



Asian Development Bank
National Capital Region Planning Board



Capacity Development of the
National Capital Region Planning Board
Package 2 Component B
TA No. 7055-IND



FINAL REPORT

**Volume IV-B: Detailed Drawings
Detailed Project Report for
Improvement of Solid Waste Management in Ghaziabad**



WilburSmith
ASSOCIATES

July 2010

NCR Planning Board
Asian Development Bank

Capacity Development of the National Capital Region Planning Board (NCRPB) – Component B (TA No. 7055-IND)

FINAL REPORT

Volume IV-B: DPR for Improvement of SWM in Ghaziabad –
Drawings

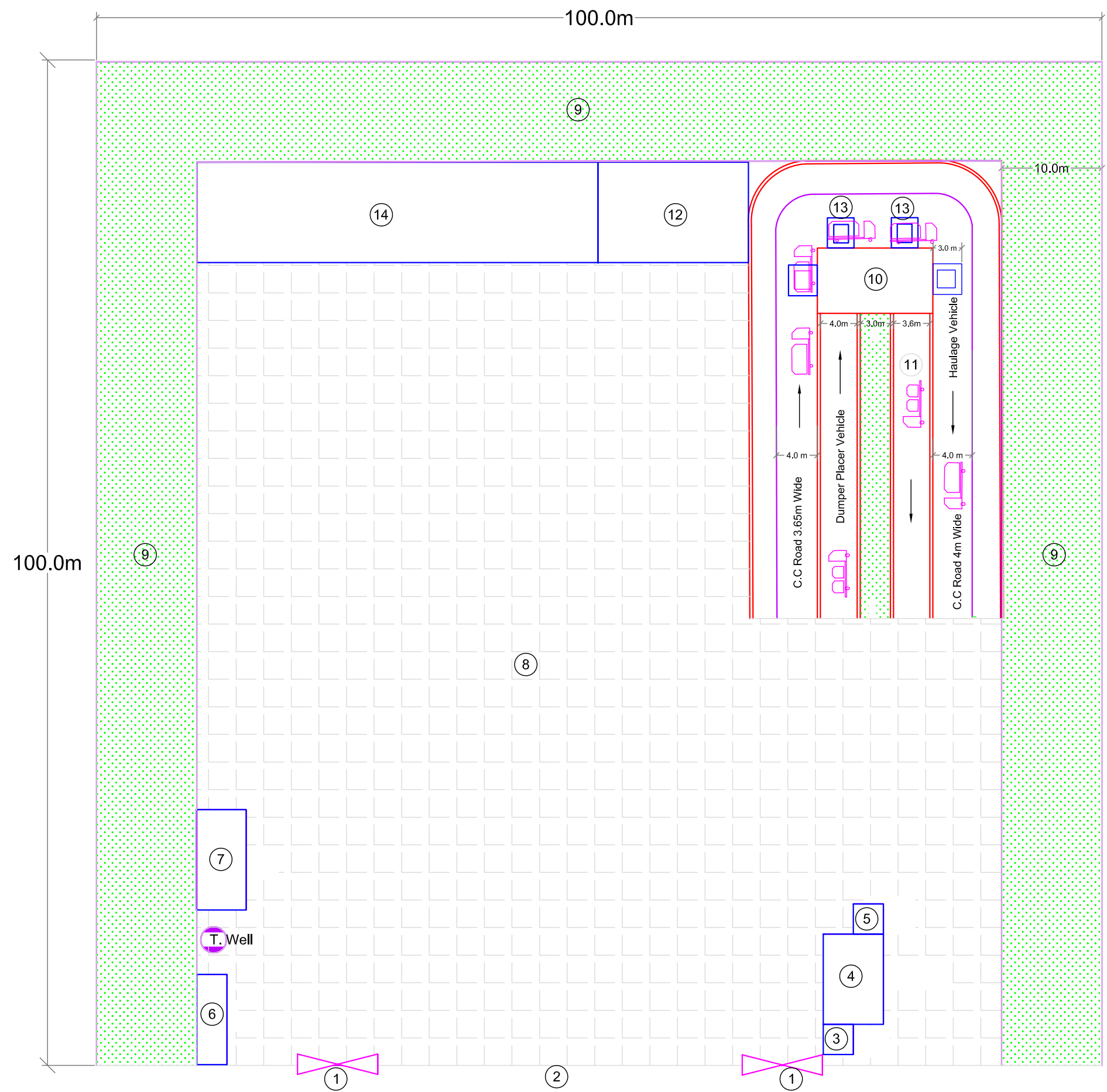
July 2010



Volume IV-B: DPR for Improvement of Solid Waste Management in Ghaziabad - Drawings

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**Capacity Development of
the NCRPB: Component B
ADB TA-7055**

Ghaziabad
Schematic Plan of Transfer Station

Details:

S. No	Description	Size
1	Gate - 2 Nos	8m
2	Compund Wall	-
3	Security Cabin	3m x3m
4	Weigh Bridge	6mx9m
5	Weigh Bridge Cabin	3mx3m
6	Cabin Toilet	3mx9m
7	Staff Room	5mx10m
8	C.C Pavement	-
9	Green Belt 10m Wide	-
10	Unloading Platform	-
11	Ramp	-
12	Administrative Office	9mx10m
13	Hoppers	-
14	Work Shop	10mx35m

Note:
All Dimensions are in Meters

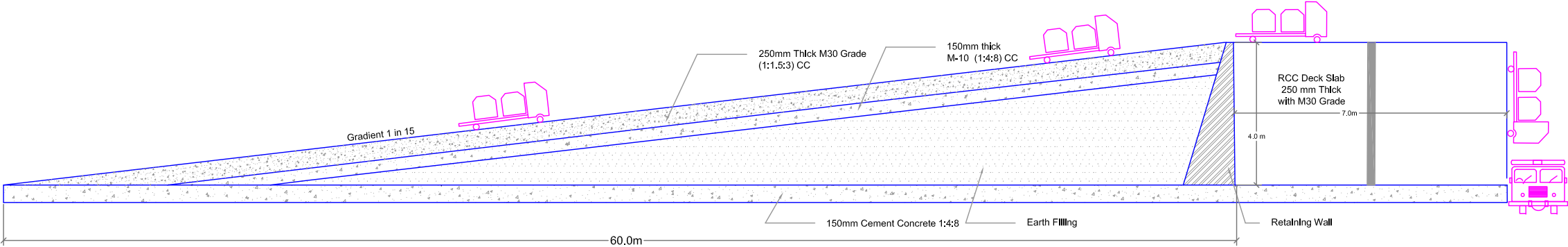
Client:
**Asian Development Bank
National Capital Region Planning Board**
Consultant:
Wilbur Smith Associates

Drawn: SK
Date: Aug. 2009
Checked:SKG
Approved: NSS
Scale: 0 4.0 8.0 12.0 16.0 20.0 Meters

Drg. No.NCRPB-GZD-SWM-01

Capcity Development of
the NCRPB: Component B
ADB TA-7055

Ghaziabad
Section of Ramp of Transfer Station



Section of Ramp

Client:
Asian Development Bank
National Capital Region Planning Board

Consultant
Wilbur Smith Associates

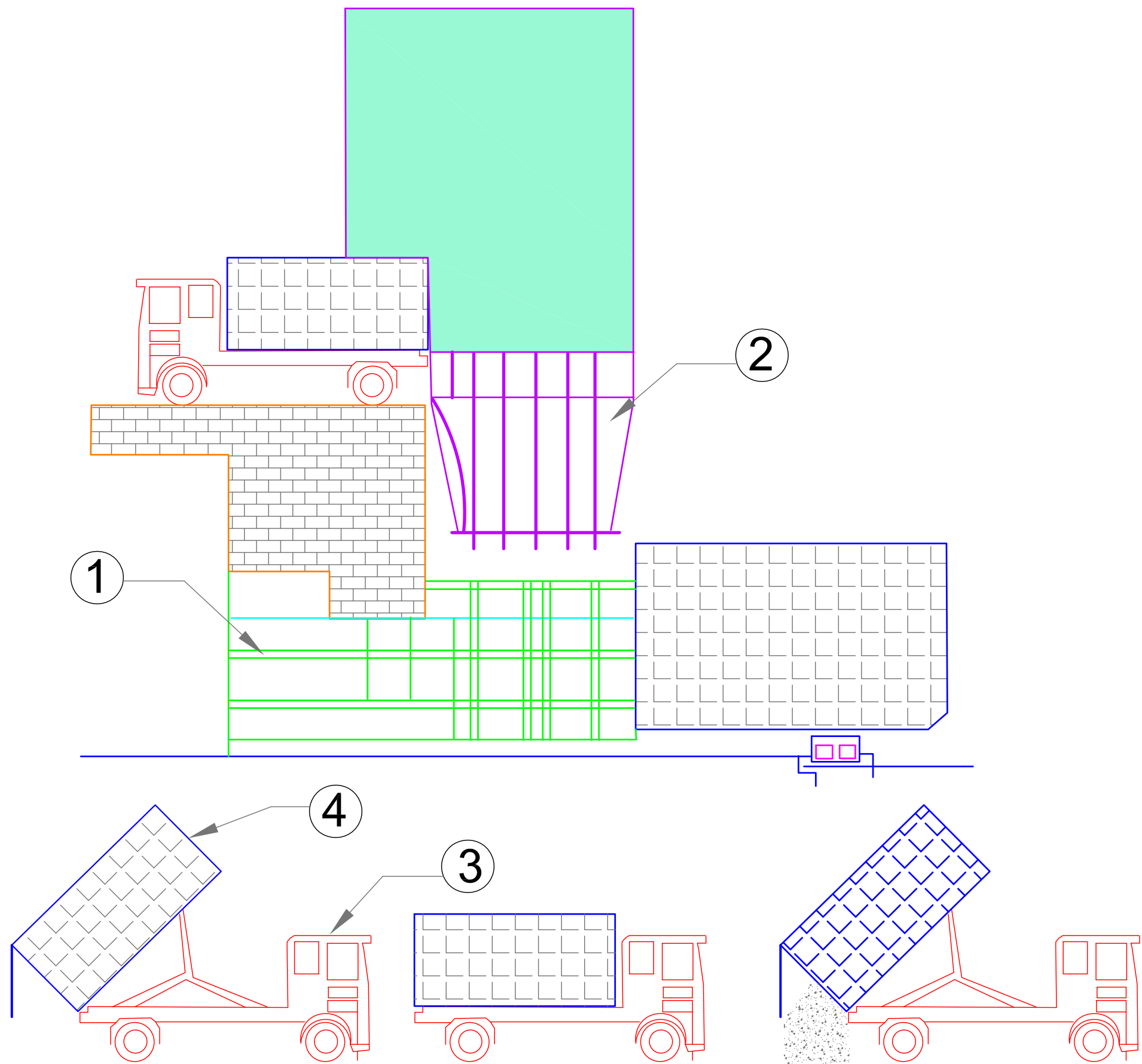
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Date: Aug. 2009	Approved: NSS

Scale: NTS

Drg. No. NCRPB-GZD-SWM-02

**Capcity Development of
the NCRPB: Component B
(ADB TA-7055)**

Panipat
Machine and Equipment of Transfer Station



SI No	Description
1.	Static Compactor
2.	Storage Hopper
3.	Hook Loader
4.	Containers

Client:
**Asian Development Bank
National Capital Region Planning Board**

Consultant:
Wilbur Smith Associates

Drawn: SK
Date: August.2009
Scale: NTS

Checked: SKG
Approved: NSS

Drg. No. NCRPB-GZD-SWM-03

**Capacity Development of
the NCRPB: Component B
(ADB TA-7055)**

Ghaziabad
Layout Plan of Solid Waste Disposal Site

Area Details:

Item No.	Description	Size
1	Main Gate	8.0 m WIDE
2	Security Cabin	3.0 m x 3.0 m
3	Parking Shed	28.0m x8.0m x 4.0m
4	Office Building	10.0 m x 9.0 m
5	Weighbridge (2 Platforms) and Scale Room	3.0 m x 12.0 m 3.3 m x 3.3 m
6	Approach Road [Total Width : 8.00 m (7.0 m - Black Topped Road with 1.0 m Hard Shoulder on each side)]	795.00 m
7	Visual Inspection Area	24.0 m x 44.0 m
8	Wheel Wash Facility	18.0 m x 5.0 m
9	Compost Plant	2.0 Hectares
10	Workers Rest Room & Toilet Block	11.5 m x 8.0 m
11	Fill Soil Area	30.0 m x 30.0 m
12	Ramp (Slope:1 In 10)	81.00 m
13	Storm Water Drain	2535.0 m
14	Outer Side Of Bund	1V:2H (6 m)
15	Top of Bund	9.0 m
16	Inner Side of Bund	1V:3H (9 m)
17	Trench Inner Side	1V:3H (3.60 m)
18A	Landfill	108000 Sq.mt.
19	Monitoring Wells	4 Nos.
20	Green Belt	10 m WIDE
21	Leachate Pond	3.0 X3.0M
22	Water Tank	4.5 X5.0M

Total Area = 45.0 Hect.
Area for First Phase = 20 Hect.

Note:
All Dimensions are In Meters

Client:
Asian Development Bank
National Capital Region Planning Board

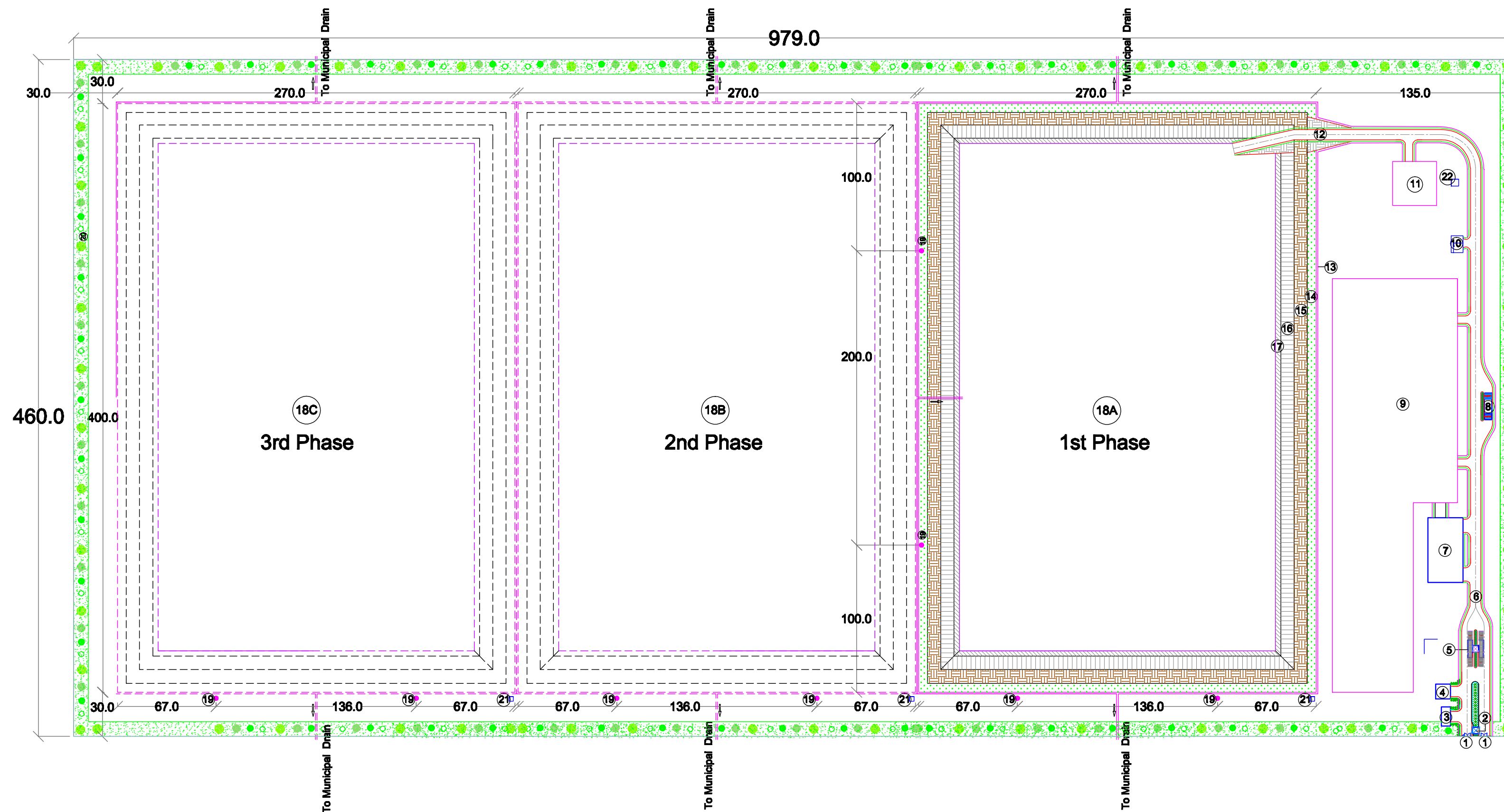
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Wilbur Smith Associates

Drawn: SK
Date: August.2009

Checked:SKG
Approved: NSS

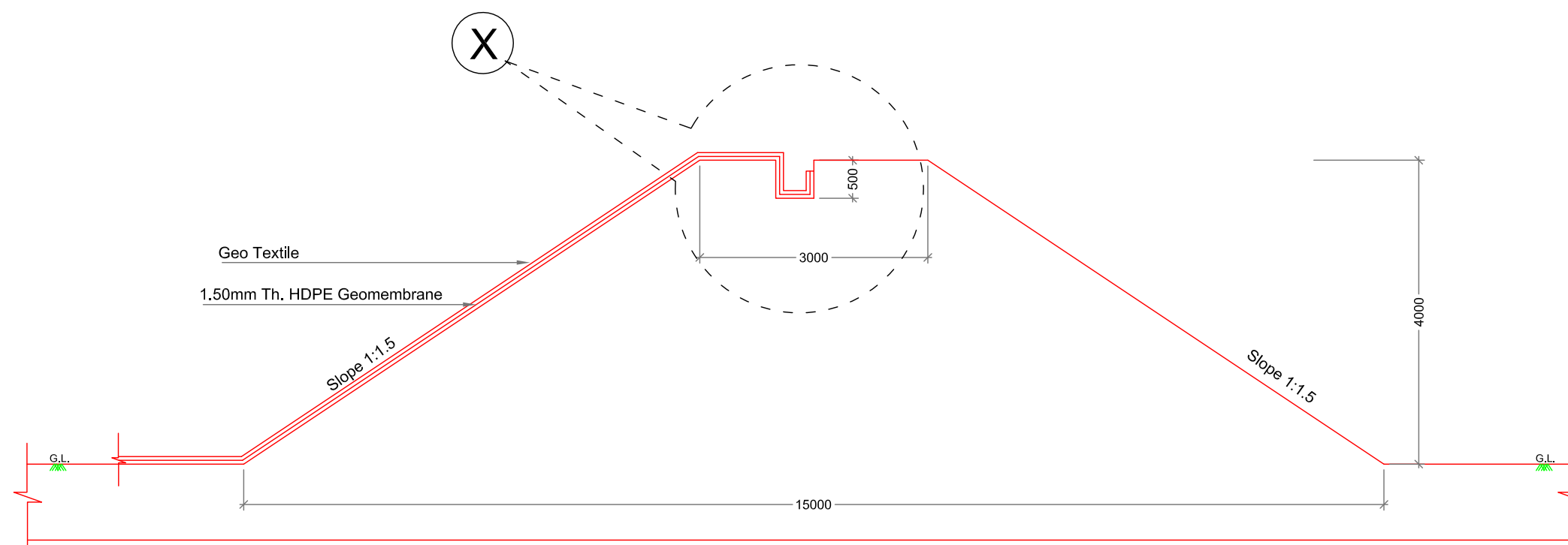
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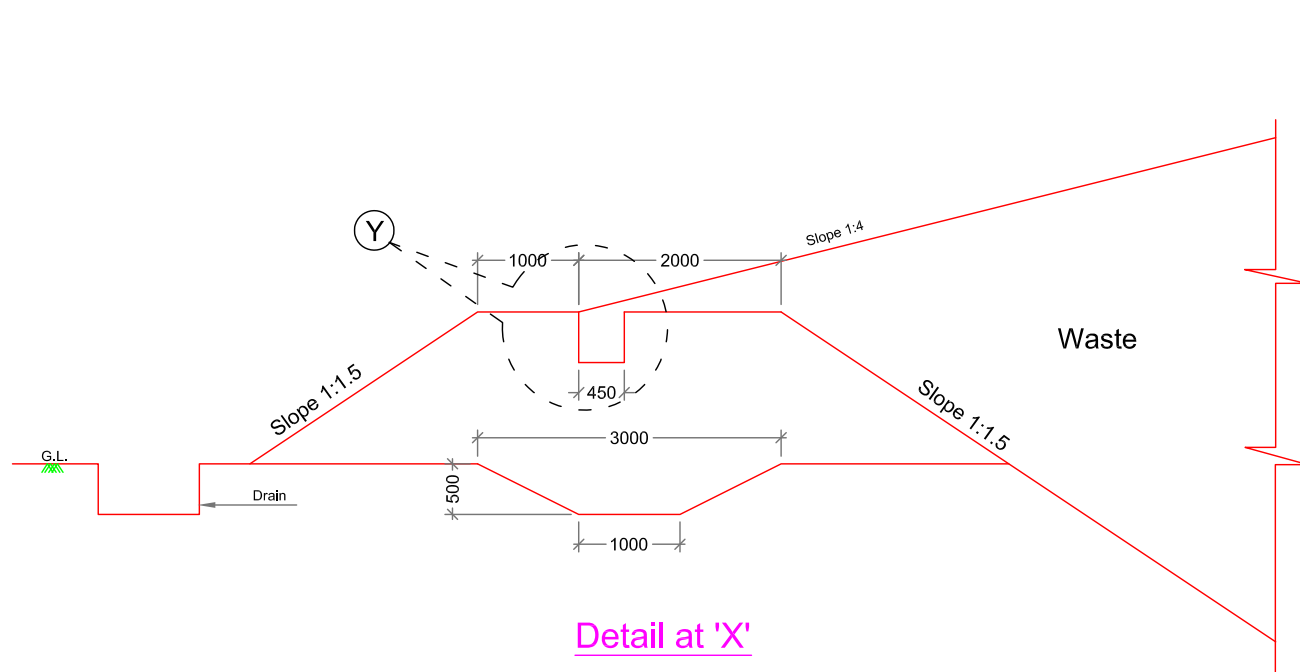


Capacity Development of
the NCRPB: Component B
ADB TA-7055

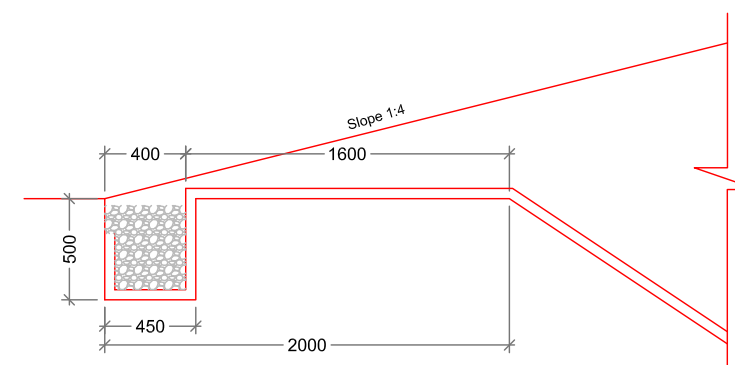
Ghaziabad
Side Bund Anchor Trench



Detail of Side Bund



Detail at 'X'



Detail at 'Y'
Anchor Trench Detail

(Scale: NTS)

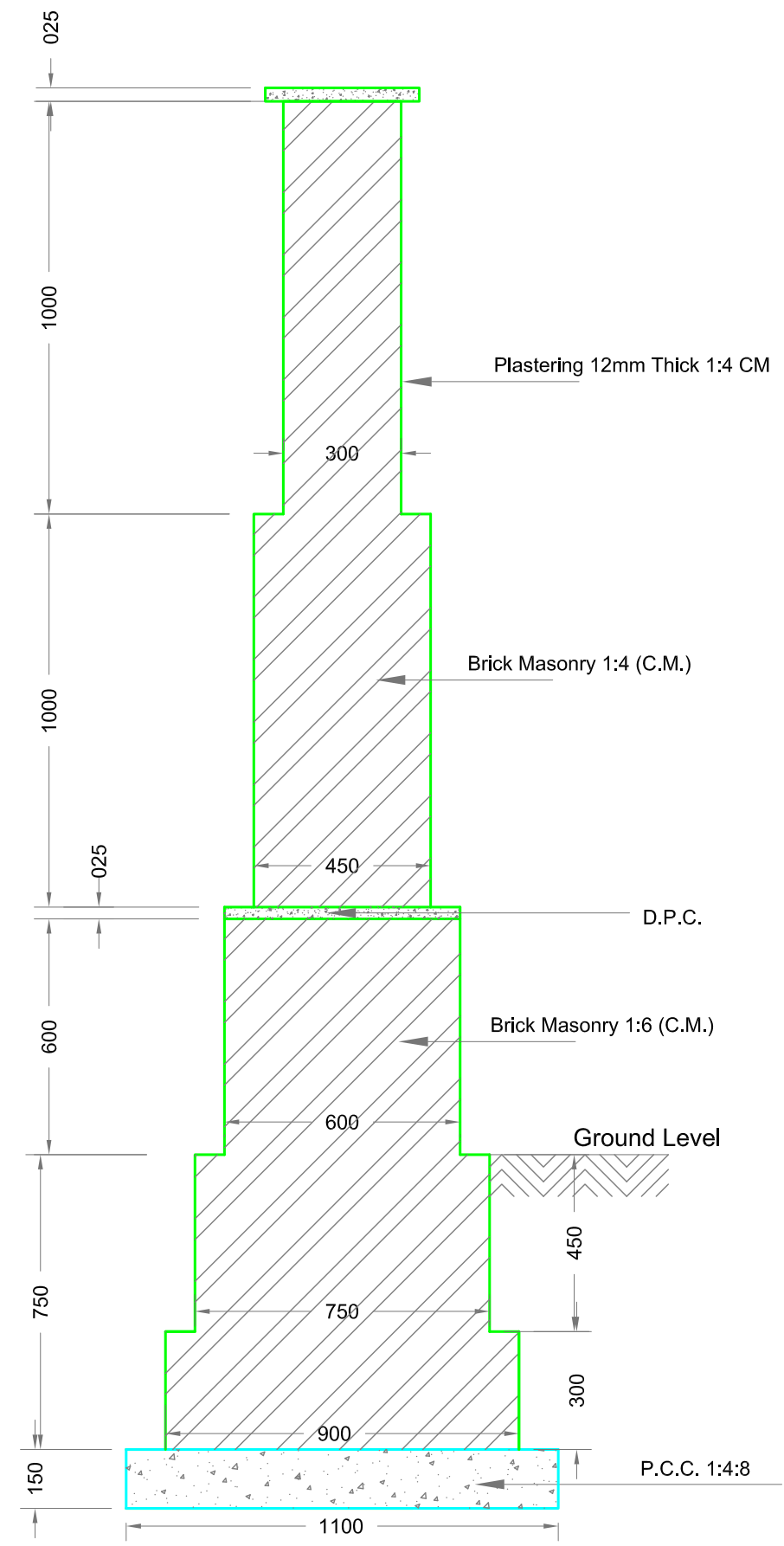
Note:
All Dimensions are in Millimeters

Client:
**Asian Development Bank
National Capital Region Planning Board**
Consultant:
Wilbur Smith Associates

Drawn: SK
Date: Aug. 2009
Checked: SKG
Approved: NSS

Scale: 00 500 1000 1500 2000mm

Drg. No. NCRPB-GZD-SWM-06



Cross Section of Boundary Wall

Capacity Development of
the NCRPB: Component B
ADB TA-7055

Ghaziabad
Section of Compound Wall

Note:
All Dimensions are in Millimeters

Client:
**Asian Development Bank
National Capital Region Planning Board**

Consultant:
Wilbur Smith Associates

Drawn: SK	Checked: SKG
Date: Aug. 2009	Approved: NSS
Scale: 0 150 300 450 600 750 Millimeters	

Drg. No. NCRPB-GZD-SWM-07

Capacity Development of
the NCRPB: Component B
ADB TA-7055

Ghaziabad
Typical Details of Entrance Gate at
Landfill Site

Note:

All Dimensions are in Millimeters

Client:

Asian Development Bank
National Capital Region Planning Board

Consultant

Wilbur Smith Associates

Drawn: SK

Date: Aug. 2009

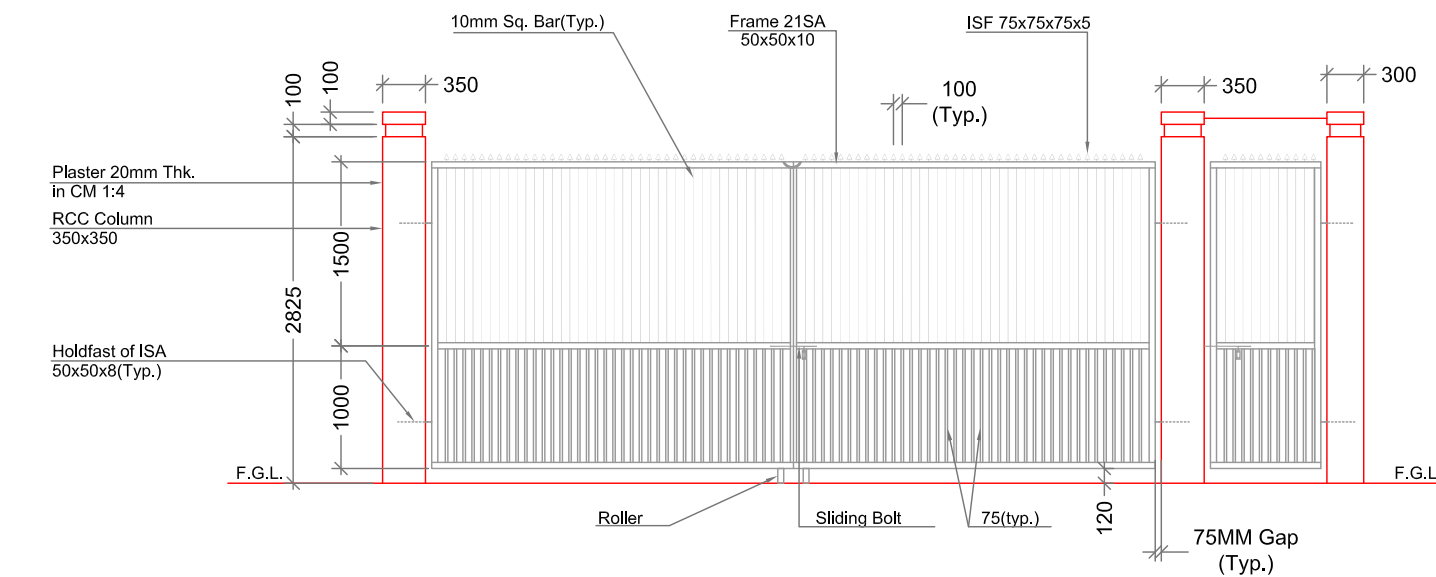
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Approved: NSS

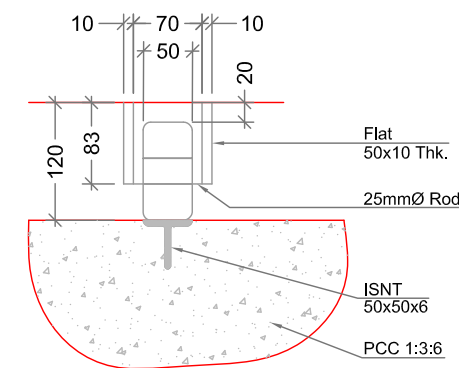
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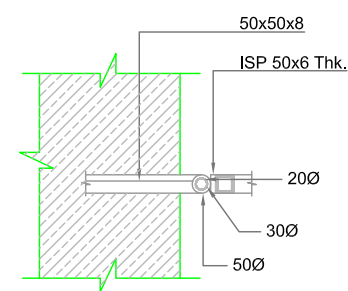
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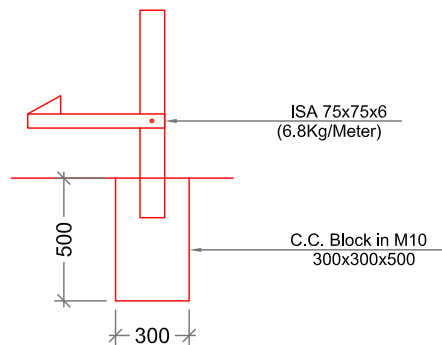
Elevation



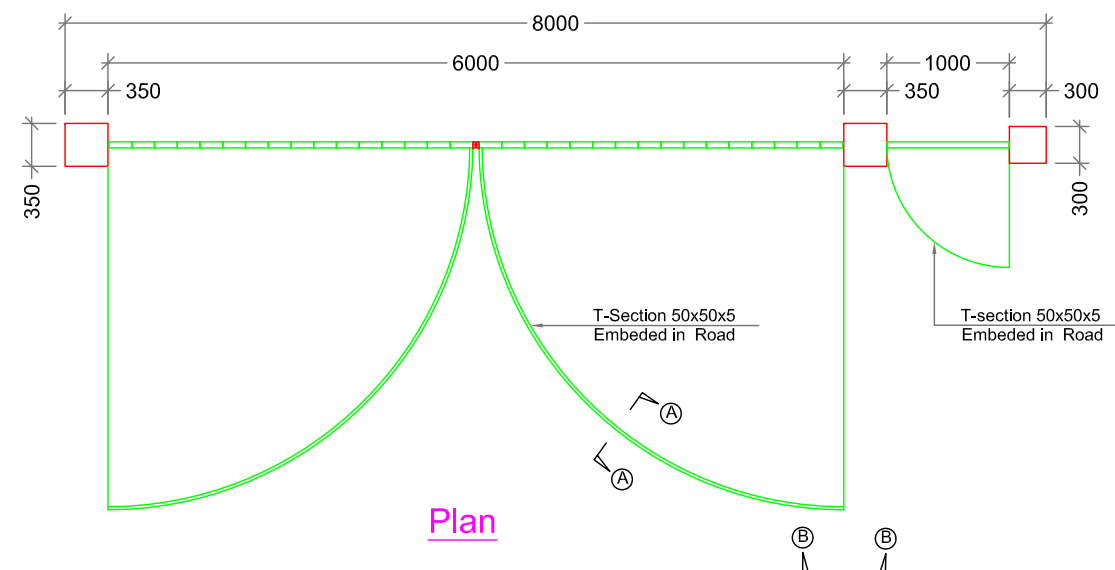
Section A-A
Detail of Roller



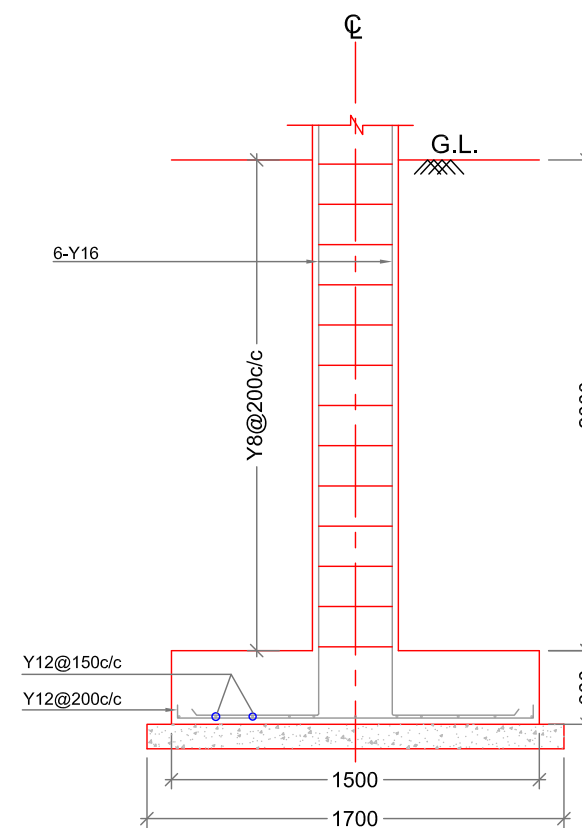
Detail 'A'



Section B-B



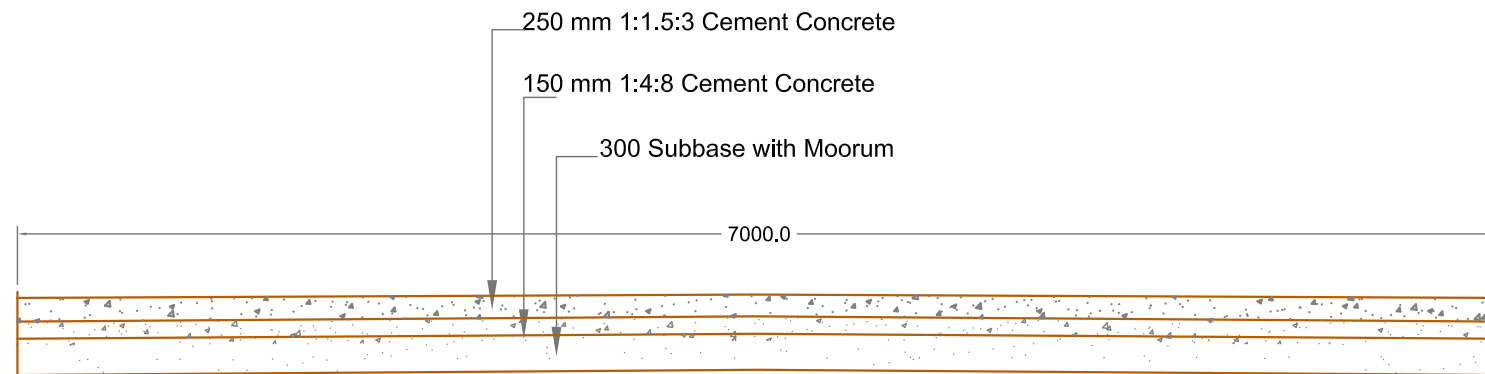
Plan



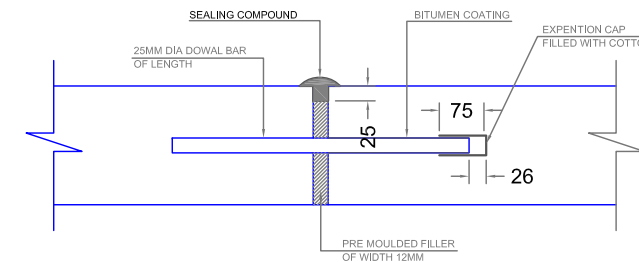
Section of Column Footing
SCALE : NTS

Capacity Development of
the NCRPB: Component B
ADB TA-7055

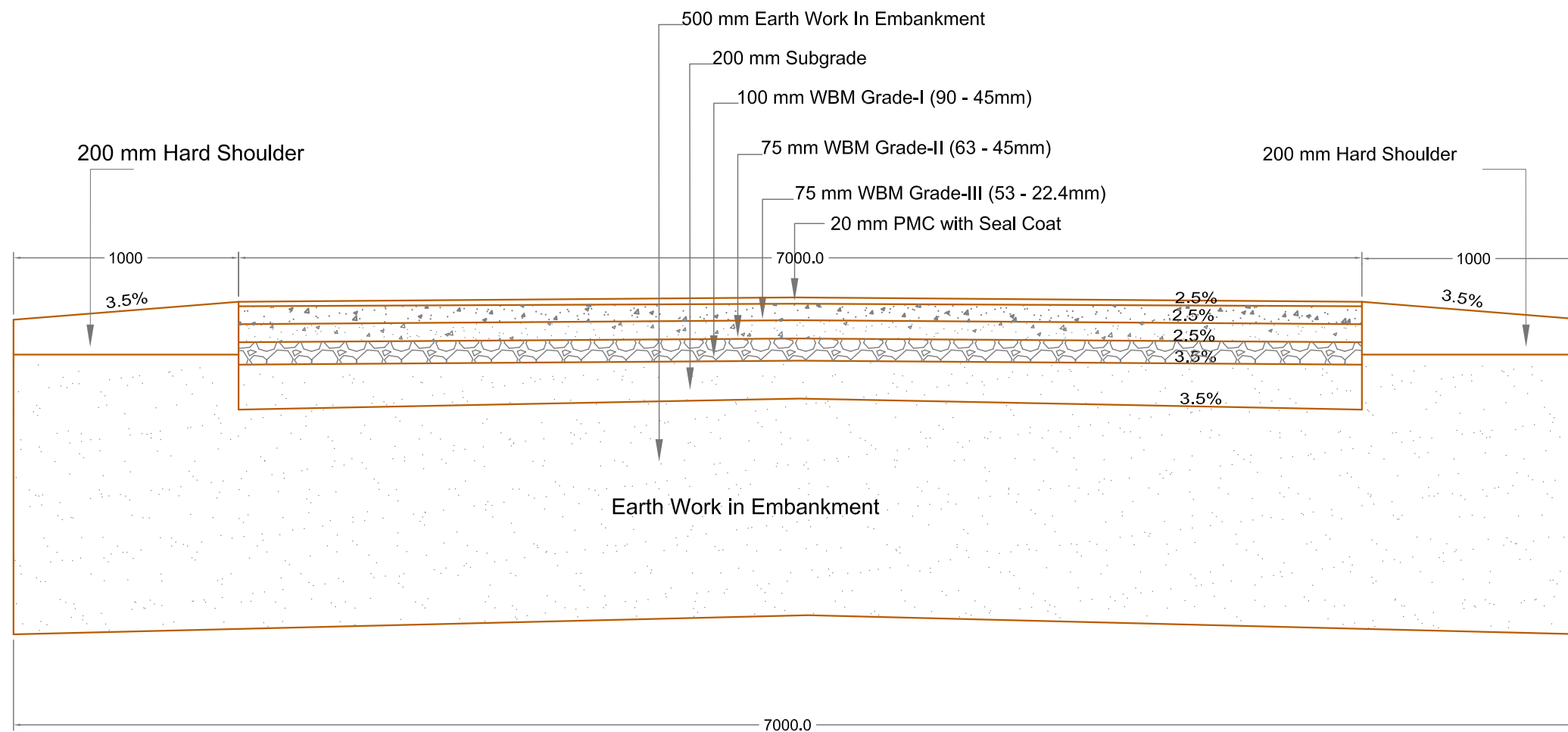
Ghaziabad
Cross Section of Roads



Cross Section of CC Road



Expansion Joint With Dowel Bars



Cross Section of BT Road

Note:
All Dimensions are in Millimeters

Client:
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National Capital Region Planning Board**

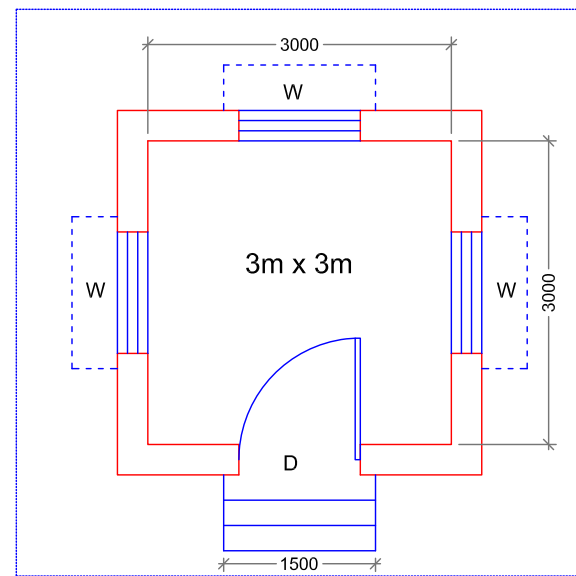
Consultant:
Wilbur Smith Associates

Drawn: SK
Date: Aug. 2009
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Checked:SKG
Approved: NSS

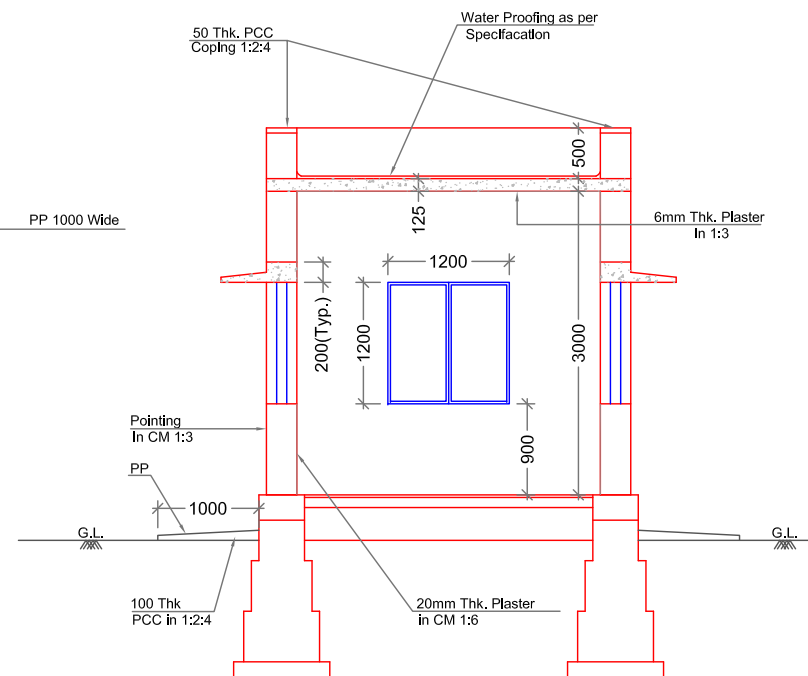
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Capacity Development of
the NCRPB: Component B
ADB TA-7055

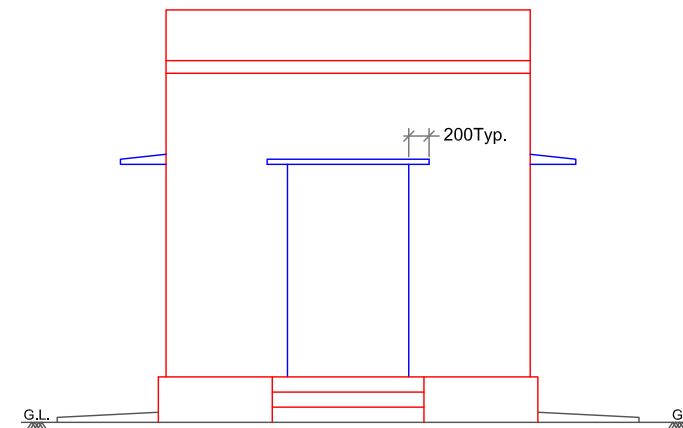
Ghaziabad
Plan and Sectional Details of Watchman Cabin



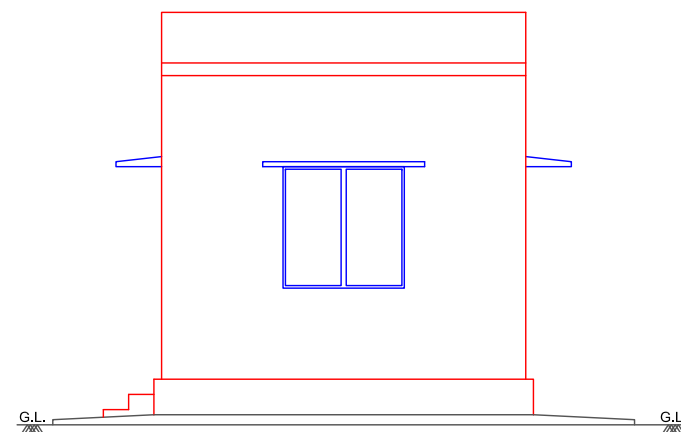
Plan



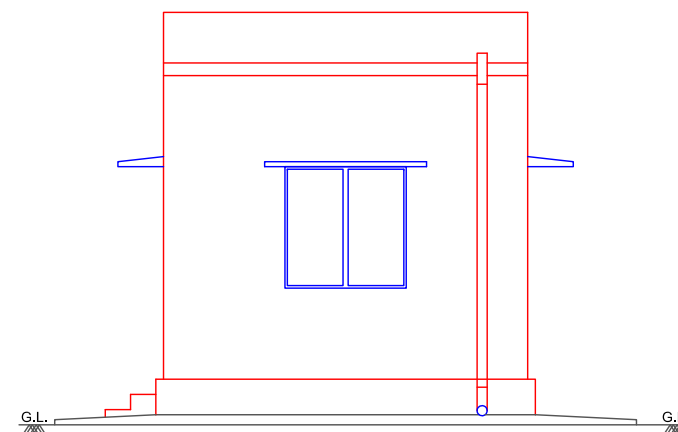
Section 1-1



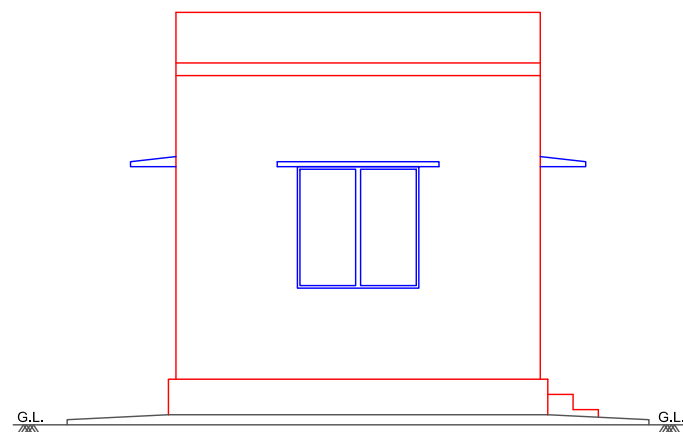
Elevation -1



Elevation -2



Elevation -3



Elevation -4

Note:
All Dimensions are in Millimeters

Client:
**Asian Development Bank
National Capital Region Planning Board**

Consultant:
Wilbur Smith Associates

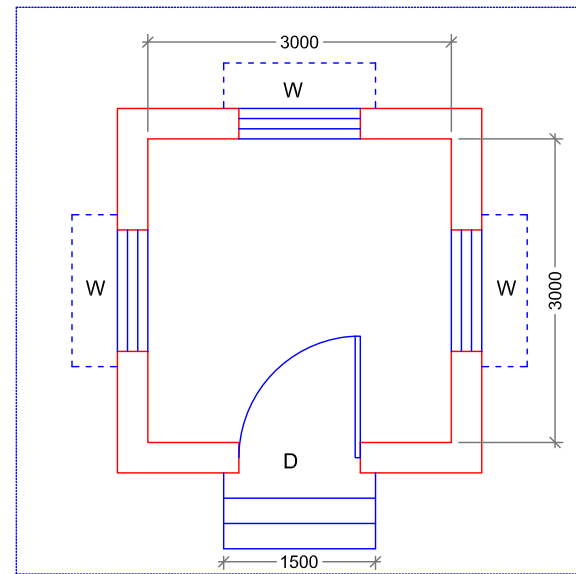
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Date: Aug. 2009
Checked: SKG
Approved: NSS

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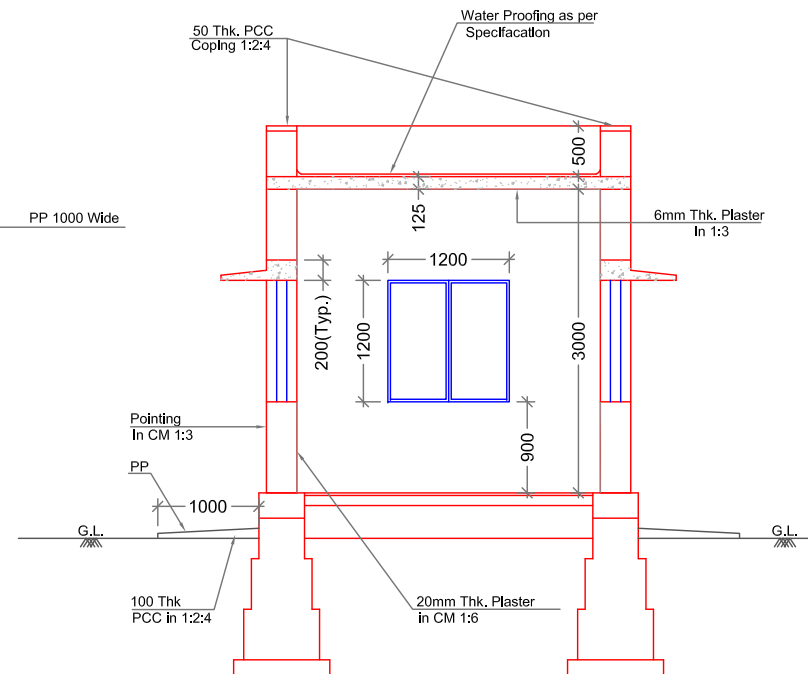
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**Capacity Development of
the NCRPB: Component B
ADB TA-7055**

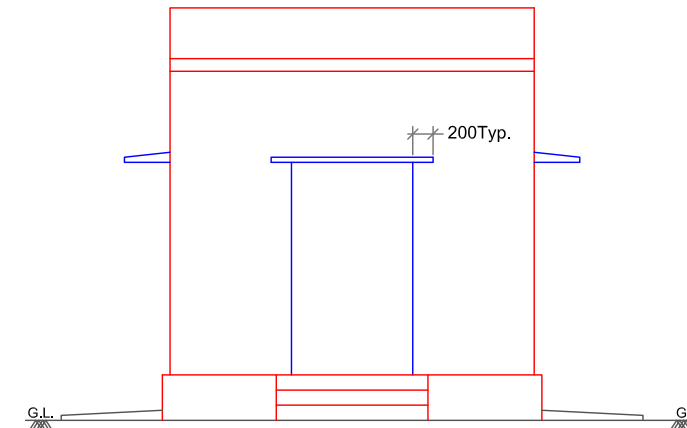
Ghaziabad
Plan and Elevation of Weigh Bridge Record Room



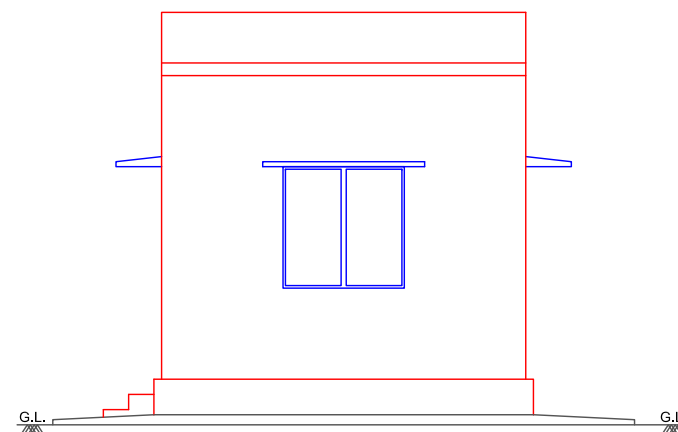
Plan



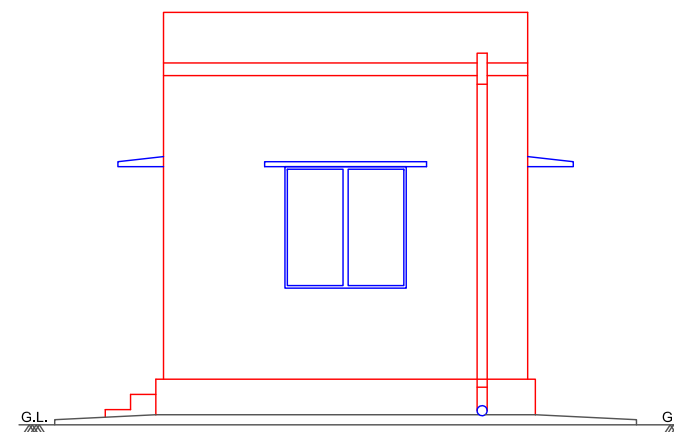
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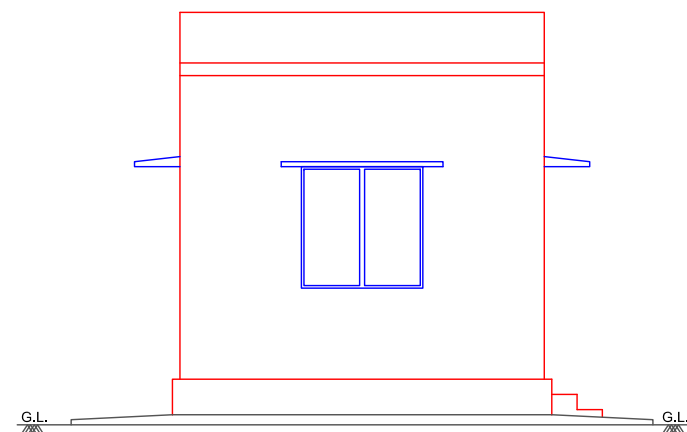
Elevation -1



Elevation -2



Elevation -3



Elevation -4

Note:
All Dimensions are in Millimeters

Client:
**Asian Development Bank
National Capital Region Planning Board**

Consultant:
Wilbur Smith Associates

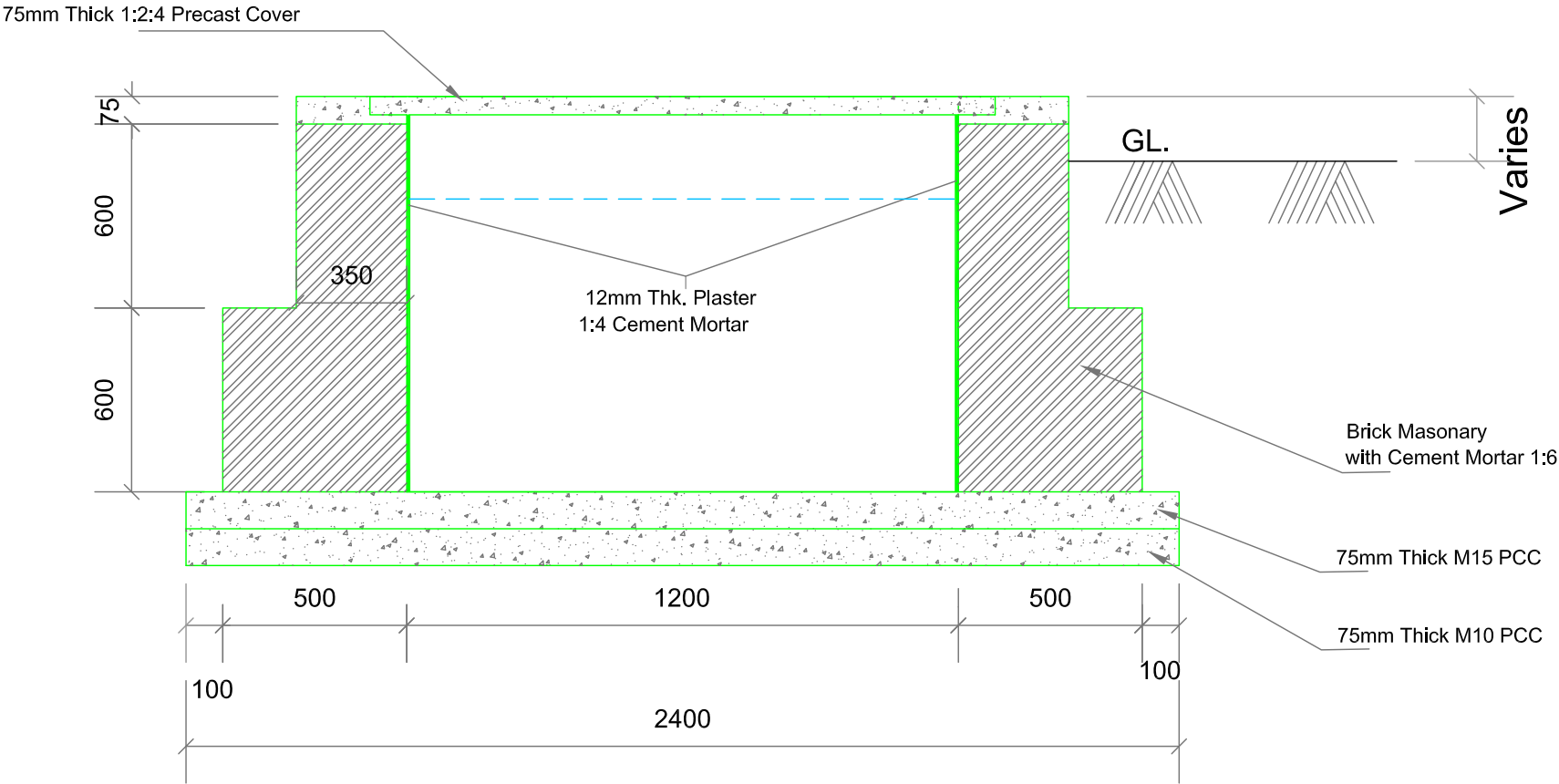
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Date: Aug. 2009
Checked: SKG
Approved: NSS

Scale: 00 750 1500 2250 3000mm

Drg. No. NCRPB-GZD-SWM-11

**Capacity Development of
the NCRPB: Component B
(ADB TA-7055)**

Ghaziabad
Cross Section of Drain



Cross Sectional Details of Drain

Notes:
All Dimensions are in Millimeters

Client:
**Asian Development Bank
National Capital Region Planning Board**

Consultant:
Wilbur Smith Associates

Drawn: SK	Checked: SKG
Date: August.2009	Approved: NSS
Scale: NTS	

Drg. No.NCRPB-GZD-SWM-12

Ghaziabad
Plan, Section of Administrative Building
and Septic Tank

Drg. No. NCRPB-GZD-SWM-13

**Capacity Development of
the NCRPB: Component B
ADB TA-7055**

Ghaziabad
Plan Showing Electrical Arrangement for
Administrative Building

Legend

- Industrial Light Fitting with Twine Box
- Industrial Type AC Ceiling Fan
- Switch Box
- Light Point
- Exhaust Fan

Note:
All Dimensions are in Millimeters

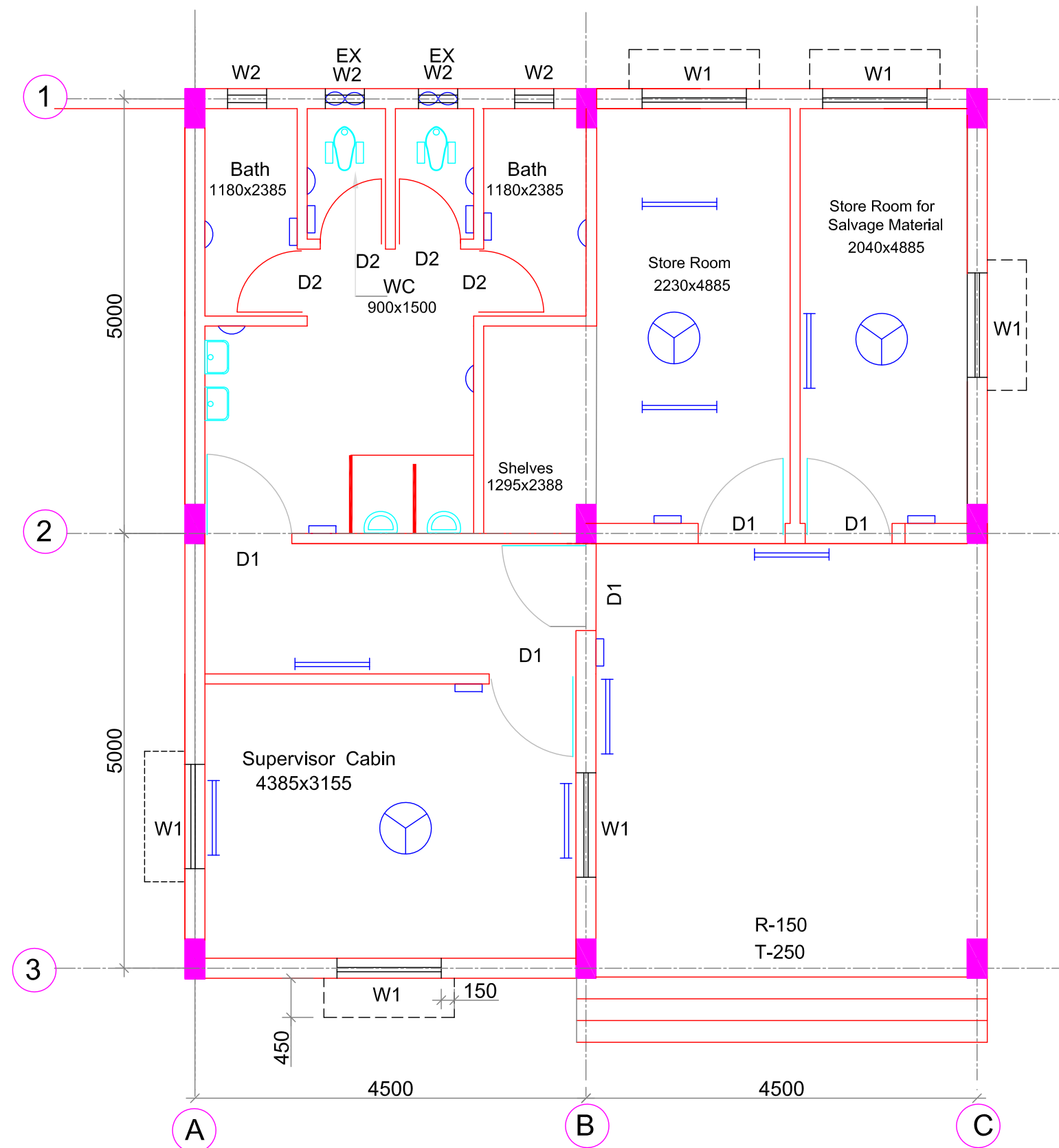
Client:
**Asian Development Bank
National Capital Region Planning Board**

Consultant:
Wilbur Smith Associates

Drawn: SK
Date: Aug. 2009
Checked: SKG
Approved: NSS

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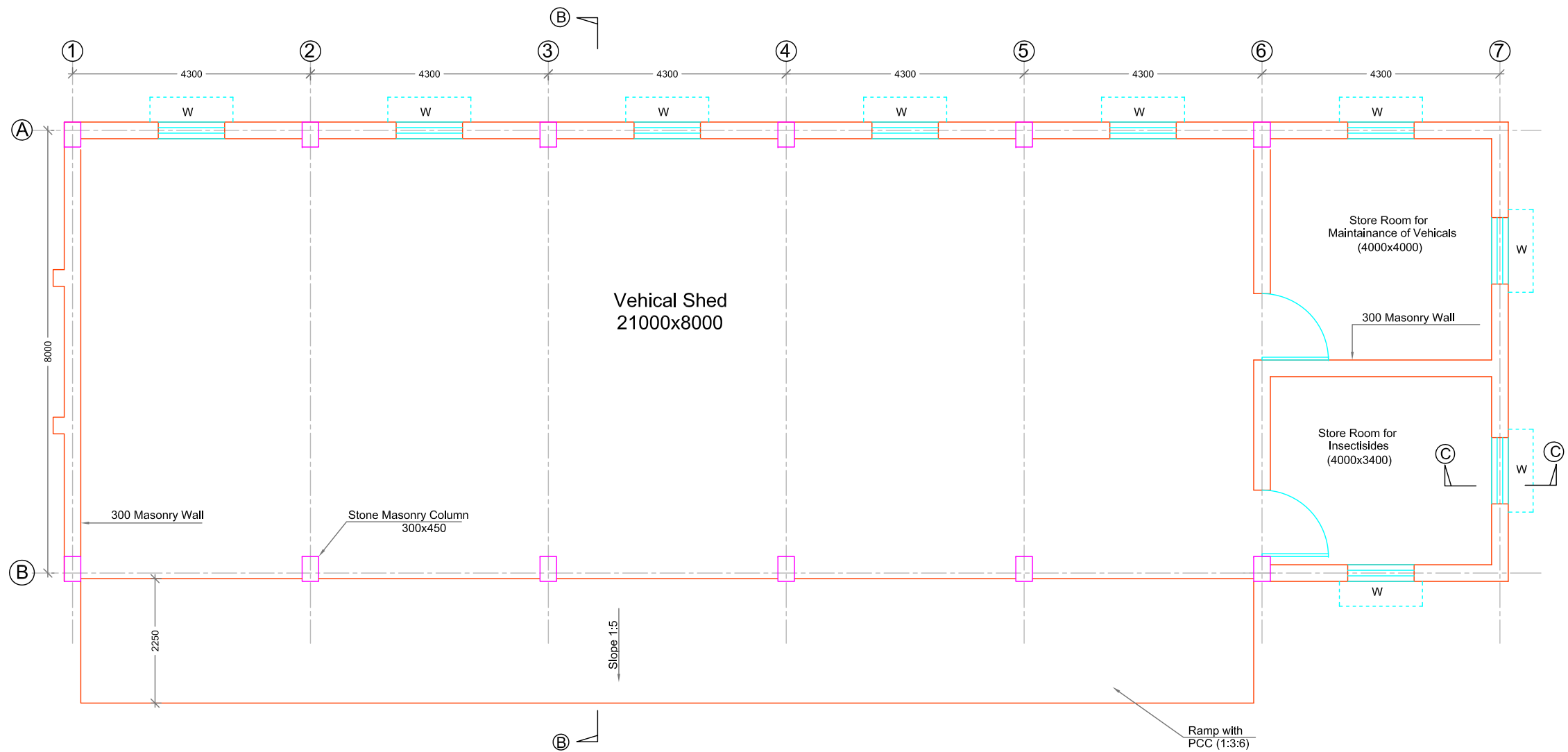
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Plan of Electrical Arrangements

Capacity Development of
the NCRPB: Component B
ADB TA-7055

Ghaziabad
Plan of Vehicle Shed



Note:
All Dimensions are in Millimeters

Client:
**Asian Development Bank
National Capital Region Planning Board**

Consultant
Wilbur Smith Associates

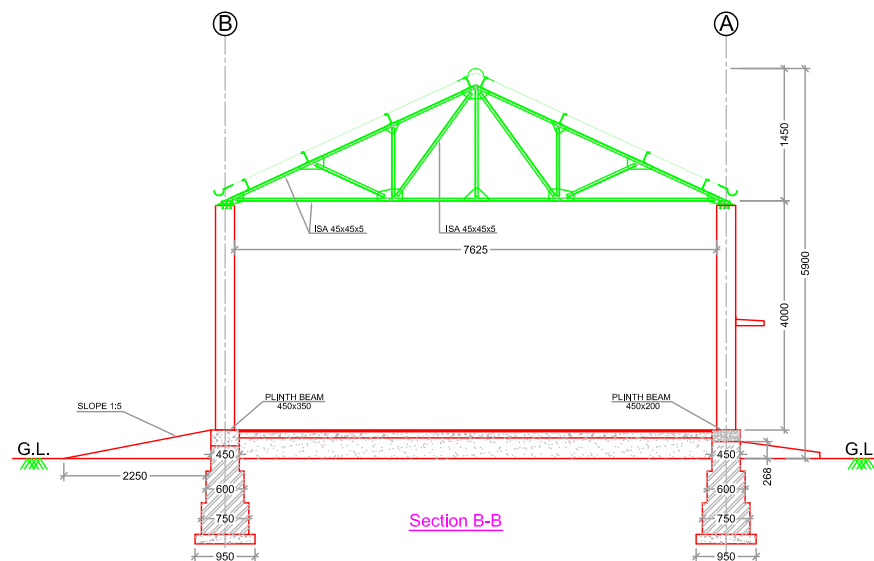
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Approved: NSS

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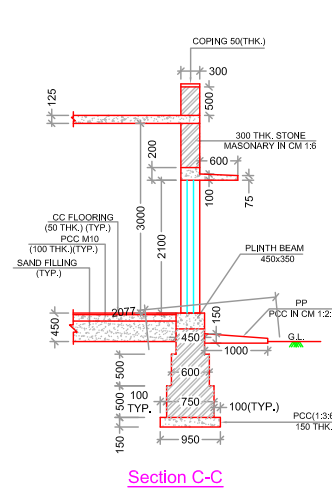
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Capacity Development of
the NCRPB: Component B
ADB TA-7055

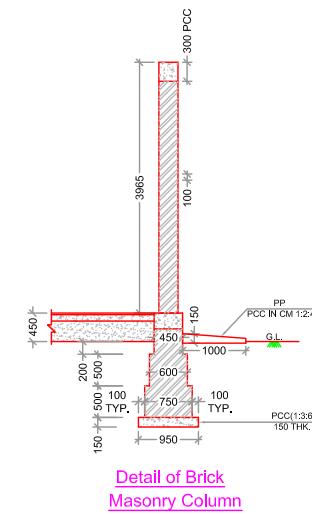
Ghaziabad
Sectional & Reinforcement Details of
Vehical Shed & Store Room



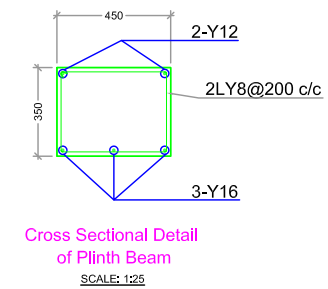
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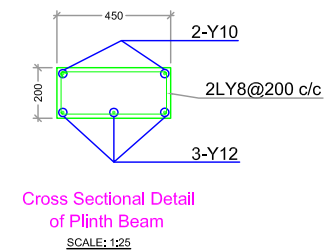
Section C-C



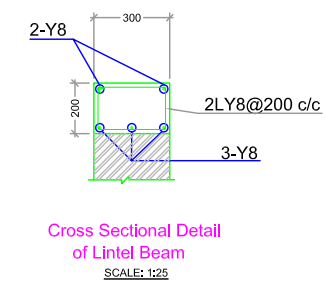
Detail of Brick
Masonry Column



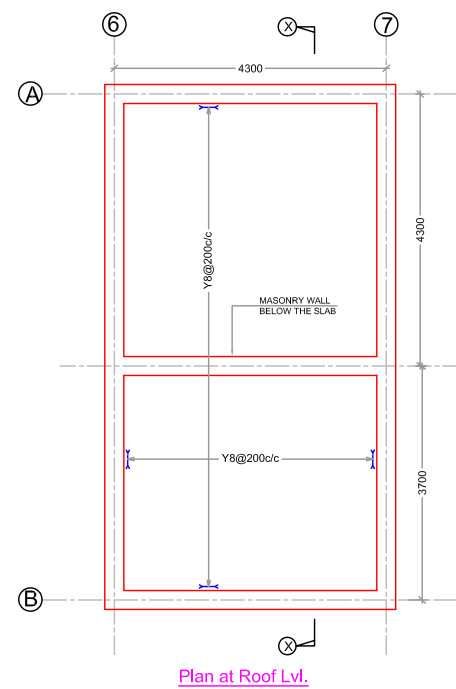
Cross Sectional Detail
of Plinth Beam
SCALE: 1:25



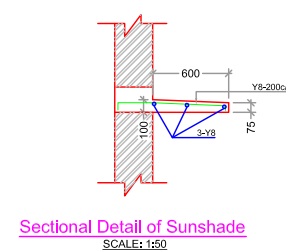
Cross Sectional Detail
of Plinth Beam
SCALE: 1:25



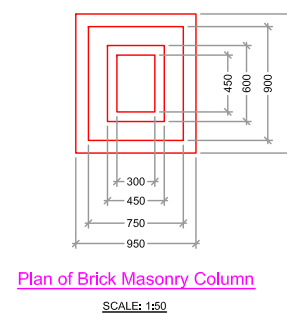
Cross Sectional Detail
of Lintel Beam
SCALE: 1:25



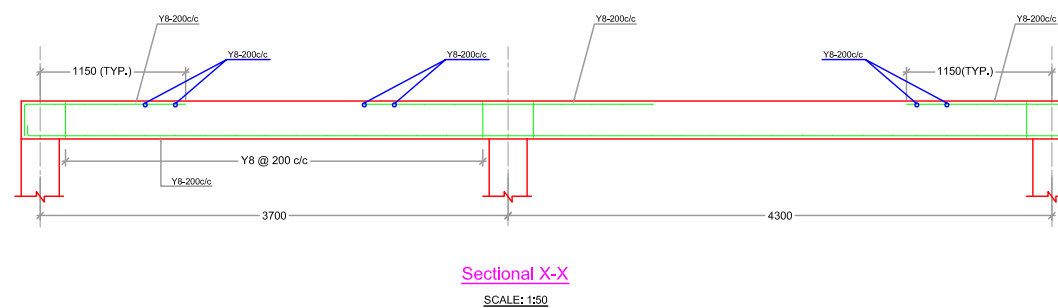
Plan at Roof Lvl.



Sectional Detail of Sunshade
SCALE: 1:50



Plan of Brick Masonry Column
SCALE: 1:50



Sectional X-X
SCALE: 1:50

Note:
All Dimensions are in Millimeters

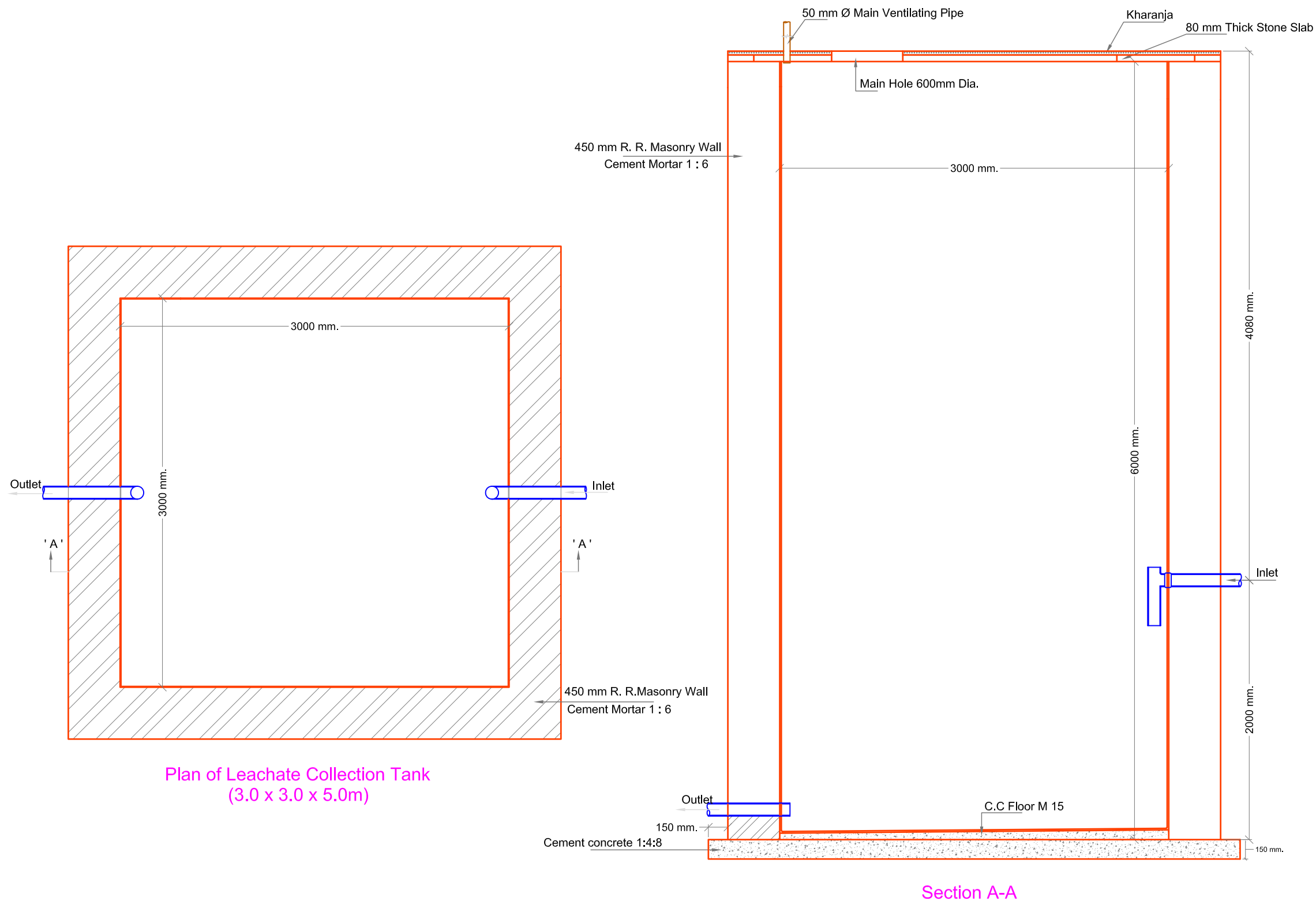
Client:
**Asian Development Bank
National Capital Region Planning Board**
Consultant:
Wilbur Smith Associates

Drawn: SK
Date: Aug. 2009
Checked: SKG
Approved: NSS
Scale: 00 750 1500 2250 3000mm

Drg. No. NCRPB-GZD-SWM-16

**Capacity Development of
the NCRPB: Component B
ADB TA-7055**

Ghazlabad
Detail of Leachate Collection Tank for
Landfill Site



Plan of Leachate Collection Tank
(3.0 x 3.0 x 5.0m)

Section A-A

Note:
All Dimensions are in Millimeters

Client:
**Asian Development Bank
National Capital Region Planning Board**

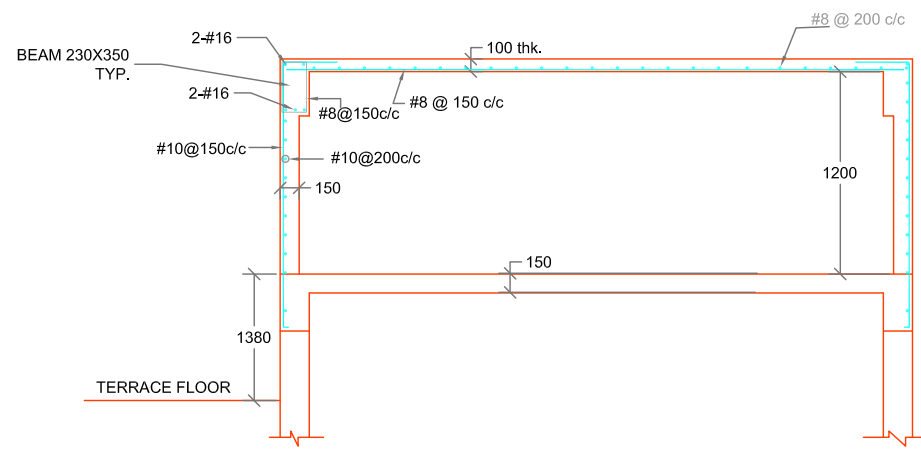
Consultant:
Wilbur Smith Associates

Drawn: SK	Checked: SKG
Date: Aug. 2009	Approved: NSS
Scale: 0 225 450 675 900 Millimeters	

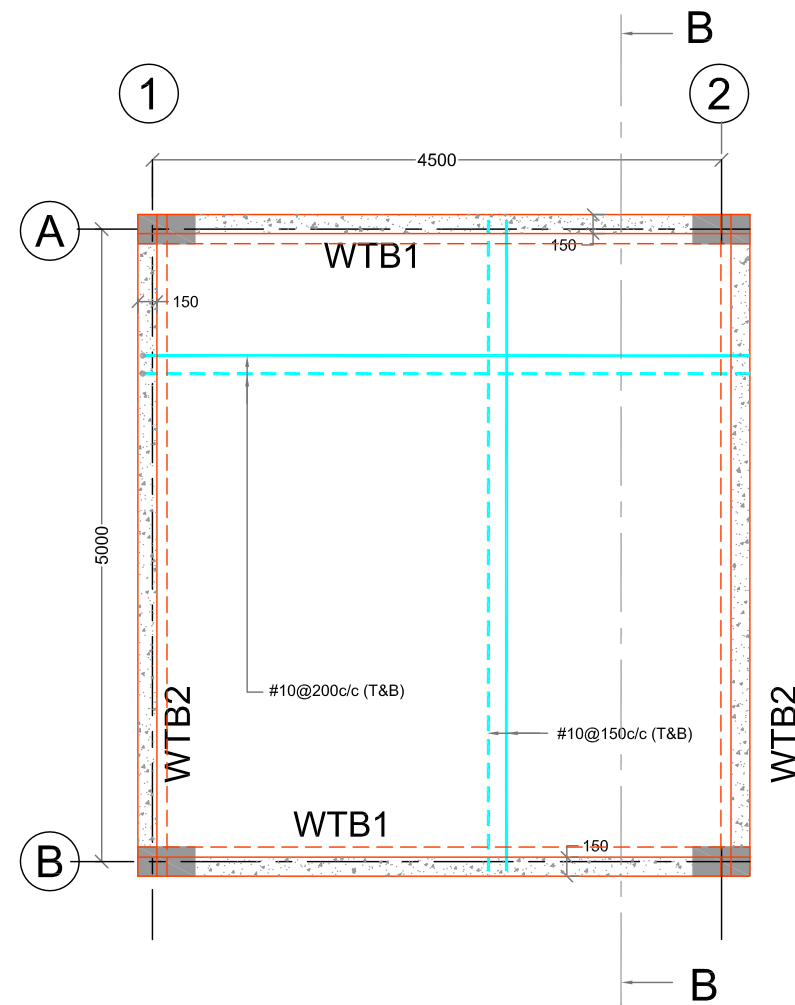
Drg. No. NCRPB-GZD-SWM-17

Capacity Development of
the NCRPB: Component B
ADB TA-7055

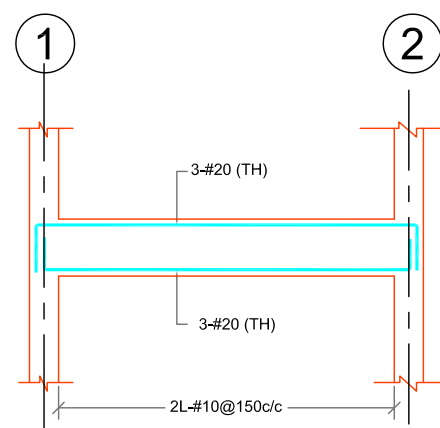
Ghaziabad
Water Tank Structural Layout



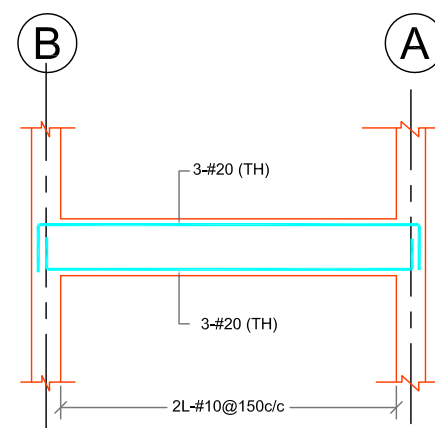
Section B-B



Water Tank Plan (Lvl +5.725 Top of Concrete)



WTB1 (230x600)



WTB2 (230x600)

Note:
All Dimensions are in Millimeters

Client:
**Asian Development Bank
National Capital Region Planning Board**

Consultant:
Wilbur Smith Associates

Drawn: SK
Date: Aug. 2009
Checked: SKG
Approved: NSS

Scale: 00 450 900 1350 1800mm

Org. No. NCRPB-GZD-SWM-18

**Capcity Development of
the NCRPB: Component B
(ADB TA-7055)**

Ghaziabad
Compost Plant Layout

Area Details:

Item No	Description	Size
1.	Tipping Area	10m x 20m
2.	Pre processing	10m x 50m
3.	Over Size Rejection	10m x 10m
4.	Manson Shed	20m x 20m
5.	Machine Shed	40m x 20m
6.	Curing Shed	20m x 20m
7.	Sewing and Bagging	20m x 20m
8.	Refinment Section	20m x 20m
9.	Store	40m x 20m
10.	Vermi Composting and any Other Process	80m x 20m
11.	Maintance & Other Utilities	10m x 30m
12.	Laboratories	10m x 16m
13.	Office	9m x 10m
14.	Future Expansion	50m x 25m
15.	Compost Pad	9000 Sq. m
16.	CC Road 5m Wide	-

Total Area = 20000 Sq. m

All Dimensions are in Meters

Client:
**Asian Development Bank
National Capital Region Planning Board**

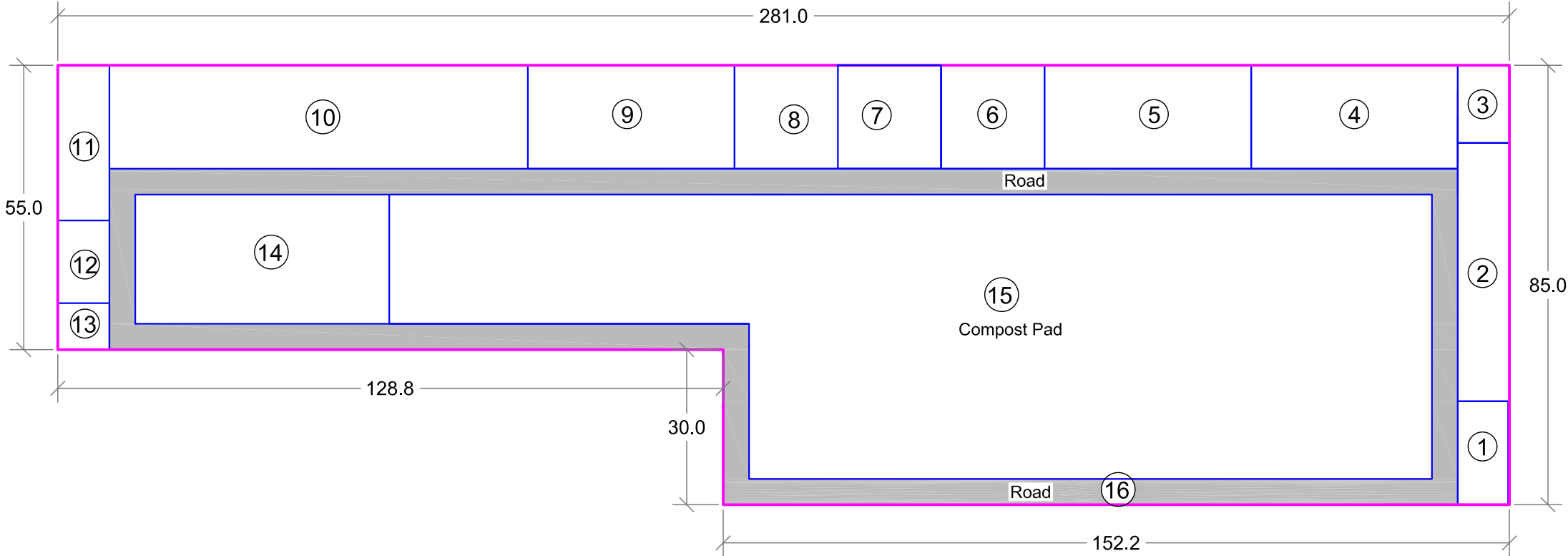
Consultant:
Wilbur Smith Associates

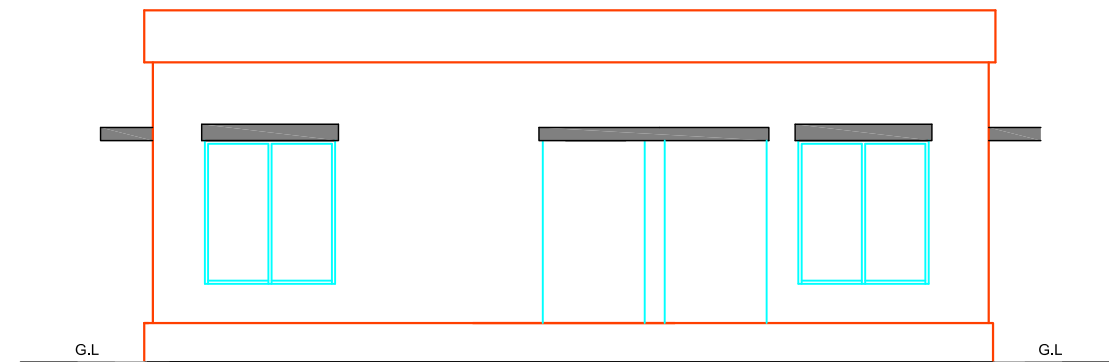
Drawn: SK
Date: August,2009

Checked: SKG
Approved: NSS

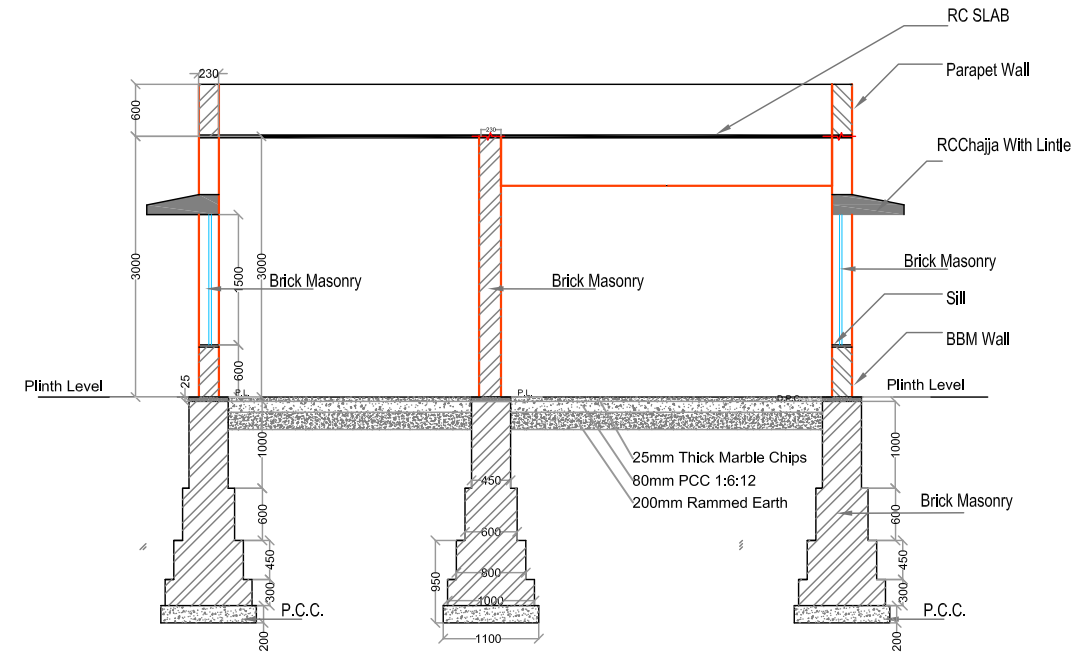
Scale: 0 10 20 30 40 Meters

Drg. No. NCRPB-GZD-SWM-19





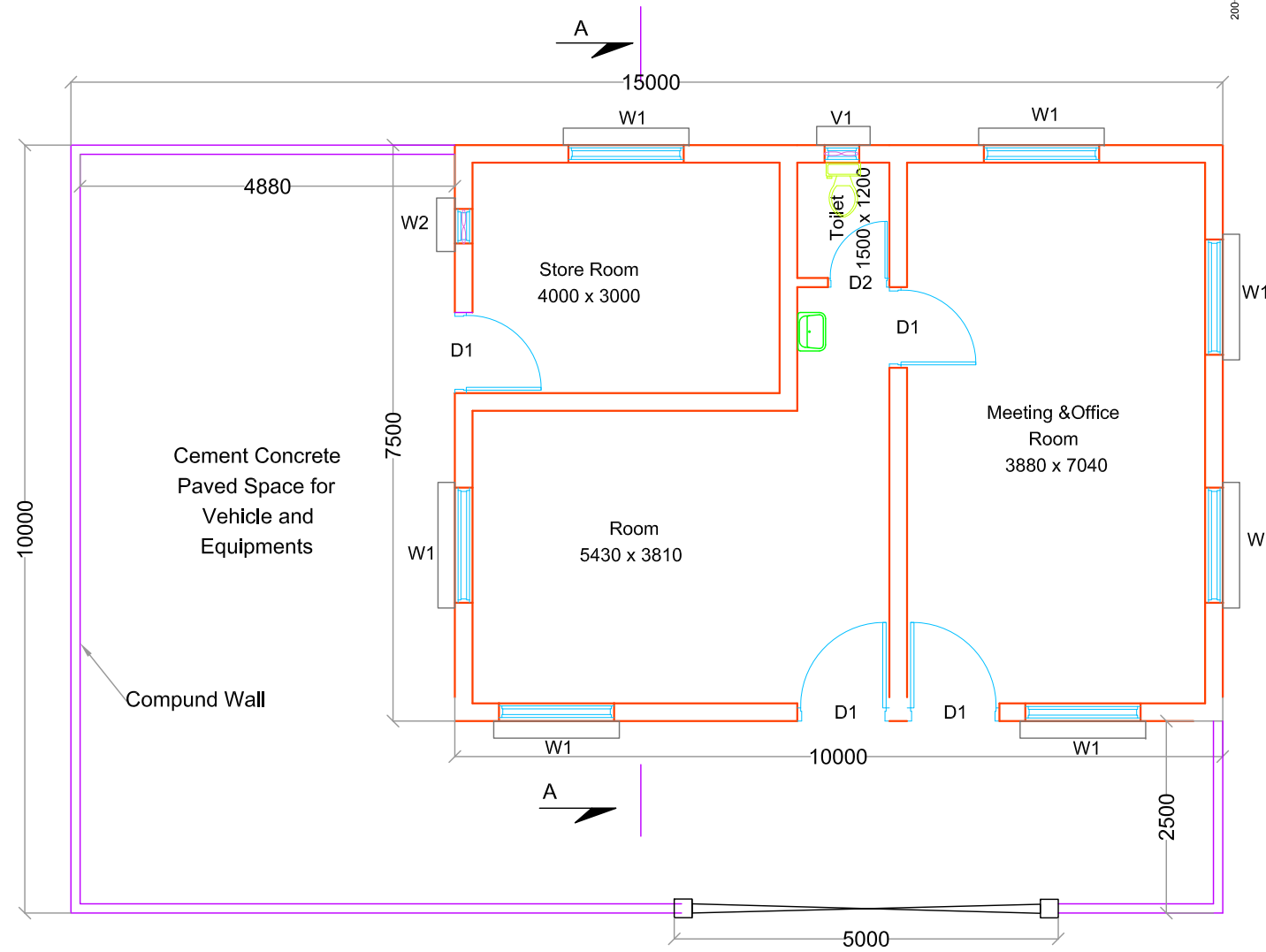
Front Elevation



Section -AA

**Capacity Development of
the NCRPB: Component B
(ADB TA-7055)**

Ghazlabad
Schematic Plan of Ward Office



Plan with
Compound Wall

Jointery Details

- D1 -1000 x 2000 (4 Nos)
- D2 - 750 x 2000 (1 Nos)
- W1 -1500 x1500 (6 Nos)
- W2 - 750 x 1500 (1 No)
- V1 - 750 x 750 (1 No)

Note:
All Dimensions are in Millimetres

Client
**Asian Development Bank
National Capital Region Planning Board**

Consultant
Wilbur Smith Associates

Drawn:SKG
Date: August. 2009

Checked: SKG
Approved: NSS

Scale: 0 600 1200 1800 2400 3000 Millimeters

Drg. No. NCRPB-GZD-SWM-20

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