

1
E101
NEW CHILLER LAYOUT
EXISTING MECHANICAL ROOM
SCALE: 1:50

CONSTRUCTION NOTES:

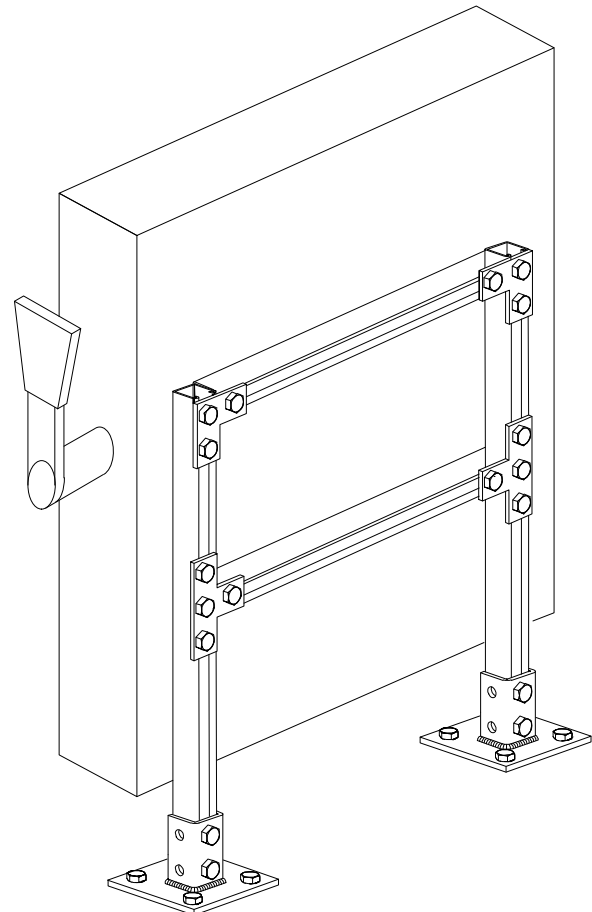
- ELECTRICAL CONNECTIONS:
1. INSTALL NEW BREAKER FOR CHILLER CH-1A ON MDP. BREAKER SIZE TO BE 250A/3P. NEW SUPPLY CONDUCTOR SIZE TO BE 4#250MCM Cu + BOND - TECK90. INSTALL NEW DISCONNECT FOR CHILLER CH-1A. COORDINATE WITH APPROVED SHOP DRAWINGS.
 2. INSTALL NEW BREAKER FOR CHILLER CH-1B ON MDP. BREAKER SIZE TO BE 250A/3P. NEW SUPPLY CONDUCTOR SIZE TO BE 4#250MCM Cu + BOND - TECK90. INSTALL NEW DISCONNECT FOR CHILLER CH-1B. COORDINATE WITH APPROVED SHOP DRAWINGS.
 3. INSTALL NEW SUPPLY CONDUCTOR FROM EXISTING BREAKERS ON MCC-A TO NEW VFD PUMPS P-3, P-4, P-5, AND P-6. CONDUCTOR SIZE TO BE 3#12 + 1#14 RW90 IN EXISTING CONDUIT.
 4. INSTALL NEW CHEMICAL FEEDER CONTROL PANEL. EXISTING M100-23 15A/1P BREAKER AND 2#12AWG RW90 WIRING TO BE RE-USED.
 5. FINAL CONNECTIONS TO PUMPS TO BE IN LIQUID-TIGHT FLEXIBLE CONDUIT.

LEGEND		
ITEM	SYMBOL	REMARKS
MOTOR EQUIPMENT		
DISCONNECT SWITCH		
PUMP		
VARIABLE FREQUENCY DRIVE		
DISTRIBUTION PANEL		
CHEMICAL FEEDER CONTROL PANEL		
TRANSFORMER		

EQUIPMENT LEGEND		
ITEM	SYMBOL	REMARKS
BOILER		
CHILLER		
PUMP		

Existing				New			
Equipment	Power kW	Load %	Equipment Load kW	Equipment	Power kW	Load %	Equipment Load kW
Chiller CH-1	209	100	209	Chiller CH-1A	112.2	95	106.59
Pump P-3	11.2	100	11.2	Chiller CH-1B	112.2	95	106.59
Pump P-4	11.2	100	11.2	Pump P-3	11.2	90	10.08
Pump P-5	11.2	100	11.2	Pump P-4	11.2	90	10.08
Pump P-6	11.2	100	11.2	Pump P-5	11.2	90	10.08
Chemical System	1.8	100	1.8	Pump P-6	11.2	90	10.08
Total			255.6	Chemical System	1.8	30	0.54
				Total			254.04

ELECTRICAL LOAD CHANGE



TYP DISCONNECT & VFD MOUNTING DETAIL

Public Works and Government Services Canada

Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest

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SEAL

Certificate of Authorization
DGH Engineering Ltd.
No. 540 Date: 2021-08-19

5	-	-
4	-	-
3	-	-
2	-	-
1	-	-
0	ISSUED FOR TENDER	2021-08-20
Revision	Description	Date
Client		client

PUBLIC WORKS & GOVERNMENT SERVICES

269 MAIN STREET SUITE 310
WINNIPEG, MB. R3C 1B3

Project title

Projet

MORDEN, MB. R6M 1Y5
101 RTE 100 #100
MORDEN RESEARCH & DEVELOPMENT CENTRE

**AAFC MRDC: CHILLER & BOILER UPGRADE
(CHILLER SCOPE ONLY)**

Designed by
KAS

Conçu par

Drawn by
RTD

Dessiné par

Approved by
JKN

Approuvé par

PWSC Project Manager
OWEN VAN WALLEGHEM

Administrateur de Projets TPSGC

Drawing title

Titre du dessin

**ELECTRICAL PLAN
MAIN FLOOR
MECHANICAL ROOM**

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.111908	E101	00
14 OF 15		