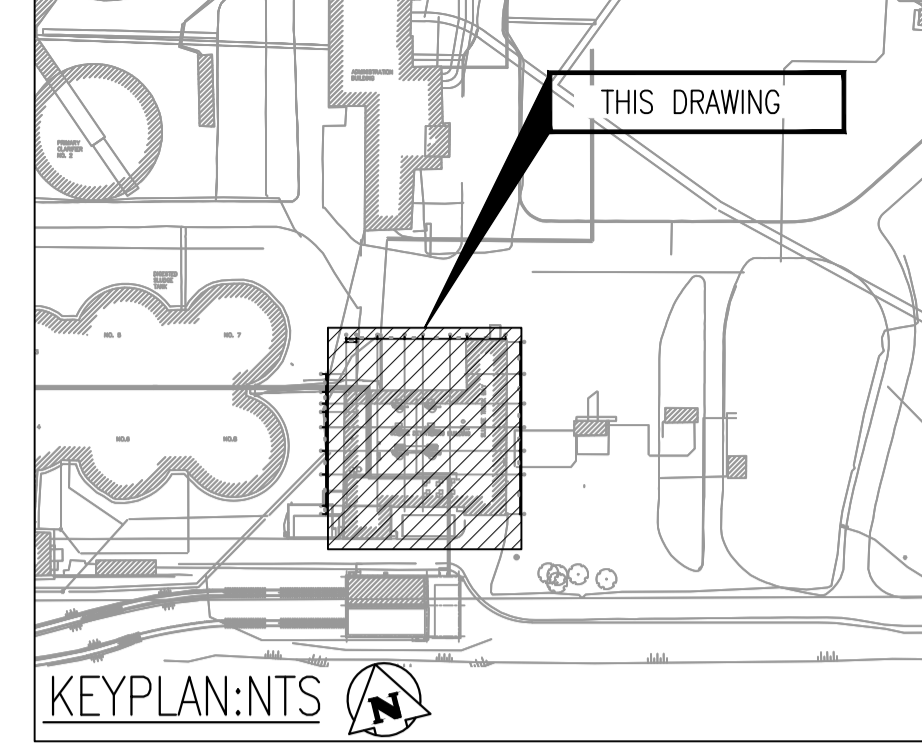


GENERAL NOTES:

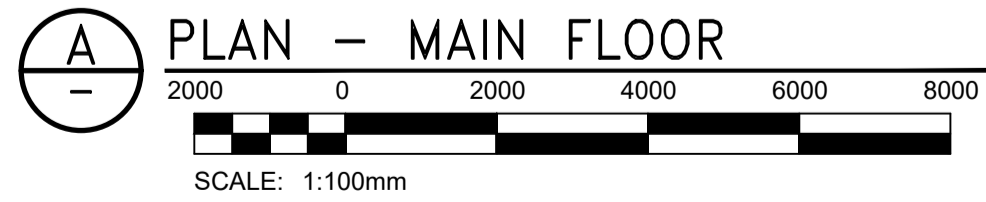
- ELECTRICAL SUB CONTRACTOR TO VISIT SITE PRIOR TO SUBMITTING BID, REVIEW EXISTING SITE THOROUGHLY AND CONFIRM EXISTING DEVICES LOCATIONS, EXISTING WIRING ROUTING AND FAMILIARIZE WITH SCOPE OF DEMOLITION AND RENOVATION WORK. NO ADDITIONAL COST WILL BE CONSIDERED FOR ITEMS THAT WOULD HAVE BEEN OBSERVABLE ON SITE.
- EXISTING WIRING INSTALLED IN WORKING AREA TO REMAIN OPERATIONAL DURING UPGRADE. IN EVENT OF ANY NEW WIRING, THE MODIFICATION SHALL COMPLY WITH LATEST EDITION OF CEC AND LOCAL REGULATIONS.
- DISRUPT THE FUNCTIONALITY OF SYSTEMS ONLY AS ACCEPTABLE BY THE CONTRACT ADMINISTRATOR. PROVIDE NOTICE AND COORDINATE WORK WITH ALL PARTIES TO MINIMIZE DISRUPTION.
- POWER INTERRUPTION SHALL BE KEPT TO A MINIMUM. ELECTRICAL SUB CONTRACTOR SHALL ADVISE CONTRACT ADMINISTRATOR PRIOR TO ANY SHUTDOWN NECESSARY FOR WORK AND COORDINATE SUITABLE TIME FOR WORK.
- ANY MATERIALS BEING REMOVED SHALL BE OFFERED TO THE CONTRACT ADMINISTRATOR. ACCEPTED MATERIALS SHALL BE PLACED ON SITE AT CONTRACT ADMINISTRATORS DIRECTION. DECLINED MATERIALS SHALL BE REMOVED FROM SITE TO APPROPRIATE RECYCLING FACILITY BY ELECTRICAL SUB CONTRACTOR. NO ADDITIONAL COST WILL BE CONSIDERED FOR ITEM THAT IS REQUIRED TO BE DISPOSED.
- WHERE 'TYPICAL' IS USED, IT APPLIES TO ALL SIMILAR DEVICES ALSO INDICATED ON PLANS.
- THE ENGINEER'S DESIGN RESPONSIBILITY IS LIMITED TO THE NEW WORK INDICATED BY THE CLOUDED PORTION OF THE DRAWING.
- ELECTRICAL SUB CONTRACTOR TO VERIFY ALL SOURCES PRIOR TO EQUIPMENT REPLACEMENT. ALL UN-USED ELECTRICAL SHALL BE DEMOLISHED BACK TO SOURCE AND MADE SAFE. EXISTING SOURCE TO BE LABELLED 'SPARE'.
- THE MAIN FLOOR AREA (ROOM 104) IS AN EXISTING CLASS 1 ZONE 2 HAZARDOUS AREA AS WELL AS A CEC CATEGORY 2 CORROSIVE LOCATION.
- TEMPERATURE RATING ('T' RATING) IS BASED ON THE PRESENCE OF HYDROGEN SULFIDE GAS/VAPOUR IN THE ATMOSPHERE WHICH HAS AN AUTOIGNITION TEMPERATURE OF 260°C AND CONSEQUENTLY 'T' RATING IS T2B (260°C).
- ALL ELECTRICAL EQUIPMENT INSTALLED IN HAZARDOUS AREAS SHALL HAVE MARKINGS INDICATING CERTIFICATION FOR USE IN THAT AREA IN ACCORDANCE WITH TABLE 18 OF CSA C22.1.

THE MARKINGS SHALL INCLUDE THE FOLLOWING:
FOR EQUIPMENT INSTALLED IN ZONE 0, GROUP IIB AREAS:
 - ZONE 0, GROUP IIB
 - CLASS I DIVISION 1, GROUP C
 - INTRINSICALLY SAFE, IS, I.S., EXI, EXIA
 - TEMPERATURE 'T' RATING OF T2B (260°C)
- ACCEPTABLE WIRING METHODS IN ZONE 2 LOCATIONS SHALL BE IN ACCORDANCE WITH CSA C22.1 RULE 18-152 WHICH INCLUDES BUT NOT LIMITED TO THE FOLLOWING:
 - THREADED RIGID METAL CONDUIT WITH CONDUIT SEALS.
 - HAZARDOUS LOCATION RATED CABLES WITH ASSOCIATED CABLE GLANDS SUITABLE FOR ZONE 2 LOCATION.
 - ARMORED CABLE WITH OVERALL NON-METALLIC JACKET, SUCH AS TECK90 OR ACWU90.
 - CONTROL AND INSTRUMENTATION CABLES WITH AN INTERLOCKING METALLIC ARMOUR AND A CONTINUOUS JACKET IN CONTROL CIRCUITS SUCH AS TYPE ACIC.
 - LIQUID-TIGHT FLEXIBLE METAL CONDUIT AND CONNECTORS MARKED FOR HEAVY DUTY.
 - EXPLOSION PROOF BOXES, FITTINGS AND JOINTS SHALL BE THREADED FOR CONNECTION TO CONDUIT OR CABLE GLANDS, AND BOXES AND FITTINGS SHALL BE MARKED FOR USE IN ZONE 2 LOCATIONS.
 - SUITABLE ADAPTERS SHALL BE USED WHERE THREAD FORMS DIFFER BETWEEN THE EQUIPMENT AND WIRING SYSTEM.
 - CABLES SHALL BE INSTALLED AND SUPPORTED SO AS TO AVOID TENSILE STRESS AT THE CABLE GLANDS.
 - WHERE THESE REQUIREMENTS CONFLICT WITH THE CITY OF WINNIPEG DESIGN GUIDES, OR CONTRACT SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- ALL WALL, CEILING AND FLOOR PENETRATIONS BETWEEN HAZARDOUS AREAS AND ORDINARY AREAS SHALL BE SEALED GAS TIGHT AS REQUIRED BY MOST ECENT ADOPTED CSA C22.1 REVISION.



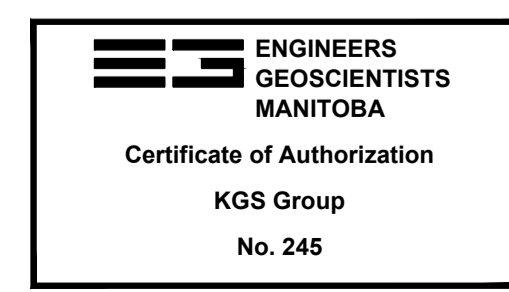
KEYNOTES:

- EXISTING SLUDGE CAKE PUMP SKID #5 TO BE DEMOLISHED. RECONNECT EXISTING CABLING FOR FORMER HPP MAIN DRIVE TO NEW HPP-W1550.MTR. RECONNECT EXISTING OIL COOLER FAN CABLE TO NEW HPP-W1550.HE.
- EXISTING SLUDGE CAKE PUMP SKID #6 TO BE DEMOLISHED. RECONNECT EXISTING CABLING FOR FORMER HPP MAIN DRIVE TO NEW HPP-W1560.MTR. RECONNECT EXISTING OIL COOLER FAN CABLE TO NEW HPP-W1560.HE.
- DEMOLISH UNUSED EXISTING CABLE FOR DEMOLISHED OIL RECIRCULATION PUMP BACK TO MCC.
- MOTOR DISCONNECTING MEANS TO BE SUPPLIED BY SKID VENDOR. ELECTRICAL SUB CONTRACTOR TO COORDINATE WITH VENDOR FOR INSTALLATION AND CONNECTION. CABLE ON DOWNSTREAM SIDE OF DISCONNECT TO MATCH CABLE ON UPSTREAM SIDE.



PLAN - MAIN FLOOR

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



00	ISSUED FOR CONSTRUCTION	2026-04-02	
NO.	REVISIONS	DATE	DESIGN/CHECK

KGS GROUP	
DESIGNED BY: M. BERGEN	CHECKED BY: C. ROBINSON
DRAWN BY: F. AHMED	APPROVED BY: C. ROBINSON
SCALE: AS NOTED	ISSUED FOR CONSTRUCTION BY:
DATE: 2026-04-02	DATE:
CONSULTANT NO.: 25-0107-017_E3	

ENGINEER'S SEAL

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

NORTH END SEWAGE TREATMENT PLANT (NEWPCC)
SLUDGE CAKE PUMP UPGRADE
ELECTRICAL
EQUIPMENT LAYOUT

CITY DRAWING NUMBER 1-0101-EGAD-W001	SHEET 00	REV. A1	SIZE A1
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