	GENERAL
SYMBOL	DESCRIPTION
S/A	SUPPLY AIR (DOWN)
R/A	RETURN AIR (DOWN)
E/A	EXHAUST AIR (DOWN)
T/A	TRANSFER AIR (DOWN)
> O/A	OUTDOOR AIR (DOWN)
S/A	SUPPLY AIR (UP)
R/A	RETURN AIR (UP)
E/A	EXHAUST AIR (UP)
T/A	TRANSFER AIR (UP)
O/A	OUTDOOR AIR (UP)
F———	FIRE DAMPER
M	MOTORIZED DAMPER
B	BACKDRAFT DAMPER
O	BALANCING DAMPER
	DUCT FLEXIBLE CONNECTION
_	FIN TUBE RADIATION
	RADIATION PANEL
	DUCT c/w ACOUSTIC INSULATION
	R/A, E/A FLOW DIRECTION
>	S/A FLOW DIRECTION
	AXIAL FAN
	CENTRIFUGAL FAN
	CENTRIFUGAL PUMP
, , ,	TURNING VANES
	AIR SEPARATOR (SECTION)
<i>>>></i>	FLEXIBLE HOSE
PH/ C	PRE-HEAT COIL
H/C	HEATING COIL
	SHELL AND TUBE HEAT EXCHANGER
TBF	TUBULAR BACKWASH FILTER

PROCESS PIPING		
IļI	UNION	
П	FLANGED CONNECTION	
Δ	CONCENTRIC REDUCER	
Д	ECENTRIC REDUCER	
]	CAP	

PLUMB	ING & DRAINAGE
SYMBOL	DESCRIPTION
⊕ FD-#	FLOOR DRAIN (TYPE)
□□ TD	TRENCH DRAIN
田 RD	ROOF DRAIN
—— нв	HOSE BIBB
── NFHB	NON-FREEZE HOSE BIBB
Фсо	CLEANOUT (ABOVE GRADE VIEW)
——————————————————————————————————————	CLEANOUT (BELOW GRADE VIEW)
	P-TRAP
	RUNNING TRAP WITH CLEANOUT
$\overline{+}$	"T" CONNECTION
TPD	TRAP PRIMING DEVICE
	DIRECTION OF FLUID FLOW

CON	TROL SYMBOLS
SYMBOL	DESCRIPTION
\bigcirc	THERMOSTAT
Tr	THERMOSTAT REVERSE ACTING
lacksquare	HUMIDISTAT
Hr	HUMIDISTAT REVERSE ACTING
\$	SWITCH
TT	TEMPERATURE TRANSMITTER
FZ	FREEZE STAT
	DISCONNECT SWITCH
M	MOTOR
М	MOTOR ACTUATOR
	ADJUSTABLE FREQUENCY DRIVE
CS	CURRENT SENSING RELAY
PS	PRESSURE SENSOR
Fs	FLOW SWITCH
LS	LIMIT SWITCH
SM	SMOKE DETECTOR
co	CARBON MONOXIDE SENSOR
BDD	BACK DRAFT DAMPER
─	INTERLOCK
-///-	THREE PHASE WIRING
//	SINGLE PHASE WIRING
	CONTROL WIRING
LWCO	LOW WATER CUT-OFF

FHC	FIRE HOSE CABINET
*	FIRE DEPARTMENT CONNECTION
	FIRE EXTINGUISHER (10 kg)
VALVES A	ND PIPING SYMBOLS
SYMBOL	DESCRIPTION
	SOLENOID VALVE
\bowtie	GATE VALVE (NORMALLY OPEN)
M	GATE VALVE (NORMALLY CLOSED)
\bowtie	PLUG VALVE (NORMALLY OPEN)
 ◆	PLUG VALVE (NORMALLY CLOSED)
101	BALL VALVE (NORMALLY OPEN)
•	BALL VALVE (NORMALLY CLOSED)
1/	BUTTERFLY VALVE
	GLOBE VALVE
K	DOUBLE LEAF CHECK VALVE
	CHECK VALVE
<u>K</u> ol	BALL CHECK VALVE
₩	CIRCUIT BALANCING VALVE
\mathbb{R}	THERMOSTATICALLY CONTROLLED VALVE
RP RP	REDUCED PRESSURE BACKFLOW PREVENTER
DC	DOUBLE CHECK VALVE BACKFLOW PREVENTER
R	CONTROL VALVE
	PRESSURE REGULATOR
	SELF REGULATING CONTROL VALVE
	THREE WAY CONTROL VALVE
F	SAFETY RELIEF VALVE
⊢⊗H	SUCTION DIFFUSER
	FOOT VALVE
l , l	STRAINER
AAV 🛪	AUTOMATIC AIR VENT
MAV 🛪	MANUAL AIR VENT
9	PRESSURE GAUGE
<u>.</u>	THERMOMETER W/ WELL
, ,	i

FIRE PROTECTION EQUIPMENT

DESCRIPTION

UPRIGHT SPRINKLER HEAD

PENDANT SPRINKLER HEAD

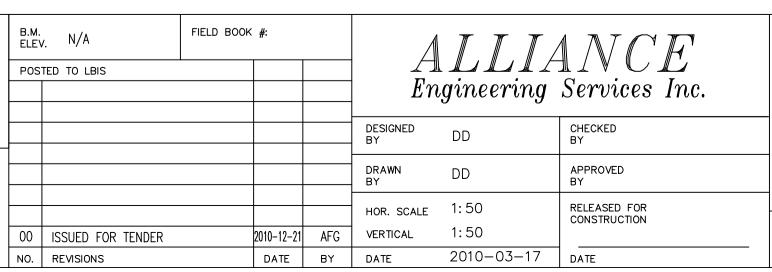
SIDE WALL SPRINKLER HEAD

DRY SPRINKLER HEAD

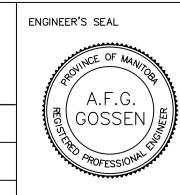
PIPING	IDENTIFICATION
SYMBOL	DESCRIPTION
DCW	DOMESTIC COLD WATER SUPPLY
——————————————————————————————————————	DOMESTIC HOT WATER SUPPLY
—DHR—	DOMESTIC HOT WATER RECIRC.
s	SANITARY LINE
s	SANITARY LINE (BURIED)
V	SANITARY VENT
——— PS ———	PUMPED SANITARY
ST	STORM
ST	STORM (BURIED)
——— FW ———	FLUSHING WATER
SA	SERVICE AIR
PW	POTABLE WATER
CA	COMPRESSED AIR
CA	COMPRESSED AIR (BURIED)
——————————————————————————————————————	GLYCOL HEATING SUPPLY
———— GHR ————	GLYCOL HEATING RETURN
———CHGS———	CHILLED GLYCOL SUPPLY
——— CHGR ———	CHILLED GLYCOL RETURN
NG	NATURAL GAS
VAC	VACUUM
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
RS	REFRIGERANT SUCTION
RD	REFRIGERANT DISCHARGE
PC	PUMPED CONDENSATE
BBD	BOILER BLOWDOWN
MU	MAKE-UP WATER
EXP	EXPANSION TANK EQUALIZER LINE
O RWL	RAIN WATER LEADER
<u>_</u>	PIPE DROP
o	PIPE RISE
	PIPE TEE DOWN
	PIPE TEE UP
	FLOW DIRECTION

GAS	VALVE TRAIN
	PILOT MANUAL SHUT-OFF VALVE
\	PILOT BURNER AUTOMATIC SAFETY SHUT-OFF VALVE
P	PILOT BURNER GAS PRESSURE REGULATOR
Ŷ	PRESSURE TEST POINT
X	MAIN BURNER TEST FIRING VALVE
\bowtie	MAIN BURNER AUTOMATIC SAFETY SHUT-OFF VALVE
S	GAS INPUT FLOW CONTROL VALVE
Š	MAIN BURNER AUTOMATIC SAFETY SHUT-OFF VALVE
Q	MAIN BURNER GAS PRESSURE REGULATOR
Ţ/	GAS OVER-PRESSURE RELIEF VALVE





GAS COCK



CONSULTANT DRAWING NO.

LL2.1



THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

2010 HVAC REPLACEMENT
AND ASSOCIATED WORKS
WEWPCC
GENERAL AREA
LEGEND SHEET 1 OF 2

SHEET 1 OF 1
CITY DRAWING NUMBER

1-0103A-P0007-001