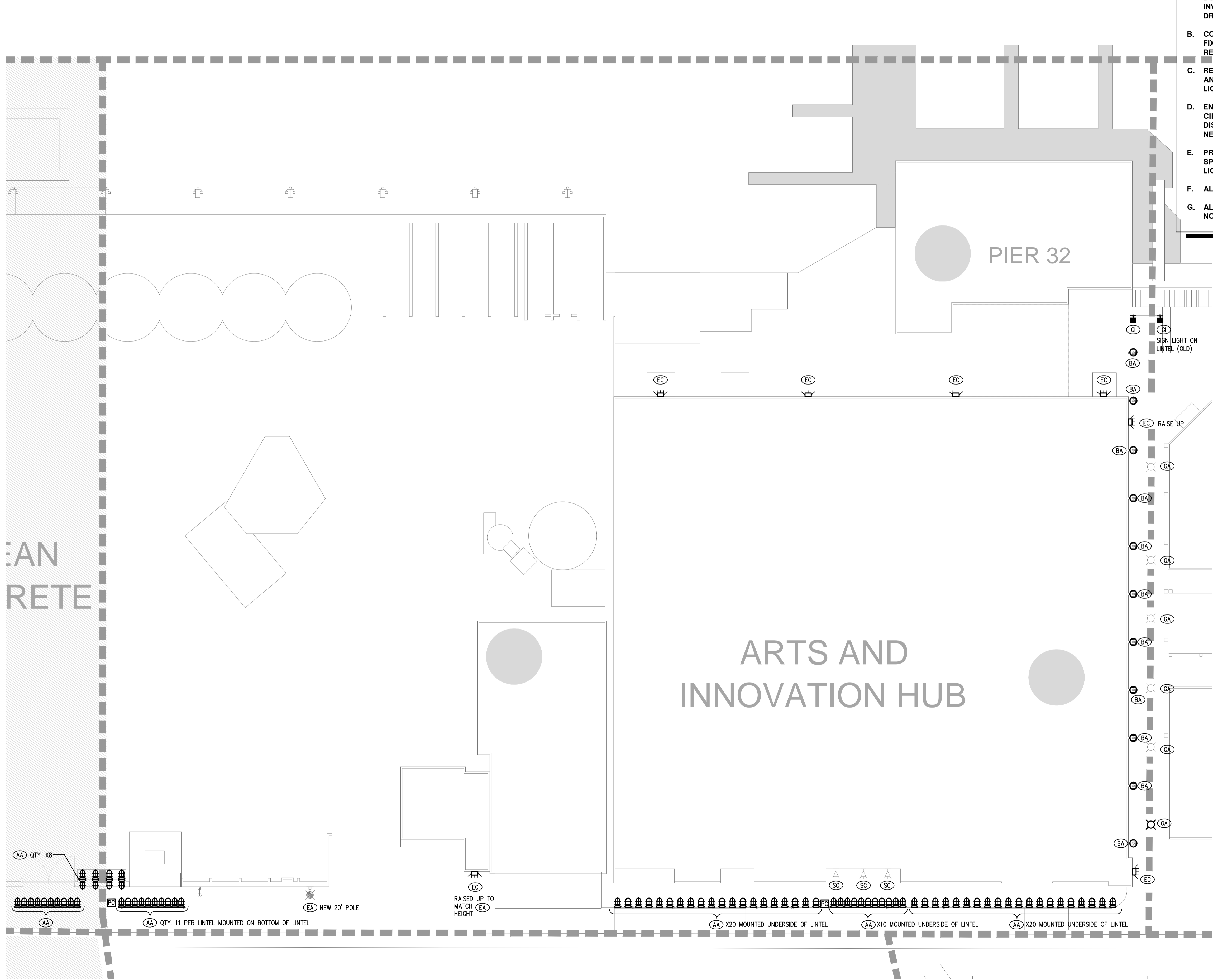
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Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE  
EXISTING CONDITION  
VANCOUVER BC CANADA

Title  
ZONE I PLAN - EXISTING

Project No. 14440	Scale 1:1:250 M
Drawn By DM	Checked By KK/DN
Drawing No.	Date 07. OCT.2020

E5.0



- GENERAL NOTES:**
- A. ALL LINTEL LIGHTS TO BE INSTALLED TO MATCH SPACING. ALL LIGHTS ARE TO FACE DOWN UNLESS OTHERWISE NOTED OR INVOLVE RUNNING OVER A VEHICULAR DRIVEWAY/PATH.
  - B. CONFIRM MOUNTING HEIGHTS OF ALL FIXTURES THAT ARE NOT INDICATED TO BE REPLACED AT EXISTING LOCATIONS.
  - C. REMOVE ALL REDUNDANT WIRING , CONDUIT AND OUTLET BOXES NOT REQUIRED FOR NEW LIGHTING LAYOUTS.
  - D. ENSURE ALL EXTERIOR LIGHTING IS CIRCUITED AND CONTROLLED BY CMHC DISTRIBUTION KIOSK PANELS. REVISE IF NECESSARY.
  - E. PROVIDE NEW WIRING AND RACEWAYS PER SPECIFICATIONS TO ACCOMODATE NEW LIGHTING LAYOUTS.
  - F. ALL FIXTURES IN BOLD ARE NEW.
  - G. ALL DIMMED LIGHTS ARE TO REMAIN AS IS. NO REPLACEMENT REQUIRED.

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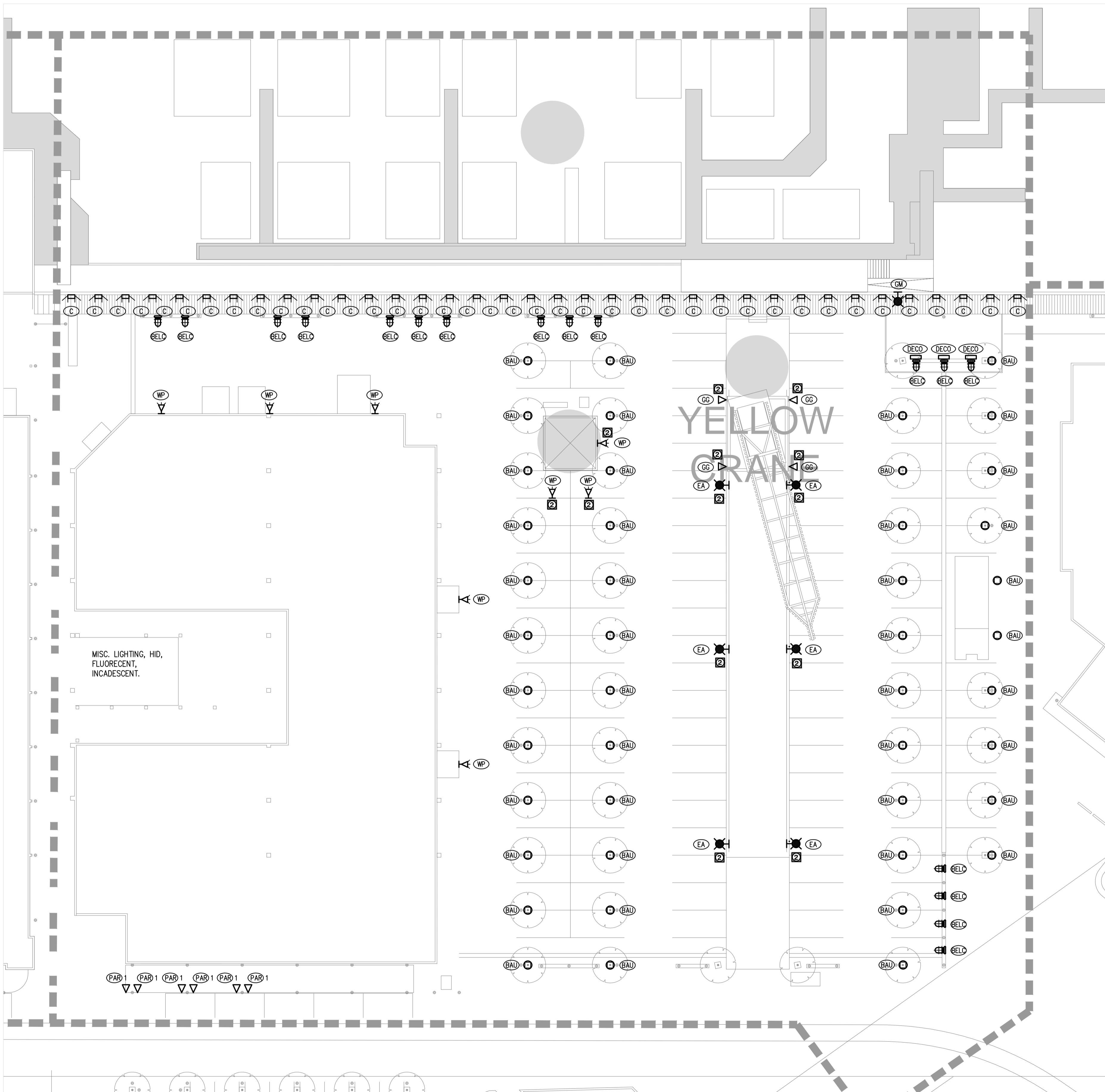
Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE

VANCOUVER BC CANADA

Title  
**ZONE I1PLAN**

Project No. 14440	Scale 1:250 M
Drawn By DM	Checked By KK/DN
Drawing No.	Date 18. NOV. 2020

E5.1



**EXISTING LUMINAIRE SYMBOL SCHEDULE:**

- BELC** - UNDERBENCH JAM JAR CEILING MOUNT
- WP** - WALL PACK EXISTING VARIOUS TYPES
- PAR** - SINGLE HEAD PAR LAMP HOLDER
- BAU** - GRANVILLE ISLAND BOLLARD C/W UPLIGHT & DOWNLIGHT
- DECO** - DECORATIVE LIGHT BOX
- EA** - POLE MOUNTED 49 LED LUMINAIRE NEW SPEC.
- GC** - 14W LED WIDE FLOOD LIGHT LUMEN PULSE NEW SPEC.
- C** - STEPLIGHTS

**DRAWING KEY NOTES:**

- 1** REMOVE EXISTING POTLIGHTS. REPLACE W/ SPECIFIED NEW LED RECESSED LIGHTING AT EXISTING LOCATIONS.
- 2** EXISTING LIGHT FIXTURE TO REMAIN.
- 3** SPARE NOTE
- 4** REMOVE EXISTING FIXTURE AND RETURN TO CMHC. INSTALL NEW SPECIFIED FIXTURE IN EXISTING LOCATION.

**GENERAL NOTES:**

- A. ALL TYPICAL GRANVILLE ISLAND BOLLARDS TO BE REVISED AS FOLLOWS:**
- EXISTING TYPE 'BA' - REMOVE DOWNLIGHT RETURN TO CMHC AND INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE.
  - EXISTING TYPE 'BAU' - REMOVE UPLIGHT AND SHROUD. DISCARD SHROUD OFFSITE AND RETURN FIXTURE TO CMHC. INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE. REWIRE AS REQUIRED.
- B. ALL EXISTING UNDER BENCH FIXTURES (BELC, BELW) TO BE REPLACED WITH NEW SPECIFIED FIXTURES. RETURN OLD FIXTURES TO CMHC. REPLACE DAMAGED WIRING, CONDUIT AND OUTLET BOXES REQUIRED.**
- C. ALL LINTEL LIGHTING TO BE AS FOLLOWS:**
- REMOVE AND DISCARD OFFSITE ALL TYPE 'PAR' FIXTURES. PATCH ALL UNUSED HOLES IN LINTELS.
  - REMOVED ALL EXISTING TYPE 'JJC' FIXTURES AND RETURN TO CMHC. REVISE WIRING, CIRCUITRY AND CONTROLS TO SUIT NEW LAYOUTS. OBSERVE TOP OR BOTTOM MOUNTING NOTES. PATCH UNUSED HOLES REQUIRED.
  - ALL LIGHTING FIXTURES NOT NOTED AS EXISTING TO REMAIN ARE TO BE REMOVED AND DISCARDED OFFSITE. ALL REDUNDANT WIRING, CONDUIT AND OUTLET BOXES ARE TO BE REMOVED AND BUILDING FINISHES TO BE REPAIRED TO MATCH SURROUNDING CONDITIONS.

CONSULTANT



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Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE  
EXISTING CONDITION  
VANCOUVER BC CANADA

Title  
ZONE I2 PLAN - EXISTING

Project No. 14440	Scale 1:1:250 M
Drawn By DM	Checked By KK/DN
Drawing No.	Date 25 NOV. 2020

E6.0

**GENERAL NOTES:**

- A. ALL LINTEL LIGHTS TO BE INSTALLED TO MATCH SPACING. ALL LIGHTS ARE TO FACE DOWN UNLESS OTHERWISE NOTED OR INVOLVE RUNNING OVER A VEHICULAR DRIVEWAY/PATH.
- B. CONFIRM MOUNTING HEIGHTS OF ALL FIXTURES THAT ARE NOT INDICATED TO BE REPLACED AT EXISTING LOCATIONS.
- C. REMOVE ALL REDUNDANT WIRING, CONDUIT AND OUTLET BOXES NOT REQUIRED FOR NEW LIGHTING LAYOUTS.
- D. ENSURE ALL EXTERIOR LIGHTING IS CIRCUITED AND CONTROLLED BY CMHC DISTRIBUTION KIOSK PANELS. REVISE IF NECESSARY.
- E. PROVIDE NEW WIRING AND RACEWAYS PER SPECIFICATIONS TO ACCOMMODATE NEW LIGHTING LAYOUTS.
- F. ALL FIXTURES IN BOLD ARE NEW.
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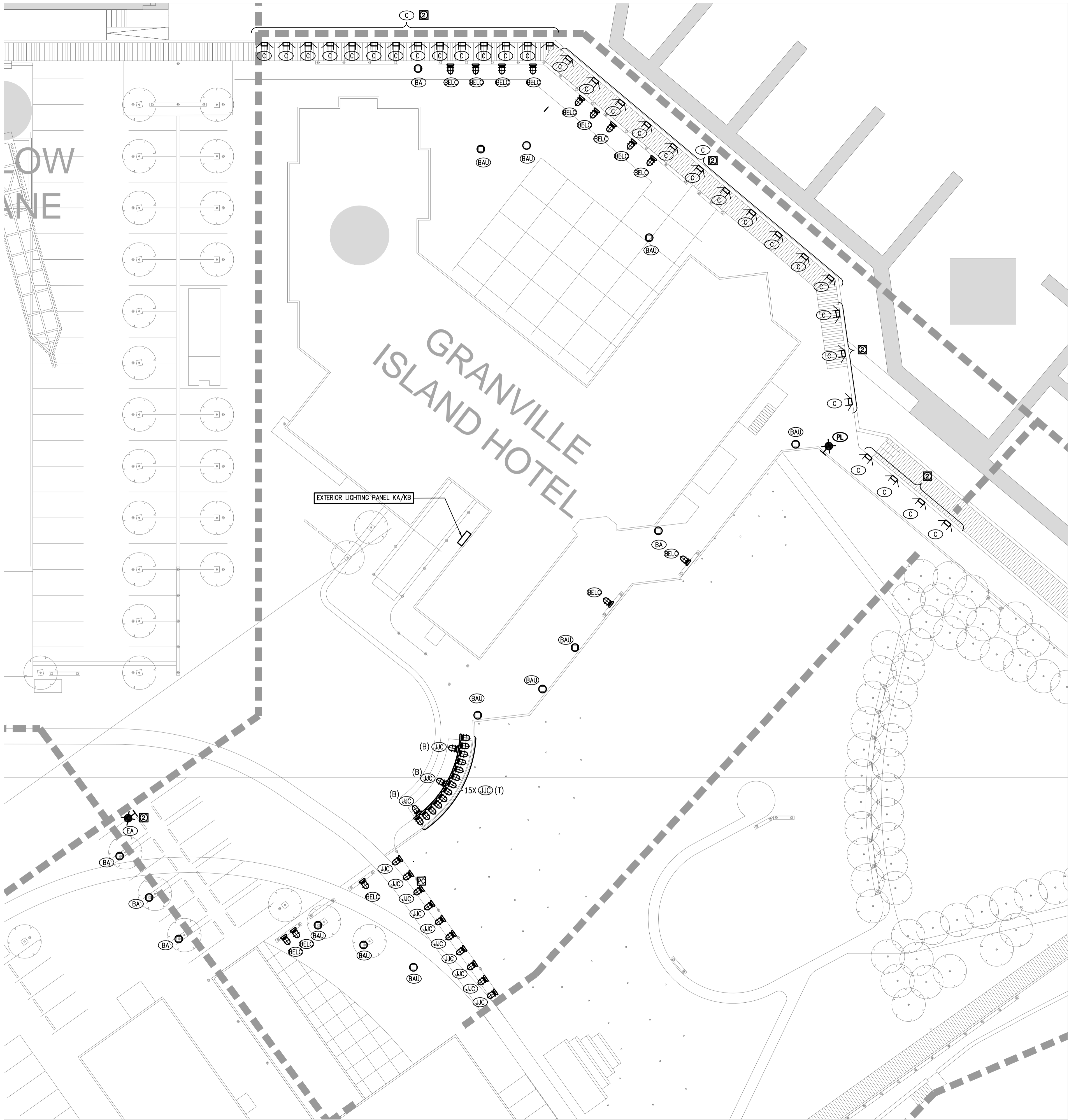
Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE

VANCOUVER BC CANADA

Title  
**ZONE I2 PLAN**

Project No. 14440	Scale 1:250 M
Drawn By DM	Checked By KK/DN
Drawing NO.	Date 25 NOV. 2020

E6.1



EXISTING LUMINAIRE SYMBOL SCHEDULE:

- (BELC) [Symbol] - UNDERBENCH JAM JAR CEILING MOUNT
- (WP) [Symbol] - WALL PACK EXISTING VARIOUS TYPES
- (PAR) 1 [Symbol] - SINGLE HEAD PAR LAMP HOLDER
- (BAU) [Symbol] - GRANVILLE ISLAND BOLLARD C/W UPLIGHT & DOWNLIGHT
- (DECO) [Symbol] - DECORATIVE LIGHT BOX
- (EA) [Symbol] - POLE MOUNTED 49 LED LUMINAIRE NEW SPEC.
- (GG) [Symbol] - 14W LED WIDE FLOOD LIGHT LUMEN PULSE NEW SPEC.
- (C) [Symbol] - STEPLIGHTS
- (PL) [Symbol] - POLELIGHT EXISTING
- (PC) [Symbol] - PHOTOCELL
- (T) - DENOTES MOUNTED ON TOP OF LINTEL
- (B) - DENOTES MOUNTED ON BOTTOM OF LINTEL

DRAWING KEY NOTES:

- 1 REMOVE EXISTING POTLIGHTS. REPLACE W/ SPECIFIED NEW LED RECESSED LIGHTING AT EXISTING LOCATIONS.
- 2 EXISTING LIGHT FIXTURE TO REMAIN.
- 3 SPARE NOTE
- 4 REMOVE EXISTING FIXTURE AND RETURN TO CMHC. INSTALL NEW SPECIFIED FIXTURE IN EXISTING LOCATION.

GENERAL NOTES:

- A. ALL TYPICAL GRANVILLE ISLAND BOLLARDS TO BE REVISED AS FOLLOWS:
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CONSULTING ENGINEERS

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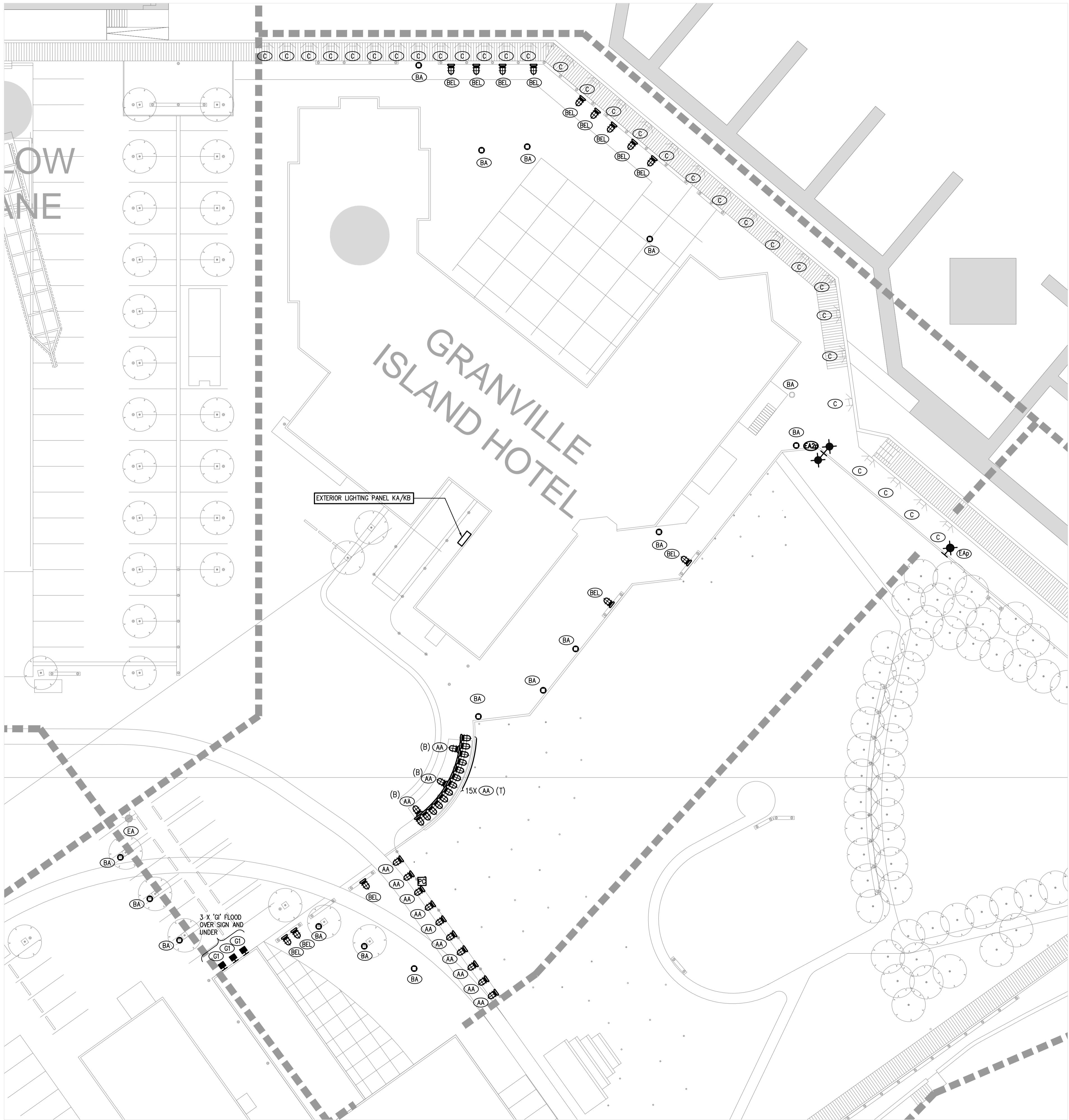
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Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE  
EXISTING CONDITION  
VANCOUVER BC CANADA

Title  
ZONE J1 PLAN - EXISITNG

Project No. 14440	Scale 1:1:250 M
Drawn By DM	Checked By KK/DN
Drawing NO.	Date 07 OCT. 2020

E7.0



- GENERAL NOTES:**
- A. ALL LINTEL LIGHTS TO BE INSTALLED TO MATCH SPACING. ALL LIGHTS ARE TO FACE DOWN UNLESS OTHERWISE NOTED OR INVOLVE RUNNING OVER A VEHICULAR DRIVEWAY/PATH.
  - B. CONFIRM MOUNTING HEIGHTS OF ALL FIXTURES THAT ARE NOT INDICATED TO BE REPLACED AT EXISTING LOCATIONS.
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Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE

VANCOUVER BC CANADA

Title  
**ZONE J1 PLAN**

Project No. 14440	Scale 1:250 M
Drawn By DM	Checked By KK/DN
Drawing NO.	Date 18 NOV. 2020

E7.1



**EXISTING LUMINAIRE SYMBOL SCHEDULE:**

- (J) J - JAM JAR CEILING MOUNT
- (BELC, BELW) J - UNDERBENCH JAM JAR CEILING MOUNT
- (BELW) J - UNDERBENCH JAM JAR WALL MOUNT
- (WP) W - WALL PACK EXISTING VARIOUS TYPES
- (WL) W - WALL LIGHT VARIOUS ON RIGID PIPE
- (PAR2) V - DOUBLE HEAD PAR LAMP HOLDER
- (BAL) B - GRANVILLE ISLAND BOLLARD C/W UPLIGHT & DOWNLIGHT
- (PL) P - POLELIGHT EXISTING
- (C) C - STEPLIGHTS
- (PC) P - PHOTOCELL
- (B) - DENOTES MOUNTED ON BOTTOM OF LINTEL

**DRAWING KEY NOTES:**

- 1 REMOVE EXISTING POTLIGHTS. REPLACE W/ SPECIFIED NEW LED RECESSED LIGHTING AT EXISTING LOCATIONS.
- 2 EXISTING LIGHT FIXTURE TO REMAIN.
- 3 SPARE NOTE
- 4 REMOVE EXISTING FIXTURE AND RETURN TO CMHC. INSTALL NEW SPECIFIED FIXTURE IN EXISTING LOCATION.

**GENERAL NOTES:**

- A. ALL TYPICAL GRANVILLE ISLAND BOLLARDS TO BE REVISED AS FOLLOWS:
- EXISTING TYPE 'BA' - REMOVE DOWNLIGHT RETURN TO CMHC AND INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE.
  - EXISTING TYPE 'BAU' - REMOVE UPLIGHT AND SHROUD. DISCARD SHROUD OFFSITE AND RETURN FIXTURE TO CMHC. INSTALL NEW SPECIFIED DOWNLIGHT FIXTURE. REWIRE AS REQUIRED.
- B. ALL EXISTING UNDER BENCH FIXTURES (BELC, BELW) TO BE REPLACED WITH NEW SPECIFIED FIXTURES. RETURN OLD FIXTURES TO CMHC. REPLACE DAMAGED WIRING, CONDUIT AND OUTLET BOXES REQUIRED.
- C. ALL LINTEL LIGHTING TO BE AS FOLLOWS:
- REMOVE AND DISCARD OFFSITE ALL TYPE 'PAR' FIXTURES. PATCH ALL UNUSED HOLES IN LINTELS.
  - REMOVED ALL EXISTING TYPE 'JJC' FIXTURES AND RETURN TO CMHC. REVISE WIRING, CIRCUITRY AND CONTROLS TO SUIT NEW LAYOUTS. OBSERVE TOP OR BOTTOM MOUNTING NOTES. PATCH UNUSED HOLES REQUIRED.
  - ALL LIGHTING FIXTURES NOT NOTED AS EXISTING TO REMAIN ARE TO BE REMOVED AND DISCARDED OFFSITE. ALL REDUNDANT WIRING, CONDUIT AND OUTLET BOXES ARE TO BE REMOVED AND BUILDING FINISHES TO BE REPAIRED TO MATCH SURROUNDING CONDITIONS.

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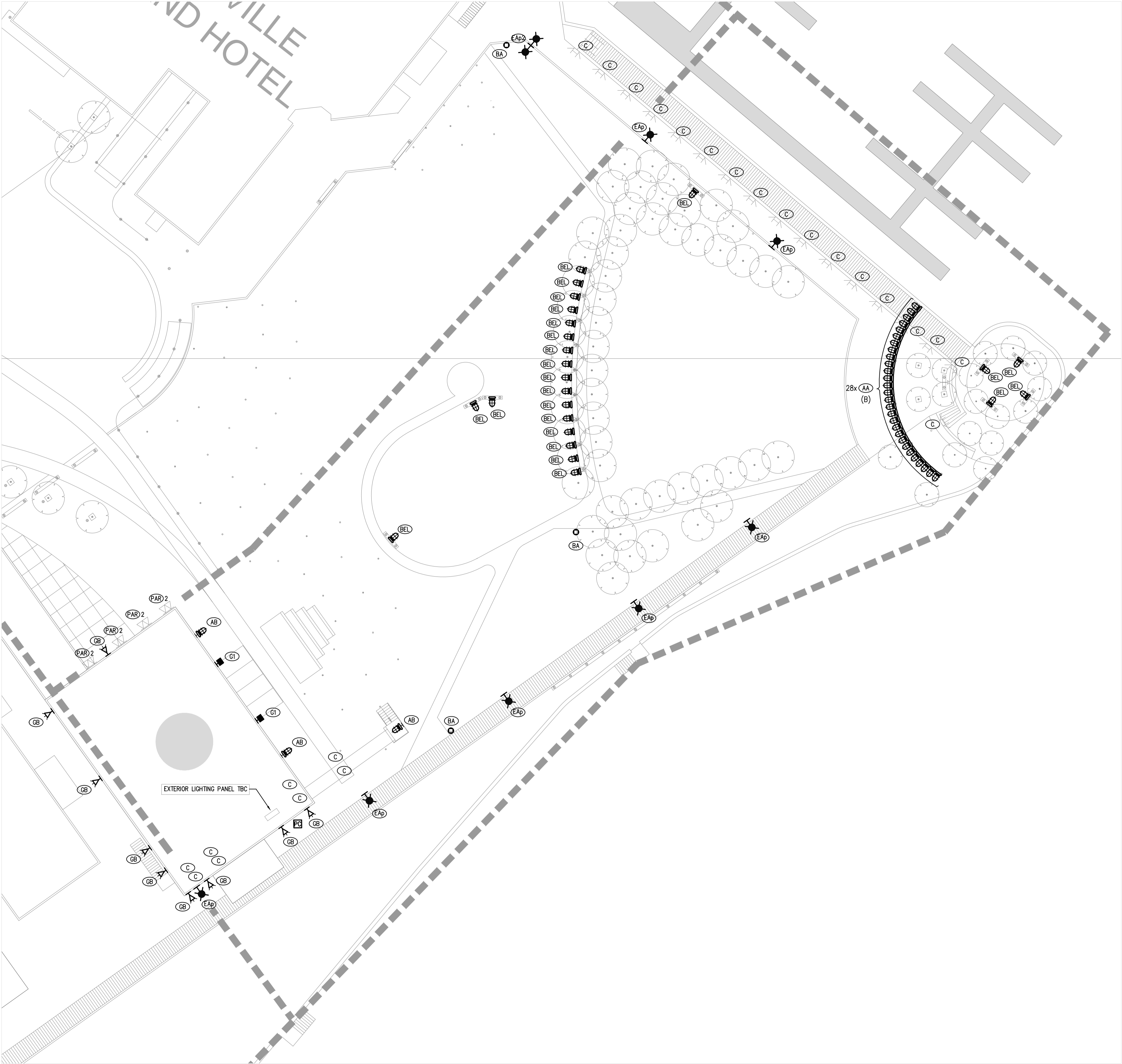
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4	-	-	-
3	ISSUED FOR TENDER	DM	2020.11.26
2	ISSUED FOR CONSTRUCTION	DM	2020.11.12
1	ISSUED FOR COORDINATION	DM	2020.11.05
No.	Issued	By	yy/mm/dd

Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE  
EXISTING CONDITION  
VANCOUVER BC CANADA

Title  
ZONE J2 PLAN - EXISTING

Project No. 14440	Scale 1:1:250
Drawn By DM	Checked By KK/DN
Drawing NO.	Date 07 OCT. 2020

E8.0



**GENERAL NOTES:**

- A. ALL LINTEL LIGHTS TO BE INSTALLED TO MATCH SPACING. ALL LIGHTS ARE TO FACE DOWN UNLESS OTHERWISE NOTED OR INVOLVE RUNNING OVER A VEHICULAR DRIVEWAY/PATH.
- B. CONFIRM MOUNTING HEIGHTS OF ALL FIXTURES THAT ARE NOT INDICATED TO BE REPLACED AT EXISTING LOCATIONS.
- C. REMOVE ALL REDUNDANT WIRING , CONDUIT AND OUTLET BOXES NOT REQUIRED FOR NEW LIGHTING LAYOUTS.
- D. ENSURE ALL EXTERIOR LIGHTING IS CIRCUITED AND CONTROLLED BY CMHC DISTRIBUTION KIOSK PANELS. REVISE IF NECESSARY.
- E. PROVIDE NEW WIRING AND RACEWAYS PER SPECIFICATIONS TO ACCOMMODATE NEW LIGHTING LAYOUTS.
- F. ALL FIXTURES IN BOLD ARE NEW.
- G. ALL DIMMED LIGHTS ARE TO REMAIN AS IS. NO REPLACEMENT REQUIRED.

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PHASE 4 EXTERIOR LIGHTING UPGRADE

VANCOUVER BC CANADA

Title  
ZONE J2 PLAN

Project No. 14440	Scale 1:250 M
Drawn By DM	Checked By KK/DN
Drawing NO. E8.1	Date 25 NOV. 2020

S-001: ELECTRICAL SPECIFICATIONS:

1. GENERAL
1. THE ELECTRICAL CONTRACTOR IS TO SUPPLY AND INSTALL ALL LABOUR AND MATERIALS NECESSARY TO PROVIDE A COMPLETE AND OPERATING ELECTRICAL SYSTEMS AS SPECIFIED OR INDICATED ON THE DRAWINGS. ANY WORK, EVEN IF NOT SHOWN OR SPECIFIED, WHICH IS OBVIOUSLY NECESSARY OR REASONABLY IMPLIED TO COMPLETE THE WORK, IS TO BE DONE AS IF IT WERE BOTH SHOWN OR SPECIFIED.

2. THE DRAWINGS OF THE DIVISION ARE PERFORMANCE DRAWINGS AND INDICATE THE GENERAL ARRANGEMENT OF WORK. THEY ARE DIAGRAMMATIC AND DO NOT SHOW ALL THE EXISTING STRUCTURAL AND CONSTRUCTION DETAILS. ANY INFORMATION INVOLVING ACCURATE MEASUREMENTS AND EXISTING CONDITIONS SHALL BE VERIFIED ON SITE. ALL NECESSARY ADJUSTMENTS, CHANGES, AND ADDITIONS TO CARRY OUT THE DESIGN INTENT IS TO BE MADE WITHOUT ADDITIONAL CHARGE.

3. CONTRACTOR TO VISIT SITE AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO TENDER. NO EXTRAS WILL BE ALLOWED FOR FAILURE TO DO SO.

4. CONTRACTOR TO ENSURE CONFORMANCE TO ALL APPLICABLE REGULATIONS OF WORSHIP BC AND SUBMIT ALL REQUIRED DOCUMENTATION TO AHJ PRIOR TO COMMENCING CONSTRUCTION.

5. CONTRACTOR TO HAVE APPROPRIATE FIRST AID AND WORK SAFE PRACTICES IN PLACE PRIOR TO COMMENCING WORK.

6. THE CONTRACTOR IS TO PROVIDE "AS-BUILT" RED LINE MARK UPS COMPLETE WITH CIRCUITS JUNCTION BOX AND KNOWN CONDUIT LOCATIONS UPON COMPLETION AND TO ALLOW AS40 PER SHEET FOR THE CONSULTANT TO UPDATE THE FILES FOR THE OWNER'S RECORD.
2. CODES, PERMITS AND INSPECTION
1. THE INSTALLATION IS TO COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE AND THE REGULATIONS OF THE ELECTRICAL INSPECTION AUTHORITY HAVING JURISDICTION. THESE DOCUMENTS ARE NOT INTENDED TO RETERATE ANY CODES OR REGULATIONS. ALL CONTRACTORS AND THEIR RESPECTIVE TRADES PEOPLE ARE TO BE LICENSED AND QUALIFIED TO PERFORM THIS TYPE OF WORK. NO ALLOWANCE WILL BE MADE FOR THE FAILURE OF THE CONTRACTOR TO PROVIDE SUITABLE GROUNDING, ACCESS PANELS, WIRING METHODS, ETC. TO THE SATISFACTION OF THE APPLICABLE CODES AND INTENT OF THESE DOCUMENTS.

2. GRANVILLE ISLAND IS FEDERALLY OWNED LAND. A B.C. SAFETY AUTHORITY INSPECTOR MAY INSPECT BUT ONLY UNDER THE CANADIAN ELECTRICAL CODE AS ITS IS PUBLISHED FEDERALLY. NO BUILDING FOR AMENDMENTS PUBLISHED BY BC SAFETY AUTHORITY ARE APPLICABLE. AS AN ALTERNATIVE, A FEDERAL INSPECTOR MAY BE BROUGHT IN TO INSPECT THE WORK.

3. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS REQUIRED FOR THE COMPLETION OF THE JOB. PROVIDE FOR DRAWINGS TO THE POWER AUTHORITY AS REQUIRED BY THE GOVERNING RULES AND REGULATIONS.
3. STANDARDS OF MATERIAL AND QUALITY OF INSTALLATION
1. ALL MATERIALS ARE TO BE NEW UNLESS OTHERWISE INDICATED, OF MINIMUM QUALITY SPECIFIED AND ARE TO CONFORM TO THE REQUIREMENTS OF THE CANADIAN STANDARDS ASSOCIATION (CSA) FOR THE INTENDED APPLICATION AND BEAR THE LABEL OF CSA OR EQUIVALENT AUTHORITY. WHERE EQUIPMENT OR MATERIAL IS SPECIFIED BY TECHNICAL DESCRIPTION ONLY, IT IS TO BE OF THE BEST COMMERCIAL QUALITY OBTAINABLE FOR THE PURPOSE.

2. ALL SIMILAR PRODUCTS TO BE OF ONE TYPE AND FROM ONE MANUFACTURE UNLESS OTHERWISE NOTED.

3. ALL WORK TO BE LAID OUT IN A NEAT AND ORGANIZED MANNER.

4. WHERE WIRING IS EXPOSED, IT SHALL BE RUN PARALLEL OR PERPENDICULAR TO BUILDING LINES.
4. ALTERNATES
1. ALTERNATES ENTAILING ADDITIONAL WORK OR DELETIONS ARE TO BE CARRIED OUT ONLY UPON THE WRITTEN REQUEST OF THE PRIME CONSULTANT.

2. ANY PRICES SUBMITTED BY THE ELECTRICAL CONTRACTOR FOR ADDITIONAL WORK OR ALTERATIONS ARE TO INCLUDE A PRICE BREAKDOWN FOR ALL LABOUR AND MATERIALS. WHERE REQUIRED, PRICING FOR LABOUR AND MATERIALS WILL BE CHECKED BY INVOICES, TIME SHEETS, ETC. NO EXTRAS WILL BE ALLOWED WITHOUT PRIOR WRITTEN AUTHORIZATION.
5. SHOP DRAWINGS AND APPROVALS
1. THE ELECTRICAL CONTRACTOR IS TO SUBMIT, TO THE ENGINEER FOR APPROVAL, A COMPLETE LIST OF ALL A COMPLETE LIST OF ALL EQUIPMENT PROPOSED TO BE USED ON THE PROJECT, IDENTIFYING NAME OF MANUFACTURER, RATING, TECHNICAL DESCRIPTION AND CATALOGUE NUMBER. ALL SUBMISSIONS ARE TO BE MADE ON A TRANSPARENCY TYPE MATERIAL (SUITABLE FOR REPRODUCING) AND PROVIDED WITH SUFFICIENT ROOM FOR ALL APPROVAL STAMPS (FOR 8 1/2" X 11" CATALOGUE CUTS USE AN 8 1/2" X 14" FORMAT TYPICAL). SHOP DRAWINGS WILL NOT BE REVIEWED UNTIL BOTH THE ELECTRICAL CONTRACTOR AND GENERAL (PRIME) CONTRACTOR HAVE REVIEWED, STAMPED AND SIGNED OFF THE RESPECTIVE DRAWINGS. SUBMISSIONS ARE TO INCLUDE ONE (1) TRANSPARENCY AND THREE (3) COPIES, ALL STAMPED BY THE RESPECTIVE CONTRACTORS.
6. SETTING OUT WORK
1. THE ELECTRICAL CONTRACTOR IS TO THOROUGHLY EXAMINE THE SITE AND DRAWINGS AND REPORT ANY DISCREPANCIES, ERRORS OR OMISSIONS TO THE ENGINEER PRIOR TO TENDER. THE ELECTRICAL CONTRACTOR IS TO OBTAIN THE ENGINEER'S PERSONAL SUPERVISION, LAYOUT THE WORK, DO ALL NECESSARY LEVELING AND MEASURING, OR EMPLOY A COMPETENT ENGINEER TO DO SO. FIGURES, FULL SIZE AND DETAILED DRAWINGS ARE TO TAKE PRECEDENCE OVER SCALE MEASUREMENTS OF THE DRAWINGS.

2. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR CORRECTING ALL WORK COMPLETED CONTRARY TO THE INTENT OF THE DRAWINGS AND IS TO BEAR ALL COSTS OF SAME, WHERE THE INTENT OF THE DRAWINGS IS NOT CLEAR, OBTAIN CLARIFICATION FROM THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

3. IT IS THE INTENT OF THESE DRAWINGS TO PROVIDE FOR AN ELECTRICAL INSTALLATION COMPLETE AND IN OPERATING CONDITION AND THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR THE SUPPLY AND INSTALLATION OF ALL MATERIALS NECESSARY TO ACCOMPLISH THIS.

4. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY THE IMPROPER LOCATION OR CARRYING OUT OF HIS WORK.

5. THE ELECTRICAL CONTRACTOR, IN SETTING OUT OF THE WORK IS TO MAKE REFERENCE TO THE ELECTRICAL, MECHANICAL, STRUCTURAL AND ARCHITECTURAL DRAWINGS. CONSULT WITH THE RESPECTIVE TRADES IN SETTING OUT LOCATIONS FOR CONDUIT RUNS, LIGHTING FIXTURES, PANEL ASSEMBLIES, ETC. SO THAT CONFLICTS ARE AVOIDED AND SYMMETRICAL EVEN SPACING IS MAINTAINED.

6. CONDUIT IS TO BE LAID OUT TO AVOID INTERFERENCE WITH OTHER TRADES AND IS TO MAINTAIN MAXIMUM HEADROOM WITH THE MINIMUM NUMBER OF CROSSOVERS.

7. SWITCH MOUNTING HEIGHTS ARE TO BE CO-ORDINATED WITH THE ARCHITECTURAL DETAILS AND ARE TO BE ADJUSTED AS NECESSARY TO CO-ORDINATE WITH PANELING, MASONRY COURSE LINE, ETC. CONFIRM WITH ARCHITECT BEFORE INSTALLATION.

8. BEFORE INSTALLING WALL OUTLET BOXES, THE ELECTRICAL CONTRACTOR IS TO CHECK THE ARCHITECTURAL DRAWINGS FOR ROOM DETAILS, DOOR SWINGS, BUILT-IN UNITS, ETC. AND IS TO ADJUST OUTLET POSITIONS TO CO-ORDINATE WITH SUCH ITEMS. CONFIRM WITH ARCHITECT BEFORE INSTALLATION.

9. THE ELECTRICAL CONTRACTOR IS TO REFER TO MECHANICAL DRAWINGS FOR LOCATION OF THERMOSTATS, RADIATION CABINETS, ETC. OUTLETS ARE TO BE ADJUSTED IN THESE AREAS TO CO-ORDINATE WITH THE MECHANICAL EQUIPMENT. CONFIRM WITH ARCHITECT BEFORE INSTALLATION.

10. WHERE SWITCHES, RECEPTACLES, ETC. ARE SHOWN IN THE SAME GENERAL LOCATIONS, THESE OUTLETS ARE TO BE LINED UP VERTICALLY.

11. THE ELECTRICAL CONTRACTOR IS TO COORDINATE WITH ALL EQUIPMENT SUPPLIERS FOR THE EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PRIOR TO ROUGH-IN.

7. NAMETAGS
1. WATER PROOF INDELEIBLE LABEL TAGS ARE TO BE PLACED ON ALL WIRING IN ALL JUNCTION BOXES AND OUTLET BOXES. NEUTRAL CONDUCTORS TO BE LABELED IDENTIFYING WHICH PHASE CONDUCTORS THEY ARE ASSOCIATED WITH.

2. NAMETAGS ARE TO BE THREE LAYER LAMINATED PLASTIC BLACK/WHITE/BLACK WITH ETCHED LETTERS TO ONE WHITE LETTERS ON BLACK BACKGROUND. EDGES ARE TO BE BEVELLED. EMBOSSED ADHESIVE BACKED DYMO NAMETAGS ARE NOT TO BE USED FOR PANEL BOUNDS, MOTOR STARTERS, DISTRIBUTION CENTRES, ETC.
8. TESTING
1. ALL PORTIONS OF THE ELECTRICAL WORK IS TO BE TESTED AND CHECKED FOR SATISFACTORY OPERATION.

2. WHEN ADDING/REPLACING LUMINAIRES, CHECK EXISTING CIRCUITS FOR VOLTAGE DROP AND PHASE BALANCE. KEEP A RECORD AND PROVIDE THE DOCUMENTATION OF TESTING TO THE ENGINEER UPON COMPLETION OF THE PROJECT.

3. UPON COMPLETION OF THE WORK AND IMMEDIATELY PRIOR TO FINAL INSPECTION AND TAKEOVER THE ELECTRICAL CONTRACTOR IS TO CHECK THE LOAD BALANCE ON ALL FEEDER, DISTRIBUTION CENTRES, PANELS, ETC. TESTS ARE TO BE CARRIED OUT BY TURNING ON ALL POSSIBLE LOADS IN THE PROJECT AND CHECKING THE LOAD CURRENT BALANCE. IF LOAD UNBALANCE EXCEEDS 15 PERCENT, RECONNECT THE CIRCUITS TO BALANCE THE LOAD.
9. CO-ORDINATION BETWEEN TENANT AND EXTERIOR LIGHTING SYSTEM
1. CHECK AND CO-ORDINATE ALL SYSTEMS IN THE TENANT AREAS WHICH ARE IMPACTED BY THE EXTERIOR LIGHTING UPGRADE TO ENSURE THEIR PROPER OPERATION.

2. PROVIDE INTERFACING COMPONENTS BETWEEN NEW AND EXISTING SYSTEMS AS NECESSARY FOR PROPER PERFORMANCE AND OPERATION.
10. USE OF BASE BUILDING MATERIAL AND EQUIPMENT
1. TEST BASE BUILDING EQUIPMENT WHICH IS TO REMAIN IN AREAS BEING RENOVATED FOR PROPER OPERATION AND REPAIR AS NECESSARY.

2. CLEAN, TEST FOR PROPER OPERATION, AND REPAIR AS NECESSARY BEFORE BEING PUT BACK INTO SERVICE. BASE BUILDING EQUIPMENT TO BE RELOCATED OR RE-USED.

3. UNLESS NOTED OTHERWISE, BASE BUILDING WIRING MATERIAL MAY BE RE-USED IF ACCEPTABLE TO THE INSPECTION AUTHORITIES.

4. REPAIR OR REPLACE WITHOUT ADJUSTMENT TO THE CONTRACT PRICE ALL BASE BUILDING EQUIPMENT WHICH IS DAMAGED IN THE PROCESS OR RELOCATION.

5. UNLESS NOTED OTHERWISE, PROVIDE ADDITIONAL EQUIPMENT OF THE SAME TYPE AND MANUFACTURE WHERE REQUIRED TO SUPPLEMENT EXISTING EQUIPMENT.
11. SALVAGE MATERIALS
1. ALL EXISTING MATERIALS IN THE TENANT AREAS OF THE BASE BUILDING WHICH ARE NOT TO REMAIN OR BE RE-USED IS TO REMAIN THE PROPERTY OF THE BUILDING OWNER UNLESS NOTED OTHERWISE.
12. BASE BUILDING SERVICES
1. DISCONNECT AND REMOVE ALL BASE BUILDING SERVICES WHICH ARE ABANDONED.

2. REMOVE ALL CONDUIT WORK WHICH IS ABANDONED EXCEPT CUT FLUSH WHERE EMBEDDED IN STRUCTURE.

3. WHERE BASE BUILDING WIRING DEVICES ARE ABANDONED BUT OUTLET BOXES ARE TO REMAIN, PROVIDE BLANK PLATES OF MATERIAL AS SPECIFIED.

4. MAKE SAFE ALL CIRCUIT WIRING LEFT FOR FUTURE USE.
13. INTERRUPTION AND SERVICES
1. ALL INTERRUPTIONS OF BASE BUILDING SERVICES (POWER, WATER, ETC.) ARE TO BE CO-ORDINATED THROUGH THE BUILDING OWNER AND TO BE EFFECTED ONLY AS DIRECTED BY THE BUILDING OWNER.
14. PREMIUM TIME
1. INCLUDE COST OF PREMIUM TIME IN TENDER PRICE FOR WORK DURING NIGHTS, WEEKENDS OR OTHER TIME OUTSIDE NORMAL WORKING HOURS REQUIRED TO MAINTAIN ALL ELECTRICAL SERVICES IN OPERATION.
15. CONDUIT
1. ALL EXPOSED CONDUIT SHALL BE RIGID GALVANIZED STEEL MINIMUM SIZE 35mm COMPLETE WITH THREADED COUPLINGS AND CONNECTORS. NO ENT PERMITTED.

2. USED OF TEC90 IS NOT PERMITTED UNLESS SPECIFIC INSTALLATION AREA IS REQUESTED IN WRITING FOR APPROVAL BY THE ENGINEER AND THE CONTRACT ADMINISTRATOR.

3. ALL STRAPS TO BE RIGID GALVANIZED STEEL.

4. ALL UNDERGROUND CONDUIT SHALL BE THICK WALLED RIGID PVC AND SHALL BE MINIMUM 35mm DIAMETER. ALL CONDUIT, FITTINGS AND CEMENT TO BE CSA CERTIFIED. DBI IS NOT PERMITTED.

4. PROVIDE CONDUIT EXPANSION JOINTS WHERE REQUIRED BY CODE.

5. SIZE CONDUITS TO CODE REQUIREMENTS, PROVIDE LARGER SIZE WHERE NOTED.

6. ALL CONDUIT IS TO BE TESTED FOR CLEAR BORE.

7. INSTALL A CONTINUOUS NYLON CORD IN EACH CONDUIT LEFT EMPTY.
16. OUTLET BOXES
1. ALL OUTDOOR LOCATED OUTLET BOXES AND JUNCTION BOXES ARE TO MEET LOCATION RATED WITH THREADED HUB PROVISIONS AND OF THE SAME MANUFACTURE.

2. ALL INGROUND JUNCTION BOXES SHALL BE VALEMONT WEST COAST ENGINEERING-25020 - LARGE ROUND DUAL-TYPE 10 CONFIGURATION COMPLETE WITH LID-550 AND DRAIN PLATE PART # 25810. JUNCTION BOXES TO BE BEDDED ON WELL GRADED BASE COURSE AGGREGATE. CONDUCTORS SPLICED OR PULLED THROUGH SHALL BE LABELED WITH ADEQUATE SLACK TO PROTRUDE ABOVE GRADE FOR MAINTENANCE.

3. PVC CONDUITS ENTERING TYPE 10 JUNCTION BOXES SHALL BE SLOPED TOWARD THE JUNCTION BOX FOR DRAINING AND TERMINATED WITH APPROVED BELL ENDS.
17. WIRE AND CABLE
1. INSTALL ALL WIRING IN CONDUIT UNLESS OTHERWISE NOTED. ALL WIRING IS TO BE COPPER AND MINIMUM #12 AWG AND SHALL BE STRANDED.

2. ALL INSULATED CONDUCTORS MUST BE OF THE TYPE APPROVED FOR THE LOCATION OF INSTALLATION AND BE COLOR CODED: WHITE FOR NEUTRAL, RED, BLACK AND BLUE FOR EACH PHASE AND GREEN FOR GROUND.

3. ALE POLE LIGHTING SHALL BE PROVIDED WITH ONE IN-LINE CARTRIDGE FUSE PER LUMINAIRE.

4. CONDUCTORS RUN IN RIGID PVC OR INSIDE OR STREET LIGHT POLES SHALL BE RIGID AND INSTALLED WITH ADEQUATE SLACK TO PERMIT REMOVAL OF CONNECTED WIRES AND FUSING THROUGH THE HAND HOLE.

18. ACCESS PANELS AND DOORS
1. PROVIDE ACCESS PANELS OR DOORS TO ALLOW READY ACCESS TO ALL CONCEALED ELECTRICAL JUNCTION BOXES AND/OR PRODUCTS REQUIRING ADJUSTMENTS OR MAINTENANCE.
19. POWER PANELS AND KIOSK
1. KEEP AND ACCURATE RECORD OF CIRCUITS WHERE EXISTING LUMINAIRES ARE BEING REPLACED FOR ADD. UPDATE WITH TYPE WRITTEN PANEL SCHEDULES FOR ALL KIOSKS AND PANELS WHERE WORK IS PERFORMED.

2. EXTERIOR LIGHTING MAY BE CONNECTED TO EXISTING CONTROLS WHERE POSSIBLE; OTHERWISE PROVIDE NEW TIME CLOCK, PHOTO CELL AND RELAYS AS REQUIRED.
20. DISTRIBUTION EQUIPMENT
1. DISTRIBUTION EQUIPMENT CONSISTS OF ELECTRICAL COMPONENTS AS DETAILED ON DRAWINGS.
21. WIRING DEVICES
1. SWITCHES: QUIET, SLOW MAKE, SLOW BREAK DESIGN, TOGGLE HANDLE, WITH TOTALLY ENCLOSED CASE RATED TO MATCH OR EXCEED UPSTREAM OVERCURRENT DEVICE, 247 VOLT, AC TYPE WITH WIDE FACE BODY AND FULL GANG MATCHING TYPE. SWITCH AND PILOT LIGHT: PUSH ACTION TYPE WITH RED HANDLE. INTEGRAL LONG-LIFE PILOT LIGHT, RATED AS SPECIFIED ABOVE OR CALLED FOR ON THE DRAWINGS. COLOUR: PROVIDE IVORY BAKELITE SWITCHES IN ALL AREAS, UNLESS DIRECTED OTHERWISE BY THE OWNER.

2. HUBBEL, BRYANT OR APPROVED EQUAL.
22. LUMINAIRES (LIGHTING FIXTURES)
1. THE CONTRACTOR SHALL PROVIDE ALL LIGHTING PRODUCTS INCLUDING ALL WIRING, BASES, LUMINAIRES, LAMPS, PHOTO OR OTHERWISE DAMAGED SWITCHES AND OTHER ASSOCIATED CONTROLS PER DRAWINGS AND SPECIFICATIONS TO FORM A COMPLETE EXTERIOR LIGHTING SYSTEM CONSISTENT WITH PREVIOUS EXTERIOR LIGHTING UPGRADE PHASES AND COMPLIANT WITH THE CURRENT CEC PART 1, 24TH EDITION AND MASTER MUNICIPAL CONSTRUCTION DOCUMENT PLATINUM EDITION.

2. INSTALL ALL FIXTURES IN THE STANDARD MANNER FOR THE TYPE OF FIXTURE AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

3. ALL LAMPS CONTAINING MERCURY & PCB'S SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL LAWS.

4. SUPPORT ALL FIXTURES FROM STRUCTURAL MEMBERS EXCEPT THAT FIXTURES INSTALLED IN SUSPENDED CEILINGS MAY BE SUPPORTED BY THE CEILING PROVIDED THE SUPPORTS ARE REINFORCED TO CARRY THE ADDITIONAL LOAD.
23. LOCAL AUTHORITY INSPECTION REPORTS
1. SUBMIT ALL COPIES OF THE LOCAL AUTHORITY INSPECTION REPORTS TO THE ENGINEER FOR REVIEW. PHOTOCOPIES ARE ACCEPTABLE.
24. MAINTENANCE MANUALS AND "FIELD RECORD" DRAWINGS
1. THE ELECTRICAL CONTRACTOR IS TO PROVIDE THE OWNER WITH TWO (2) COMPLETE MAINTENANCE MANUALS (COMPLETE WITH LIGHTING FIXTURE INFORMATION AND SHOP DRAWINGS, ETC.) AND TWO (2) COMPLETE SETS OF BLUE-LINE PRINTS MARKED "FIELD RECORD DRAWINGS" INDICATING ALL CHANGES MADE DURING CONSTRUCTION. THE ELECTRICAL CONTRACTOR IS TO MAINTAIN, AT ALL TIMES, ON THE SITE, A COMPLETE SET OF CLEAN ELECTRICAL DRAWINGS RECORDING THE ACTUAL PROGRESS OF THE ELECTRICAL INSTALLATION INDICATING ALL VARIATIONS FROM THE TENDER DRAWINGS.
25. GUARANTEE
1. THE ELECTRICAL CONTRACTOR IS TO GUARANTEE THE SATISFACTORY OPERATION OF ALL WORK AND APPARATUS INSTALLED UNDER THIS CONTRACT AND IS TO REPLACE FORTHWITH, AT HIS OWN EXPENSE, ANY PART WHICH MAY FAIL OR PROVE DEFECTIVE WITHIN A PERIOD OF TWELVE (12) MONTHS AFTER FINAL ACCEPTANCE OF THE COMPLETE CONTRACT, ALWAYS PROVIDED THAT SUCH FAILURE IS NOT CAUSED BY IMPROPER USAGE OR ORDINARY WEAR AND TEAR. THE PERIOD OF THIS GUARANTEE SPECIFIED ABOVE IS TO IN NO WAY SUPPLANT ANY OTHER GUARANTEE OF A LONGER PERIOD BUT IS TO BE BINDING ON ALL WORK, NOT OTHERWISE COVERED.
26. ADDITIONAL CONDITIONS
1. REMOVAL AND REPLACEMENT OF LUMINAIRES IN EXISTING LOCATIONS REQUIRES ASSESSMENT OF EXISTING CONDUIT, JUNCTION BOXES AND WIRING. REPLACE ALL DAMAGED, RUSTED, BENT OR OTHERWISE DAMAGED CONDUIT AND FITTINGS AND WIRING WITH INSULATION THAT IS CRACKED OR OTHERWISE UNFIT FOR RE-ENERGIZATION.

2. VOLTAGE FOR EXISTING LUMINAIRES IS 208 VOLT LINE TO NEUTRAL. WHEN REPLACING OR ADDING LUMINAIRES TO EXISTING CIRCUITS, TEST VOLTAGE PRIOR TO CONNECTING AND ENERGIZING. ACCURATE AS-BUILTS OF EXTERIOR LIGHTING ARE NOT AVAILABLE.

3. ALL UNUSED ELECTRICAL MATERIALS TO BE REMOVED FROM SITE.

4. ANY UNUSED FIXTURES TO BE HANDED OVER TO OWNER.

5. IT IS THE INTENT ON THIS PROJECT THAT ALL EXTERIOR LIGHTING TO BE ADDED OR REPLACED, IS TO BE CONTROLLED AND CIRCUITED TO LOCAL KIOSK PANELS AND NOT FROM INDIVIDUAL BUILDING TENANT ELECTRICAL PANELS. IF IT IS FOUND THAT PROJECT LUMINAIRES ARE BEING FED FROM TENANT BUILDING PANELS, THE WIRING IS TO BE REMOVED AND MADE SAFE AND LUMINAIRES ARE TO BE RE-FED FROM APPROPRIATE DISTRIBUTION.

6. WHERE LUMINAIRES ARE REMOVED AND NO NEW LUMINAIRE IS INSTALLED IN THE SAME LOCATION, REMOVE REDUNDANT MATERIALS AND MAKE GOOD SURFACES TO MATCH EXISTING SURROUNDINGS.

7. INSTALLATION AND SCHEDULE TO BE COORDINATED WITH GRANVILLE ISLAND OPERATIONS DEPARTMENT.

8. ELECTRICAL CONTRACTOR SHALL VISIT SITE DURING PRICING.

9. ELECTRICAL CONTRACTOR SHALL REVIEW CURRENT BUILDING GUIDELINES.

10. ALL ELECTRICAL CHANGES MUST BE TYPED ONTO PANEL DIRECTORIES ON COMPLETION OF WORK.

11. CLEAN UP DEBRIS AND EXCESS MATERIALS AT THE END OF EACH WORK DAY.

12. UNUSED WIRING IS TO BE REMOVED FROM THE CONDUIT SYSTEM WHEN NEW LINES ARE INSTALLED.

13. ALL ELECTRICAL PRODUCTS TO BE BUILDING STANDARD AND OF THE SAME MAKE WHERE PRACTICAL.

14. ALL UNUSED WIRING TO BE CLEARED BACK TO GRID JUNCTION BOXES.

15. ELECTRICAL CONTRACTOR TO INDICATE THE FOLLOWING:

A) PROJECT FIXTURES REMAINING.  
B) PROJECT FIXTURES RELOCATED.  
C) PROJECT FIXTURES RETURNED TO OWNER.  
D) NEW FIXTURES PROVIDED AND INSTALLED.

16. CONTRACTOR TO REMOVE ALL UNUSED POWER WIRING. ANY POWER WIRING EXISTING IN CONDUIT SYSTEM WHICH IS SUITABLE FOR USE MAY BE REUSED BUT SHALL BE SUBJECT TO A MEGGER TEST FOR INSULATING RESISTANCE. THE ABOVE TESTS ARE TO BE WITNESSED BY THE ENGINEER.

17. THE FOLLOWING SEISMIC REQUIREMENTS SHALL APPLY UNLESS APPROVAL IN WRITING IS OBTAINED FROM THE AUTHORITY HAVING JURISDICTION TO WAIVE PART OR ALL SAID REQUIREMENTS.

27. SEISMIC RESTRAINT NOTES
1. ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE FOLLOWING CRITERIA:

A) FIXED EQUIPMENT ON GRADE - USE 33% OF OPERATING WEIGHT AT THE CENTER OF GRAVITY.  
B) FIXED EQUIPMENT ON STRUCTURE - USE 50% OF OPERATING WEIGHT AT THE CENTER OF GRAVITY.  
C) EMERGENCY POWER AND COMMUNICATION EQUIPMENT ON STRUCTURE - USE 75% OF OPERATING WEIGHT AT THE CENTER OF THE GRAVITY.  
D) EMERGENCY AND POWER COMMUNICATION EQUIPMENT ON STRUCTURE - USE 75% OF OPERATING HEIGHT OR CENTER OF GRAVITY IF HIGHER.  
E) FLEXIBLY MOUNTED EQUIPMENT - USE 2 TIMES THE ABOVE VALUES.  
F) SIMULTANEOUS VERTICAL FORCE - USE 1/3 TIMES THE HORIZONTAL FORCE.

2. HORIZONTAL SEISMIC FORCES SHALL BE DETERMINED FROM THE APPLICABLE EQUATIONS OF THE GOVERNING CODE.

3. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON DRAWINGS FOR FLOOR, WALL, CEILING OR ROOF MOUNTED EQUIPMENT WEIGHING LESS THAN 1,000 lbs., THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF A STRUCTURAL ENGINEER RETAINED BY THE ELECTRICAL CONTRACTOR. STRUCTURAL ENGINEER TO PROVIDE APPROPRIATE LETTER OF ASSURANCE.

4. PROVIDE ALL REQUIRED SEISMIC BRACING, SUPPORTS, BOLTS, WASHERS, NUTS, ETC. FOR CONDUITS AND CONDUIT SUPPORTS.

5. PROVIDE A SYSTEM TO SECURE ALL RECESSED LIGHTING FIXTURES. FIXTURES SHALL BE SUPPORTED DIRECTLY AND LATEROALLY FROM THE BUILDING STRUCTURE ABOVE, USING NO. 12 GAUGE WIRE MINIMUM. THE CEILING SUSPENSION SYSTEM SHALL NOT BE USED FOR DIRECT SUPPORT.
28. CIVIL, UNDERGROUND AND ROADWORKS
1. ALL CIVIL, UNDERGROUND AND ROADWORKS IS PART OF ELECTRICAL CONTRACTORS SCOPE OF WORK.

2. UNDER THE DIRECTION OF THE ELECTRICAL CONTRACTOR, ALL CIVIL AND ROADWORKS, TRENCHING AND BACKFILLING, EXCAVATION ETC. SHALL COMPLY WITH THE MASTER MUNICIPAL CONSTRUCTION DOCUMENT (MMCD) PLATINUM EDITION.

3. MINIMAL RECORD DRAWINGS ARE AVAILABLE OF UNDERGROUND UTILITIES, BC-ONE CALL SHALL BE DONE AND PRIOR TO EXCAVATING CHECKS TO BE DONE BEFORE DIGGING.

4. HAND DIGGING WILL BE REQUIRED IN SENSITIVE AREAS.

5. CONDUITS SHALL BE INSTALLED AT A CONSTANT DEPTH WITH MINIMUM COVER CONDUITS TO BE 600mm WHERE EVER POSSIBLE. USE OF APPROPRIATE MECHANICAL PROTECTION MAY BE REQUIRED IN SOME AREAS.

6. IN ALL TRENCHES DUCTS SHALL BE BEDDED AND INSTALLED SLIGHTLY SHAKED TO PERMIT EXPANSION AND CONTRACTION.

7. PLACE TRENCH MARKER TAPE 300mm ABOVE CONDUITS IN ALL TRENCHES.

8. ALL GROUNDING AND BONDING SHALL CONFORM TO CANADIAN ELECTRICAL CODE AND AS NOTED ON THE DRAWINGS.

9. PROVIDE REASONABLE NOTIFICATION TO ENGINEER PRIOR TO BACK FILLING.

10. TAKE REASONABLE PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING UTILITIES. ANY DAMAGES TO UTILITIES MUST BE REPAIRED TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR.

11. EXISTING PAVERS ARE NO LONGER AVAILABLE, HANDLE WITH CARE WHILE REMOVING, STORING AND RE-INSTALLING.

12. CONTRACTOR TO REINSTATE AREAS OF CONSTRUCTION TO IT'S ORIGINAL CONDITION.

CONSULTANT



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SEAL

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4	-		-
3	ISSUED FOR TENDER	DM	2020.11.26
2	ISSUED FOR CONSTRUCTION	DM	2020.11.12
1	ISSUED FOR COORDINATION	DM	2020.11.05
No.	Issued	By	yy/mm/dd

Client/Project  
CMHC SCHL  
GRANVILLE ISLAND OFFICE  
GRANVILLE ISLAND  
PHASE 4 EXTERIOR LIGHTING UPGRADE

VANCOUVER BC CANADA

Title  
SPECIFICATION

Project No. 14440	Scale N.T.S.
Drawn By DM	Checked By KK/DN
Drawingh No.	Date 07 OCT. 2020