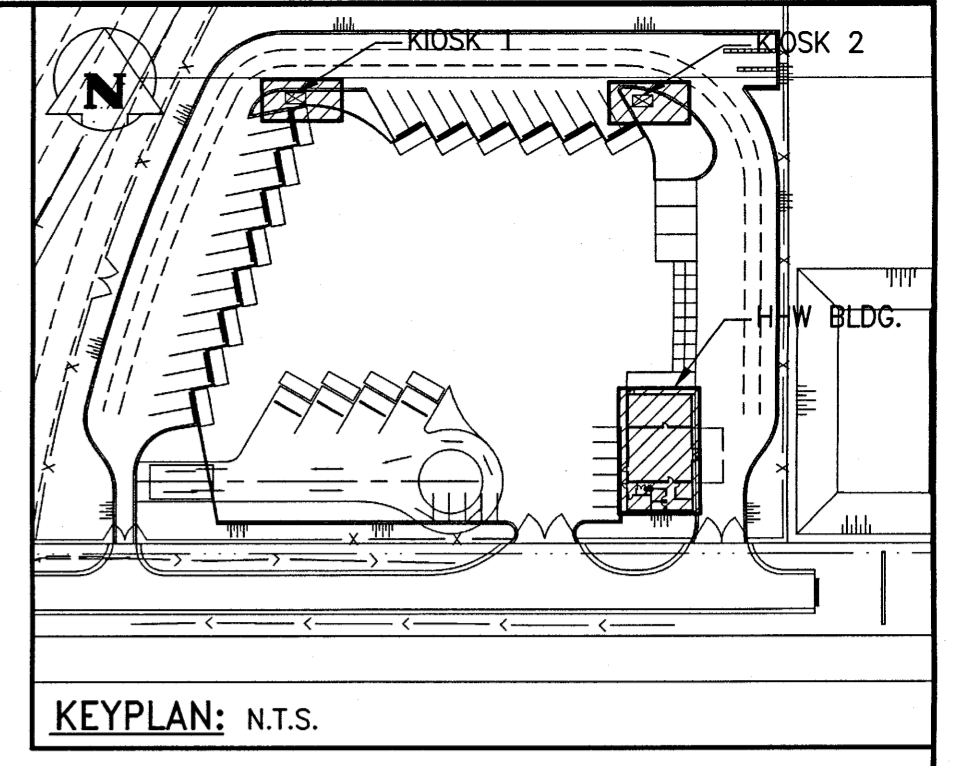


**HHW BUILDING - MAIN FLOOR PLAN**  
SCALE: 1:75

- GENERAL NOTES:**
- PERFORM WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
  - EQUIPMENT LOCATIONS AND PIPE ROUTING INDICATED ON THE DRAWINGS IS APPROXIMATE ONLY. CONFIRM IN THE FIELD. REROUTE PIPING AS REQUIRED TO ELIMINATE FIELD INTERFERENCES, WITH BUILDING STRUCTURES, ELECTRICAL, ETC.. CONFIRM CHANGES WITH CONTRACT ADMINISTRATOR. CO-ORDINATE WORK WITH ALL SUBTRADES. WHERE DIMENSIONS ARE INDICATED FOR PIPING EQUIPMENT SIZES, ETC. THESE ARE FOR BIDDING PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING EQUIPMENT AND COMMENCING INSTALLATION WITHOUT EXTRA CHARGES TO THE PROJECT. THE CONTRACTOR IS RESPONSIBLE TO ENSURE ALL EQUIPMENT, DUCTWORK AND PIPING FITS IN THE SPACE AVAILABLE AND TO MAINTAIN THE GENERAL DESIGN INTENT FOR THE SYSTEMS.
  - PROVIDE ALL WALL PENETRATIONS. PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE FIRE SEALED.
  - CONFORM TO SMACNA STANDARDS FOR SUPPLY AND INSTALLATION OF DUCTWORK. SEAL ALL DUCT JOINTS.
  - MOUNT THERMOSTATS AT 1200mm ABOVE FINISHED FLOOR.



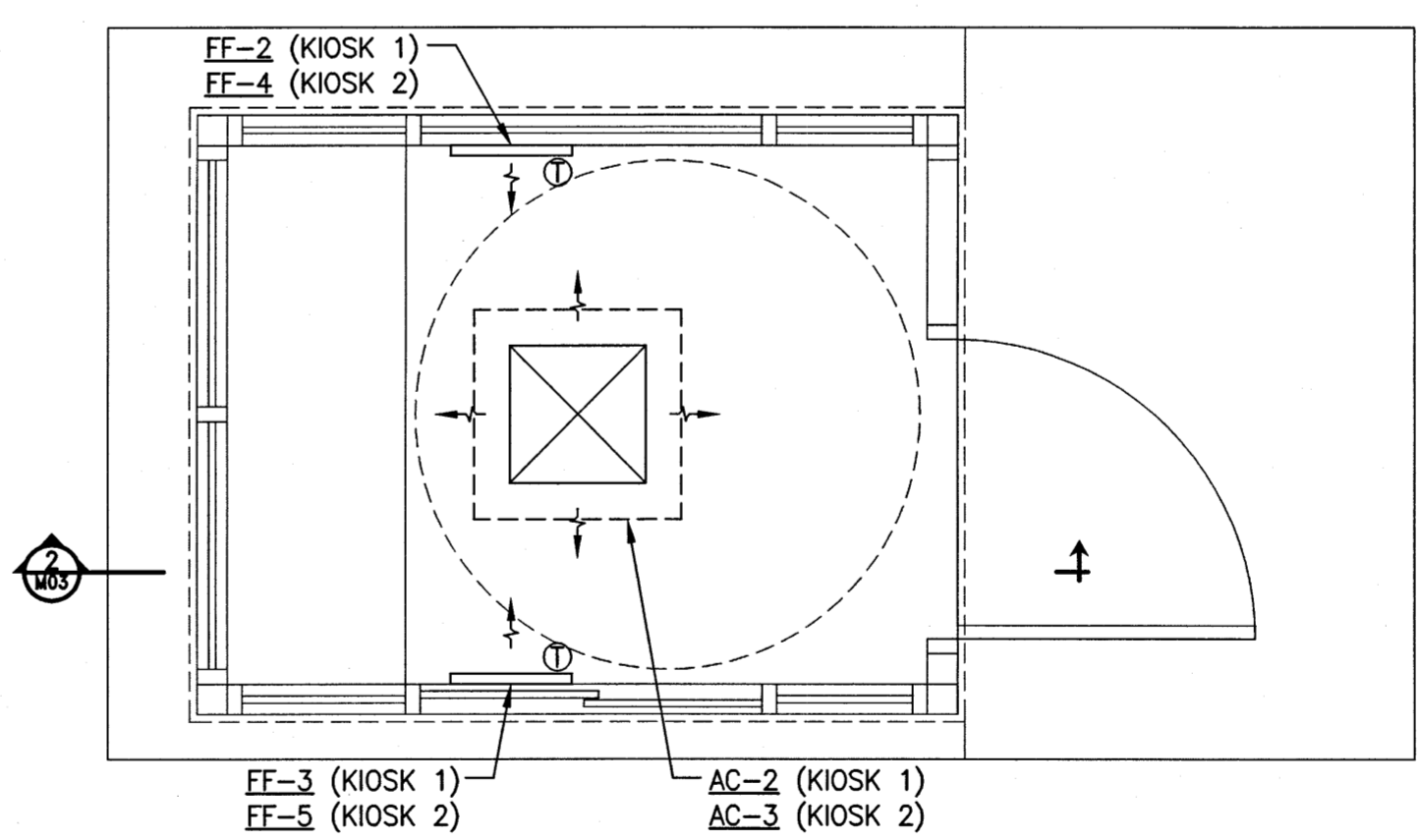
- LEGEND:**
- NEW EQUIPMENT/DUCTWORK
  - CONTROL WIRING
  - E/A EXHAUST AIR
  - O/A OUTSIDE AIR
  - UH-# UNIT HEATER
  - PTAC-# PACKAGED TERMINAL AIR CONDITIONER
  - BH-# BASEBOARD HEATER
  - AC-# AIR CONDITIONING UNIT
  - CU-# CONDENSING UNIT
  - FF-# FORCE FLOW HEATER
  - SF-# SUPPLY FAN
  - EF-# EXHAUST FAN
  - DH-# DUCT HEATER
  - ERV-# ENERGY RECOVERY VENTILATOR
  - AIRFLOW DIRECTION
  - EXTERNAL DUCT INSULATION
  - R REFRIGERANT PIPING
  - BALANCE DAMPER
  - BACKDRAFT DAMPER
  - THERMOSTAT
  - CARBON MONOXIDE SENSOR
  - NITROGEN DIOXIDE SENSOR
  - MOTORIZED DAMPER
  - SUPPLY AIR
  - EXHAUST AIR
  - GRILLE NO.
  - NECK SIZE
  - AIR FLOW RATE
  - LOUVER NO.
  - LOUVER SIZE
  - AIR FLOW RATE

**GRILLE SCHEDULE**

GRILLE No.	DESCRIPTION	MAKE	MODEL	APPROVED EQUIVALENTS
G1	SQUARE CONE DIFFUSER	PRICE	100/300x300/SCD/31/3C/B12	TITUS, NAILOR
G2	EGG CRATE GRILLE	PRICE	150x100/80/TB/B12	TITUS, NAILOR
G3	DOUBLE DEFLECTION SUPPLY GRILLE	PRICE	300x200/520D/SDF/S/B12	TITUS, NAILOR
G4	LOUVERED FACE RETURN GRILLE	PRICE	300x200/510ZD/SDF/S/B12	TITUS, NAILOR
G5	TRANSFER AIR GRILLE	PRICE	300x300/STG1/BF/B15	TITUS, NAILOR

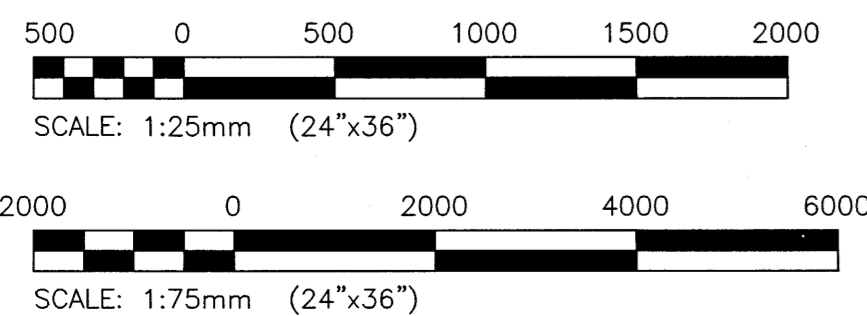
**LOUVRE SCHEDULE**

LOUVRE No.	SIZE	MAKE/MODEL	APPROVED EQUIVALENTS
L1	750x750	PRICE/DE439	VENTEX
L2	300x300	PRICE/DE439	VENTEX
L3	500x500	PRICE/DE439	VENTEX



**1 KIOSK - FLOOR PLAN (TYP. OF KIOSK 1 & 2)**  
SCALE: 1:25

- KEYNOTES:**
- INSTALL NEW WALL MOUNTED EXHAUST FAN (EF-2). INSTALL U/S OF FAN AT 3150mm ABOVE FLOOR.
  - INSTALL GRILLES AT 45° DOWN FROM HORIZONTAL (TYP.)
  - HANG UNIT HEATERS FROM CEILING WITH THREADED RODS. HANG AT 2400mm FROM FLOOR TO U/S OF HEATER. (TYP.)
  - INSTALL CONDENSING UNIT (CU-1). PROVIDE WALL BRACKET SUPPORTS. SUPPLY AND INSTALL INSULATED REFRIGERANT PIPING ACCORDING TO MANUFACTURERS INSTALLATION INSTRUCTIONS.
  - INSTALL NEW ENERGY RECOVERY VENTILATOR (ERV-1) IN CEILING SPACE. RUN CONDENSATE DRAIN LINES TO FLOOR DRAIN IN HWT ROOM. (ERV-1) SHALL BE SUPPLIED BY THE CITY.
  - INSTALL PACKAGED TERMINAL AIR CONDITIONING UNITS (PTAC-1 & PTAC-2) BELOW WINDOW. MOUNT U/S OF UNIT AT 350mm ABOVE FLOOR. (TYP.)
  - MOUNT INDOOR AIR CONDITIONING UNIT ON WALL IN I.T. CLOSET. RUN CONDENSATE LINE TO FLOOR DRAIN IN HWT ROOM.
  - INSTALL NEW ELECTRIC BASEBOARD HEATERS (BH-1 TO BH-3) C/W LINE VOLTAGE THERMOSTAT (THERMOSTATS SUPPLIED BY MECHANICAL, INSTALLED BY ELECTRICAL).
  - INSTALL NEW ELECTRIC FORCE FLOW HEATER (FF-1) C/W LINE VOLTAGE THERMOSTAT. (THERMOSTATS SUPPLIED BY MECHANICAL, INSTALLED BY ELECTRICAL).
  - MAINTAIN 500mm DISTANCE FROM DUCT HEATER (DH-2) FROM MOTORIZED DAMPER (MD-3) AND SUPPLY FAN (SF-2).
  - RUN U/S OF NEW SUPPLY AIR DUCT HEADER AT 3150mm ABOVE FLOOR.



SCALE VERIFIED BY: *[Signature]*

**APEGM**  
Certificate of Authorization  
KGS Group  
No. 245

**LOCATION APPROVED UNDERGROUND STRUCTURES**  
SUPV. U/G STRUCTURES DATE COMMITTEE  
NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	DATE	BY
1	RE-ISSUED FOR TENDER	17/04/24	[Signature]
0	ISSUED FOR TENDER	17/03/14	PSS

**KGS GROUP**  
CONSULTING ENGINEERS  
DESIGNED BY: MAP  
DRAWN BY: EAG  
CHECKED BY: [Signature]  
APPROVED BY: [Signature]  
RELEASED FOR CONSTRUCTION: [Signature]  
HOR. SCALE: AS NOTED  
VERTICAL: AS NOTED  
DATE: 16/08/17

ENGINEER'S SEAL  
**WILLIAMS**  
Member 20958  
CONSULTANT DRAWING NO. 16-0107-010

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT  
PROJECT TITLE: 4R WINNIPEG DEPOT EAST WINNIPEG COMMUNITY RESOURCE RECOVERY CENTRE HHW BUILDING HVAC PLAN  
SHEET OF 23 OF 41  
COMPUTER FILE NAME: 16-0107-010  
CITY DRAWING NUMBER: M02

16-0107-010\16-0107-010\_CALL-Rev B.dwg