MECHANICAL LIST OF DRAWINGS				
PROJECT NAME:		WADI MOSA		
DRAWING NO.		DRAWING TITLE	SCALE	REVISION
1	M0G01-GNRL-LIST-R00	MECHANICAL LIST OF DRAWINGS	N.T.S.	R00
2	M0G02-GNRL-LGND-R00	MECHANICAL GENERAL LEGEND & NOTES	N.T.S.	R00
GENERAL SITE				
1	M0G03-GNRL-SITEL-R00	SITE PLAN MECHANICAL SERVICES LAYOUT(OVER ALL)	1:800	R00
2	M0G04-GNRL-SITEL-R00	SITE PLAN MECHANICAL SERVICES LAYOUT (PART-1)	1:100	R00
3	M0G05-GNRL-SITEL-R00	SITE PLAN MECHANICAL SERVICES LAYOUT (PART-2)	1:100	R00
4	M0G06-GNRL-SITEL-R00	SITE PLAN MECHANICAL SERVICES LAYOUT (PART-3)	1:100	R00
5	M0G07-GNRL-SITEL-R00	SITE PLAN MECHANICAL SERVICES LAYOUT (PART-4)	1:100	R00
6	M0G08-GNRL-SITEL-R00	SITE PLAN MECHANICAL SERVICES LAYOUT (PART-5)	1:100	R00
7	M0G09-GNRL-SITEL-R00	SITE PLAN MECHANICAL SERVICES LAYOUT (PART-6)	1:100	R00
8	M0G10-GNRL-SITEL-R00	SITE PLAN MECHANICAL SERVICES LAYOUT (PART-7)	1:100	R00
HVAC SYSTEM				
1	M1001-HVAC-GFL-R00	GROUND FLOOR HVAC SYSTEM LAYOUT (OVER ALL)	1:800	R00
2	M1002-HVAC-GFL-R00	GROUND FLOOR HVAC SYSTEM LAYOUT (PART-1)	1:100	R00
3	M1003-HVAC-GFL-R00	GROUND FLOOR HVAC SYSTEM LAYOUT (PART-2)	1:100	R00
4	M1004-HVAC-GFL-R00	GROUND FLOOR HVAC SYSTEM LAYOUT (PART-3)	1:100	R00
DRAINAGE SYSTEM				
1	P1001-DRAN-GFL-R00	GROUND FLOOR DRAINAGE SYSTEM LAYOUT (OVER ALL)	1:800	R00
2	P1002-DRAN-GFL-R00	GROUND FLOOR DRAINAGE SYSTEM LAYOUT (PART-1)	1:100	R00
3	P1003-DRAN-GFL-R00	GROUND FLOOR DRAINAGE SYSTEM LAYOUT (PART-2)	1:100	R00
4	P1004-DRAN-GFL-R00	GROUND FLOOR DRAINAGE SYSTEM LAYOUT (PART-3)	1:100	R00
WATER SYSTEM				
1	P2001-WATR-GFL-R00	GROUND FLOOR WATER SYSTEM LAYOUT (OVER ALL)	1:800	R00
2	P2002-WATR-GFL-R00	GROUND FLOOR WATER SYSTEM LAYOUT (PART-1)	1:100	R00
3	P2003-WATR-GFL-R00	GROUND FLOOR WATER SYSTEM LAYOUT (PART-2)	1:100	R00
4	P2004-WATR-GFL-R00	GROUND FLOOR WATER SYSTEM LAYOUT (PART-3)	1:100	R00
TOILET PLAN				
HVAC SYSTEM				
1	M1005-HVAC-GFL-R00	GROUND FLOOR HVAC SYSTEM LAYOUT	1:500	R00
DRAINAGE SYSTEM				
1	P1005-DRAN-GFL-R00	GROUND FLOOR DRAINAGE SYSTEM LAYOUT	1:500	R00
WATER SYSTEM				
1	P2005-WATR-GFL-R00	GROUND FLOOR WATER SYSTEM LAYOUT	1:500	R00
PROJECT DATE		MONTH		MAY
		YEAR		2023

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PROJECT: Wadi Musa Plaza
ADDRESS: Wadi Musa, JORDAN

STATUS: TENDER

NOTES

ISSUE | DATE | AMENDMENT | CHECKED

DRAWN: ENG.Z.ABDEEN | NORTH | SCALE: N.T.S.
CHECKED: ENG.Z.ABDEEN | APPROVED: ENG.S.AL-KURDI

DRAWING TITLE: MECHANICAL LIST OF DRAWINGS
SHEET NUMBER: M0G01-GNRL-LIST-R00 | ISSUE | DATE: – JUL 2023

DIMENSIONS

1- UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE GIVEN IN MILLIMETERS.

2- DIMENSIONS SHOWN ON DRAWING SHALL GOVERN. DO NOT MEASURE FROM DRAWINGS

3- ALL DIMENSIONS SHALL BE VERIFIED ON SITE BEFORE PROCEEDING WITH THE WORK. THE ENGINEERING CONSULTANTS AND CONSTRUCTION MANAGER SHALL BE NOTIFIED OF ANY DISCREPANCIES.

4- THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES.

5- THE DESIGN DRAWINGS SHOW THE VISUAL AND DESIGN INTENT ONLY, WHERE THE DESIGN DRAWINGS DETAIL OF EQUIPMENT, OR ANY SYSTEM COMPONENT IS GIVEN. IT SHOULD BE CONSIDERED AS INDICATIVE ONLY THE RESPONSIBILITY FOR UNDERTAKING THE DETAILED DESIGN TO ACHIEVE THE REQUIRED PERFORMANCE, WORKABILITY AND SELECTION OF SUITABLE MATERIALS REMAINS WITH THE CONTRACTOR.

DRAWING NOTES

1-NUMBERS IN CIRCLES SHOWN DENOTE TO NUMBER IN THE CORRESPONDING RISER DIAGRAM FOR THE PARTICULAR SERVICE.

D 1 — DUCT RISER

W 1 — WATER RISER

DR 1 — DRAIN RISER

H 1 — HEATING RISER

ABBREVIATIONS

AFC	ABOVE FALSE CEILING
B/G	BELOW GROUND
B/S	BELOW SLAB
D/D	DROP DOWN
D/P	DRAINAGE PIPE
F/A	FROM ABOVE
F/B	FROM BELOW
H/L	HIGH LEVEL
I/S	INSIDE SHAFT
I/T	INSIDE TRENCH
I/W	INSIDE WALL
L/L	LOW LEVEL
NC	NORMALY CLOSED
NO	NORMALY OPENED
O/A	OFFSET TO ABOVE
O/B	OFFSET TO BELOW
RWP	RAIN WATER PIPE
T/A	TO ABOVE
T/B	TO BELOW
U/G	UNDER GROUND
U/T	UNDER TILE
VC	VENT CAWL / CAP TERMINATION
V/P	VENT PIPE
EXF	EXHAUST FAN
SMH	SEWAGE MANHOLE
DCWS	DOMESTIC COLD WATER SUPPLY
DCWP	DOMESTIC COLD WATER PUMP
TWP	TRANSFER WATER PUMP
DHWC	DOMESTIC HOT WATER CYLINDER
FLT	CARTRIDGE FILTER
MSF	MULTI MEDIA SAND FILTER
SOF	WATER SOFTNER
PV	PRESSURE VESSEL
DB	DRY BULB TEMPERATURE
VD	VOLUME DAMPER
WB	WET BULB TEMPERATURE
DXH	DIAMETER X HEIGHT
LXWXH	LENGTH X WIDTH X HEIGHT

HVAC SYSTEM

ABBR.	DESIGNATION
REF PIPE	REFRIGERANT PIPE
	A/C IN DOOR WALL MOUNTED UNIT
	A/C IN DOOR FLOOR MOUNTED UNIT
DO NOT	A/C OUT DOOR SPLIT UNIT
EAD	EXHAUST AIR DUCT
	EXHAUST GRILL
EXF	EXHAUST AIR FANS
VD	VOLUME DAMPER
	EXHAUST AIR LOUVER
DG	DOOR GRILL

DRAINAGE SYSTEM

ABBR.	DESIGNATION
D/P	DRAIN PIPE
C/P	CONDENSATE PIPE RUNNING ABOVE FALSE CEILING
C/P	CONDENSATE PIPE RUNNING UNDER TILE
V/P	VENT PIPE
FD-01	Ø80mm UPVC FLOOR DRAIN WITH Ø80mm SIDE PIPE OUTLET & 13X13 cm TILLABLE STAINLESS STEEL RIM COVER
RWO-1	UPVC RAIN WATER OUTLET WITH Ø 50mm BOTTOM OUTLET
RWO-2	UPVC RAIN WATER OUTLET WITH Ø 80mm SIDE PIPE OUTLET
FCO-01	FLOOR CLEAN OUT
SMH	SEWAGE MANHOLE
VC	VENT PIPE WITH CAP TERMINATES 500mm ABOVE FINISHED ROOF LEVEL OR ABOVE THE PARAPET (DEPENDS ON THE LOCATION)
	TRENCH
DD-01	DECK DRAIN WITH Ø110MM OUTLET

PLUMBING DRAWING NOTES

1- PLUMBING FIXTURES DESIGNATIONS SHOWN ON THE DRAWINGS SHALL CORRESPOND TO THE FIXTURE DESIGNATION TYPE NUMBER GIVEN IN THE SPECIFICATION.
2- FOR SERVICES CONNECTED WITH A/C WORKS REFER TO A/C DRAWINGS FOR THE EXACT LOCATION, SIZE AND OTHER REQUIREMENTS, ALL SUCH SERVICES SHALL BE COORDINATED WITH THE A/C TRADE.
3- UNLESS OTHERWISE STATED, MINIMUM DRAINAGE PIPES SLOPES SHALL BE AS FOLLOWS:

PIPE SIZE	SLOPE
< 4" (110mm)	2.0%
≥ 4" (110 mm)	1.0%

DOMESTIC WATER SYSTEM

ABBR.	DESIGNATION
DCWS	DOMESTIC COLD WATER SUPPLY
DHWS	DOMESTIC HOT WATER SUPPLY
DHWR	DOMESTIC HOT WATER RETURN
	FILLING LINE
	ELECTRIC WATER HEATER
	HAND SPRAY
	WATER TANK
DCWP	DOMESTIC COLD WATER COOSTING PUMP
	WATER MANIFOLD CABINET

1- PIPING DIAMETER CONNECTION TO FIXTURES
SIZES OF WATER PIPE CONNECTION TO INDIVIDUAL PLUMBING FIXTURES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE EXCEPT IF SHOWN OTHERWISE ON THE DRAWINGS:

SANITARY FIXTURE TYPE	WATER Ø(mm)	MAX. FLOW (L/s)
BIDET	15mm	0.125
SINK	20mm	0.20
HOSE BIB	20mm	0.20
SHOWER	20mm	0.20
KITCHEN SINK	20mm	0.20
WC FLUSH TANK	15mm	0.15

2- WATER MANIFOLD SIZES
COLD AND HOT WATER MANIFOLD SIZES SHALL BE SIZED ON THE TOTAL WATER FLOW DEMAND OF CONNECTED OUTLETS

NOMINAL SIZE INTERNAL	TOTAL WATER FLOW DEMAND (L/s)
½"	0.13
¾"	0.38
1"	0.68
1 ¼"	0.95
1 ½"	1.39

FIREFIGHTING SYSTEM

ABBR.	DESIGNATION
FP	FIRE PIPE
	FIRE PUMP
HRC-01	HOSE REEL CABINET DOUBLE DOOR RECESSED TYPE

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PROJECT: Wadi Musa Plaza
ADDRESS: Wadi Musa, JORDAN

STATUS: TENDER

NOTES:

ISSUE	DATE	AMENDMENT	CHECKED

DRAWN: ENG.Z.ABDEEN | NORTH | SCALE: N.T.S.
CHECKED: ENG.Z.ABDEEN | APPROVED: ENG.S.AL-KURDI

DRAWING TITLE: MECHANICAL GENERAL LEGEND & NOTES
SHEET NUMBER: M0GS02-GNRL-LGND-R00 | ISSUE: – | DATE: JUL 2023

SEWAGE MANHOLES SCHEDULE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
										COVER			
MN REF.	DRAIN TYPE	DRAIN OUTLET DIA. (mm)	COVER LEVEL (m)	INVERT LEVEL (m)	BASE LEVEL (m)	CHAMBER TYPE	MH CONST. TYPE	MANHOLE SIZE (mm)	APPROXIMATE DEPTH (m)	COVER SIZE (mm)	COVER TYPE	COVER SEAL	BEARING TYPE
SMH-01	1	160mm	1031.10	1030.5000	1030.35	1	1	Ø600	0.60	Ø600	1	2	3
SMH-02	1	160mm	1030.20	1029.6000	1029.45	1	1	Ø600	0.60	Ø600	1	2	3
SMH-03	1	160mm	1028.56	1027.9600	1027.81	1	1	Ø600	0.60	Ø600	1	2	3
SMH-04	1	160mm	1027.06	1026.4600	1026.31	1	1	Ø600	0.60	Ø600	1	2	3
SMH-05	1	160mm	1026.46	1025.8600	1025.71	1	1	Ø600	0.60	Ø600	1	2	3
SMH-06	1	160mm	1026.16	1025.5600	1025.41	1	1	Ø600	0.60	Ø600	1	2	3
SMH-07	1	160mm	1025.86	1025.2600	1025.11	1	1	Ø600	0.60	Ø600	1	2	3
SMH-08	1	160mm	1025.86	1025.2600	1025.11	1	1	Ø600	0.60	Ø600	1	2	3
SMH-09	1	160mm	1025.58	1024.9800	1024.83	1	1	Ø600	0.60	Ø600	1	2	3
SMH-10	1	160mm	1030.60	1030.0000	1029.85	1	1	Ø600	0.60	Ø600	1	2	3
SMH-11	1	160mm	1029.00	1028.4000	1028.25	1	1	Ø600	0.60	Ø600	1	2	3
SMH-12	1	160mm	1027.40	1026.8000	1026.65	1	1	Ø600	0.60	Ø600	1	2	3
SMH-13	1	160mm	1026.65	1026.0500	1025.90	1	1	Ø600	0.60	Ø600	1	2	3
SMH-14	1	160mm	1026.03	1025.4300	1025.28	1	1	Ø600	0.60	Ø600	1	2	3
SMH-15	1	160mm	1025.63	1025.0300	1024.88	1	1	Ø600	0.60	Ø600	1	2	3
SMH-16	1	160mm	1025.43	1024.8300	1024.68	1	1	Ø600	0.60	Ø600	1	2	3
SMH-17	1	160mm	1025.33	1024.7300	1024.58	1	1	Ø600	0.60	Ø600	1	2	3
SMH-18	1	160mm	1025.00	1024.4000	1024.25	1	1	Ø600	0.60	Ø600	1	2	3
SMH-19	1	160mm	1025.00	1023.98	1023.83	1	1	Ø900	1.02	Ø600	1	2	3
SMH-20	1	160mm	1025.00	1023.59	1023.44	1	1	Ø900	1.41	Ø600	1	2	3
SMH-21	1	160mm	1025.00	1023.27	1023.12	1	1	Ø1200	1.73	Ø900	1	2	3
SMH-22	1	160mm	1022.00	1021.4000	1021.25	1	1	Ø600	0.60	Ø600	1	2	3
SMH-23	1	160mm	1016.00	1015.4000	1015.25	1	1	Ø600	0.60	Ø600	1	2	3
SMH-24	1	160mm	1009.10	1008.5000	1008.35	1	1	Ø600	0.60	Ø600	1	2	3
SMH-25	1	160mm	1006.00	1005.4000	1005.25	1	1	Ø600	0.60	Ø600	1	2	3
SMH-26	1	160mm	1002.30	1001.7000	1001.5500	1	1	Ø600	0.60	Ø600	1	2	3

DRAIN TYPE COL 2:
1.FOUL WATER
2.RAIN WATER

CHAMBER TYPE COL 7:
1.CONCRETE CHANNEL
2.UPVC CHANNEL

MH CONSTRUCTION TYPE COL 8:
1.INSITU CONCRETE
2.PRE-CAST CONCRETE RING

COVER TYPE COL 12:
1. GALVANIZED STEEL RECESSED WITH FLOOR FINISH MATCHING SURROUNDING
2. CAST IRON
3. 6mm GALVANIZED STEEL,CHECKERED PLATE

COVER SEAL COL 13:
1.SINGLE SEAL
2.DOUBLE SEAL

BEARING TYPE CO 14
1. LIGHT
2. MEDIUM
3. HEAVY

RAINWATER MANHOLES SCHEDULE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
										COVER			
MN REF.	DRAIN TYPE	DRAIN OUTLET DIA. (mm)	COVER LEVEL (m)	INVERT LEVEL (m)	BASE LEVEL (m)	CHAMBER TYPE	MH CONST. TYPE	MANHOLE SIZE (mm)	APPROXIMATE DEPTH (m)	COVER SIZE (mm)	COVER TYPE	COVER SEAL	BEARING TYPE
RMH-01	1	160mm	1008.62	1008.0200	1007.87	1	1	Ø600	0.60	Ø600	1	2	3
RMH-02	1	160mm	1008.24	1007.6400	1007.49	1	1	Ø600	0.60	Ø600	1	2	3
RMH-03	1	160mm	1007.47	1006.8700	1006.72	1	1	Ø600	0.60	Ø600	1	2	3
RMH-04	1	160mm	1006.71	1006.1100	1005.96	1	1	Ø600	0.60	Ø600	1	2	3
RMH-05	1	160mm	1006.33	1005.7300	1005.58	1	1	Ø600	0.60	Ø600	1	2	3
RMH-06	1	160mm	1005.95	1005.3500	1005.20	1	1	Ø600	0.60	Ø600	1	2	3
RMH-07	1	160mm	1009.35	1008.7500	1008.60	1	1	Ø600	0.60	Ø600	1	2	3
RMH-08	1	160mm	1009.65	1008.6300	1008.48	1	1	Ø900	1.02	Ø600	1	2	3
RMH-09	1	160mm	1009.65	1008.5000	1008.35	1	1	Ø900	1.15	Ø600	1	2	3
RMH-10	1	160mm	1009.90	1008.3200	1008.17	1	1	Ø1200	1.58	Ø900	1	2	3
RMH-11	1	160mm	1005.85	1005.1900	1005.04	1	1	Ø600	0.66	Ø600	1	2	3

DRAIN TYPE COL 2:
1.FOUL WATER
2.RAIN WATER

CHAMBER TYPE COL 7:
1.CONCRETE CHANNEL
2.UPVC CHANNEL

MH CONSTRUCTION TYPE COL 8:
1.INSITU CONCRETE
2.PRE-CAST CONCRETE RING

COVER TYPE COL 12:
1. GALVANIZED STEEL RECESSED WITH FLOOR FINISH MATCHING SURROUNDING
2. CAST IRON
3. 6mm GALVANIZED STEEL,CHECKERED PLATE

COVER SEAL COL 13:
1.SINGLE SEAL
2.DOUBLE SEAL

BEARING TYPE CO 14
1. LIGHT
2. MEDIUM
3. HEAVY

DOMESTIC WATER PUMP SCHEDULE

REF.	DESCRIPTION	LOCATION	FLOW (L/s)	HEAD (m)	ELECTRICAL DATA								QUANTITY			TYPE	PUMP'S MATERIAL			INSTALLATION AND IP RATING	MAXIMUM AMBIENT TEMPERATURE (°C)	MAXIMUM LIQUID TEMPERATURE (°C)	REMARKS
					CONTROL METHOD	MOTOR SPEED (RPM)	MOTOR POWER (kW)	MOTOR EFFICIENCY	MOTOR INSULATION CLASS	PHASE (Ø)	FREQUENCY (Hz)	VOLT (V)	DUTY	STAND BY	TOTAL		CASING / HOUSING	IMPELLER	SHAFT				
IRRP-01	IRRIGATION WATER PUMP	PUMP ROOM	1.50	25.0	CONTROL PANEL	2900	0.7 + 0.7	IE3	F	1	50	230	1	-	1	VARIABLE SPEED PACKAGED VERTICAL MULTISTAGE CENTRIFUGAL BOOSTER PUMP SET	CAST IRON	STAINLESS STEEL	STAINLESS STEEL	OUTDOOR (IP54)	45	40	-WITH PRESSURE VESSEL .CAPACITY IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION -CONTROL PANEL FROM THE SAME MANUFACTURER -WITH BUILT-IN VARIABLE FREQUENCY DRIVE (VFD) -WITH DRY RUN PROTECTION -SELF PRIMING WITH FOOT CHECK VALVE -WITH RAIN WATER CANOPY

NOTES:
* PUMP HEAD IS AN ESTIMATED VALUE, THE CONTRACTOR SHALL UNDERTAKE SYSTEM ACTUAL PRESSURE DROP. REVALIDATE HEAD OF PUMP AND SIZE PUMP MOTOR ACCURATELY ACCORDING TO APPROVED SHOP DRAWINGS.
** THE POWER CONSUMPTION IN (kW) SHOWN IN THE DESIGN SCHEDULES IS BASED ON PRELIMINARY EQUIPMENT SELECTION, ACTUAL POWER CONSUMPTION AND NOMINAL RATING SHOULD BE VERIFIED BY THE CONTRACTOR BASED ON FINAL EQUIPMENT SELECTION. ANY VARIANT IN POWER CONSUMPTION RATE SHALL BE CONSIDERED AT NO ADDITIONAL COST.

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ADDRESS: Wadi Musa, JORDAN

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STATUS: TENDER

NOTES

ISSUE	DATE	AMENDMENT	CHECKED

DRAWN: ENG.Z.ABDEEN | NORTH | SCALE: 1:800
CHECKED: ENG.Z.ABDEEN | APPROVED: ENG.S.AL-KURDI

DRAWING TITLE: SITE PLAN MECHANICAL SERVICES LAYOUT(OVER ALL)
SHEET NUMBER: MWG03-GNRL-SITE-R00 | ISSUE: – | DATE: JUL 2023

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PROJECT
Wadi Musa Plaza

ADDRESS
Wadi Musa, JORDAN

STATUS
TENDER

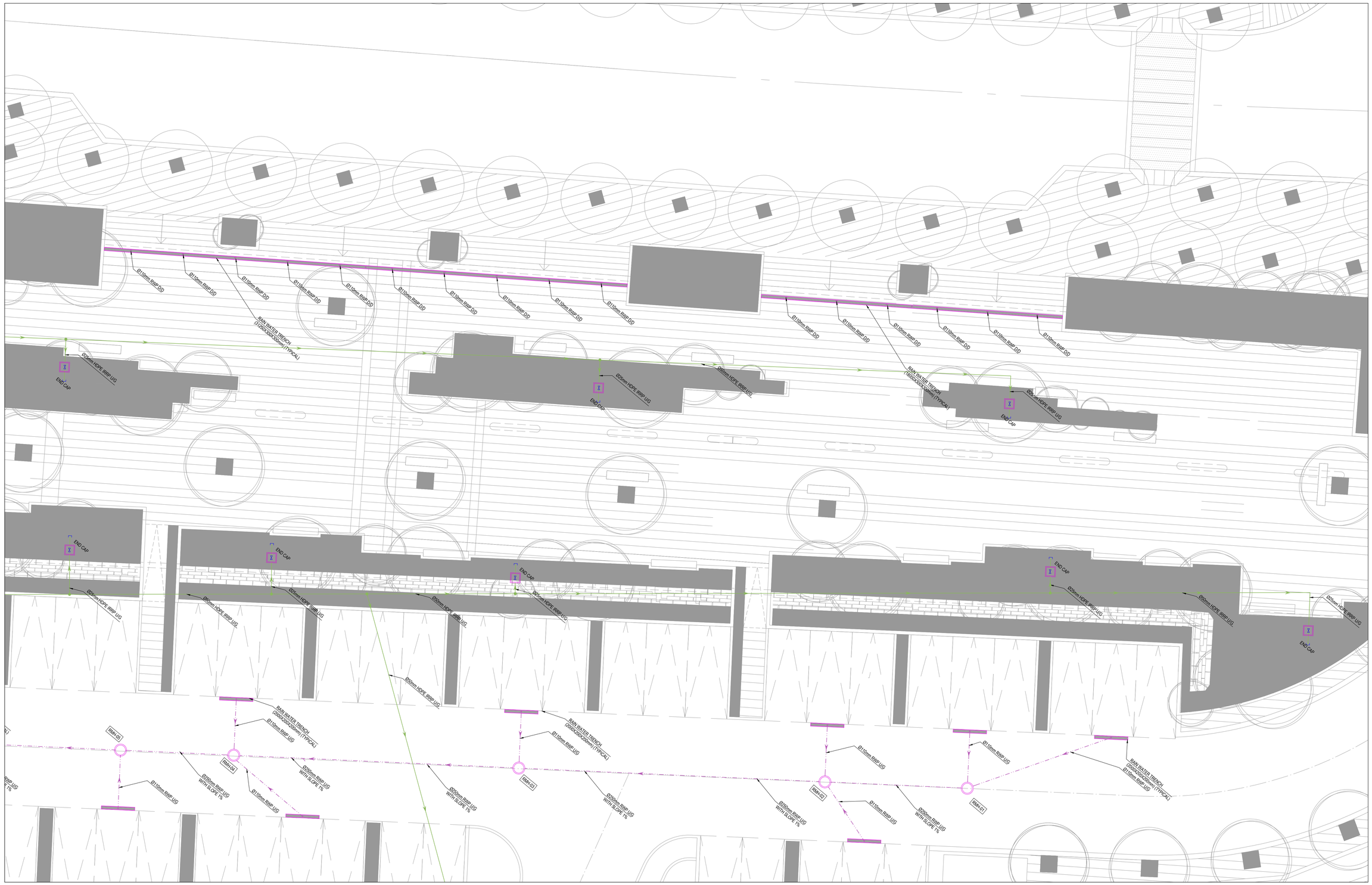
NOTES

ISSUE	DATE	AMENDMENT	CHECKED

DRAWN	NORTH	SCALE
ENG.Z.ABDEEN		1:100
CHECKED	APPROVED	
ENG.Z.ABDEEN	ENG.S.AL-KURDI	

DRAWING TITLE
SITE PLAN MECHANICAL SERVICES LAYOUT(PART-01)

SHEET NUMBER	ISSUE	DATE
MXG04-GNRL-SITE-01-R00	–	JUL 2023



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PROJECT
Wadi Musa Plaza

ADDRESS
Wadi Musa, JORDAN

STATUS
TENDER

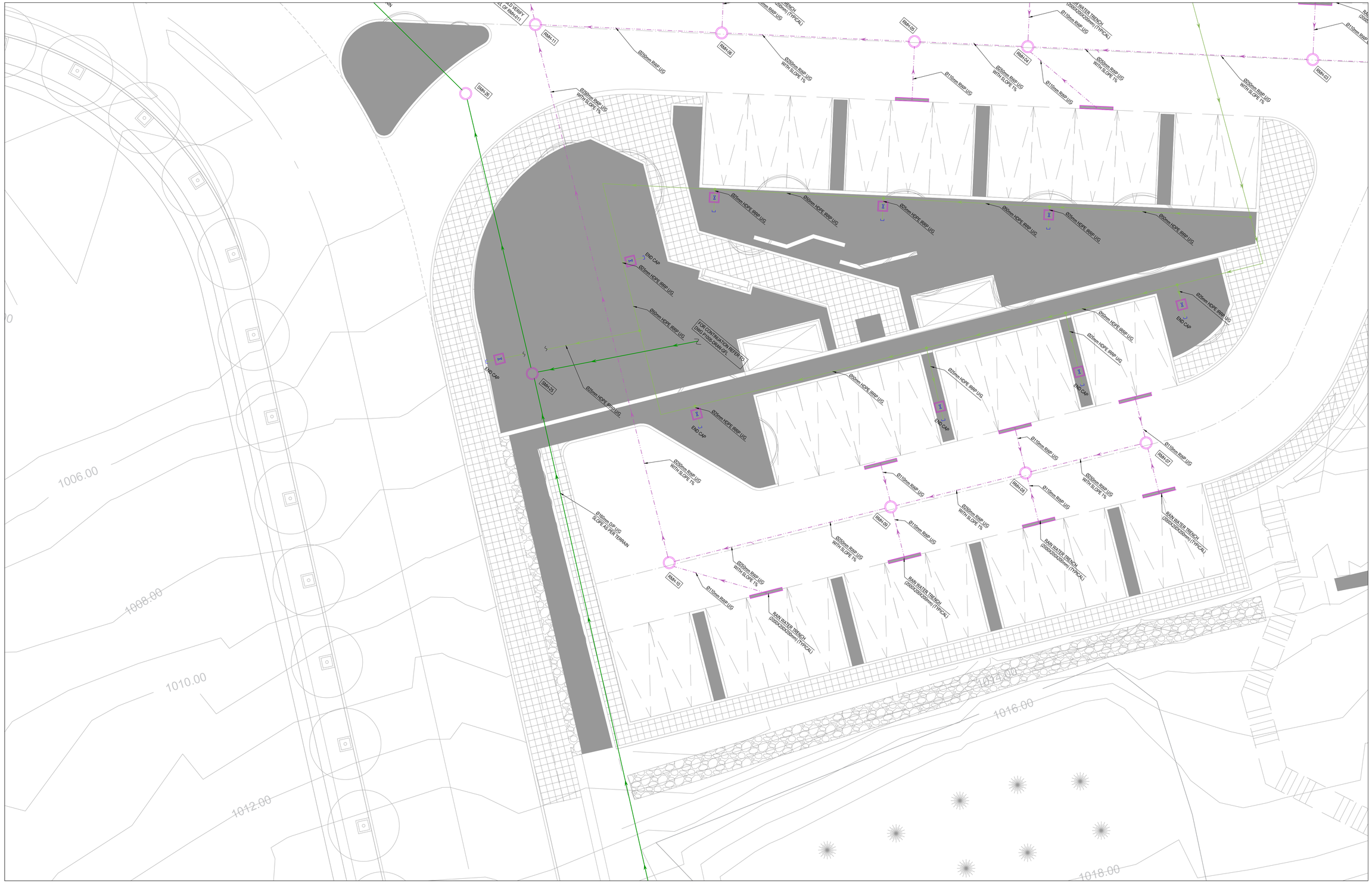
NOTES

ISSUE	DATE	AMENDMENT	CHECKED

DRAWN	NORTH	SCALE
ENG.Z.ABDEEN		1:100
CHECKED	APPROVED	
ENG.Z.ABDEEN	ENG.S.AL-KURDI	

DRAWING TITLE
SITE PLAN MECHANICAL SERVICES LAYOUT(PART-02)

SHEET NUMBER	ISSUE	DATE
M0G05GNRL-SITE-02-R00	–	JUL 2023



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PROJECT
Wadi Musa Plaza

ADDRESS
Wadi Musa, JORDAN

STATUS
TENDER

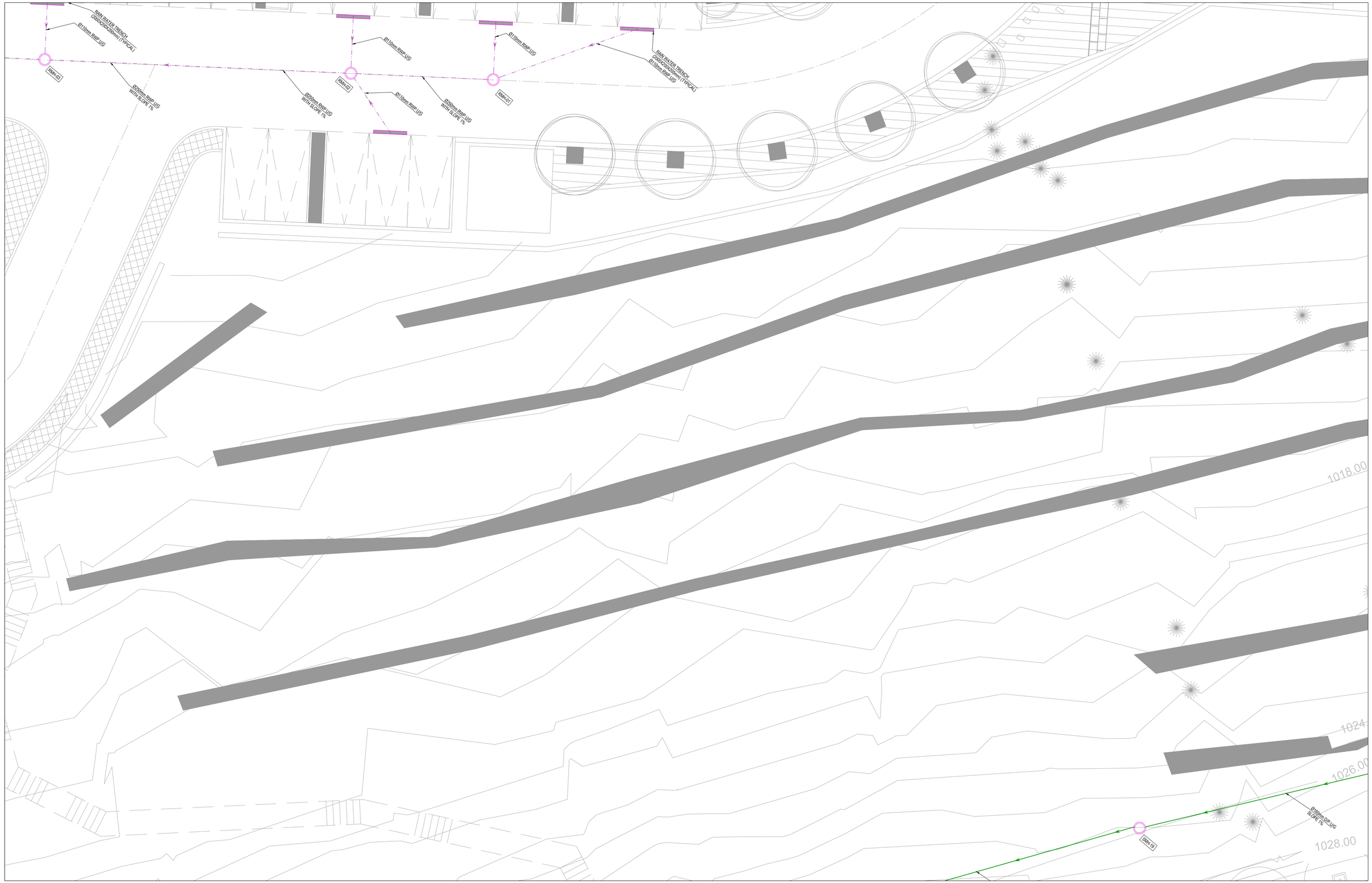
NOTES

ISSUE	DATE	AMENDMENT	CHECKED

DRAWN ENG.Z.ABDEEN | NORTH | SCALE 1:100
CHECKED ENG.Z.ABDEEN | APPROVED ENG.S.AL-KURDI

DRAWING TITLE
SITE PLAN MECHANICAL SERVICES LAYOUT(PART-03)

SHEET NUMBER M0C006-GNRL-SITE-03-R00 | ISSUE — | DATE JUL 2023



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PROJECT
Wadi Musa Plaza

ADDRESS
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STATUS
TENDER

NOTES

ISSUE	DATE	AMENDMENT	CHECKED

DRAWN	NORTH	SCALE
ENG.Z.ABDEEN		1:100

CHECKED	APPROVED
ENG.Z.ABDEEN	ENG.S.AL-KURDI

DRAWING TITLE
SITE PLAN MECHANICAL SERVICES LAYOUT(PART-04)

SHEET NUMBER	ISSUE	DATE
M0G07GNRL-SITE-04-R00	–	JUL 2023

KHAMMASH ARCHITECTS

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PROJECT
Wadi Musa Plaza

ADDRESS
Wadi Musa, JORDAN

STATUS
TENDER

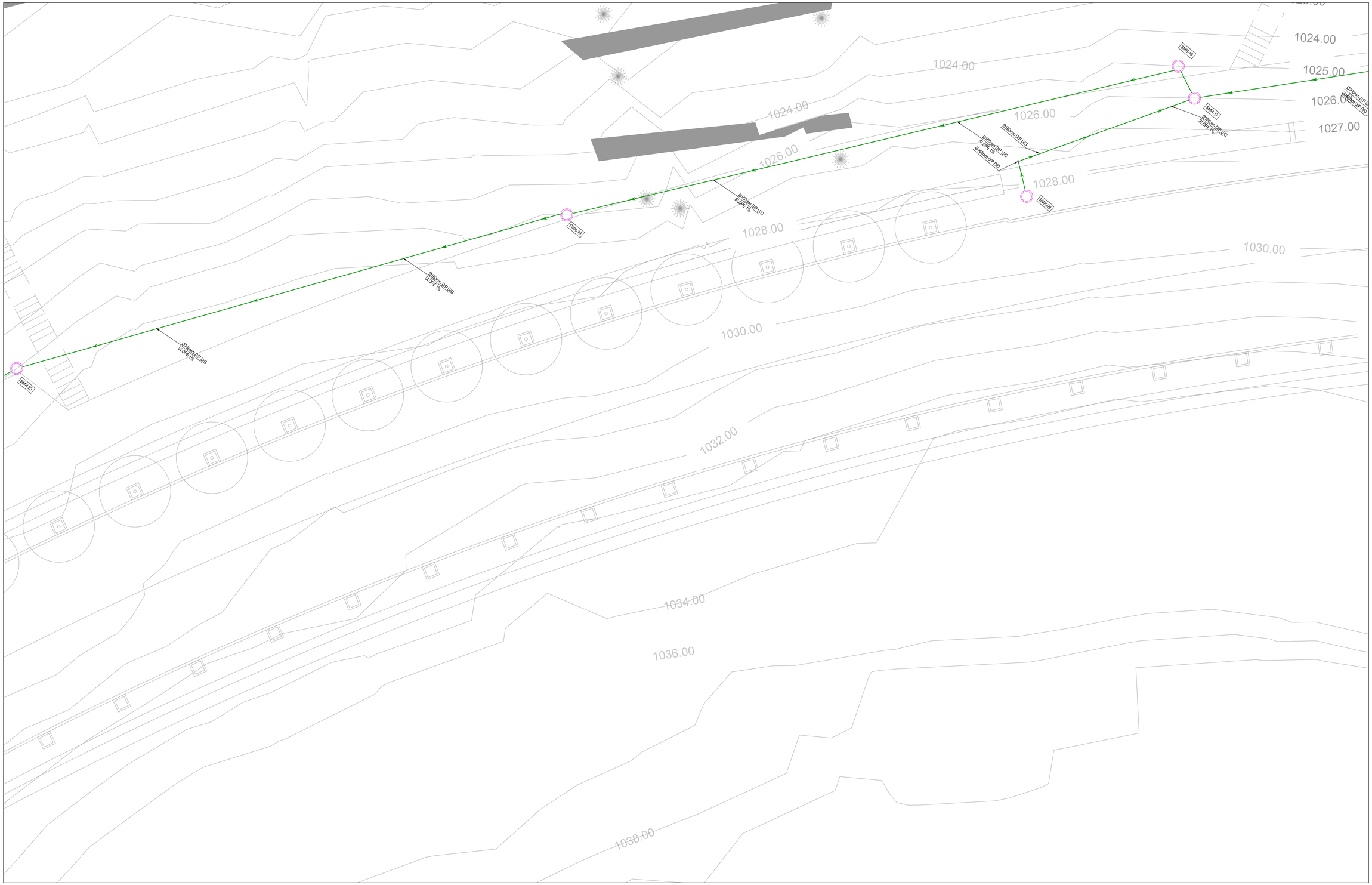
NOTES

ISSUE	DATE	AMENDMENT	CHECKED

DRAWN	NORTH	SCALE
ENG.Z.ABDEEN		1:100
CHECKED	APPROVED	
ENG.Z.ABDEEN	ENG.S.AL-KURDI	

DRAWING TITLE
SITE PLAN MECHANICAL SERVICES LAYOUT(PART-05)

SHEET NUMBER	ISSUE	DATE
M0G08-GNRL-SITE-05-R00	–	JUL 2023



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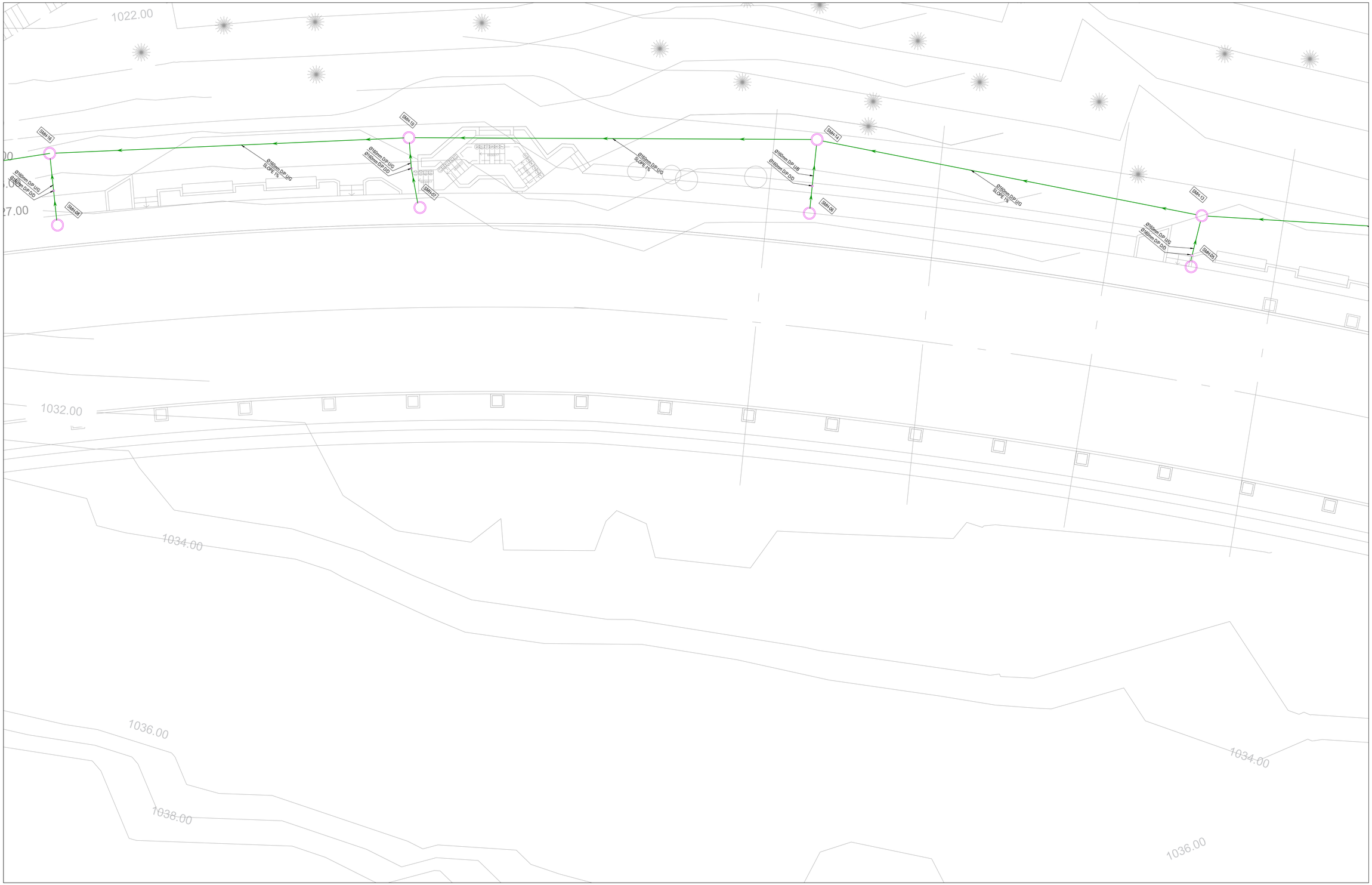
DRAWING TITLE

SITE PLAN MECHANICAL SERVICES LAYOUT(PART-06)

SHEET NUMBER	ISSUE	DATE
M0C09-GNRL-06-SITE-R00	—	JUL 2023



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DRAWING TITLE
SITE PLAN MECHANICAL SERVICES LAYOUT(PART-07)
SHEET NUMBER M0C10-GNRL-07-SITE.R00 | ISSUE — | DATE JUL 2023

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DRAWING TITLE
SITE PLAN MECHANICAL SERVICES LAYOUT(PART-07)

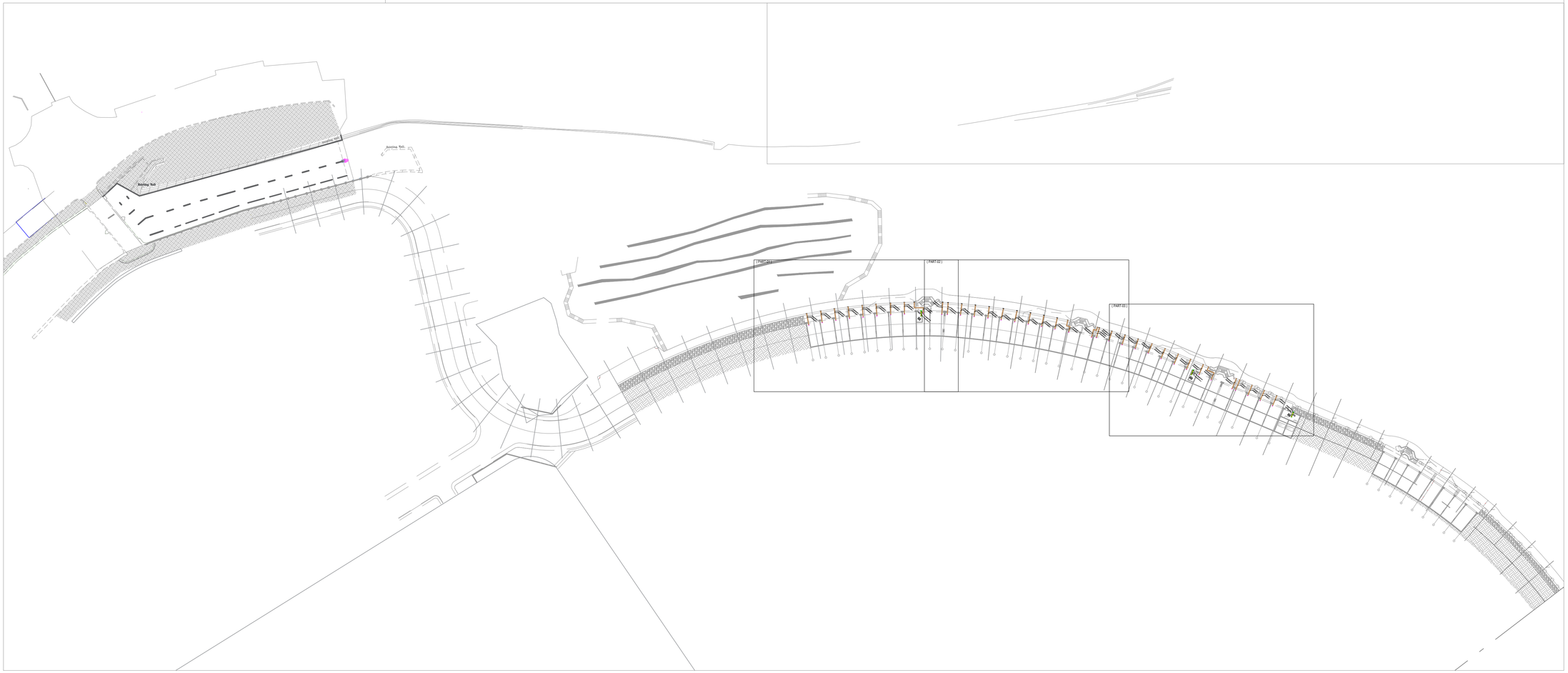
SHEET NUMBER	ISSUE	DATE
M0C10-GNRL-08-SITE-R00	–	JUL 2023

FANS SCHEDULE

REF.	SERVED AREA	LOCATION	AIR FLOW (L/s)	ESTIMATED EXTERNAL STATIC PRESSURE (Pa)	FAN SPEED(S)	ELECTRICAL CHARACTERISTICS						TYPE	TYPE OF DRIVE	SOUND PRESSURE (dBa @ 1.5 m)	FAN EFFICIENCY	FILTERS	INSTALLATION AND IP RATING	OPERATING AIR STREAM TEMPERATURE (°C)	ADDITIONAL REQUIREMENTS
						CONTROL METHOD	POWER (kW)	MOTOR PROTECTION TYPE	VOLT. (V)	PHASE (Ø)	FREQUENCY. (Hz)								
EXF-01	GROUND FLOOR	TOILET	50	60	ONE SPEED	-TIMER SWITCH -PUSH BUTTON	0.10	-	230	1	50	IN LINE MIXED FLOW	DIRECT DRIVE	42	75%	CARBON FILTER	INDOOR (IP45)	50	FACTORY ASSEMBLED FAN SHOULD BE PROVIDED WITH THE FOLLOWINGS: 1- PROVIDE STAINLESS STEEL BIRDS & INSECT SCREEN 2- PROVIDE SPEED REGULATOR 3-PROVIDE BACK DRAFT DAMPER 4- SILENT FAN WITH WITH SOUND ABSORBENT INSULATION HOUSING

NOTES:-

- INTER LOCK ALL FRESH AIR FANS WITH EXHAUST AIR FANS AND SPEED SELECTOR
- THE POWER CONSUMPTION IN (kW) IS BASED ON PRELIMINARY EQUIPMENT SELECTION
- THE ACTUAL POWER CONSUMPTION AND NOMINAL RATING SHOULD BE VERIFIED BY THE CONTRACTOR BASED ON FINAL EQUIPMENT SELECTION
- CONTRACTOR SHALL VERIFY THE FINAL REQUIRED EXTERNAL STATIC PRESSURE BASED ON FINAL FAN SELECTION AND FINAL DUCT ROUT



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DRAWING TITLE
GROUND FLOOR HVAC SYSTEM LAYOUT (OVER ALL)

SHEET NUMBER M1001-HVAC-GFL-R00 | ISSUE | DATE – JUL 2023

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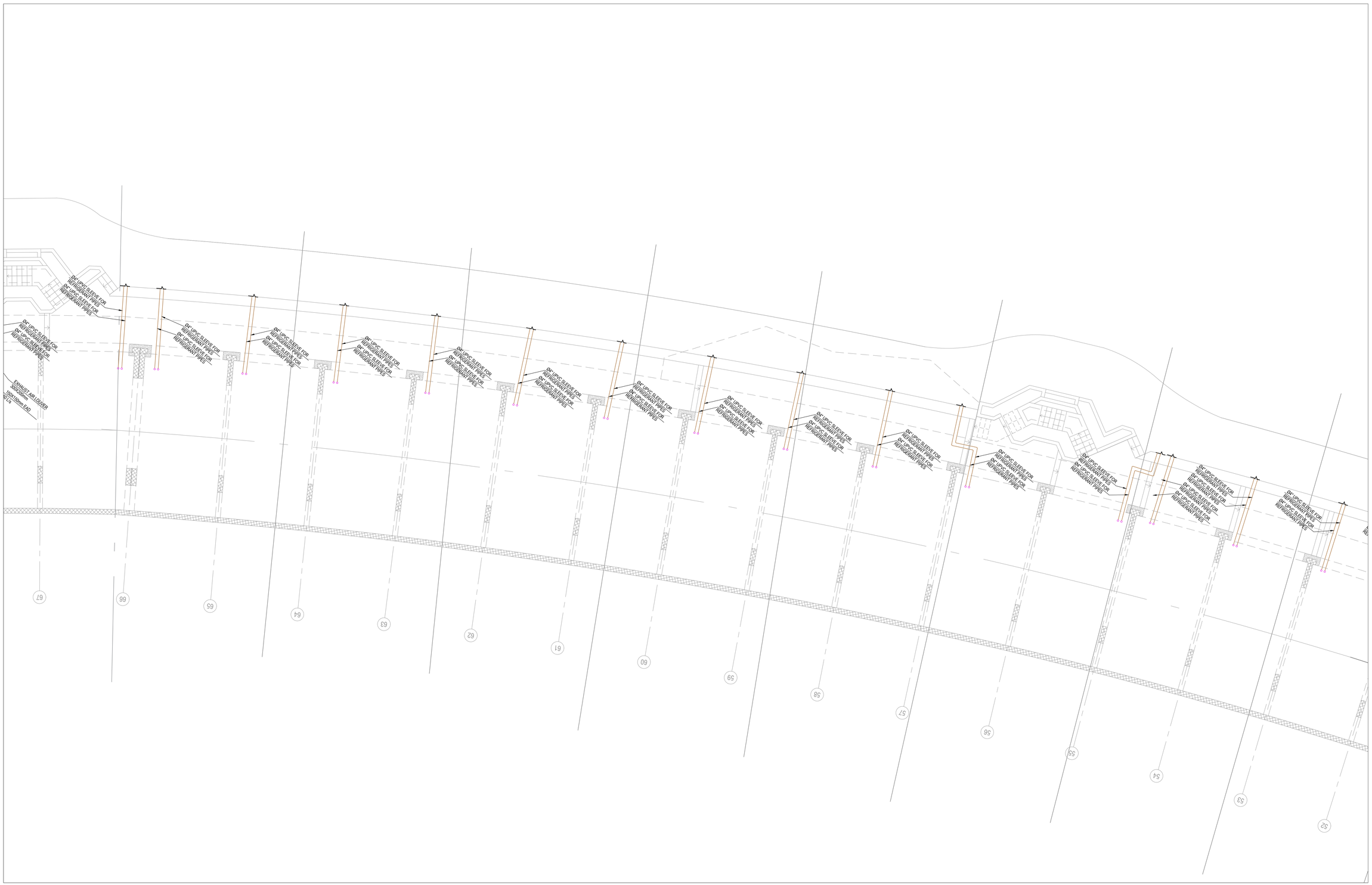
DRAWING TITLE: GROUND FLOOR HVAC SYSTEM LAYOUT (PART-01)

SHEET NUMBER: M1002-HVAC-GFL-R00 | ISSUE | DATE: – JUL 2023



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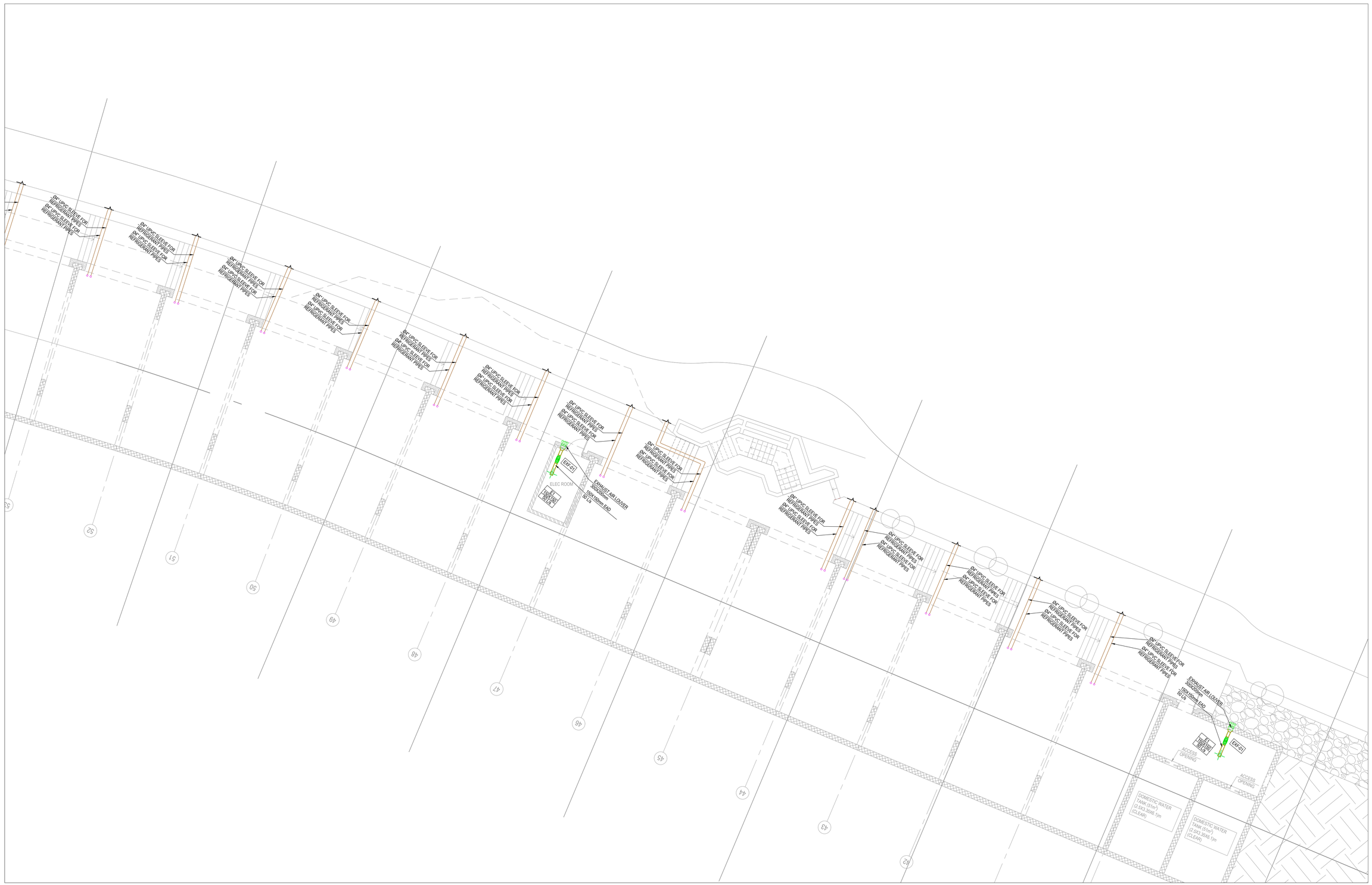
DRAWING TITLE
GROUND FLOOR HVAC SYSTEM LAYOUT (PART-02)

SHEET NUMBER	ISSUE	DATE
M1003-HVAC-GFL-R00	–	JUL 2023



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DRAWING TITLE
GROUND FLOOR HVAC SYSTEM LAYOUT (PART-03)

SHEET NUMBER	ISSUE	DATE
M1004-HVAC-GFL-R00	–	JUL 2023

SUBMERSIBLE PUMP SCHEDULE

REF.	SERVED AREA, SYSTEM OR EQUIPMENT	LOCATION	FLOW (L/s)	HEAD (m)	ELECTRICAL DATA									QUANTITY			TYPE	PUMP'S MATERIAL			INSTALLATION AND IP RATING	MAXIMUM AMBIENT TEMPERATURE (°C)	MAXIMUM LIQUID TEMPERATURE (°C)	REMARKS
					CONTROL METHOD	MOTOR SPEED (RPM)	MOTOR POWER (kW)	MOTOR PROTECTION TYPE	MOTOR EFFICIENCY	MOTOR INSULATION CLASS	PHASE (Ø)	FREQUENCY (Hz)	VOLT. (V)	DUTY	STAND BY	TOTAL		CASING	IMPELLER	SHAFT				
SMP-01	SEWAGE SYSTEM MECHANICAL ROOM	SITE (MECHANICAL ROOM)	1.00	7.0	CONTROL PANEL	2900	1.5	THERMAL SWITCH	IE3	F	1	50	230	1	1	2	CONSTANT SPEED PACKAGED SUBMERSIBLE PUMP SET	CAST IRON	STAINLESS STEEL	STAINLESS STEEL	SUBMERSIBLE (IP68)	40	40	FACTORY ASSEMBLED PUMP SHOULD BE PROVIDED WITH THE FOLLOWINGS FROM THE SAME MANUFACTURER: - OPEN TYPE MULTI VANE IMPELLER -AUTO-COUPLING SYSTEM -STAINLESS STEEL SLIDING RAILS -STAINLESS STEEL CHAINS -4 NO'S LEVEL SWITCHES -EXPLOSION PROOF MOTOR -CONTROL PANEL

NOTES:
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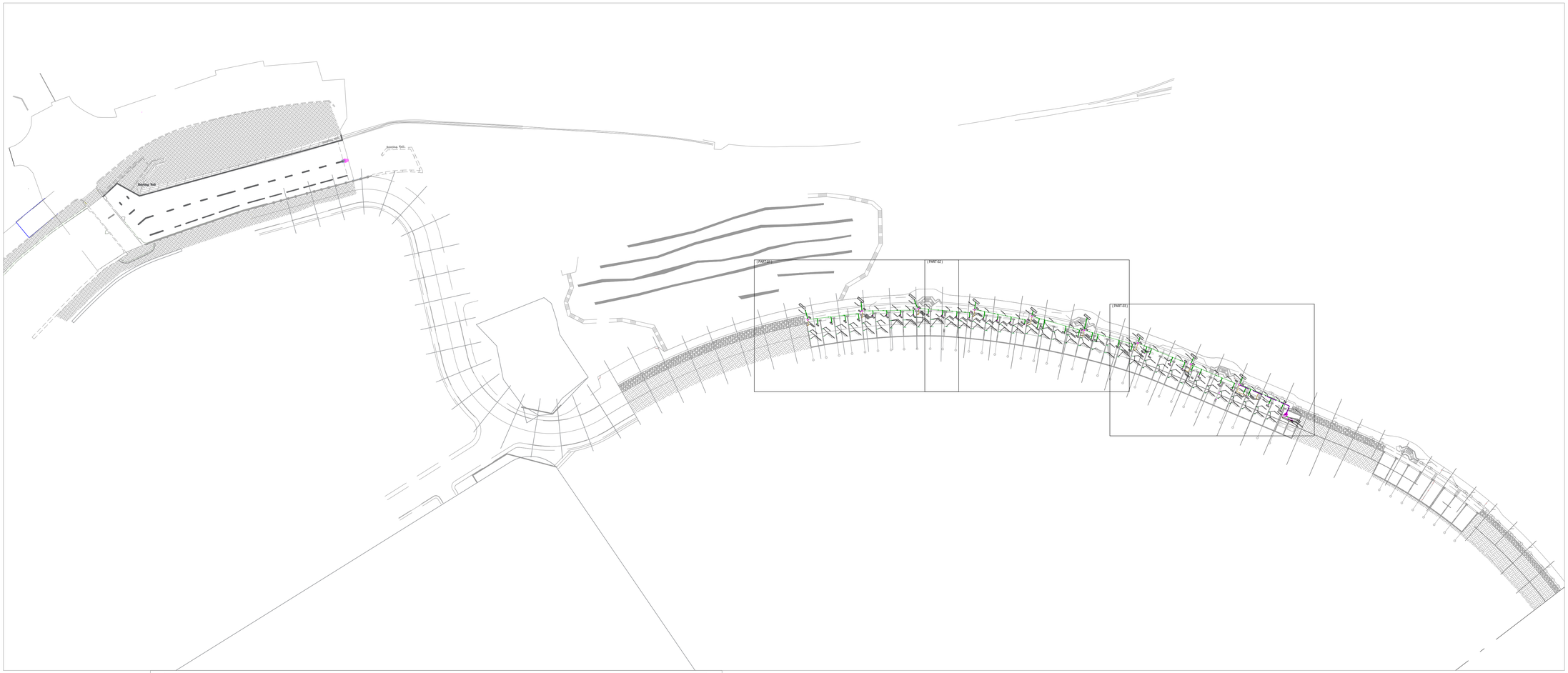
** THE POWER CONSUMPTION IN (kW) SHOWN IN THE DESIGN SCHEDULES IS BASED ON PRELIMINARY EQUIPMENT SELECTION. ACTUAL POWER CONSUMPTION AND NOMINAL RATING SHOULD BE VERIFIED BY THE CONTRACTOR BASED ON FINAL EQUIPMENT SELECTION. ANY VARIANT IN POWER CONSUMPTION RATE SHALL BE CONSIDERED AT NO ADDITIONAL COST.



SEWAGE MANHOLES SCHEDULE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
										COVER			
MN REF.	DRAIN TYPE	DRAIN OUTLET DIA. (mm)	COVER LEVEL (m)	INVERT LEVEL (m)	BASE LEVEL (m)	CHAMBER TYPE	MH CONST. TYPE	MANHOLE SIZE (mm)	APPROXIMATE DEPTH (m)	COVER SIZE (mm)	COVER TYPE	COVER SEAL	BEARING TYPE
SMH-01	1	160mm	1031.10	1030.5000	1030.35	1	1	Ø600	0.60	Ø600	1	2	3
SMH-02	1	160mm	1030.20	1029.6000	1029.45	1	1	Ø600	0.60	Ø600	1	2	3
SMH-03	1	160mm	1028.56	1027.9600	1027.81	1	1	Ø600	0.60	Ø600	1	2	3
SMH-04	1	160mm	1027.06	1026.4600	1026.31	1	1	Ø600	0.60	Ø600	1	2	3
SMH-05	1	160mm	1026.46	1025.8600	1025.71	1	1	Ø600	0.60	Ø600	1	2	3
SMH-06	1	160mm	1026.16	1025.5600	1025.41	1	1	Ø600	0.60	Ø600	1	2	3
SMH-07	1	160mm	1025.86	1025.2600	1025.11	1	1	Ø600	0.60	Ø600	1	2	3
SMH-08	1	160mm	1025.86	1025.2600	1025.11	1	1	Ø600	0.60	Ø600	1	2	3
SMH-09	1	160mm	1025.56	1024.9600	1024.81	1	1	Ø600	0.60	Ø600	1	2	3

DRAIN TYPE COL 2:
1.FOUL WATER
2.RAIN WATER

CHAMBER TYPE COL 7:
1.CONCRETE CHANNEL
2.UPVC CHANNEL

MH CONSTRUCTION TYPE COL 8:
1.INSITU CONCRETE
2.PRE-CAST CONCRETE RING

COVER TYPE COL 12:
1. GALVANIZED STEEL RECESSED WITH FLOOR FINISH MATCHING SURROUNDING
2. CAST IRON
3. 6mm GALVANIZED STEEL,CHECKERED PLATE

COVER SEAL COL 13:
1.SINGLE SEAL
2.DOUBLE SEAL

BEARING TYPE CO 14
1. LIGHT
2. MEDIUM
3. HEAVY

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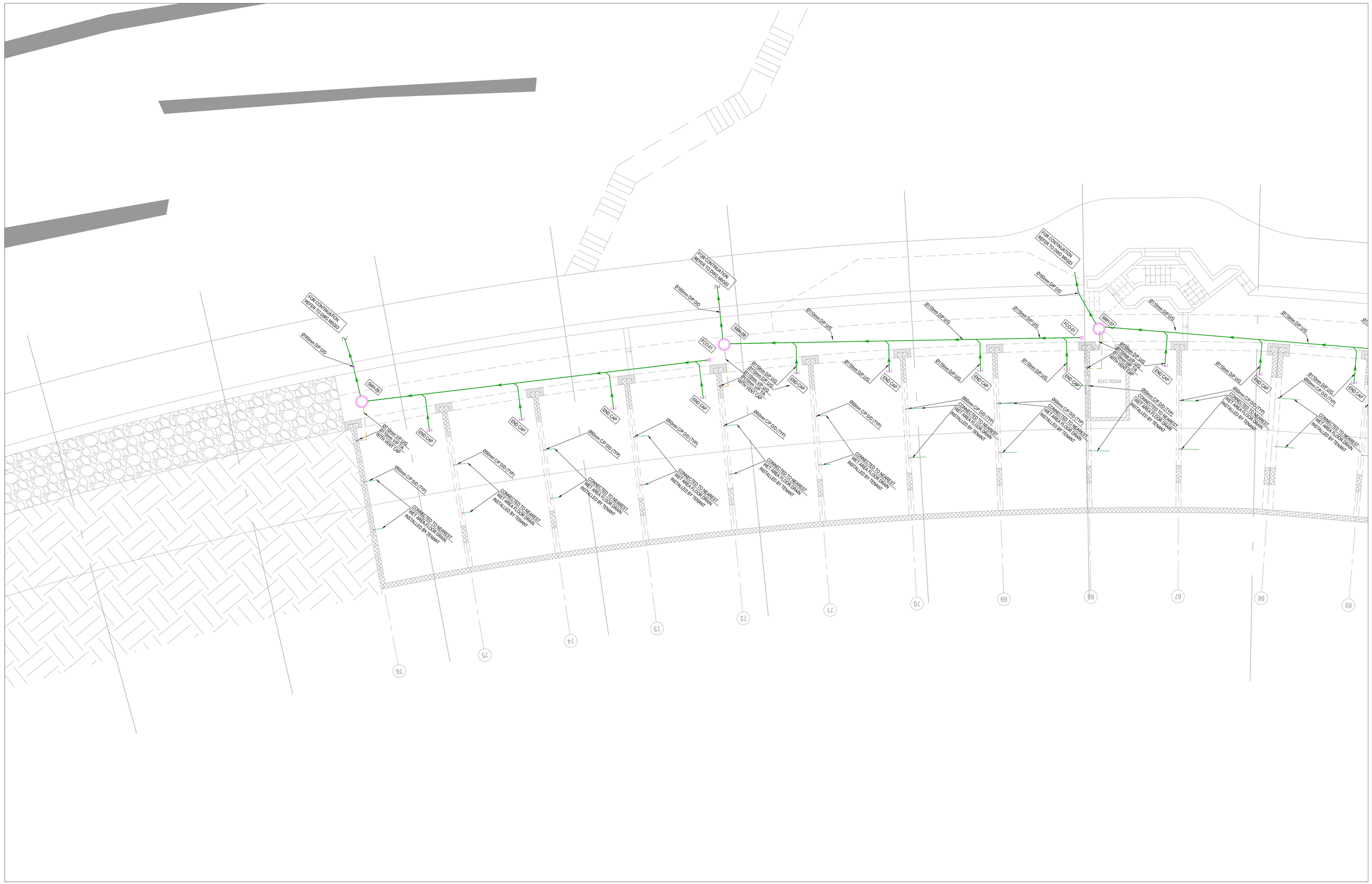
DRAWING TITLE
GROUND FLOOR DRAINAGE SYSTEM LAYOUT (OVER ALL)

SHEET NUMBER: P1001-DRAIN-GFL-R00 | ISSUE | DATE: – JUL 2023



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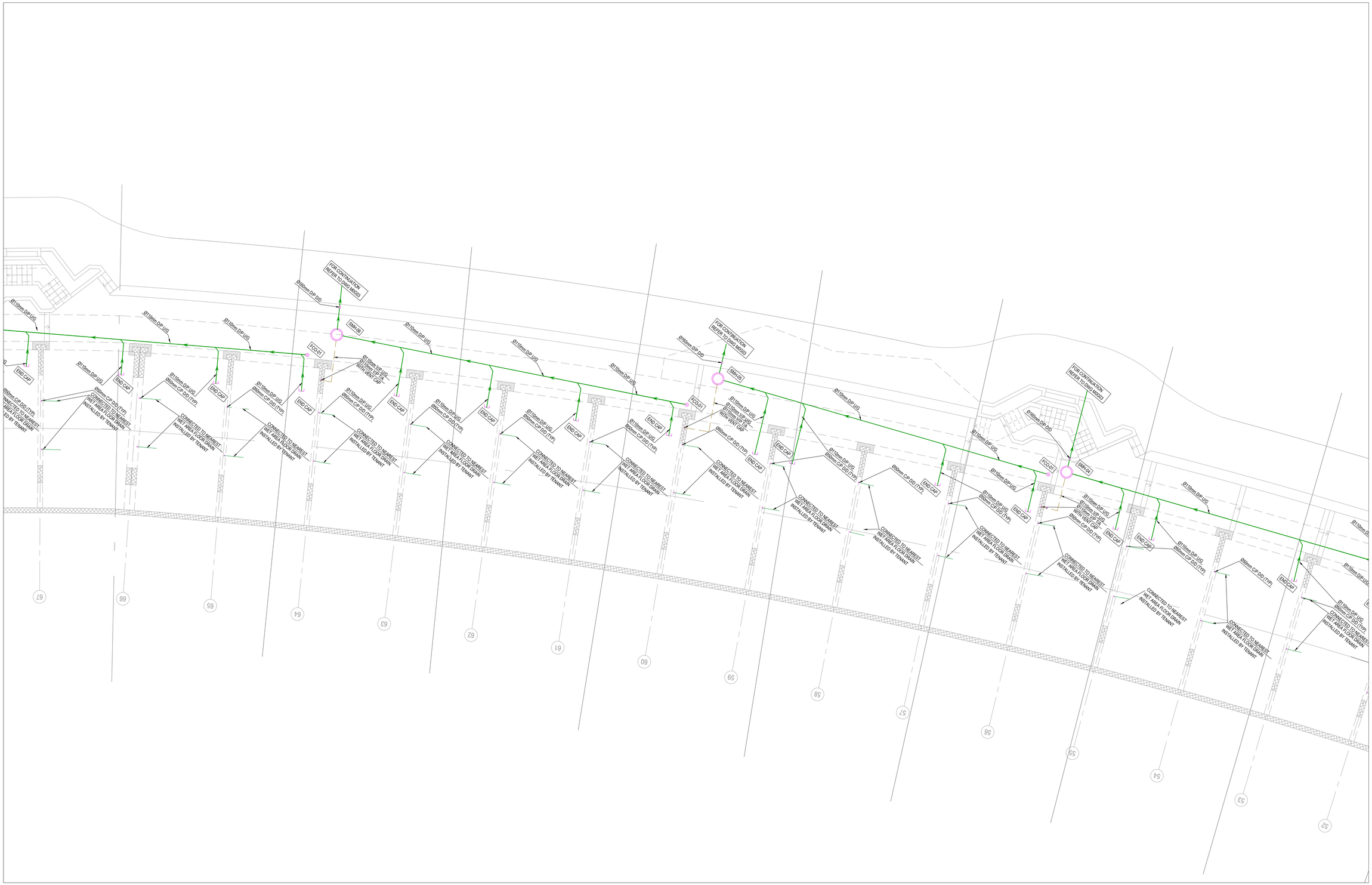
DRAWING TITLE
GROUND FLOOR DRAINAGE SYSTEM LAYOUT (PART-01)

SHEET NUMBER	ISSUE	DATE
P1002-DRAN-GFL-R00	–	JUL 2023



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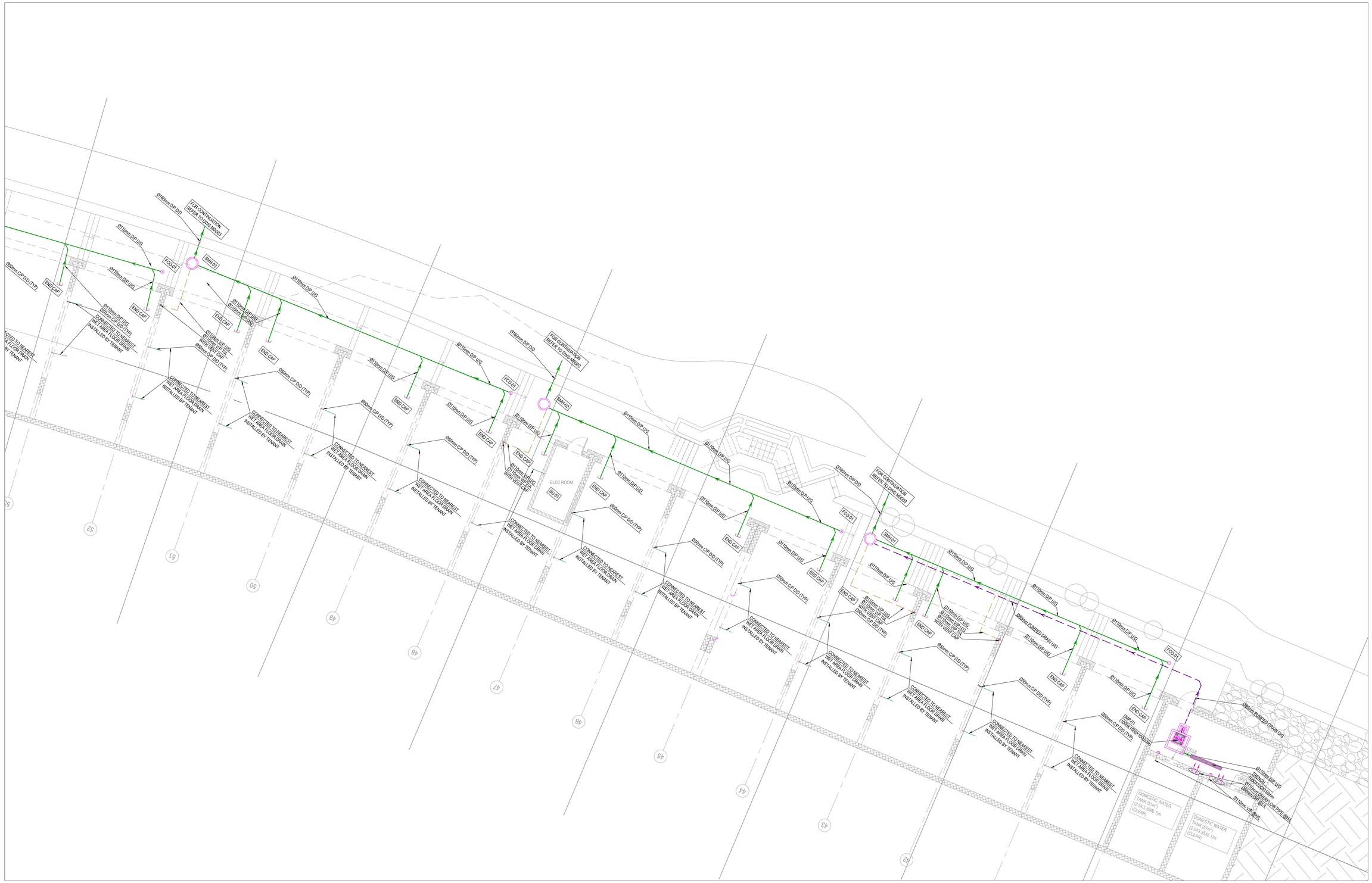
DRAWING TITLE
GROUND FLOOR DRAINAGE SYSTEM LAYOUT (PART-02)

SHEET NUMBER	ISSUE	DATE
P1003-DRAN-GFL-R00	–	JUL 2023



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DRAWING TITLE
GROUND FLOOR DRAINAGE SYSTEM LAYOUT (PART-03)
SHEET NUMBER P1004-DRAN-GFL-R00 | ISSUE — | DATE JUL 2023

FIRE EXTINGUISHERS SCHEDULE		
REF.	TYPE	CAPACITY
FE-01	ABC DRY POWDER FIRE EXTINGUISHER	6 kg
FE-02	CARBON DIOXIDE FIRE EXTINGUISHER	5 kg

DOMESTIC WATER PUMP SCHEDULE

REF.	DESCRIPTION	LOCATION	FLOW (L/s)	HEAD (m)	ELECTRICAL DATA									QUANTITY			TYPE	PUMPS MATERIAL			INSTALLATION AND IP RATING	MAXIMUM AMBIENT TEMPERATURE (°C)	MAXIMUM LIQUID TEMPERATURE (°C)	REMARKS
					CONTROL METHOD	MOTOR SPEED (RPM)	MOTOR POWER (kW)	MOTOR PROTECTION TYPE	MOTOR EFFICIENCY	MOTOR INSULATION CLASS	PHASE (Ø)	FREQUENCY (Hz)	VOLT (V)	DUTY	STAND BY	TOTAL		CASING / HOUSING	IMPELLER	SHAFT				
DCWP-01	DOMESTIC COLD WATER BOOSTER PUMP	MECHANICAL ROOM	2.89	30.0	-	2900	1.7 + 1.7	-	IE3	F	1	50	400	2	-	2	VARIABLE SPEED PACKAGED MULTISTAGE CENTRIFUGAL BOOSTER PUMP	CAST IRON	STAINLESS STEEL	STAINLESS STEEL	INDOOR (IP44)	40	40	-WITH PRESSURE VESSEL. CAPACITY IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION -WITH BUILT-IN VARIABLE FREQUENCY DRIVE (VFD) -WITH DRY RUN PROTECTION -SELF PRIMING WITH FOOT CHECK VALVE

NOTES:
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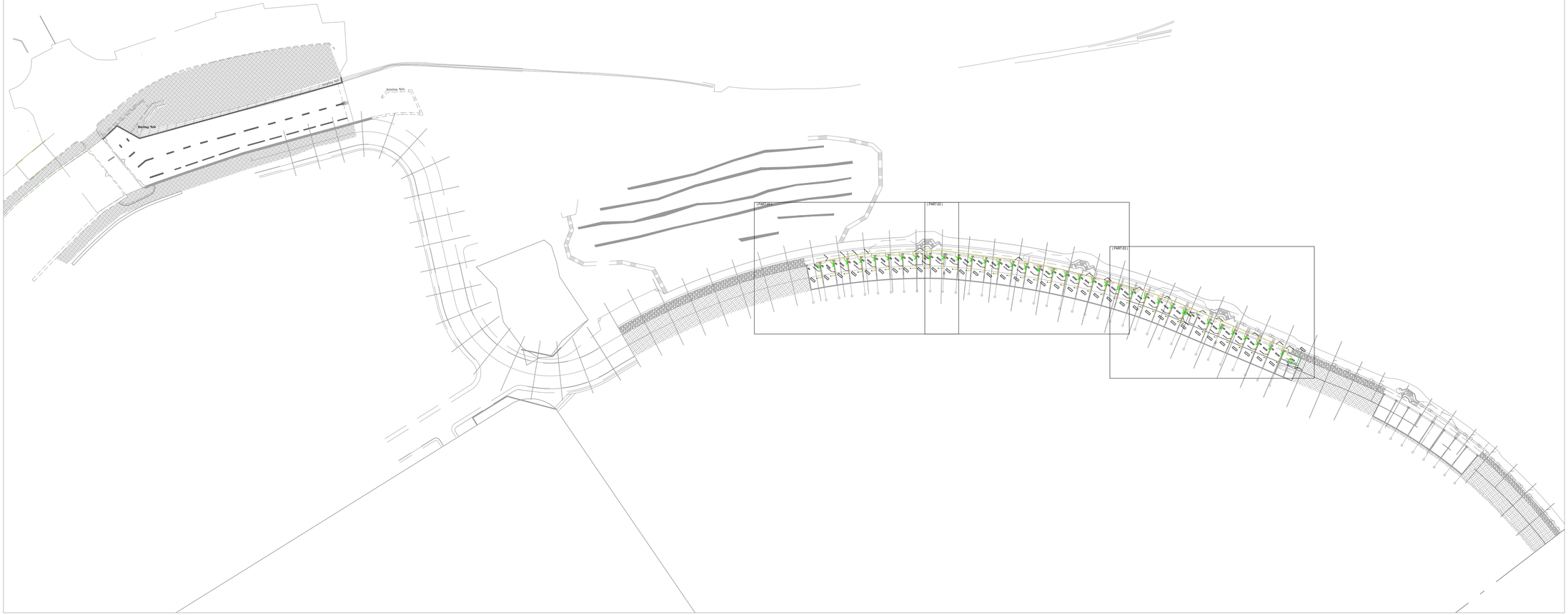

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DRAWING TITLE
GROUND FLOOR WATER SYSTEM LAYOUT (OVER ALL)

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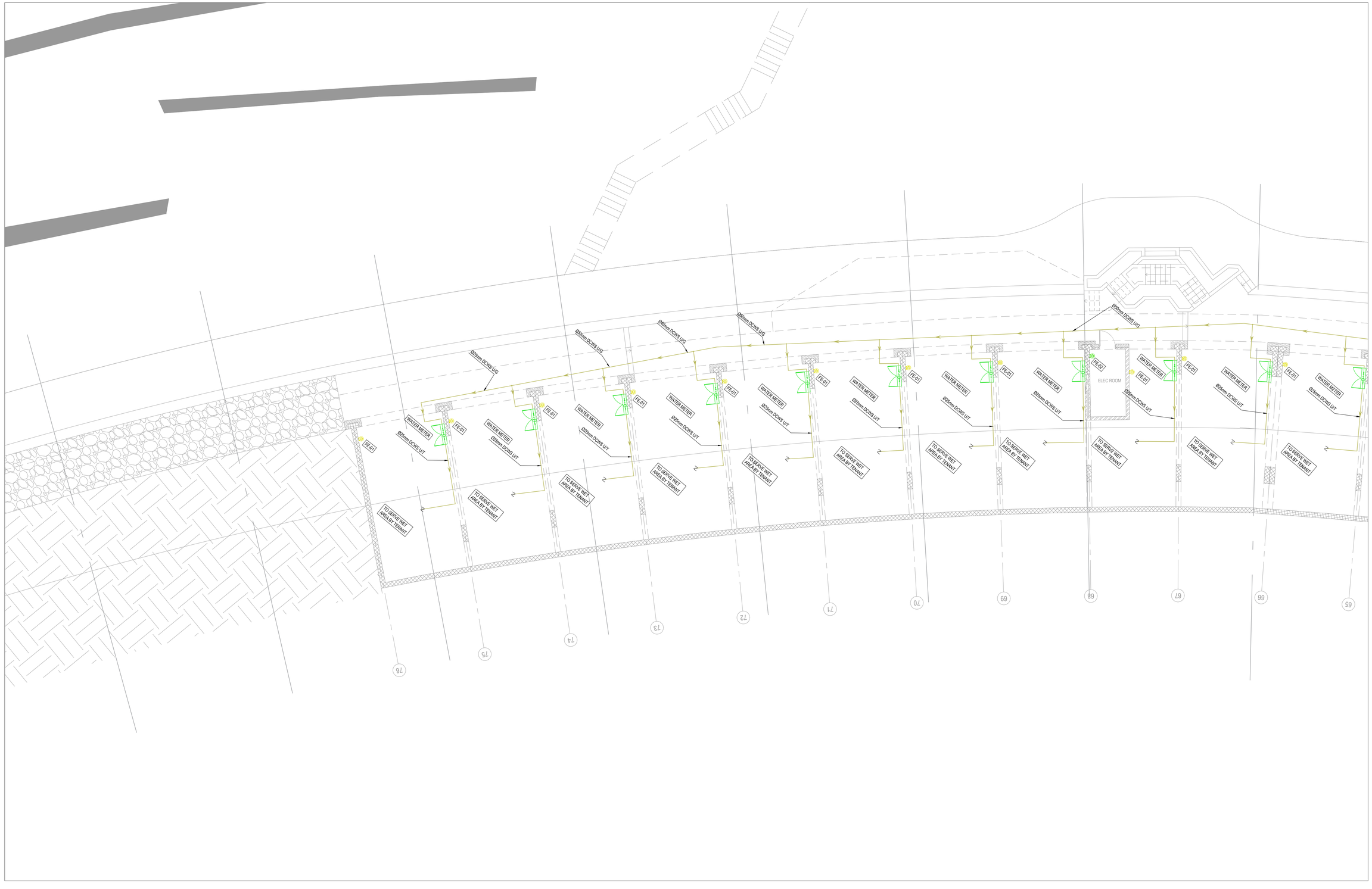

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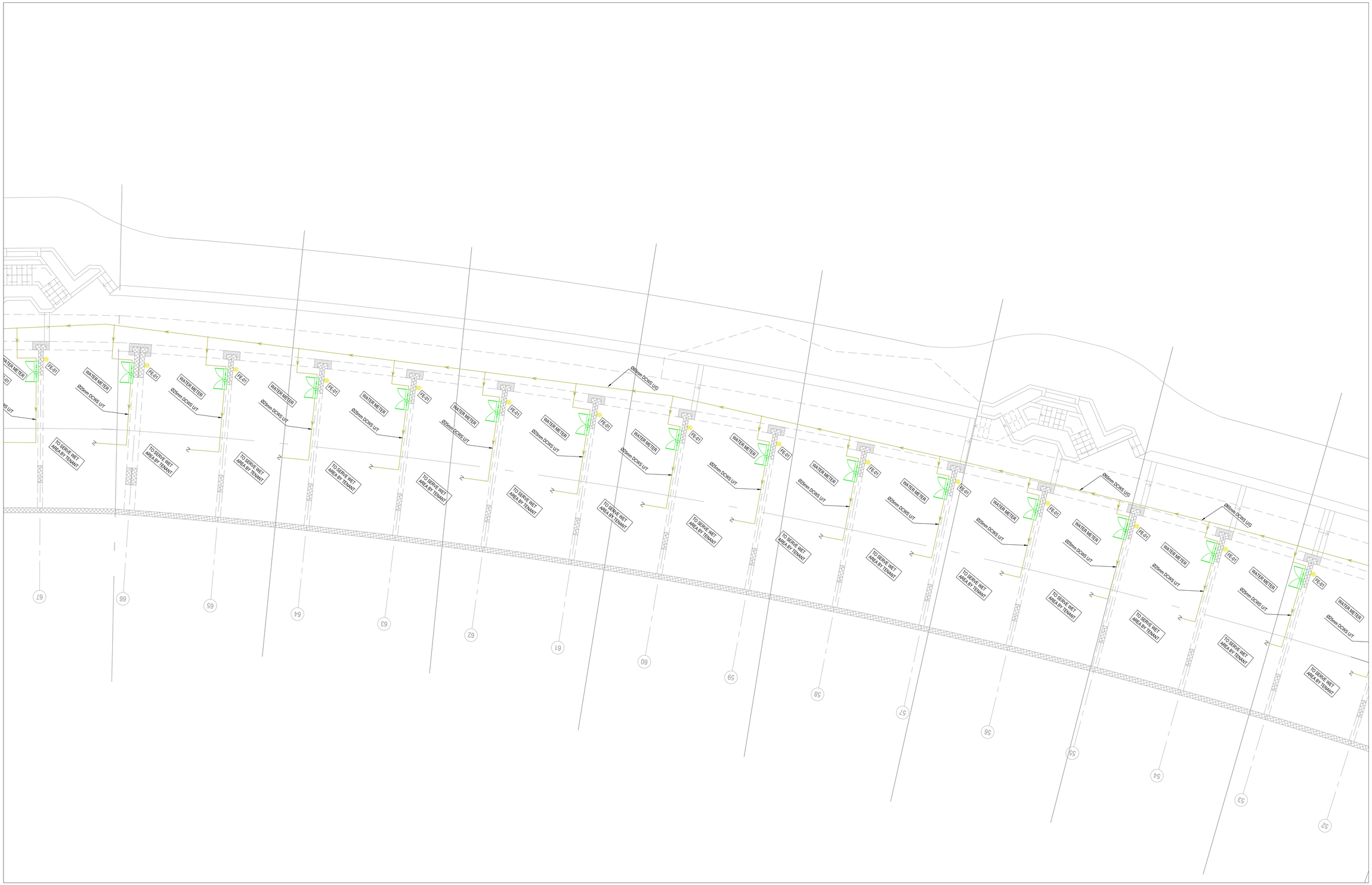
DRAWING TITLE
GROUND FLOOR WATER SYSTEM LAYOUT (PART-01)

SHEET NUMBER: P2002-WATR-GFL-R00 | ISSUE | DATE: – JUL 2023



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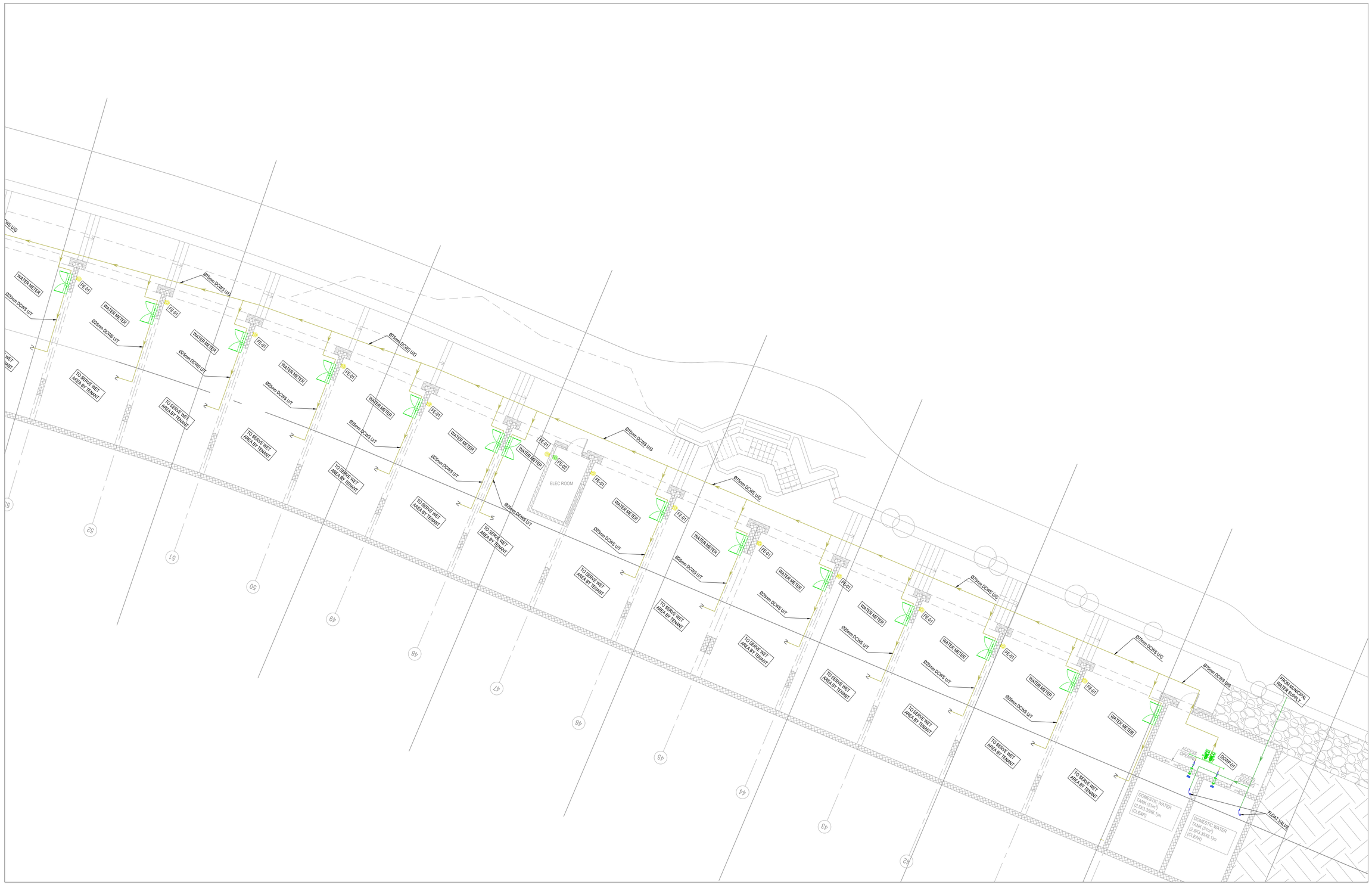
DRAWING TITLE
GROUND FLOOR WATER SYSTEM LAYOUT (PART-02)

SHEET NUMBER: P2003-WATR-GFL-R00 | ISSUE | DATE: – JUL 2023



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PROJECT
Wadi Musa Plaza

ADDRESS
Wadi Musa, JORDAN

STATUS
TENDER

NOTES

ISSUE	DATE	AMENDMENT	CHECKED

DRAWN: ENG.Z.ABDEEN | NORTH | SCALE: 1:100
CHECKED: ENG.Z.ABDEEN | APPROVED: ENG.S.AL-KURDI

DRAWING TITLE
GROUND FLOOR WATER SYSTEM LAYOUT (PART-03)

SHEET NUMBER: P2004-WATR-GFL-R00 | ISSUE | DATE: — JUL 2023

FANS SCHEDULE

REF.	SERVED AREA	LOCATION	AIR FLOW (L/s)	ESTIMATED EXTERNAL STATIC PRESSURE (Pa)	FAN SPEED(S)	ELECTRICAL CHARACTERISTICS						TYPE	TYPE OF DRIVE	SOUND PRESSURE (dBa @ 1.5 m)	FAN EFFICIENCY	FILTERS	INSTALLATION AND IP RATING	OPERATING AIR STREAM TEMPERATURE (°C)	ADDITIONAL REQUIREMENTS
						CONTROL METHOD	POWER (kW)	MOTOR PROTECTION TYPE	VOLT. (V)	PHASE (Ø)	FREQUENCY. (Hz)								
EXF-02	GROUND FLOOR	TOILET	345	150	ONE SPEED	-TIMER SWITCH -PUSH BUTTON	0.30	-	230	1	50	IN LINE MIXED FLOW	DIRECT DRIVE	42	75%	CARBON FILTER	INDOOR (IP45)	50	FACTORY ASSEMBLED FAN SHOULD BE PROVIDED WITH THE FOLLOWINGS: 1- PROVIDE STAINLESS STEEL BIRDS & INSECT SCREEN 2- PROVIDE SPEED REGULATOR 3-PROVIDE BACK DRAFT DAMPER 4- SILENT FAN WITH WITH SOUND ABSORBENT INSULATION HOUSING

NOTES:-

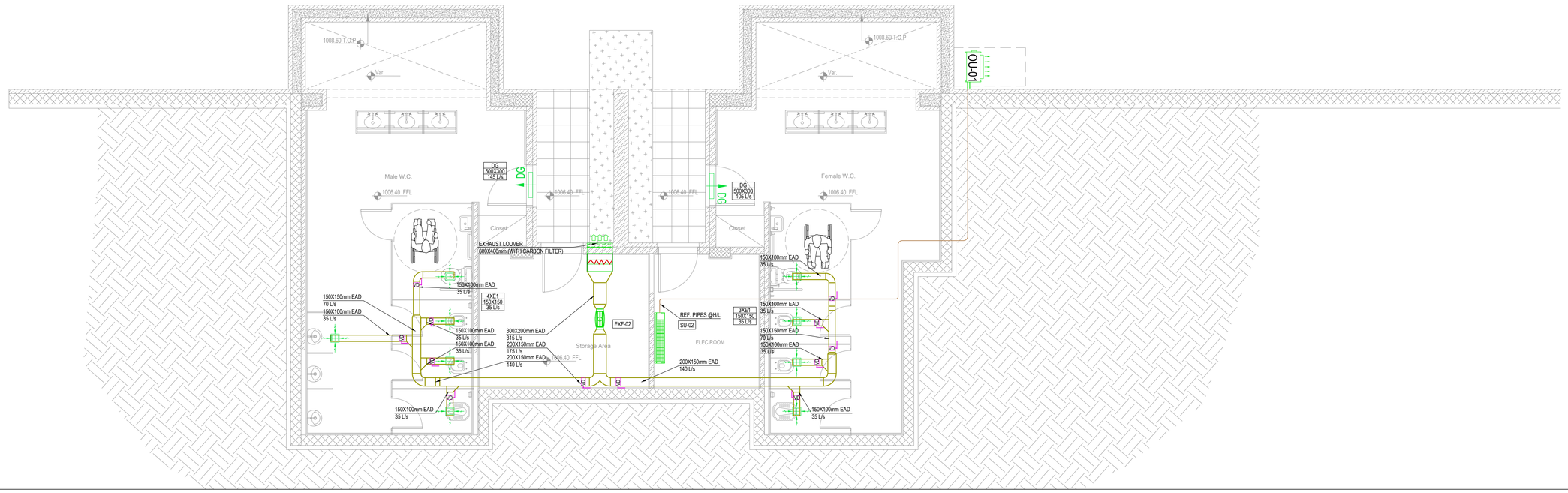
- INTER LOCK ALL FRESH AIR FANS WITH EXHAUST AIR FANS AND SPEED SELECTOR
- THE POWER CONSUMPTION IN (kW) IS BASED ON PRELIMINARY EQUIPMENT SELECTION
- THE ACTUAL POWER CONSUMPTION AND NOMINAL RATING SHOULD BE VERIFIED BY THE CONTRACTOR BASED ON FINAL EQUIPMENT SELECTION
- CONTRACTOR SHALL VERIFY THE FINAL REQUIRED EXTERNAL STATIC PRESSURE BASED ON FINAL FAN SELECTION AND FINAL DUCT ROUT

SPLIT UNIT COOLING ONLY SCHEDULE (INVERTER TYPE)

REF.	TYPE	INDOOR UNIT AIR FLOW (L/s)	ESTIMATED REQUIRED EXTERNAL STATIC PRESSURE (Pa)	REQUIRED INDOOR AIR TEMPERATURE (DB/WB)	MINIMUM REQUIRED COOLING CAPACITY AT AMBIENT TEMP.* (kW)		VOLT. (V)	PHASE (Ø)	FREQUENCY. (HZ)	ELECTRIC INPUT POWER (kW)	INDOOR UNIT MAXIMUM SOUND PRESSURE LEVEL AT HIGH SPEED (dBa @ 1.5 m)	OUTDOOR UNIT MAXIMUM SOUND PRESSURE LEVEL	ADDITIONAL REQUIREMENTS
					TOTAL	SENSIBLE							
SU-02	WALL MOUNTED	-	-	23.0/16.0	3.20	2.70	230	1	50	2.60	37	50	-

* SELECTION SHALL BE BASED ON:

1- AMBIENT TEMPERATURE = 37°C DB
2- SYSTEM SHALL WITHSTAND OPERATING TEMPERATURE UP TO 43°C DB
3- REFRIGERANT TYPE = R134A OR R407C OR R410A
4- ALL WALL MOUNTED UNITS TO BE CONTROLLED BY REMOTE CONTROLLER WITH BACKLIGHT FEATURE
5- SELECTED INDOOR AND OUTDOOR UNITS SENSIBLE AND TOTAL COOLING CAPACITIES SHALL ACHIEVE THE REQUIRED SENSIBLE AND TOTAL COOLING CAPACITIES BASED ON ACTUAL COPPER PIPE RUN BETWEEN INDOOR & OUTDOOR UNITS ACCORDING TO MANUFACTURER CORRECTION FACTOR
6- THE POWER CONSUMPTION IN (kW) SHOWN IN THE DESIGN SCHEDULES IS BASED ON PRELIMINARY EQUIPMENT SELECTION, ACTUAL POWER CONSUMPTION AND NOMINAL RATING SHOULD BE VERIFIED BY THE CONTRACTOR BASED ON FINAL EQUIPMENT SELECTION. ANY VARIANT IN POWER CONSUMPTION RATE SHALL BE CONSIDERED AT NO ADDITIONAL COST.



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DRAWING TITLE
GROUND FLOOR HVAC SYSTEM LAYOUT
SHEET NUMBER: M1005-HVAC-GFL-R00 | ISSUE | DATE: — JUL 2023

SEWAGE MANHOLES SCHEDULE

1	2	3	4	5	6	7	8	9	10	11	12	13	14
										COVER			
MN REF.	DRAIN TYPE	DRAIN OUTLET DIA. (mm)	COVER LEVEL (m)	INVERT LEVEL (m)	BASE LEVEL (m)	CHAMBER TYPE	MH CONST. TYPE	MANHOLE SIZE (mm)	APPROXIMATE DEPTH (m)	COVER SIZE (mm)	COVER TYPE	COVER SEAL	BEARING TYPE
SMH-01	1	160mm	1008.6000	1008.0000	1007.85	1	1	Ø600	0.60	Ø600	1	2	3
SMH-02	1	160mm	1008.6000	1007.8500	1007.70	1	1	Ø600	0.75	Ø600	1	2	3

DRAIN TYPE COL 2:
1.FOUL WATER
2.RAIN WATER

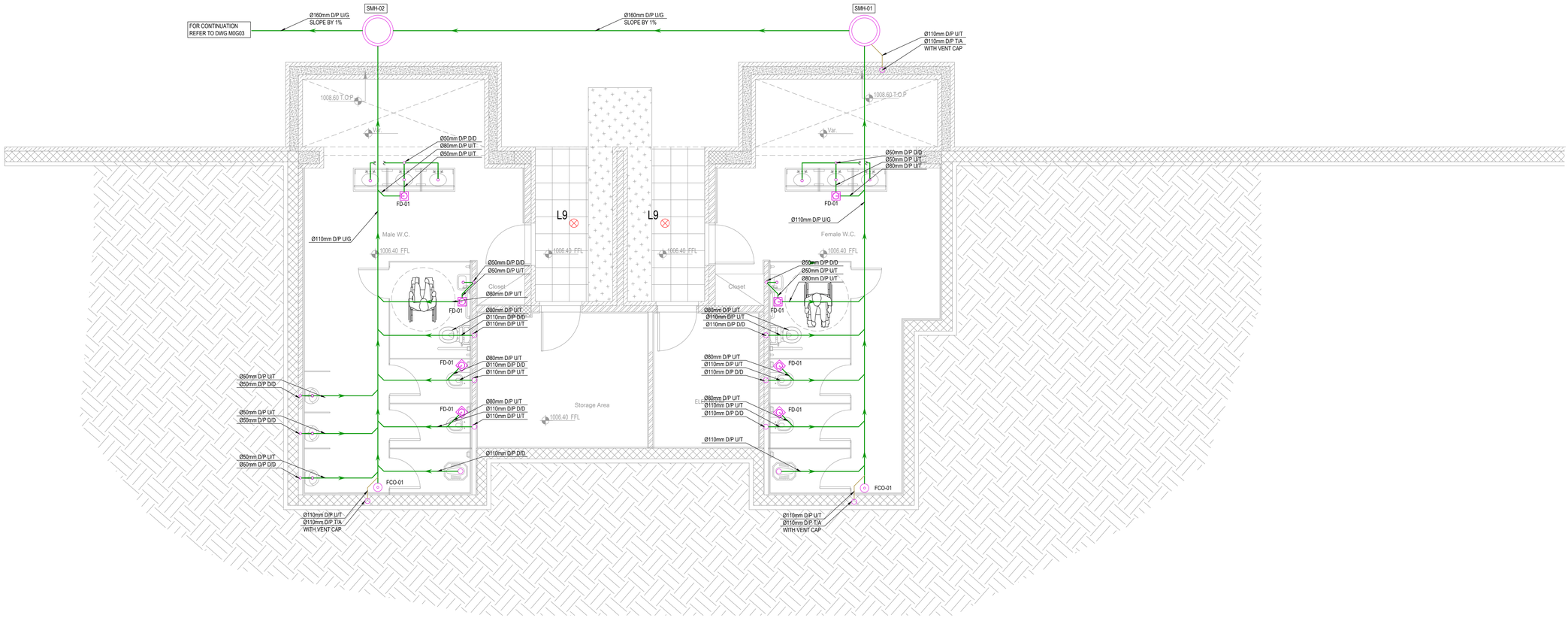
CHAMBER TYPE COL 7:
1.CONCRETE CHANNEL
2.UPVC CHANNEL

MH CONSTRUCTION TYPE COL 8:
1.INSITU CONCRETE
2.PRE-CAST CONCRETE RING

COVER TYPE COL 12:
1. GALVANIZED STEEL RECESSED WITH FLOOR FINISH MATCHING SURROUNDING
2. CAST IRON
3. 6mm GALVANIZED STEEL,CHECKERED PLATE

COVER SEAL COL 13:
1.SINGLE SEAL
2.DOUBLE SEAL

BEARING TYPE CO 14
1. LIGHT
2. MEDIUM
3. HEAVY



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DRAWING TITLE
GROUND FLOOR DRAINAGE SYSTEM LAYOUT
SHEET NUMBER: P1005-DRAN-GFL-R00 | ISSUE | DATE: — JUL 2023

DOMESTIC WATER PUMP SCHEDULE

REF.	DESCRIPTION	LOCATION	FLOW (L/s)	HEAD (m)	ELECTRICAL DATA									QUANTITY			TYPE	PUMP'S MATERIAL			INSTALLATION AND IP RATING	MAXIMUM AMBIENT TEMPERATURE (°C)	MAXIMUM LIQUID TEMPERATURE (°C)	REMARKS
					CONTROL METHOD	MOTOR SPEED (RPM)	MOTOR POWER (kW)	MOTOR PROTECTION TYPE	MOTOR EFFICIENCY	MOTOR INSULATION CLASS	PHASE (Ø)	FREQUENCY (Hz)	VOLT (V)	DUTY	STAND BY	TOTAL		CASING / HOUSING	IMPELLER	SHAFT				
DCWP-01	DOMESTIC COLD WATER BOOSTER PUMP	MECHANICAL ROOM	2.20	30.0	-	2900	1.5 + 1.5	-	IE3	F	1	50	400	2	-	2	VARIABLE SPEED PACKAGED MULTISTAGE CENTRIFUGAL BOOSTER PUMP	CAST IRON	STAINLESS STEEL	STAINLESS STEEL	INDOOR (IP44)	40	40	-WITH PRESSURE VESSEL .CAPACITY IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION -WITH BUILT-IN VARIABLE FREQUENCY DRIVE (VFD) -WITH DRY RUN PROTECTION -SELF PRIMING WITH FOOT CHECK VALVE

NOTES:
* PUMP HEAD IS AN ESTIMATED VALUE, THE CONTRACTOR SHALL UNDERTAKE SYSTEM ACTUAL PRESSURE DROP, REVALIDATE HEAD OF PUMP AND SIZE PUMP MOTOR ACCURATELY ACCORDING TO APPROVED SHOP DRAWINGS.
** THE POWER CONSUMPTION IN (kW) SHOWN IN THE DESIGN SCHEDULES IS BASED ON PRELIMINARY EQUIPMENT SELECTION, ACTUAL POWER CONSUMPTION AND NOMINAL RATING SHOULD BE VERIFIED BY THE CONTRACTOR BASED ON FINAL EQUIPMENT SELECTION. ANY VARIANT IN POWER CONSUMPTION RATE SHALL BE CONSIDERED AT NO ADDITIONAL COST.

FIRE EXTINGUISHERS SCHEDULE

REF.	TYPE	CAPACITY
FE-01	ABC DRY POWDER FIRE EXTINGUISHER	6 kg
FE-02	CARBON DIOXIDE FIRE EXTINGUISHER	5 kg

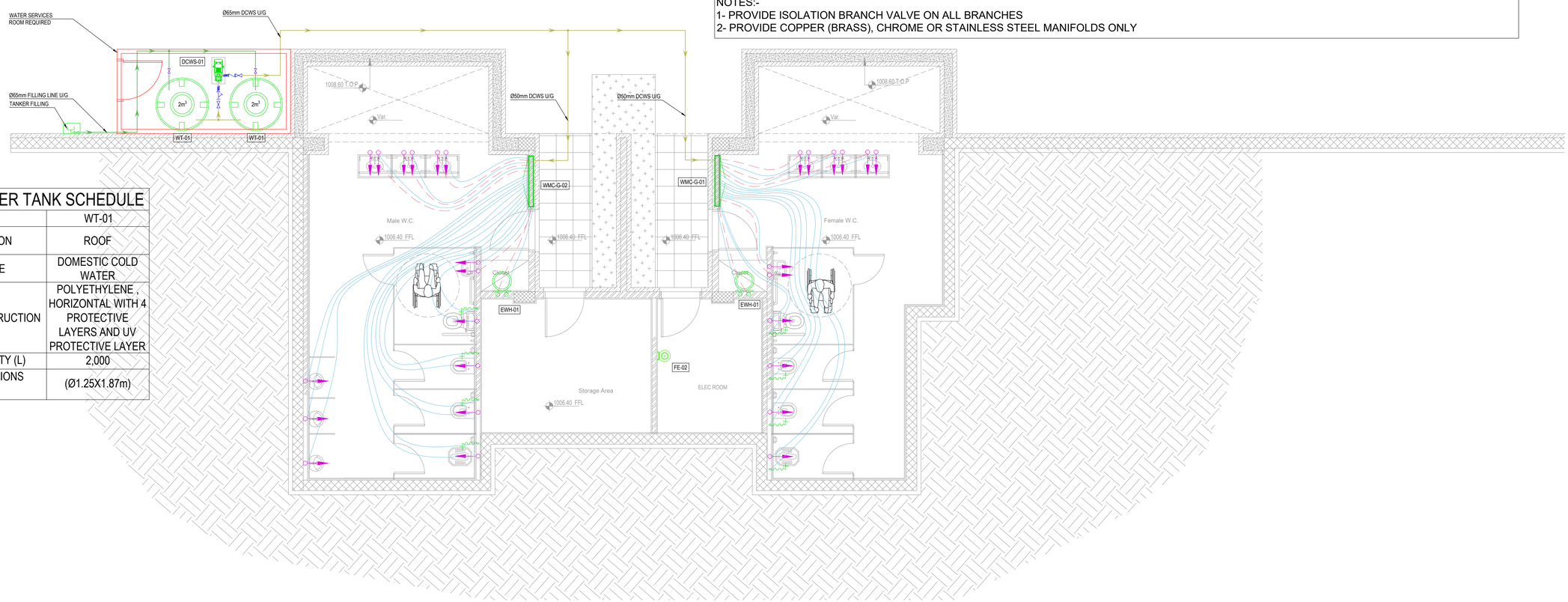
WATER MANIFOLD CABINETS SCHEDULE

REF.	NO. OF MANIFOLDS WITHIN CABINET	1ST ROW						2ND ROW			CABINET LENGTH (mm)
		MANIFOLD NO.1			MANIFOLD NO.2			MANIFOLD NO.1			
		COLD			HOT			HOT			
		NUMBER OF OUTLETS	SIZE (INCH)	PIPE SIZE (mm)	NUMBER OF OUTLETS	SIZE (INCH)	PIPE SIZE (mm)	NUMBER OF OUTLETS	SIZE (INCH)	PIPE SIZE (mm)	
WMC-B4-01	3	13	1 ¼"	32mm	-	-	-	4	¾"	20mm	1200
WMC-B4-02	3	6	1 "	25mm	10	1 ¼"	25mm	4	¾"	20mm	1200

NOTES:-
1- PROVIDE ISOLATION BRANCH VALVE ON ALL BRANCHES
2- PROVIDE COPPER (BRASS), CHROME OR STAINLESS STEEL MANIFOLDS ONLY

WATER TANK SCHEDULE

REF.	WT-01
LOCATION	ROOF
SERVICE	DOMESTIC COLD WATER
CONSTRUCTION	POLYETHYLENE , HORIZONTAL WITH 4 PROTECTIVE LAYERS AND UV PROTECTIVE LAYER
CAPACITY (L)	2,000
DIMENSIONS (L*W*H)	(Ø1.25X1.87m)



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