



MINISTRY OF ENVIRONMENT AND ENERGY
MALE: REPUBLIC OF MALDIVES

**CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER FACILITIES IN B.
DHARAVANDHOO, MALDIVES**

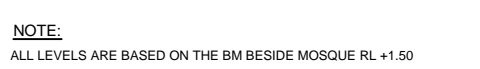
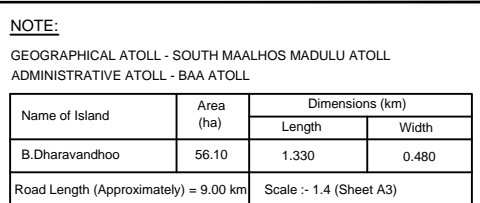


VOLUME II

REPORT DRAWINGS & LAYOUTS
MAY - 2017



SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA
IN ASSOCIATION WITH
DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES



No.	DATE	DESCRIPTION	DRAWING No.	DESCRIPTION	
REVISION			REFERENCE DRAWINGS		

CLIENT


MINISTRY OF ENVIRONMENT AND ENERGY
MALE: REPUBLIC OF MALDIVES

PROJECT


CONSULTANCY SERVICES FOR DESIGN AND SUPERVISION OF WATER SUPPLY FACILITIES
IN THE ISLAND B. DHARAVANDHOO, MALDIVES

TITLE

MAP SHOWING PROJECT AREA ISLAND



SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA
In Association With
DESIGNING TECHNOLOGIES MALDIVES, MALDIVES



APPROVED

SSS

CHECKED

SSS

DESIGNED

RKC

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SSN

SCALE

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DATE

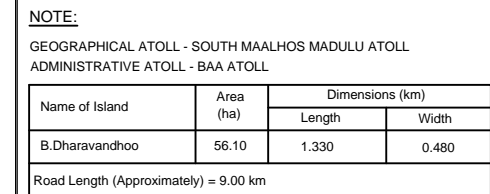
MAY 2017

DRAWING NUMBER




B.Dharavandhoo/WS/01

REVISION








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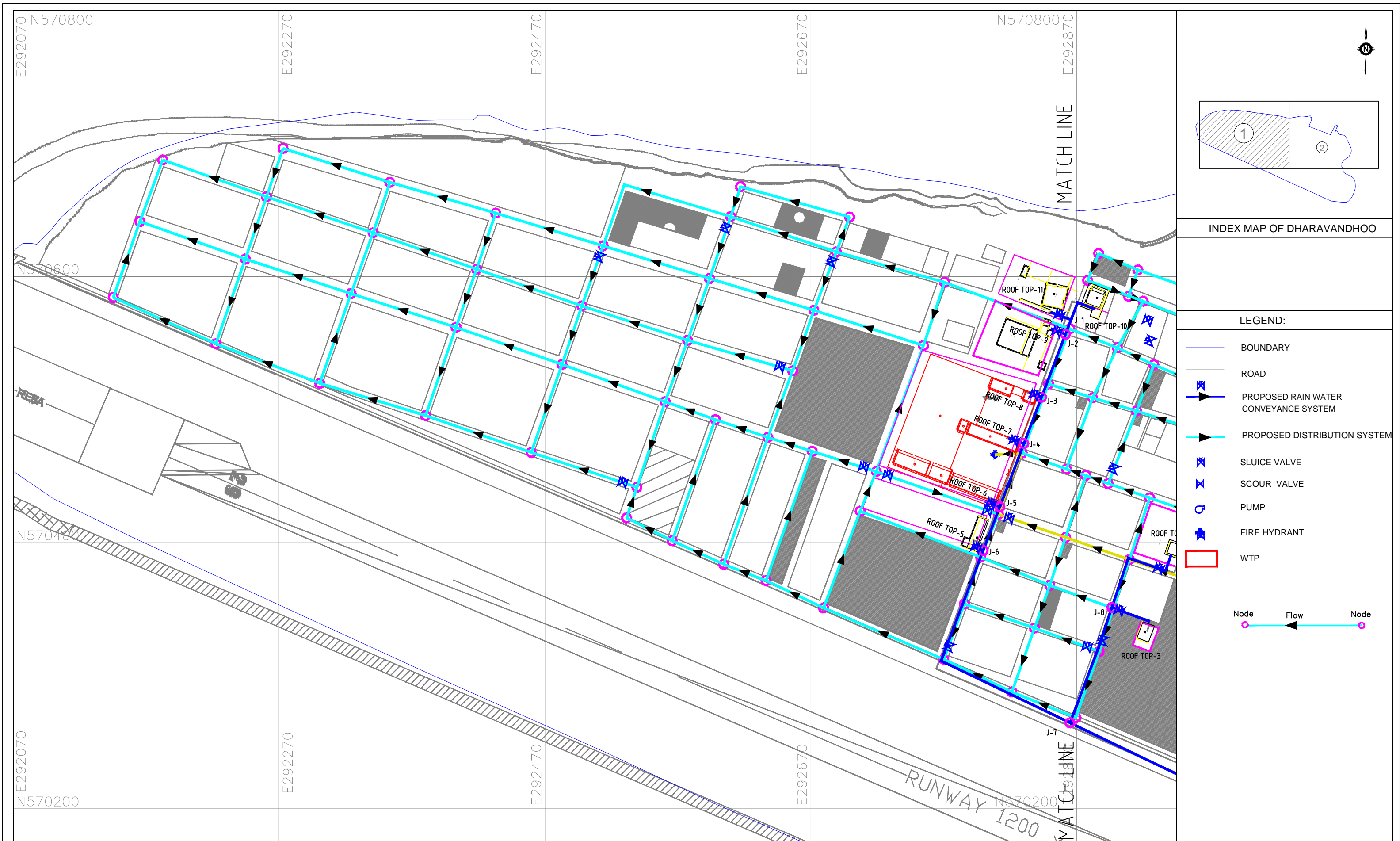


Name of Island	Area (ha)	Dimensions (km)	
		Length	Width
B.Dharavandhoo	56.10	1.330	0.480
Road Length (Approximately) = 9.00 km			

- | | | | | |
|---|-------------|-----------------------|--|-----------------|
|  CLIENT MINISTRY OF ENVIRONMENT AND ENERGY
MALE: REPUBLIC OF MALDIVES | | | | |
| PROJECT CONSULTANCY SERVICES FOR DESIGN AND SUPERVISION OF WATER SUPPLY FACILITIES
IN THE ISLAND B. DHARAVANDHOO, MALDIVES | | | | |
| TITLE MAP SHOWING LANDUSE | | | | |
|  SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA
In Association With
 DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES | | | | |
| APPROVED | | CHECKED | | DESIGNED |
| SSS | | SSS | | RKC |
| | | | | DRAWN |
| | | | | SSN |
| SCALE | DATE | DRAWING NUMBER | | REVISION |
| 1:2,000 | MAY 2017 | B. Dharavandhoo/WS/02 | | 0 |










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	CLIENT				
	MINISTRY OF ENVIRONMENT AND ENERGY MALE' REPUBLIC OF MALDIVES				
	PROJECT				
	CONSULTANCY SERVICES FOR DESIGN AND SUPERVISION OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES				
	TITLE				
	MAP SHOWING LANDUSE				
	SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA				
	In Association With				
	DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES				
	APPROVED		CHECKED		DESIGNED
	SSS		RKC		SSN
	SCALE		DRAWING NUMBER		REVISION
	1:2,000		B. Dharavandhoo/WS/02		0



INDEX MAP OF DHARAVANDHOO

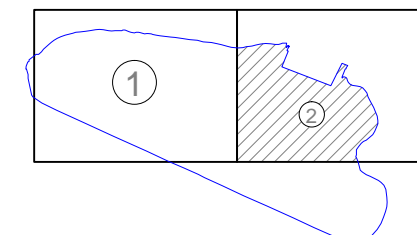
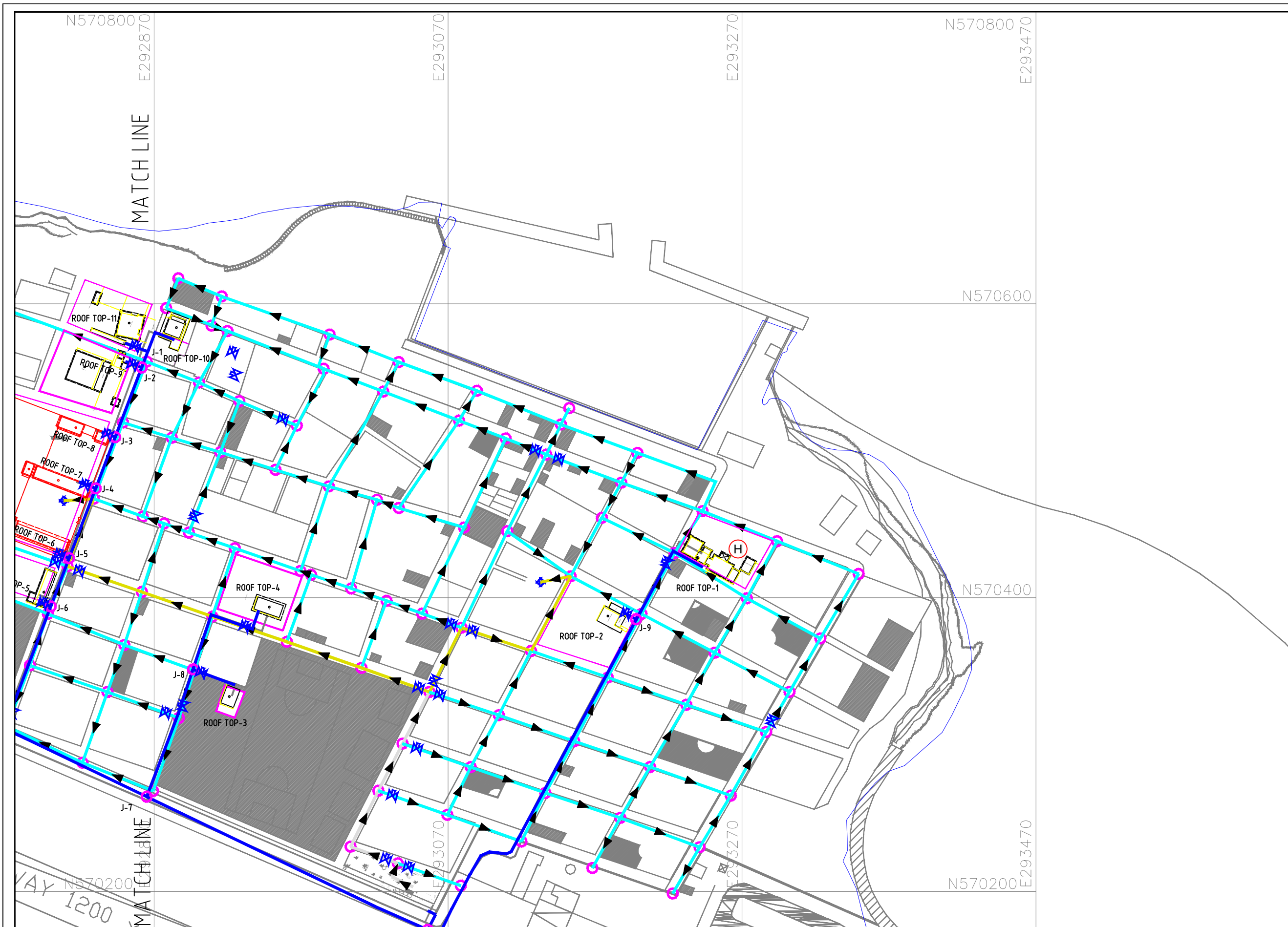
LEGEND:

- | | |
|---|--|
|  | BOUNDARY |
|  | ROAD |
|  | PROPOSED RAIN WATER
CONVEYANCE SYSTEM |
|  | PROPOSED DISTRIBUTION SYSTEM |
|  | SLUICE VALVE |
|  | SCOUR VALVE |
|  | PUMP |
|  | FIRE HYDRANT |
|  | WTP |












NOTES:

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INDEX MAP OF DHARAVANDHOO

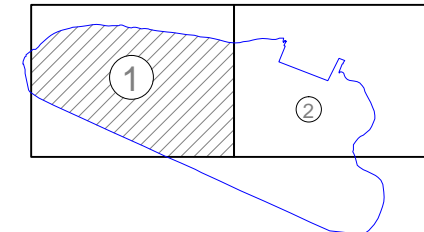
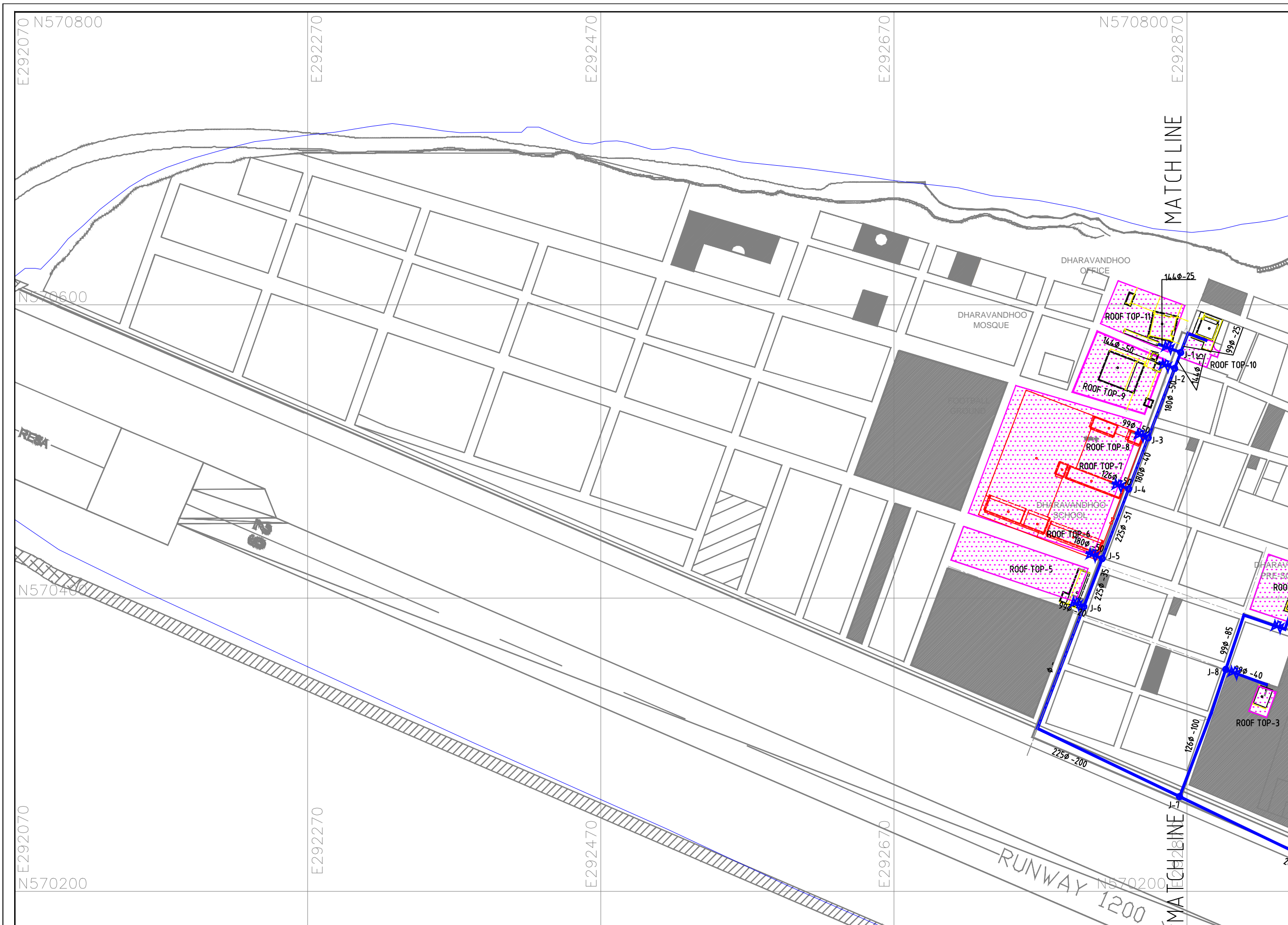
LEGEND:

- | | |
|---|--|
|  | BOUNDARY |
|  | ROAD |
|  | PROPOSED RAIN WATER
CONVEYANCE SYSTEM |
|  | PROPOSED DISTRIBUTION SYSTEM |
|  | SLUICE VALVE |
|  | SCOUR VALVE |
|  | PUMP |
|  | FIRE HYDRANT |
|  | WTP |



NOTES:








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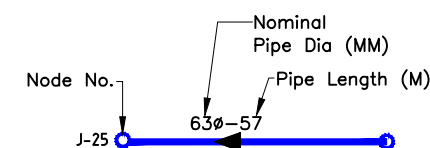


INDEX MAP OF DHARAVANDHOO

Phase I			
S. No	Node No.	Name of catchment area	Catchment Area (Ha.)
1	RT-1	Healthcenter	0.039
2	RT-2	Mosque2	0.018
3	RT-3	Stadium roof	0.01
4	RT-4	Pre School	0.013
5	RT-5	CNLC	0.015
6	RT-6	Dharavandhoo School	0.062
7	RT-7	Dharavandhoo School	0.027
8	RT-8	Dharavandhoo School	0.013
9	RT-9	Dharavandhoo Moaque	0.045
10	RT-10	Dharavandhoo Court	0.011
11	RT-11	Council office	0.03
		Total Area	0.283

LEGEND:

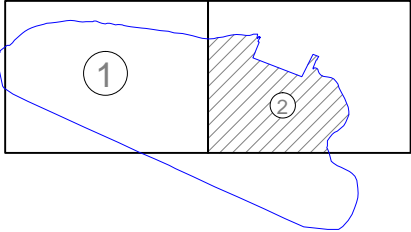
- | | |
|---|--|
|  | BOUNDARY |
|  | ROAD |
|  | PROPOSED RAIN WATER
CONVEYANCE SYSTEM |
|  | SLUICE VALVE |
|  | SCOUR VALVE |
|  | WTP |
|  | CATCHMENT ROOF |



NOTES:

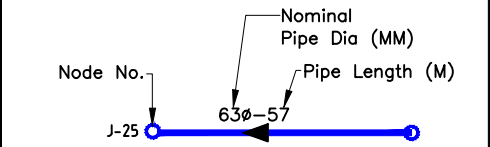
1. ALL COORDINATES ARE BASED ON WGS 84 DATUM, UTM SYSTEM.
2. UTM ZONE - 43 N

[illegible]



INDEX MAP OF DHARAVANDHOO			
Phase I			
S. No	Node No.	Name of catchment area	Catchment Area (Ha.)
1	RT1	Healthcenter	0.039
2	RT2	Mosque2	0.018
3	RT3	Stadium roof	0.01
4	RT4	Pre School	0.013
5	RT5	CNLC	0.015
6	RT6	Dharavandhoo School	0.062
7	RT7	Dharavandhoo School	0.027
8	RT8	Dharavandhoo School	0.013
9	RT9	Dharavandhoo Moaque	0.045
10	RT-10	Dharavandhoo Court	0.011
11	RT-11	Council office	0.03
Total Area			0.283






LEGEND:	
	BOUNDARY
	ROAD
	PROPOSED RAIN WATER CONVEYANCE SYSTEM
	SLUICE VALVE
	SCOUR VALVE
	WTP
	CATCHMENT ROOF



NOTES:

1. ALL COORDINATES ARE BASED ON WGS 84 DATUM, UTM SYSTEM.

2. UTM ZONE - 43 N

							MINISTRY OF ENVIRONMENT AND ENERGY MALE REPUBLIC OF MALDIVES							
							CONSULTANCY SERVICES FOR DESIGN AND SUPERVISION OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES							
							KEY PLAN OF PROPOSED RAIN WATER CONVEYANCE SYSTEM (2 OF 2)							
							SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With							
							DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES							
No.	DATE	DESCRIPTION			DRAWING No.	DESCRIPTION			SSS	CHECKED SSS	DESIGNED RKC	DRAWN SSN		
REVISION					REFERENCE DRAWINGS					SCALE 1:1250	DATE MAY 2017	DRAWING NUMBER B.Dharavandhoo/WS/04		REVISION 0

WTP PLOT AREA :- 1355m²

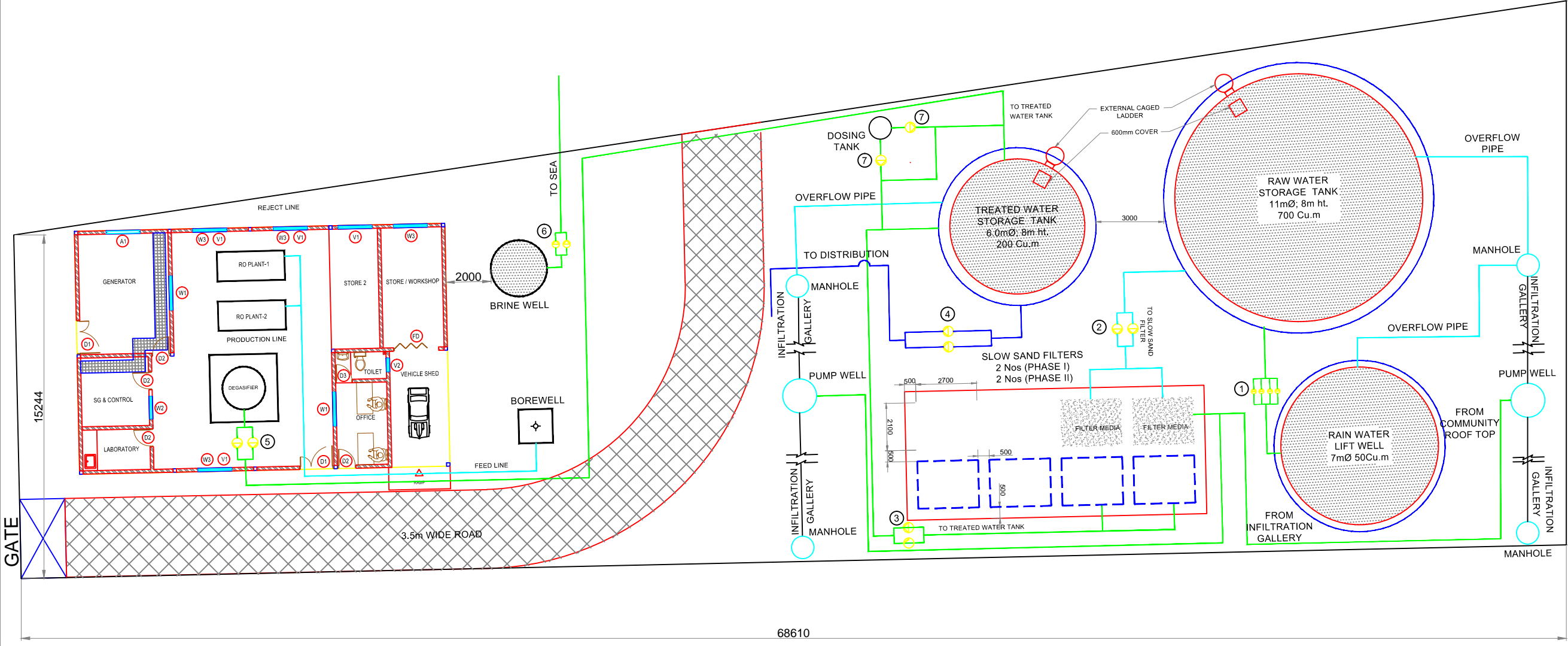

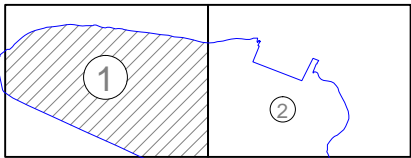
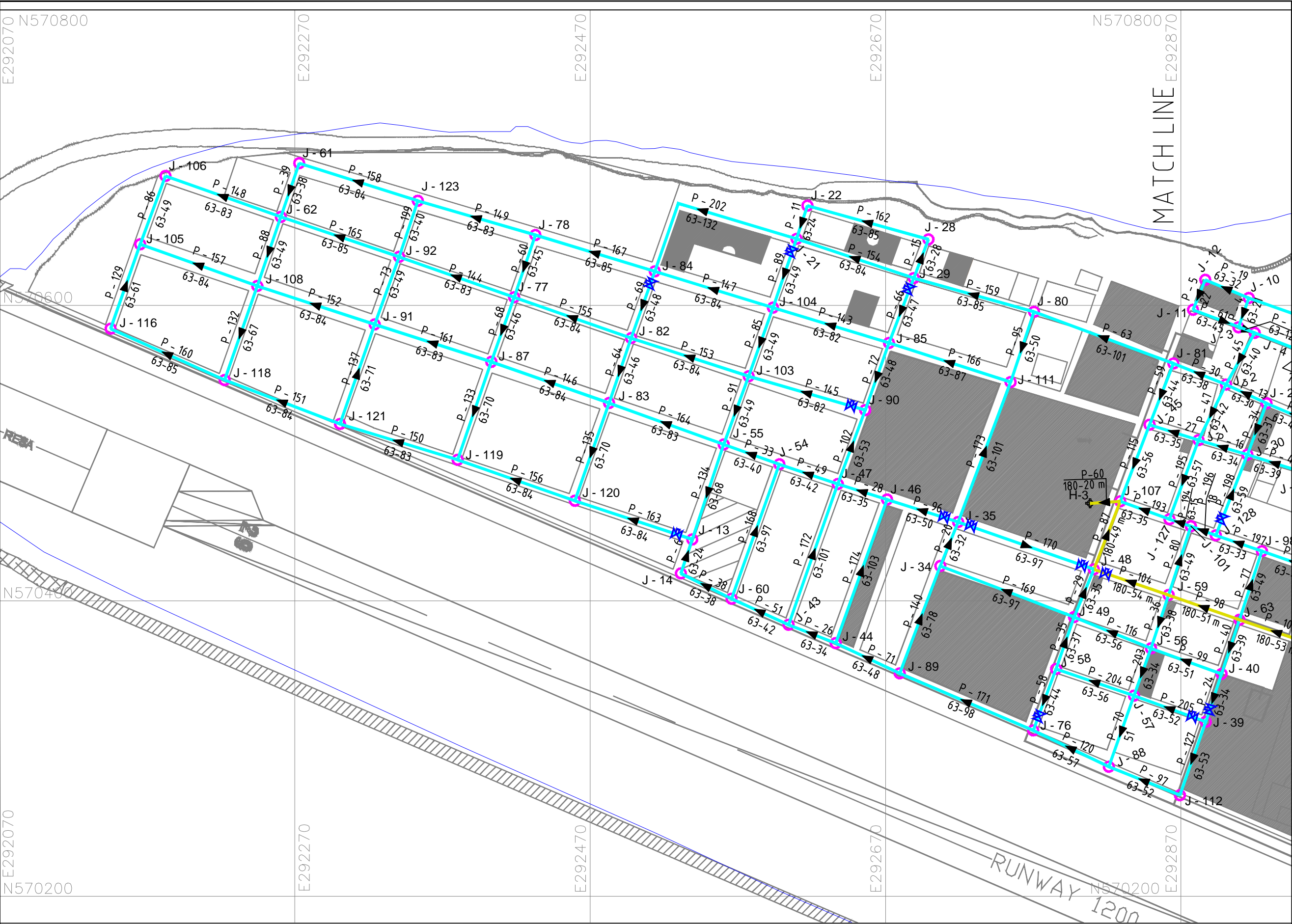


FIGURE 5.4 :- LAYOUT OF TREATMENT FACILITY

NOTES:

1. ALL DIMENSIONS ARE IN MM UNLESS AND OTHERWISE SPECIFIED.

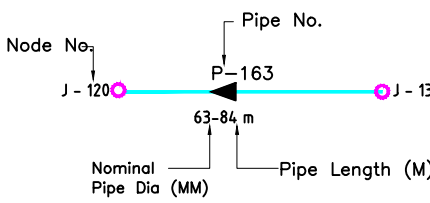
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					PROJECT CONSULTANCY SERVICES FOR DESIGN AND SUPERVISION OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES
					TITLE LAYOUT OF TREATMENT FACILITY
					ISTC SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With
					dten DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES
No.	DATE	DESCRIPTION	DRAWING No.	DESCRIPTION	APPROVED SSS CHECKED SSS DESIGNED RKC DRAWN SSN
REVISION			REFERENCE DRAWINGS		SCALE NTS DATE MAY 2017 DRAWING No. B. Dharavandhoo/WS/05 REVISION 0



INDEX MAP OF DHARAVANDHOO

LEGEND:

- BOUNDARY
- ROAD
- PROPOSED DISTRIBUTION SYSTEM
- SLUICE VALVE
- SCOUR VALVE
- PUMP
- FIRE HYDRANT



HDPE PIPE DIA (mm)	PIPE COLOUR
56_7	
81_1	
99_3	
67_4	
112_8	

NOTES:

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MINISTRY OF ENVIRONMENT AND ENERGY
MALE REPUBLIC OF MALDIVES

CONSULTANCY SERVICES FOR DESIGN AND SUPERVISION OF WATER SUPPLY FACILITIES
IN THE ISLAND B. DHARAVANDHOO, MALDIVES

KEY PLAN OF PROPOSED DISTRIBUTION SYSTEM (1 OF 2)

SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA

DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES

APPROVED

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DESIGNED

RKC

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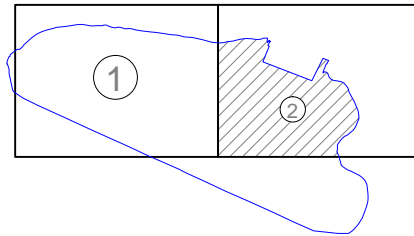
APRIL 2017

DRAWING NUMBER

B. Dharavandhoo/WS/06

REVISION

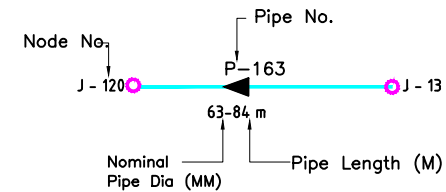
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INDEX MAP OF DHARAVANDHOO

LEGEND:

- BOUNDARY
- ROAD
- PROPOSED DISTRIBUTION SYSTEM
- SLUICE VALVE
- SCOUR VALVE
- PUMP
- FIRE HYDRANT



HDPE PIPE DIA (mm)	PIPE COLOUR
56_7	
81_1	
99_3	
67_4	
112_8	

NOTES:

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CONSULTANCY SERVICES FOR DESIGN AND SUPERVISION OF WATER SUPPLY FACILITIES
IN THE ISLAND B. DHARAVANDHOO, MALDIVES

TITLE

KEY PLAN OF PROPOSED DISTRIBUTION SYSTEM (2 OF 2)

SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA
In Association With
DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES

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DATE

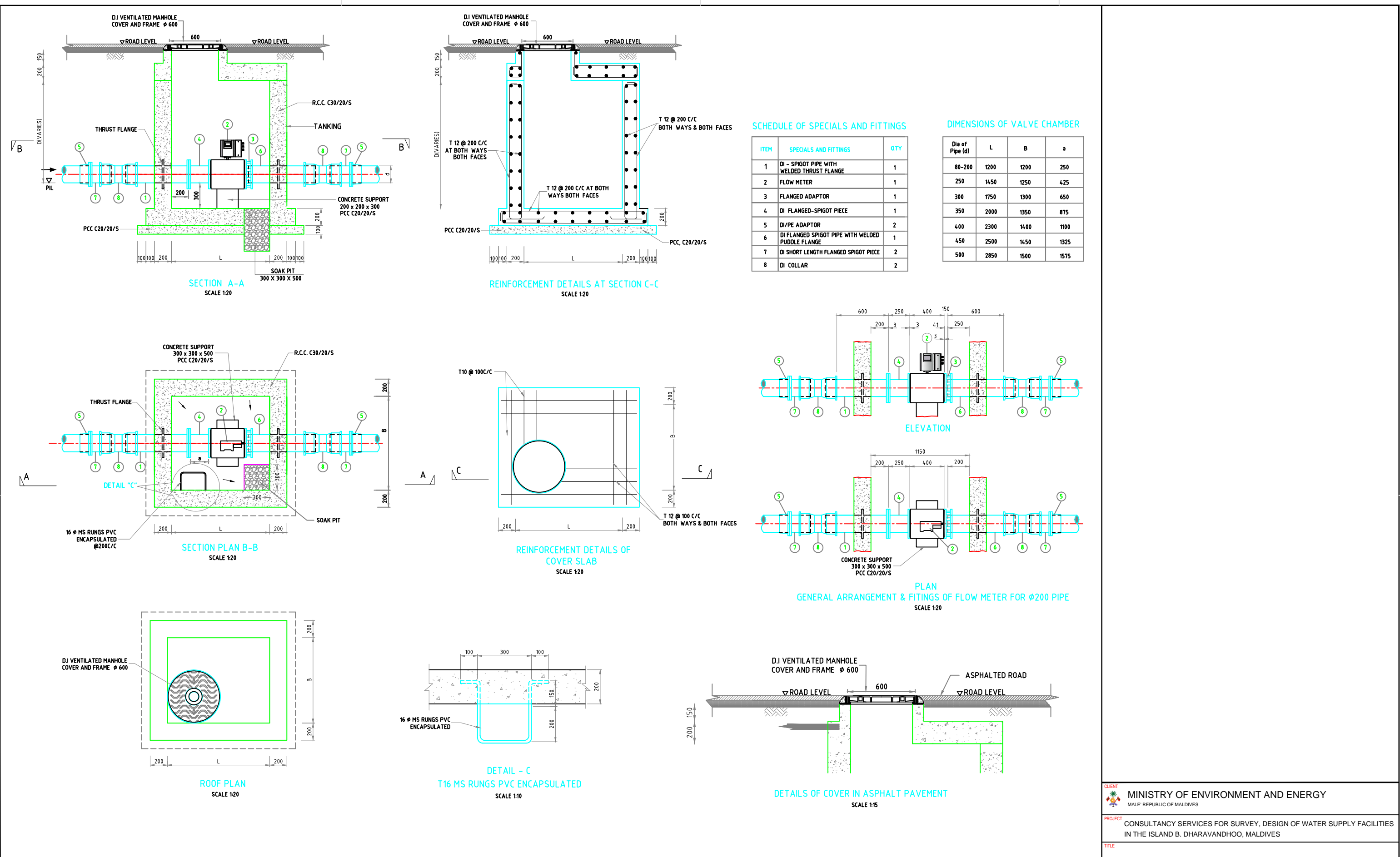
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DRAWING NUMBER

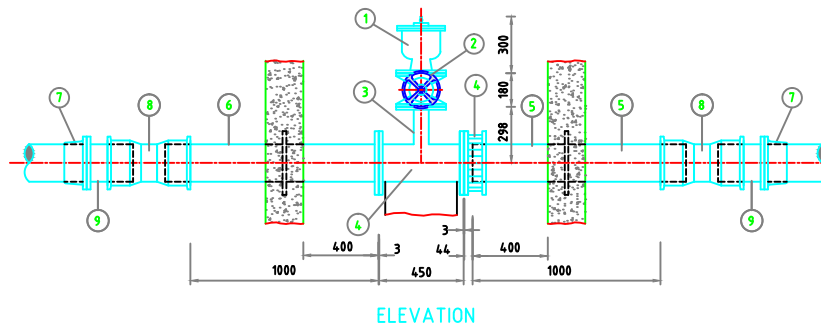
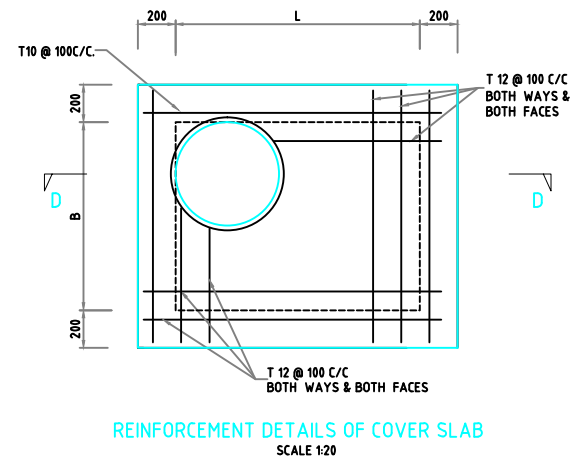
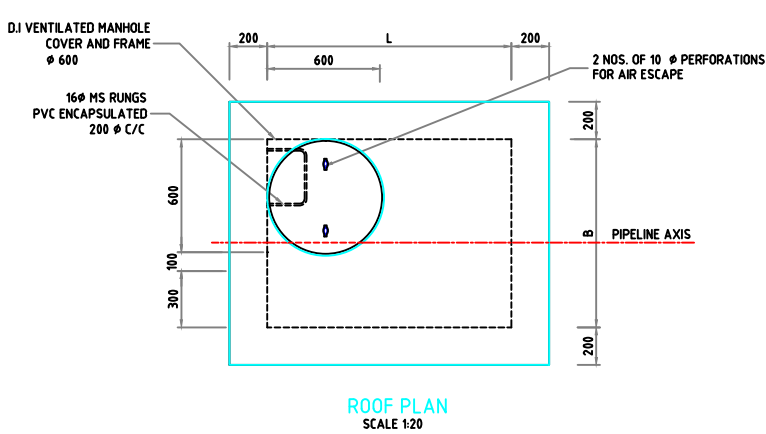
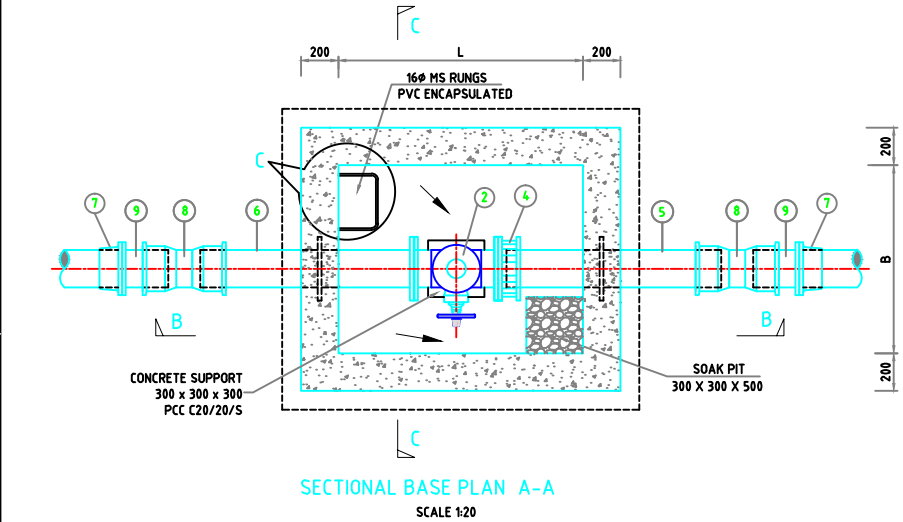
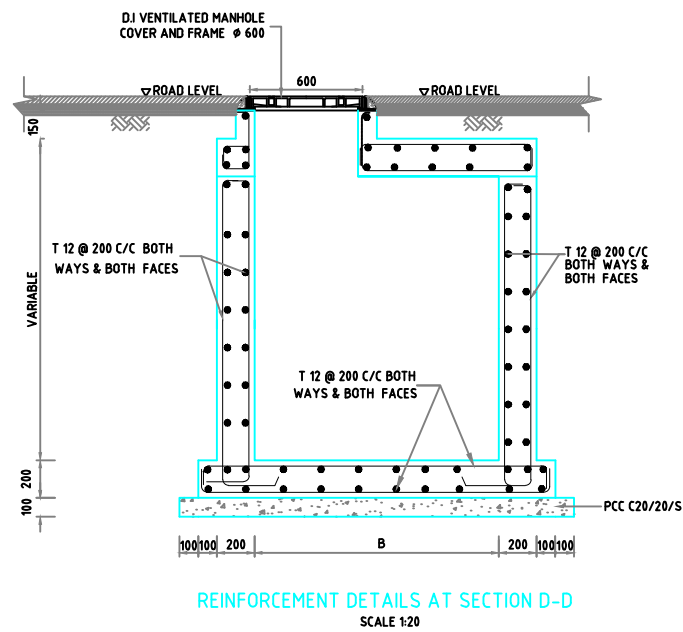
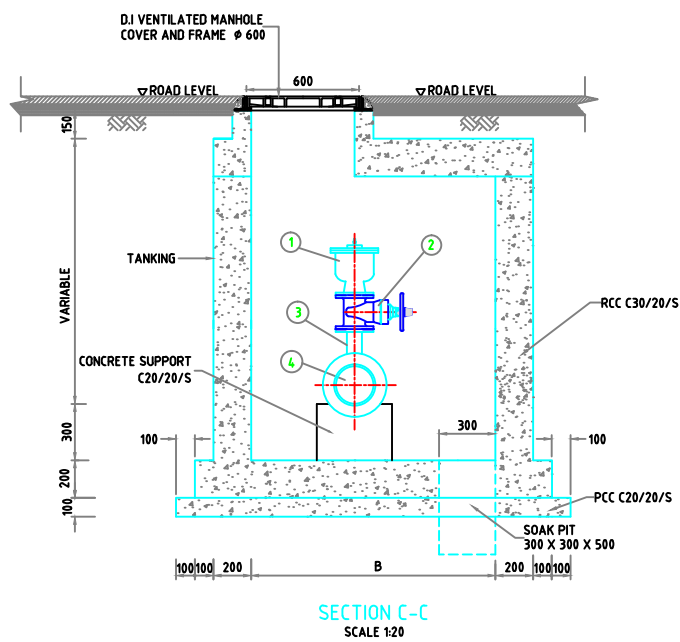
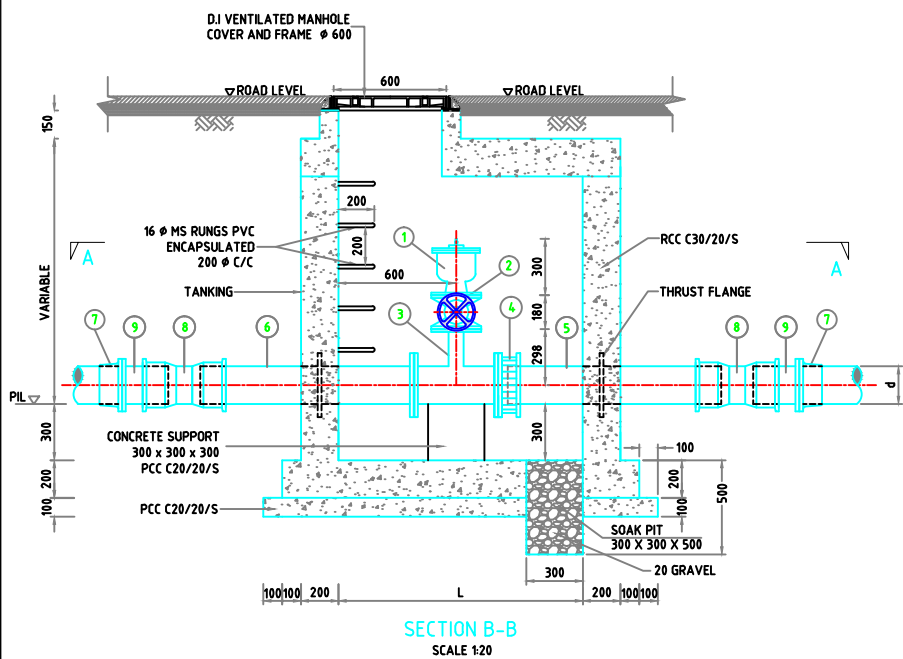
B. Dharavandhoo/WS/06

REVISION

0



<div>NOTES:</div> <div><div><div>1. All dimensions are in mm</div><div>2. For location and depths of Gate valve chamber refer to drawings of pipeline plans and profiles.</div><div>3. The specials and pipe fittings shall be selected to suit the supply pipe line</div><div>4. All the valves, specials and pipes inside the chamber should be of Ductile iron</div><div>5. Flow meter shall comply with BS 5150</div><div>6. DI pipe & Fitting shall comply with BS 4772</div><div>7. Building materials:- Description of building materials is as follows</div></div><div><div><div>C 30 / 20 / S</div><div>Compressive strength of concrete</div></div><div><div>Sulphate resistant cement</div><div>maximum size of aggregate</div></div></div></div> <div><div>8. Concrete: a. mixes shall comply with BS 8110 b. minimum 28 day characteristic strength in accordance with BS 8110</div><div>9. Cover to reinforcement to be 50mm,</div><div>10. The steel used shall be of fy 350 grade.</div><div>11. The tanking shall be with two layers of Bituminous Paint for external surfaces of Valve chamber</div><div>12. Gate Valve Chamber to be provided for Pipe dia 200 to 300 mm</div><div>13. MH Cover Should Comply to BS EN 124 Class D400</div></div> <div><div>ABBREVIATIONS</div><div><div>PIL - PIPE INVERT LELEL</div><div>MS - MILD STEEL</div><div>DI - DUCTILE IRON</div><div>PE - POLY ETHYLINE</div><div>RCC -REINFORCED CEMENT CONCRETE</div><div>PCC - PLAIN CEMENT CONCRETE</div></div></div> <div><div><div><div></div><div></div><div></div><div></div><div></div></div><div><div>No.</div><div>DATE</div><div>DESCRIPTION</div><div>DRG. No.</div><div>DESCRIPTION</div></div><div><div>REVISION</div><div>REFERENCE DRAWINGS</div></div></div></div> <div><div><div>TYPICAL DRAWING OF WATER METER CHAMBER</div><div><div><div>STC</div><div>SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA</div><div>In Association With</div><div>djm</div><div>DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES</div></div><div><div>APPROVED</div><div>SSS</div><div>CHECKED</div><div>SSS</div><div>DESIGNED</div><div>RKC</div><div>DRAWN</div><div>SSN</div></div><div><div>SCALE</div><div>AS SHOWN</div><div>DATE</div><div>APRIL 2017</div><div>DRAWING No.</div><div>B. Dharavandhoo/WS/07</div><div>REVISION</div><div>0</div></div></div></div></div>



AIR VALVE CHAMBER DETAILS

No.	PIPE DIA (d)	L	B
1	150	900	1000
2	200	1000	1000
3	250	1250	1000
4	300	1300	1100
5	350	1300	1100
6	400	1350	1200
7	450	1450	1200
8	500	1500	1200

NOTES:

- ALL DIMENSIONS ARE IN MM
- FOR LOCATION AND DEPTHS OF GATE VALVE CHAMBER REFER TO DRAWINGS OF PIPELINE PLANS AND PROFILES.
- THE SPECIALS AND PIPE FITTINGS SHALL BE SELECTED TO SUIT THE SUPPLY PIPE LINE
- ALL THE VALVES, SPECIALS AND PIPES INSIDE THE CHAMBER SHOULD BE OF DUCTILE IRON
- GATE VALVE SHALL COMPLY WITH BS 5150 & AIR VALVE SHALL COMPLY WITH AWWA C-572
- DI PIPE & FITTING SHALL COMPLY WITH BS 4772
- BUILDING MATERIALS:-
DESCRIPTION OF BUILDING MATERIALS IS AS FOLLOWS
COMPRESSION STRENGTH OF CONCRETE C 30 / 20 / S
SULPHATE RESISTANT CEMENT
MAXIMUM SIZE OF AGGREGATE

8. CONCRETE:
A. MIXES SHALL COMPLY WITH BS 8110
B. MINIMUM 28 DAY CHARACTERISTIC STRENGTH IN ACCORDANCE WITH BS 8110
9. COVER TO REINFORCEMENT TO BE 50MM,
10. THE STEEL USED SHALL BE OF FY 350 GRADE.
11. THE TANKING SHALL BE WITH TWO LAYERS OF BITUMINOUS PAINT FOR EXTERNAL SURFACES OF VALVE CHAMBER
12. GATE VALVE CHAMBER TO BE PROVIDED FOR PIPE DIA 200 TO 300 MM
13. MH COVER SHOULD COMPLY TO BS EN 124 CLASS D400

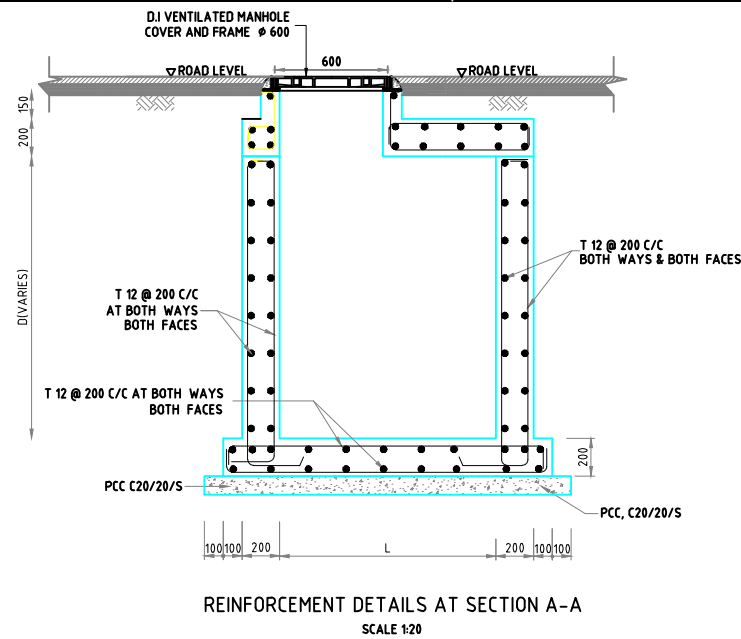
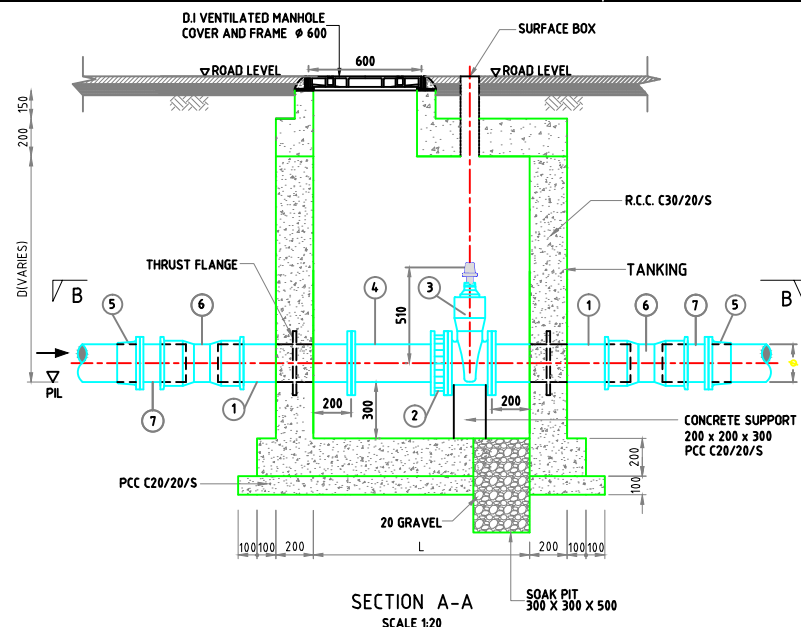
ABBREVIATIONS

PIL - PIPE INVERT LEVEL.
MS - MILD STEEL.
DI - DUCTILE IRON.
PE - POLY ETHYLENE
RCC - REINFORCED CEMENT CONCRETE
PCC - PLAIN CEMENT CONCRETE

No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
REVISION		REFERENCE DRAWINGS		

PIPE DIA	S.NO	SPECIALS & FITTINGS	QUANTITY
150	1	DN 80 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 80 MM DIA	1
	3	DN 150 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 150 DI FLANGE ADAPTER	1
	5	DN 150 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 150 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 150 DI/PE ADAPTER	2
	8	DN 150 DI COLLAR	2
	9	DN 150 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
200	1	DN 80 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 80 MM DIA	1
	3	DN 200 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 200 DI FLANGE ADAPTER	1
	5	DN 200 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 200 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 200 DI/PE ADAPTER	2
	8	DN 200 DI COLLAR	2
	9	DN 200 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
250	1	DN 80 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 80 MM DIA	1
	3	DN 250 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 250 DI FLANGE ADAPTER	1
	5	DN 250 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 250 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 250 DI/PE ADAPTER	2
	8	DN 250 DI COLLAR	2
	9	DN 250 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
300	1	DN 80 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 80 MM DIA	1
	3	DN 300 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 300 DI FLANGE ADAPTER	1
	5	DN 300 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 300 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 300 DI/PE ADAPTER	2
	8	DN 300 DI COLLAR	2
	9	DN 300 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
350	1	DN 100 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 100 MM DIA	1
	3	DN 350 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 350 DI FLANGE ADAPTER	1
	5	DN 350 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 350 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 350 DI/PE ADAPTER	2
	8	DN 350 DI COLLAR	2
	9	DN 350 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
400	1	DN 100 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 100 MM DIA	1
	3	DN 400 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 400 DI FLANGE ADAPTER	1
	5	DN 400 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 400 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 400 DI/PE ADAPTER	2
	8	DN 400 DI COLLAR	2
	9	DN 400 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
450	1	DN 150 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 150 MM DIA	1
	3	DN 450 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 450 DI FLANGE ADAPTER	1
	5	DN 450 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 450 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 450 DI/PE ADAPTER	2
	8	DN 450 DI COLLAR	2
	9	DN 450 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
500	1	DN 150 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 150 MM DIA	1
	3	DN 500 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 500 DI FLANGE ADAPTER	1
	5	DN 500 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 500 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 500 DI/PE ADAPTER	2
	8	DN 500 DI COLLAR	2
	9	DN 500 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2

CLIENT		MINISTRY OF ENVIRONMENT AND ENERGY MALE' REPUBLIC OF MALDIVES	
PROJECT		CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES	
TITLE		TYPICAL DRAWING OF AIR RELEASE VALVE CHAMBER	
STC		SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES	
APPROVED	SSS	CHECKED	SSS
DESIGNED	RKC	DRAWN	SSN
SCALE	AS SHOWN	DATE	APRIL 2017
DRAWING No.	B. Dharavandhoo/WS/08		REVISION
		0	

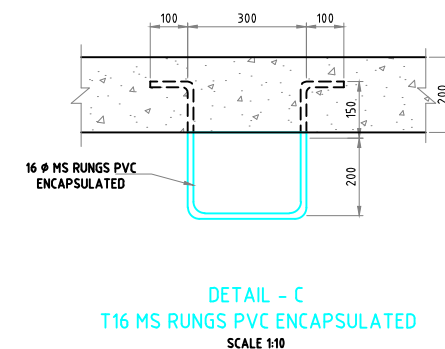
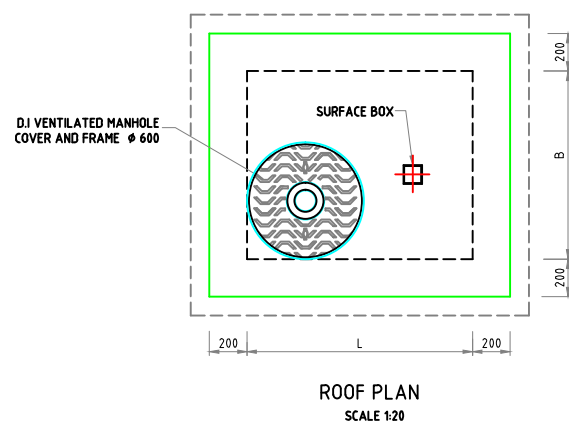
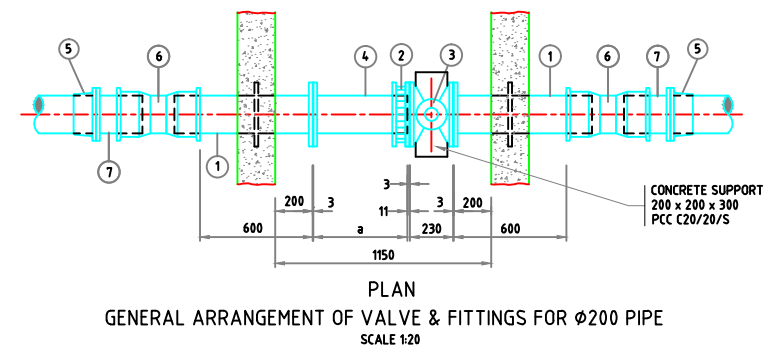
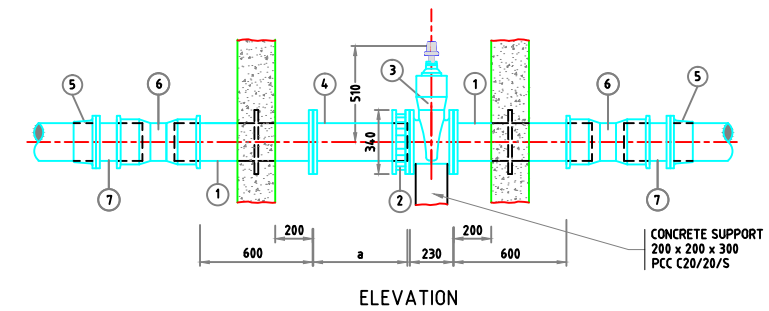
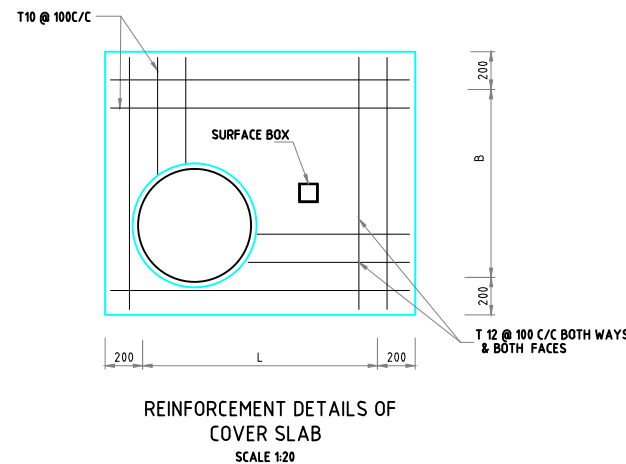
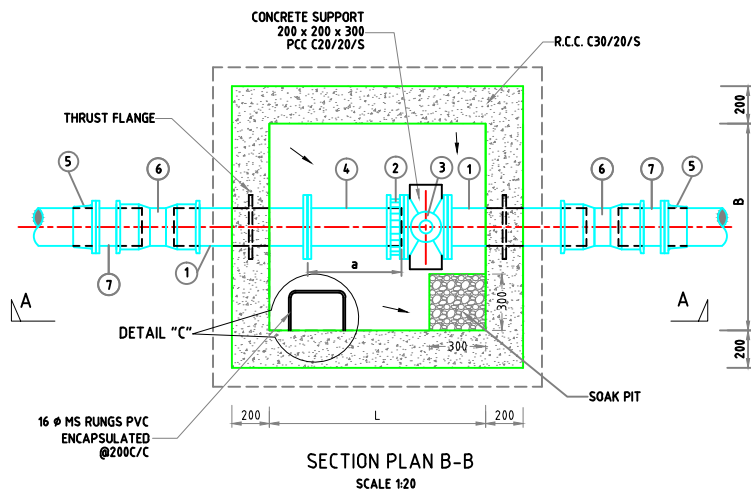


DIMENSIONS OF VALVE CHAMBER

DIA OF PIPE (D)	L	B	a
200	1150	1100	500
250	1600	1200	250

SCHEDULE OF SPECIALS AND FITTINGS

ITEM	SPECIALS AND FITTINGS	QTY
1	DI FLANGED SPIGOT PIPE WITH WELDED THRUST FLANGE	2
2	FLANGE ADAPTOR	1
3	DI GATE VALVE	1
4	DI FLANGED-SPIGOT PIECE	1
5	DI/PE ADOPTOR	2
6	DI COLLAR	2
7	DI SHORT LENGTH FLANGED SPIGOT PIECE	2



NOTES:

- All dimensions are in mm
- For location and depths of Gate Valve chamber refer to drawings of pipeline plans and profiles.
- The specials and pipe fittings shall be selected to suit the supply pipe line
- All the valves, specials and pipes inside the chamber shall be of Ductile iron
- Gate Valve shall comply with BS 5150
- DI pipe & Fitting shall comply with BS 4772
- Building materials:-
Description of building materials is as follows
Compressive strength of concrete ≥ 30 / 20 / S
Sulphate resistant cement
Maximum size of aggregate

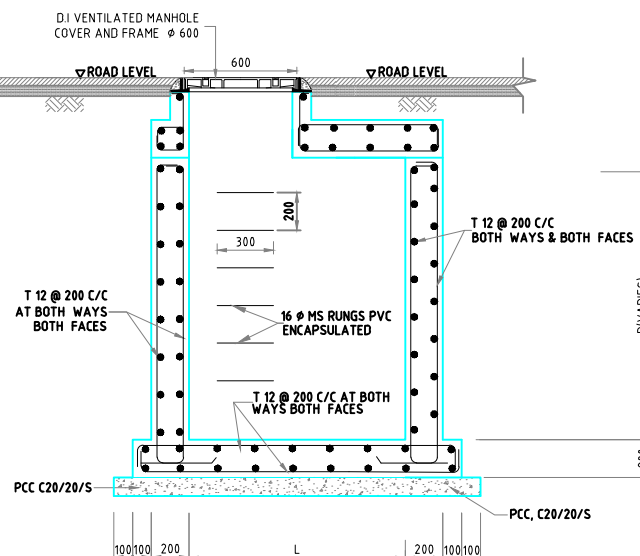
- Concrete:
a. mixes shall comply with BS 8110
b. minimum 28 day characteristic strength in accordance with BS 8110
- Cover to reinforcement to be 50mm.
- The steel used shall be of fy 350 grade.
- The tanking shall be with two layers of Bituminous Paint for external surfaces of Valve chamber
- Gate Valve Chamber to be provided for Pipe dia 200 to 300 mm
- MH Cover Should Comply to BS EN 124 Class D400

ABBREVIATIONS

PIL - PIPE INVERT LEVEL.
MS - MILD STEEL.
DI - DUCTILE IRON.
PE - POLY ETHYLENE
RCC - REINFORCED CEMENT CONCRETE
PCC - PLAIN CEMENT CONCRETE

No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
REVISION			REFERENCE DRAWINGS	

<p>CLIENT</p> <p>MINISTRY OF ENVIRONMENT AND ENERGY MALE' REPUBLIC OF MALDIVES</p>				
<p>PROJECT</p> <p>CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES</p>				
<p>TITLE</p> <p>TYPICAL DRAWING OF SLUICE VALVE CHAMBER</p>				
<p>SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES</p>				
APPROVED	CHECKED	DESIGNED	DRAWN	
SSS	SSS	RKC	VPT	
SCALE	DATE	DRAWING No.	REVISION	
AS SHOWN	APRIL 2017	B. Dharavandhoo/WS/09	0	

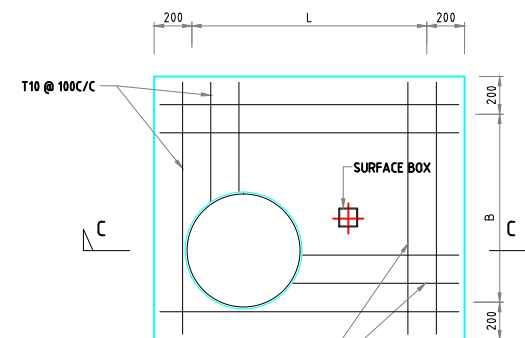


SECTION A-A
SCALE 1:20

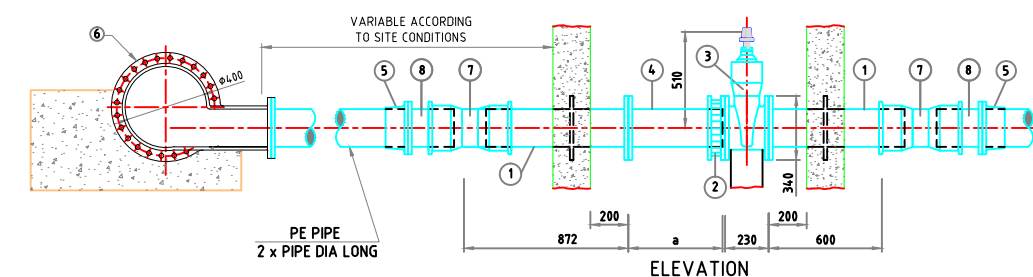
REINFORCEMENT DETAILS AT SECTION C-C
SCALE 1:20

Dia of Pipe (d)	L	B	a
200	1150	1100	500
250	1600	1200	250

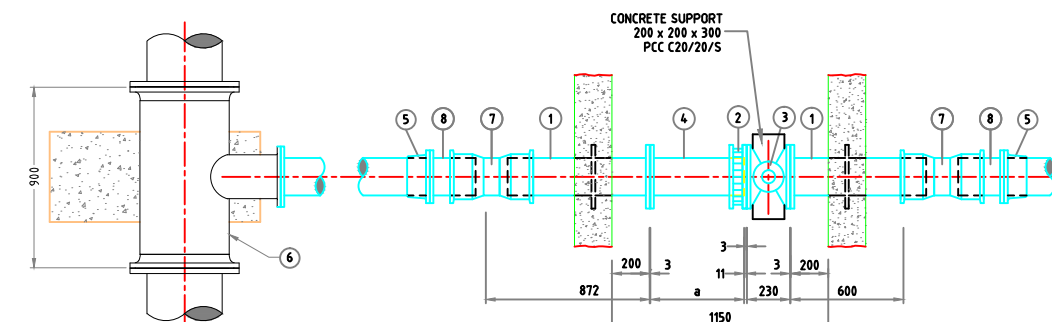
ITEM	SPECIALS AND FITTINGS	QTY
1	DI FLANGED-SPIGOT PIPE WITH WELDED THRUST FLANGE	2
2	FLANGE ADAPTOR	1
3	DI GATE VALVE	1
4	DI FLANGED-SPIGOT PIECE	1
5	DI/PE ADOPTOR	2
6	ALL FLANGED LEVEL SCOUR TEE	1
7	DI COLLAR	2
8	DI SHORT LENGTH FLANGED SPIGOT PIECE	2



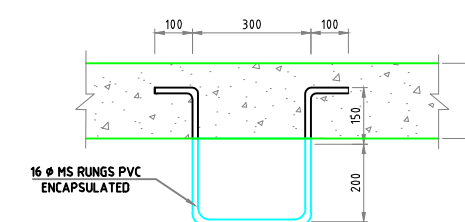
REINFORCEMENT DETAILS OF
COVER SLAB
SCALE 1:20



PLAN
PLAN & ELEVATION OF VALVE & FITTINGS
SCALE 1:20






ROOF PLAN
SCALE 1:20

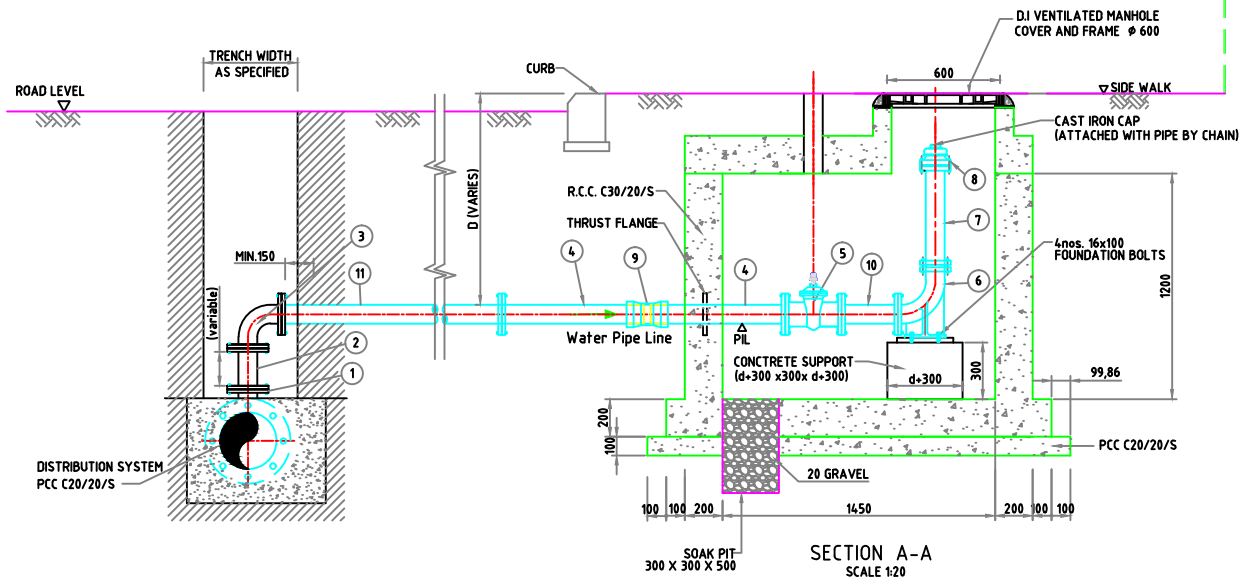
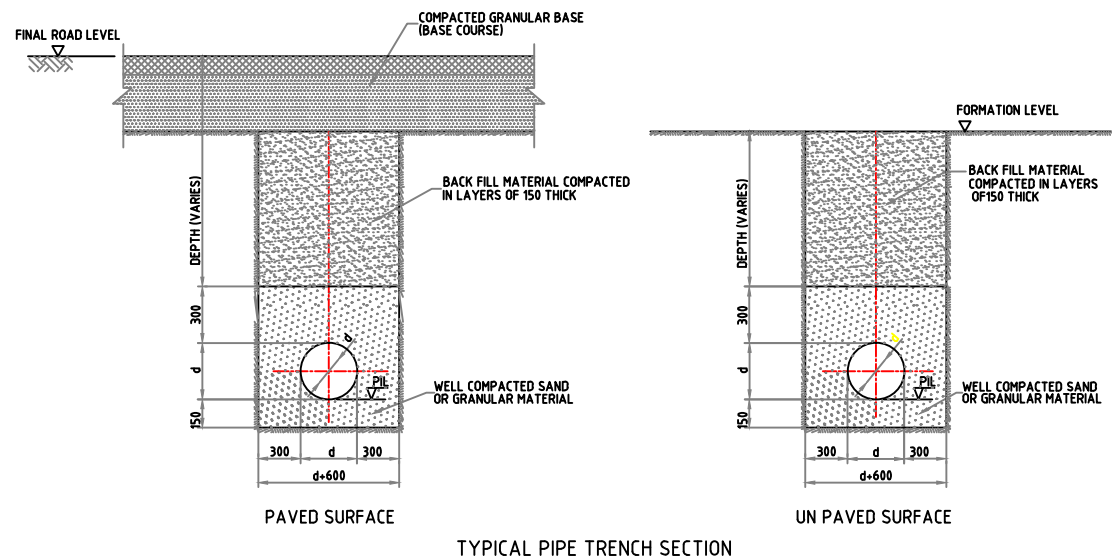
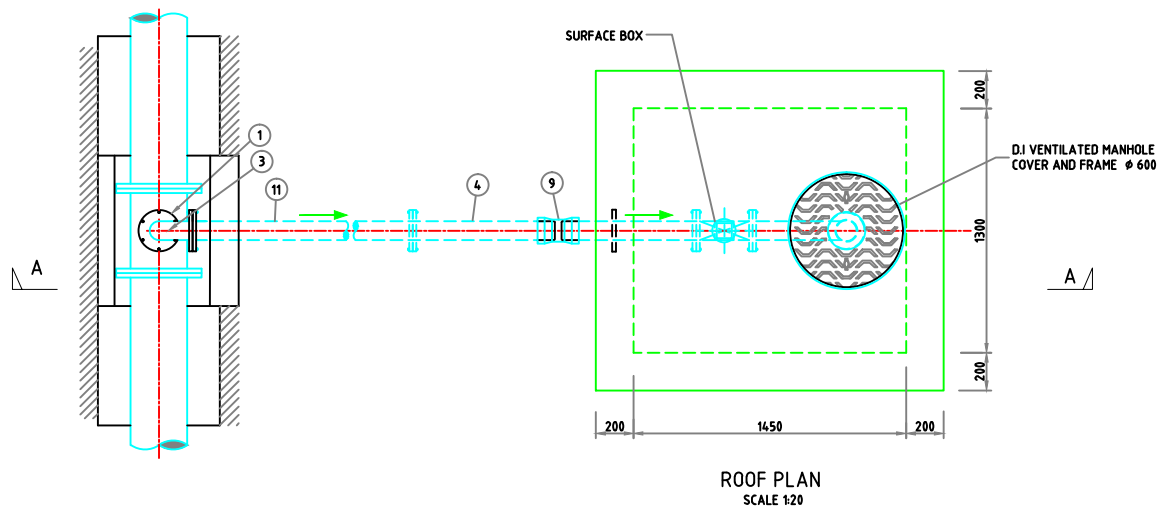


DETAIL - C
MS RUNGS
SCALE 1:10

- ABBREVIATIONS**
- PIL - PIPE INVERT LEVEL.
MS - MILD STEEL.
DI - DUCTILE IRON.
PE - POLY ETHYLENE
RCC -REINFORCED CEMENT CONCRETE
PCC - PLAIN CEMENT CONCRETE

E					
	No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
	REVISION			REFERENCE DRAWINGS	

<div>CLIENT</div>  <div>MINISTRY OF ENVIRONMENT AND ENERGY MALE* REPUBLIC OF MALDIVES</div>				
<div>PROJECT</div> <div>CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAWANDHOO, MALDIVES</div>				
<div>TITLE</div> <div>TYPICAL DRAWING OF SCOUR VALVE CHAMBER</div>				
<div>  <div>SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With  DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES</div> </div>				
<div>APPROVED</div> <div>SSS</div>		<div>CHECKED</div> <div>SSS</div>		<div>DESIGNED</div> <div>RKC</div>
			<div>DRAWN</div> <div>SSN</div>	
<div>SCALE</div> <div>AS SHOWN</div>	<div>DATE</div> <div>APRIL 2017</div>	<div>DRAWING No.</div> <div>B. Dharavandhoo/WS/10</div>		<div>REVISION</div> <div>0</div>



FITTINGS			
ITEM	DESCRIPTION	QTY	DIAMETER
1	DI ALL FLANGED TEE	1	Var./80
2	DI DOUBLE FLANGED PIPE (VARIABLE)	1	DN80
3	DI DF 90° SHORT BEND	1	DN80
4	FLANGED SPIGOT PIPE	3	DN80
5	DI GATE VALVE	1	DN80
6	DI DUCK FOOT BEND	1	DN80
7	DI DF PIPE 900 LONG	1	DN80
8	FIRE HYDRANT	1	DN80
9	DI COLLAR	2	DN80
10	DI FLANGED SPIGOT PIPE WITH WELDED THRUST FLANGE	1	DN80
11	DI DF PIPE (AS PER REQUIREMENT)	1	DN80

NOTES:

- All dimensions are in mm
- For location of fire hydrant and depths of valve chamber refer to drawings of pipeline plans and profiles.
- Building materials--
Description of building materials is as follows
C 30 / 20 / S
Compressive strength of concrete sulphate resistant cement
maximum size of aggregate
- All the valves, specials and pipes inside the chamber shall be of Ductile iron
- The tanking shall be with two layers of Bituminous Paint for external surfaces of Valve chamber
- The specials and pipe fittings shall be supplied by the vendor to suit the supply pipe line

- Minimum cover to reinforcement shall be 50mm
- Concrete: a. mixes shall comply with BS 8110
b. minimum 28 day characteristic strength
- Shall be measured on a cube specimen in accordance with BS 8110
- DI Pipe and fitting shall comply with BS 4772
- Gate Valve shall comply with BS 5150

ABBREVIATIONS

PIL - PIPE INVERT LEVEL.
MS - MILD STEEL.
DI - DUCTILE IRON.
PE - POLY ETHYLENE
RCC - REINFORCED CEMENT CONCRETE
PCC - PLAIN CEMENT CONCRETE

No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
		REVISION	REFERENCE DRAWINGS	

CLIENT
MINISTRY OF ENVIRONMENT AND ENERGY
MALDIVES REPUBLIC OF MALDIVES

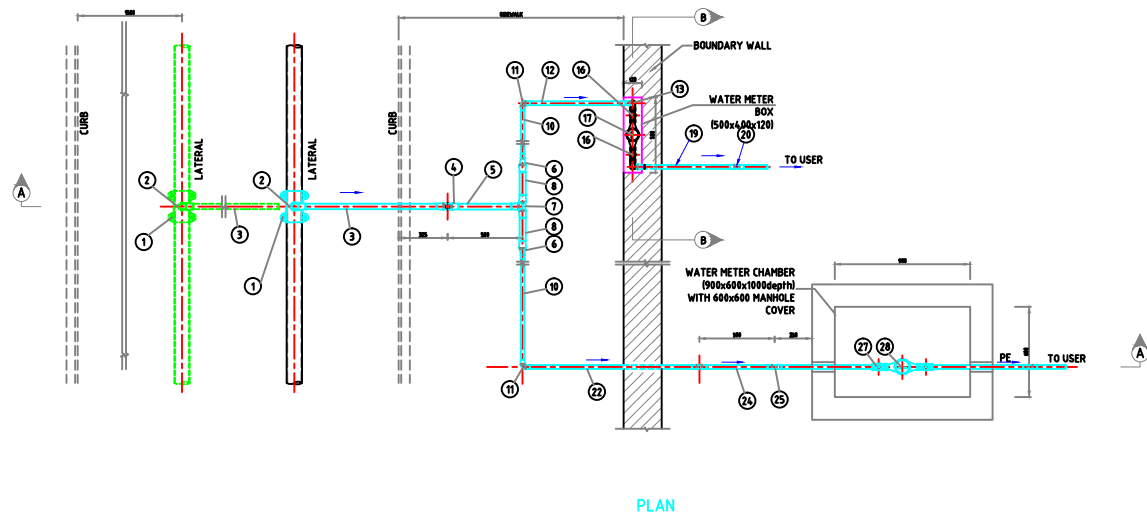
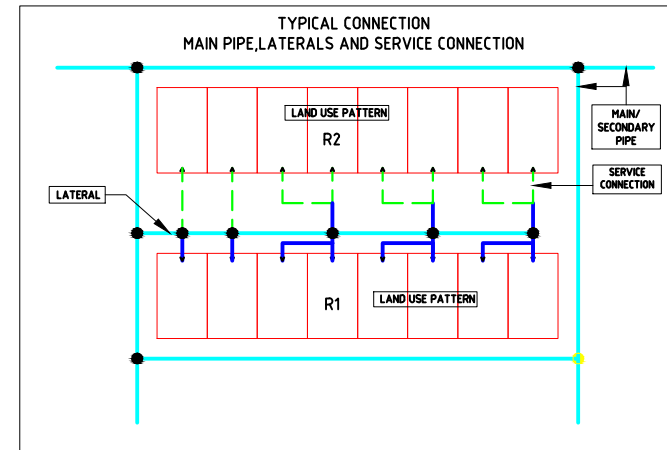
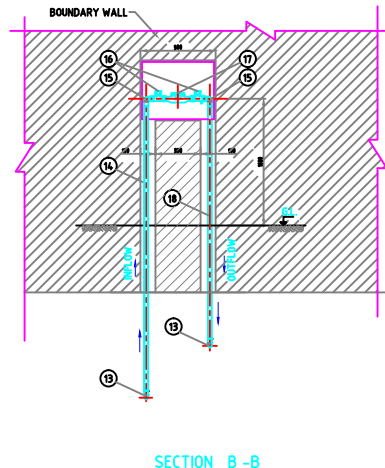
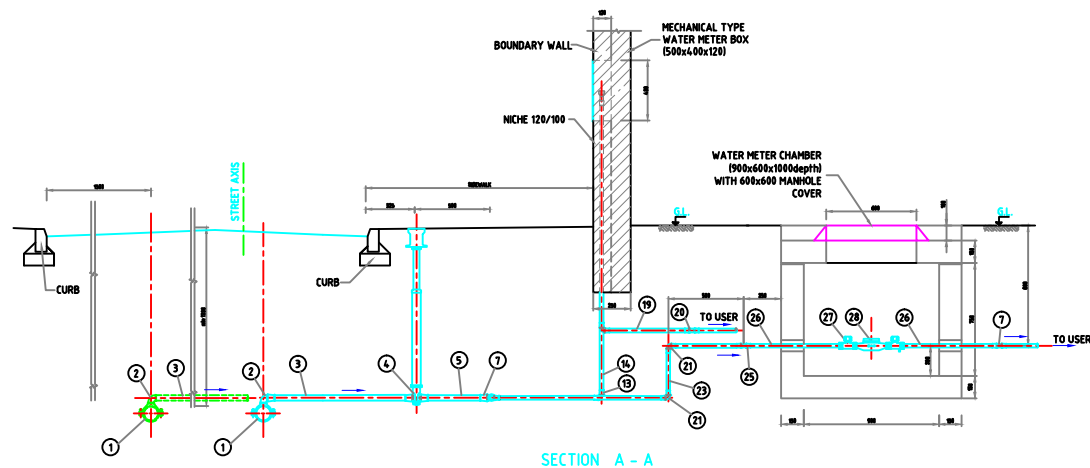
PROJECT
CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES
IN THE ISLAND B. DHARAVANDHOO, MALDIVES

TITLE
TYPICAL DRAWING OF FIRE HYDRANTS

STC SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA
In Association With
djm DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES

APPROVED SSS	CHECKED SSS	DESIGNED RKC	DRAWN VPT
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SCALE AS SHOWN	DATE APRIL 2017	DRAWING No. B. Dharavandhoo/WS/11	REVISION 0
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DOUBLE HOUSE CONNECTION WITH WATER METER BOX AND WATER METER CHAMBER

SERVICE CONNECTION TYPE

1. HOUSE CONNECTION											
ITEM	DESCRIPTION	LSC -40/25		LSC -50/32		LSC -63/40		LSC -63/32		LSC -75/63	
		DIA	QUALITY	DIA	QUALITY	DIA	QUALITY	DIA	QUALITY	DIA	QUALITY
1	UNIVERSAL PIPE SADDLE	40	1	50	1	63	1	63	1	75	1
2	ELBOW 90°	40	1	50	1	63	1	63	1	75	1
3	PE PIPE	32	--	32	--	40	--	40	--	63	--
4	SERVICE VALVE for PE PIPES, COMPLETE WITH TELESCOPIC EXTENSION SPINDLE AND HEAVY BOX	32	1	32	1	40	1	32	1	63	1
5	PE PIPE	32	--	32	--	40	1	32	--	63	--
6	REDUCER	32/25	1	--	--	40/32	1	40/32	1	--	--
7	TEE	40	1	50	1	63	1	63	1	75	1
8	CONNECTOR	40	1	50	1	63	1	63	1	75	1
9	---	---	---	---	---	---	---	---	---	---	---
10	PE PIPE	25	1	32	1	40	1	32	1	63	1
11	ELBOW 90°	25	1	32	1	40	1	32	1	63	1
12	PE PIPE	25	1	32	1	40	1	32	1	63	1
13	ELBOW 90°	25	1	32	1	40	1	32	1	63	1
14	PE PIPE	25	1	32	1	40	1	32	1	63	1
15	---	25	1	32	1	40	1	32	1	63	1
16	CONNECTOR	25	2	32	2	40	2	32	2	63	2
17	METER	25	1	32	1	40	1	32	1	63	1
18	PE PIPE	25	1	32	1	40	1	32	1	63	1
19	PE PIPE	25	1	32	1	40	1	32	1	63	1
20	PE PIPE	25	1	32	1	40	1	32	1	63	1
21	ELBOW 90°	25	2	32	2	40	2	32	2	63	2
22	PE PIPE	25	1	32	1	40	1	32	1	63	1
23	PE PIPE	25	1	32	1	40	1	32	1	63	1
24	PE PIPE	25	1	32	1	40	1	32	1	63	1
25	PE PIPE	25	1	32	1	40	1	32	1	63	1
26	PE PIPE	25	1	32	1	40	1	32	1	63	1
27	CONNECTOR	25	2	32	2	40	2	32	2	63	2
28	WATER METER	25	1	32	1	40	1	32	1	63	1
		25	1	32	1	40	1	32	1	63	1

- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS.
 - FOR LOCATION AND DEPTHS OF DISTRIBUTION SUPPLY PIPE LINE REFER TO PROFILES.
 - DIMENSIONS ARE INDICATED ONLY & ARE TO BE COMFORTED BY VENDOR PLAN
 - THE WATER METER CHAMBER & WATER METER BOX TO BE PROVIDED BY CONSUMER
 - SPECIALS & PIPE FITTINGS SHALL BE SUPPLIED BY THE VENDOR TO SUIT THE PIPE LINES
 - LIMIT OF CONTRACTOR SCOPE IS UP TO WATER METER BOX
 - THE WATER METER IS OF ELECTROMAGNETIC TYPE
 - PE PIPE AND FITTINGS SHALL COMPLY WITH BS 3284 / DIN 8074 - 8075

ABBREVIATIONS:

OD - OUTER DIAMETER
MIN - MINIMUM
GL - GROUND LEVEL
PE - POLY ETHYLENE

- THE LENGTH OF LATERAL AS PER SITE CONDITION ,
- SERVICE CONNECTION TABLE IS WORKED FOR TYPICAL CONDITION, HOWEVER LATERAL DIAMETER SHOULD BE CALCULATED BASED ON WATER DEMAND AT TIME OF EXECUTION.
- TYPE: LSC-40/25 LATERAL PIPE - 40 mm AND SERVICE PIPE 25 mm.
- TYPE: LSC-50/32 LATERAL PIPE - 50 mm AND SERVICE PIPE 32 mm.
- TYPE: LSC-63/40 LATERAL PIPE - 63 mm AND SERVICE PIPE 40 mm.
- TYPE: LSC-75/63 LATERAL PIPE - 75 mm AND SERVICE PIPE 63 mm.
- TYPE: LSC-75/75 LATERAL PIPE - 75 mm AND SERVICE PIPE 75 mm.

RECOMMENDED FOR BULK SUPPLY

No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
REVISION		REFERENCE DRAWINGS		

CLIENT
MINISTRY OF ENVIRONMENT AND ENERGY
MALE' REPUBLIC OF MALDIVES

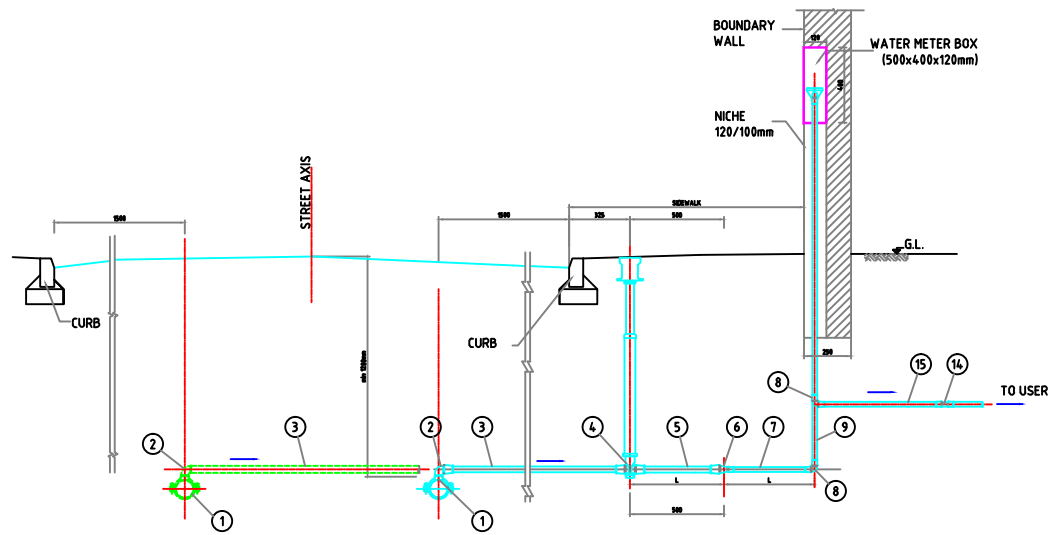
PROJECT
CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES

TITLE
TYPICAL DRAWING OF HOUSE SERVICE CONNECTION DOUBLE

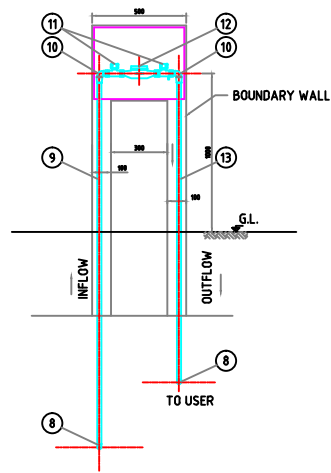
SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA
In Association With
DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES

APPROVED SSS	CHECKED SSS	DESIGNED RKC	DRAWN SSN
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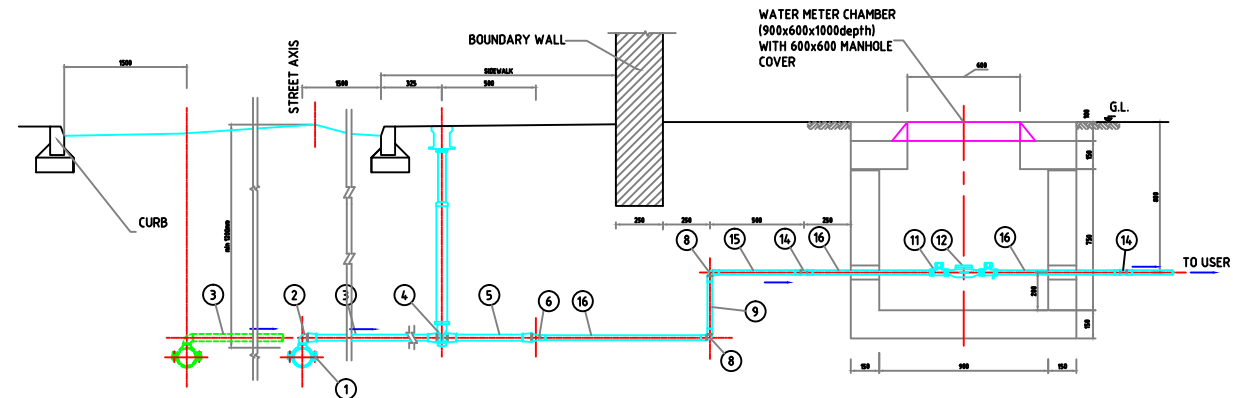
SCALE NTS	DATE APRIL 2017	DRAWING No. B. Dharavandhoo/WS/12(A)	REVISION 0
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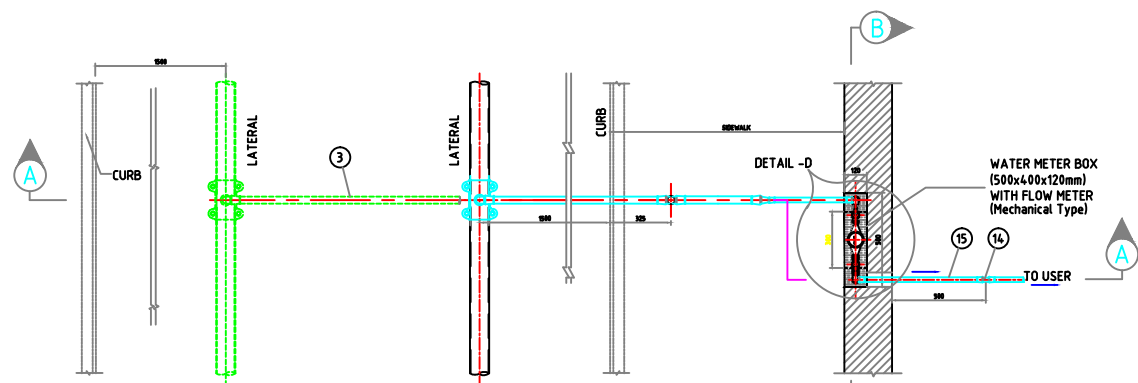
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SCALE 1:20



SECTION B - B
SCALE 1:20

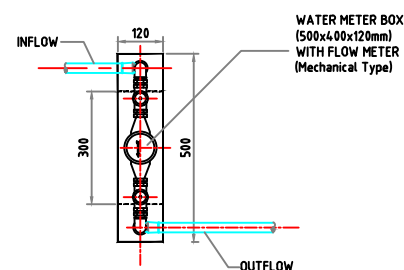


SECTION C - C
SCALE 1:20

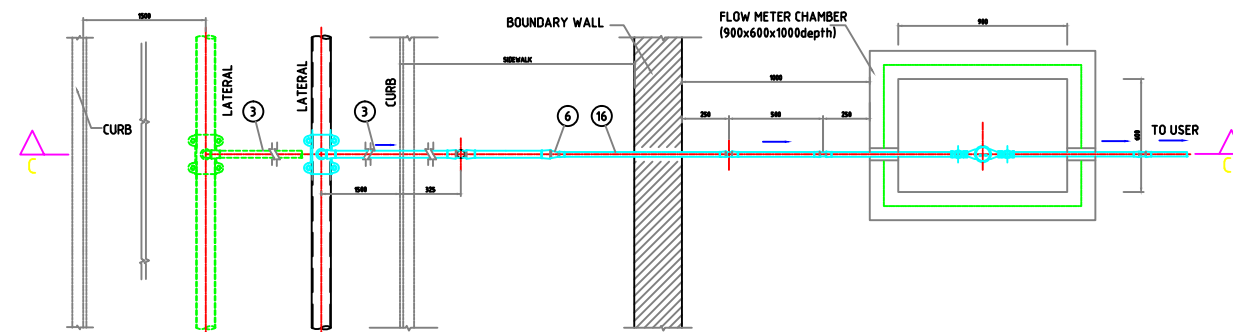


PLAN
SCALE 1:20

SINGLE HOUSE CONNECTION WITH WATER METER BOX

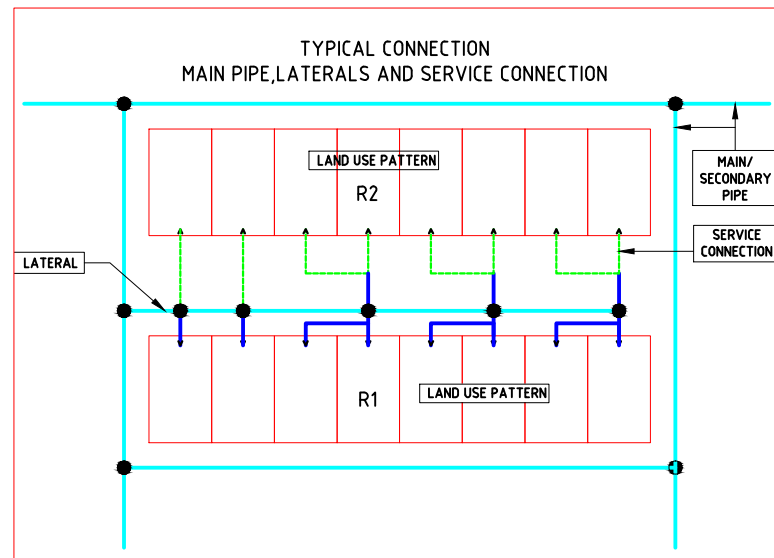


DETAIL - D
SCALE 1:10



PLAN
SCALE 1:20

SINGLE HOUSE CONNECTION WITH WATER METER CHAMBER



SERVICE CONNECTION TYPE

I. HOUSE CONNECTION											
ITEM	DESCRIPTION	LSC -40/25		LSC -50/32		LSC -63/40		LSC -63/32		LSC -75/63	
		DIA	QUALITY	DIA	QUALITY	DIA	QUALITY	DIA	QUALITY	DIA	QUALITY
1	UNIVERSAL PIPE SADDLE	40	1	50	1	63	1	63	1	75	1
2	ELBOW 90°	40	1	50	1	63	1	63	1	75	1
3	PE PIPE	32	--	32	--	40	--	40	--	63	--
4	SERVICE VALVE for PE PIPES, COMPLETE WITH TELESCOPIC EXTENSION SPINDLE AND HEAVY BOX	32	1	32	1	40	1	32	1	63	1
5	PE PIPE	32	--	32	--	40	--	32	--	63	--
6	REDUCER	32/25	1	--	--	40/32	1	40/32	1	--	--
II. WATER METER											
1	PE PIPE	25	--	32	--	40	--	32	--	63	--
2	ELBOW 90°	25	2	32	2	40	2	32	2	63	2
3	PE PIPE	25	--	32	--	40	--	32	--	63	--
4	ELBOW 90° WITH MALE THREAD	25	2	32	2	40	2	32	2	63	2
5	WATER METER CONSOLE WITH 2 FEMALE THREADS GM VALVES, WITH INTEGRAL BACK FLOW PREVENTOR & DRAINAGE PLUG	25	1	32	1	40	1	32	1	63	1
6	WATER METER	25	1	32	1	40	1	32	1	63	1
7	PE PIPE	25	--	32	--	40	--	32	--	63	--
8	CONNECTOR	25	2	32	2	40	2	32	2	63	2
9	PE PIPE	25	--	32	--	40	--	32	--	63	--
III. WATER METER CHAMBER											
1	PE PIPE	25	--	32	--	40	--	32	--	63	--

- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETERS.
 - FOR LOCATION AND DEPTHS OF HOUSE CONNECTIONS REFER TO DISTRIBUTION PROFILE DRAWINGS
 - DIMENSIONS ARE INDICATIVE ONLY & ARE TO BE CONFORTED BY VENDOR PLAN.
 - THE LENGTH OF THE PIPES ARE VARIABLE, DEPENDS ON PROPERTY BOUNDARY
 - PROVISION OF FLOW METER CHAMBER & FLOW METER BOX IS THE RESPONSIBILITY OF USERS
 - SPECIALS & PIPE FITTINGS SHALL BE SELECTED TO SUIT THE PIPE LINES
 - LIMIT OF CONTRACTOR SCOPE IS UP TO WATER METER BOX
 - THE WATER METER IS OF ELECTROMAGNETIC TYPE
 - PE PIPE AND FITTINGS SHALL COMPLY WITH BS 3284 / DIN 8074 - 8075

ABBREVIATIONS:

OD - OUTER DIAMETER
MIN - MINIMUM
GL - GROUND LEVEL
PE - POLY ETHYLENE

- *, THE LENGTH OF LATERAL AS PER SITE CONDITION ,
- *, SERVICE CONNECTION TABLE IS WORKED FOR TYPICAL CONDITION, HOWEVER LATERAL DIAMETER SHOULD BE CALCULATED BASED ON WATER DEMAND AT TIME OF EXECUTION.
- *, TYPE LSC-40/25 LATERAL PIPE - 40 mm AND SERVICE PIPE 25 mm.
- *, TYPE LSC-50/32 LATERAL PIPE - 50 mm AND SERVICE PIPE 32 mm.
- *, TYPE LSC-63/40 LATERAL PIPE - 63 mm AND SERVICE PIPE 40 mm.
- *, TYPE LSC-75/63 LATERAL PIPE - 75 mm AND SERVICE PIPE 63 mm.
- *, TYPE LSC-75/75 LATERAL PIPE - 75 mm AND SERVICE PIPE 75 mm.

RECOMMENDED FOR BULK SUPPLY

No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
REVISION		REFERENCE DRAWINGS		

CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
MALE' REPUBLIC OF MALDIVES

PROJECT: CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES

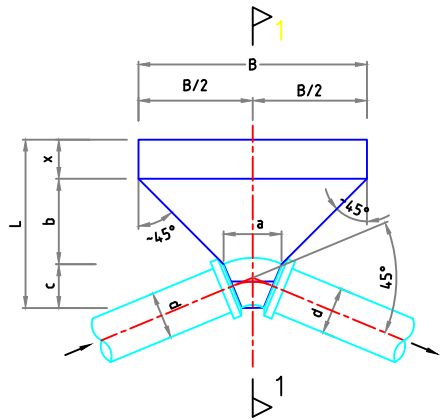
TITLE: TYPICAL DRAWING OF HOUSE SERVICE CONNECTION SINGLE

STC: SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA
In Association With
DTM: DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES

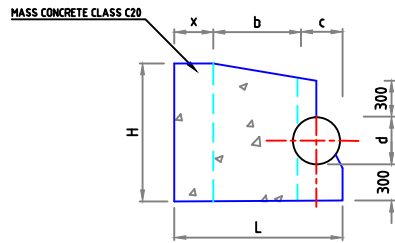
APPROVED	CHECKED	DESIGNED	DRAWN
SSS	SSS	RKC	SSN

SCALE	DATE	DRAWING No.	REVISION
AS SHOWN	APRIL 2017	B. Dharavandhoo/WS/12	0

A1-LANDSCAPE



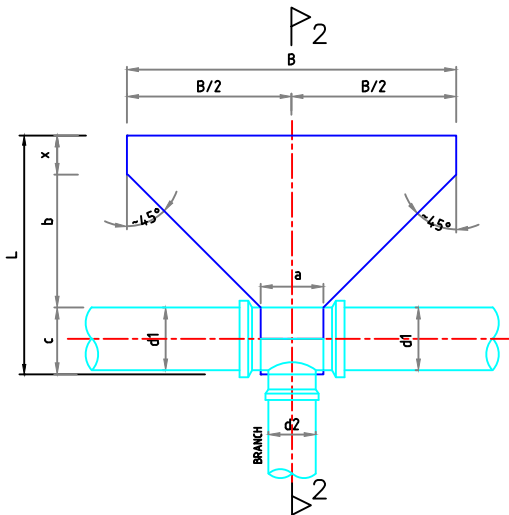
PLAN OF THRUST BLOCK
FOR SHORT RADIUS SOCKET
BEND-90°, 45°, 22½° AND 11¼°



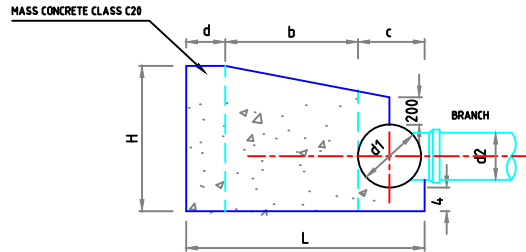
SECTION 1-1

THRUST BLOCK ELEMENTS FOR HORIZONTAL BENDS

Diameter d mm	Angle (°)	B mm	H mm	L mm	a mm	b mm	c mm	x mm
150	11¼	300	800	750	100	300	150	300
	22½	400	800	750	110	300	150	300
	45	500	800	750	170	300	150	300
	90	700	800	750	300	300	150	300
200	11¼	400	800	800	100	300	200	300
	22½	500	800	800	150	300	200	300
	45	700	800	800	220	300	200	300
	90	1000	800	800	400	300	200	300
250	11¼	600	850	850	100	300	250	300
	22½	800	850	900	150	350	250	300
	45	1000	850	950	260	400	250	300
	90	1500	850	1550	450	1000	250	300
300	11¼	600	900	1000	150	300	300	400
	22½	800	900	1000	220	300	300	400
	45	1200	900	1150	310	450	300	400
	90	2000	900	1400	600	700	300	400
400	11¼	600	1200	1100	150	300	400	400
	22½	800	1200	1100	220	300	400	400
	45	1500	1200	1350	400	550	400	400
	90	2200	1500	1550	700	750	400	400
500	11¼	800	1200	1400	180	400	500	500
	22½	1000	1500	1400	270	400	500	500
	45	2000	1500	1750	500	750	500	500
	90	3500	1500	2200	900	1200	500	500
600	11¼	800	1500	1500	180	400	600	500
	22½	1500	1500	1700	310	600	600	500
	45	2500	1500	2100	570	1000	600	500
	90	4000	1800	2600	1000	1500	600	500
700	11¼	1000	1500	1600	220	400	700	500
	22½	2000	1500	2000	360	800	700	500
	45	2500	2000	2100	660	900	700	500
	90	4500	2200	2900	1200	1700	700	500
800	11¼	1200	1500	1800	250	500	800	500
	22½	2500	1500	2400	400	1100	800	500
	45	3500	2000	2700	750	1400	800	500
	90	5000	2500	3300	1200	2000	800	500



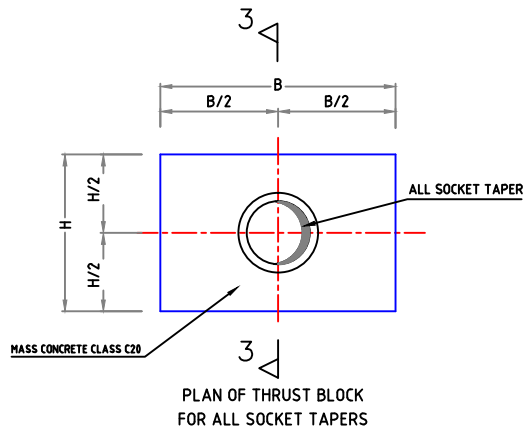
PLAN OF THRUST BLOCK
FOR ALL SOCKET TEE



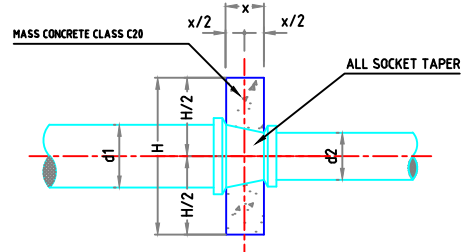
CROSS SECTION 2-2

THRUST BLOCK ELEMENTS
FOR TEES AND END CAPS

BRANCH (D2)	B	H	a	b	c	x	L
mm	mm	mm	mm	mm	mm	mm	mm
150	800	600	300	300	200	300	1100
200	1000	800	300	400	300	300	1300
250	1200	900	400	400	400	300	1500
300	1500	900	400	600	400	400	1800
400	2500	1000	400	1100	500	400	2400
500	3000	1200	500	1300	500	500	2800
600	3500	1500	600	1500	500	500	3100
700	3500	1500	600	1500	600	500	3200
800	4000	1500	700	1700	600	500	3500
900	4500	1500	1000	1800	700	500	4000



PLAN OF THRUST BLOCK
FOR ALL SOCKET TAPERS



SECTION 3-3

THRUST BLOCK ELEMENTS
FOR ALL SOCKET TAPERS

TAPER		B	H	x
D1	D2	mm	mm	mm
mm	mm	mm	mm	mm
200	150	800	800	200
250	200	850	850	200
300	250	900	900	200
400	250	1200	1200	400
500	400	1500	1500	400
600	400	1800	1600	400
600	500	1600	1600	400
700	600	1700	1700	400
800	600	2200	1800	500
900	800	2000	2000	500

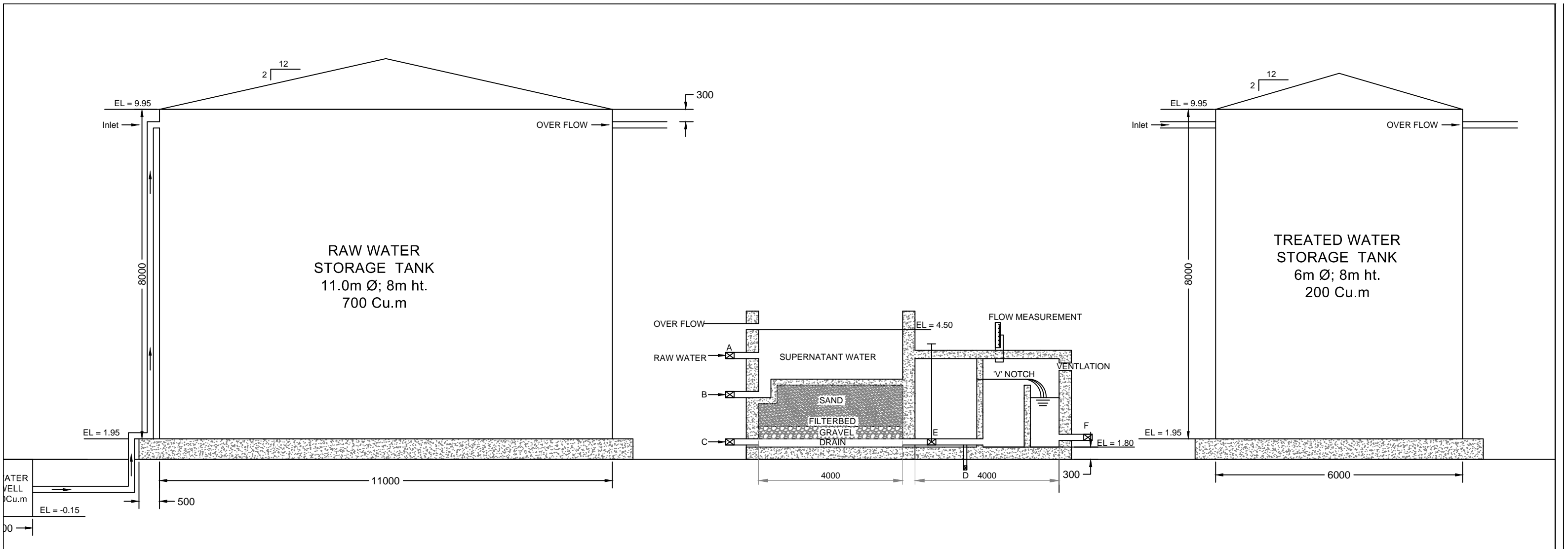
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. FOR LOCATION SEE LONGITUDINAL PROFILES.
3. DESCRIPTION OF CONCRETE TO BE USED.











C 20 / 20/S
CUBE STRENGTH OF CONCRETE
MAXIMUM SIZE OF AGGREGATE
SULPHATE RESISTANT CEMENT

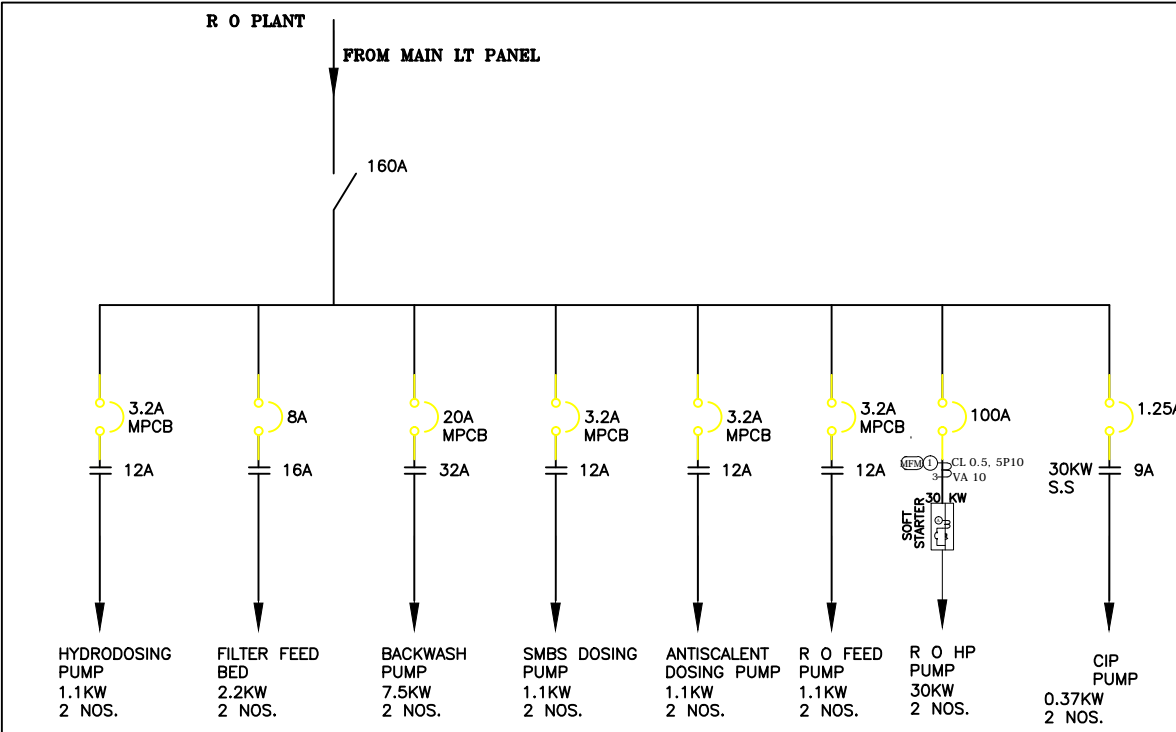
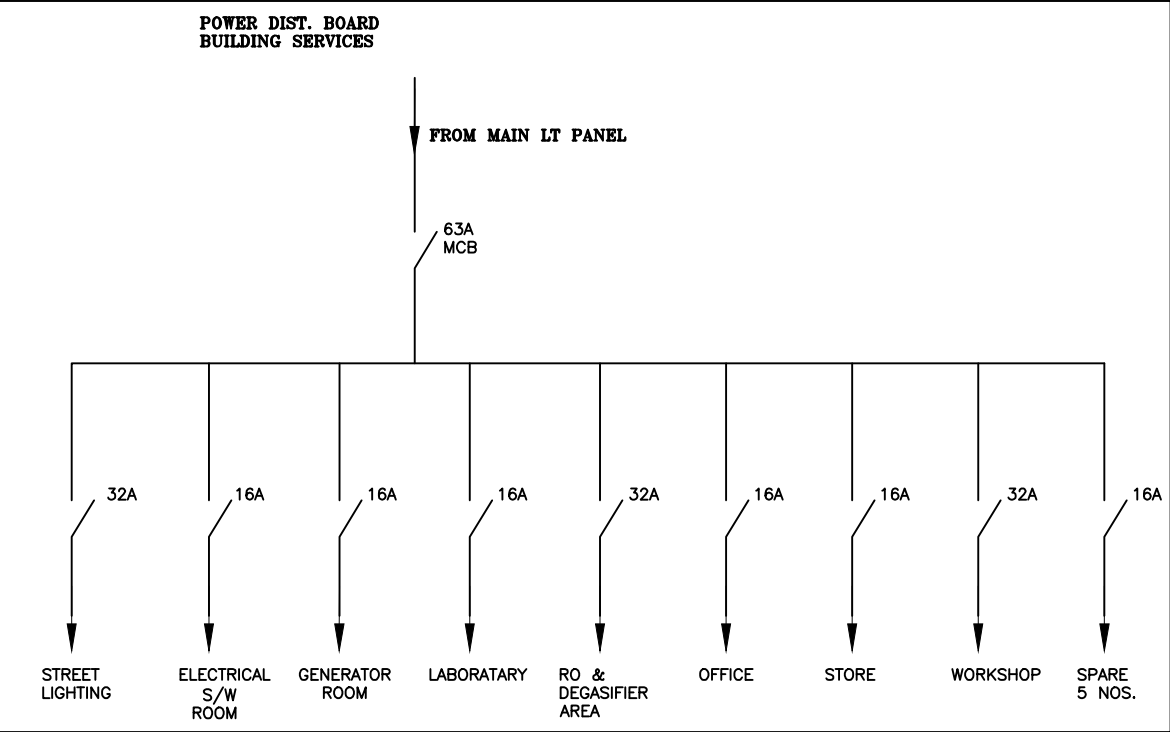
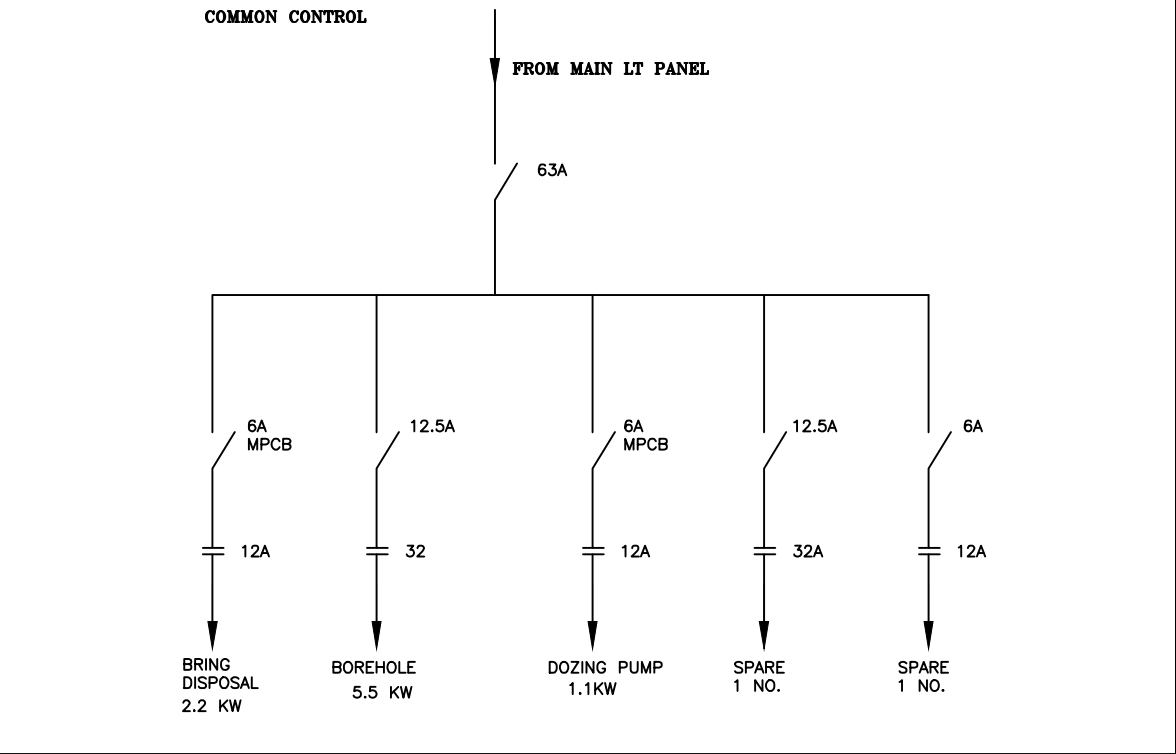
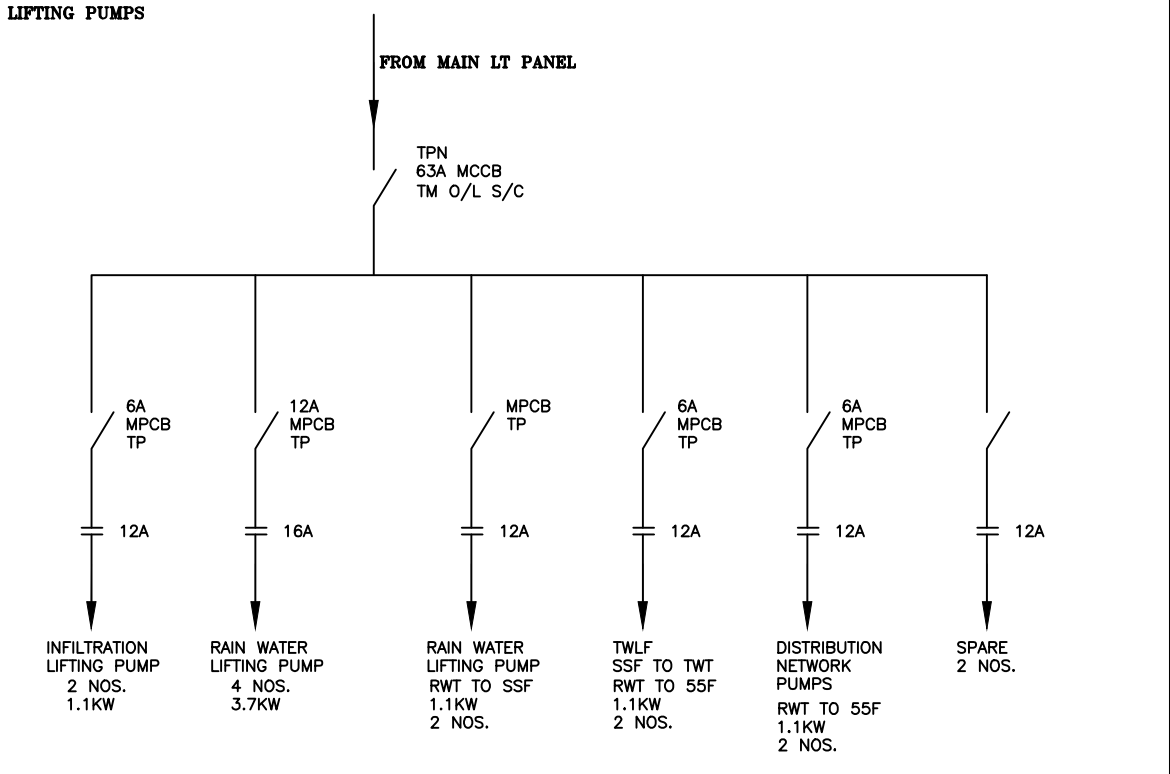
No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
REVISION		REFERENCE DRAWINGS		

CLIENT		MINISTRY OF ENVIRONMENT AND ENERGY MALE' REPUBLIC OF MALDIVES	
PROJECT		CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO , MALDIVES	
TITLE		TYPICAL DRAWING AND DETAILS FOR THRUST BLOCK	
DESIGNED		SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES	
APPROVED	CHECKED	DESIGNED	DRAWN
SSS	SSS	RKC	SSN
SCALE	DATE	DRAWING No.	REVISION
NTS	APRIL 2017	B. Dharavandhoo/WS/13	0



LEGEND :	
A	RAIN WATER INLET VALVE
B	SUPERNATANT DRAINOUT VALVE
C	RECHARGE VALVE
D	FILTER SCOUR VALVE
E	FILTERED WATER OUTLET VALVE
F	FILTERED WATER VALVE

NOTES:						 CLIENT	MINISTRY OF ENVIRONMENT AND ENERGY MALE REPUBLIC OF MALDIVES						
						 PROJECT	CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAWANDHOO, MALDIVES						
						 TITLE	HYDRAULIC FLOW DIAGRAM						
						 SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With							
						 DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES							
						 APPROVED	SSS	 CHECKED	SSS	 DESIGNED	RKC	 DRAWN	SSN
						 SCALE	DATE	DRAWING No.		REVISION			
					NTS	APRIL 2017	B. Dharawandhoo/WS/14		0				
					REVISION		REFERENCE DRAWINGS						

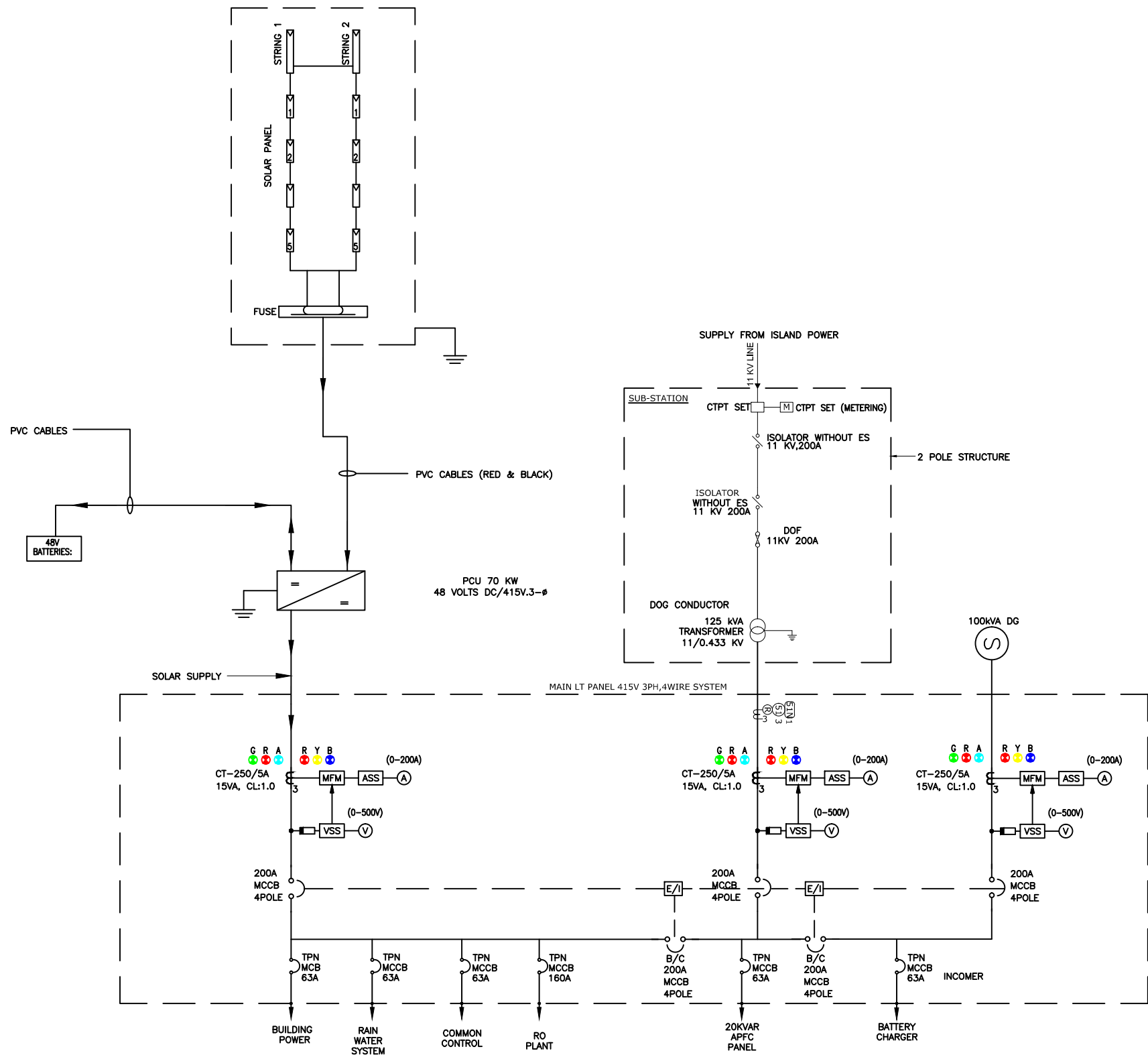


NOTES:
1. All dimensions are in mm
2. This Is Tentative Sld As Changes May Occur Due To Any Changes In Load.

ABBREVIATIONS

No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION	
REVISION			REFERENCE DRAWINGS		

CLIENT	MINISTRY OF ENVIRONMENT AND ENERGY MALE' REPUBLIC OF MALDIVES				
PROJECT	CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES				
TITLE	Typical SLD for each distribution				
	STC SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With djm DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES				
APPROVED	SSS	CHECKED	TRJ	DESIGNED	TRJ
SCALE	AS SHOWN	DATE	APRIL 2017	DRAWING No.	B. Dharavandhoo/EL/01
				REVISION	0

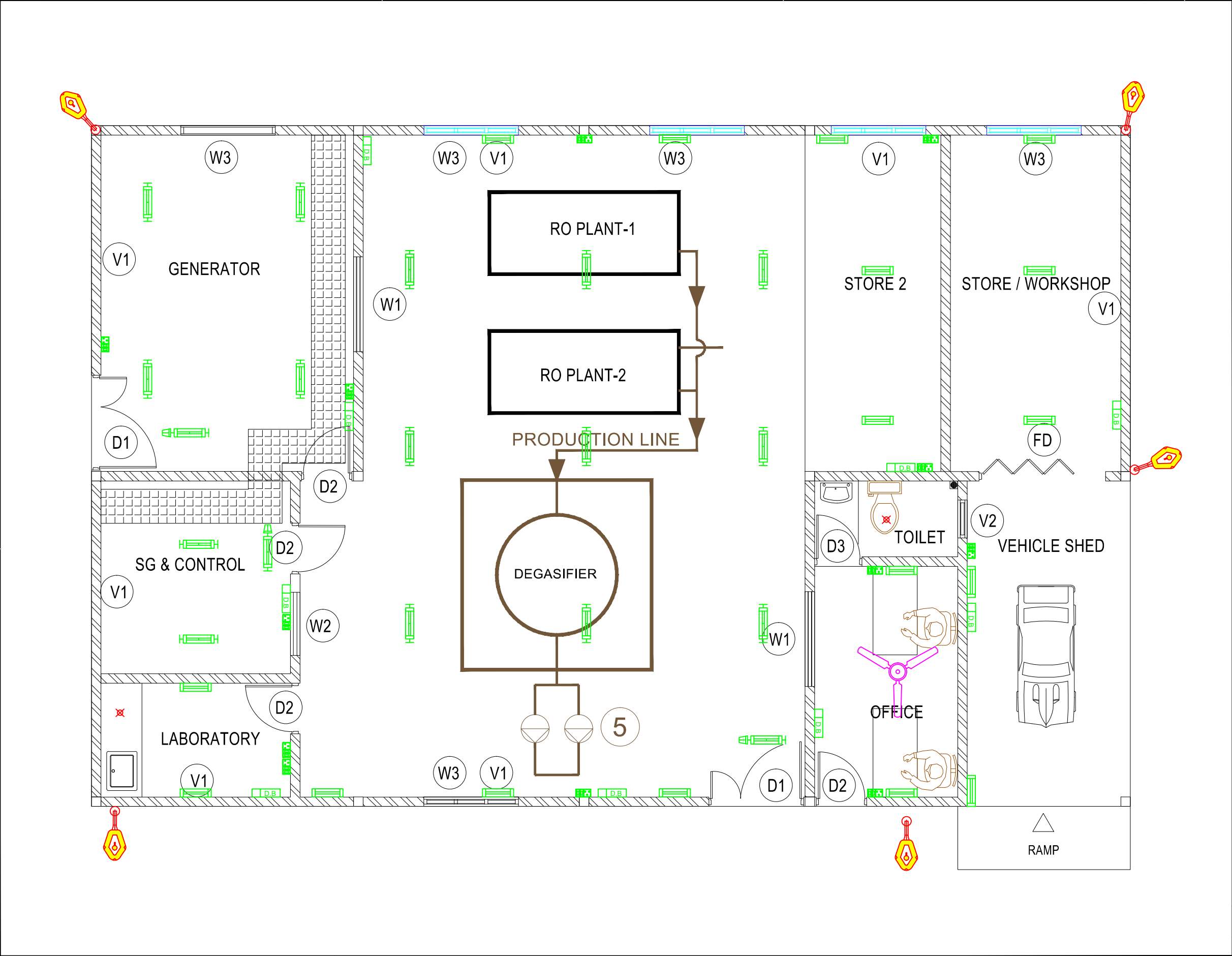


NOTES:
1. All dimensions are in mm
2. This Is Tentative Sld As Changes May Occur Due To Any Changes In Load.

ABBREVIATIONS

No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
REVISION			REFERENCE DRAWINGS	

CLIENT MINISTRY OF ENVIRONMENT AND ENERGY MALE' REPUBLIC OF MALDIVES			
PROJECT CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES			
TITLE Main SLD for PMCC (Main LT Panel)			
SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES			
APPROVED SSS	CHECKED TRJ	DESIGNED TRJ	DRAWN SSN
SCALE AS SHOWN	DATE APRIL 2017	DRAWING No. B. Dharavandhoo/EL/02	REVISION 0



S.No.	LEGEND	DESCRIPTION	QTY
01		INDUSTRIAL GENERAL PURPOSE LUMINAIRE SUITABLE FOR 1x36W T5/FTL WITH HIGH FREQUENCY ELECTRONIC BALLAST.	
02		INDUSTRIAL GENERAL PURPOSE LUMINAIRE SUITABLE FOR 1x36W T5/FTL WITH HIGH FREQUENCY ELECTRONIC BALLAST. CONVERSION KIT & BATTERY FOR EMERGENCY BACK UP OPERATION.	
03		INDUSTRIAL GENERAL PURPOSE LUMINAIRE SUITABLE FOR 2x36W T5/FTL WITH HIGH FREQUENCY ELECTRONIC BALLAST.	
04		INDUSTRIAL GENERAL PURPOSE LUMINAIRE SUITABLE FOR 2x36W T5/FTL WITH HIGH FREQUENCY ELECTRONIC BALLAST. CONVERSION KIT & BATTERY FOR EMERGENCY BACK UP OPERATION.	
05		STREET LIGHT FIXTURE SUITABLE FOR 1x40W FTL	
06		COMMERCIAL TYPE 14,16A SOCKET OUTLETS FOR AC	
07		4 MODULE SWITCH BOARD WITH 5A, 2Nos. SWITCH & 1No. SOCKET OUTLET. (INDUSTRIAL TYPE)	
08		4WAY LDB (LIGHTING DISTRIBUTION BOARD)	

NOTES:
1. All dimensions are in mm
2. This Is Tentative Sld As Changes May Occur Due To Any Changes In Load.

ABBREVIATIONS

No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
REVISION		REFERENCE DRAWINGS		

CLIENT MINISTRY OF ENVIRONMENT AND ENERGY MALE' REPUBLIC OF MALDIVES			
PROJECT CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND B. DHARAVANDHOO, MALDIVES			
TITLE LIGHTING AND VENTILATION LAYOUT			
STC SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA In Association With Development Technologies Maldives, Maldives			
APPROVED SSS	CHECKED TRJ	DESIGNED TRJ	DRAWN SSN
SCALE AS SHOWN	DATE APRIL 2017	DRAWING No. B. Dharavandhoo/EL/03	REVISION 0