

ADDENDUM NUMBER 3

R18-01 Island Savings Centre Lobby Washroom Upgrades

January 25, 2018

This Addendum shall be read in conjunction with and considered as an integral part of the Request for Proposals. Respondents should acknowledge the addendum on Appendix B the Submission Form.

The Addendum is as follows:

Attachments

- Electrical Addendum 3
- Asbestos Report for main washrooms
- Extra Tile drawing

Questions & Answers

- **Q1.** Please clarify the published answer to question 6 on the attached does the asbestos pertain only to the accessible washroom flooring?
- **A1.** Yes the first test we got done did only deal with the accessible washroom. Since then we have had the men's and women's washrooms tested. See attached report.
- **Q2.** The electrical drawings don't seem to reflect any emergency lighting other than exits, are they required in the washrooms? Please provide all locations for emergency lighting. A2. See Electrical Addendum E-3.
- **Q3.** While Addendum 2 does provide information/locations for the emergency exit lights, the location of "emergency battery pack lights" and their locations are not shown on the drawing. The assumption would be that emergency lighting would be required in each of the washrooms, washroom corridor and back corridor. Please provide clarity for these locations.
- A3. See Electrical Addendum E-3.
- **Q4.** Fire Alarm devices seem to be moved around and perhaps added however the note in specification 3.5(1) states that Thomas Electric do all F.A. modifications. Please clarify if Electrical Contractors are to include any fire alarm work during the project or is it excluded completely with Thomas providing the fire alarm scope.
- A4. See Electrical Addendum E-3.
- **Q5.** I estimate 120square feet of tile in the lobby that will need to be included in the scope of work or replaced as a "patch and make good" after excavation of the Slab on Grade for the structural work (in order to widen the strip footings & also the area in the existing storage room has no tile right now). It will be somewhere between very difficult to impossible to match the tiles in the lobby exactly unless you happen to have extra tiles in storage that can be used for this purpose?
- **A5.** See attached drawing. Tile will match new tile going in hall way to theatre room and washrooms. Actual additional tile is approximately 200 square feet.

Approved Products

Could you please place a request to allow Sloan SL-ECOS as an alternate tap for the specified TOTO's?

Approved

Addendum 2 Question 6 answer currently reads:

A6. The floor was known to have contained asbestos and should be treated as such. The tiles can be made to work with the floor drains and given the possible asbestos concerns would be the most cost effective approach.

See A16.

Change to Read:

A6. The floor was known to have contained asbestos and should be treated as such. The tiles can be made to work with the floor drains and given the possible asbestos concerns would be the most cost effective approach. The floor specifications is as per the original. Epoxy flooring for the washrooms. See Architectural Specifications.

See A16.

End of Addendum 3

Anthony Jeffery Procurement Officer Cowichan Valley Regional District 175 Ingram Street, Duncan, BC V9L 1N8

Email: purchasing@cvrd.bc.ca

Tel: 250.746.2580 / Toll free: 1.800.665.3955



Electrical Addendum E-03

DATE: January 24, 2018

PROJECT: CVRD Island Savings Center - Duncan, BC

PROJECT NO: 140010.000

To: Ryan King

Company: Steller Architectural Consulting Address: 210, 4252 Commerce Circle

Victoria, BC V8Z 4M2

Email: ryan@stellerconsulting.com

This Addendum forms part of the Contract documents and is to be read, interpreted and coordinated with all other parts. The cost of all work contained herein is to be included in the Contract Sum. The following revisions supersede the information contained in the original drawings and specifications issued for the above named project to the extent referenced and shall become part thereof.

This Addendum contains 1 pages and 2 drawings.

The following items form part of the Scope of Work document issued January 2, 2018:

- 1.1 REVISE fire alarm system specification. See attached drawing E-0
- 1.2 ADD emergency lights to washrooms and corridors. See attached drawing E-1

INTEGRAL GROUP

Peter Kremler, EIT

PETK/petk

SEALED

ELECTRICAL SPECIFICATIONS

PART 1: GENERAL

- 1. ELECTRICAL SPECIFICATIONS AND DRAWINGS FORM PART OF THE COMPLETE PROJECT MANUAL AND ARE TO BE READ IN CONJUNCTION WITH THE REST OF THE CONTRACT DOCUMENTS. THE RESPONSIBILITY AS TO WHICH SUB-TRADE PROVIDES REQUIRED LABOUR OR MATERIALS RESTS SOLELY WITH THE CONTRACTOR.
- PROVIDE ALL ITEMS, MATERIAL, EQUIPMENT AND LABOUR REQUIRED TO COMPLETE THE WORK INDICATED OR INFERRED HEREIN. SHOULD ANY WORK OR MATERIAL BE REQUIRED WHICH IS NOT SPECIFICALLY SPECIFIED OR INDICATED ON THE DRAWINGS BUT IS NEVERTHELESS REQUIRED TO PROVIDE A FULLY OPERATIONAL SYSTEM, PROVIDE SUCH WORK OR MATERIALS WITHOUT ADDITIONAL
- 3. UNLESS DIMENSIONAL INFORMATION IS SPECIFICALLY INDICATED, DRAWINGS INDICATE APPROXIMATE LOCATIONS OF ELECTRICAL DEVICES. THE RIGHT IS RESERVED TO MAKE CHANGES IN LOCATION AS MAY BE NECESSARY TO CENTRE LIGHTS OR MEET THE EXIGENCIES OF CONSTRUCTION IN ANY WAY. NO EXTRA WILL BE ALLOWED FOR SUCH CHANGES UNLESS THE DISTANCE MOVED
- 4. SHOULD ANY DISCREPANCY BETWEEN THE SPECIFICATIONS AND DRAWINGS LEAVE THE CONTRACTOR IN DOUBT AS TO THE TRUE INTENT AND MEANING, OBTAIN A RULING FROM THE CONSULTANT. 5. CHECK FOR ANY ADDENDA TO THE ORIGINAL DRAWINGS AND SPECIFICATIONS AND ALLOW FOR RESULTING ADJUSTMENTS IN TENDER
- QUOTATIONS. 6. THE CONSULTANT OR THEIR AUTHORIZED REPRESENTATIVE HAVE THE RIGHT TO REJECT ANY ITEM THAT, IN THEIR OPINION, DOES NOT CONFORM TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. RECTIFY ALL UNACCEPTABLE INSTALLATIONS TO THE APPROVAL OF THE CONSULTANT.

EXISTING CONDITIONS

- PRIOR TO TENDERING, BECOME FAMILIAR WITH ALL EXISTING SITE CONDITIONS THAT WILL AFFECT THE WORK. INSPECT ALL EXISTING BUILDING ELEMENTS AND STRUCTURES FOR CONSIDERATION OF NECESSARY STRUCTURAL CHANGES TO FACILITATE INSTALLATIONS COVERED BY THE CONTRACT.
- 2. CONFIRM ALL LOCATIONS AND ROUTING OF ANY EXISTING SERVICES, ABOVE AND BELOW GRADE, WHICH MIGHT BE AFFECTED BY THIS INSTALLATION.
- WHERE BUILDINGS, STRUCTURES OR INSTALLATIONS HAVE TO BE DEMOLISHED, REMOVED, RELOCATED OR RE-ROUTED, ENSURE THAT EXISTING BUILDINGS OR REMAINING STRUCTURES WILL NOT BE CUT OFF FROM ELECTRICAL AND COMMUNICATION SERVICES WHICH THEY MAY RECEIVE FROM THE BUILDING OR STRUCTURE TO BE ELIMINATED. RE-ROUTE SUCH SERVICES FOR TEMPORARY OR
- PERMANENT CONNECTION, WHATEVER THE NECESSITY MAY BE, AND ALLOW COSTS IN TENDER FOR SUCH ADDITIONAL WORK. 4. WHERE IT IS NECESSARY TO RELOCATE TEMPORARILY ANY ELECTRICAL EQUIPMENT OR TO RE-ROUTE AND DISTRIBUTION LINES, ALLOW FOR ALL COSTS INCURRED FOR SUCH WORK IN TENDER.

1.3 GENERAL MATERIALS

- 1. PROVIDE ALL NEW MATERIALS UNLESS NOTED OTHERWISE. PROVIDE ONLY MATERIALS LISTED FOR USE IN CANADA AND BEARING SUITABLE MARK INDICATING SUCH.
- 2. SHOULD ANY OF THE MATERIALS SPECIFIED/REQUESTED BE DISCONTINUED OR NOT AVAILABLE, NOTIFY CONSULTANT PRIOR TO TENDER SUBMISSION AND OBTAIN CLARIFICATION OF ALTERNATE PRODUCTS.
- THE DRAWINGS AND SPECIFICATIONS CALL FOR SPECIFIC EQUIPMENT. OTHER MATERIALS OR EQUIPMENT MAY BE SUBSTITUTED, PROVIDED SUCH PROPOSED SUBSTITUTIONS HAVE BEEN APPROVED VIA A FORMAL ADDENDUM ISSUED BY THE CONSULTANT. ALLOW A MINIMUM OF TEN (10) WORKING DAYS FOR REVIEW OF ALTERNATES BY THE CONSULTANT. IF CIRCUMSTANCES ARISE AFTER THE WORK HAS BEEN UNDER CONSTRUCTION FOR SOME TIME. SUCH THAT THE SPECIFIED MATERIALS OR EQUIPMENT CANNOT OR SHOULD NOT BE INSTALLED, OBTAIN APPROVAL FROM THE CONSULTANT BEFORE SUBSTITUTIONS ARE MADE. CONTRACTOR IS RESPONSIBLE FOR ANY PART 2: PRODUCTS REDESIGN OF ALL ASSOCIATED SERVICES/MATERIAL TO ACCOMMODATE ANY PROPOSED ALTERNATES.
- ANY SUBSTITUTIONS MADE WITHOUT APPROVAL MAY BE REJECTED AT THE SOLE DISCRETION OF THE CONSULTANT. PROVIDE MATERIAL FROM A SINGLE MANUFACTURER FOR ALL MATERIAL OF A SIMILAR NATURE.

- 1. ELECTRICAL DRAWINGS DO NOT INDICATE ALL BUILDING ELEMENTS. CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL SITE
- CONDITIONS. DIMENSIONAL DATA FOR THE BUILDING IS INDICATED ON ARCHITECTURAL DRAWINGS. 2. THE ELECTRICAL DRAWINGS SHOW THE APPROXIMATE LOCATIONS OF PRINCIPAL APPARATUS, EQUIPMENT, DUCTS AND WIRING. THE ARRANGEMENT SHOWN ON THE DRAWINGS IS MORE OR LESS DIAGRAMMATIC AND AS SUCH IS APPROXIMATE ONLY. THE ACTUAL LOCATION OF APPARATUS, EQUIPMENT AND WIRING SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE CONSULTANT
- BEFORE INSTALLATION. THIS CONTRACTOR IS RESPONSIBLE FOR ALL MEASUREMENTS FOR THE ELECTRICAL WORK THROUGHOUT. ARRANGE THE WIRING AND APPARATUS TO CONFORM TO THE ARCHITECTURAL AND STRUCTURAL DETAILS IN AN APPROVED MANNER.
- 4. ALTERATIONS NECESSARY TO THE ARRANGEMENT OF APPARATUS, FIXTURES, CONDUITS AND WIRING THAT HAVE BEEN INSTALLED WITHOUT PROPER CONSIDERATION AND APPROVAL, EVEN IF IN ACCORDANCE WITH THE ELECTRICAL DRAWINGS, AND ALL ALTERATIONS NECESSARY TO MAKE THE APPARATUS, FIXTURES, CONDUIT AND WIRING COME WITHIN THE FINISHED LINES OF THE ROOMS, SHALL BE UNDERTAKEN WITHOUT COST TO THE OWNER.

- PROVIDE WRITTEN GUARANTEE FOR ALL WORK COVERED BY THIS SECTION. REPLACE OR REPAIR ANY DEFECT IN WORK THAT APPEARS WITHIN A PERIOD OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION. INCLUDING ANY DEFICIENCIES OR OMISSIONS IN RESPECT TO THE CONTRACT DOCUMENTS WHICH MAY APPEAR. WARRANTY DOES NOT COVER DAMAGE ATTRIBUTED TO MISUSE OF
- ADDITIONAL EXTENDED WARRANTY PERIODS MAY APPLY TO SPECIFIC MATERIALS. WHERE, IN THE OPINION OF THE CONSULTANT, AN UNREASONABLE DELAY IN REPLACEMENT OR ACCEPTABLE REPAIR OCCURS ON THE 2.5
- PART OF THE CONTRACTOR, REPAIRS OR REPLACEMENT WILL BE MADE BY THE OWNER, AND THE COST OF SUCH REPAIRS SHALL BE BORNE BY THE CONTRACTOR

FEES AND PERMITS

PAY ALL FEFS AND ORTAIN ALL PERMITS AND LICENSES IN CONNECTION WITH WORK. SUBMIT ALL DOCUMENTATION REQUIRED BY THE INSPECTION AUTHORITY, FOR APPROVAL PRIOR TO START OF CONSTRUCTION, AND PROMPTLY REPORT ANY COMMENTS TO THE CONSULTANT.

- CODES AND BY-LAWS PERFORM ALL WORK IN ACCORDANCE WITH THE REGULATIONS OF THE PROVINCE OF BRITISH COLUMBIA, INCLUDING, BUT NOT
- LIMITED TO THE BC BUILDING ACT, THE BC SAFETY ACT, AND WORKSAFE BC STANDARDS. 2. AT THE CONCLUSION OF THE WORK, SUBMIT TO THE CONSULTANT A CERTIFICATE OF APPROVAL FROM THE INSPECTION AUTHORITY SHOWING THAT ALL WORK HAS BEEN PROPERLY INSTALLED AND ACCEPTED.

SHOP DRAWINGS

- REFER TO GENERAL SPECIFICATION FOR SHOP DRAWING REQUIREMENTS. 2. PROVIDE SHOP DRAWINGS FOR THE FOLLOWING:
- 2.1. LUMINAIRES
- 2.2. EXIT SIGNS 2.3. LIGHTING CONTROL DEVICES
- 3. THE REVIEW OF SHOP DRAWINGS BY THE CONSULTANT IS FOR SOLE PURPOSE OF ASCERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. APPROVAL OF SHOP DRAWINGS DOES NOT IMPLY THAT CONSULTANT APPROVES OF ALL DETAIL INHERENT IN THE SHOP DRAWINGS. CONTRACTOR REMAINS RESPONSIBLE FOR ENSURING ALL MATERIAL PROVIDED COMPLIES IN ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL DIMENSIONS ON SITE, FOR INFORMATION THAT PERTAINS SOLELY TO FABRICATION PROCESSES OR TO TECHNIQUES OF CONSTRUCTION AND INSTALLATION, AND FOR COORDINATION OF WORK OF TRADES.

RECORD DRAWINGS

- REFER TO GENERAL CONDITION FOR REQUIREMENTS OF RECORD (AS-BUILT) DOCUMENTATION. INDICATE THE FOLLOWING ITEMS ON RECORD DRAWINGS.
- 2.1. BRANCH CIRCUIT RACEWAYS, INCLUDING FLEXIBLE CONDUIT DROPS AND JUNCTION BOXES, INDICATING THE CIRCUITRY
- CONTAINED THEREIN. 2.2. RACEWAY RUNS IN OR UNDER THE SLAB WITH ROUTING CLEARLY IDENTIFIED.
- 2.3. LOCATION OF ALL DEVICES INCLUDING, BUT NOT LIMITED TO LIGHTING, OUTLETS, SWITCHES, DISCONNECTS, AND PANELBOARDS. 3. AT THE COMPLETION OF THE WORK, TRANSFER THE ABOVE INFORMATION TO A NEW CLEAN SET OF DRAWINGS. EMPLOY A COMPETENT DRAFTING SERVICE TO TRANSFER INFORMATION TO AUTOCAD FILES AND CERTIFY THE ABOVE-MENTIONED FILES AS BEING ACCURATE AND CORRECT. DELIVER COMPLETED AUTOCAD FILES TO CONSULTANT AS PART OF OPERATION AND MAINTENANCE
- 4. PROVIDE MAINTENANCE MANUALS FOR ALL SYSTEMS PROVIDED, INCLUDING ALL ITEMS COVERED UNDER "SHOP DRAWINGS" SECTION

1.10 IDENTIFICATION OF EQUIPMENT

- PROVIDE IDENTIFICATION FOR ALL ELECTRICAL MATERIAL INSTALLED. IDENTIFICATION SHALL BE IN ENGLISH.
- IDENTIFY ALL WIRING THROUGH THE USE OF SELF-LAMINATING LABELS (FLAG TYPE).
- IDENTIFY ALL JUNCTION BOXES WITH BRANCH CIRCUITING WIRING (PANEL AND CIRCUIT NUMBERS). WRITE INFORMATION ON THE INSIDE OF THE JUNCTION BOX AND ON THE COVER PLATE USING A BLACK INDELIBLE MARKER.
- COLOUR-CODE ALL ELECTRICAL JUNCTION, PULL BOXES, SPLITTERS AND OUTLET BOXES WITH APPROPRIATELY COLOURED PAINT AS

DESCRIPTION PRIMARY **AUXILIARY**

GREEN

AS NOTED

51 VOLTS UP TO 240 VOLTS YELLOW 241 VOLTS UP TO 600 VOLTS ORANGE TELEPHONE OTHER COMMUNICATION SYSTEMS BLUE FIRF ALARM RFD SECURITY BROWN

5. WHERE JUNCTION BOXES OR PULL BOXES ARE LOCATED ABOVE A GRID CEILING SYSTEM, PROVIDE A MINIMUM 19MM SELF-ADHERING COLOUR-CODED CIRCULAR DISC LOCATED ON THE ROOM SIDE OF THE GRID, AFFIXED DIRECTLY TO CEILING SPLINE IN CLOSE PROXIMITY 3.3

AS NOTED

- TO WHERE CONCEALED BOX IS LOCATED. MATCH COLOUR TO THE COLOUR OF ASSOCIATED JUNCTION BOX AS INDICATED ABOVE. 6. IDENTIFY GROUPED LIGHT SWITCHES TO INDICATE LOADS/AREAS CONTROLLED. PROVIDE CUSTOM ENGRAVED BUTTONS WHERE INDICATED ON DRAWINGS.
- PROVIDE TYPE WRITTEN LABEL ON ALL RECEPTACLE COVER PLATES INDICATING CIRCUIT BEING USED
- DRAWINGS MAY NOT MATCH OWNER'S ASSIGNED ROOM NAMES AND NUMBERS. PROVIDE ARC FLASH PROTECTION IDENTIFICATION AND WIRING LABELS ON ALL NEW ELECTRICAL DISTRIBUTION IN COMPLIANCE WITH

PROVIDE TYPEWRITTEN, REMOVABLE CIRCUIT DIRECTORY CLEARLY INDICATING USAGE OF EACH BREAKER INSIDE PANEL OF ALL PANEL

BOARDS. CONFIRM ROOM NUMBERS AND NAMES WITH CONSULTANT PRIOR TO COMPLETING DIRECTORY AS NUMBERS INDICATED ON

- CEC 2-306, NFPA 70E-2004, AND ANSI Z535-4-200.
- OPERATING AND MAINTENANCE MANUALS REFER TO GENERAL SPECIFICATION FOR OPERATING AND MAINTENANCE MANUAL REQUIREMENTS.
- INCLUDE MANUFACTURER'S MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT NOTED BELOW: 2.1. LUMINAIRES

GROUND

OTHERS

2.2. EXIT SIGNS 2.3. LIGHTING CONTROL DEVICES

1.13 SUBSTANTIAL COMPLETION

- PROVIDE THE FOLLOWING DOCUMENTATION PRIOR TO REQUESTING SUBSTANTIAL COMPLETION REVIEW:
- 1.1. FINAL ELECTRICAL INSPECTION REPORT.
- FIRE ALARM VERIFICATION CERTIFICATE/REPORT
- SCHEDULE S-C FROM STRUCTURAL ENGINEER FOR SEISMIC BRACING OF ALL ELECTRICAL EQUIPMENT. 1.4. RECORD DRAWINGS AND MAINTENANCE MANUALS.
- 1.5. CERTIFICATION THAT ALL DEFICIENCIES NOTED DURING FIELD REVIEWS HAVE BEEN COMPLETED.
- WARRANTY CERTIFICATES. WRITTEN VERIFICATION THAT ALL SYSTEMS, SPECIFICALLY ALL LIGHTING CONTROL SYSTEMS, ACCESS CONTROL SYSTEMS AND 1.7.
- INTRUSION DETECTION SYSTEMS. HAVE BEEN TESTED AND ARE FULLY OPERATIONAL. CERTIFICATION THAT THE OWNER'S PERSONNEL HAVE BEEN INSTRUCTED IN THE OPERATION AND MAINTENANCE OF ALL SYSTEMS 1.9. WRITTEN VERIFICATION THAT ALL EQUIPMENT IDENTIFICATION HAS BEEN COMPLETED.
- 1.10. WRITTEN VERIFICATION THAT ALL SPARE PARTS AND REPLACEMENT PARTS SPECIFIED HAVE BEEN PROVIDED.

- UNLESS OTHERWISE INDICATED, DO NOT USE WIRE SMALLER THAN NO. 12 AWG FOR BRANCH CIRCUIT WIRING. PROVIDE STRANDED COPPER CONDUCTORS FOR ALL CONDUCTORS NO. 10 AWG OR LARGER. PROVIDE SOLID COPPER CONDUCTORS FOR
- ALL CONDUCTORS NO. 12 AWG OR SMALLER. SIZE ALL CONDUCTORS TO MAINTAIN VOLTAGE DROP OF 2% OR LESS FOR FEEDERS AND 2% OR LESS FOR BRANCH CIRCUIT WIRING.
- COREFLEX CABLE IS NOT PERMITTED
- PROVIDE COPPER CONDUCTORS WITH RW-90 WITH CROSSLINKED POLYETHYLENE (XLPE) INSULATION UNLESS NOTED OTHERWISE 6. USE COLOUR CODED CONDUCTORS THROUGHOUT. PROVIDE A DIFFERENT COLOURED CONDUCTOR FOR EACH PHASE AND A WHITE
- CONDUCTOR FOR NEUTRAL.
- **IDENTIFY ALL CONDUCTORS AS FOLLOWS:**
- 7.1. PHASE A RED BLACK
- 7.2. PHASE B 7.3. PHASE C BLUE
- 7.4. NEUTRAL
- GROUND GREEN OR BARE 7.6. SWITCH LEGS YELLOW, ORANGE, BROWN

RACEWAYS

- PROVIDE RIGID STEEL, RIGID ALUMINIMUM OR ELECTRIC METALLIC TUBING (EMT) RACEWAY COMPLAINT WITH BC ELECTRICAL CODE. PROVIDE SET SCREW TYPE COUPLERS FOR ALL CONDUITS.
- USE OF ENT CONDUIT IS NOT PERMITTED.
- ACCEPTABLE MANUFACTURERS: THOMAS & BETTS OR APPROVED ALTERNATE.
- OUTLETS AND SWITCHBOXES
- PROVIDE NON-METALLIC OUTLET BOXES THROUGHOUT. PROVIDE OUTLET/JUNCTION BOXES AS REQUIRED TO COMPLY WITH REQUIREMENTS OF THE BC ELECTRICAL CODE.
- WHERE CONDUIT IS EXPOSED. PROVIDE SURFACE MOUNTED BOXES.
- PROVIDE EXTENSIONS RINGS AS REQUIRED TO ENSURE COVER PLATE IS INSTALLED FLUSH WITH FACE OF SURFACE. UNLESS OTHERWISE NOTED, SECTIONAL BOXES ARE NOT PERMITTED
- 5. ACCEPTABLE MANUFACTURERS: THOMAS & BETTS / IBERVILLE 52151 SERIES OR APPROVED ALTERNATE.
- PROVIDE LISTED FIRE STOPPING SYSTEM AT ELECTRICAL PENETRATIONS INTO OR THROUGH ANY RATED ASSEMBLY. ACCEPTABLE MANUFACTURERS: REFER TO GENERAL SPECIFICATION.
- PROVIDE SPECIFICATION GRADE, CSA TYPE 5-15R, WHITE SINGLE, DUPLEX OR QUAD RECEPTACLE AS INDICATED ON DRAWINGS.
- PROVIDE SPECIAL PURPOSE RECEPTACLES WHERE INDICATED. PROVIDE WHITE NYLON COVER PLATES UNLESS NOTED OTHERWISE.
- PROVIDE WEATHERPROOF DURABLE LEFT SPRING-LOADED CAST ALUMINUM RECEPTACLE, COMPLETE WITH GASKETS WHERE INSTALLED OUTDOORS OR IN WET LOCATIONS.
- ACCEPTABLE MANUFACTURERS: HUBBELL 5262-1 OR APPROVED ALTERNATE.

- CIRCUIT BREAKERS: MOLDED CASE, BOLT-ON, THERMAL MAGNETIC TYPE, 40 DEGREES C AMBIENT TEMPERATURE COMPENSATED, FIXED 3. INSTALL RECEPTACLES WITH GROUND PIN DOWN. MOUNTING, WITH QUICK-MAKE AND QUICK-BREAK SWITCHING MECHANISM MECHANICALLY TRIP-FREE FROM THE OPERATING PROVIDE COMMON HANDLE BASE FOR ALL MULTI-POLE BREAKERS. SINGLE POLE BREAKERS WITH BREAKER TIE ARE NOT PERMITTED.
- HALF SIZE BREAKERS ARE NOT PERMITTED. RATINGS: REFER TO DRAWINGS AND PANEL SCHEDULES FOR TRIP FRAME AND POLES REQUIRED. MINIMUM SHORT CIRCUIT RATING FOR 120 TO 240 VOLT BREAKERS IS 10,000A, IF NOT INDICATED OTHERWISE.
- ACCEPTABLE MANUFACTURERS: MATCH BASE BUILDING STANDARD. 2.10 LUMINAIRES
- PROVIDE ALL LUMINAIRES AS INDICATED ON DRAWINGS AND WITHIN LUMINAIRE SCHEDULE ACCEPTABLE MANUFACTURERS: AS INDICATED IN LUMINAIRE SCHEDULE.

PROVIDE COMPLETE LIGHTING CONTROL SYSTEM AS NOTED ON DRAWINGS. LIGHTING CONTROL SYSTEM SHALL MEET ALL REQUIREMENTS OF AHSRAE/IES/ANSI 90.1-2010

- PROVIDE NEW COMPONENTS AND INSTALLATION PROCEDURES WHICH MEET THE REQUIREMENTS OF: 1.1. BC ELECTRICAL CODE - CURRENT ENFORCED EDITION
- 1.2. BC BUILDING CODE CURRENT ENFORCED EDITION
- 1.3. BC FIRE CODE CURRENT ENFORCED EDITION 1.4. UNDERWRITERS LABORATORIES OF CANADA - ULC S524 (CURRENT EDITION)
- 2. PROVIDE ALL ISOLATION MODULES IN ACCORDANCE WITH ULC \$524 REQUIREMENTS.

ACCEPTABLE MANUFACTURERS: MATCH EXISTING

PART 3: EXECUTION

GENERAL REQUIREMENTS

INSTALL ALL ELECTRICAL EQUIPMENT FLUSH, PLUMB AND LEVEL UNLESS OTHERWISE NOTED.

VIBRATION AND SEISMIC RESTRAINT PROVIDE VIBRATION, SEISMIC RESTRAINT AND ANCHORAGE FOR ALL EQUIPMENT (INCLUDING NEW AND EXISTING LUMINAIRES, EXIT

SIGNS, BACK BOXES AND SPEAKERS). 3. ENGAGE A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER TO DESIGN AND REVIEW VIBRATION AND SEISMIC RESTRAINTS FOR ALL WORK ASSOCIATED WITH ELECTRICAL. SUBMIT SUPPLEMENTAL LETTERS OF ASSURANCE (SCHEDULES S-B) FROM THE STRUCTURAL ENGINEER AT THE COMMENCEMENT OF THE PROJECT. SUBMIT SUPPLEMENTAL LETTER OF ASSURANCE (SCHEDULE S-C), INDICATING THAT STRUCTURAL ENGINEER HAS PERFORMED REQUIRED FIELD REVIEWS AND THAT WORK SUBSTANTIALLY COMPLIES WITH

HANGERS AND FASTENERS

- PROVIDE HANGERS AND FASTENERS REQUIRED TO SUPPORT ALL ELECTRICAL EQUIPMENT. ATTACH HANGERS AND FASTENERS TO STRUCTURAL BUILDING MATERIAL ONLY.
- WHERE POSSIBLE, CAST IN CONCRETE INSERTS DURING POURING, OTHERWISE DRILLED METAL INSERTS MAY BE USED. WHERE WOOD SCREWS ARE USED, THEY SHALL PENETRATE WOOD AT LEAST 25MM.
- EXPLOSIVE SET INSERTS MAY BE USED ONLY WITH SPECIFIC PERMISSION FROM THE CONSULTANT. THEY MAY NOT BE USED IN ANY AREA WITH HIGH VOLTAGE EQUIPMENT.
- PERFORATED PIPE HANGER IRONS ARE PROHIBITED.
- SUPPORT ALL RACEWAY RUNNING VERTICALLY WITHIN BUILDING AT EACH FLOOR.

REQUIREMENTS OF THE BC BUILDING CODE AT THE COMPLETION OF THE PROJECT..

- ENSURE ALL LIGHTING FIXTURES ARE ADEQUATELY SUPPORTED. 8. SUPPORT RECESSED FLUORESCENT FIXTURES INDEPENDENT FROM T-BAR CEILING BY WIRE TO BUILDING STRUCTURE FROM TWO DIAGONAL ENDS
- 9. POWER WIRING FOR RECEPTACLES SHOULD NOT BE STRAPPED TO DATA RACEWAYS. MAINTAIN A 150MM CLEARANCE BETWEEN TELEPHONE/DATA OUTLETS AND POWER RECEPTACLES.

- LIGHTING FIXTURES PROVIDE ALL REQUIRED HANDLING AND STORAGE
- INSTALL FIXTURES PLUMB, LEVEL, AND IN STRAIGHT LINES WITHOUT DISTORTION
- INSTALL EACH FIXTURE IN A MANNER RECOMMENDED BY THE FIXTURE MANUFACTURER. SUSPEND ALL FIXTURES IN AREAS OF EXPOSED DUCT AND PIPE WORK TO AVOID CONFLICTS.
- PROVIDE BALL ALIGNERS AND SWAY ADAPTORS ON ALL PENDANT MOUNTED FIXTURES WITH RIGID SUPPORT SYSTEM. PROTECT ALL FIXTURES FROM DUST, DEBRIS, AND DAMAGE DURING CONSTRUCTION

FIRE ALARM SYSTEM

ALL DEFICIENCIES AT COMPLETION OF PROJECT.

- MODIFY EXISTING FIRE ALARM SYSTEM TO SUIT RENOVATIONS AS DESCRIBED HEREAFTER AND AS SHOWN ON PLANS. CONFIRM EXISTING FIRE ALARM SYSTEM IS FULLY OPERATIONAL PRIOR TO ANY WORK DONE. NOTIFY CONSULTANT OF ANY PRE-EXISTING DEFICIENCY ITEMS PRIOR TO STARTING WORK. THE SYSTEM IS ASSUMED TO BE FULLY OPERATIONAL WITH NO DEFICIENCY IF NO NOTIFICATION FROM THE CONTRACTOR IS RECEIVED. AND CONTRACTOR IS RESPONSIBLE FOR ENSURING THE SYSTEM IS FREE OF
- PROVIDE ALL DEVICE AND EQUIPMENT AS INDICATED ON THE DRAWINGS AS SPECIFIED HEREIN AND AS REQUIRED TO PROVIDE A COMPLETE AND OPERABLE SYSTEM
- 4. PRIOR TO SUBSTANTIAL COMPLETION, PROVIDE A COMPLETE FIRE ALARM VERIFICATION REPORT IN ACCORDANCE WITH ULC STANDARDS INDICATING COMPLETE OPERATION OF FIRE ALARM SYSTEM FREE OF ANY DEFICIENCIES.

CONNECT TO DEDICATE LIGHTING CIRCUIT AND INTERLOCKED WITH LOCAL LIGHTING CIRCUIT.

SUPPORT CEILING MOUNTED EXIT SIGNS DIRECTLY FROM THE CEILING SUPPORT SYSTEM. DO NOT SUPPORT EXIT SIGNS FROM T-BAR TILES OR DRYWALL CEILINGS. PROVIDE HORIZONTAL BACKING SUPPORT SYSTEM TO SUPPORT EXIT SIGNS OFF CEILING SUPPORT

- WIRE, CABLES AND RACEWAYS INSTALL ALL CONDUCTORS IN RACEWAY (RIGID GALVANIZED STEEL, RIGID ALUMINUM OR EMT) UNLESS OTHERWISE NOTED BELOW. ARMOURED CABLE (TYPES, BX AND AC) MAY BE USED IN THE FOLLOWING LOCATIONS. ARMOURED CABLE IS NOT PERMITTED TO BE
- USED TO EXTEND BRANCH CIRCUITS TO PANEL BOARDS. 3. FINAL DROPS TO LUMINARIES WITH A MAXIMUM LENGTH OF 1500MM. DAISY CHAINING OF LUMINARIES IS NOT PERMITTED.
- 4. FINAL CONNECTIONS TO MOTORS/TRANSFORMERS OR VIBRATING EQUIPMENT.
- CONNECTIONS BETWEEN 15 AMPERE, 120 VOLT SINGLE OR DUPLEX RECEPTACLES WITHIN A COMMON LENGTH OF STRAIGHT WALL OF
- STUD AND DRYWALL CONSTRUCTION IN ONE AND THE SAME ROOM. HORIZONTAL LENGTH NOT TO EXCEED 7000 MM. CEILING JUNCTION BOX TO BE LOCATED NO FURTHER THAN 900MM FROM THE PARTITION WALL. PROVIDE RIGID GALVANIZED STEEL RACEWAY FOR ALL CONDUCTORS ROUTED IN CONCRETE OR SUBJECT TO MECHANICAL INJURY.
- INSTALL ALL CONDUIT AND RACEWAY PARALLEL TO BUILDING GRID LINES.
- CONCEAL ALL CONDUCTORS/RACEWAY UNLESS NOTED OTHERWISE. 9. PROVIDE A NYLON PULL CORD IN ALL EMPTY CONDUITS.

3.10 EQUIPMENT CONNECTIONS

- PROVIDE CONNECTION TO ALL EQUIPMENT, INCLUDING BUT NOT LIMITED TO MOTORS, HVAC EQUIPMENT, ELECTRICAL WATER
- HEATERS OR OWNER SUPPLIED EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS. CONFIRM EXACT LOCATION OF ALL EQUIPMENT ON SITE AND COORDINATED WITH EQUIPMENT INSTALLER.
- 3. UNLESS OTHERWISE SHOWN, CONNECT MOTORS AND OTHER VIBRATING EQUIPMENT WITH A SUITABLE LENGTH OF WATERTIGHT FLEXIBLE CONDUIT WITH WATERTIGHT CONNECTORS.
- 4. GROUND MOTORS TO THE RIGID CONDUIT SYSTEM USING EITHER A SEPARATE GROUNDING CONDUCTOR IN THE FLEXIBLE CONDUIT OR WITH THE BONDING CONDUCTOR IN THE FLEXIBLE CONDUIT USING THE SPECIAL BRASS GLANDS SUPPLIED FOR THE PURPOSE.
- 1. EXTEND THE BASE BUILDING GROUNDING SYSTEM TO SUIT THE BRANCH DISTRIBUTION ARRANGEMENT OUTLINED ON THE DRAWING
- 2. THE GROUNDING SYSTEM IS TO CONFORM TO THE LATEST EDITION OF THE BC ELECTRICAL CODE AND IS TO MEET THE REQUIREMENTS OF THE LOCAL INSPECTION AUTHORITY. 3. GROUNDING SYSTEM FOR COMMUNICATION ROOM SHALL COMPLY WITH EIA/TIA 607. 4. GROUND CONDUCTORS SHALL BE INSTALLED FROM A NEW COPPER GROUND BUS TO BE LOCATED IN ELECTRICAL ROOM AT NEW PANEL

TUBS, GROUND BUSSES, EQUIPMENT ETC. THEY SHALL TERMINATE WITH BUNDY TYPE CONNECTORS INSTALLED TO MANUFACTURER'S

INSTALL ALL RECEPTACLES IN THE VERTICAL PLANE UNLESS OTHERWISE NOTED. . INSTALL RECEPTACLES VERTICALLY IN GANG TYPE OUTLET BOX WHEN MORE THAN ONE DEVICE IS INDICATED IN A SINGLE LOCATION.

LIGHTING SYMBOL SCHEDULE SYMBOL DESCRIPTION RECESSED LUMINAIRE TYPE 'A' ON CIRCUIT B-7 SWITCHED BY LOCAL SWITCH 'a' TYPICAL CIRCUITING DESIGNATION FOR ALL LIGHTS ANDRECEPTACLES) WALL MOUNTED LUMINAIRE RECESSED DOWN LIGHT - ROUND SHAPE RECESSED DOWN LIGHT - SQUARE SHAPE

EX

EMERGENCY BATTERY PACK WITH 30MINUTES

LIGHTING WITH INTEGRAL LIGHTING HEADS

CEILING MOUNTED EXIT LIGHT FIXTURE

WALL MOUNTED EXIT LIGHT FIXTURE

SINGLE POLE LINE VOLTAGE SWITCH

VACANCY SENSOR WALL MOUNTED

(ARROW DENOTES EGRESS DIRECTION)

OCCUPANCY SENSOR CEILING MOUNTED

POWER SYMBOL SCHEDULE							
SYMBOL	DESCRIPTION						
Ф	15 AMP 125 VOLT DUPLEX RECEPTACLE						
#	15 AMP 125 VOLT QUAD RECEPTACLE						
JB	JUNCTION BOX						

FIRE ALARM SYMBOL SCHEDULE							
SYMBOL	DESCRIPTION						
•	SMOKE DETECTOR						
6	ALARM SIGNALLING DEVICE - GONG						

DRAWING LIST:

DWG. No.	DESCRIPTION (TITLE)
E-0	ELECTRICAL COVER SHEET
<u>E-1</u>	POWER AND LIGHTING PLANS

CIVIC ADDRESS

2687 JAMES ST, DUNCAN, BC

LUMINAIRE SCHEDULE																			
FIXTURE TAG						SOURCE						ELECTRICAL			MOUNTING			REMARKS	
	DESCRIPTION	FINISH	MANUFACTURER	PRODUCT LINE	AGENT	TYPE	OUTPUT	COLOR TEMP (K)	MIN CRI	COLOR CONSISTENCY (SDMC)	L70 RATING (HRS)	QTY OF LAMPS	DIMMING	CONTROL SIGNAL	VOLTAGE	STYLE	MATERIAL	LOCATION	
L1	RECESSED 2'X2' LED	WHITE	DAY-BRITE	CLEAR APPEAL	SLS	LED	3000	3500	80	<4	>70,000	N/A	N/A	N/A	120VAC	RECESSED	DRYWALL	CORRIDORS, WASHROOMS	PROVIDE LUMINAIRE C/W DRYWALL KIT
R1	RECESSED 4" DOWNLIGHT	WHITE	LIGHTOLIER	LYTECASTER	SLS	LED	650	3000	80	<4	>50,000	N/A	N/A	N/A	120VAC	RECESSED	DRYWALL	SINKS AND WASHROOM STALLS	PROVIDE LUMINAIRE C/W DRYWALL KIT
R2	RECESSED 6" DOWNLIGHT	WHITE	LIGHTOLIER	LYTECASTER	SLS	LED	1500	3000	80	<4	>50,000	N/A	N/A	N/A	120VAC	RECESSED	DRYWALL	LOBBY, ART INSTALLATION	PROVIDE LUMINAIRE C/W DRYWALL KIT
EVIT	ALLIMINIUM LOW PROFILE EDGE	ΔΙΙΙΜ	EMERGIJITE	EAE SEDIES	919	LED	NI/A	N/A	NI/A	NI/Δ	NI/A	NI/Δ	NONE	N/A	120VAC	SLIDEACE	DRVWALI	AS NOTED	OR APPROVED ALTERNATE

GENERAL NOTES

LITE LED PICTOGRAM EXIT SIGN

- ALL LUMINAIRE FINISHES TO BE APPROVED PRIOR TO ORDERING
- TYPE OF CONSTRUCTION FOR MOUNTING ARE INDICATED FOR REFERENCE ONLY. CONFIRM ALL ASSEMBLY DETAILS WITH ARCHITECTURAL DRAWINGS PRIOR TO ORDERING. NO EXTRAS WILL BE ALLOWED FOR RE-ORDERING OF LUMINAIRES OR MOUNTING KITS TO MATCH ASSEBLY TYPES SHOWN ON ARCHITECTURAL PLANS. MOUNTING HEIGHT OF ALL SUSPENDED LUMINAIRES TO BE CONFIRMED ON SITE

ISLAND SAVINGS





Victoria BC Canada V8W 2Y9

Project Reference No: 140010.000

T 250.418.1288

www.integralgroup.com

ISSUED FOR DATE: **CLIENT REVIEW** 24AUG2017 CLIENT REVIEW 19SEPT2017 ISSUED FOR RFQ 30OCT2017 RE-ISSUED 02JAN2018 FOR RFQ RE-ISSUED 17JAN2018 FOR RFQ ADD E-02

PK

24JAN2018

RE-ISSUED

FOR RFQ ADD E-03

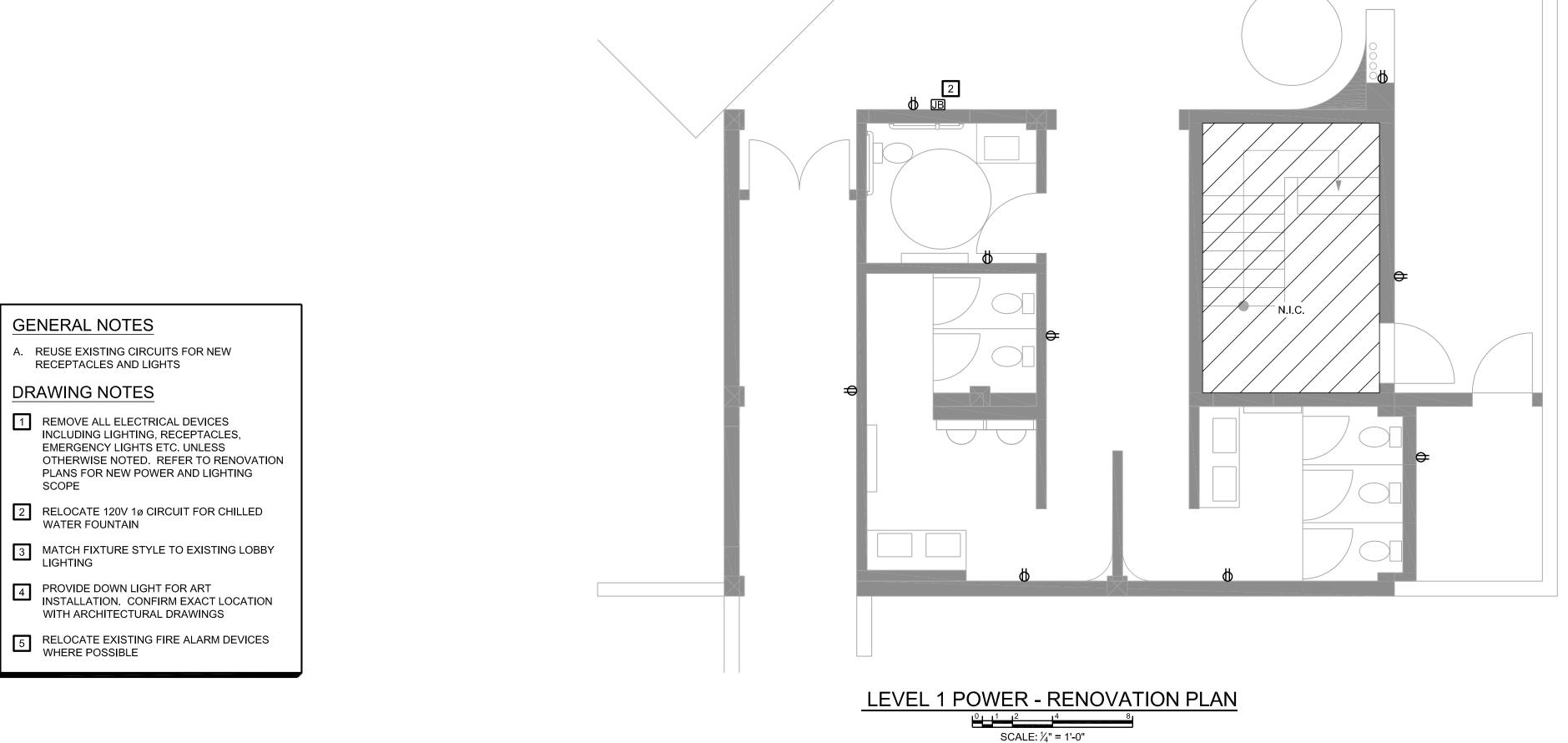
CVRD-01-17

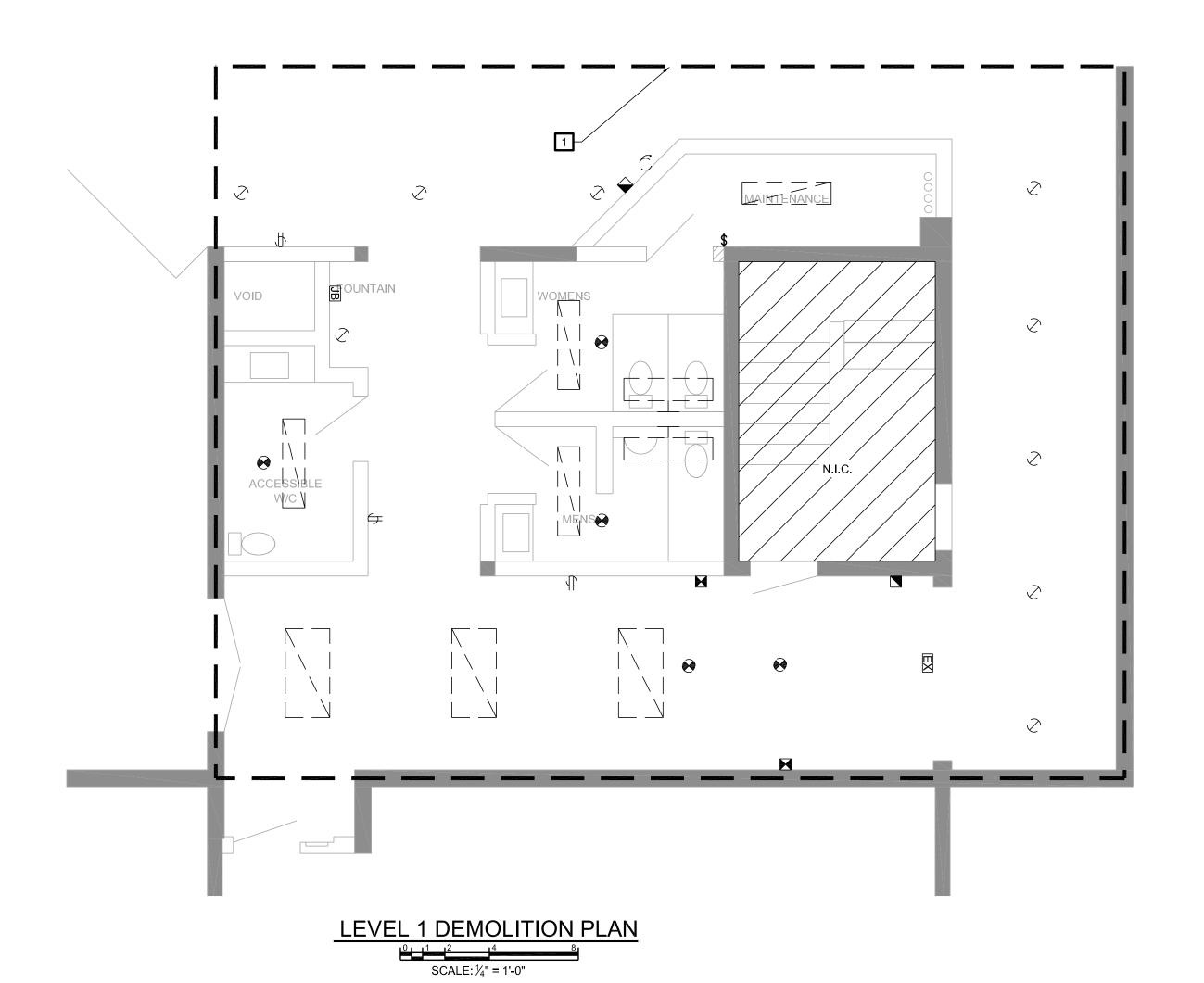
AS NOTED

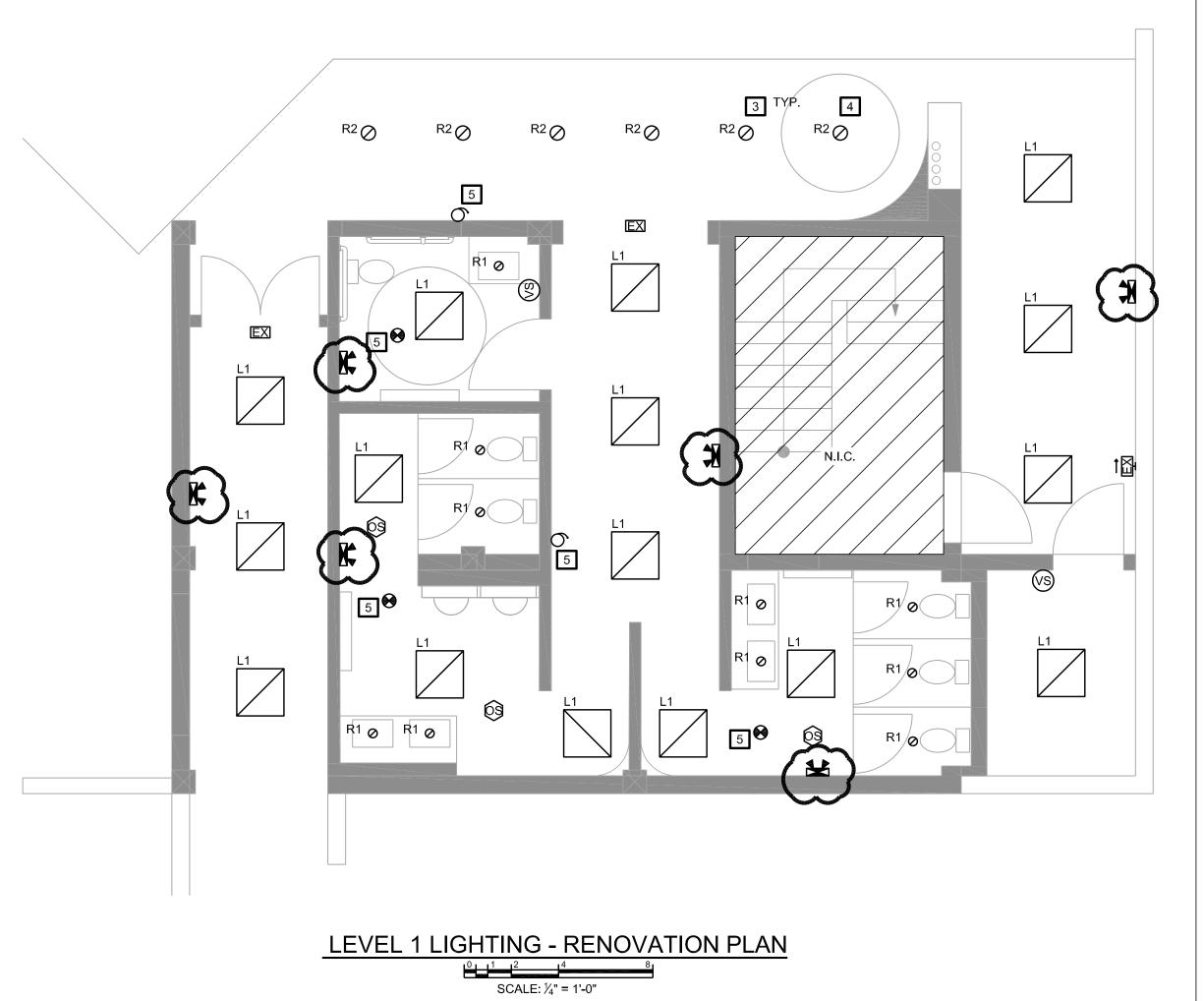
ELECTRICAL

COVER SHEET

DRAWING NUMBER







ISLAND SAVINGS CENTRE WASHROOM

COWICHAN
VALLEY
REGIONAL
DISTRICT

UPGRADES





Suite 101 - 1019 Wharf Street Victoria BC Canada V8W 2Y9 T 250.418.1288 www.integralgroup.com Project Reference No: 140010.000

ISSUED FOR:	DATE:						
CLIENT REVIEW	24AUG2017						
CLIENT REVIEW	19SEPT2017						
ISSUED FOR RFQ	30OCT2017						
RE-ISSUED FOR RFQ	02JAN2018						
RE-ISSUED FOR RFQ ADD E-01	15JAN2018						
RE-ISSUED FOR RFQ ADD E-03	24JAN2018						
DRAWN BY:							
PK							

PK No.:

AS NOTED

CVRD-01-17

DAWING TITLE:

LEVEL 1 POWER AND LIGHTING

E-1

bastion

environmental inc

1910 Northfield Road Nanaimo, B.C. V9S 3B5

p. 250.585.3830 f. 250.585.2465 e. info@bastionenv.com

Bulk Asbestos Certificate of Analysis

Project # 18-066 Client: Hazforce Site: 2687 James Road, Duncan BC Sampled By: Jeff Bonar Method: NIOSH Method 9002

Lab Project #	Sample ID	Location	Phase Description	Phase %	Asbestos Type	Asbestos %	Other Material Type	Other Material %	Date Analysed	Analyst
18-066-1	Mastic And Leveling Compound	Women"s Washroom	Leveling Compound Mastic	98 2	NONE NONE	NAD NAD	Non-Fibrous Non-Fibrous	100 100	1/23/2018 1/23/2018	SC SC
18-066-2	Mastic And Leveling Compound	Men's Washroom	Leveling Compound Mastic	98 2	NONE NONE	NAD NAD	Non-Fibrous Non-Fibrous	100 100	1/23/2018 1/23/2018	SC SC

NAD = NO ASBESTOS DETECTED

Date Sampled: 1/23/2018

Report Date: 1/23/2018

Page 1 of 1

Association are themical Profession

Bastion Environmental Inc Senior Analyst

