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- .3 ESA PLAN APPROVAL REVIEW COMMENTS.

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ELECTRICAL LEGEND

REFLECTED CEILING PLAN		ELECTRICAL DISTRIBUTION		COMMUNICATIONS	
	LED LIGHT FIXTURE, TYPE AS INDICATED. REFER TO LIGHTING SCHEDULE FOR DETAILS.		WALL MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5-15R		SECURITY CARD READER
	EMERGENCY LIGHTING FIXTURE INDICATED WITH HATCHING		ABOVE COUNTER DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5-15R		SECURITY ELECTRIC STRIKE
	EXIT LIGHT CEILING MOUNTED C/W FACES AND ARROWS AS INDICATED		WALL MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5-15R		DOOR CONTACT
	EXIT LIGHT WALL MOUNTED C/W FACES AND ARROWS AS INDICATED		WALL MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, 2 POLE, SPLIT CIRCUIT		ELECTRIC LOCK
	SINGLE POLE LINE VOLTAGE LIGHT SWITCH		WALL MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5-15R, DEDICATED CIRCUIT		OCCUPIED WHEN LIT
	LIGHTING CONTROL TIMER SWITCH - LEVITON LTB60-1LZ		CEILING MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5-15R		COMMUNICATION PANEL
	LOW VOLTAGE LIGHTING CONTROL SWITCH - CRESTRON C2N-CB		QUAD RECEPTACLE 120 VOLT, 15 AMP, CSA 5-15R		PROX CARD READER
	LIGHTING CONTROL SWITCH - OCC AND VACANCY - LEVITON OSS-MT		WALL MOUNTED SPECIALTY RECEPTACLE, VOLTS AND AMPS AS INDICATED IN RECEPTACLE SCHEDULE		LONG RANGE WIEGAND READER
FIRE ALARM SYSTEMS			VOICE/DATA OUTLET		DOOR CONTACT, DOUBLE
	MANUAL PULL STATION		FLOOR BOX C/W CSA 5-15R AND OPENING FOR USE BY COMMUNICATION CONTRACTOR		DOOR CONTACT, SINGLE
	SMOKE DETECTOR		FLOOR BOX C/W 2 CSA 5-15R AND OPENING FOR USE BY COMMUNICATION CONTRACTOR		DOOR CONTACT, HEAVY DUTY
	HEAT DETECTOR		PANEL-SURFACE MOUNT		UTILITY CONTACT
	SMOKE DETECTOR DUCT MOUNTED		PANEL-FLUSH MOUNT		MOTION DETECTOR
	EMERGENCY EVACUATION SWITCH		DIRECT CONNECTION TO EQUIPMENT AS NOTED		WATER DETECTOR
	FIREMAN'S HANDSET		COMBINATION DISCONNECT/STARTER		HI/LO TEMPERATURE DETECTOR
	HORN SINGLE		DISCONNECT SWITCH		SECURITY KEYPAD
	COMBINATION HORN/STROBE LIGHT		FUSED DISCONNECT SWITCH		SECURITY CAMERA, FIXED
	EMERGENCY EVACUATION SPEAKER-CEILING MOUNTED		TRANSFORMER		ELECTRIC DOOR STRIKE
	EMERGENCY EVACUATION SPEAKER - WALL MOUNTED		CONNECTION TO SINGLE PHASE MOTOR		ELECTROMAGNET
	FLOW SWITCH		CONNECTION TO THREE PHASE MOTOR		EMERGENCY PULL STATION
	SUPERVISED VALVE		MANUAL STARTER		EXIT BUTTON
	FAN AUTOMATIC SHUTDOWN		CONTACTOR		HANDICAPPED BUTTON
	FRESH AIR DAMPER CONTROL		TV OUTLET WALL MOUNTED		REX (REQUEST TO EXIT) DEVICE
	SMOKE DAMPER CONTROL		CABLE TRAY REFER TO SPECIFICATION LETTER DENOTES FOR TYPE		LOCKDOWN BUTTON
	INTERFACE ANALOG MODULE		JUNCTION BOX, 3 1/2" BOX WITH COVER PLATE		PANIC BAR
	ISOLATION MODULE		BUILDING AUTOMATED SYSTEM CONNECTION POINT		STROBE
	STAND ALONE STROBE		PULL BOX		FIRE INTERFACE
	END OF LINE RESISTOR		SPLITTER		HORN (DOOR FORCED OPEN OR OPEN TOO LONG)
			BREAKER		BELL
			AUTOMATIC TRANSFER SWITCH (ATS)		SOUNDER
			GENERATOR		MOTOR INTERFACE
					PANIC BUTTON
					ONE CEILING MOUNT BACKBOX C/W ONE 3/4" CONDUIT STUBBED INTO CEILING SPACE C/W TWO CONNECTORS WITH NYLON BUSHINGS AND PULL STRINGS FOR USE BY COMMUNICATIONS CONTRACTOR. ONE CONDUIT PER BOX.

NOTE: NOT ALL SYMBOLS APPLY. CONTRACTOR TO REFER TO FLOOR PLANS.
SECURITY DRAWINGS ARE TO BE READ IN CONJUNCTION WITH COMMUNICATION PLANS AND ARCHITECT'S; DOOR, FRAME AND HARDWARE SCHEDULE.

DRAWING LIST	
DRAWING NUMBER	DESCRIPTION
E-S1	ELECTRICAL SITE PLAN
GENERAL	
E-000	LEGEND
E-010	ELECTRICAL DISTRIBUTION BELOW GRADE
E-011	ELECTRICAL DISTRIBUTION BELOW GRADE TEST FACILITY
REFLECTED CEILING PLAN (R.C.P)	
E-101	GROUND FLOOR
E-102	SECOND & THIRD FLOOR
E-103	FOURTH FLOOR & PENTHOUSE
E-104	TEST FACILITY
ELECTRICAL DISTRIBUTION	
E-201A	GROUND FLOOR: ELECTRICAL DISTRIBUTION
E-201B	REFER TO NOOGA COMMS PACKAGE
E-202	SECOND FLOOR
E-203	THIRD FLOOR
E-204	FORTH FLOOR
E-205	PENTHOUSE
E-206	TEST FACILITY
RISERS, DIAGRAMS AND DETAILS	
E-301	SINGLE LINE DIAGRAM
E-302	PANEL SCHEDULES
E-303	PANEL SCHEDULES & MSCL
E-304	ELECTRICAL - TYPICAL DETAILS
E-305	SECURE DOOR - TYPICAL DETAILS
E-306	FIRE ALARM RISER

INTERIOR LIGHTING SCHEDULE

SYMBOL	LABEL	DESCRIPTION	WATTAGE	LUMENS
	A	BBDLED-B3-MF-1000-80-30-SO	38.8	3823
	C	LBIL-4-40LW-EU COLUMBIA	34.7	3161
	D	LRO4-35ML-EDU COLUMBIA	52.5	5039
	E	CUS33569 TMS	6	775
	F	SCD-B4-500-35-0_5-4-NK-W-UNV-D-1 AXIS	19.9	2000
	G	BRVLED-B3-MF-300-80-40-SO L SHAPE 6' and 2' AXIS	9.46	1143
	H	LBSLEDA10L30K9_WH SHOWERLITE PRESCOLITE	16.37	1032
	K	VN4-LS2-W_40K STANPRO	54	6001
	L	FN-LS3-W_35K STANPRO INDUSTRIAL	149.05	17787
	M	699-581-613-40-X-20 LETO 20 SENSO	32.2	2426
	N	PH-STR9-300-15W-BL-10-23_10_1	13.92	285
	M1	699-581-613-40-X-07 LETO 20 SENSO	20	876
	O4	SCD-B4-500-35-F-4-NK-W-UNV-D-1 AXIS 4FT	13	1203
	O8	SCD-B4-500-35-F-4-NK-W-UNV-D-1 AXIS 8FT	N.A.	N.A.

ELECTRICAL GENERAL NOTES:

- ALL ELECTRICAL EQUIPMENT SHOWN IN THICK SOLID LINES IS NEW TO BE PROVIDED UNDER THIS CONTRACT, TOGETHER WITH ALL ASSOCIATED CONDUITS AND WIRING, TO PROVIDE COMPLETE WORKING SYSTEM.
- ALL CONDUITS AND WIRING PASSING THROUGH FLOOR AND FIRE RATED WALLS TO BE FIRE STOP USING 3M FIRE RETARDANT MASTIC SEALANT NO EQUIVALENT.
- ALL WIRING TO BE R/RW90, MINIMUM SIZE #12AWG COPPER, IN EMT CONDUIT UNLESS OTHERWISE NOTED.
- ALL ELECTRICAL CIRCUITS ARE SHOWN FOR GROUPING PURPOSES ONLY.
- REGROUP CIRCUITS AS REQUIRED.
- COORDINATE ALL WORK WITH ARCHITECTURAL AND MECHANICAL CONTRACTORS.
- ALL EQUIPMENT, ACCESSORIES, SIZES, LOCATIONS AND DETAILS OF INSTALLATIONS TO BE CONFIRMED ON SITE.
- SEISMIC RESTRAINT SYSTEM (SRS) - PROVIDE DESIGN, SUPPLY AND INSTALLATION OF COMPLETE SRS FOR ALL SYSTEMS EQUIPMENT SPECIFIED FOR INSTALLATION ON THIS PROJECT AS PER ONTARIO BUILDING CODE LATEST EDITION. THIS INCLUDES ELECTRICAL LIGHT FIXTURES, TRANSFORMERS, MCC'S, UPS, DIESEL GENERATORS, FIRE PROTECTION, CONDUIT, COMMUNICATIONS, ELECTRICAL EQUIPMENT AND SYSTEMS, BOTH VIBRATION ISOLATED AND STATICALLY SUPPORTED.



Client:
TOMLINSON
5597 POWER RD
OTTAWA, ON
K1G 3N4

Project:
TOMLINSON
NEW BUILDING
CITIGATE, OTTAWA

Drawing title:
ELECTRICAL LEGEND

Scale:	AS SHOWN	Drawn by:	M.G
Designed by:	M.G	Reviewed by:	J.R.P.
Approved by:	J.R.P.	Date:	NOV. 2016

Project no.:	100-16L	Drawing no.:	E-000
Revision:	0		

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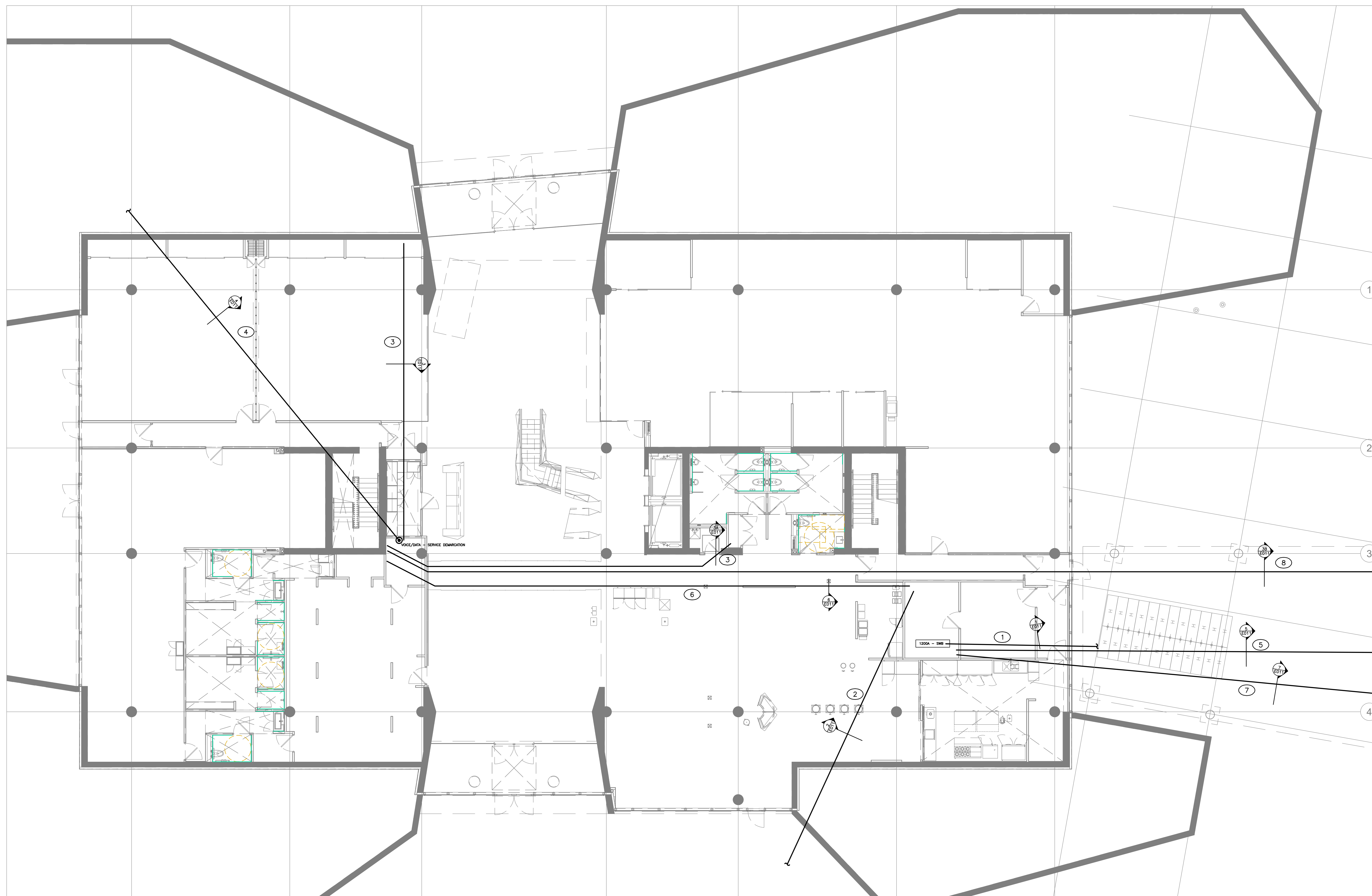
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1
E010 **ELECTRICAL DISTRIBUTION – BELOW GRADE**
SCALE 1:100

GENERAL NOTES:

- ① ALL ELECTRICAL SHOWN IN THICK SOLID LINES IS TO BE PROVIDED UNDER THIS CONTRACT C/W WITH ALL ASSOCIATED CONDUITS, SADDLES, HARDWARE, EXCAVATION, CONCRETE FORMING, FILL, PULL STRINGS ETC.
- ② COORDINATE ALL WORK AND UNDER SLAB INTERFERENCES WITH ARCHITECTURAL, STRUCTURAL AND MECHANICAL CONTRACTORS.

DRAWING NOTES:

- ① PROVIDE SECONDARY DUCT BANK FROM PAD MOUNT TRANSFORMER TO METERING SIDE OF NEW SWITCH BOARD AS PER TYPICAL DETAIL 1/E011.
- ② PROVIDE DIRECT BURIED CONDUIT(S) FROM MAIN ELECTRICAL ROOM TO EXTERIOR OF BUILDING FOR FUTURE CONNECTION TO EXTERIOR LIGHTING CABLE TRENCH AND ELECTRICAL VEHICLE CONNECTION POINTS AS PER TYPICAL DETAIL 2/E011.
- ③ PROVIDE DIRECT BURIED CONDUIT(S) FROM ELEC/IT CLOSET TO LOCATIONS WITHIN BUILDING AS SHOWN AS PER TYPICAL DETAIL 3A/E011.
- ④ PROVIDE DIRECT BURIED CONDUITS FROM COMMUNICATION SERVICE PROVIDER TO DEMARCATION POINT WITHIN BUILDING AS PER TYPICAL DETAIL 4/E011.
- ⑤ PROVIDE DUCT BANK FROM MAIN ELECTRICAL ROOM TO STANDBY GENERATOR AS PER TYPICAL DETAIL 5/E011.
- ⑥ PROVIDE DIRECT BURIED CONDUIT FROM MAIN ELECTRICAL ROOM TO ELEC/IT CLOSET IN SMALL POD AS PER TYPICAL DETAIL 6/E011.
- ⑦ PROVIDE DUCT BANK FROM MAIN ELECTRICAL ROOM TO TEST FACILITY AS PER TYPICAL DETAIL 7/E011.
- ⑧ PROVIDE DUCT BANK FROM ELEC/IT CLOSET TO IT STORAGE ROOM IN TEST FACILITY AS PER TYPICAL DETAIL 3B/E011.

No	DESCRIPTION	DATE
A	ISSUED FOR CONSTRUCTION	NOV. 22 2016

REVISIONS

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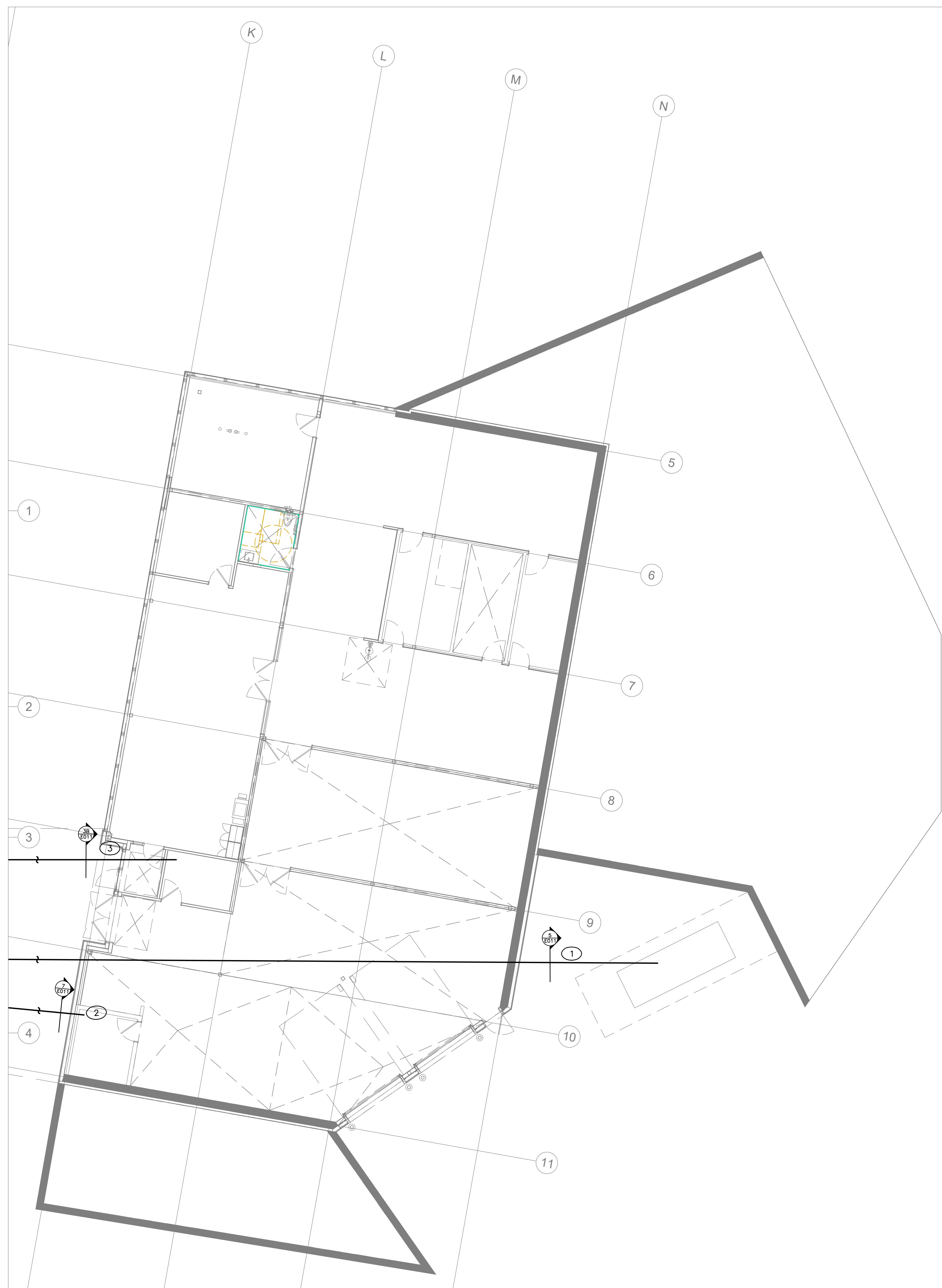
client:
TOMLINSON
5597 POWER RD
OTTAWA, ON
K1G 3N4

project:
TOMLINSON
NEW BUILDING
CITIGATE, OTTAWA

drawing title:
**ELECTRICAL DISTRIBUTION
BELOW GRADE**

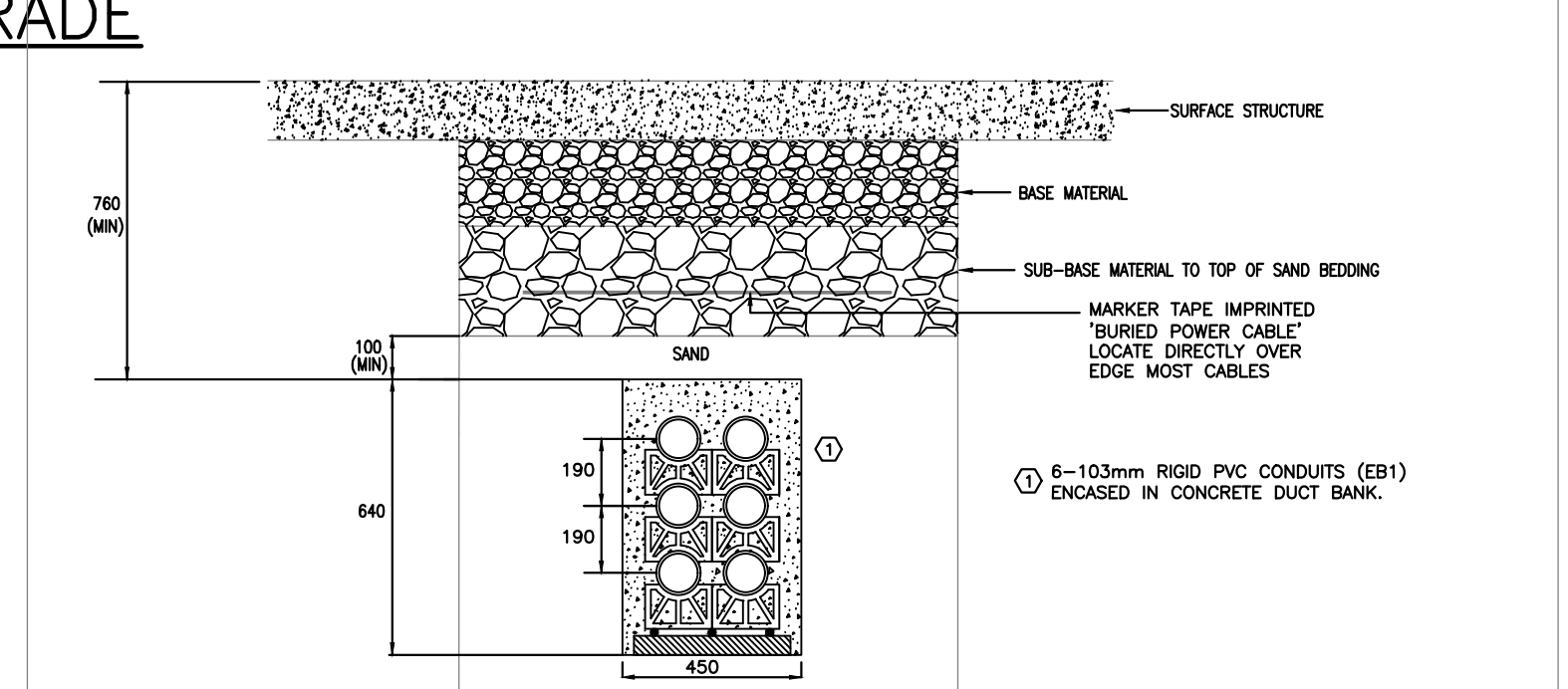
scale:	AS SHOWN	drawn by:	M.G
designed by:	M.G	reviewed by:	J.R.P.
approved by:	J.R.P.	date:	NOV. 2016

project no.:	100-16L	drawing no.:	E-010
revision:	0		

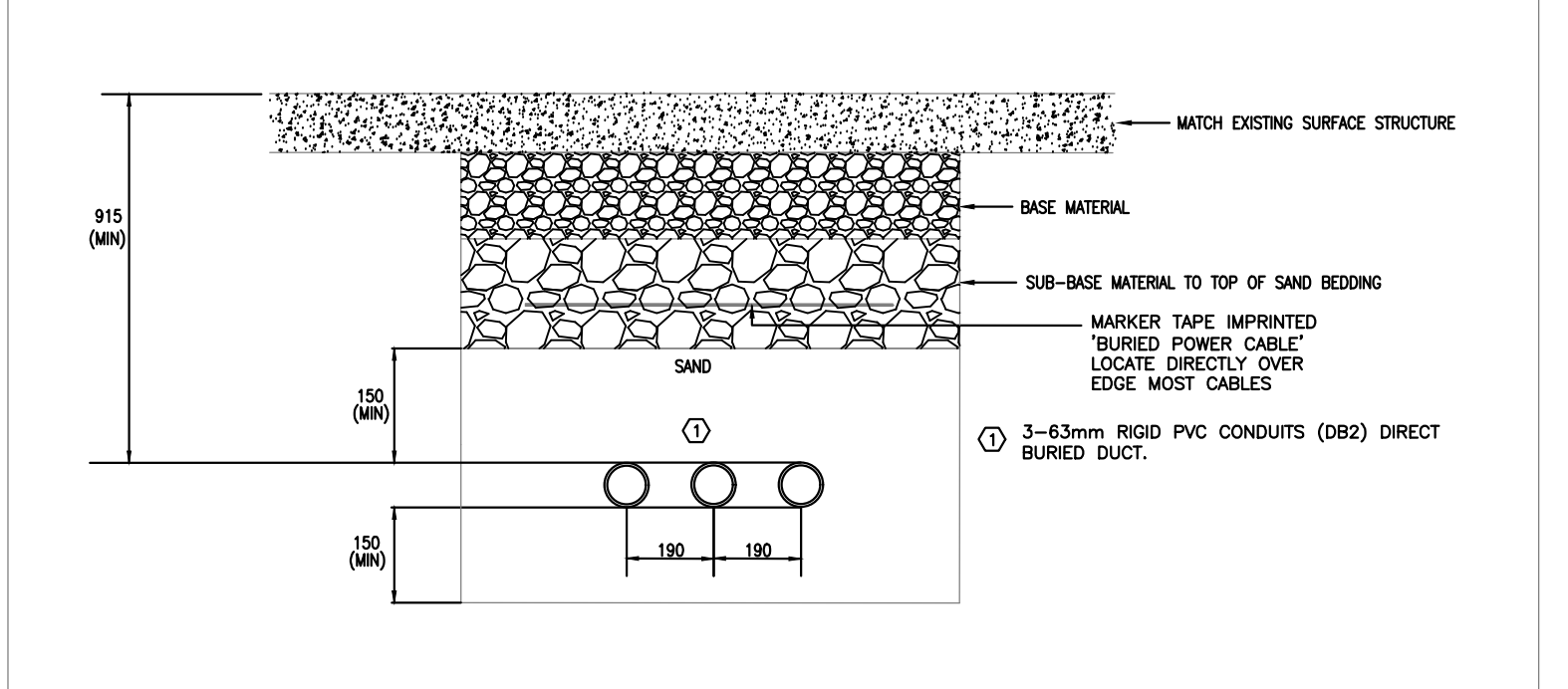


- DRAWING NOTES:**
- 1 PROVIDE DUCT BANK FROM MAIN ELECTRICAL ROOM TO STANDBY GENERATOR AS PER TYPICAL DETAIL 5/E011.
 - 2 PROVIDE DUCT BANK FROM MAIN ELECTRICAL ROOM TO TEST FACILITY AS PER TYPICAL DETAIL 7/E011.
 - 3 PROVIDE DUCT BANK FROM ELEC/IT CLOSET TO IT STORAGE ROOM IN TEST FACILITY AS PER TYPICAL DETAIL 3B/E011.

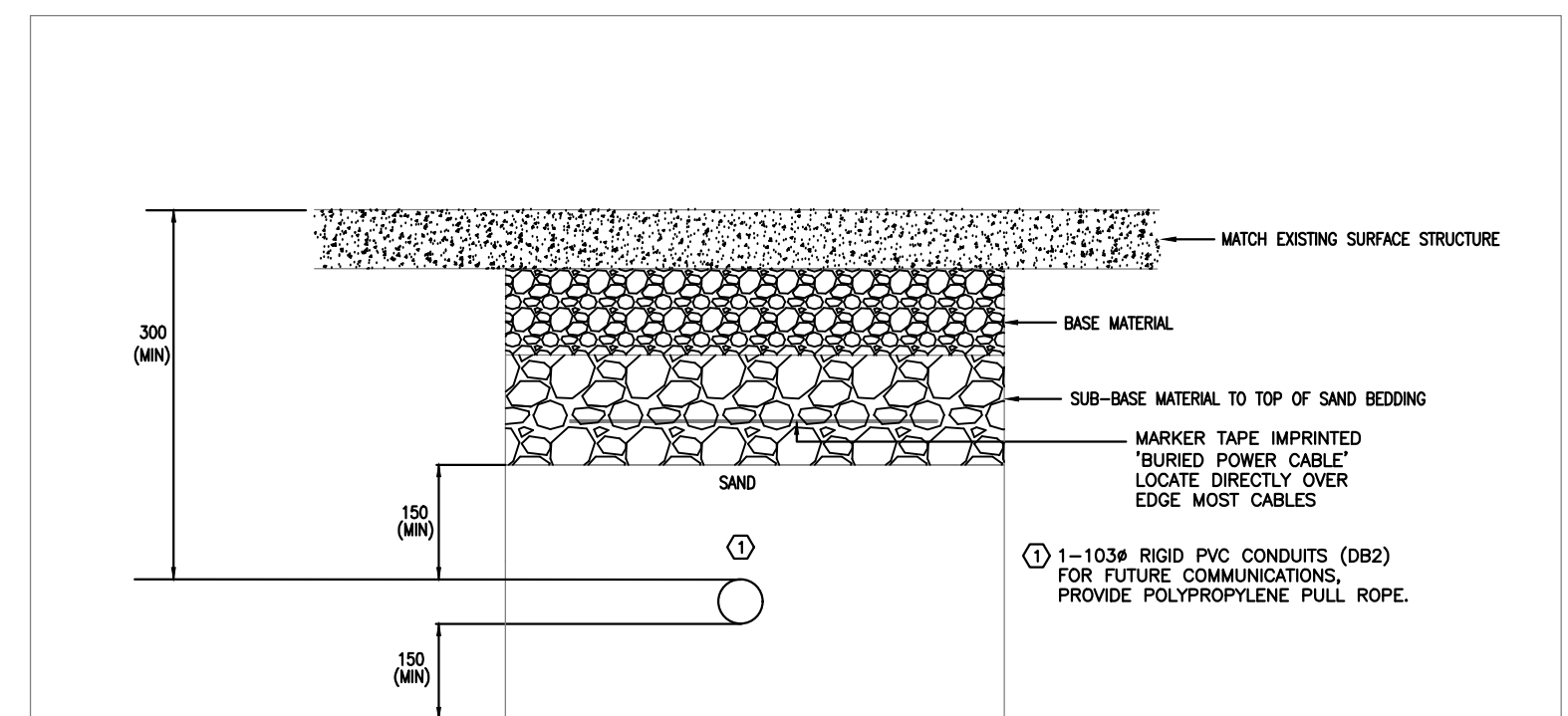
1 ELECTRICAL DISTRIBUTION – BELOW GRADE
SCALE 1:100



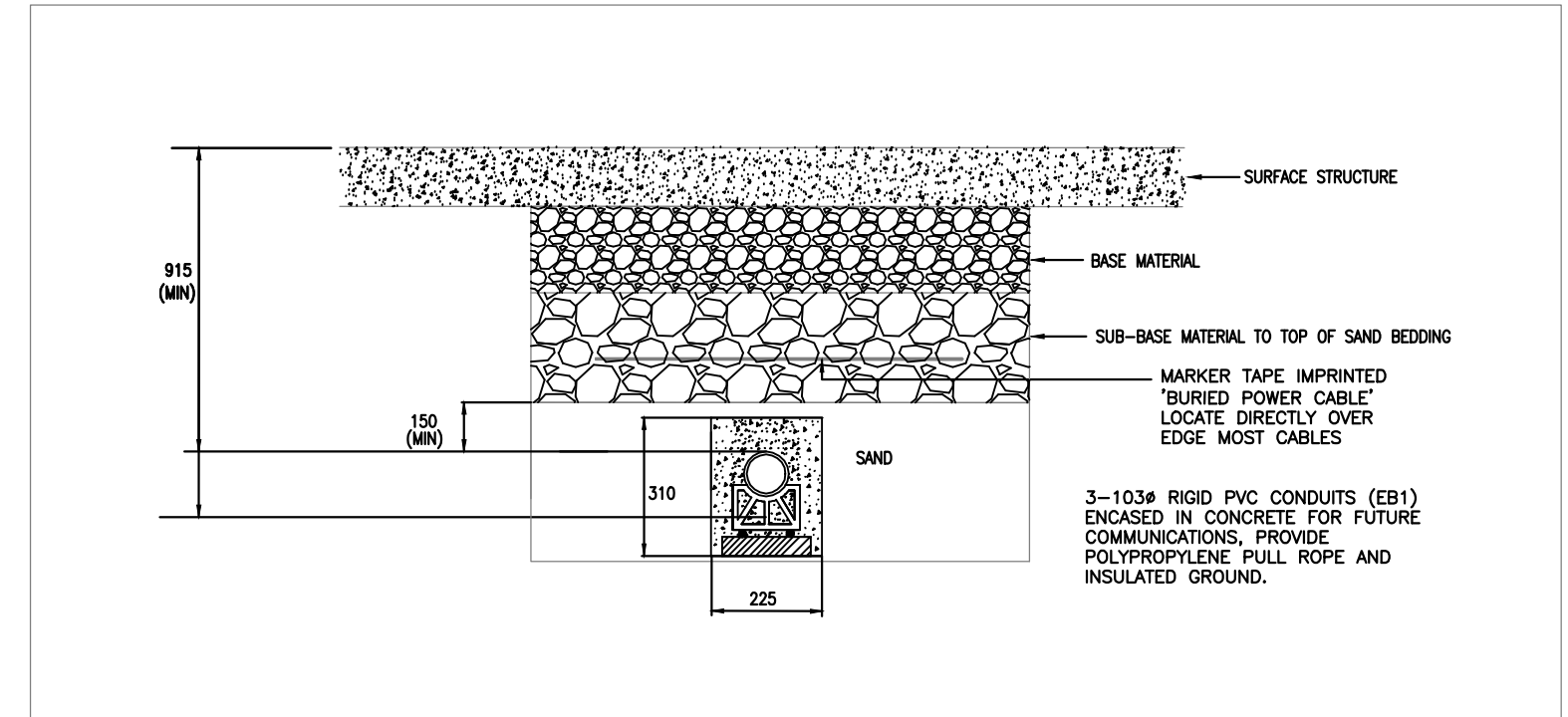
1 SECONDARY CABLE TRENCH DETAIL – PADMOUNT TRANSFORMER TO BLDG – MAIN ELECTRICAL ROOM
E-011 N.T.S.



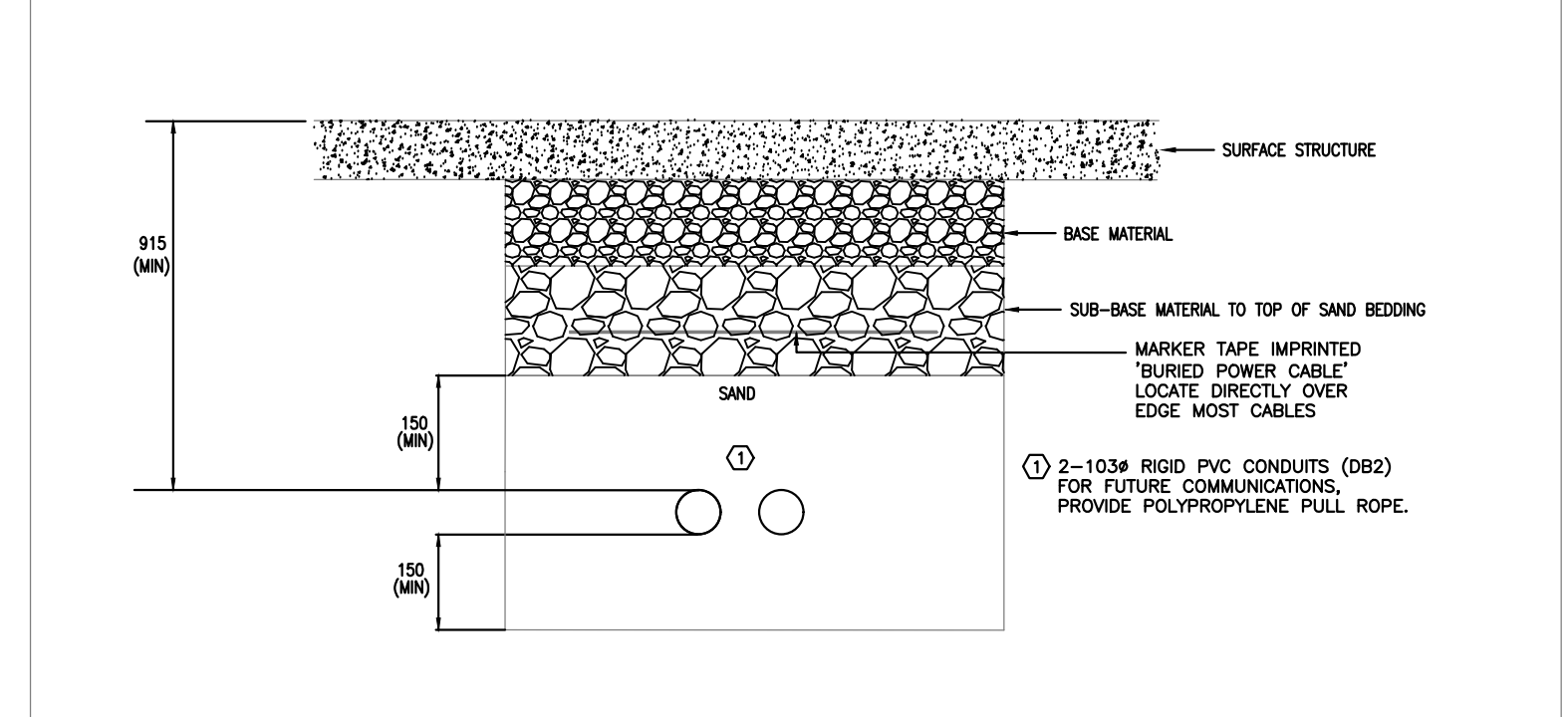
2 CABLE TRENCH DETAIL – EXTERIOR LIGHTING
E-011 N.T.S.



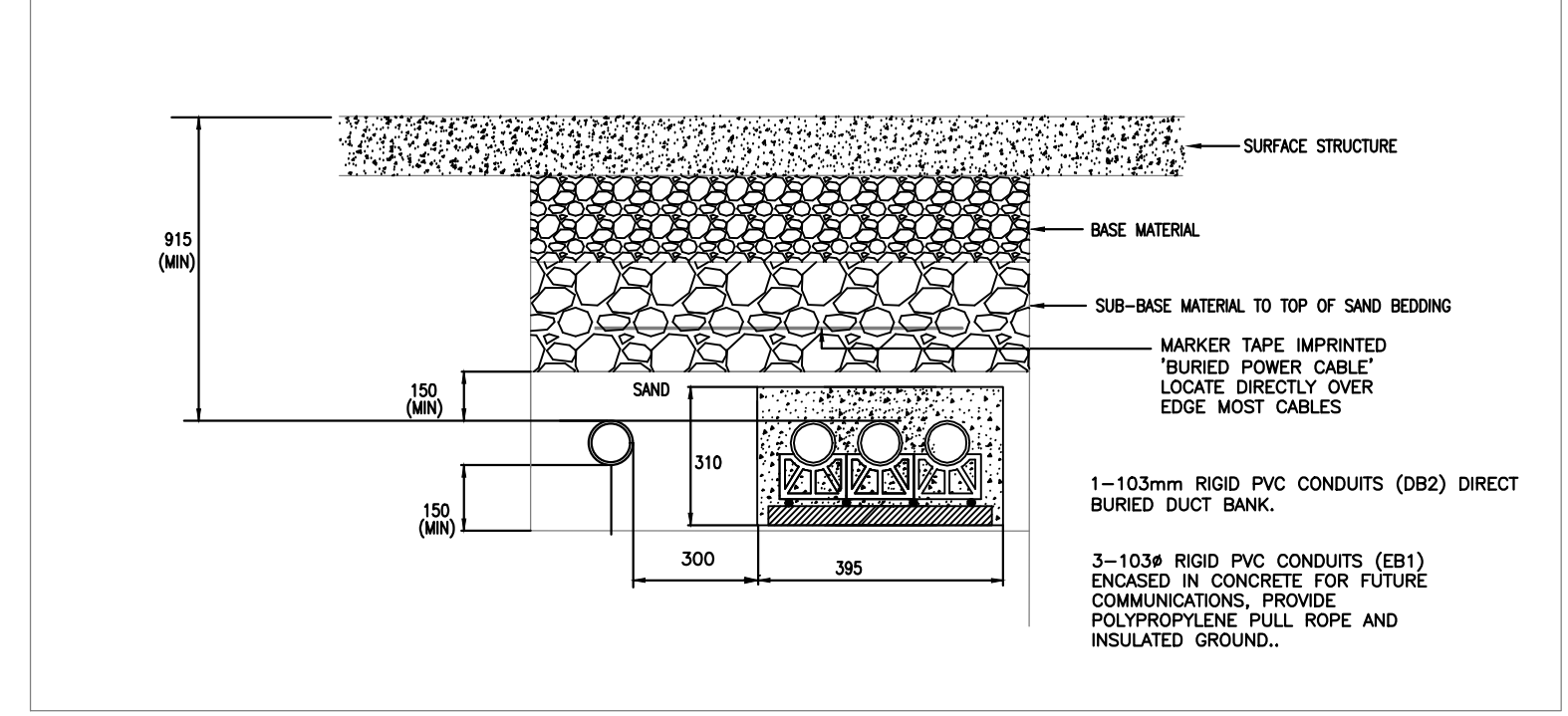
3A CABLE TRENCH DETAIL – COMMUNICATION/IT (INTERIOR)
E-011 N.T.S.



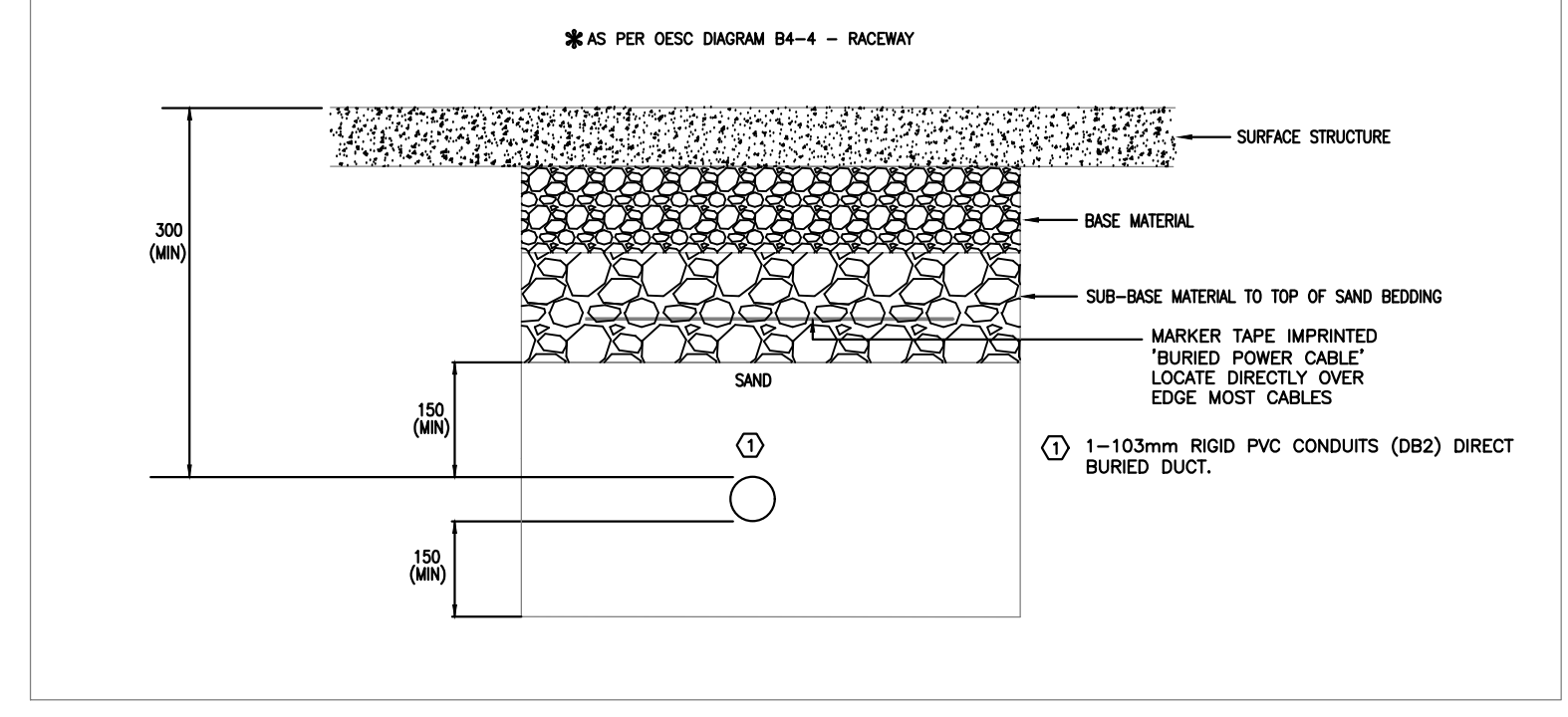
3B CABLE TRENCH DETAIL – COMMUNICATION/IT (EXTERIOR)
E-011 N.T.S.



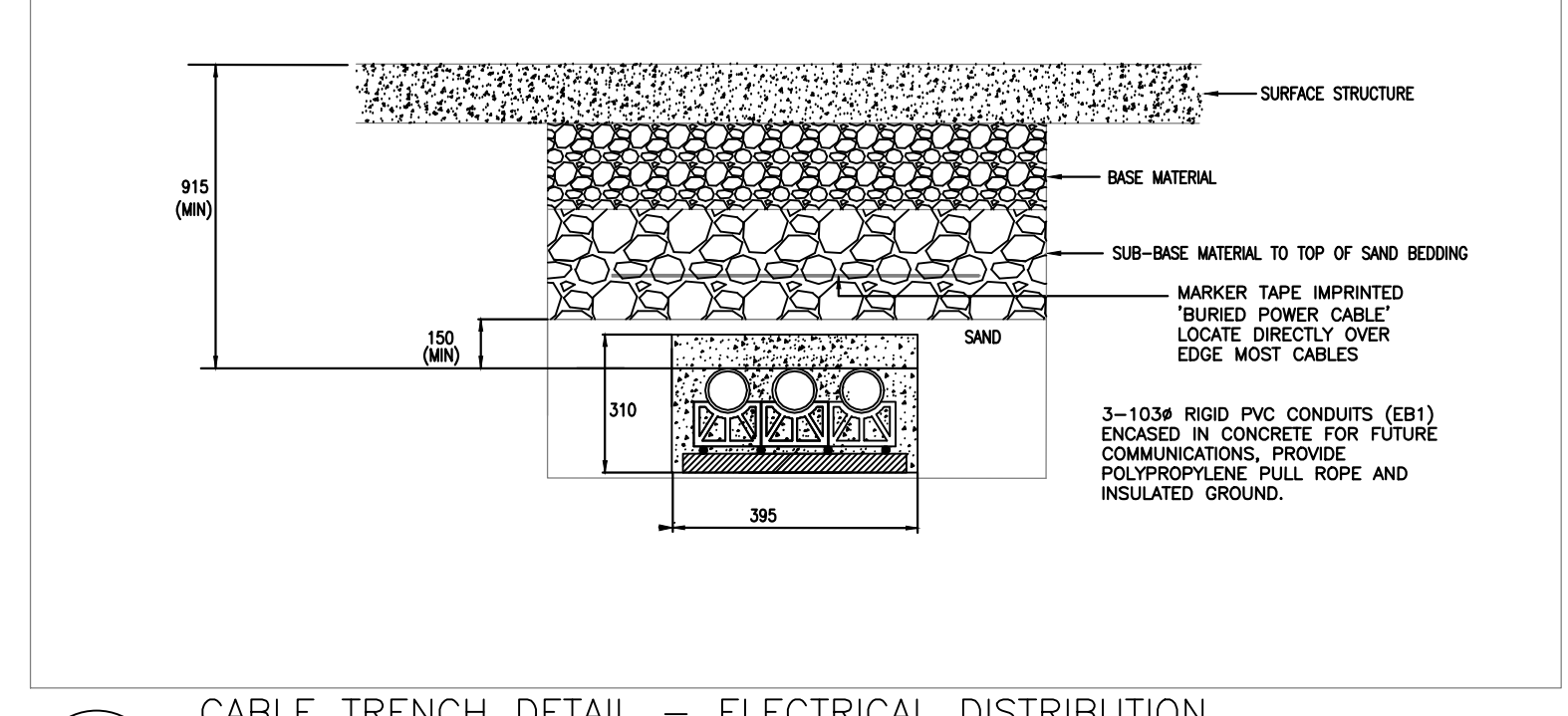
4 CABLE TRENCH DETAIL – COMMUNICATION SERVICE PROVIDER
E-011 N.T.S.



5 CABLE TRENCH DETAIL – GENERATOR
E-011 N.T.S.



6 CABLE TRENCH DETAIL – ELECTRICAL DISTRIBUTION (INTERIOR)
E-011 N.T.S.



7 CABLE TRENCH DETAIL – ELECTRICAL DISTRIBUTION MAIN ELECTRICAL ROOM TO TEST FACILITY
E-011 N.T.S.

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A	ISSUED FOR CONSTRUCTION	NOV. 22 2016

REVISIONS

Client: TOMLINSON
5597 POWER RD
OTTAWA, ON
K1G 3N4

Project: TOMLINSON
NEW BUILDING
CITIGATE, OTTAWA



Scale: AS SHOWN
Designed by: M.G.
Reviewed by: J.R.P.
Approved by: J.R.P.

Project No.: 100-16L
Drawing No.: E-011

Scale: AS SHOWN
Designed by: M.G.
Reviewed by: J.R.P.
Approved by: J.R.P.

Project No.: 100-16L
Drawing No.: E-011

Revision: 0



- DRAWING NOTES:**
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 - ◇ LIGHT FIXTURE TO BE TIED INTO EMERGENCY LIGHTING CIRCUIT AND REMAIN UNSWITCHED AT ALL TIMES.
 - ◇ PROVIDE LIGHTING FIXTURE, ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
 - ◇ FIRE ALARM PANEL, REFER TO RISER DIAGRAM FOR FURTHER DETAILS.
 - ◇ PROVIDE FIRE ALARM DEVICE AS INDICATED C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
 - ◇ LIGHTING TO BE CONTROLLED BY BAS BUILDING AUTOMATION SYSTEM.
 - ◇ LOW VOLTAGE LIGHTING CONTROL PANEL TO BE MOUNTED AS HIGH AS POSSIBLE. LOCATION TO BE DETERMINED ONSITE.

1 GROUND FLOOR – R.C.P.
E101 SCALE 1:100

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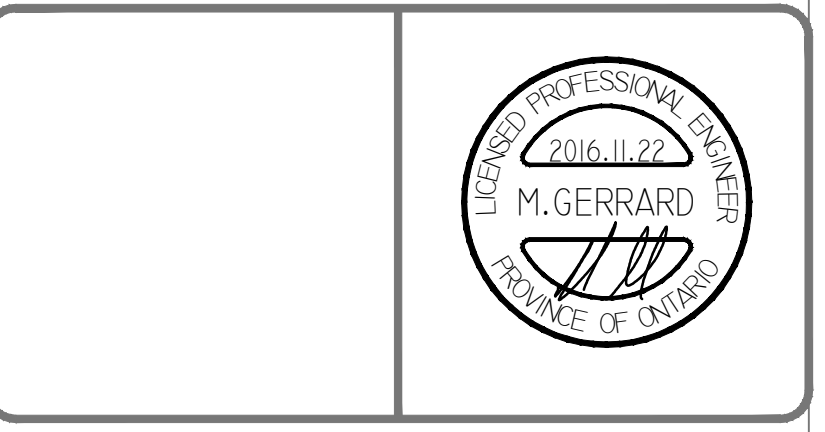
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client:
TOMLINSON
5597 POWER RD
OTTAWA, ON
K1G 3N4

project:
TOMLINSON
NEW BUILDING
CITIGATE, OTTAWA

drawing title:
R.C.P
GROUND FLOOR

scale:	AS SHOWN	drawn by:	M.G
designed by:	M.G	reviewed by:	J.R.P.
approved by:	J.R.P.	date:	NOV. 2016

project no.:	100-16L	drawing no.:	E-101
revision:	0		

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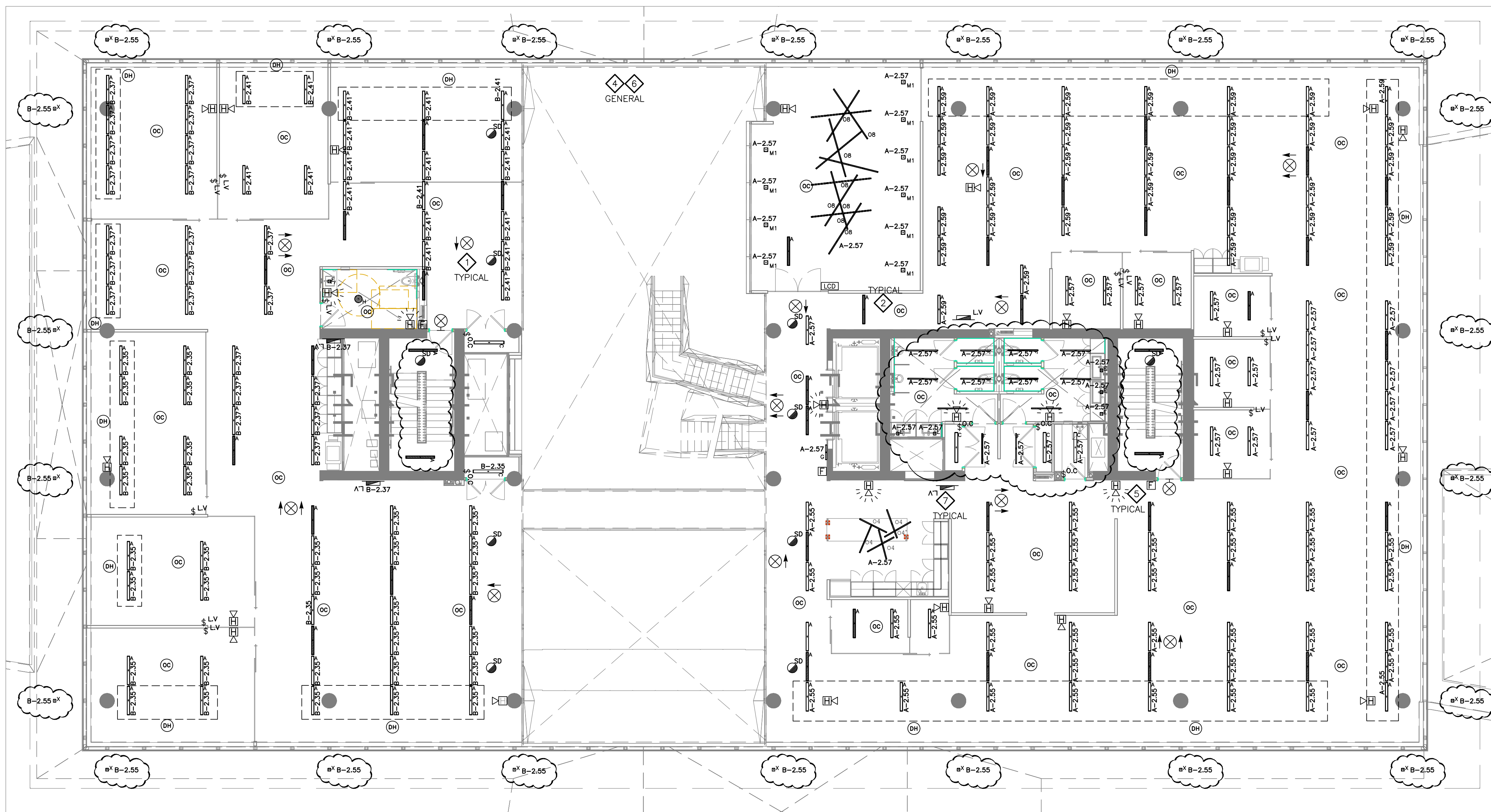
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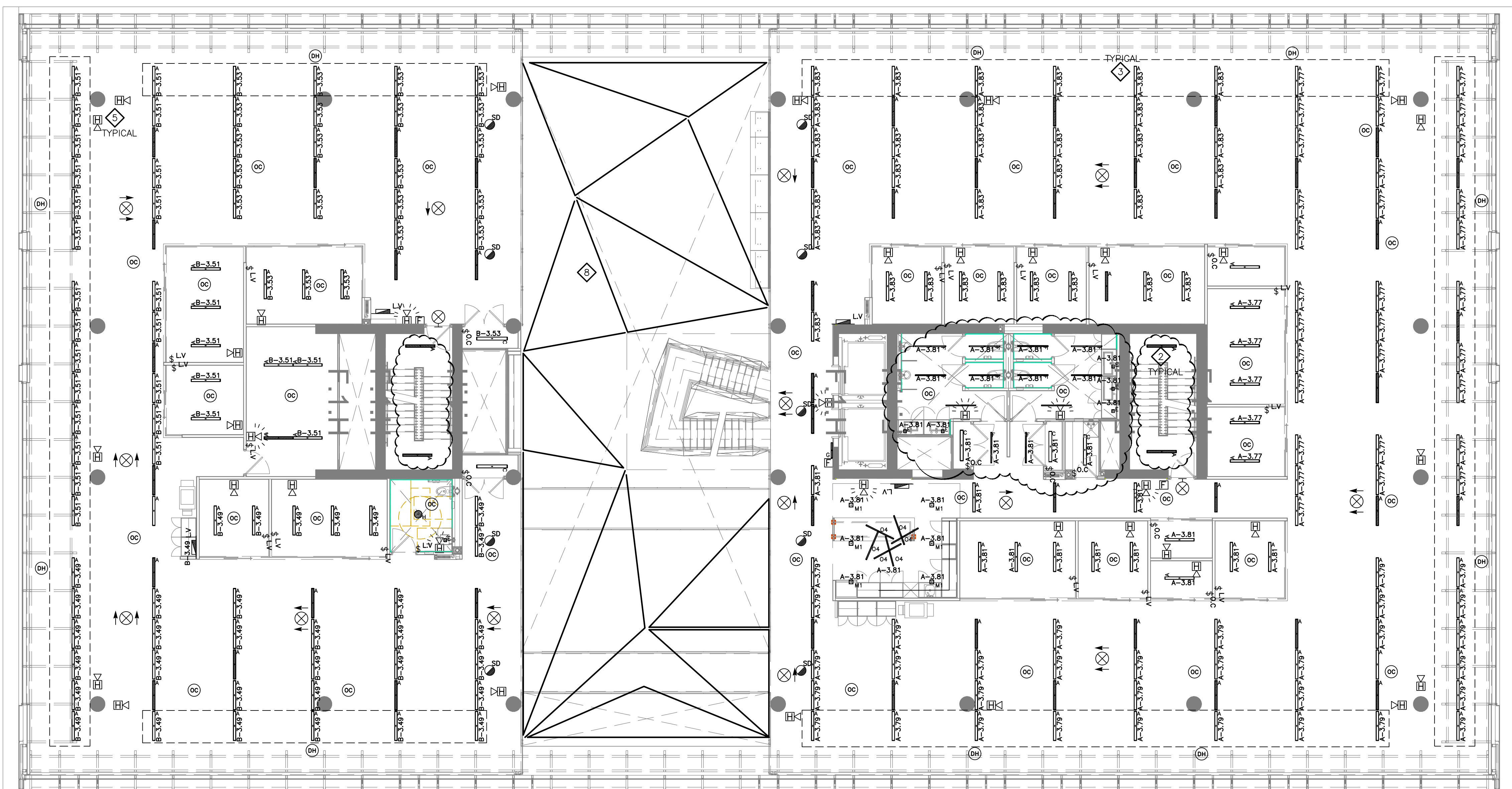
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DRAWING NOTES:

- ◇ PROVIDE SIDE LIT LED EXIT SIGN C/W DIRECTIONAL ARROWS AS INDICATED, ALL ASSOCIATED HARDWARE. EXIT SIGN TO BE TIED INTO EMERGENCY LIGHTING CIRCUIT.
- ◇ LIGHT FIXTURE TO BE TIED INTO EMERGENCY LIGHTING CIRCUIT AND REMAIN UNSWITCHED AT ALL TIMES.
- ◇ PROVIDE LIGHTING FIXTURE, ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
- ◇ ATRIUM LIGHTING TO BE TIED INTO EMERGENCY LIGHTING CIRCUITS AND REMAIN UNSWITCHED AT ALL TIMES.
- ◇ PROVIDE FIRE ALARM DEVICE AS INDICATED C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
- ◇ LIGHTING TO BE CONTROLLED BY BAS BUILDING AUTOMATION SYSTEM.
- ◇ LOW VOLTAGE LIGHTING CONTROL PANEL TO BE MOUNTED AS HIGH AS POSSIBLE. LOCATION TO BE DETERMINED ONSITE.
- ◇ PROVIDE CUSTOM SUSPENDED LIGHT FIXTURE WITH PRE-BUILT ILLUMINATED CORNERS AND CONTINUOUS RUNS OF LIGHTING CREATING THE LOOK OF A SINGLE FIXTURE. COORDINATE SUSPENSION WITH ACOUSTIC PANELS MANUFACTURER/CONTRACTOR. FIXTURES TO BE SELF SUPPORTING.



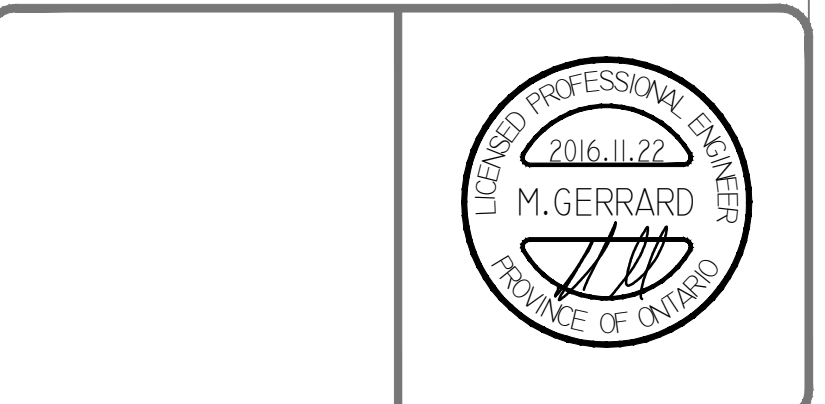
1 SECOND FLOOR - R.C.P.
E102 SCALE 1:100



2 THIRD FLOOR - R.C.P.
E102 SCALE 1:100

No	DESCRIPTION	DATE
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REVISIONS



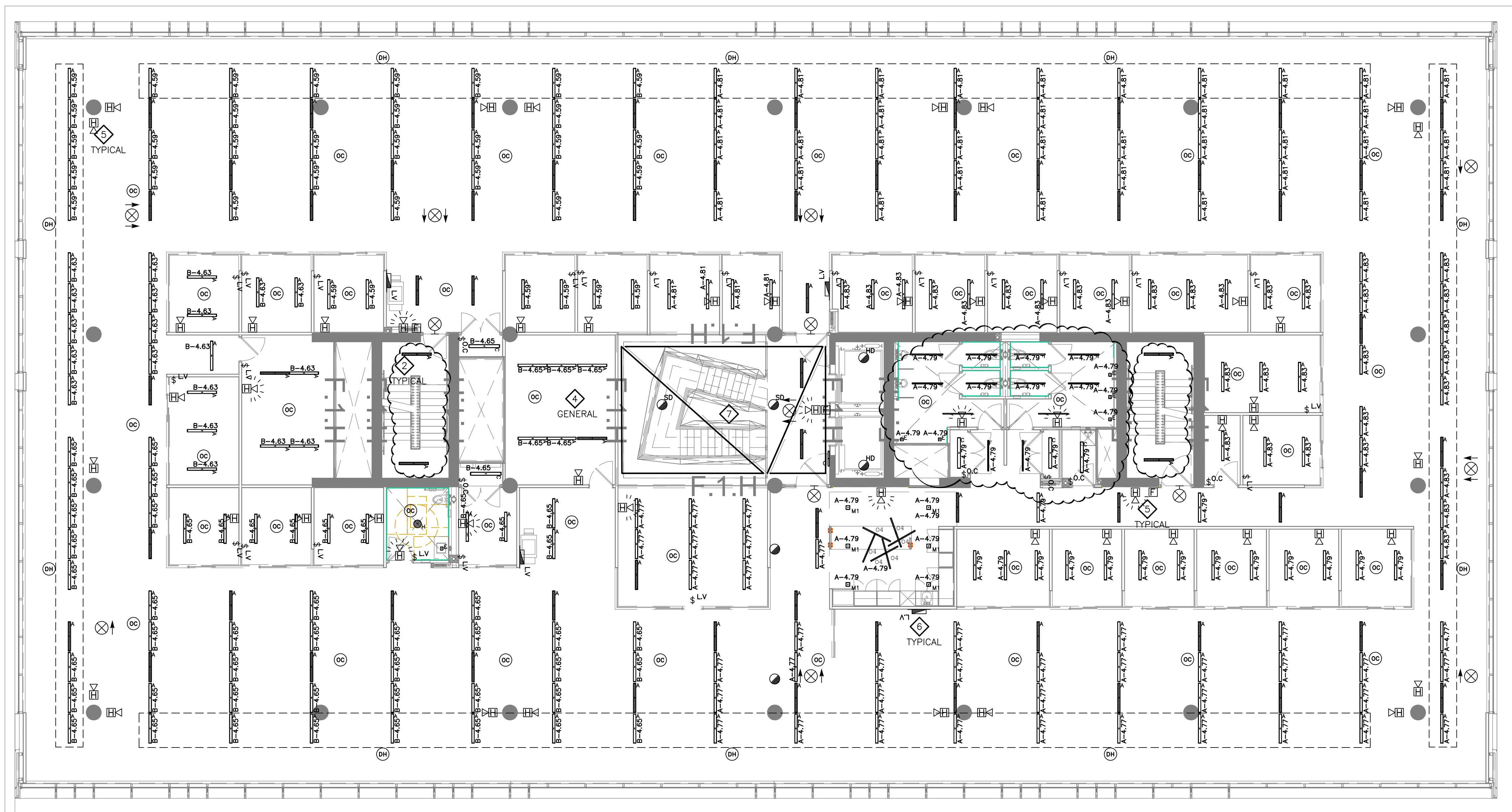
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project:
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NEW BUILDING
CITIGATE, OTTAWA

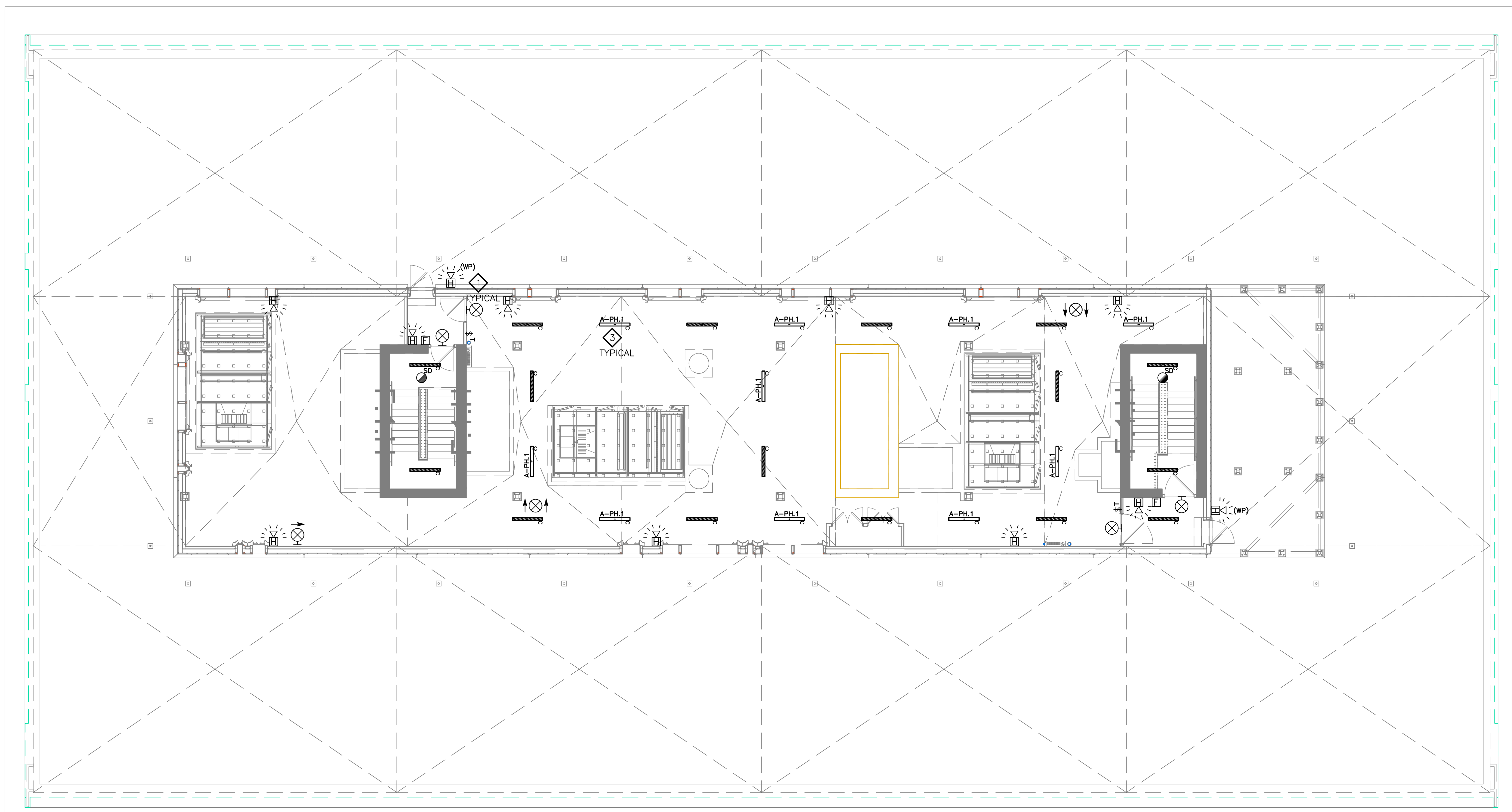
drawing title:
**R.C.P.
SECOND & THIRD
FLOOR**

scale:	AS SHOWN	drawn by:	M.G
designed by:	M.G	reviewed by:	J.R.P.
approved by:	J.R.P.	date:	NOV. 2016

project no.:	100-16L	drawing no.:	E-102
revision:	0		



1 FOURTH FLOOR – R.C.P
E103 SCALE 1:100



2 PENTHOUSE – R.C.P
E103 SCALE 1:100

DRAWING NOTES:

- ◇ PROVIDE LED EXIT SIGN C/W DIRECTIONAL ARROWS AS INDICATED. ALL ASSOCIATED HARDWARE. EXIT SIGN TO BE TIED INTO EMERGENCY LIGHTING CIRCUIT.
- ◇ LIGHT FIXTURE TO BE TIED INTO EMERGENCY LIGHTING CIRCUIT AND REMAIN UNSWITCHED AT ALL TIMES.
- ◇ PROVIDE LIGHTING FIXTURE, ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
- ◇ LIGHTING TO BE CONTROLLED BY BAS BUILDING AUTOMATION SYSTEM.
- ◇ PROVIDE FIRE ALARM DEVICE AS INDICATED C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
- ◇ LOW VOLTAGE LIGHTING CONTROL PANEL. TO BE MOUNTED AS HIGH AS POSSIBLE. LOCATION TO BE DETERMINED ONSITE.
- ◇ PROVIDE CUSTOM SUSPENDED LIGHT FIXTURE WITH PRE-BUILT ILLUMINATED CORNERS AND CONTINUOUS RUNS OF LIGHTING CREATING THE LOOK OF A SINGLE FIXTURE. COORDINATE SUSPENSION WITH ACOUSTIC PANELS MANUFACTURER/CONTRACTOR. FIXTURES TO BE SELF SUPPORTING.

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Authorized modifications must be signed and sealed by an engineer and this engineer will be completely responsible for these modifications. J.R.P. Engineering is not and will not be responsible for the consequences of these modifications or for modifications carried out without its consent.

GENERAL/CONSTRUCTION NOTES:

1. THE ISSUED FOR CONSTRUCTION SET OF DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE FOLLOWING ADDITIONAL CONTRACT DOCUMENTS:

1. NOOGA COMMS/AV/SECURITY DRAWINGS.
2. ADDENDUMS E1 THROUGH E4.
3. ESA PLAN APPROVAL REVIEW COMMENTS.

NOTE: SOME CHANGES FROM ADDENDUMS ARE NOT SHOWN ON THE DRAWINGS. HOWEVER THE CONTRACTOR SHOULD COORDINATE AND KEEP A PROPER WORKING COPY OF THE ADDENDUMS AND ONGOING AS-BUILT DRAWINGS ON SITE AT ALL TIMES.

No	DESCRIPTION	DATE
A	ISSUED FOR CONSTRUCTION	NOV. 22 2016

REVISIONS

client:
TOMLINSON
5597 POWER RD
OTTAWA, ON
K1G 3N4

project:
TOMLINSON
NEW BUILDING
CITIGATE, OTTAWA

drawing title:
R.C.P
FOURTH FLOOR
& PENTHOUSE

scale:	AS SHOWN	drawn by:	M.G
designed by:	M.G	reviewed by:	J.R.P.
approved by:	J.R.P.	date:	NOV. 2016

project no.:	100-16L	drawing no.:	E-103
revision:	0		

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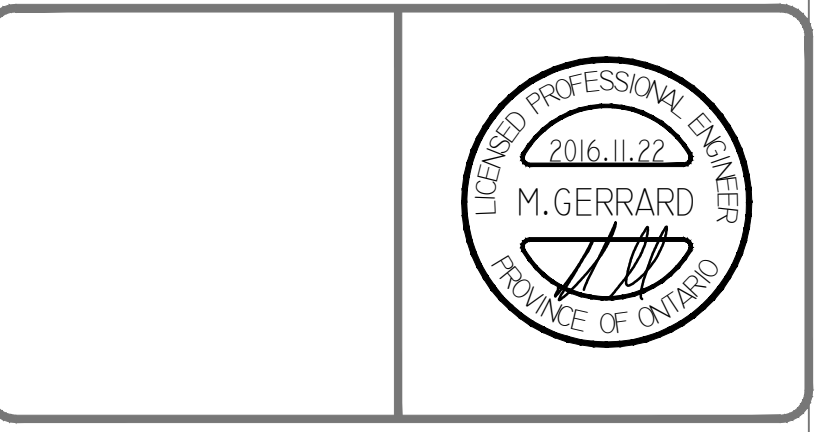
DRAWING NOTES:

- 1 PROVIDE LED EXIT SIGN C/W DIRECTIONAL ARROWS AS INDICATED. ALL ASSOCIATED HARDWARE. EXIT SIGN TO BE TIED INTO EMERGENCY LIGHTING CIRCUIT.
- 2 LIGHT FIXTURE TO BE TIED INTO EMERGENCY LIGHTING CIRCUIT AND REMAIN UNSWITCHED AT ALL TIMES.
- 3 PROVIDE LIGHTING FIXTURE, ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
- 4 FIRE ALARM PANEL. REFER TO RISER DIAGRAM FOR FURTHER DETAILS.
- 5 PROVIDE FIRE ALARM DEVICE AS INDICATED C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
- 6 LIGHTING TO BE CONTROLLED BY BAS BUILDING AUTOMATION SYSTEM.

1 TEST FACILITY – R.C.P.
E104 SCALE 1:100

No	DESCRIPTION	DATE
A	ISSUED FOR CONSTRUCTION	NOV. 22 2016

REVISIONS



client:
TOMLINSON
5597 POWER RD
OTTAWA, ON
K1G 3N4

project:
TOMLINSON
NEW BUILDING
CITIGATE, OTTAWA

drawing title:
R.C.P
TEST FACILITY

scale:	AS SHOWN	drawn by:	M.G
designed by:	M.G	reviewed by:	J.R.P.
approved by:	J.R.P.	date:	NOV. 2016

project no.:	100-16L	drawing no.:	E-104
revision:	0		

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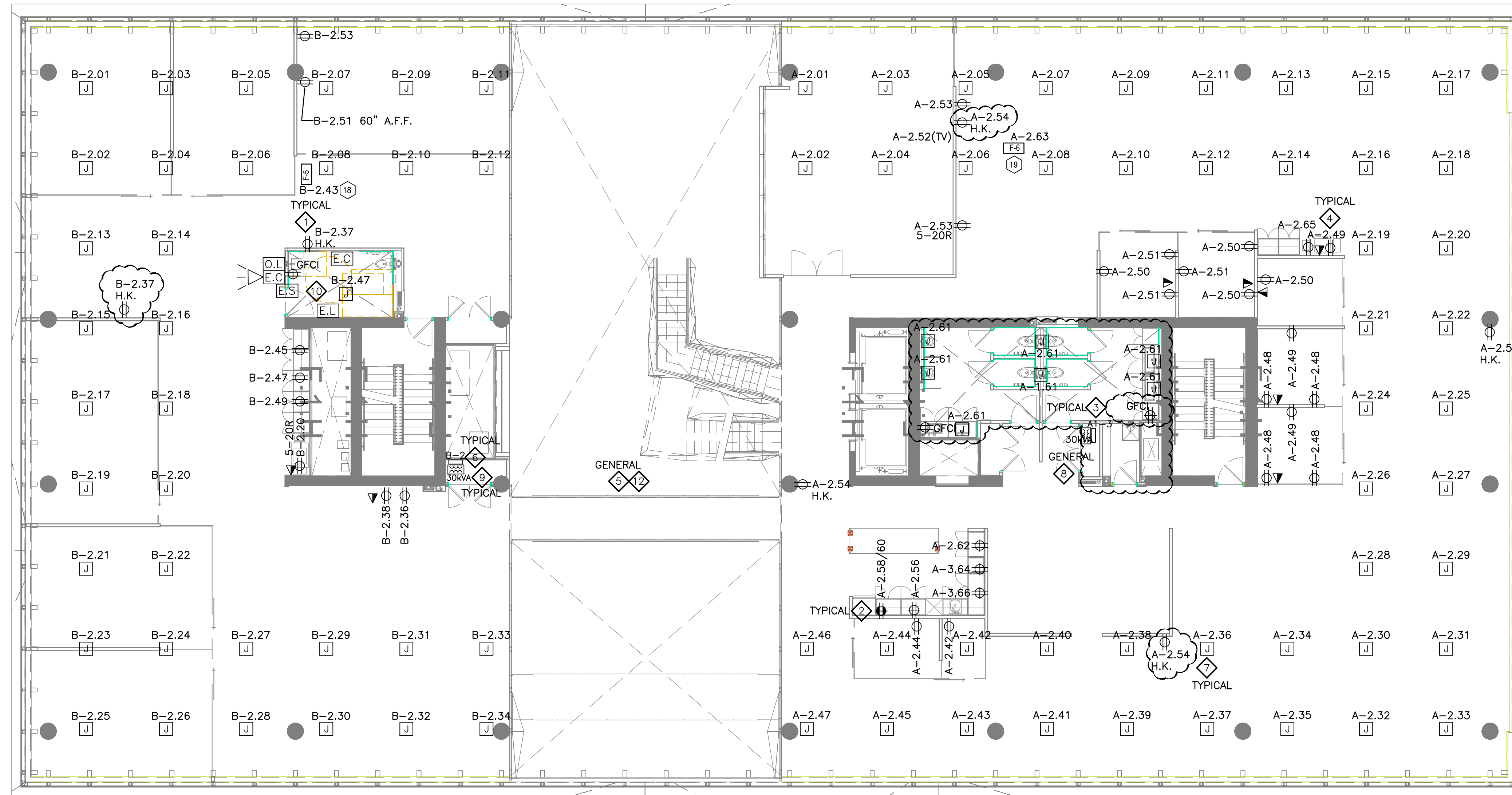
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GENERAL/CONSTRUCTION NOTES:

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2. ADDENDUMS E1 THROUGH E4.
3. ESA PLAN APPROVAL REVIEW COMMENTS.

NOTE: SOME CHANGES FROM ADDENDUMS ARE NOT SHOWN ON THE DRAWINGS; HOWEVER THE CONTRACTOR SHOULD COORDINATE AND KEEP A PROPER WORKING COPY OF THE ADDENDUMS AND ONGOING AS-BUILT DRAWINGS ON SITE AT ALL TIMES.



DRAWING NOTES:

1. PROVIDE DUPLEX RECEPTACLE (5-15R) C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
2. PROVIDE DEDICATED/SPLIT DUPLEX RECEPTACLE AS INDICATED (5-15R) C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
3. PROVIDE GFCI DUPLEX RECEPTACLE (5-15R) C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
4. PROVIDE DEDICATED DUPLEX RECEPTACLE (5-20R) FOR NEW PRINTER C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
5. PROVIDE SIX (6) CONTROLS TRANSFORMER FOR ADDITIONAL VAV BOXES (LOW VOLTAGE WIRING BY OTHERS) C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE. MOUNT TO UNDERSIDE OF SLAB. LOCATIONS NOT SHOWN.
6. PROVIDE DISTRIBUTION PANEL, REFER TO SLD AND PANEL SCHEDULE FOR FURTHER DETAILS.
7. PROVIDE CEILING MOUNTED, (SLAB MOUNTED BOX) C/W ALL CIRCUIT(S), CONDUIT, WIRING AND ASSOCIATED HARDWARE.
8. PROVIDE ELECTRICAL DISTRIBUTION AS PER SLD, C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
9. 30KVA TRANSFORMER TO SUSPENDED FROM BUILDING STRUCTURE. STRUCTURAL AND SEISMIC SUPPORT SHALL BE DESIGNED BY STRUCTURAL ENGINEER AND SUPPLIED BY GENERAL CONTRACTOR. MOUNT TRANSFORMER AS HIGH AS POSSIBLE.
10. PROVIDE AND INSTALL EMERGENCY CALL SYSTEM C/W AUDIBLE AND VISIBLE SIGNAL, PUSH BUTTONS, PULL STRING, ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE TO MAKE FULLY OPERATIONAL SYSTEM. REFER TO UNIVERSAL WASHROOM TYPICAL DETAIL. INSTALL AS PER OBC 3.8.3.12.(2). SIGNAGE BY OTHERS.
11. PROVIDE WIRING ALL ASSOCIATED CONDUIT AND WIRING ASSOCIATED WITH FINAL CONNECTIONS REQUIRED TO SERVICE DUCTLESS SPLIT SYSTEM UNITS TYPICAL TO ALL FLOORS (ELECTRICAL/IT CLOSETS) MAIN FEEDER DIRECT TO EVAPORATOR COIL IN IT CLOSET, THEN FEEDER UP TO CONDENSER LOCATED ON THE ROOF. COORDINATE EXACT WIRING REQUIREMENTS WITH FINAL UNIT SELECTION.
12. THE ELECTRICAL CONTRACTOR SHALL PROVIDE OPTIONS FOR AUTOMATIC CONTROL OF RECEPTACLE LOADS ON EACH FLOOR. THE CONTRACTOR MAY USE A RELAY/CONTACTOR WITH RECEPTACLE CIRCUITS RUN THROUGH IT C/W AUTOMATIC TIME CLOCK. OTHER OPTIONS MAY BE USED SUCH AS AUTOMATICALLY CONTROLLED RECEPTABLES.

AUTOMATIC RECEPTACLE CONTROL SECTION 130.5(D):

CONTROLLED RECEPTABLES THAT AUTOMATICALLY SHUT-OFF ARE REQUIRED IN PRIVATE OFFICES, OPEN OFFICES, LOBBIES, COPY ROOMS, KITCHENETTES, AND CONFERENCE ROOMS.

AT LEAST ONE CONTROLLED RECEPTACLE MUST BE WITHIN 6 FEET OF AN UNCONTROLLED RECEPTACLE; THIS CAN BE ACCOMPLISHED BY SWITCHING ONE OF THE TWO OUTLETS IN EACH RECEPTACLE

CONTROLLED RECEPTABLES NEED TO BE MARKED TO DIFFERENTIATE THEM FROM UNCONTROLLED RECEPTACLE

ALLOW FOR ALL ASSOCIATED CONDUIT, WIRE HARDWARE, FASTENERS, FITTINGS, RELAYS, WIRELESS DEVICES REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. TYPICAL NOTE, 4 FLOORS.

COMMUNICATION NOTES:

- ▲ ELECTRICAL DRAWINGS TO BE READ IN CONJUNCTION WITH SECURITY, IT AND AV DRAWINGS.

1 SECOND FLOOR - ELECTRICAL DISTRIBUTION
E202 SCALE 1:100

No	DESCRIPTION	DATE
A	ISSUED FOR CONSTRUCTION	NOV. 22 2016

REVISIONS

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client:
TOMLINSON
5597 POWER RD
OTTAWA, ON
K1G 3N4

project:
TOMLINSON
NEW BUILDING
CITIGATE, OTTAWA

drawing title:
**ELECTRICAL
DISTRIBUTION
SECOND FLOOR**

scale:	AS SHOWN	drawn by:	M.G
designed by:	M.G	reviewed by:	J.R.P.
approved by:	J.R.P.	date:	NOV. 2016

project no.:	100-16L	drawing no.:	E-202
revision:	0		

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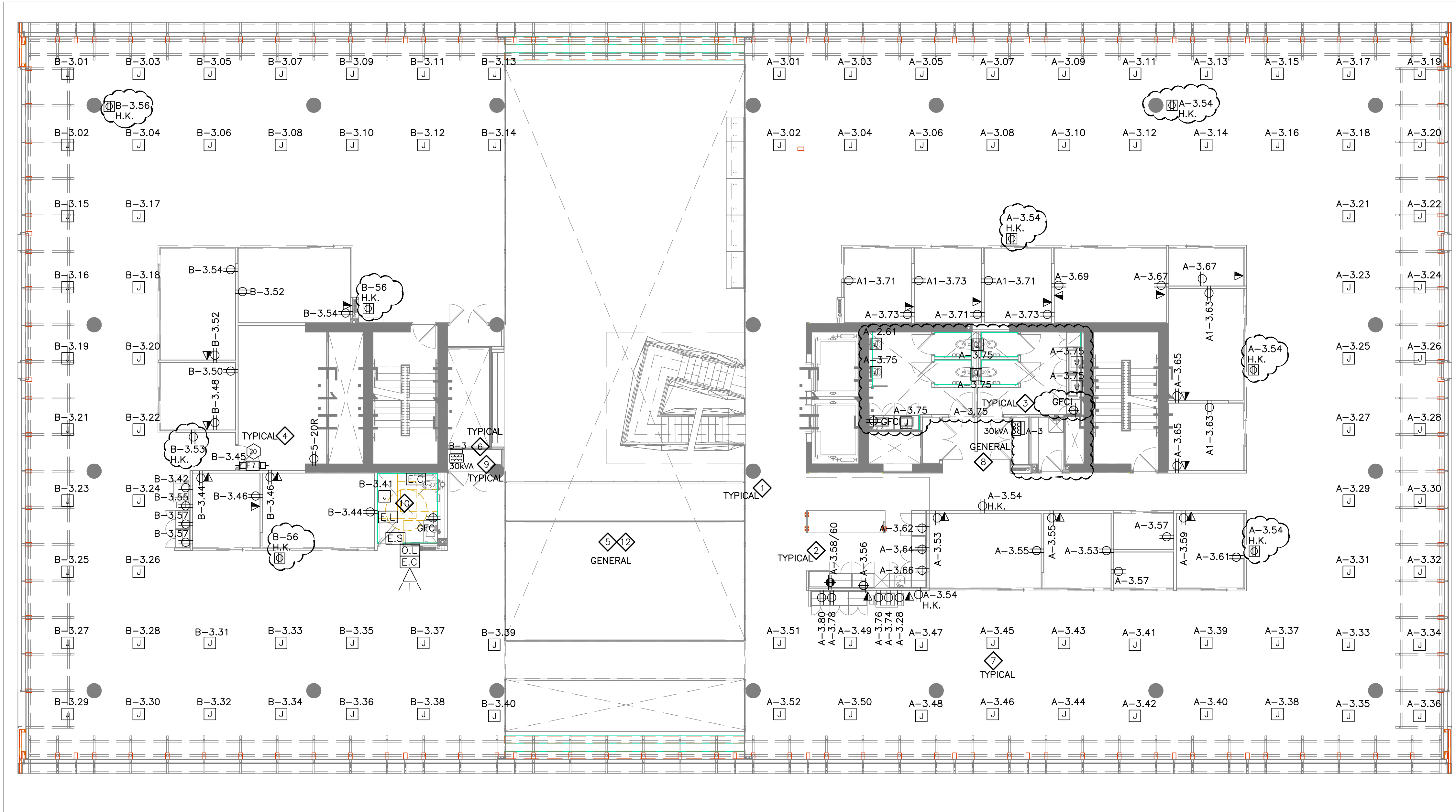
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- .2 ADDENDUMS E1 THROUGH E4
- .3 ESA PLAN APPROVAL REVIEW COMMENTS.

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- DRAWING NOTES:**
- 1 PROVIDE DUPLEX RECEPTACLE (5-15R) C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
 - 2 PROVIDE DEDICATED DUPLEX RECEPTACLE (5-15R) C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
 - 3 PROVIDE GFCI DUPLEX RECEPTACLE (5-15R) C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
 - 4 PROVIDE DEDICATED DUPLEX RECEPTACLE (5-20R) FOR NEW PRINTER C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
 - 5 PROVIDE SIX (6) CONTROLS TRANSFORMER FOR ADDITIONAL VAV BOXES (LOW VOLTAGE WIRING BY OTHERS) C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE. MOUNT TO UNDERSIDE OF SLAB. LOCATIONS NOT SHOWN.
 - 6 PROVIDE DISTRIBUTION PANEL, REFER TO SLD AND PANEL SCHEDULE FOR FURTHER DETAILS.
 - 7 PROVIDE CEILING MOUNTED, (SLAB MOUNTED BOX) C/W ALL CIRCUIT(S), CONDUIT, WIRING AND ASSOCIATED HARDWARE.
 - 8 PROVIDE ELECTRICAL DISTRIBUTION AS PER SLD, C/W ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE.
 - 9 30KVA TRANSFORMER TO SUSPENDED FROM BUILDING STRUCTURE. STRUCTURAL AND SEISMIC SUPPORT SHALL BE DESIGNED BY STRUCTURAL ENGINEER AND SUPPLIED BY GENERAL CONTRACTOR. MOUNT TRANSFORMER AS HIGH AS POSSIBLE.
 - 10 PROVIDE AND INSTALL EMERGENCY CALL SYSTEM C/W AUDIBLE AND VISIBLE SIGNAL, PUSH BUTTONS, PULL STRING, ALL CONDUIT, WIRING AND ASSOCIATED HARDWARE TO MAKE FULLY OPERATIONAL SYSTEM. REFER TO UNIVERSAL WASHROOM TYPICAL DETAIL. INSTALL AS PER OBC 3.8.3.12.(2). SIGNAGE BY OTHERS.
 - 11 PROVIDE WIRING ALL ASSOCIATED CONDUIT AND WIRING ASSOCIATED WITH FINAL CONNECTIONS REQUIRED TO SERVICE DUCTLESS SPLIT SYSTEM UNITS TYPICAL TO ALL FLOORS (ELECTRICAL/IT CLOSETS) MAIN FEEDER DIRECT TO EVAPORATOR COIL IN IT CLOSET, THEN FEEDER UP TO CONDENSER LOCATED ON THE ROOF. COORDINATE EXACT WIRING REQUIREMENTS WITH FINAL UNIT SELECTION.
 - 12 THE ELECTRICAL CONTRACTOR SHALL PROVIDE OPTIONS FOR AUTOMATIC CONTROL OF RECEPTACLE LOADS ON EACH FLOOR. THE CONTRACTOR MAY USE A RELAY/CONTACTOR WITH RECEPTACLE CIRCUITS RUN THROUGH IT C/W AUTOMATIC TIME CLOCK. OTHER OPTIONS MAY BE USED SUCH AS AUTOMATICALLY CONTROLLED RECEPTACLES.

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ALLOW FOR ALL ASSOCIATED CONDUIT, WIRE HARDWARE, FASTENERS, FITTINGS, RELAYS, WIRELESS DEVICES REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. TYPICAL NOTE, 4 FLOORS.

COMMUNICATION NOTES:

- ⚠ ELECTRICAL DRAWINGS TO BE READ IN CONJUNCTION WITH SECURITY, IT AND AV DRAWINGS.

1 3RD FLOOR - ELECTRICAL DISTRIBUTION
E203 SCALE 1:100

No	DESCRIPTION	DATE
A	ISSUED FOR CONSTRUCTION	NOV. 22 2016



client:
TOMLINSON
5597 POWER RD
OTTAWA, ON
K1G 3N4

project:
TOMLINSON
NEW BUILDING
CITIGATE, OTTAWA

drawing title:
**ELECTRICAL DISTRIBUTION
THIRD FLOOR**

scale:	AS SHOWN	drawn by:	M.G
designed by:	M.G	reviewed by:	J.R.P.
approved by:	J.R.P.	date:	NOV. 2016

project no.:	100-16L	drawing no.:	E-203
revision:	0		