AREA E - SUBSTATION

SWITCH

WIRELESS ACCESS

INTEGRATOR NOTE 3
CONTRACTOR NOTE 4

OPERATOR WORKSTATION
CWO-E8001

IT/ADMIN NETWORK
FROM MAIN FACILITY
SEE DRAWING
1-0101-ANET-A004-001

NSW-E9310 ①

SUPERVISORY NETWORK
FROM MAIN FACILITY
SEE DRAWING
1-0101-ANET-A004-001

TO PRIMARY CLARIFIER FACILITY

SUPERVISORY NETWORK
FROM MAIN FACILITY
SEE DRAWING
1-0101-ANET-A004-001

TO PRIMARY CLARIFIER FACILITY

CONTROL NETWORK ①
FROM MAIN FACILITY
SEE DRAWING
1-0101-ANET-A004-001

TO PRIMARY CLARIFIER FACILITY

NSW-E9110   NSW-E9210

POWER SUPPLY UPGRADE PLC

CRITICAL PROCESS

AREA CONTROL ROOM

AREA G - GRIT FACILITY

SWITCH

WIRELESS ACCESS

INTEGRATOR NOTE 3
CONTRACTOR NOTE 4

PLC-G8001-A   PLC-G8001-B

RIO-G8001-1

RIO-G8001-2

CRITICAL PROCESS ④

AREA CONTROL ROOM G-322

AREA P - PRIMARY CLARIFIER FACILITY

SWITCH

WIRELESS ACCESS

INTEGRATOR NOTE 3
CONTRACTOR NOTE 4

OPERATOR WORKSTATION
CWO-P8001

NSW-P9310

SUPERVISORY NETWORK ②
FROM SUBSTATION

SERVER NETWORK ②
FROM SUBSTATION

CONTROL NETWORK ②
FROM SUBSTATION

NSW-P9110   NSW-P9210

PLC-P8001-A   PLC-P8001-B

RIO-P8001-1

RIO-P8001-2   NSW-P8001
DUAL RING
SWITCH

INTEGRATOR NOTE 5

CRITICAL PROCESS ⑤

AREA CONTROL ROOM P-110

AREA S - SECONDARY CLARIFIER FACILITY

SWITCH

INTEGRATOR NOTE 3
CONTRACTOR NOTE 4

WIRELESS ACCESS

OPERATOR WORKSTATION
CWO-S8001

ADMIN WORKSTATION
CW-S001

IT/ADMIN NETWORK
TO REACTOR
SEE DRAWING
1-0101-ANET-A006-001

NSW-S9310

TO CENTRATE FACILITY
SEE DRAWING
1-0101-ANET-A006-001 ③

SUPERVISORY NETWORK
TO REACTOR FACILITY
SEE DRAWING
1-0101-ANET-A006-001

SERVER
CS-A8200

HMI SERVER B
CS-A8201   DOMAIN CONTROLLER
CS-A8203

SERVER CS-A8200

NSW-S9110 ②

SERVER NETWORK
TO REACTOR FACILITY
SEE DRAWING
1-0101-ANET-A006-001

SECONDARY CLARIFIERS HVAC PLC

TO CENTRATE FACILITY
SEE DRAWING
1-0101-ANET-A006-001 ③

CONTROL NETWORK
TO REACTOR FACILITY
SEE DRAWING
1-0101-ANET-A006-001

NSW-S9110   NSW-S9210

WIRELESS ACCESS POINT

BRIDGE 1 PLC

BRIDGE 2 PLC

BRIDGE 3 PLC

PLC-S8001-A   PLC-S8002-B

RIO-S8001-1   RIO-S8001-2

BRIDGE 3 PLC

RIO-S8001-3

BRIDGE 5 PLC

RIO-S8001-4

BRIDGE 6 PLC

INTEGRATOR NOTE 5

RIO-S8001-5   NSW-S8001
DUAL RING
SWITCH

BRIDGE 7 PLC

CRITICAL PROCESS ⑥

BRIDGE 8 PLC

FAN HOUSE PLC

AREA CONTROL ROOM S-112

POINT PROVIDED AND INSTALLED BY CITY OF WINNIPEG

INTEGRATOR NOTES:
1. SEE SPECIFICATION 40 90 00 FOR SCOPE.
2. INTEGRATOR SCOPE IS:
   .1 PANEL FABRICATION, NETWORK INTERCONNECTION AND DEVICE CONFIGURATION FOR ARCHITECTURE.
   .2 PROVIDE, INSTALL, AND CONFIGURE OPERATOR AND MAINTENANCE WORKSTATIONS.
   .3 INSTALLATION AND CONNECTION OF PRE-PURCHASED SERVERS INTO RACKS AND TO NETWORK.
3. WIRELESS ACCESS POINT PROVIDED AND INSTALLED BY CITY OF WINNIPEG.
4. REARRANGE EXISTING FIBRE TERMINATIONS IN SWITCH AND PROVIDE FIBRE PATCH CABLES TO CREATE A DUAL TRUNKED NETWORK
5. CONNECT NETWORKED INSTRUMENTS TO DUAL RING SWITCH

CONTRACTOR NOTES:
1. SEE SPECIFICATION 26 05 10 FOR SCOPE.
2. INSTALL PANELS AND POWER FEEDS TO PANELS.
3. INSTALL RACK AND POWER FEEDS TO SERVERS.
4. PROVIDE CABLE CONNECTION TO WIRELESS ACCESS POINT. WIRELESS ACCESS

KEYNOTES:
1. SEE REFERENCE DRAWINGS 1 AND 3
2. SEE REFERENCE DRAWINGS 1 AND 2
3. SEE REFERENCE DRAWINGS 1 AND 4
4. SEE REFERENCE DRAWING 6
5. SEE REFERENCE DRAWING 7
6. SEE REFERENCE DRAWING 5

FOR REFERENCE ONLY

LEGEND

— F — F —   FIBRE CONNECTION

⌇⌇⌇   WIRELESS CONNECTION (IEEE 802.11)

———   ETHERNET CONNECTION

GREYED OUT ITEMS INDICATE
EXISTING EQUIPMENT OR DEVICES

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
AECOM Canada Ltd.
No. 4671   Date: 2023/12/08

NO.	DRAWING TITLE	DRAWING NUMBER
5	NETWORK DIAGRAM SECONDARY CLARIFIERS PLC DEVICE NETWORK	1-0101-ANET-S101
4	FIBRE RISER - NP-S9000	1-0101-ANET-S001-001 / 1-0101-ANET-S001-002
3	FIBRE RISER - NP-E9000	1-0101-ANET-E001-001 / 1-0101-ANET-E001-002
2	FIBRE RISER - TYPICAL	1-0101-ANET-A002
1	NETWORK BLOCK DIAGRAM FIBRE LOOP	1-0101-ANET-A001

REFERENCE DRAWING

NO.	DRAWING TITLE	DRAWING NUMBER
7	NETWORK DIAGRAM PRIMARY CLARIFIERS PLC DEVICE NETWORK	1-0101-ANET-P101
6	NETWORK DIAGRAM GRIT PLC DEVICE NETWORK	1-0101-ANET-G101

REFERENCE DRAWING

NO.	REVISIONS	DATE	DESIGN	CHECK
1	ISSUED FOR GC TENDER	2024-01-08	KG	SDS
0	ISSUED FOR TENDER	2023-03-17	KG	SDS

AECOM

DESIGNED BY: KG
CHECKED BY: SDS
DRAWN BY: KG
APPROVED BY: SB
SCALE: NONE
RELEASED FOR CONSTRUCTION BY:
DATE: 2024-01-08
DATE:
CONSULTANT NO.:

ENGINEER'S SEAL
PROVINCE OF MANITOBA
S.D. SYMONS
Member 43103
REGISTERED PROFESSIONAL ENGINEER

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

NORTH END SEWAGE TREATMENT PLANT
DCS MIGRATION
GENERAL
BLOCK DIAGRAM NETWORK ARCHITECTURE
AREAS E, G, P & S

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0101-ANET-A005	001	0A	A1