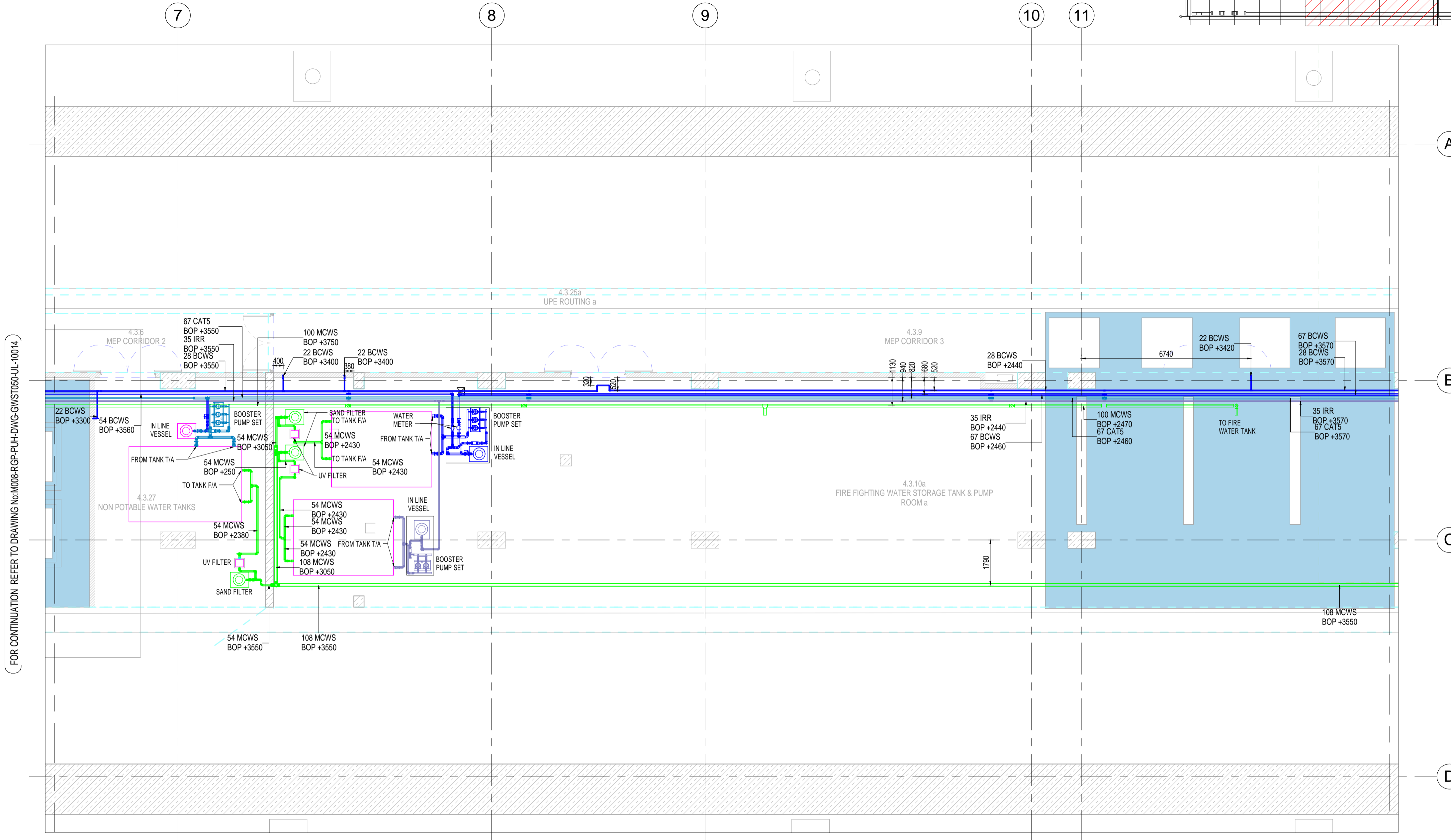
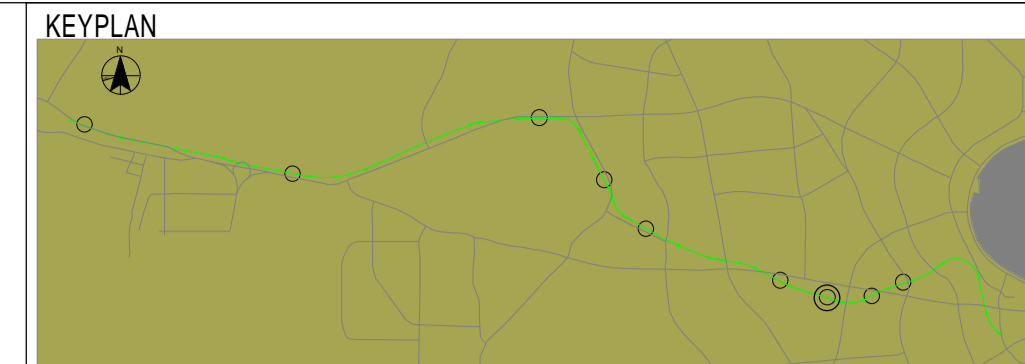
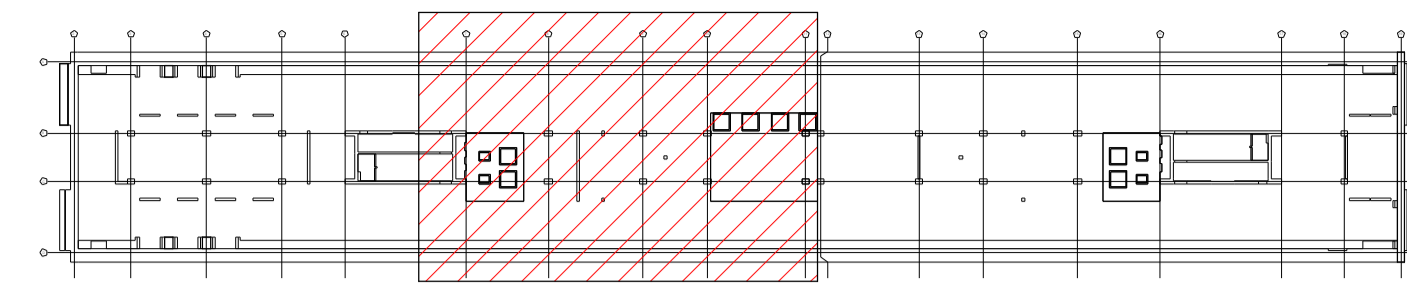
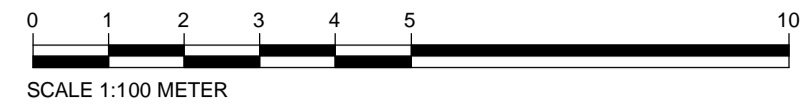
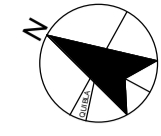


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FOR CONTINUATION REFER TO DRAWING No. M008-RGP-PUH-DWG-GWST050-UL-10014

NOTES

- All dimensions are in millimetre unless otherwise specified.
- This drawing should be read in conjunction with all relevant drawings and project specifications.
- Where pipe enters a building it shall be accommodated in a sleeve and the space between the pipe and the sleeve shall be filled with approved material to prevent the passage of water, gas or insects.
- All piping and fittings shall be secured by clips, brackets or clamps as per approved material submittal.
- Allowance shall be made for free lateral movement with in the clips, brackets or clamps.
- Insulated piping shall be secured on clips or brackets that allow sufficient space behind the back of the pipe and the batten or wall to which the pipe is fixed for the insulation to be properly installed.
- Hangers spacing shall be such that the piping is installed with out undue strains and stresses and provision shall be made of expansion, contraction, structural settlement and water-hammer.
- All proprietary joints shall be made in accordance with the manufacturer's instructions.
- Satisfactory jointing techniques for all water service pipe work shall be established as per manufacturer recommendation.
- All piping and fittings shall be cleaned internally and be free from particles of sand, soil metal filings and chips etc.
- Thermal insulating materials shall be applied in accordance with the manufacturer's recommendations.
- Gaps shall not be left at the joints of the insulating materials.
- The insulating shall be finished in such a manner as to allow access to valves for operation.
- High level services should not be installed any lower than 3000mm AFFL.

REFERENCES:

- M008-ARE-ARC-MD3-GWST050-CL-00101.S4.P7
- M008-ARE-ARC-MD3-GWST050-ZZ-00101.S4.P11
- M008-HLQ-MEP-MD3-GWST050-PL-00101.RV.T
- M008-SSF-ARC-MD3-GWST050-CL-00301.S3.P16
- M008-SSF-ARC-MD3-GWST050-ZZ-00101.S3.P19
- M008-SSF-STR-MD3-GWST050-CL-00301.S3.P14
- M008-SSF-STR-MD3-GWST050-ZZ-00101.S3.P24

SCHEMATICS AND DETAIL INSTALLATION REFERENCES:

- M008-HLQ-PUH-DWG-GWST050-AA-10021
- M008-HLQ-PUH-DWG-GWST050-AA-10041

ISSUED FOR CONSTRUCTION			
MH	30-12-2017	JF	30-12-2017
ISSUED FOR CONSTRUCTION APPROVAL			
NN	13-11-2016	IM	13-11-2016

SCALES @ A1	ISSUING OFFICE	PROJECT NUMBER
1:100	DOHA	M008

CLIENT APPROVAL	
A - APPROVED	
B - APPROVED WITH COMMENTS	
C - DO NOT USE	

STATUS	PURPOSE OF ISSUE
S4	FOR CONSTRUCTION APPROVAL

CONTRACTOR
PORR - SBG - HBK JOINT VENTURE
 P.O. BOX 207471 DOHA
 QATAR



CONSULTANT:
HOARE LEA QATAR LLC
 P.O. BOX 201834 DOHA
 QATAR

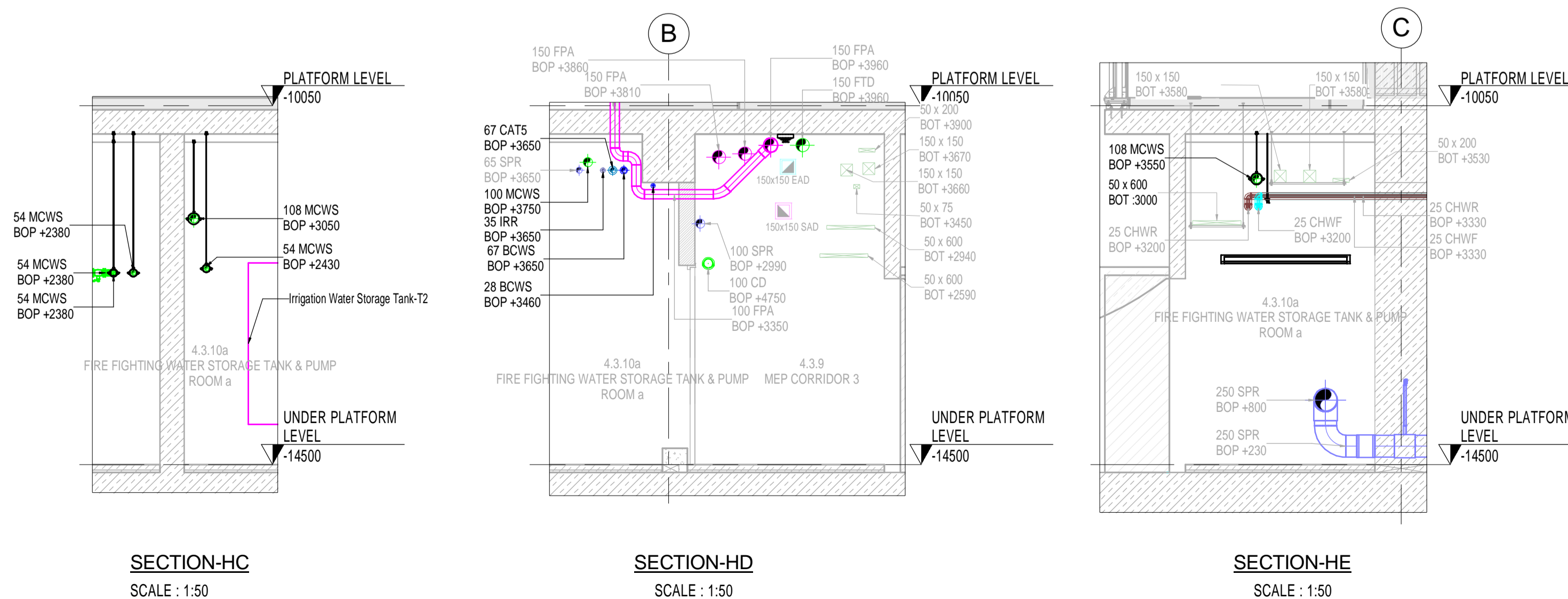


SUB CONTRACTOR

 PSC S.P.A. Viale Scharounelli 27026 - 00173 ROMA TEL: 06/72630488 FAX: 06/72671393 Website: www.pscspoc.com QATAR - ITALY	 Redco International W.L.L. TEL: 44-15426 FAX: 44-13786 Email: rafco@redco.com DOHA, QATAR
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SHOP DRAWINGS STATION - AL RAYYAN / AL QADEEM UNDER PLATFORM LEVEL - DOMESTIC HOT AND COLD WATER SERVICES (STATION CENTRAL WEST)

SCALE : 1:100



SYMBOL AND ABBREVIATION

SYMBOL	DESCRIPTION
	CAT5 PIPE
	IRRIGATION PIPE
	BOOSTER COLD WATER SUPPLY
	MAIN COLD WATER SUPPLY
	PIPE WITH INSULATION
ABBREVIATION	DESCRIPTION
CAT 5	CATEGORY 5 WATER SUPPLY
BCWS	BOOSTER COLD WATER SUPPLY
IRR	IRRIGATION PIPE
MCWS	MAIN COLD WATER SUPPLY
BOP	BOTTOM OF PIPE
DN	PIPE OFFSET DOWN
UP	PIPE OFFSET UP
T/A	TO ABOVE
F/A	FROM ABOVE
T/B	TO BELOW
F/B	FROM BELOW
PRV	PRESSURE REGULATING VALVE
IV	ISOLATION VALVE

SUPPORT SPACING SCHEDULE

S.N.	NOMINAL DIAMETER	INSULATION THICKNESS	MAXIMUM SPACING ON HORIZONTAL RUN	MAXIMUM SPACING ON VERTICAL RUN	THREADED ROD SIZE
1	1 1/2"	15	13.00	1.2	M8
2	3/4"	22	13.00	1.8	M8
3	1"	28	13.00	1.8	M8
4	1 1/4"	35	13.00	2.4	M8
5	1 1/2"	42	13.00	2.4	M8
6	2"	54	13.00	2.7	M8
7	2 1/2"	67	13.00	2.7	M8
8	3"	76	13.00	3.0	M10
9	4"	108	13.00	3.0	M10
10	5"	133	13.00	3.0	M10
11	6"	159	13.00	3.6	M10

- HOT AND COLD WATER PIPE MATERIAL SHALL BE COPPER PIPE CONFORMING TO BS EN 1057 TABLE X FOR ABOVE GROUND PIPES AND BS EN 1057 TABLE Y FOR UNDER GROUND APPLICATION.
- THE COPPER PIPE FITTINGS SHALL BE WITH SOLDERED/BRAZED BENDS, TEES AND REDUCERS COMPLYING TO BS EN 1057 - R250 AND R290.
- THE COPPER PIPES SHALL BE PROVIDED WITH ELASTOMERIC INSULATION OF THICKNESS 13mm.
- FOR THE CHANGE OF DIRECTION AND LEVELS, APPLICATION OF CONCENTRATED LOADS, JOINTS POINTS, FITTINGS AND VALVES EXTRA SUPPORT SHALL BE PROVIDED AS PER THE SITE CONDITION.
- THREADED ROD SHALL BE HOT DIPPED GALVANIZED IRON.

PROJECT
DESIGN & BUILD PACKAGE 2
GREEN LINE UNDERGROUND

TITLE
SHOP DRAWINGS STATION - AL RAYYAN / AL QADEEM UNDER PLATFORM LEVEL - DOMESTIC HOT AND COLD WATER SERVICES (STATION CENTRAL WEST)

CLIENT
QATAR RAILWAYS COMPANY
 P.O. BOX 29988 DOHA
 QATAR



DRAWING NUMBER
M008-RGP-PUH-DWG-GWST050-UL-10013

REV
C2