



TANATHI WATER WORKS DEVELOPMENT AGENCY

VOLUME IV

DRAWINGS

CONSTRUCTION OF KIAMBERE- MWINGI PHASE V LAST MILE CONNECTIVITY (REHABILITATION OF MIGWANI) WATER SUPPLY PROJECT

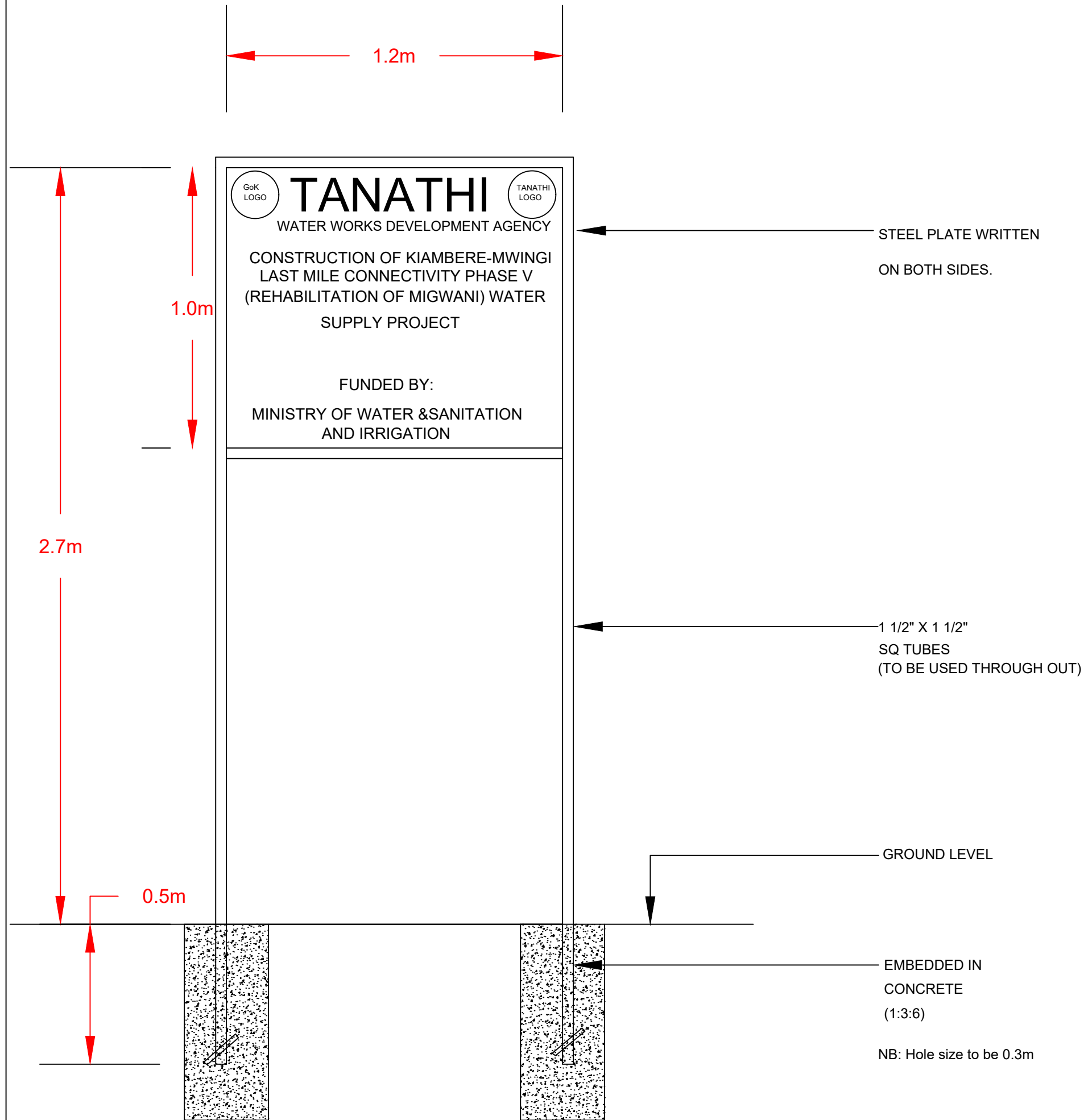
TENDER No: TAWWDA/020/2024-2025

DATE: FEBRUARY 2025

Employer:

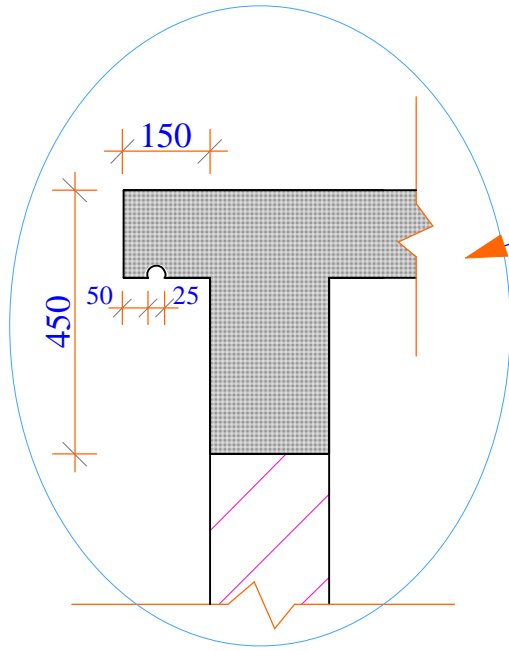
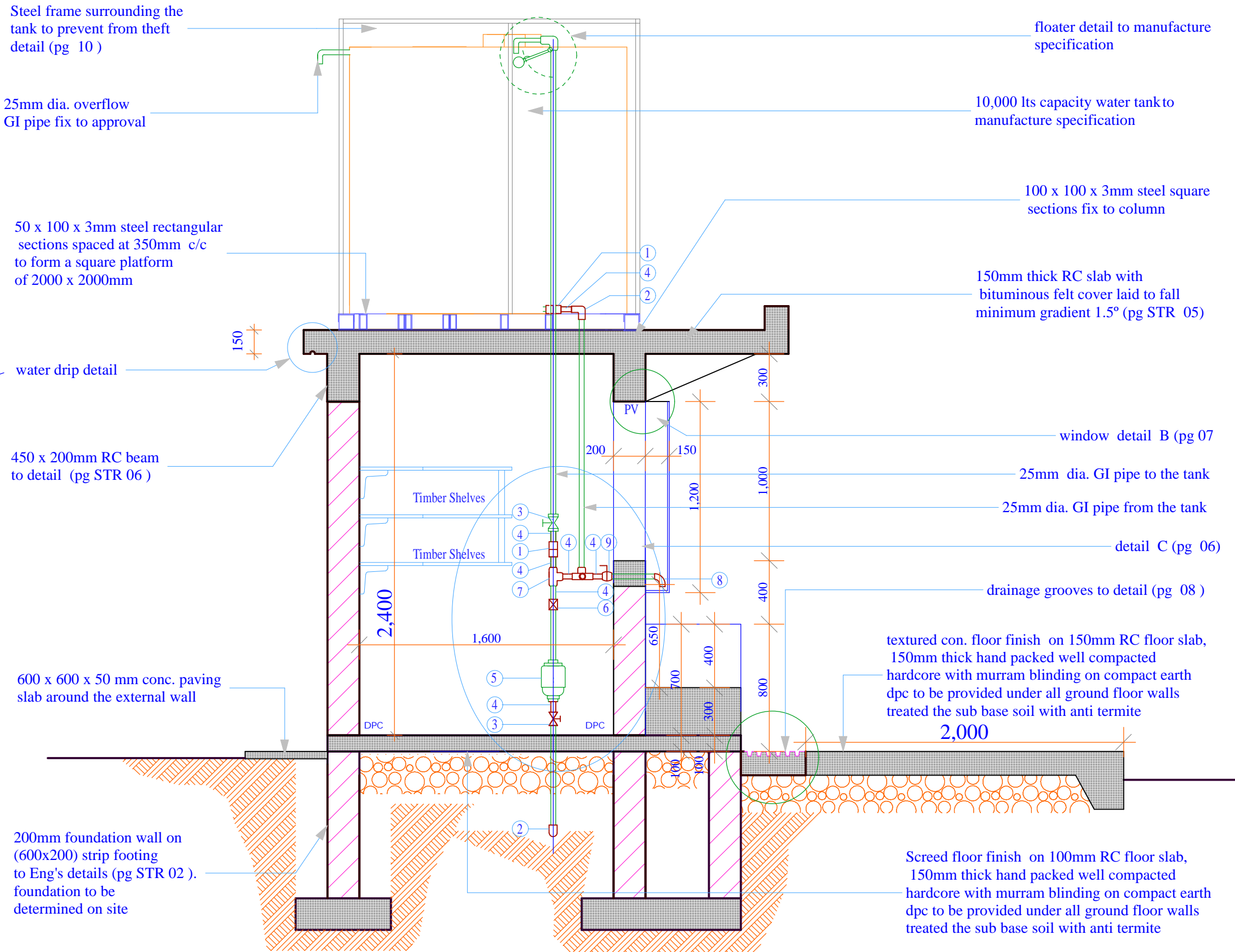
*The Chief Executive Officer,
Tanathi Water Works Development Agency,
P.O. Box Private Bag
KITUI*

PROJECT SIGNBOARD



DIMENSIONS TO BE

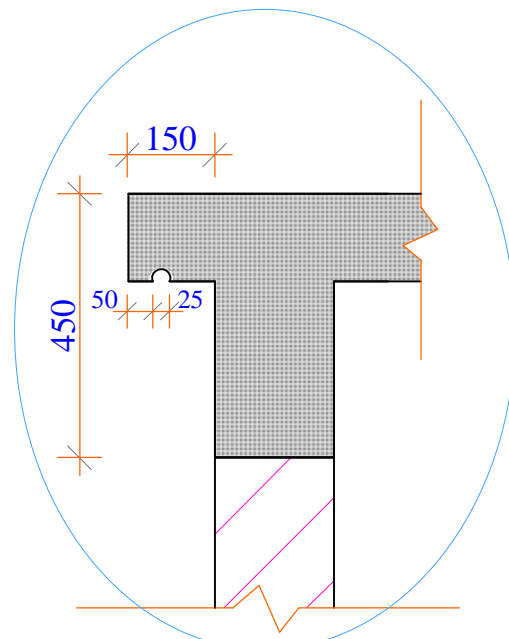
TANATHI WATER WORKS DEVELOPMENT AGENCY	
PROJECT NAME: REHABILITATION OF MIGWANI BOREHOLE WATER SUPPLY PROJECT	
Date	3/12/2024
Designed by	K.M
Drawn by	K.M
Checked by	Eng. DM
Approved by	Eng. F. S



water drip detail

SECTION - X

<p><u>Project Title:</u> WATER KIOSK (Type Closed) PREFABRICATED</p>	<p><u>Client:</u> TAWWDA</p>	<p><u>drq title:</u> SECTION</p>	<p><u>drq no:</u> ARC 02</p>	<p><u>Consultant:</u></p>	<p><u>Designed By</u> E.O.K</p>	<p><u>Checked By</u> D.M</p>	<p><u>Approved by</u> F.K.S Signature.....</p>	<p>Scale 1 : 25 Date: FEBRUARY 2009 page 02</p>
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water drip detail

Steel frame surrounding the tank to prevent from theft detail (pg 10)

10,000 Its capacity water tank to manufacture specification

25mm dia. galvanised iron inlet pipe to tank

50 x 100mm steel rectangular sections spaced at 350mm c/c to form a square platform of 2000 x 2000mm

water drip detail

150mm thick RC slab with bituminous felt cover laid to fall minimum gradient 1.5°

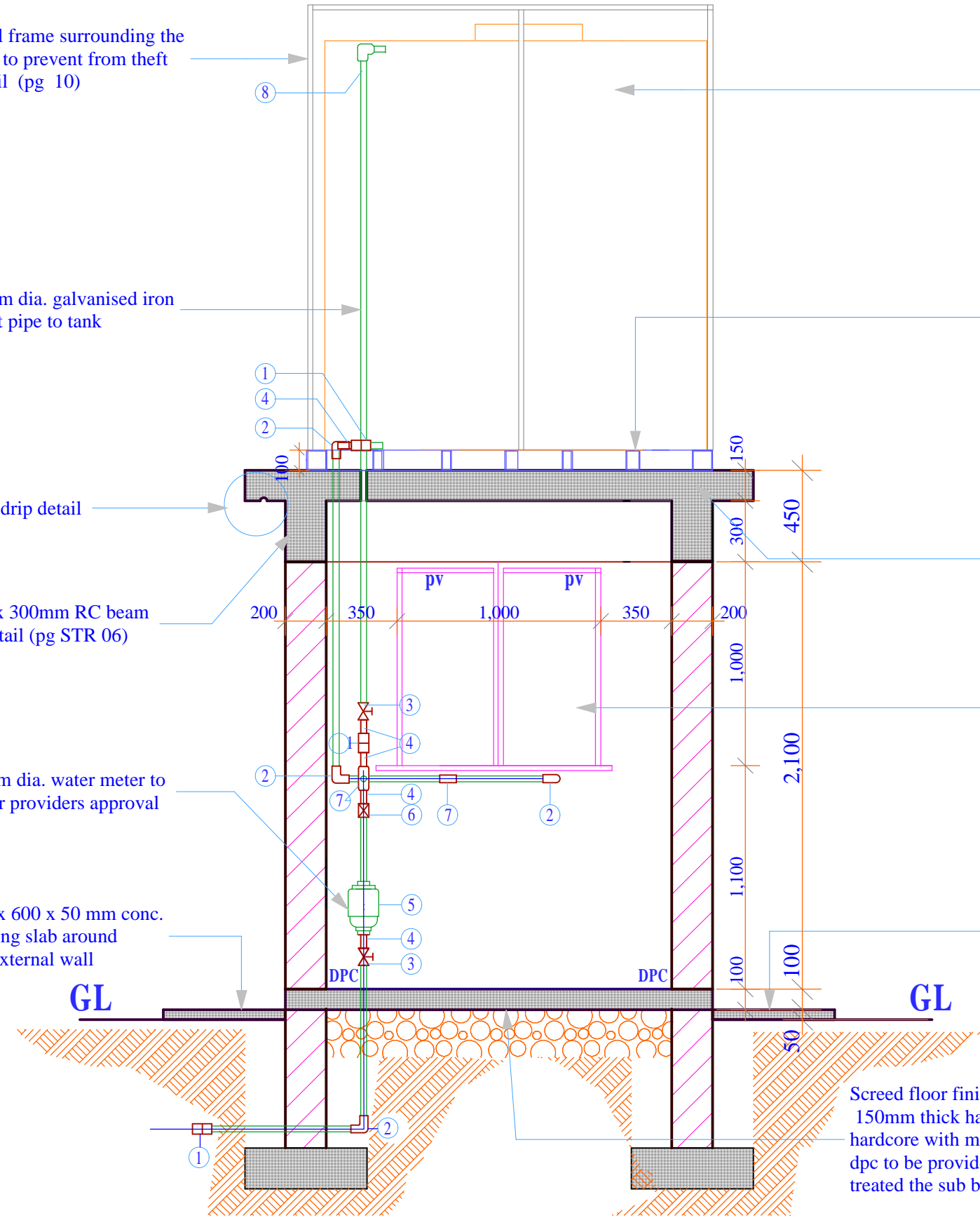
450 x 300mm RC beam to detail (pg STR 06)

steel lockable window plain on the inside to detail (pg 07)

25mm dia. water meter to water providers approval

600 x 600 x 50 mm conc. paving slab around the external wall

600 x 600 x 50 mm conc. paving slab around the external wall



SECTION - Y

Project Title:
WATER KIOSK
(Type Closed)
PREFABRICATED

Client:
TAWWDA

drq title:
SECTION

drq no.:
ARC 03

Consultant:

Designed By
E.O.K

Checked By
D.M

Approved by
F.K.S
Signature.....

Scale 1 : 25
Date:
FEBRUARY 2009
page 03

tank to prevent from theft.
detail (pg 10)

10,000lts capacity water
tank to manufacture
specification

25mm dia. galvanised
iron pipe

masonry wall keyed
to approval

steel lockable window
plain on the inside to
detail (pg 07)

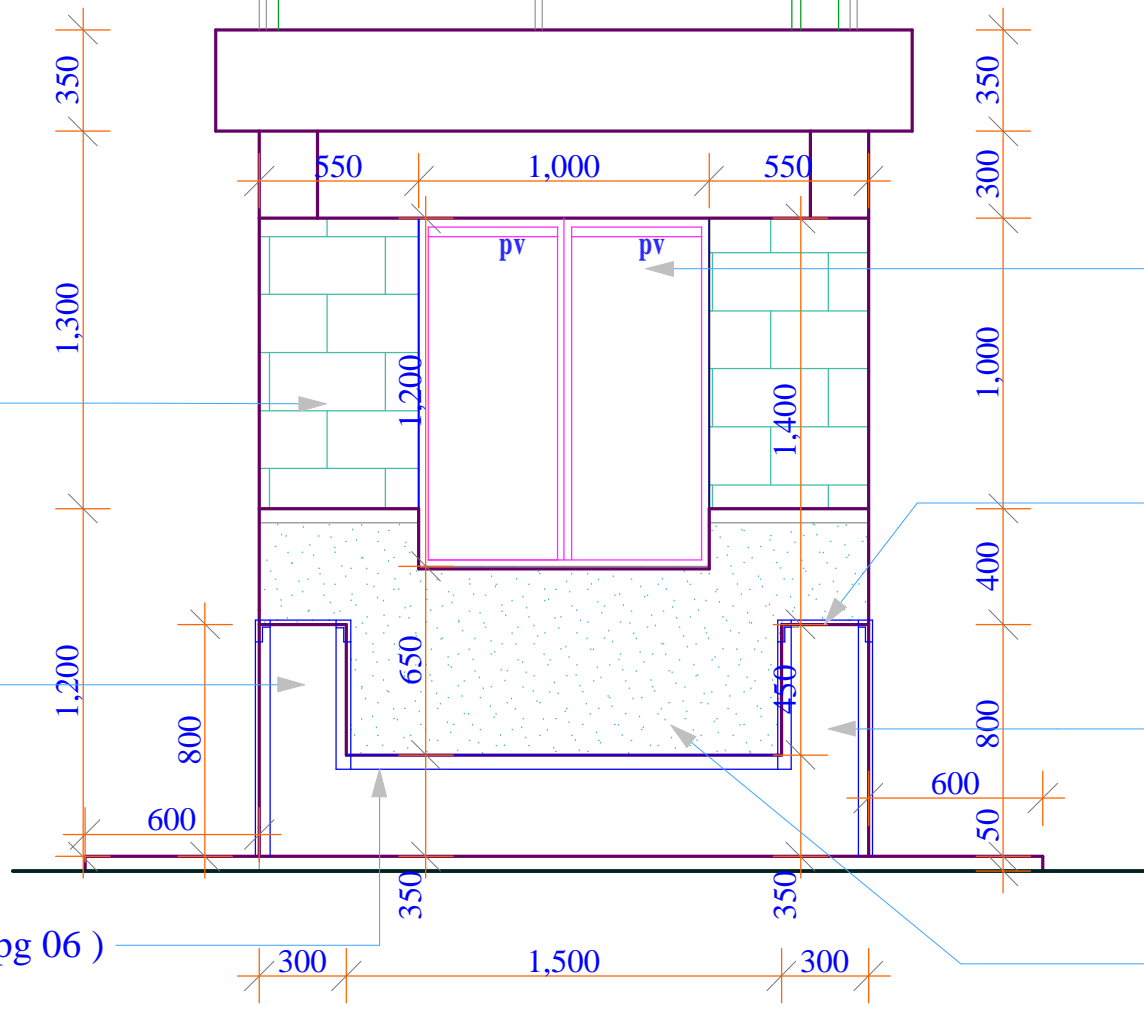
800mm high RC wall
bucket placing bay

50 x 50mm angle section
fixed all round to
detail (pg 06)

50 x 50mm angle section
fixed to approval detail (pg 06)

800mm high RC wall
bucket placing bay

plaster to approval



FRONT ELEVATION

Project Title:
WATER KIOSK
(Type Closed)
PREFABRICATED

Client:
TAWWDA

drq title:
FRONT ELEVATION

drq no.:
ARC 04

Consultant:

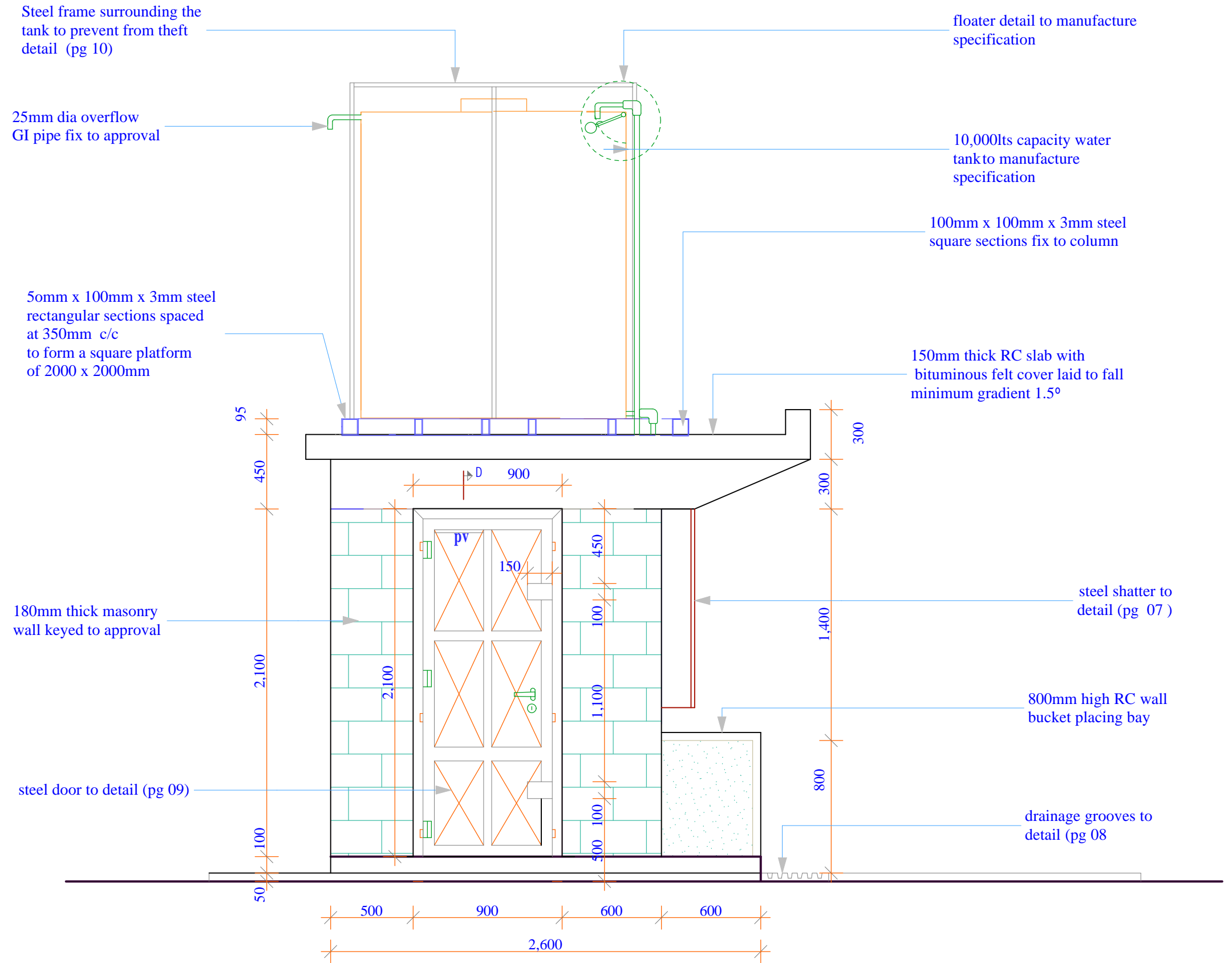
Designed By
E.O.K

Checked By
D.M

Approved by
F.K.S

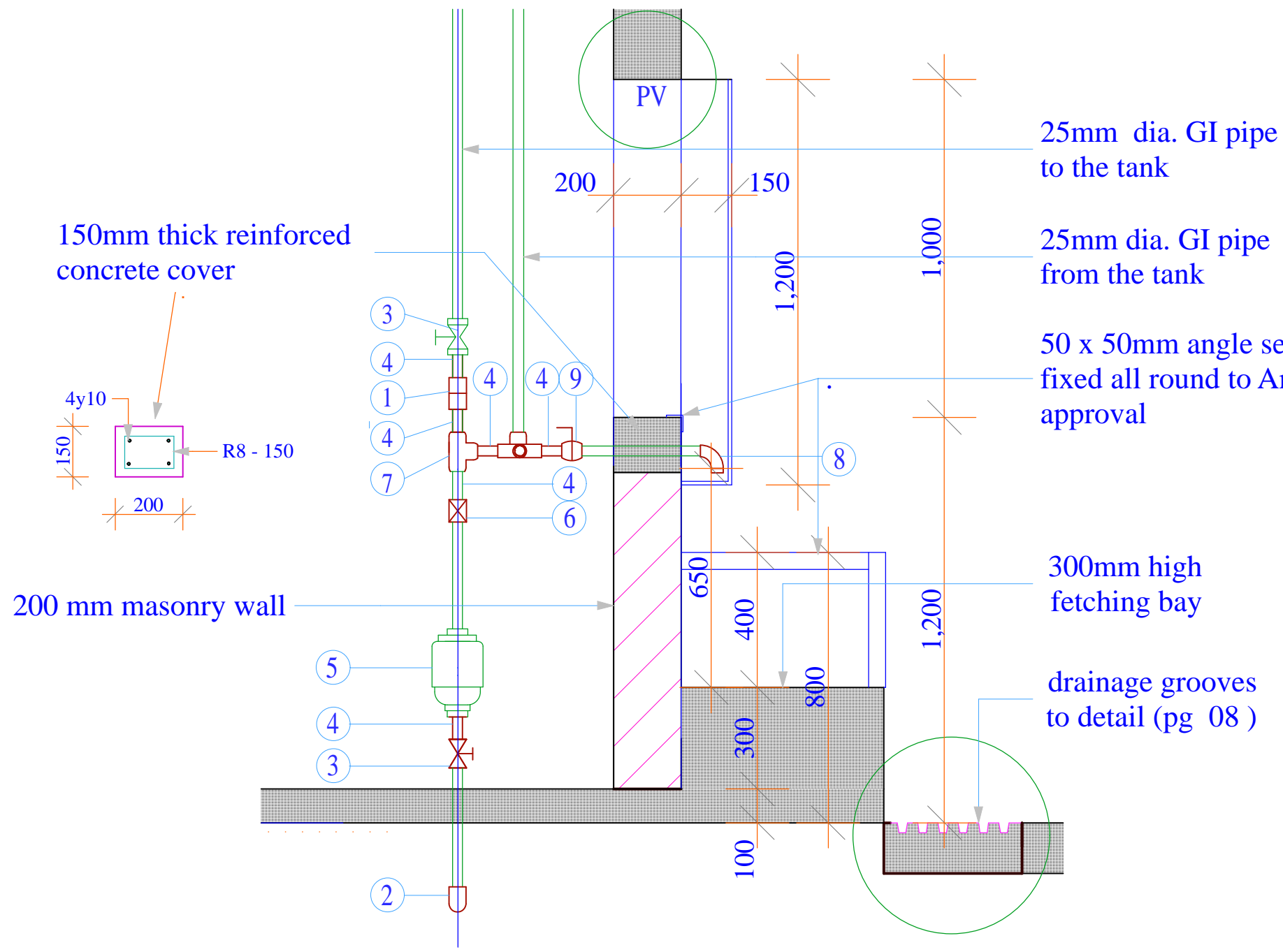
Signature.....

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Date:
FEBRUARY 2009
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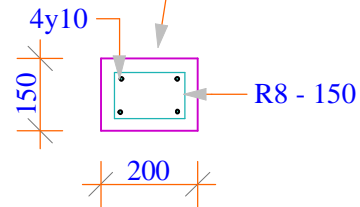


SIDE ELEVATION

<p><u>Project Title:</u> WATER KIOSK (Type Closed) PREFABRICATED</p>	<p><u>Client:</u> TAWWDA</p>	<p><u>drq title:</u> SIDE ELEVATION</p>	<p><u>drq no.:</u> ARC 05</p>	<p><u>Consultant:</u></p>	<p><u>Designed By</u> E.O.K</p>	<p><u>Checked By</u> D.M</p>	<p><u>Approved by</u> F.K.S Signature.....</p>	<p>Scale 1 : 25 Date: FEBRUARY 2009 page 05</p>
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150mm thick reinforced concrete cover



200 mm masonry wall

25mm dia. GI pipe to the tank

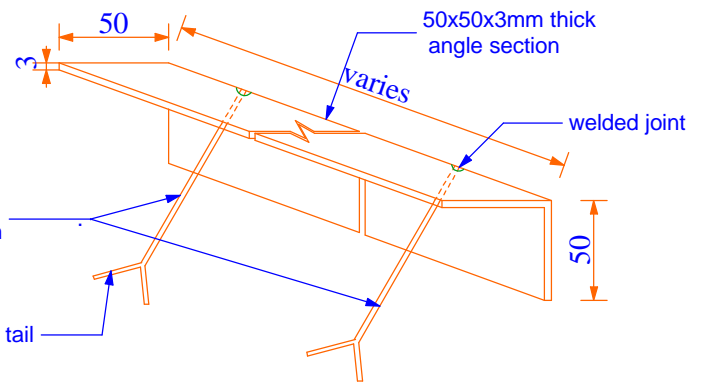
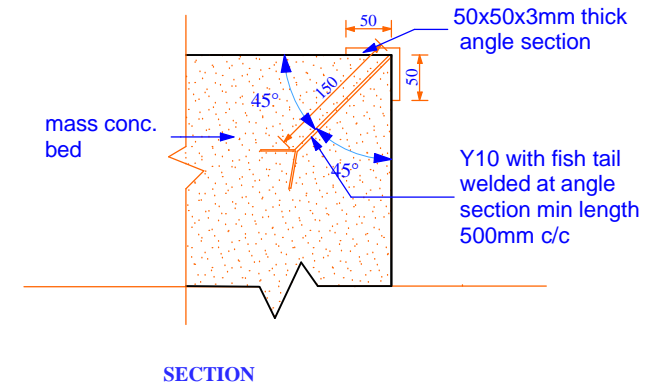
25mm dia. GI pipe from the tank

50 x 50mm angle section fixed all round to Arch. approval

300mm high fetching bay

drainage grooves to detail (pg 08)

DETAIL C



AXONOMETRIC VIEW SHOWING ANGLE SECTION ANCHORING DETAIL

ITEM NO.	DESCRIPTION (ALL 25NN DIA)	UNIT)	QTY
1	Galvanised Iron Union	No.	3
2	Galvanised Iron Elbows	No.	3
3	Galvanised Iron Gate Valve (Pegler)	No.	2
4	Galvanised Iron Nipples	No.	11
5	Water Meter	No.	1
6	Non Return Valve	No.	1
7	Galvanised Iron Equal Tee	No.	5
8	Galvanised Iron Bend	No.	4
9	Ball Cock Water Taps	No.	3
10	Galvanised Iron Long Thread Nipples	No.	2
17	Galvanised Iron Black Nuts	No.	4
12	Galvanised Iron Class B Pipe (per metres)	No.	4
13	Boss white (400g)	No.	3
14	Temp Thread	LM..	2

Project Title:
WATER KIOSK
(Type Closed)
PREFABRICATED

Client:
TAWWDA

drq title:
PLUMBING DETAIL

drq no.:
ARC 06

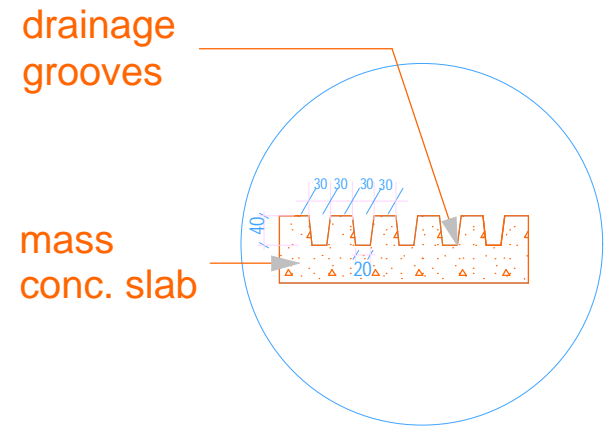
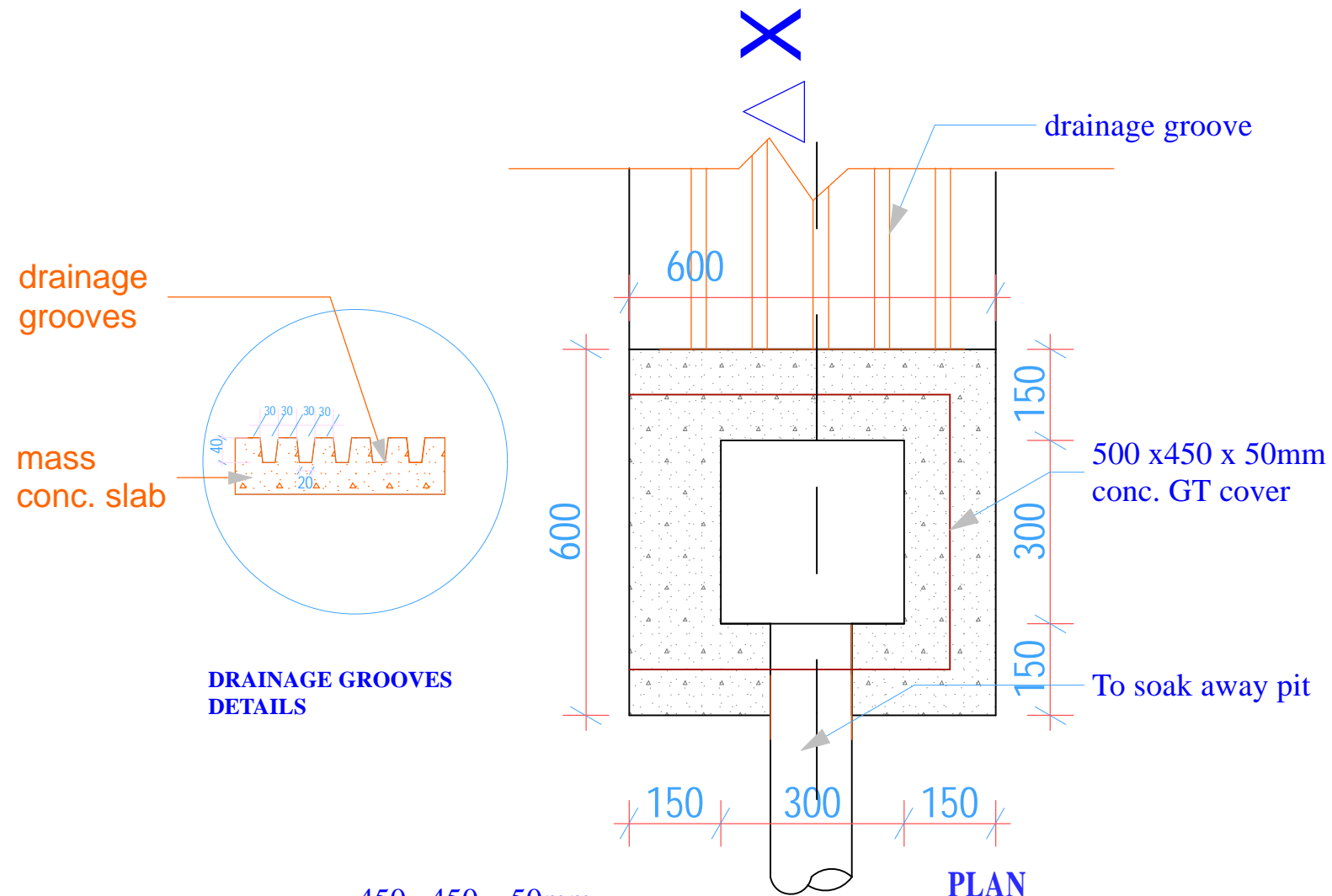
Consultant:

Designed By
E.O.K

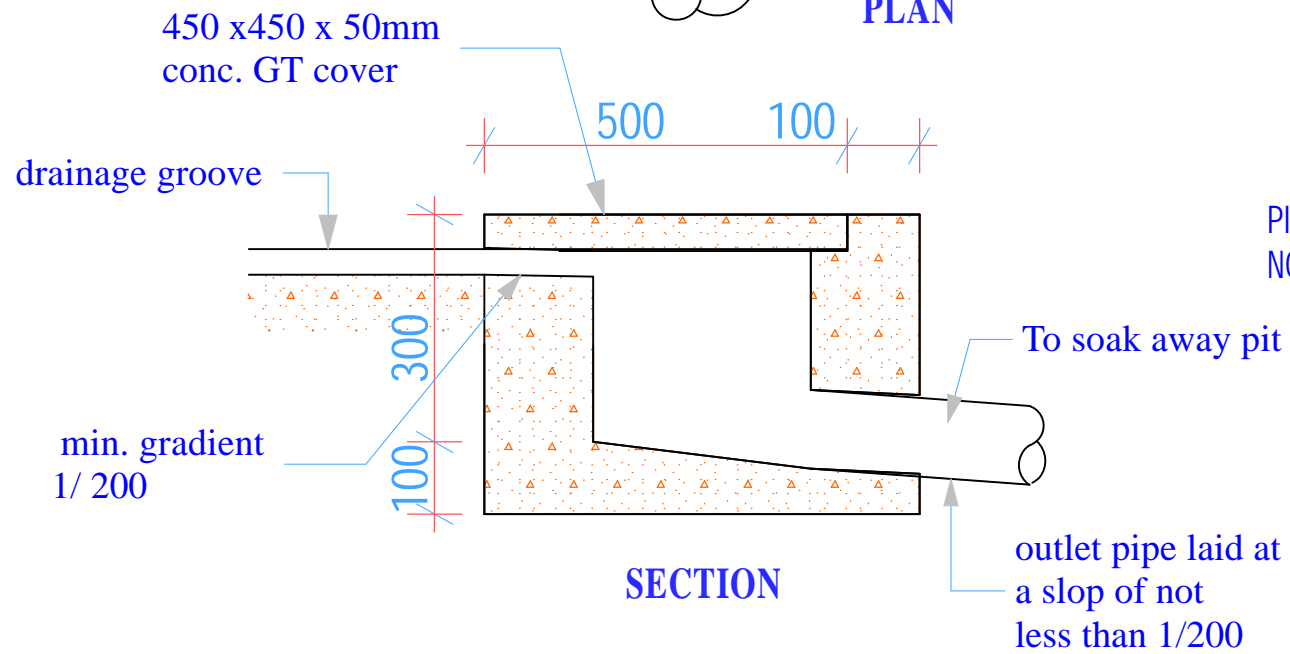
Checked By
D.M

Approved by
F.K.S
Signature.....

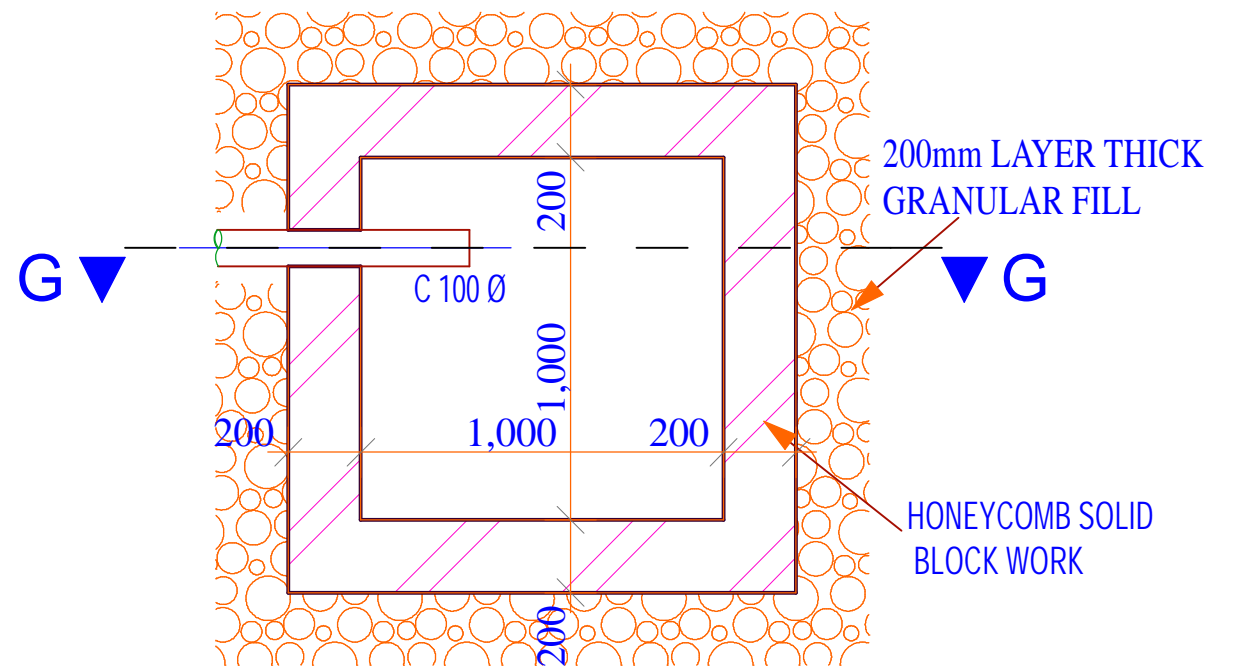
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Date: FEBRUARY 2009
page 06



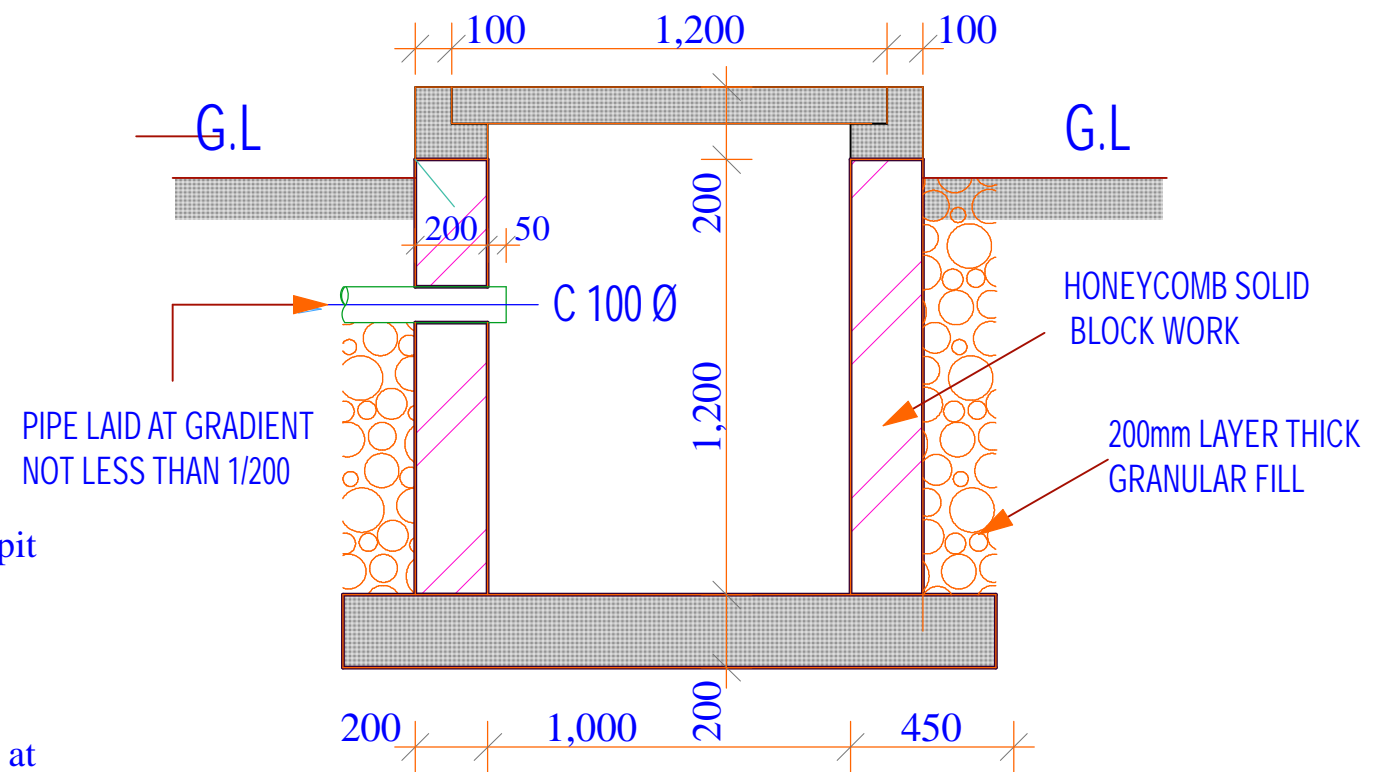
DRAINAGE GROOVES DETAILS



GT DETAIL



SOAK PIT PLAN



SOAK AWAY DETAIL

Project Title:
WATER KIOSK
(Type Closed)
PREFABRICATED

Client:
TAWWDA

drq title:
DRAINAGE DETAILS

drq no:
ARC 08

Consultant:

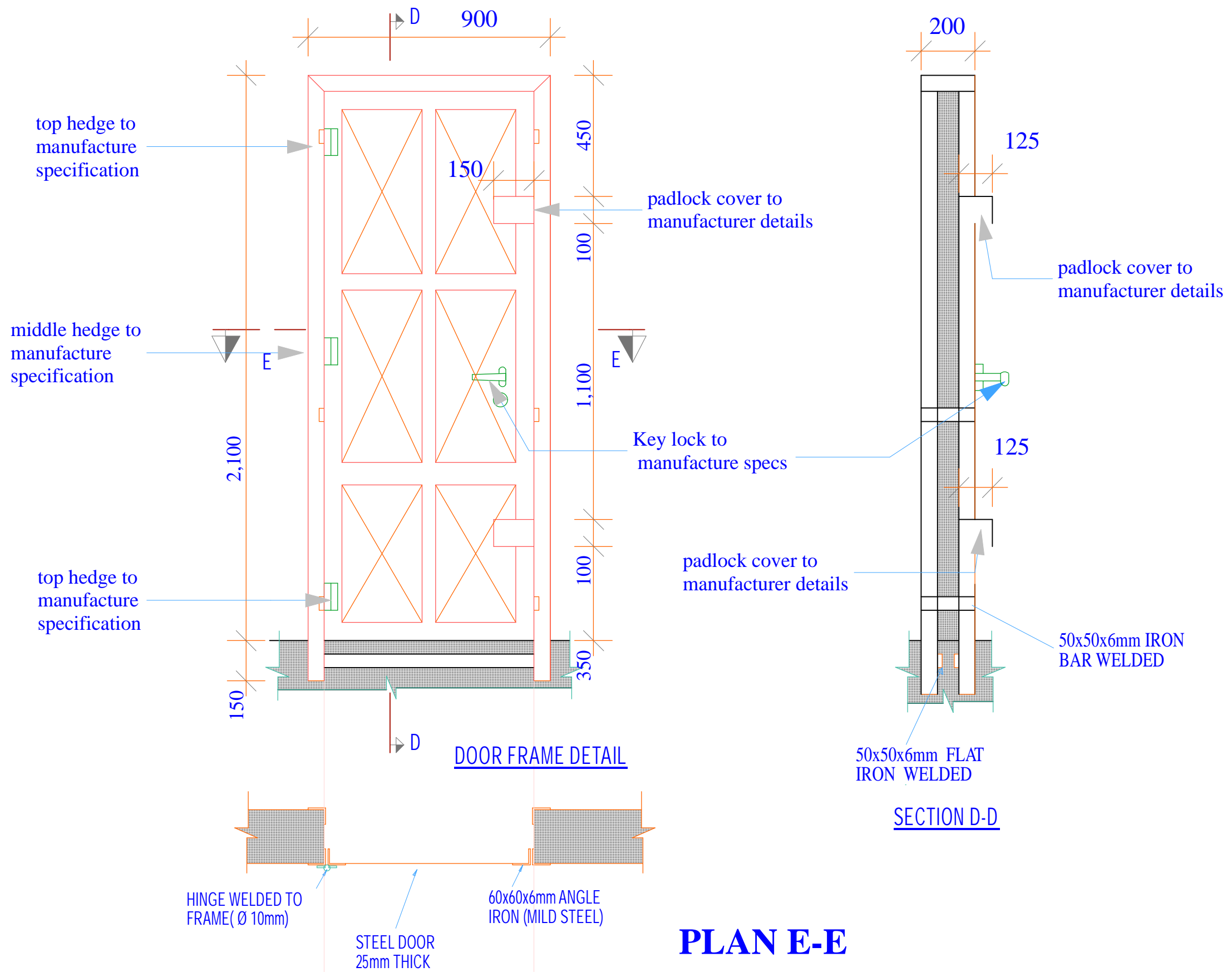
Designed By
E.O.K

Checked By
D.M

Approved by
F.K.S

Signature.....

Scale 1 : 10 1 : 20
Date:
FEBRUARY 2009
page 08



Project Title:
 WATER KIOSK
 (Type Closed)
 PREFABRICATED

Client:
 TAWWDA

drq title:
 STEEL DOOR DETAIL

drq no.:
 ARC 9

Consultant:

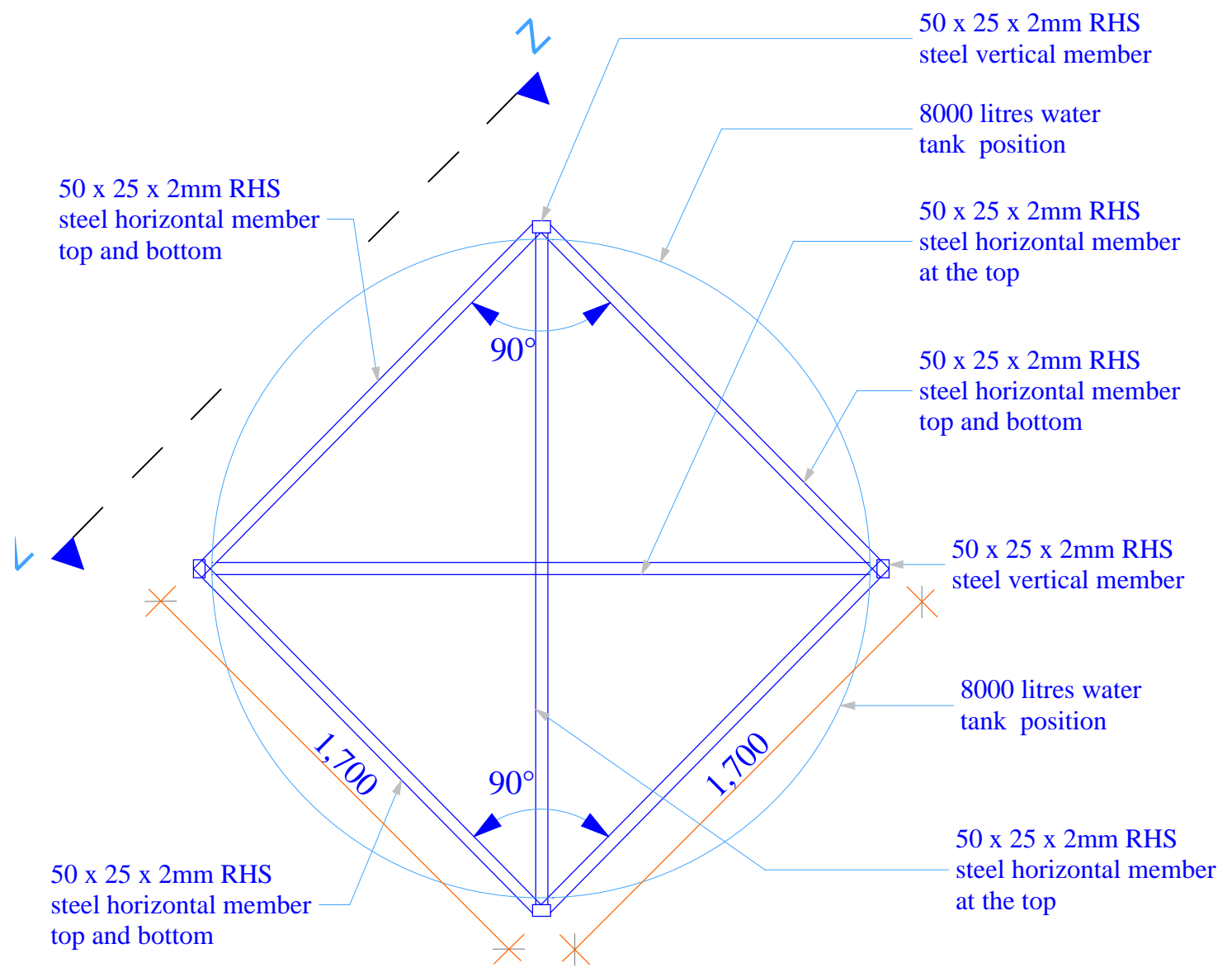
Designed By
 E.O.K

Checked By
 D.M

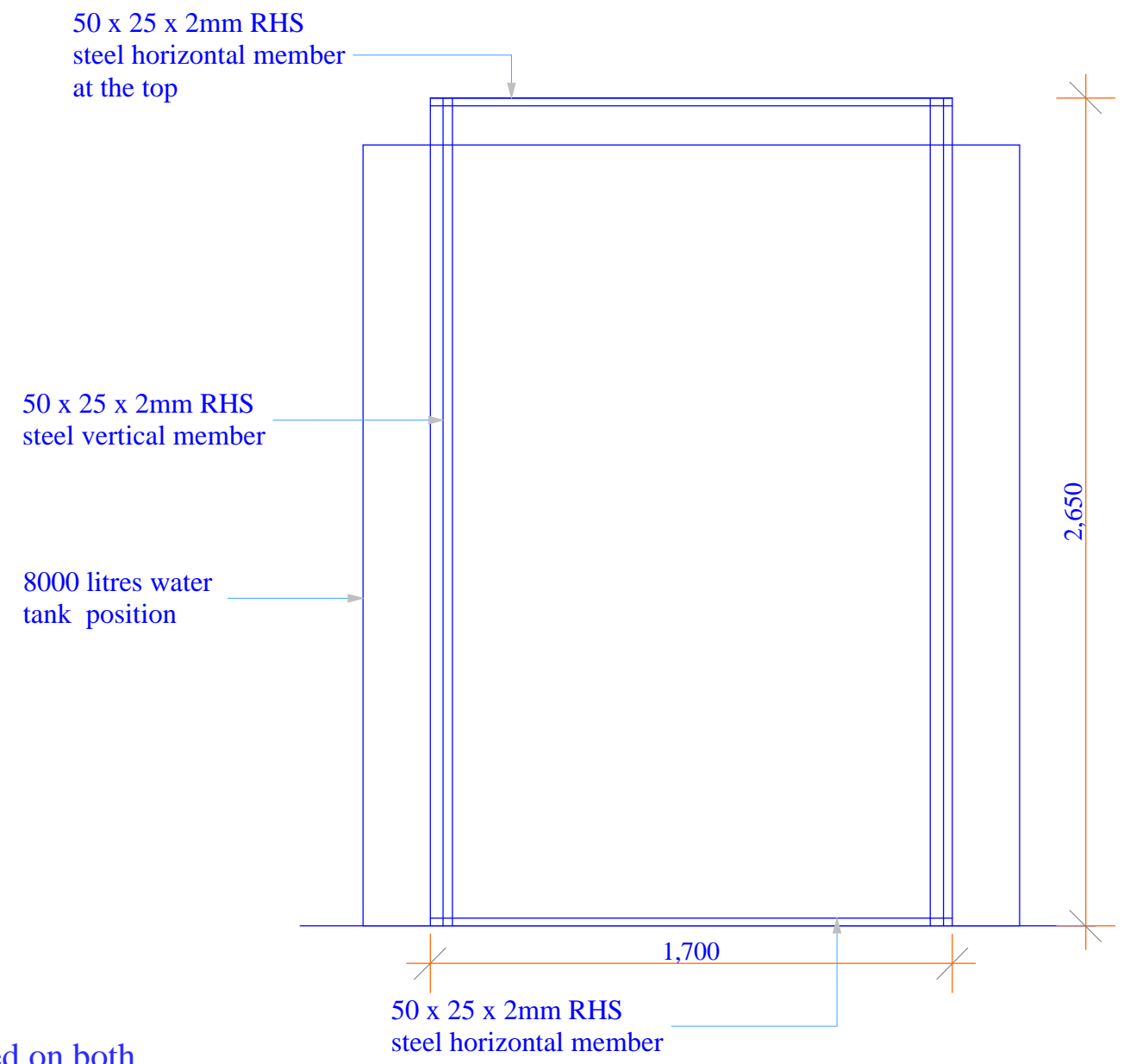
Approved by
 F.K.S

Signature.....

Scale 1 : 15
 Date: FEBRUARY 2009
 page 09



TOP VIEW



SIDE VIEW X-X

NB the cage to be used on both 8000ltrs and 5000ltrs tanks

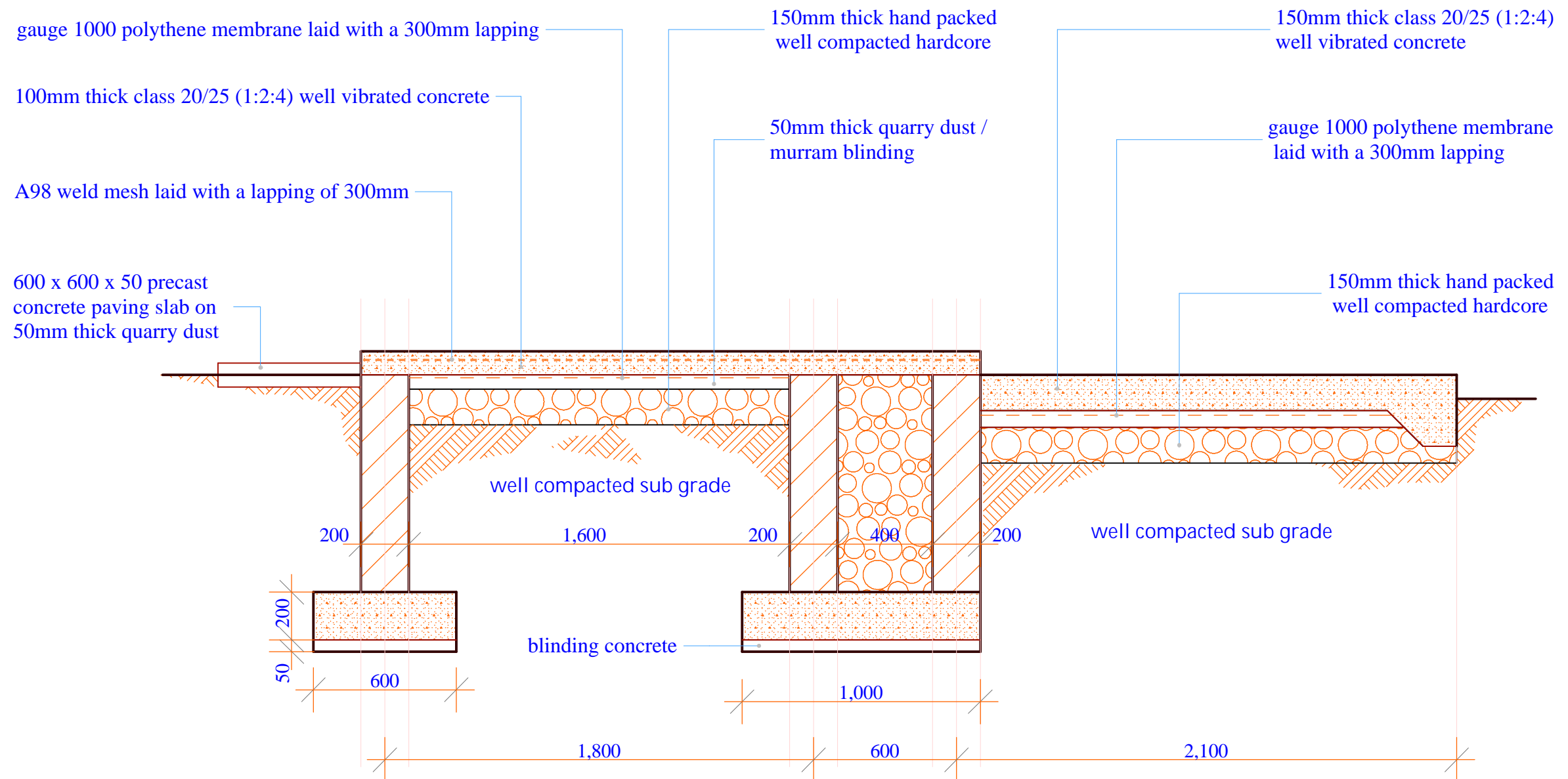
STEEL CAGE DETAIL

<p><u>Project Title:</u> WATER KIOSK (Type Closed) PREFABRICATED</p>	<p><u>Client:</u> TAWWDA</p>	<p><u>drq title:</u> STEEL CAGE DETAIL</p>	<p><u>drq no.:</u> ARC 10</p>	<p><u>Consultant:</u></p>	<p><u>Designed By</u> E.O.K</p>	<p><u>Checked By</u> D.M</p>	<p><u>Approved by</u> F.K.S Signature.....</p>	<p>Scale 1 : 20 Date: FEBRUARY 2009 page 10</p>
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STRUCTURAL DRAWINGS

TABLE OF CONTENTS

No.	Dwg. Title	Dwg. No.	Page
1	Foundation Plan	STR - 01	01
2	Foundation Section	STR - 02	02
3	Column Detail	STR - 03	03
4	Slab Reinforcement dtl	STR - 04	04
5	Slab Reinforcement Section	STR - 05	05
6	Beam Reinforcement dtl	STR - 06	06



FOUNDATION SECTION

Project Title:
WATER KIOSK
(Type Closed)
PREFABRICATED

Client:
TAWWDA

drq title:
FOUNDATION SECTION

drq no.:
STR 02

Consultant:

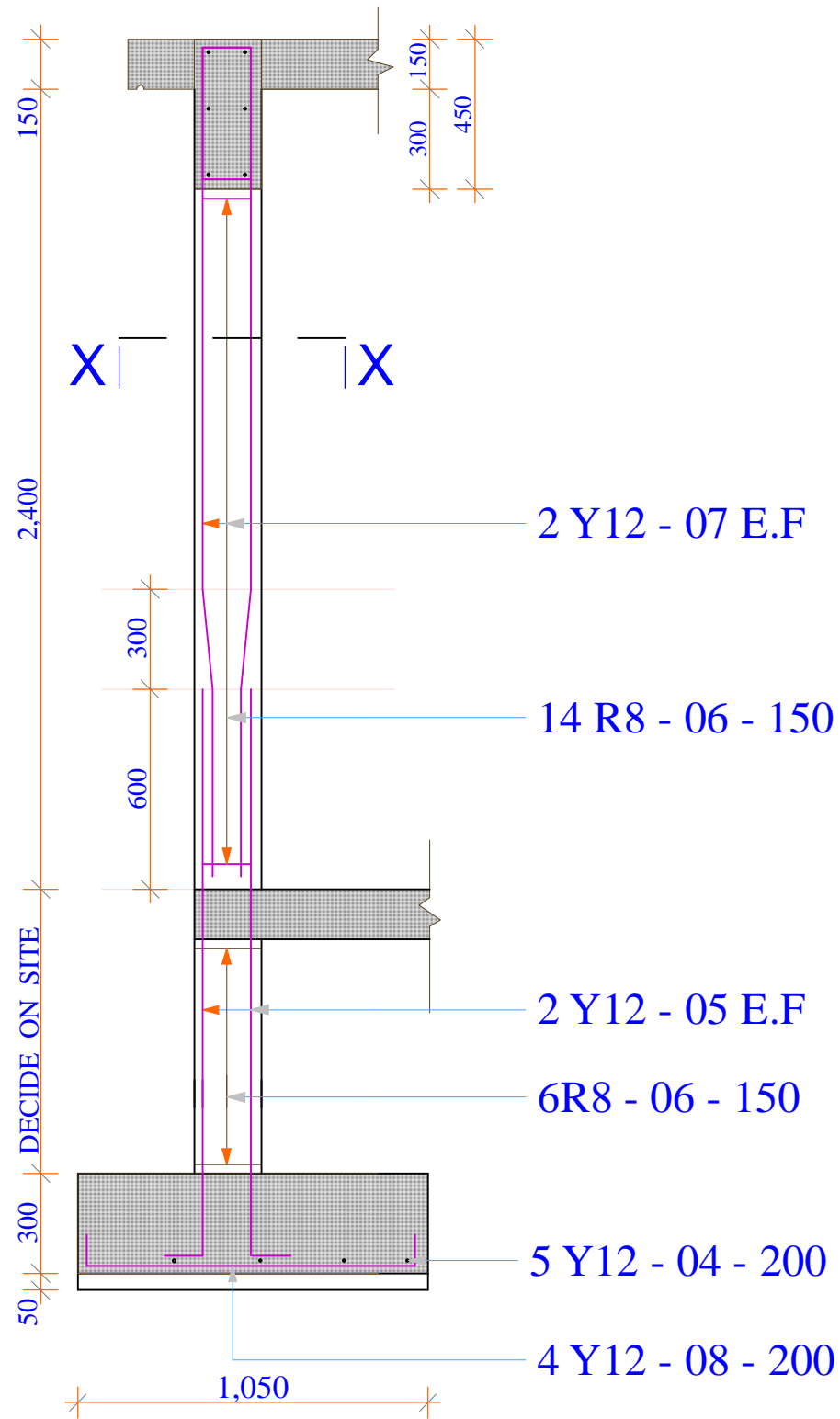
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E.O.K

Checked By
D.M

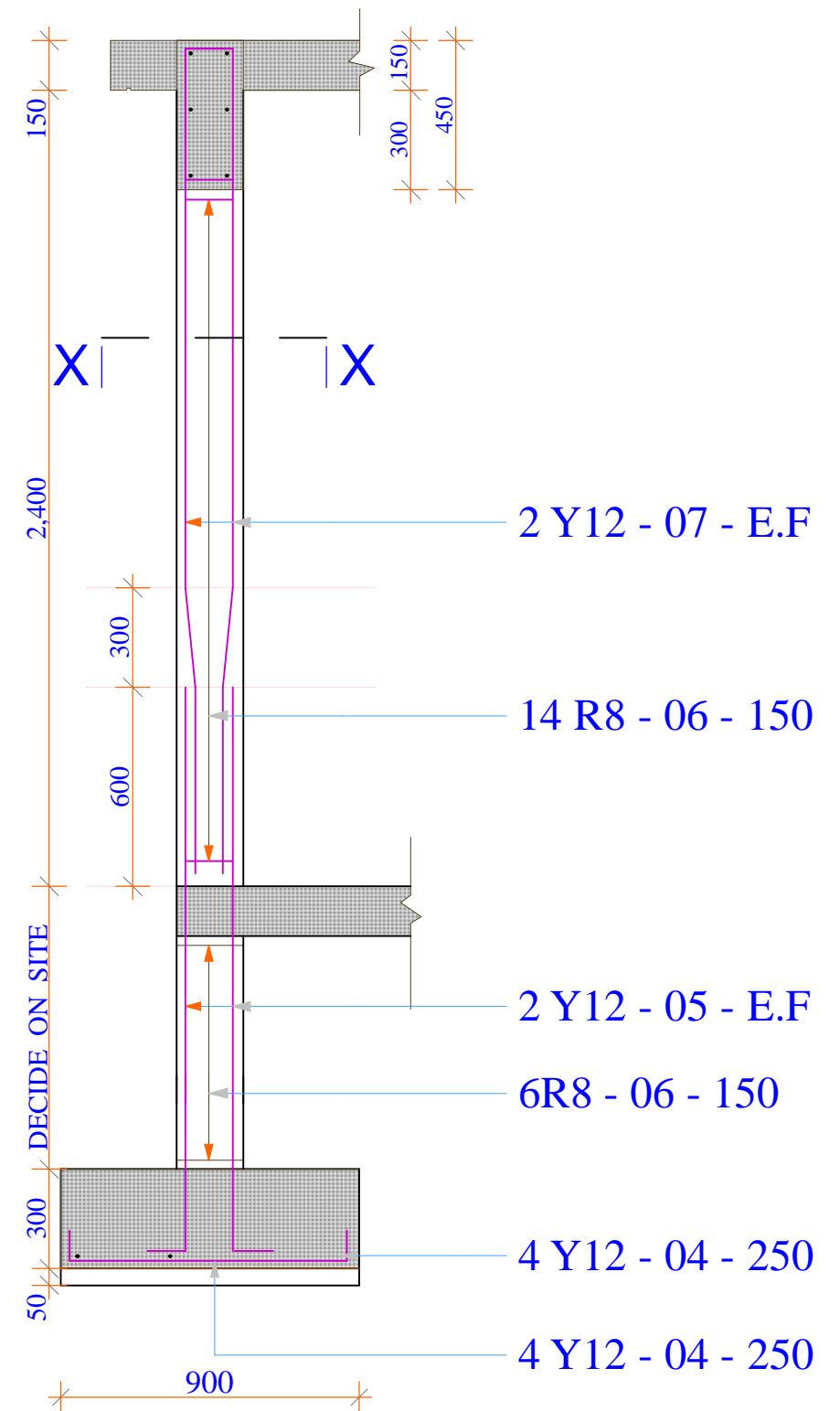
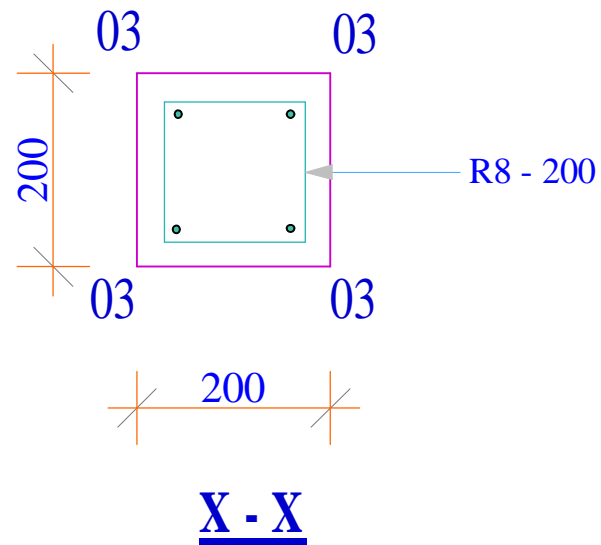
Approved by
F.K.S

Signature.....

Scale 1 : 20
Date:
FEBRUARY 2009
page 02



DETAIL FOR COLUMN & COL. BASE
SHOWN THUS D 2no.



DETAIL FOR COLUMN & COL. BASE
SHOWN THUS C 2no.

Project Title:
 WATER KIOSK
 (Type Closed)
 PREFABRICATED

Client:
 TAWWDA

drq title:
 COLUMNS REINFORCEMENT
 DETAIL

drq no:
 STR 03

Consultant:

Designed By
 E.O.K

Checked By
 D.M

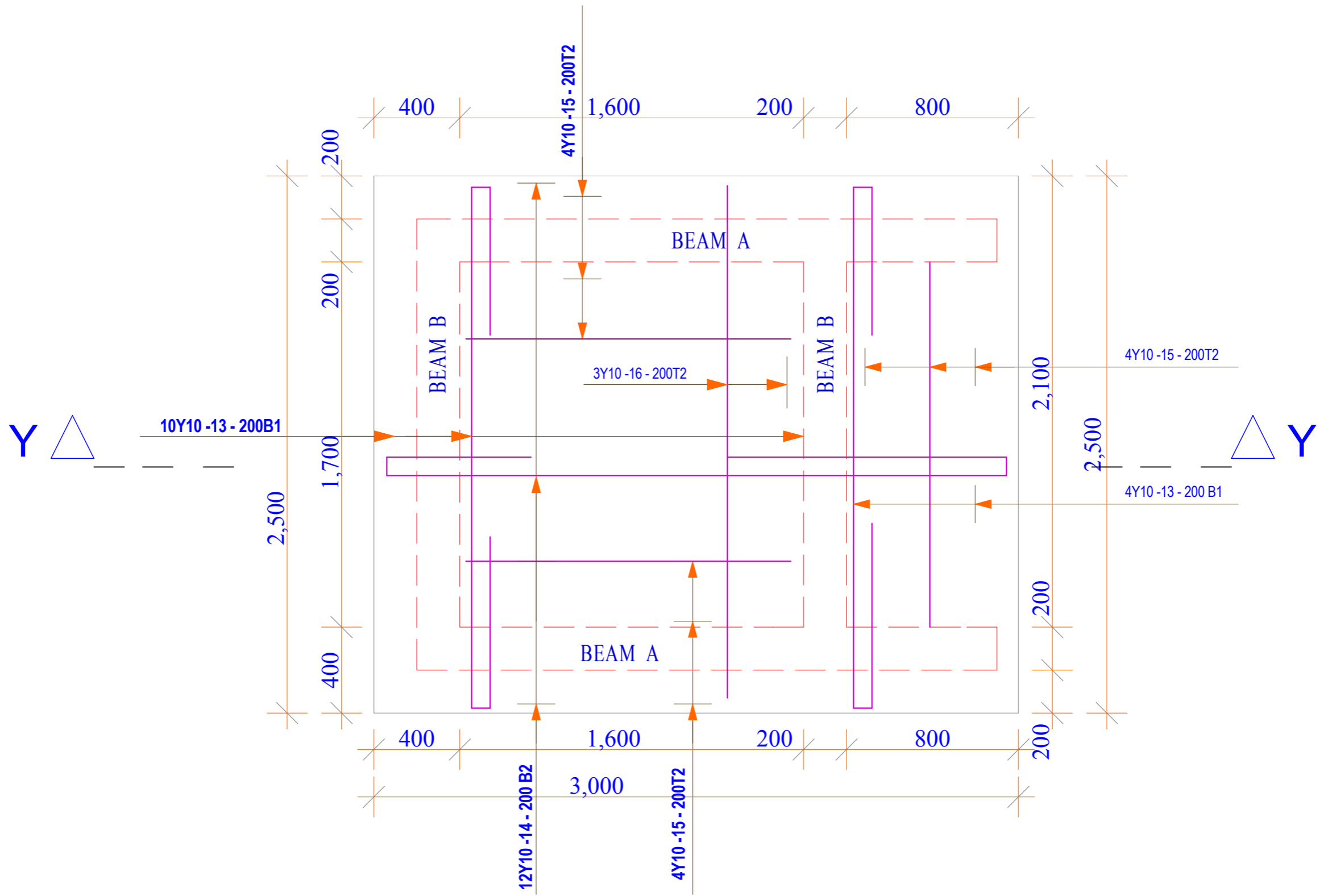
Approved by
 F.K.S

Signature.....

Scale 1 : 20

Date:
 FEBRUARY 2009

page 03



R. C. SLAB DETAILS

Project Title:

**WATER KIOSK
(Type Closed)
PREFABRICATED**

Client:

TAWWDA

drq title:

**SLAB REINFORCEMENT
DETAIL**

drq no:

STR 04

Consultant:

Designed By

E.O.K

Checked By

D.M

Approved by

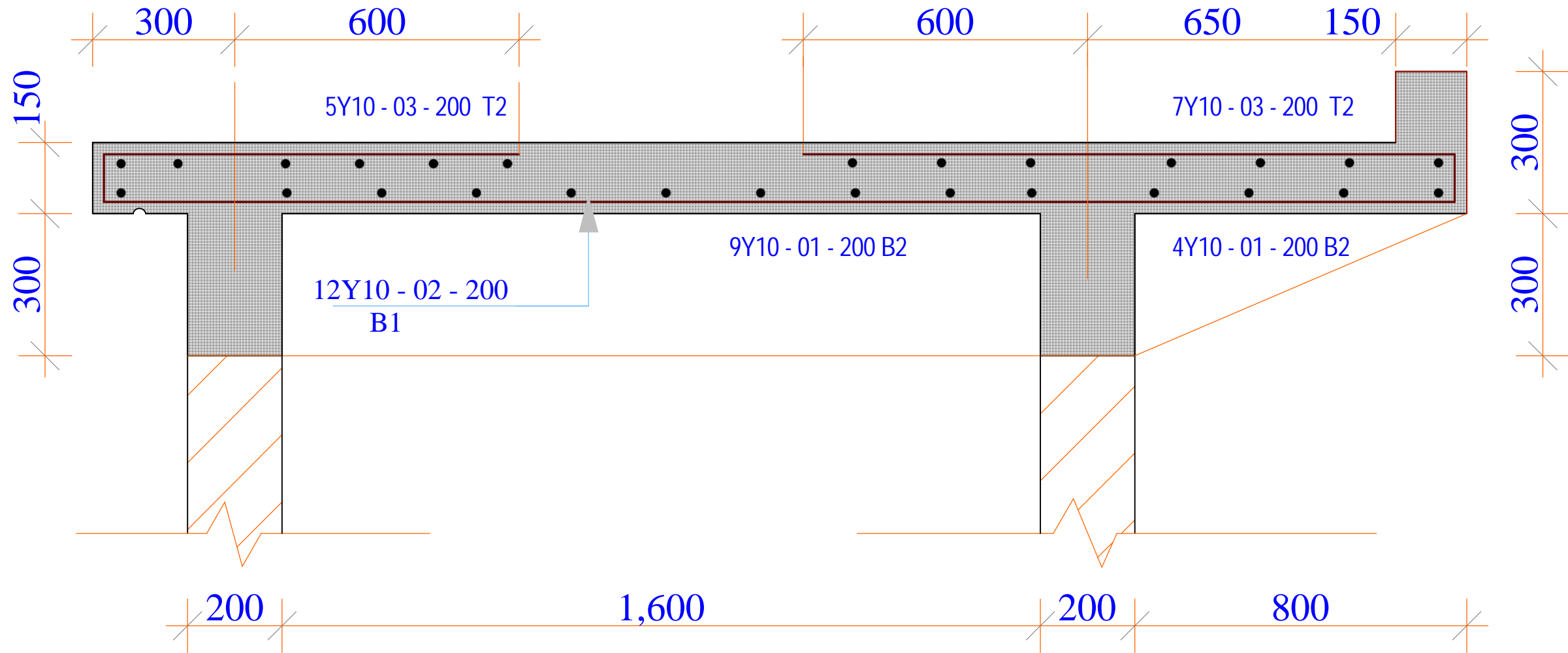
F.K.S

Signature.....

Scale 1 : 20

Date: FEBRUARY 2009

page 04



R. C. SLAB SECTION Y-Y

Project Title:

WATER KIOSK
(Type Closed)
PREFABRICATED

Client:

TAWWDA

drq title:

RC SLAB SECTION

drq no:

STR 05

Consultant:

Designed By

E.O.K

Checked By

D.M

Approved by

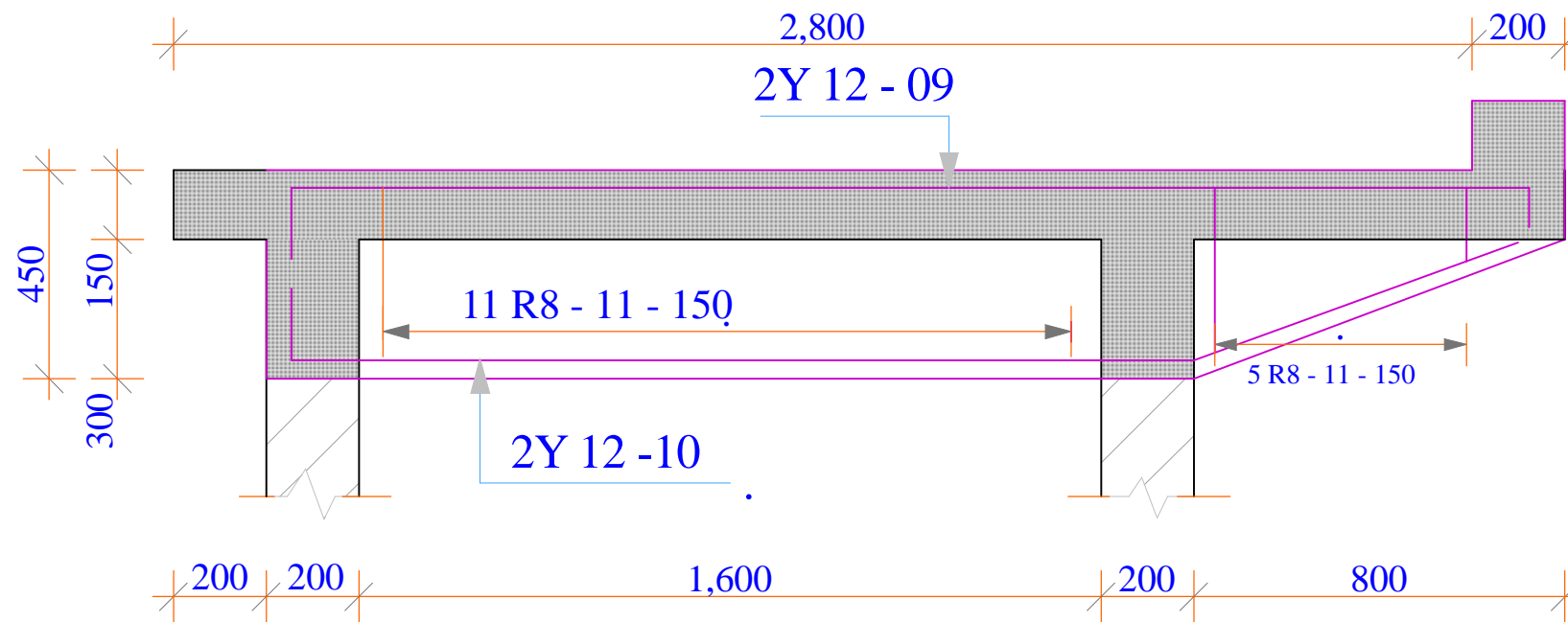
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Signature.....

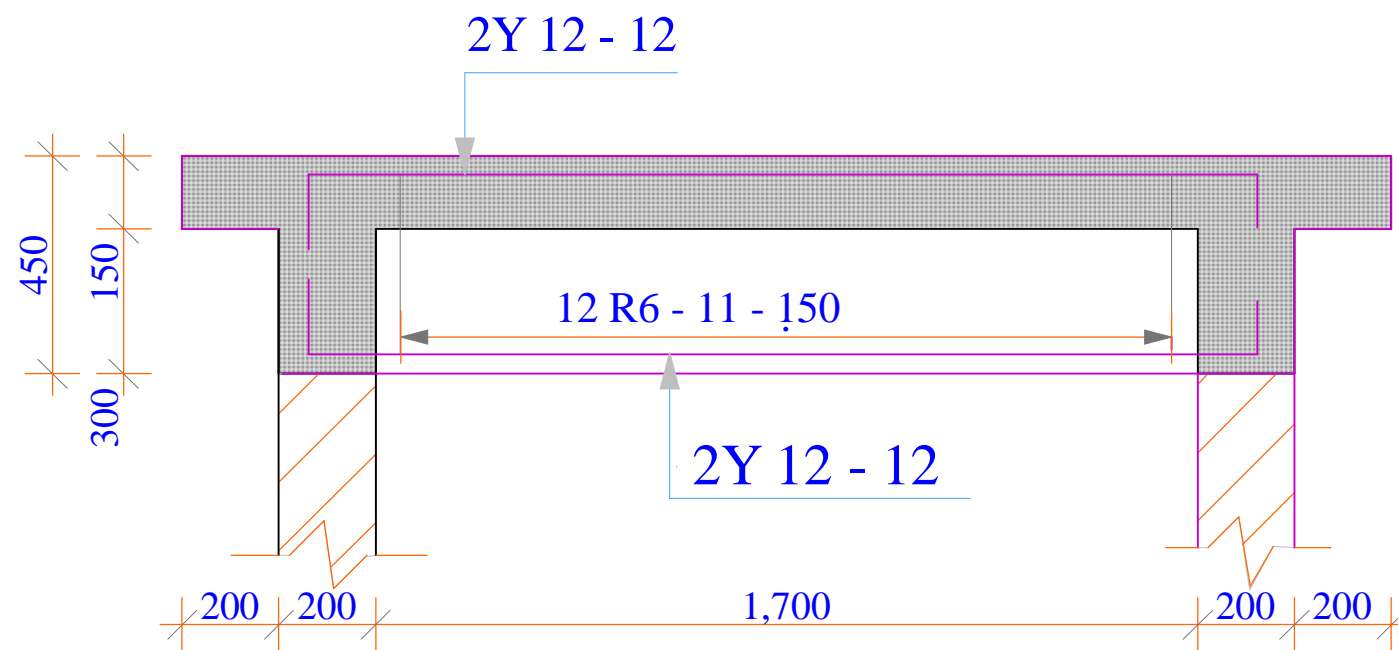
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Date:
FEBRUARY 2009

page 05



BEAM A 2No.



BEAM B 2No.

Project Title:

WATER KIOSK
(Type Closed)
PREFABRICATED

Client:

TAWWDA

drq title:

BEAMS REINFORCEMENT
DETAILS

drq no:

STR 06

Consultant:

Designed By

E.O.K

Checked By

D.M

Approved by

F.K.S

Signature.....

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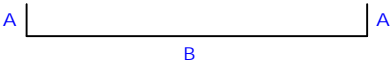
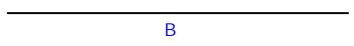
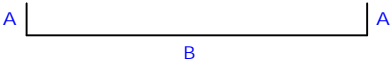
Date:
FEBRUARY 2009

page 06

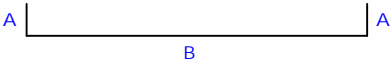
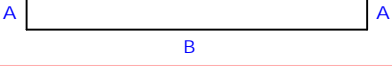
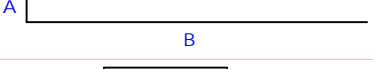
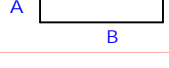
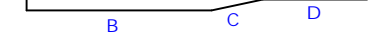
BAR BENDING SCHEDULE

TABLE OF CONTENTS

No.	Dwg. Title	Dwg. No.	Page
1	Foundation Footings and Columns	BBS - 01	01
2	Beams and Slab	BBS - 02	02

Item	Description	Bar type	Bar mark	Shape	Dimensions (mm)				Length (mm)	Number	Total length (mm)
					A	B	C	D			
1	<u>Foundation Footing</u>	Y10	01		100	500			700	18	56700mm
		Y10	02			2000			2000	14	28,000mm
		Y10	03		100	1050			1250	7	8750mm

Length of bar is estimated to be 12,000mm

Item	Description	Bar type	Bar mark	Shape	Dimensions (mm)				Length (mm)	Number	Total length (mm)
					A	B	C	D			
1	<u>Columns</u>	Y12	04		100	800			1000	26	26,000
		Y12	08		100	1050			1250	10	10,000
		Y12	05		300	1800			2100	16	33,600
		R 8	06		100	100			500	80	40,000
		Y12	07		100	1500	300	600	2500	16	40,000

Length of bar is estimated to be 12,000mm

Project Title:

WATER KIOSK
(Type Closed)
PREFABRICATED

Client:

TAWWDA

drq title:

BAR BENDING SCHEDULE

drq no.:

BBS 01

Consultant:

Designed By

Checked By

D.M

Approved by

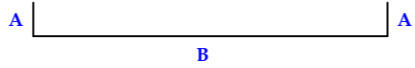
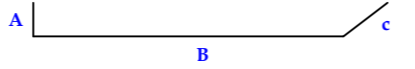
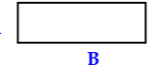
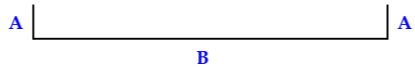
F.K.S

Signature.....

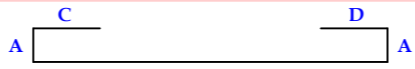

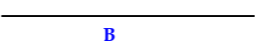
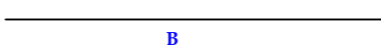
Scale

Date:
FEBRUARY 2009

page 01

Item	Description	Bar type	Bar mark	Shape	Dimensions (mm)				Length (mm)	Number	Total length (mm)
					A	B	C	D			
1	<u>Beams</u>	Y12	09		100	2750			2950	2	5,900
		Y12	10		100	1975	850		2925	2	5,850
		R 8	11		150	400			1200	45	55,000
		Y12	12		100	2050			2250	8	18,000

Length of bar is estimated to be 12,000mm

Item	Description	Bar type	Bar mark	Shape	Dimensions (mm)				Length (mm)	Number	Total length (mm)
					A	B	C	D			
1	<u>Slab</u>	Y10	13		100	2,450	1,000	1,000	4,550	14	63,700
		Y10	14		100	2,900	1,000	1,600	5,700	12	68,400
		Y10	15			1,600			1,600	12	19,200
		Y10	16			2,400			2,400	3	7,200

Length of bar is estimated to be 12,000mm

Project Title:

**WATER KIOSK
(Type Closed)
PREFABRICATED**

Client:

TAWWDA

drq title:

BAR BENDING SCHEDULE

drq no:

BBS 02

Consultant:

Designed By

E.O.K

Checked By

D.M

Approved by

F.K.S

Signature.....

Scale

**Date:
FEBRUARY 2009**

page 02