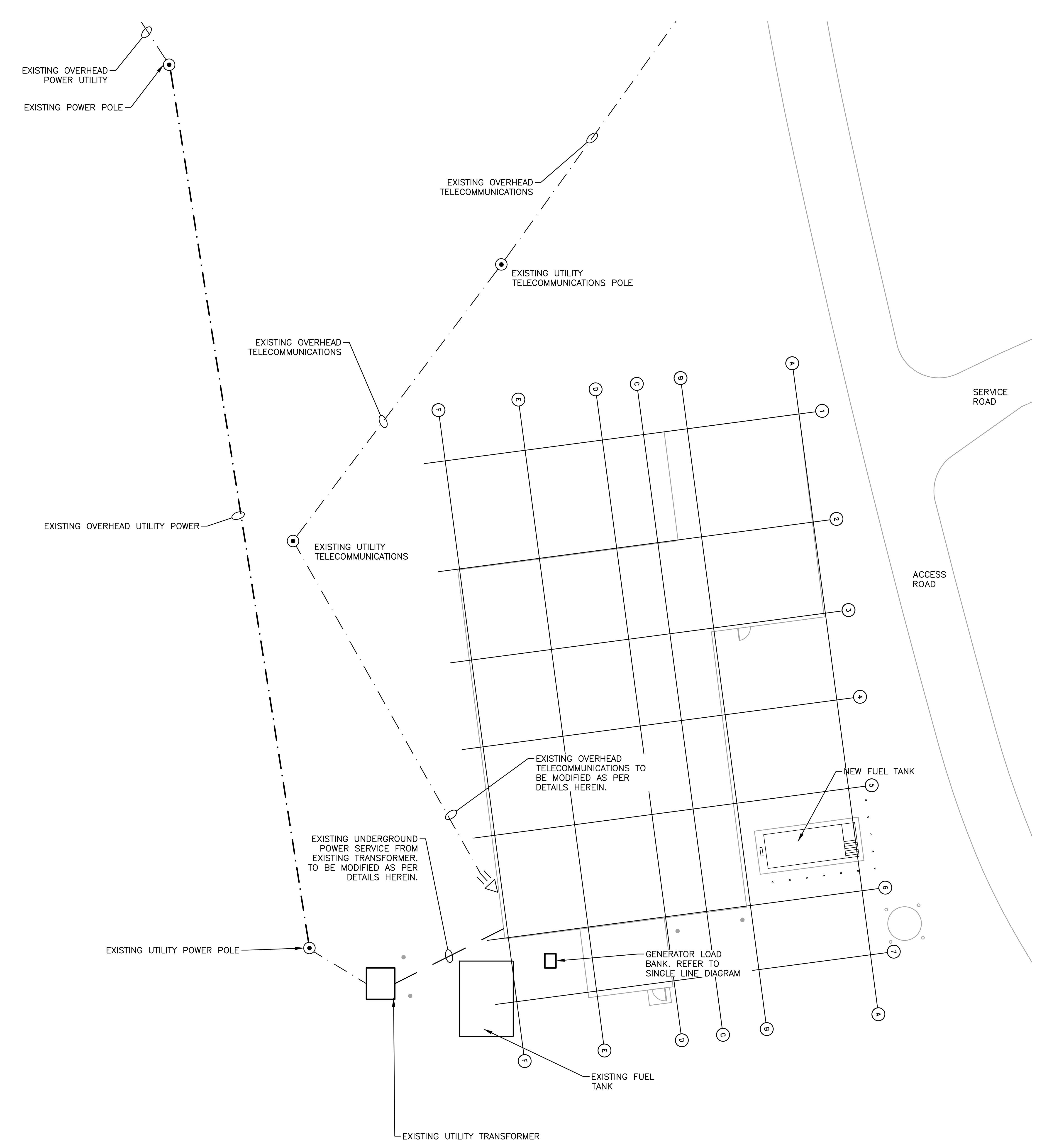


NOTES:

1. COORDINATE SCHEDULING OF WORK WITH CIVIL DIVISION AND UTILITIES. COORDINATE WITH OWNER TO INITIATE POWER SHUTDOWN NOTICES AT APPROPRIATE STAGES OF CONSTRUCTION.
2. DURING THE INITIAL STAGE OF CONSTRUCTION, REROUTE THE EXISTING MAIN SECONDARY SERVICE CONDUCTORS FEEDING THE EXISTING WWTP TO THE NEW MAIN SERVICE ENTRANCE BREAKER LOCATION FOR THE PURPOSES OF PROVIDING A TEMPORARY POWER SOLUTION DURING CONSTRUCTION. REFER TO DRAWINGS E601 AND E602 FOR FURTHER DETAILS.
3. NOT USED.
4. COORDINATE CONSTRUCTION STAGES WITH OWNER AND OTHER TRADES.
5. CLEARLY INDICATE ON AS-BUILT DWGS ROUTING OF ALL UNDERGROUND CONDUIT.
6. LOCATION OF EXISTING BURIED SERVICES IS UNKNOWN. LOCATE, IDENTIFY AND PROTECT ALL EXISTING BURIED SERVICES IN THE AREA OF WORK. MINIMIZE CROSSOVERS AND INSTALL NEW CONDUITS AS PER C.E.C. RESTORE EXCAVATIONS TO ORIGINAL CONDITIONS SUBSEQUENT TO COMPLETION OF ELECTRICAL INSTALLATIONS DESCRIBED HEREIN.

LIGHTING PLAN LEGEND

Symbol	Description
	SURFACE MOUNTED STRIP LUMINAIRE, 1219mm LONG
	SUSPENDED STRIP LUMINAIRE, 1219mm LONG
	WALL MOUNTED STRIP LUMINAIRE, 1219mm LONG
	SURFACE MOUNTED OR SUSPENDED LUMINAIRE, 152mm DIAMETER OR LARGER
	WALL MOUNTED LUMINAIRE
	WALL MOUNTED EXIT SIGN (TEXT ON SHADED SIDES, ARROWS AS INDICATED)
PC	PHOTOCELL
	LINE VOLTAGE SWITCH (347V)
3	LINE VOLTAGE 3 WAY SWITCH (347V)
4	LINE VOLTAGE 4 WAY SWITCH (347V)
	EMERGENCY LIGHTING BATTERY PACK (NO LAMPS)
	EMERGENCY LIGHTING BATTERY PACK C/W TWO LAMPS
	WALL MOUNTED EMERGENCY LIGHTING REMOTE HEAD (# OF LAMPS AS SHOWN)

POWER PLAN LEGEND

Symbol	Description
	DUPLEX 5-15R RECEPTACLE
GF	DUPLEX 5-15R GROUND FAULT PROTECTED RECEPTACLE
•	DEVICE MOUNTED ABOVE MILLWORK COUNTERTOP
J	CEILING MOUNTED JUNCTION BOX
MP	MANUAL MOTOR PROTECTION SWITCH
	LOAD RATED DISCONNECT
	MAGNETIC STARTER C/W DISCONNECT
	COMBINATION MAGNETIC STARTER AND DISCONNECT
HOA	HAND-OFF-AUTO SWITCH
J	WALL MOUNTED JUNCTION BOX
	CABLE TRAY
	POWER PANELBOARD
	SPECIAL PANEL (TYPE AS IDENTIFIED)

FIRE ALARM LEGEND

Symbol	Description
F	FIRE ALARM MANUAL STATION
FACP	FIRE ALARM CONTROL PANEL
FAA	FIRE ALARM ANNUNCIATOR
	ELECTRONIC HORN/STROBE
	RATE OF RISE HEAT DETECTOR
F	FIXED TEMPERATURE HEAT DETECTOR (TEMPERATURE AS NOTED)
S	SMOKE DETECTOR
DS	DUCT TYPE SMOKE DETECTOR
R FA	POWER SHUTDOWN RELAY
MM	MONITORING MODULE
ISO	ISOLATION MODULES
EOL	END OF LINE RESISTOR

TELECOMMUNICATIONS LEGEND

Symbol	Description
#	WALL MOUNTED TELECOM OUTLET (# DENOTES NUMBER OF CABLES)

INTRUSION DETECTION/ACCESS CONTROL LEGEND

Symbol	Description
K	SECURITY KEY PAD
DP	DOOR POSITION SWITCH
M	WALL MOUNTED SECURITY MOTION DETECTOR

CABLE TRAY LEGEND

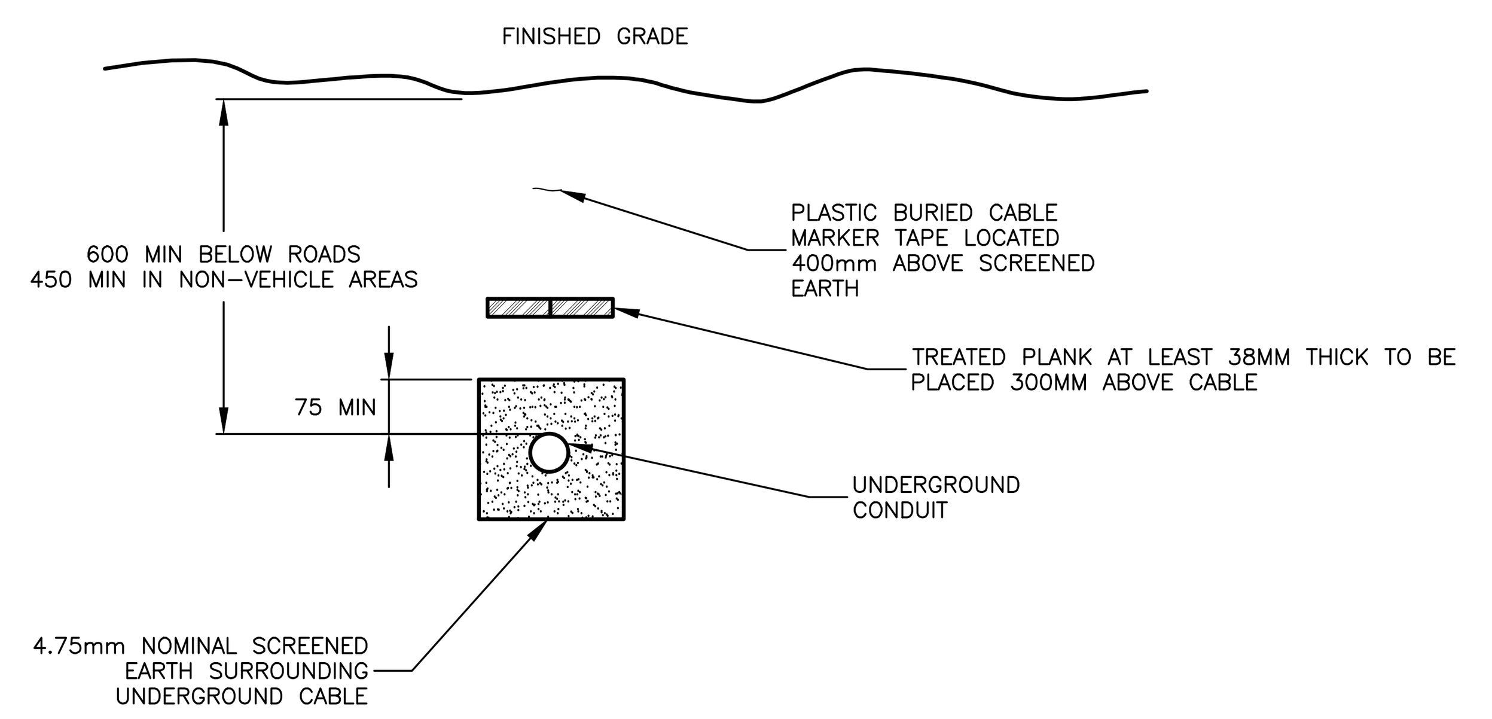
Symbol	Description
	SINGLE TIER CABLE TRAY (WIDTH AND MOUNTING AS INDICATED)
	2-TIER CABLE TRAY (WIDTH AND MOUNTING AS INDICATED)

SCHEMATIC LEGEND

Symbol	Description
	WEATHERHEAD
	MOTOR C/W DISCONNECT
VFD	VARIABLE FREQUENCY DRIVE
G	GENERATOR
	TRANSFORMER
	CURRENT TRANSFORMER
M	METER
	BREAKER
	SWITCH
PNL	PANEL

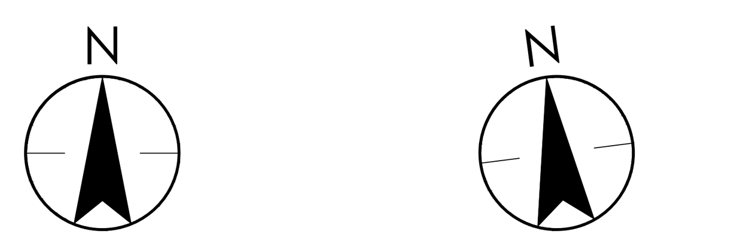
ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFP	BELT FILTER PRESS
BRKR	BREAKER
CCT	CIRCUIT
DAF	DISSOLVED AIR FLOATATION
DWG	DRAWING
FEW	FILTERED EFFLUENT WATER
LTG	LIGHTING
MDP	MAIN DISTRIBUTION BOARD
MGB	MAIN GROUND BUSBAR
PNL	PANEL
REC	RECEPTACLE
SPD	SURGE PROTECTIVE DEVICE
MTGB	MAIN TELECOM GROUND BUSBAR
TWAS	THICKENED WASTE ACTIVATED SLUDGE
WWTP	WASTEWATER TREATMENT PLANT



NOTES:

1. IF TREATED PLANKS ARE USED FOR MECHANICAL PROTECTION, MINIMUM BURIAL DEPTHS CAN BE REDUCED BY 150MM. OTHERWISE, MINIMUM BURIAL DEPTHS ARE 600MM OR 450MM AS INDICATED.
2. CONTRACTOR TO REINSTATE SURFACES TO PRIOR CONDITIONS.



TRUE NORTH   CONSTRUCTION NORTH

1 / E001 — ELECTRICAL SITE PLAN — 1:200

2 / E001 — CONDUCTOR BURIAL DETAIL — N.T.S.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 23 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI
STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project

Iqaluit

IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION

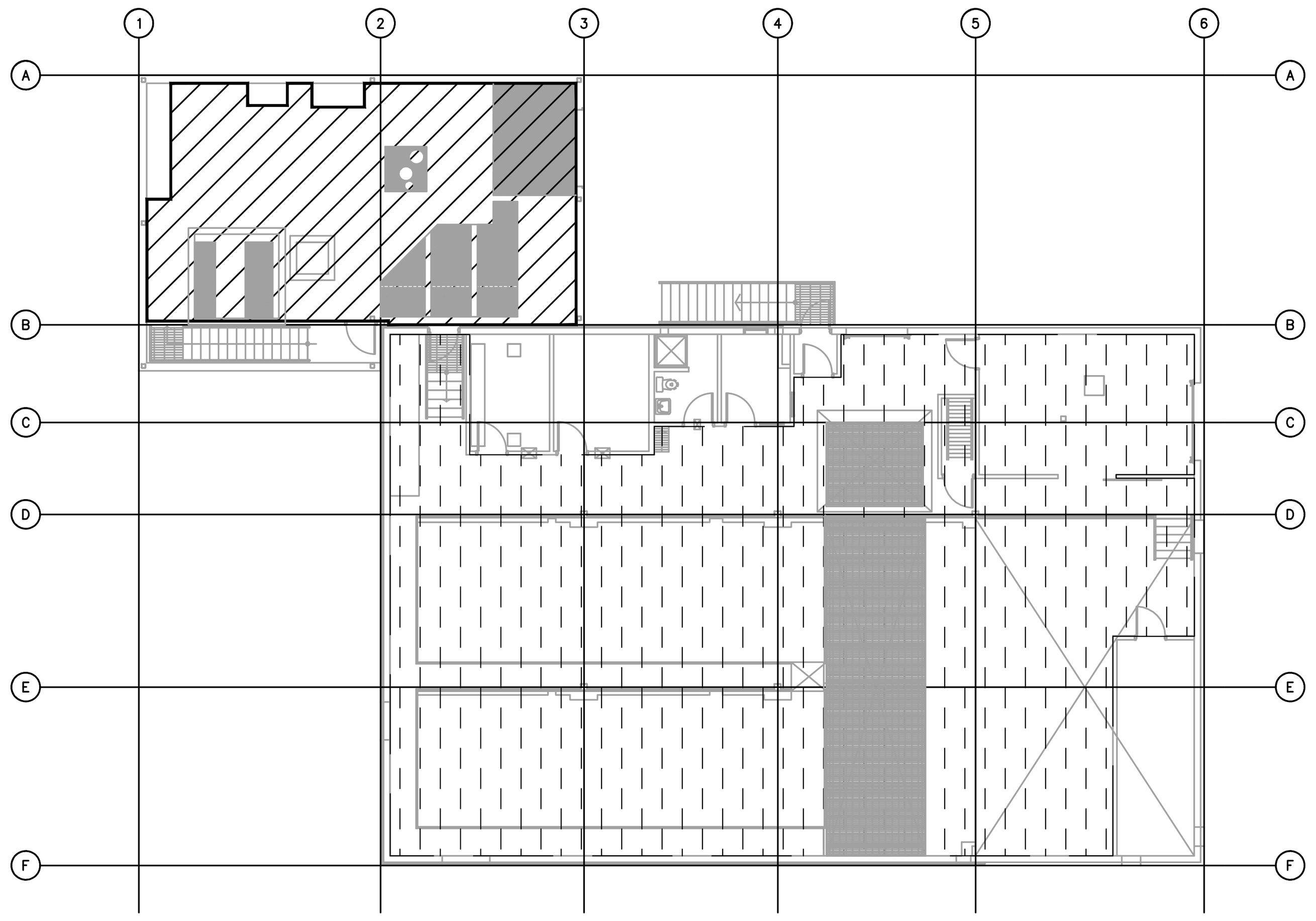
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

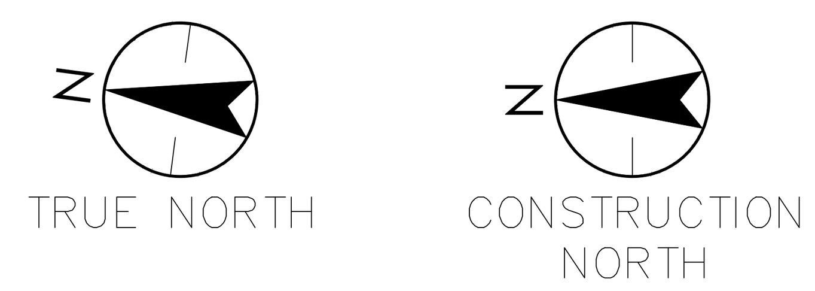
Title

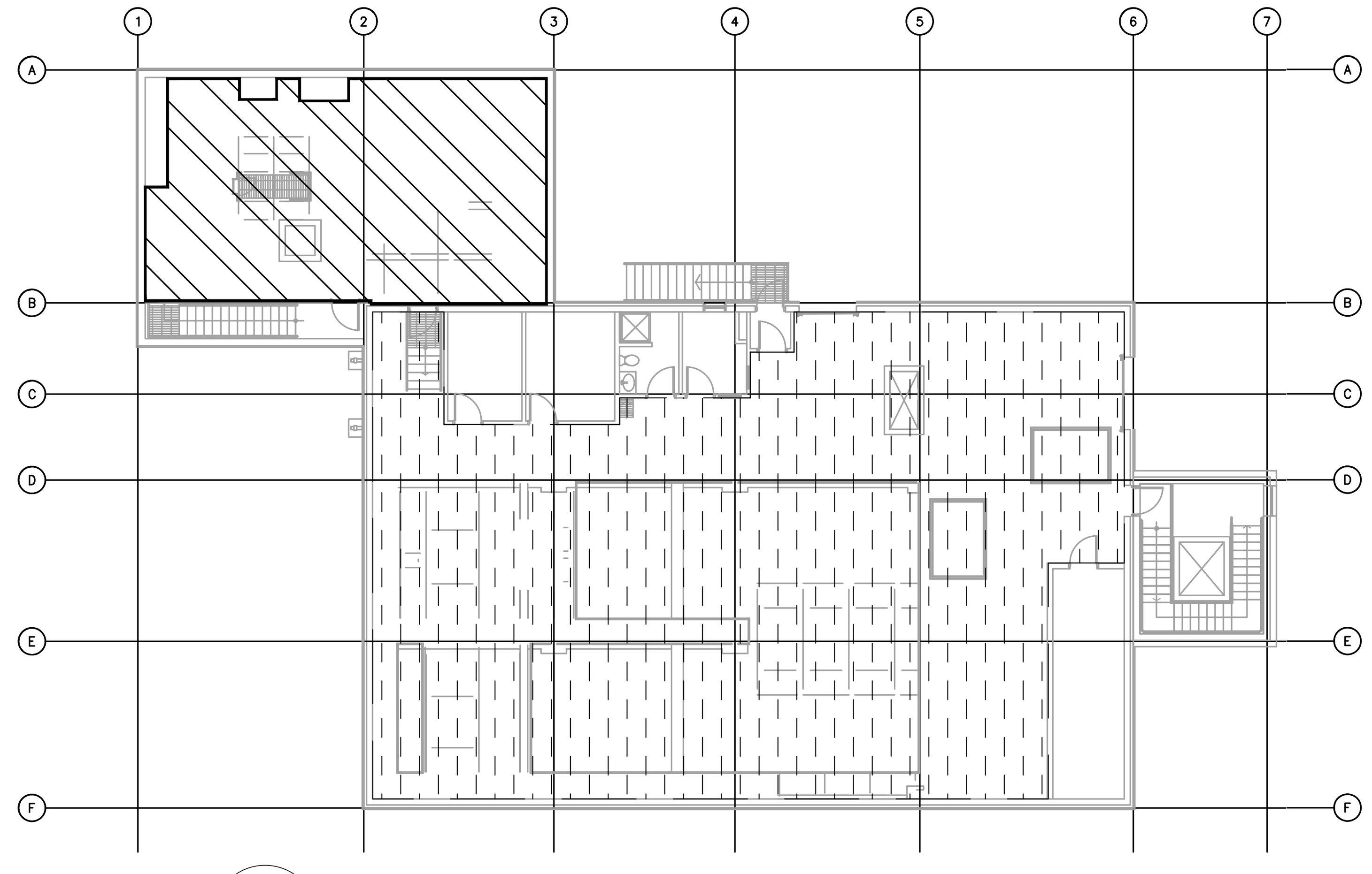
ELECTRICAL LEGEND AND SITE PLAN

Project No.	Scale	
110126045	AS SHOWN	
Drawing No.	Sheet	Revision
E001	1 of 23	0



1 UPPER FLOOR EXISTING CLASSIFICATION PLAN
E002 1:200

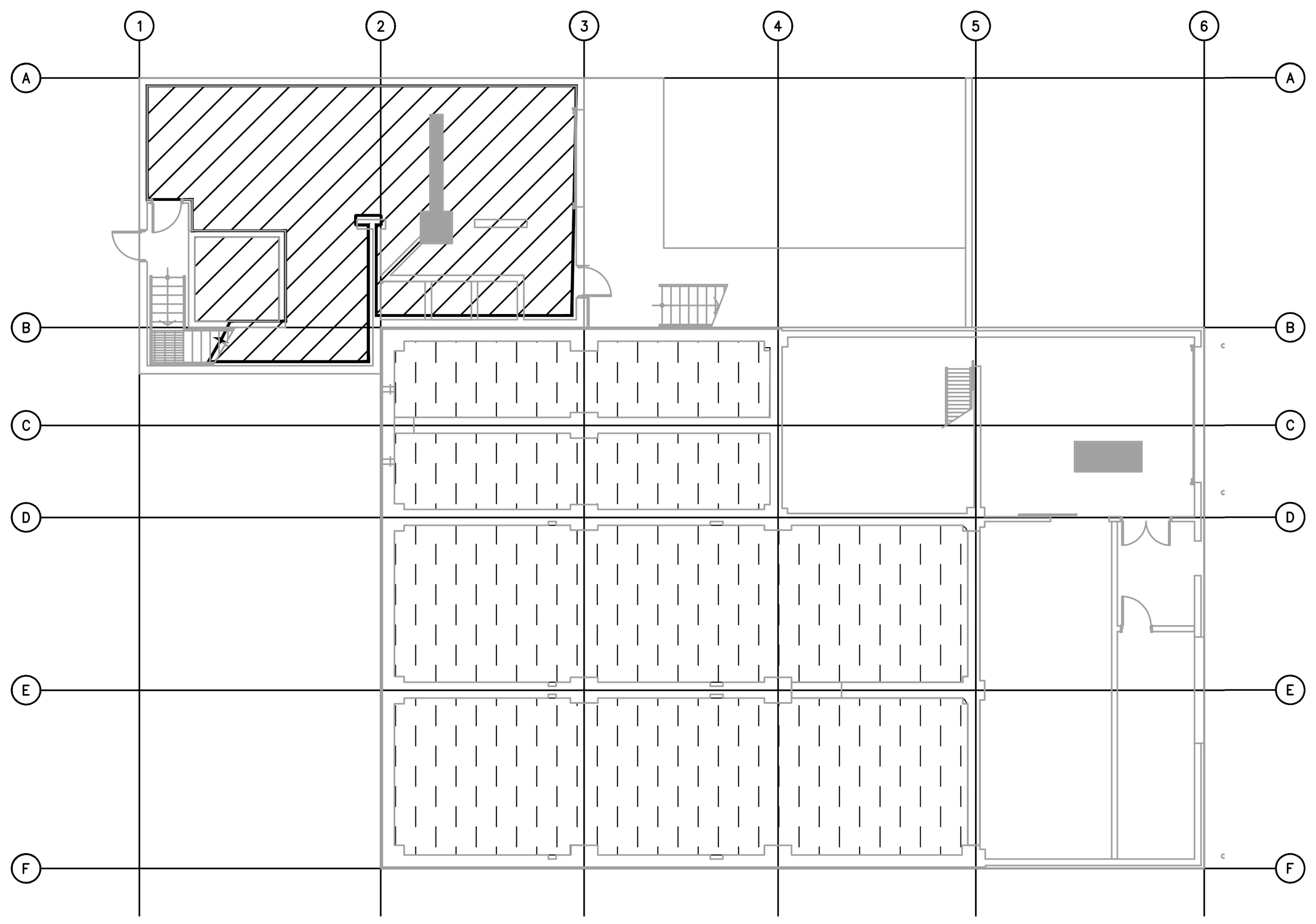




3 UPPER FLOOR NEW CLASSIFICATION PLAN
E002 1:200

LEGEND:

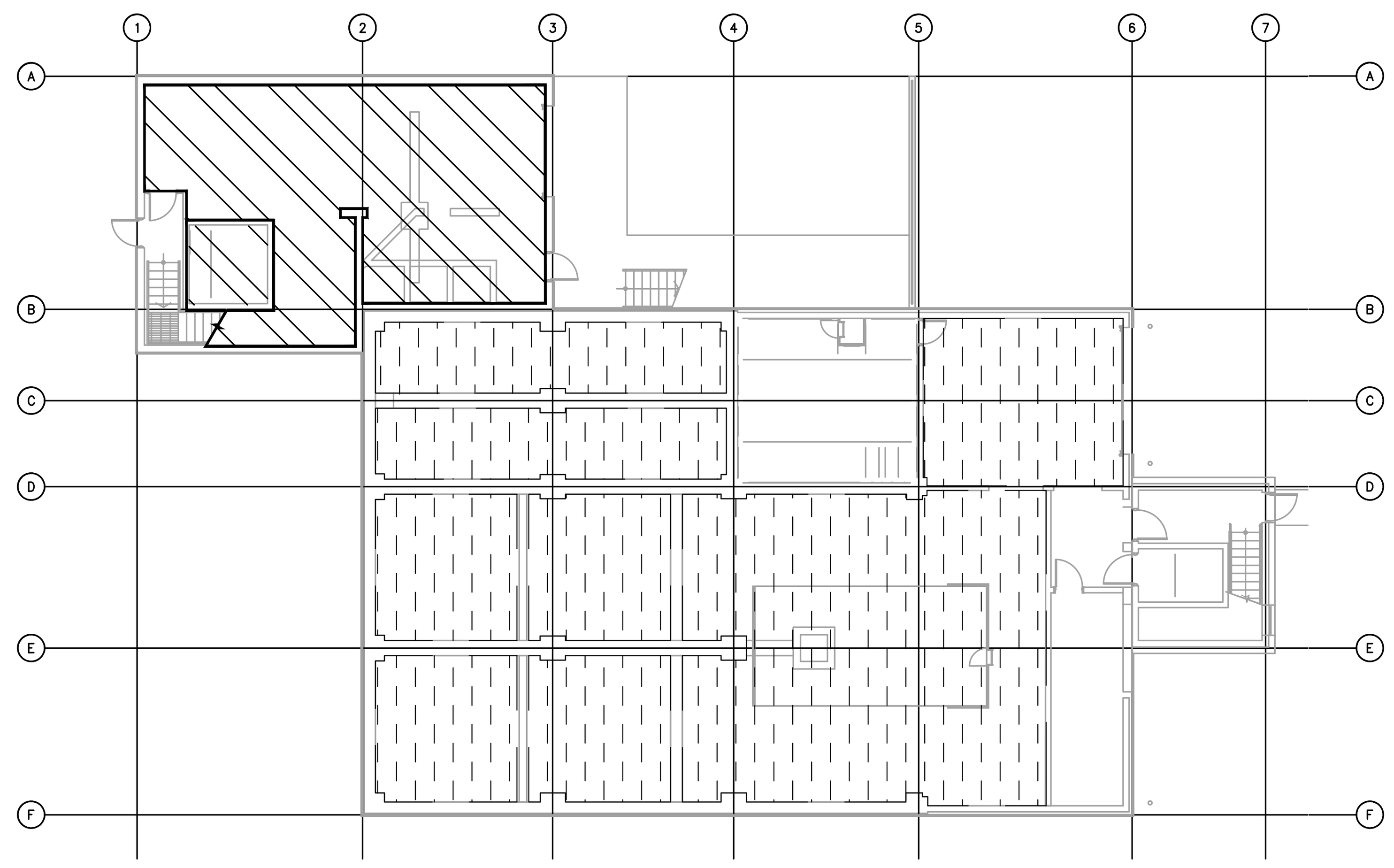
- CLASS 1, ZONE 1 AND CATEGORY 2
- CLASS 1, ZONE 2 AND CATEGORY 1
- CATEGORY 1: WET LOCATION
- FIRE RATED ASSEMBLY.



2 LOWER FLOOR EXISTING CLASSIFICATION PLAN
E002 1:200

NOTES:

1. REFER TO CEC RULE 18–154 FOR HAZARDOUS SEALING REQUIREMENTS BETWEEN ZONE 2 AND NON–HAZARDOUS LOCATIONS. ENSURE CABLE INSTALLATIONS ARE FULLY SEALED AGAINST VAPOUR MIGRATION. APPROPRIATE SEALING CHARACTERISTICS MAY BE ACHIEVED BY DIFFERENT MEANS; THEREFORE MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED.
2. REFER TO CEC SECTION 22 FOR RULES RELATING TO CATEGORY 1 AND CATEGORY 2 LOCATIONS AND RULES SPECIFICALLY RELATED TO SEWAGE TREATMENT FACILITIES. REFER TO CEC SECTION 18 FOR RULES RELATING TO HAZARDOUS LOCATIONS.



4 LOWER FLOOR NEW CLASSIFICATION PLAN
E002 1:200

KEY NOTES – APPLICABLE TO NEW WORK:

1. ELECTRICAL INSTALLATIONS IN THE EXISTING HEADWORKS (UPPER AND LOWER LEVELS) SHALL MEET REQUIREMENTS FOR CLASS 1, ZONE 2 AREAS AS REQUIRED BY SECTION 18 AND SECTION 20 OF THE CANADIAN ELECTRICAL CODE. PROVIDE TECK90 C/W SEALS, ALUMINUM BOXES, FITTINGS, AND EQUIPMENT APPROVED FOR INSTALLATION IN SUCH AREAS. ALL EQUIPMENT WIRING, FITTINGS, DEVICES AND TERMINATIONS MUST BE EXPLOSION PROOF.
2. ELECTRICAL INSTALLATIONS IN THE SECONDARY TREATMENT AREAS (UPPER AND LOWER LEVELS) SHALL MEET REQUIREMENTS FOR CATEGORY 1 AREAS AS REQUIRED BY SECTION 22 OF THE CANADIAN ELECTRICAL CODE. PROVIDE TECK90, NEMA 3R WEATHERPROOF ENCLOSURES AND EQUIPMENT APPROVED FOR USE IN SUCH AREAS.
3. IF ANY INSTALLATIONS REMAINING IN THE EXISTING HEADWORKS DO NOT CURRENTLY COMPLY WITH THE REQUIREMENTS OF KEYNOTE 1, NOTIFY ENGINEER PRIOR TO COMMENCEMENT OF WORK.

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC'S
N.W.T.

NUNAMI
STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ

IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

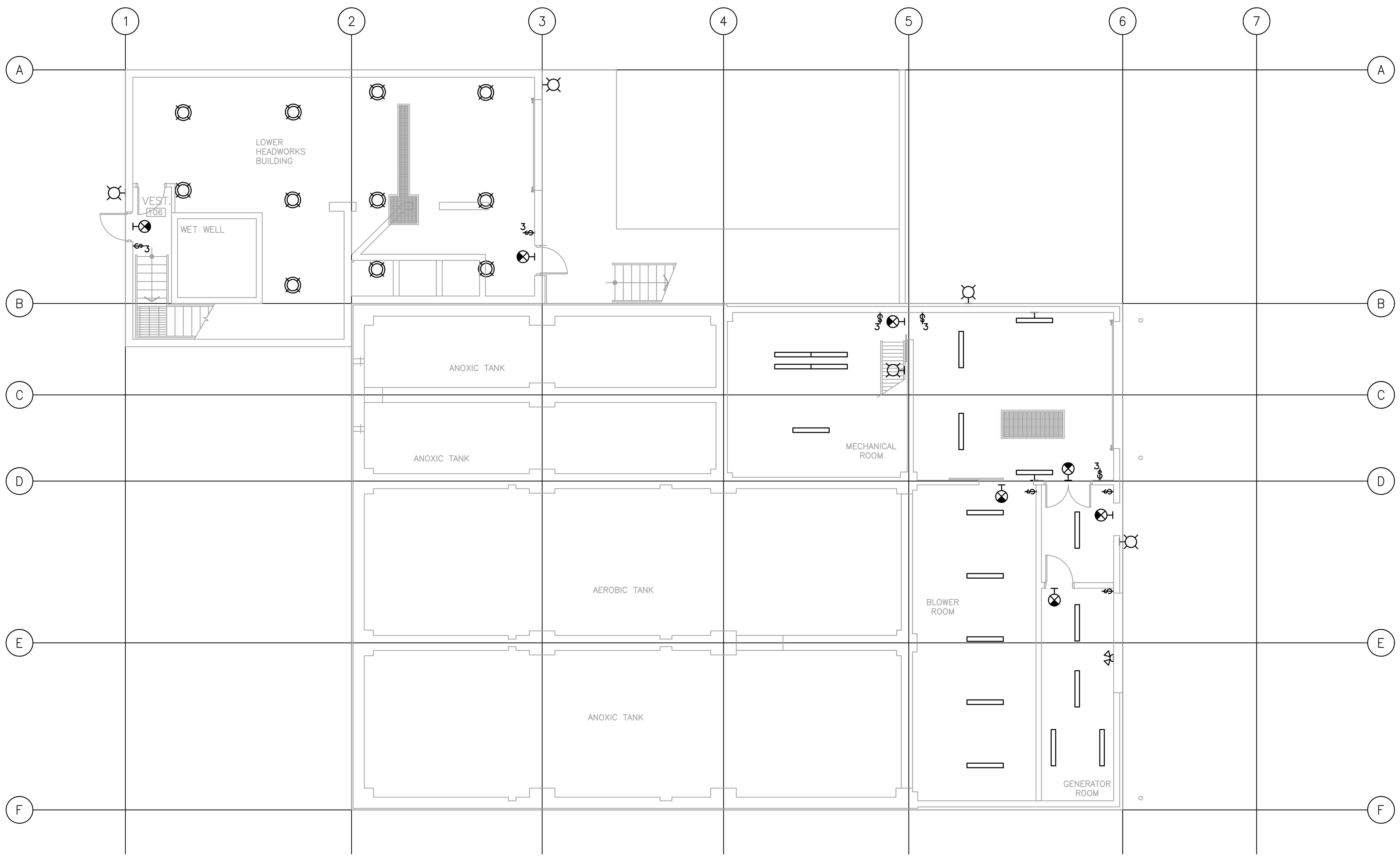
Title
CLASSIFICATION PLANS

Project No.	Scale	
110126045	AS SHOWN	
Drawing No.	Sheet	Revision
E002	2 of 23	0

ORIGINAL SHEET - ISO A1

KEY NOTES – APPLICABLE TO ALL DRAWINGS:

1. THE FOLLOWING IS INDICATED BY THE DESCRIPTORS BELOW:
   'E' – EXISTING TO REMAIN
   WHERE NO DESCRIPTOR HAS BEEN INDICATED, DEVICE IS TO BE REMOVED (DEMO PLANS) OR PROVIDED (NEW PLANS). ALL DEVICES THAT ARE REMOVED AND NOT REUSED ARE TO BE DISPOSED OF AS PER DIVISION 1 REQUIREMENTS.
2. INFORMATION PRESENTED ON DEMO DRAWINGS AND EXISTING DETAILS IS AS PER EXISTING DRAWINGS AND VISUAL REVIEW OF SITE CONDITIONS. CONFIRM ON SITE AND INFORM ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.
3. DURING THE TENDER PERIOD AND PRIOR TO BID CLOSING, REVIEW THE CONSTRUCTION STAGING PLAN AND COORDINATE WITH OTHER TRADES THE SCHEDULING OF THE WORK. WWTP TO REMAIN OPERATIONAL DURING CONSTRUCTION.
4. UNLESS OTHERWISE NOTED, FOR ALL DEVICES DESIGNATED FOR REMOVAL, DISCONNECT FROM POWER SUPPLIES, REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE. DISPOSE OF WIRE AND CONDUIT AS PER DIVISION 1 REQUIREMENTS. BURIED CABLES AND CONDUITS TO BE CUT OFF AT FLOOR OR GROUND LEVEL.
5. WHERE EXISTING DEVICES AND EQUIPMENT ARE TO REMAIN, EXISTING FEEDERS, CONDUIT, FITTINGS, BOXES TO BE REMOVED AND REPLACED WITH NEW TO SUIT AREA CLASSIFICATIONS AS PER DWG E002. PRIOR TO REMOVAL, RETAIN ELECTRICAL SERVICES TO EXISTING DEVICES AND EQUIPMENT UNTIL THE NEW WWTP IS FULLY OPERATIONAL. MINIMIZE INTERRUPTIONS TO ON–GOING FACILITY OPERATIONS WHEN SCHEDULING THE WORK.
6. IN ADDITION TO NEW PANELS, PROVIDE TYPEWRITTEN PANEL SCHEDULES FOR ALL EXISTING PANELS AFFECTED DURING RENOVATION. TRACE EXISTING CIRCUIT FOR PANELS '2B' AND '6B' AND FULLY UPDATE PANEL SCHEDULES BY PROVIDING NEW
7. NEW EMERGENCY LIGHTING AC CIRCUITS TO BE CIRCUITED TO NORMAL LIGHTING CIRCUIT OF AREA SERVED AS PER C.E.C. REQUIREMENTS. EMERGENCY LIGHTING BATTERY PACKS ARE TO BE CONNECTED TO THE LIGHTING CIRCUITS IN THE SAME AREA AS IS SERVED BY THE PACKS SUCH THAT IF NORMAL LIGHTING IN THE AREA FAILS, THE ASSOCIATED EMERGENCY LIGHTING BATTERY PACK(S) WILL COME 'ON'. CIRCUITING TO COMPLY WITH CEC REQUIREMENTS REGARDLESS OF EXISTING CONDITIONS.
8. COORDINATE REMOVAL OF BUILDING MECHANICAL AND PROCESS EQUIPMENT WITH RESPECTIVE DIVISIONS ON SITE.
9. ALL ABANDONED EQUIPMENT TO BE REMOVED. EQUIPMENT TO BE DISCONNECTED FROM POWER SUPPLIES, CONDUCTORS, AND CONDUITS REMOVED. CABLES/CONDUIT BURIED IN CONCRETE TO BE CUT OFF AT FLOOR LEVEL WHERE ABANDONED AND CAPPED OFF.



1 / E101 LOWER FLOOR DEMO LIGHTING PLAN
1:100

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

ORIGINAL SHEET - ISO A1

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

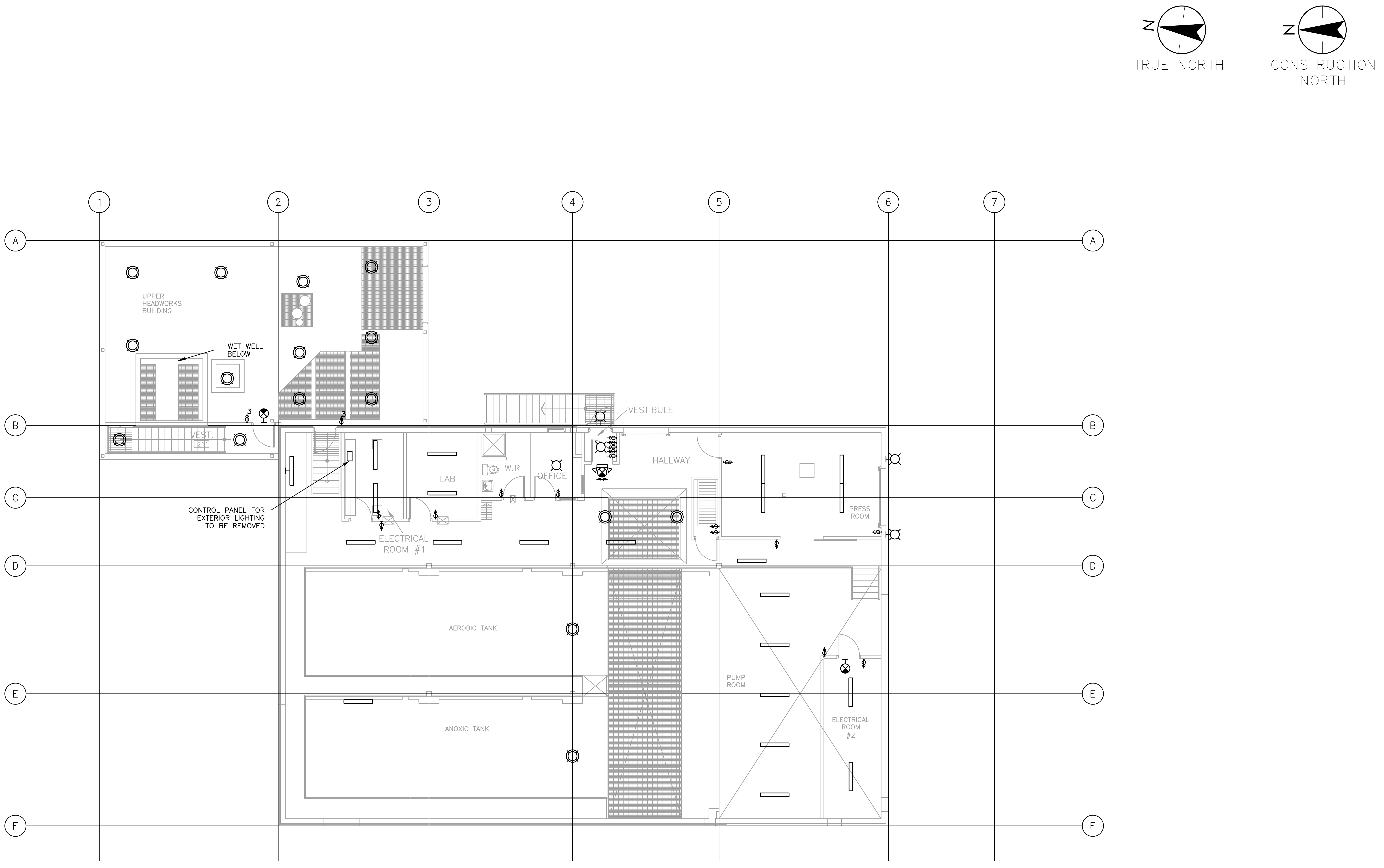
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title
LOWER FLOOR DEMO LIGHTING PLAN

Project No.	Scale	
110126045	AS SHOWN	
Drawing No.	Sheet	Revision
E101	3 of 23	0



1 E102 UPPER FLOOR DEMO LIGHTING PLAN
1:100

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI
STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ

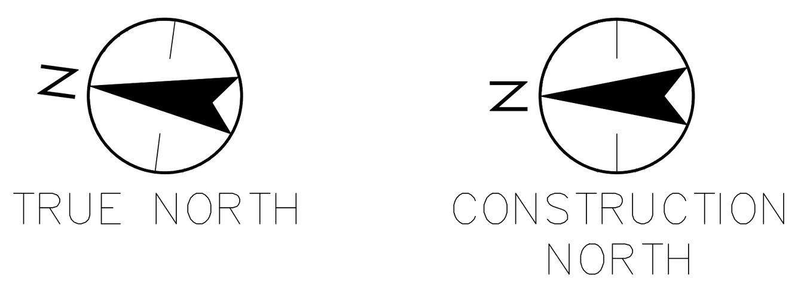
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title
UPPER FLOOR DEMO LIGHTING PLAN

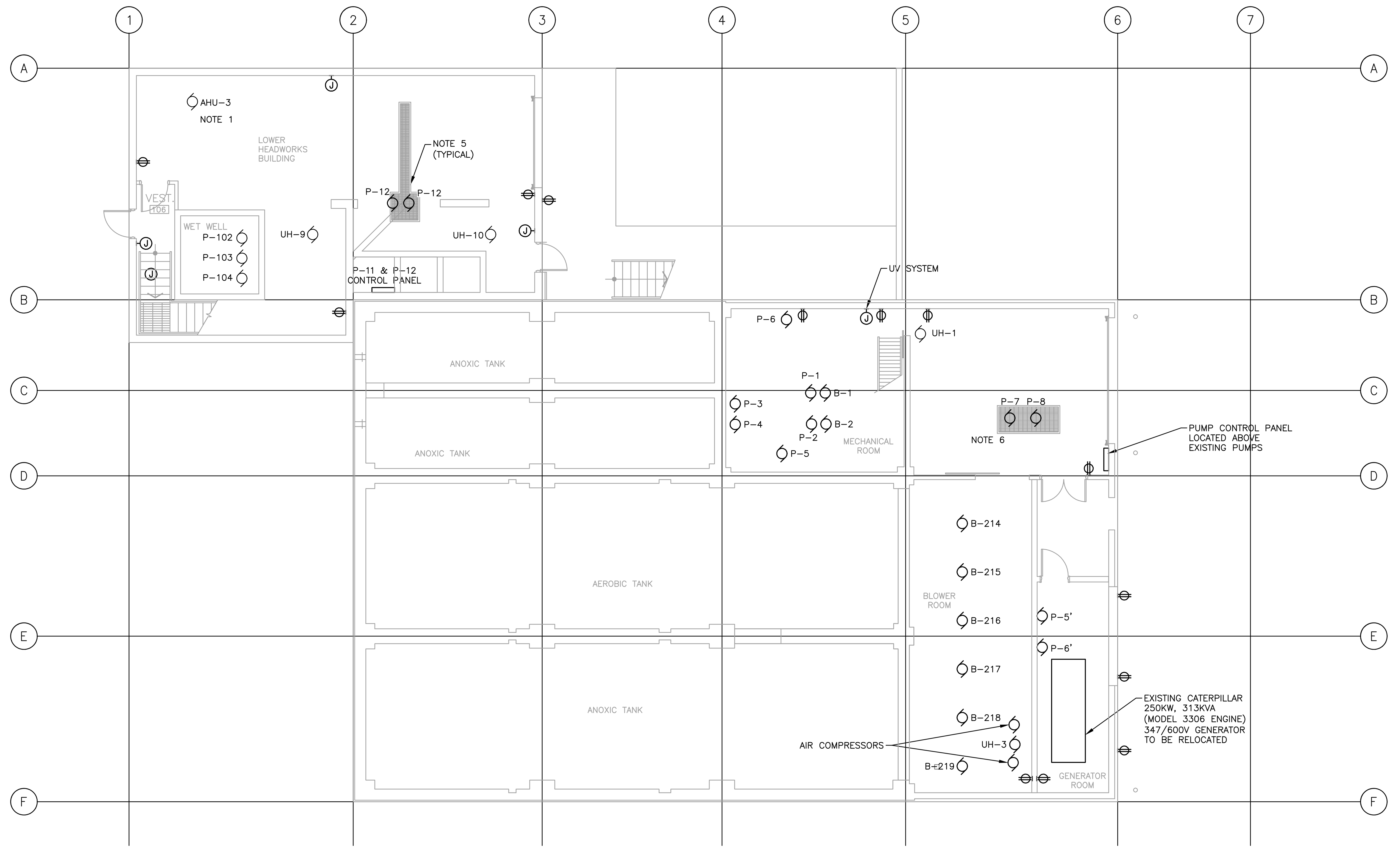
Project No.	Scale	
110126045	AS SHOWN	
Drawing No.	Sheet	Revision
E102	4 of 23	0

ORIGINAL SHEET - ISO A1



NOTES:

1. EXISTING AHU-3 TO REMAIN. NEW UPSIZED FAN MOTORS BEING SUPPLIED BY MECHANICAL DIVISION. REFER TO MOTOR, CONTROL AND EQUIPMENT LIST.
2. EXISTING GENERATOR TO BE RELOCATED TO FACILITATE INSTALLATION OF MBBR/DAF UNITS. COORDINATE WITH OWNER TO PLAN GENERATOR RELOCATION AND UNAVAILABILITY OF STANDBY POWER.
3. RELOCATE EXISTING GENERATOR CONTROL PANEL, BATTERY CHARGER, BLOCK HEATER AND OTHER COMPONENTS OF EXISTING GENSET.
4. EXISTING GENERATOR MAY BE RELOCATED TO SLUDGE TRAILER 105 DURING STAGE 2 CONSTRUCTION'S 4 MONTH SHUTDOWN PERIOD AND USED AS A STANDBY POWER SOURCE DURING CONSTRUCTION. REFER TO SPECIFICATIONS SECTION 01 11 14 WORK SEQUENCE FOR OPTIONS.
5. BUILDING MECHANICAL AND PROCESS MOTOR ID'S PROVIDED INDICATE EXISTING NOMENCLATURE. PROVIDED TO ASSIST IN THE COORDINATION OF DEMOLITION WORK ON SITE.
6. LOCATION OF TEMPORARY ELECTRICAL DISTRIBUTION AND RELOCATED EXISTING GENERATOR, IF SO DETERMINED BY THE CONTRACTOR. COORDINATE WITH OTHER TRADES AND THE OWNER IN REGARDS TO REMOVAL OF EXISTING EQUIPMENT AND STORED MATERIAL TO READY THE ROOM.



1 E103 LOWER FLOOR DEMO POWER PLAN
1:100

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
LICENSEE
N.W.T.

NUNAMI
STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

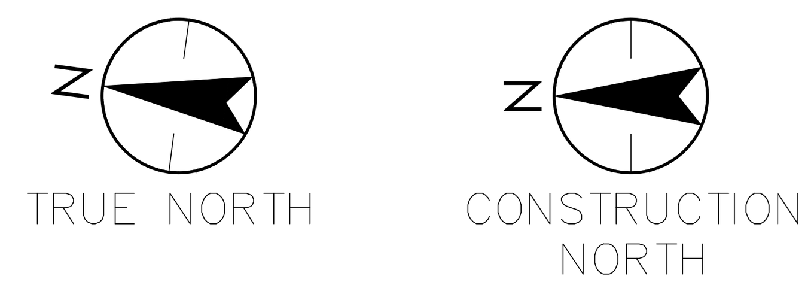
Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

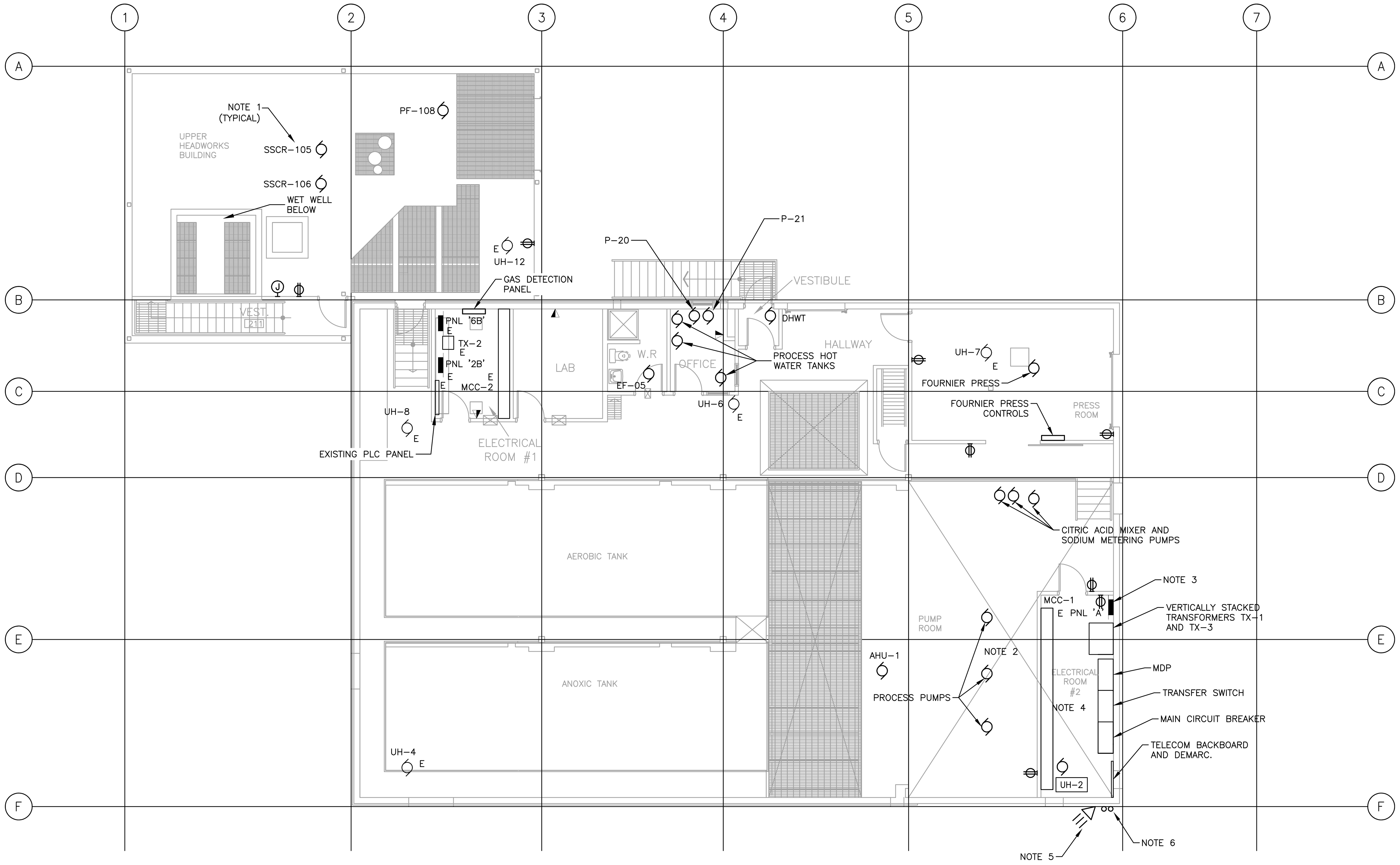
File Name: | KG Dwn. | KSS Chkd. | KSS Dsgn. | 18.05.23 YY.MM.DD

Title
LOWER FLOOR DEMO POWER PLAN

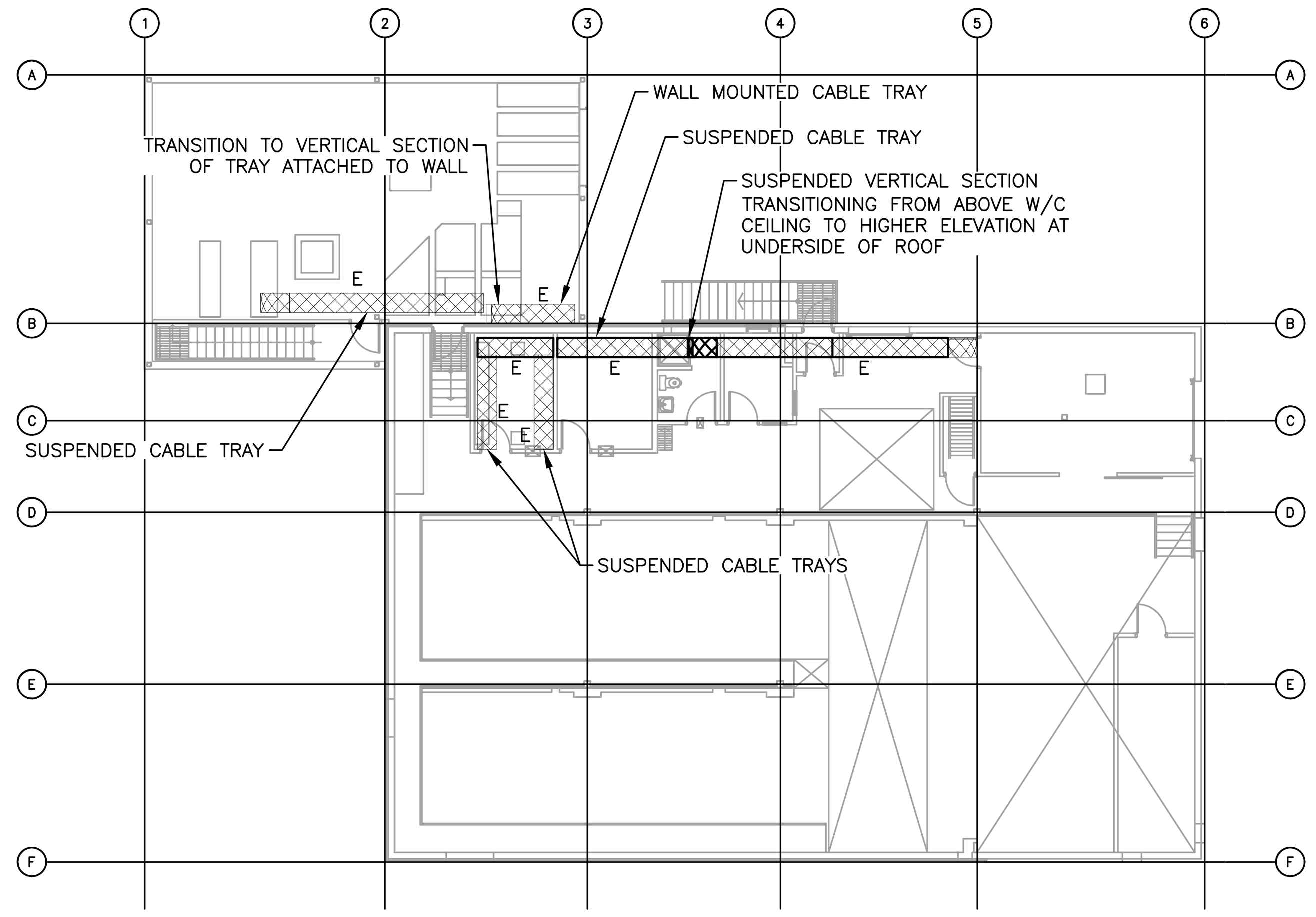
Project No. 110126045
Scale AS SHOWN
Drawing No. E103
Sheet 5 of 23
Revision 0

ORIGINAL SHEET - ISO A1





1 UPPER FLOOR DEMO POWER AND LOW TENSION PLAN
E104 1:100



2 UPPER FLOOR EXISTING CABLE TRAY PLAN
E104 1:200

NOTES:

1. BUILDING MECHANICAL AND PROCESS MOTOR ID'S PROVIDED INDICATE EXISTING NOMENCLATURE. PROVIDED TO ASSIST IN THE COORDINATION OF DEMOLITION WORK ON SITE.
2. EXISTING MCC-1 TO BE REMOVED DURING STAGE 2 OF CONSTRUCTION. MCC-1 TO BE STORED SECURELY DURING CONSTRUCTION AND REINSTALLED AFTER THE NEW ELECTRICAL ROOM IS CONSTRUCTED. REFER TO THE STRUCTURAL AND ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. MCC-1 TO BE RECOMMISSIONED DURING THE LATER STAGES OF CONSTRUCTION
3. EXISTING LOADS FED BY PANEL A SHALL BE RE-CIRCUITED TO NEW TEMPORARY PANEL 2T PRIOR TO REMOVAL OF PANEL A. PROVIDE NEW PANEL AND RUN CONDUCTORS TO EQUIPMENT AND DEVICES, SCHEDULING THE WORK TO MINIMIZE DOWNTIME. REFER TO DWG E105 FOR LOCATION OF NEW PANEL 2T.
4. EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT IN ELECTRICAL ROOM 202 TO BE REMOVED DURING STAGE 2 OF CONSTRUCTION. REMOVE EQUIPMENT ONLY AFTER NEW TEMPORARY DISTRIBUTION EQUIPMENT HAS BEEN PROVIDED IN SLUDGE TRAILER ROOM 105 AND IS ENERGIZED.
5. EXISTING TELECOMMUNICATION SERVICE ENTRANCE TO BE REMOVED. NEW TELECOMMUNICATION SERVICES TO BE IN PLACE PRIOR TO DISCONNECTION OF EXISTING.
6. EXISTING ELECTRICAL SERVICE CONDUIT ROUTED VERTICALLY ON BUILDING EXTERIOR FROM BELOW GRADE TO SECOND FLOOR ELECTRICAL ROOM 202 TO BE RELOCATED TO NEW TEMPORARY ELECTRICAL SERVICE ENTRANCE LOCATION. COORDINATE DISRUPTION OF SERVICES WITH OWNER. INSTALLATIONS TO BE PROVIDED AND STAGED SUCH THAT DOWNTIME IS MINIMIZED.

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI
STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

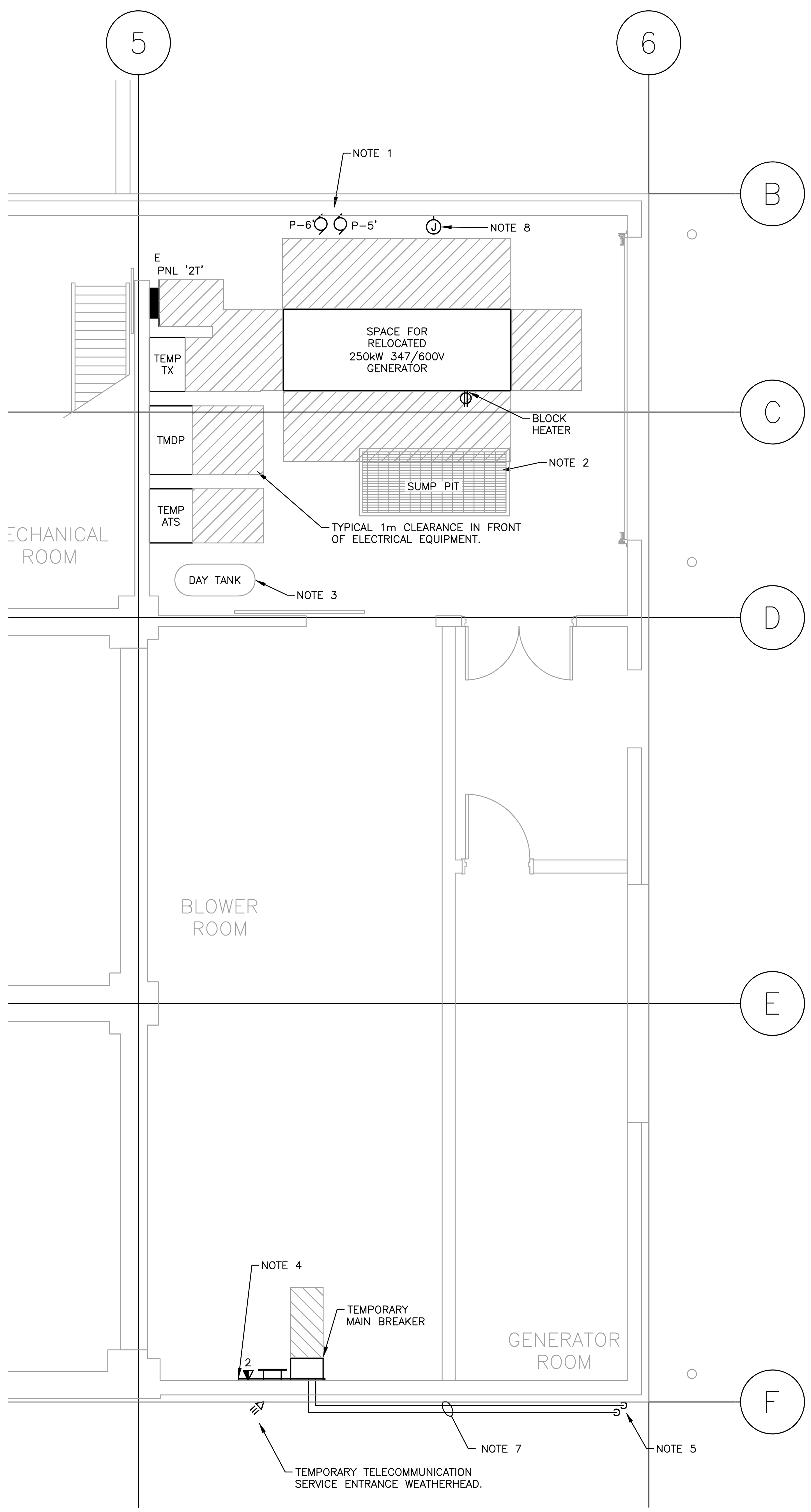
File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title
UPPER FLOOR DEMO POWER, CABLE TRAY AND LOW TENSION PLAN

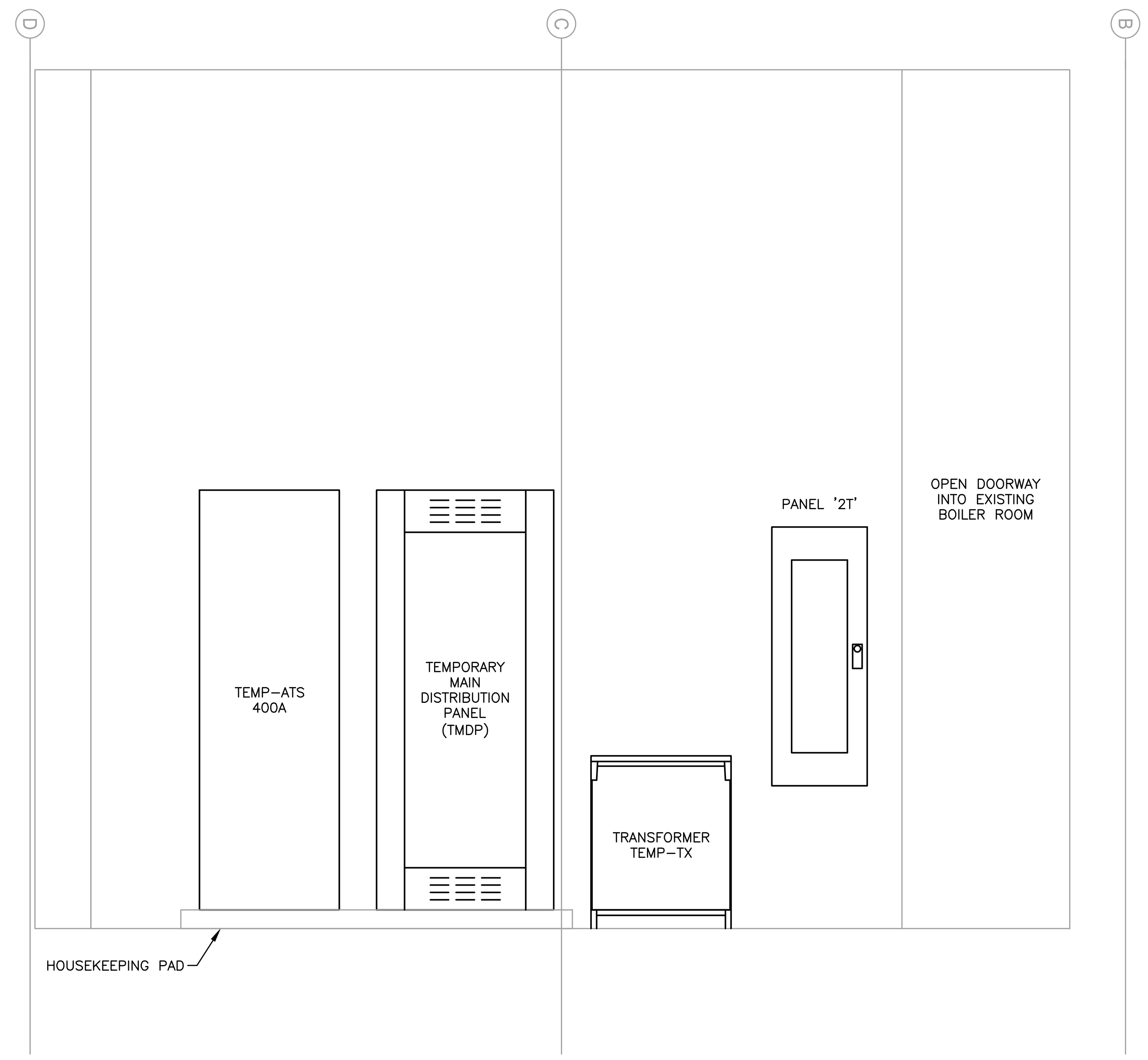
Project No. 110126045
Scale AS SHOWN
Drawing No. E104
Sheet 6 of 23
Revision 0

TRUE NORTH

CONSTRUCTION NORTH



1 / E105 TEMPORARY ELECTRICAL ROOM (EXISTING RECEIVING ROOM) LAYOUT
1:50



2 / E105 TEMPORARY ELECTRICAL ROOM (EXISTING RECEIVING ROOM) NORTH ELEVATION
1:25

NOTES:

1. RELOCATED EXISTING FUEL PUMPS TO BE LATER REPLACED WITH NEW FUEL PUMPS (P-4.1, P-4.2) IN THE SAME LOCATION. COORDINATE SEQUENCING OF WORK WITH MECHANICAL DIVISION.
2. EXISTING SUMP PIT C/W REMOVABLE GRATE COVER.
3. NEW TEMPORARY DAY TANK PROVIDED BY MECHANICAL DIVISION. WHERE EXISTING GENERATOR IS USED DURING CONSTRUCTION.
4. PROVIDE 1200mm X 2400mm G1S PLYWOOD BACKBOARD COATED WITH FIRE RETARDANT PAINT FOR MOUNTING OF NEW TEMPORARY MAIN BREAKER AND TEMPORARY DEMARCATION OF TELECOMMUNICATION SERVICES.
5. EXISTING BURIED ELECTRICAL SERVICE IS ROUTED FROM PAD MOUNTED TRANSFORMER UNDERGROUND TO BUILDING EXTERIOR AT GRIDLINE 6. SERVICE CONDUIT IS RUN VERTICALLY ON BUILDING EXTERIOR TO EXISTING SECOND FLOOR ELECTRICAL ROOM 202. REFER TO DETAILS 01/E001 AND 01/E104 FOR APPROXIMATE LOCATIONS.
6. PROVIDE NEW TEMPORARY ELECTRICAL DISTRIBUTION AND NEW MAIN BREAKER PRIOR TO RELOCATION OF ELECTRICAL SERVICE ENTRANCE TO MINIMIZE DOWNTIME. COORDINATE WITH LOCAL UTILITY AND ENSURE PROVISION OF UTILITY METER WHEN NEEDED.
7. ROUTE NEW SERVICE ENTRANCE CONDUIT HORIZONTALLY ON BUILDING EXTERIOR FROM EXISTING LOCATION TO NEW UTILITY METER/MAIN BREAKER. PROVIDE INSTALLATIONS AND STAGE WORK TO MINIMIZE DOWNTIME. COORDINATE WITH THE OWNER WHEN SCHEDULING INTERRUPTION OF SERVICES.
8. EXISTING BATTERY CHARGER MAY BE USED DURING CONSTRUCTION IF CONTRACTOR'S METHODS AND MEANS INCLUDES USING THE EXISTING GENERATOR. PROVIDE STEEL CHECKER PLATE TO COVER CABLES RUNNING FROM BATTERY CHARGER TO GENERATOR.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER 05/23/18 K. S. SMITH 110126045 IFC N.W.T.

NUNAMI
STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ

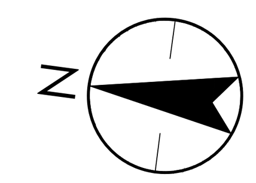
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

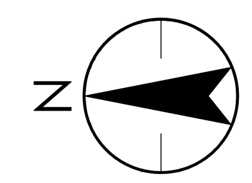
File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

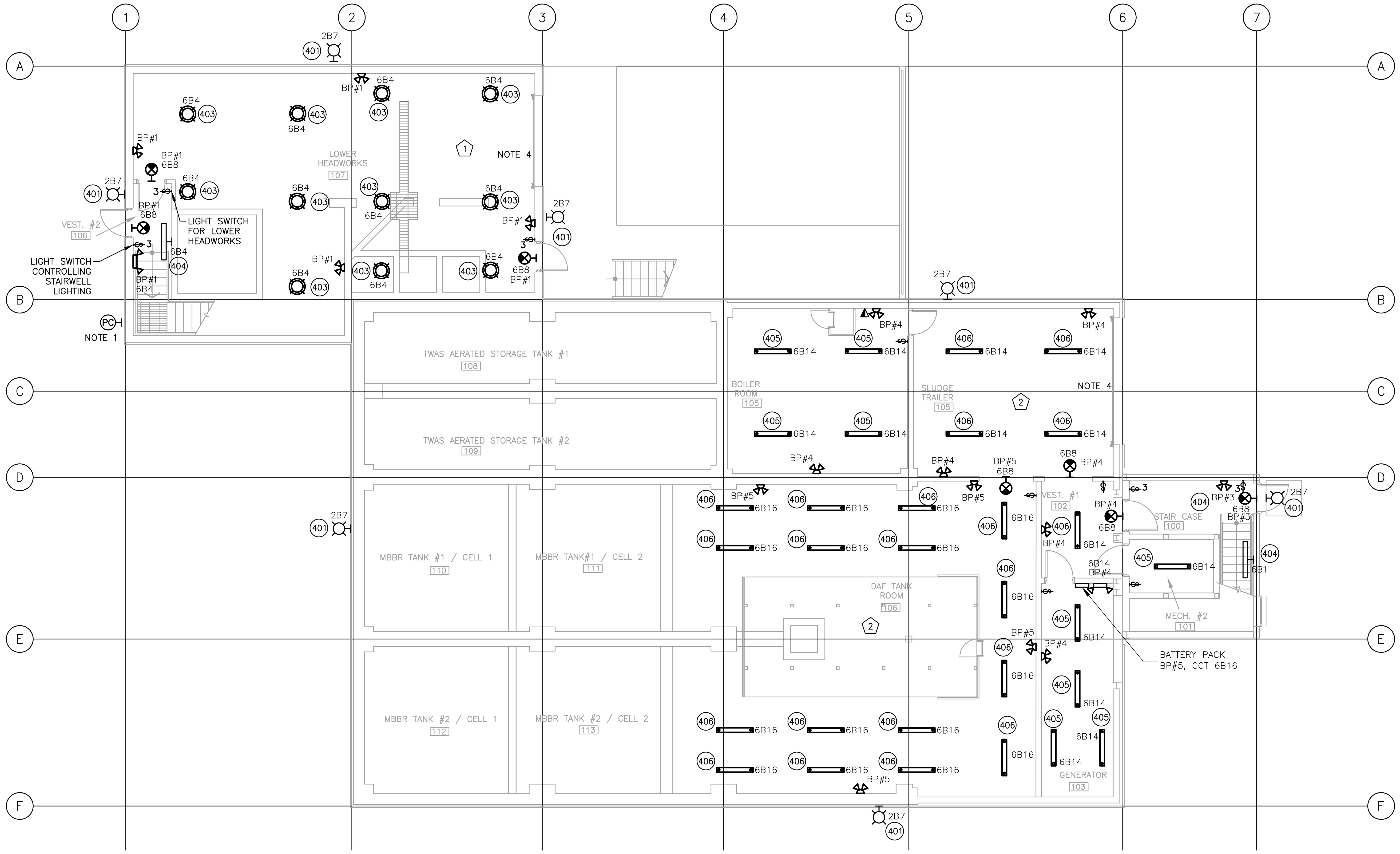
Title
TEMPORARY ELECTRICAL ROOM LAYOUT AND ELEVATION

Project No.	Scale	
110126045	AS SHOWN	
Drawing No.	Sheet	Revision
E105	7 of 23	0

ORIGINAL SHEET - ISO A1







LUMINAIRE SCHEDULE

401	MINIMUM 4700 LUMEN, 5000K, SURFACE MOUNTED EXTERIOR LED LIGHT LUMINAIRE. C/W HIGH IMPACT, VANDAL RESISTANT, DIE-CAST ALUMINUM HOUSING, FULL CUTOFF TYPE IV DISTRIBUTION OPTICS, BLACK FINISH, 120V STANDARD DRIVER, 60000 HOUR RATED LIFESPAN, RATED FOR MINIMUM -40°C. TO BE MCGRAW-EDISON ISS, HUBBELL QSP, OR PHILIPS 106L.
402	MINIMUM 11000 LUMEN, 5000K WALL MOUNTED ADJUSTABLE LED FLOODLIGHT LUMINAIRE. C/W CLASS 1 ZONE 2 HAZARDOUS RATING, DAMP LOCATION RATING, WIDE BEAM (7x6) OPTICS. 347V STANDARD DRIVER. TO BE NEMALUX RS-WF OR CROUSE-HINDS FMV-76 OR APPROVED EQUIVALENT.
403	MINIMUM 5000 LUMEN, 5000K PENDANT MOUNTED LED LUMINAIRE. C/W CLASS 1 ZONE 2 HAZARDOUS RATING, DAMP LOCATION RATING, 347V STANDARD DRIVER AND WIDE TYPE 5 OPTICS. TO BE CROUSE-HINDS VMV-5L OR NEMALUX MR6 OR APPROVED EQUAL.
404	1219mm LONG, MINIMUM 5500 LUMEN, 5000K, LED WALL MOUNTED LUMINAIRE. C/W DAMP RATING, FULLY FROSTED LENS, WIREGUARD, 347V STANDARD DRIVER. TO BE METALUX 4SNLED-LW AND WG/SNR-4FT OR PHILIPS DAY-BRITE LF4FR AND LF4WGW OR PEERLESS NSL-RA-WG.
405	1219mm LONG, MINIMUM 5500 LUMEN, 5000K, SUSPENDED LED LUMINAIRE. C/W DAMP RATING, FULLY FROSTED LENS, WIREGUARD, 347V STANDARD DRIVER. TO BE METALUX 4SNLED-LW AND WG/SNR-4FT OR PHILIPS DAY-BRITE LF4FR AND LF4WGW OR PEERLESS NSL-RA-WG.
406	1219mm LONG, MINIMUM 6300 LUMEN, SUSPENDED LED LUMINAIRE. C/W ENCLOSED AND GASKETED HOUSING, WET LOCATION RATING, WIDE OPTICS, 347V STANDARD DRIVER. TO BE PHILIPS V2W, HOLOPHANE EVT4 OR LSI EGW.

EMERGENCY BATTERY PACK SCHEDULE

PACK	AREA BEING SERVED	LOCATION OF BATTERY PACK	POWER (WATTS)
BP#1	LOWER HEADWORKS	VESTIBULE #2	144
BP#2	UPPER HEADWORKS	VESTIBULE #4	144
BP#3	ELECTRICAL ROOM 202, STAIR CASE	ELECTRICAL ROOM 202	144
BP#4	BOILER, TRAILER SLUDGE, GENERATOR ROOMS	GENERATOR ROOM	350
BP#5	DISSOLVED AIR FLOATATION TANKS	GENERATOR ROOM	144
BP#6	ELECTRICAL ROOM 209	ELECTRICAL ROOM 209	144
BP#7	UPPER FLOOR AREA	ELECTRICAL ROOM 209	144

EMERGENCY LIGHTING NOTES:

1. SIZING IS BASED ON A PARTICULAR MANUFACTURER AT 24V WITH 6 WATT MR16 LED LAMPS AND A 5W ALLOWANCE FOR EACH EXIT LIGHT.
2. BATTERY PACKS INDICATED TO BE MINIMUM ALLOWABLE SIZE.
3. ENSURE BATTERY PACK SIZED TO LAST 30 MINUTES AS PER NBCC EXCEPT FOR BATTERY PACK IN GENERATOR ROOM WHICH IS TO LAST 2 HOURS.
4. IN ANY AREAS SERVED BY EMERGENCY LIGHTING: EMERGENCY LIGHTING SHALL TURN ON UPON FAILURE OF POWER SUPPLY TO NORMAL LIGHTING AS PER CEC 46-304.4.

NOTES:

1. MOUNT PHOTOCELL MINIMUM 3000mm A.F.G. AND AWAY FROM ARTIFICIAL SOURCES OF LIGHT.
2. MOUNT FIXTURES SO AS TO AVOID ANY PIPES, DUCTS, CABLE TRAYS AND EQUIPMENT. COORDINATE WITH OTHER TRADES ON SITE AND LOCATE FIXTURES ACCORDINGLY.
3. MOUNT ALL SUSPENDED LUMINAIRES AT 3000mm AFF UNLESS NOTED OTHERWISE. COORDINATE WITH OTHER TRADES FOR REQUIRED HEADSPACE CLEARANCES.
4. MOUNT LIGHT FIXTURES SO AS TO AVOID INTERFERENCE WITH OVERHEAD DOOR. COORDINATE WITH ARCHITECTURAL DIVISION.

1 E201 LOWER FLOOR NEW LIGHTING PLAN
1:100

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI
STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:

KG	KSS	KSS	18.05.23
Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title
LOWER FLOOR NEW LIGHTING PLAN

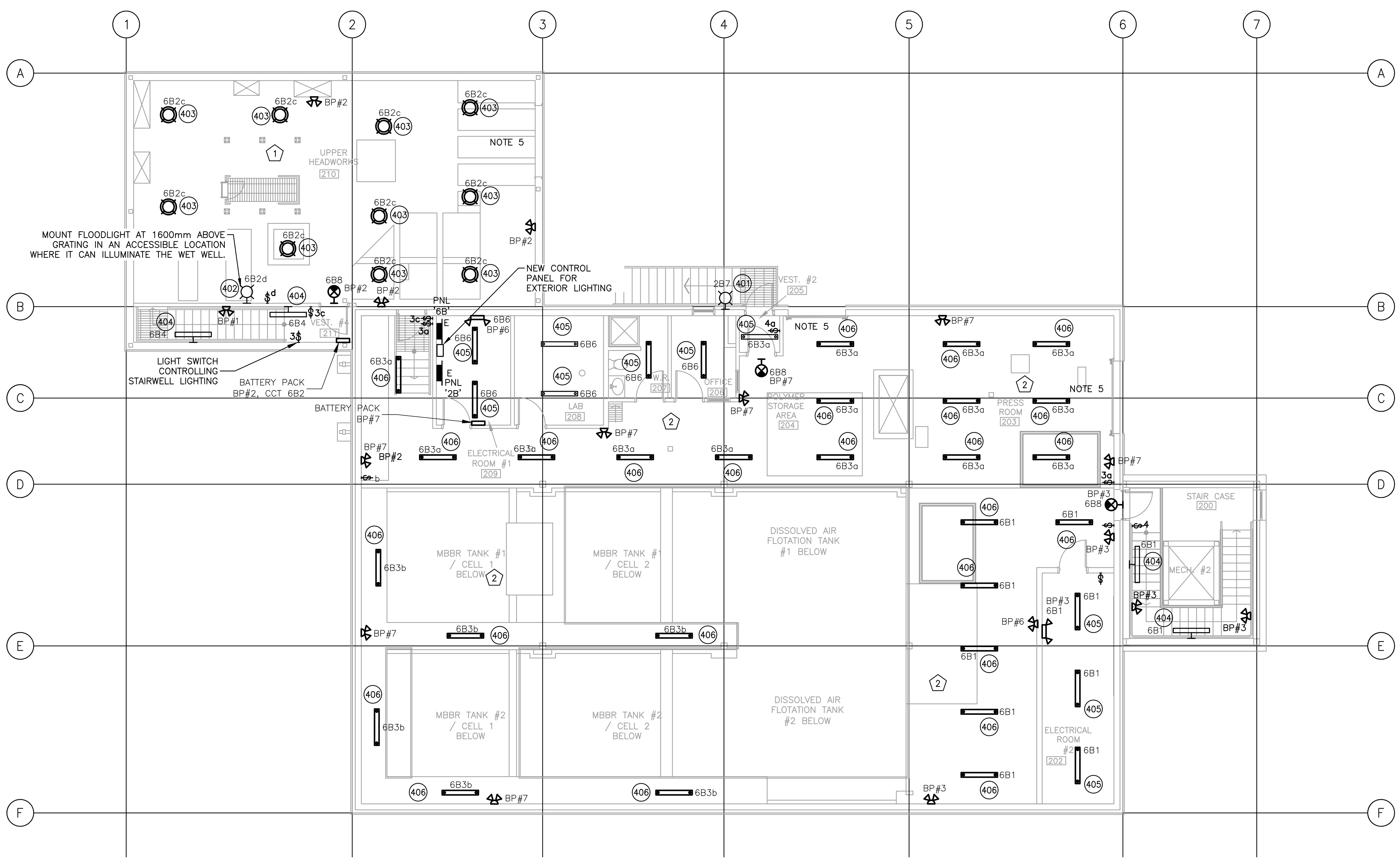
Project No. 110126045
Scale AS SHOWN
Drawing No. E201

Revision 0

ORIGINAL SHEET - ISO A1

TRUE NORTH

CONSTRUCTION NORTH



NOTES:

1. NEW LIGHTING IN ELECTRICAL ROOM 209, EXISTING LAB 208, EXISTING W/C 207, EXISTING OFFICE 206 AND VESTIBULE #2 IS A 1:1 REPLACEMENT. EXISTING SWITCHING AND CIRCUITING NOT SHOWN AND TO REMAIN AS IS.
2. REFER TO DWG E201 FOR EMERGENCY BATTERY PACK SCHEDULE.
3. MOUNT ALL SUSPENDED LUMINAIRES AT 3000mm ABOVE FINISHED FLOOR OR GRATING.
4. NEW SUSPENDED LIGHTING IN THE EXISTING UPPER FLOOR HEADWORKS IS A 1:1 REPLACEMENT. NEW SWITCHING AS INDICATED.
5. MOUNT LIGHT FIXTURES SO AS TO AVOID INTERFERENCE WITH OVERHEAD DOOR. COORDINATE WITH ARCHITECTURAL DIVISION.

1 / E202 UPPER FLOOR NEW LIGHTING PLAN
1:100

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ

IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

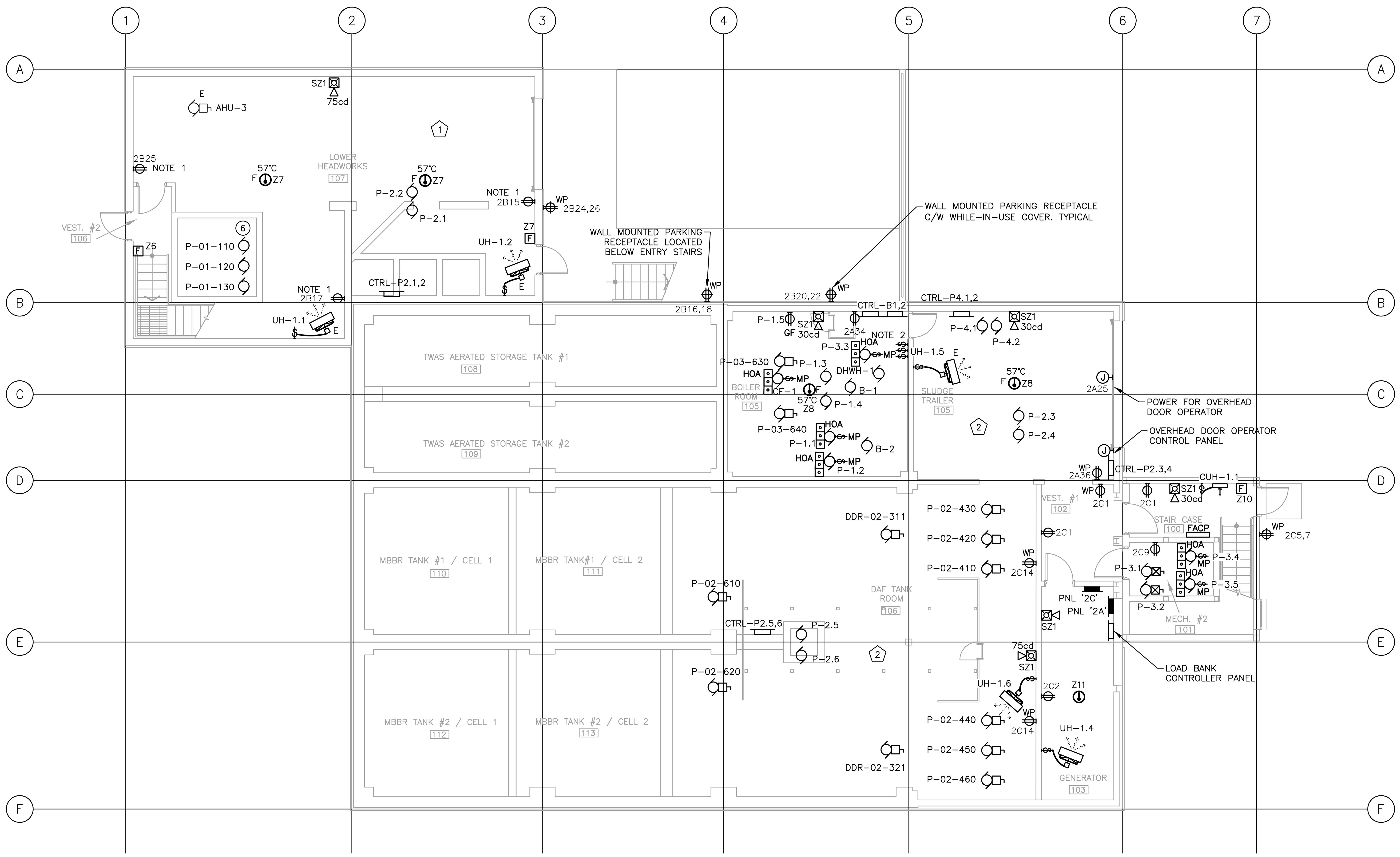
Title
UPPER FLOOR NEW LIGHTING PLAN

Project No. 110126045
Scale AS SHOWN
Drawing No. E202
Sheet 9 of 23
Revision 0

ORIGINAL SHEET - ISO A1

TRUE NORTH

CONSTRUCTION NORTH



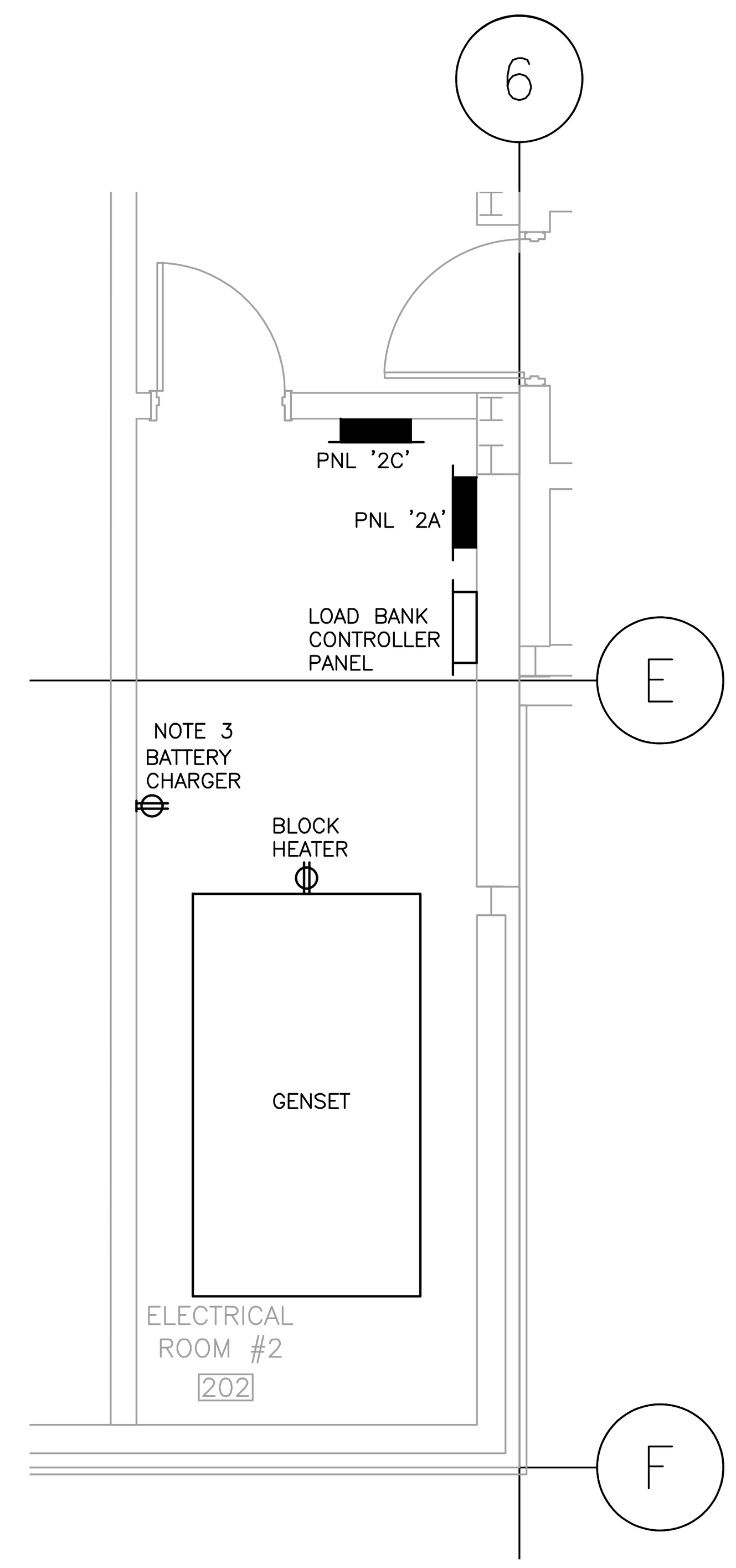
1 E203 LOWER FLOOR NEW POWER AND FIRE ALARM PLAN 1:100

KEY NOTES – DWGS E203-E204:

1. FIRE ALARM SIGNAL DEVICES TO BE RATED 15cd UNLESS OTHERWISE INDICATED.
2. REFER TO DWG EXXX FOR FIRE ALARM SCHEDULE AND RISER DIAGRAM.
3. REFER TO DRAWING E501 FOR MCC ELEVATIONS AND DRAWINGS E601, E602 AND E603 FOR SINGLE LINE DIAGRAMS. REFER TO DWG E204 FOR LOCATIONS OF MCC'S ON UPPER FLOOR.
4. COORDINATE ACTUAL LOCATION OF PROCESS AND BUILDING MECHANICAL EQUIPMENT WITH RESPECTIVE DIVISIONS ON SITE. CONFIRM REQUIREMENTS OF INSTALLATION WITH EACH DIVISION PRIOR TO COMMENCEMENT OF WORK.
5. NEW OVERHEAD DOORS AND DOOR OPERATORS SUPPLIED BY DIVISION 8. OPERATOR MOTOR AND CONTROL PANEL TO BE INSTALLED BY DIVISION 26. COORDINATE WITH DIVISION 8 ON SITE.
6. ALL DISCONNECTS, FEEDERS, FITTINGS, BOXES, SEALS FOR NEW RAW WASTEWATER PUMPS (P-01-110, P-01-120, P-01-130) TO BE RATED FOR ZONE 1, GROUP D HAZARDOUS LOCATION. PUMPS TO REMAIN OPERATIONAL IN THE EVENT OF VENTILATION FAILURE AND RESULTING CHANGE IN HAZARDOUS LOCATION CLASSIFICATION.
7. PROVIDE GROUND FAULT RECEPTACLES WHERE REQUIRED BY C.E.C. EVEN WHERE NOT SPECIFICALLY CALLED FOR HEREIN.

NOTES:

1. EXISTING RECEPTACLE TO BE REPLACED WITH NEW. REUSE EXISTING CIRCUIT.
2. PROVIDE BOILER AND DOMESTIC HOT WATER HEATER DISCONNECT SWITCHES AT 1500mm A.F.F. SWITCHES TO HAVE RED COVER PLATE WITH WHITE LETTERING READING "EMERGENCY DISCONNECT". LABEL SWITCHES "B-1", "B-2" AND "DHWH" TO ASSOCIATE SWITCH WITH CORRESPONDING OIL-FIRES APPLIANCE.
3. PROVIDE STEEL CHECKER PLATE TO COVER CABLES RUNNING FROM BATTERY CHARGER TO GENERATOR.



2 E203 GENERATOR ROOM LAYOUT 1:50

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project

Iqaluit

IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION

City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title

LOWER FLOOR NEW POWER AND FIRE ALARM PLAN

Project No.	Scale	
110126045	AS SHOWN	
Drawing No.	Sheet	Revision
E203	10 of 23	0

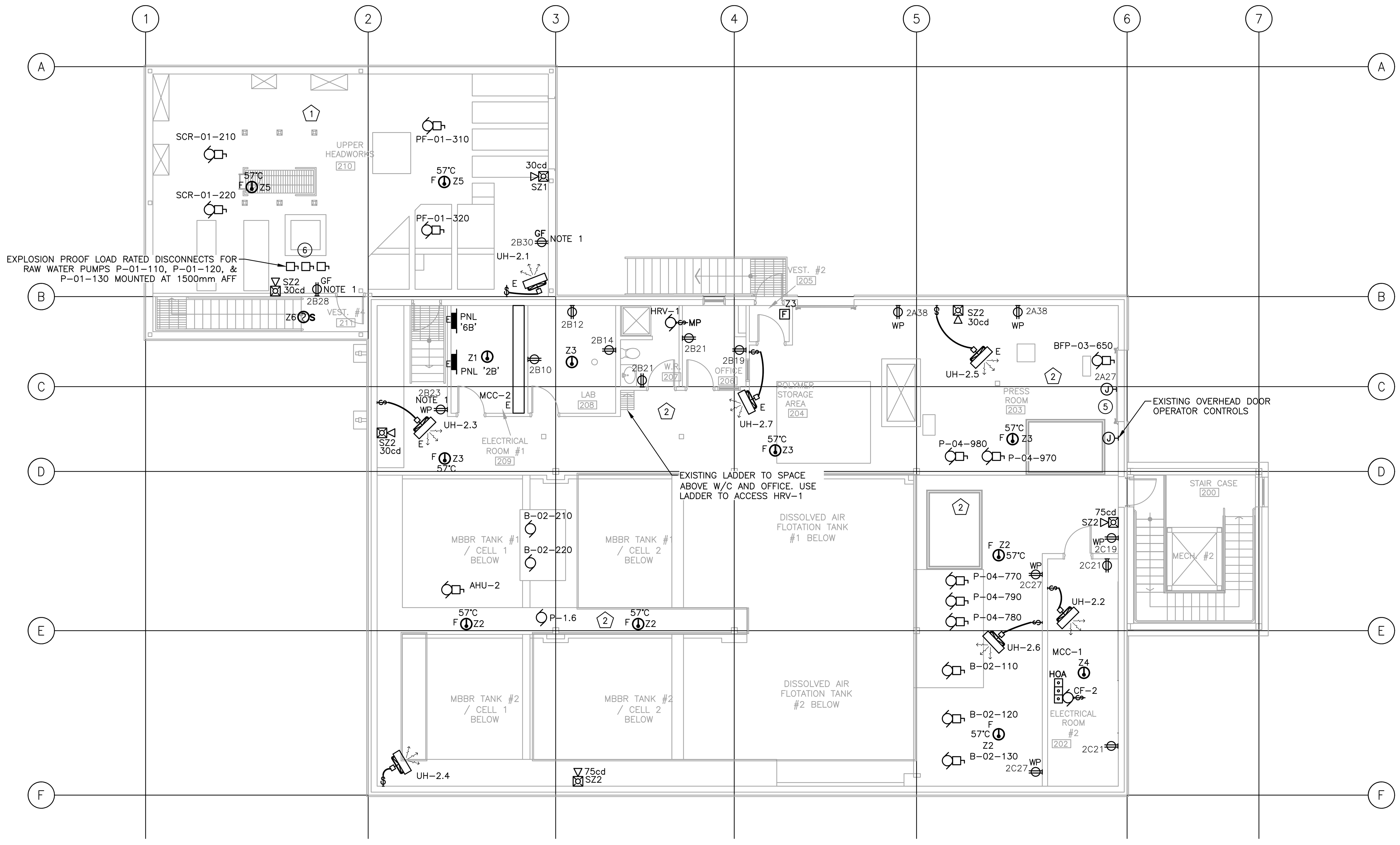
ORIGINAL SHEET - ISO A1

TRUE NORTH

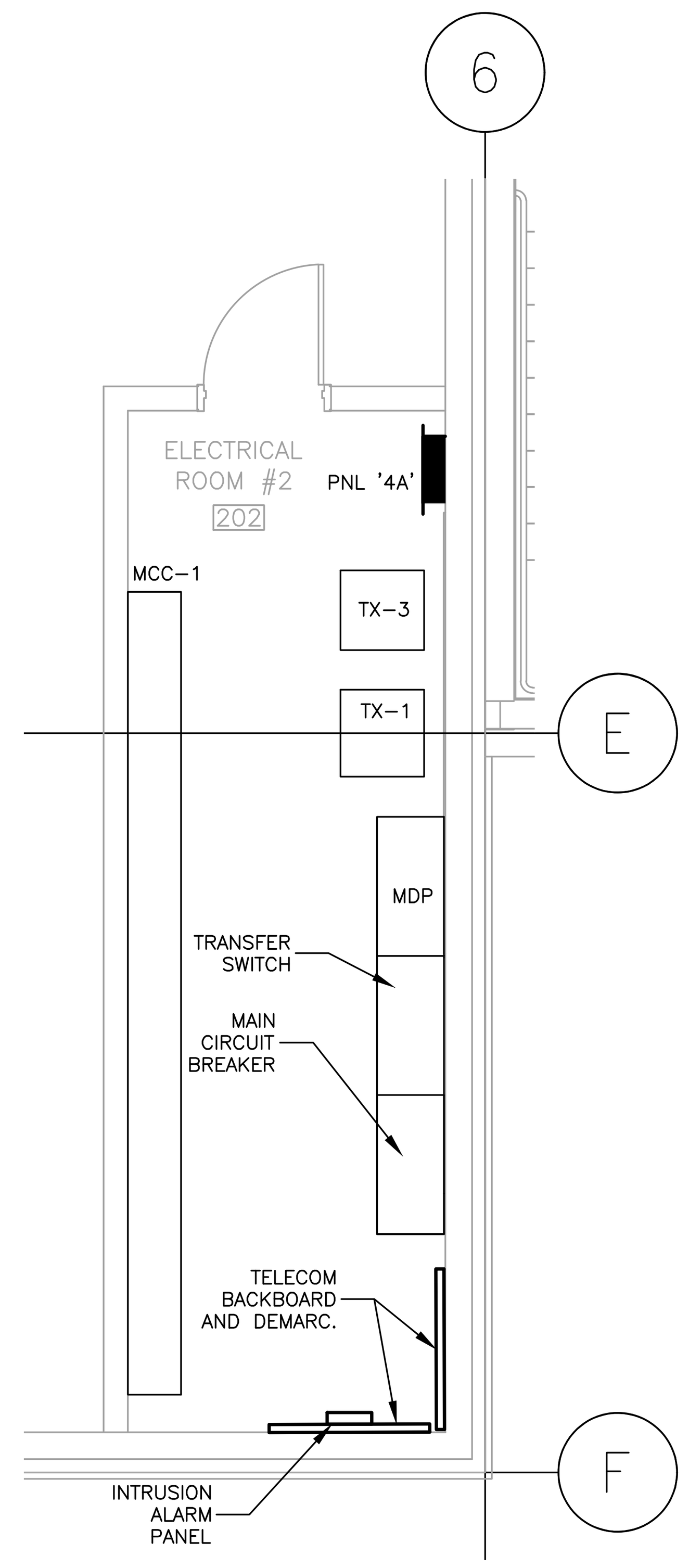
CONSTRUCTION NORTH

NOTES:

1. EXISTING RECEPTACLE TO BE REPLACED WITH NEW. REUSE EXISTING CIRCUIT.



1 E204 UPPER FLOOR NEW POWER AND FIRE ALARM PLAN 1:100



2 E204 ELECTRICAL ROOM LAYOUT 1:50

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER 05/23/18 K. S. SMITH 110126045 IFC N.W.T.

NUNAMI STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project

Iqaluit

IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION

City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

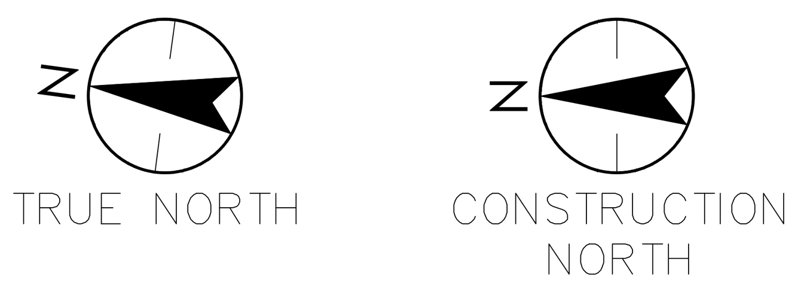
Title

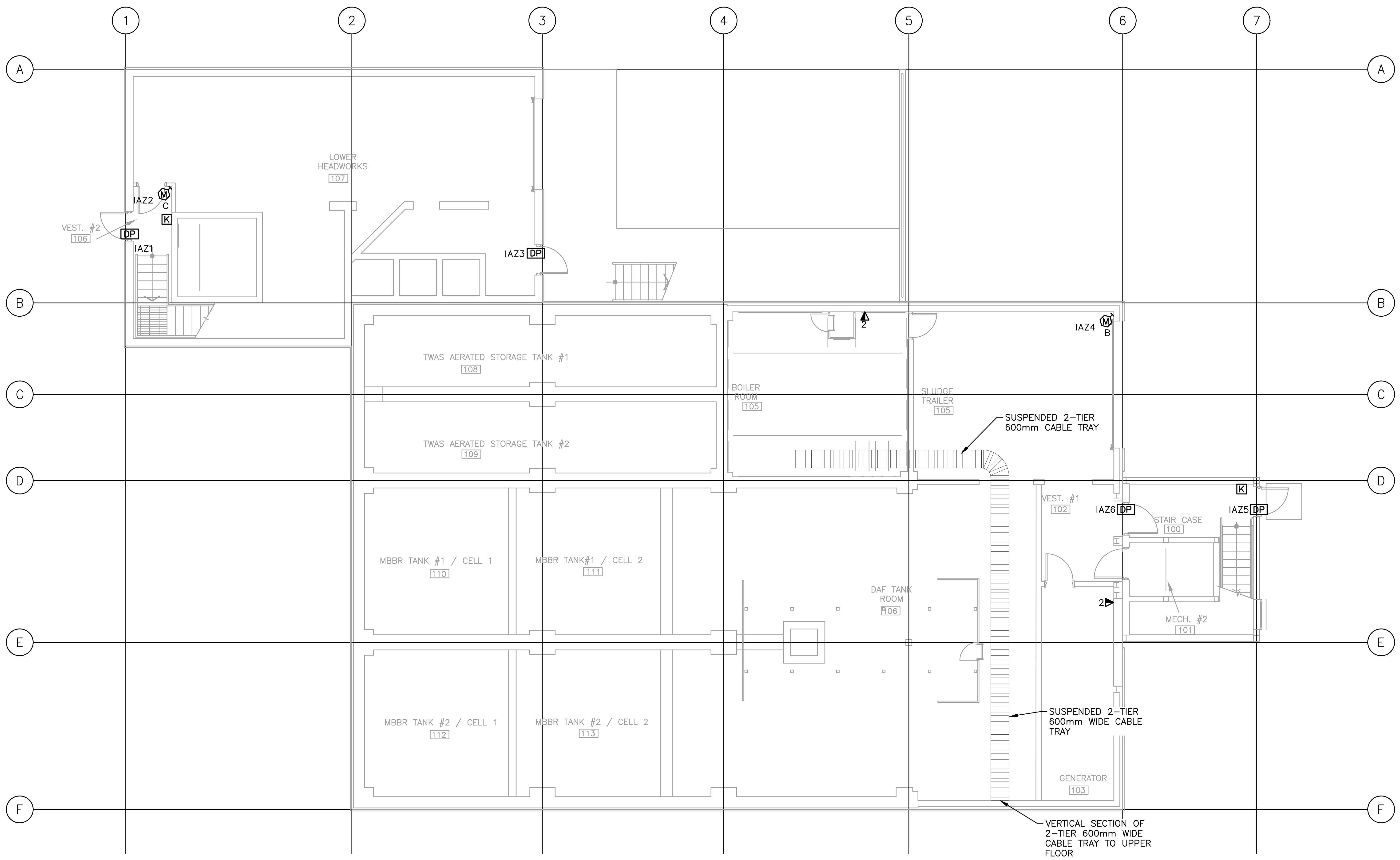
UPPER FLOOR NEW POWER AND FIRE ALARM PLAN

Project No.	Scale
110126045	AS SHOWN

Drawing No.	Sheet	Revision
E204	11 of 23	0

ORIGINAL SHEET - ISO A1





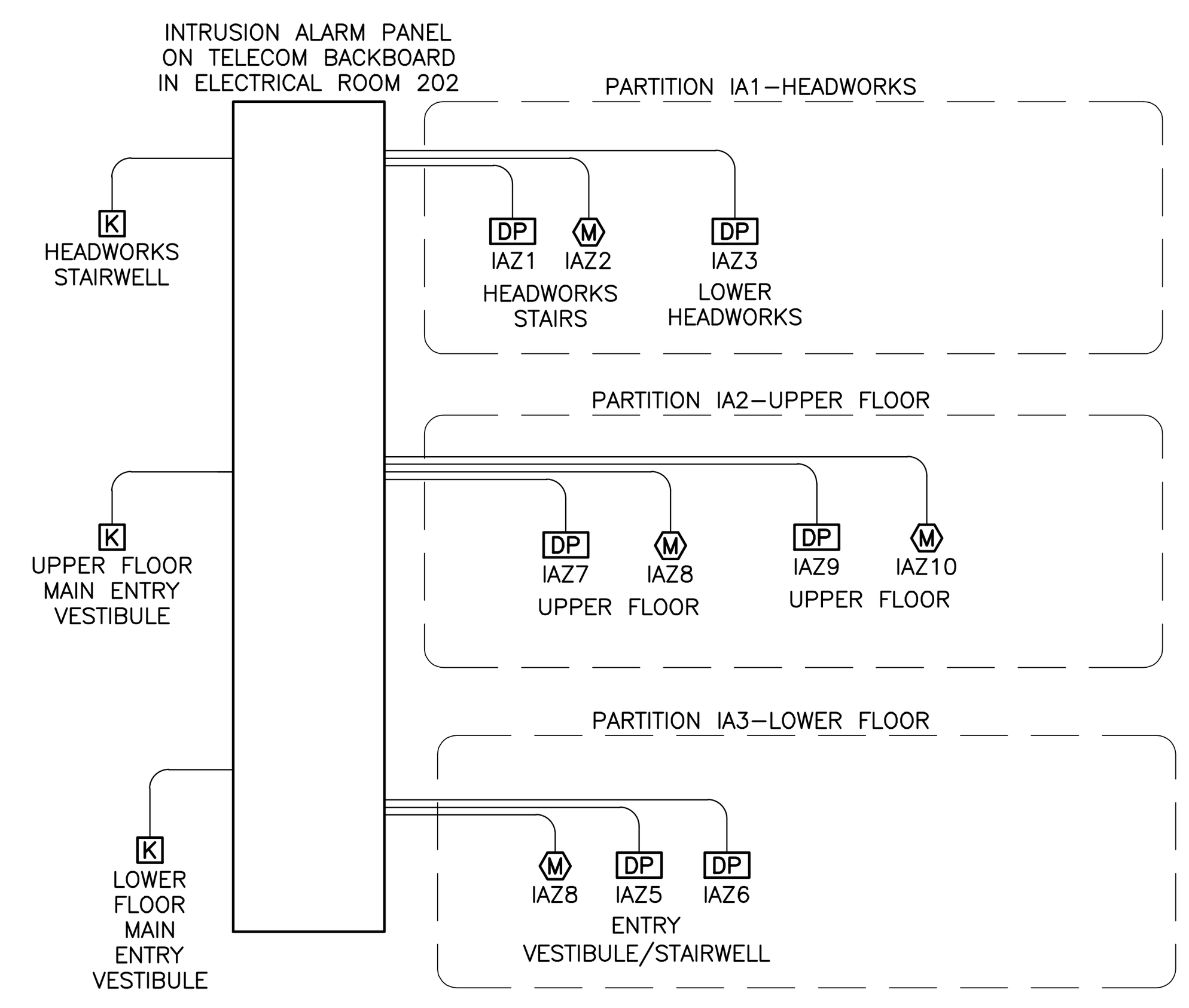
1 E205 LOWER FLOOR NEW CABLE TRAY AND INTRUSION ALARM PLAN
1:100

KEY NOTES – DWGS E205–E206

1. CABLE TRAY ROUTING AND MOUNTING TO BE COORDINATED WITH OTHER TRADES ON SITE. DETERMINE CABLE TRAY LOCATIONS THAT SUIT FEEDER ROUTING TO EQUIPMENT. TRAY TO BE SECURED TO BUILDING STRUCTURE. INSTALL AS PER C.E.C. SECTION 12.
2. LOW TENSION AND CONTROL CABLES TO BE RUN IN CONDUIT IN SERVICE SPACES. CONTRACTOR IS EXPECTED TO REROUTE EXISTING CABLES OF DIFFERENT VOLTAGE CLASSES THAT ARE CURRENTLY RUN TOGETHER.
3. LETTERS ADJACENT TO INTRUSION ALARM MOTION DETECTORS INDICATE THE FOLLOWING:
   C – CURTAIN TYPE
   B – BROAD TYPE
4. FOR EACH INTRUSION ALARM DEVICE AND KEYPAD SHOWN, PROVIDE SEPARATE WIRING HOME RUN TO INTRUSION ALARM CONTROL PANEL IN ELECTRICAL ROOM 209. EACH DEVICE SHALL BE A SEPARATE ZONE.
5. COORDINATE INSTALLATION OF DOOR CONTACTS WITH DOOR FRAME PROVIDER.
6. TECK CABLE DROP TO EQUIPMENT MAY BE ACCOMPLISHED USING VERTICAL CABLE TRAY SECTIONS OR BY PROVISION OF UNISTRUT CHANNELS AND BRACKETS. SUPPORT VERTICAL CABLES EVERY 1000mm.
7. PROVIDE BOND WIRE ALONG THE ENTIRE SECTION OF CABLE TRAY USING #6 AWG COPPER AND BOND TO THE TRAY AT EACH SECTION USING COMPRESSION FITTINGS APPROVED FOR THE PURPOSE. CONDUCTORS TO BE TIED TO MGB.
8. PROVIDE ULC–APPROVED FIRE STOPPING FOR CABLE TRAYS WHERE FIRE SEPARATIONS AT FLOORS OR WALLS ARE PENETRATED. COORDINATE WITH ARCHITECTURAL DIVISION TO CONFIRM LOCATIONS OF FIRE SEPARATIONS.
9. AS–BUILTS TO REFLECT ACTUAL CABLE TRAY INSTALLATION.

INTRUSION ALARM SCHEDULE

PARTITION	LOCATION	ZONES
IA1	HEADWORKS	IAZ1–IAZ3
IA2	UPPER FLOOR	IAZ7–IAZ10
IA3	LOWER FLOOR	IAZ5–IAZ6



2 E205 INTRUSION ALARM SYSTEM DIAGRAM
N.T.S.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI
STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

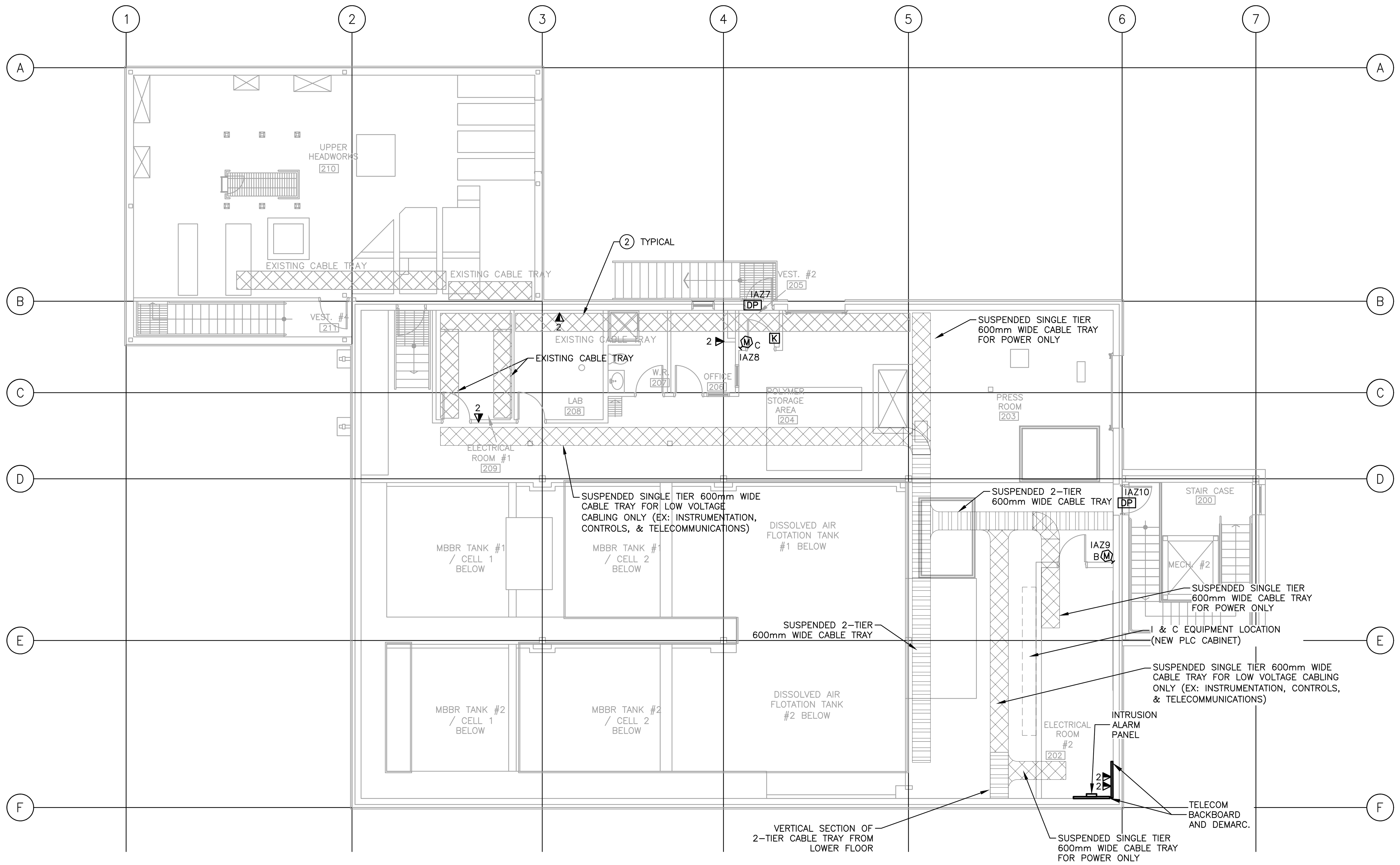
Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD
	KG	KSS	KSS	18.05.23

Title
LOWER FLOOR NEW CABLE TRAY AND INTRUSION ALARM PLAN

Project No. 110126045
Scale AS SHOWN
Drawing No. E205
Sheet 12 of 23
Revision 0

ORIGINAL SHEET - ISO A1



1 E206 UPPER FLOOR NEW CABLE TRAY AND INTRUSION ALARM PLAN
1:100

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI
STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

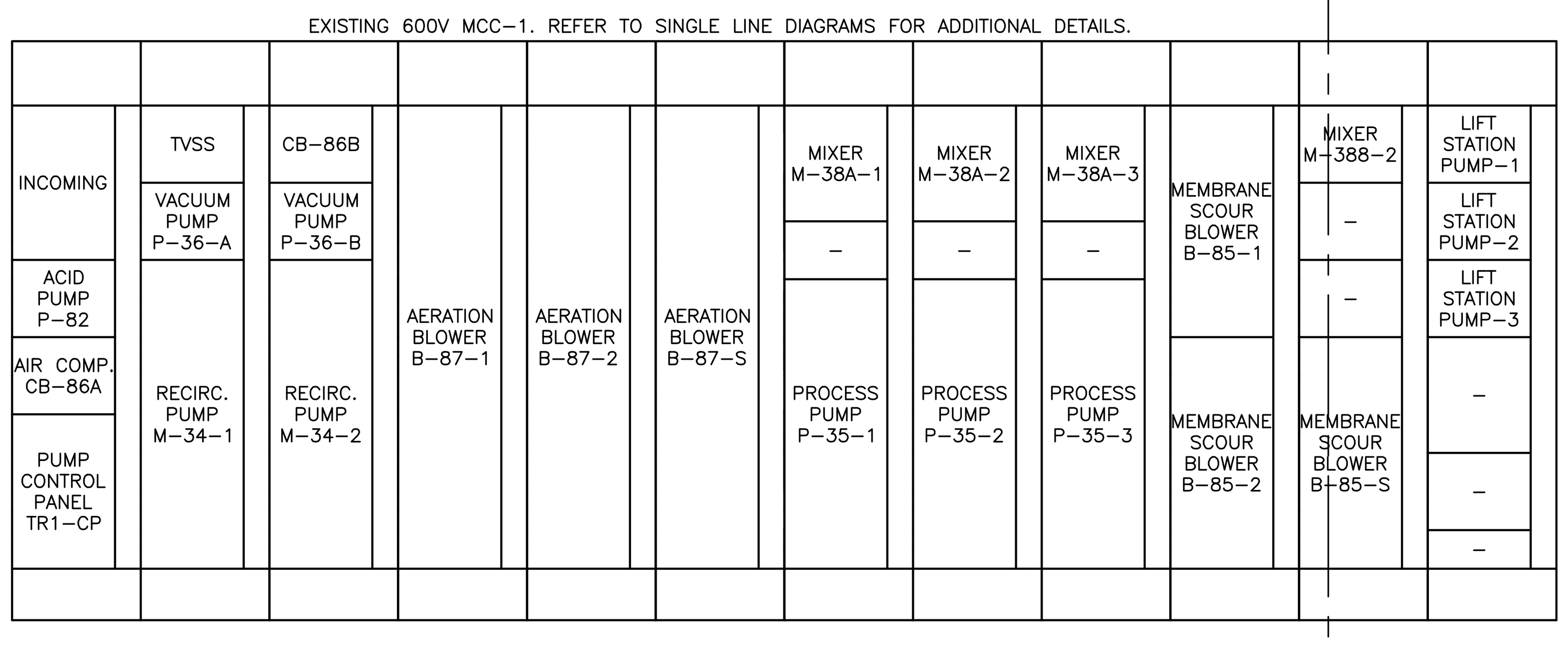
Title
UPPER FLOOR NEW CABLE TRAY AND INTRUSION ALARM PLAN

Project No.	Scale	
110126045	AS SHOWN	
Drawing No.	Sheet	Revision
E206	13 of 23	0

ORIGINAL SHEET - ISO A1

TRUE NORTH

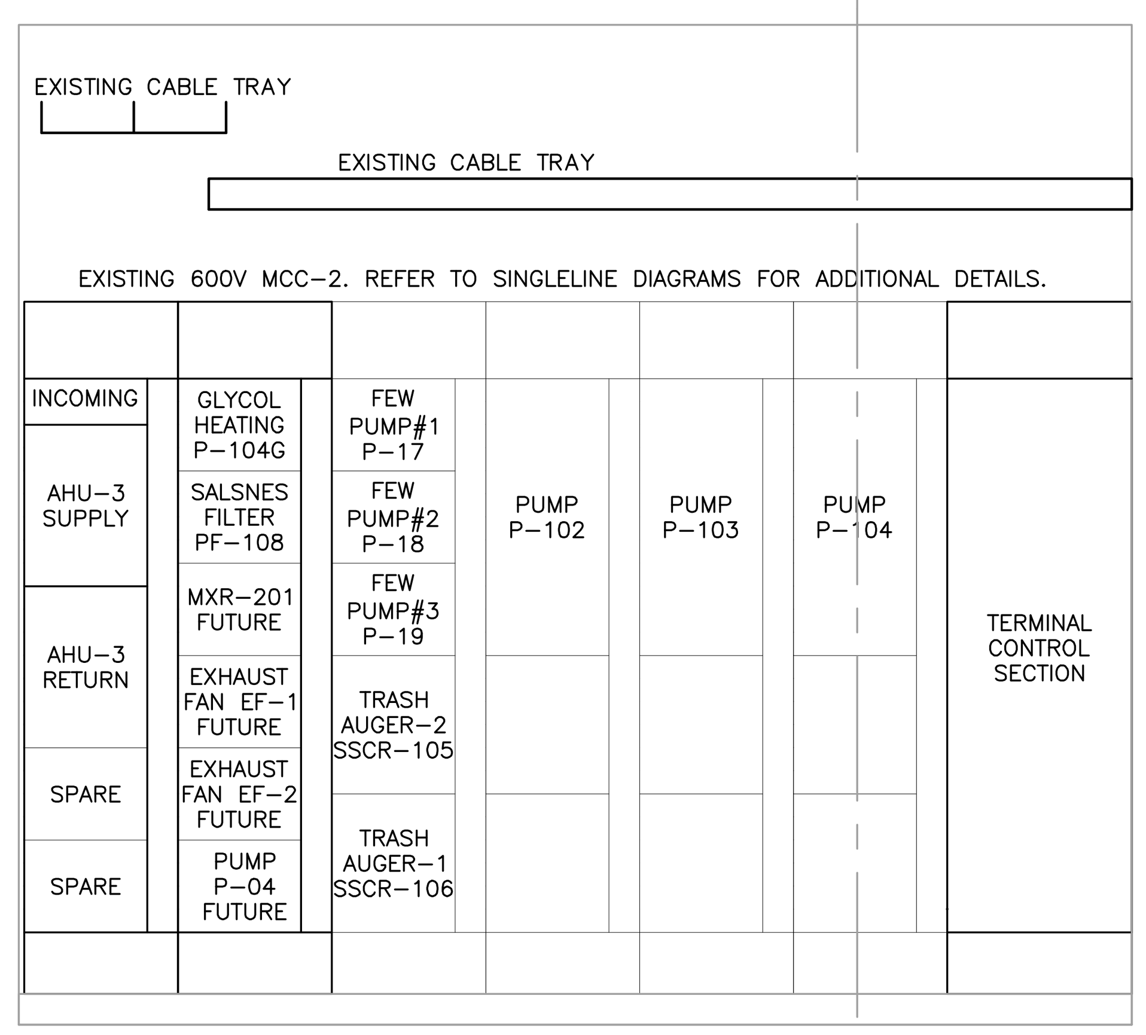
CONSTRUCTION NORTH



NOTES:

1. EQUIPMENT ELEVATION REPRESENTS EXISTING MCC-1 ELEVATION. PROVIDED FOR REFERENCE . EXISTING MCC-1 TO BE REMOVED DURING STAGE 2 OF CONSTRUCTION AND REINSTALLED AFTER NEW ELECTRICAL ROOM IS RECONSTRUCTED. TO BE MODIFIED AS PER SCOPE OF WORK INCLUDED HEREIN.

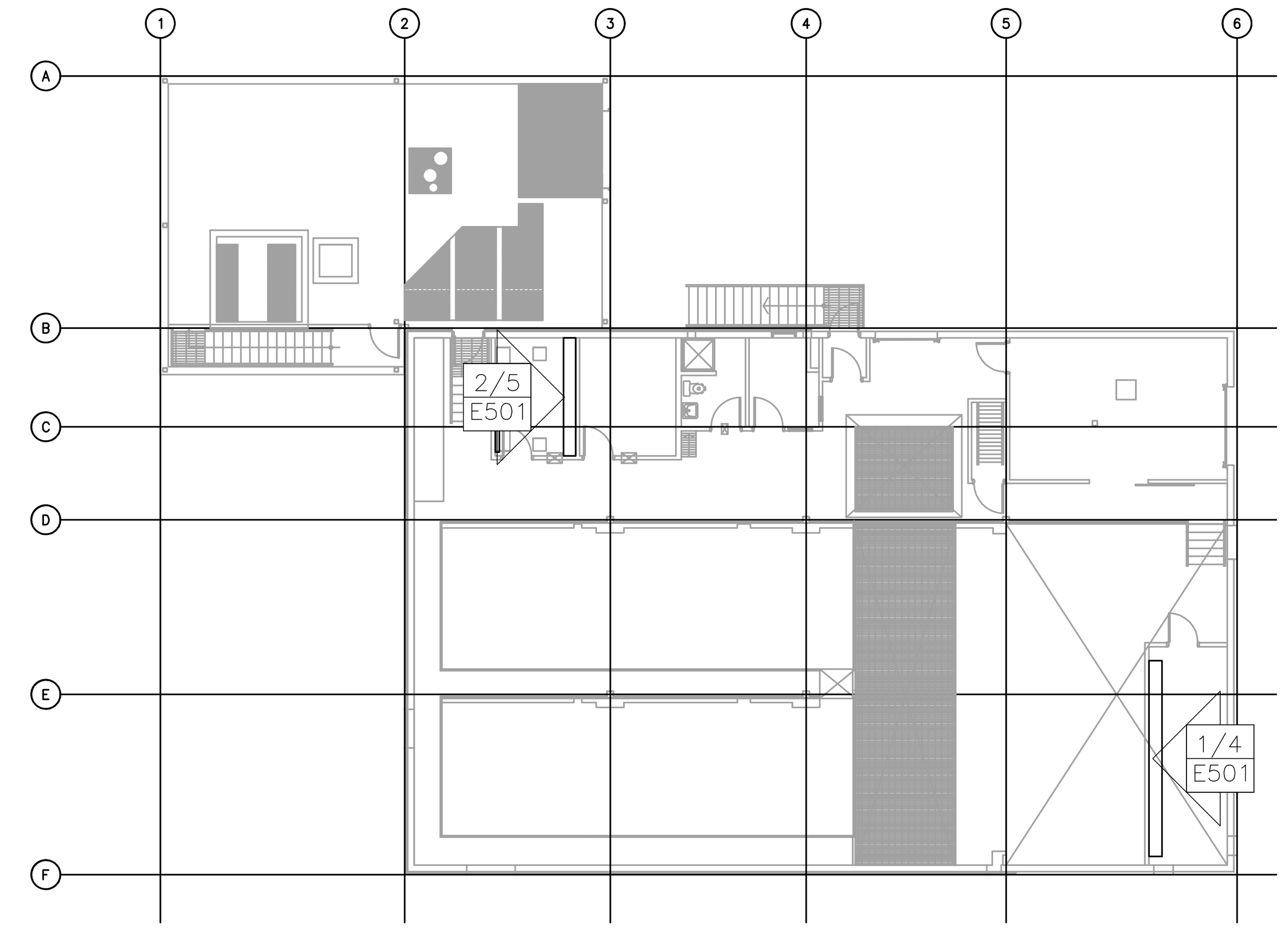
1 E501 EXISTING MCC-1 ELEVATION 1:25



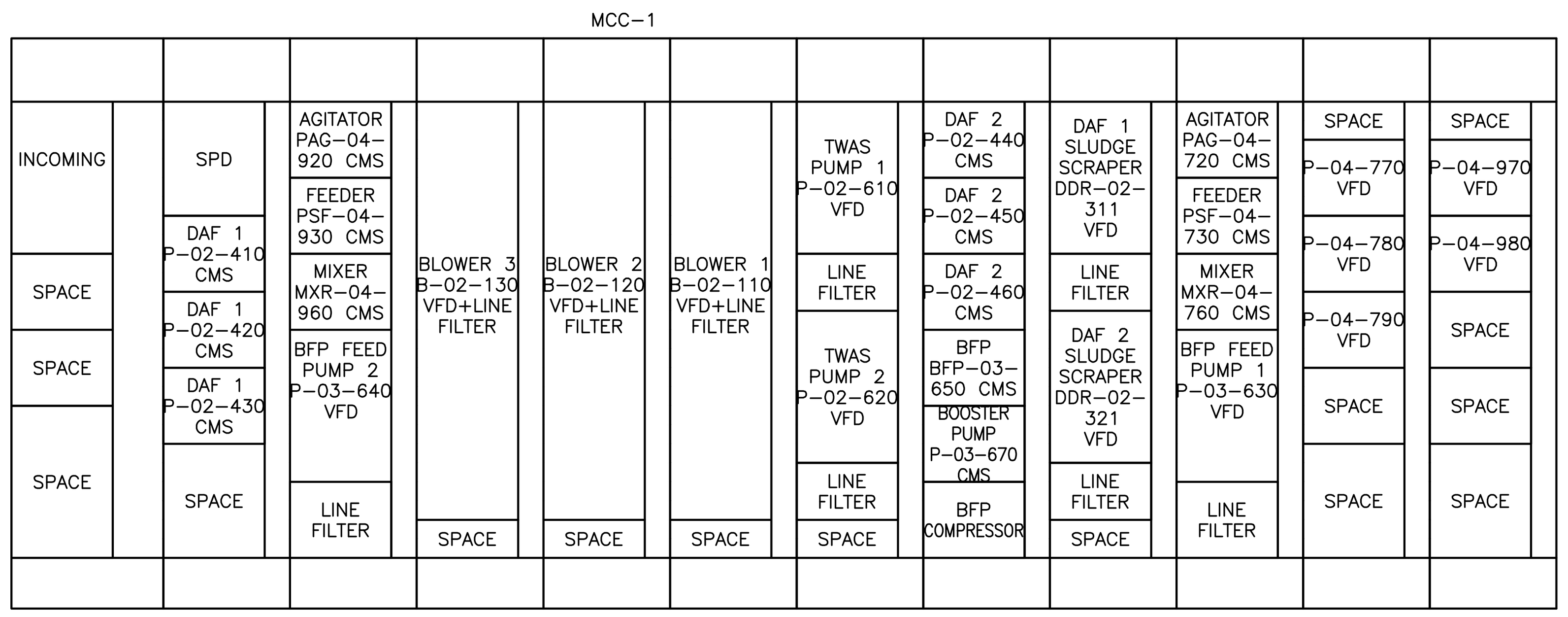
NOTES:

1. EQUIPMENT ELEVATION REPRESENTS EXISTING MCC-2 ELEVATION. TO BE MODIFIED AS PER SCOPE OF WORK INCLUDED HEREIN

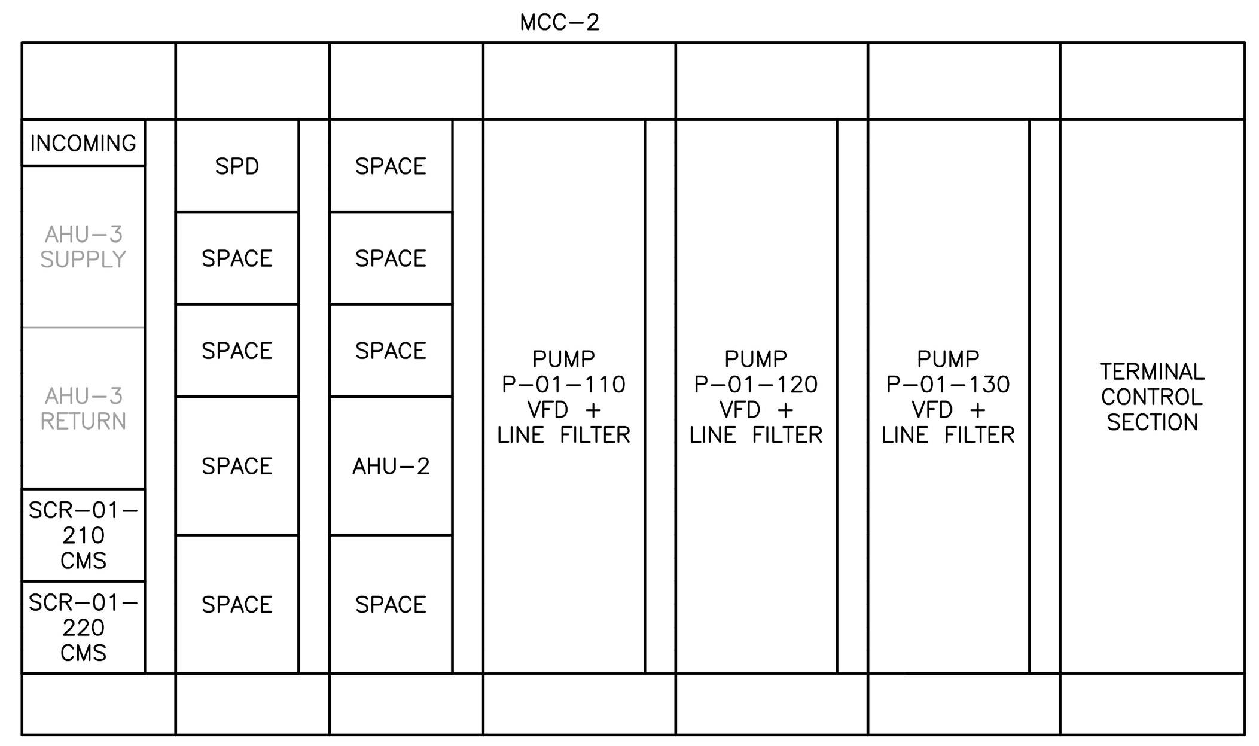
2 E501 EXISTING MCC-2 ELEVATION 1:25



3 E501 EQUIPMENT ELEVATION KEYPLAN 1:200



4 E501 MCC-1 ELEVATION 1:25



5 E502 MCC-2 ELEVATION 1:25

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

ORIGINAL SHEET - ISO A1

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI
STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project

Iqaluit

ᐃᖃᓗᐃᑦ

IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION

City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title

EXISTING AND NEW ELECTRICAL EQUIPMENT ELEVATIONS

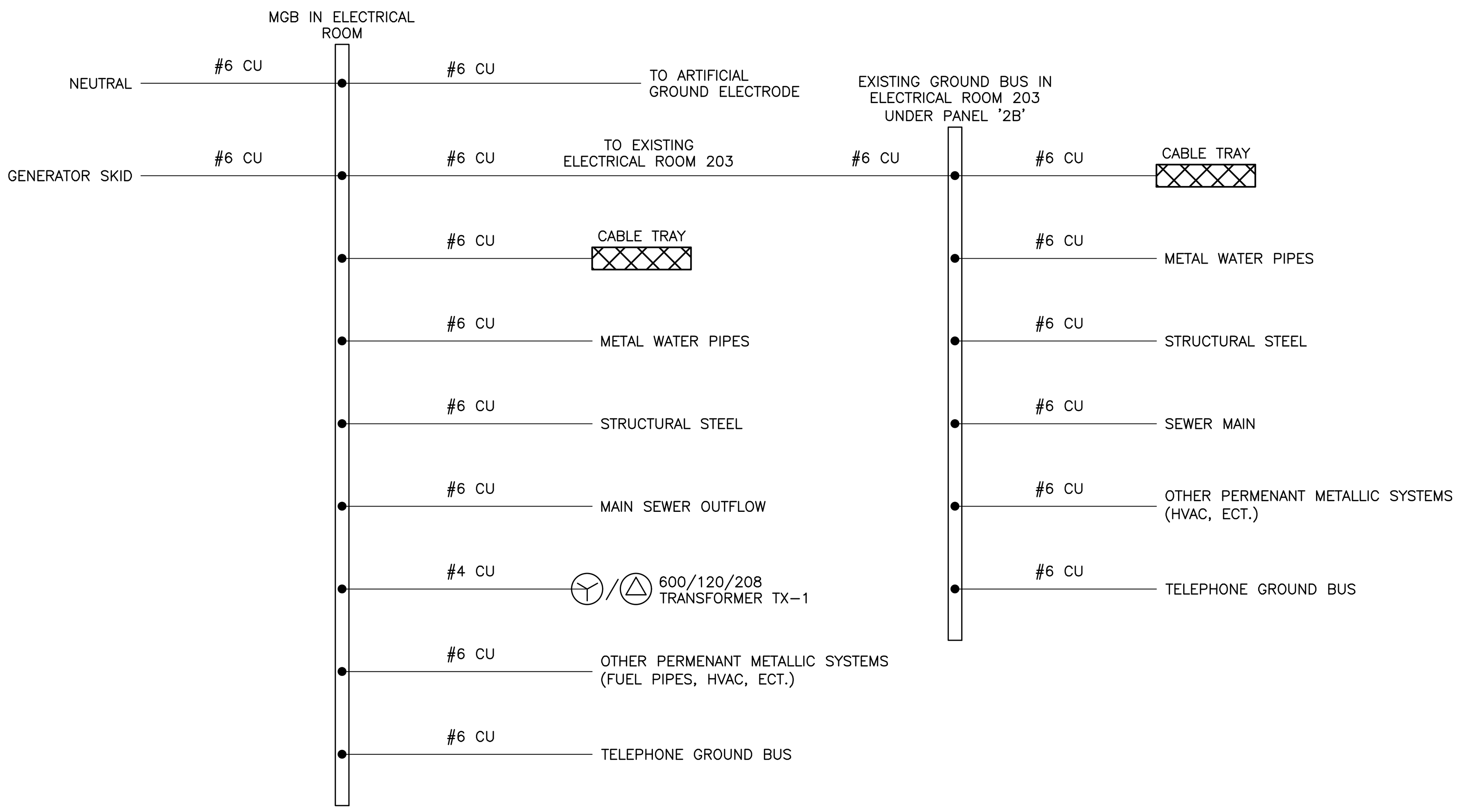
Project No. 110126045

Scale AS SHOWN

Drawing No. E501

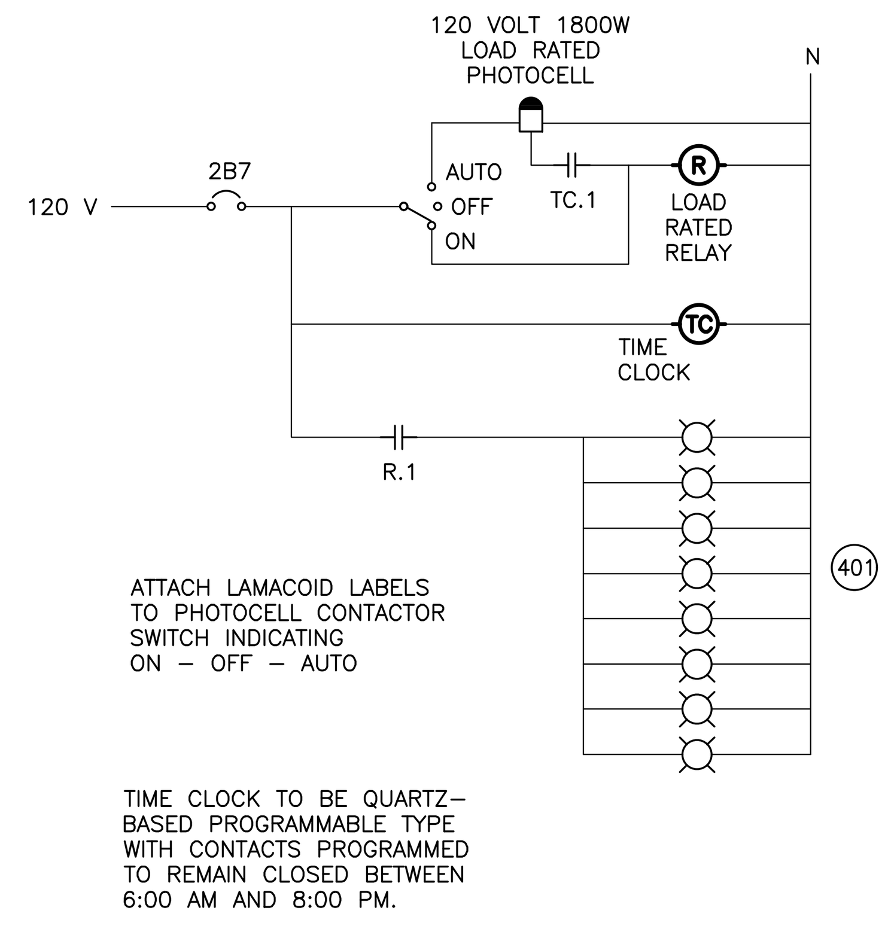
Sheet 14 of 23

Revision 0

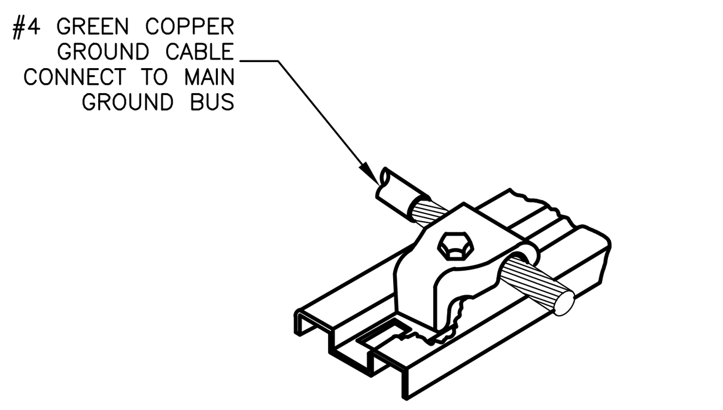


GROUNDING RISER NOTES;
1. PROVIDE BONDING JUMPER PAST METERS, AND NON-METALLIC PIPE JUNCTIONS.
2. BARE COPPER REQUIRED FOR GROUND ELECTRODE AND SYSTEM GROUND CONDUCTOR.
3. ALL OTHER BONDING PAST THE SERVICE SWITCH TO BE IN GREEN, INSULATED BOND CONDUCTOR, SIZE AS INDICATED, COPPER RW90 XLPE.

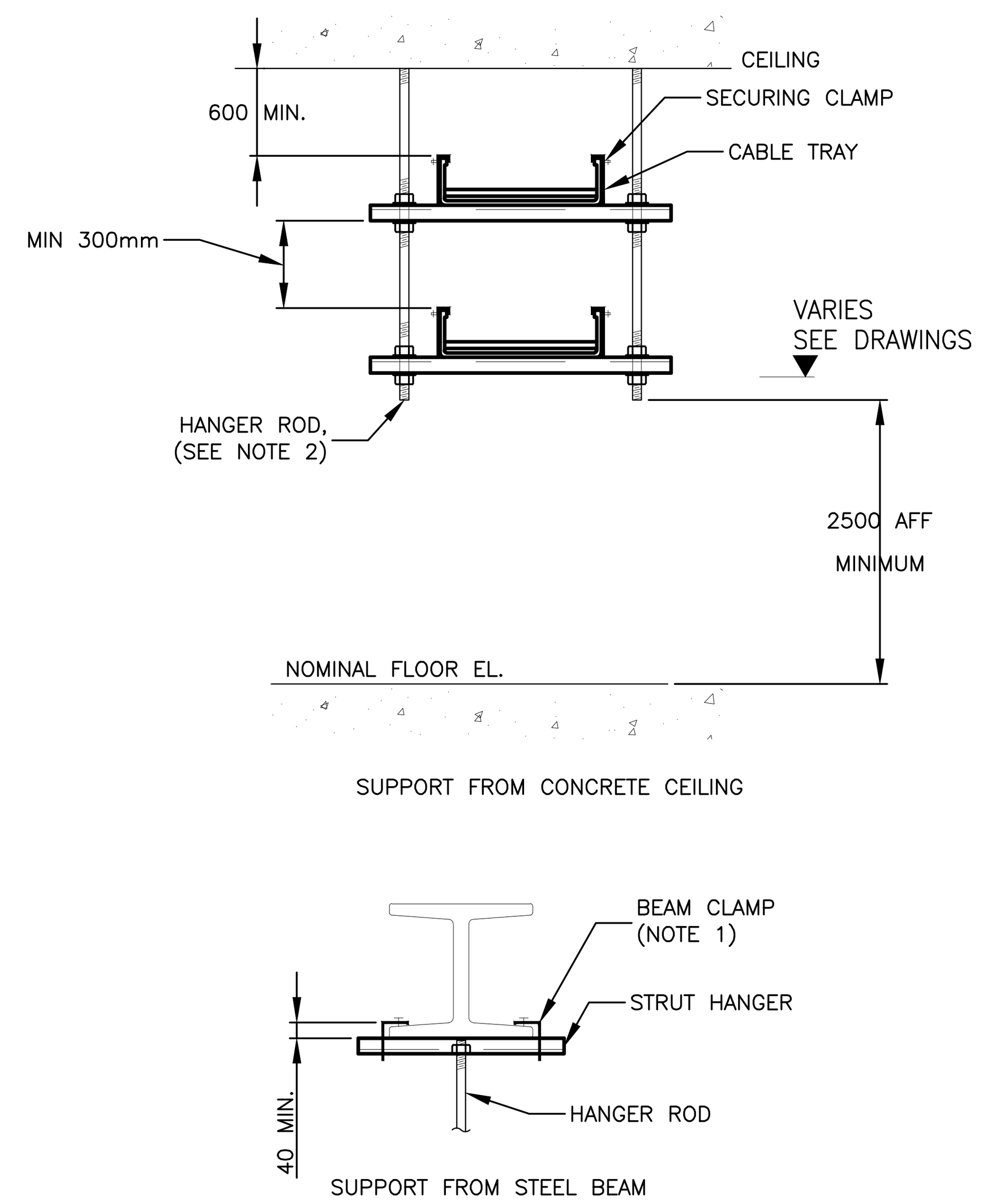
1 E502 GROUNDING RISER DIAGRAM
N.T.S.



4 E502 PHOTOCELL CONTROL SCHEMATIC
N.T.S.

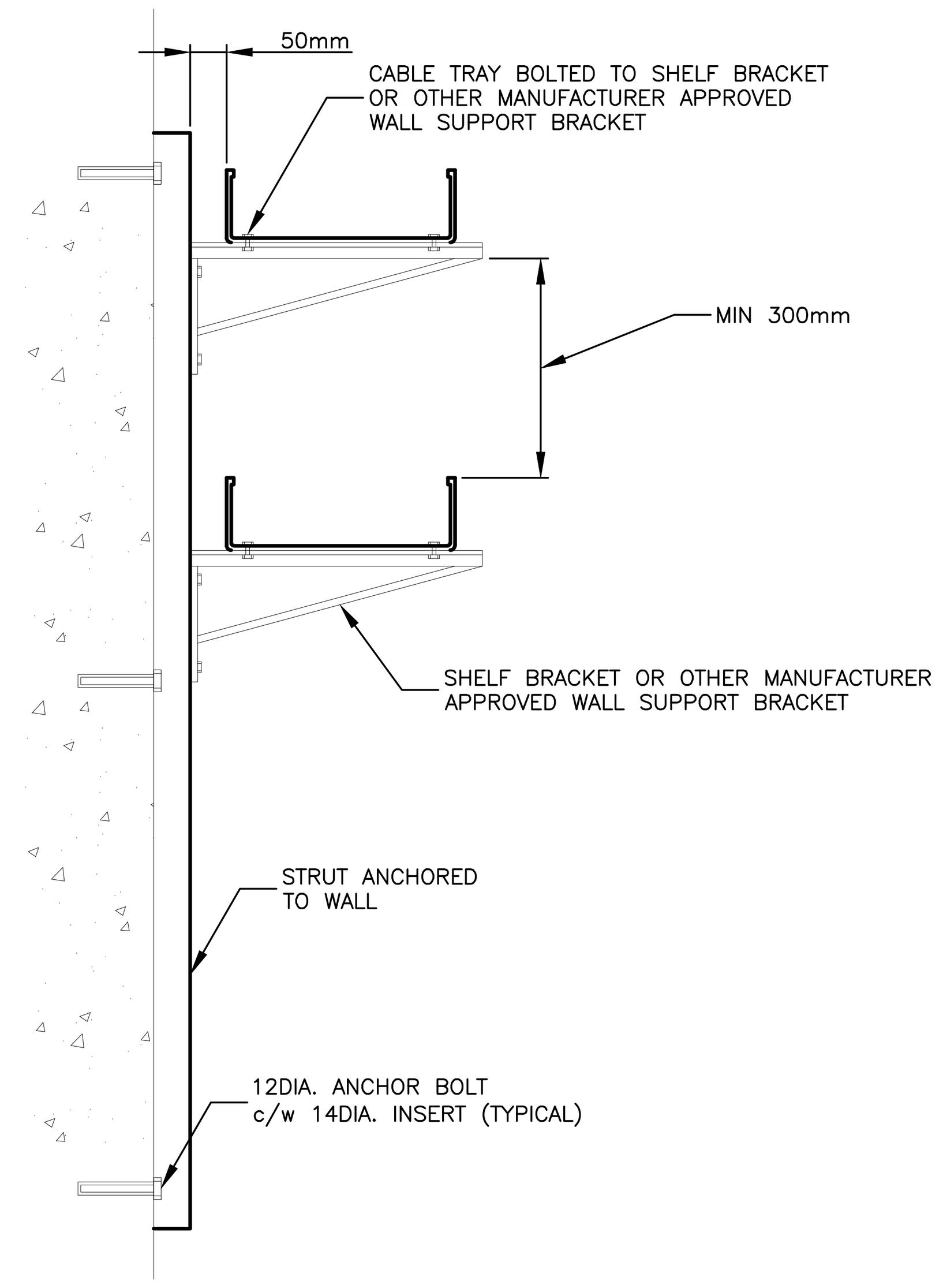


2 E502 TYPICAL GROUND CLAMP (CABLE TRAY)
N.T.S.

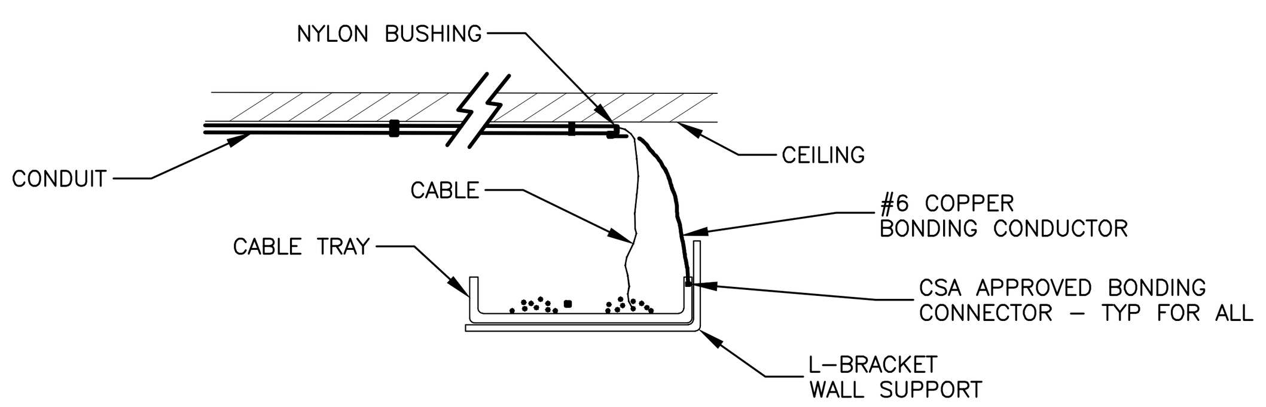


NOTES:
1. CLAMP TO SUIT BEAM, PURLIN, TRUSS OR OTHER SIMILAR MEMBERS.
2. SEE SPECIFICATION FOR CABLE TRAY REQUIREMENTS.

5 E502 SUSPENDED CABLE TRAY INSTALLATION DETAIL
N.T.S.



6 E502 HORIZONTAL WALL MOUNTED CABLE TRAY INSTALLATION DETAIL
N.T.S.



3 E502 CONDUIT TO CABLE TRAY BONDING
N.T.S.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI
STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

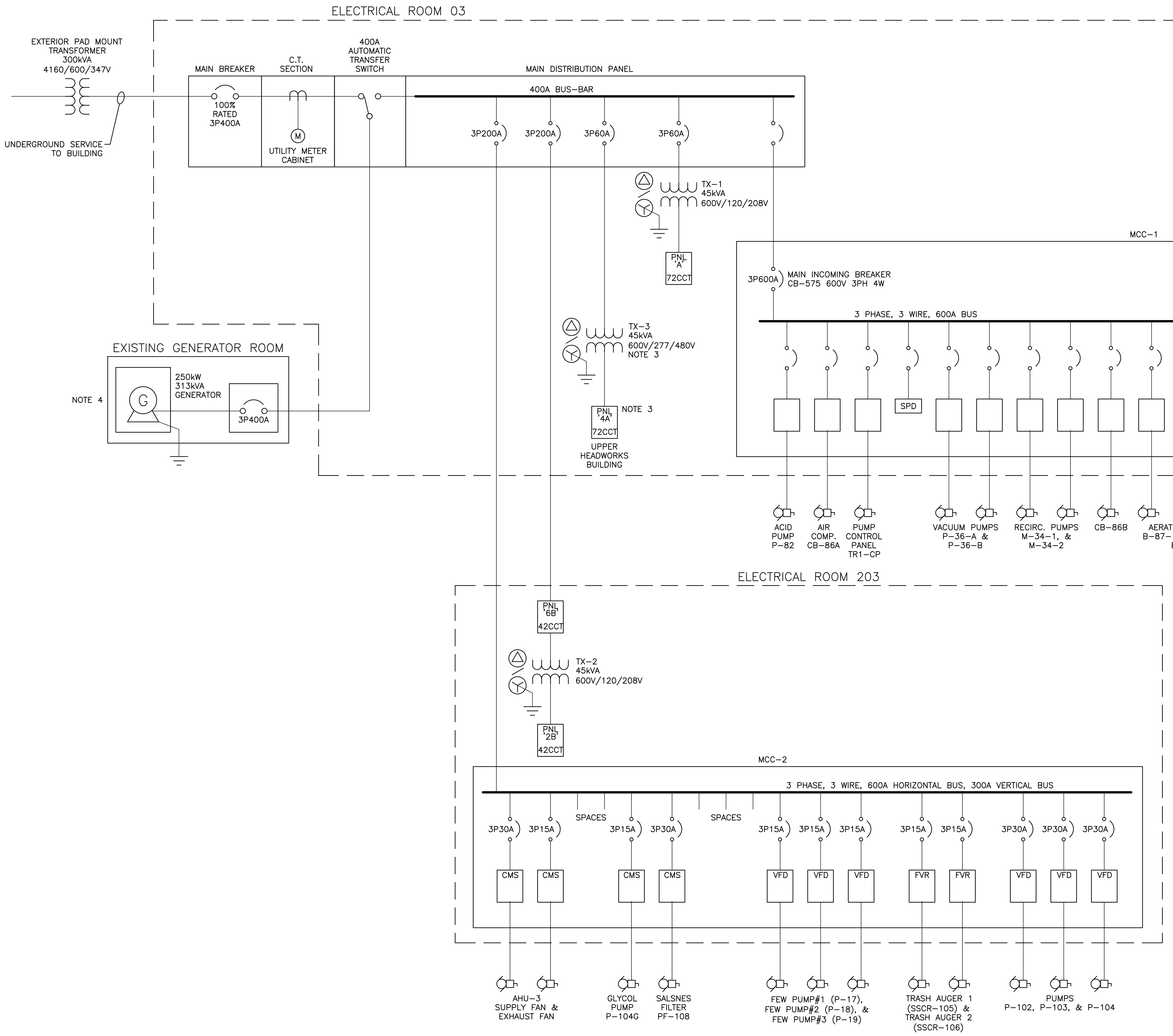
File Name: | KG Dwn. | KSS Chkd. | KSS Dsgn. | 18.05.23 YY.MM.DD

Title
ELECTRICAL DETAILS

Project No. 110126045
Scale AS SHOWN
Drawing No. E502

Revision 0

ORIGINAL SHEET - ISO A1



1 E601 EXISTING SINGLE LINE DIAGRAM
N.T.S.

EXISTING SINGLE LINE DIAGRAM NOTES:

1. EXISTING INFORMATION AS SHOWN OBTAINED FROM ORIGINAL DESIGN DOCUMENTS.
2. EXISTING ELECTRICAL DISTRIBUTION WILL BE MODIFIED TO SUIT REQUIREMENTS OF NEW PROCESS AND MECHANICAL EQUIPMENT. THE INTENT IS TO REUSE AS MUCH OF THE EXISTING DISTRIBUTION EQUIPMENT AS IS PRACTICAL.
3. EXISTING INFORMATION INDICATES THAT 480V PANEL '4A' IS NOT IN USE AND DOES NOT FEED ANY LOADS. NEW SALSNES PRIMARY FILTERS WILL REQUIRE 277/480V POWER. EXISTING TRANSFORMER AND PANEL WILL BE RELOCATED AND REUSED REUSED.
4. NOT USED.
5. EXISTING INFORMATION INDICATES THAT MCC-1 IS NOT IN USE AND MAY NOT FEED ANY LOADS. THE INTENT IS TO REUSE MCC-1 FOR NEW PROCESS LOADS. REMOVE EXISTING MCC-1 AND STORE SECURELY DURING DEMOLITION PF EXISTING ELECTRICAL ROOM. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR MORE INFORMATION. MCC-1 TO BE RE-INSTALLED DURING STAGE 3, UPON RECONSTRUCTION OF ELECTRICAL ROOM

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature [signature]
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER 05/23/18 K. S. SMITH 110126045 N.W.T.

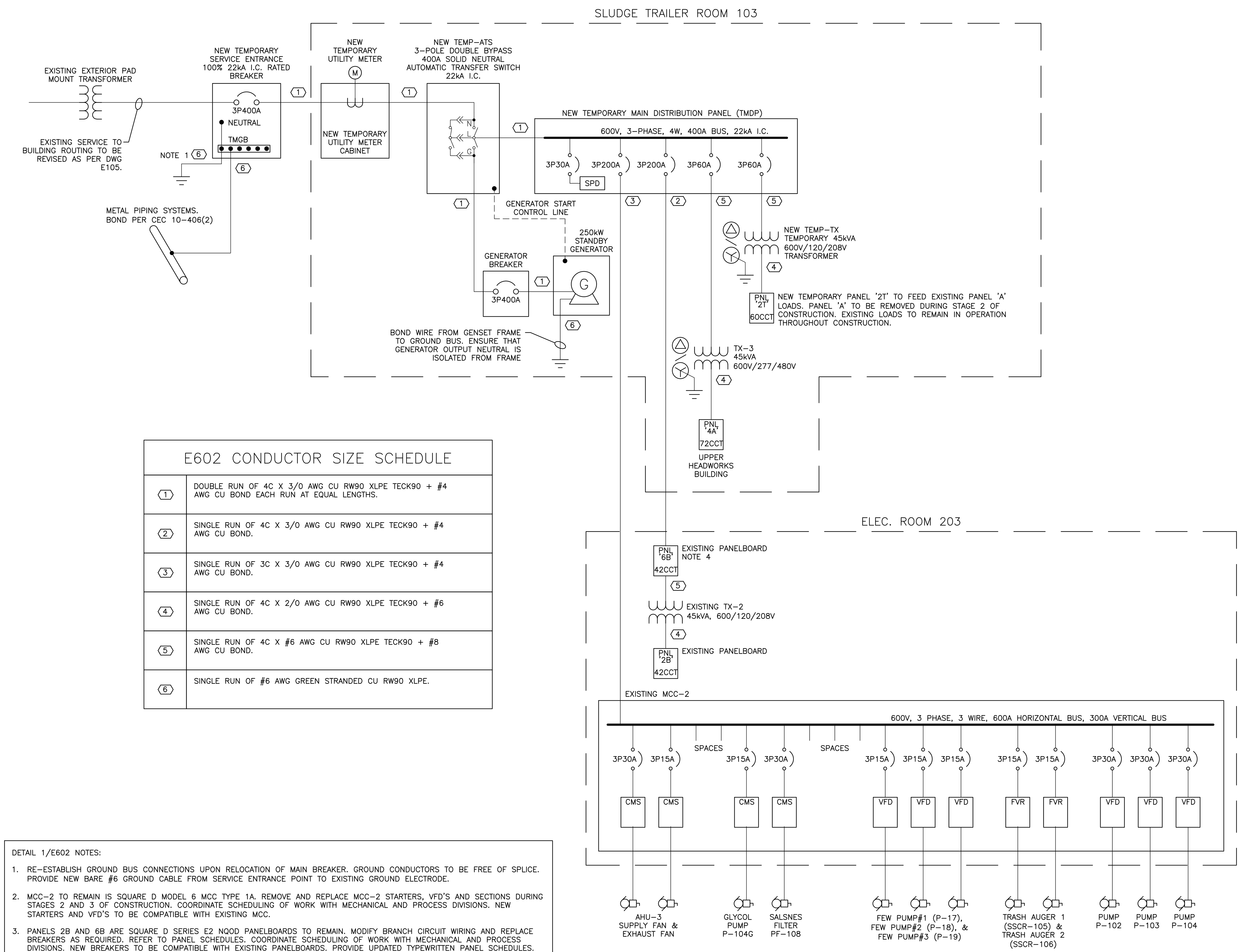
NUNAMI STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title
EXISTING SINGLE LINE DIAGRAM

Project No. 110126045
Scale AS SHOWN
Drawing No. E601
Sheet 16 of 23
Revision 0



E602 CONDUCTOR SIZE SCHEDULE

1	DOUBLE RUN OF 4C X 3/0 AWG CU RW90 XLPE TECK90 + #4 AWG CU BOND EACH RUN AT EQUAL LENGTHS.
2	SINGLE RUN OF 4C X 3/0 AWG CU RW90 XLPE TECK90 + #4 AWG CU BOND.
3	SINGLE RUN OF 3C X 3/0 AWG CU RW90 XLPE TECK90 + #4 AWG CU BOND.
4	SINGLE RUN OF 4C X 2/0 AWG CU RW90 XLPE TECK90 + #6 AWG CU BOND.
5	SINGLE RUN OF 4C X #6 AWG CU RW90 XLPE TECK90 + #8 AWG CU BOND.
6	SINGLE RUN OF #6 AWG GREEN STRANDED CU RW90 XLPE.

DETAIL 1/E602 NOTES:

1. RE-ESTABLISH GROUND BUS CONNECTIONS UPON RELOCATION OF MAIN BREAKER. GROUND CONDUCTORS TO BE FREE OF SPLICE. PROVIDE NEW BARE #6 GROUND CABLE FROM SERVICE ENTRANCE POINT TO EXISTING GROUND ELECTRODE.
2. MCC-2 TO REMAIN IS SQUARE D MODEL 6 MCC TYPE 1A. REMOVE AND REPLACE MCC-2 STARTERS, VFD'S AND SECTIONS DURING STAGES 2 AND 3 OF CONSTRUCTION. COORDINATE SCHEDULING OF WORK WITH MECHANICAL AND PROCESS DIVISIONS. NEW STARTERS AND VFD'S TO BE COMPATIBLE WITH EXISTING MCC.
3. PANELS 2B AND 6B ARE SQUARE D SERIES E2 NQOD PANELBOARDS TO REMAIN. MODIFY BRANCH CIRCUIT WIRING AND REPLACE BREAKERS AS REQUIRED. REFER TO PANEL SCHEDULES. COORDINATE SCHEDULING OF WORK WITH MECHANICAL AND PROCESS DIVISIONS. NEW BREAKERS TO BE COMPATIBLE WITH EXISTING PANELBOARDS. PROVIDE UPDATED TYPEWRITTEN PANEL SCHEDULES.
4. PROVIDE NEW 3P60A BREAKER IN PANEL 6B TO FEED EXISTING TX-2. REPLACE EXISTING 3P50A BREAKER IN CIRCUIT SPACES 6B38/40/42. REFER TO PANEL SCHEDULE. PROVIDE NEW FEEDER TO EXISTING TX-2 AS INDICATED.

1 / E602 TEMPORARY SINGLE LINE DIAGRAM
N.T.S.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
N.W.T.

NUNAMI STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name: | KG Dwn. | KSS Chkd. | KSS Dsgn. | 18.05.23 YY.MM.DD

Title
TEMPORARY SINGLE LINE DIAGRAM

Project No. 110126045 | Scale AS SHOWN
Drawing No. E602 | Sheet 17 of 23 | Revision 0

ORIGINAL SHEET - ISO A1

1 E603 FINAL SINGLE LINE DIAGRAM
N.T.S.

E603 CONDUCTOR SIZE SCHEDULE

1	DOUBLE RUN OF 4C X 3/0 AWG CU RW90 XLPE TECK90 + #4 AWG CU BOND EACH RUN AT EQUAL LENGTHS.
2	DOUBLE RUN OF 4C X 3/0 AWG CU RW90 XLPE + #4 AWG CU BOND EACH RUN AT EQUAL LENGTHS EACH IN 53mm EMT CONDUIT.
3	SINGLE RUN OF 4C X #3 AWG CU RW90 XLPE + #6 AWG CU BOND IN 41mm EMT CONDUIT.
4	SINGLE RUN OF #6 AWG BARE CU.
5	SINGLE RUN OF 3C X #6 AWG CU RW90 XLPE TECK90 + #8 AWG CU BOND.
6	SINGLE RUN OF 4C X 2/0 AWG CU RW90 XLPE TECK90 + #6 AWG CU BOND.
7	SINGLE RUN OF 3C X 3/0 AWG CU RW90 XLPE TECK90 + #4 AWG CU BOND.
8	SINGLE RUN OF 3C X 250kcmil CU RW90 XLPE + #4AWG CU BOND IN 78mm EMT CONDUIT
9	SINGLE RUN OF 3C X 1/0 AWG CU RW90 XLPE + #6 AWG CU BOND IN 53mm EMT CONDUIT.
10	SINGLE RUN OF 2C X #12 AWG CU RW90 XLPE + #14 AWG CU BOND IN 21mm EMT CONDUIT.

NOTES:

1. ENSURE THAT THE ACTUAL VOLTAGE DROP ON THE FEEDERS SUPPLYING PANEL DOES NOT EXCEED THE REQUIREMENTS OF CEC RULE 8-102.
2. IF NOT INDICATED AS EXISTING, DISTRIBUTION EQUIPMENT IS NEW.
3. BREAKER FOR FIRE ALARM CONTROL PANEL TO BE RED IN COLOUR, C/W COMPATIBLE LOCK-ON DEVICE. TO SOURCE NO OTHER LOADS.
4. ENSURE THAT GENERATOR OUTPUT NEUTRAL IS ISOLATED FROM FRAME.
5. REFER TO 1/E502 FOR GROUNDING RISER DIAGRAM.
6. THROUGH LUG CONNECTION TO GROUND BUS. CONDUCTOR TO BE FREE OF SPLICE FROM MAIN BREAKER TO GROUND ELECTRODE.

DEMAND CALCULATION AS PER C22.1-15

SERVICE FEEDER CALCULATION				
BASIC AREA LOADING	W/M^2	$AREA(M^2)$	% OF LOAD	
INDUSTRIAL AND COMMERCIAL	25	739	100	18475 W
	QTY	UNIT (W)		
PARKING RECEPTACLES	6	1200	100	7200 W
RAW WASTEWATER PUMPS	2	25000	100	50000 W
AERATION BLOWERS	2	25000	100	50000 W
DAF WHITE WATER PUMPS	4	10000	100	40000 W
OTHER HEADWORKS LOADS		27000	100	27000 W
OTHER PROCESS LOADS		20000	100	20000 W
AIR HANDLING UNIT AHU-2	1	11000	100	11000 W
AIR HANDLING UNIT AHU-3	1	10000	100	10000 W
OTHER MECHANICAL LOADS		15000	100	15000 W
SUB-TOTAL				248675 W
FUTURE EXPANSION		20%		298410 W
AT 347/600V, 3 PHASE			=	287 A
DISCONNECT SIZE			=	400 A

*SERVICE CALCULATION ACCOUNTS FOR DUTY AND STANDBY LOADS NOT BEING OPERATIONAL AT THE SAME TIME AS PER CONTROLS SEQUENCING.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists

PROFESSIONAL ENGINEER — 05/23/18 — K. S. SMITH — 1101260645 — REGISTERED — N.W.T.

NUNAMI STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:

Dwn.	Chkd.	Dsgn.	YY.MM.DD
KG	KSS	KSS	18.05.23

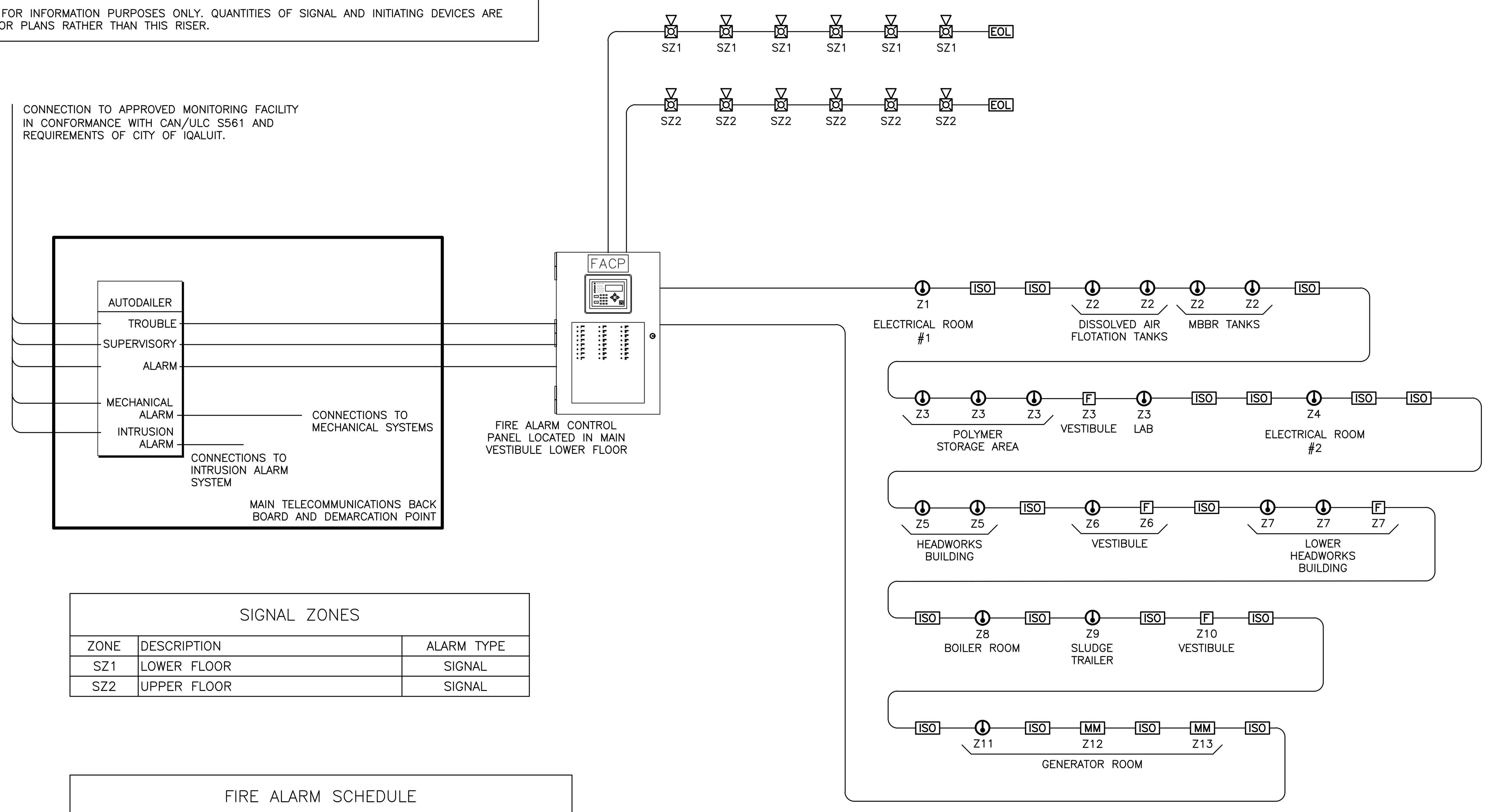
Title
FINAL SINGLE LINE DIAGRAM

Project No. 110126045
Scale AS SHOWN
Drawing No. E603
Sheet 18 of 23
Revision 0

ORIGINAL SHEET - ISO A1

FIRE ALARM NOTES:

1. AS PER CAN/ULC S524–14, PROVIDE FAULT ISOLATORS BETWEEN ZONES CONTAINED ON THE SAME ADDRESSABLE LOOP. THE RISER DIAGRAM SHOWN HERE INDICATES PROPER LOCATION FOR LINE ISOLATORS, SHOULD THE SYSTEM BE INSTALLED AS ONE CONTINUOUS CLASS 'A' LOOP WITH THE SAME SEQUENCE OF DEVICES INDICATED.
2. THIS RISER IS FOR EXAMPLE ONLY AND CONTRACTOR MAY USE MORE LOOPS AS IS CONVENIENT FOR INSTALLATIONS PROVIDED CAN/ULC S524–14, 'THE STANDARD FOR INSTALLATION OF FIRE ALARM SYSTEMS' IS ADHERED TO. FAULT ISOLATION MODULES ARE TO BE PROVIDED BETWEEN FIRE COMPARTMENTS SHARING A COMMON LOOP. FAULT ISOLATION MODULES SHOWN HERE MAY REQUIRE TWO (OR MORE) DEVICES INSTALLED BACK–TO–BACK DEPENDING ON ASSEMBLY(IES) PENETRATED AND LOCATION/ROUTE CHOSEN. IN GENERAL, ISOLATORS REQUIRED FOR PENETRATION OF RATED ASSEMBLIES FOR SERVICE ROOMS (INCLUDING ELECTRICAL AND MECHANICAL ROOMS) JANITOR'S ROOMS, STAIR SHAFTS AND BETWEEN FLOORS. FAULT ISOLATOR MODULES THAT ARE INSTALLED BACK–TO–BACK TO BE HORIZONTALLY OFFSET BY MINIMUM OF 400mm AND IF ASSEMBLY PENETRATED IS WOOD OR STEEL–STUD CONSTRUCTION NOT LOCATED WITHIN THE SAME STUD SPACE. REFER TO CAN/ULC–S524–14, 5.14. REFER TO ARCHITECTURAL DRAWINGS FOR DELINEATION OF FIRE–RATED ASSEMBLIES.
3. PROVIDE SURGE PROTECTION DEVICE FOR FIRE ALARM CONTROL PANEL.
4. RISER DIAGRAM IS FOR INFORMATION PURPOSES ONLY. QUANTITIES OF SIGNAL AND INITIATING DEVICES ARE GOVERNED BY FLOOR PLANS RATHER THAN THIS RISER.



SIGNAL ZONES		
ZONE	DESCRIPTION	ALARM TYPE
SZ1	LOWER FLOOR	SIGNAL
SZ2	UPPER FLOOR	SIGNAL

FIRE ALARM SCHEDULE		
ZONE	DESCRIPTION	ALARM TYPE
Z1	ELECTRICAL ROOM 1	ALARM
Z2	FLOTATION AND MBBR TANKS	ALARM
Z3	POLYMER STORAGE AREA, VESTIBULE, LAB	ALARM
Z4	ELECTRICAL ROOM 2	ALARM
Z5	HEADWORKS BUILDING	ALARM
Z6	VESTIBULE	ALARM
Z7	LOWER HEADWORKS BUILDING	ALARM
Z8	BOILER ROOM	ALARM
Z9	SLUDGE TRAILER	ALARM
Z10	VESTIBULE	ALARM
Z11	GENERATOR ROOM	ALARM
Z12	GENERATOR GENERAL TROUBLE	SUPERVISORY
Z13	GENERATOR RUNNING	SUPERVISORY

1 E604 NEW FIRE ALARM RISER DIAGRAM
N.T.S.

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 22 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC
N.W.T.

NUNAMI
STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ

IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name: KG KSS KSS 18.05.23
Dwn. Chkd. Dsgn. YY.MM.DD

Title
NEW FIRE ALARM RISER DIAGRAM

Project No. 110126045
Scale AS SHOWN
Drawing No. E604
Sheet 19 of 23
Revision 0

ORIGINAL SHEET - ISO A1

PROCESS MOTOR, CONTROL AND EQUIPMENT SCHEDULE

ID	DESCRIPTION	DUTY	LOCATION	HP	WATTS	VOLTS	PH	FLA	FEEDER	BREAKER	SOURCE	CONTROL	COMMENTS
EQUIPMENT TO BE INSTALLED													
P-01-110	RAW WASTEWATER PUMP 1	DUTY	HEADWORKS WET WELL	25	–	575	3	27	3C #6 AWG CU + #8 AWG CU BOND TECK CABLE	3P60	MCC-2	VFD/LRD	–
P-01-120	RAW WASTEWATER PUMP 2	DUTY	HEADWORKS WET WELL	25	–	575	3	27	3C #6 AWG CU + #8 AWG CU BOND TECK CABLE	3P60	MCC-2	VFD/LRD	–
P-01-130	RAW WASTEWATER PUMP 3	STANDBY	HEADWORKS WET WELL	25	–	575	3	27	3C #6 AWG CU + #8 AWG CU BOND TECK CABLE	3P60	MCC-2	VFD/LRD	–
SCRN-01-210	FINE SCREEN 1	DUTY	HEADWORKS UPPER	2	–	575	3	2.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-2	CMS/LRD	–
SCRN-01-220	FINE SCREEN 2	STANDBY	HEADWORKS UPPER	2	–	575	3	2.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-2	CMS/LRD	–
PF-01-310	PRIMARY FILTER BELT 1	DUTY	HEADWORKS UPPER	1	–	480	3	1.8	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	4A1,3,5	LRD	PRIMARY FILTER IS PACKAGED UNIT COMPLETE WITH VFD'S
PF-01-330	PRIMARY FILTER SCREW PRESS 1	DUTY	HEADWORKS UPPER	0.5	–	480	3	1	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	4A7,9,11	LRD	
PF-01-320	PRIMARY FILTER BELT 2	ASSIST	HEADWORKS UPPER	1	–	480	3	1.8	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	4A13,15,17	LRD	PRIMARY FILTER IS PACKAGED UNIT COMPLETE WITH VFD'S
PF-01-340	PRIMARY FILTER SCREW PRESS 2	ASSIST	HEADWORKS UPPER	0.5	–	480	3	1	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	4A19,21,23	LRD	
B-02-110	PROCESS AERATION BLOWER 1	DUTY	SECONDARY TREATMENT-UPPER	25	–	575	3	27	3C #6 AWG CU + #8 AWG CU BOND TECK CABLE	3P60	MCC-1	VFD/LRD	PACKAGED UNIT WITH SINGLE POINT POWER CONNECTION
B-02-120	PROCESS AERATION BLOWER 2	DUTY	SECONDARY TREATMENT-UPPER	25	–	575	3	27	3C #6 AWG CU + #8 AWG CU BOND TECK CABLE	3P60	MCC-1	VFD/LRD	PACKAGED UNIT WITH SINGLE POINT POWER CONNECTION
B-02-130	PROCESS AERATION BLOWER 3	STANDBY	SECONDARY TREATMENT-UPPER	25	–	575	3	27	3C #8 AWG CU + #10 AWG CU BOND TECK CABLE	3P60	MCC-1	VFD/LRD	PACKAGED UNIT WITH SINGLE POINT POWER CONNECTION
DDR-02-311	DAF 1 SLUDGE SCRAPER	DUTY	SECONDARY TREATMENT-LOWER	0.5	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	VFD/LRD	
P-02-410	DAF 1 WHITE WATER PUMP 1	DUTY	SECONDARY TREATMENT-LOWER	10	–	575	3	11	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P25	MCC-1	CMS/LRD	
P-02-420	DAF 1 WHITE WATER PUMP 2	DUTY	SECONDARY TREATMENT-LOWER	10	–	575	3	11	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P25	MCC-1	CMS/LRD	
P-02-430	DAF 1 WHITE WATER PUMP 3	STANDBY	SECONDARY TREATMENT-LOWER	10	–	575	3	11	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P25	MCC-1	CMS/LRD	
DDR-02-321	DAF 2 SLUDGE SCRAPER	DUTY	SECONDARY TREATMENT-LOWER	0.5	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	VFD/LRD	
P-02-440	DAF 2 WHITE WATER PUMP 1	DUTY	SECONDARY TREATMENT-LOWER	10	–	575	3	11	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P25	MCC-1	CMS/LRD	
P-02-450	DAF 2 WHITE WATER PUMP 2	DUTY	SECONDARY TREATMENT-LOWER	10	–	575	3	11	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P25	MCC-1	CMS/LRD	
P-02-460	DAF 2 WHITE WATER PUMP 3	STANDBY	SECONDARY TREATMENT-LOWER	10	–	575	3	11	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P25	MCC-1	CMS/LRD	
P-02-610	TWAS PUMP 1	DUTY	SECONDARY TREATMENT-LOWER	1	–	575	3	1.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	VFD/LRD	
P-02-620	TWAS PUMP 2	DUTY	SECONDARY TREATMENT-LOWER	1	–	575	3	1.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	VFD/LRD	
B-02-210	PRIMARY FILTER BLOWER 1	DUTY	HEADWORKS UPPER	10	–	480	3	14	3C #8 AWG CU + #10 AWG CU BOND TECK CABLE	3P35	4A2,4,6	LRD	PART OF THE PRIMARY FILTER SYSTEM/ACKAGE UNIT
F-02-215	PRIMARY FILTER BLOWER FAN 1	DUTY	HEADWORKS UPPER	0.25	–	480	3	1	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	4A8,10,12	LRD	PART OF THE PRIMARY FILTER SYSTEM/ACKAGE UNIT
B-02-220	PRIMARY FILTER BLOWER 2	ASSIST	HEADWORKS UPPER	10	–	480	3	14	3C #8 AWG CU + #10 AWG CU BOND TECK CABLE	3P35	4A14,16,18	LRD	PART OF THE PRIMARY FILTER SYSTEM/ACKAGE UNIT
F-02-225	PRIMARY FILTER BLOWER FAN 2	ASSIST	HEADWORKS UPPER	0.25	–	480	3	1	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	4A20,22,24	LRD	PART OF THE PRIMARY FILTER SYSTEM/ACKAGE UNIT
P-03-630	BELT FILTER PRESS FEED PUMP 1	DUTY	SOLIDS HANDLING LOWER	2	–	575	3	2.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	VFD/LRD	
P-03-640	BELT FILTER PRESS FEED PUMP 2	STANDBY	SOLIDS HANDLING LOWER	2	–	575	3	2.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	VFD/LRD	
BFP-03-650	BELT FILTER PRESS	DUTY	SOLIDS HANDLING UPPER	1	–	575	3	1.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	CMS/LRD	PACKAGED UNIT WITH SINGLE POINT POWER CONNECTION
		DUTY	SOLIDS HANDLING UPPER	2	1500	575	3	2.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15			
P-03-670	BOOSTER PUMP	DUTY	SOLIDS HANDLING UPPER		5500	575	3		3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P20	MCC-1	CMS/LRD	
VAC-04-710	DAF POLYMER VACUUM CONVEYOR	DUTY	CHEMICAL DOSING UPPER			120	1	9.2	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P20	2B42	CMS/LRD	
PAG-04-720	DAF FEEDER HOPPER POLYMER AGITATOR	DUTY	CHEMICAL DOSING UPPER	0.5	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	CMS/LRD	
PSF-04-730	DAF POLYMER SCREW FEEDER	DUTY	CHEMICAL DOSING UPPER	0.25	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	CMS/LRD	
MXR-04-760	DAF POLYMER MIXER	DUTY	CHEMICAL DOSING UPPER	0.33	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	CMS/LRD	
P-04-770	POLYMER DOSING PUMP 1	DUTY	CHEMICAL DOSING UPPER	0.5	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	LRD	C/W VFD SUPPLIED BY OTHERS
P-04-780	POLYMER DOSING PUMP 2	STANDBY	CHEMICAL DOSING UPPER	0.5	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	LRD	C/W VFD SUPPLIED BY OTHERS
P-04-790	POLYMER DOSING PUMP 3	DUTY	CHEMICAL DOSING UPPER	0.5	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	LRD	C/W VFD SUPPLIED BY OTHERS
VAC-04-910	BFP POLYMER VACUUM CONVEYOR	DUTY	CHEMICAL DOSING UPPER			120	1	9.2	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P20	2B42	CMS/LRD	
PAG-04-920	BFP FEEDER HOPPER POLYMER AGITATOR	DUTY	CHEMICAL DOSING UPPER	0.5	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	CMS/LRD	
PSF-04-930	BFP POLYMER SCREW FEEDER	DUTY	CHEMICAL DOSING UPPER	0.25	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	CMS/LRD	
MXR-04-960	BFP POLYMER MIXER	DUTY	CHEMICAL DOSING UPPER	0.5	–	575	3	0.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	CMS/LRD	
P-04-970	BFP POLYMER DOSING PUMP 1	DUTY	CHEMICAL DOSING UPPER		500	575	3		3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	LRD	C/W VFD SUPPLIED BY OTHERS
P-04-980	BFP POLYMER DOSING PUMP 2	STANDBY	CHEMICAL DOSING UPPER		500	575	3		3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC-1	LRD	C/W VFD SUPPLIED BY OTHERS
EXISTING EQUIPMENT TO BE REMOVED													
T-02-001	INFLUENT PUMP STATION WET WELL	DUTY	HEADWORKS	–	19000	575	3						
P-102	RAW WASTEWATER PUMP	DUTY	EXISTNG HEADWORKS WET WELL 101	–	11250	600	3	–	–	–	MCC-2	–	–
P-103	RAW WASTEWATER PUMP	DUTY	EXISTNG HEADWORKS WET WELL 101	–	11250	600	3	–	–	–	MCC-2	–	–
P-104	RAW WASTEWATER PUMP	STANDBY	EXISTNG HEADWORKS WET WELL 101	–	11250	600	3	–	–	–	MCC-2	–	–
PF-108	PRIMARY FILTER	DUTY	EXISTING UPPER HEADWORKS 202	–	10100	600	3	–	–	–	MCC-2	–	–
SSCR-105	SCREW SCREEN (TRASH AUGER-1)	DUTY	EXISTING UPPER HEADWORKS 202	–	1500	600	3	–	–	–	MCC-2	–	–
SSCR-106	SCREW SCREEN (TRASH AUGER-2)	STANDBY	EXISTING UPPER HEADWORKS 202	–	1500	600	3	–	–	–	MCC-2	–	–
B-214	BLOWER	–	BLOWER ROOM	–	18750	600	3	–	–	–	OLD MCC-1	–	–
B-215	BLOWER	–	BLOWER ROOM	–	18750	600	3	–	–	–	OLD MCC-1	–	–
B-216	BLOWER	–	BLOWER ROOM	–	37500	600	3	–	–	–	OLD MCC-1	–	–
B-217	BLOWER	–	BLOWER ROOM	–	37500	600	3	–	–	–	OLD MCC-1	–	–
B-218	BLOWER	–	BLOWER ROOM	–	–	600	3	–	–	–	OLD MCC-1	–	–
B-219	BLOWER	–	BLOWER ROOM	–	–	600	3	–	–	–	OLD MCC-1	–	–
CB86-A	EXISTING AIR COMPRESSOR	–	BLOWER ROOM	–	–	600	3	–	–	–	OLD MCC-1	–	–
–	CITRIC ACID PUMP	–	PUMP ROOM	–	–	600	3	–	–	–	OLD MCC-1	–	–
–	SODIUM METERING PUMP	–	PUMP ROOM	–	–	600	3	–	–	–	OLD MCC-1	–	–
P-17	FEW PUMP 1	–	EXISTING BOILER ROOM 104	5	–	600	3	6.1	–	–	MCC-2	–	–
P-18	FEW PUMP 2	–	EXISTING BOILER ROOM 104	5	–	600	3	6.1	–	–	MCC-2	–	–
P-19	FEW PUMP 3	–	EXISTING BOILER ROOM 104	5	–	600	3	6.1	–	–	MCC-2	–	–
P-20	HOT FEW BOOSTER PUMP	–	ABOVE EXISTING OFFICE	–	–	208	1	–	–	–	2B2/4	–	–
P-21	FEW RECIRCULATION PUMP	–	ABOVE EXISTING OFFICE	–	–	–	–	–	–	–	–	–	–
–	FEW HOT WATER TANK	–	EXISTING OFFICE	–	–	–	–	–	–	–	–	–	–
–	FEW HOT WATER TANK	–	EXISTING OFFICE	–	–	–	–	–	–	–	–	–	–
–	FEW HOT WATER TANK	–	EXISTING OFFICE	–	–	–	–	–	–	–	–	–	–

CONTROL DEVICE LEGEND:

LRD – LOAD RATED DISCONNECT
MAG – MAGNETIC STARTER
CMS – COMBINATION MAGNETIC STARTER WITH DISCONNECT
MMP – MANUAL MOTOR PROTECTION
FVR – FULL VOLTAGE REVERSING STARTER
/R – WITH LOAD RATED RELAY
/HOA – WITH H-O-A SWITCH
/SFOA – WITH SLOW-FAST-OFF-AUTO SWITCH
/K – KEYED
/SS – SOFT START
VFD – VARIABLE FREQUENCY DRIVE
TC – TEMPERATURE CONTROL
LC – LEVEL CONTROL
CB – STANDARD CIRCUIT BREAKER

MOTOR CONTROL AND EQUIPMENT NOTES:

1. MOTOR SCHEDULE IS FOR ESTIMATING PURPOSES ONLY. CONFIRM ALL MOTOR FULL LOAD CURRENTS WITH NAMEPLATES AND SIZE MOTOR DISCONNECTS, BREAKERS, FEEDERS AND OVERLOADS ACCORDINGLY.
2. CONFIRM PROCESS EQUIPMENT LOCATIONS WITH PROCESS DIVISION. PROVIDE POWER AND CONTROL WIRING FROM CONTROL PANEL OF EACH PACKAGED UNIT TO EQUIPMENT. ALLOW FOR CONNECTION 120V, 15A POWER FROM THE NEAREST 208V PANEL FOR LOCAL CONTROL PANEL POWER. COORDINATE WITH PROCESS SHOP DRAWINGS AND PROVIDE ACCORDINGLY.
3. DIVISION 26 CONTRACTOR SHALL COORDINATE THE LOCATIONS OF ALL LINE VOLTAGE PILOT DEVICES WITH PROCESS DIVISION AND PROVIDE CONDUIT AND WIRING AS NECESSARY.
4. FOR ALL EXISTING PROCESS EQUIPMENT TO BE REMOVED, REMOVE ALL WIRING, CONDUIT, DISCONNECTS, STARTERS, ETC. DISPOSE OF EQUIPMENT AS PER DIVISION 1 REQUIREMENTS. REMOVE WIRING AND CONDUIT BACK TO SOURCE.
5. PROVIDE POWER TO OTHER PROCESS EQUIPMENT AS SHOWN ON PANEL SCHEDULES.
6. NOTE UNUSED
7. IN ADDITION TO CONTROL SHOWN, PROVIDE LOCAL DISCONNECT AT EACH MOTOR LOCATION AS REQUIRED BY C.E.C. PROVIDE EXPLOSION-PROOF DISCONNECT WHERE REQUIRED.
8. REFER TO 2/E002 FOR INFORMATION REGARDING CLASSIFICATIONS AND, WET AND CORROSIVE CATEGORY LOCATIONS.
9. INFORMATION REGARDING EXISTING EQUIPMENT TO BE REMOVED HAS BEEN OBTAINED FROM PREVIOUS DESIGN DOCUMENTATION. CONFIRM ON SITE. INFORM ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 23 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC'S
N.W.T.

NUNAMI
STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title
PROCESS MOTOR, CONTROL AND EQUIPMENT SCHEDULE

Project No. 110126045
Scale AS SHOWN
Drawing No. E605

Revision 0

ORIGINAL SHEET - ISO A1

BUILDING MECHANICAL MOTOR, CONTROL AND EQUIPMENT SCHEDULE

ID	DESCRIPTION	LOCATION	HP	VOLTS	PH	FLA	FEEDER	BREAKER	SOURCE	CONTROL	COMMENTS
NEW EQUIPMENT											
B–1	HEATING WATER BOILER BLOWER MOTOR	MECHANICAL ROOM	0.75	208	3	3.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	2A1,3,5	LRD	
B–1 CTRL	HEATING WATER BOILER CONTROLS	MECHANICAL ROOM	–	120	1	–	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A30	BREAKER	
B–2	HEATING WATER BOILER BLOWER MOTOR	MECHANICAL ROOM	0.75	208	3	3.7	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	2A2,4,6	LRD	
B–2 CTRL	HEATING WATER BOILER CONTROLS	MECHANICAL ROOM	–	120	1	–	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A32	BREAKER	
DHWH–1	OIL FIRED DIRECT HOT WATER HEATER	MECHANICAL ROOM	0.125	120	1	4.4	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A19	LRD	
P–1.1	B–1 PRIMARY HW PUMP	MECHANICAL ROOM	1	208	3	2.5	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	2A7,9,11	MMP/R/HOA	
P–1.2	B–2 PRIMARY HW PUMP	MECHANICAL ROOM	1	208	3	2.5	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	2A8,10,12	MMP/R/HOA	
P–1.3	SECONDARY HW PUMP	MECHANICAL ROOM	2	208	3	7.8	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	2A13,15,17	VFD	
P–1.4	SECONDARY HW PUMP	MECHANICAL ROOM	2	208	3	7.8	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	2A14,16,18	VFD	
P–1.5	GLYCOL FILL TANK	MECHANICAL ROOM	–	120	1	0.7	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A20	GFI REC	CORD CONNECTED EQUIPMENT
P–1.6	AHU–2 PREHEAT COIL PUMP	UPPER LEVEL@AHU–2	0.5	208	3	1.98	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	2B5,7,9	CMS/R/HOA	–
CTRL–P2.1/2.2	CONTROL PANEL FOR PUMPS P–2.1 & P–2.2	SLUDGE TRAILER GL C:5–6	–	208	3	–	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	2B29,31,33	BREAKER	
P–2.1	SUMP PUMP (REPLACING P–7)	SLUDGE TRAILER GL C:5–6	0.6	208	3	2.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	–	CTRL–P2.1/2.2	CTRL–P2.1,2	NOTE 6.
P–2.2	SUMP PUMP (REPLACING P–8)	SLUDGE TRAILER GL C:5–6	0.6	208	3	2.9	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	–	CTRL–P2.1/2.2	CTRL–P2.1,2	NOTE 6.
CTRL–P2.3/2.4	CONTROL PANEL FOR PUMPS P–2.3 & P–2.4	SLUDGE TRAILER GL C:5–6	–	208	1	–	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	2P15	2A21,23	BREAKER	
P–2.3	SUMP PUMP (REPLACING P–11)	HEADWORKS–LOWER GLA–B:2	0.5	208	1	6.5	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	–	CTRL–P2.3/2.4	CTRL–P2.3,4	NOTE 6.
P–2.4	SUMP PUMP (REPLACING P–12)	HEADWORKS–LOWER GLA–B:2	0.5	208	1	6.5	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	–	CTRL–P2.3/2.4	CTRL–P2.3,4	NOTE 6.
CTRL–P2.5/2.6	CONTROL PANEL FOR PUMPS P–2.5 & P–2.6	DAF TANKS GL E:4	–	208	1	–	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	2P15	2C18,20	BREAKER	
P–2.5	DUPLEX SUMP PUMP	DAF TANKS GL E:4–5	0.6	208	1	2.9	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	–	CTRL–P2.5/2.6	CTRL–P2.5,6	NOTE 6.
P–2.6	DUPLEX SUMP PUMP	DAF TANKS GL E:4–5	0.6	208	1	2.9	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	–	CTRL–P2.5/2.6	CTRL–P2.5,6	NOTE 6.
P–3.1	WATER SERVICE RECIRCULATION PUMP	NEW STAIRS, LOWER LEVEL	0.33	115	1	6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C11	CMS	FUTURE PUMP
P–3.2	WATER SERVICE RECIRCULATION PUMP	NEW STAIRS, LOWER LEVEL	0.33	115	1	6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C13	CMS	FUTURE PUMP
P–3.3	DHW RECIRC PUMP	MECHANICAL ROOM	0.06	120	1	0.65	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A26	MMP/R/HOA	–
P–3.4	WS HEAT INJECTION	NEW STAIRS, LOWER LEVEL	0.33	120	1	1.6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C15	MMP/R/HOA	–
P–3.5	HEAT INJECTION PUMP	NEW STAIRS, LOWER LEVEL	0.33	120	1	1.6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C17	MMP/R/HOA	–
CTRL–P4.1/4.2	CONTROL PANEL FOR PUMPS P–4.1 & P–4.2	SLUDGE TRAILER GL C:6	–	120	1	–	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A33	BREAKER	
P–4.1	FUEL OIL TRANSFER PUMP	SLUDGE TRAILER GL C:6	–	–	–	–	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A22	CTRL–P41,2	NOTE 6.
P–4.2	FUEL OIL TRANSFER PUMP	SLUDGE TRAILER GL C:6	–	–	–	–	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A24	CTRL–P41,2	NOTE 6.
	TEMPORARY RELOCATED FO TRANSFER PUMP	SLUDGE TRAILER GL C:6	–	120	1	–	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15		–	TEMPORARILY RELOCATED EXISTING PUMP TO BE REPLACED BY P–4.1.
	TEMPORARY RELOCATED FO TRANSFER PUMP	SLUDGE TRAILER GL C:6	–	120	1	–	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15		–	TEMPORARILY RELOCATED EXISTING PUMP TO BE REPLACED BY P–4.2.
UH–1.1	EXISTING UNIT HEATER UH–9	HEADWORKS–LOWER GL B:2	0.05	120	1	4.4	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2B8	MMP	–
UH–1.2	EXISTING UNIT HEATER UH–10	HEADWORKS–LOWER GL B:3	0.08	120	1	4.4	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2B4	MMP	
UH–1.4	UNIT HEATER	GENERATOR ROOM	0.05	120	1	1.6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C10	MMP	
UH–1.5	EXISTING UNIT HEATER UH–1	SLUDGE TRAILER GL B:5	0.33	120	1	7.2	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A29	MMP	
UH–1.6	UNIT HEATER	DAF TANKS	0.05	120	1	1.6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C12	MMP	
UH–1.7	VERTICAL UNIT HEATER	DISSOLVED AIR FLOTATION TANKS	0.05	120	1	1.6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C16	MMP	
CUH–1.1	CABINET UNIT HEATER	NEW STAIRS	0.04	120	1	0.6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C3	MMP	
UH–2.1	EXISTING UNIT HEATER UH–12	HEADWORKS–UPPER GL B:3	0.17	120	1	4.4	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2B2	MMP	
UH–2.2	UNIT HEATER	ELECTRICAL ROOM	0.05	120	1	1.6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C25	MMP	
UH–2.3	EXISTING UNIT HEATER UH–8	UPPER NEAR OFFICE GL D:2	0.125	120	1	4.4	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2B1	MMP	
UH–2.4	EXISTING UNIT HEATER UH–4	ABOVE MBBR TANKS GL F:2	0.33	120	1	7.2	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2B3	MMP	
UH–2.5	EXISTING UNIT HEATER UH–7	BELT FILTER PRESS	0.125	120	1	4.4	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A31	MMP	
UH–2.6	VERTICAL UNIT HEATER	DAF TANKS GRID E–F:5–6	0.05	120	1	1.6	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2B27	MMP	
UH–2.7	EXISTING UNIT HEATER UH–6	UPPER CORRIDOR GL C:4	0.33	120	1	7.2	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2B11	MMP	
AHU–2	MBBR & DAF AIR HANDLING UNIT	ABOVE MBBR CELLS		575	3		3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P25	MCC–2	LRD	SINGLE POINT CONNECTION. 2 X 7.5 HP MOTORS.
AHU–3 SF	EXISTING AHU SUPPLY FAN	EXISTING LOWER HEADWORKS	5	575	3	5.4	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC–2	CMS/SFOA/LRD	EXISTING TWO SPEED MOTOR.
AHU–3 RF	EXISTING AHU RETURN FAN	EXISTING LOWER HEADWORKS	5	575	3	5.4	3C #12 AWG CU + #14 AWG CU BOND TECK CABLE	3P15	MCC–2	CMS/SFOA/LRD	EXISTING TWO SPEED MOTOR.
HRV–1	OFFICE/LAB HRV	ABOVE OFFICE GL C:3		120	1	2.1	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2B13	MMP	
CF–1	MECHANICAL ROOM COOLING FAN	MECHANICAL ROOM	0.25	120	1	5.8	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2A28	MMP/R/HOA	
CF–2	ELECTRICAL ROOM COOLING FAN	ELECTRICAL ROOM	0.25	120	1	5.8	2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15	2C23	MMP/R/HOA	
BMS	BUILDING MANAGEMENT SYSTEM	VARIES		120	1		2C #12 AWG CU + #14 AWG CU BOND TECK CABLE	1P15		BREAKER	
EXISTING EQUIPMENT TO BE REMOVED											
B–01	EXISTING BOILER	EXISTING BOILER ROOM	–	120	1	–	–				
B–02	EXISTING BOILER	EXISTING BOILER ROOM	–	120	1	–	–				
P–01	PRIMARY HOT WATER PUMP	EXISTING BOILER ROOM	–	120	1	–	–				
P–02	PRIMARY HOT WATER PUMP	EXISTING BOILER ROOM	–	120	1	–	–				
P–03	SECONDARY HOT WATER PUMP	EXISTING BOILER ROOM	–	575	3	–	–				
P–04	SECONDARY HOT WATER PUMP	EXISTING BOILER ROOM	–	575	3	–	–				
P–5	GLYCOL FILL PUMP	EXISTING BOILER ROOM	–	120	1	–	–				
P–6	DOMESTIC COLD WATER PRESSURE PUMP	EXISTING BOILER ROOM	–	120	1	–	–				
P–5'	FUEL OIL TRANSFER PUMP	EXISTING GENERATOR ROOM	–	120	1	–	–				
P–6'	FUEL OIL TRANSFER PUMP	EXISTING GENERATOR ROOM	–	120	1	–	–				
P–7	SUMP PUMP (REPLACE WITH P–2.1)	SLUDGE TRAILER	–	120	1	–	–				
P–8	SUMP PUMP (REPLACE WITH P–2.2)	SLUDGE TRAILER	–	120	1	–	–				
P–11	SUMP PUMP (REPLACE WITH P–2.3)	EXISTING LOWER HEADWORKS	0.375	120	1	7.2	–				
P–12	SUMP PUMP (REPLACE WITH P–2.4)	EXISTING LOWER HEADWORKS	0.375	120	1	7.2	–				
P–17	EFFLUENT WATER BOOSTER PUMP	MECHANICAL ROOM	5	575	3	6.1	–				
P–18	EFFLUENT WATER BOOSTER PUMP	MECHANICAL ROOM	5	575	3	6.1	–				
P–19	EFFLUENT WATER BOOSTER PUMP	MECHANICAL ROOM	5	575	3	6.1	–				
UH–2	EXISTING UNIT HEATER	GENERATOR ROOM		120	1		–				
UH–3	EXISTING UNIT HEATER	UPPER LEVEL GL F:5–6		120	1		–				
DHWH	DOMESTIC HOT WATER HEATER	ABOVE VESTIBULE	–	120	1	–	–				
AHU–1	AIR HANDLING UNIT	ABOVE OLD PUMP ROOM	–	575	3	–	–				
EF–05	EXHAUST FAN	WASHROOM GL C:3–4		120	1		–				

CONTROL DEVICE LEGEND:

LRD – LOAD RATED DISCONNECT
MAG – MAGNETIC STARTER
CMS – COMBINATION MAGNETIC STARTER WITH DISCONNECT
MMP – MANUAL MOTOR PROTECTION
/R – WITH LOAD RATED RELAY
/HOA – WITH H–O–A SWITCH
/SFOA – WITH SLOW–FAST–OFF–AUTO SWITCH
/K – KEYED
/SS – SOFT START
VFD – VARIABLE FREQUENCY DRIVE
TC – TEMPERATURE CONTROL
LC – LEVEL CONTROL
CB – STANDARD CIRCUIT BREAKER

MOTOR CONTROL AND EQUIPMENT NOTES:

1. MOTOR SCHEDULE IS FOR ESTIMATING PURPOSES ONLY. CONFIRM ALL MOTOR FULL LOAD CURRENTS WITH NAMEPLATES AND SIZE MOTOR DISCONNECTS, BREAKERS, FEEDERS AND OVERLOADS ACCORDINGLY.
2. CONFIRM MECHANICAL EQUIPMENT LOCATIONS WITH MECHANICAL DIVISION.
3. DIVISION 26 CONTRACTOR SHALL COORDINATE THE LOCATIONS OF ALL LINE VOLTAGE PILOT DEVICES WITH MECHANICAL DIVISION AND PROVIDE CONDUIT AND WIRING AS NECESSARY.
4. PROVIDE POWER SUPPLY TO CONTROL TRANSFORMERS PROVIDED BY DIV 21. COORDINATE EXACT LOCATIONS OF POWER SUPPLY WITH MECHANICAL PRIOR TO ROUGH–IN.
5. PROVIDE POWER TO OTHER MECHANICAL EQUIPMENT AS SHOWN ON PANEL SCHEDULES.
6. DUPLEX AND TRIPLEX PUMPS PROVIDED WITH CONTROL PANEL SUPPLIED BY MECHANICAL, INSTALLED AND WIRED BY ELECTRICAL. CONTROL PANELS TO BE LOCATED ON SITE IN AN ACCESSABLE LOCATION WITHIN LINE–OF–SIGHT TO PUMPS.
7. WHERE REQUIRED BY C.E.C, PROVIDE LOCAL DISCONNECT AT EACH MOTOR LOCATION. PROVIDE EXPLOSION–PROOF DISCONNECT WHERE REQUIRED.
8. INFORMATION REGARDING EXISTING EQUIPMENT TO BE REMOVED HAS BEEN OBTAINED FROM PREVIOUS DESIGN DOCUMENTATION. CONFIRM ON SITE. INFORM ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.
9. REFER TO 2/E002 FOR INFORMATION REGARDING HAZARDOUS CLASSIFICATIONS AND, WET AND CORROSIVE CATEGORY LOCATIONS.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 23 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC'S
N.W.T.

NUNAMI
STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ

IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title
BUILDING MECHANICAL MOTOR CONTROL AND EQUIPMENT SCHEDULE

Project No. 110126045
Scale AS SHOWN
Drawing No. E606

Revision 0

ORIGINAL SHEET - ISO A1

PANEL "A"

VOLTS: 120/208V | LOCATION: ELECTRICAL ROOM 03 | BUSS: 225A
PHASE: 3 | FEEDER: EXISTING FROM 1999 | MOUNTING: SURFACE
WIRE: 4

CCT	BRKR	WATTS			DESCRIPTION	DESCRIPTION	WATTS			BRKR	CCT
		A	B	C			A	B	C		
1	1P15	–			EXT. PLUG	BSMT LIGHT	–			1P15	2
3	1P15		–		EXT. PLUG	UNKNOWN		–		2P15	4
5	1P15			–	EXT. PLUG				–		6
7	1P15	–			GEN. HTR.	HEATER	–			1P15	8
9	1P15		–		SPARE	PLUGS		–		1P15	10
11	1P15			–	UH–1&2	AIR DRYER			–	1P15	12
13		–			SPARE	CIRCULATING PUMP #2	–			1P15	14
15	1P15		–		BOILER 1	CIRCULATING PUMP #3		–		1P15	16
17	1P15			–	BOILER 2	CIRCULATING PUMP #4			–	1P15	18
19	1P15	–			CIRCULATING PUMP #1	SPARE	–			1P15	20
21	2P20		–		GEN. BATT. CHARGER	DOMESTIC WATER PUMP		–		2P20	22
23				–					–		24
25	2P20	–			SPARE	UNKNOWN	–			2P30	26
27			–					–			28
29	2P20			–	SPARE	SPARE			–	1P15	30
31		–				SPACE	–				32
33	2P15		–		LIGHTS	PLUGS		–		1P15	34
35				–		PLUGS			–	1P15	36
37	2P20	–			BLOCK HEATER	SPACE	–				38
39			–		GENSET	SPARE		–		1P15	40
41	1P15			–	PLUG	UNKNOWN			–	2P15	42
43	1P15	–			U.H. 6&7		–				44
45	1P15		–		U.H. 4&5&8	UNKNOWN		–		1P15	46
47	1P15			–	E.F.1	UNKNOWN			–	1P15	48
49	1P15	–			MEZZ PLUG	SPARE	–			1P15	50
51	2P15		–		UNKNOWN	SPARE		–		1P15	52
53				–		SPARE			–	1P15	54
55		–			UNKNOWN	SPARE	–			1P15	56
57	2P30		–		UNKNOWN	SPARE		–		1P15	58
59				–		SPARE			–	1P15	60
61	2P60	–			UNKNOWN	SPACE	–				62
63			–			SPACE		–			64
65				–	SPACE	SPACE			–		66
67		–			SPACE	SPACE	–				68
69			–		SPACE	SPACE		–			70
71				–	SPACE	SPACE			–		72
TOTAL		–	–	–			–	–	–	TOTAL	

PANEL NOTES:
EXISTING PANEL A TO BE REMOVED DURING STAGE 2.
DURING STAGE 1, LOADS TO BE RE–CIRCUITED TO NEW TEMPORARY PANEL 2T.

PANEL "2B"

VOLTS: 120/208V | LOCATION: ELECTRICAL ROOM 203 | BUSS: 225A
PHASE: 3 | FEEDER: EXISTING FROM 2005 | MOUNTING: SURFACE
WIRE: 4

CCT	BRKR	WATTS			DESCRIPTION	DESCRIPTION	WATTS			BRKR	CCT
		A	B	C			A	B	C		
1	1P15	–			UH–10 (LOWER)	HOT FEW PUMPS	–			2P15	2
3	2P30		–		SUMP PUMPS			–			4
5				–		EMERG LTS BATT PACK			–	1P15	6
7	1P15	–			EXTERIOR LIGHTS	EMERG LTS BATT PACK	–			1P15	8
9	1P15		–		UH–9 (LOWER)	RECEPTACLE LAB		–		1P15	10
11	1P15			–	UNKNOWN	RECEPTACLE LAB			–	1P15	12
13	1P15	–			UNKNOWN	RECEPTACLE LAB	–			1P15	14
15	1P15		–		RECEPTACLE LOWER	UNKNOWN		–		1P15	16
17	1P15			–	METAL ARC HALLWAY	SALSNESS BLOWER FAN			–	3P15	18
19	1P15	–			OFFICE		–				20
21	1P15		–		BATROOM & OFFICE			–			22
23	1P15			–	HALLWAY	UNKNOWN			–	1P15	24
25	1P15	–			UH–12 (UPPER)	PLUGS UPPER	–			1P15	26
27	1P15		–		UNKNOWN	PLUGS UPPER		–		1P15	28
29	1P15			–	PLC	OUTSIDE PLUG			–	1P15	30
31	2P30	–			HOT WATER TANK DOMESTIC	BIONEST PUMP	–			2P20	32
33			–					–			34
35	2P20			–	HOT WATER TANK	SPACE			–		36
37		–				PRESSURE WASHER	–			3P20	38
39	2P20		–		HOT WATER TANK			–			40
41				–					–		42
TOTAL		–	–	–			–	–	–	TOTAL	

PANEL NOTES:

PANEL "6B"

VOLTS: 347/600V | LOCATION: ELECTRICAL ROOM 203 | BUSS: 225A
PHASE: 3 | FEEDER: EXISTING FROM 2005 | MOUNTING: SURFACE
WIRE: 4

CCT	BRKR	WATTS			DESCRIPTION	DESCRIPTION	WATTS			BRKR	CCT
		A	B	C			A	B	C		
1	1P15	–			SPARE	LIGHT UPPER	–			1P15	2
3	1P15		–		SPARE	LIGHT LOWER		–		1P15	4
5	3P100			–	BOILER 60kW FEW	LIGHT LAB, ELECTRICAL			–	1P15	6
7		–				SPACE	–				8
9			–			SPACE		–			10
11				–	SPACE	SPACE			–		12
13		–			SPACE	SPACE	–				14
15			–		SPACE	SPACE		–			16
17				–	SPACE	SPACE			–		18
19		–			SPACE	SPACE	–				20
21			–		SPACE	SPACE		–			22
23				–	SPACE	SPACE			–		24
25		–			SPACE	SPACE	–				26
27			–		SPACE	SPACE		–			28
29	3P30			–	HOIST	SPARE			–	1P15	30
31		–				SPARE	–			1P15	32
33			–			SPARE		–		1P15	34
35	1P15			–	SPARE	SPARE			–	1P15	36
37	1P15	–			SPARE	TRANSFO 120/208*	–			3P60	38
39	1P15		–		SPARE			–			40
41	1P15			–	SPARE				–		42
TOTAL		–	–	–			–	–	–	TOTAL	

PANEL NOTES:
REPLACE EXISTING 3P50A TRANSFORMER TX–2 BREAKER WITH NEW 3P60A BREAKER.
BREAKER TO BE COMPATIBLE WITH EXISTING PANELBOARD.

PANEL "2T"

VOLTS: 120/208V | LOCATION: SLUDGE TRAILER 109 | BUSS: 225A
PHASE: 3 | FEEDER: SEE SINGLE LINE 2/E602 | MOUNTING: SURFACE
WIRE: 4

CCT	BRKR	WATTS			DESCRIPTION	DESCRIPTION	WATTS			BRKR	CCT
		A	B	C			A	B	C		
1	1P15	–			EXT. PLUG	BSMT LIGHT	–			1P15	2
3	1P15		–		EXT. PLUG	UNKNOWN		–		2P15	4
5	1P15			–	EXT. PLUG				–		6
7	1P15	–			GEN. HTR.	HEATER	–			1P15	8
9	1P15		–		SPARE	PLUGS		–		1P15	10
11	1P15			–	UH–1&2	AIR DRYER			–	1P15	12
13		–			SPARE	CIRCULATING PUMP #2	–			1P15	14
15	1P15		–		BOILER 1	CIRCULATING PUMP #3		–		1P15	16
17	1P15			–	BOILER 2	CIRCULATING PUMP #4			–	1P15	18
19	1P15	–			CIRCULATING PUMP #1	SPARE	–			1P15	20
21	2P20		–		GEN. BATT. CHARGER	DOMESTIC WATER PUMP		–		2P20	22
23				–					–		24
25	2P20	–			SPARE	UNKNOWN	–			2P30	26
27			–					–			28
29	2P20			–	SPARE	SPARE			–	1P15	30
31		–				SPACE	–				32
33	2P15		–		LIGHTS	PLUGS		–		1P15	34
35				–		PLUGS			–	1P15	36
37	2P20	–			BLOCK HEATER	SPACE	–				38
39			–		GENSET	SPARE		–		1P15	40
41	1P15			–	PLUG	UNKNOWN			–	2P15	42
43	1P15	–			U.H. 6&7		–				44
45	1P15		–		U.H. 4&5&8	UNKNOWN		–		1P15	46
47	1P15			–	E.F.1	UNKNOWN			–	1P15	48
49	1P15	–			MEZZ PLUG	FUEL PUMP P–5	–			1P15	50
51	2P15		–		UNKNOWN	FUEL PUMP P–6		–		1P15	52
53				–		SPARE			–	1P15	54
55		–			UNKNOWN	SPARE	–			1P15	56
57	2P30		–		UNKNOWN	SPARE		–		1P15	58
59				–		SPARE			–	1P15	60
61	2P60	–			UNKNOWN	SPACE	–				62
63			–			SPACE		–			64
65				–	SPACE	SPACE			–		66
67		–			SPACE	SPACE	–				68
69			–		SPACE	SPACE		–			70
71				–	SPACE	SPACE			–		72
TOTAL		–	–	–			–	–	–	TOTAL	

PANEL NOTES:
NEW TEMPORARY PANEL '2T' PROVIDED DURING CONSTRUCTION STAGE 1.
RE–CIRCUIT PANEL A LOADS TO PANEL '2T' PRIOR TO REMOVAL AND DISCONNECTION OF PANEL 'A'.
MINIMIZE INTERRUPTION TO SERVICES.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 23 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC'S
N.W.T.

NUNAMI STANTEC LIMITED
202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	KG	KSS	KSS	18.05.23
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Title
EXISTING PANELS SCHEDULES

Project No. 110126045
Scale AS SHOWN
Drawing No. E607
Sheet 22 of 23
Revision 0

ORIGINAL SHEET - ISO A1

PANEL '2A'

VOLTS: 120/208V | LOCATION: MECHANICAL ROOM 211 | BUSS: 225A
PHASE: 3 | FEEDER: REFER TO SINGLE LINE 1/E603 | MOUNTING: SURFACE
WIRE: 4

CCT	BRKR	WATTS A	WATTS B	WATTS C	DESCRIPTION	DESCRIPTION	WATTS A	WATTS B	WATTS C	BRKR	CCT
1		186					186				2
3	3P15		186		B–1	B–2		186		3P15	4
5				186					186		6
7		250					250				8
9	3P15		250		P–1.1	P–1.2		250		3P15	10
11				250					250		12
13		500					500				14
15	3P15		500		P–1.3	P–1.4		500		3P15	16
17				500					500		18
19	1P15	93			DHWH–1	P–1.5	–			1P15	20
21	2P15		372		CONTROL PANEL FOR P–2.3 & P–2.4	P–4.1		150		1P15	22
23				372		P–4.2			150	1P15	24
25	1P15	500			OVERHEAD DOOR	P–3.3	45			1P15	26
27	1P15		500		OVERHEAD DOOR	CF–1		186		1P15	28
29	1P15			250	UH–1.5	CONTROL PANEL FOR B–1			–	1P15	30
31	1P15	93			UH–2.5	CONTROL PANEL FOR B–2	–			1P15	32
33	1P15		–		CONTROL PANEL FOR P–4.1 & P–4.2	BOILER ROOM REC		125		1P15	34
35			–		SPACE	SLUDGE TRAILER REC			125	1P15	36
37				–	SPACE	POLYMER STORAGE AREA REC	250			1P15	38
39			–		SPACE	SPACE		–		1P15	40
41				–	SPACE	SPACE			–		42
43		–			SPACE	SPACE	–				44
45			–		SPACE	SPACE		–			46
47				–	SPACE	SPACE			–		48
49		–			SPACE	SPACE	–				50
51			–		SPACE	SPACE		–			52
53				–	SPACE	SPACE			–		54
55	1P15	–			SPARE	SPARE	–			1P15	56
57	1P15		–		SPARE	SPARE		–		1P15	58
59	1P15			–	SPARE	SPARE			–	1P15	60
TOTAL		1622	1808	1558			1231	1397	1211	TOTAL	
PHASE A TOTAL =			2853								
PHASE B TOTAL =			3205								
PHASE C TOTAL =			2769			25	38				
PANEL TOTAL =			8827		@120/208 VOLTS 3 PHASE		AMPS				

PANEL NOTES:

EXISTING PANEL '2B'

VOLTS: 120/208V | LOCATION: ELECTRICAL ROOM 203 | BUSS: 225A
PHASE: 3 | FEEDER: REFER TO SINGLE LINE 1/E603 | MOUNTING: SURFACE
WIRE: 4

CCT	BRKR	WATTS A	WATTS B	WATTS C	DESCRIPTION	DESCRIPTION	WATTS A	WATTS B	WATTS C	BRKR	CCT
1	1P15	93			UH–2.3	UH–2.1	195			1P15	2
3	1P15		500		UH–2.4	UH–1.2		60		1P15	4
5				125		FIRE ALARM				1P15	6
7	3P15	125			P–1.6	UH–1.1	37			1P15	8
9			125			RECEPTACLE LAB		500		1P15	10
11	1P15			246	UH–2.7	RECEPTACLE LAB			500	1P15	12
13	1P15	–			HRV–1	RECEPTACLE LAB	500			1P15	14
15	1P15		125		RECEPTACLE LOWER	PARKING REC		1200		2P15	16
17	1P15		125	–	RECEPTACLE LOWER				1200		18
19	1P15	–			OFFICE	PARKING REC	1200			2P15	20
21	1P15		–		OFFICE/WASHROOM			1200			22
23	1P15			125	RECEPTACLE UPPER	PARKING REC			1200	2P15	24
25	1P15	125			RECEPTACLE LOWER		1200				26
27	1P15		37		UH–2.6	RECEPTACLE UPPER		125		1P15	28
29				300		RECEPTACLE UPPER			125	1P15	30
31	3P15	300			CONTROL PANEL FOR P–2.1 & P–2.2	SPACE	–				32
33			300			SPACE		–			34
35				–	SPACE	SPACE			–		36
37	1P15	–			SPARE	SPARE	–			1P15	38
39	1P15		–		SPARE	SPARE		–		1P15	40
41	1P15			–	SPARE	SPARE			–	1P15	42
TOTAL		–	–	–			–	–	–	TOTAL	
PHASE A TOTAL =			3775								
PHASE B TOTAL =			4297								
PHASE C TOTAL =			3821			33	52				
PANEL TOTAL =			11893		@120/208 VOLTS 3 PHASE		AMPS				

PANEL NOTES:

PANEL '2C'

VOLTS: 120/208V | LOCATION: GENERATOR ROOM 112 | BUSS: 100A
PHASE: 3 | FEEDER: REFER TO SINGLE LINE 1/E603 | MOUNTING: SURFACE
WIRE: 4

CCT	BRKR	WATTS A	WATTS B	WATTS C	DESCRIPTION	DESCRIPTION	WATTS A	WATTS B	WATTS C	BRKR	CCT
1	1P15	250			LOWER REC	GEN RM REC	125			1P15	2
3	1P15		125		CUH–1.1	GEN BATT CHARGER		500		1P15	4
5	2P15			125	OUTSIDE RECEPTACLE	GEN BLOCK HEATER			1000	2P25	6
7		125					1000				8
9	1P15		125		MECH RM 2 REC	UH–1.4		37		1P15	10
11	1P15			246	P–3.1	UH–1.6			37	1P15	12
13	1P15	246			P–3.2	DISSOLVED AIR FLOTATION TANKS LOWER REC	250			1P15	14
15	1P15		246		P–3.4	UH–1.7		37		1P15	16
17	1P15			246	P–3.5	CONTROL PANEL FOR P–2.5 & P–2.6			440	2P15	18
19	1P15	125			RECEPTACLE		400				20
21	1P15		250		ELECTRICAL RM REC	SPACE		–			22
23	1P15			186	CF–2	SPACE			–		24
25	1P15	37			UH–2.2	SPACE	–				26
27	1P15		250		DISSOLVED AIR FLOTATION TANKS UPPER REC	SPACE		–			28
29	1P15			37	UH–2.6	SPACE			–		30
31		–			SPACE	SPACE	–				32
33			–		SPACE	SPACE		–			34
35				–	SPACE	SPACE			–		36
37	1P15	–			SPARE	SPARE	–			1P15	38
39	1P15		–		SPARE	SPARE		–		1P15	40
41	1P15			–	SPARE	SPARE			–	1P15	42
TOTAL		783	996	840			1775	574	1477	TOTAL	
PHASE A TOTAL =			2558								
PHASE B TOTAL =			1570								
PHASE C TOTAL =			2317			18	28				
PANEL TOTAL =			6445		@120/208 VOLTS 3 PHASE		AMPS				

PANEL NOTES:

EXISTING PANEL '4A'

VOLTS: 277/480 | LOCATION: ELECTRICAL ROOM 203 | BUSS: 225A
PHASE: 3 | FEEDER: REFER TO SINGLE LINE 1/E603 | MOUNTING: SURFACE
WIRE: 4

CCT	BRKR	WATTS A	WATTS B	WATTS C	DESCRIPTION	DESCRIPTION	WATTS A	WATTS B	WATTS C	BRKR	CCT
1		370					2485				2
3	3P15		370		PF–01–310	B–02–210		2485		3P35	4
5				370					2485		6
7		125					62				8
9	3P15		125		PF–01–330	F–02–215		62		3P15	10
11				125					62		12
13		370					2485				14
15	3P15		370		PF–01–320	B–02–220		2485		3P35	16
17				370					2485		18
19		125					62				20
21	3P15		125		PF–01–340	F–02–225		62		3P15	22
23				125					62		24
25		–			SPACE	SPACE	–				26
27			–		SPACE	SPACE		–			28
29				–	SPACE	SPACE			–		30
31		–			SPACE	SPACE	–				32
33			–		SPACE	SPACE		–			34
35				–	SPACE	SPACE			–		36
37	1P15	–			SPARE	SPARE	–			1P15	38
39	1P15		–		SPARE	SPARE		–		1P15	40
41	1P15			–	SPARE	SPARE			–	1P15	42
TOTAL		–	–	–			–	–	–	TOTAL	
PHASE A TOTAL =			6084								
PHASE B TOTAL =			6084								
PHASE C TOTAL =			6084			22	34				
PANEL TOTAL =			18252		@277/480 VOLTS 3 PHASE		AMPS				

PANEL NOTES:

EXISTING PANEL '6B'

VOLTS: 347/600V | LOCATION: ELECTRICAL ROOM 203 | BUSS: 225A
PHASE: 3 | FEEDER: REFER TO SINGLE LINE 1/E603 | MOUNTING: SURFACE
WIRE: 4

CCT	BRKR	WATTS A	WATTS B	WATTS C	DESCRIPTION	DESCRIPTION	WATTS A	WATTS B	WATTS C	BRKR	CCT
1	1P15	440			ELECTRICAL ROOM 1 LTG & BP#3	HEADWORKS BUILDING LTG & BP#2	460			1P15	2
3	1P15		800		POLYMER STORAGE AREA, PRESS ROOM, MBBR TANKS LTG & BP#7	LOWER HEADWORKS LTG & BP#1		650		1P15	4
5				–	SPACE	ELECTRICAL ROOM 2, LAB, W.R., OFFICE LIGHT & BP# 6			400	1P15	6
7		–			SPACE	EXIT SIGNS LIGHTS	80			1P15*	8
9			–		SPACE	SPARE		–		1P15	10
11				–	SPACE	SPACE			–		12
13		–			SPACE	BOILER, GENERATOR MECH 2 ROOM, SLUDGE TRAILER LTG & BP#4	660			1P15	14
15			–		SPACE	DISSOLVED AIR FLOTATION TANKS LTG & BP#5		640		1P15	16
17				–	SPACE	SPACE			–		18
19		–			SPACE	SPACE	–				20
21			–		SPACE	SPACE		–			22
23				–	SPACE	SPACE			–		24
25		–			SPACE	SPACE	–				26
27			–		SPACE	SPACE		–			28
29				–	SPACE	SPACE			–		30
31		–			SPACE	SPACE	–				32
33			–		SPACE	SPACE		–			34
35	1P15			–	SPARE	SPARE			–	1P15	36
37	1P15	–			SPARE	SPARE	–			1P15	38
39	1P15		–		SPARE	SPARE		–		1P15	40
41	1P15			–	SPARE	SPARE			–	1P15	42
TOTAL										TOTAL	
PHASE A TOTAL =			1640								
PHASE B TOTAL =			2090								
PHASE C TOTAL =			400			4	6				
PANEL TOTAL =			4130		@347/600 VOLTS 3 PHASE		AMPS				

PANEL NOTES:
*LOCKABLE BREAKER FOR EXIT SIGNS TO BE LOCKED IN THE 'ON' POSITION AND TO SERVE NO OTHER LOADS.

Revision	By	Appd.	YY.MM.DD
0 ISSUED FOR CONSTRUCTION	KG	KSS	18.05.23
Issued	By	Appd.	YY.MM.DD

General Notes

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature
Date 23 MAY 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
05/23/18
K. S. SMITH
110126045
IFC'S
N.W.T.

NUNAMI STANTEC LIMITED

202 107 Main Street
Whitehorse YT
www.stantec.com

Client/Project
Iqaluit
ᐃᖃᓗᐃᑦ
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE/EXPANSION
City of Iqaluit, Nunavut

File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD
	KG	KSS	KSS	18.05.23

Title
NEW PANELS SCHEDULES

Project No. 110126045
Scale AS SHOWN
Drawing No. E608

Revision 0

ORIGINAL SHEET - ISO A1