



Republic of Uganda

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REPUBLIC OF UGANDA
MINISTRY OF WATER AND ENVIRONMENT
DIRECTORATE OF WATER DEVELOPMENT

INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT

DRAWINGS FOR SANITATION FACILITIES IN RUKUNGIRI

Grant N°:

Contract N°.....

Lot 3: Volume 4-3

August 2021

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DRAWING No

DRAWING TITLE

CIVIL DRAWINGS (SANITATION FACILITIES IN RUKUNGIRI-LOT 3)

DRAWING No.

DRAWING TITLE

FAECAL SLUDGE TREATMENT PLANT

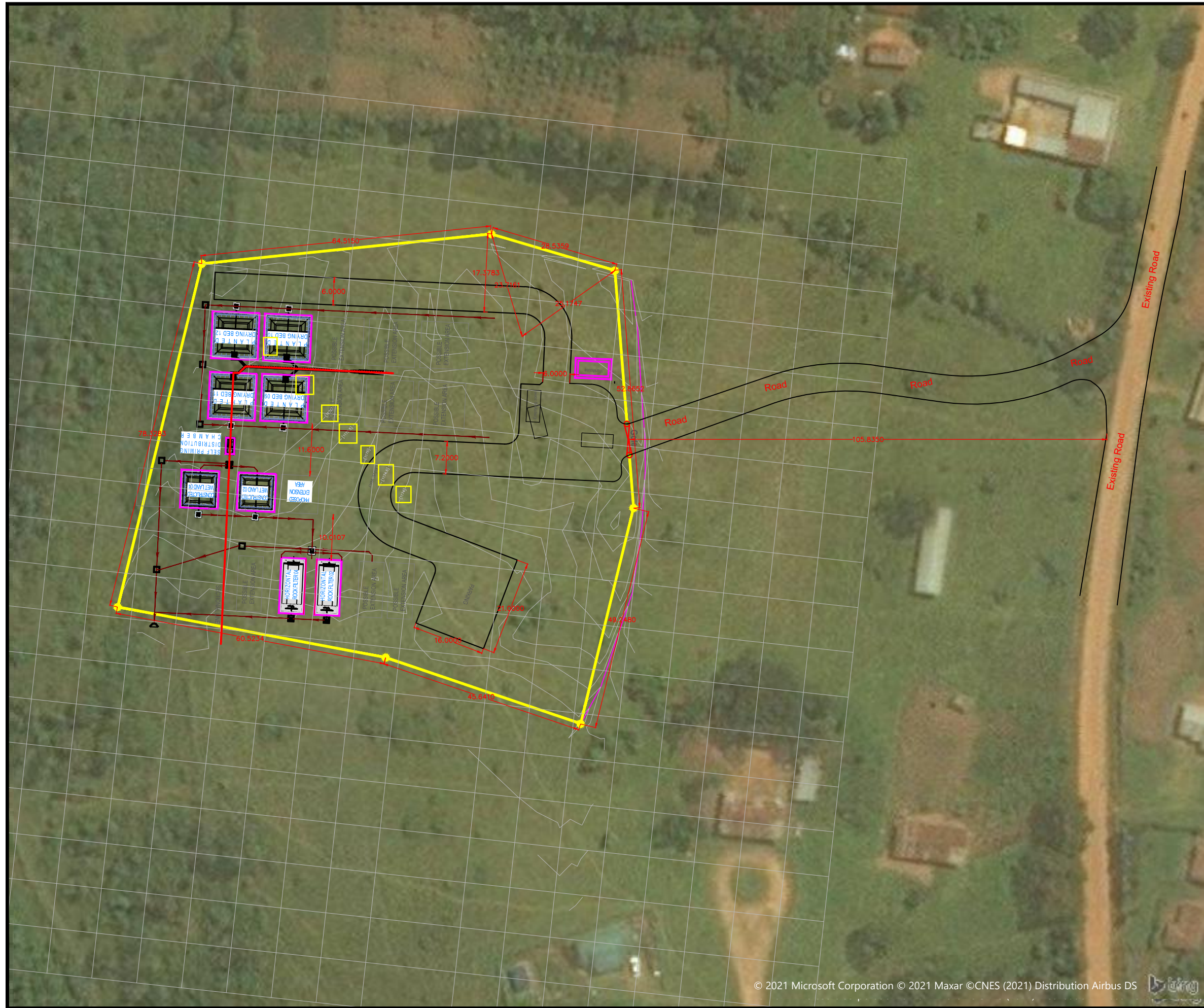
MWE/LOT3/RUK/S/0.0.0	FAECAL SLUDGE TREATMENT WORKS SITE PLAN
MWE/LOT3/RUK/S/0.0.1	FAECAL SLUDGE TREATMENT WORKS LONGITUDINAL SECTION
MWE/LOT3/RUK/S/1.0.0	PRE-TREATMENT(SCREEN AND GRIT CHAMBER) - LAYOUT AND SECTION
MWE/LOT3/RUK/S/1.1.0	PLANTED DRYING BED(10.4 X 10.4m) - LAYOUT AND SECTION
MWE/LOT3/RUK/S/2.0.0	SELF PRIMING DISTRIBUTION & BED SELECTION CHAMBER - PLAN LAYOUT AND SECTION
MWE/LOT3/RUK/S/2.1.0	CONSTRUCTION WETLAND(8.4 X 8.4m) - PLAN LAYOUT AND SECTION
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MWE/LOT3/RUK/S/4.0.0	WARE HOUSE - PLAN, ELEVATIONS & SECTION A-A

SANITATION FACILITIES

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MWE/LOT3/RUK/S/5.0.1	13-STANCES WATERBORNE TOILET - ROOF PLAN & SIDE ELEVATION - FOR, Kebisoni and Nyamayenjo Markets
MWE/LOT3/RUK/S/5.0.2	13-STANCES WATERBORNE TOILET - SIDE ELEVATION & DETAILS - FOR, Kebisoni and Nyamayenjo Markets
MWE/LOT3/RUK/S/5.0.3	13-STANCES WATERBORNE TOILET - TOP PLAN & SECTION A-A,B-B,C-C & MATERIALS SHEET OF REINFORCEMENT - FOR, Kebisoni and Nyamayenjo Markets
MWE/LOT3/RUK/S/5.0.4	PUBLIC TOILET LIGHTING & SOCKET PLAN FOR A 13-STANCES WATERBORNE TOILET - FOR, Kebisoni and Nyamayenjo Markets
MWE/LOT3/RUK/S/6.0.0	6 STANCE SINGLE VAULT VIP-BOYS - FLOOR PLAN ,SECTION B-B & F-F,DETAIL X,Y & Z - FOR, Primary Schools of; Nyakibale Upper, Nyakibale Lower, Kinyansano Boarding and Kahororo.
MWE/LOT3/RUK/S/6.0.1	PUBLIC TOILET LIGHTING & SOCKET PLAN - FOR. A 6-STANCE SINGLE VAULT VIP SCHOOL TOILET FOR BOYS
MWE/LOT3/RUK/S/6.0.2	6 STANCE SINGLE VAULT VIP-GIRLS - FLOOR PLAN ,SECTION E-E & G-G,DETAIL Y & Z - FOR, Primary Schools of; Nyakibale Upper, Nyakibale Lower, Kinyansano Boarding and Kahororo.
MWE/LOT3/RUK/S/6.0.3	PUBLIC TOILET LIGHTING & SOCKET PLAN - FOR, A 6-STANCE SINGLE VAULT VIP SCHOOL TOILET FOR GIRLS
MWE/LOT3/RUK/S/7.0.0	3 STANCE - WATER BORNE TOILET - FLOOR PLAN & SECTION A-A - FOR, Nyakibale Hospital and Kakabanda Health Centre.
MWE/LOT3/RUK/S/7.0.1	PUBLIC TOILET LIGHTING & SOCKET PLAN - FOR, A 3 STANCE WATERBORNE HEALTH CENTRE TOILET

STANDARD DRAWINGS

MWE/LOT3/RUK/S/SD100	STANDARD DRAWINGS, CONTRACT SIGN POST
MWE/LOT3/RUK/S/SD101	STANDARD DRAWINGS, WATER TANK
MWE/LOT3/RUK/S/SD102	STANDARD DRAWINGS, TOILET DETAILS
MWE/LOT3/RUK/S/SD103	STANDARD DRAWINGS - WATER TANK TOWER
MWE/LOT3/RUK/S/SD104	STANDARD DRAWINGS - SEPTIC TANK DETAILS



NOTES

- 1). All dimensions in millimetres unless otherwise indicated
- 2). All levels in metres above sea level
- 3). Structural details are not included
- 4). All structural concrete is class 25/10mm aggregate
- 5). All mass concrete is class 15/10mm aggregate

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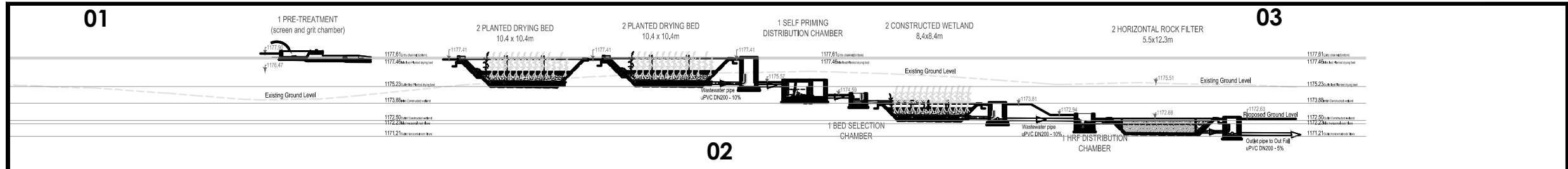
PROJECT
 INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT

DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

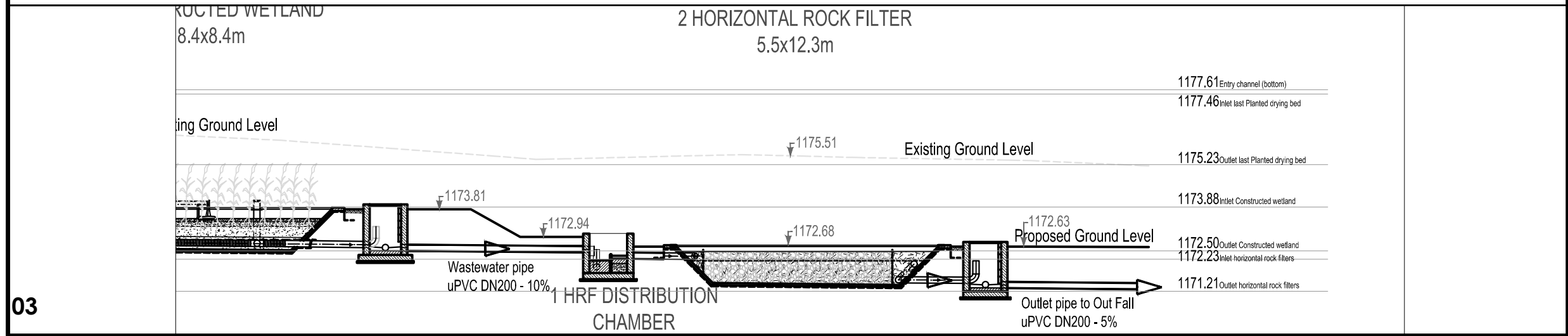
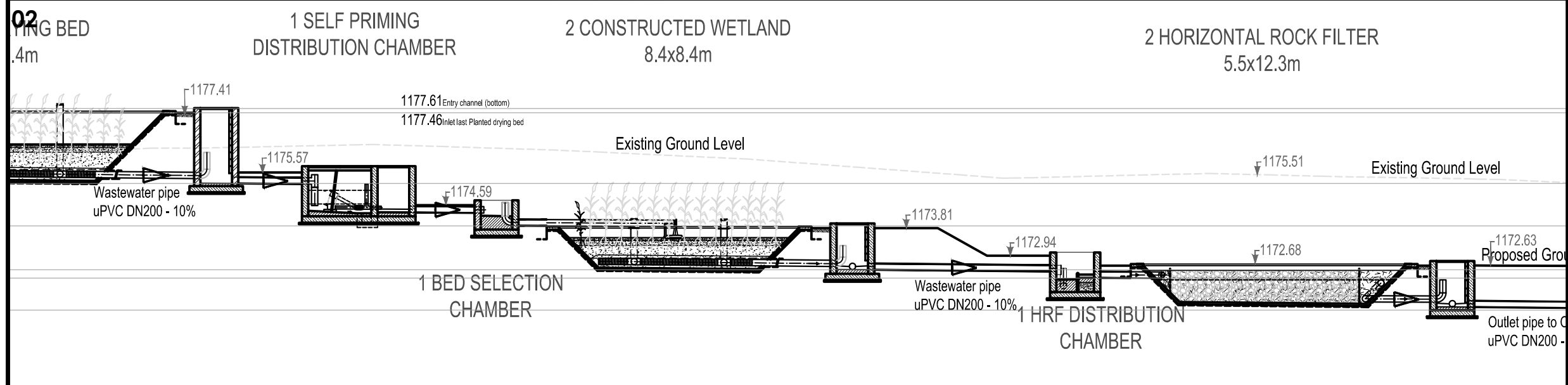
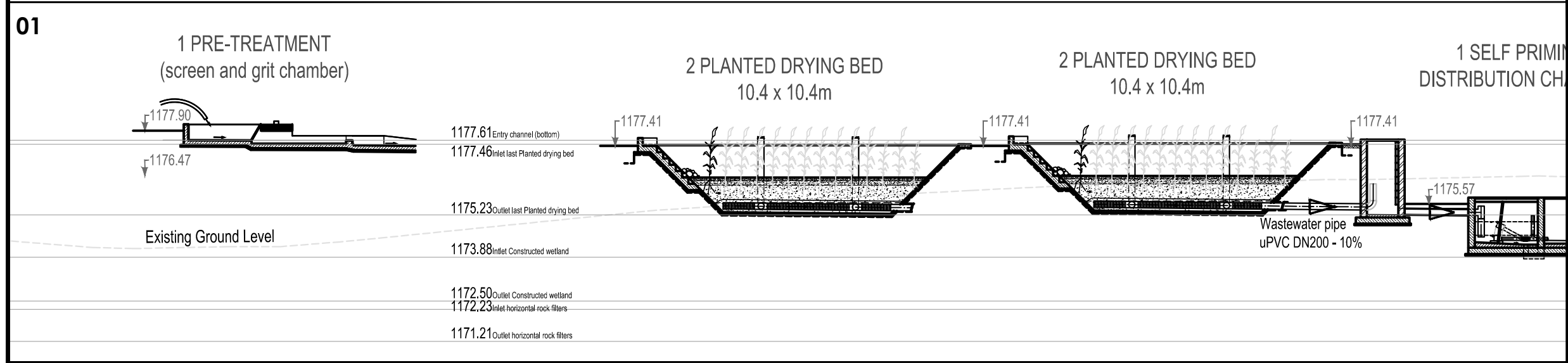
DETAILED ENGINEERING DESIGN
DRAWING TITLE FAECAL TREATMENT PLANT
FAECAL SLUDGE TREATMENT WORKS
SITE PLAN

SCALE	1:850	DRAWING No.	MWE/LOT3/RUK/S/0.0.0
SURVEYED	M.S.E&K.C	DESIGNED	AB
DRAWN	MARK	CHECKED	ND
DATE	AUG 2020	APPROVED	CZ



NOTES

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- 4). All structural concrete is class 25/10mm aggregate
- 5). All mass concrete is class 15/10mm aggregate



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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

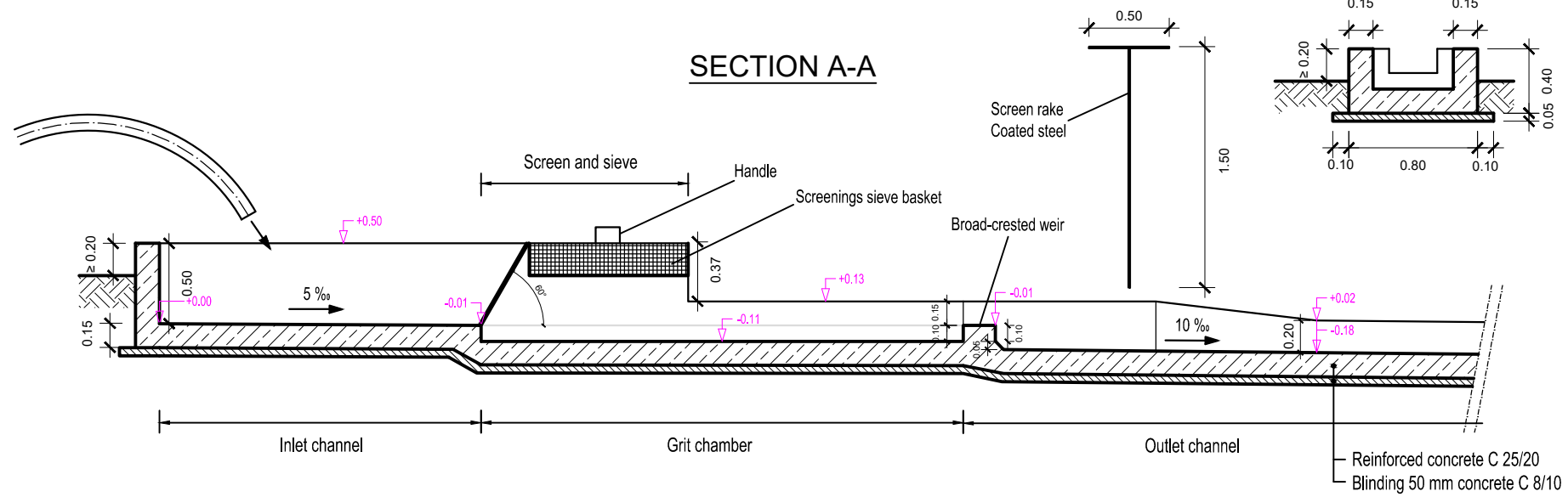
CONSULTANTS

DETAILED ENGINEERING DESIGN

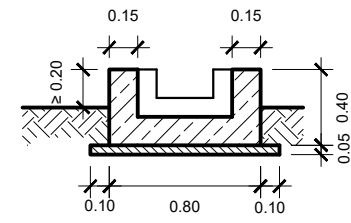
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 FAECAL TREATMENT PLANT
 FAECAL SLUDGE TREATMENT WORKS
 LONGITUDINAL SECTION

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SURVEYED		DESIGNED	AB
DRAWN	MARK	CHECKED	ND
DATE	AUG 2020	APPROVED	CZ

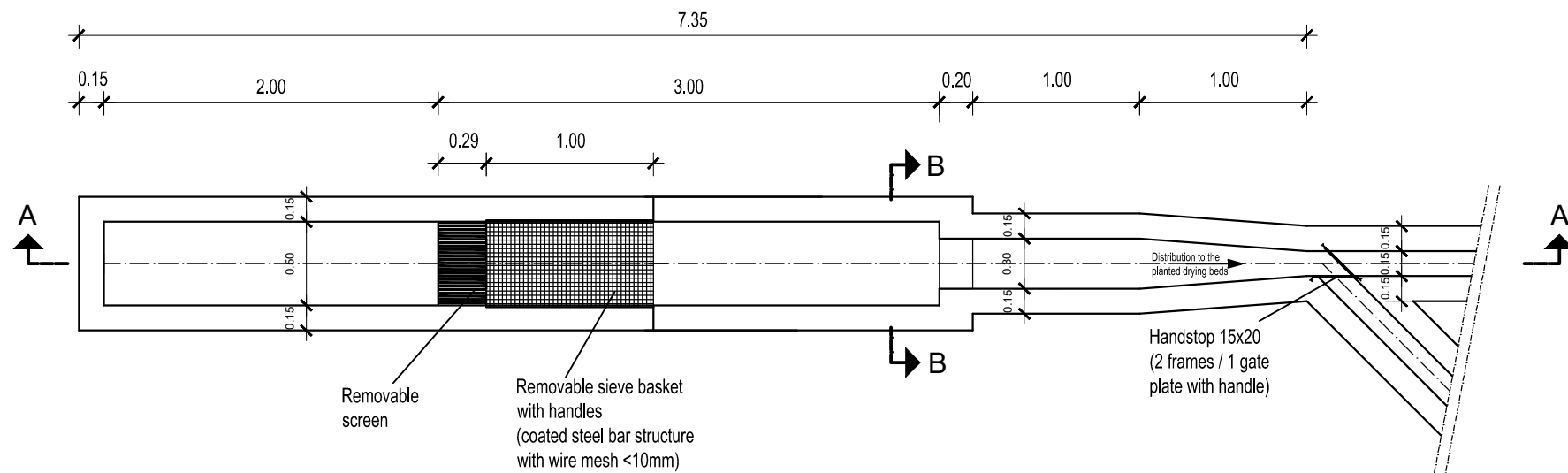
**PRE-TREATMENT
(screen and grit chamber)**



SECTION B-B



SECTIONAL PLAN



NOTES



1. Unless otherwise stated, all dimensions are in meters
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.
4. For Site Layout, Refer to Dwg. MWE/LOT3/RUK/S/0.0.0

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**INTEGRATED WATER MANAGEMENT AND
DEVELOPMENT PROJECT**

**DESIGN OF SANITATION FACILITIES IN
RUKUNGIRI - LOT 3**

CONSULTANTS

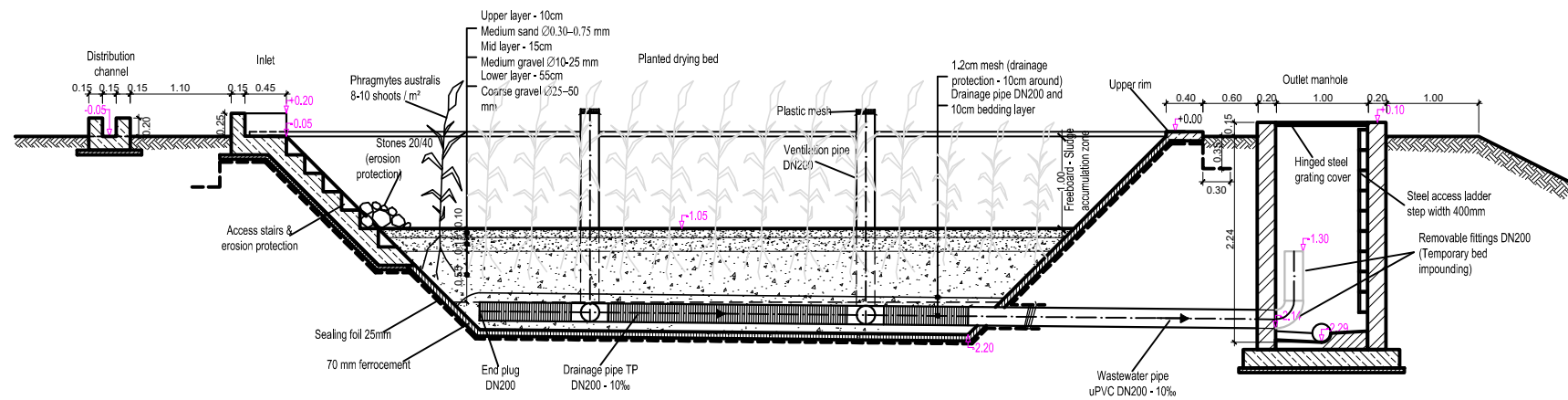
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LAYOUT AND SECTION**

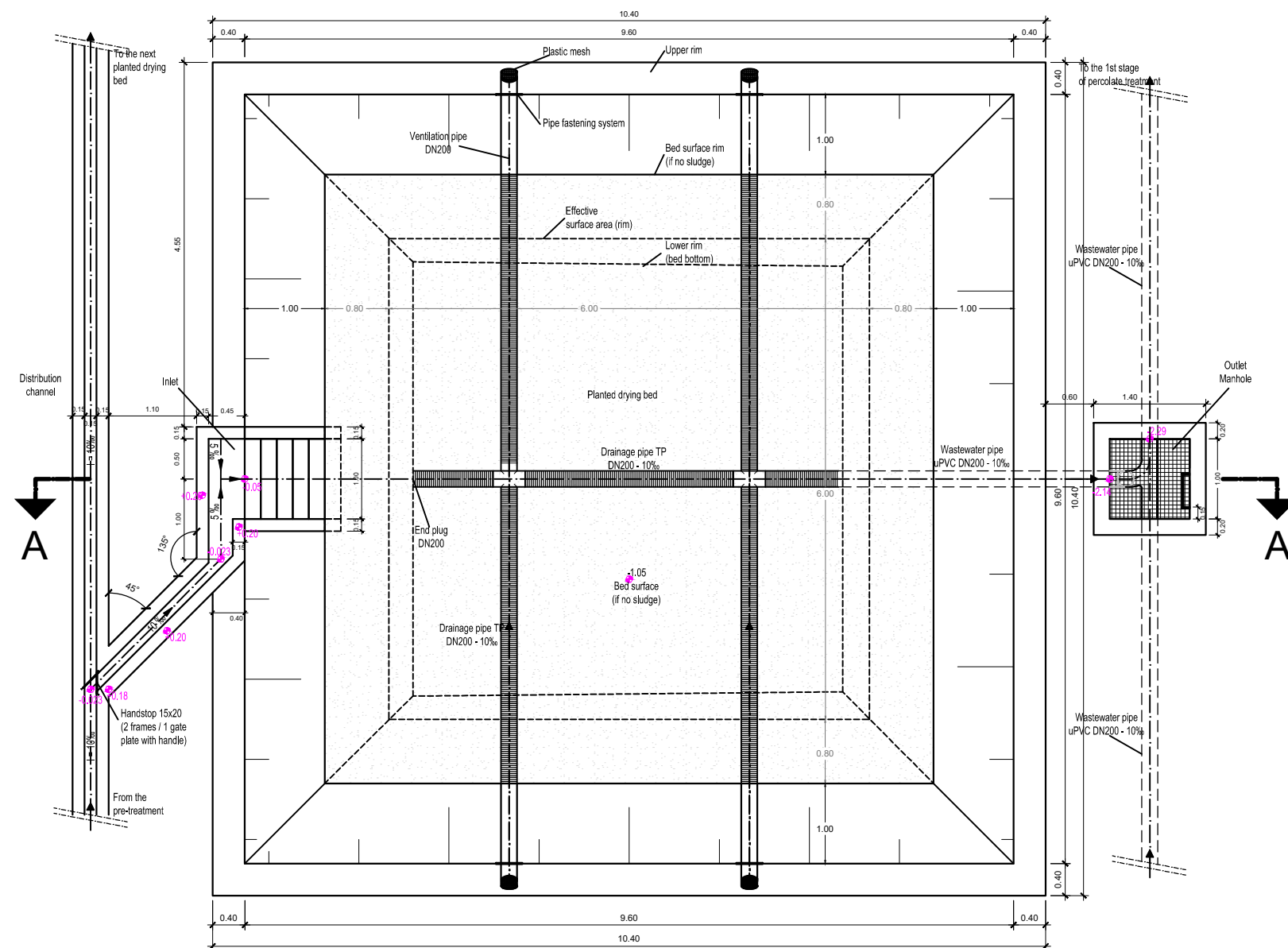
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SURVEYED	M.S.C&K.C	DESIGNED	AB
DRAWN	MARK	CHECKED	ND
DATE	AUG 2020	APPROVED	CZ

PLANTED DRYING BED
10.4 x 10.4 m

SECTION A-A



SECTIONAL PLAN



NOTES

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3. All levels in metres above mean sea level.
4. For Site Layout, Refer to Dwg. MWE/LOT3/RUK/S/0.0.0

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PROJECT

INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT

DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

DETAILED ENGINEERING DESIGN

DRAWING TITLE FAECAL TREATMENT PLANT
PLANTED DRYING BED(10.4 X 10.4m)
LAYOUT AND SECTION

SCALE 1:75 **DRAWING No.** MWE/LOT3/RUK/S/1.1.0

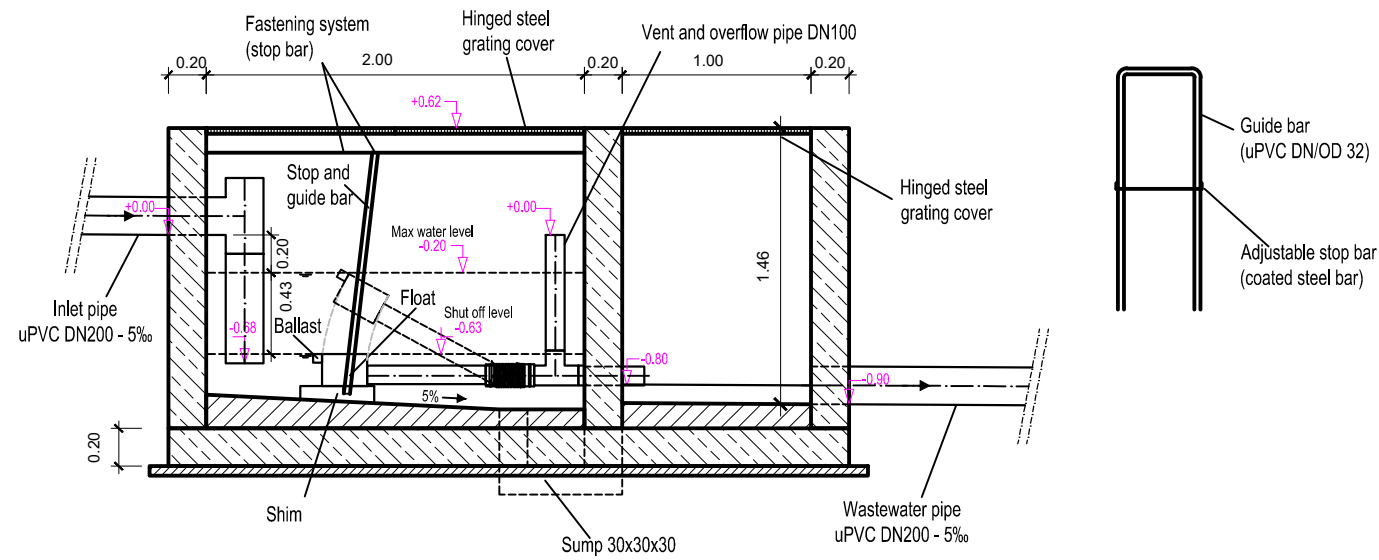
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DRAWN MARK **CHECKED** ND

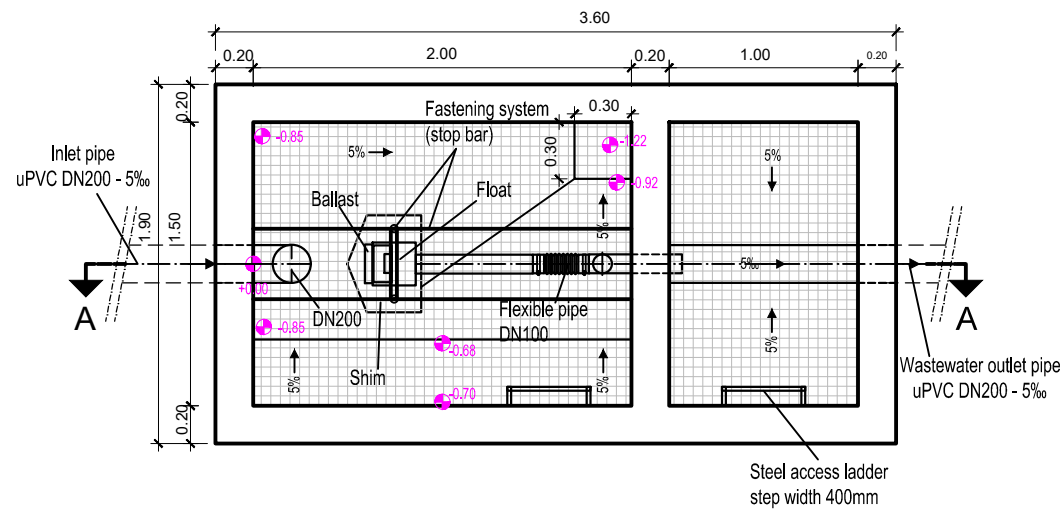
DATE JAN 2020 **APPROVED** CZ

SELF PRIMING DISTRIBUTION CHAMBER (for the constructed wetlands)

SECTION A-A

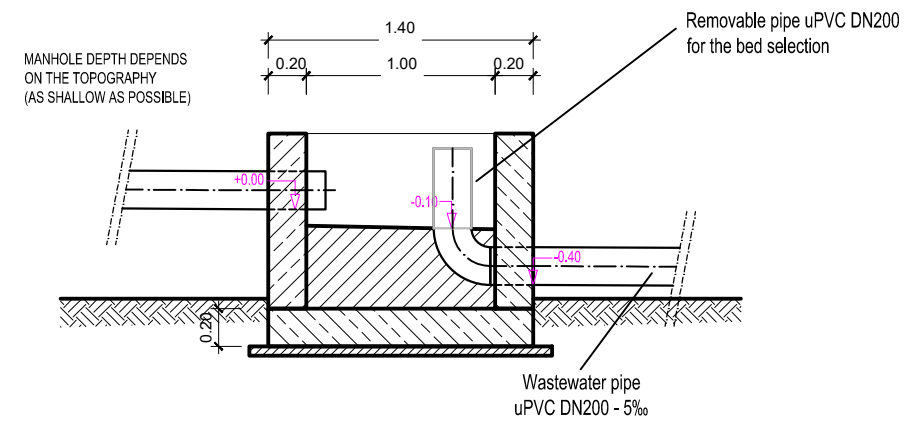


SECTIONAL PLAN

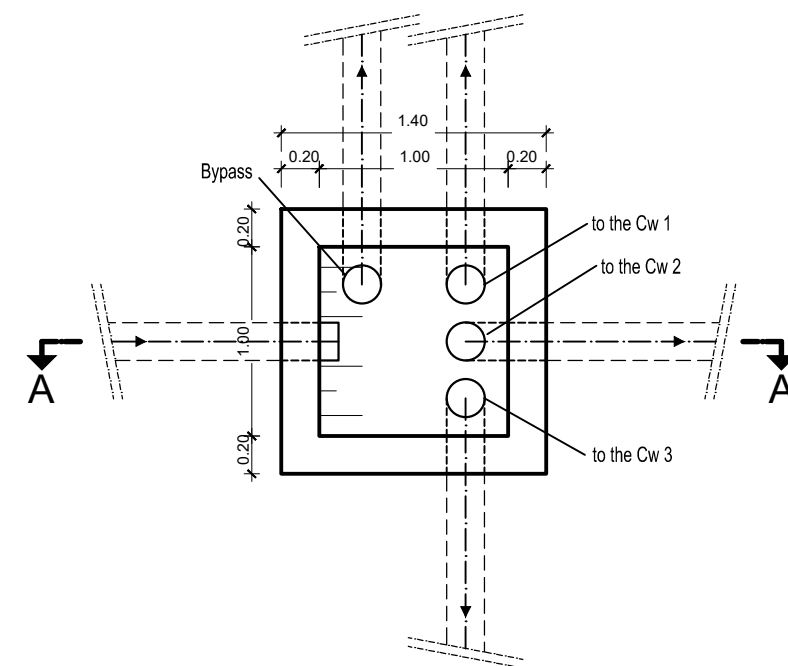


BED SELECTION CHAMBER (for the constructed wetlands)

SECTION A-A



SECTIONAL PLAN

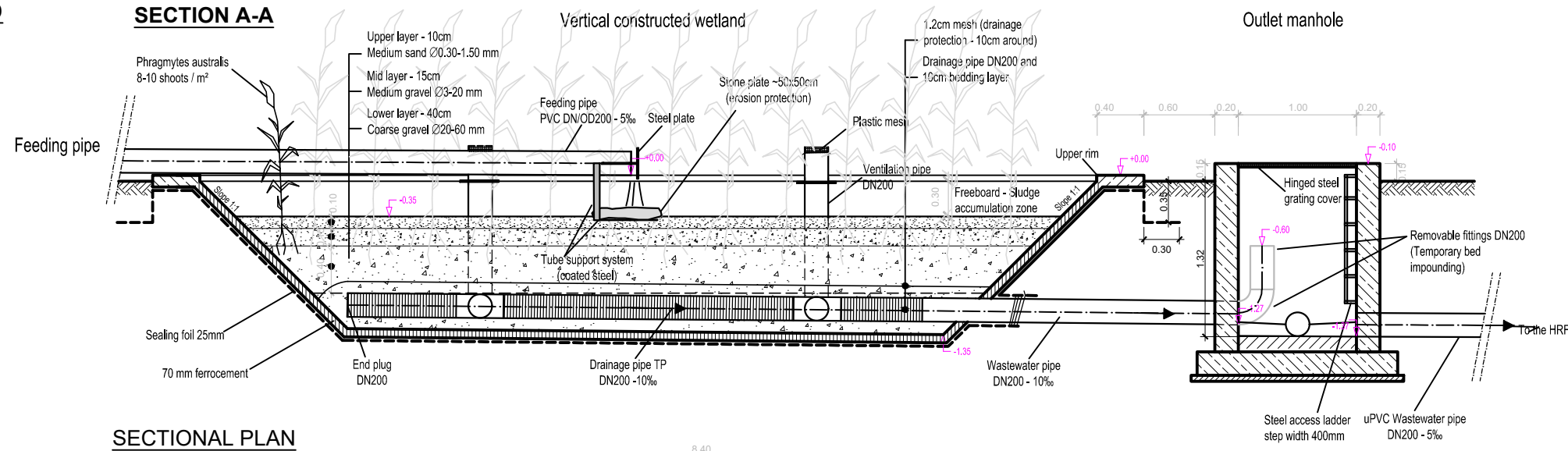


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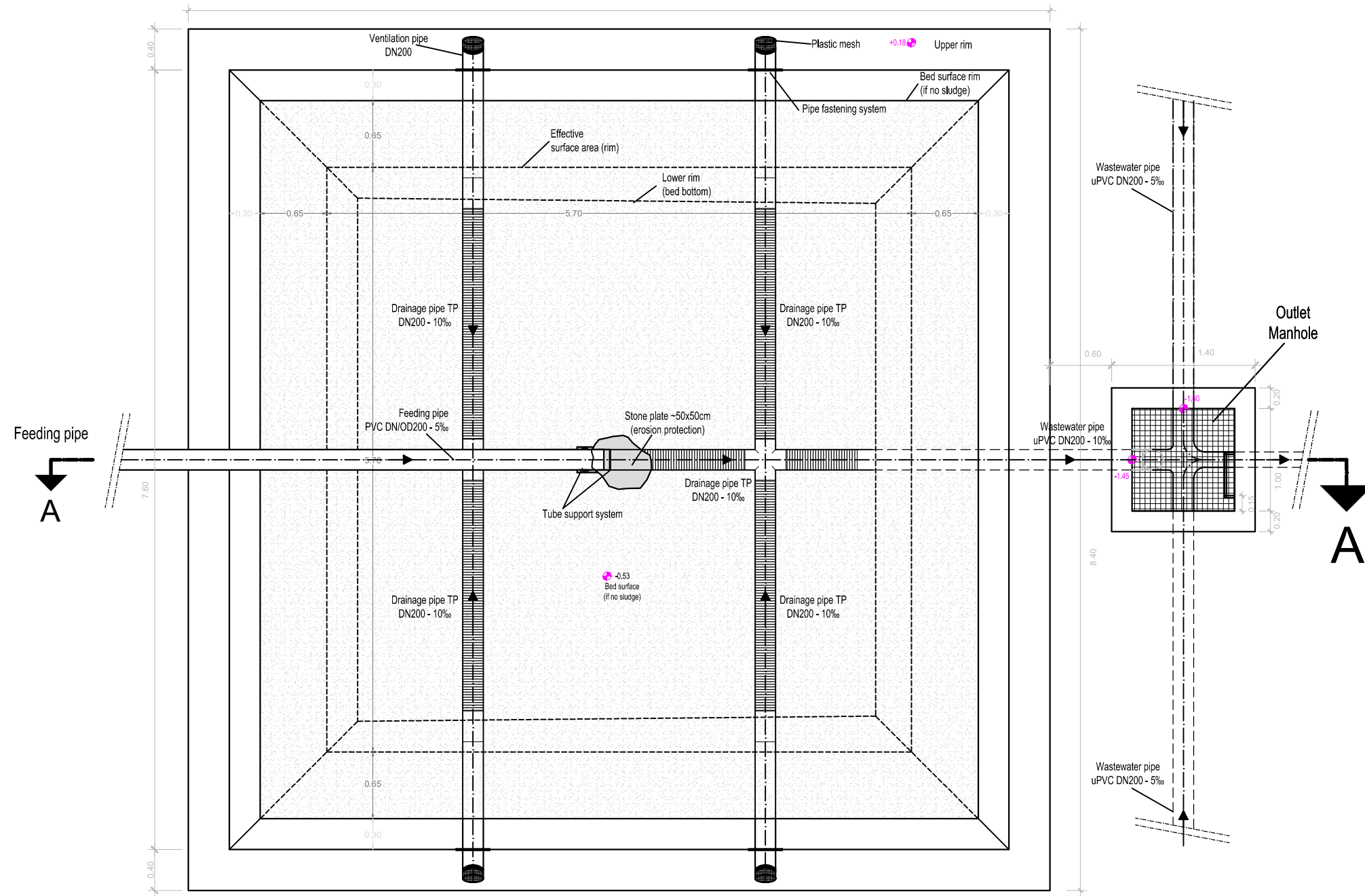
1. Unless otherwise stated, all dimensions are in meters
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.
4. For Site Layout, Refer to Dwg. MWE/LOT3/RUK/S/0.0.0

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<p>PROJECT INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT</p>			
<p>DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3</p>			
<p>CONSULTANTS</p>			
<p>DETAILED ENGINEERING DESIGN</p>			
<p>DRAWING TITLE FAECAL TREATMENT PLANT SELF PRIMING DISTRIBUTION & BED SELECTION CHAMBER PLAN LAYOUT AND SECTION</p>			
SCALE	AS SHOWN	DRAWING No.	MWE/LOT3/RUK/S/2.0.0
SURVEYED	M.S.C&K.C	DESIGNED	AB
DRAWN	MARK	CHECKED	ND
DATE	AUG 2020	APPROVED	CZ

CONSTRUCTED WETLAND
8.4 x 8.4 m



SECTIONAL PLAN



NOTES

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3. All levels in metres above mean sea level.
4. For Site Layout, Refer to Dwg. MWE/LOT3/RUK/S/0.0.0

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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

DETAILED ENGINEERING DESIGN

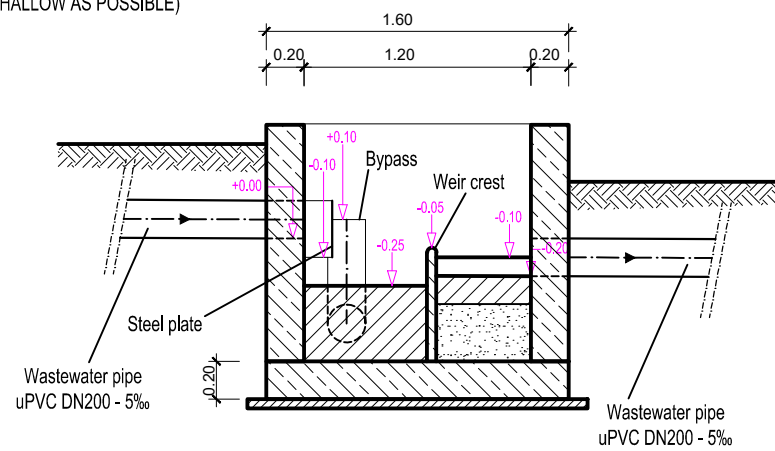
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FAECAL TREATMENT PLANT
CONSTRUCTION WETLAND(8.4 X 8.4m)
PLAN LAYOUT AND SECTION

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SURVEYED	M.S.C&K.C	DESIGNED	AB
DRAWN	MARK	CHECKED	ND
DATE	AUG 2020	APPROVED	CZ

HRF DISTRIBUTION CHAMBER

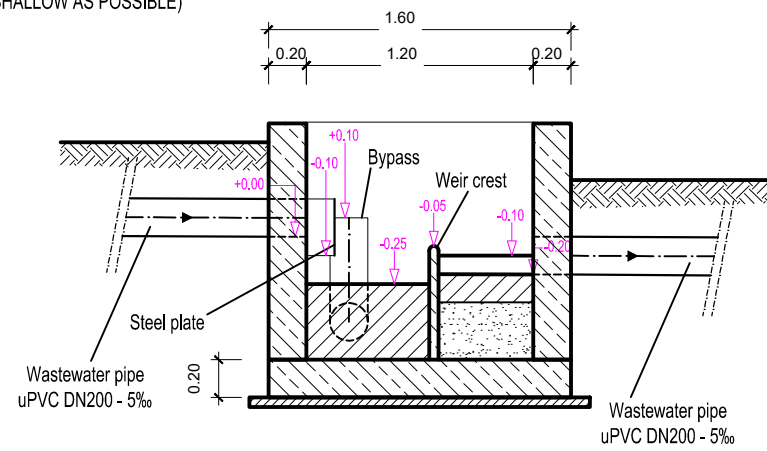
MANHOLE DEPTH DEPENDS ON THE TOPOGRAPHY (AS SHALLOW AS POSSIBLE)

SECTION A-A

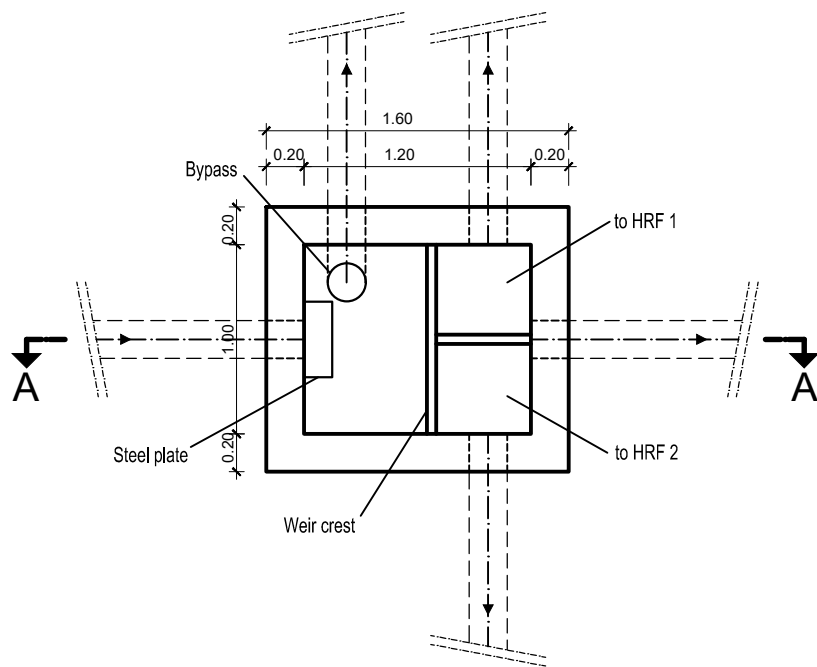


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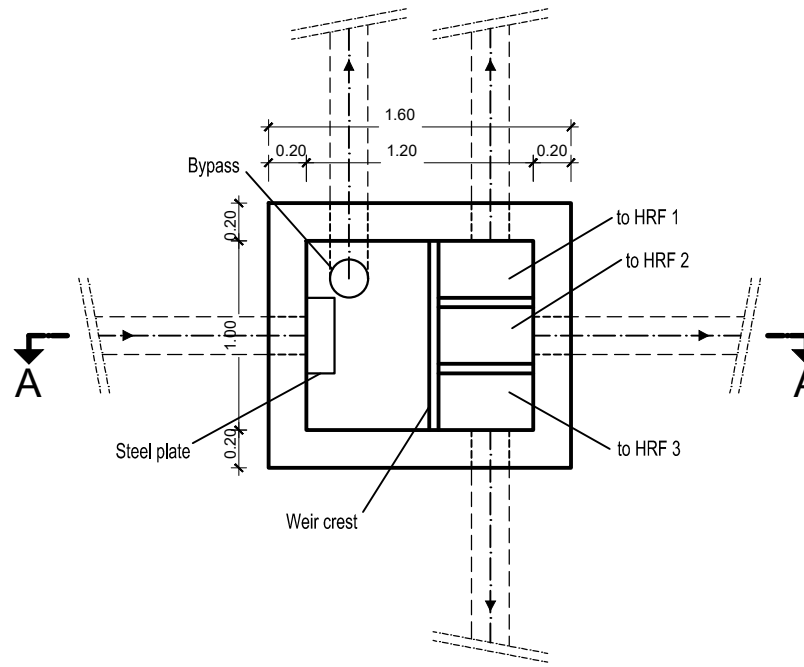
SECTION A-A



SECTIONAL PLAN






SECTIONAL PLAN



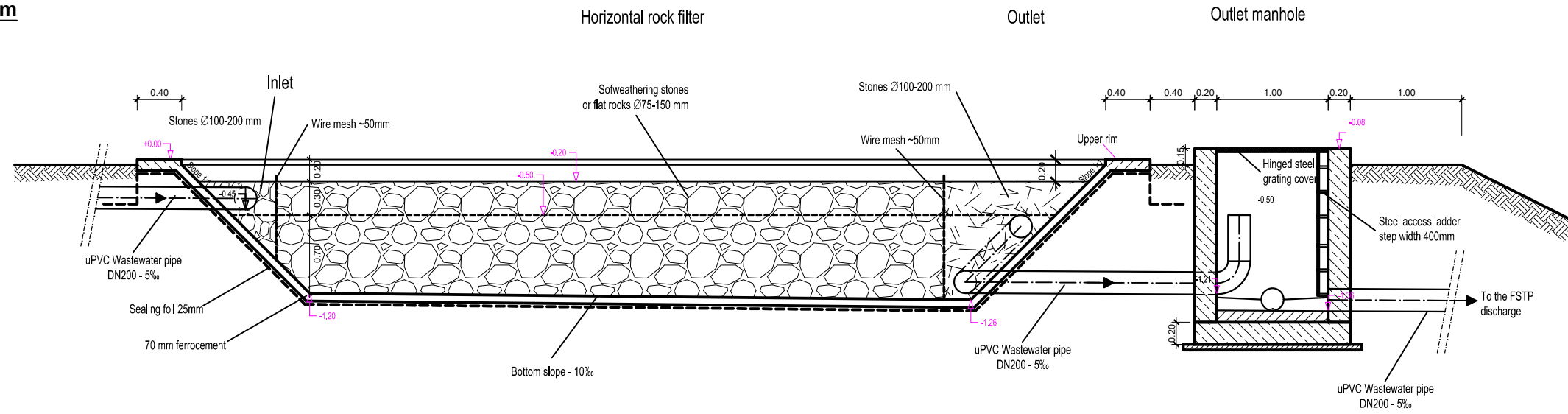
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1. Unless otherwise stated, all dimensions are in meters
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.
4. For Site Layout, Refer to Dwg. MWE/LOT3/RUK/S/0.0.0

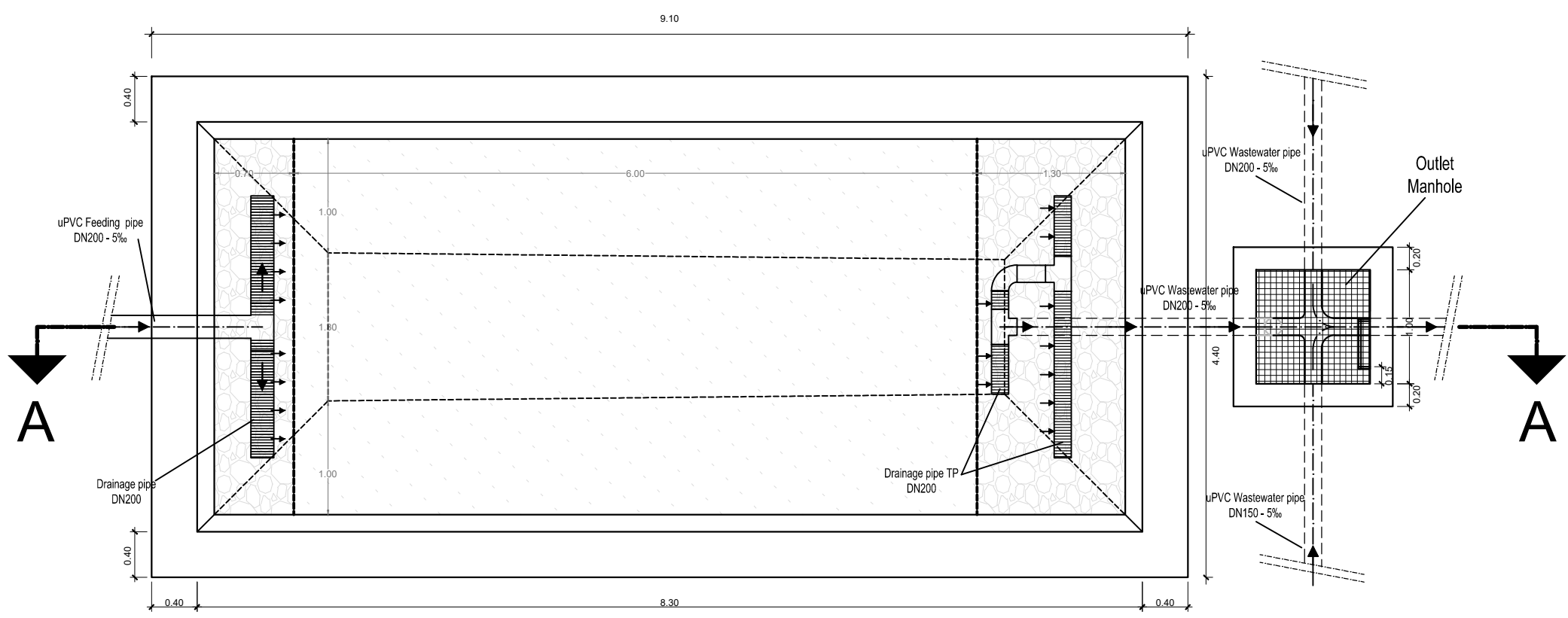
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<p>CO-FINANCED BY:</p>   <p>WORLD BANK & GOVERNMENT OF UGANDA</p>			
<p>PROJECT</p> <p>INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT</p>			
<p>DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3</p>			
<p>CONSULTANTS</p>			
<p>DETAILED ENGINEERING DESIGN</p>			
<p>DRAWING TITLE</p> <p>FAECAL TREATMENT PLANT DISTRIBUTION CHAMBER(FOR HRF)</p> <p>PLAN LAYOUT AND SECTION</p>			
SCALE	1:40	DRAWING No.	MWE/LOT3/RUK/S/3.0.0
SURVEYED	M.S.C&K.C	DESIGNED	AB
DRAWN	MARK	CHECKED	ND
DATE	AUG 2020	APPROVED	CZ

HORIZONTAL ROCK FILTER
4.4x9.1m

SECTION A-A



SECTIONAL PLAN



NOTES

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2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.
4. For Site Layout, Refer to Dwg. MWE/LOT3/RUK/S/0.0.0

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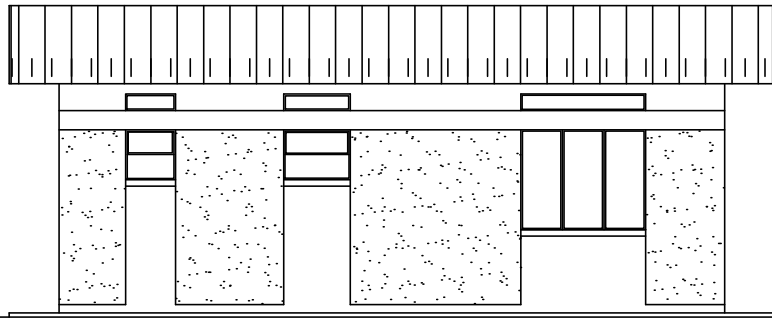
PROJECT
INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT

DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

DETAILED ENGINEERING DESIGN
DRAWING TITLE **FAECAL TREATMENT PLANT HORIZONTAL ROCK FILTERS(HRF) (4.4 X 9.1m) PLAN LAYOUT AND SECTION**

SCALE	1:50	DRAWING No.	MWE/LOT3/RUK/S/3.1.0
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DRAWN	MARK	CHECKED	ND
DATE	AUG 2020	APPROVED	CZ



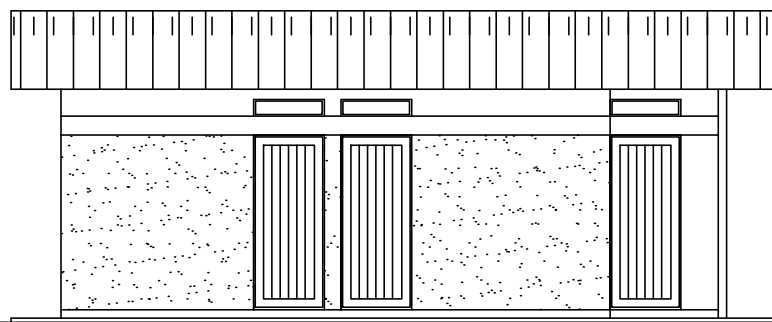
REAR ELEVATION

DOOR SCHEDULE.				
SYMBOL	HEIGHT	WIDTH	No REQ	REMARK.
D1	2100	850	3	FRAMED WOODEN DOORS PV

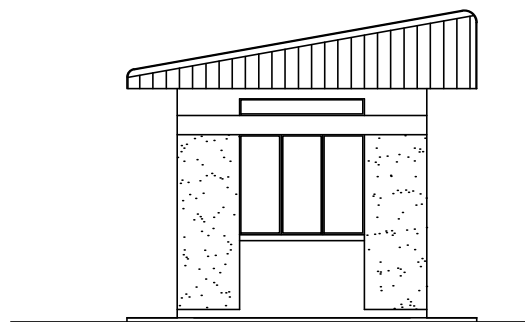
WINDOW SCHEDULE.				
SYMBOL	HEIGHT	WIDTH	No REQ	REMARK.
W1	1200	1500	2	STEEL CASEMENT WINDOW
W2	600	800	1	STEEL WINDOW TOP HANG
W3	600	600	1	-DO-

DOOR & WINDOW SCHEDULES

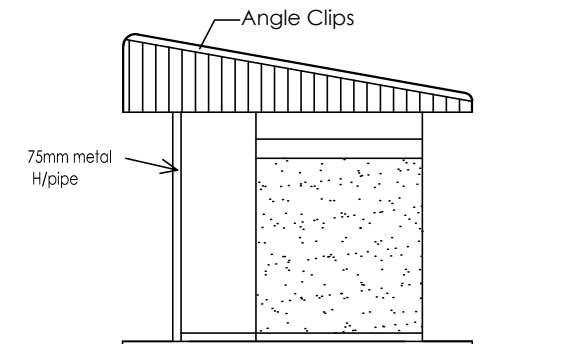
- NOTES**
1. For Site Location, see Dwg, MWE/RUK/S/0.0.0
 2. All levels in metres above mean sea level
 3. Unless otherwise stated, all dimensions are in mm
 4. Check all dimensions and elevations on site



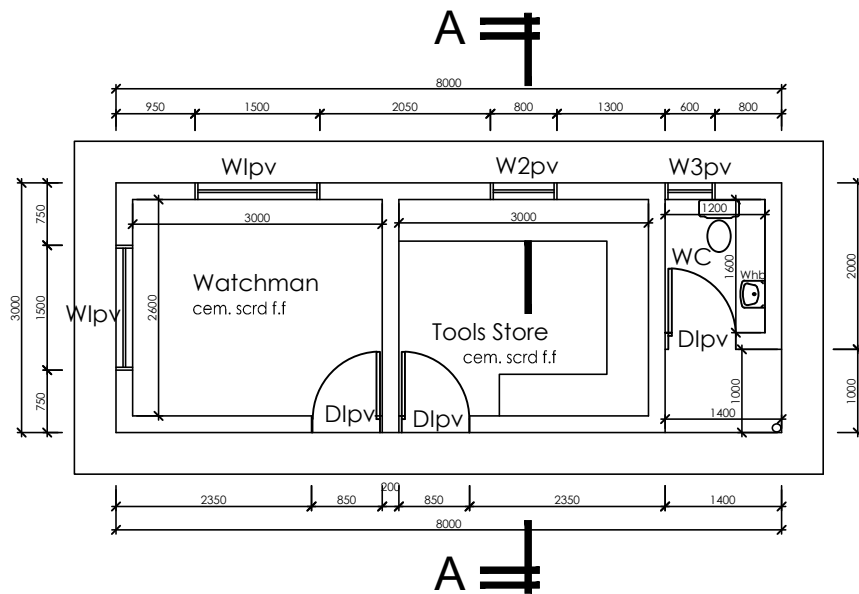
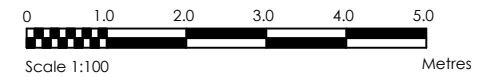
FRONT ELEVATION



SIDE 1 ELEVATION



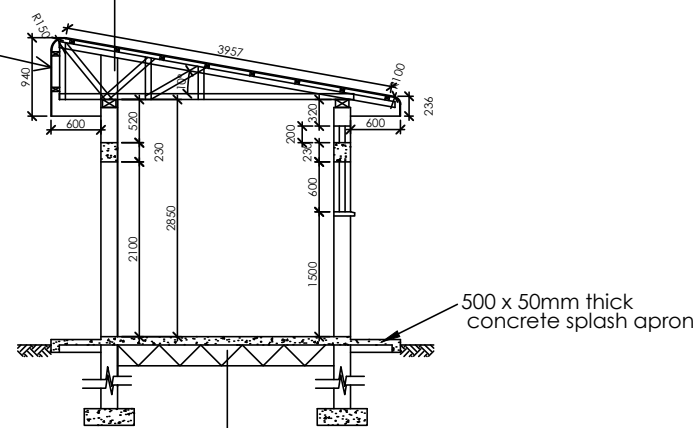
SIDE 2 ELEVATION



PLAN LAYOUT

ROOF NOTES.
 10° Roof Pitch of Prepainted I. Sheets
 Supplied with matching angle clips
 75x50mm Timber purlins.
 100x50mm Rafter with ties and struts on
 150x50mm Tie beam on
 100x75mm Wall plate
 secured by steel straps at 1000mm c/c

Matching sheet cladding
 on 75 x 50mm Purlins
 nailed to trusses



FOUNDATION NOTES.
 50mm cement sand screed (1:4mix) on
 100mm concrete slab (1:3:6mix agg) on
 200mm Hardcore 64mm agg on
 Well compacted marram soil

SECTION A-A

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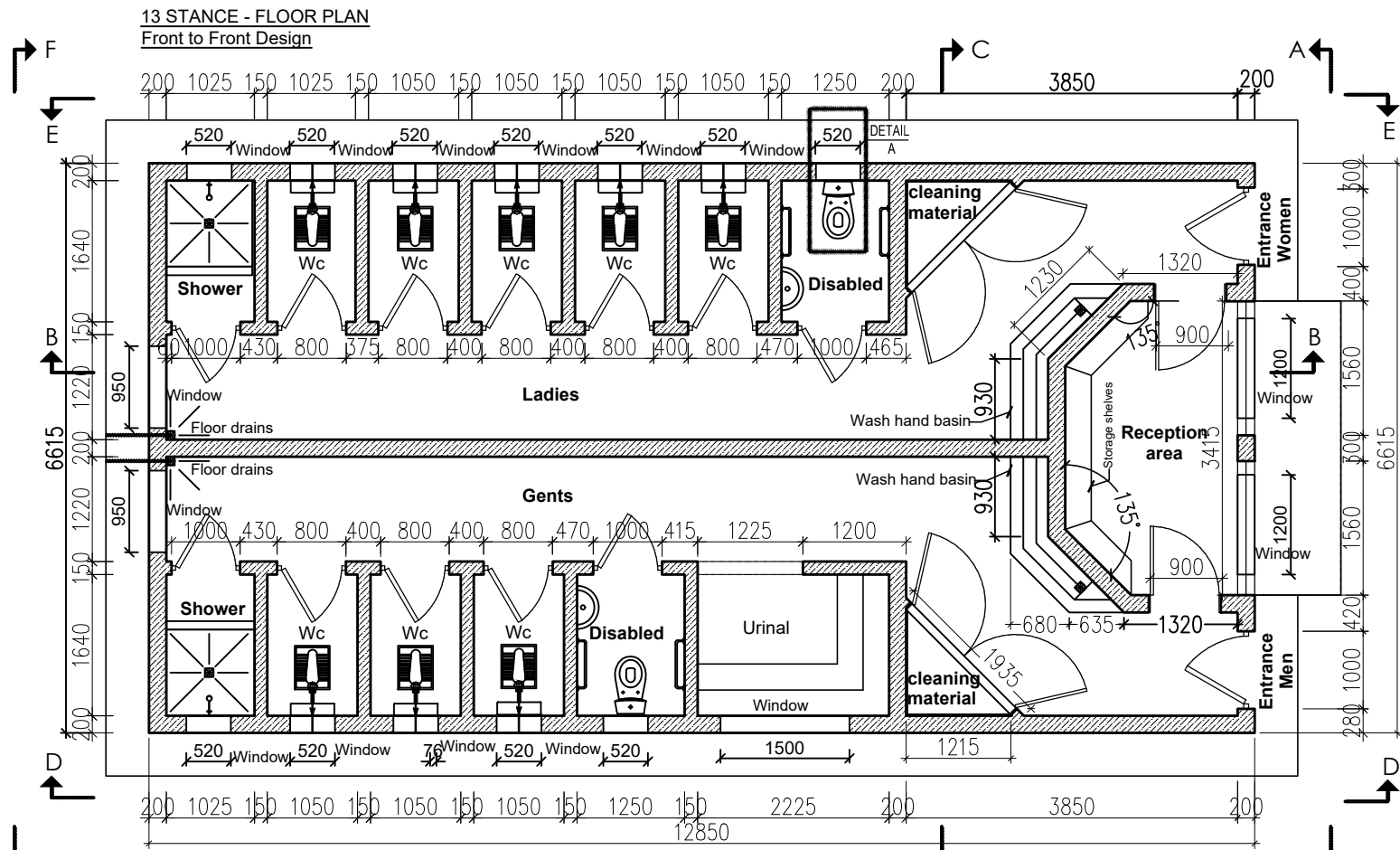
PROJECT
INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT

DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

DETAILED ENGINEERING DESIGN
 DRAWING TITLE **FAECAL TREATMENT PLANT WARE HOUSE PLAN, ELEVATIONS & SECTION A-A**

SCALE	1:75	DRAWING No.	MWE/LOT3/RUK/S/4.0.0
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DRAWN	MARK	CHECKED	ND
DATE	AUG 2020	APPROVED	CZ

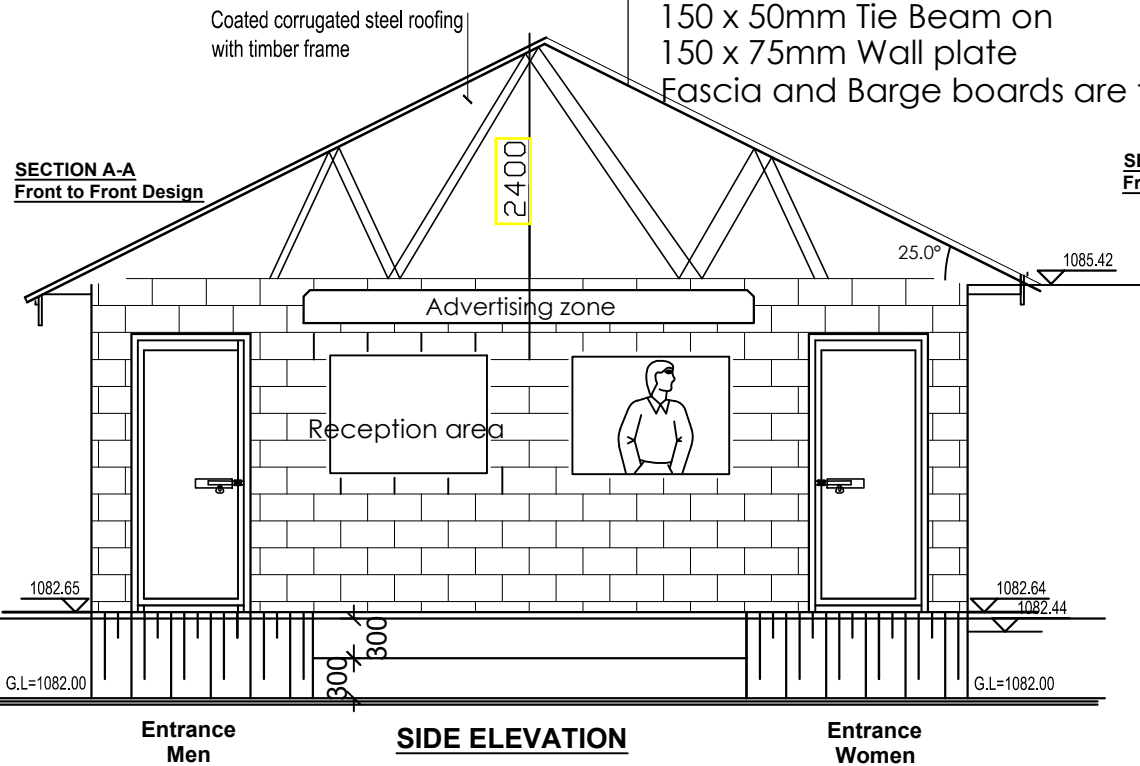


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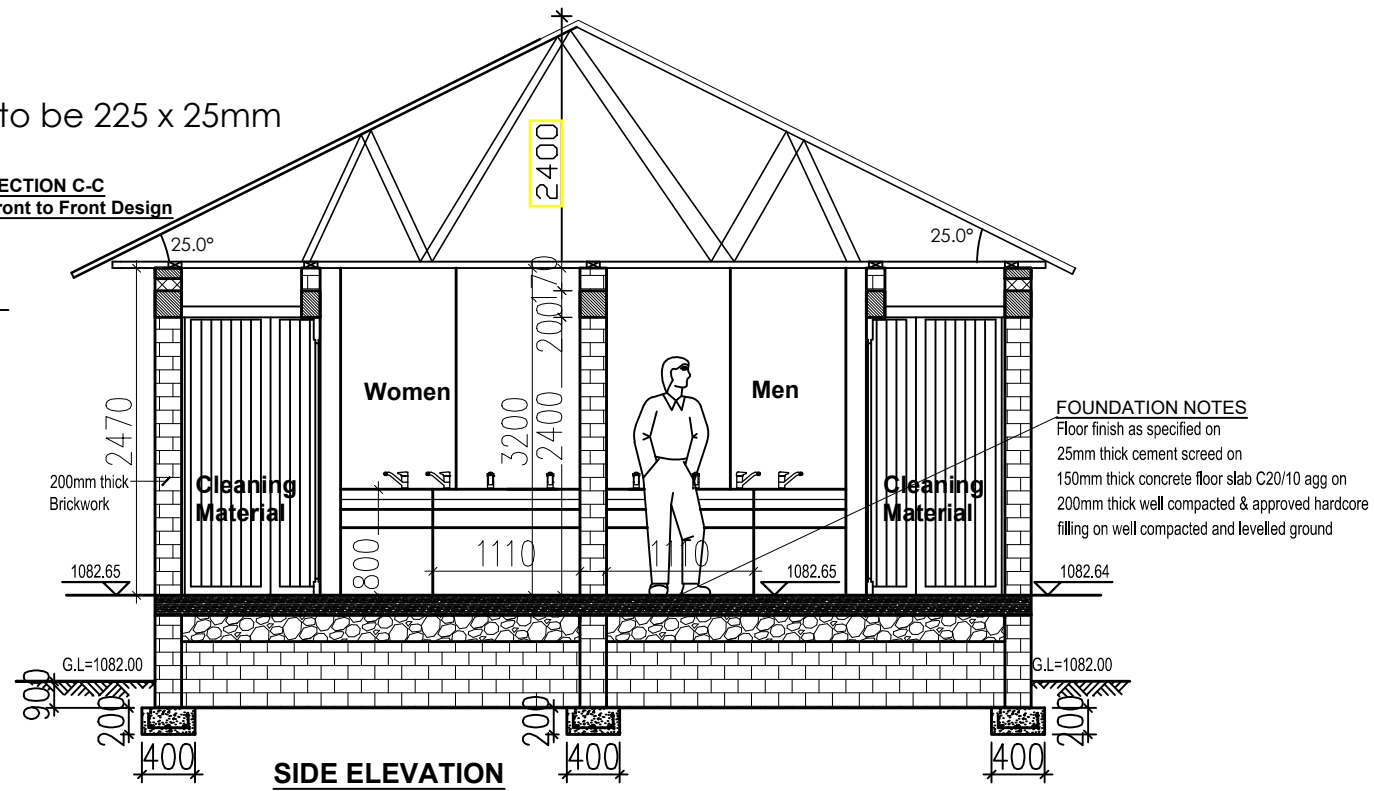
1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.

Roof pitch 25°
pre-painted roofing sheets on
75 x 50mm purlins on
150 x 50mm Rafters at 1800mm c/c with
150 x 50mm struts and ties on
150 x 50mm Tie Beam on
150 x 75mm Wall plate
Fascia and Barge boards are to be 225 x 25mm

SECTION A-A
Front to Front Design



SECTION C-C
Front to Front Design




FOUNDATION NOTES
Floor finish as specified on
25mm thick cement screed on
150mm thick concrete floor slab C20/10 agg on
200mm thick well compacted & approved hardcore
filling on well compacted and levelled ground

CLIENT



THE REPUBLIC OF UGANDA
MINISTRY OF WATER AND ENVIRONMENT
DIRECTORATE OF WATER DEVELOPMENT

CO-FINANCED BY:



WORLD BANK & GOVERNMENT OF UGANDA

PROJECT
INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT (IWMDP)

DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

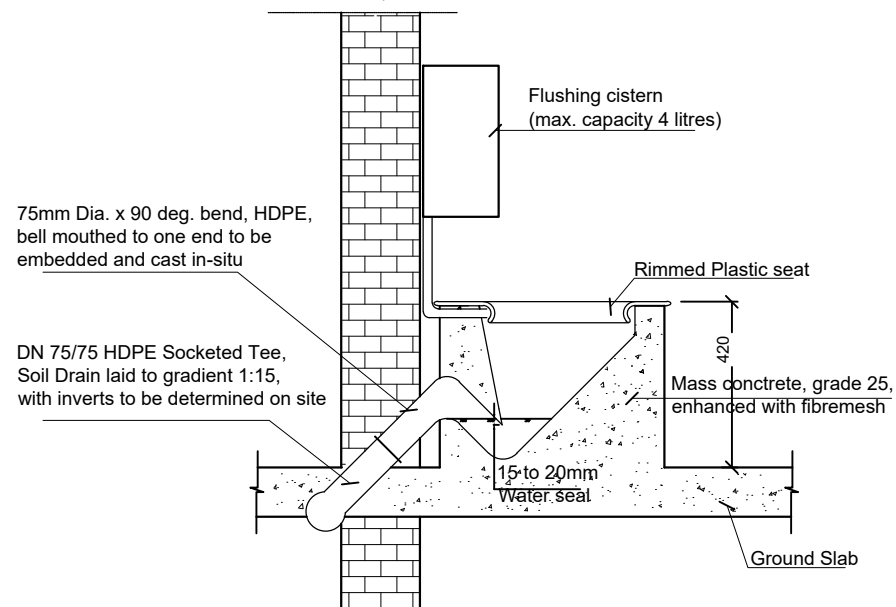
CONTRACTOR

DRAWINGS

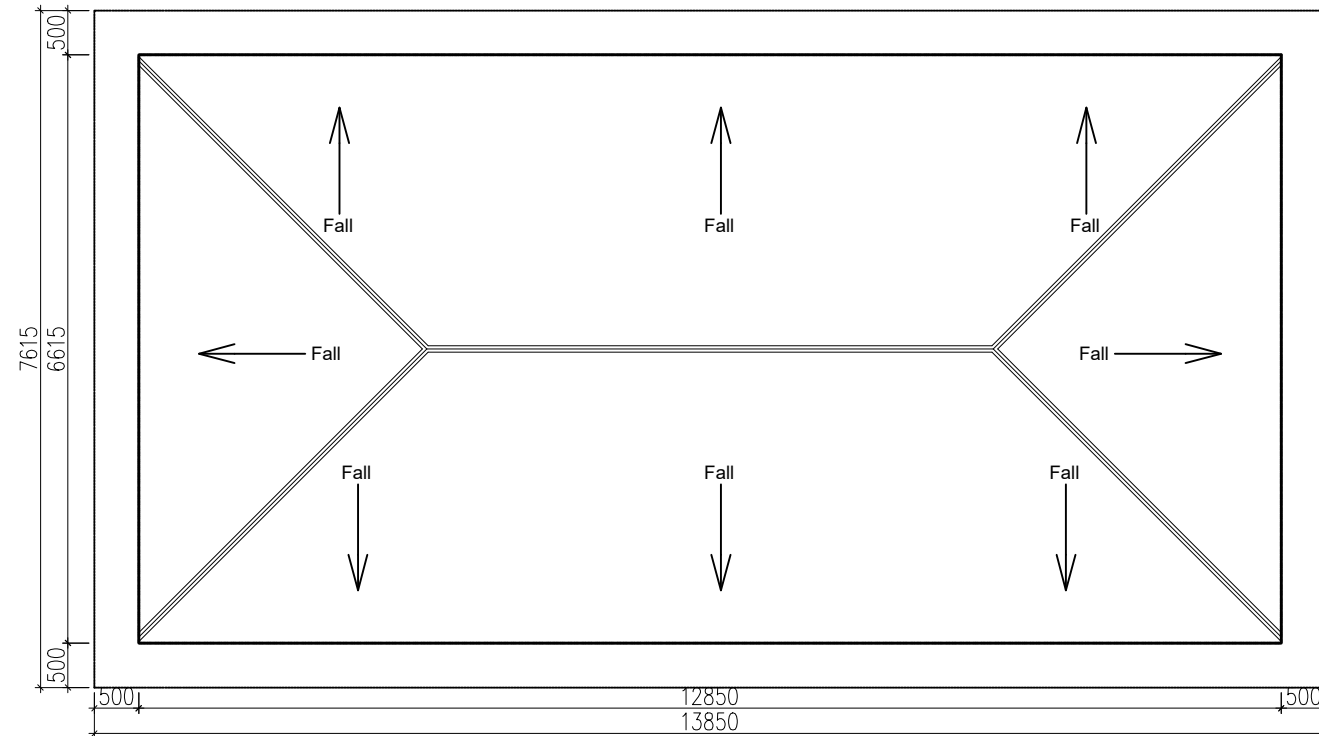
DRAWING TITLE **13-STANCES WATERBORNE TOILET TOILET PLAN & ELEVATION**
FOR, Kebisoni and Nyamayenjo Markets

SCALE As show DRAWING No. MWE/LOT3/RUK/S/5.0.0
SURVEYED WANG DESIGNED ODE
DRAWN MARK CHECKED
DATE AUG 2020 APPROVED M.O

Detail A Scale 1:20

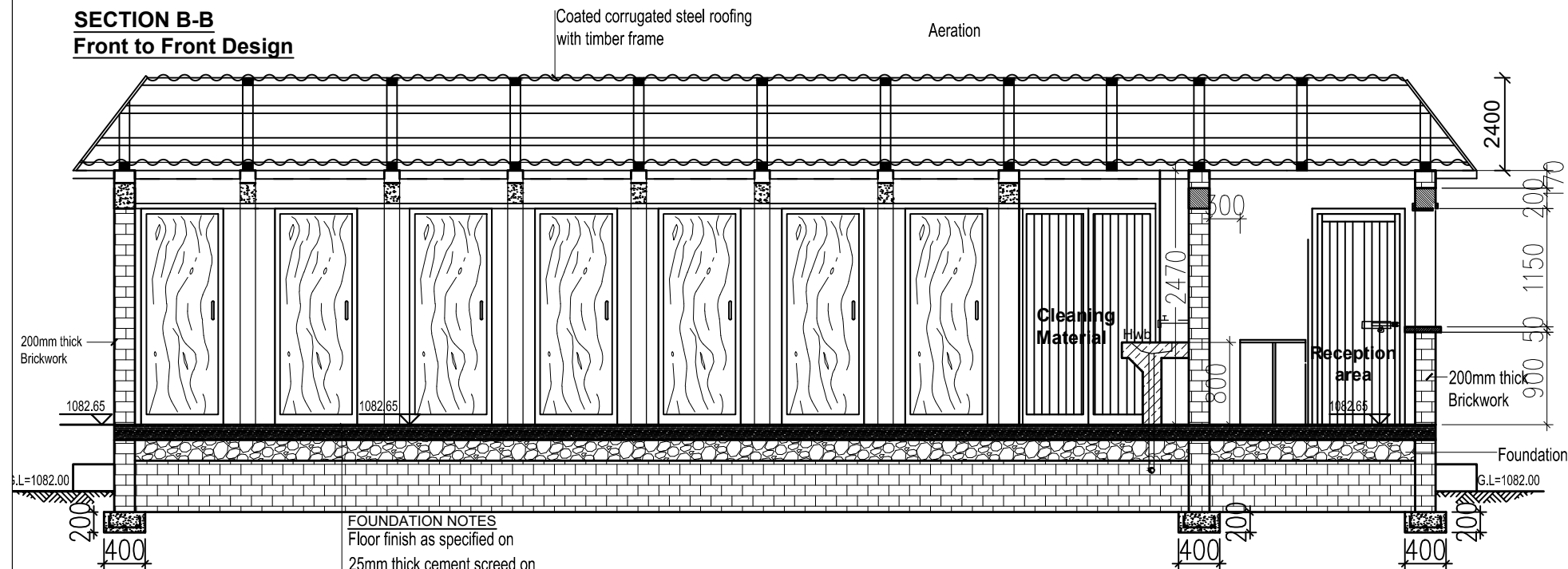


**ROOF PLAN
Front to Front Design**



ROOF PLAN

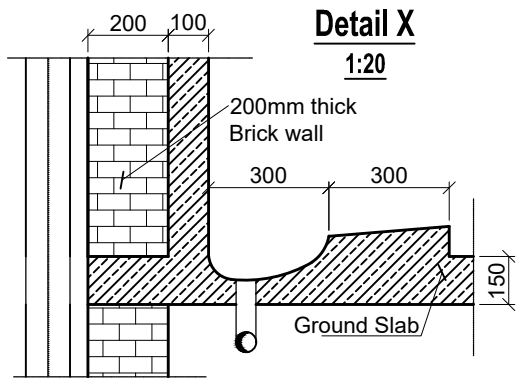
**SECTION B-B
Front to Front Design**



SIDE ELEVATION

FOUNDATION NOTES
 Floor finish as specified on
 25mm thick cement screed on
 150mm thick concrete floor slab C20/1012mm agg on
 200mm thick well compacted & approved hardcore filling on
 50mm concrete blinding


**Detail X
1:20**



NOTES


1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.

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INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT (IWMDP)

DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

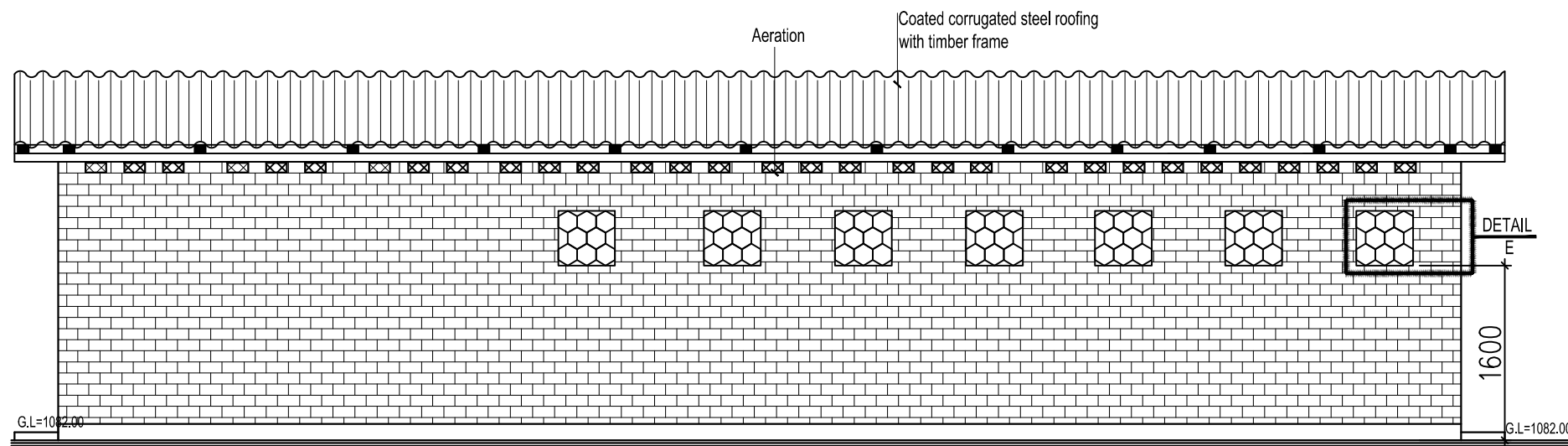
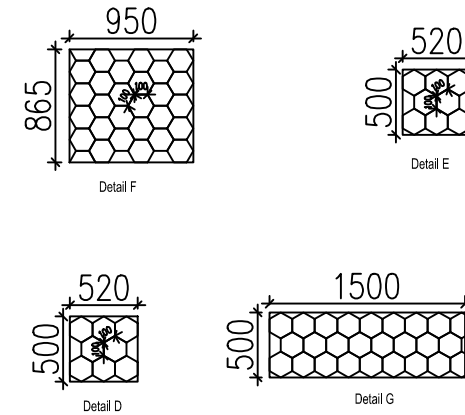
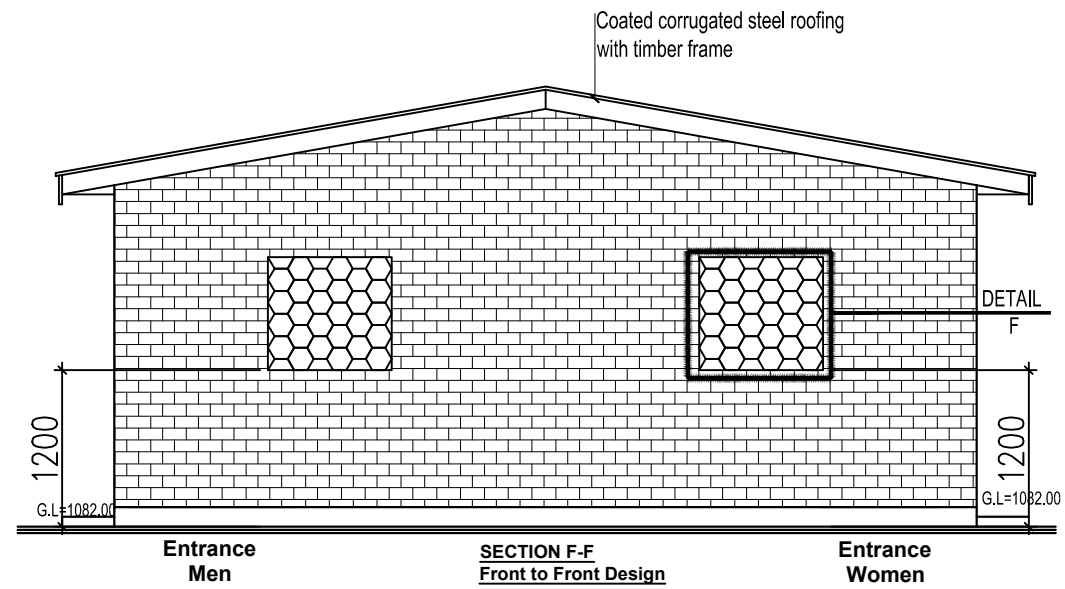
CONSULTANTS

CONTRACTOR

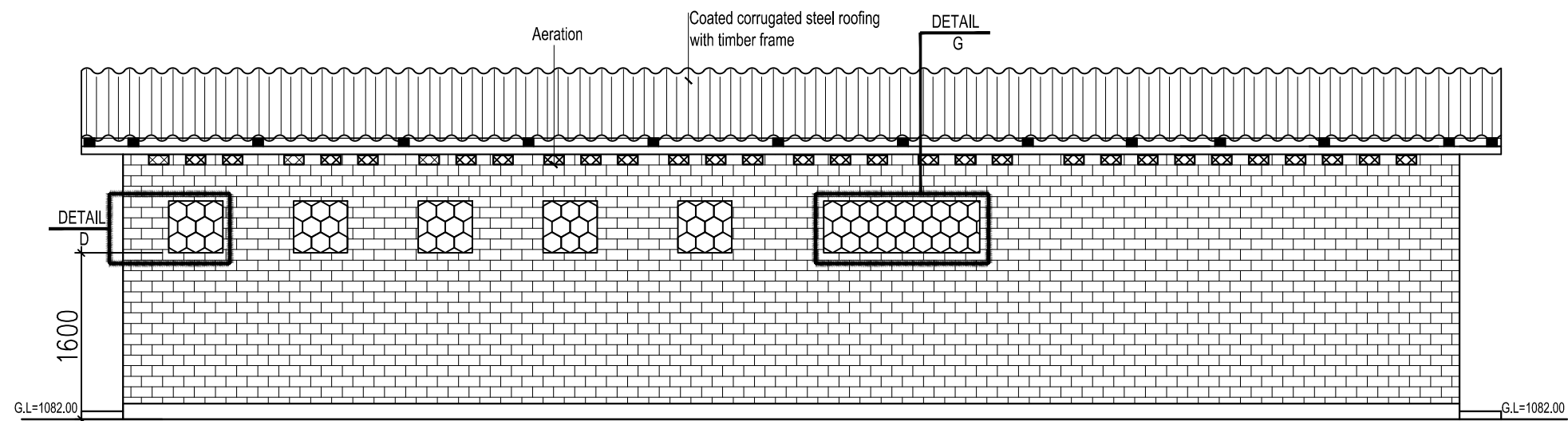
DRAWINGS

DRAWING TITLE **13-STANCES WATERBORNE TOILET ROOF PLAN & SIDE ELEVATION**
 FOR, Kebisoni and Nyamayenjo Markets

SCALE	As show	DRAWING No.	MWE/LOT3/RUK/S/5.0.1
SURVEYED	WANG	DESIGNED	ODE
DRAWN	MARK	CHECKED	
DATE	AUG 2020	APPROVED	M.O



SECTION E-E
Front to Front Design



SECTION D-D
Front to Front Design

NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.

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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

CONTRACTOR

DRAWINGS

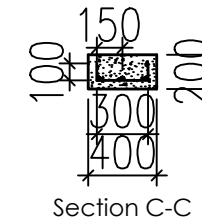
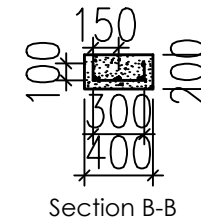
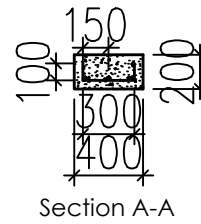
DRAWING TITLE
13-STANCES WATERBORNE TOILET SIDE ELEVATION & DETAILS FOR, Kebisoni and Nyamayenje Markets

SCALE	As show	DRAWING No.	MWE/LOT3/RUK/S/5.0.2
SURVEYED	WANG	DESIGNED	ODE
DRAWN	MARK	CHECKED	
DATE	AUG 2020	APPROVED	M.O

Materials sheet

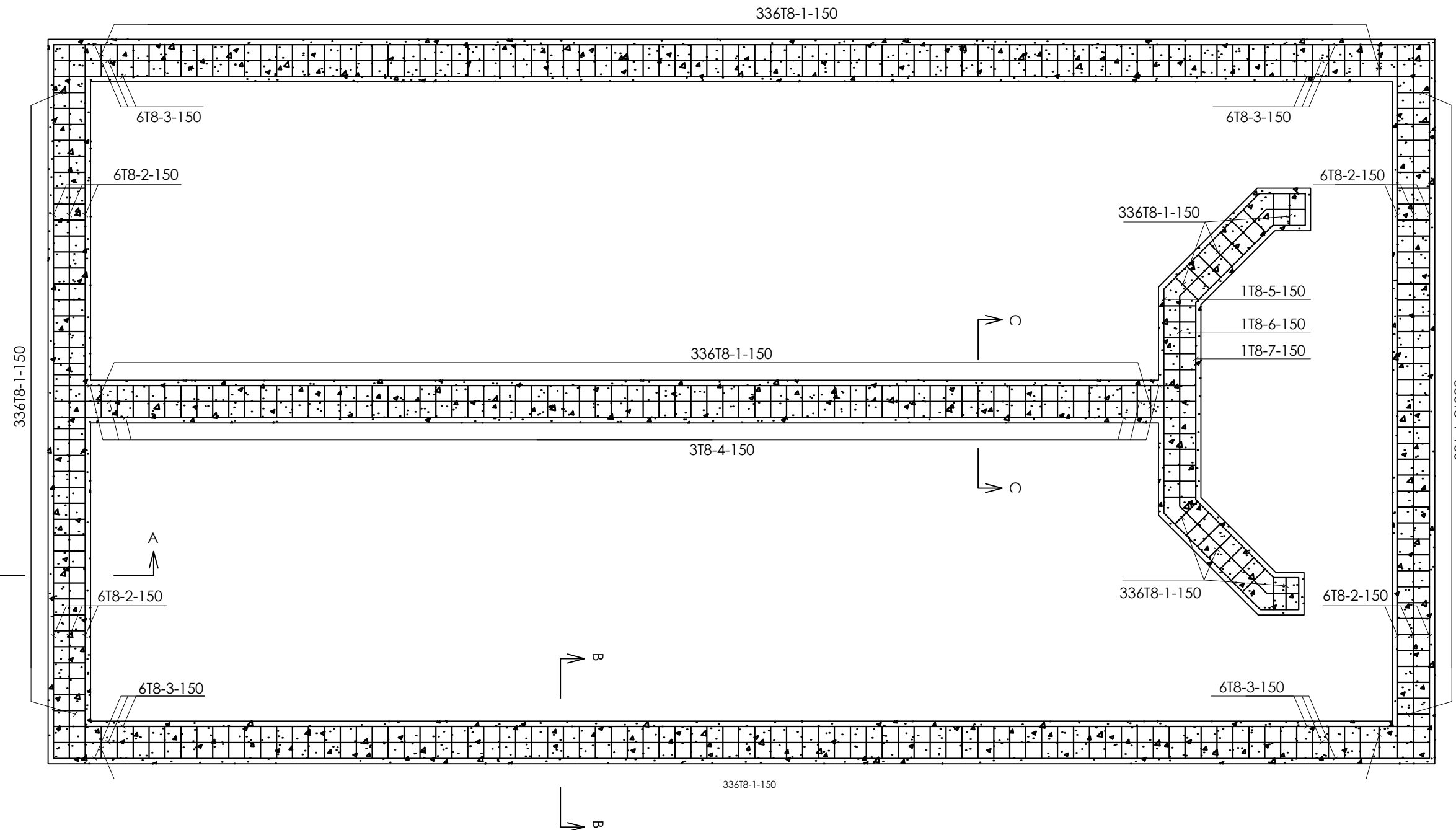
STEEL BARS PLAN FOR TOILETS

Item	Specification	G.N.	Quantity	Unit Length (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Shape
1	T8	1	336	168000	300	100	100			B A C
2	T8	2	6	41490	6715	100	100			B A C
3	T8	2	6	78900	12950	100	100			B A C
4	T8	1	3	32850	10750	100	100			B A C
5	T8	1	1	5455	430	1275	2105	1285	360	A B C D E
6	T8	1	1	4960	370	1150	1980	1165	295	A B C D E
7	T8	1	1	4460	305	1025	1855	1040	235	A B C D E




NOTES

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2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.




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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

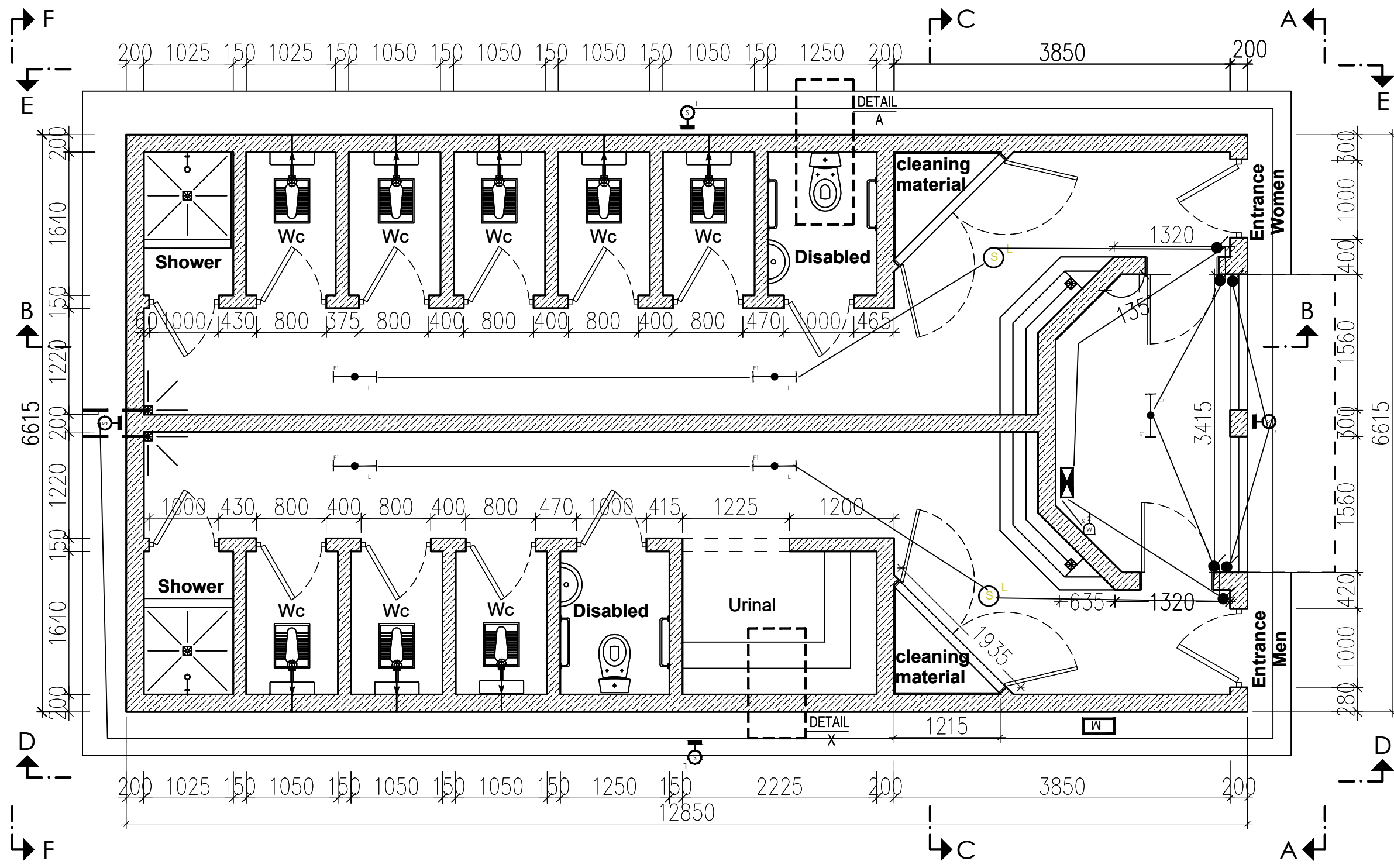
CONSULTANTS

CONTRACTOR

DRAWINGS

DRAWING TITLE **13-STANCES WATERBORNE TOILET**
TOP PLAN & SECTION A-A, B-B, C-C & MATERIALS SHEET OF REINFORCEMENT
FOR, Kibusi and Nyamayenjo Markets

SCALE	As show	DRAWING No.	MWE/LOT3/RUK/S/5.0.3
SURVEYED	WANG	DESIGNED	ODE
DRAWN	MARK	CHECKED	
DATE	AUG 2020	APPROVED	M.O



NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.



SYMBOL	DESCRIPTION
	100A 8Way Distribution Board
	13A 2gang 3Pin Double socket
	6A 2 gang 2way switch
	UMEME Meter
	1x28W T5 Corrosion Resistant Fluorescent Fitting
	Security Light Bulk Head With LED Lamp
	Pendent Set Light with LED Energy Saving Bulb

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INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT (IWMDP)

DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

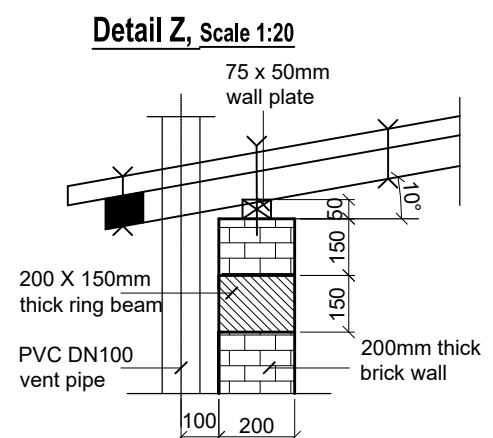
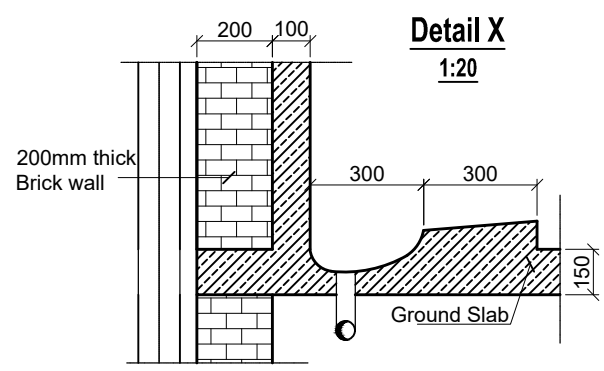
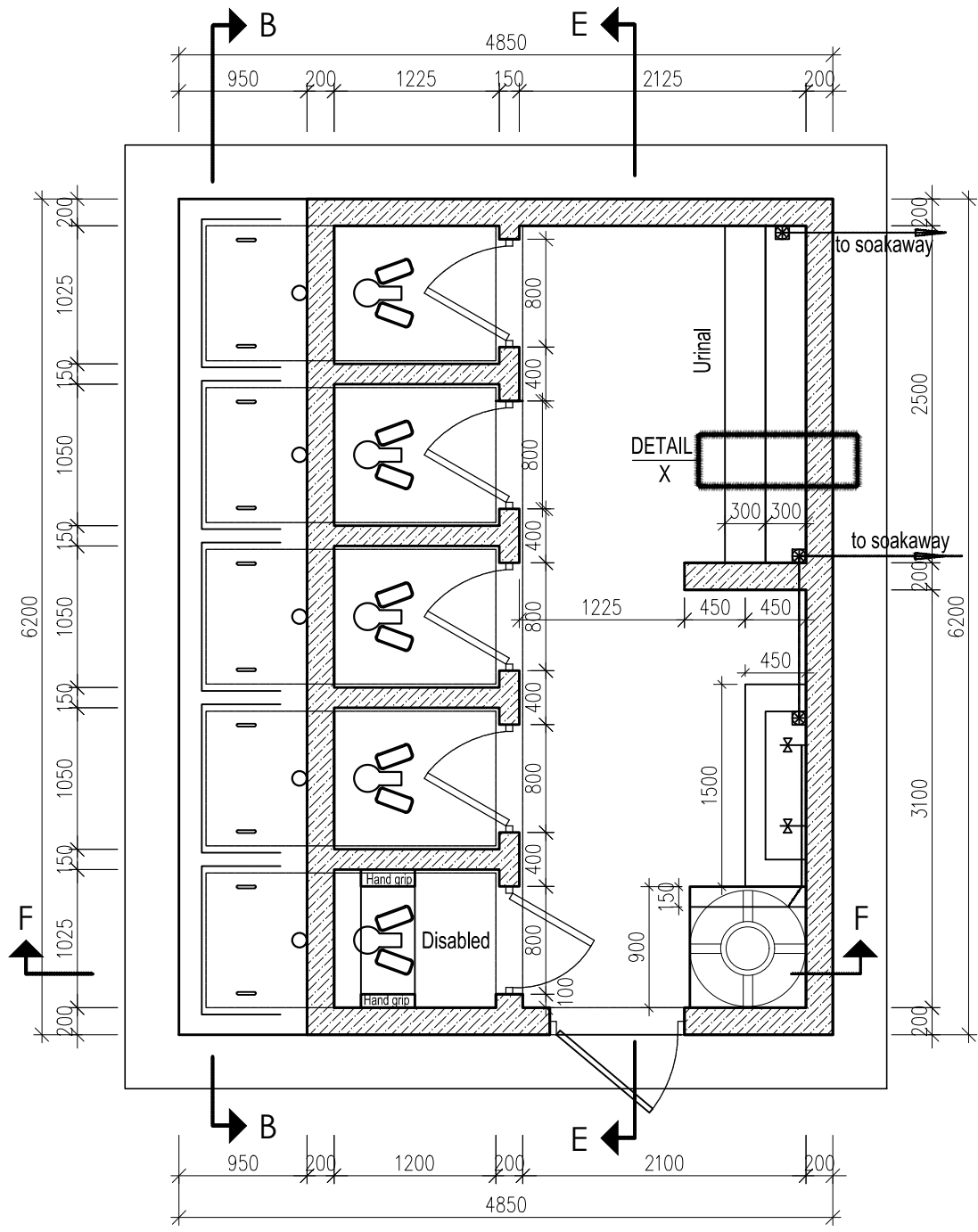
CONSULTANTS

CONTRACTOR

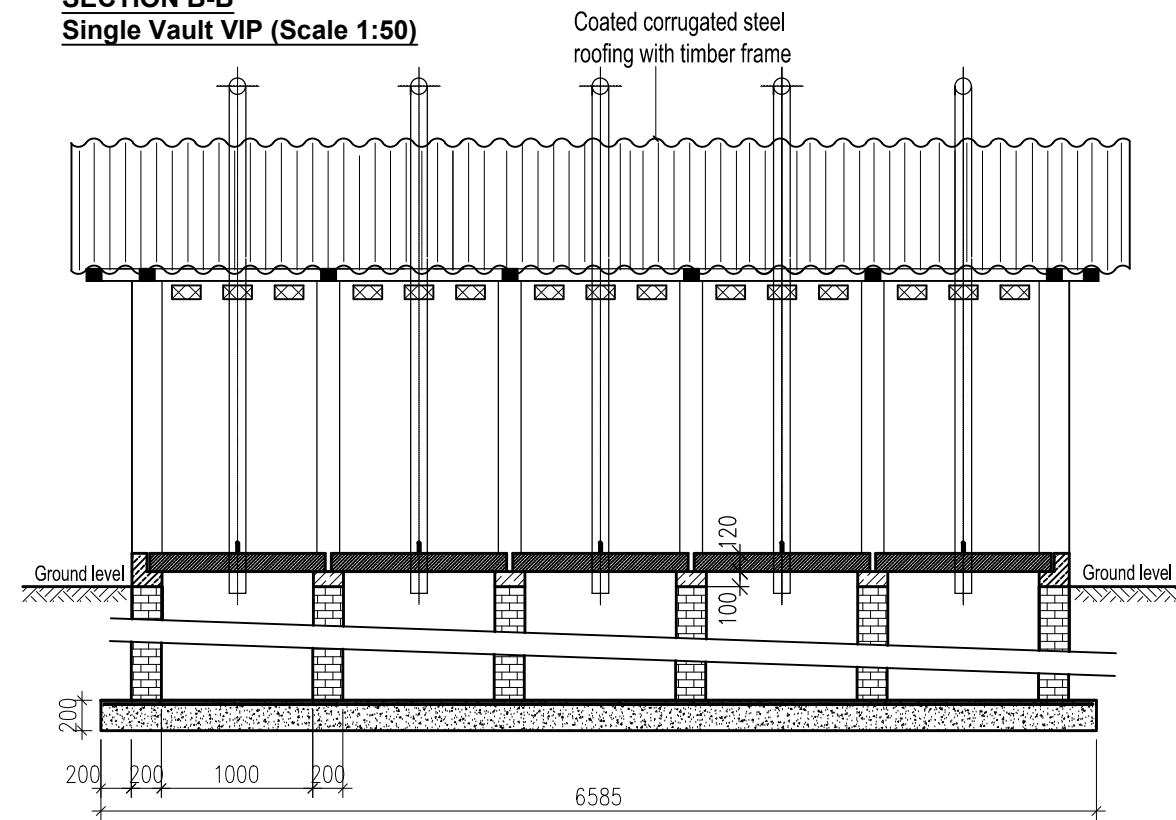
DRAWING TITLE
PUBLIC TOILET LIGHTING & SOCKET PLAN FOR A 13-STANCES WATERBORNE TOILET FOR, Kebisoni and Nyamayenjo Markets

SCALE	As show	DRAWING No.	MWE/LOT3/RUK/S/5.0.4
SURVEYED	WANG	DESIGNED	ODE
DRAWN	MARK	CHECKED	
DATE	AUG 2020	APPROVED	M.O

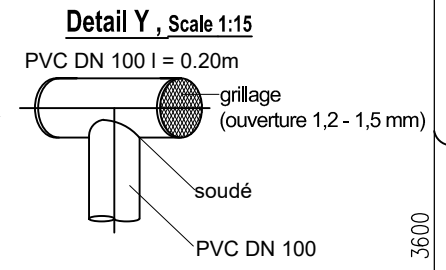
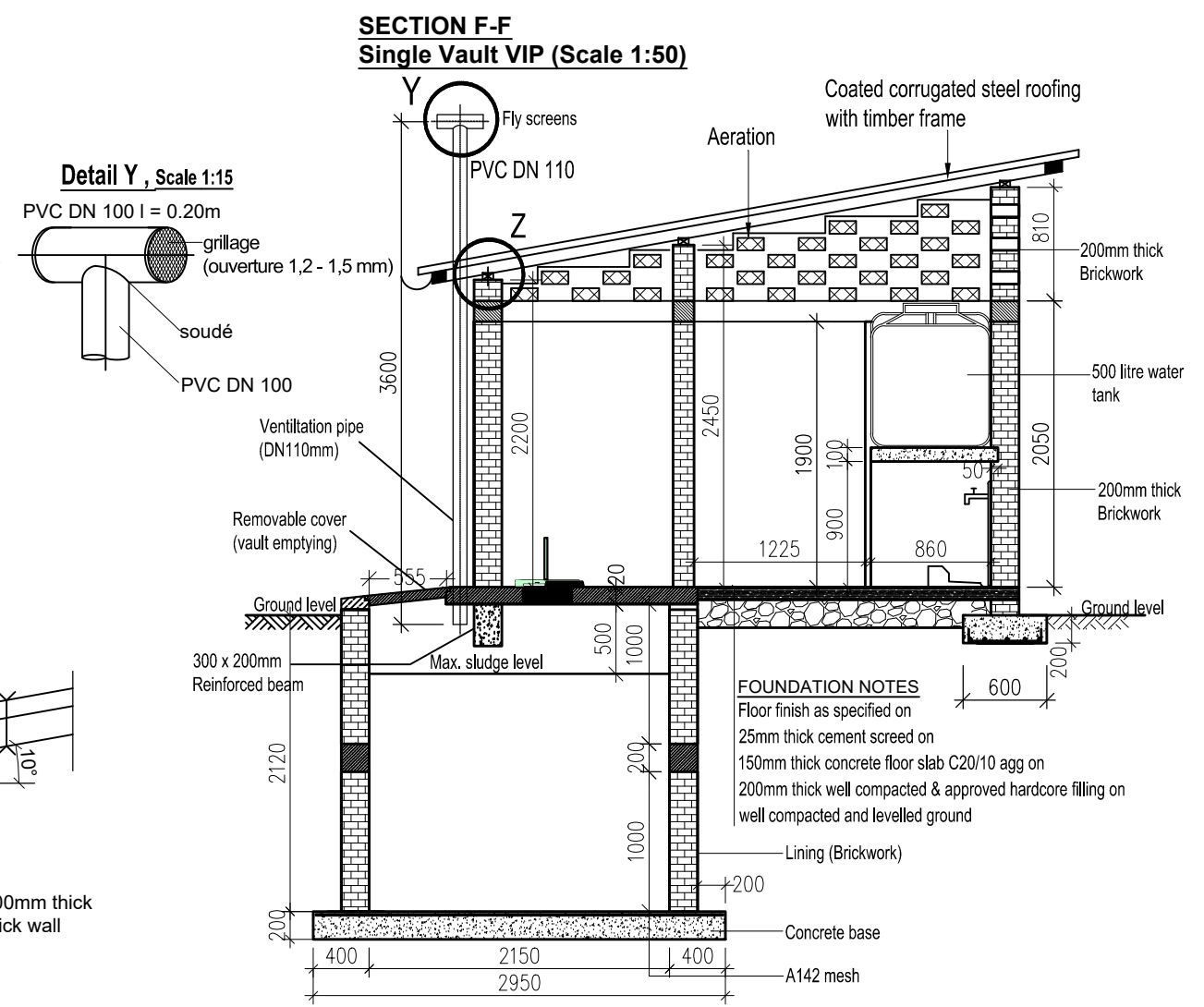
PUBLIC TOILET LIGHTING & SOCKET PLAN



**SECTION B-B
Single Vault VIP (Scale 1:50)**



**SECTION F-F
Single Vault VIP (Scale 1:50)**



NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.

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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

DETAILED ENGINEERING DESIGN

DRAWING TITLE: **6 STANCE SINGLE VAULT VIP-BOYS**
FLOOR PLAN, SECTION B-B & F-F, DETAIL X, Y & Z
 FOR: Primary Schools of Nyakibale Upper, Nyakibale Lower, Kinyansano Boarding and Kahororo.

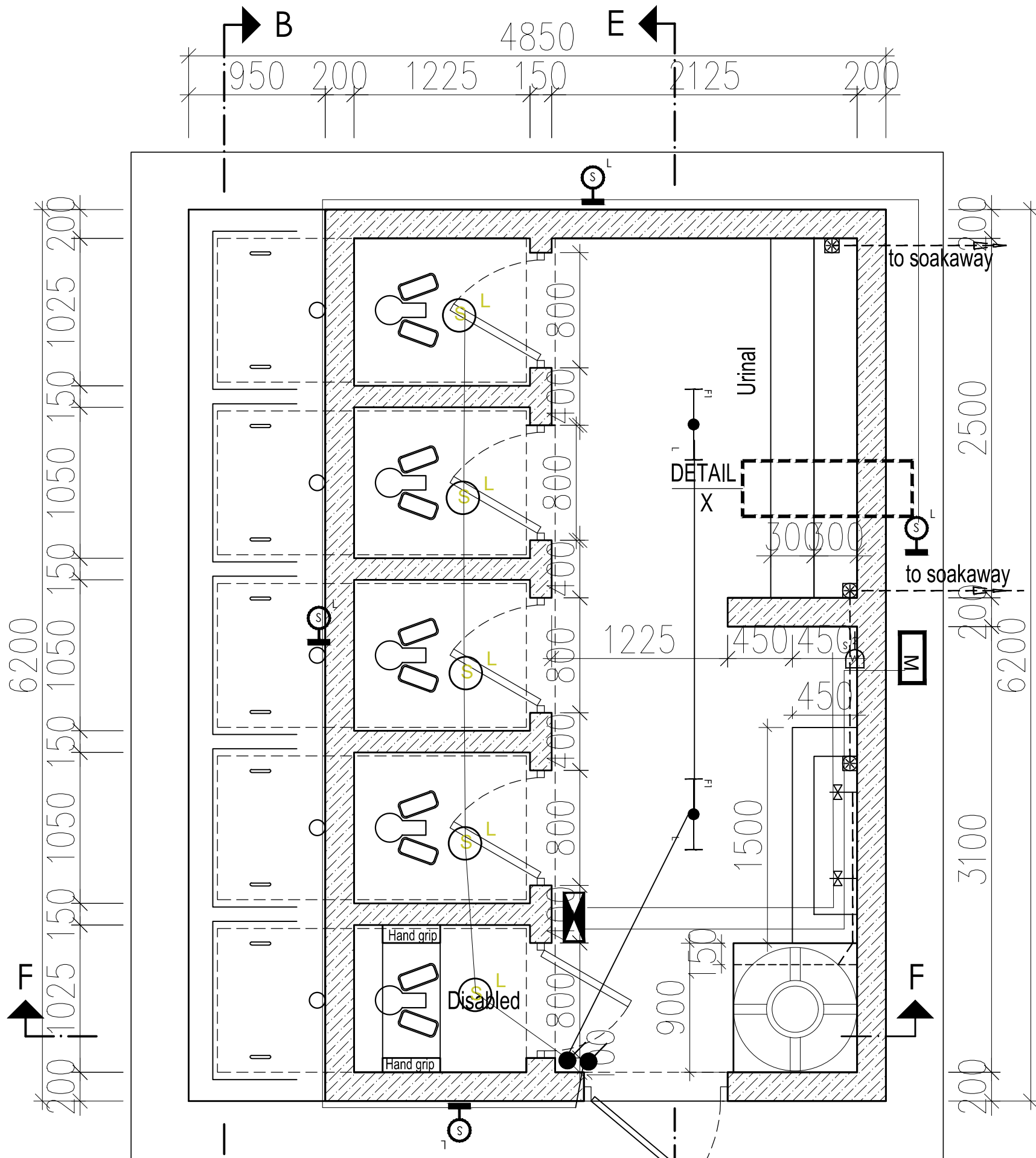
SCALE: AS SHOWN DRAWING No. MWE/LOT3/RUK/S/6.0.0

SURVEYED: DESIGNED:

DRAWN: MARK.A CHECKED:

DATE: AUG 2020 APPROVED:

6 STANCE - BOYS
Single Vault VIP Design (Scale 1:50)



NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.



SYMBOL	DESCRIPTION
	100A 8Way Distribution Board
	13A 2gang 3Pin Double socket
	6A 2 gang 2way switch
	UMEME Meter
	1x28W T5 Corrosion Resistant Fluorescent Fitting
	Security Light Bulk Head With LED Lamp
	Pendent Set Light with LED Energy Saving Bulb

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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

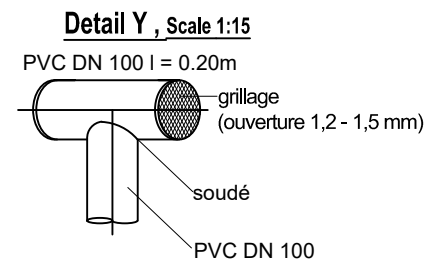
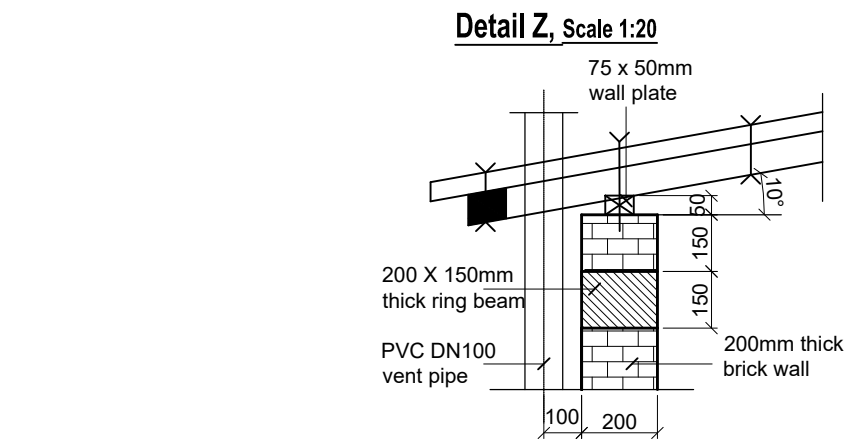
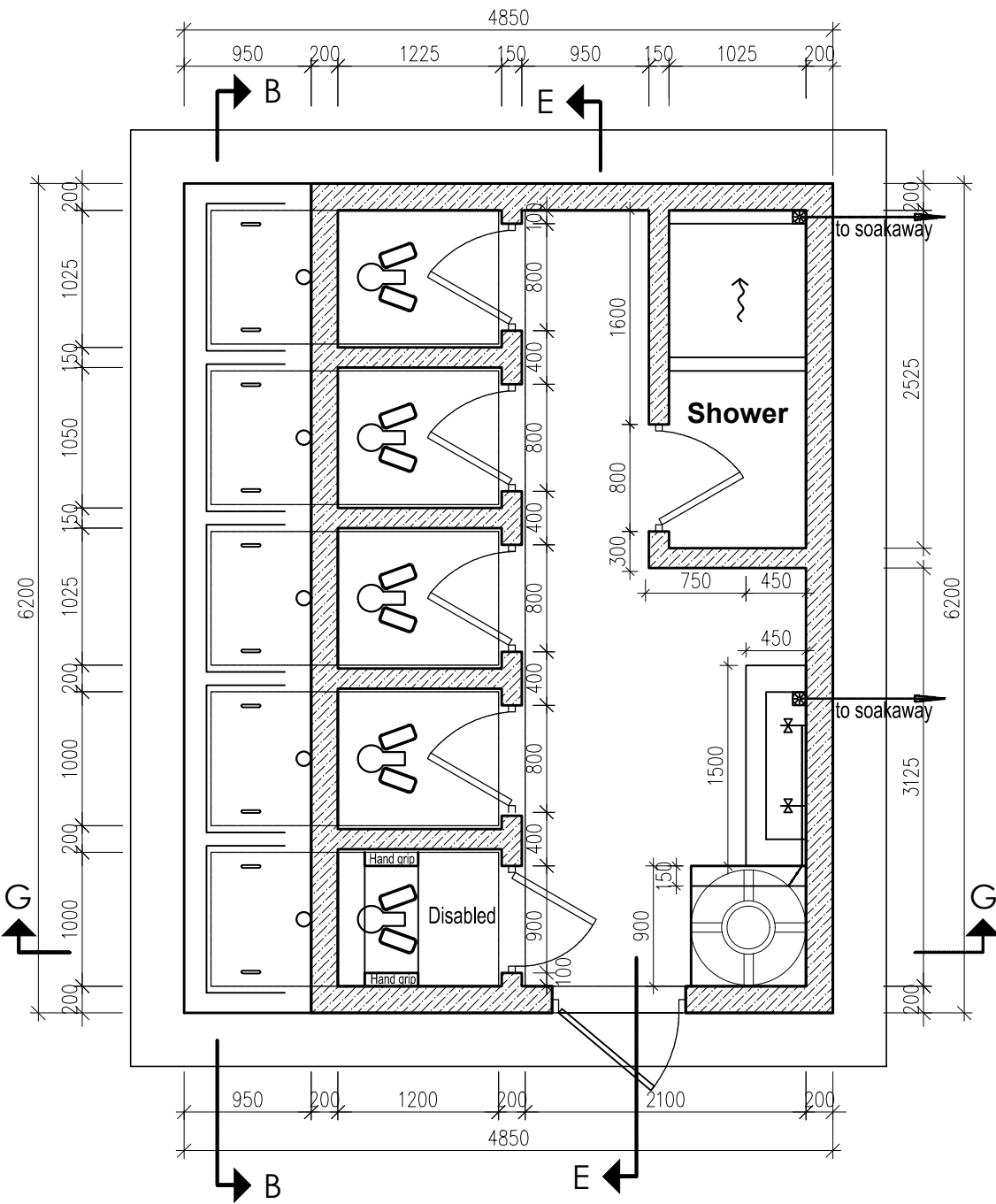
CONSULTANTS

CONTRACTOR

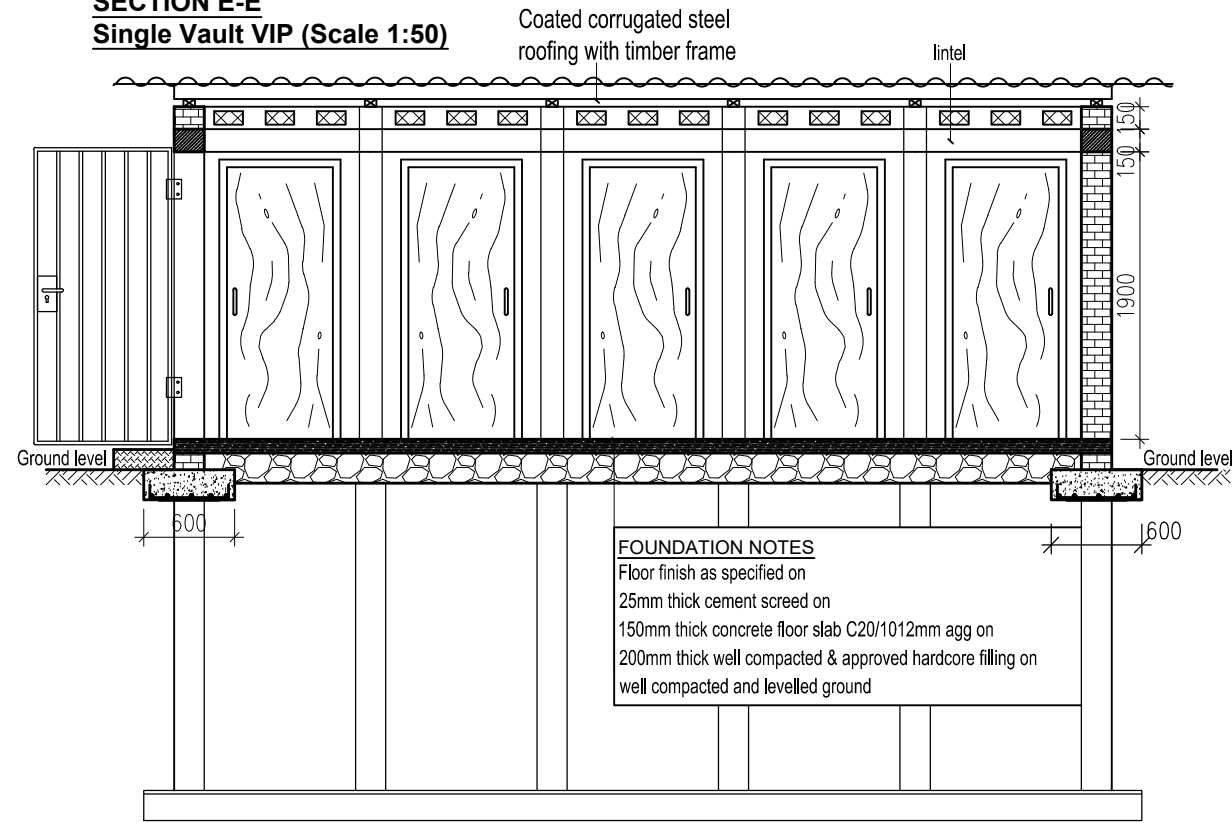
DRAWINGS

DRAWING TITLE **PUBLIC TOILET LIGHTING & SOCKET PLAN FOR A 6-STANCE SINGLE VAULT VIP SCHOOL TOILET FOR BOYS**

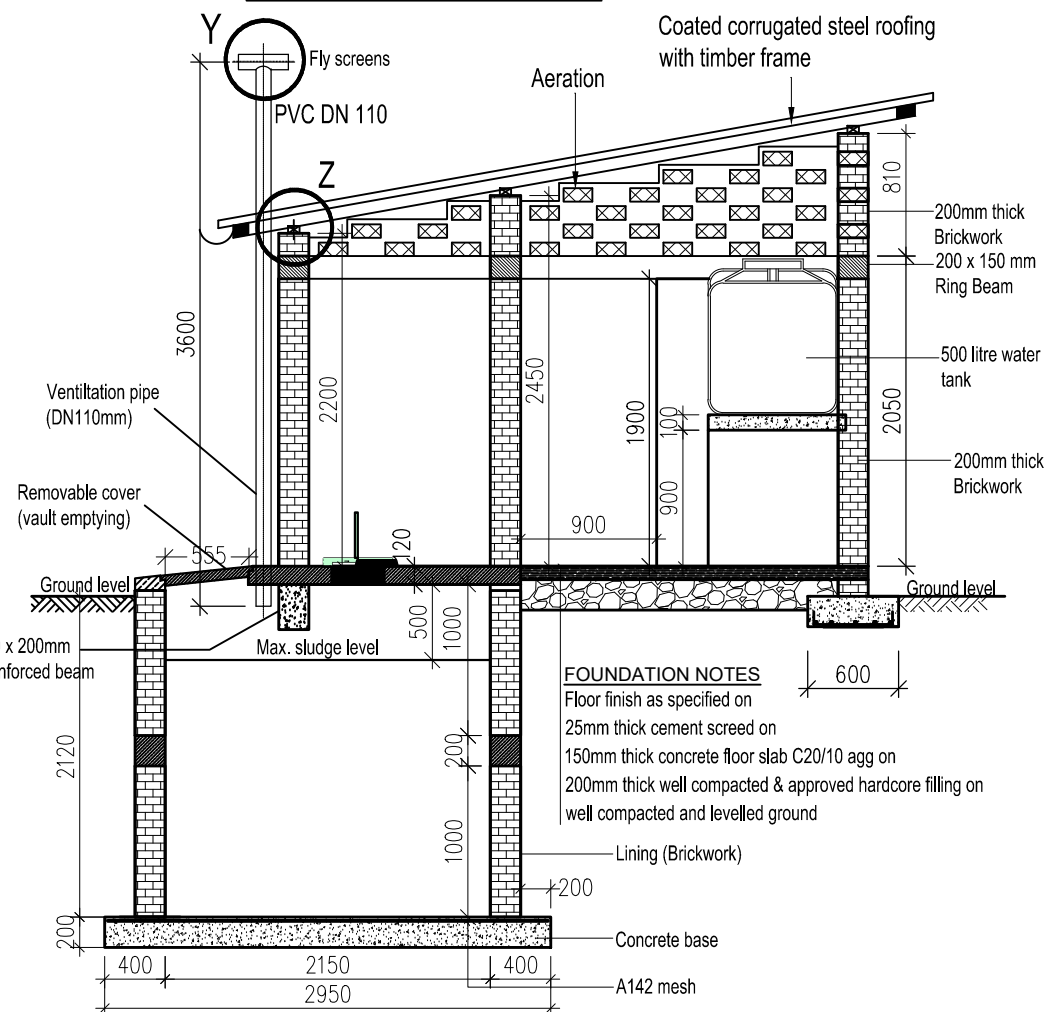
SCALE	As show	DRAWING No.	MWE/LOT3/RUK/S/6.0.1
SURVEYED	WANG	DESIGNED	ODE
DRAWN	MARK	CHECKED	
DATE	AUG 2020	APPROVED	M.O



**SECTION E-E
Single Vault VIP (Scale 1:50)**



**SECTION G-G
Single Vault VIP (Scale 1:50)**



NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.

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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

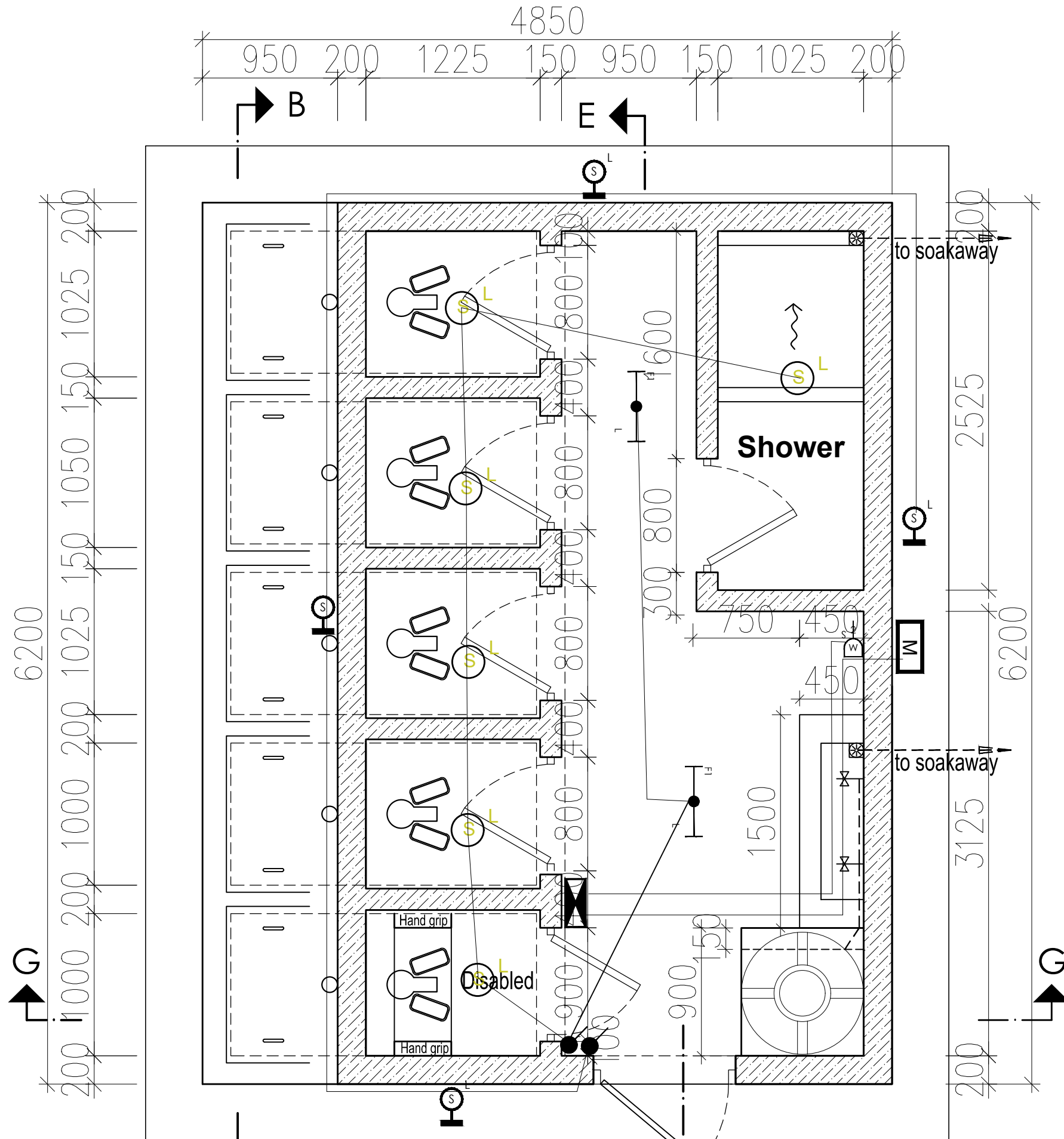
CONSULTANTS

DETAILED ENGINEERING DESIGN

DRAWING TITLE **6 STANCE SINGLE VAULT VIP-GIRLS**
FLOOR PLAN, SECTION E-E & G-G, DETAIL Y & Z
 FOR: Primary Schools of Nyakibale Upper, Nyakibale Lower, Kinyansano Boarding and Kahororo.

SCALE	AS SHOWN	DRAWING No.	MWE/LOT3/RUK/S/6.0.2
SURVEYED		DESIGNED	
DRAWN	MARK.A	CHECKED	
DATE	AUG 2020	APPROVED	

6 STANCE - GIRLS
Single Vault VIP Design (Scale 1:50)




NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.

SYMBOL	DESCRIPTION
	100A 8Way Distribution Board
	13A 2gang 3Pin Double socket
	6A 2 gang 2way switch
	UMEME Meter
	1x28W T5 Corrosion Resistant Fluorescent Fitting
	Security Light Bulk Head With LED Lamp
	Pendent Set Light with LED Energy Saving Bulb

CLIENT



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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

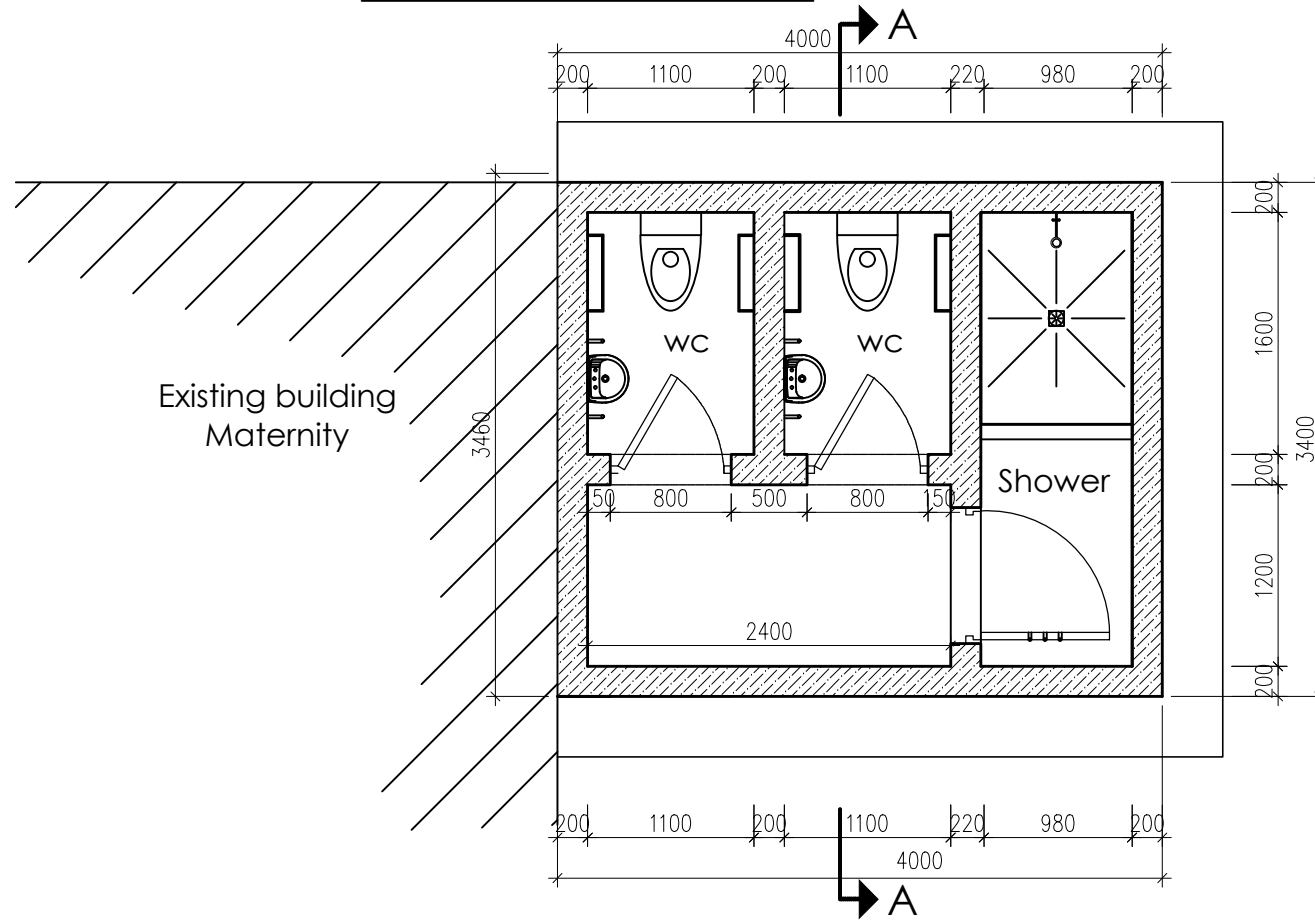
CONTRACTOR

DRAWINGS

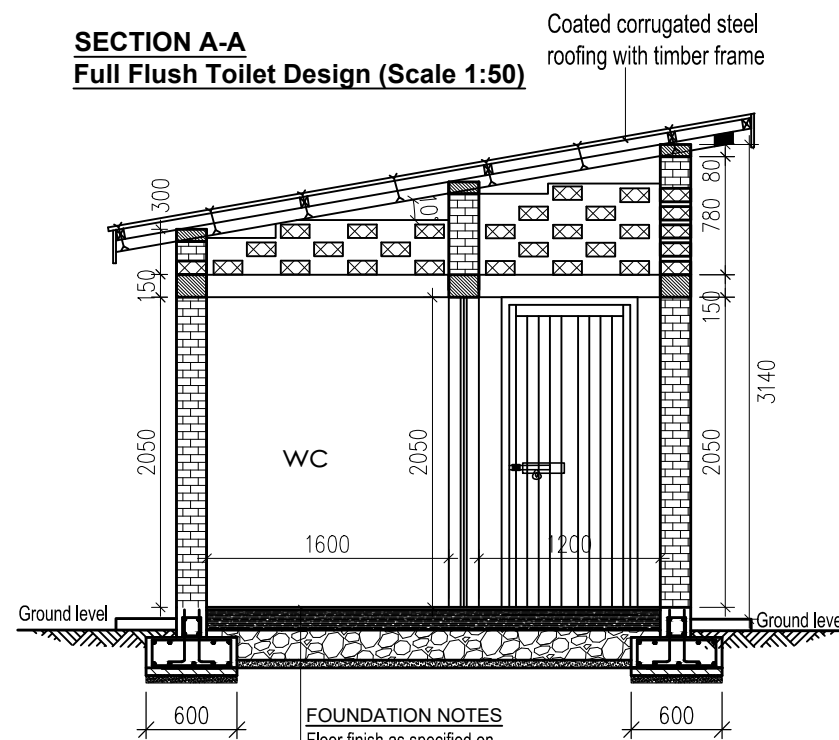
DRAWING TITLE PUBLIC TOILET LIGHTING & SOCKET PLAN FOR A 6-STANCE SINGLE VAULT VIP SCHOOL TOILET FOR GIRLS

SCALE	As show	DRAWING No.	MWE/LOT3/RUK/S/6.0.3
SURVEYED	WANG	DESIGNED	ODE
DRAWN	MARK	CHECKED	
DATE	AUG 2020	APPROVED	M.O

3 STANCE - FLOOR PLAN
Full Flush Toilet Design (Scale 1:50)



SECTION A-A
Full Flush Toilet Design (Scale 1:50)



FOUNDATION NOTES
 Floor finish as specified on
 25mm thick cement screed on
 150mm thick concrete floor slab C20/10 agg on
 200mm thick well compacted & approved hardcore filling on
 50mm concrete blinding

NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.

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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

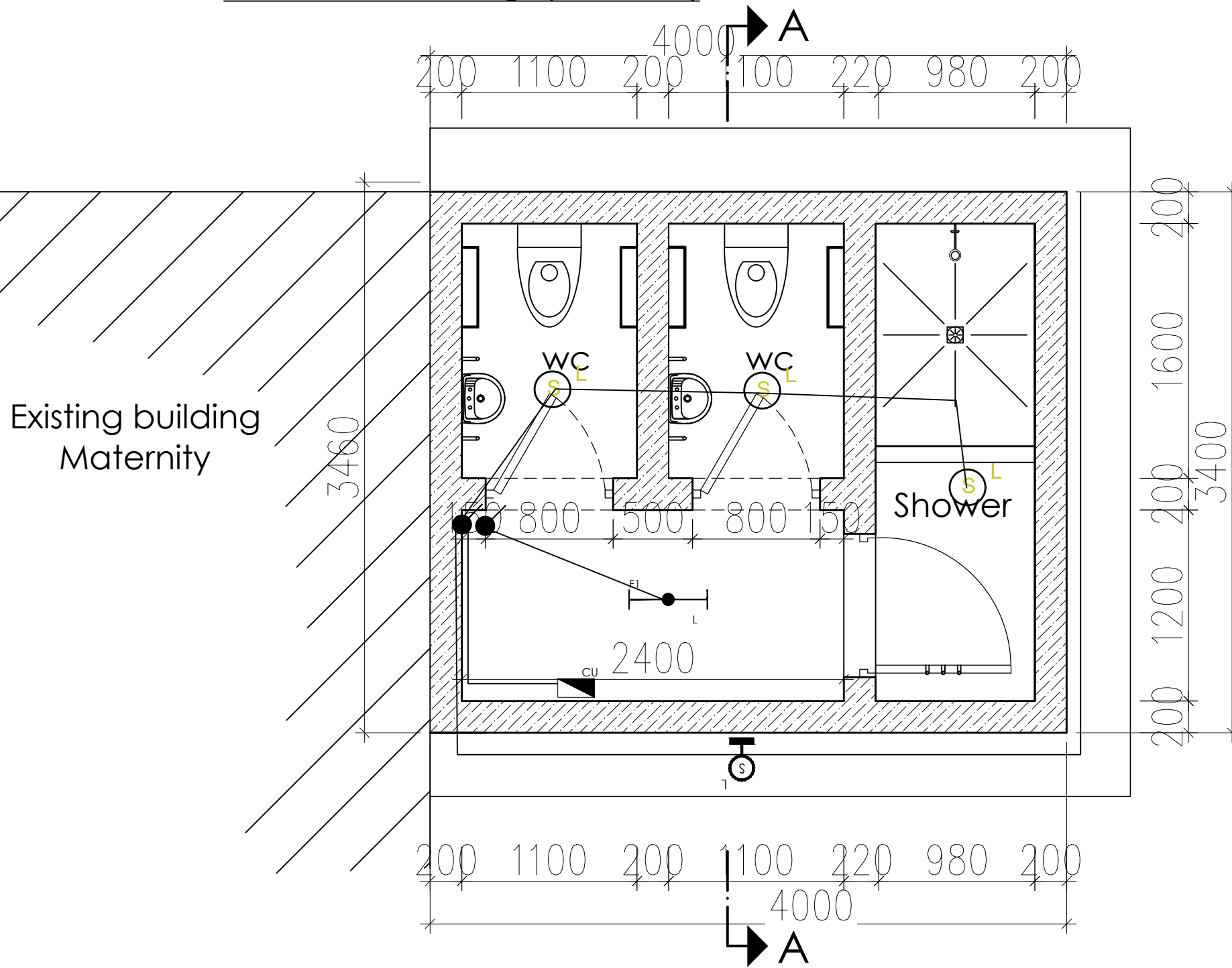
CONSULTANTS

DETAILED ENGINEERING DESIGN

DRAWING TITLE **3 STANCE - WATER BORNE TOILET FLOOR PLAN & SECTION A-A FOR, Nyakibale Hospital and Kakabanda Health Centre**

SCALE	AS SHOWN	DRAWING No.	MWE/LOT3/RUK/S/7.0.0
SURVEYED		DESIGNED	
DRAWN	MARK.A	CHECKED	
DATE	AUG 2020	APPROVED	

3 STANCE - FLOOR PLAN
Full Flush Toilet Design (Scale 1:50)




NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.



SYMBOL	DESCRIPTION
	Consumer Unit
	13A 2gang 3Pin Double socket
	6A 2 gang 2way switch
	UMEME Meter
	1x28W T5 Corrosion Resistant Fluorescent Fitting
	Security Light Bulk Head With LED Lamp
	Pendent Set Light with LED Energy Saving Bulb

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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

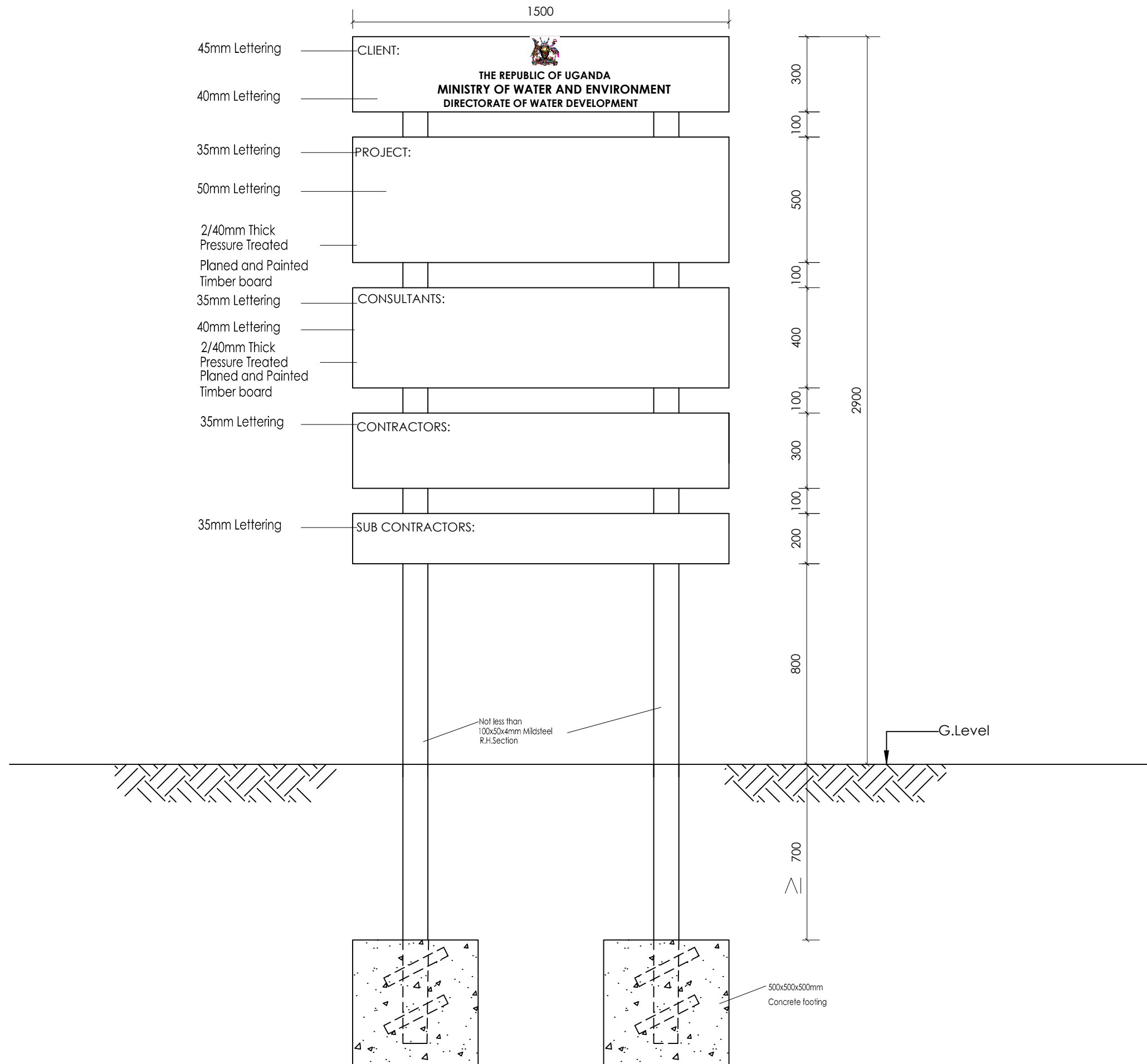
CONSULTANTS

CONTRACTOR

DRAWINGS




DRAWING TITLE PUBLIC TOILET LIGHTING & SOCKET PLAN FOR A 3 STANCE WATERBORNE HEALTH CENTRE TOILET

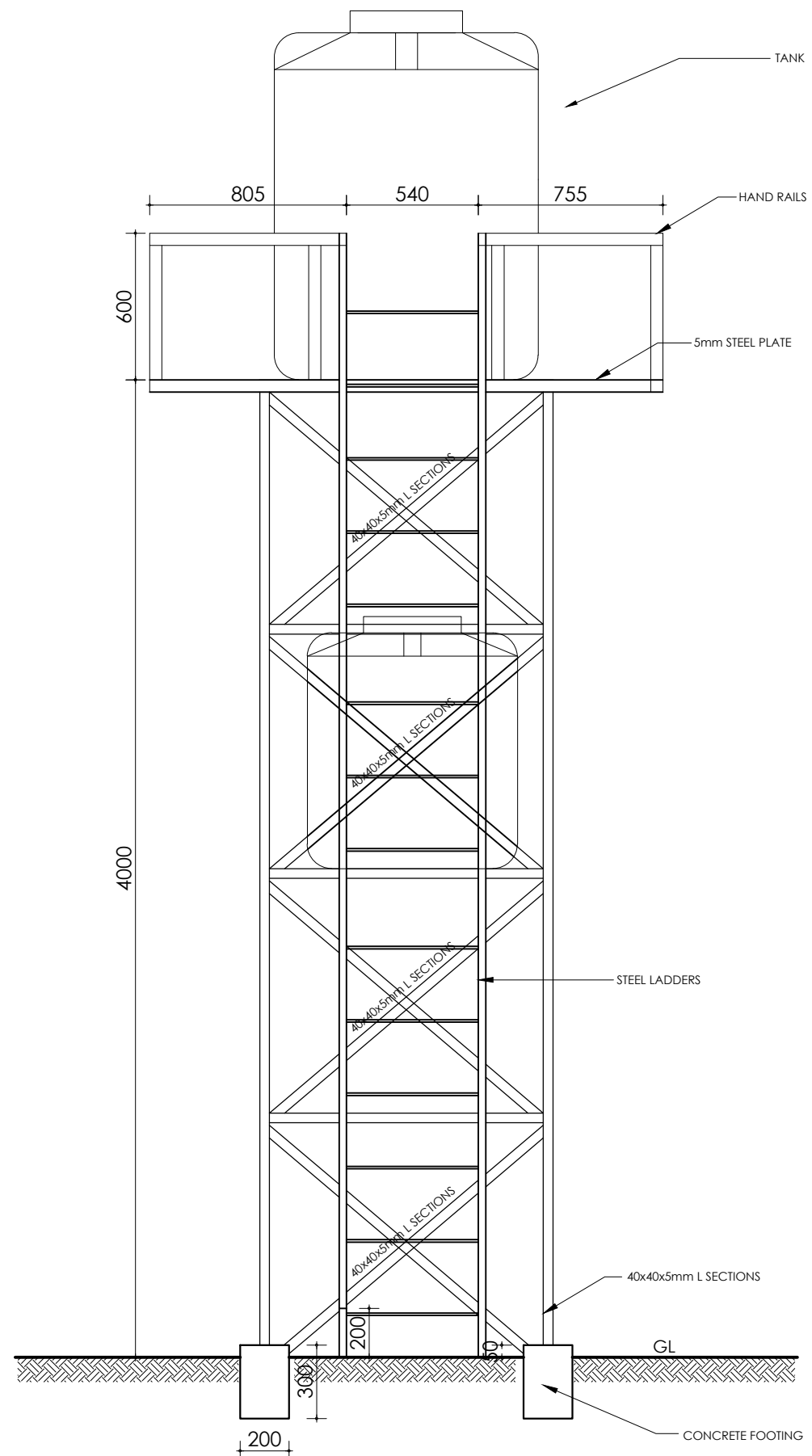
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SURVEYED	WANG	DESIGNED	ODE
DRAWN	MARK	CHECKED	
DATE	AUG 2020	APPROVED	M.O



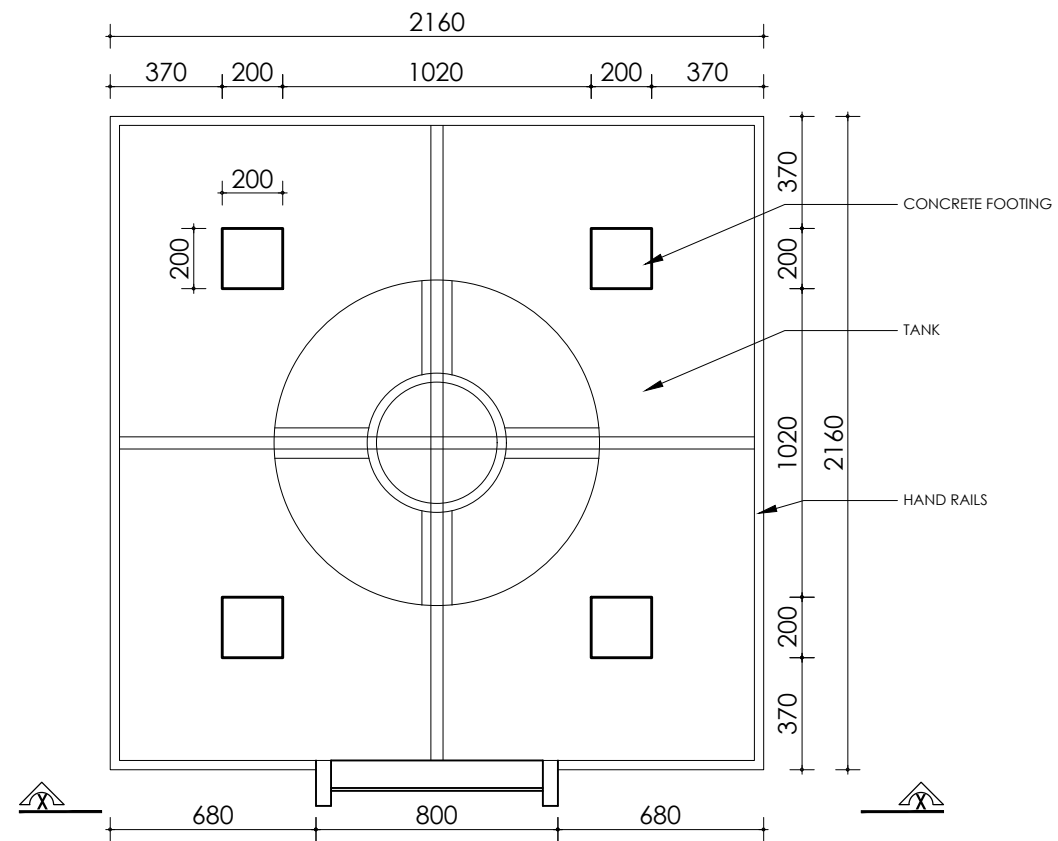
NOTES

1. Each sign board shall have two faces.
2. The contractor shall use a black lettering on white background.
3. The contractor shall use a sticker measuring 350 x 200, to display her particulars and contract number on the sign board.

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PROJECT INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT (IWMDP)																
DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3																
CONSULTANTS																
CONTRACTOR																
DRAWINGS																
DETAILED ENGINEERING DESIGN																
DRAWING TITLE STANDARD DRAWINGS CONTRACT SIGN POST																
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">SCALE</td> <td style="width: 30%;">AS SHOWN</td> <td style="width: 20%;">DRAWING No.</td> <td style="width: 30%;">MWE/LOT3/RUK/S/SD100</td> </tr> <tr> <td>SURVEYED</td> <td></td> <td>DESIGNED</td> <td>FK</td> </tr> <tr> <td>DRAWN</td> <td>MARK</td> <td>CHECKED</td> <td>RBB</td> </tr> <tr> <td>DATE</td> <td>AUG 2020</td> <td>APPROVED</td> <td>CZ</td> </tr> </table>	SCALE	AS SHOWN	DRAWING No.	MWE/LOT3/RUK/S/SD100	SURVEYED		DESIGNED	FK	DRAWN	MARK	CHECKED	RBB	DATE	AUG 2020	APPROVED	CZ
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SURVEYED		DESIGNED	FK													
DRAWN	MARK	CHECKED	RBB													
DATE	AUG 2020	APPROVED	CZ													



SECTION X-X
Scale 1:25



TOP PLAN
Scale 1:25

NOTES

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2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.

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DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

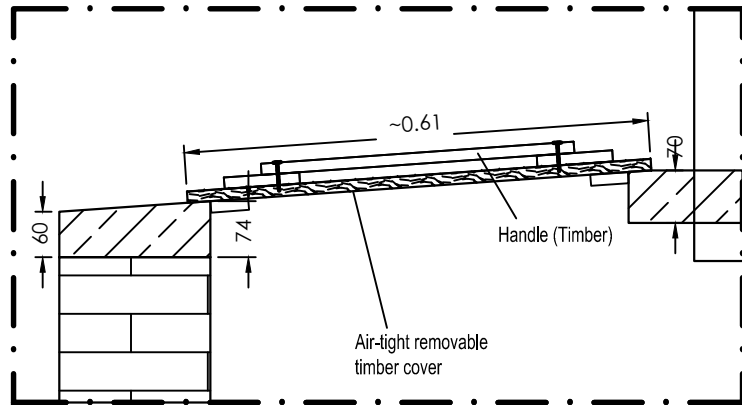
DETAILED ENGINEERING DESIGN

DRAWING TITLE

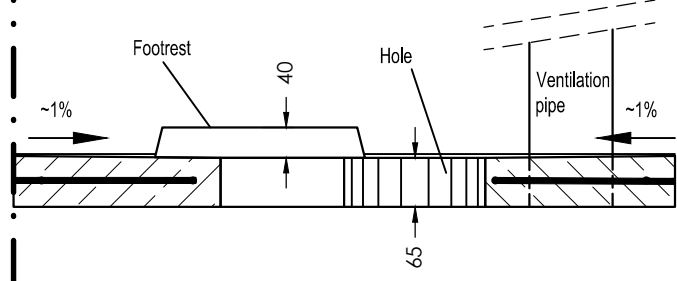
**STANDARD DRAWINGS
WATER TANK**

SCALE	AS SHOWN	DRAWING No.	MWE/LOT3/RUK/S/SD101
SURVEYED		DESIGNED	
DRAWN	MARK.A	CHECKED	
DATE	AUG 2020	APPROVED	

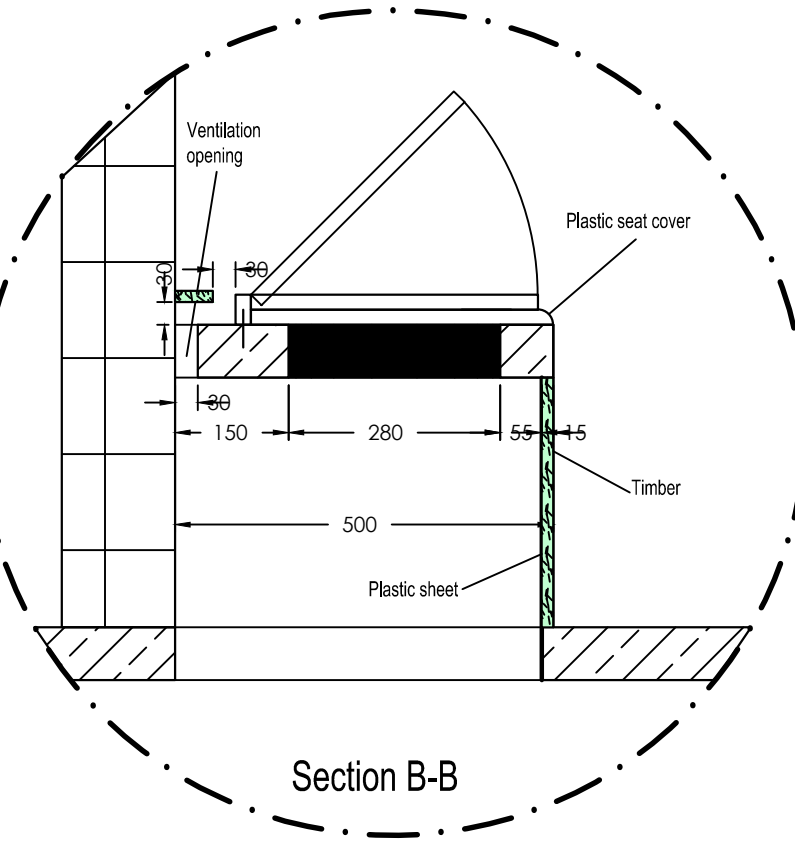
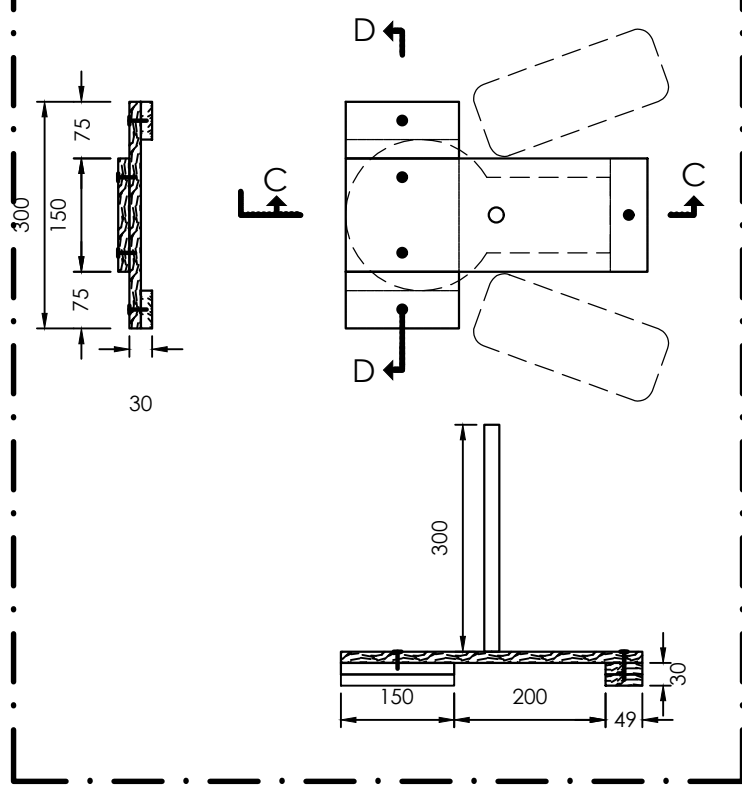
Detail
Removable vault cover



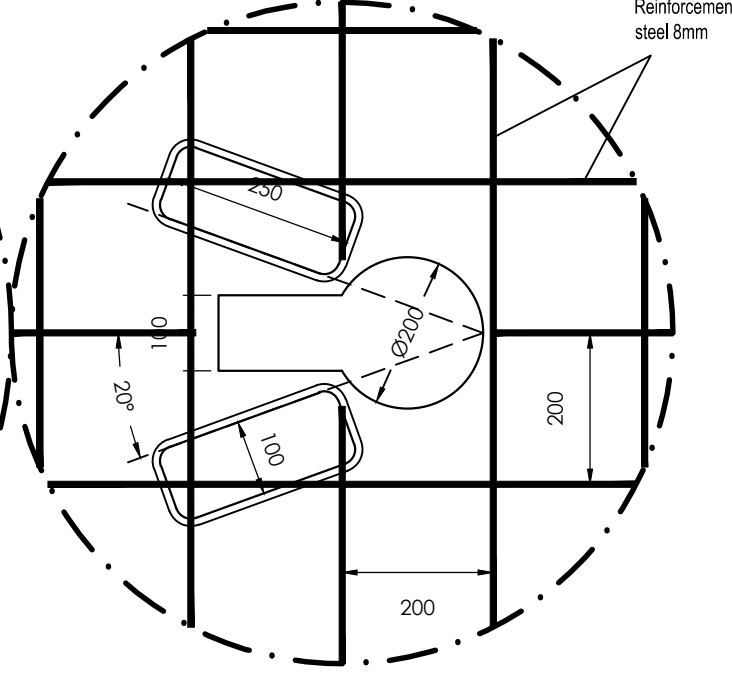
Defecating hole (squat)



Detail
Removable lid cover (squat)



Defecating hole (squat)



NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.

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PROJECT

INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT

DESIGN OF SANITATION FACILITIES IN RUKUNGIRI - LOT 3

CONSULTANTS

DETAILED ENGINEERING DESIGN

DRAWING TITLE

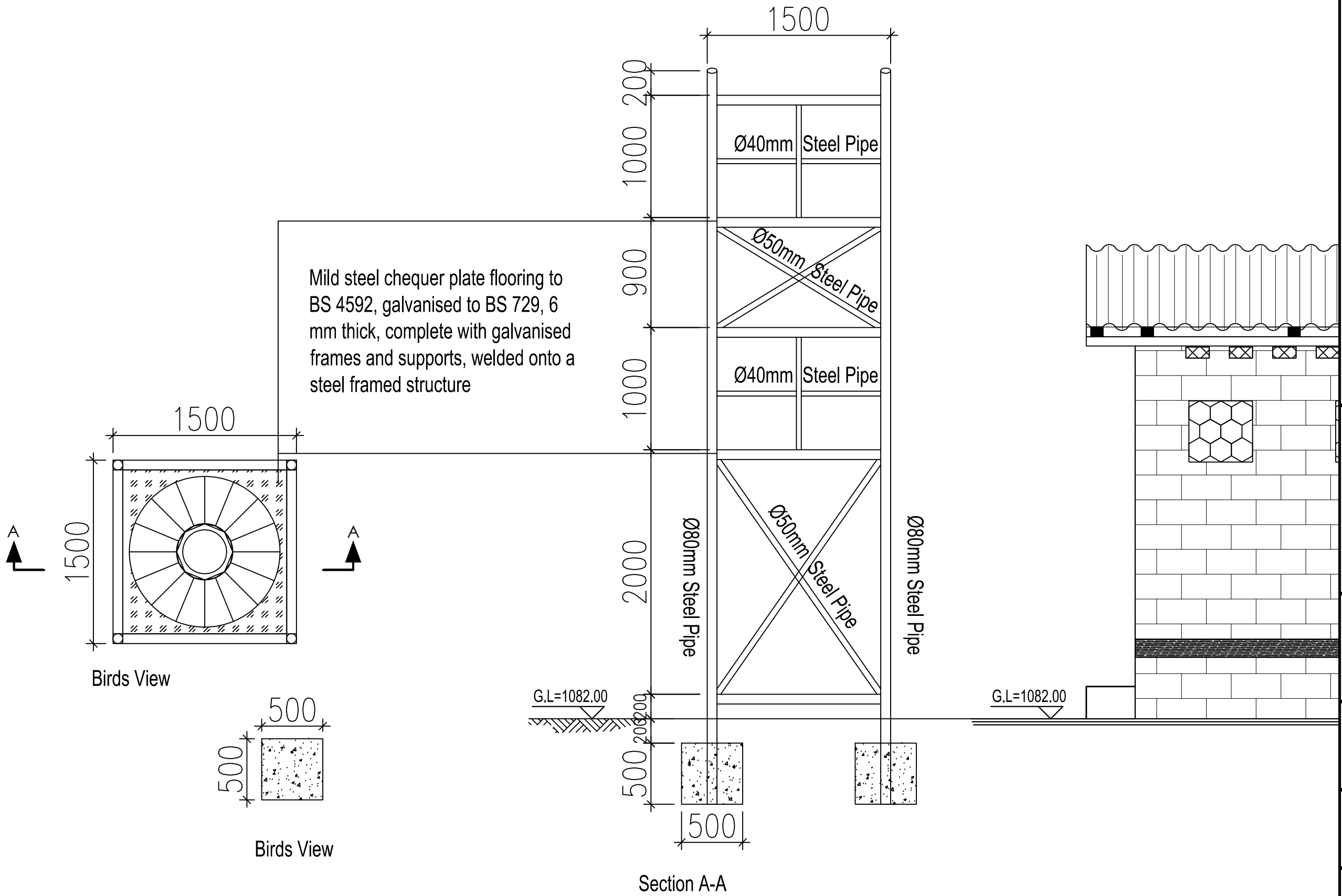
STANDARD DRAWINGS

TOILET DETAILS

SCALE	SCALE 1:10	DRAWING No.	MWE/LOT3/RUK/SD102
SURVEYED		DESIGNED	
DRAWN	MARK.A	CHECKED	
DATE	AUG 2020	APPROVED	

NOTES

1. Unless otherwise stated, all dimensions are in mm
2. Concrete grade to be C20/10.
3. All levels in metres above mean sea level.



CLIENT

THE REPUBLIC OF UGANDA
MINISTRY OF WATER AND ENVIRONMENT
 DIRECTORATE OF WATER DEVELOPMENT

CO-FINANCED BY:

WORLD BANK & GOVERNMENT OF UGANDA

PROJECT
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CONSULTANTS

CONTRACTOR

AS-BUILT DRAWINGS

DRAWING TITLE **13 STANCE - WATER BORNE TOILET PUBLIC (ALL PROJECT AREAS)**
 Water Tank tower

SCALE	AS SHOWN	DRAWING No.	MWE/LOT3/RUK/S/SD103
SURVEYED	K.ZHOU	DESIGNED	TANG LIYU
DRAWN	MARK.A	CHECKED	G.N
DATE	AUG 2020	APPROVED	M.O

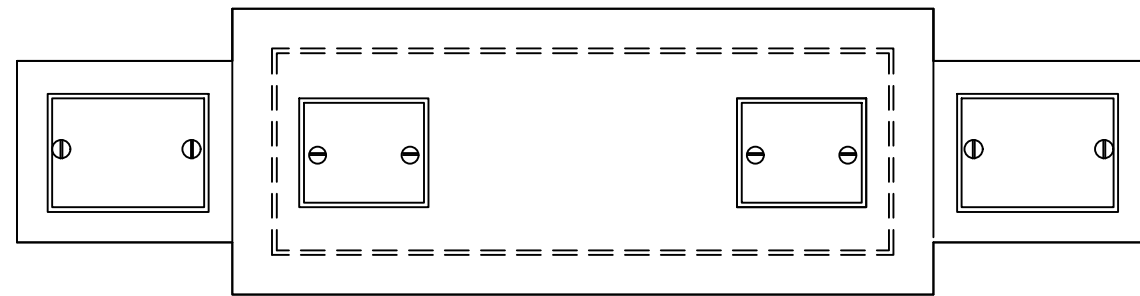
LEGEND

1. Unless otherwise stated, all dimensions are in mm.
2. Concrete grade to be C20/10.

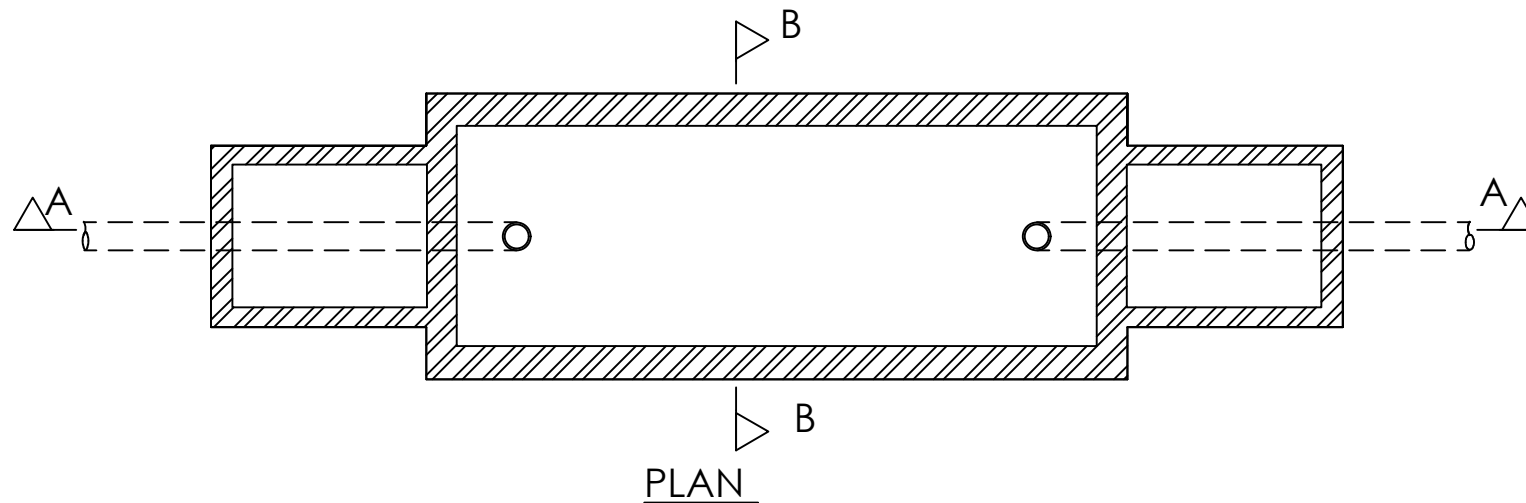
SIZES OF INSPECTION CHAMBER			
DEPTH TO INVERTS	INTERNAL DIMENSIONS	WALL THICKNESS	FOUNDATION THICKNESS
UP TO 450	450x450	100	150
475 900	450x600	100	150
925 1500	750x1050	225	225
OVER 1500	750x1050	225	225

BRICKWORK TO BE BUILT IN CEMENT MORTAR 1:6 AND RENDERED INTERNALLY IN 1:3 CEMENT PLASTER 13mm THICK
FOUNDATION TO BE 1:3:6 CONCRETE MIX OF CEMENT

DIMENSIONS OF SEPTIC TANK				
No. of Users	L	B	D	Capacity Liters
6	1800	625	900	1137
10	2250	625	900	1435
15	2475	625	900	1707
20	2860	625	900	1820
25	3300	625	900	2117
30	2400	900	1050	2388
35	2550	900	1050	2530
40	3000	900	1050	2980
45	3300	900	1050	3276
50	3750	900	1050	3727
60	3150	925	1200	4460
70	3750	925	1200	5312
80	4200	925	1200	5890
90	4850	925	1200	6597
100	4950	1125	1200	7462
150	5250	1350	1500	10533
200	6450	1350	1500	12697
250	7050	1350	1650	16513

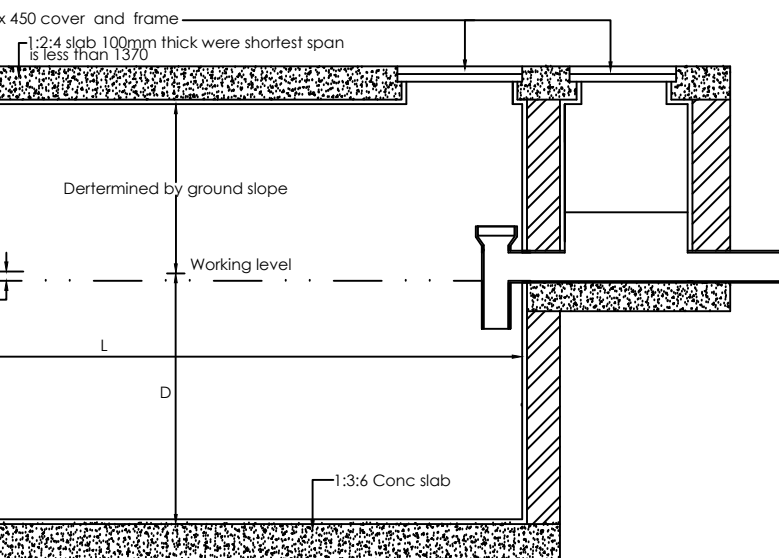


PLAN OF TOP



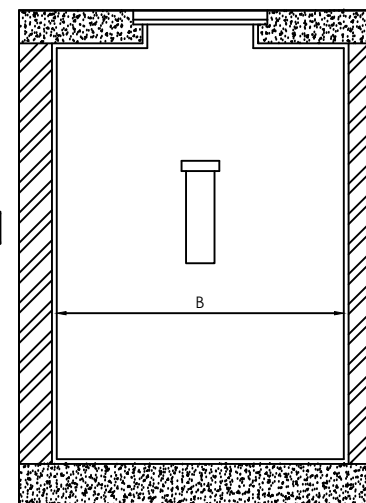
PLAN

Block wall built in 1:3 cem mortar, or 1:3:6 rendered with 1:2 mortar 13mm thick
Walls to be 175 thick for walls less than 910 high and 240 otherwise

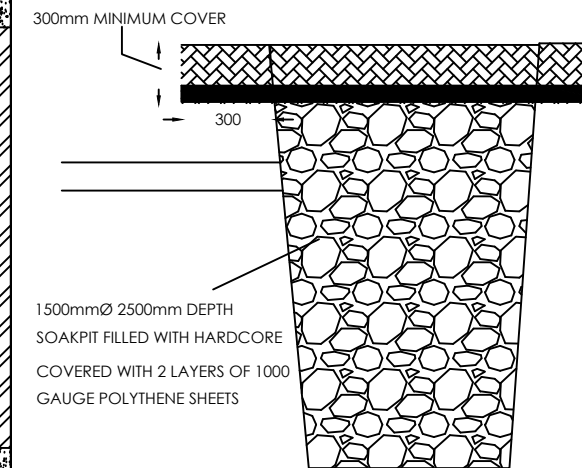


SECTION A-A

125mm conc slab (1:3:6) for invert depth less than 1520 and 200mm if more than 1520.
Internal dimensions of inspection chambers to 450 x 450 if depth to invert does not exceed 450, 610 x 450 if less than 910 and 1050 x 760 if more than 1520.



SECTION B-B



SOAK PIT

CLIENT

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CONSULTANTS

DETAILED ENGINEERING DESIGN

DRAWING TITLE

STANDARD DRAWINGS

SEPTIC TANK DETAILS

SCALE AS SHOWN DRAWING No. MWE/LOT3/RUK/SD104

SURVEYED DESIGNED

DRAWN MARK.A CHECKED

DATE AUG 2020 APPROVED

Standard Drawings for Accessibility Ramp and Handrails

