

チュニジア国農業・水資源・漁業省
水資源開発公社（SONEDE）

チュニジア国
スファックス海水淡水化施設
整備事業準備調査

最終報告書
図面集

平成 27 年 8 月
(2015 年)

独立行政法人
国際協力機構（JICA）

株式会社 N J S コンサルタンツ
株式会社 アンジェロセック
日本テクノ株式会社

環境
CR(4)
15-123

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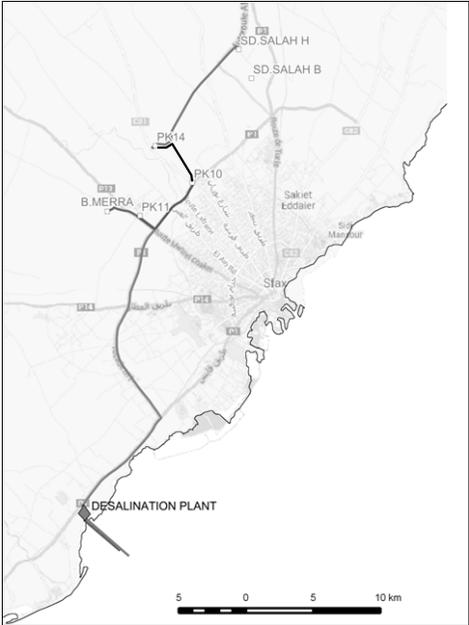
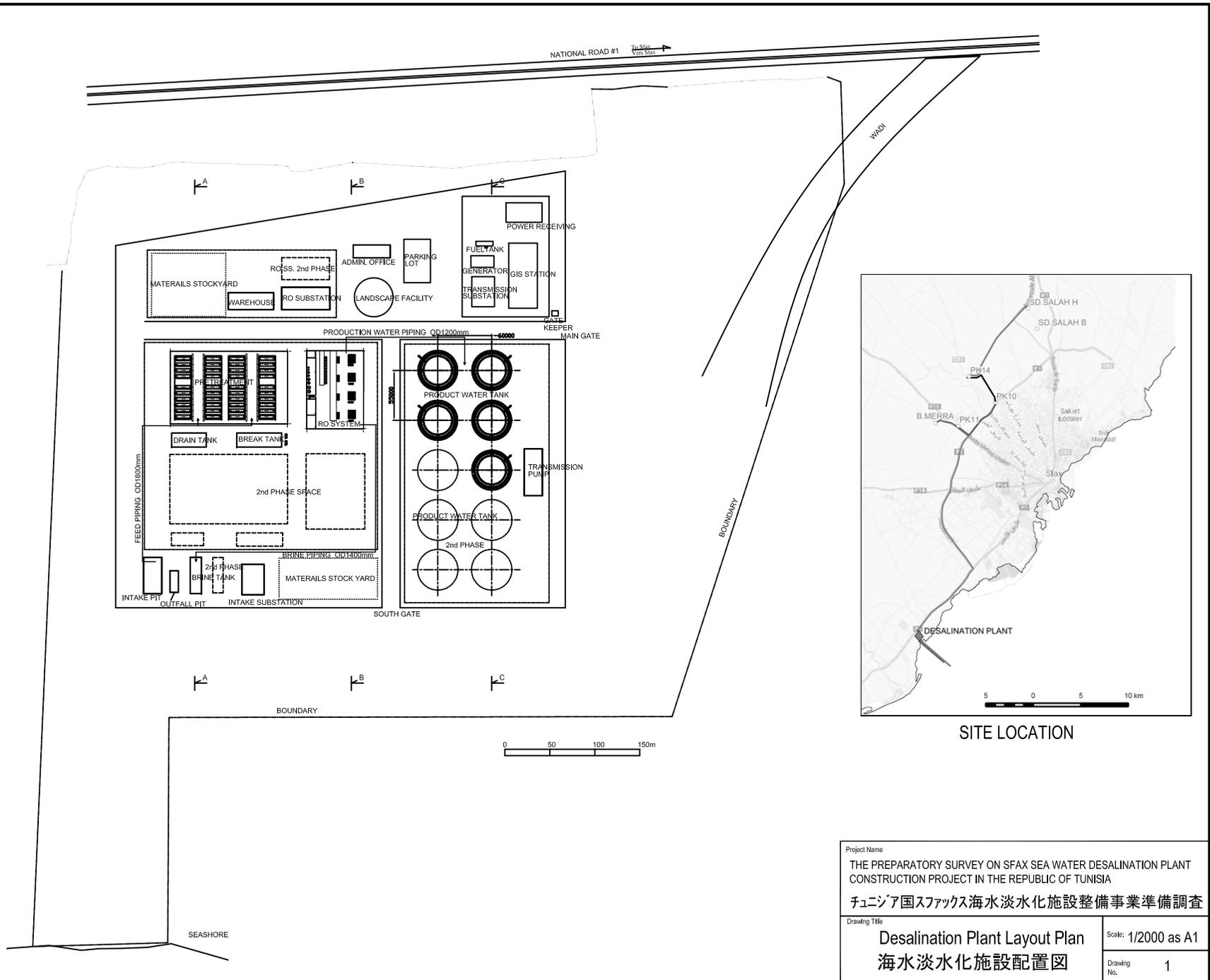
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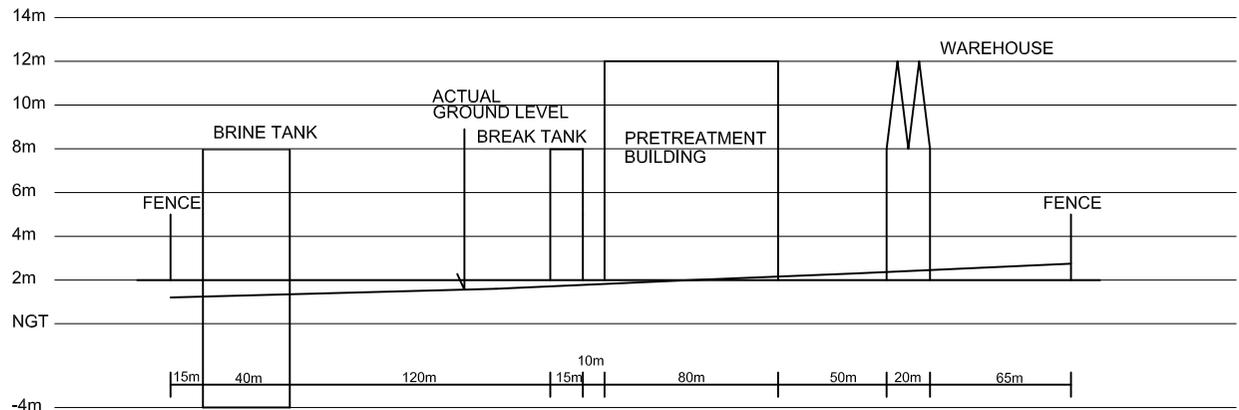
図面リスト

ID	内 容	ID	内 容	ID	内 容
1	海水淡水化施設 配置図	24	取水ポンプ変電施設	47	Sidi Salah EH 配水池 配置計画図
2	施設配置計画 横断面図	25	RO ろ過機器変電施設	48	Sidi Salah EH 配水池受水混合槽 平面図・断面図
3	海水淡水化施設 水位関係図	26	送水ポンプ変電施設	49	送水管平縦断面図 位置図— 1
4	海水淡水化処理フロー図— 1	27	PK10 配水池 現況図	50	送水管平縦断面図 位置図— 2
5	海水淡水化処理フロー図— 2	28	PK10 配水池 配置計画図	51	送水管平縦断面図— 1
6	前処理棟・RO 処理棟 一般配置図	29	PK10 配水池受水混合槽 平面図・断面図	52	送水管平縦断面図— 2
7	前処理施設棟 立面図	30	PK10 配水池ポンプ場 平面図・断面図	53	送水管平縦断面図— 3
8	前処理施設棟 平面図	31	PK10 配水池ポンプ場 ポンプ配置計画	54	送水管平縦断面図— 4
9	前処理施設棟 施設配置	32	PK11 配水池 現況図	55	送水管平縦断面図— 5
10	RO 処理施設棟 立面図	33	PK11 配水池 配置計画図	56	送水管平縦断面図— 6
11	RO 処理施設棟 平面図	34	PK11 配水池受水混合槽 平面図・断面図	57	送水管平縦断面図— 7
12	RO 処理施設棟 施設配置	35	PK11 配水池ポンプ場 平面図	58	送水管平縦断面図— 8
13	守衛室 平面図・断面図	36	PK11 配水池ポンプ場 断面図	59	送水管平縦断面図— 9
14	管理棟 立面図	37	PK11 配水池ポンプ場 ポンプ配置計画	60	送水管平縦断面図— 1 0
15	管理棟 平面図— 1	38	PK14 配水池 現況図	61	送水管平縦断面図— 1 1
16	管理棟 平面図— 2	39	PK14 配水池 配置計画図	62	送水管平縦断面図— 1 2
17	倉庫 立面図	40	PK14 配水池受水混合槽 平面図・断面図	63	送水管平縦断面図— 1 3
18	倉庫 平面図	41	PK14 配水池ポンプ場 平面図・断面図	64	送水管平縦断面図— 1 4
19	生産水タンク	42	PK14 配水池ポンプ場 ポンプ配置計画	65	送水管平縦断面図— 1 5
20	海水淡水化施設送水ポンプ棟 平面図	43	Bou Merra 配水池 配置計画図	66	送水管平縦断面図— 1 6
21	海水淡水化施設送水ポンプ棟 断面図	44	Bou Merra 配水池受水混合槽 平面図・断面図	67	ワンウェイ サージタンク 平面図
22	海水淡水化施設送水ポンプ棟ポンプ配置計画	45	Bou Merra 配水池	68	ワンウェイ サージタンク 断面図
23	150kV 受変電施設	46	Sidi Salah EH 配水池 現況図	添付 A2 版: ID51 - ID66	

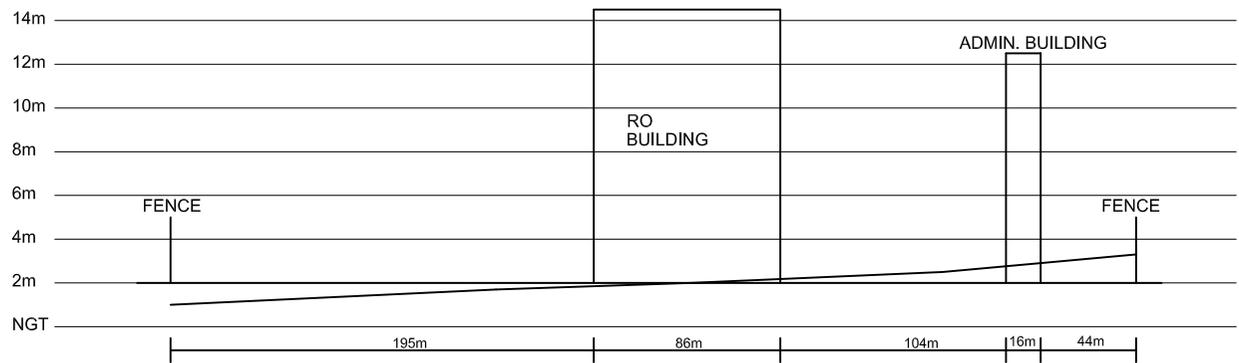


SITE LOCATION

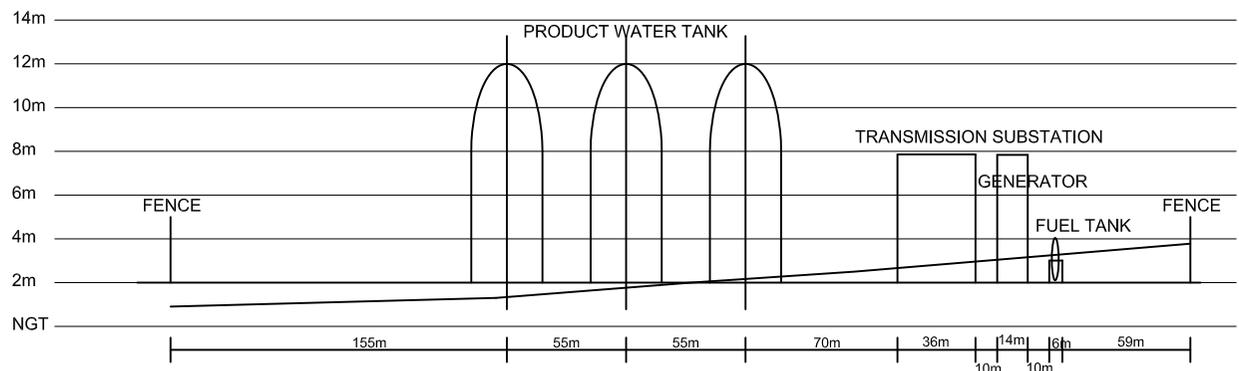
Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/2000 as A1
Desalination Plant Layout Plan 海水淡水化施設配置図	Drawing No. 1



A-A SECTION

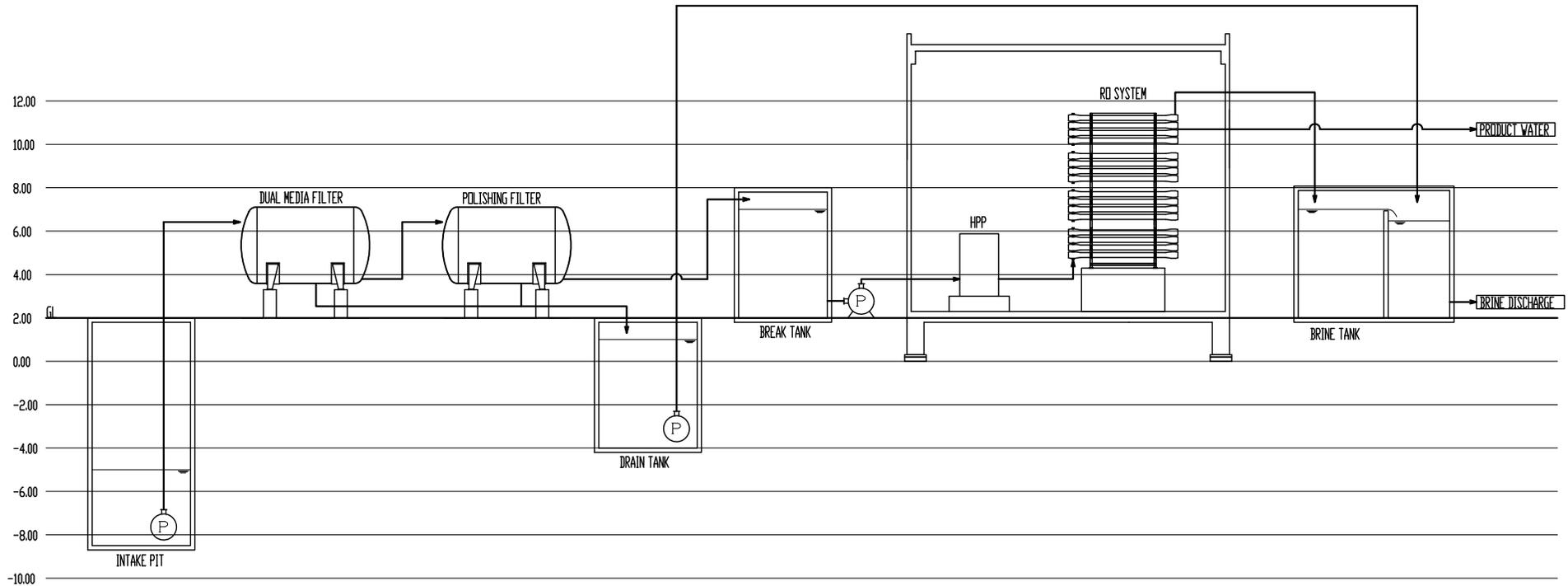


B-B SECTION

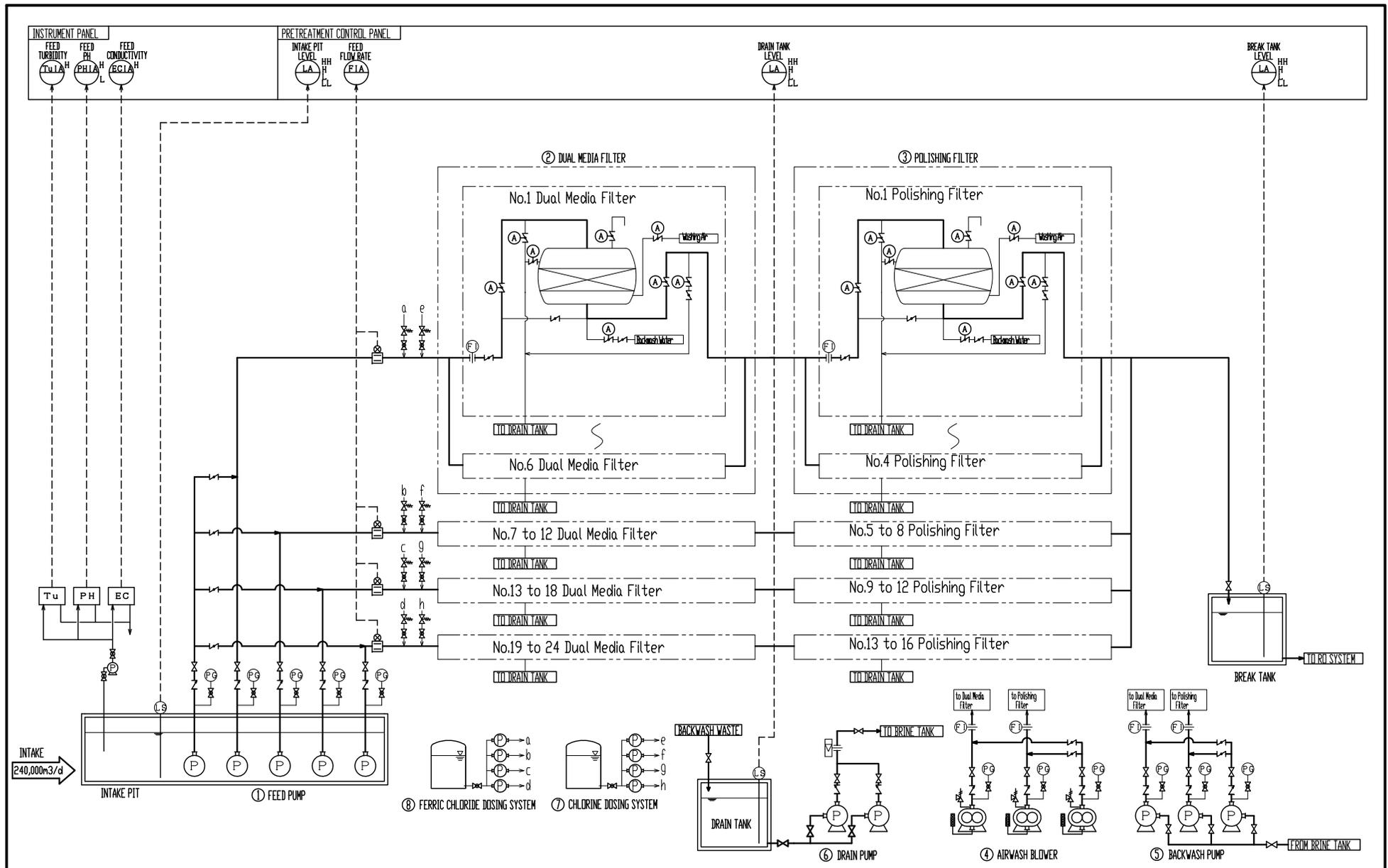


C-C SECTION

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: NO SCALE
Desalination Plant : Layout Plan - Sections	
施設配置計画横断面図	Drawing No. 2



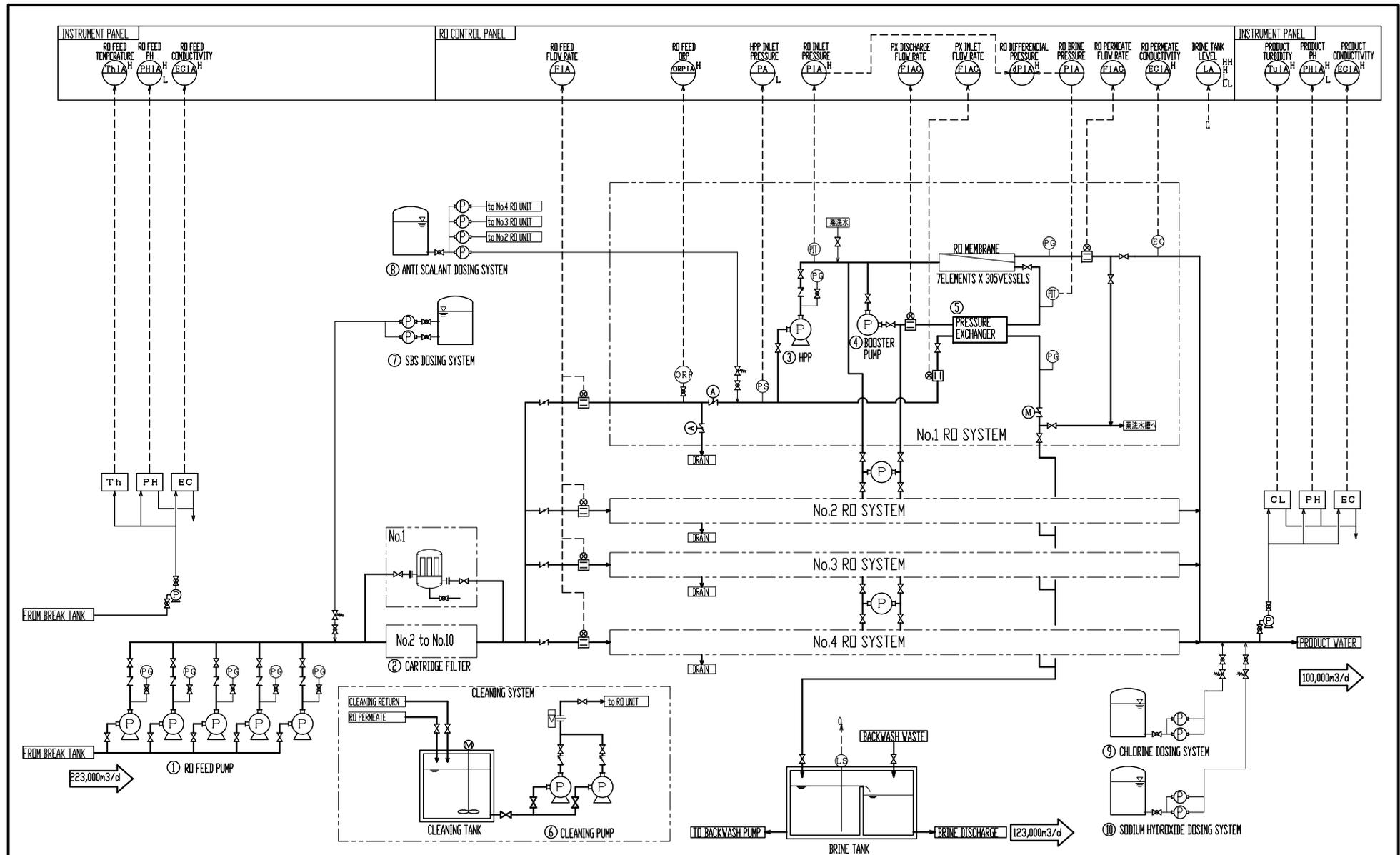
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THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale:
Desalination Plant : Hydraulic Profile 海水淡水化施設水位関係図	
Drawing No.	3



EQUIPMENT LIST

No.	①	②	③	④	⑤	⑥	⑦	⑧	⑨
NAME	FEED PUMP	DUAL MEDIA FILTER	POLISHING FILTER	AIRWASH BLOWER	BACKWASH PUMP	DRAIN PUMP	FERRIC CHLORIDE DOSING SYSTEM	CHLORINE DOSING SYSTEM	
CAPACITY	2350m ³ /h×0.20MPa	3500dia.×16000vml	3500dia.×16000vml	2600m ³ /h×0.04MPa	2000m ³ /h×0.15MPa	560m ³ /h×0.10MPa	TANK : 10m ³ ×2tanks PUMP : 150L/h	TANK : 20m ³ ×2tanks PUMP : 300L/h	
OUTPUT	180kW	—	—	45kW	120kW	45kW	0.4kW	0.75kW	
MATERIAL	STAINLESS STEEL	CS + Rubber Lining	CS + Rubber Lining	CARBON STEEL	STAINLESS STEEL	STAINLESS STEEL	TANK : GRP PUMP : PVC	TANK : GRP PUMP : PVC	
NDS.	5 (1-STANDBY)	24 (2-STANDBY)	16 (2-STANDBY)	3 (1-STANDBY)	3 (1-STANDBY)	2 (1-STANDBY)	1 set	1 set	

<ul style="list-style-type: none"> DB BALL VALVE GV GATE VALVE GV GLOVE VALVE CV CHECK VALVE BV BACK PRESSURE VALVE AR AIR REGULATOR F1 FLOW GAUGE 	<ul style="list-style-type: none"> FM FLOW METER TI TEMPERATURE METER LS LEVEL SWITCH PG PRESSURE GAUGE PI T PURESSURE SENSOR A PNEUMATIC VALVE 	<p>Project Name THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA</p> <p>チュニジア国スファックス海水淡水化施設整備事業準備調査</p> <p>Drawing Title Desalination Plant Process Flow Diagram -1 海水淡水化処理フロー図-1</p> <p>Scale: Drawing No. 4</p>
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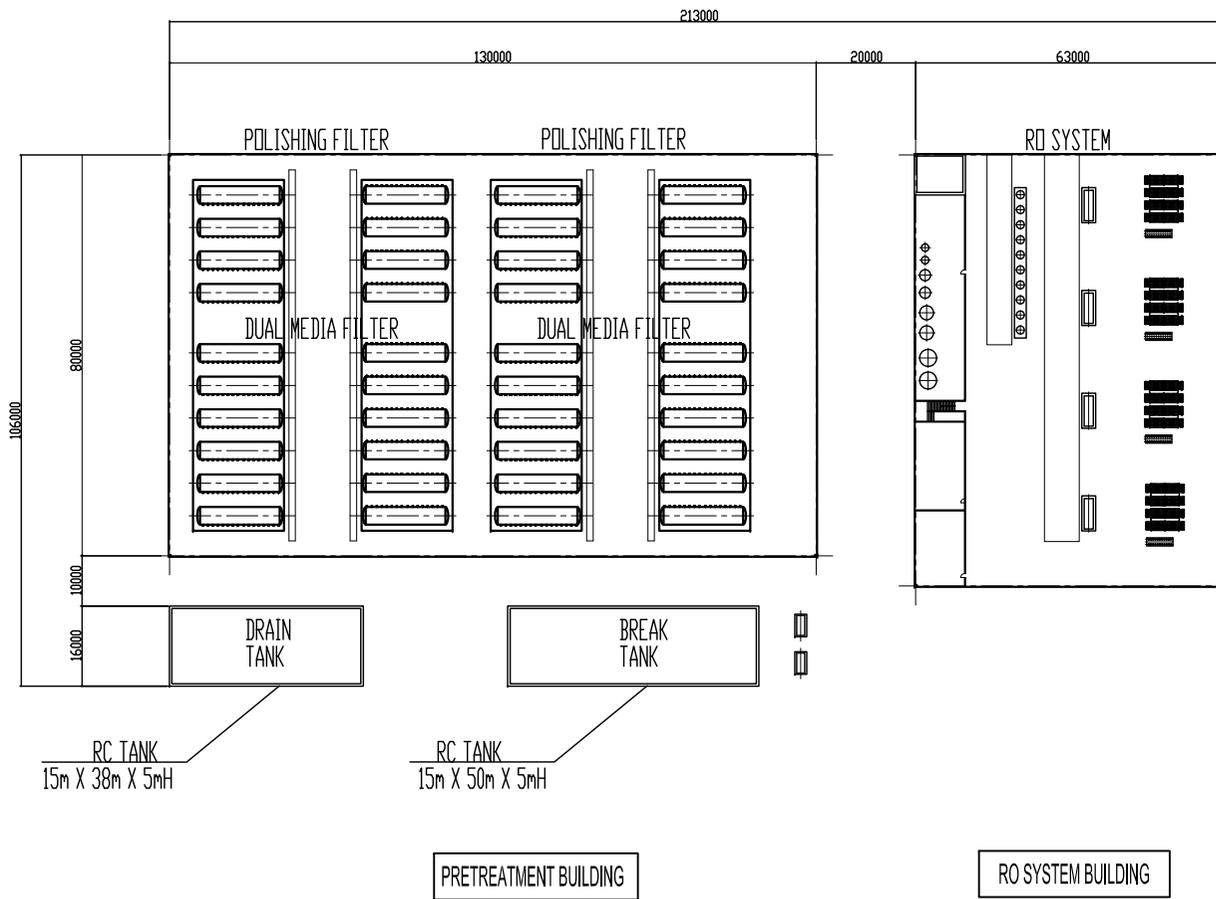
EQUIPMENT LIST

No.	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
NAME	RO FEED PUMP	CARTRIDGE FILTER	HPP	BOOSTER PUMP	PRESSURE EXCHANGER	CLEANING PUMP	SBS DOSING SYSTEM	ANTI SCALANT DOSING SYSTEM	CHLORINE DOSING SYSTEM	SODIUM HYDROXIDE DOSING SYSTEM
CAPACITY	2350m ³ /h × 0.2MPa	1200m ³ /h	1100m ³ /h × 7.15MPa	1300m ³ /h × 0.50MPa	64m ³ /h	960m ³ /h × 0.50MPa	TANK : 30m ³ × 2tanks PUMP : 150L/h	TANK : 4m ³ × 2tanks PUMP : 20L/h	TANK : 20m ³ × 2tanks PUMP : 60L/h	TANK : 5m ³ × 2tanks PUMP : 80L/h
OUTPUT	180kW	—	2960kW	250kW	—	200kW	0.4kW	0.2kW	0.4kW	0.4kW
MATERIAL	STAINLESS STEEL	GRP	STAINLESS STEEL	STAINLESS STEEL	CERAMIC	STAINLESS STEEL	TANK : GRP PUMP : PVC	TANK : GRP PUMP : PVC	TANK : GRP PUMP : PVC	TANK : GRP PUMP : PVC
NOS.	5 (1-STANDBY)	10 (2-STANDBY)	4	6 (2-STANDBY)	80(20/unit)	2 (1-STANDBY)	1 set	1 set	1 set	1 set

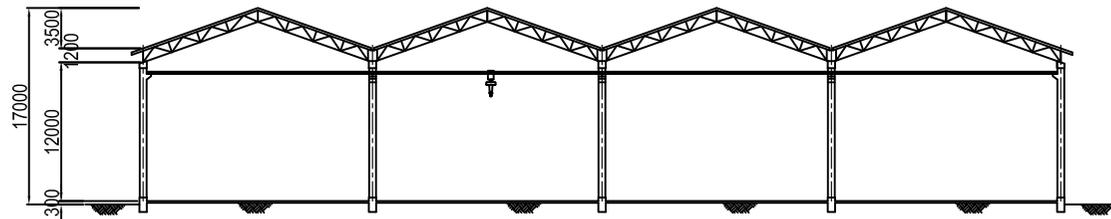
Project Name
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA
 チュニア国スファックス海水淡水化施設整備事業準備調査

Drawing Title
Desalination Plant Process Flow Diagram -2
 海水淡水化処理フロー図-2

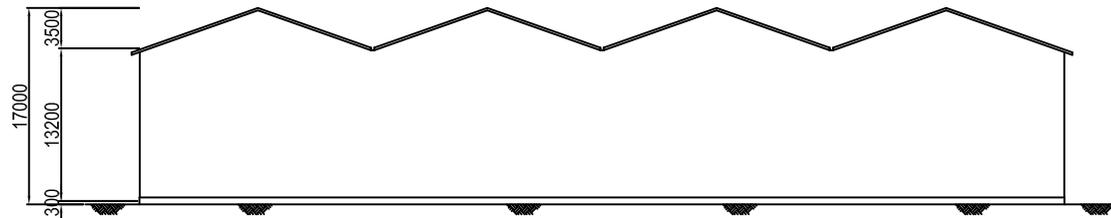
Scale:
 Drawing No. **5**



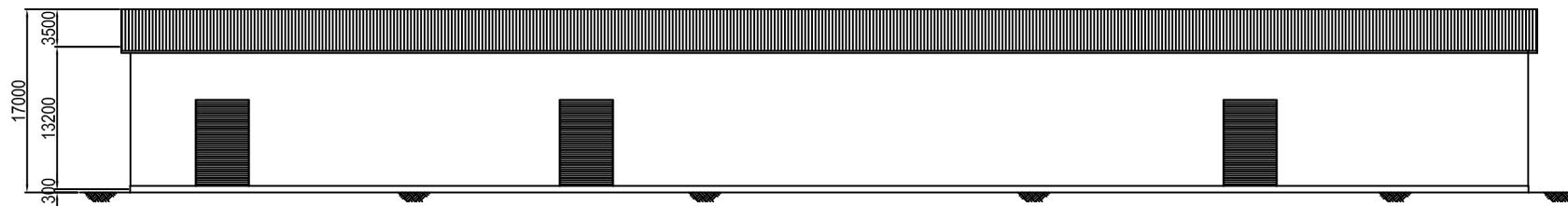
Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:500
Pre-treatment Building & RO system System Building : General Layout	Drawing No. 6
前処理棟・RO処理棟 一般配置図	



NORTH SIDE ELEVATION (A - A)
S = 1 : 600

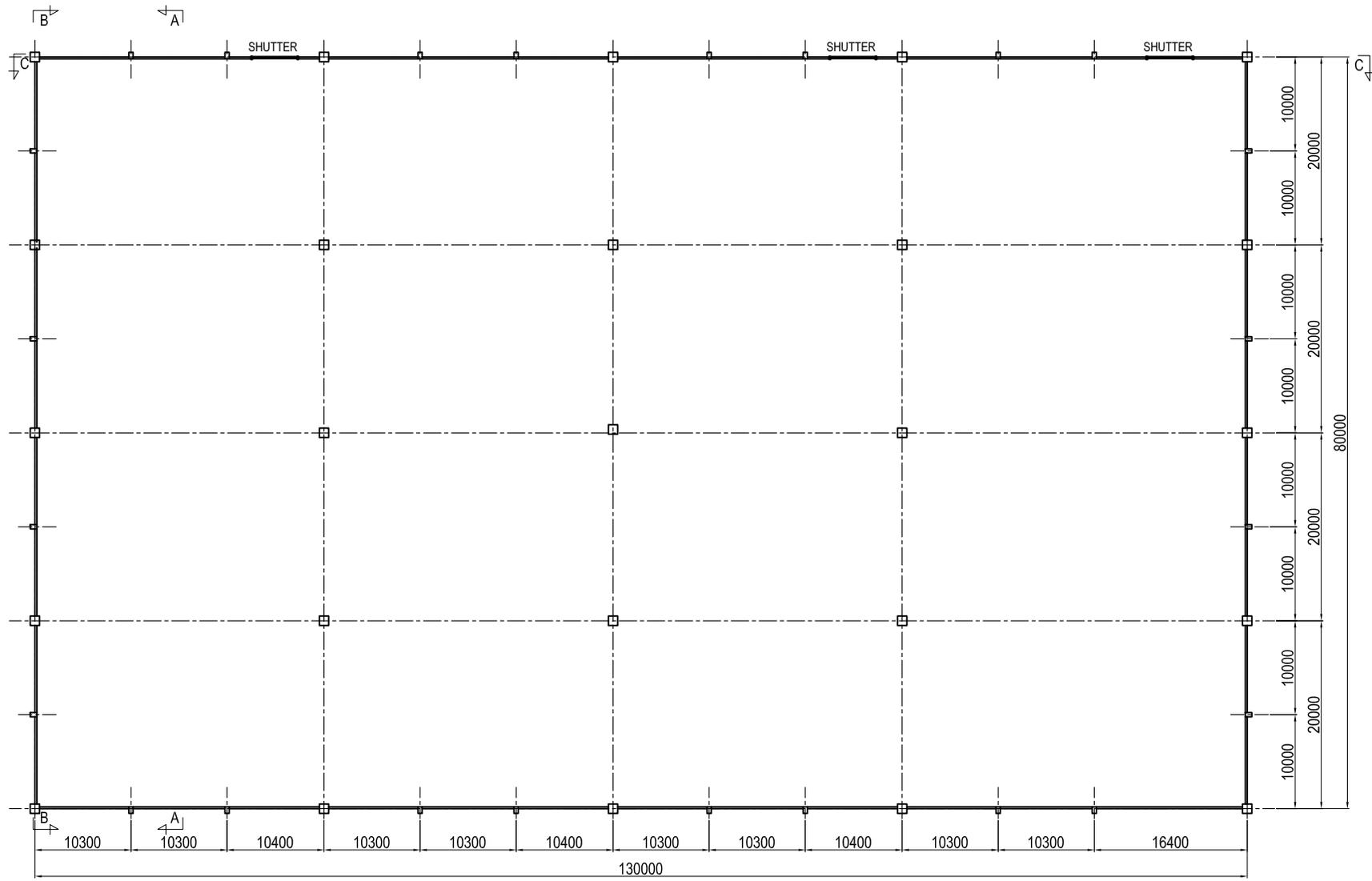


SOUTH SIDE ELEVATION (B - B)
S = 1 : 600



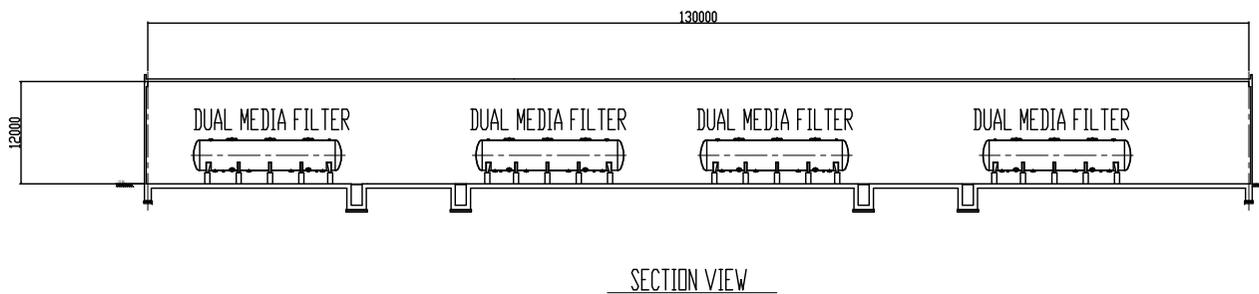
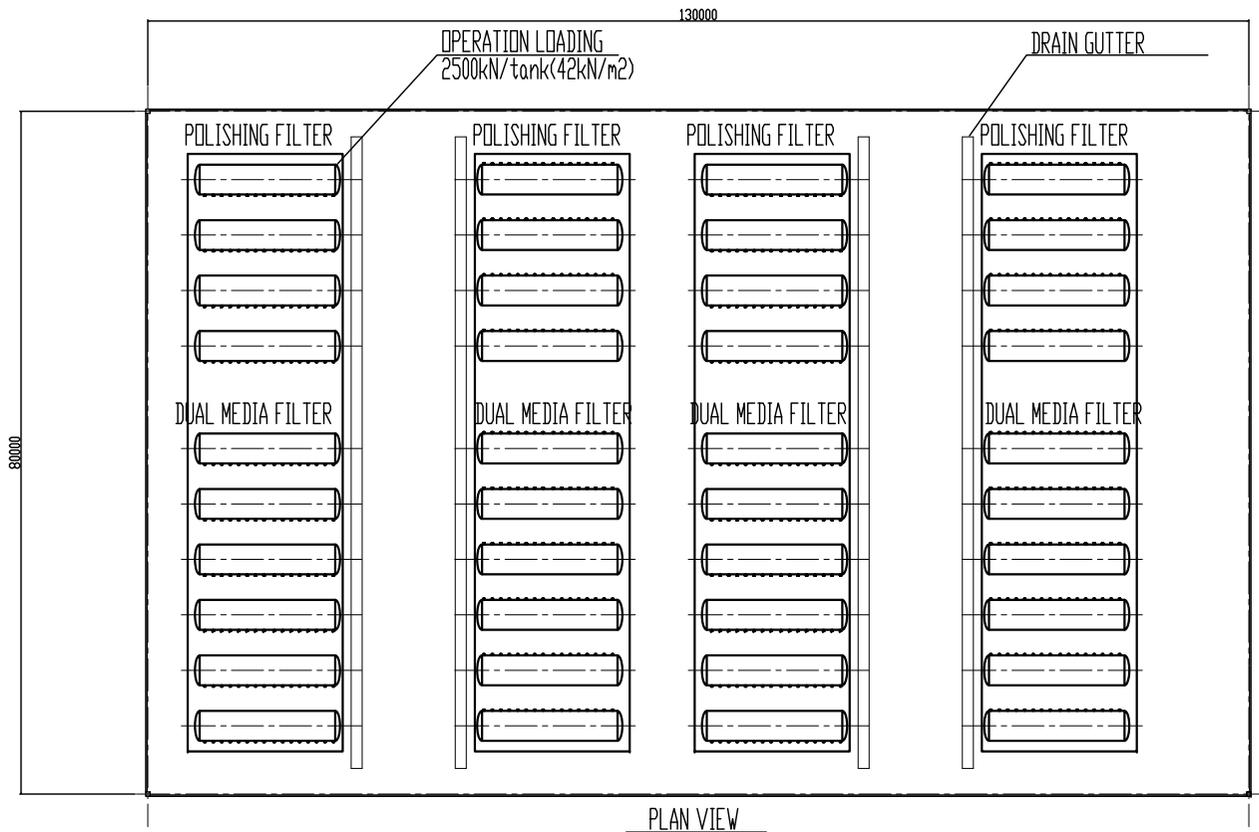
WEST SIDE ELEVATION (C - C)
S = 1 : 600

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:600
Pretreatment Building : Elevation	
前処理施設棟 立面図・断面図	Drawing No. 7

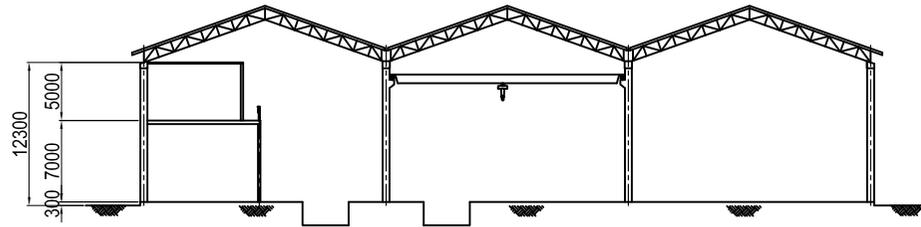


GROUND FLOOR PLAN
S = 1 : 600

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:600
Pretreatment Building : Plan 前処理施設棟 平面図	Drawing No. 8



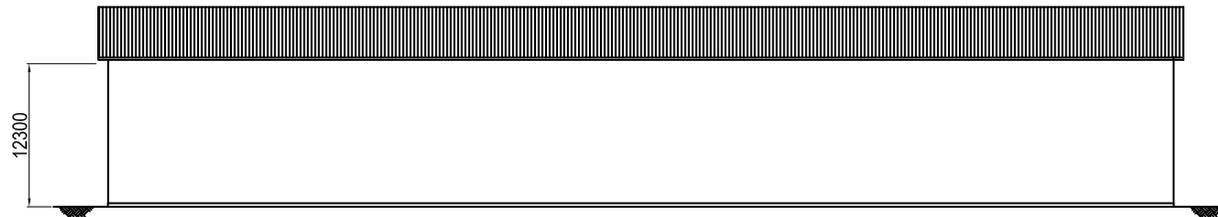
Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:300
Pre-treatment Building : Equipment Layout 前処理施設棟 施設配置	Drawing No. 9



SECTION A - A
S = 1 : 600

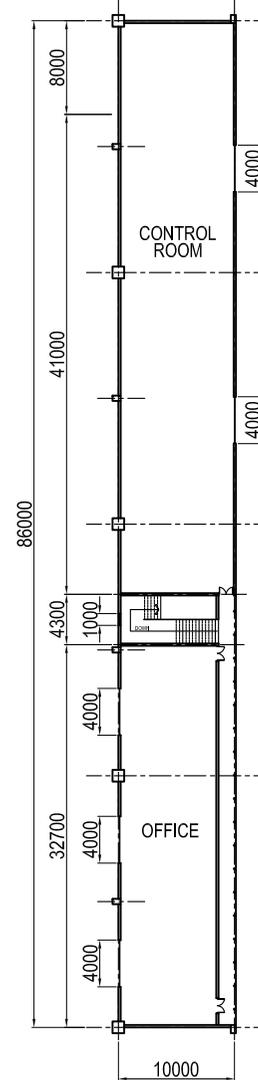
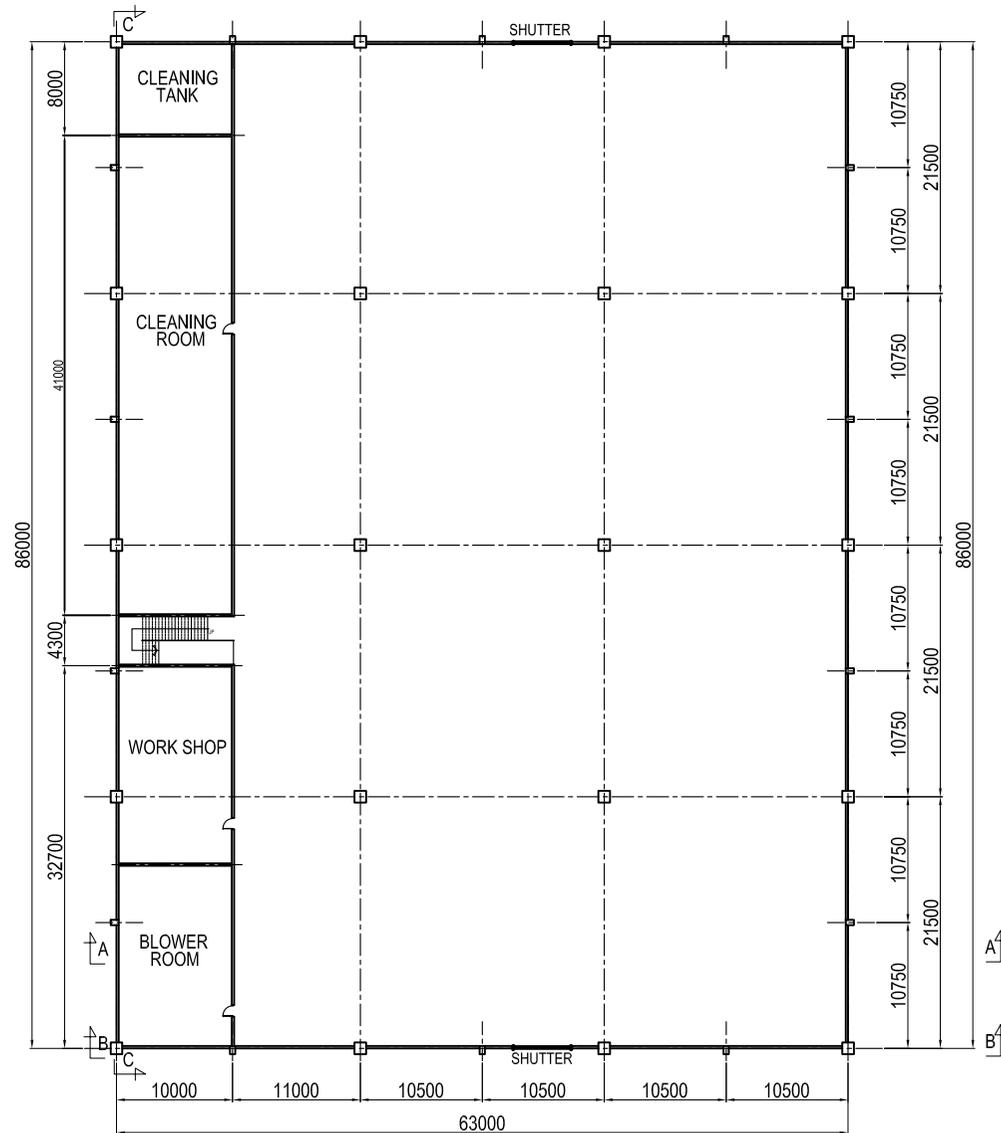


EAST SIDE ELEVATION (B - B)
S = 1 : 600

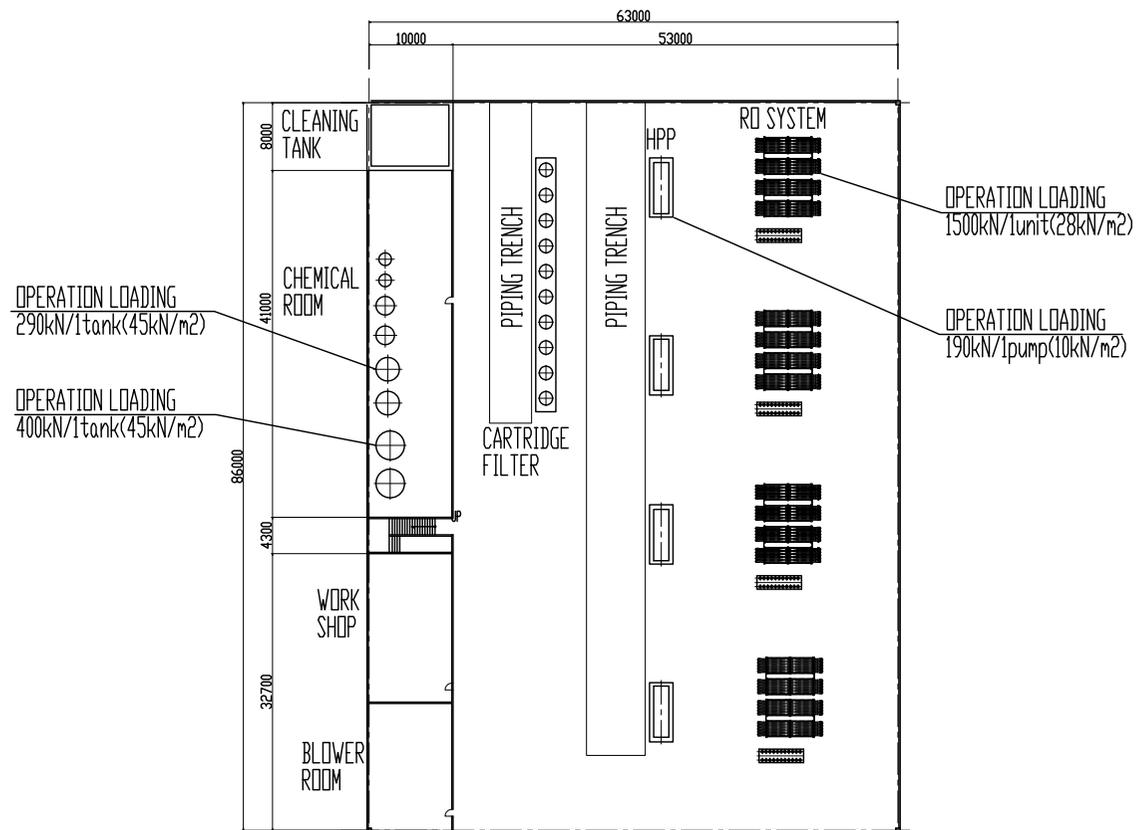


SOUTH SIDE ELEVATION (C - C)
S = 1 : 600

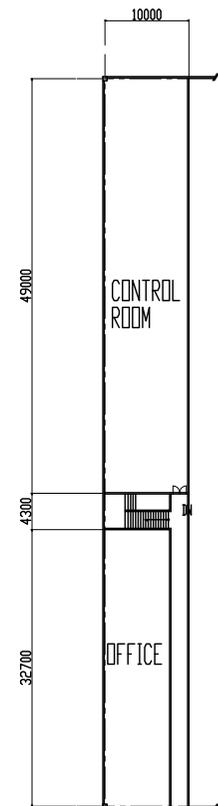
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THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:600
RO System Building : Elevation	
RO処理棟 立面図・断面図	Drawing No. 10



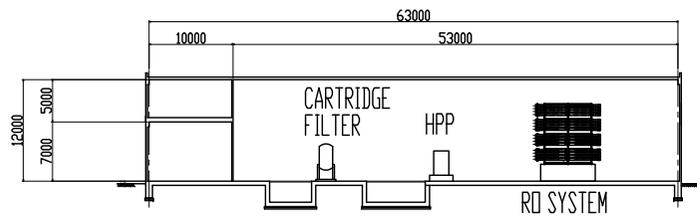
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Drawing Title RO System Building : Plan RO処理棟 平面図	Scale: 1:600
	Drawing No. 11



PLAN VIEW

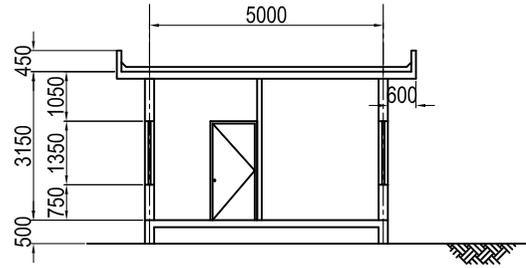


2nd FLOOR PLAN

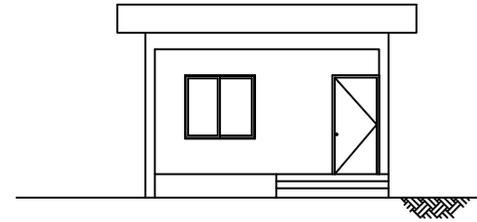


SECTION VIEW

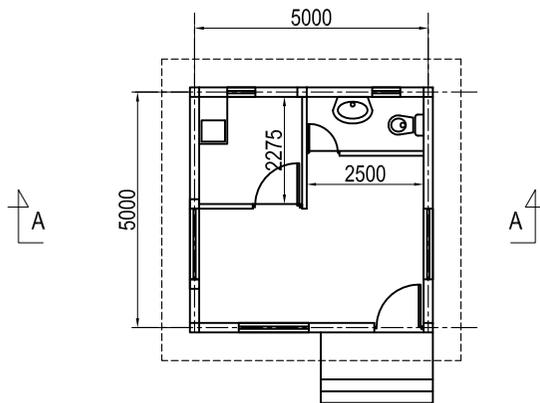
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THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:300
RO System Building : Equipment Layout RO処理施設棟 施設配置	Drawing No. 12



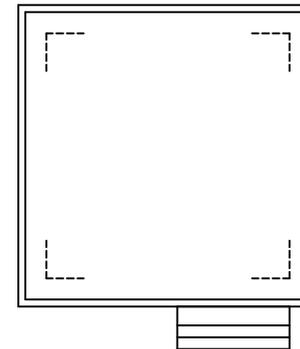
SECTION A-A S=1:150



FRONT ELEVATION S=1:150

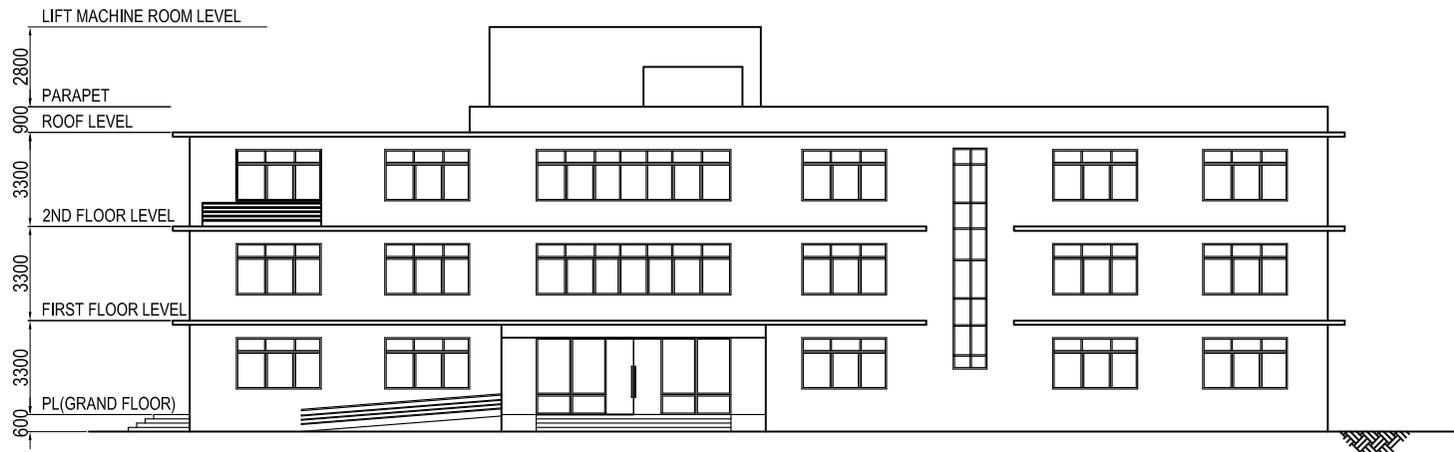


GROUND FLOOR PLAN S=1:150

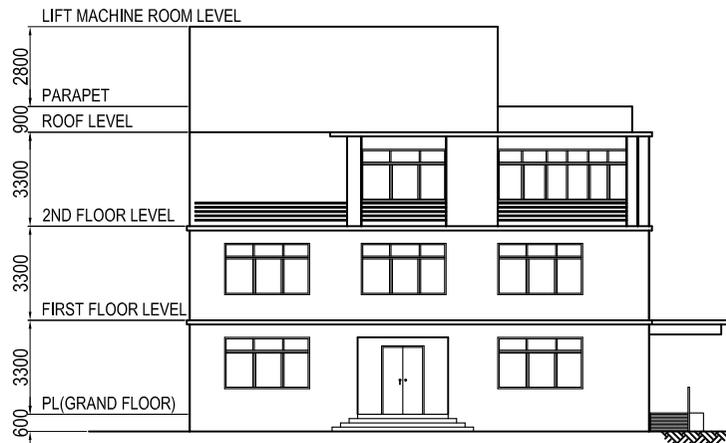


ROOF PLAN S=1:150

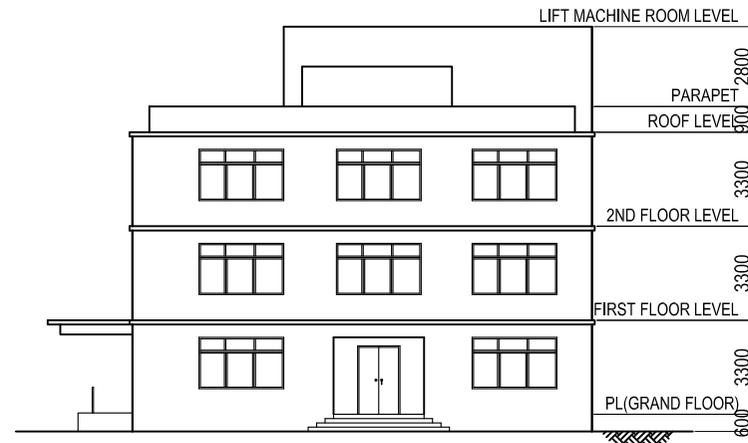
Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:150
Gatekeeper House : Plan & Section 守衛室 平面図・断面図	Drawing No. 13



EAST SIDE ELEVATION (A - A)
S = 1 : 250

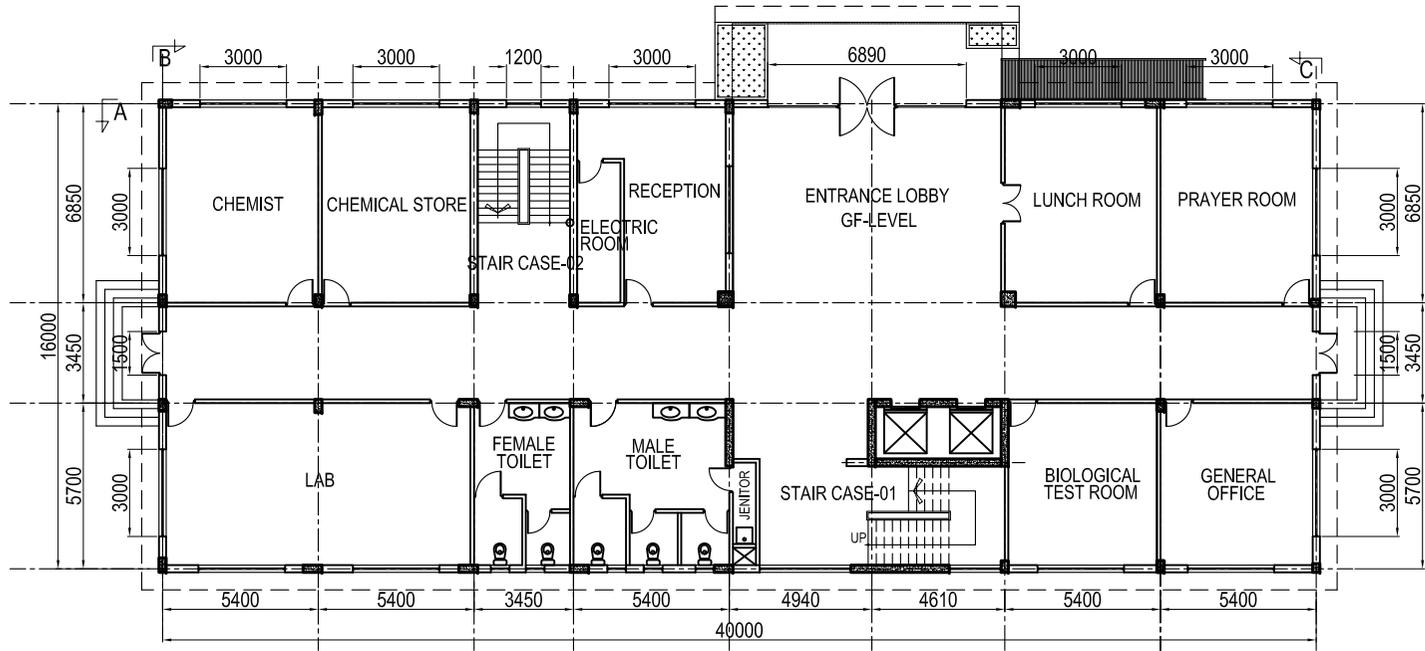


SOUTH SIDE ELEVATION (B - B)
S = 1 : 250

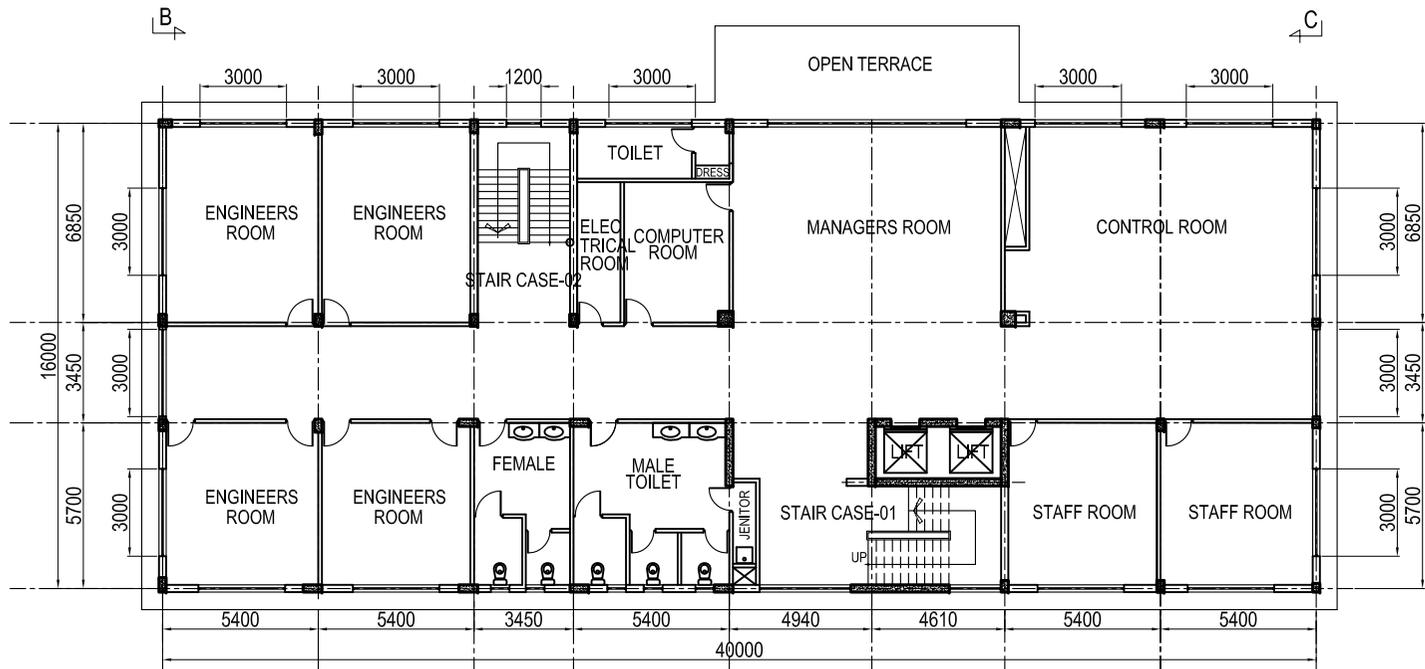


NORTH SIDE ELEVATION (C - C)
S = 1 : 250

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	
Administration Building : Elevation	
管理棟 立面図	
Scale:	1:250
Drawing No.	14

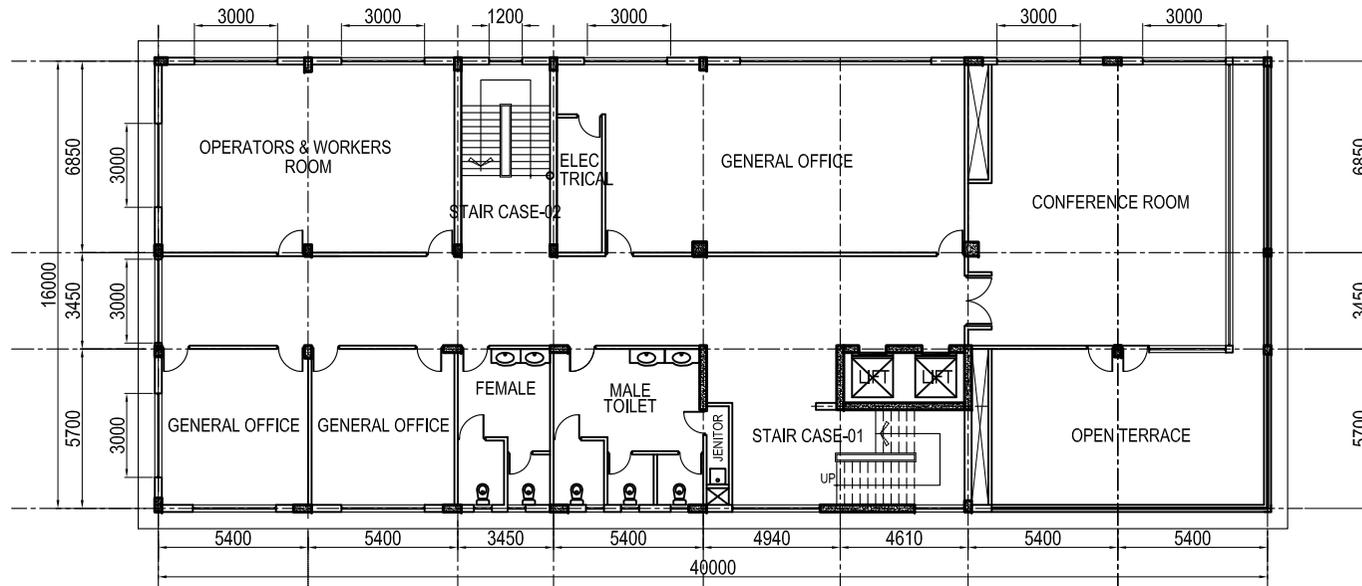


GROUND FLOOR PLAN
S = 1 : 250



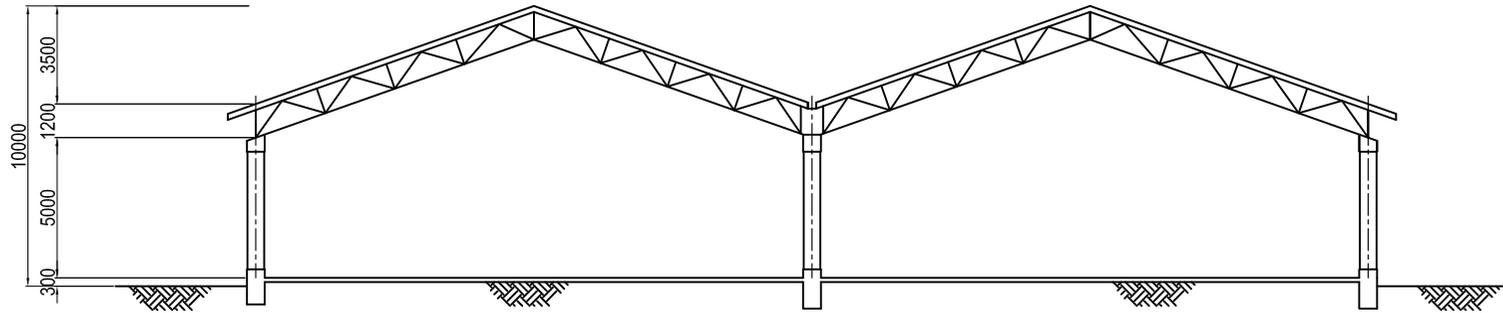
FIRST FLOOR PLAN
S = 1 : 250

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:250
Administration Building : Plan -1	Drawing No. 15
管理棟 平面図-1	

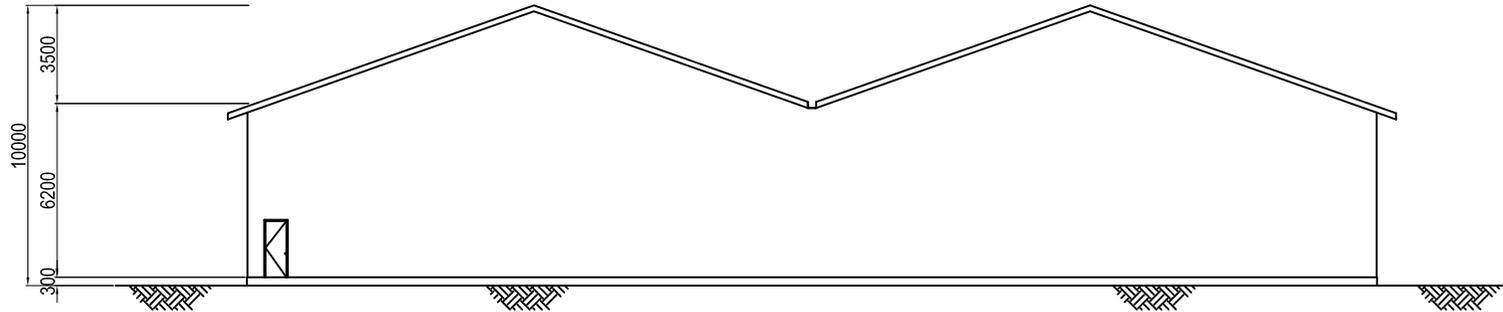


SECOND FLOOR PLAN
S = 1 : 250

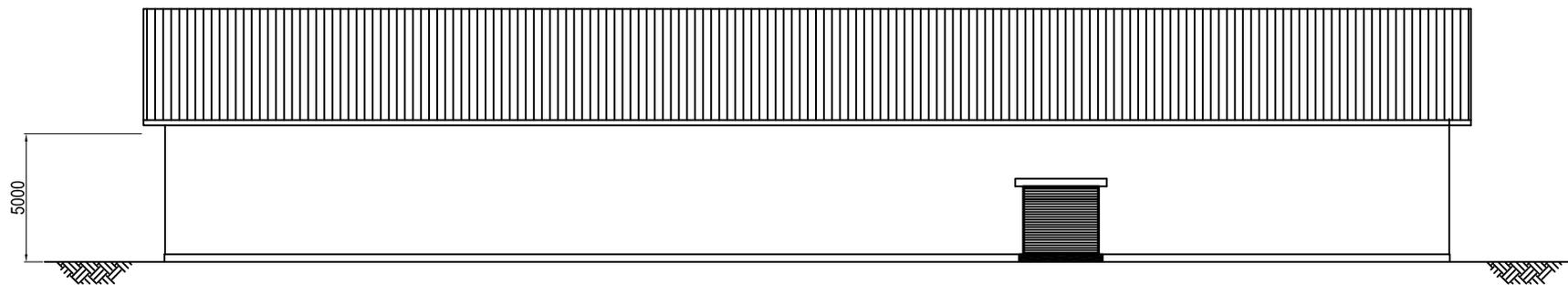
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THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:250
Administration Building : Plan -2	
管理棟 平面図-2	Drawing No. 16



SECTION A - A
S = 1 : 250

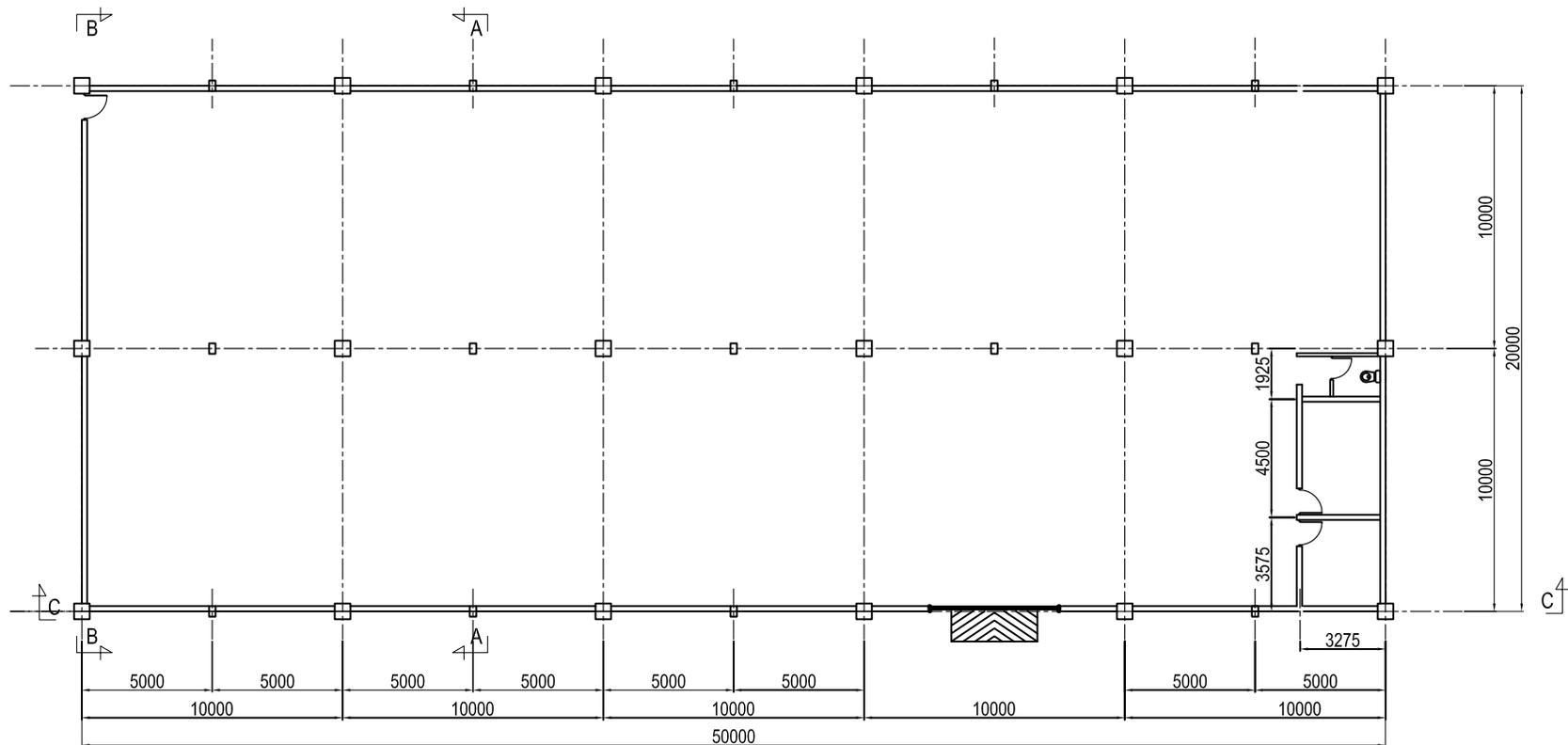


SOUTH SIDE ELEVATION (B - B)
S = 1 : 250



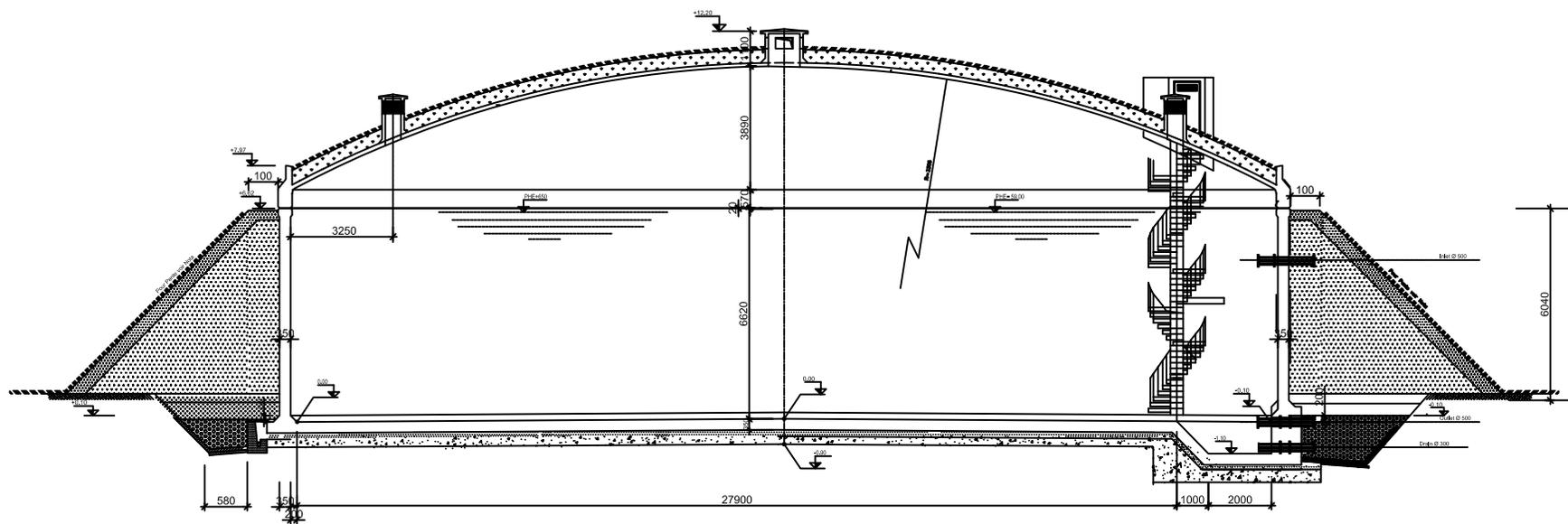
SOUTH SIDE ELEVATION (C - C)
S = 1 : 250

Project Name THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title Warehouse : Elevation 倉庫 立面図	Scale: 1:250
	Drawing No. 17

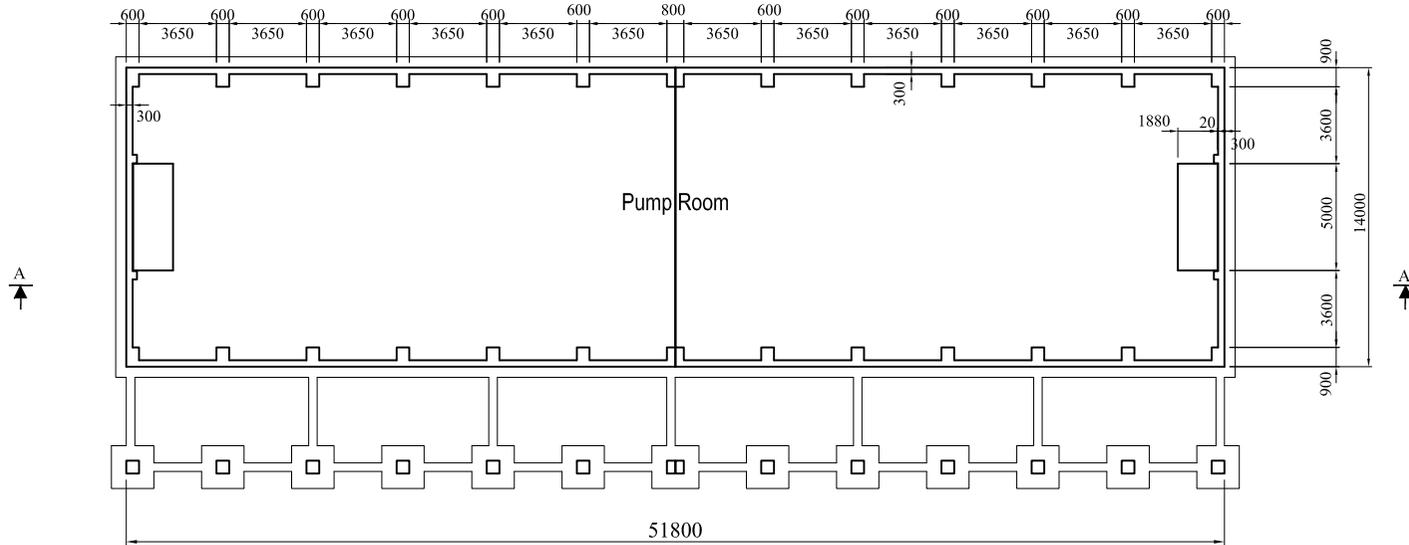


WARE HOUSE GROUND FLOOR PLAN
S = 1 : 250

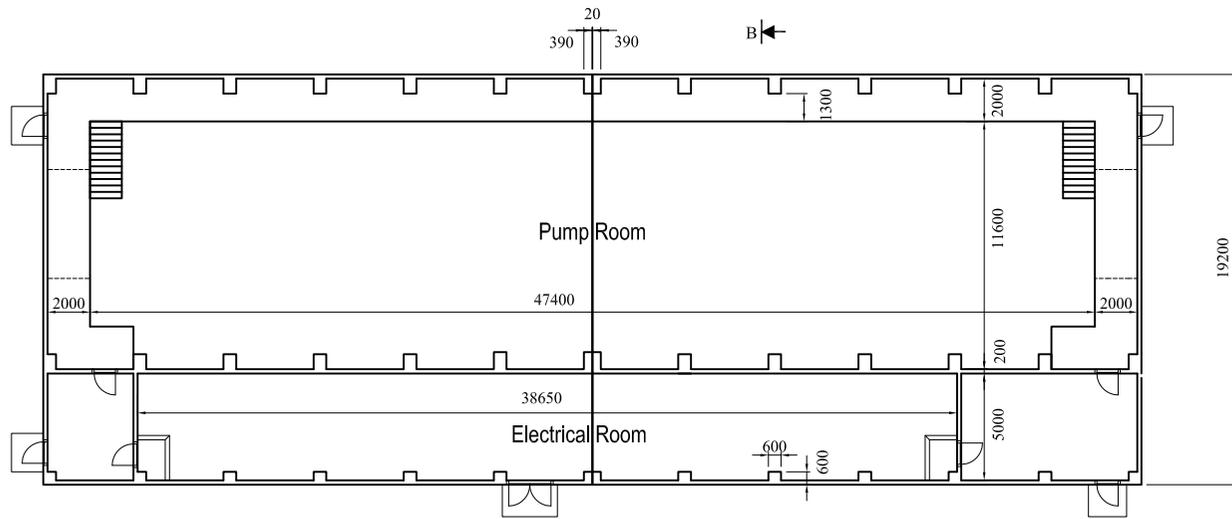
Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:250
Warehouse : Plan	
倉庫 平面図	Drawing No. 18



Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1:150
Product Water tank 5,000m3	Drawing No. 19
生産水タンク 5,000m3	

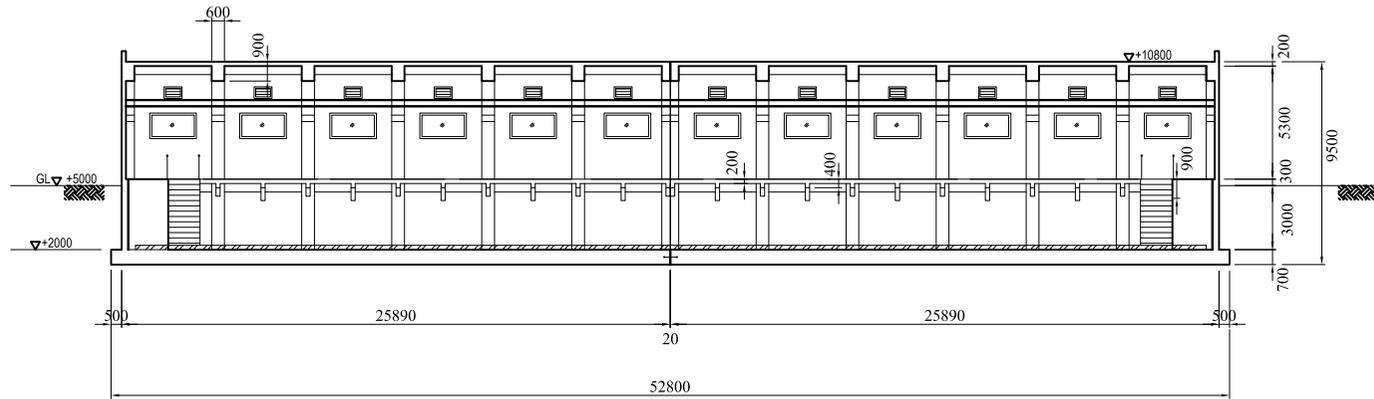


PLAN (LOWER LEVEL)

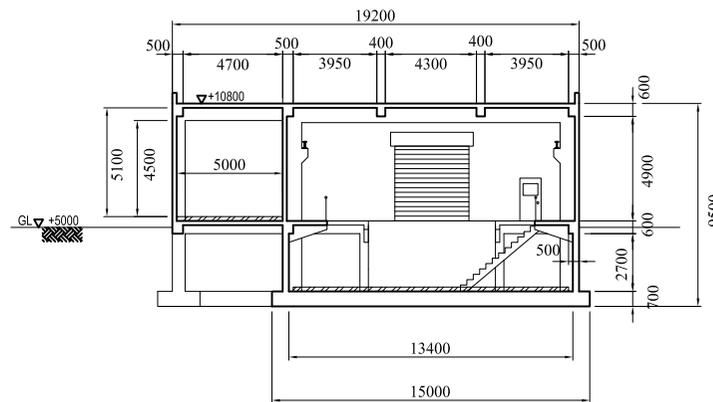


PLAN (GROUND LEVEL)

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
Transmission Pump Building : Plan 海水淡水化施設送水ポンプ棟 平面図	Drawing No. 20

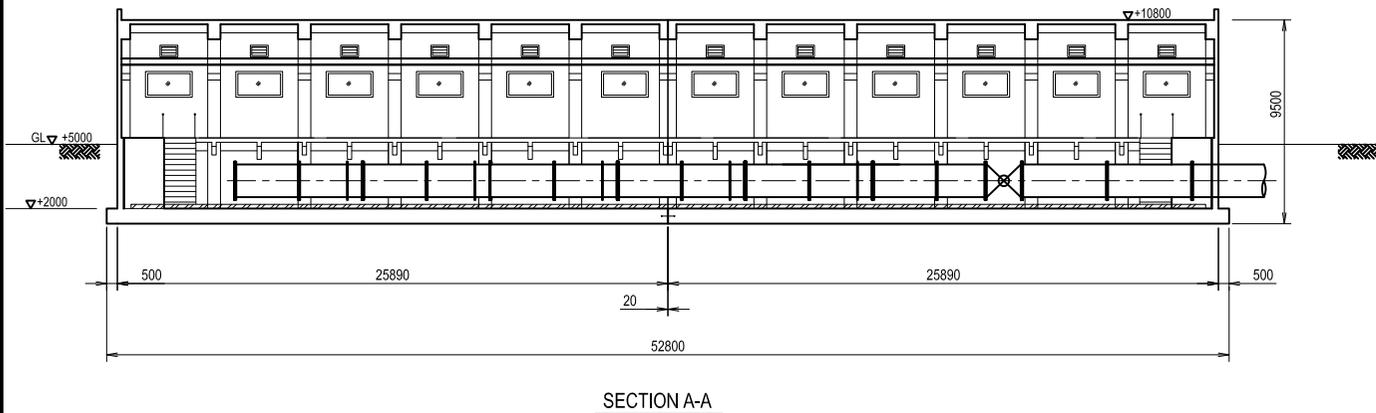
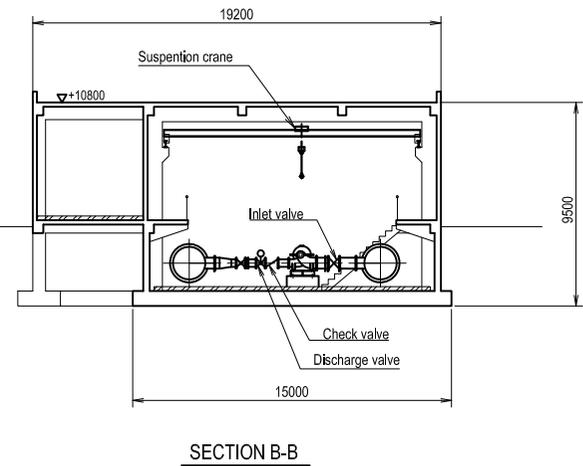
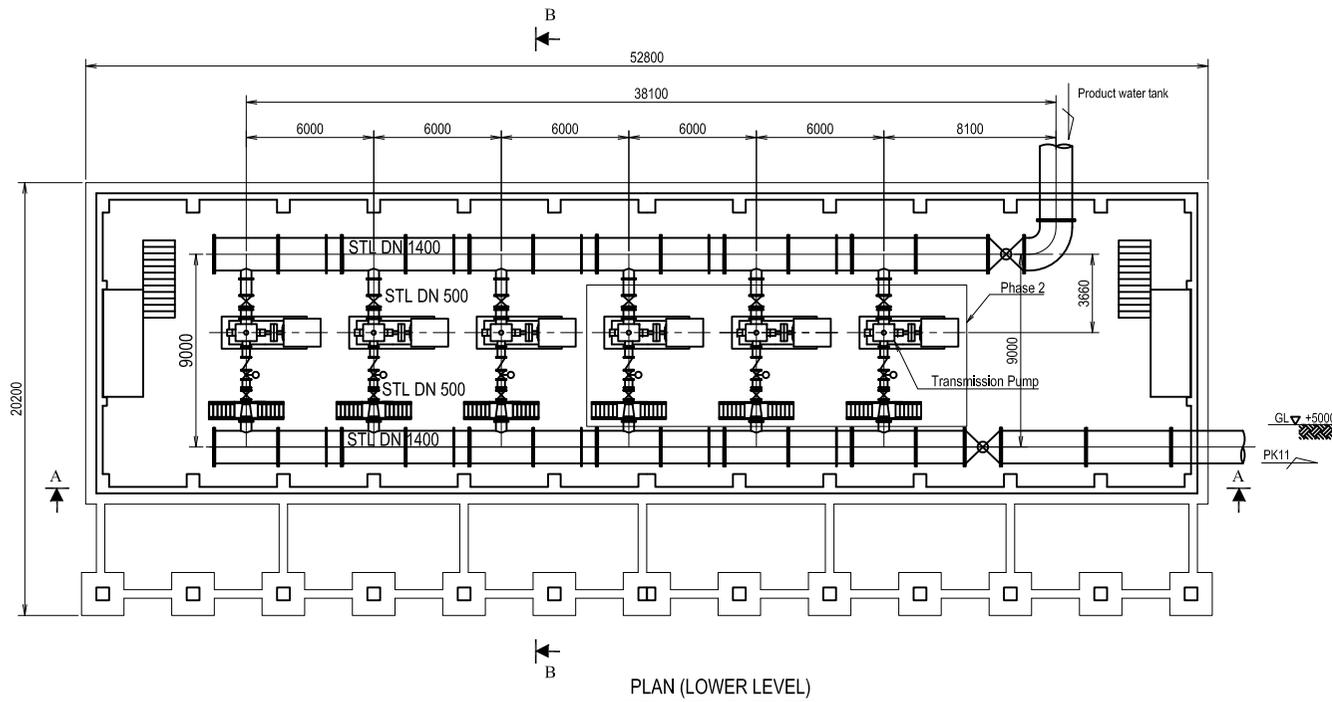


SECTION A-A

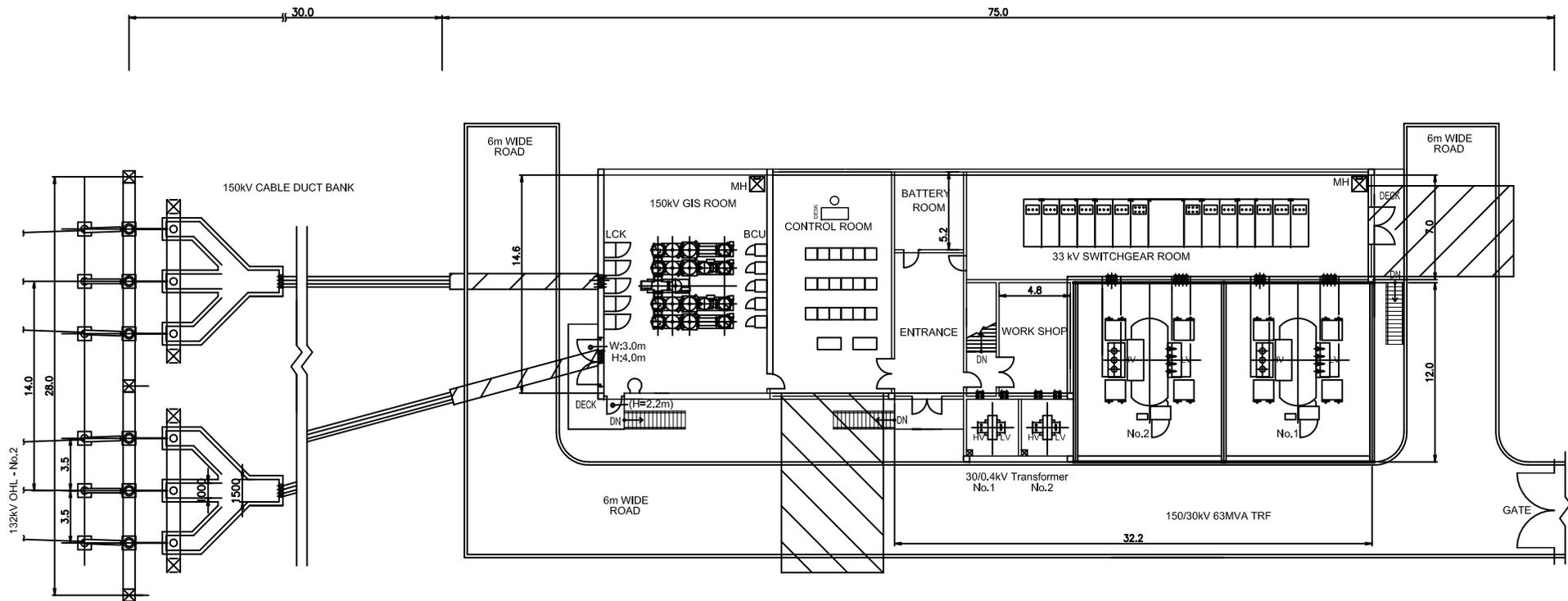


SECTION B-B

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
Transmission Pump Building : Section 海水淡水化施設送水ポンプ棟 断面図	Drawing No. .21

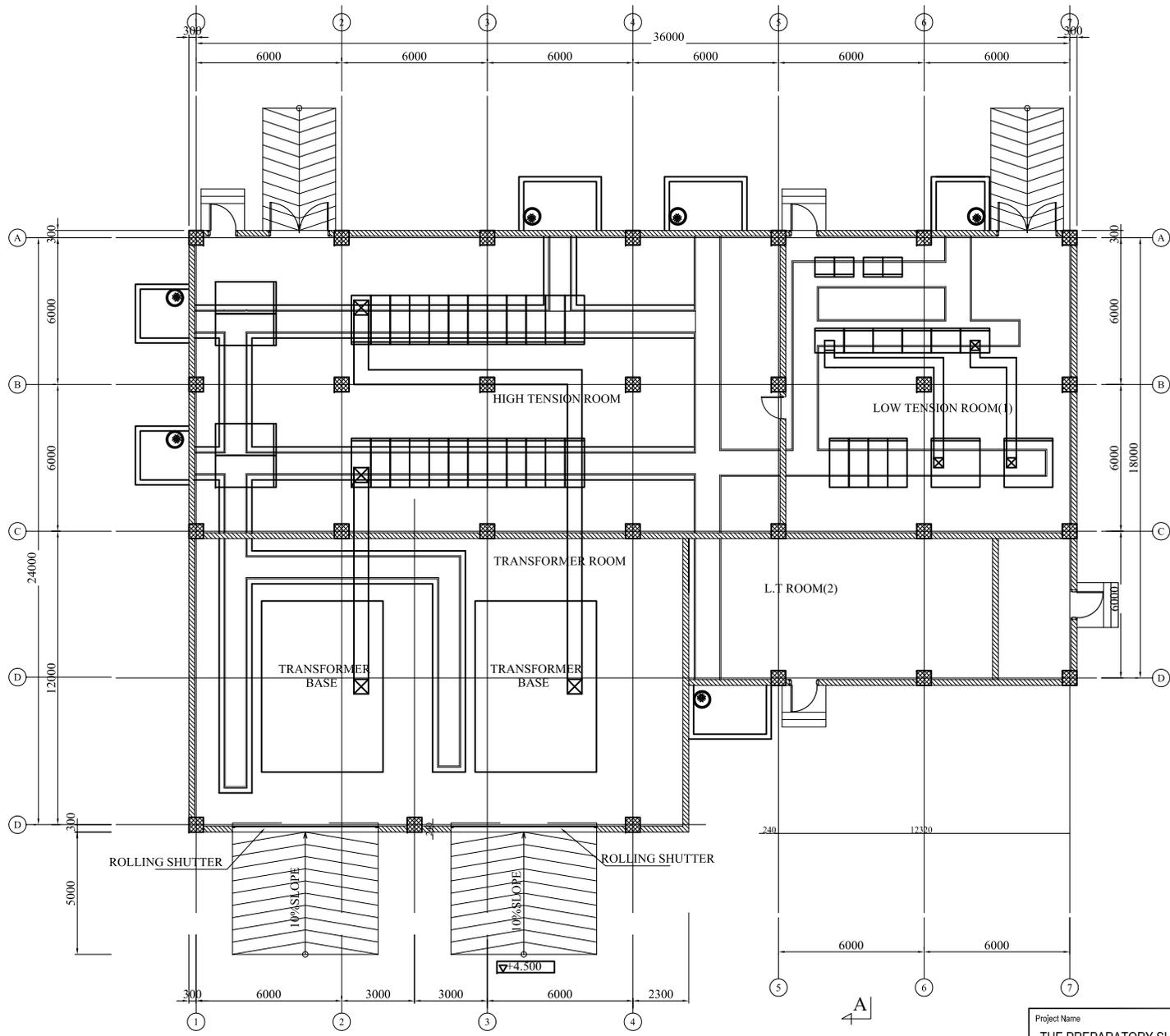


Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
Transmission Pump Building : Pump Layout	
海水淡水化施設送水ポンプ棟 ポンプ配置計画	Drawing No. 22



NOTES
 1. ALL DIMENSIONS ARE IN METERS (m)

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/400
150kV Power Receiving Facility	
150kV 受変電施設	Drawing No. 23

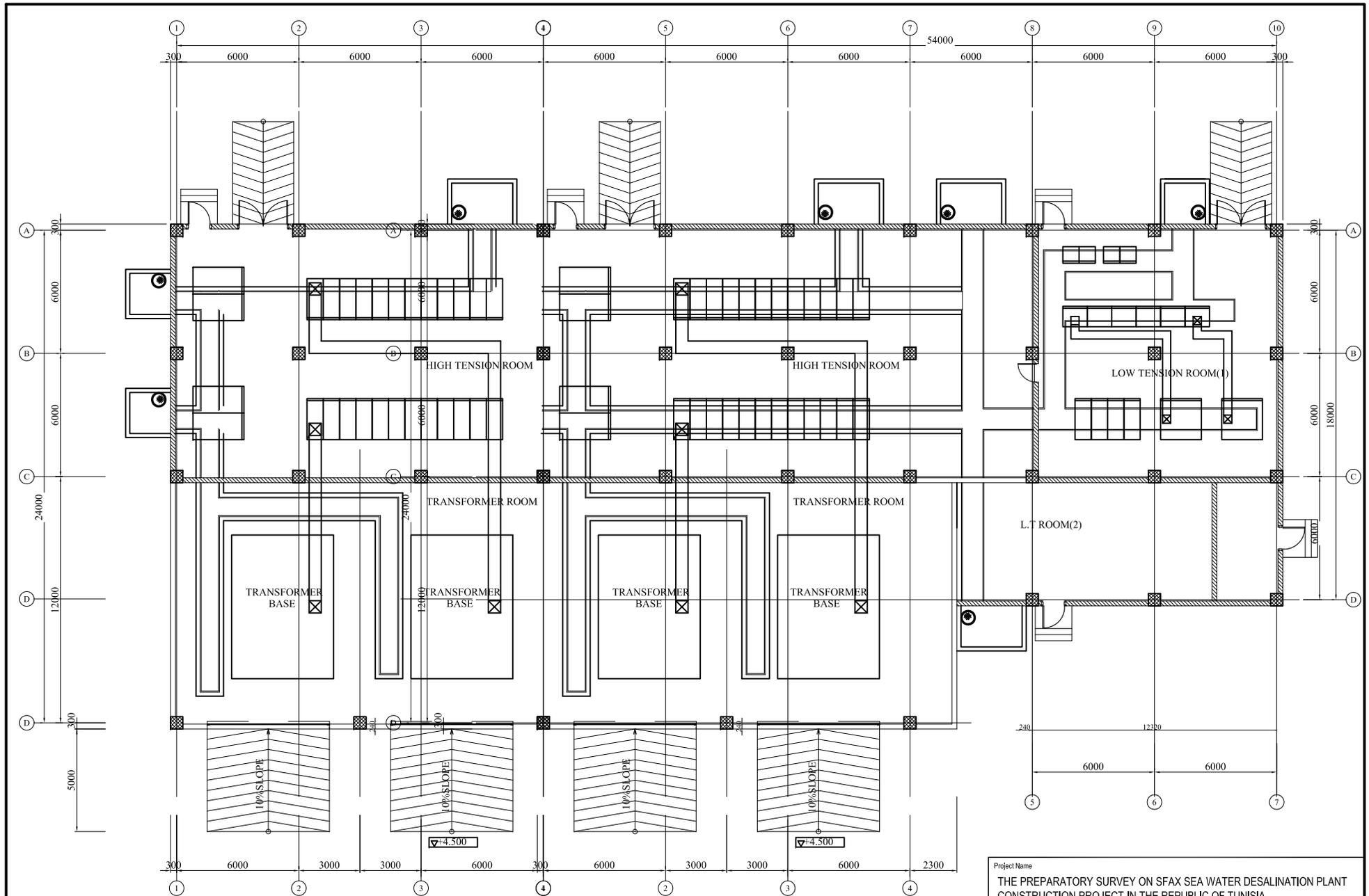


Intake Pump Substation

Project Name
 THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT
 CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA
 チュニジア国スファックス海水淡水化施設整備事業準備調査

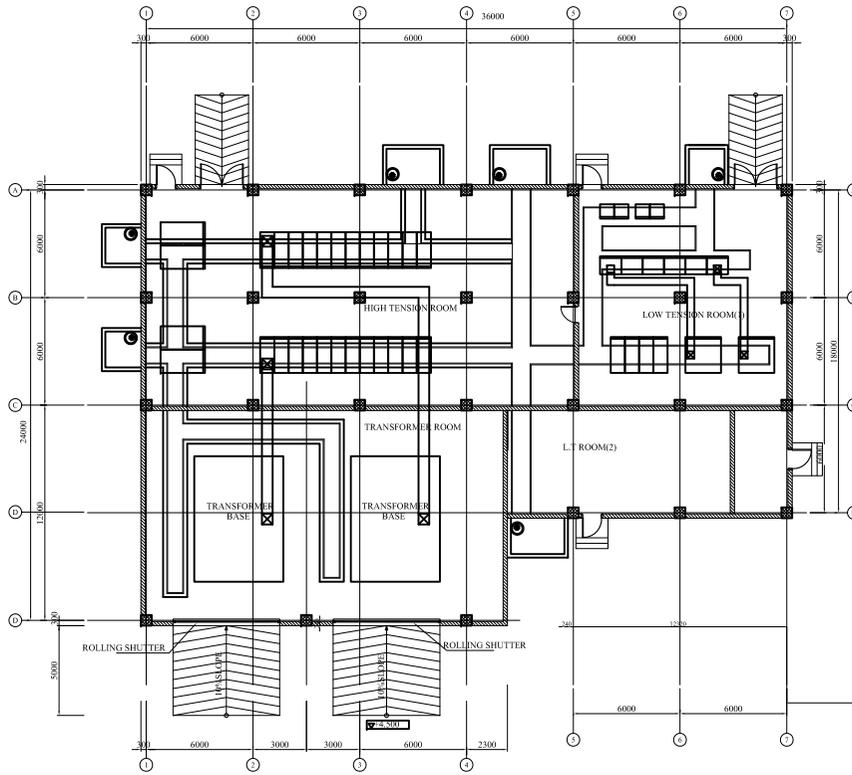
Drawing Title
 Intake Pumps Sub-station
 取水ポンプ変電施設

Scale: 1/250
 Drawing No. 24

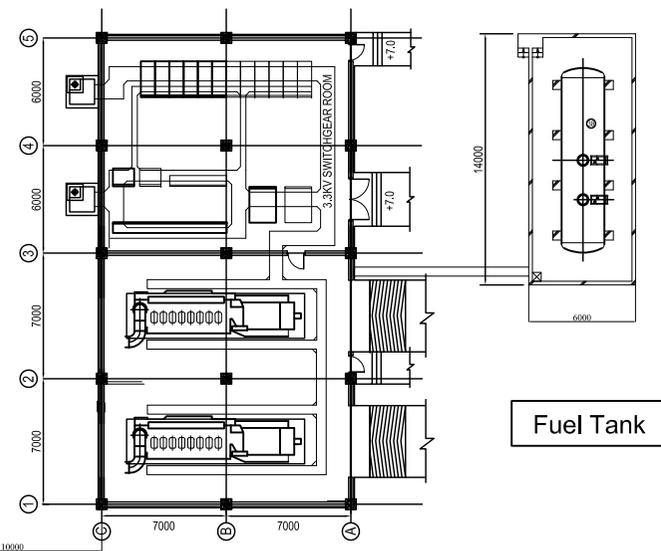


RO Substation

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
RO Facilities Sub-station	Drawing No. 25
ROろ過機器変電施設	



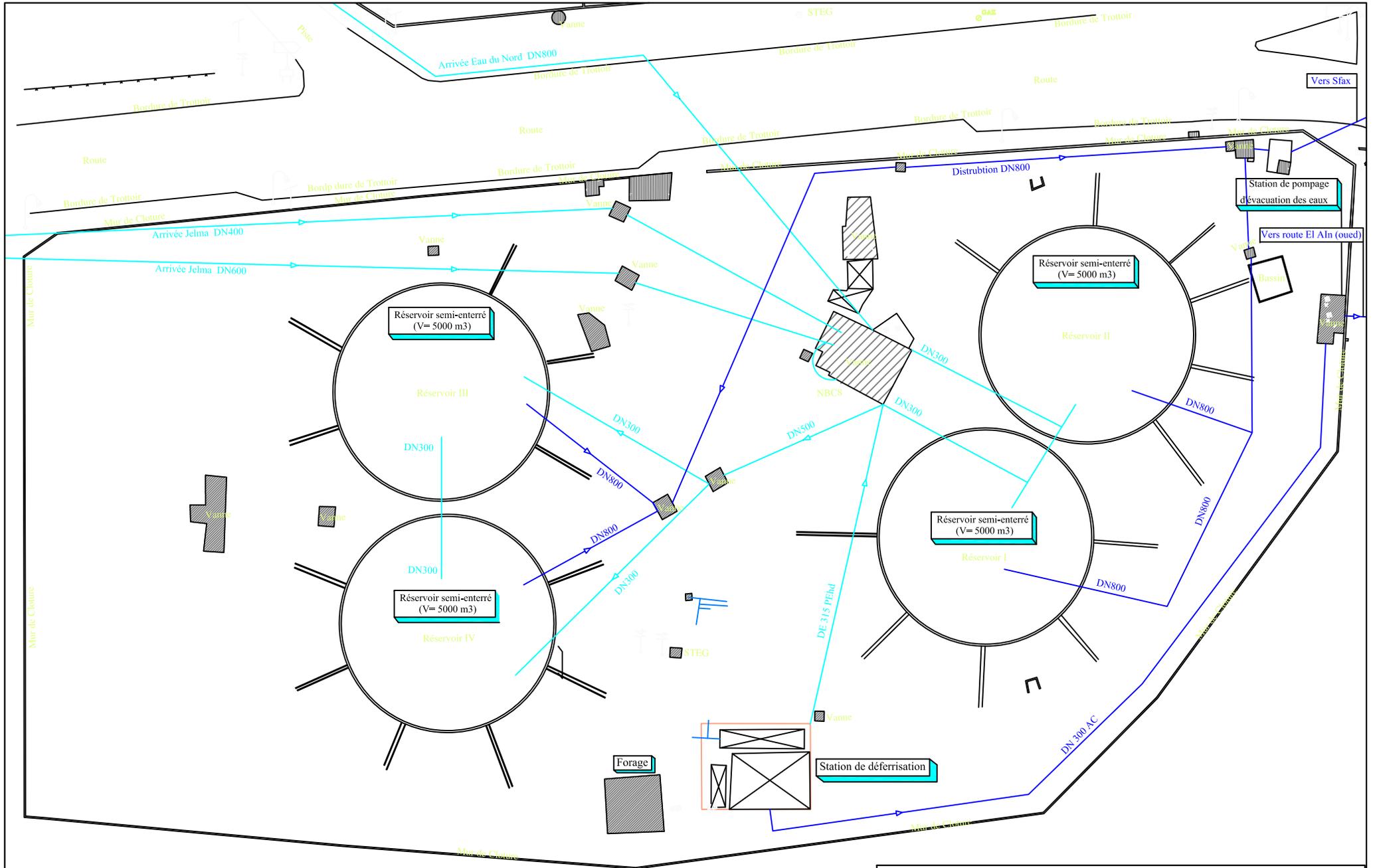
Transmission Pumps Substation



Power Generators

Fuel Tank

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/400
Transmission Pumps Sub- station 送水ポンプ変電施設	26



Legend

- Pipeline transmitting water to PK10
- Pipeline distributing water from PK10

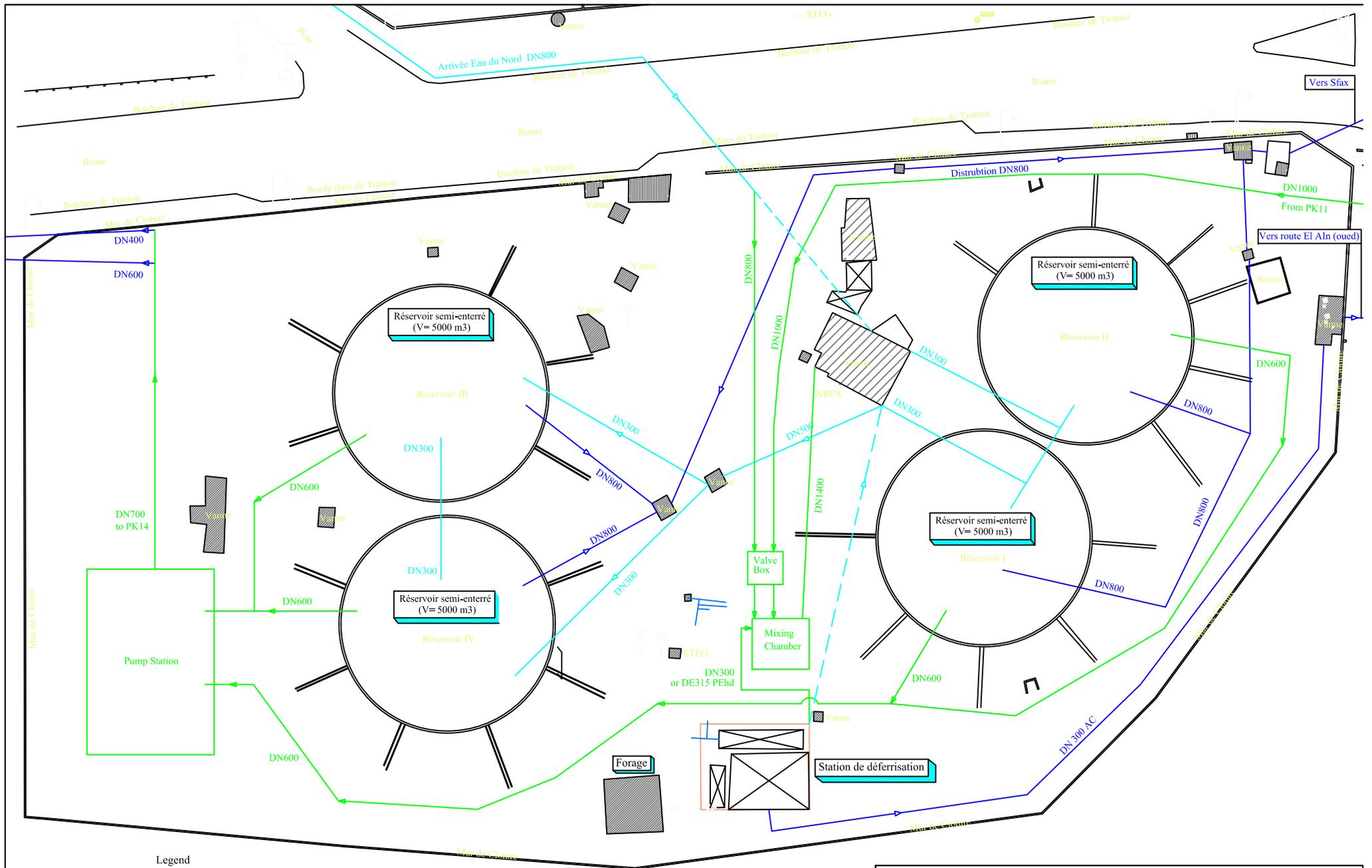
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT
IN THE REPUBLIC OF TUNISIA

チュニア国スファクス海水淡水化施設整備事業準備調査

PK10 Reservoir Site - Present Status
PK10配水池 現況図

Scale:
Drawing
No.

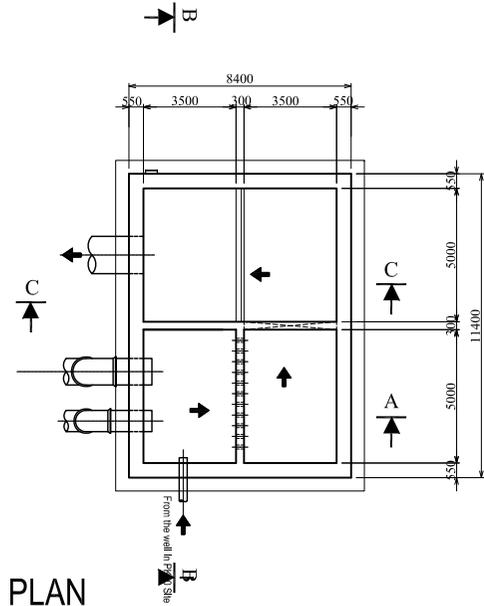
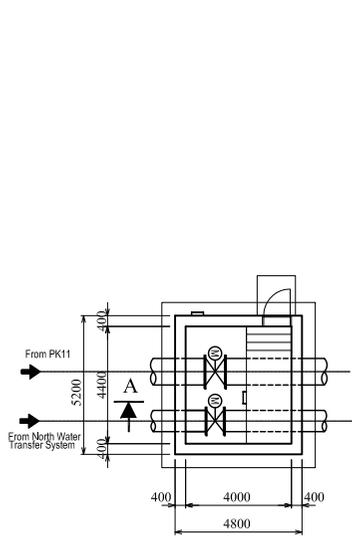
27



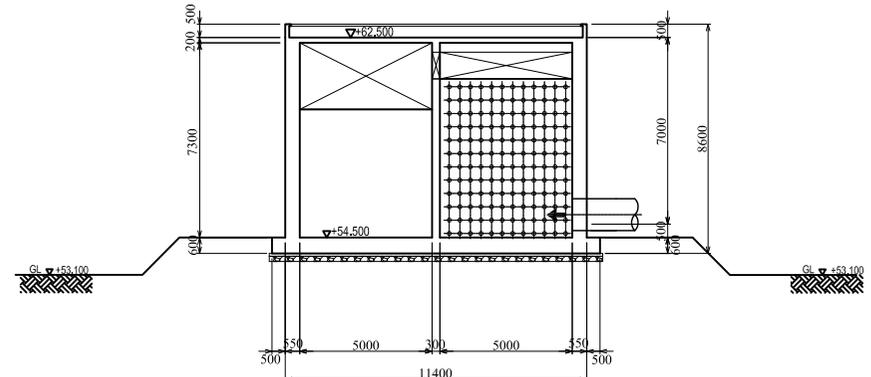
Legend

- Existing pipeline transmitting water to PK10
- Existing pipeline distributing water from PK11
- Planned facility
- - - Bypass pipeline for emergency and maintenance

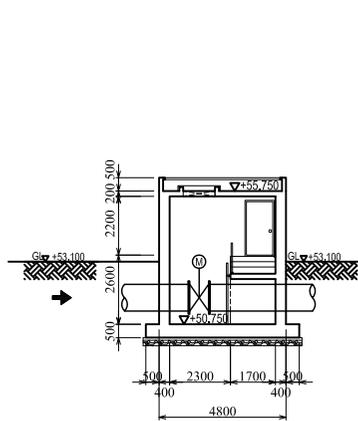
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA チュニジア国スファックス海水淡水化施設整備事業準備調査	
PK10 Reservoir Site : Layout Plan PK10配水池 配置計画図	Scale: 1/500 Drawing No. 28



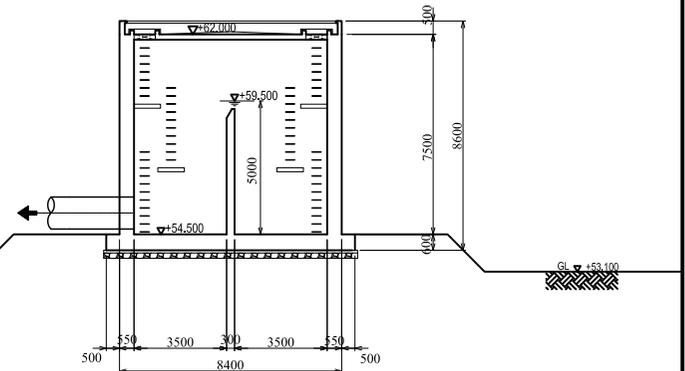
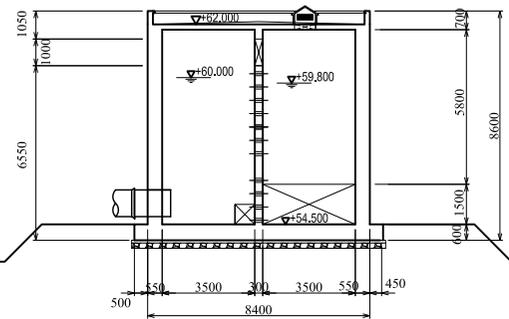
PLAN



SECTION B-B

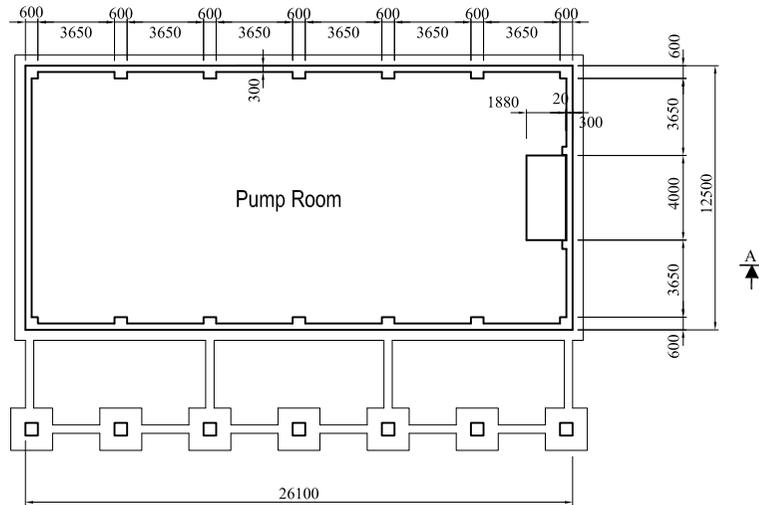


SECTION A-A

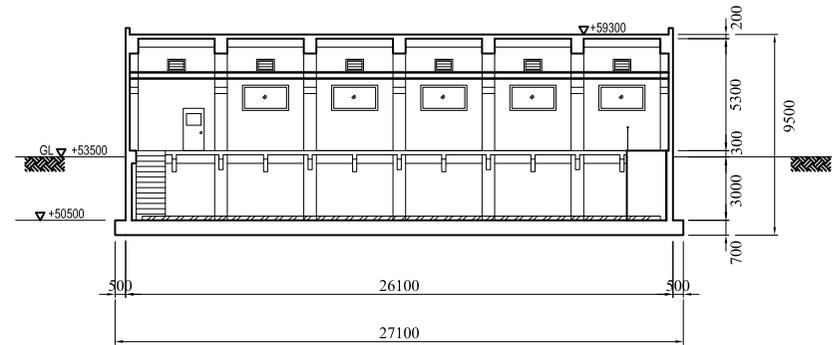


SECTION C-C

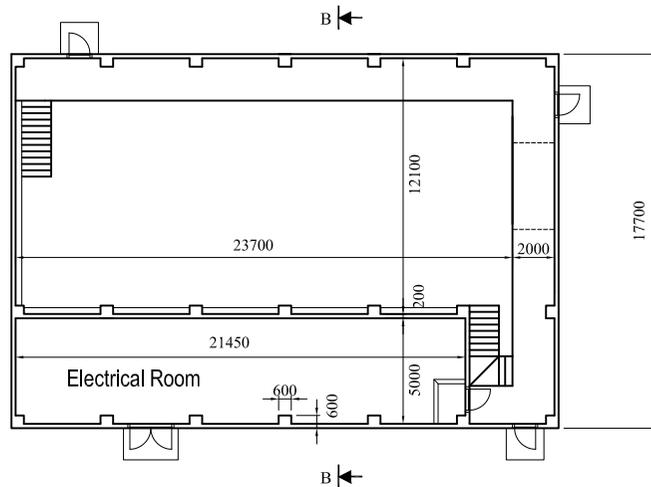
Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/100
Receiving Mixing Chamber, PK10: Plan & Sections	
Bâches de mélange	Drawing No. 29
受水混合槽 PK10: 平面図・断面図	No.



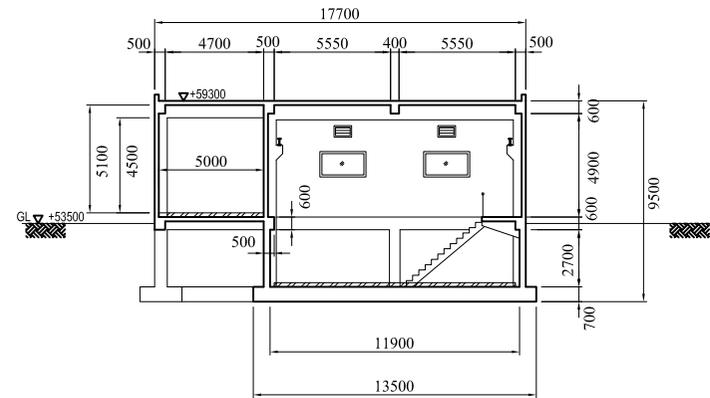
PLAN (LOWER LEVEL)



SECTION A-A

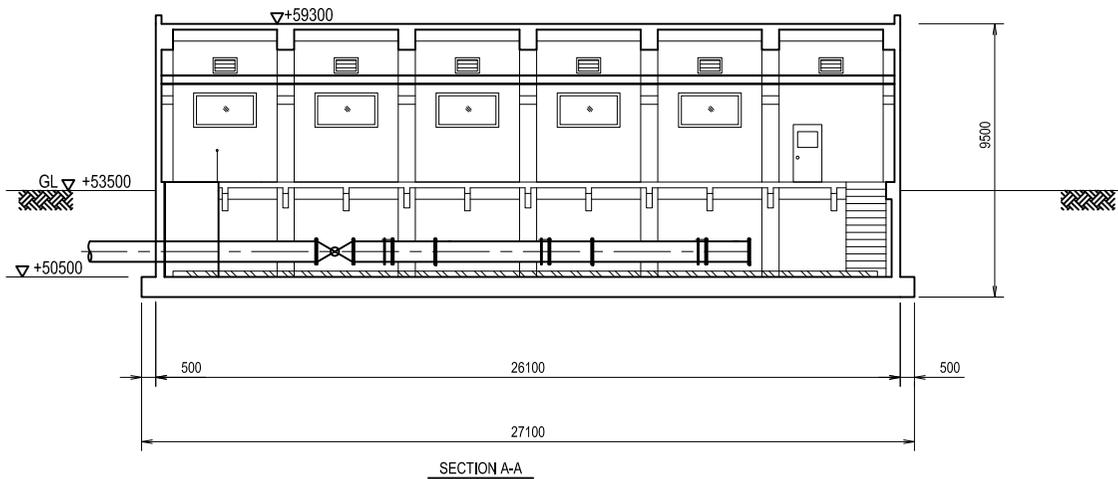
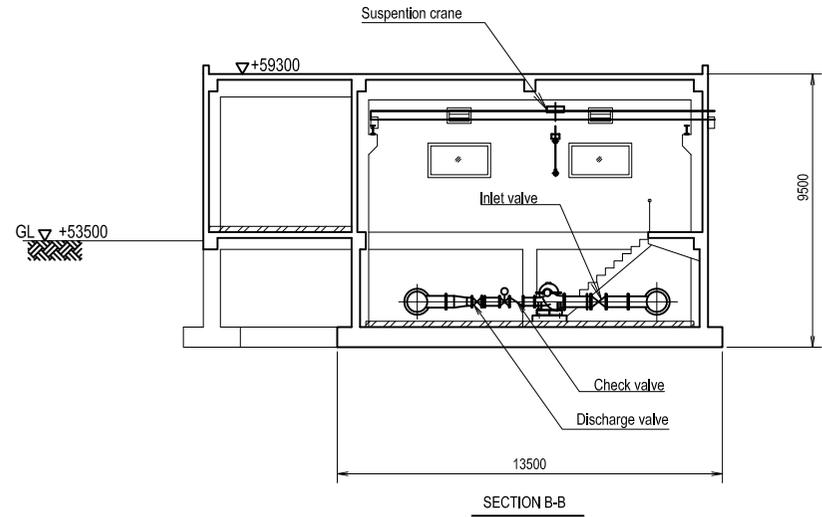
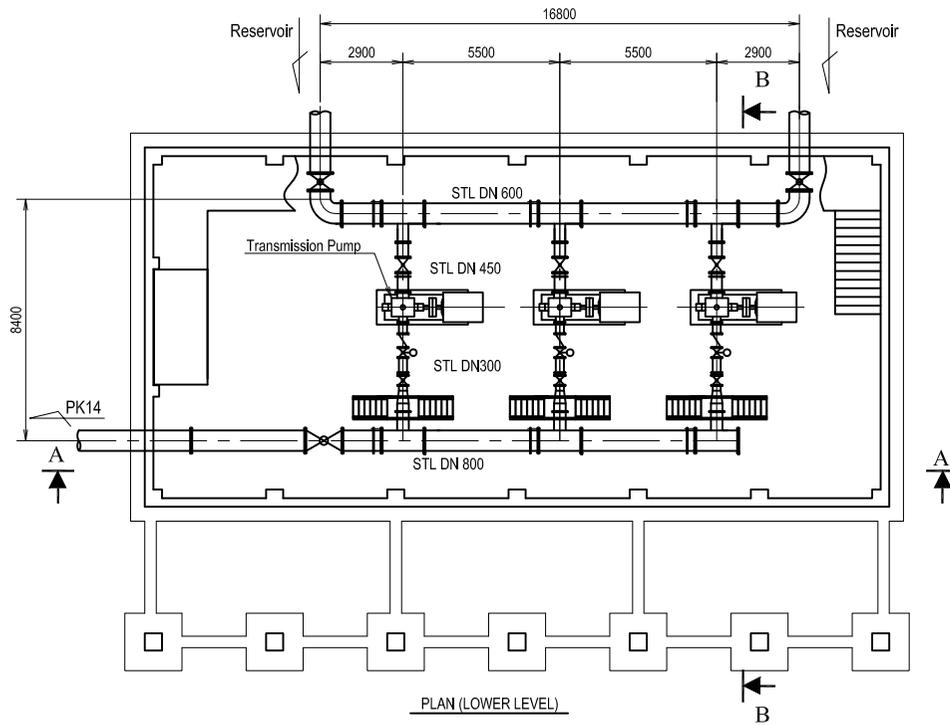


PLAN (GROUND LEVEL)

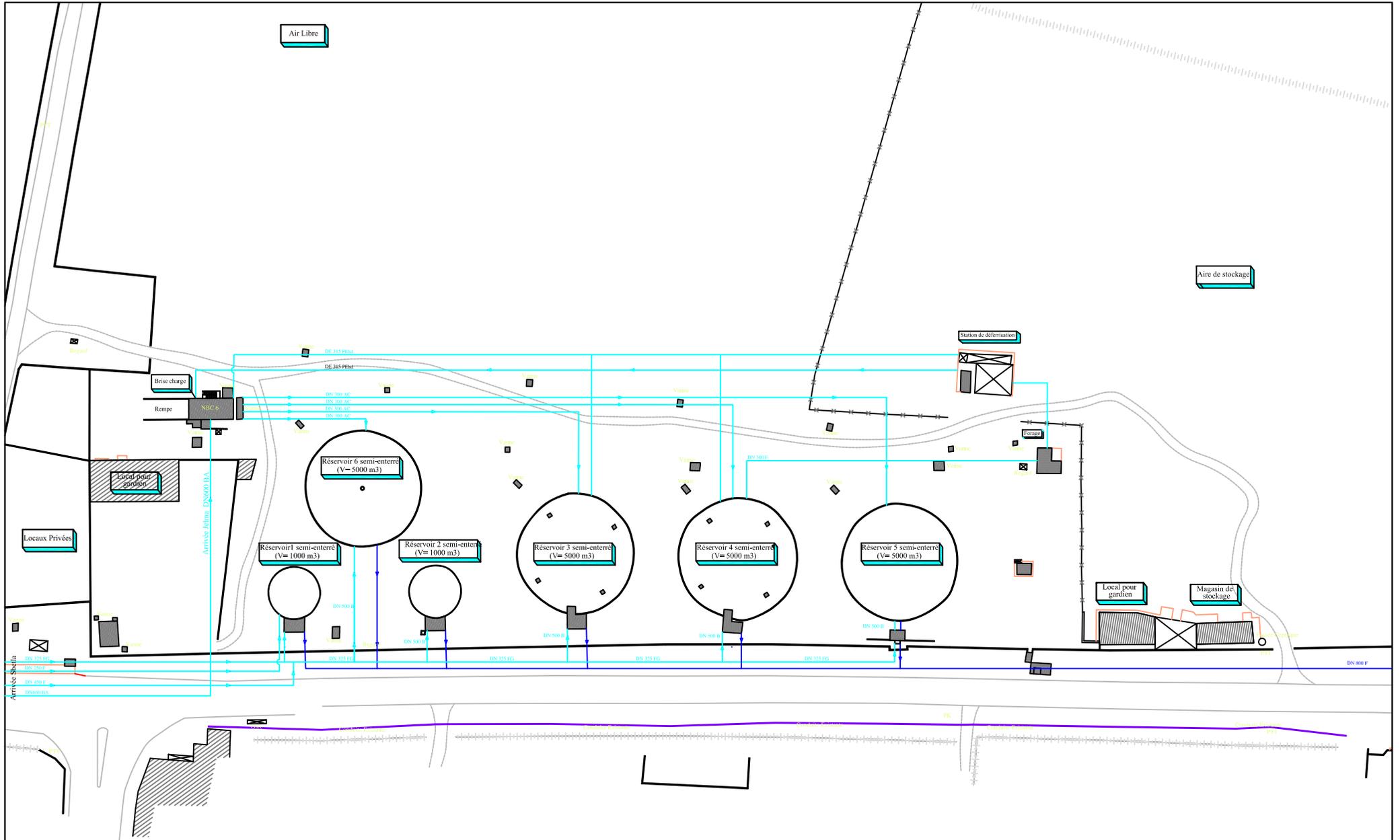


SECTION B-B

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
PK10 Pump Station : Plan & Section	
PK10 配水池ポンプ場 平面図 断面図	Drawing No. 30



Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
PK10 Pump Station : Pump Layout	
PK10 配水池ポンプ場ポンプ配置計画	Drawing No. 31



Legend

- Existing pipeline transmitting water to PK11
- Existing pipeline distributing water from PK11

THE PREPARATORY SURVEY ON SFAJ SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT
IN THE REPUBLIC OF TUNISIA

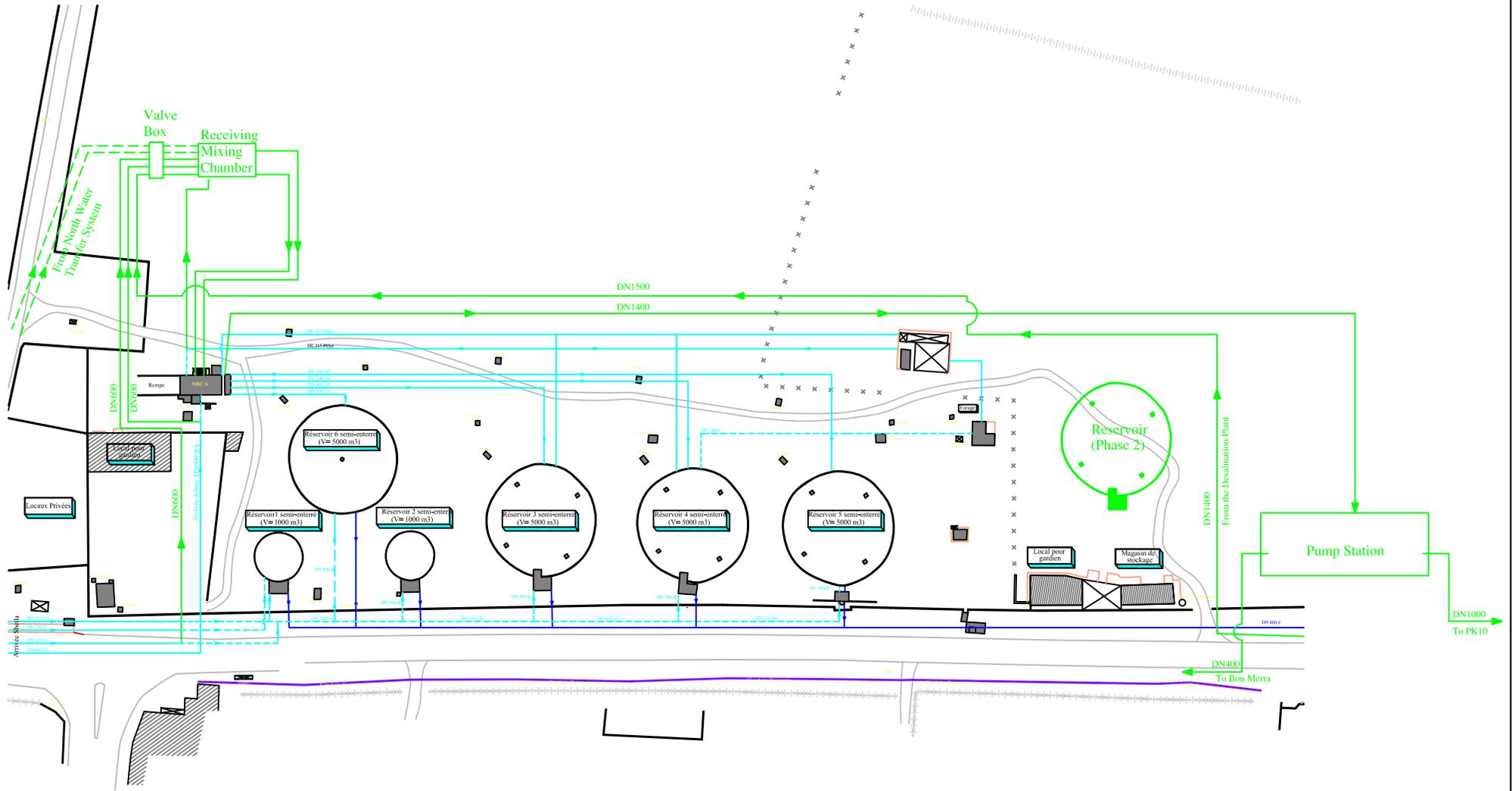
チュニジア国スファクス海水淡水化施設整備事業準備調査

PK11 Reservoir Site: Present Status

PK11配水池：現況図

Scale:

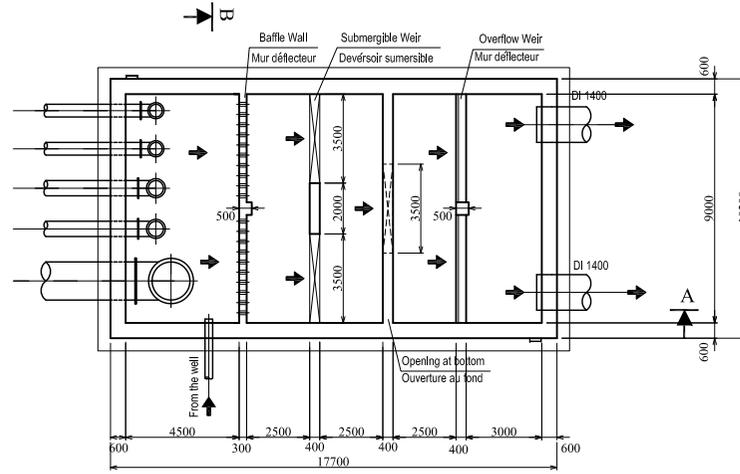
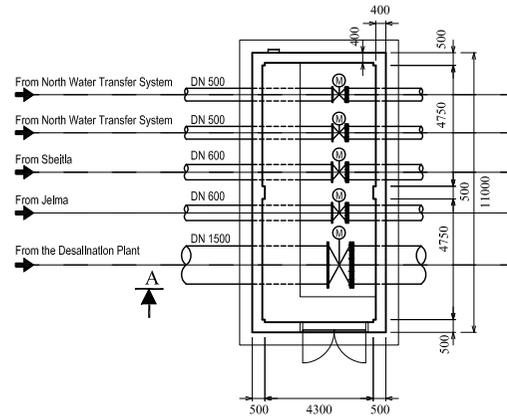
Drawing No. 32



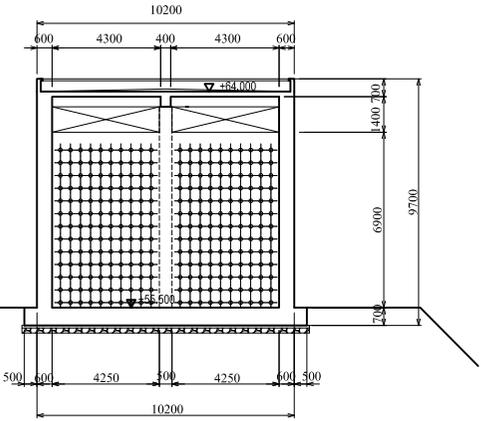
Legend

- Existing pipeline transmitting water to PK11
- Existing pipeline distributing water from PK11
- Planned facility
- - - Bypass pipeline for emergency and maintenance

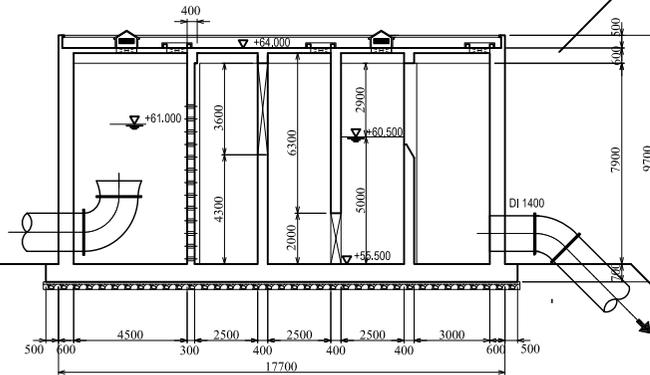
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA チュニジア国スファックス海水淡水化施設整備事業準備調査	
PK11 Reservoir Site : Layout Plan PK11配水池 配置計画図	Scale: Drawing No. 33



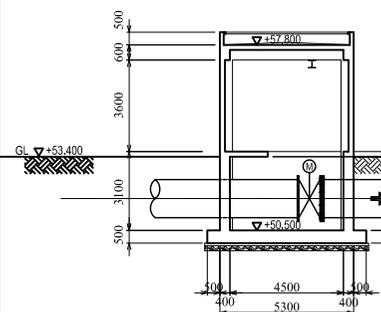
PLAN



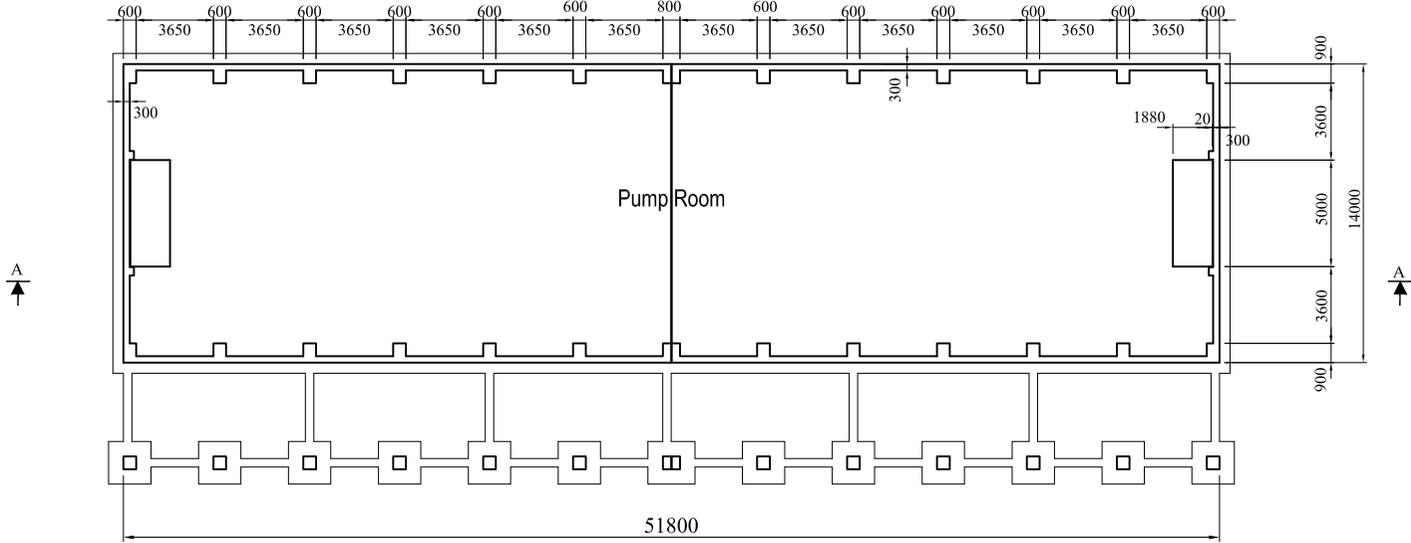
SECTION B-B



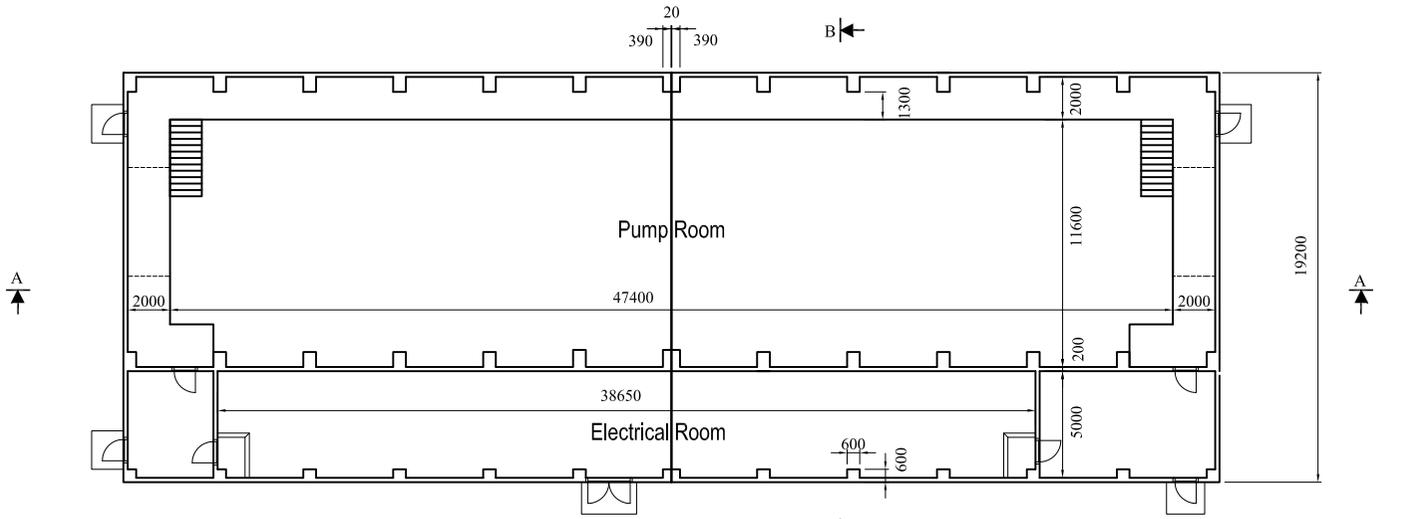
SECTION A-A



Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/200
PK11 Receiving/Mixing Chamber : Plan & Section	Drawing 34 No.
PK11受水混合槽 平面図・断面図	

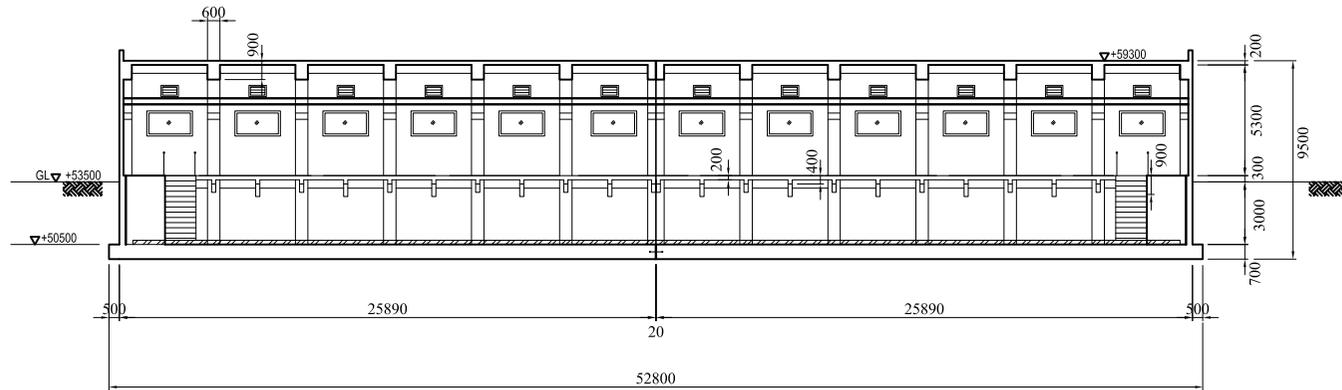


PLAN (LOWER LEVEL)

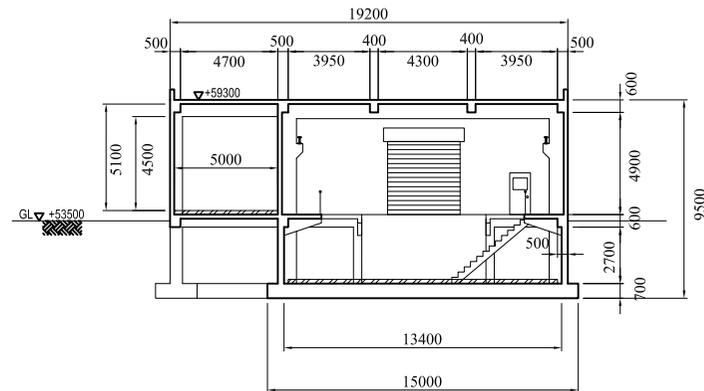


PLAN (GROUND LEVEL)

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
PK11 Pump Station : Plan	
PK11配水池ポンプ場 平面図	Drawing No. 35

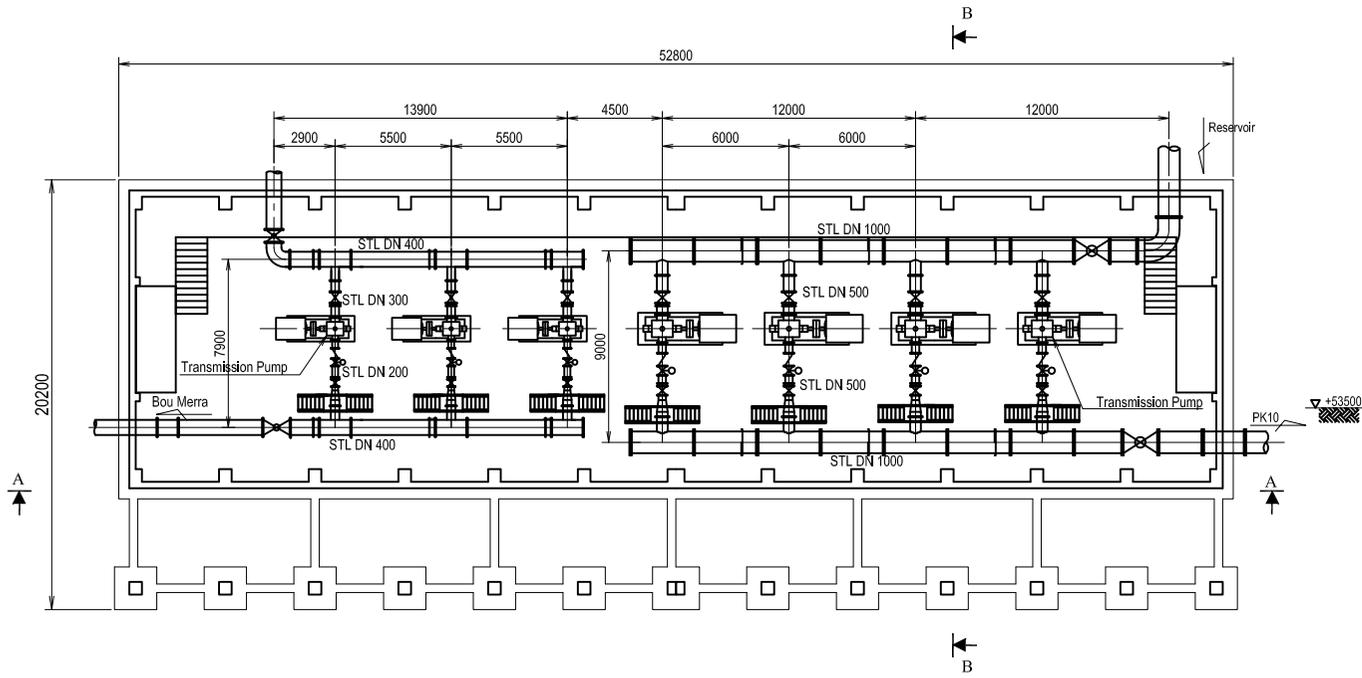


SECTION A-A

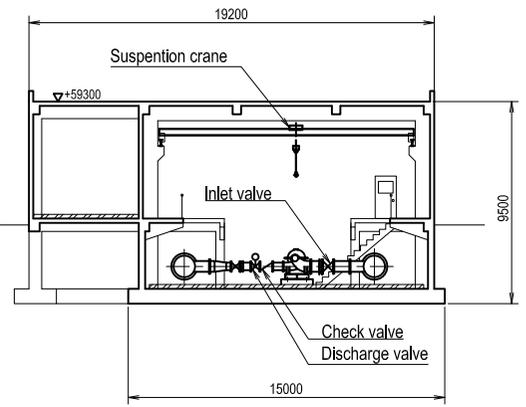


SECTION B-B

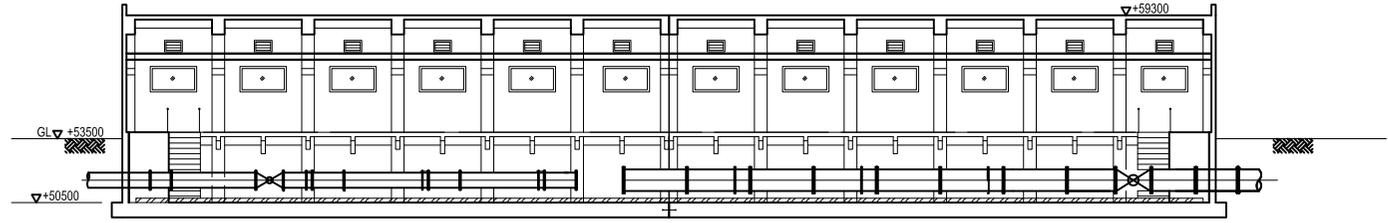
Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
PK11 Pump Station : Section	
PK11配水池ポンプ場 断面図	Drawing No. 36



PLAN (LOWER LEVEL)

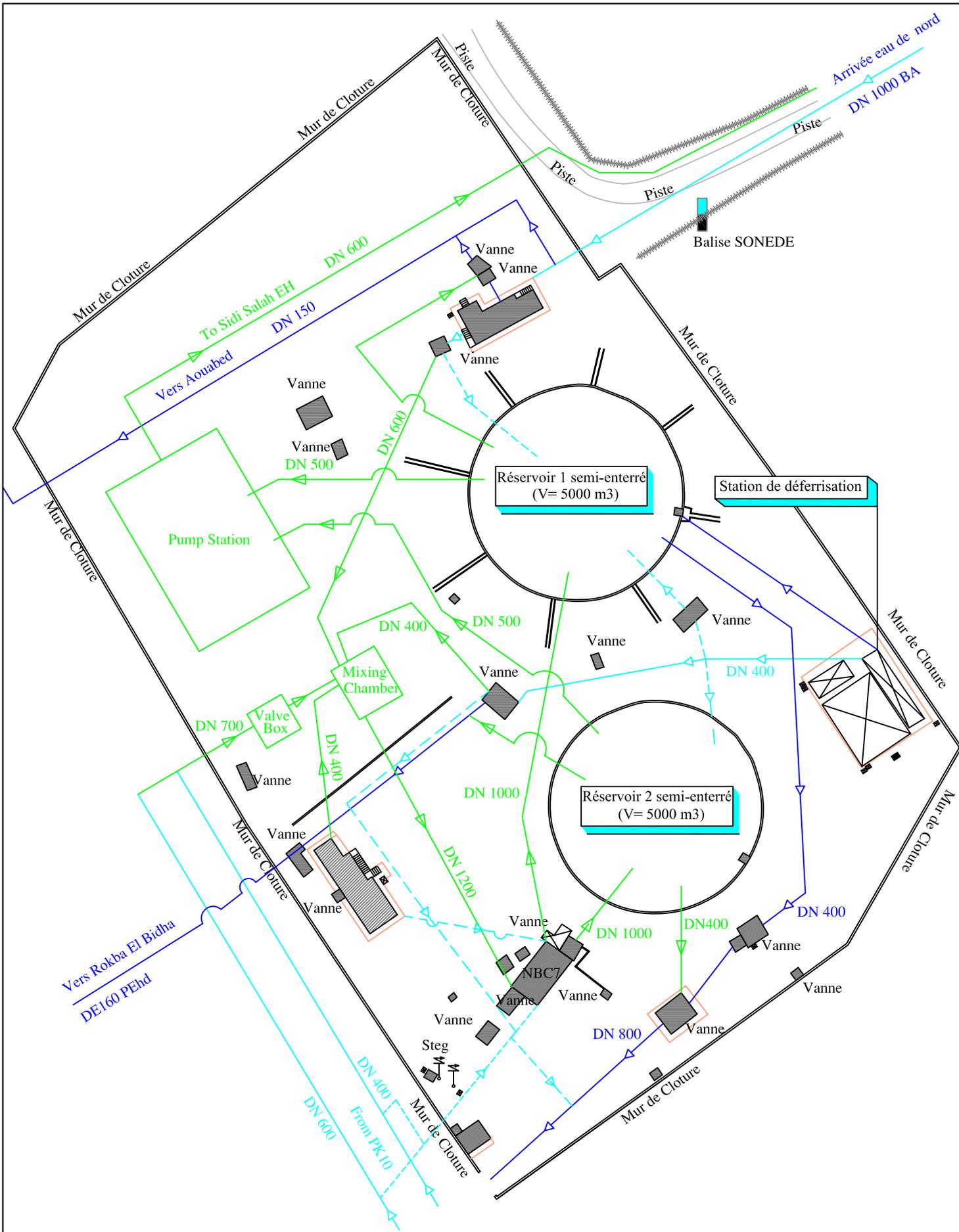


SECTION B-B



SECTION A-A

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
PK11 Pump Station : Pump Layout	
PK11 配水池ポンプ場 ポンプ配置計画	Drawing No. 37



Legend

- Existing pipeline transmitting water to PK14
- Existing pipeline distributing water from PK14
- Planned facility
- - - Bypass pipeline for emergency and maintenance

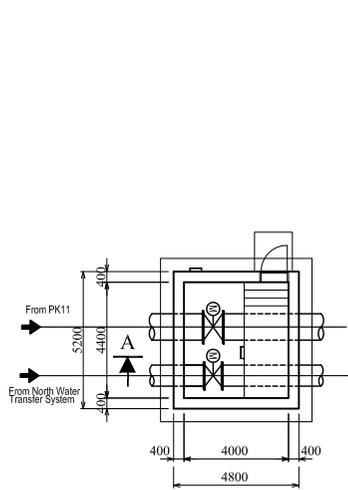
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT
IN THE REPUBLIC OF TUNISIA

チュニジア国スファックス海水淡水化施設整備事業準備調査

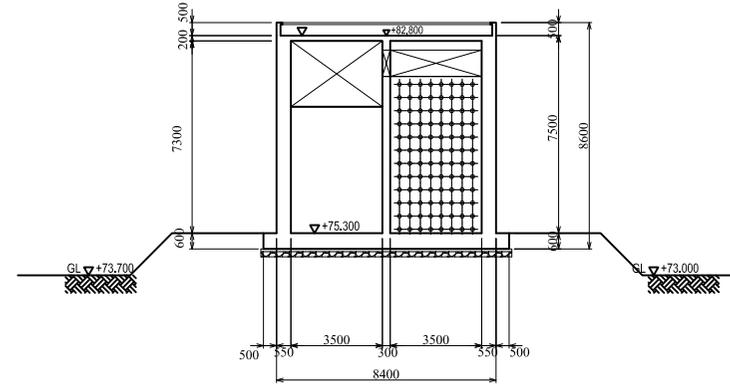
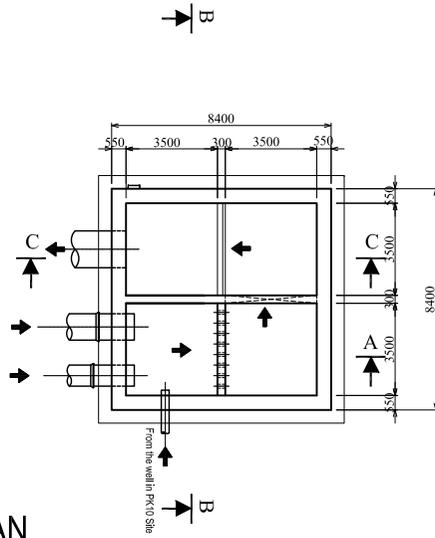
PK14 Reservoir Site : Layout Plan
PK14配水池 計画配置図

Scale:

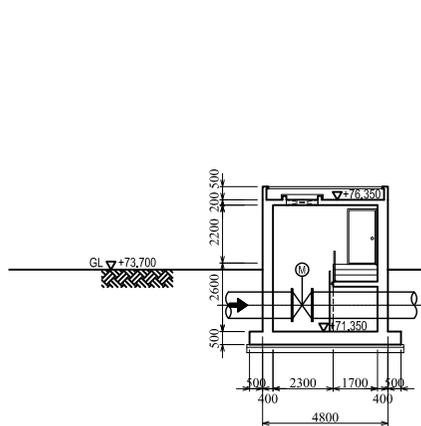
Drawing No. 39



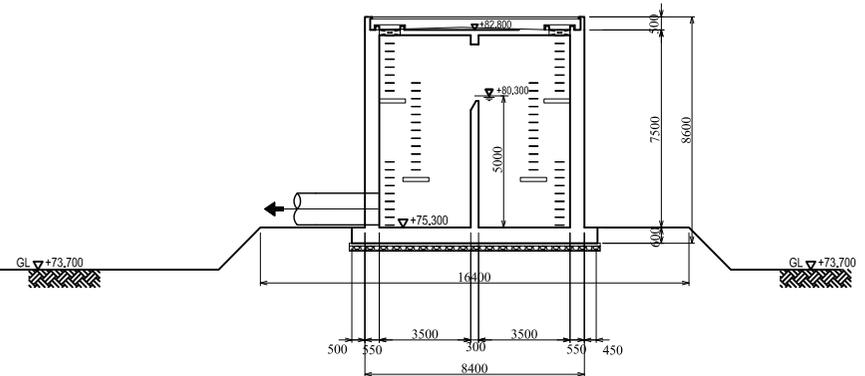
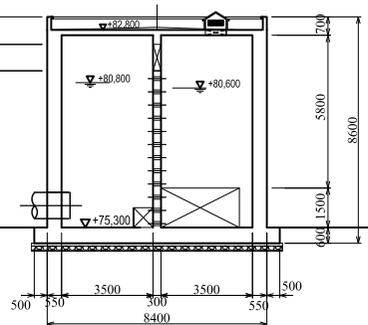
PLAN



SECTION B-B

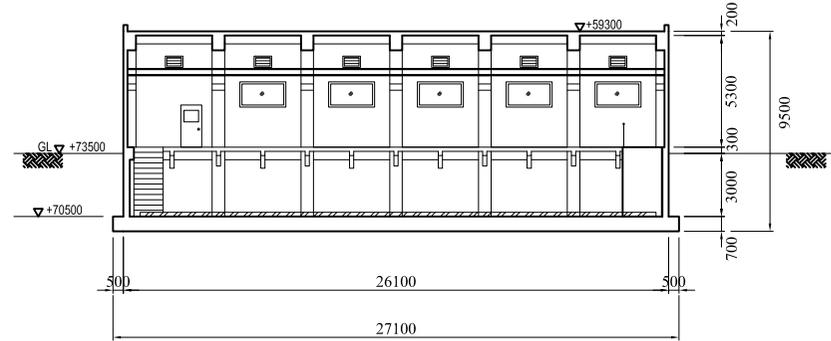
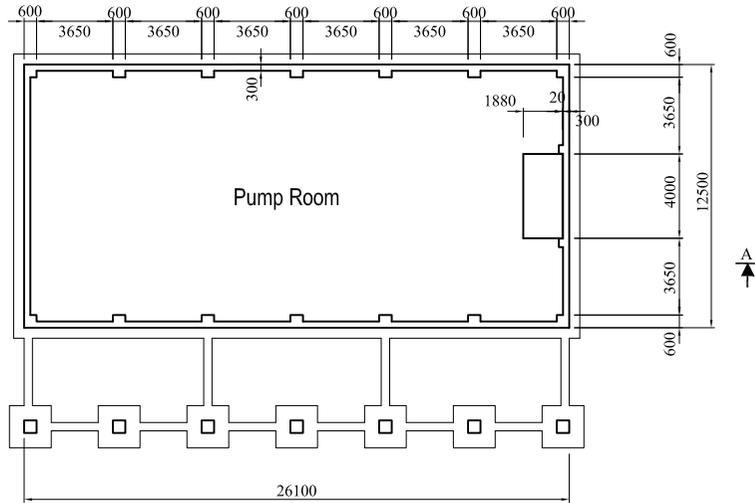


SECTION A-A



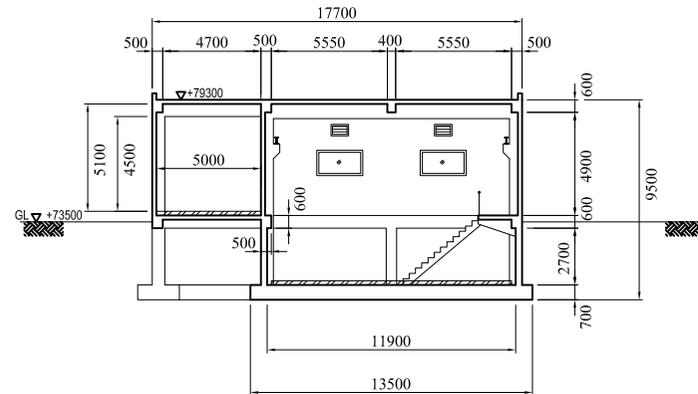
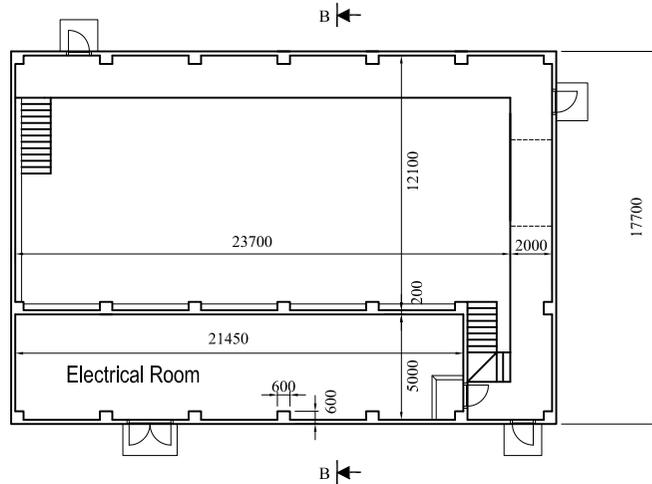
SECTION C-C

Project Name	
THE PREPARATORY SURVEY ON SFAK SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニア国スファクス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/100
PK14 Receiving/Mixing Chamber : Plan & Section	
PK14受水混合槽 平面図・断面図	Drawing No. 40



PLAN (LOWER LEVEL)

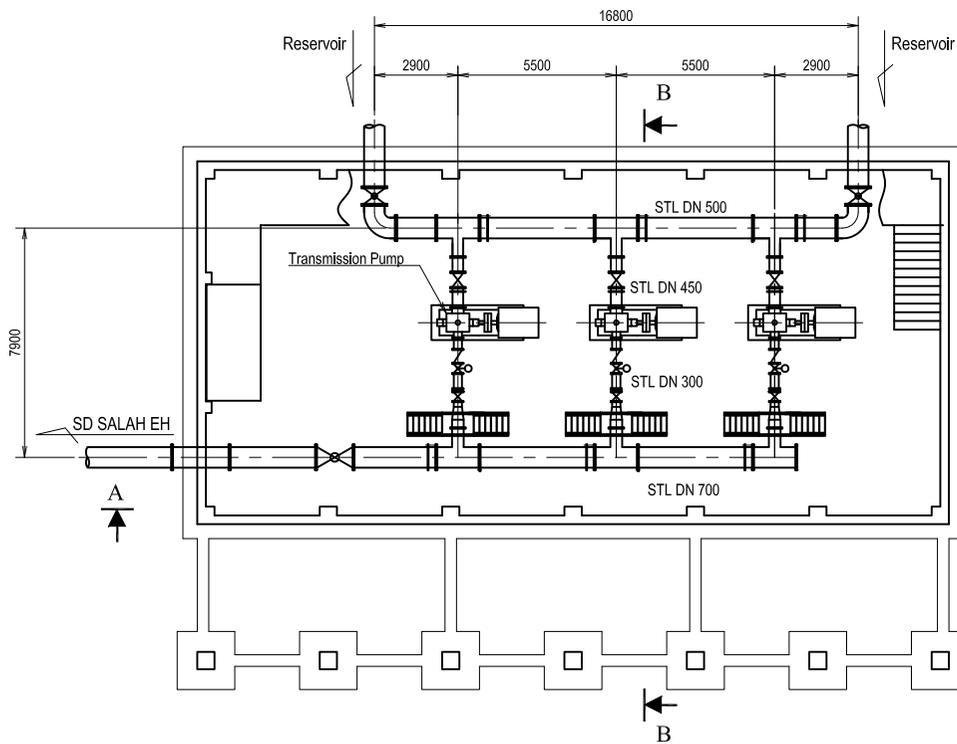
SECTION A-A



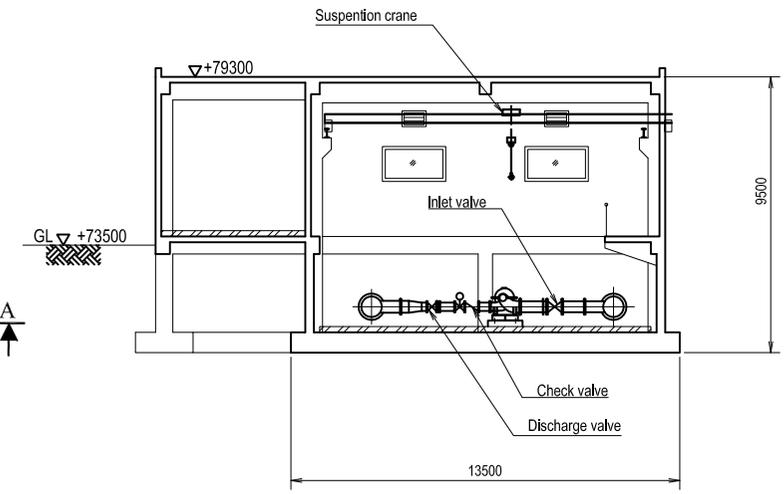
PLAN (GROUND LEVEL)

SECTION B-B

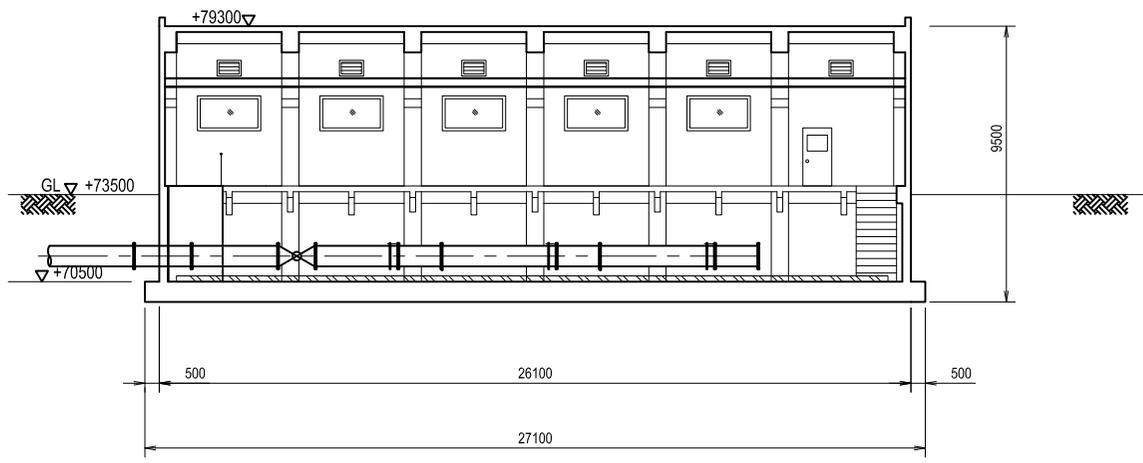
Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
PK14 Pump Station : Plan & Section	
PK14配水池ポンプ場 平面図・断面図	Drawing No. 41



PLAN (LOWER LEVEL)

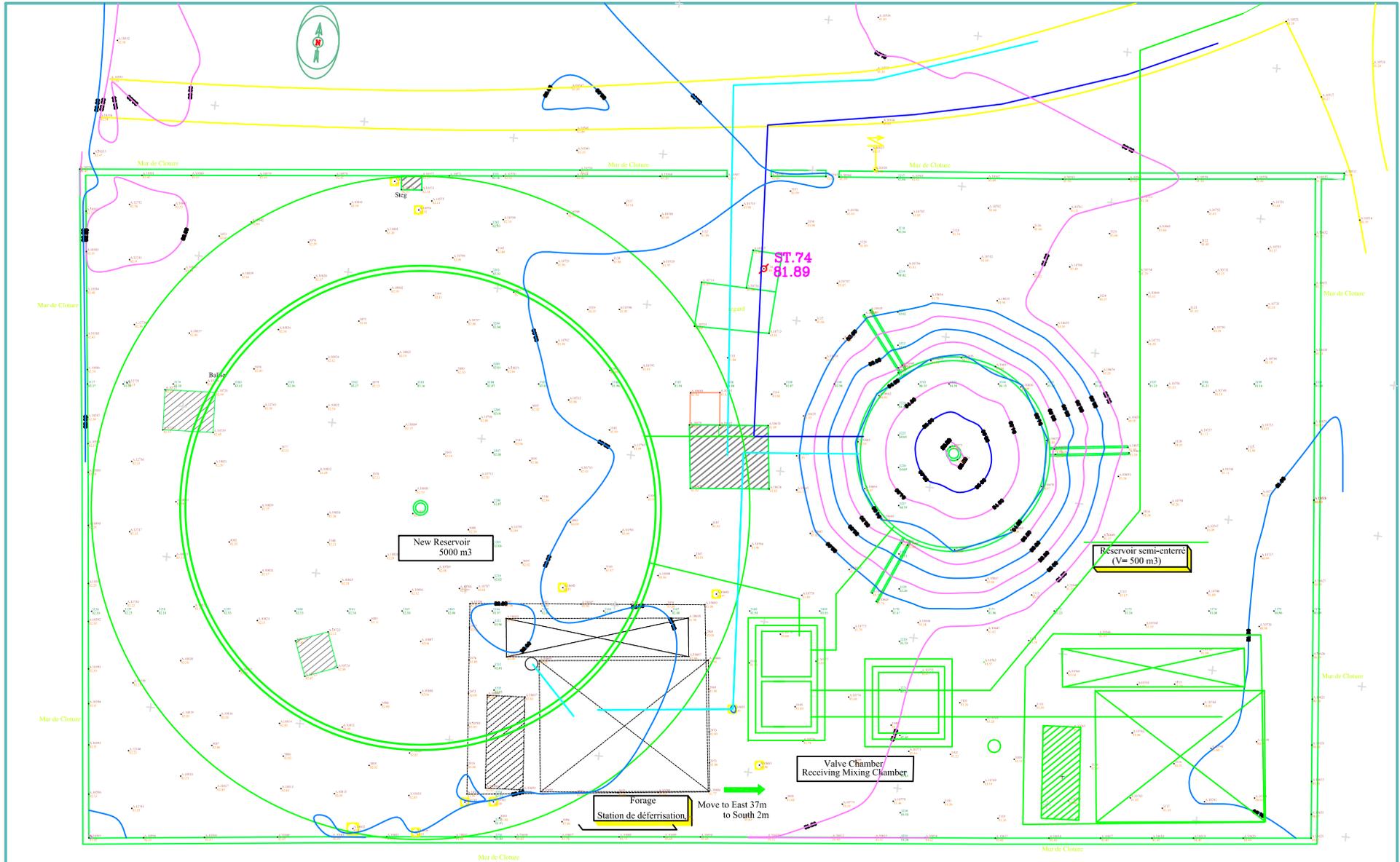


SECTION B-B



SECTION A-A

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファクス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/250
PK14 Pump Station : Pump Layout	
PK14配水池ポンプ場 ポンプ配置計画	Drawing No. 42

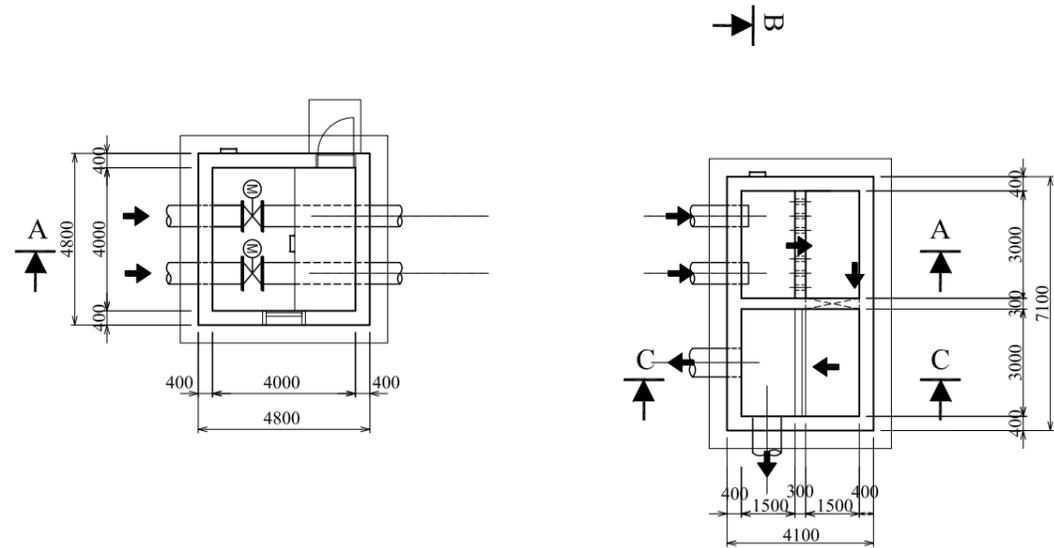


Legend

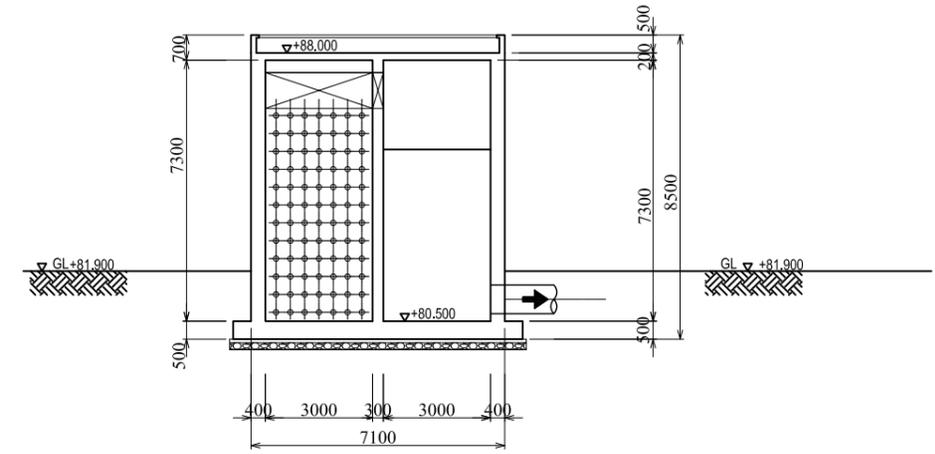
- Existing pipeline transmitting water to Bou Merra
- Existing pipeline distributing water from Bou Merra
- Planned facility
- - - Bypass pipeline for emergency and maintenance

Project Name
 THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT
 CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA
 チュニジア国スファックス海水淡水化施設整備事業準備調査

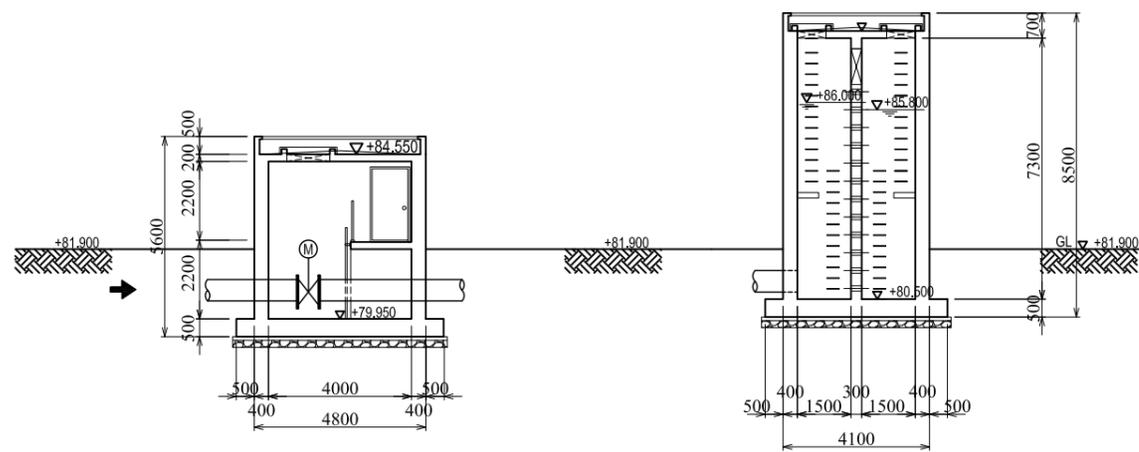
Drawing Title	Scale: 1/250
Bou Merra Reservoir Layout Plan	
Bou Merra 配水池 配置計画図	Drawing No. 43



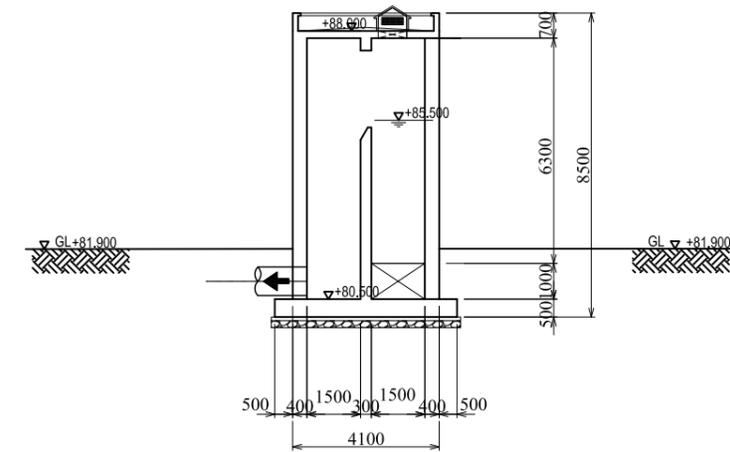
PLAN



SECTION B-B

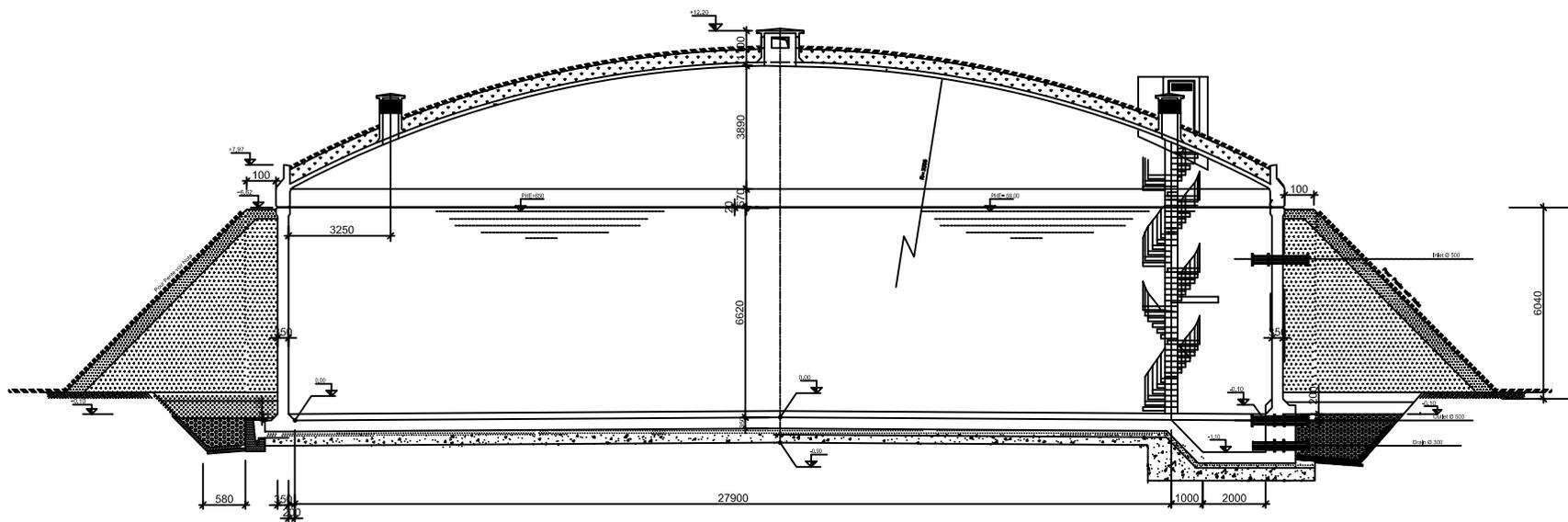


SECTION A-A

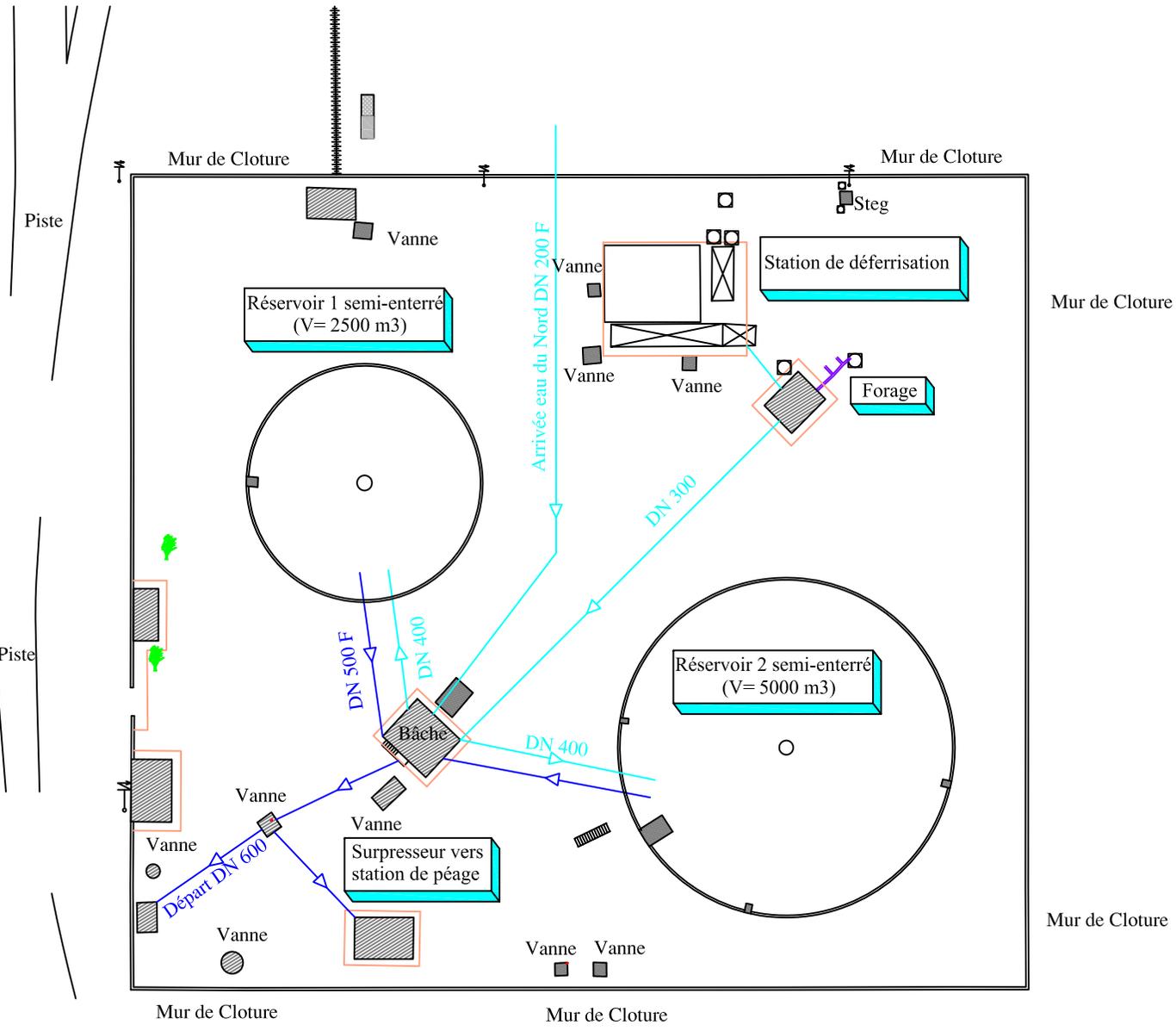


SECTION C-C

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	
Bou Merra Receiving/Mixing Chamber : Plan & Section	
Bou Merra受水混合槽 平面図・断面図	
Scale: 1/100	Drawing No. 44



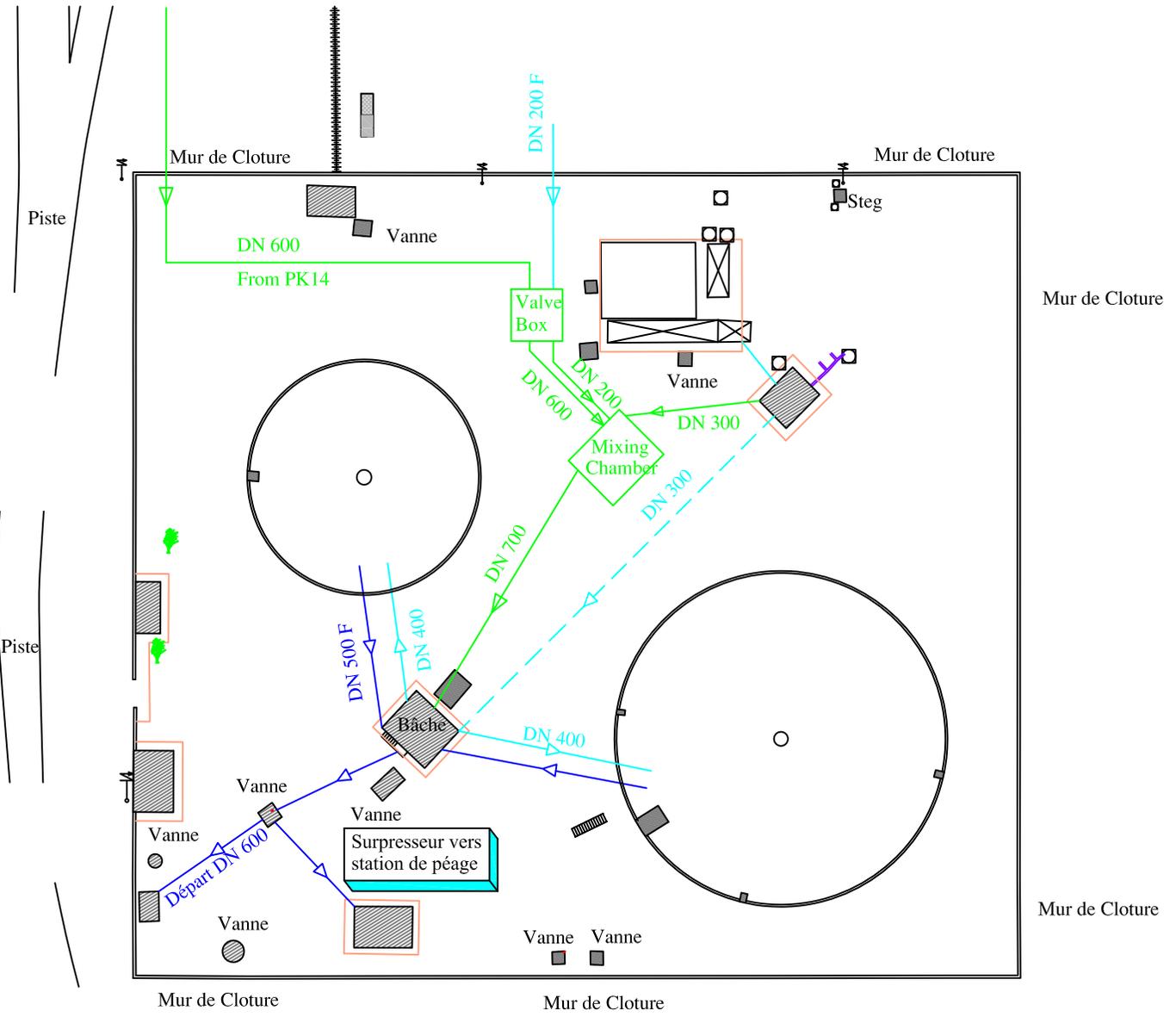
Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	
Bou Merra Reservoir 5,000m ³	Scale: 1:150
Bou Merra 配水池 5,000m ³	Drawing No. 45



Legend

- Existing pipeline transmitting water to Sidi Salah EH
- Existing pipeline distributing water from Sidi Salah EH

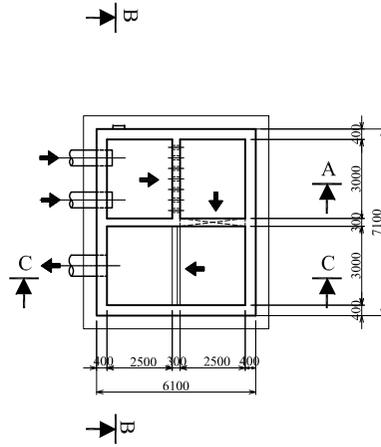
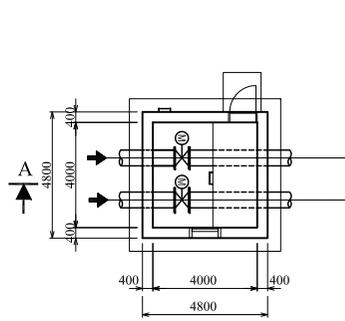
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA チュニジア国スファックス海水淡水化施設整備事業準備調査	
Sidi Salah EH Reservoir Site : Present Status Sidi Salah EH 配水池 現況図	Scale: 1/500 Drawing No. 46



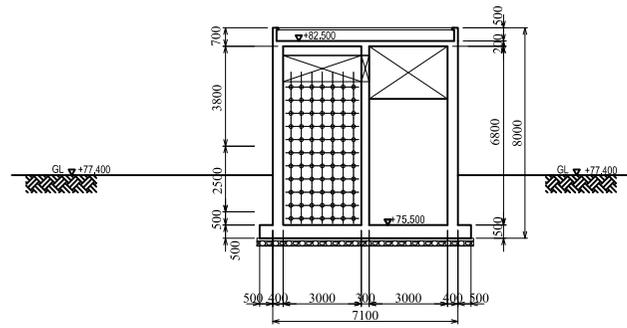
Legend

- Existing pipeline transmitting water to Sidi Salah EH
- Existing pipeline distributing water from Sidi Salah EH
- Planned facility
- - - Bypass pipeline for emergency and maintenance

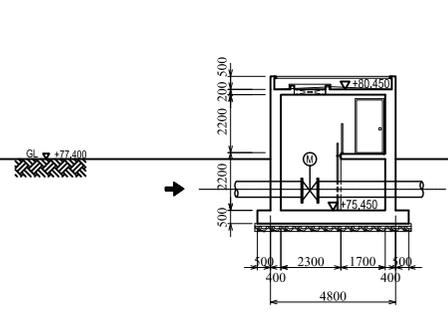
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA チュニア国スファックス海水淡水化施設整備事業準備調査	
Sidi Salah EH Reservoir Site : Layout Plan Sidi Salah EH 配水池 配置計画図	Scale: 1/500 Drawing No. 47



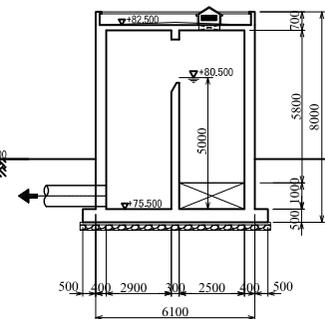
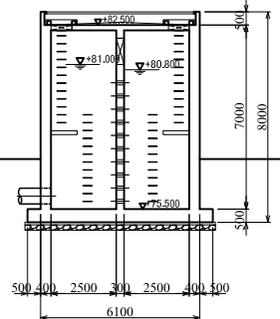
PLAN



SECTION B-B

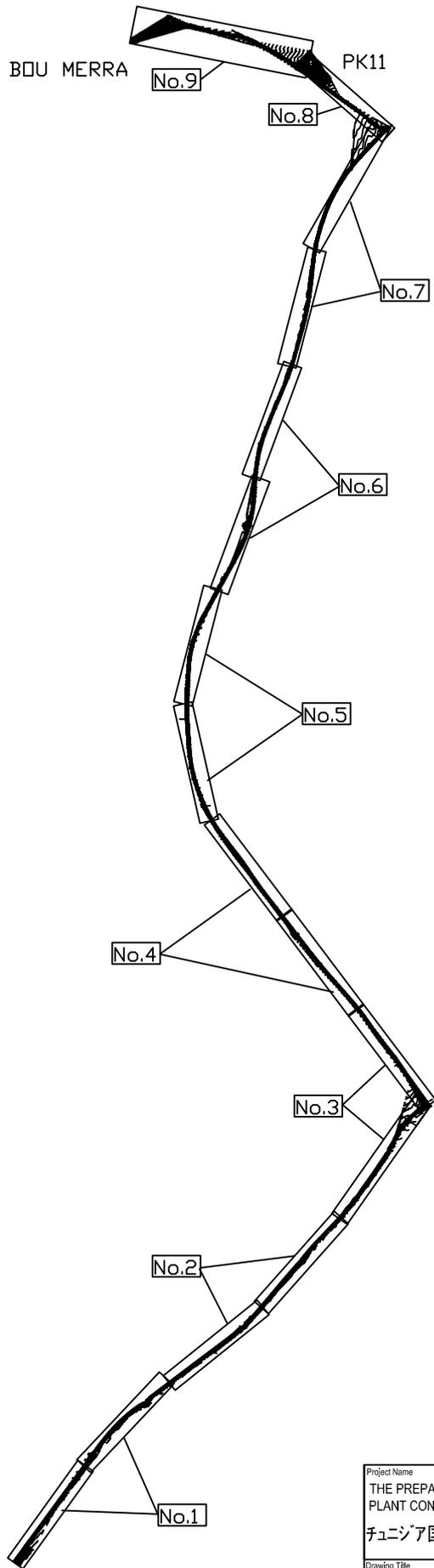


SECTION A-A



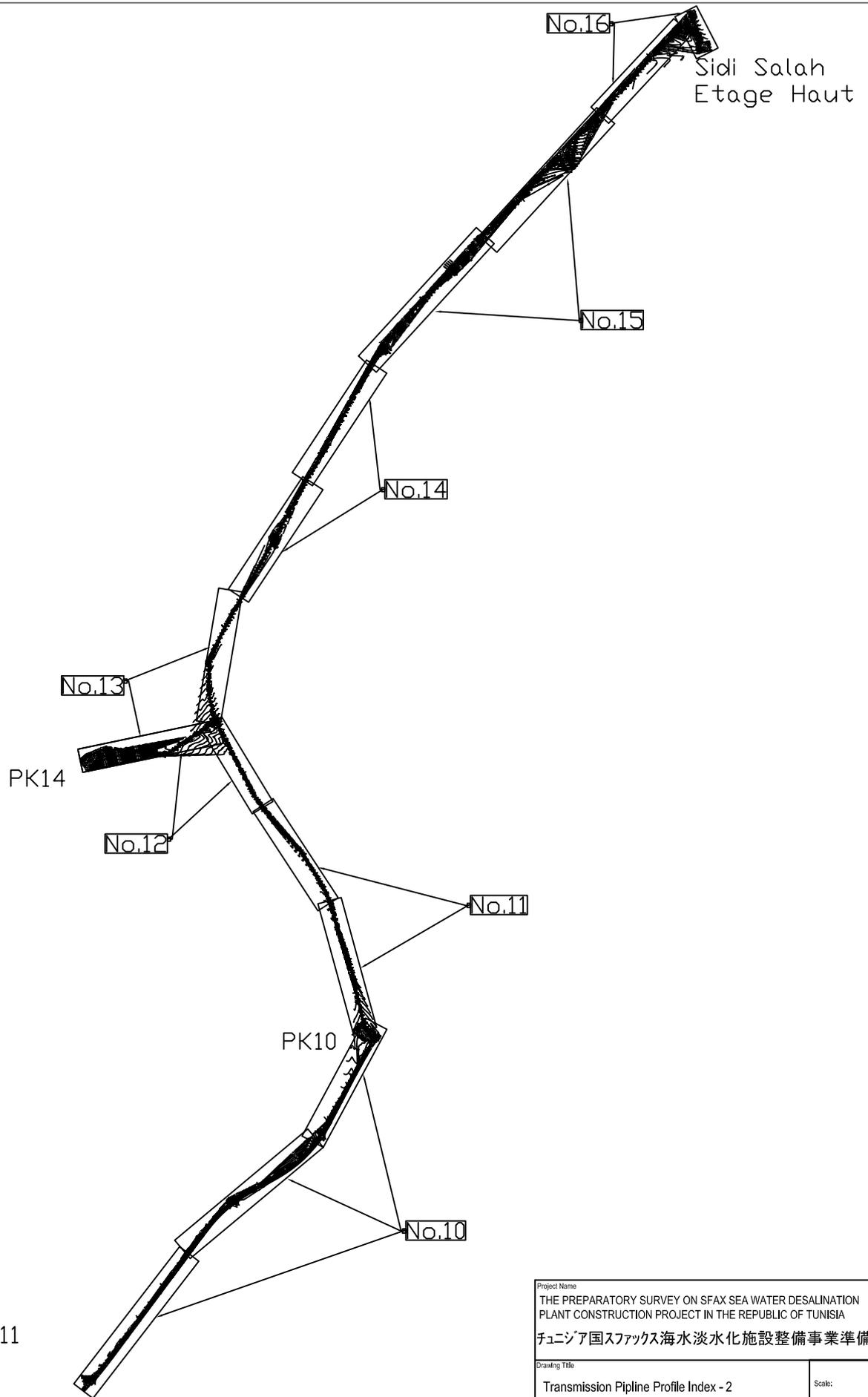
SECTION C-C

Project Name	
THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA	
チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title	Scale: 1/100
Sidi Salah EH Receiving/Mixing Chamber	
Plan & Section	
Sidi Salah EH 配水池受水混合槽 平面図・断面図	Drawing 48
	No.



SFAX SEA WATER
DESALINATION PLANT

Project Name THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title Transmission Pipeline Profile Index -1 送水管平縦断面図 位置図-1	Scale: Drawing No. 49



Project Name THE PREPARATORY SURVEY ON SFAX SEA WATER DESALINATION PLANT CONSTRUCTION PROJECT IN THE REPUBLIC OF TUNISIA チュニジア国スファックス海水淡水化施設整備事業準備調査	
Drawing Title Transmission Pipeline Profile Index - 2 送水管平縦断面図 位置図-2	Scale: Drawing No. 50