

Proposed 06 Classroom at
L.Gan Ihahdhoo School
(02 Storey)

SERVICES DRAWINGS
Client: Ministry of Education



RIYAN PRIVATE LIMITED

t : +9603315049 f : +9603310776
e : info@riyan.com.mv
w : www.riyan.com.mv

3rd floor, H. Azum, Ameeleemagu, Male'

TABLE OF CONTENTS

DRAWING No.	TITLE	REVISION No.	DATE	REMARKS
S E R V I C E S		---	---	---
DR - 01 /03	GROUND FLOOR DRAINAGE LAYOUT	---	---	---
DR - 02 /03	FIRST FLOOR DRAINAGE LAYOUT	---	---	---
DR - 03 /03	ROOF DRAINAGE LAYOUT	---	---	---
PL - 01 / 02	GROUND FLOOR PLUMBING LAYOUT	---	---	---
PL - 02 / 02	FIRST FLOOR PLUMBING LAYOUT	---	---	---
EL - 01 / 02	GROUND FLOOR LIGHTING LAYOUT	---	---	---
EL - 02 / 02	FIRST FLOOR LIGHTING LAYOUT	---	---	---
EP - 01 / 02	GROUND FLOOR POWER LAYOUT	---	---	---
EP - 02 / 02	FIRST FLOOR POWER LAYOUT	---	---	---
FDP - 01 / 02	GROUND FLOOR FDP LAYOUT	---	---	---
FDP - 02 / 02	FIRST FLOOR FDP LAYOUT	---	---	---
DETAIL - 01 / 01	GROUND WELL DETAIL	---	---	---



GROUND FLOOR DRAINAGE LAYOUT

SCALE 1:100



LEGEND

- FG FLOOR GULLY
- FD FLOOR DRAIN
- WM 40 Ø STUB FOR WASHING MACHINE
- SP 110 Ø SOIL PIPE
- SVP 110 Ø SOIL VENT PIPE
- WP 82 Ø WASTE PIPE
- WVP 82 Ø WASTE VENT PIPE
- WP 40 Ø WASTE PIPE
- RWP 82/50 Ø RAINWATER PIPE
- RWO 82/50 Ø DRAIN OUTLET
- CD 25 Ø DRAIN PIPE
- MHVP 50 Ø MANHOLE VENT PIPE

NOTE:

- ALL RAINWATER PIPES TO BE AT GROUND LEVEL DISCHARGED THROUGH A PERFORATED COWL OR TO A SOAK PIT
- ALL SOIL AND WASTE PIPES TO BE AT GROUND LEVEL, UNDER THE SLAB.

L'Gan Ihahdhoo School 06 Classroom Block (2 story)
Client: Ministry of Education

Project Number	Rev	Date
RI/2020/006		
Date: May 2021		
Architect: Mariyam Irshad Shareef		
Engineer: Mohamed Muthalib Waleed		
Drawn by: Zunabath Abdul Majid		
Services: Aishath Ahmed		

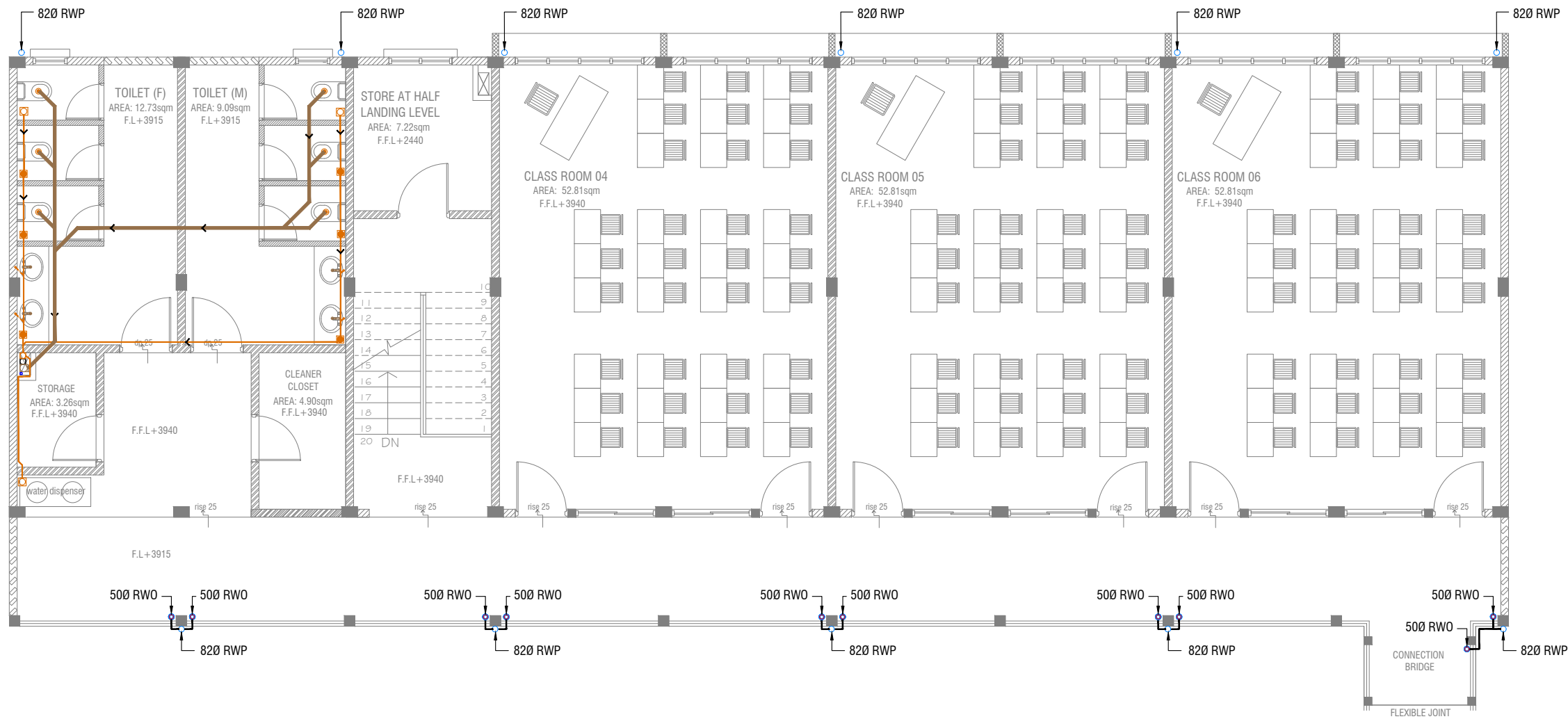


RIYAN PRIVATE LIMIT

t: +9603315049 f: +960331077
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Ammeenemagu, I

Title: Ground Floor
Drainage Layout

Page: DR 01-03



- LEGEND**
- FG FLOOR GULLY
 - FD FLOOR DRAIN
 - WM 40 Ø STUB FOR WASHING MACHINE
 - SP 110 Ø SOIL PIPE
 - SVP 110 Ø SOIL VENT PIPE
 - WP 82 Ø WASTE PIPE
 - WVP 82 Ø WASTE VENT PIPE
 - WP 40 Ø WASTE PIPE
 - RWP 82/50 Ø RAINWATER PIPE
 - RWO 82/50 Ø DRAIN OUTLET
 - CD 25 Ø DRAIN PIPE
 - MHVP 50 Ø MANHOLE VENT PIPE

NOTE:
- ALL SOIL AND WASTE PIPES TO BE UNDER THE SLAB LEVEL.

FIRST FLOOR DRAINAGE LAYOUT



L.Gan Ihahdhoo School 06 Classroom Block (2 story)
Client: Ministry of Education

Project Number	Rev	Date
RI/2020/006		
Date: May 2021		
Architect: Maniyam Irasha Shareef		
Engineer: Mohamed Muthalib Valeed		
Drawn by: Zuhairah Abdul Majid		
Services: Aishath Ahmed		

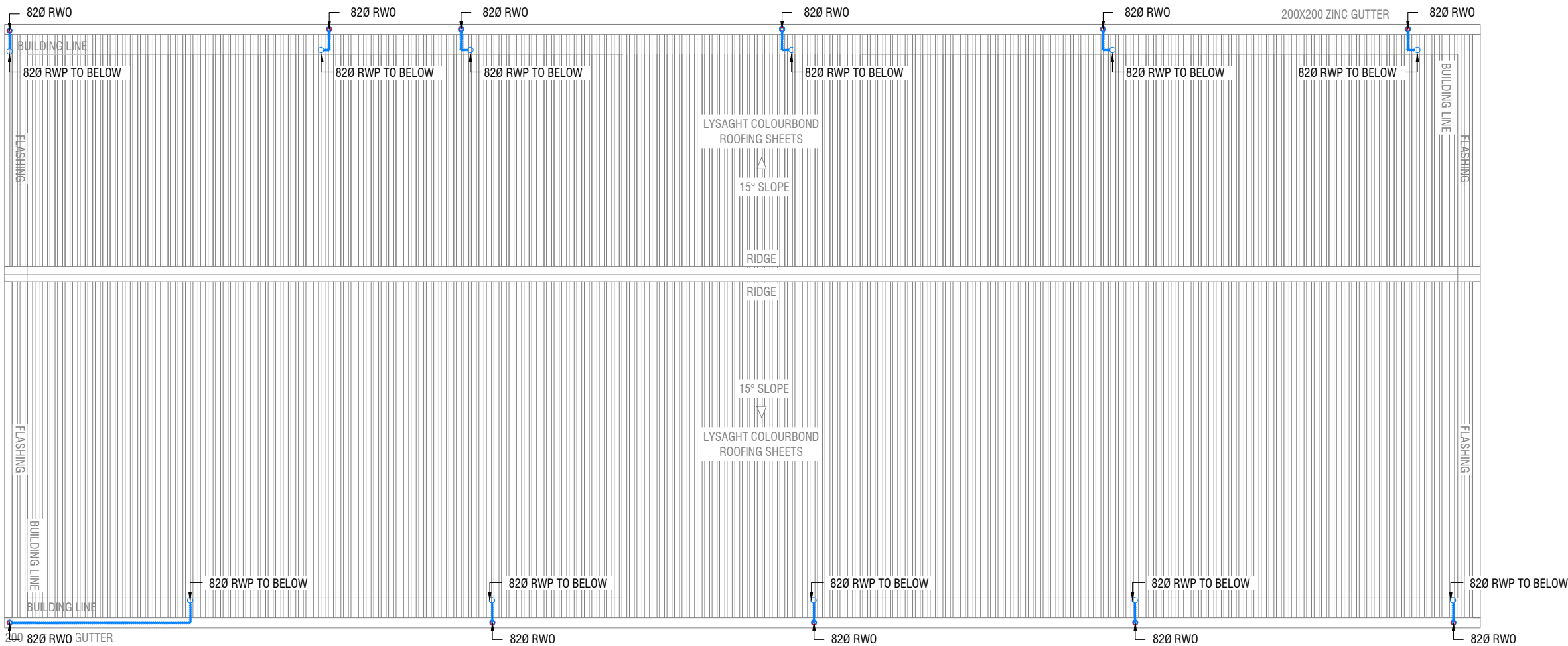


RIYAN PRIVATE LIMIT

t: +9603315049 f: +960331077
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Ameenemagui, I

Title: First Floor
Drainage Layout

Page: DR 02- 03



- LEGEND**
- FG FLOOR GULLY
 - FD FLOOR DRAIN
 - WM 40 Ø STUB FOR WASHING MACHINE
 - SP 110 Ø SOIL PIPE
 - SVP 110 Ø SOIL VENT PIPE
 - WP 82 Ø WASTE PIPE
 - WVP 82 Ø WASTE VENT PIPE
 - WP 40 Ø WASTE PIPE
 - RWP 82/50 Ø RAINWATER PIPE
 - RWO 82/50 Ø DRAIN OUTLET
 - CD 25 Ø DRAIN PIPE
 - MHVP 50 Ø MANHOLE VENT PIPE

ROOF DRAINAGE LAYOUT

SCALE 1:100



L'Gan Ihahdhoo School 06 Classroom Block (2 story)

Client: Ministry of Education

Rev no	Date
1	2020/05/06
2	2020/05/06
3	2020/05/06
4	2020/05/06
5	2020/05/06

Project Number: RI/2020/006

Date: May 2021

Architect: Maniyam Irasha Shareef

Engineer: Mohamed Munthaliq Waleed

Drawn by: Zuhairah Abdul Majid

Services: Alshath Ahmed

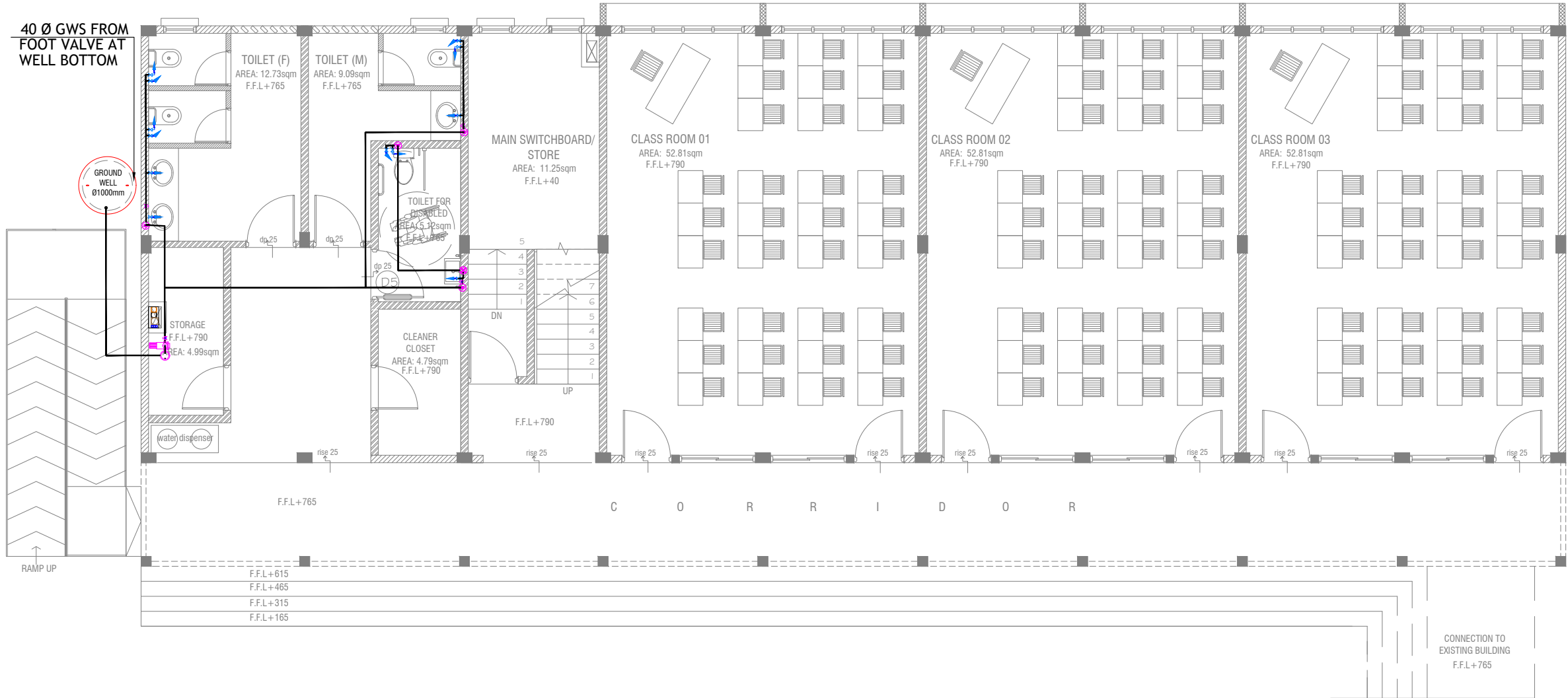
RIYAN PRIVATE LIMIT

t: +9603315049 f: +960331077
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Ammeenemagu, I

Title: Roof
Drainage Layout

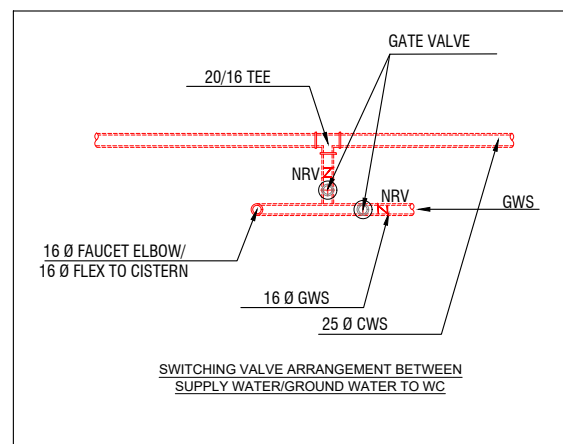
Page: DR 03-03

40 Ø GWS FROM
FOOT VALVE AT
WELL BOTTOM



GROUND FLOOR PLUMBING LAYOUT

SCALE 1:100



LEGEND

- 16 Ø COLD WATER SUPPLY TO CISTERN
- 16 Ø COLD WATER SUPPLY TO BIDET SHOWER
- 16 Ø COLD WATER SUPPLY TO BASIN FAUCET / SINK
- GV GATE VALVE
- 25 Ø COLD WATER SUPPLY PIPES RUN UNDERGROUND
- 25 Ø COLD WATER SUPPLY PIPES RUN IN WALL / UNDER FALSE CEILING
- RISE IN WALL
- DROP IN WALL
- CWS COLD WATER SUPPLY
- HWS HOT WATER SUPPLY
- GROUND WATER SUPPLY

NOTE:

- THE WELL SHALL BE RELOCATED ACCORDING TO THE SALINITY OF THE GROUND WATER.
- BASED ON WELL LOCATION PUMP CAPACITY TO BE DECIDED

L/Gan Ihahdhoo School 06 Classroom Block (2 story)
Client: Ministry of Education

Project Number: RI/2020/006

Date: May 2021

Architect: Maniyam Irasha Shareef

Engineer: Mohamed Munthaliq Waleed

Drawn by: Zuhairah Abdul Majid

Services: Aishath Ahmed

Rev no

Date

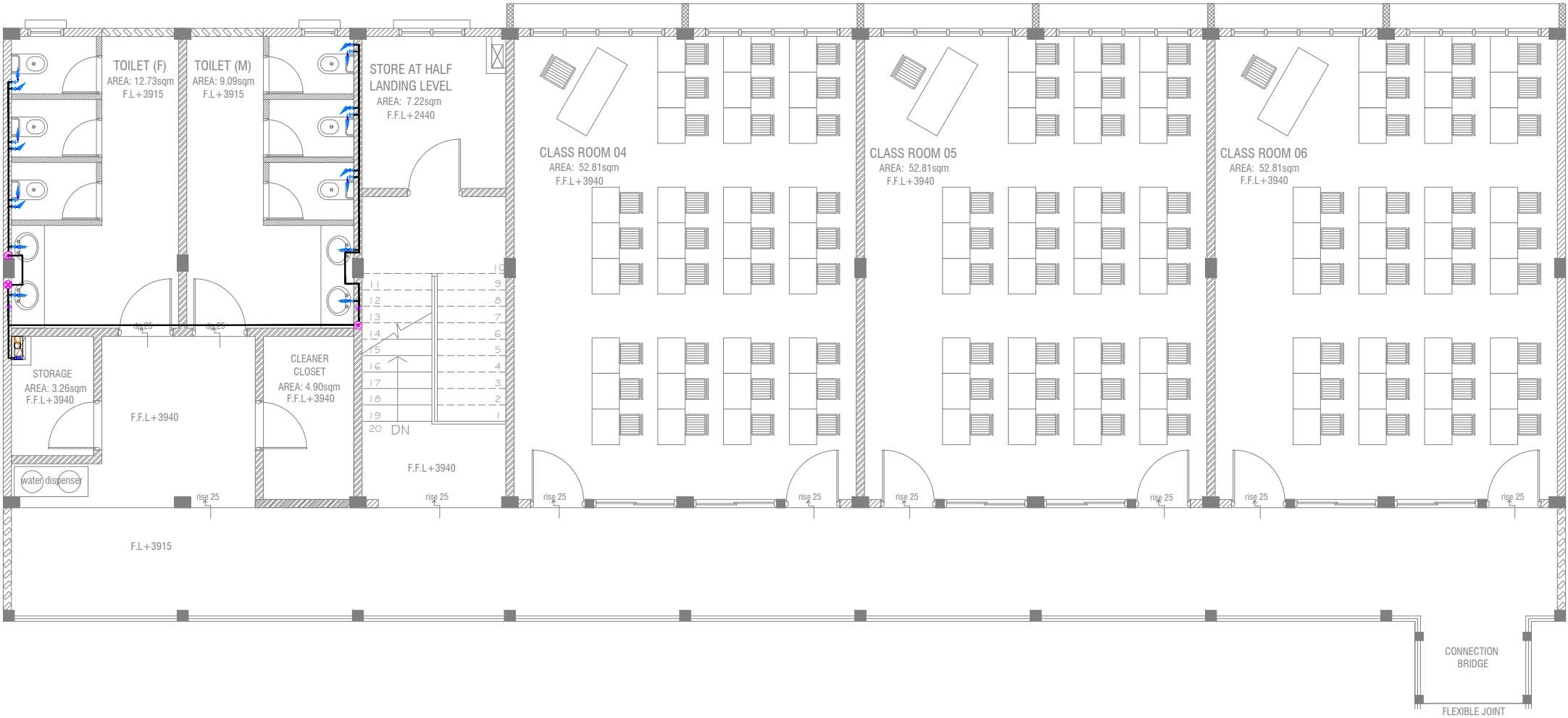


RIYAN PRIVATE LIMIT

t: +9603315049 f: +960331077
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Ameneemagau, I

Title: Ground Floor
Plumbing Layout

Page: PL 01-02



FIRST FLOOR PLUMBING LAYOUT



LEGEND

- 16 Ø COLD WATER SUPPLY TO CISTERN
- 16 Ø COLD WATER SUPPLY TO BIDET SHOWER
- 16 Ø COLD WATER SUPPLY TO BASIN FAUCET / SINK
- GV GATE VALVE
- 25 Ø COLD WATER SUPPLY PIPES RUN UNDERGROUND
- 25 Ø COLD WATER SUPPLY PIPES RUN IN WALL / UNDER FALSE CEILING
- RISE IN WALL
- DROP IN WALL
- CWS** COLD WATER SUPPLY
- HWS** HOT WATER SUPPLY
- GROUND WATER SUPPLY

L'Gan Ihahdhoo School 06 Classroom Block (2 story)

Client: Ministry of Education

Rev no	Date
1	May 2021
2	
3	
4	
5	

Project Number: RI/2020/006

Architect: Mariyam Irasha Shareef
Engineer: Mohamed Muthalib Valeed
Drawn by: Zuhairah Abdul Majid
Services: Aishath Ahmed



RIYAN PRIVATE LIMIT

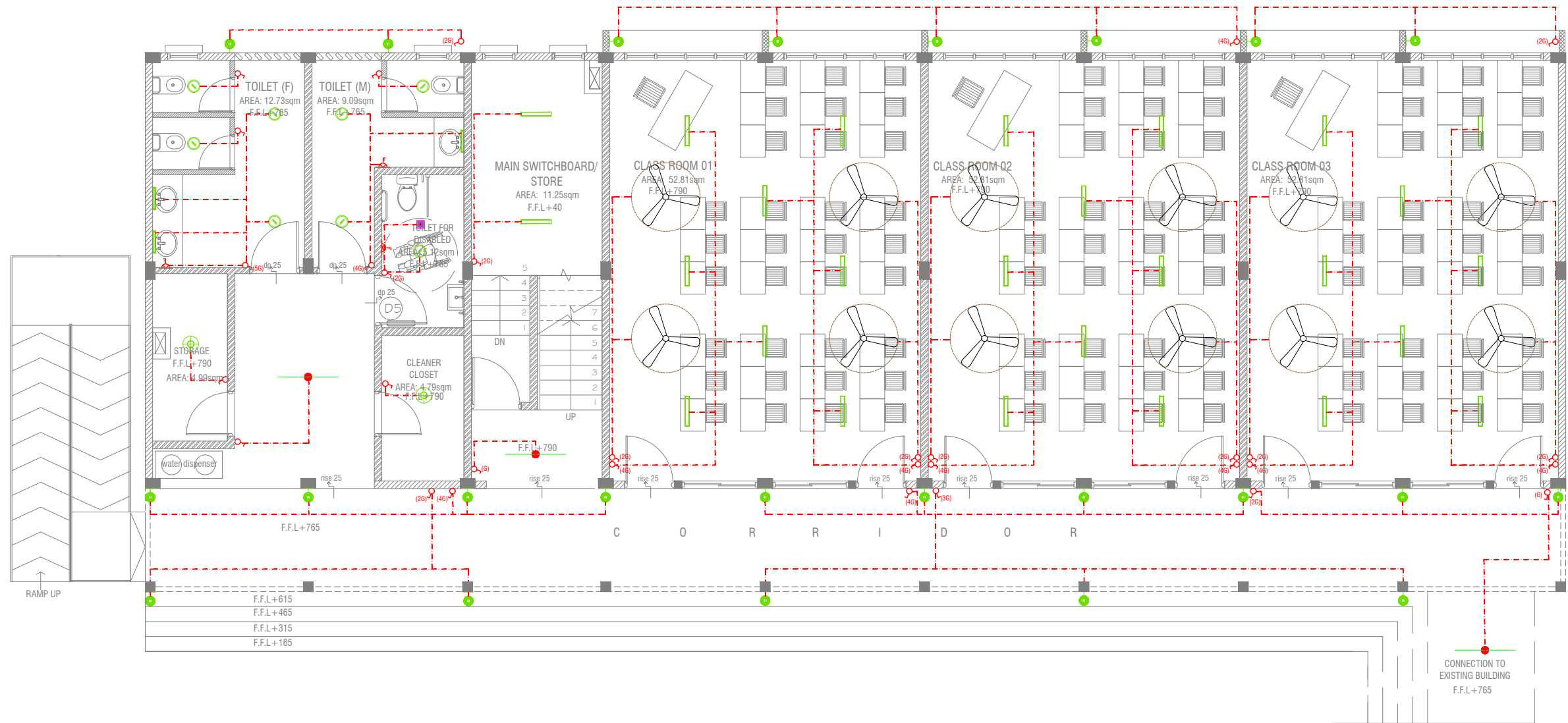
t: +9603315049 f: +960331077
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Ameenemagu, I

Title: First Floor
Plumbing Layout

Page: PL 02-/02

GROUND FLOOR LIGHTING LAYOUT

SCALE 1:100



LEGEND

- WPD 40W (IP 65) OUT DOOR WALL LIGHT
- ML MIRROR LIGHT (7W LED LIGHT)
- H2 LED RECESSED DOWN LIGHT 12W
- CL LED CEILING LIGHT 18W
- WP LED TUBE LIGHT WITH WEATHER PROOF OPAL CASING
- C2 LED CEILING DOWN LIGHT (18W)
- LIGHT SWITCH
- SWITCHING LINE
- EXHAUST
- FLEX. POWER OUTLET WITHOUT COVER PLATE

CL2 LED TUBE LIGHT WITH OPAL CASING



CEILING FAN (52" - 54")

NOTE:

- ALL WIRING TO BE OF STELCO APPROVED STANDARDS
- SWITCH CONTROL = 1200MM FROM FLOOR FIN. LEVEL
- ALL LIGHTING POINTS CONNECTED TO THEIR RESPECTIVE DB
- POLYCARBONATE ENCLOSURE TO ALL SWITCH AND SOCKET WHICH ARE LOCATED AT THE OUTDOORS

L'Gan Ihahdhoo School 06 Classroom Block (2 story)
Client: Ministry of Education

Project Number: RI/2020/006

Date: May 2021

Architect: Maniyam Irasha Shareef

Engineer: Mohamed Muthalib Waleed

Drawn by: Zuhairah Abdul Majid

Services: Aishath Ahmed

Rev no

Date

RIYAN PRIVATE LIMIT

t: +9603315049 f: +960331077
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Ameneemagui, I

Title: Ground Floor
Lighting Layout

Page: EL 01-02

FIRST FLOOR LIGHTING LAYOUT



LEGEND

- WPD 40W (IP 65) OUT DOOR WALL LIGHT
- ML MIRROR LIGHT (7W LED LIGHT)
- H2 LED RECESSED DOWN LIGHT 12W
- CL LED CEILING LIGHT 18W
- WP LED TUBE LIGHT WITH WEATHER PROOF OPAL CASING
- C2 LED CEILING DOWN LIGHT (18W)
- LIGHT SWITCH
- SWITCHING LINE
- FLEX. POWER OUTLET WITHOUT COVER PLATE

CL2 LED TUBE LIGHT WITH OPAL CASING



CEILING FAN (52" - 54")

NOTE:

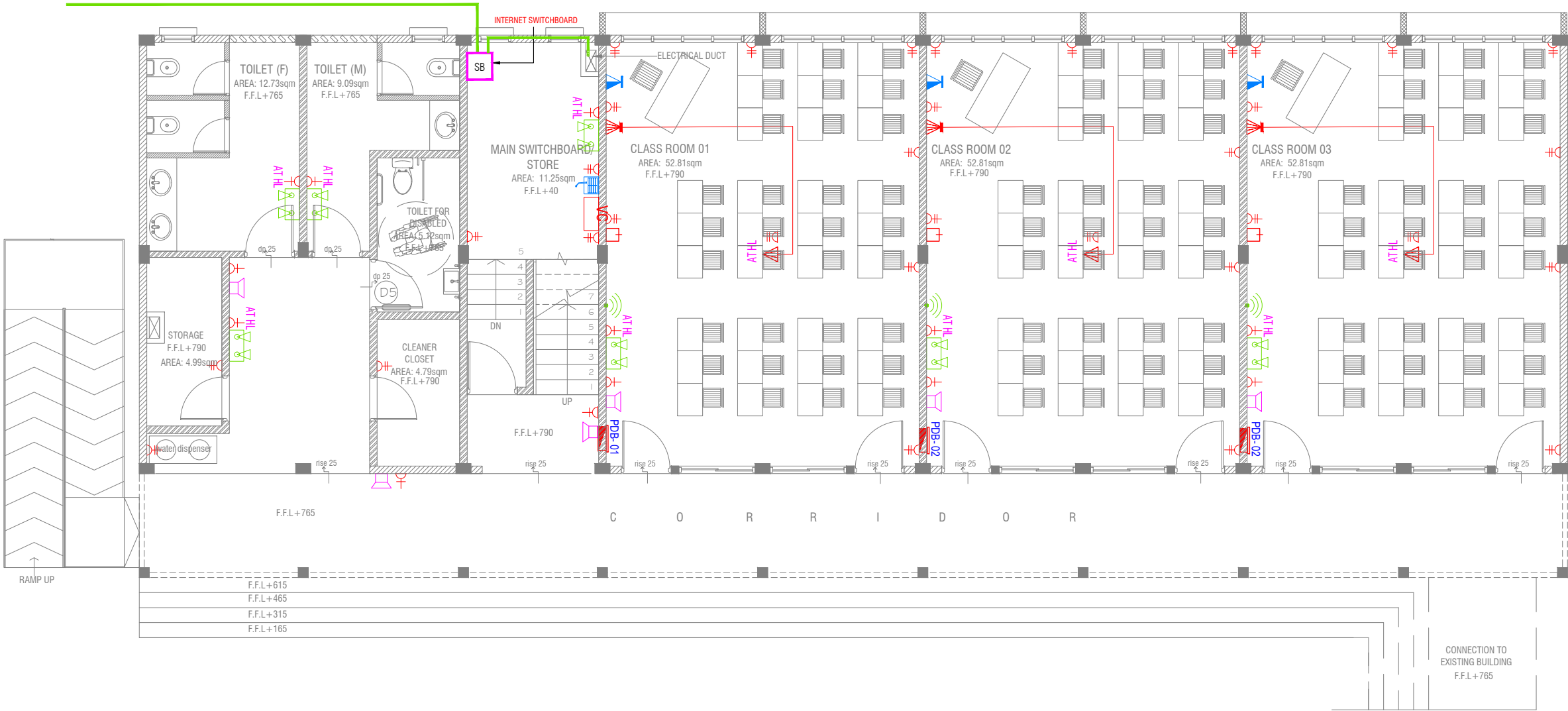
- ALL WIRING TO BE OF STELCO APPROVED STANDARDS
- SWITCH CONTROL = 1200MM FROM FLOOR FIN. LEVEL
- ALL LIGHTING POINTS CONNECTED TO THEIR RESPECTIVE DB
- POLYCARBONATE ENCLOSURE TO ALL SWITCH AND SOCKET WHICH ARE LOCATED AT THE OUTDOORS

L'Gan Ihahdhoo School 06 Classroom Block (2 story)
Client: Ministry of Education

Rev no	Date
1	May 2021
2	
3	
4	
5	

Project Number: RI/2020/006
Date: May 2021
Architect: Maniyam Irasha Shareef
Engineer: Mohamed Muthalib Waleed
Drawn by: Zuhairah Abdul Majid
Services: Aishath Ahmed

PVC DUCT FOR DATA CABLE LEAD IN BELOW GR.SLAB



GROUND FLOOR POWER LAYOUT

SCALE 1:100



NOTE:

1. ALL WIRING TO BE OF APPROVED STANDARDS
2. POWER/IT/COMPUTER SOCKETS = 300MM - 450MM FROM FLOOR FIN. LEVEL
3. SWITCH CONTROL / SOCKET = 1100MM - 1200MM FROM FLOOR FIN. LEVEL
4. KITCHEN SOCKETS / PANTRY SOCKETS = 1150MM - 1250MM FROM FLOOR FIN. LEVEL
5. AC = 2500MM - 2700MM FROM FLOOR FIN. LEVEL

LEGEND

- TELEPHONE OUTLET (RJ11, CONNECTOR)
- 13A POWER OUTLET
- 13A TWIN SOCKET OUTLET
- HDMI,VGA & RAC AV SOCKET
- DISTRIBUTION BOX
- SPEAKERS
- HDMI,VGA & RAC AV TWIN SOCKET
- TWIN COMPUTER NETWORK OUTLET
- DATA POINT
- TWO GANG / TV SOCKET

- PAGING MIC
- VOLUME CONTROLLER
- EM EMERGENCY LIGHT

ALL ELECTRICAL COMPONENT TO BE CONNECTED TO THEIR RESPECTIVE DB

SPEAKERS TO BE CONNECTED TO THE MAIN PA SYSTEM OF THE SCHOOL

TO SUPPLY AND INSTALL PANEL BOARD WITH kWh METER. WIRING AND CONNECTION TO MAIN PANEL BOARD FROM MAIN ELECTRICAL NETWORK (LOCATED AT MAIN SWITCH BOARD / STORE)

L.Gan Ihahdhoo School 06 Classroom Block (2 story)

Client: Ministry of Education

Project Number: RI/2020/006

Date: May 2021

Architect: Maniyam Irasha Shareef

Engineer: Mohamed Muththalib Waleed

Date

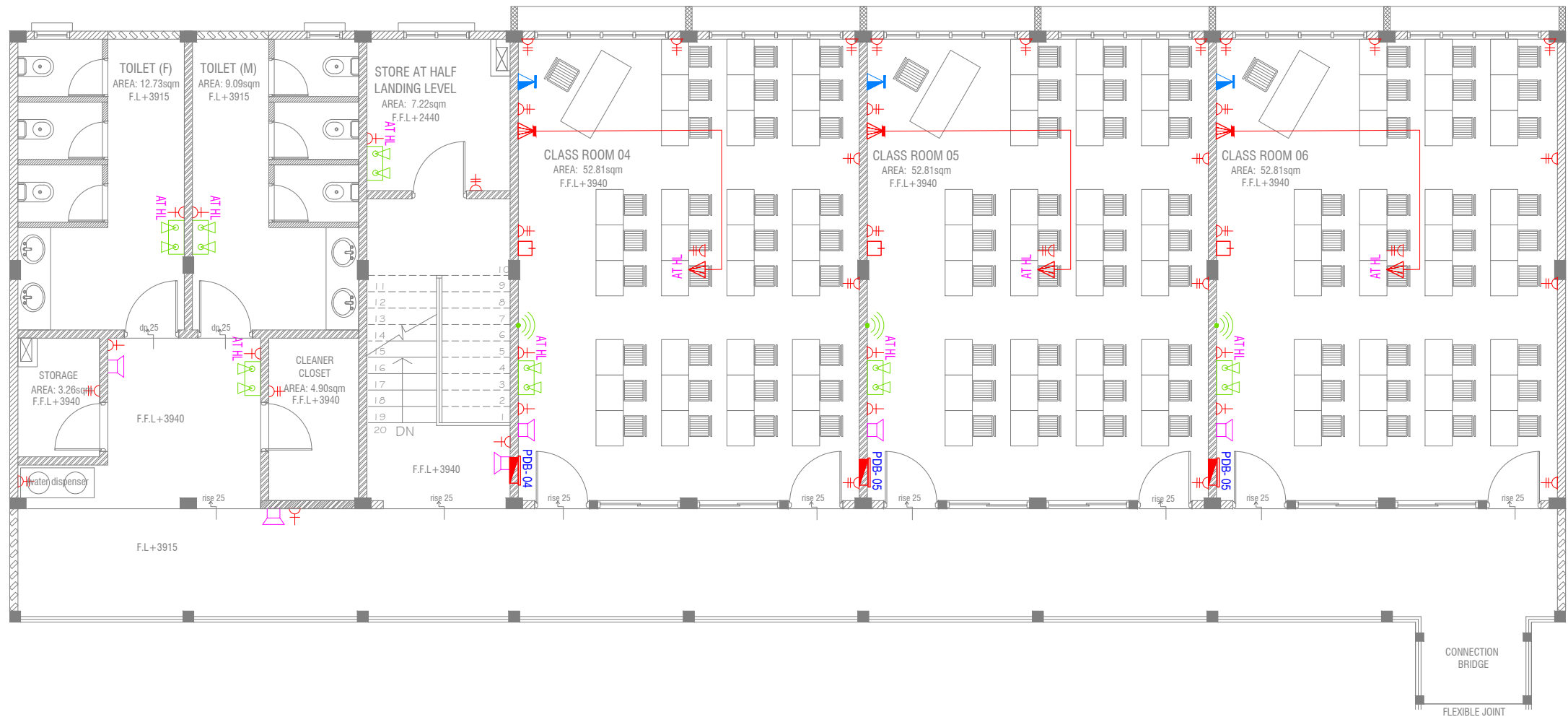
Rev no

RIYAN PRIVATI

t: +9603315049 f: -
e: info@riyan.c
w: www.riyan.c
3rd floor, H. Azum, Amee

Title: Ground Fl
Power Lay

Page: EP 01-02



FIRST FLOOR POWER LAYOUT

SCALE 1:100



NOTE:

1. ALL WIRING TO BE OF APPROVED STANDARDS
2. POWER/IT/COMPUTER SOCKETS = 300MM - 450MM FROM FLOOR FIN. LEVEL
3. SWITCH CONTROL / SOCKET = 1100MM - 1200MM FROM FLOOR FIN. LEVEL
4. KITCHEN SOCKETS / PANTRY SOCKETS = 1150MM - 1250MM FROM FLOOR FIN. LEVEL
5. AC = 2500MM - 2700MM FROM FLOOR FIN. LEVEL

LEGEND

- TELEPHONE OUTLET (RJ11, CONNECTOR)
- 13A POWER OUTLET
- 13A TWIN SOCKET OUTLET
- HDMI,VGA & RAC AV SOCKET
- DISTRIBUTION BOX
- SPEAKERS
- HDMI,VGA & RAC AV TWIN SOCKET
- TWIN COMPUTER NETWORK OUTLET
- DATA POINT
- TWO GANG / TV SOCKET



PAGING MIC



VOLUME CONTROLLER



EMERGENCY LIGHT

ALL ELECTRICAL COMPONENT TO BE CONNECTED TO THEIR RESPECTIVE DB

SPEAKERS TO BE CONNECTED TO THE MAIN PA SYSTEM OF THE SCHOOL

L'Gan Ihahdhoo School 06 Classroom Block (2 story)
Client: Ministry of Education

Project Number: RI/2020/006

Date: May 2021

Architect: Mairiyam Irasha Shareef

Engineer: Mohamed Muthalib Waleed

Drawn by: Zuhairah Abdul Majid

Services: Alshath Ahmed

Rev no

Date

RIYAN PRIVATE LIMIT

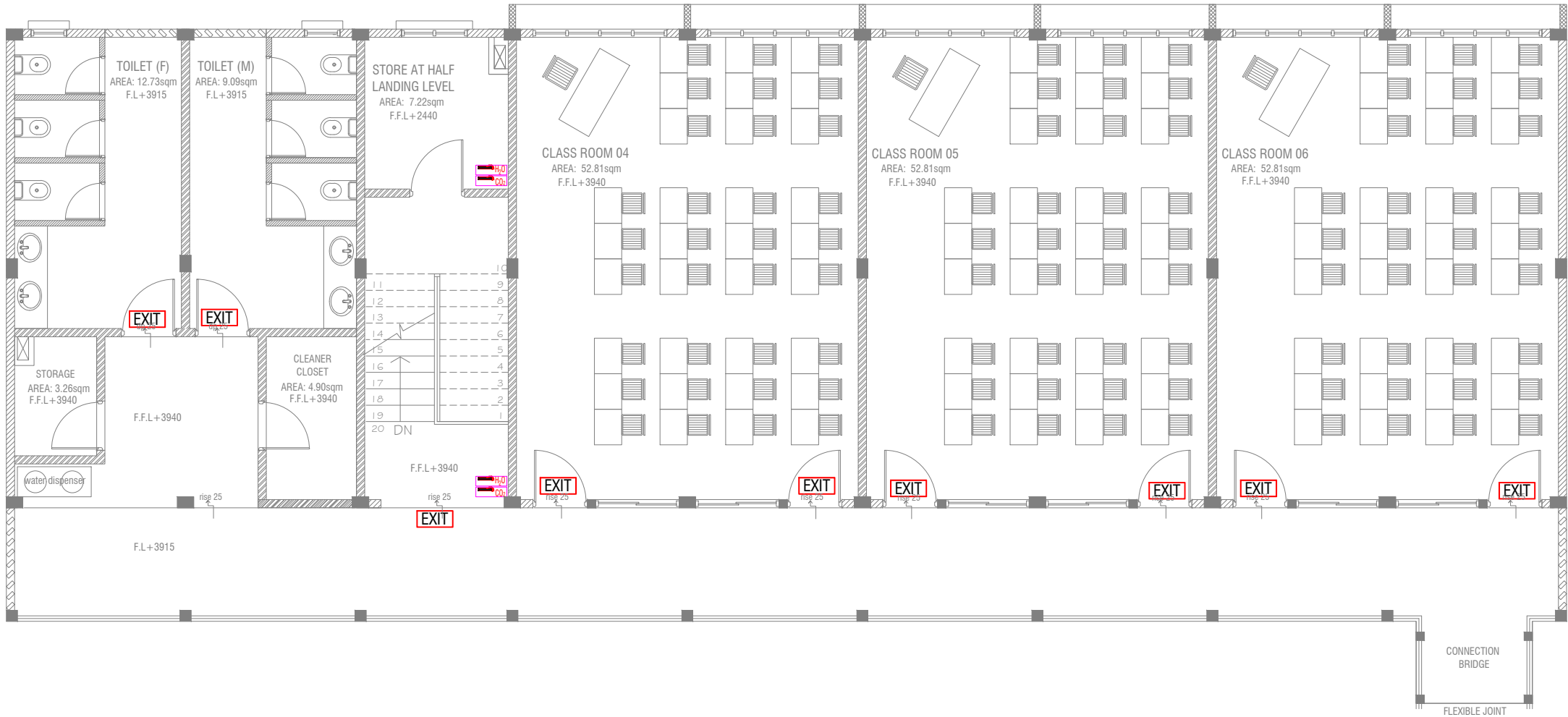
t: +9603315049 f: +960331077
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Ameenemagu, I

Title: First Floor
Power Layout

Page: EP 02-02

FIRST FLOOR FDP LAYOUT

SCALE 1:100



LEGEND

- EXIT SIGN
- CO₂ EXTINGUISHER (LOAD: 2KG) IN POLYCARBONATE ENCLOSURE(TYP.)
- H₂O EXTINGUISHER (LOAD: 9L) IN POLYCARBONATE ENCLOSURE(TYP.)

ALL FIRE CABLES AND CONDUITS SHOULD BE FIRE RETARDANT LOW SMOKE (FRLS) TYPE.

ALL FIRE RATED DOOR SHOULD COME WITH PACKING (EXPANSION SEAL TRAP)

- 1.ALL PIPES SHOULD BE GALVANIZED,SCHEDULE 40.
2. ALL PIPE SHALL BE PAINTED IN RED AS PER REGULATION.
3. ALL SUPPORT/BACKET SHALL BE HOT DIPPED GALVANIZED TO 100MM
- 4.ALL FIRE EXTINGUISHER INSIDE CABINETS. (CABINET SHOULD BE PROVIDED)

-IF THE INSTALLATION OF CEILING IS CARRIED OUT LOWER THAN BEAM BOTTOM ,SMOKE DETECTORS SHOULD BE PLACED AS INDICATED ON THE DRAWING.
-ALTERNATIVELY IF THE INSTALLATION OF CEILING IS CARRIED OUT EQUAL TO BEAM BOTTOM OR IF THE CEILING IS NOT INSTALLED , SMOKE DETECTORS ARE TO BE PLACED IN BETWEEN EACH BEAM

L.Gan Ihahdhoo School 06 Classroom Block (2 story)
Client: Ministry of Education

Project Number: RI/2020/006	Rev no	Date
Date: May 2021	1	2021-05-01
Architect : Mariyam Irasha Shareef	2	2021-05-01
Engineer : Mohamed Muththailb Waleed	3	2021-05-01
Drawn by : Zunabath Abdul Majid	4	2021-05-01
Services : Aishath Ahmed	5	2021-05-01
Interior :-	6	2021-05-01



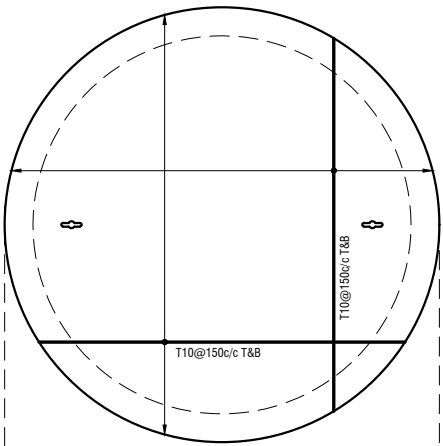
RIYAN PRIVATE LIMITED

t : +9603315049 f : +9603310776
e : info@riyan.com.mv
w : www.riyan.com.mv
3rd floor, H. Azum, Ameenemagaya, Male'

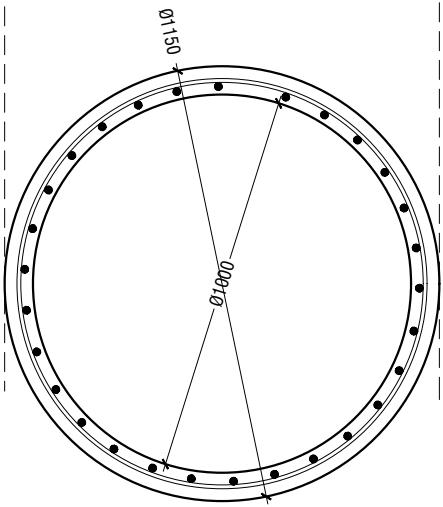
Title: First Floor
FDP Layout

Page: FDP 02-02

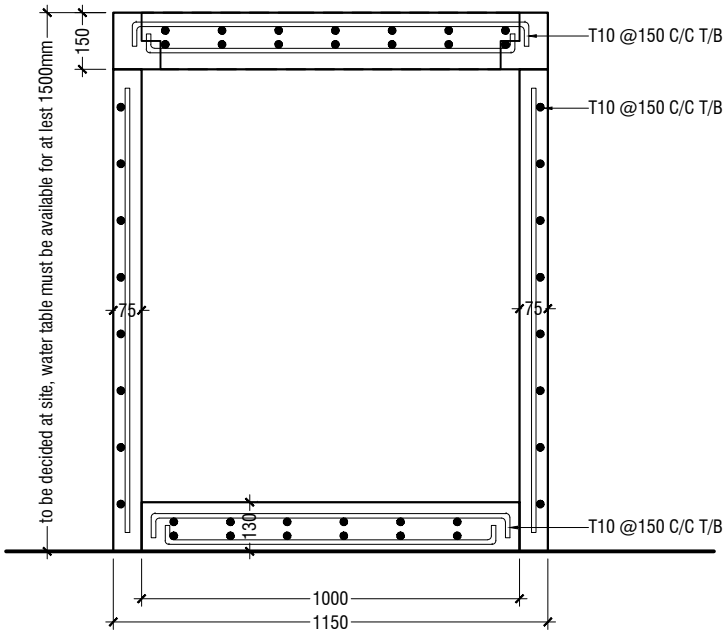
WATER TANK WALL TOP & BOTTOM SLAB



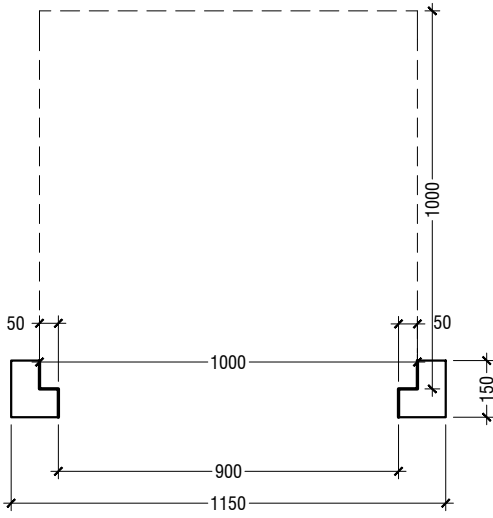
WATER TANK WALL REINF.



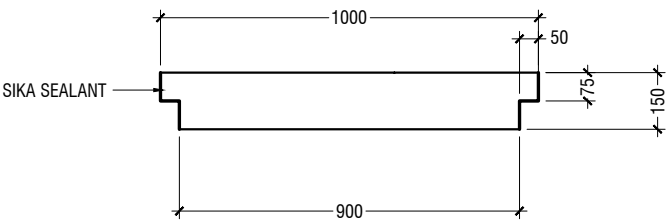
WATER TANK SECTION



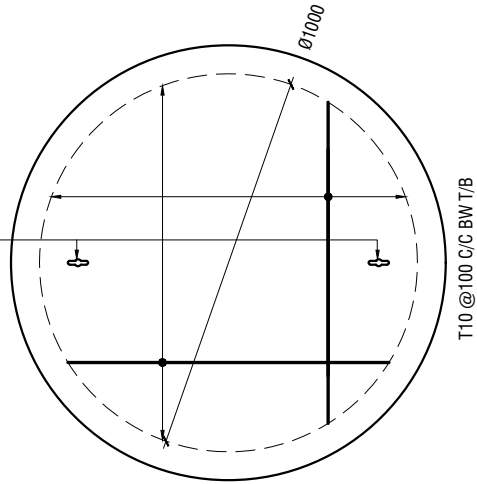
ELEVATION



SECTION



PLAN



NOTE:

- ALL CONCRETE WORKS BELOW GROUND AND AT TERRACE LEVEL TO BE TREATED WITH 'SIKA' WATERPROOFING CHEMICAL OR EQUIVALENT
- PROVIDE PROVISION FOR WATER ENTRANCE THROUGH THE BASE

WATER TANK DETAILS

SCALE 1:20



WATER TANK LID DETAILS

SCALE 1:20



L.Gan Ihahdhoo School 06 Classroom Block (2 story)

Client: Ministry of Education

Project Number: RI/2020/006

Date: May 2021

Architect: Mariyam Irasha Shareef

Engineer: Mohamed Muththailb Waleed

Drawn by: Zunabath Abdul Majid

Services: Aishath Ahmed

Interior: -

Rev no	Date
--	-----
--	-----
--	-----
--	-----



RIYAN PRIVATE LIMITED

t: +9603315049 f: +9603310776
e: info@riyan.com.mv
w: www.riyan.com.mv
3rd floor, H. Azum, Ameenemaguu, Male'

Title: GROUND WATER
WELL DETAILS

Page: D - 01 / 01