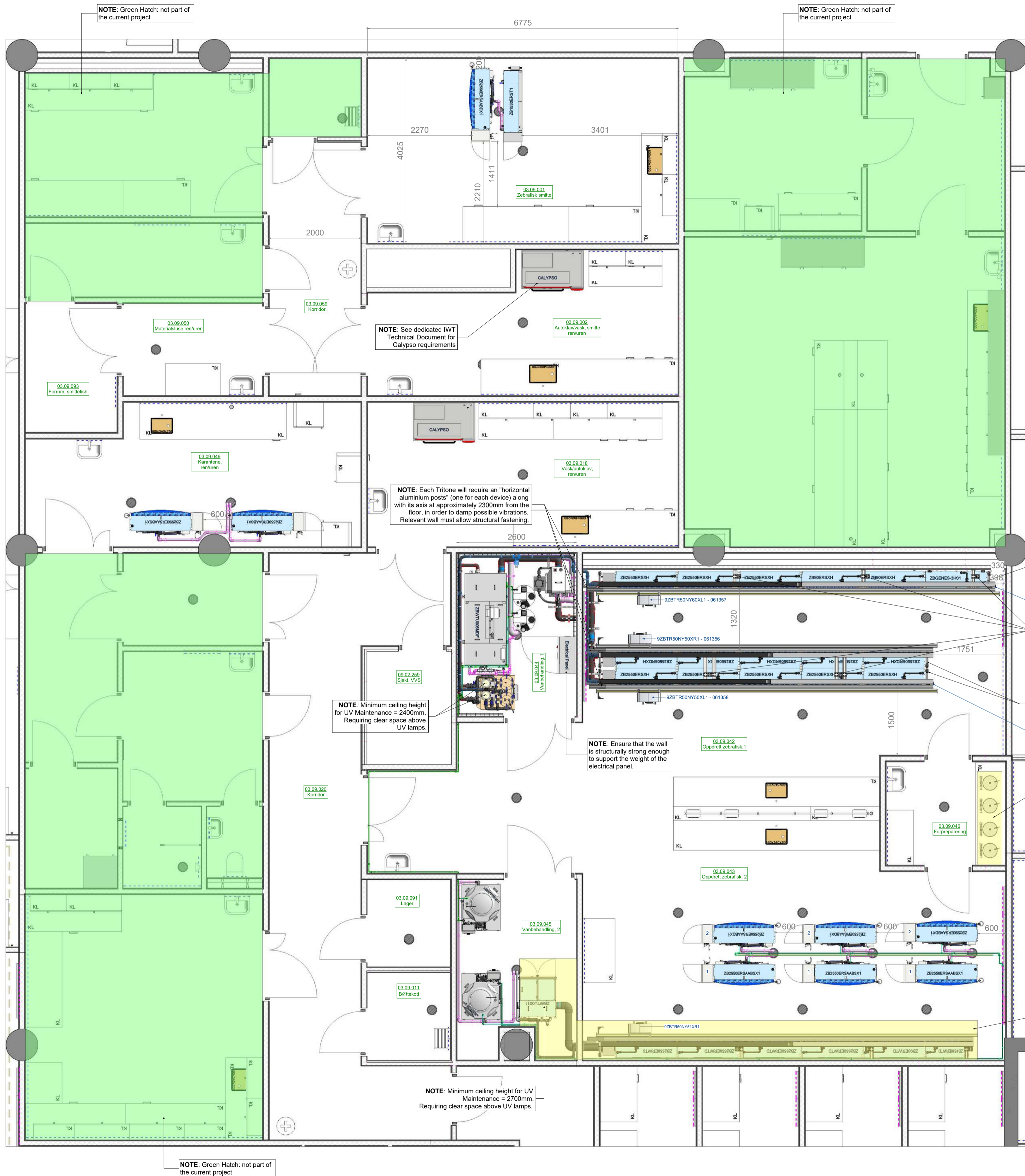


1 00 - PLAN - Electrical Layout
00 1 : 10

CUSTOMER name: Scanbur - Uni Oslo Life Science Building Aquatic Labs RELEASE 08

PROJECT N°: AQ-2018-048 SHEET DESCRIPTION: Electrical Layout - ZBXPCL0SLU01



KEY TO SYMBOLS		DRAWING NOTES	
	Recommended waste water floor drain		⚠️ NOTE: The present arrangement represents a non-exhaustive series of possible combinations. Please refer to P&ID TECNIPLAST for further functional verification.
	Electrical Power Supply		⚠️ NOTE: please carefully evaluate feasibility of all devices' access route from round level up to all installation floors.
	Water Supply		⚠️ NOTE: waste water drains are recommended to be "open connector" and floor level.
	PVC Supply Line		⚠️ NOTE: all piping must be installed foreseeing the future racks implementation, therefore considering connections and "Return Line" height and relevant slope.
	PVC Return Line		⚠️ NOTE: please consider the size of the door along with the maneuvering space required for the transportation inside the room.
	Riser ROW Supply Line		⚠️ NOTE: Suggested light positioning among rack axes (lampshades): lamp axis minimum distance from rack front surface = 500 mm
	GebertPVC Drain Line		
	PVC "Air Ventilation"		
	PVC support Pipe for Riser Pipe		
ROOM TEMPERATURE	With Chiller Max. 28°C than water housing T Without Chiller Max. 2-3°C (2°F) less than water housing T		
ROOM VENTILATION	10-12 air changes per hour (never less than 6 air changes per hour)		
ROOM LIGHTING	Floors light must guarantee a light intensity 54+350 Lux at water level.		

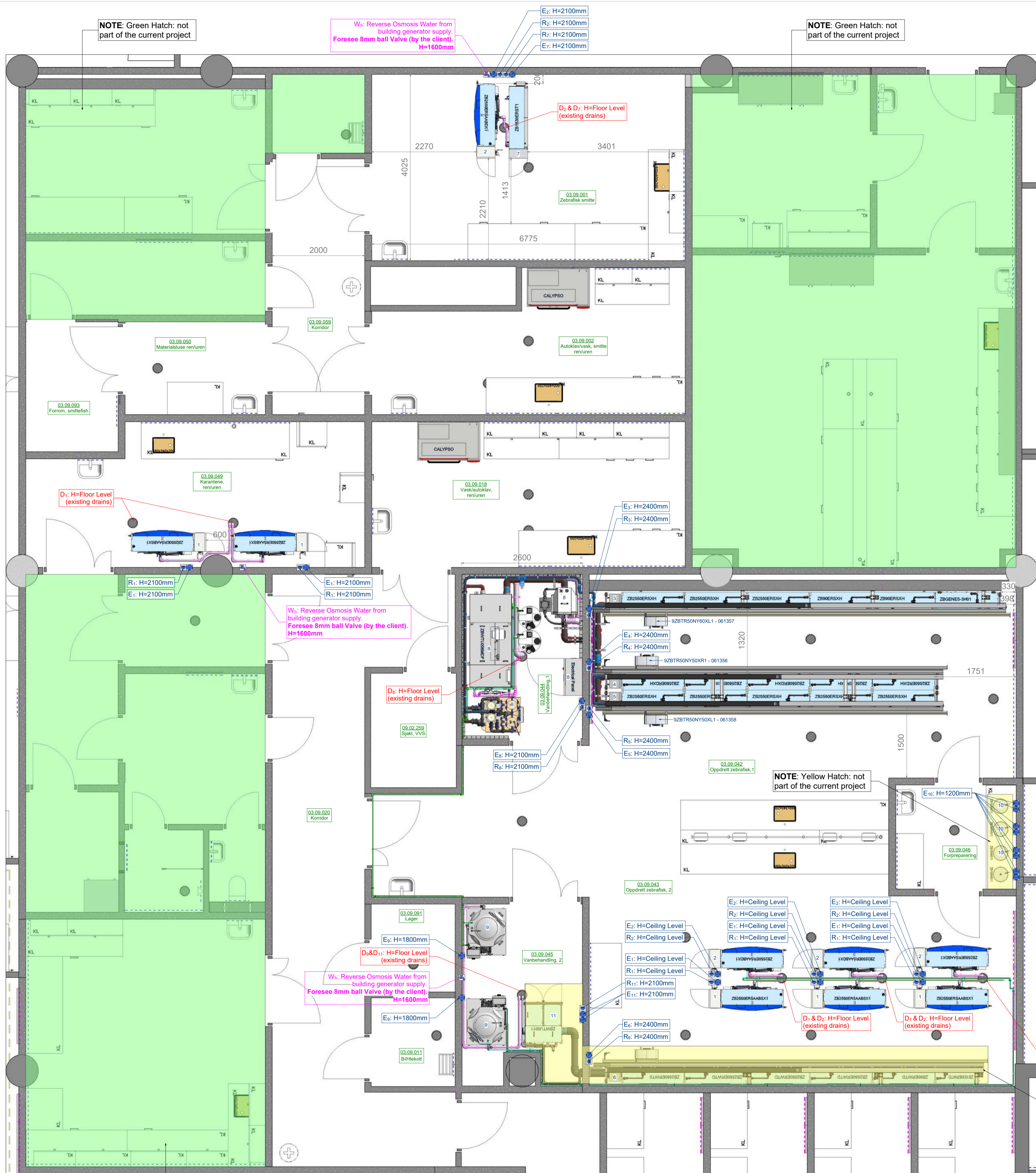
- TECNIPLAST'S DEVICES EMPLOYED -						
Image	Item	Item Description	Length [mm]	Width [mm]	Height [mm]	Operating Weight [kg]
	9ZBTR50NY50XL1	Tritone - Automatic Feeding System - 5 Standard rows 5 Standard Racks	7455	780	2460	280
	9ZBTR50NY50XR1	Tritone - Automatic Feeding System - 5 Standard rows 5 Standard Racks	7455	780	2460	280
	9ZBTR50NY51XR1	Tritone - Automatic Feeding System - 5 Standard rows 5+1 Racks	8330	780	2460	290
	9ZBTR50NY60XL1	Tritone - Automatic Feeding System - 5 Standard rows 6 Standard Racks	8810	780	2460	320
	CALYPSO	Aquatic Washer	1350	892	2100	675
	ZB10AH011	Artemia 10L	325	325	910	20
	ZB90ERSXH	6 Nursery Rows Rack without Sump	1355	400	2140	215
	ZB90ERWTD	6 Nursery Rows Rack without Sump	1355	400	2140	215
	ZB1530ERST1	Toxicological Rack	1657	487	1495	500
	ZB1530ERWTD	Slim Rack with Sump - 5 Standard Rows	875	400	2140	282.5
	ZB2550ERDXH	5 Standard Rows Rack without Sump	1355	400	2140	306
	ZB2550ERSAABDX1	SX Stand Alone Active Blue 5 Rows	1620	616	2064	510
	ZB2550ERSAABSX1	SX Stand Alone Active Blue 5 Rows	1620	616	2064	510
	ZB2550ERSXH	5 Standard Rows Rack without Sump	1355	400	2140	306
	ZB2550ERWTD	5 Standard Rows Rack with Sump	1355	400	2140	460
	ZB2550ERWTS	5 Standard Rows Rack with Sump	1355	400	2140	460
	ZBGENES-3H01	Genotype Rack without Sump - 6 Levels 12 Trays	1355	454	2045	365
	ZBWTU006MDF	Buffering Tank	515	515	1000	150
	ZBWTU006MDF	Drum Filter	814	824	906	160
	ZBWTU006MDF	Electrical Panel	800	400	1200	150
	ZBWTU006MDF	Mechanical & UV Filter	1148	813	1604	270
	ZBWTU006MDF	Technical Sump	2211	1012	1015	1220
	ZBWTU0011	Water Treatment Unit	900	1100	2122	460
	ZBXP750RR011	750 L Reservoir	877	1030	1758	833

CUSTOMER name: Scanbur - Uni Oslo Life Science Building Aquatic Labs

RELEASE 08

PROJECT N°: AQ-2018-048

SHEET DESCRIPTION: Plan & Notes



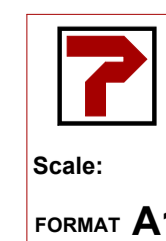
- AQUATIC DEVICES TECHNICAL REQUIREMENTS -						
System Code	System Type	System Reference	Electrical Power Supply [E]	Data Transfer [R]	Water Supply [W]	Drain [D]
ZB2550ERSAABSX1	Stand Alone Active Blue 5 Rows	1	Connection: Power supply cable (3m length as std supply), n°1 std plug. 230V-50Hz; MAX RATED POWER: 1.7 KVA; GFCI Type(A) =30mA, in conjunction with an earth resistance in accordance to the IEC60479.	Connection: RJ45; Ethernet Cable. Provide dedicated static IP address.	Connection: Øe 8mm Rilsan pipe (by Tecniplast). REVERSE OSMOSIS QUALITY: Dynamic pressure: min. 0.2bar, max. 3bar; Filling Volume: 290 litres; Consumption daily refill: 1% to 20% of total Volume (10% suggested).	Connection: Ø 40mm. If on wall: System overflow is at 332.5mm from the floor; Minimum slope to drain 1%; Open drain is required to avoid backflow of waste water; Size for a minimum flow rate of 300L/h.
ZB2550ERSAABDX1	Stand Alone Active Blue 5 Rows	2	Connection: Power supply cable (3m length as std supply), n°1 std plug. 230V-50Hz; MAX RATED POWER: 1.7 KVA; GFCI Type(A) =30mA, in conjunction with an earth resistance in accordance to the IEC60479.	Connection: RJ45; Ethernet Cable. Provide dedicated static IP address.	Connection: Øe 8mm Rilsan pipe (by Tecniplast). REVERSE OSMOSIS QUALITY: Dynamic pressure: min. 0.2bar, max. 3bar; Filling Volume: 290 litres; Consumption daily refill: 1% to 20% of total Volume (10% suggested).	Connection: Ø 40mm. If on wall: System overflow is at 332.5mm from the floor; Minimum slope to drain 1%; Open drain is required to avoid backflow of waste water; Size for a minimum flow rate of 300L/h.
9ZBTR50NY60XL1	Tritone - Automatic Feeding System	3	Connection: E-Box, Power supply cable (3m standard supply). 230V 50Hz, 1P + N + PE Max operating power 5A (Required power: 500W) GFCI Type (AC): 30mA "in conjunction with an earth resistance in accordance to the IEC60479"	Connection: E-Box. Provide a data duplex at each marked location. Separate IP address for each Tritone.	Not present	Not present
9ZBTR50NY50XR1	Tritone - Automatic Feeding System	4	Connection: E-Box, Power supply cable (3m standard supply). 230V 50Hz, 1P + N + PE Max operating power 5A (Required power: 500W) GFCI Type (AC): 30mA "in conjunction with an earth resistance in accordance to the IEC60479"	Connection: E-Box. Provide a data duplex at each marked location. Separate IP address for each Tritone.	Not present	Not present
9ZBTR50NY50XL1	Tritone - Automatic Feeding System	5	Connection: E-Box, Power supply cable (3m standard supply). 230V 50Hz, 1P + N + PE Max operating power 5A (Required power: 500W) GFCI Type (AC): 30mA "in conjunction with an earth resistance in accordance to the IEC60479"	Connection: E-Box. Provide a data duplex at each marked location. Separate IP address for each Tritone.	Not present	Not present
9ZBTR50NY51XR1	Tritone - Automatic Feeding System	6	Connection: E-Box, Power supply cable (3m standard supply). 230V 50Hz, 1P + N + PE Max operating power 5A (Required power: 500W) GFCI Type (AC): 30mA "in conjunction with an earth resistance in accordance to the IEC60479"	Connection: E-Box. Provide a data duplex at each marked location. Separate IP address for each Tritone.	Not present	Not present
ZB1530ERST1	Toxicological Rack	7	Connection: Power supply cable (3m length as std supply). 230V-50Hz; MAX RATED POWER: 1 kW; GFCI Type(A) =30mA, in conjunction with an earth resistance in accordance to the IEC60479.	Connection: RJ45; Ethernet Cable. Provide dedicated static IP address.	Connection: Øe 8mm Rilsan pipe (by Tecniplast). REVERSE OSMOSIS QUALITY: - Dynamic pressure: min. 0.2bar, max. 3bar; - Consumption: Initial water filling = 250 litres - Daily re-fill: 1% to 20% of total Volume (10% suggested).	Connection: Ø 40mm. If on wall: System overflow is at 450 mm from the floor; Minimum slope to drain 1%; Open drain is required to avoid backflow of waste water; Size for a minimum flow rate of 3600L/h.
ZBWTU006MDF	Palletized System with Drum Filter	8	Connection: Hardwire inside control panel (from bottom). 400V 3P+N+PE 50Hz. Max current: 25A. 5 PIN PLUG WITH INTERBLOCK. GFCI Type (B): 30mA, in conjunction with an earth resistance in accordance to the IEC60479	Connection: 2x Dry (from bottom). 0-24V & RJ45. Provide dedicated static IP address.	Connection: Øe 8mm Rilsan pipe (by Tecniplast). REVERSE OSMOSIS QUALITY: Dynamic pressure: min. 0.3bar, max. 3bar. Daily re-fill: 1% to 20% of total Volume (10% suggested)	Connection: Ø 110mm (Drum Filter); Ø 40mm (Solenoïd Valve). Drum Filter backwash flow rate: up to 0.2 l/s. - Solenoïd valve std flow rate: 0.15 l/s. Minimum slope to drain 1% "Open connection" required. Sized for a minimum flow rate of 4000 L/h.
ZBXP750RR011	750 L Reservoir	9	Connection: Power supply cable (3m length as std supply). 230V-50Hz; Consumption: 400W earth leakage protection Type(A): 30mA	Not present	Connection: Reservoir intake Øe 8mm Rilsan pipe. Possible alternative options: - A: from "Building Reverse Osmosis Water Generator" (connection by the client). - B: from "Reverse Osmosis Water Generator provided by TP" (connection by Tecniplast); - C: from "Reverse Osmosis Water Generator provided by client" (connection by client).	Connection: Ø 40mm. Sized for a minimum flow rate of 300 L/h.
ZB10AH011	Artemia 10L	10	Connection: 2 Power supply cables: 1 x aerator + 1 x heater. 230V-50Hz; Aerator Max Consumption: 100W; Heater Max Consumption: 300W.	Not present	Not present	Not present
ZBWTU0011	Water Treatment Unit	11	Connection: Power supply cable (3m length as std supply); n°2 std plugs. Each plug must be on an independent line (fuse and GFCI) 230V; 50 Hz MAX RATED POWER: 4Kw GFCI Type(B): 30mA, in conjunction with an earth resistance in accordance to the IEC60479.	Connection: RJ45; Ethernet Cable. Provide dedicated static IP address.	Connection: Øe 8mm Rilsan pipe (by Tecniplast). REVERSE OSMOSIS QUALITY: - Dynamic pressure: min. 0.2bar, max. 3bar; - Consumption: Initial water filling = 175 litres - Daily re-fill: 1% to 20% of total Volume (10% suggested).	Connection: Ø 40mm. Floor level "open drain" is recommended. If on wall: System overflow is at 415mm from the floor, minimum slope to drain 1%. Open drain is required to avoid backflow of waste water.

CUSTOMER name:
Scanbur - Uni Oslo Life Science Building Aquatic Labs

RELEASE
08

PROJECT N°: AQ-2018-048
SHEET DESCRIPTION: Plan - Technical Requirements

DRAWING LEVEL:
SHOP DRAWING



Designer:
F. Nicolosi
Visa:
F. Nicolosi
Date:
23/04/2025
15.22.22

SHEET NUMBER:
02

Via 1° Maggio 6
21020 Buguggiate (VA)
ITALY
Via Galliani 68/A
21020 Casale Litta (VA)
ITALY



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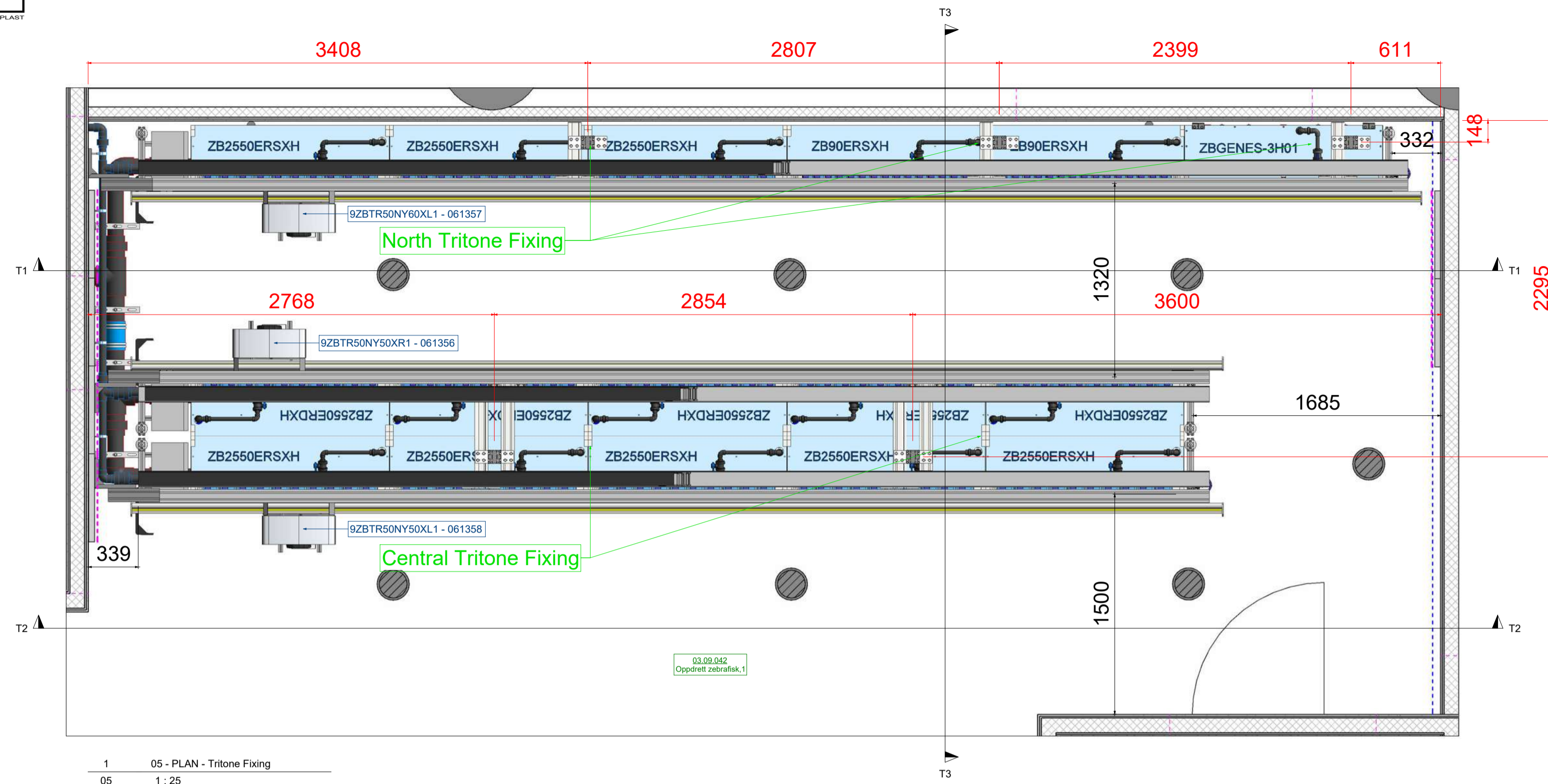
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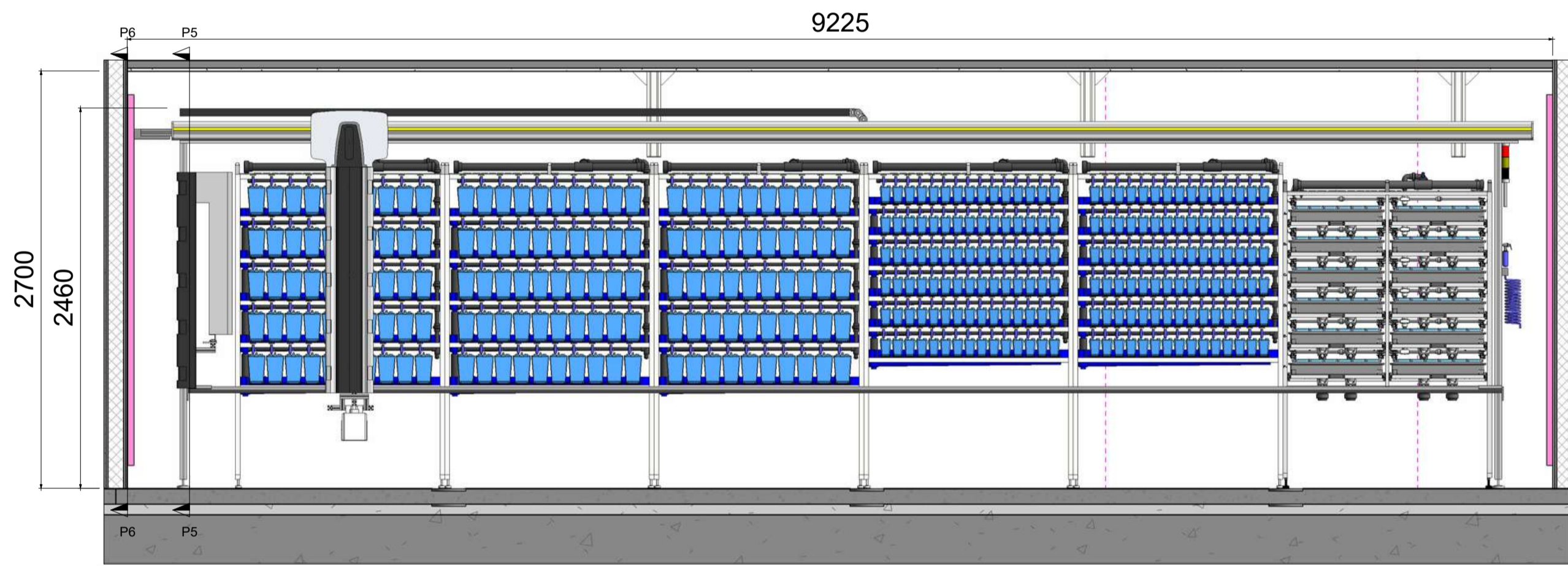
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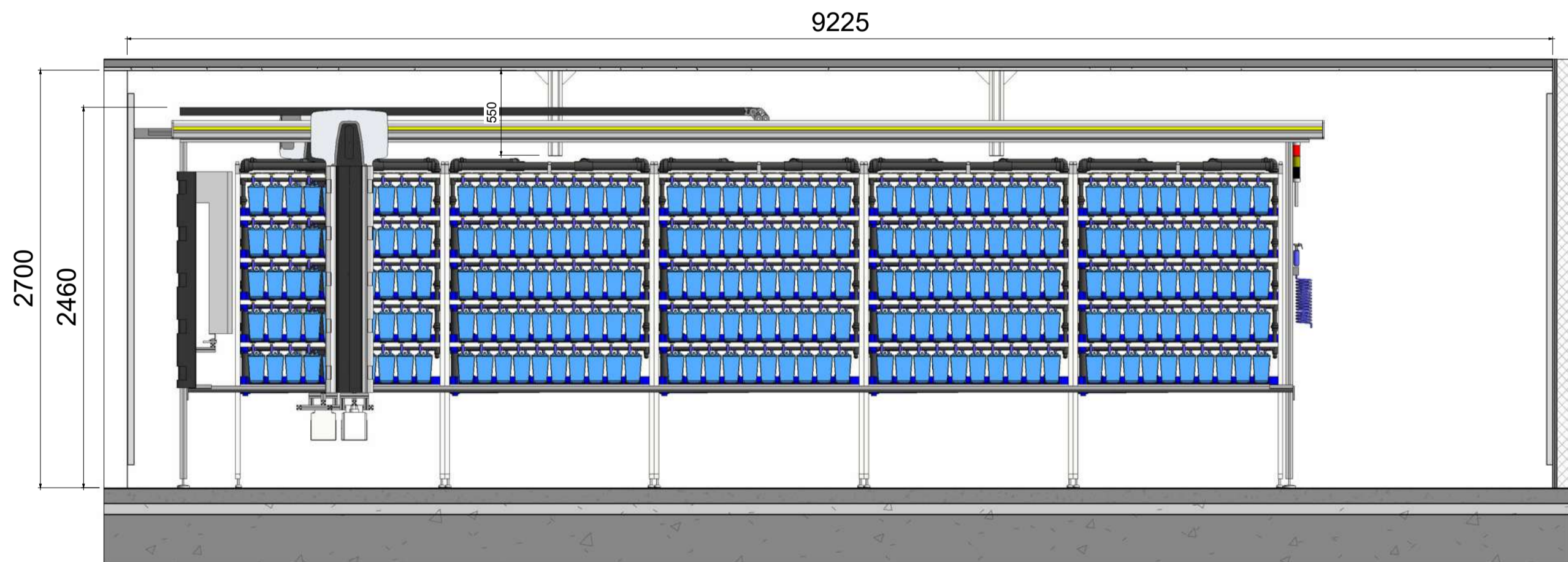
PROJECT N°: AQ-2018-048
SHEET DESCRIPTION: 3D View



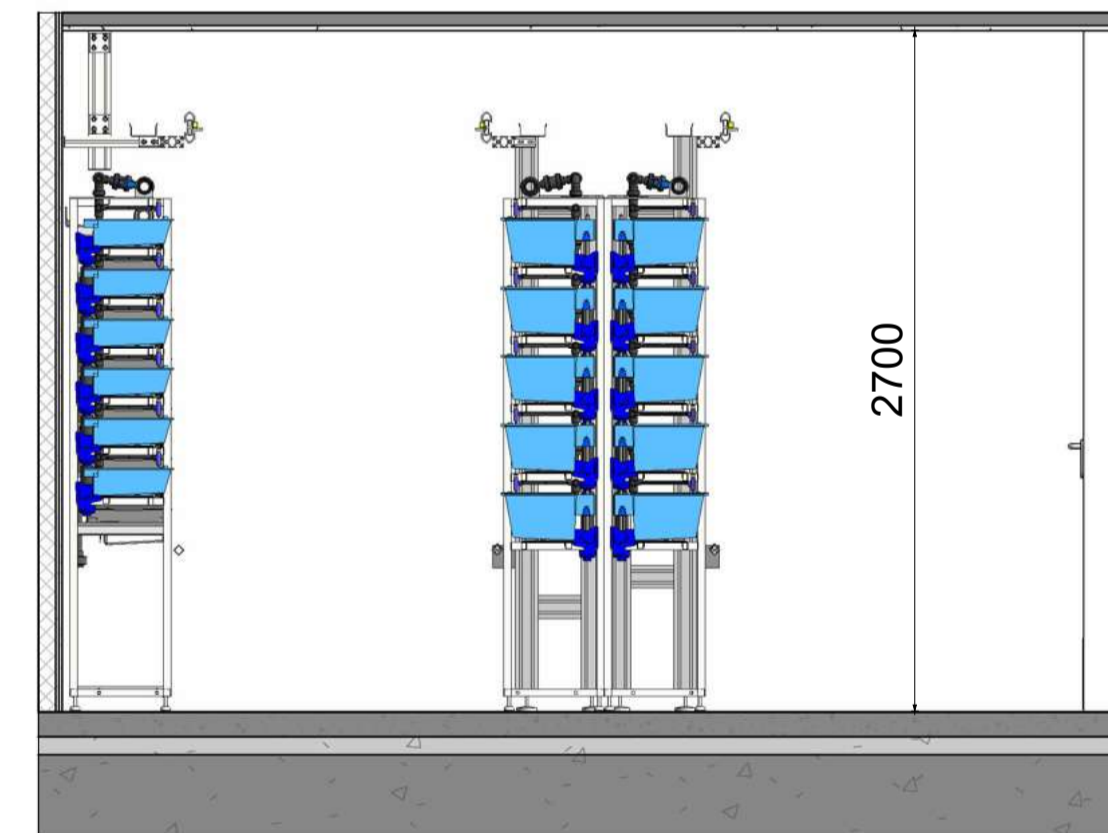
1 05 - PLAN - Tritone Fixing
05 1:25



T1 Section T1
05 1:30

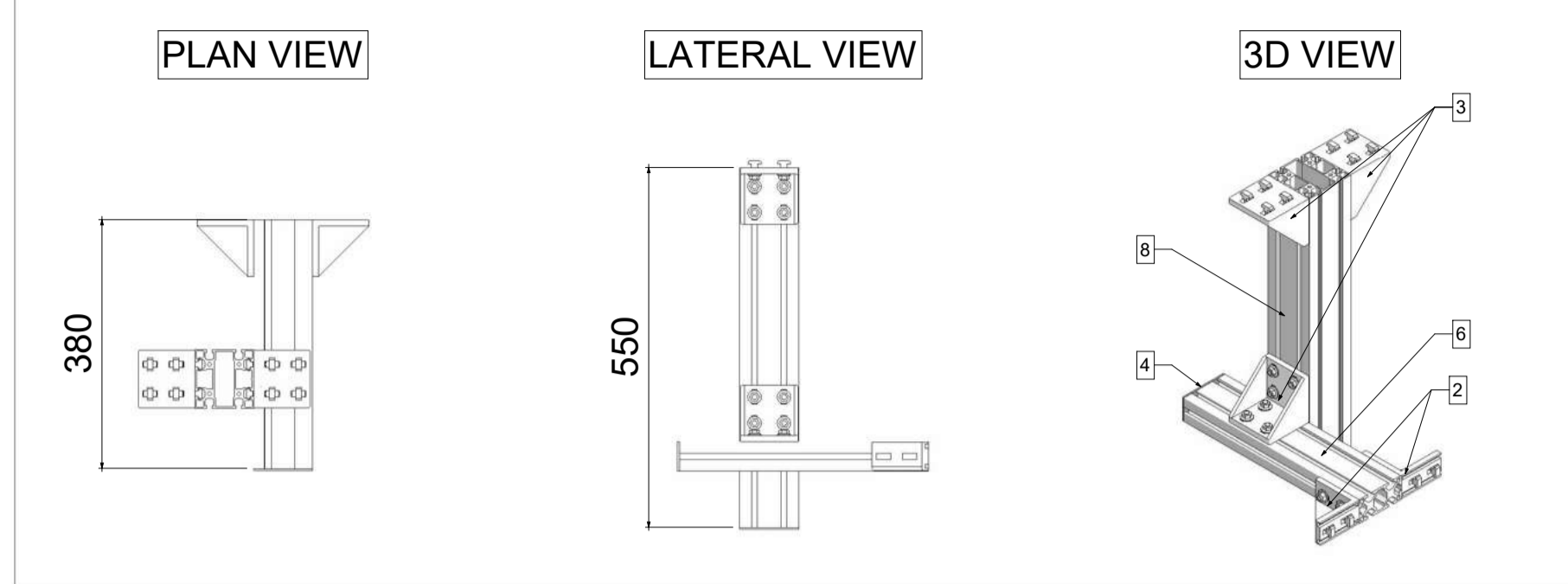


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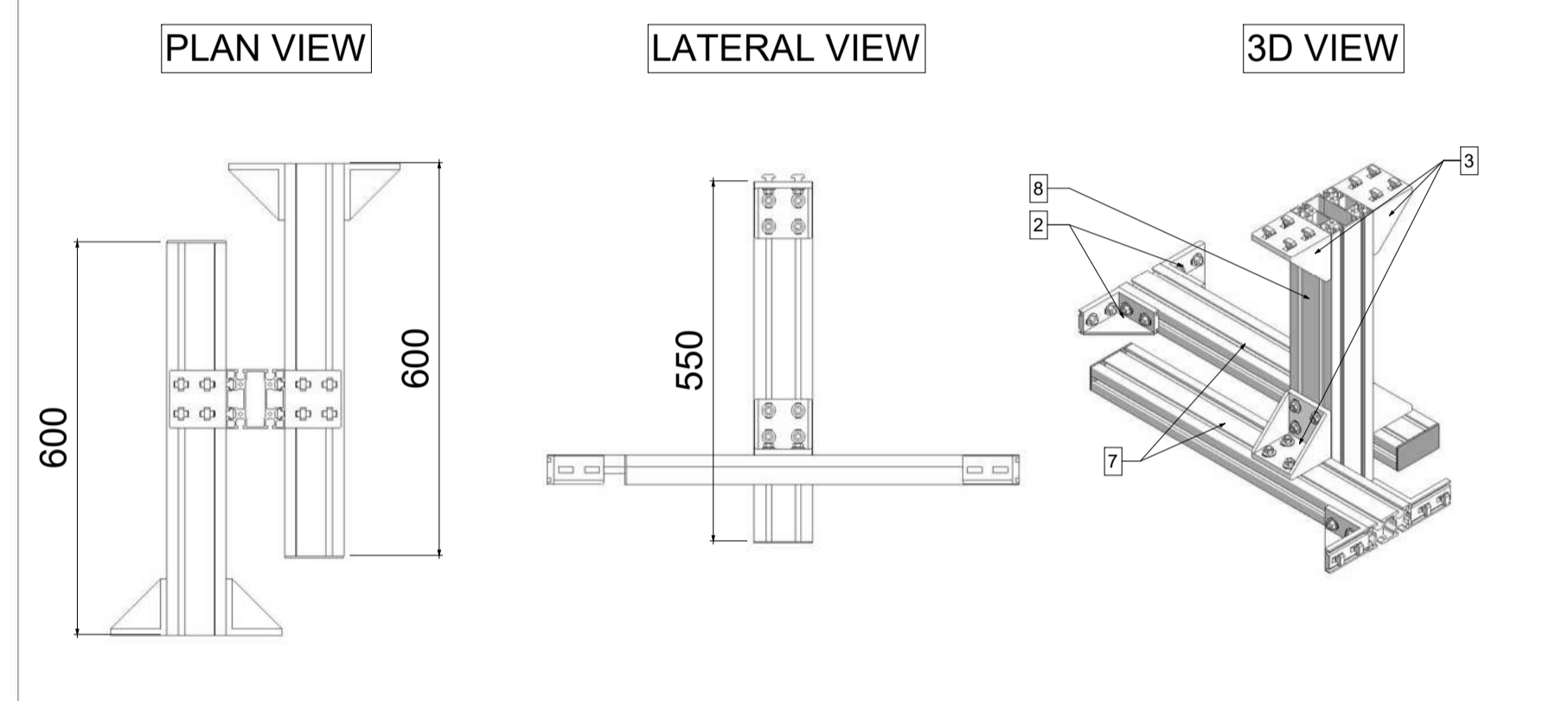


T3 Section T3
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NORTH TRITONE FIXING - DETAILS



CENTRAL TRITONE FIXING - DETAILS



TRITONE FIXING TABLE

ID ITEM	DESCRIZIONE	DESCRIPTION	QUANTITY	LENGHT [mm]
1	Bullone	Bolt	192	
2	Squadretta 45x90 mm	Bracket 45x90 mm	14	
3	Squadretta 90x90 mm	Bracket 90x90 mm	17	
4	Terminale di Chiusura 45x90 mm	Closing Terminal 45x90 mm	7	
5	Terminale di Chiusura 90x90 mm	Closing Terminal 90x90 mm	5	
6	Trafilato Orizzontale 45x90 mm	Horizontal Rod 45x90 mm	3	380
7	Trafilato Orizzontale 45x90 mm	Horizontal Rod 45x90 mm	4	600
8	Trafilato Verticale 90x90 mm	Vertical Rod 90x90 mm	5	550
9	Vite	Screw	192	

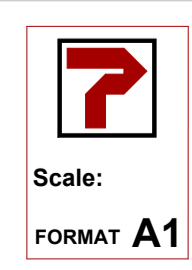
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RELEASE 08

PROJECT N°: AQ-2018-048

SHEET DESCRIPTION: TRITONE FIXING - CODE = 3-00015717-0

DRAWING LEVEL: SHOP DRAWING

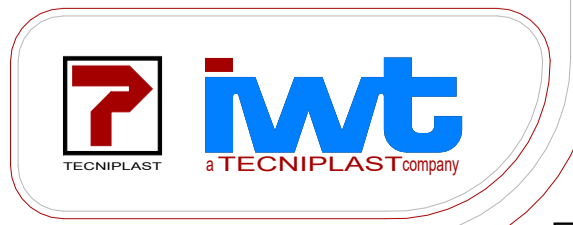


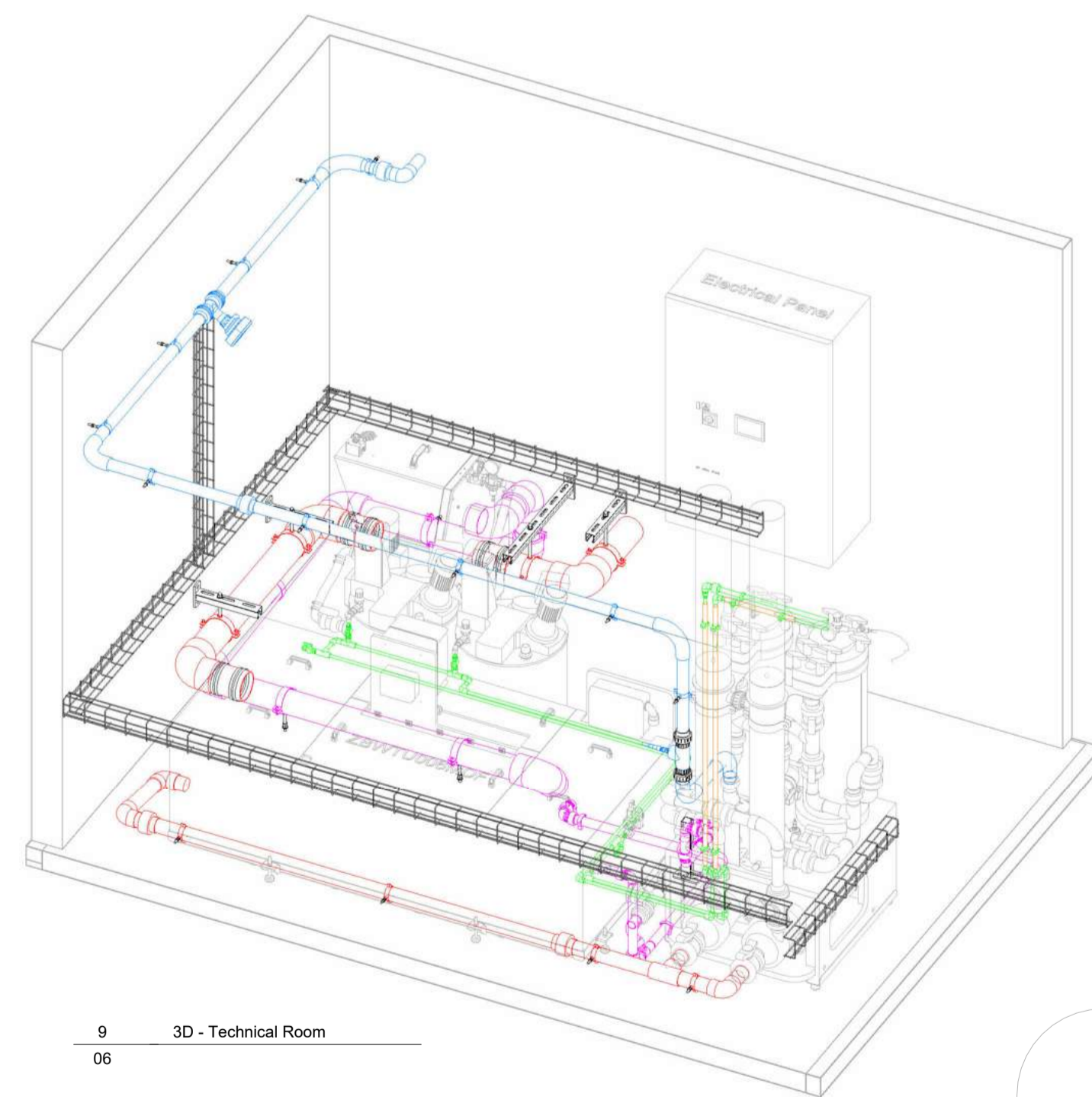
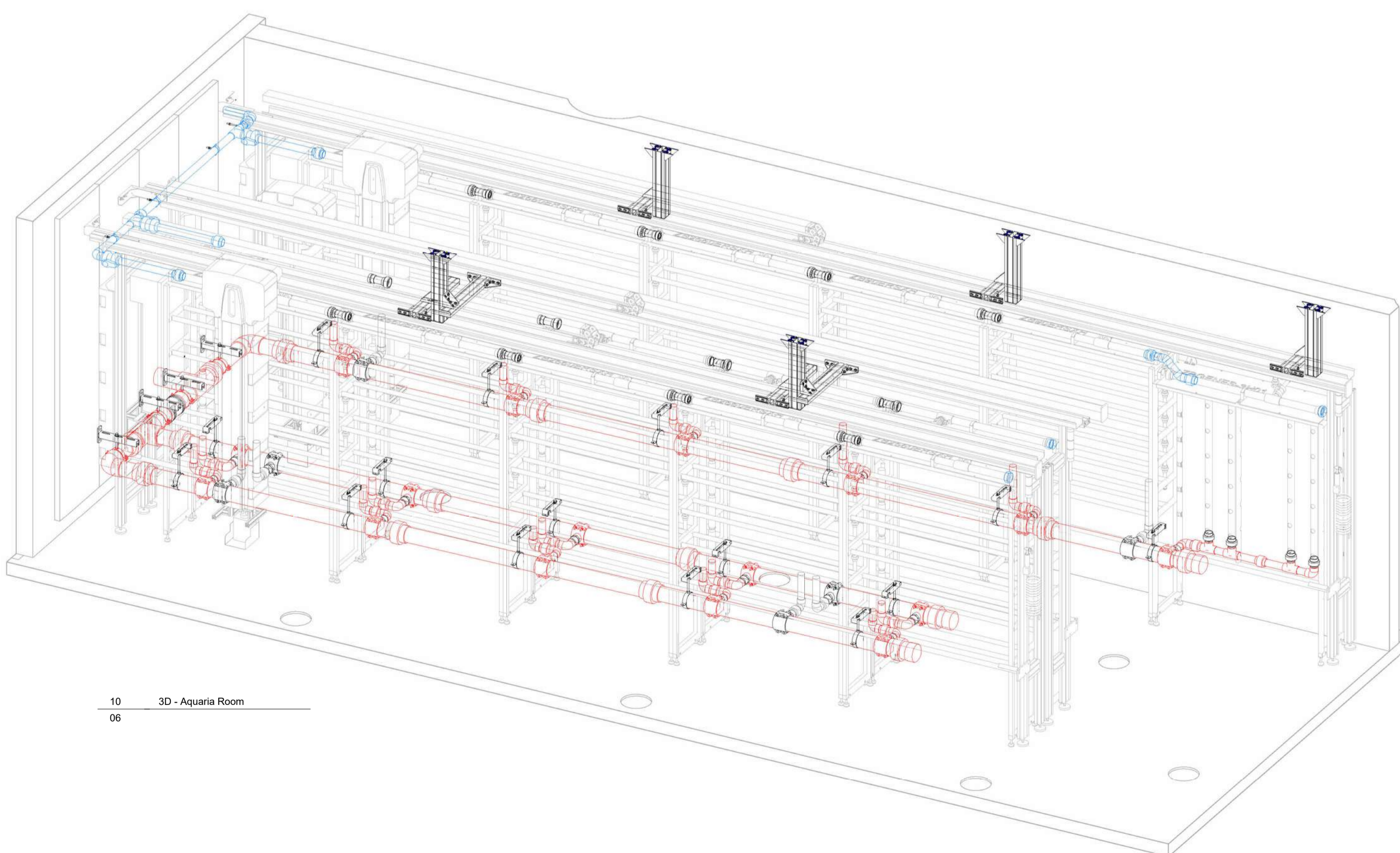
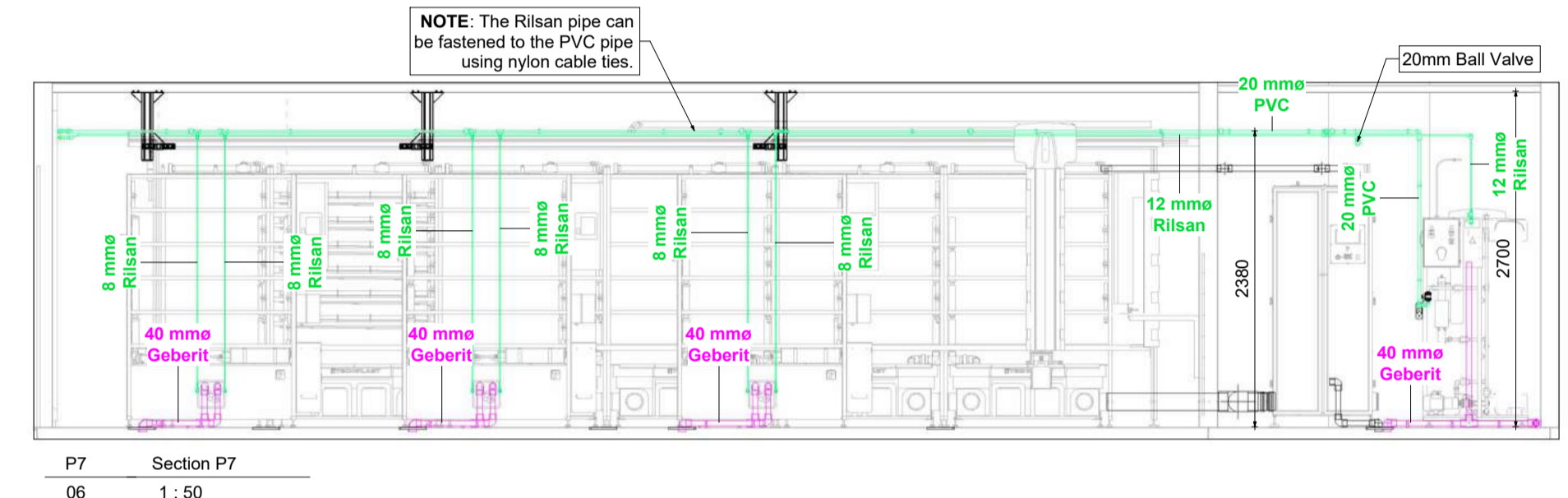
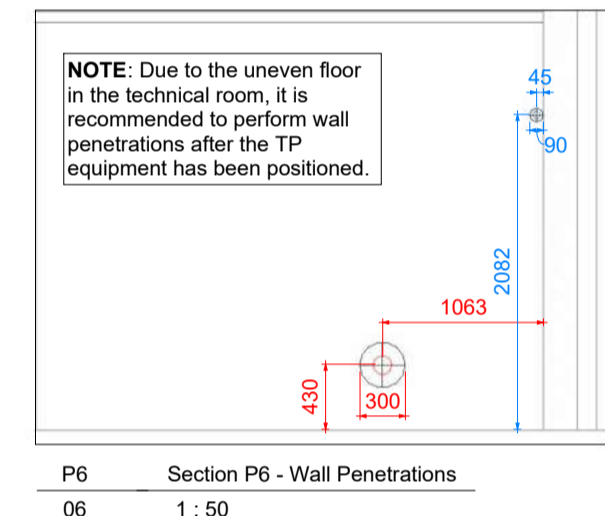
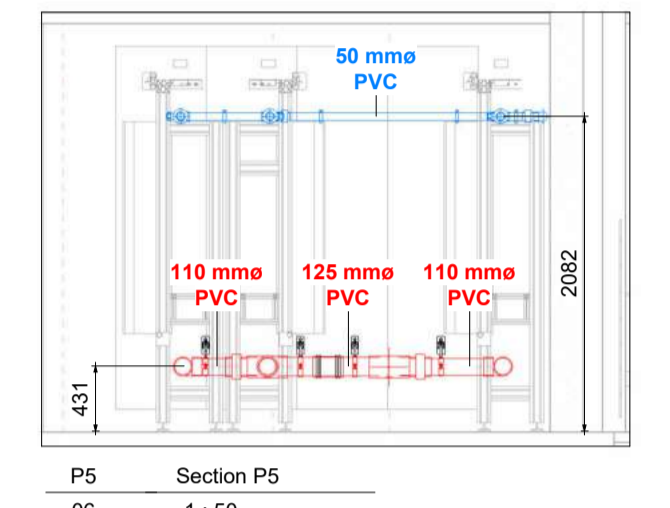
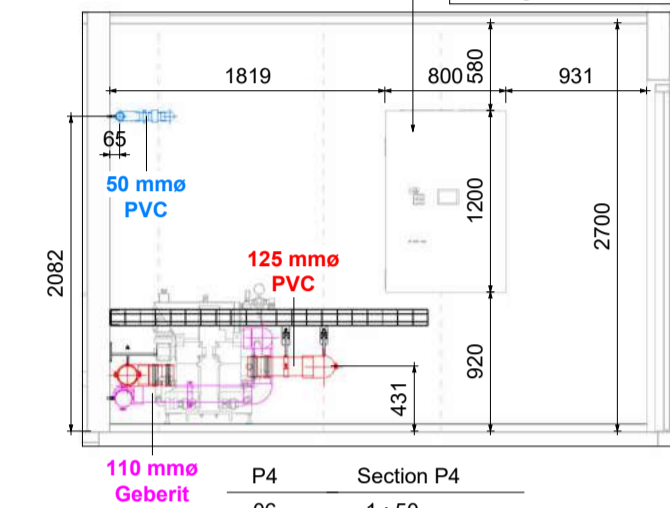
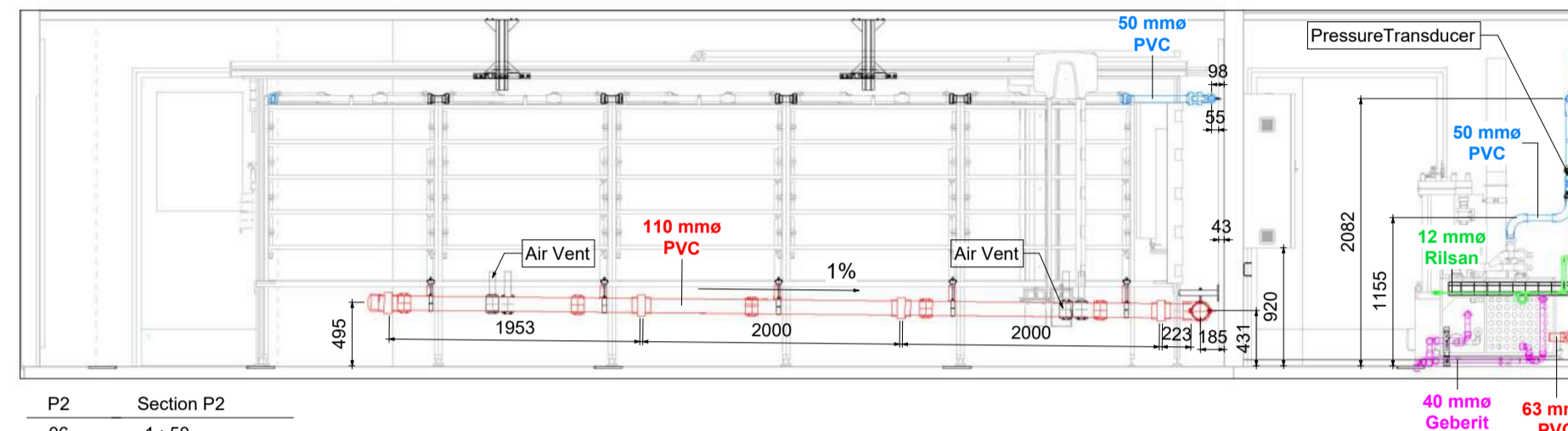
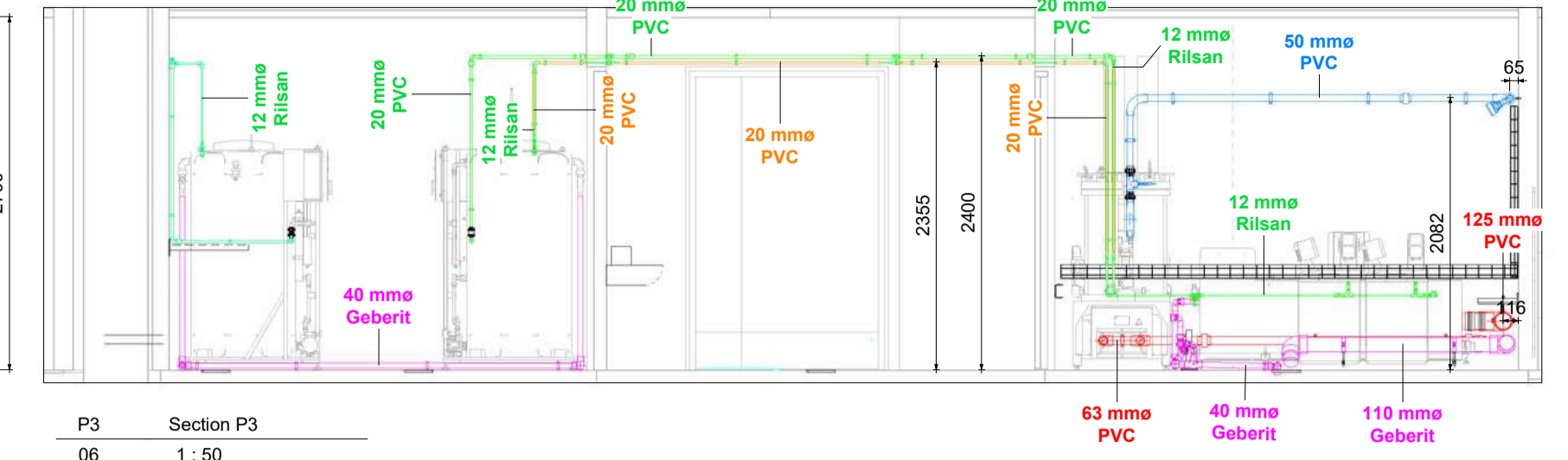
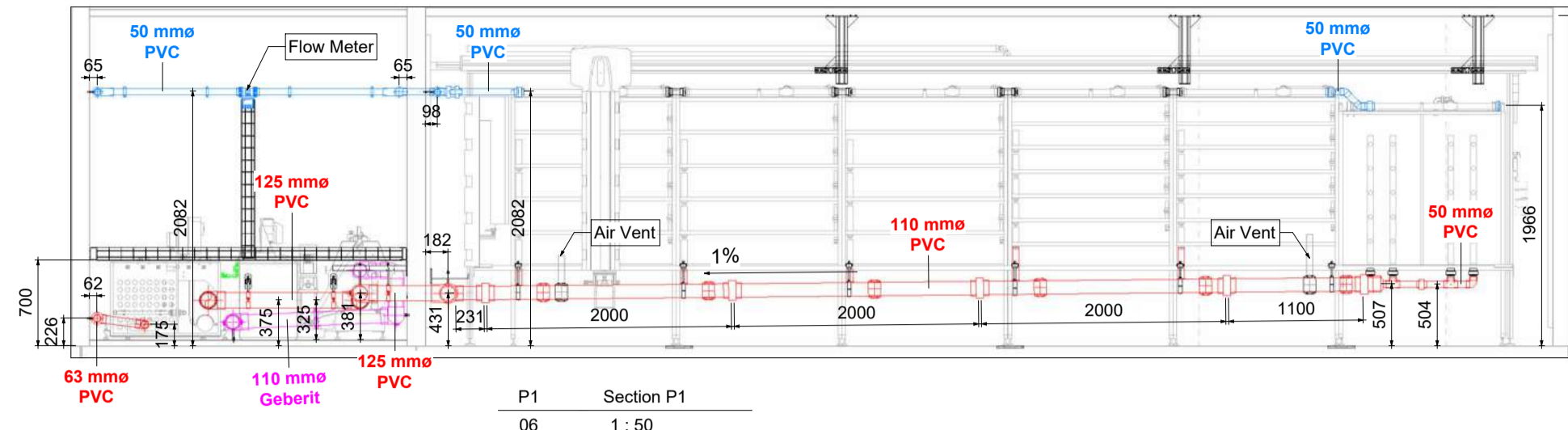
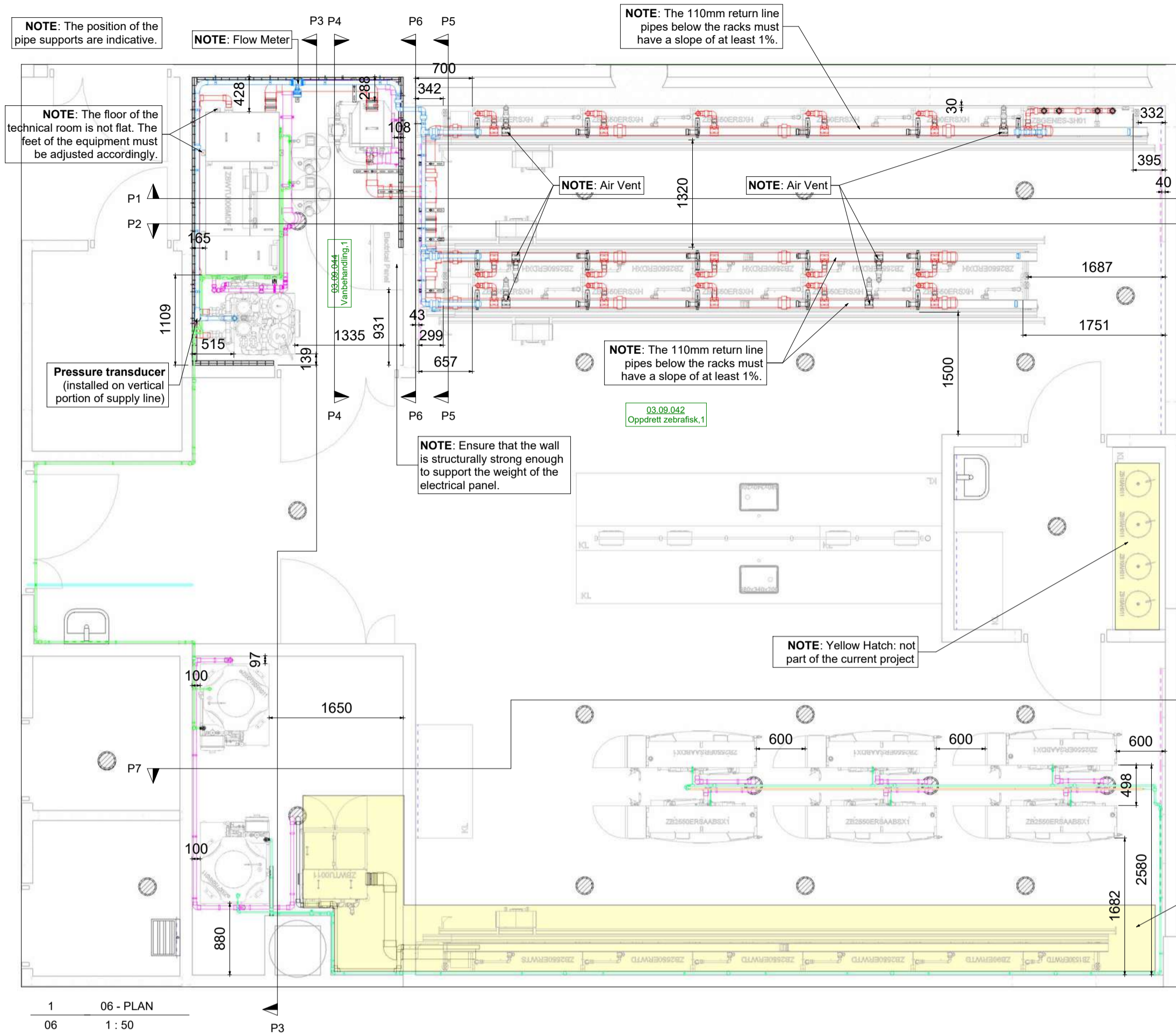
Designer: F. Nicolosi
Visa:
Date: 23/04/2025 15:24:00

SHEET NUMBER: 05

Via 1° Maggio 6
21020 Buguggiate (VA)
ITALY
Via Galliani 68/A
21020 Casale Litta (VA)
ITALY
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KEY TO SYMBOLS		DRAWING NOTES	
	Recommended waste water floor drain		Electrical Power Supply
	Data Transfer		Water Supply
	PVC Supply Line		PVC Return Line
	Rilsan ROW Supply Line		Geberit/PVC Drain Line
	PVC "Air Ventilation"		PVC support Pipe for Rilsan Pipe
	ROOM TEMPERATURE		ROOM VENTILATION
	ROOM LIGHTING		

CUSTOMER name:
Scanbur - Uni Oslo Life Science Building Aquatic Labs

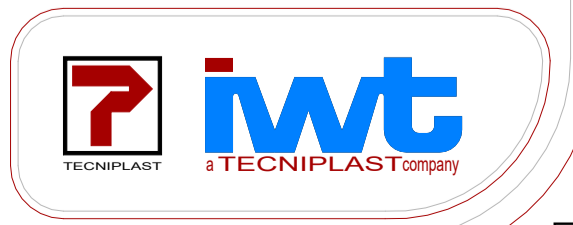
PROJECT N°: AQ-2018-048
SHEET DESCRIPTION: Plan, Sections & 3D Views - Piping & TP Equipment Position

Scale: FORMAT A1

SHEET NUMBER: 06

Designer: F. Nicolosi
Visa: F. Nicolosi
Date: 23/04/2025 15:24:18

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