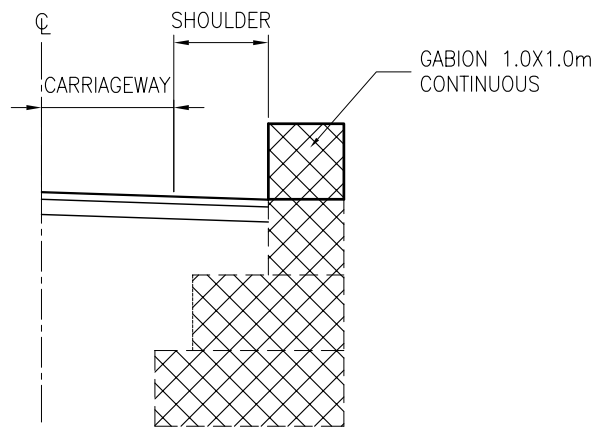


STANDARD DRAWINGS

WORK QUANTITIES (Per Linear Metre)

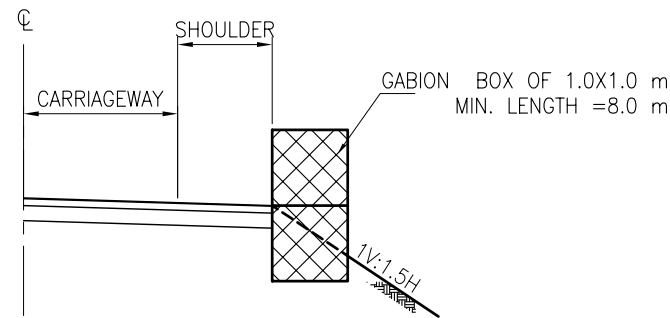
Item No	Description	UNIT	QUANTITY
	Gabion Box	m ³	1.00



GABION BARRIER FOR GABION WALL
(EMBANKMENT HEIGHT > 3.0 m)

WORK QUANTITIES (Per Linear Metre)

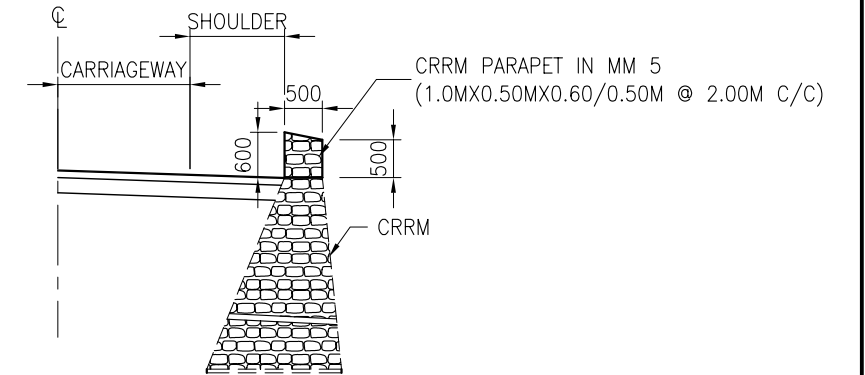
Item No	Description	UNIT	QUANTITY
	Earth Work in Excavation	m ³	0.67
	Gabion Box	m ³	2.00



GABION BARRIER FOR EMBANKMENT
(EMBANKMENT HEIGHT > 3.0 m)

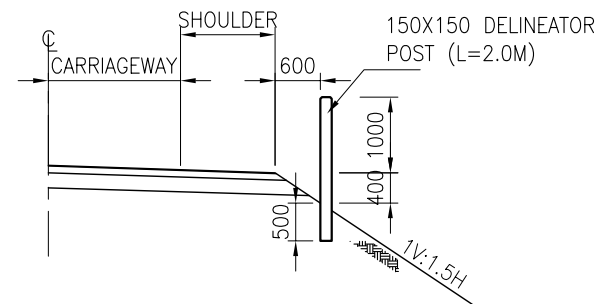
WORK QUANTITIES (Per Linear Metre)

Item No	Description	UNIT	QUANTITY
	CRRM IN MM 5	m ³	0.14

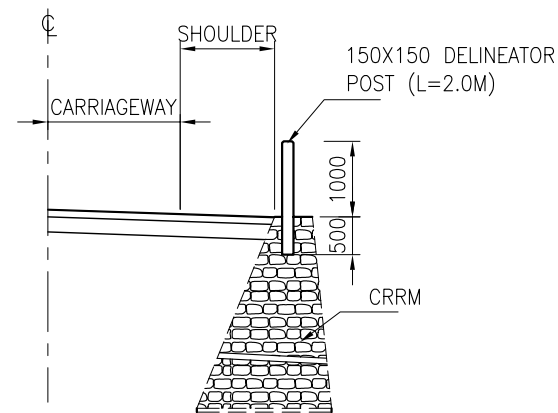


CRRM PARAPET FOR CRRM WALL
(EMBANKMENT HEIGHT > 3.0 m)

NOTE#: DELINEATORS ARE TO BE ERRECTED 600 MM FROM THE ROAD EDGE.



DELINEATOR FOR EMBANKMENT (HEIGHT ≤ 3.0 m)
(EMBANKMENT HEIGHT > 3.0 m)



DELINEATOR FOR MASONRY WALL (HEIGHT ≤ 3.0 m)
(EMBANKMENT HEIGHT > 3.0 m)

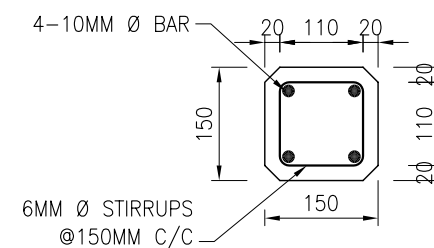
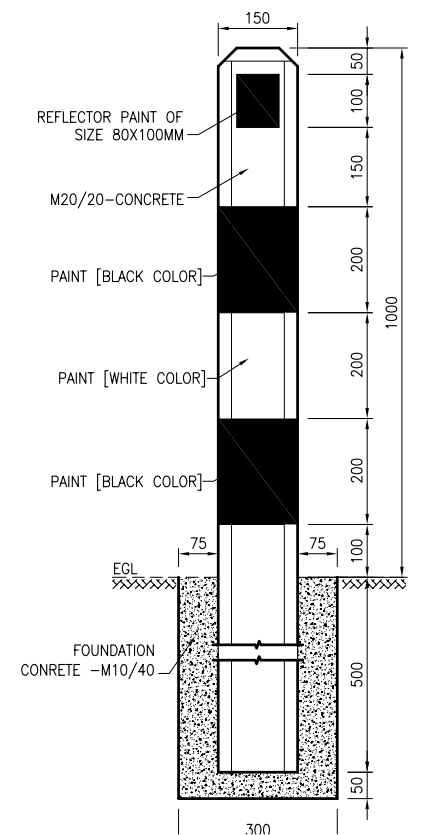
DETAILING OF DELINEATOR POST
(SCALE - 1:10)

WORK QUANTITIES (For 2.0m Height)

ITEM NO	Description	UNIT	QUANTITY
	EARTH WORK EXCAVATION	m ³	0.03
	M20/20 - CONCRETE	m ³	0.045
	M10/40 - CONCRETE	m ³	0.02
	FORMWORK (F2)	m ²	0.945
	10MM Ø BAR	Kg.	4.96
	6MM Ø STIRRUPS	Kg.	1.50

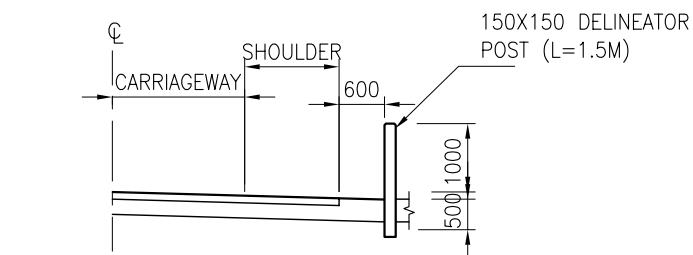
WORK QUANTITIES (For 1.50m Height)

ITEM NO	Description	UNIT	QUANTITY
	EARTH WORK EXCAVATION	m ³	0.03
	M20/20 - CONCRETE	m ³	0.033
	M10/40 - CONCRETE	m ³	0.02
	FORMWORK (F2)	m ²	0.735
	10MM Ø BAR	Kg.	3.72
	6MM Ø STIRRUPS	Kg.	1.20



PLAN

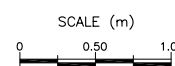
SECTIONAL ELEVATION



DELINEATOR FOR PLAIN AREA

RECOMMENDED SPACING FOR DELINEATOR.

RADIUS OF Horizontal Curve(M)	SPACING OF POST DELINEATOR(M)	PURPOSE OF DELINEATION(M)
30	6.0	Horizontal Curve
50	8.0	Horizontal Curve
100	12.0	Horizontal Curve
200	20.0	Horizontal Curve
300	25.0	Horizontal Curve
400	30.0	Horizontal Curve
500	35.0	Horizontal Curve
600	38.0	Other Purpose
700	42.0	Other Purpose
800	45.0	Other Purpose
900	48.0	Other Purpose
1000	50.0	Other Purpose
>1000 AND STRAIGHTS	70.0	Other Purpose



DESIGNED BY:	
CHECKED BY:	
APPROVED BY:	

STANDARD DRAWINGS OF
ROAD SAFETY BARRIER

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

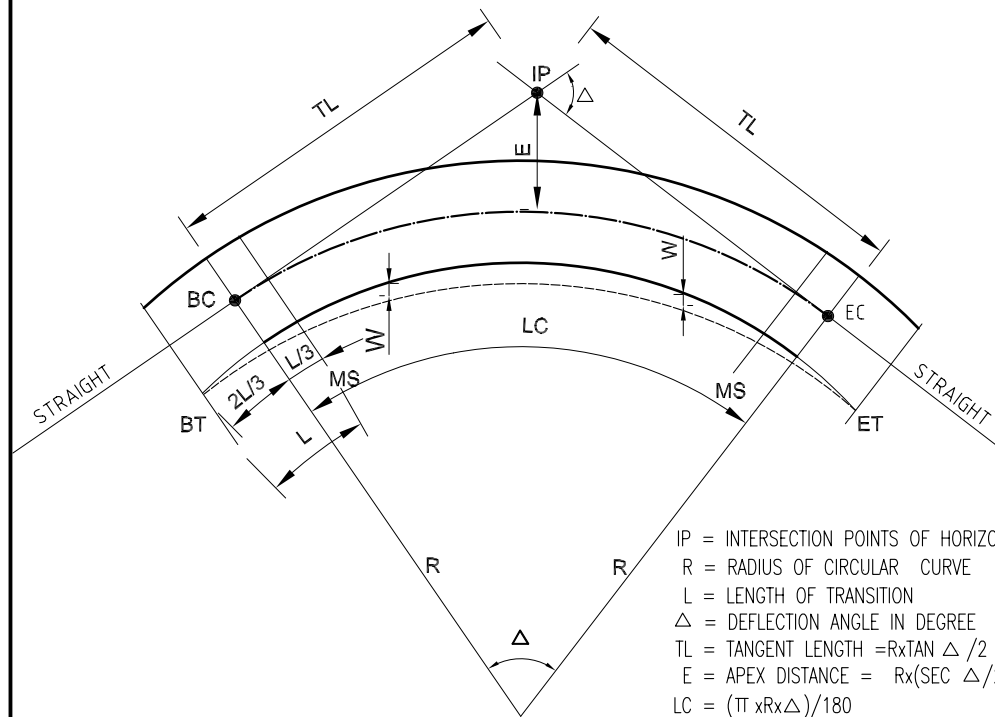
GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
DEPARTMENT OF ROADS
ROAD SECTOR DEVELOPMENT PROJECT
IDA Grant No. H629 - NP
IDA Credit No. 4832 - NP

CONSULTANTS:
M/s MMM Group Ltd.
in JV with
SAI Consulting Engineers (P) Ltd.
in association with
ITECO Nepal and TMS Nepal

DATE:
FEB '2011

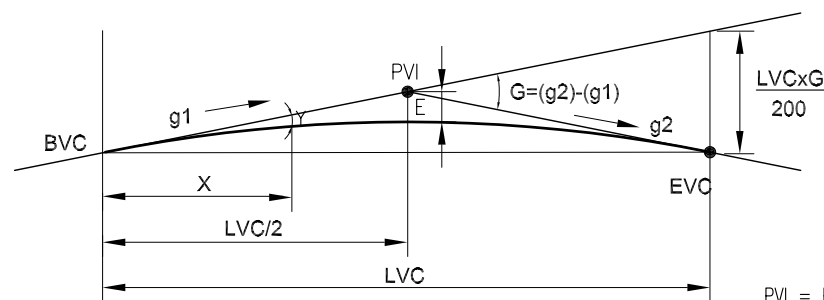
DWG. NO.:
RSDPAF-TYP

SHEET NO.:
1/26



IP = INTERSECTION POINTS OF HORIZONTAL CURVES
 R = RADIUS OF CIRCULAR CURVE
 L = LENGTH OF TRANSITION
 Δ = DEFLECTION ANGLE IN DEGREE
 TL = TANGENT LENGTH = $R \times \tan \Delta / 2$
 E = APEX DISTANCE = $R \times (\sec \Delta / 2 - 1)$
 LC = $(\pi \times R \times \Delta) / 180$
 BT = BEGINNING OF TRANSITION (JUNCTION OF TRANSITION START)
 ET = END OF TRANSITION CURVE (JUNCTION OF TRANSITION END)
 e_{max} = LIMIT OF MAXIMUM SUPER ELEVATION
 BC&EC = BEGINING AND END OF THE CURVE
 W = EXTRA WIDENING
 NC = NO CURVE SECTION
 MS = MAXIMUM SUPER ELEVATION

ELEMENTS OF HORIZONTAL CURVE

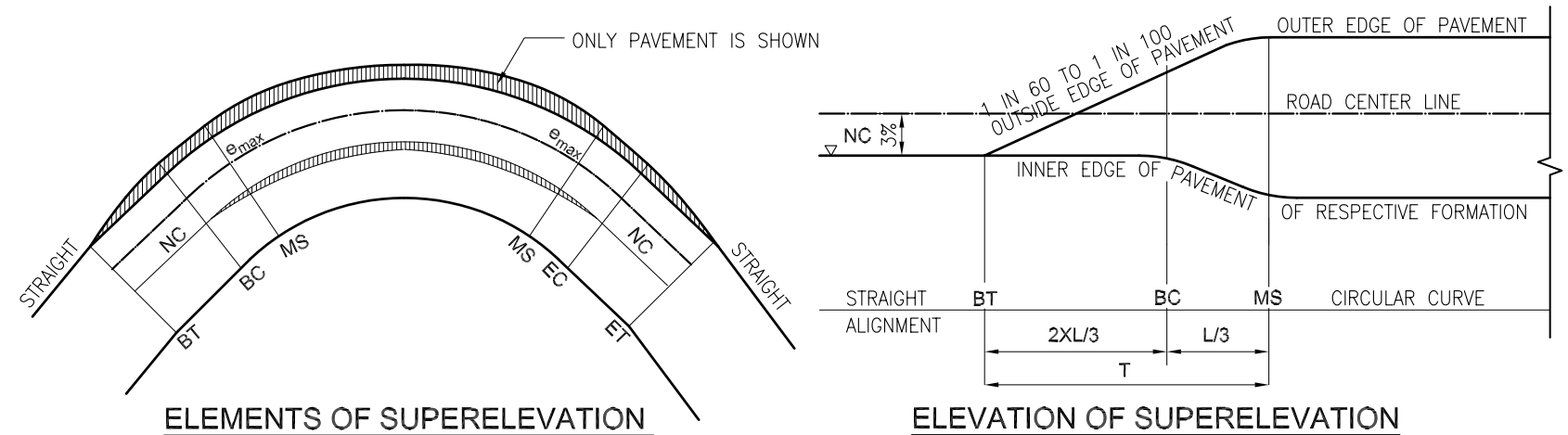


PVI = POINT OF VERTICAL INTERSECTIONS
 LVC = LENGTH OF VERTICAL CURVE
 BVC = BEGINING OF VERTICAL CURVE
 EVC = END OF VERTICAL CURVE
 $g1 \& g2$ = GRADES IN %
 $G = (g2) - (g1)$
 $Y = Gx^2 / (200 \times LVC)$
 $E = G \times LVC / 800$

ELEMENTS OF VERTICAL CURVE

Horizontal Curve Data

IP (No)	COORDINATE		DIST (m)	WCB (deg)	Def. Angle (deg)	Tan. Length (m)	Simple Curve Data			BC (m)	MC (m)	EC (m)	IP (m)
	X (m)	Y (m)					R (m)	E (m)	LC (m)				
0	618943.563	3097057.000	0.00	298.623	0.000	0.000	0.00	0.00	0.00	45+000.00	45+000.00	45+000.00	45+000.00
1	618901.875	3097079.750	47.49	277.582	21.039	23.211	125.00	2.14	45.90	45+024.28	45+047.23	45+070.18	45+047.49
2	618866.188	3097084.500	36.00	257.780	19.801	6.109	35.00	0.53	12.10	45+076.86	45+082.91	45+088.96	45+083.49
3	618829.250	3097076.500	37.79	270.619	12.840	18.566	165.00	1.04	36.98	45+102.08	45+120.57	45+139.06	45+121.29
4	618783.000	3097077.000	46.25	260.074	10.548	5.077	55.00	0.23	10.13	45+161.67	45+166.74	45+171.80	45+167.54
5	618753.000	3097071.750	30.46	282.715	22.643	11.012	55.00	1.09	21.74	45+186.17	45+197.04	45+207.91	45+198.00

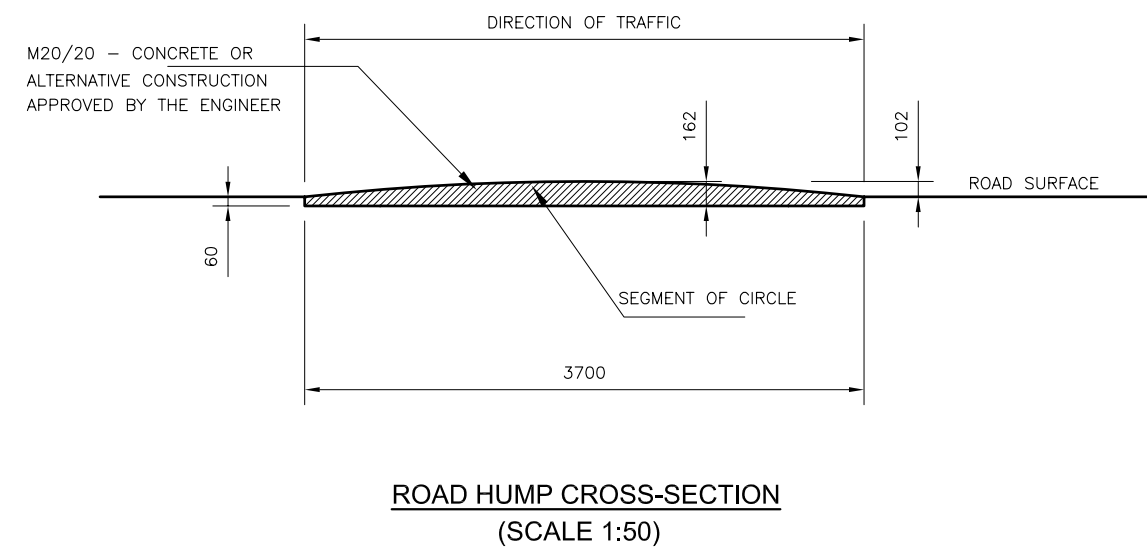
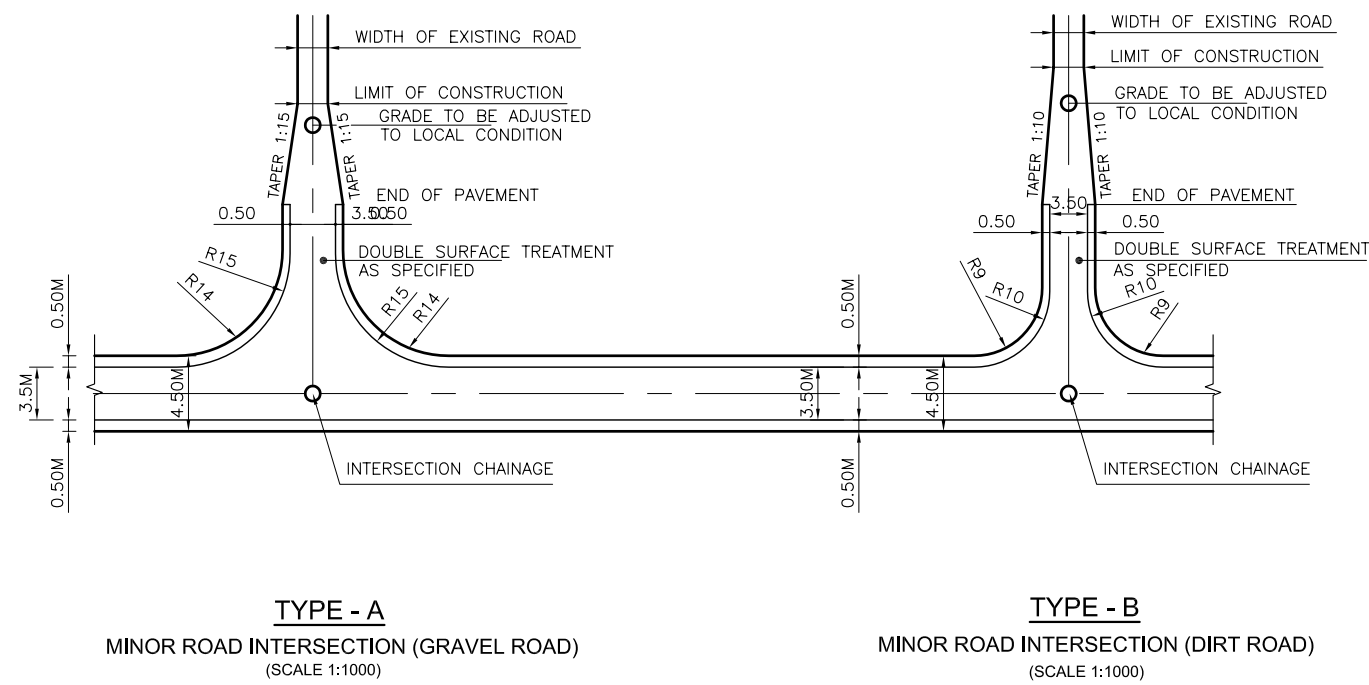
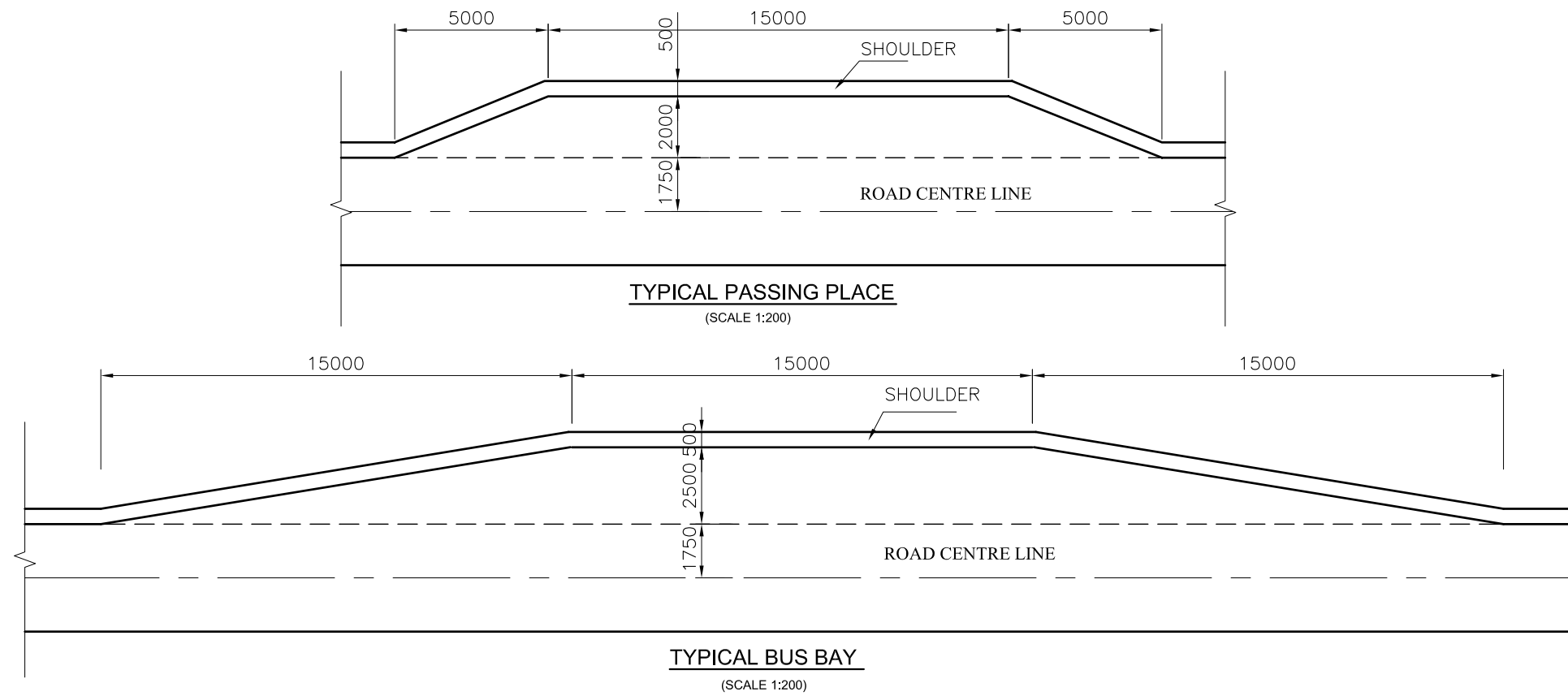


	BT	MS	MS	ET	BT	MS	MS	MS	MS	MS	MS	
SUPER ELEVATION (e)	+3.00	-3.00	-3.00	NC	-4.00	-3.00	-3.00	-3.00	-3.00	+3.00	+3.00	
CHAINAGE (m)	1+052.18	1+069.48	1+080.80	1+088.90	1+141.55	1+155.73	1+179.05	1+206.20	1+210.85	1+230.24	1+242.01	
HORIZONTAL ALIGNMENT	RIGHT		LEFT		RIGHT		LEFT		RIGHT		LEFT	
	R=500		IP-25		IP-26		R=65		IP-27		R=70	
	R=500		IP-25		IP-28		R=25		IP-29		R=150	
	R=500		IP-25		R=150		IP-30		R=150		IP-30	

TRANSITION OF SUPERELEVATION

CLACULATION OF SUPER ELEVATION	
$T = (e2 - e1) / 100 \times \text{RATE OF CHANGE OF SUPER ELEVATION} \times RW / 2$	
Where,	
T	= TRANSITION LENGTH IN METRE
e1	= PRECEDING SUPER ELEVATION IN %
e2	= FOLLOWING SUPERELEVATION IN %
RW	= ROAD WIDTH IN METRE

SUPER ELEVATION (SE)	
MIN. e	= 3.0% = TO THE CAMBER SLOPE
MAX. e	= 6.0%
RATE OF CHANGE OF SE = 1 IN 60 TO 1 IN 100	



NOTE: ALL DIMENSION ARE IN MM UNLESS NOTED OTHERWISE.

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
DEPARTMENT OF ROADS
ROAD SECTOR DEVELOPMENT PROJECT
IDA Grant No. H629 - NP
IDA Credit No. 4832 - NP

CONSULTANTS:

M/s MMM Group Ltd.
in JV with
SAI Consulting Engineers (P) Ltd.
in association with
ITECO Nepal and TMS Nepal

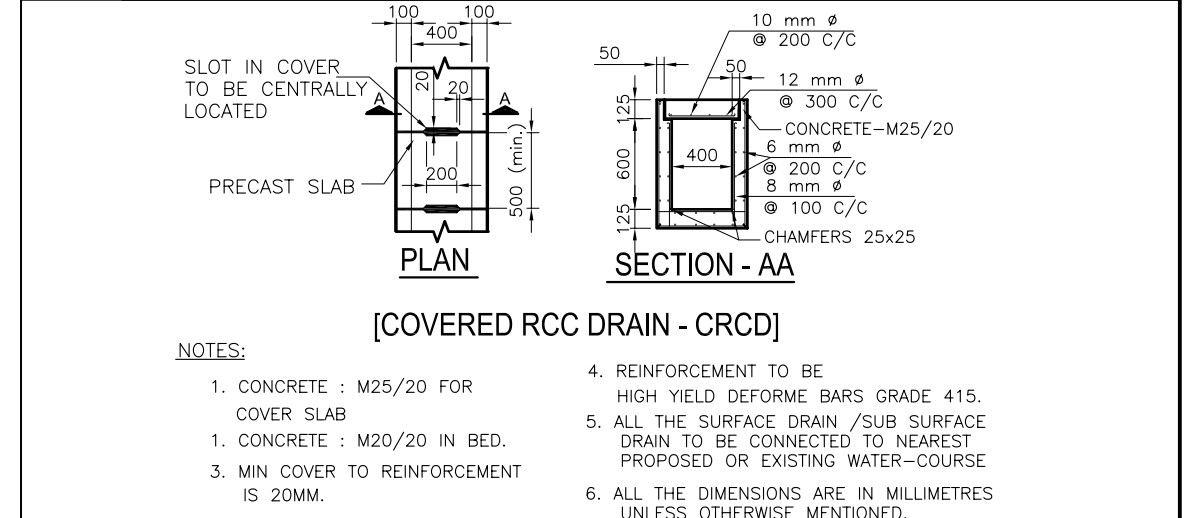
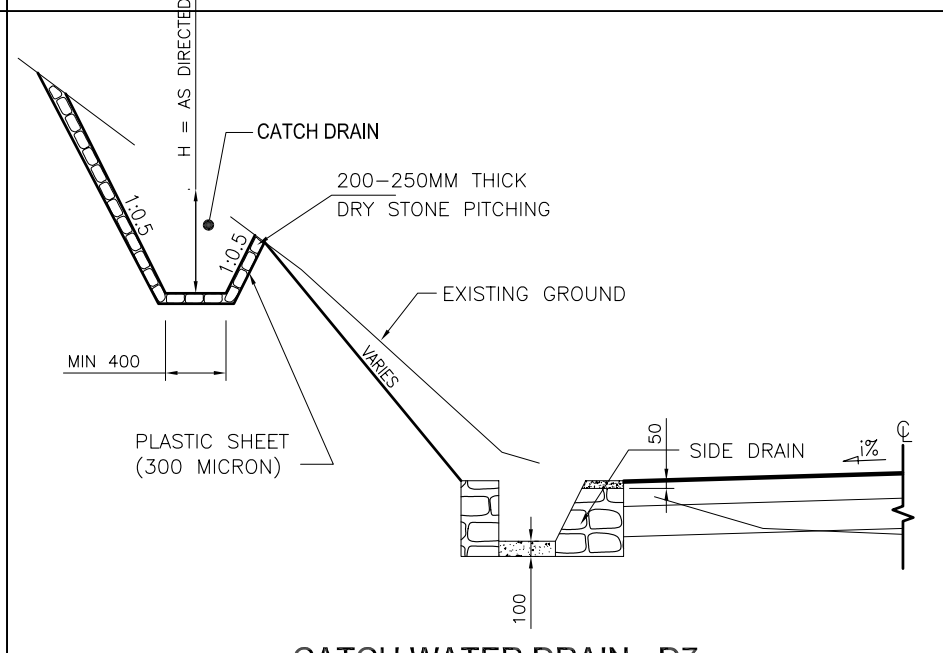
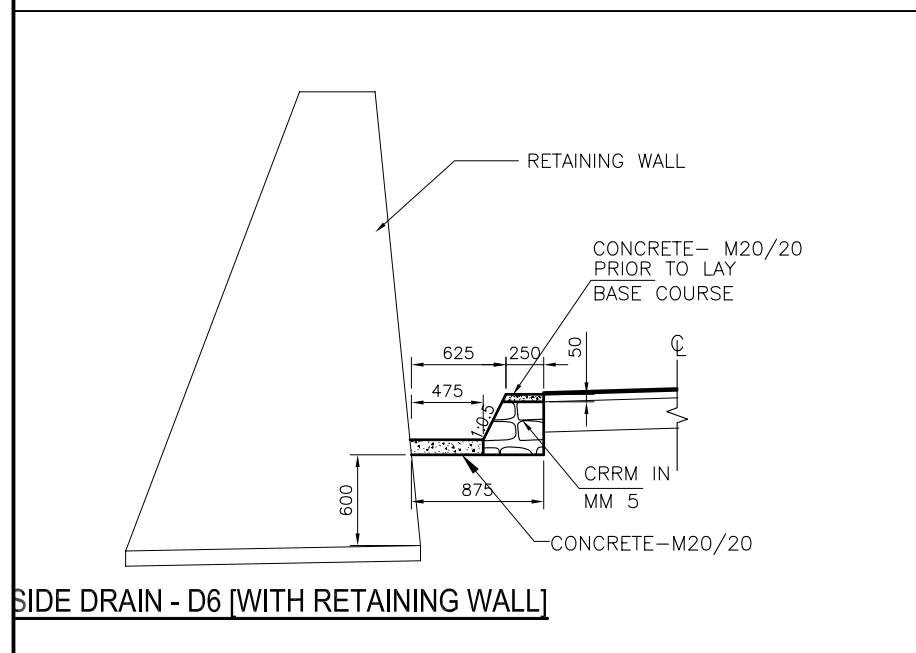
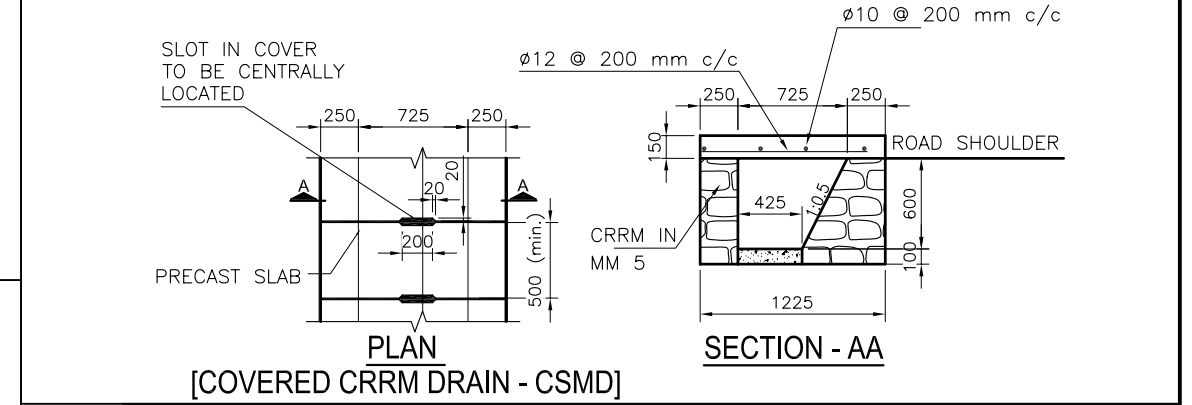
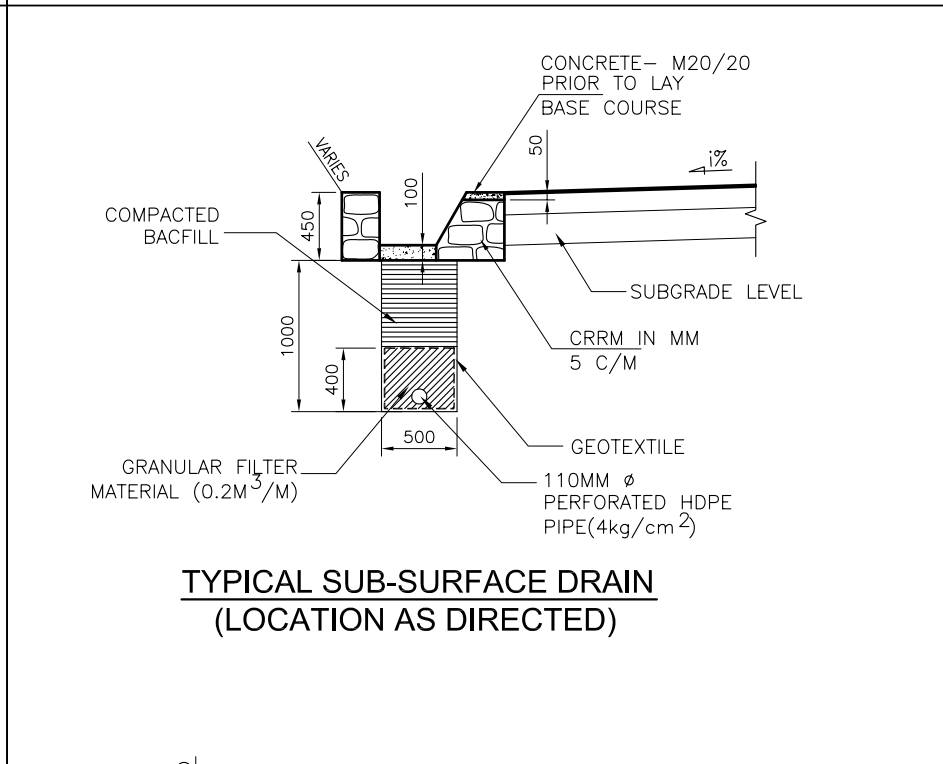
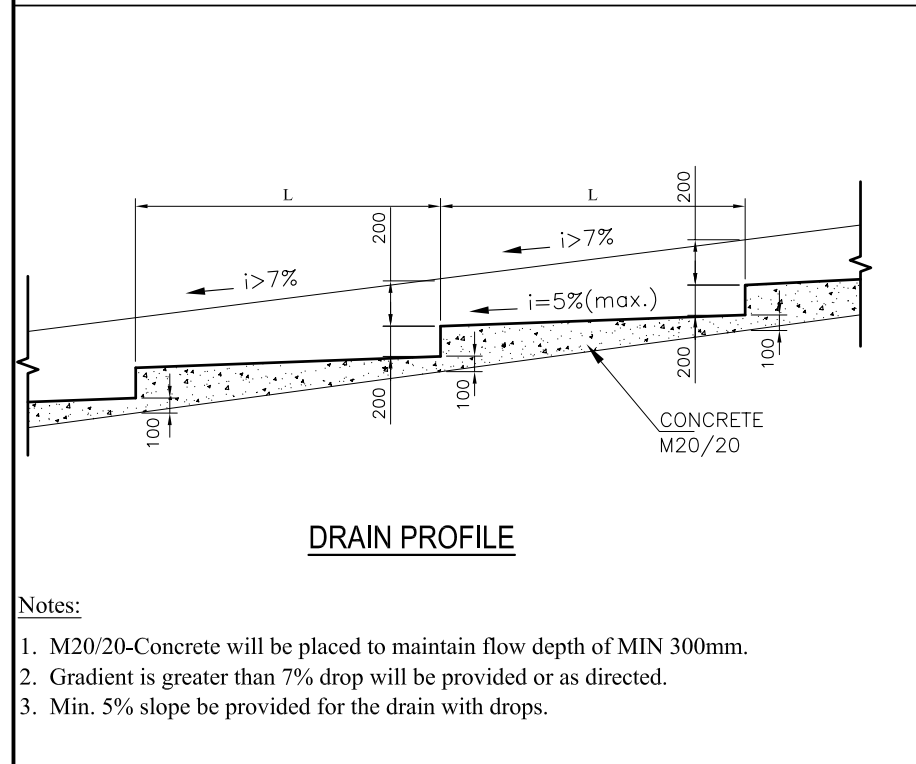
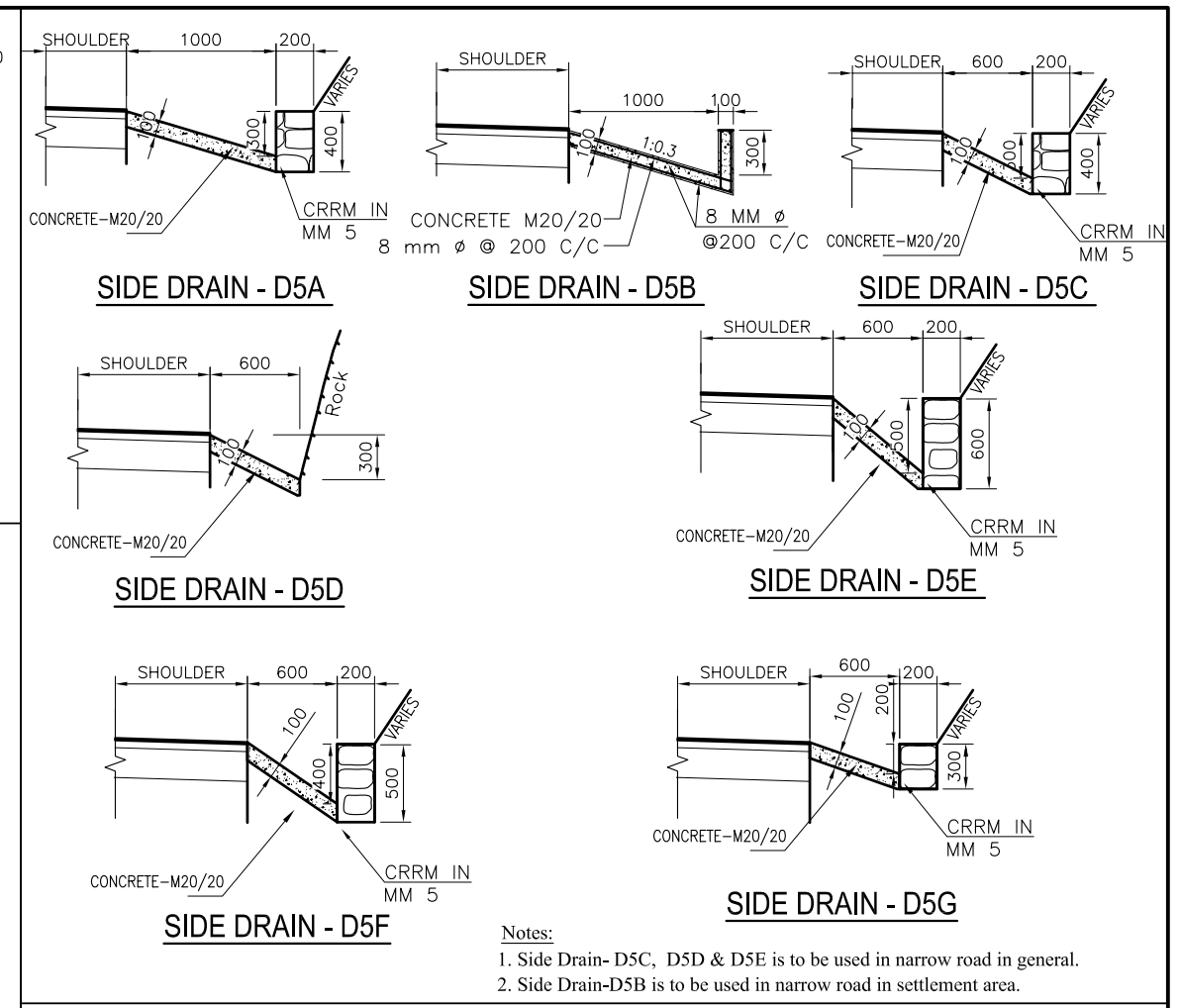
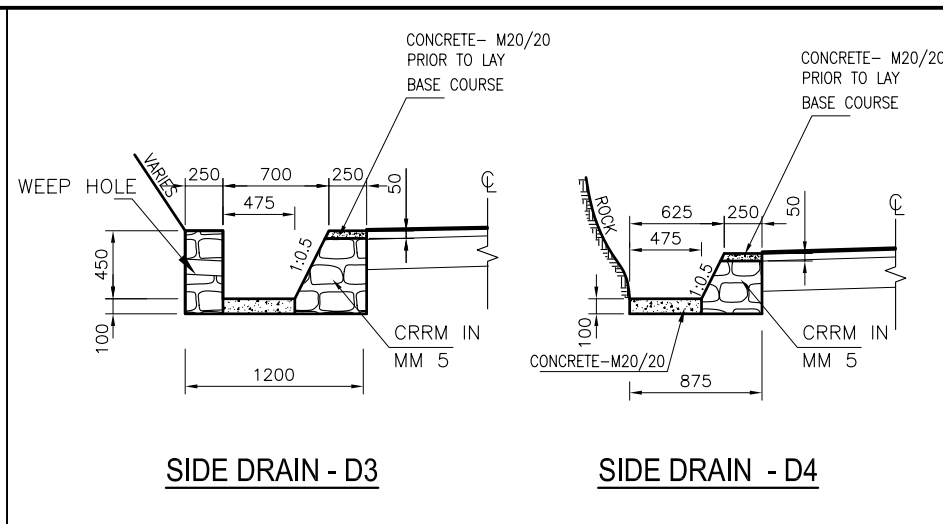
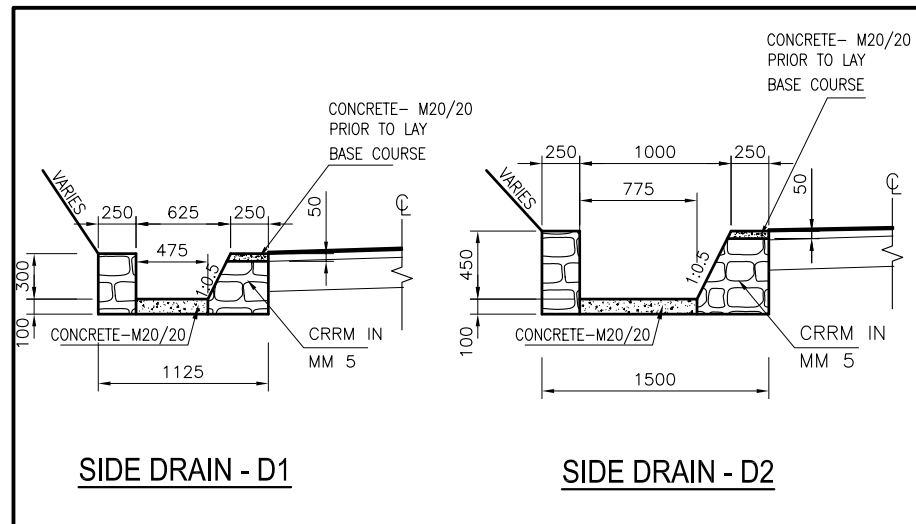
SCALE (m)
NTS

DESIGNED BY:
CHECKED BY:
APPROVED BY:

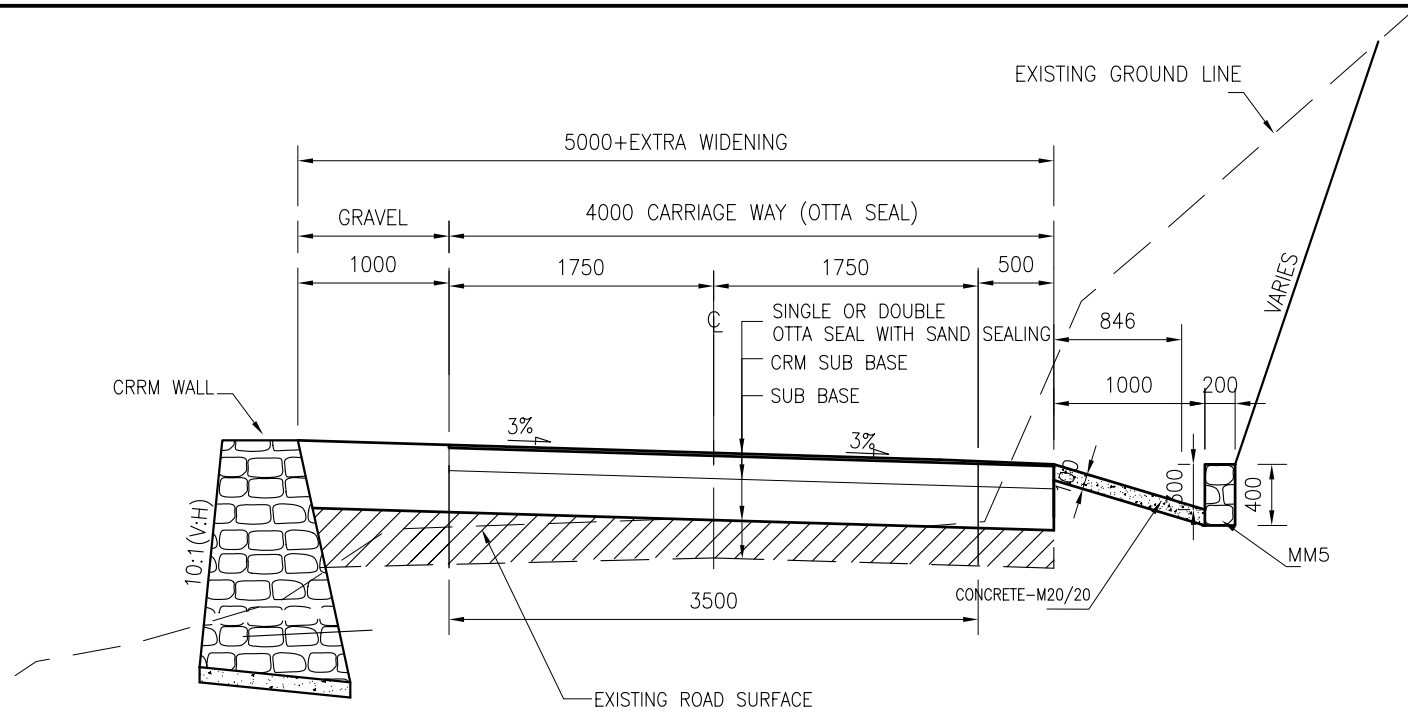
STANDARD DRAWING OF
INTERSECTION DETAILS,
PASSING PLACES, BUS BAY
AND ROAD HUMP

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

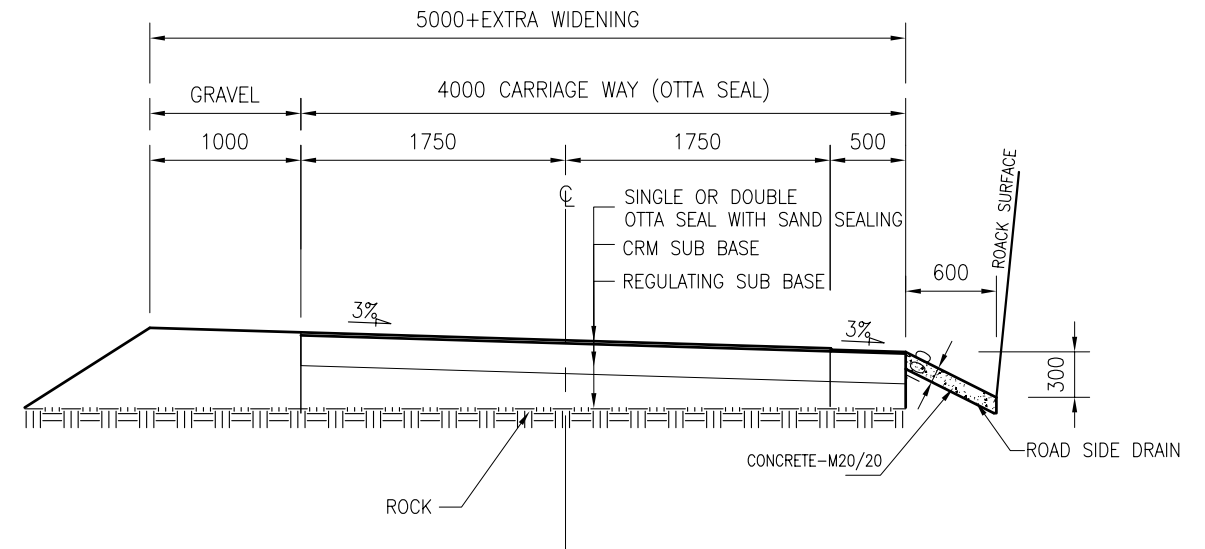
DATE:
FEB '2011
DWG. NO.:
RSDPAF-TYP
SHEET NO.:
3/26



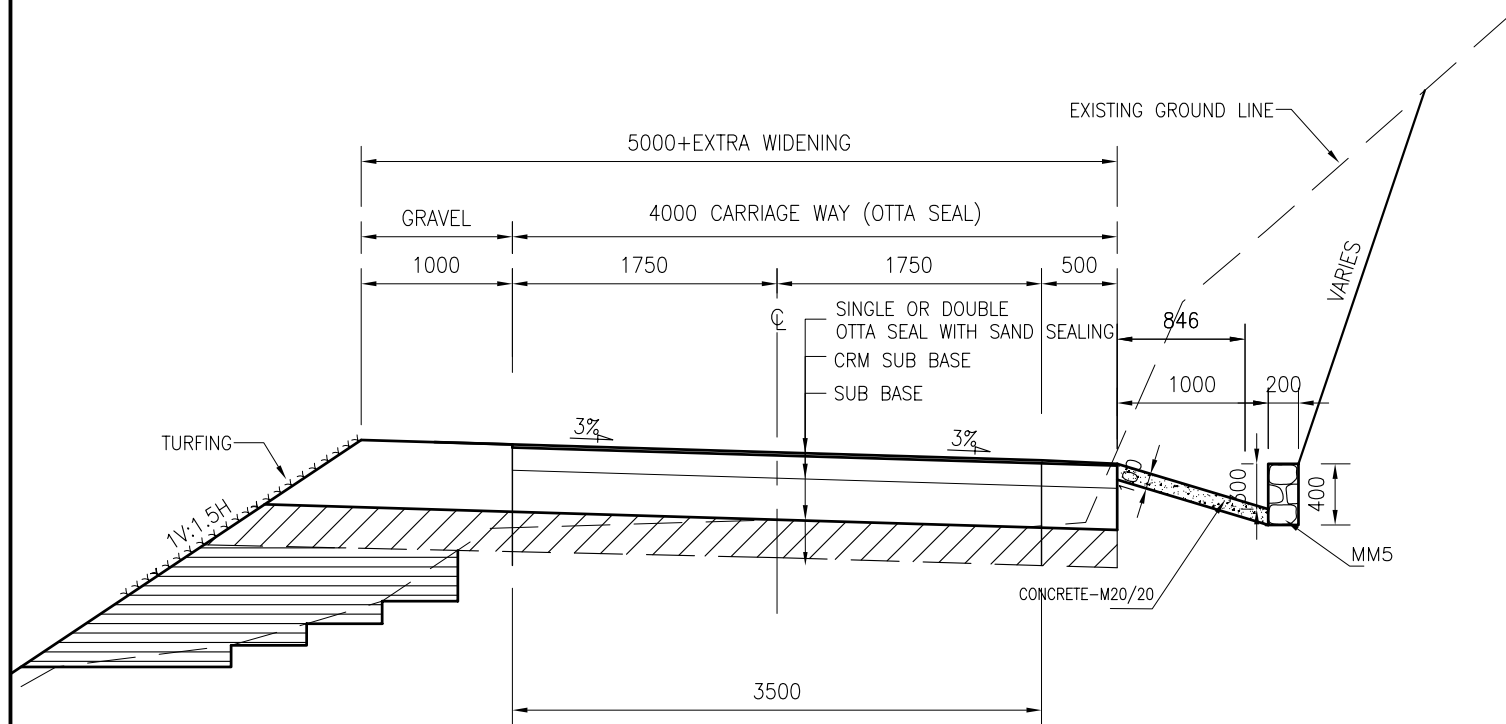
GOVERNMENT OF NEPAL (GoN) MINISTRY OF PHYSICAL PLANNING AND WORKS DEPARTMENT OF ROADS ROAD SECTOR DEVELOPMENT PROJECT IDA Grant No. H629 - NP IDA Credit No. 4832 - NP	CONSULTANTS : M/s MMM Group Ltd. <i>in JV with</i> SAI Consulting Engineers (P) Ltd. <i>in association with</i> ITECO Nepal and TMS Nepal	DESIGNED BY:		STANDARD DRAWINGS OF ROAD SIDE DRAINS	ROAD SECTOR DEVELOPMENT PROJECT (RSDP)	DATE: FEB '2011
		CHECKED BY:				DWG. NO.: RSDPAF-TYP
		APPROVED BY:				SHEET NO.: 4/26



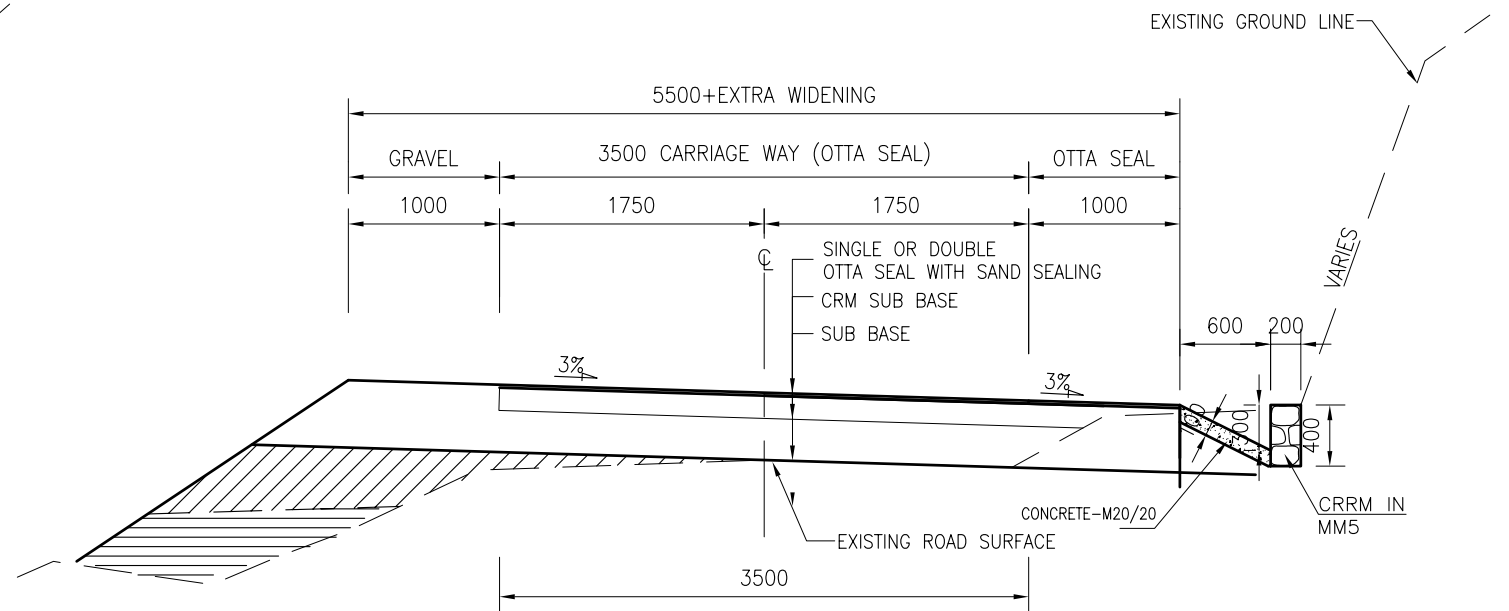
CROSS SECTION [TYPE-I]



**CROSS SECTION [TYPE-III]
ROCK SUB GRADE SECTION**



CROSS SECTION [TYPE-II]



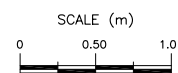
CROSS SECTION [TYPE-IV]

NOTE:

1. THE THICKNESSES OF THE PAVEMENT LAYERS' VARY AS PER DESIGN
2. CRM = CRUSHER RUN MATERIAL (Sub-base)

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
DEPARTMENT OF ROADS
ROAD SECTOR DEVELOPMENT PROJECT
IDA Grant No. H629 - NP
IDA Credit No. 4832 - NP

CONSULTANTS:
M/s MMM Group Ltd.
in JV with
SAI Consulting Engineers (P) Ltd.
in association with
ITECO Nepal and TMS Nepal

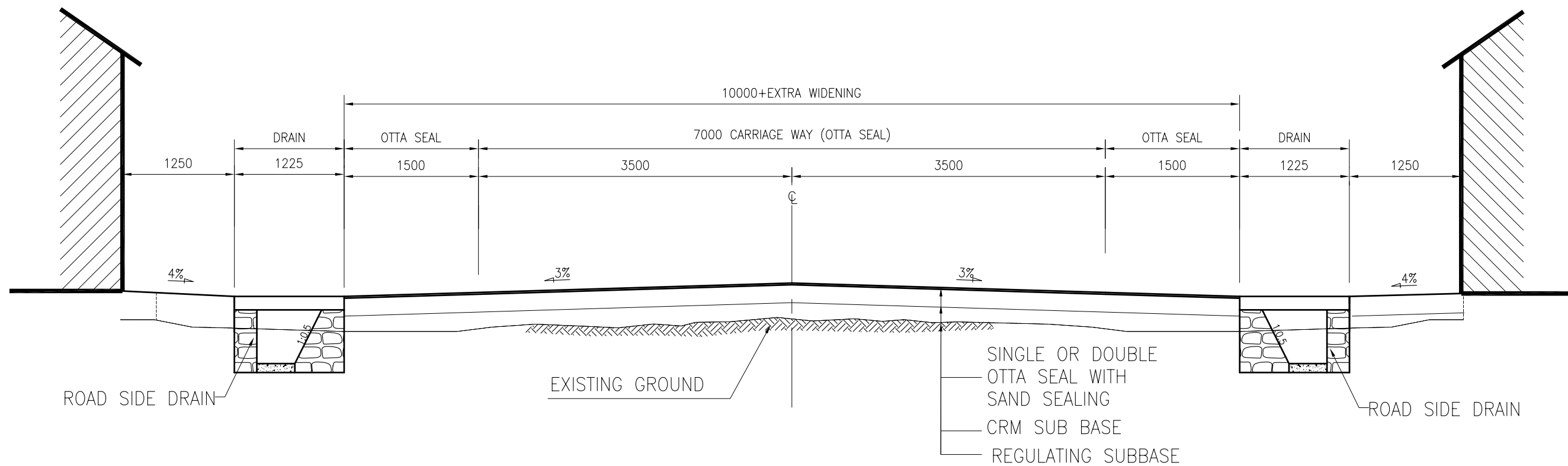


DESIGNED BY:
CHECKED BY:
APPROVED BY:

STANDARD DRAWINGS OF
PAVEMENT DETAILS

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

DATE:
FEB '2011
DWG. NO.:
RSDPAF-TYP
SHEET NO.:
5/26



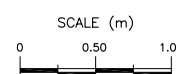
**CROSS SECTION
MARKET AREA**

Note:

- i) The width of the shoulder may vary subject to the existing site condition .
- ii) The exact locations of market areas shall be re-conformed during construction.

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
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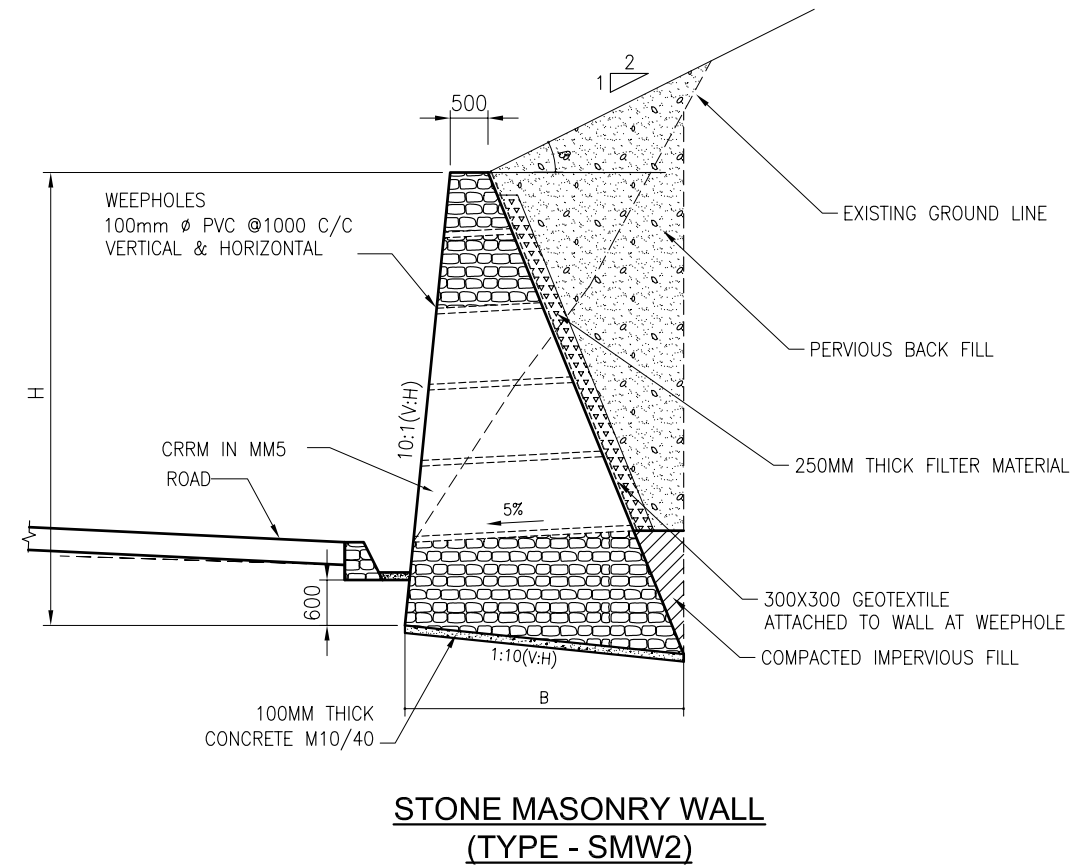
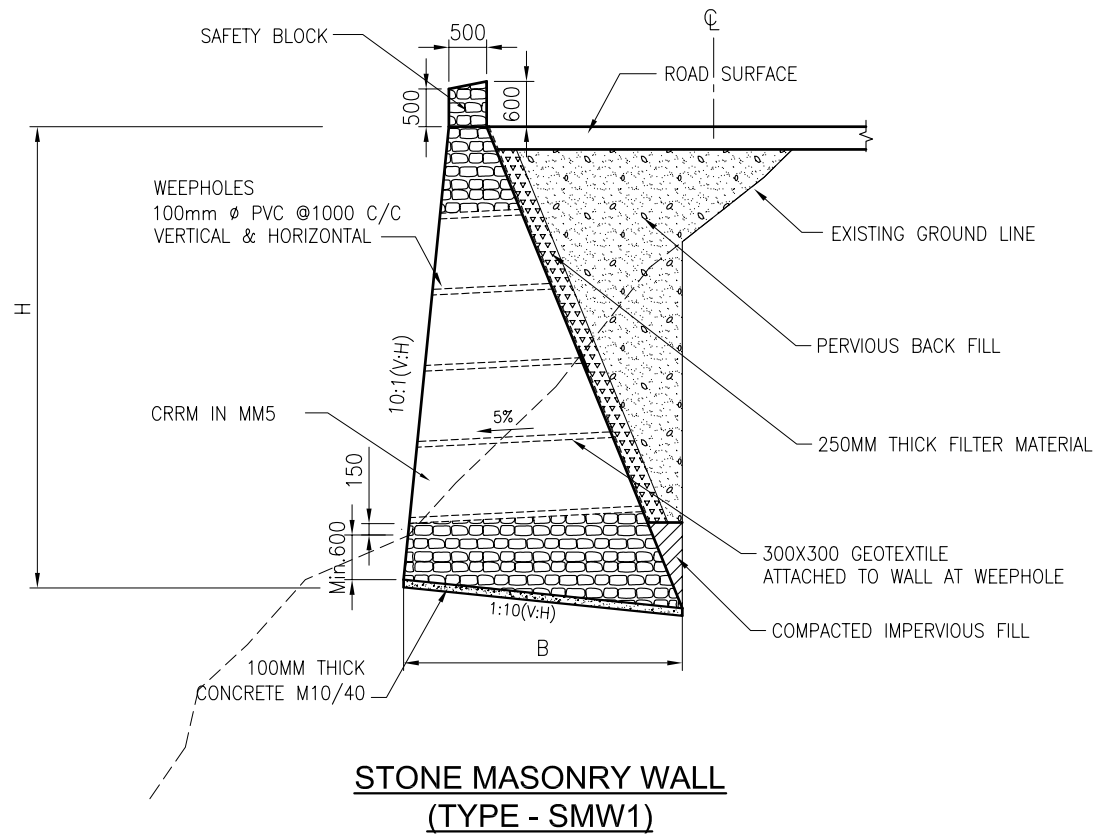


DESIGNED BY:
CHECKED BY:
APPROVED BY:

STANDARD DRAWINGS OF
PAVEMENT DETAILS AT MARKET AREA

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

DATE: FEB '2011
DWG. NO.: RSDPAF-TYP
SHEET NO.: 6/26

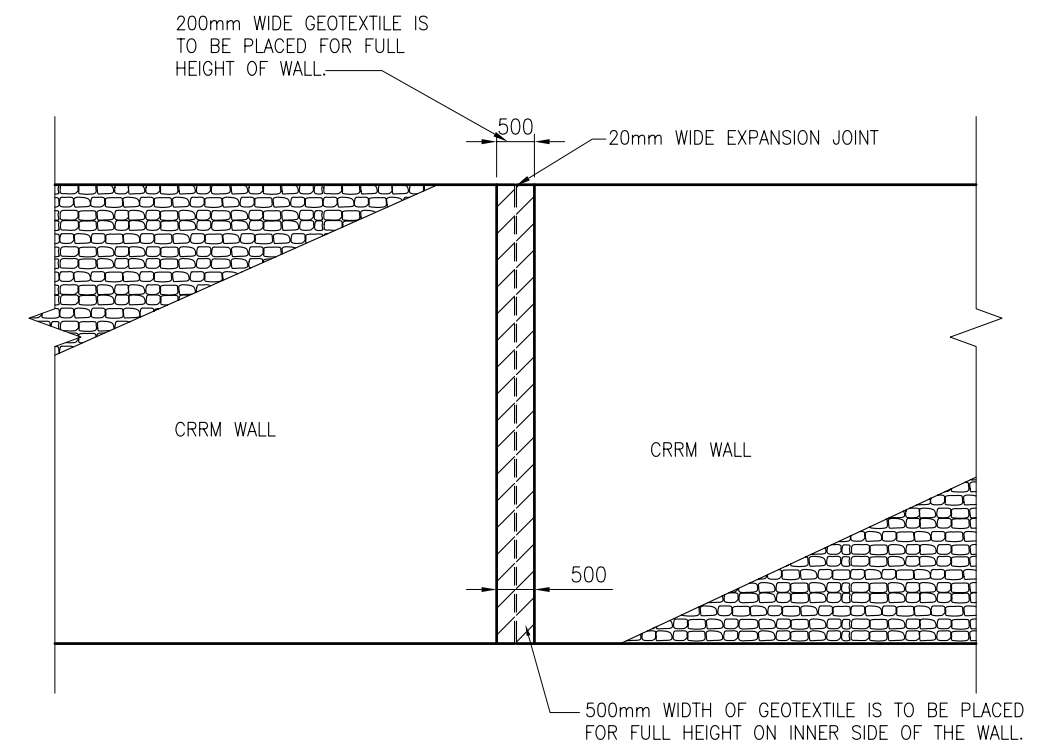


TYPE - SMW1												
H (m)	Φ=40°				Φ=30°				Φ=24°			
	B (m)	FSS	FSO	Max. Toe Pressure (kN/m ²)	B (m)	FSS	FSO	Max. Toe Pressure (kN/m ²)	B (m)	FSS	FSO	Max. Toe Pressure (kN/m ²)
2	1.36	2.03	2.56	92.00	1.50	1.65	2.46	100.00				
3	2.00	2.23	2.66	129.90	2.18	1.84	2.58	140.00	2.38	1.69	2.58	144.20
4	2.61	2.37	2.74	165.30	2.83	1.95	2.63	178.50	3.08	1.73	2.62	183.80
5	3.20	2.44	2.76	200.90	3.47	2.01	2.66	220.50	3.78	1.79	2.65	221.90
6	3.80	2.51	2.80	235.10	4.12	2.07	2.70	252.30	4.47	1.83	2.68	259.70
7	4.38	2.55	2.80	269.80	4.74	2.10	2.71	289.72	5.15	1.86	2.69	297.50
8	4.95	2.58	2.82	304.70	5.36	2.13	2.71	326.70	5.83	1.89	2.70	334.90
9	5.55	2.62	2.85	337.80	5.98	2.14	2.72	363.40	6.51	1.92	2.71	369.70
10	6.10	2.62	2.83	373.20	6.60	2.16	2.73	400.0	7.18	1.92	2.73	408.40

TYPE - SMW2								
β = 26.5°								
H (m)	Φ=40°				Φ=30°			
	B (m)	FSS	FSO	Max. Toe Pressure (kN/m ²)	B (m)	FSS	FSO	Max. Toe Pressure (kN/m ²)
2					1.27	1.55	2.38	95.90
3	1.68	2.21	2.60	123.50	1.95	1.51	2.38	145.40
4	2.31	2.13	2.60	164.20	2.61	1.49	2.37	193.10
5	3.00	2.13	2.70	200.70	3.27	1.49	2.37	241.30
6	3.54	2.06	2.60	245.40	3.93	1.48	2.37	289.40
7	4.14	2.04	2.59	286.60	4.58	1.48	2.36	339.00
8	4.75	2.03	2.59	327.10	5.32	1.50	2.43	387.70
9	5.35	2.02	2.58	368.20	6.00	1.50	2.44	436.50
10	5.95	2.01	2.58	409.20	6.65	1.50	2.43	484.30

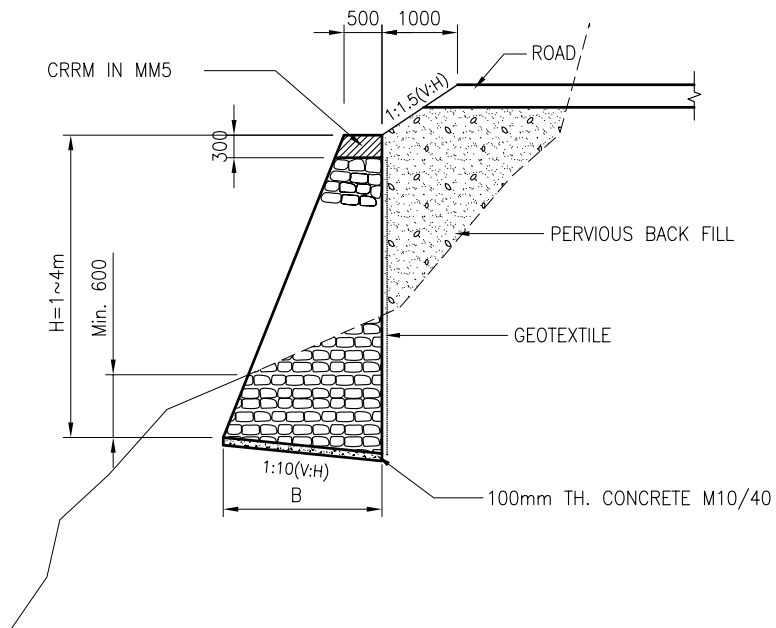
NOTES :

1. Wall height is to be modified as per actual site condition or as directed by the Engineer.
2. For Toe Pressure > 25 Kn/m² weather rock or rock foundation is envisaged. in case of soil investigation will be required.
3. Expansion Joint is to be provided at a maximum distance of 10.0 m C/C or as directed by the Engineer.
4. FSS means factor of safety against sliding and FSO means factor of safety against overturning.
5. All dimensions are in mm except otherwise mentioned.
6. Safety blocks to be provided where the wall height is more than 3.0 m.



DETAILS FOR DMW1

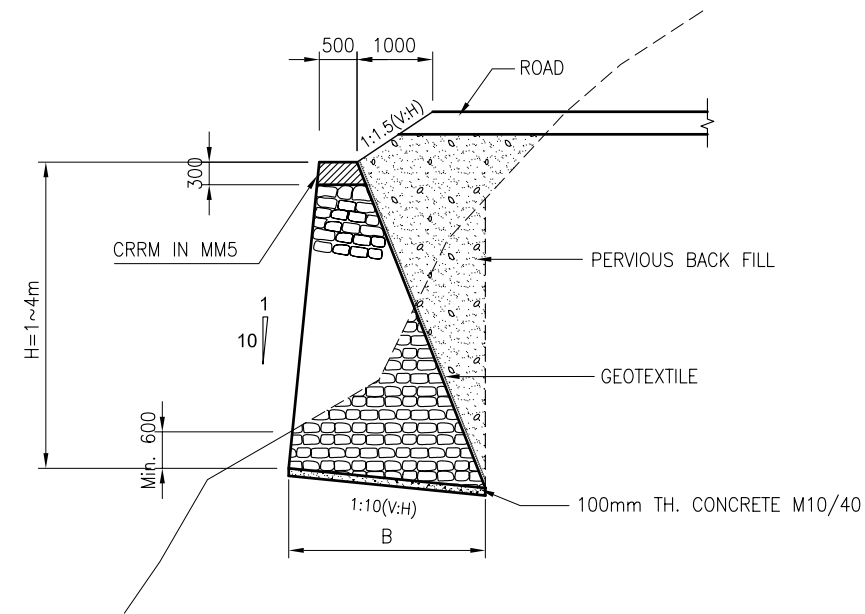
Height (m)	Base width (B) (m)	Ground Pressure (T/m ²)
1.00	0.90	2.00
2.00	1.30	3.50
3.00	1.70	5.50
4.00	2.10	7.50



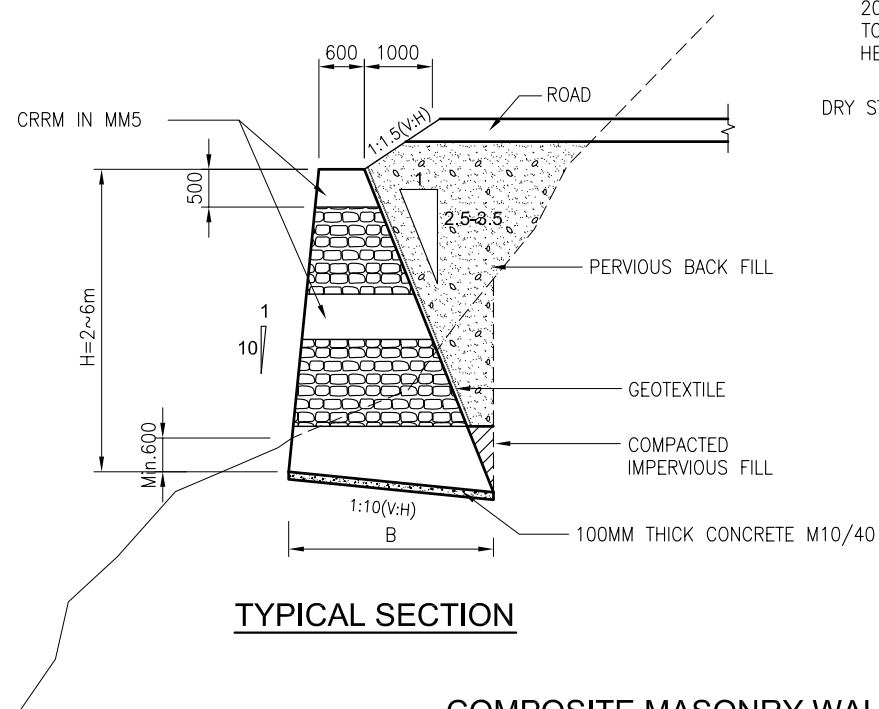
**DRY STONE MASONRY WALL
(Type - DMW1)**

DETAILS FOR DMW2

Height (m)	Base width (m)	Ground Pressure (T/m ²)
1.00	1.00	2.50
2.00	1.50	4.50
3.00	2.00	6.50
4.00	2.50	8.50

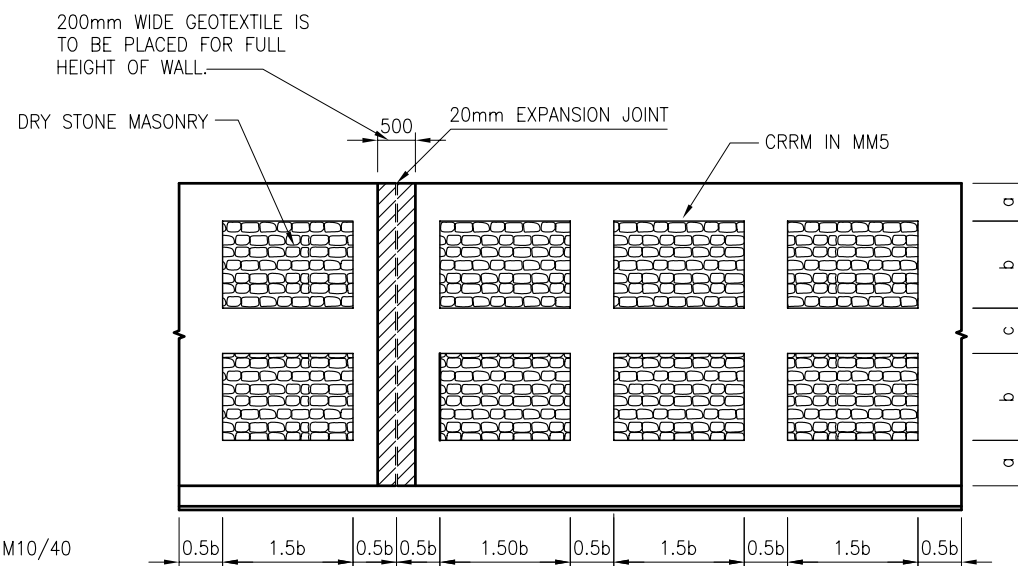


**DRY STONE MASONRY WALL
(Type - DMW2)**



TYPICAL SECTION

COMPOSITE MASONRY WALL (TYPE - CMW1)



**ELEVATION SHOWING
TYPICAL LAYOUT DETAIL**

PANNEL LAYOUT DIMENSIONS

Height (m)	Dimension (m)		
	a	b	c
2.00	0.60	0.80	-
3.00	0.75	1.50	-
4.00	0.60	1.15	0.50
5.00	0.60	1.40	1.00
6.00	0.75	1.75	1.00

NOTES :

1. Wall height is to be modified as per actual site condition or as directed by the Engineer.
2. Expansion Joint is to be provided at a maximum distance of 10.0 m c/c or as directed by the Engineer.
3. All dimensions are in mm except otherwise mentioned.

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
DEPARTMENT OF ROADS
ROAD SECTOR DEVELOPMENT PROJECT
IDA Grant No. H629 - NP
IDA Credit No. 4832 - NP

CONSULTANTS :

M/s MMM Group Ltd.
in JV with
SAI Consulting Engineers (P) Ltd.
in association with
ITECO Nepal and TMS Nepal

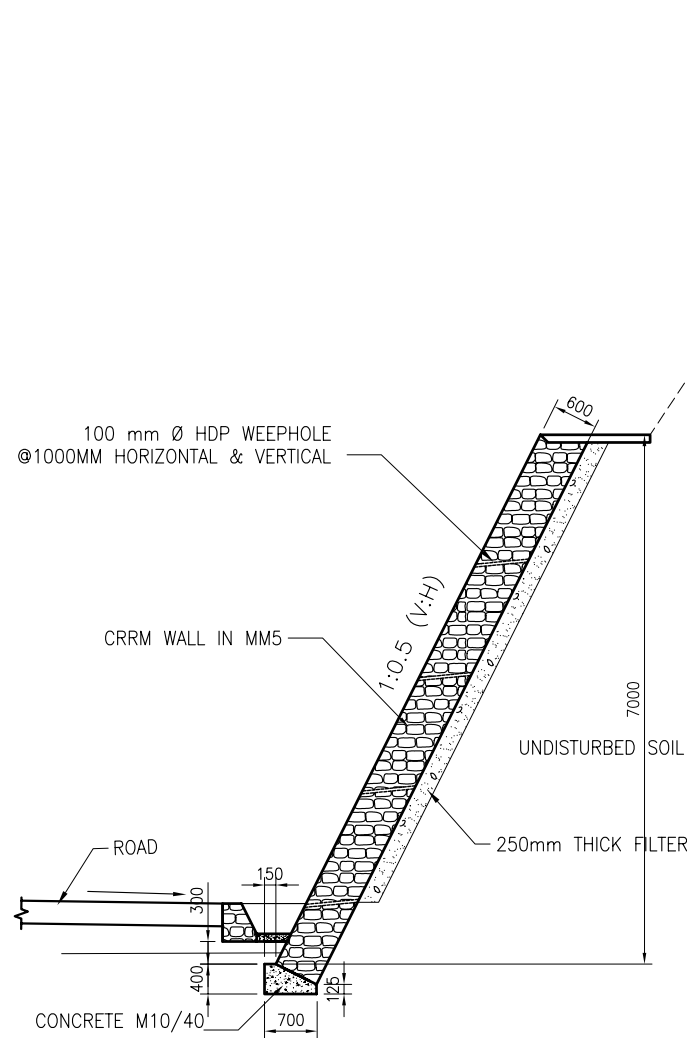


DESIGNED BY:
CHECKED BY:
APPROVED BY:

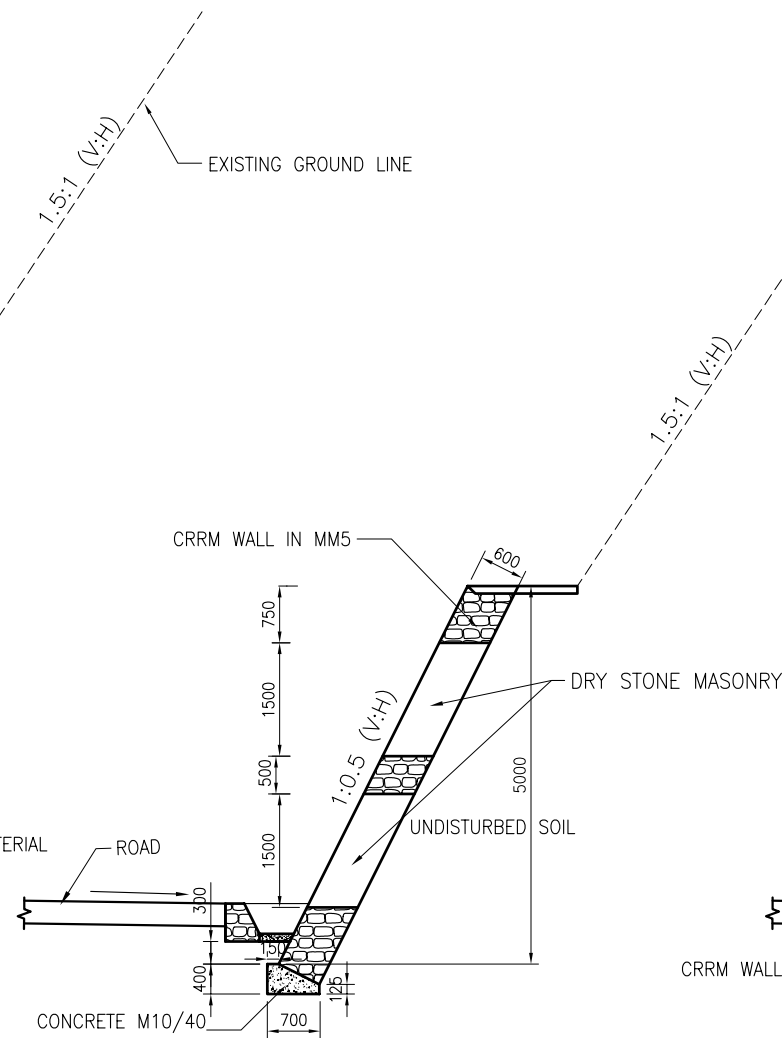
MASONRY RETAINING WALL
[DRY AND COMPOSITE]

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

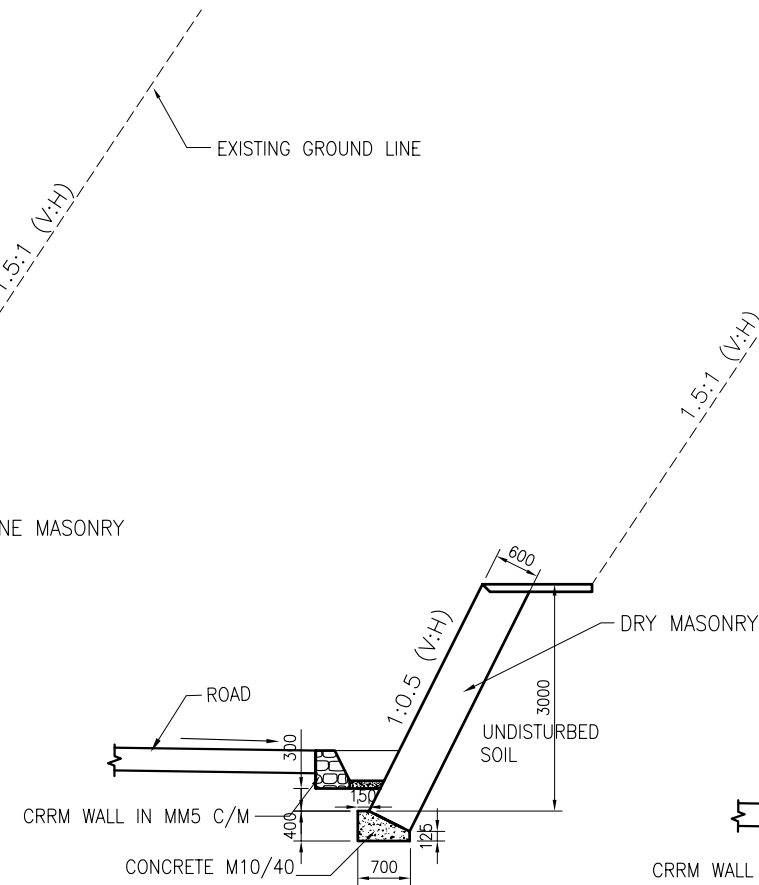
DATE: **FEB '2011**
DWG. NO.: **RSDPAF-TYP**
SHEET NO.: **8/26**



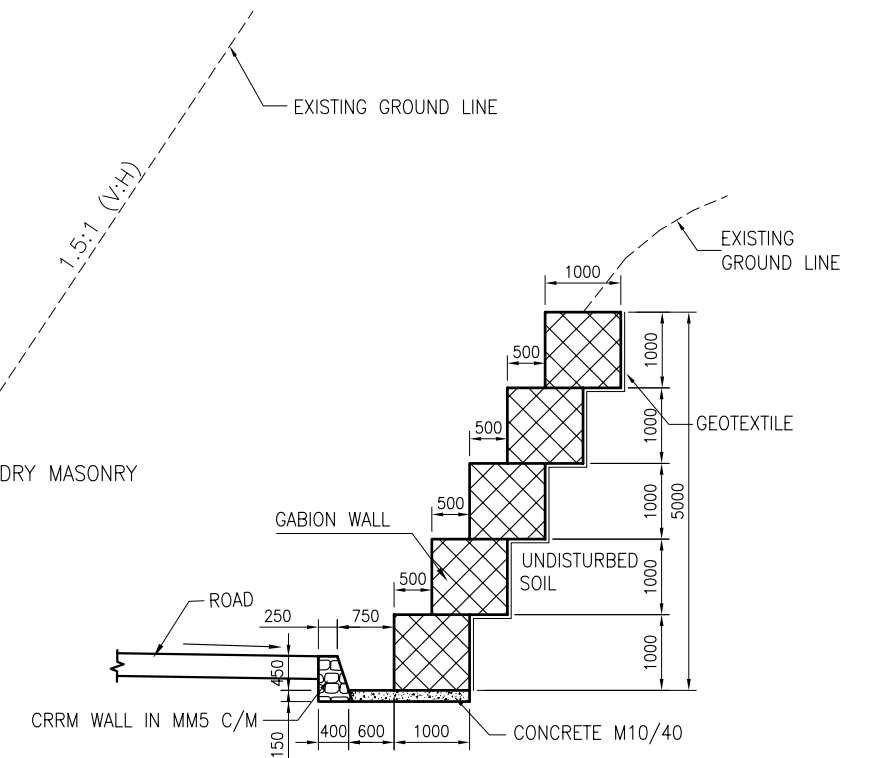
CRRM REVETMENT TYPE-SBRTA
5.00 - 7.00 m HEIGHT



COMPOSITE REVETMENT TYPE-SBRTB
3.00-5.00 m HEIGHT



DRY REVETMENT
UP TO 3.00 m HEIGHT



GABION TYPE
UP TO 5.00 m HEIGHT

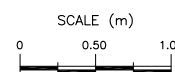
NOTES:

1. All dimensions are in mm except otherwise mentioned.
2. Retevment structures should be used for protection works only, ie for zero earth pressure case.

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
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in association with
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APPROVED BY:	

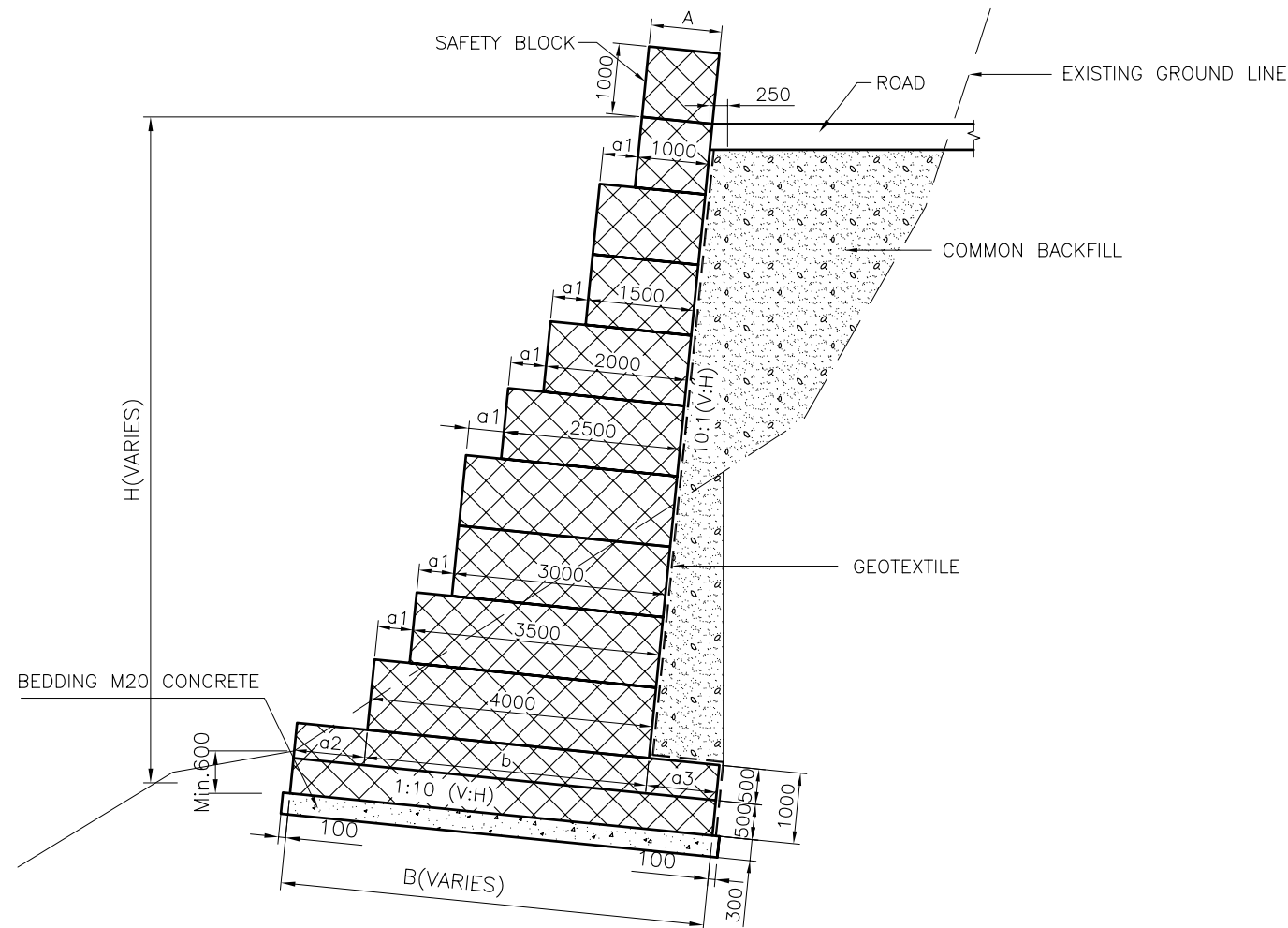
STANDARD DRAWING OF
MASONRY RETAINING WALL
[RETEVMENT]

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

DATE:
FEB '2011
DWG. NO.:
RSDPAF-TYP
SHEET NO.:
9/26

Detail for Semi Gravity Gabion wall (SGW-FB&BB)

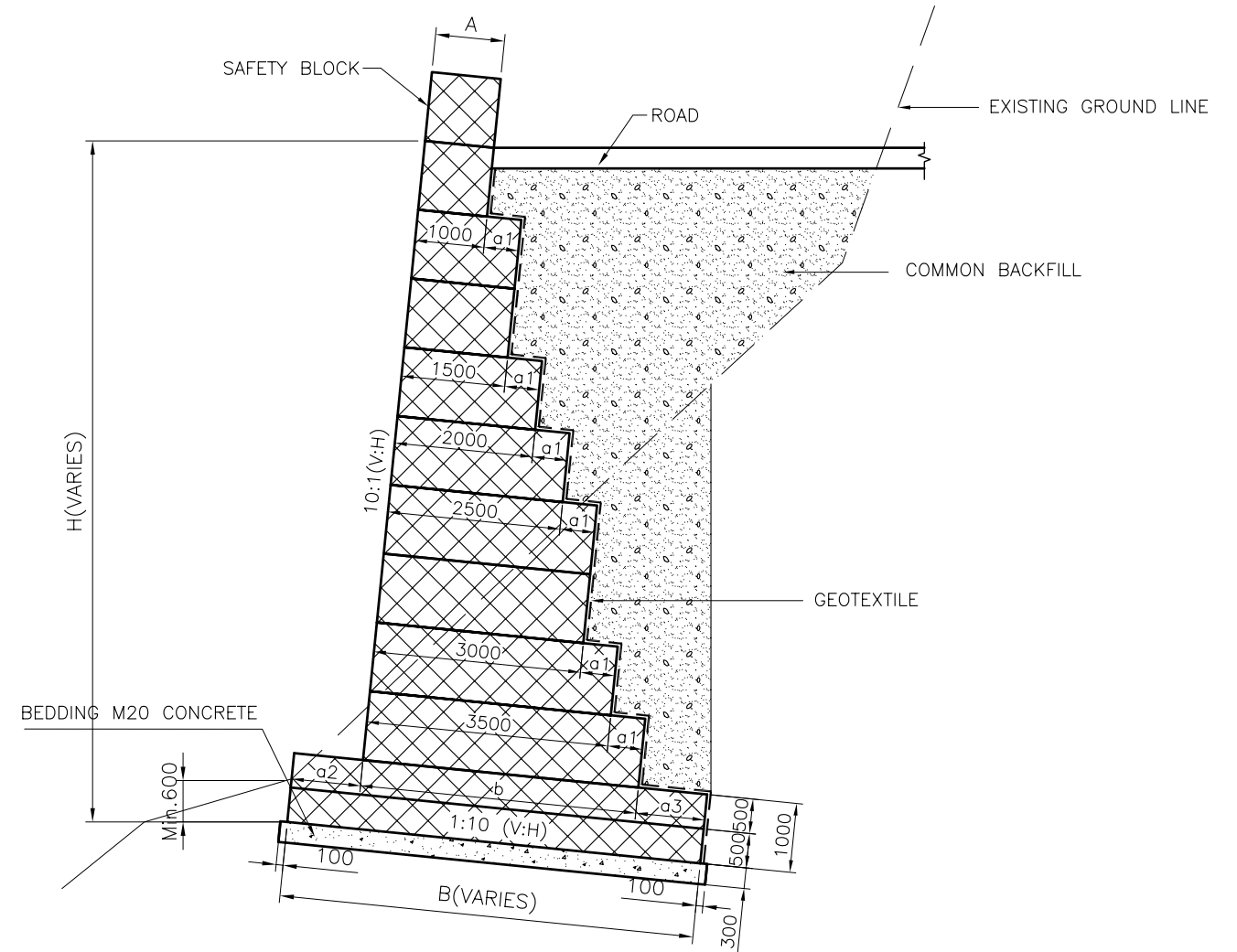
Height (m)	Dimension (m)						SGW-FB	SGW-BB
	A	a1	a2	a3	b	B	Pressure (T/m ²)	Pressure (T/m ²)
1.00	1.00	-	-	-	1.00	1.00	2.00	2.00
2.00	1.00	-	-	0.50	1.00	1.50	4.00	4.00
3.00	1.00	0.50	-	1.00	1.50	2.50	6.00	7.00
4.00	1.00	0.50	-	1.00	1.50	2.50	7.00	10.00
5.00	1.00	0.50	-	1.00	2.00	3.00	9.00	15.00
6.00	1.00	0.50	1.00	1.00	2.50	4.50	9.00	19.00
7.00	1.00	0.50	1.00	1.00	3.00	5.00	13.00	23.00
8.00	1.00	0.50	1.00	1.00	3.00	5.00	13.00	32.00



SEMI GRAVITY GABION WALL (SGAW-FB)

NOTES #1 :

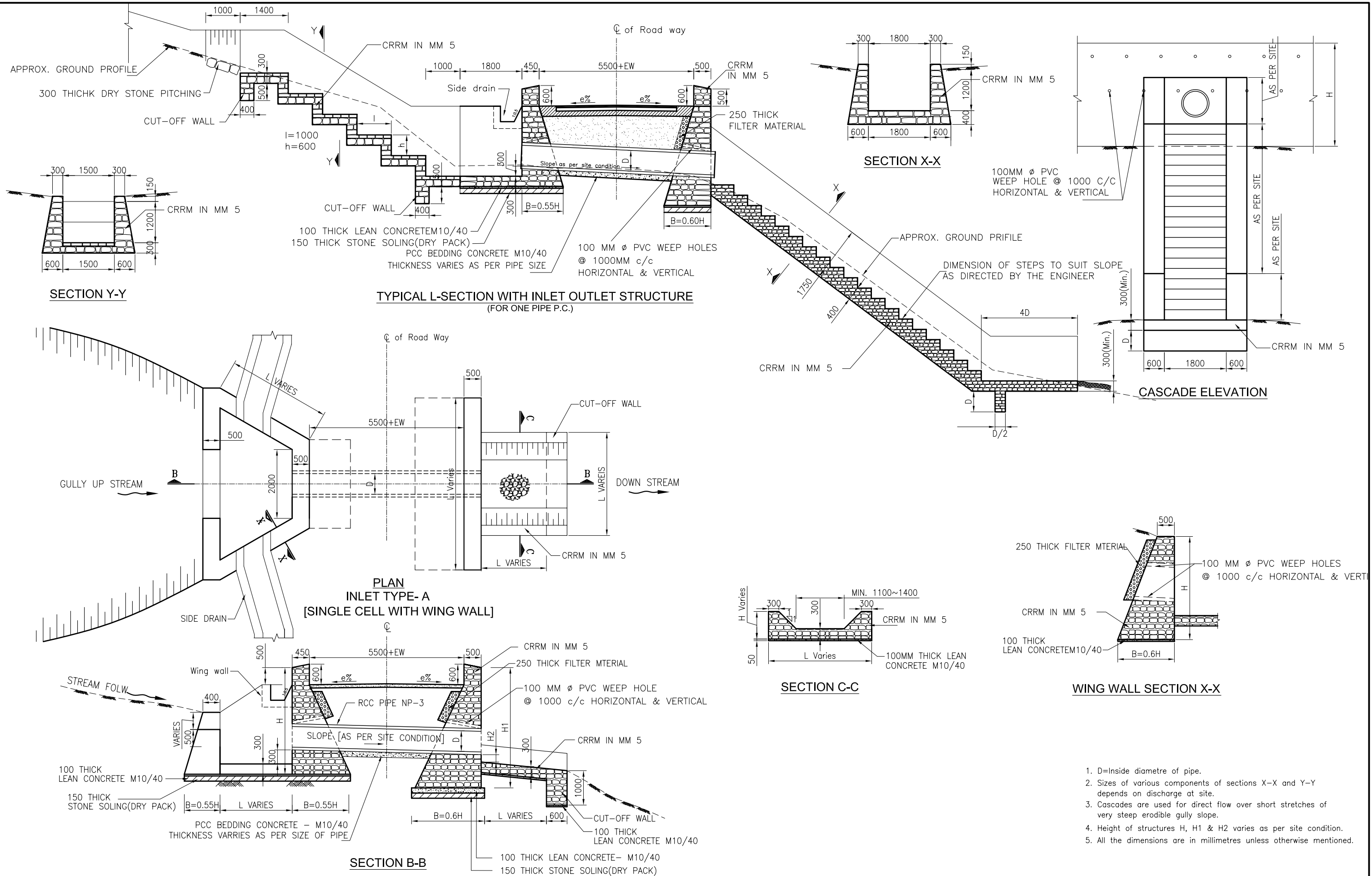
M-20 Grade concrete / Plum Concrete bedding of 300mm thickness (or as instructed by the Engineer) shall be provided in the foundation of the gabion walls ; wherever required in the opinion of the Engineer.



SEMI GRAVITY GABION WALL (SGAW-BB)

NOTES #2 :

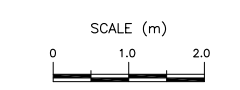
- All dimensions are in mm except otherwise mentioned.
- Foundation should consist of two layers of gabions each having thickness of 500 mm for wall height >6.0 m.
- For wall height more than 6.0 m, soil investigation is to be done or as directed by the Engineer.
- If space is available, slopping outside is preferred for valley side of the road.
- It is prudent to use semi-gravity wall at valley side up to 8.0 m high (stepping outside) and up to 6.0 m high (stepping inside).
- Site condition where soil is not very sensitive to water (yellowish soil, extremely weathered rock debris) and very little seepage to dry condition of the slope. With existing slope angle up to 35° (for old silty/clayey colluvium), 35° to 45° (for granular old colluvium), over 45° to 60° (for highly weathered rock transformed to soil) and with no sign of instability at the top of the slope.



1. D=Inside diameter of pipe.
2. Sizes of various components of sections X-X and Y-Y depends on discharge at site.
3. Cascades are used for direct flow over short stretches of very steep erodible gully slope.
4. Height of structures H, H1 & H2 varies as per site condition.
5. All the dimensions are in millimetres unless otherwise mentioned.

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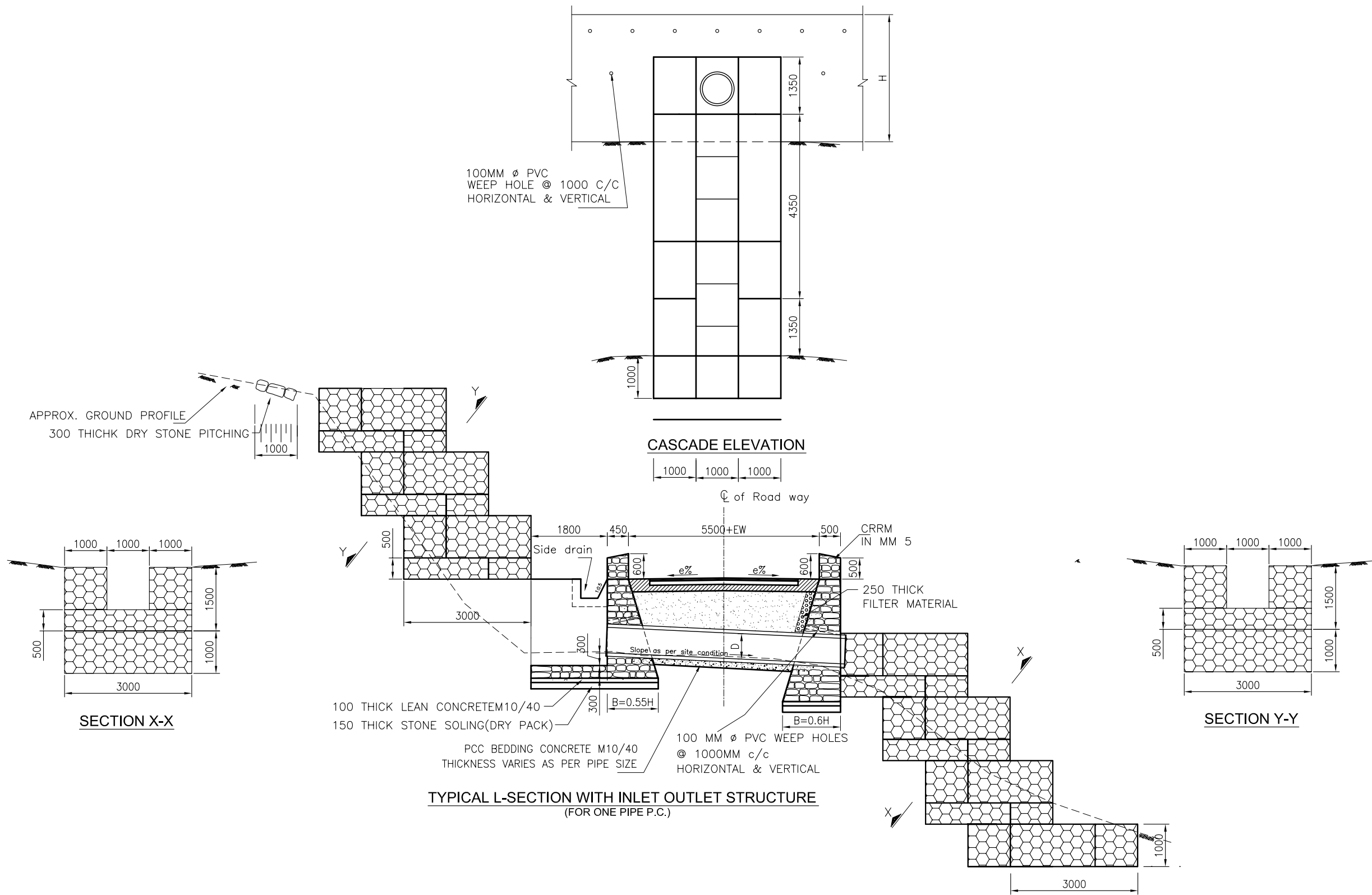


DESIGNED BY:
 CHECKED BY:
 APPROVED BY:

STANDARD DRAWINGS OF
 PIPE CULVERTS
 [WITH WING WALLS]

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

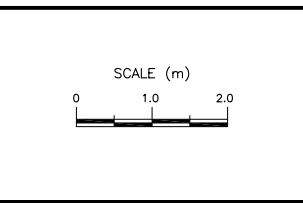
DATE:
FEB '2011
 DWG. NO.:
RSDPAF-TYP
 SHEET NO.:
11/26



1. D=Inside diametre of pipe.
2. Sizes of various components of sections X-X and Y-Y depends on discharge at site.
3. Cascades are used for direct flow over short stretches of very steep erodible gully slope.
4. Height of structures H, H1 & H2 varies as per site condition.
5. All the dimensions are in millimetres unless otherwise mentioned.

GOVERNMENT OF NEPAL (GoN)
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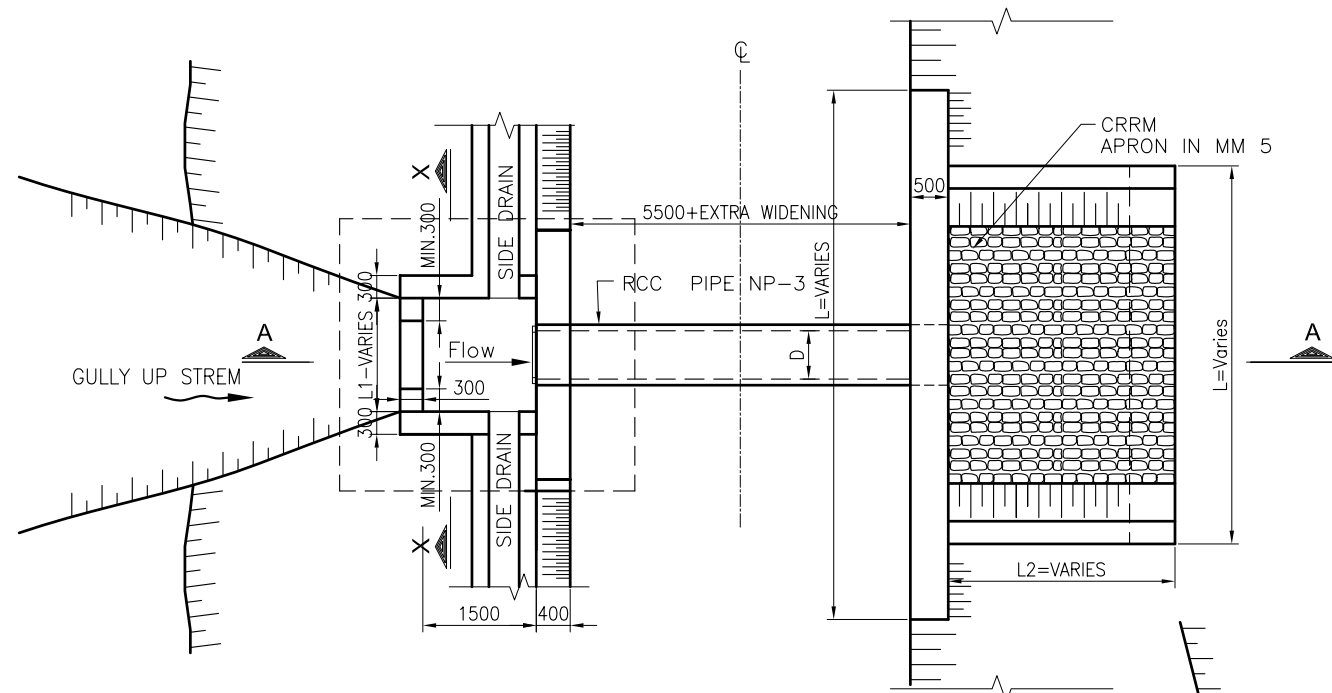


DESIGNED BY:
 CHECKED BY:
 APPROVED BY:

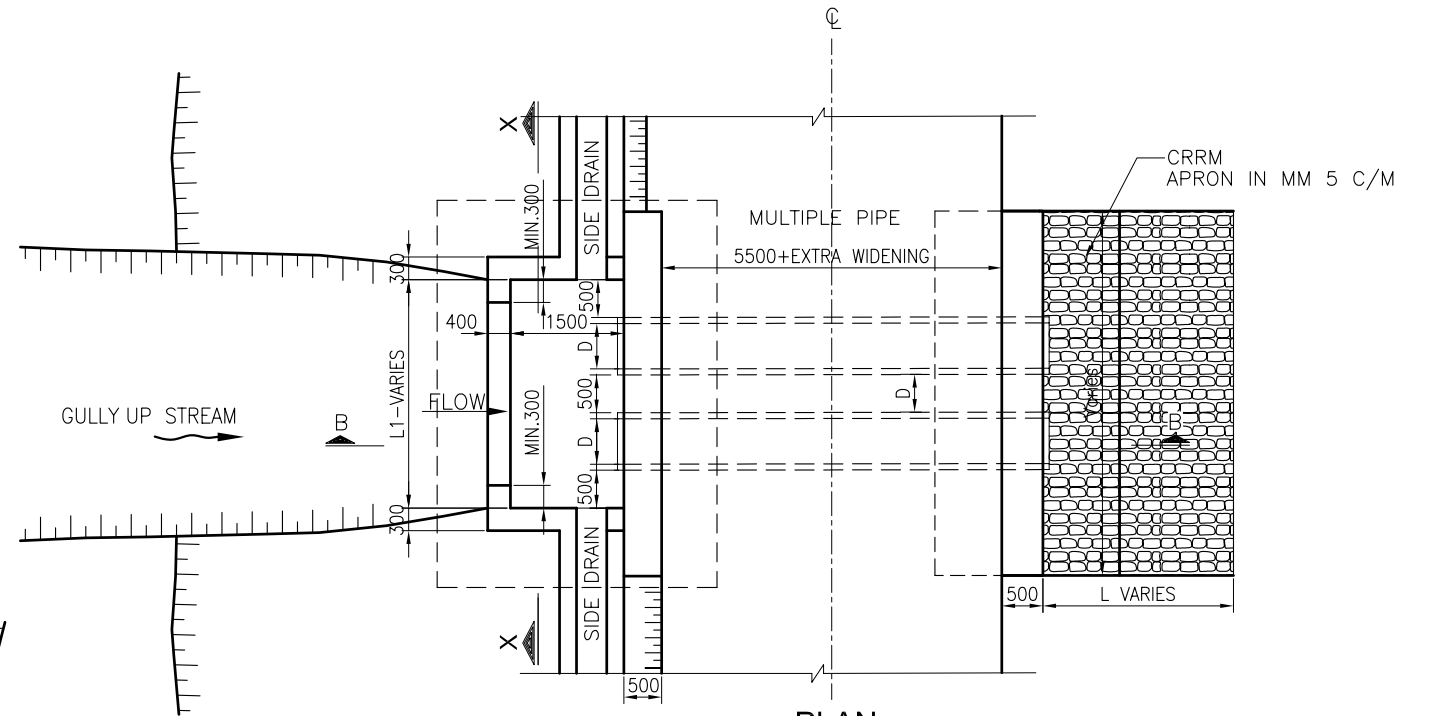
STANDARD DRAWINGS OF
 GABION CASCADE

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

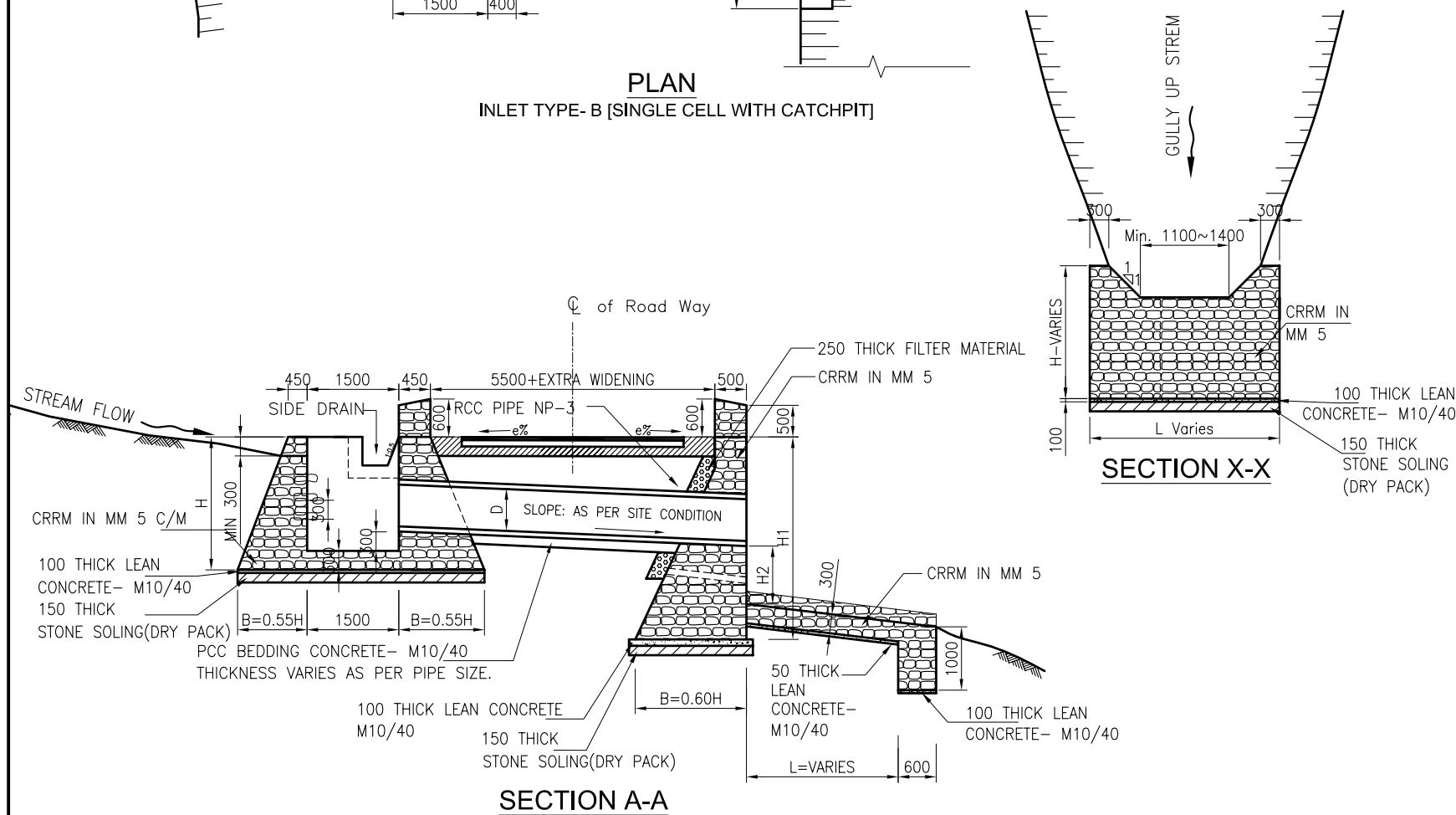
DATE: FEB '2011
 DWG. NO.: RSDPAF-TYP
 SHEET NO.: 12/26



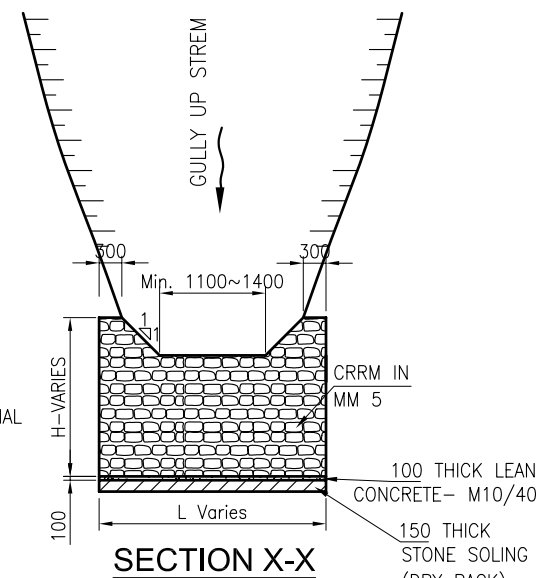
PLAN
INLET TYPE- B [SINGLE CELL WITH CATCHPIT]



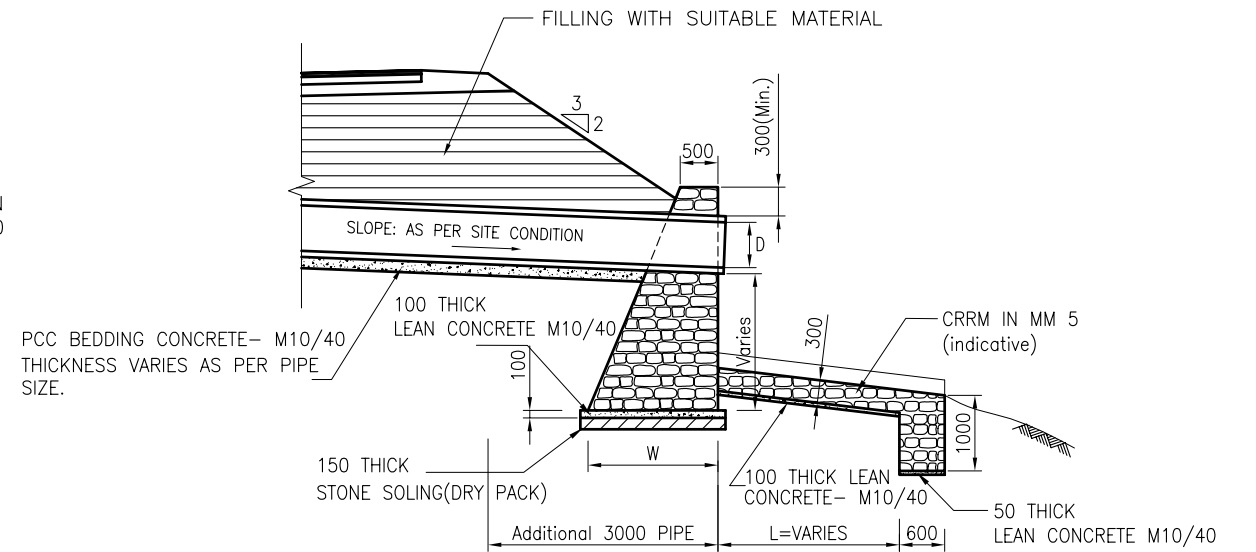
PLAN
INLET TYPE- B [DOUBLE CELL WITH CATCHPIT]



SECTION A-A



SECTION X-X

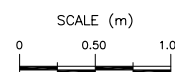


ALTERNATIVE OUTLET IN EMBANKMENT FILLING

- NOTES:
1. D=Inside diameter of pipe.
 2. USE RCC pipe NP-3, D=Varies
 3. Height of structures H, H1 & H2 varies as per site condition.
 4. Stone masonry Apron slope varies as per site condition.
 5. All the dimensions are in millimetres unless otherwise mentioned.

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
DEPARTMENT OF ROADS
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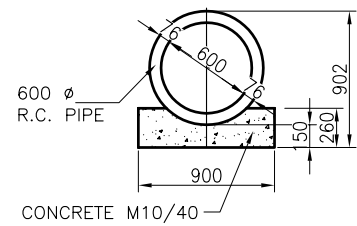


DESIGNED BY:
CHECKED BY:
APPROVED BY:

STANDARD DRAWINGS OF
PIPE CULVERTS WITH CATCHPIT
[SINGLE & DOUBLE CELL]

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

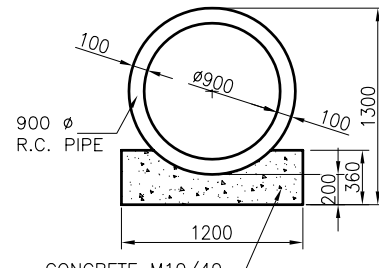
DATE:
FEB '2011
DWG. NO.:
RSDPAF-TYP
SHEET NO.:
13/26



PIPE CULVERT (Ø600)

WORK QUANTITIES (PER 10.0m)

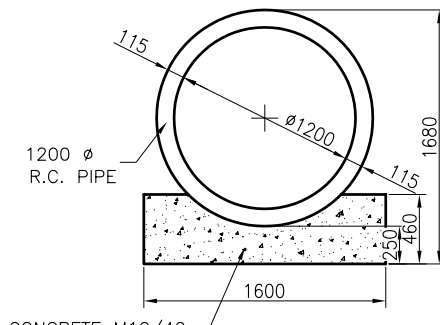
ITEM	UNIT	QUANTITY	REMARKS
R.C. PIPE (Ø900)	m	10.00	NP3
CONCRETE M10/40	m ³	1.92	
FORM WORK	m ²	5.2	
EXCAVATION	m ³	2.34	



PIPE CULVERT (Ø900)

WORK QUANTITIES (PER 10.0m)

ITEM	UNIT	QUANTITY	REMARKS
R.C. PIPE (Ø900)	m	10.00	NP3
CONCRETE M10/40	m ³	3.46	
FORM WORK	m ²	7.20	
EXCAVATION	m ³	4.32	

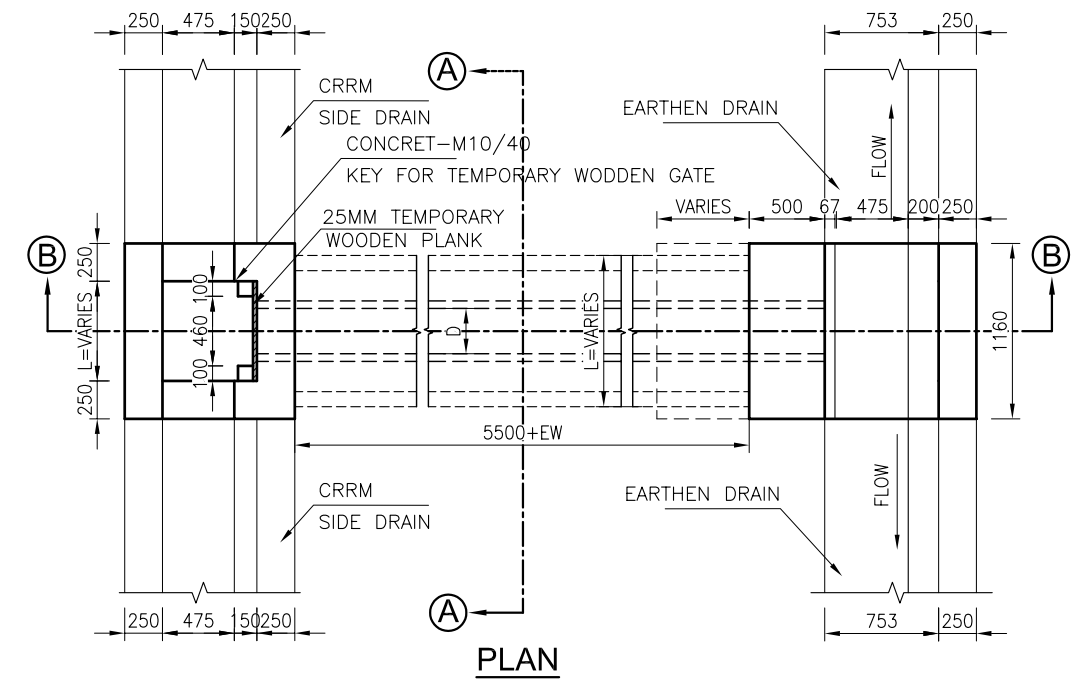


PIPE CULVERT (Ø1200)

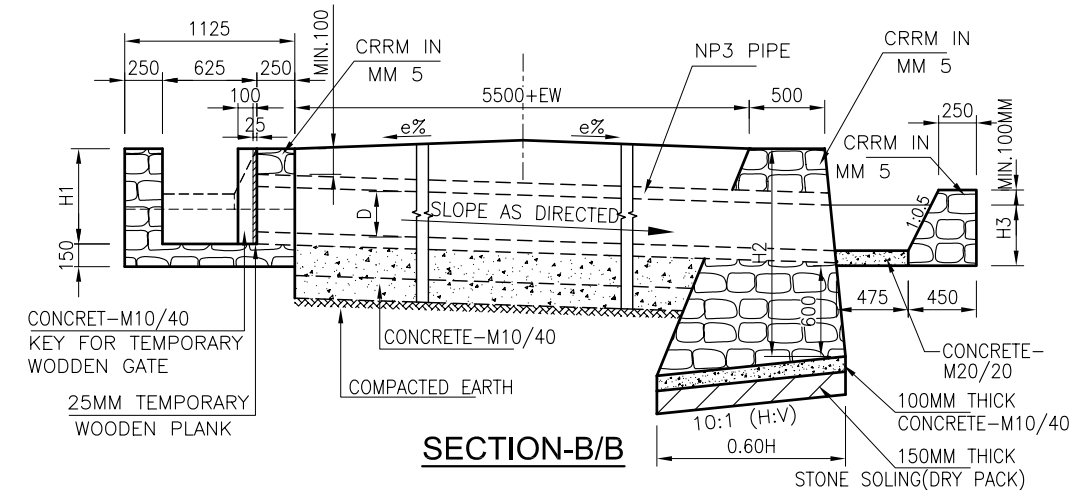
WORK QUANTITIES (PER 10.0m)

ITEM	UNIT	QUANTITY	REMARKS
R.C. PIPE (Ø1200)	m	10.00	NP3
CONCRETE M10/40	m ³	5.89	
FORM WORK	m ²	9.20	
EXCAVATION	m ³	7.36	

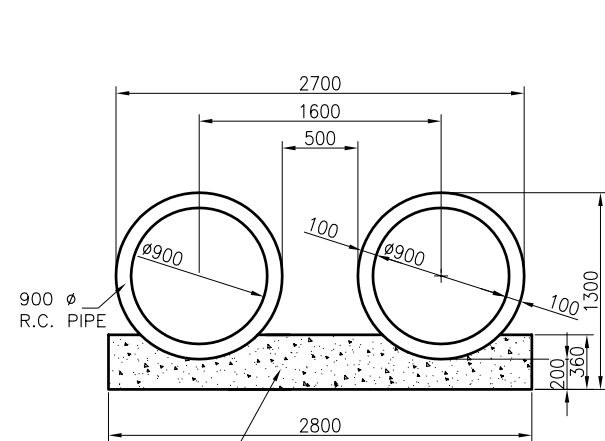
IRRIGATION CROSSING/LOOP DRAIN CROSSING



PLAN



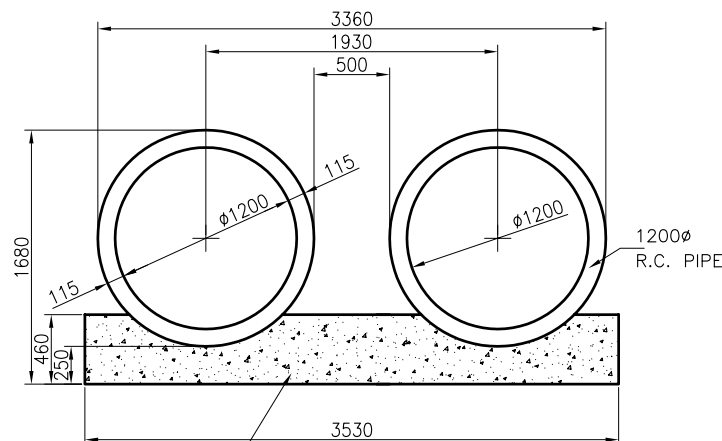
SECTION-B/B



PIPE CULVERT (2X900Ø)

WORK QUANTITIES (PER 10.0m)

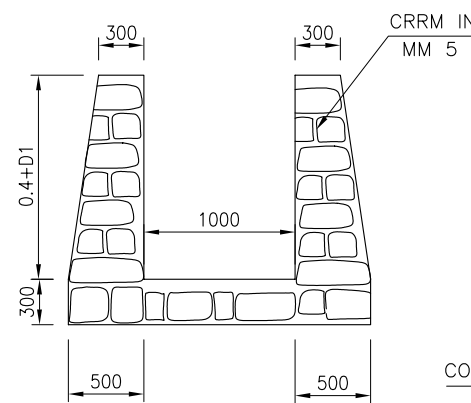
ITEM	UNIT	QUANTITY	REMARKS
R.C. PIPE (Ø900)	m	20.00	NP3
CONCRETE M10/40	m ³	8.36	
FORM WORK	m ²	7.20	
EXCAVATION	m ³	10.08	



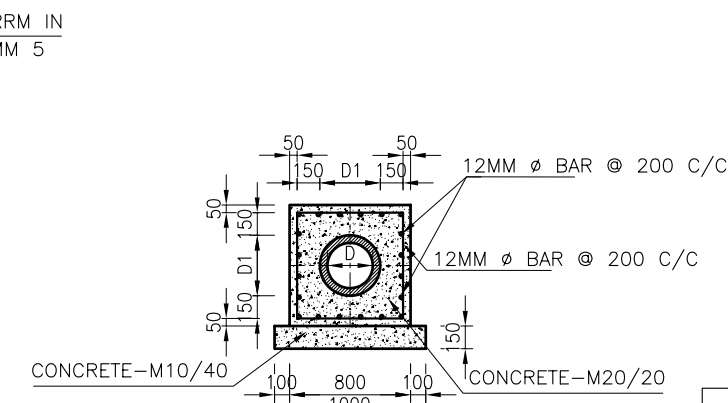
PIPE CULVERT (2X1200Ø)

WORK QUANTITIES (PER 10.0m)

ITEM	UNIT	QUANTITY	REMARKS
R.C. PIPE (Ø1200)	m	20.00	NP3
CONCRETE M10/40	m ³	13.62	
FORM WORK	m ²	9.20	
EXCAVATION	m ³	16.24	



OUTLET GUIDE CHANNEL



SECTION-A/A

ITEM	UNIT	DIAMETRE	REMARKS
RCC PIPE (D)	mm	300	NP3
RCC PIPE (D)	mm	600	NP3
RCC PIPE (D)	mm	450	NP3

NOTES:

- All DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE MENTIONED.
- D & D1 = INNER & OUTER DIAMETRE OF PIPE

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
DEPARTMENT OF ROADS
ROAD SECTOR DEVELOPMENT PROJECT
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CONSULTANTS:

M/s MMM Group Ltd.
in JV with
SAI Consulting Engineers (P) Ltd.
in association with
ITECO Nepal and TMS Nepal



DESIGNED BY:
CHECKED BY:
APPROVED BY:

STANDARD DRAWINGS OF
PIPE CULVERT SECTIONS
AND
IRRIGATION CROSSING

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

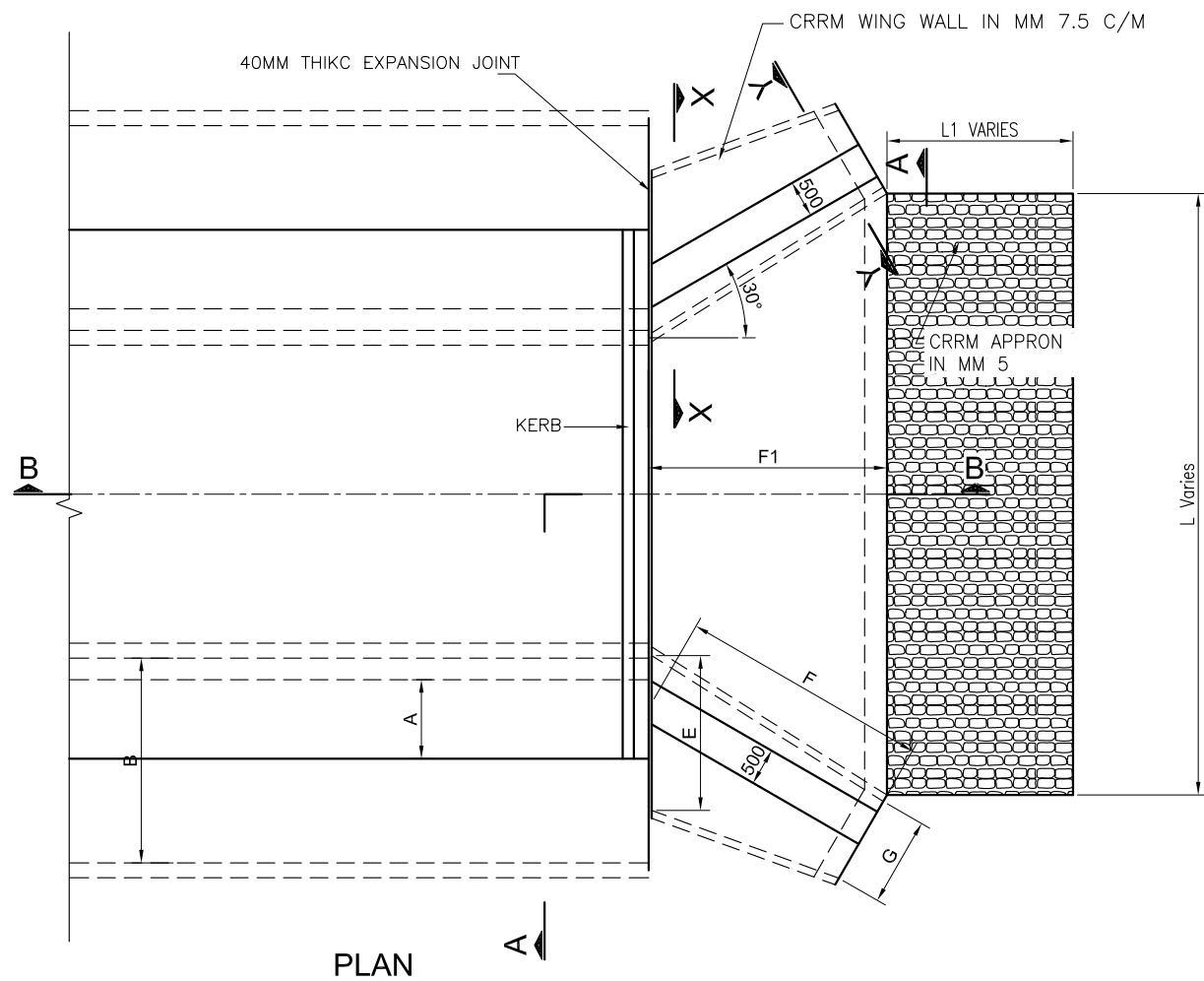
DATE:
FEB '2011

DWG. NO.:

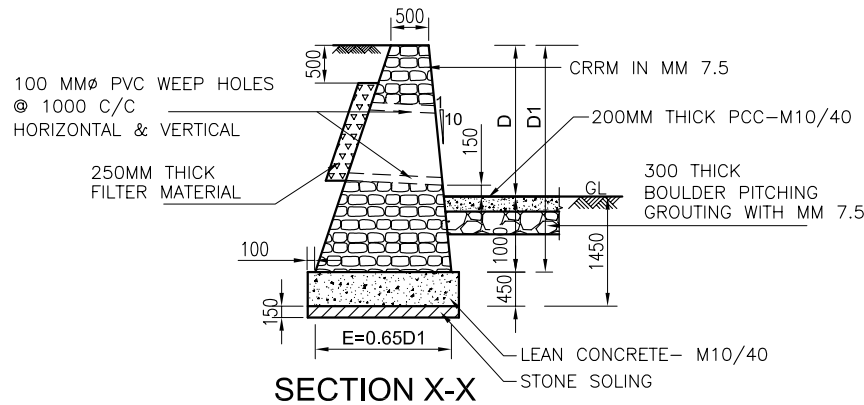
RSDPAF-TYP

SHEET NO.:

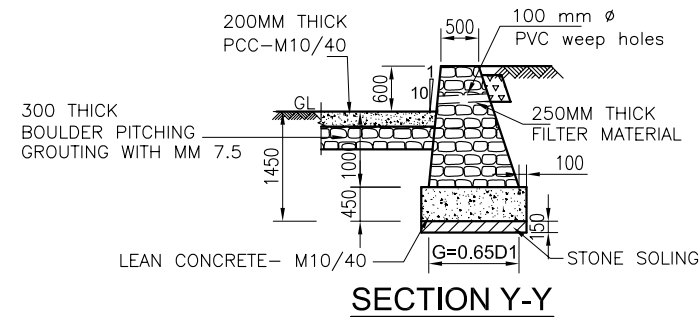
14/26



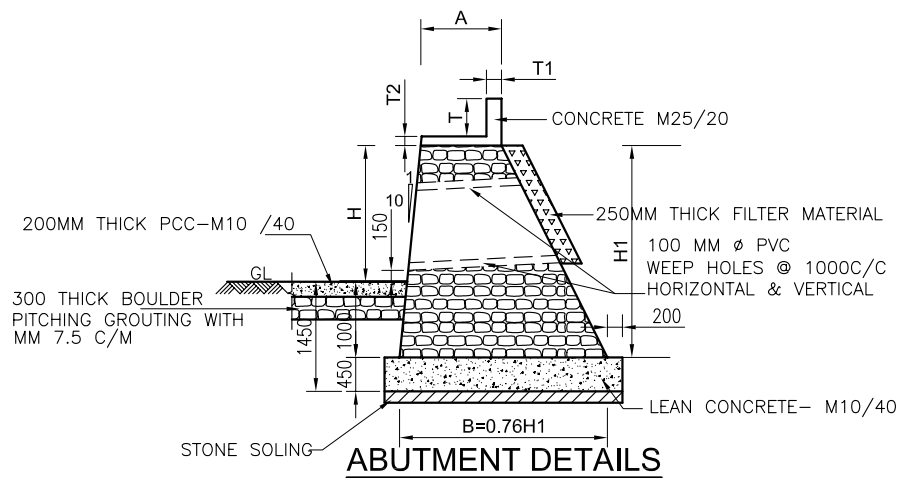
PLAN



SECTION X-X

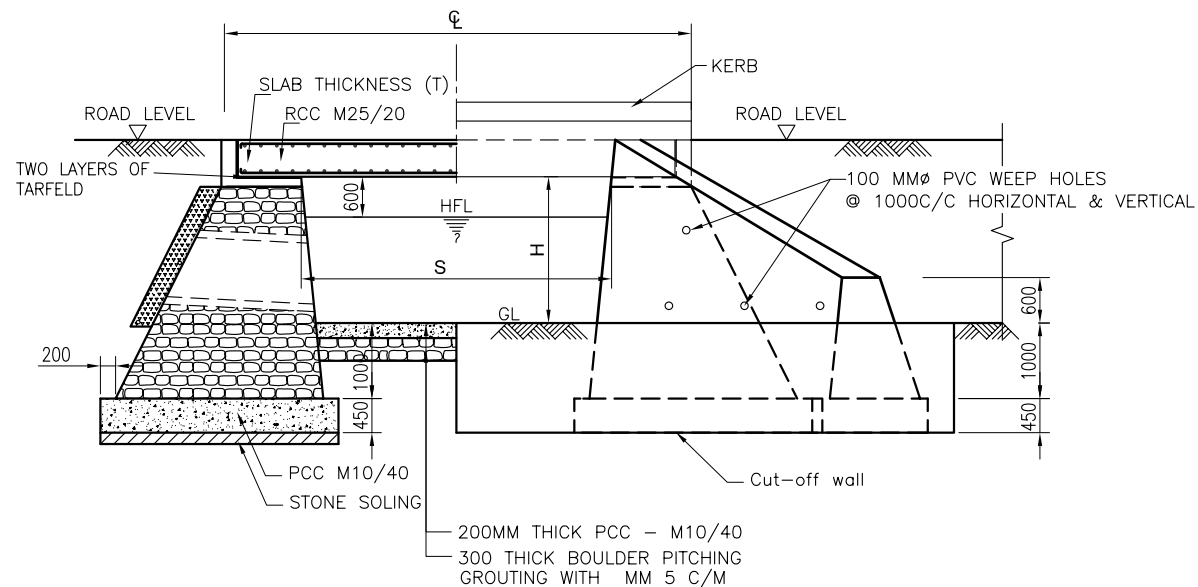


SECTION Y-Y

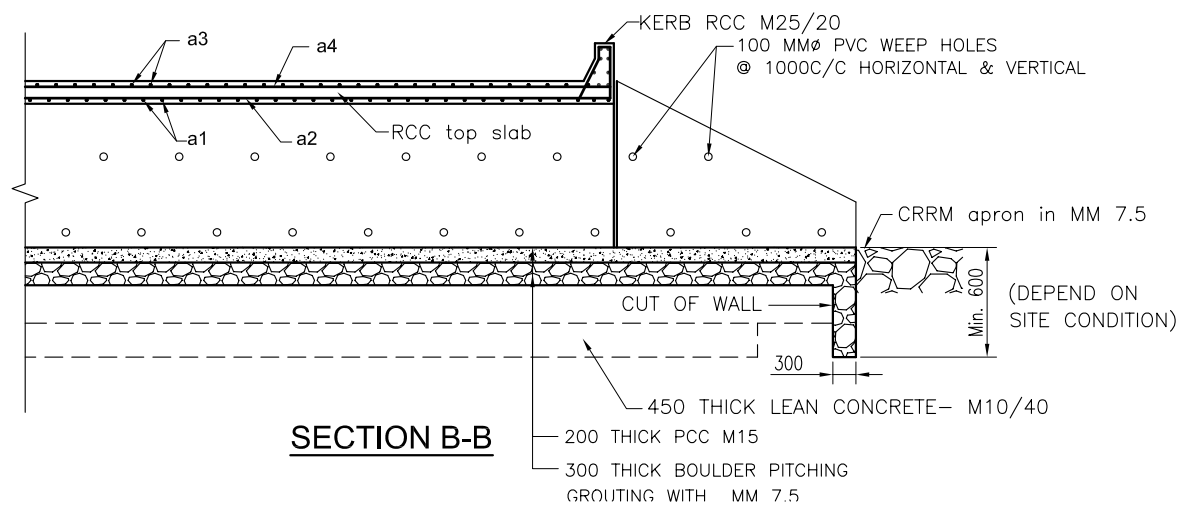


ABUTMENT DETAILS

- NOTES:
1. CONCRETE mix should be M25/20 or as shown in the drawing.
 2. All edges are to be chamfered 100 mm x 100 mm.
 3. Mortar mix should be MM 5
 4. All Dimensions are in Millimetres except the dimensions in table.



SECTION AT A-A



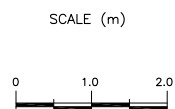
SECTION B-B

CULVERT DIMENSIONS AND QUANTITIES												
CULVERT TYPE	SIZE	DIMENSIONS(m)							QUANTITIES (LINEAR METRE EXCLUDING WING WALL APRON CUT-OFF WALL)			
		S X H	H1	T	T1	T2	A	B	L	CONCRETE M25 (M ³)	CONCRETE M15 (M ³)	Reinforcing Steel(kg) Kerb excluded
I	1.00x2.00	3.00	0.25	0.20	0.12	0.52	2.28	2.04	0.61	2.41	60.13	16.80
II	2.00x2.00	3.00	0.25	0.20	0.12	0.65	2.28	3.30	1.01	2.41	73.72	17.58
III	3.00x3.00	4.00	0.30	0.20	0.15	0.77	3.04	4.54	1.62	3.10	99.10	30.48
IV	4.00x3.00	4.00	0.40	0.20	0.15	0.77	3.04	5.54	2.49	3.10	179.99	30.48
V	5.00x3.00	4.00	0.50	0.20	0.20	1.00	3.04	7.00	3.87	3.10	211.12	30.48
VI	6.00x3.00	4.00	0.55	0.25	0.25	1.00	3.04	8.40	4.80	3.10	312.67	30.48

WINGWALL DIMENSIONS AND QUANTITIES (INCLUDING APRON SLAB & CUT-OFF WALL)								
CULVERT TYPE	SIZE	DIMENSIONS(m)						QUANTITIES (AT ONE END) MASONRY M ³
		S X H	D	D1	E	F	F1	
I	1.00x2.00	2.00	3.00	1.95	2.88	2.48	1.39	5.96
II	2.00x2.00	2.00	3.00	1.95	2.88	2.48	1.39	5.96
III	3.00x3.00	3.00	4.00	2.60	4.68	4.05	1.39	12.07
IV	4.00x3.00	3.00	4.00	2.60	4.85	4.20	1.39	12.52
V	5.00x3.00	3.00	4.00	2.60	5.02	4.35	1.39	12.95
VI	5.00x3.00	3.00	4.00	2.60	5.12	4.43	1.39	13.21

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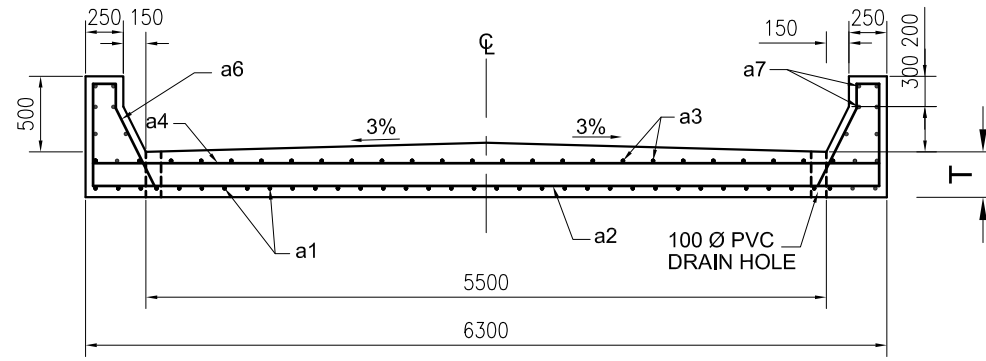


DESIGNED BY:
CHECKED BY:
APPROVED BY:

STANDARD DRAWINGS OF
SLAB CULVERT

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

DATE:
FEB '2011
DWG. NO.:
RSDPAF-TYP
SHEET NO.:
15/26

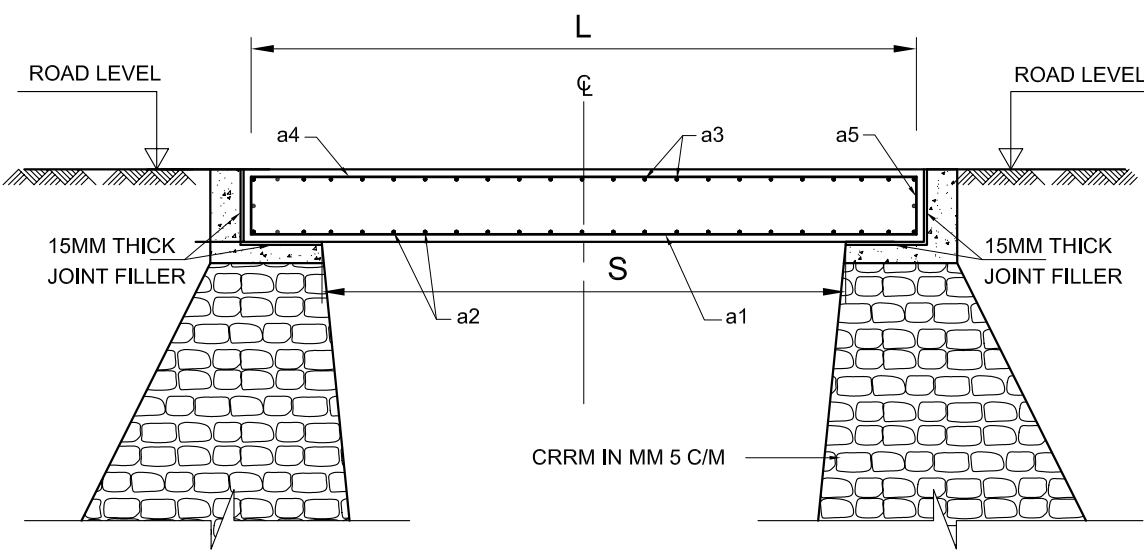


TRANSVERSE SECTION

BAR BENDING SCHEDULE OF CURB

CULVERT TYPE	MARK a6				MARK a7			
	DIA (mm)	NO.	LENGTH	TOTAL LENGTH	DIA (mm)	NO.	LENGTH	TOTAL LENGTH
I	10	22	1.74	38.17	10	12	1.96	23.52
II	10	36	1.74	62.46	10	12	3.22	38.64
III	10	48	1.74	83.28	10	12	4.46	53.52
IV	10	56	1.74	97.16	10	12	5.44	65.28
V	10	70	1.74	121.45	10	12	6.90	82.80
VI	10	80	1.74	139.20	10	12	7.70	92.40

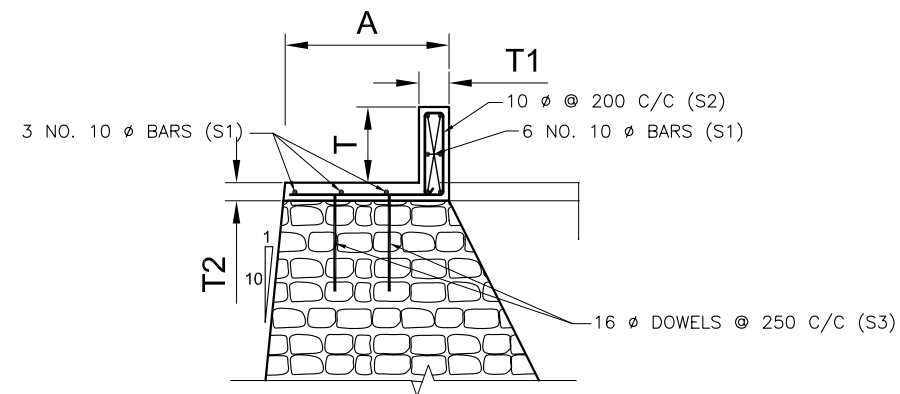
- NOTES:
1. TMT BARS having characteristic strength 500 N/mm² should be used.
 2. All the dimensions are in millimetres except the dimensions in table.



LONGITUDINAL SECTION

BAR BENDING SCHEDULE OF ABUTMENT SEAT PER LINEAR METRE

CULVERT TYPE	MARK s1				MARK s2				MARK s3			
	DIA (mm)	NO.	LENGTH	TOTAL LENGTH	DIA (mm)	NO.	LENGTH	TOTAL LENGTH	DIA (mm)	NO.	LENGTH	TOTAL LENGTH
I	10	9	1.00	9.00	10	5	1.25	6.25	10	8	0.60	4.80
II	10	9	1.00	9.00	10	5	1.26	6.32	10	8	0.60	4.80
III	10	9	1.00	9.00	10	5	1.58	7.90	10	8	0.60	4.80
IV	10	9	1.00	9.00	10	5	1.94	9.69	10	8	0.60	4.80
V	10	9	1.00	9.00	10	5	2.23	11.15	10	8	0.60	4.80
V	10	9	1.00	9.00	10	5	2.27	11.35	10	8	0.60	4.80



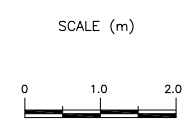
ABUTMENT SEAT DETAIL

BAR BENDING SCHEDULE PER ONE LINEAR METRE OF CULVERT (EXCLUDING CURB & ABUTMENT SEAT)

CULVERT TYPE	MARK a1				MARK a2				MARK a3				MARK a4				MARK a5			
	L				L				L				L				L			
	DIA (mm)	SPACING	NO. REQD./PER LINEAR METRE	L	DIA	SPACING	NO. REQD./PER LINEAR METRE	L	DIA	SPACING	NO. REQD./PER LINEAR METRE	L	DIA	SPACING	NO. REQD./PER LINEAR METRE	L	DIA	SPACING	NO. REQD./PER LINEAR METRE	L
I	12	140	7.14	1.54	12	300	3.33	5.10	10	300	3.33	1.54	10	300	3.33	5.10	12	2	5.10	
II	12	120	8.33	2.80	12	300	3.33	5.10	10	300	3.33	2.80	10	300	3.33	5.10	12	2	5.10	
III	16	150	6.67	4.04	12	300	3.33	5.10	10	300	3.33	4.04	10	300	3.33	5.10	12	2	5.10	
IV	20	150	6.67	6.04	12	200	5.00	5.10	10	200	5.00	6.04	10	200	2.00	5.10	12	2	5.10	
V	20	130	7.69	6.50	12	180	5.56	5.10	12	300	3.33	6.50	12	300	3.33	5.10	12	2	5.10	
VI	25	150	6.67	7.80	12	150	6.67	5.10	12	200	5.00	7.80	12	200	5.00	5.10	12	2	5.10	

GOVERNMENT OF NEPAL (GoN)
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 DEPARTMENT OF ROADS
 ROAD SECTOR DEVELOPMENT PROJECT
 IDA Grant No. H629 - NP
 IDA Credit No. 4832 - NP

CONSULTANTS:
M/s MMM Group Ltd.
in JV with
SAI Consulting Engineers (P) Ltd.
in association with
 ITECO Nepal and TMS Nepal

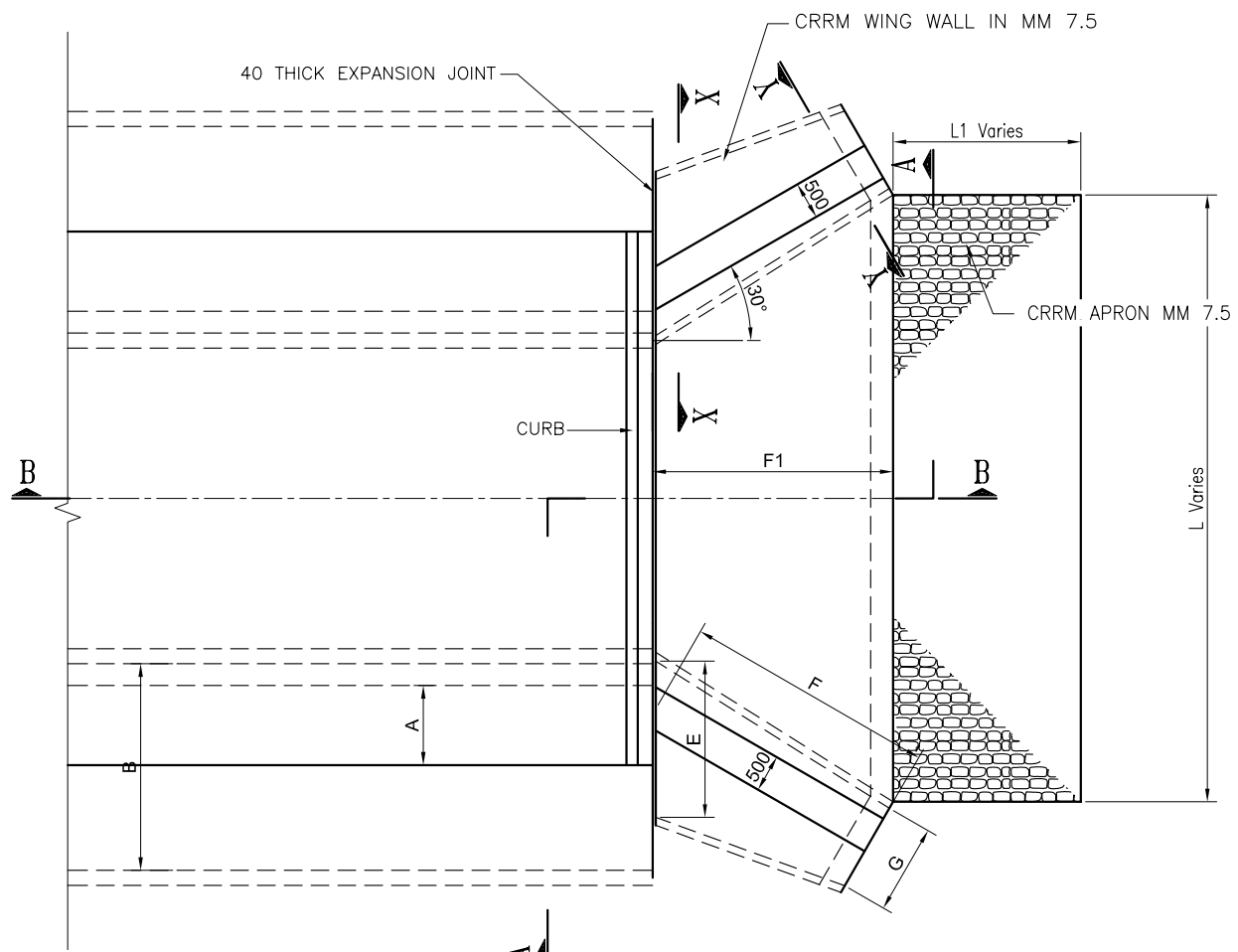


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 CHECKED BY:
 APPROVED BY:

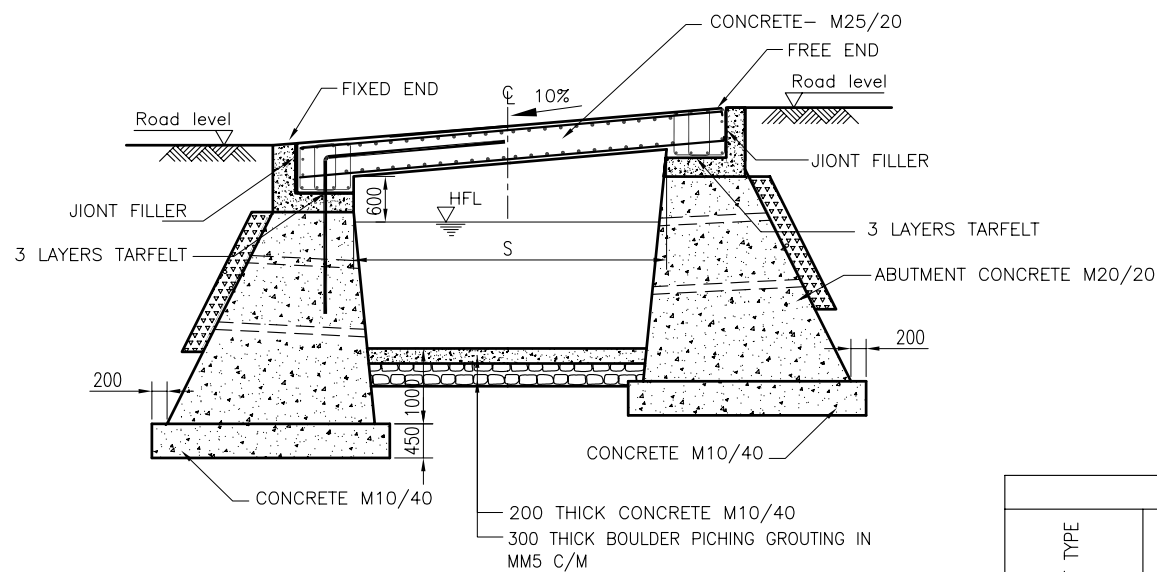
STANDARD DRAWINGS OF
 SLAB CULVERT
 [BAR BENDING SCHEDULE]

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

DATE:
FEB '2011
 DWG. NO.:
RSDPAF-TYP
 SHEET NO.:
16/26

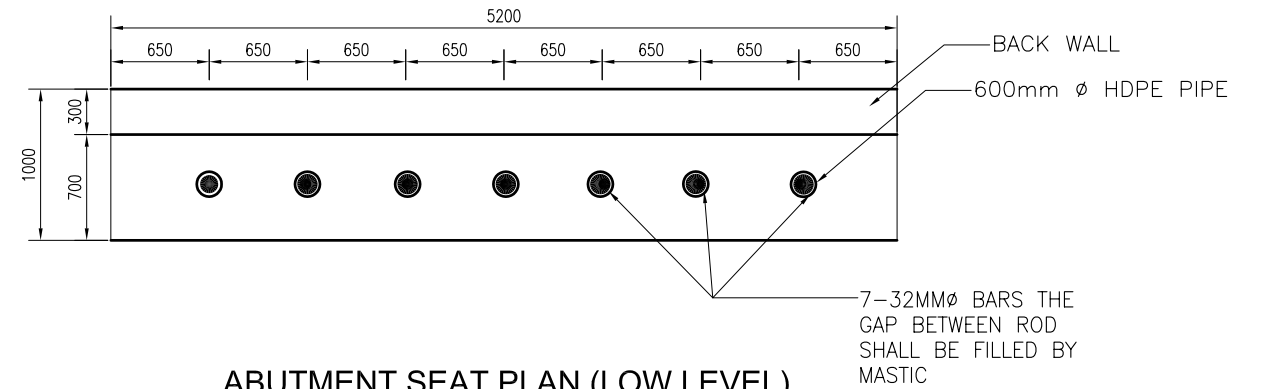


PLAN
SCALE A

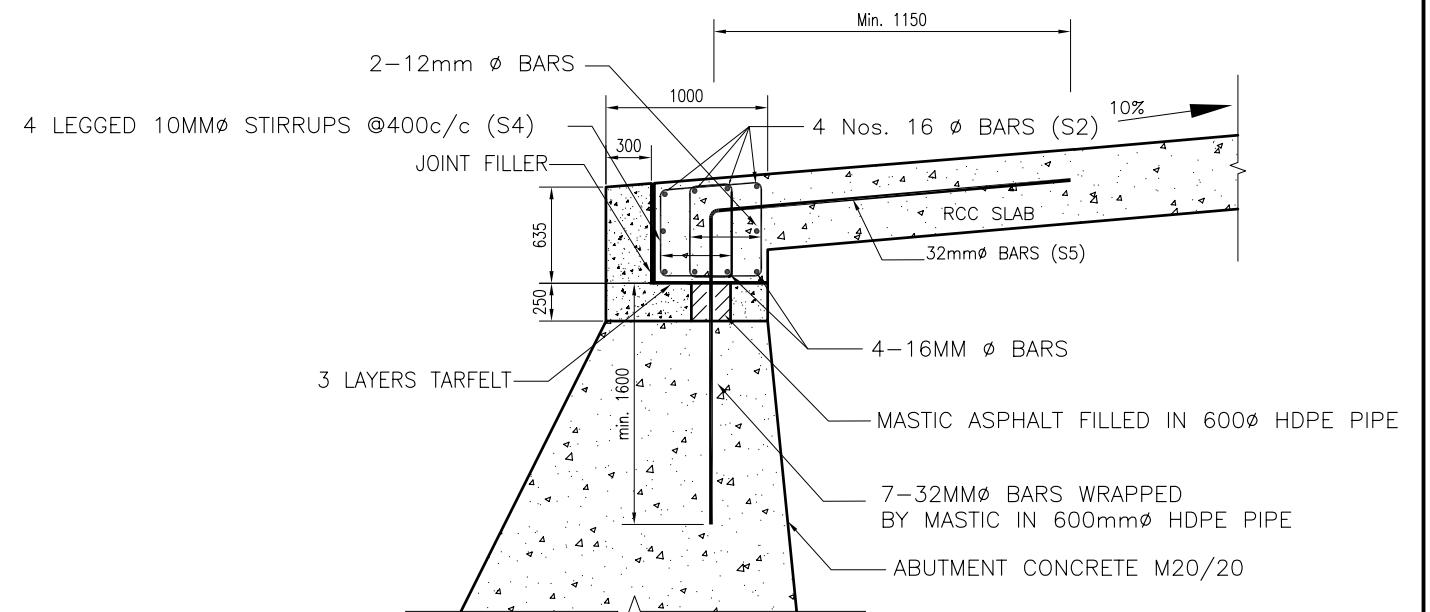


SECTION AT A-A
SCALE A

- NOTES:
1. CONCRETE MIX. OF ABUTMENT WALL SHOULD BE M20/20
 2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH STANDARD DRAWING RCSP/GTS/SD/CIV/17&18



ABUTMENT SEAT PLAN (LOW LEVEL)
SCALE B

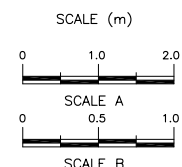


JUNCTION OF ABUTMENT AND SLAB
SCALE B

CULVERT TYPE	BAR BENDING SCHEDULE (BOTH ABUTMENT)																							
	MARK S1				MARK S2				MARK S3				MARK S4				MARK S5							
	DIA (mm)	SPACING	NO. REQD.	L	TL	DIA	SPACING	NO. REQD.	L	TL	DIA	SPACING	NO. REQD.	L	TL	DIA	SPACING	NO. REQD.	L	TL	DIA	NO. REQD.	L	TL
INCLINED SLAB	16		8	5.60	44.8	16		8	5.60	44.8	12	300	4	5.10	20.40	10	400	56	2.08	116.48	32	7	3.20	22.40

GOVERNMENT OF NEPAL (GoN)
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CONSULTANTS:
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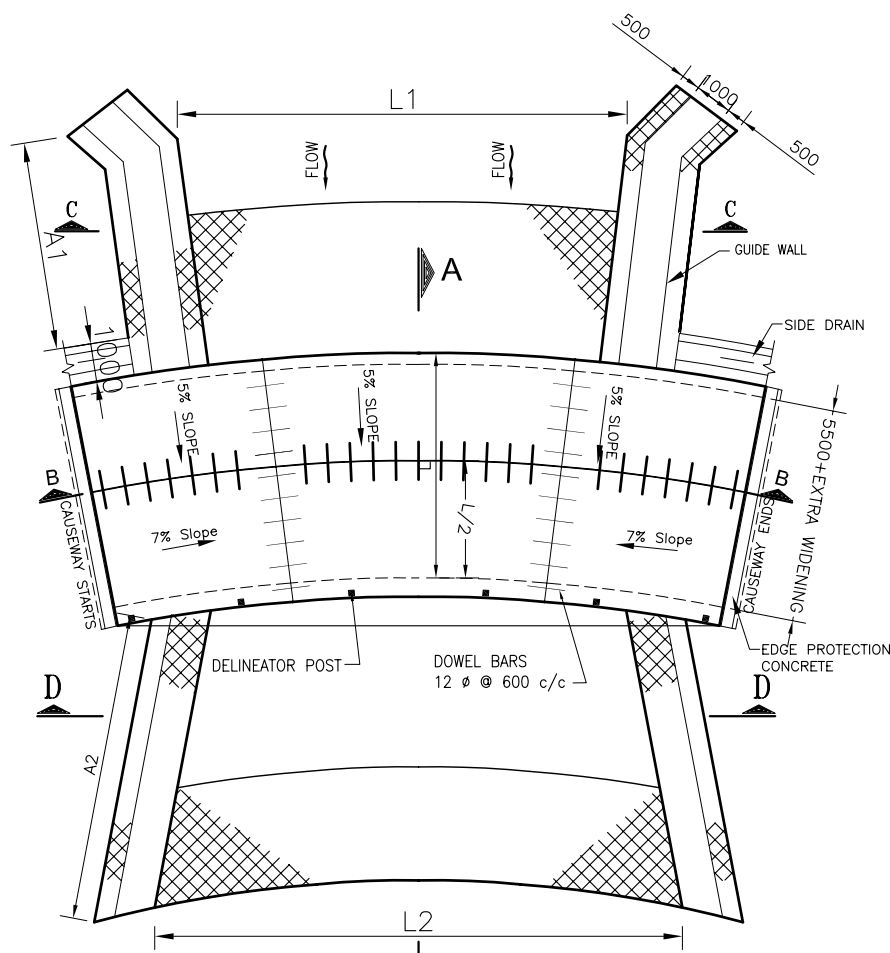


DESIGNED BY:
CHECKED BY:
APPROVED BY:

SLAB CULVERT

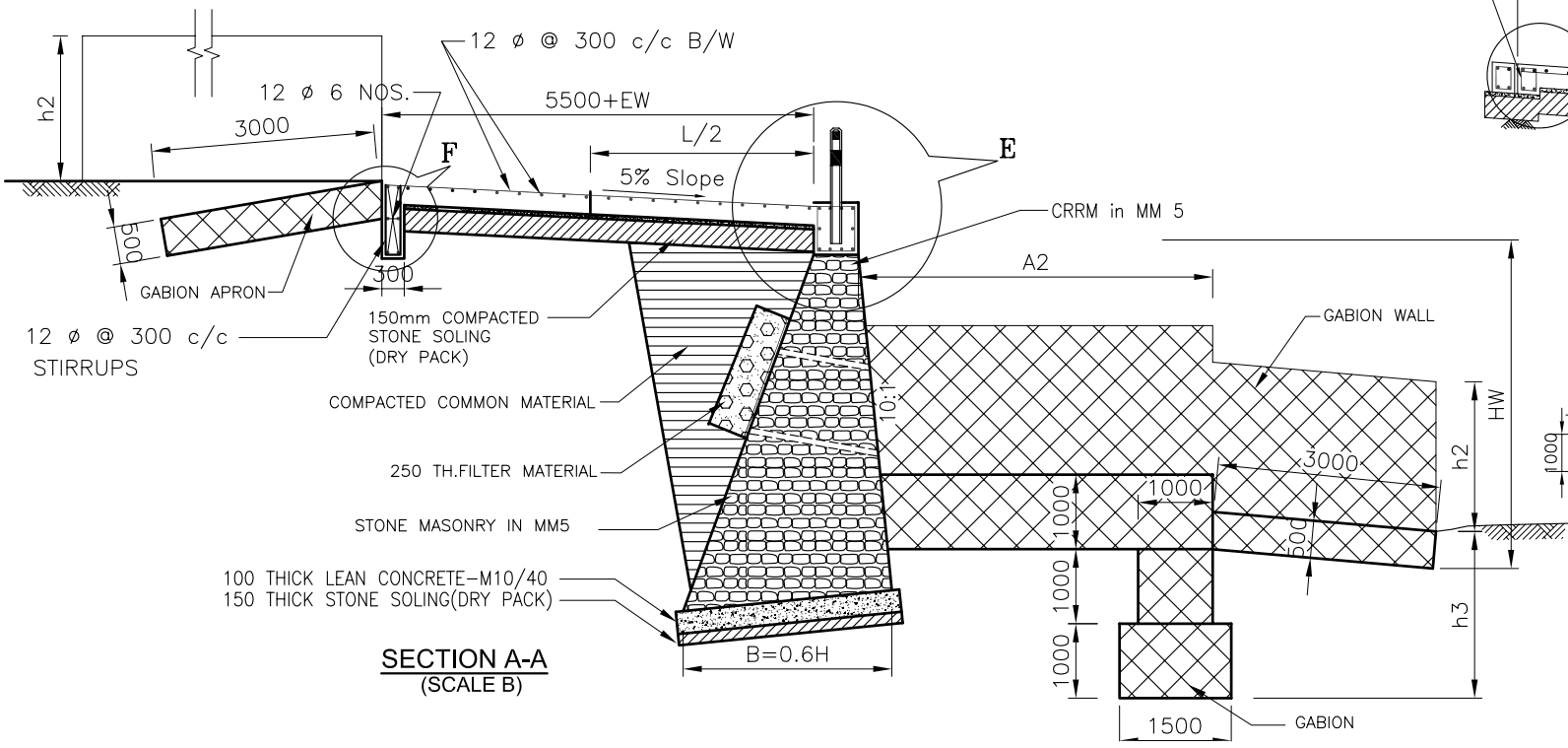
ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

DATE:
FEB '2011
DWG. NO.:
RSDPAF-TYP
SHEET NO.:
17/26

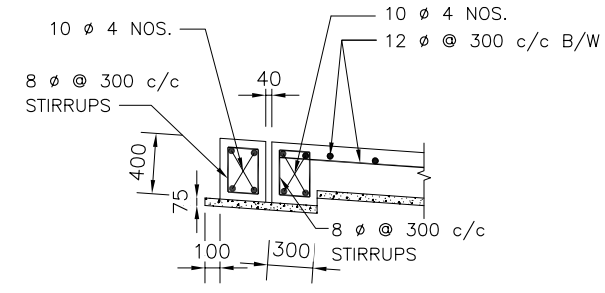


PLAN
(SCALE A)

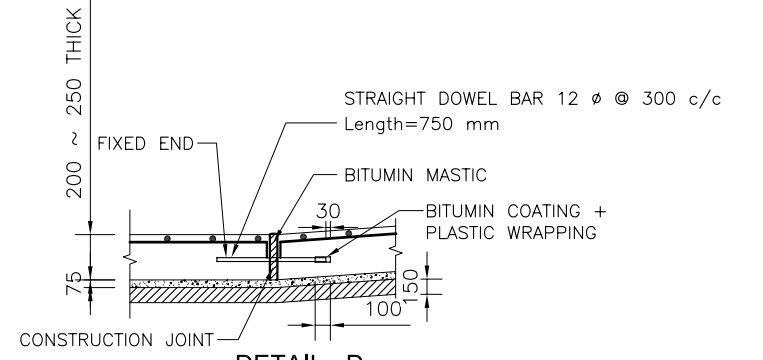
NOTE#:
The Profile for Causeway may have to be redesigned as instructed by the engineer to meet the actual site conditions .



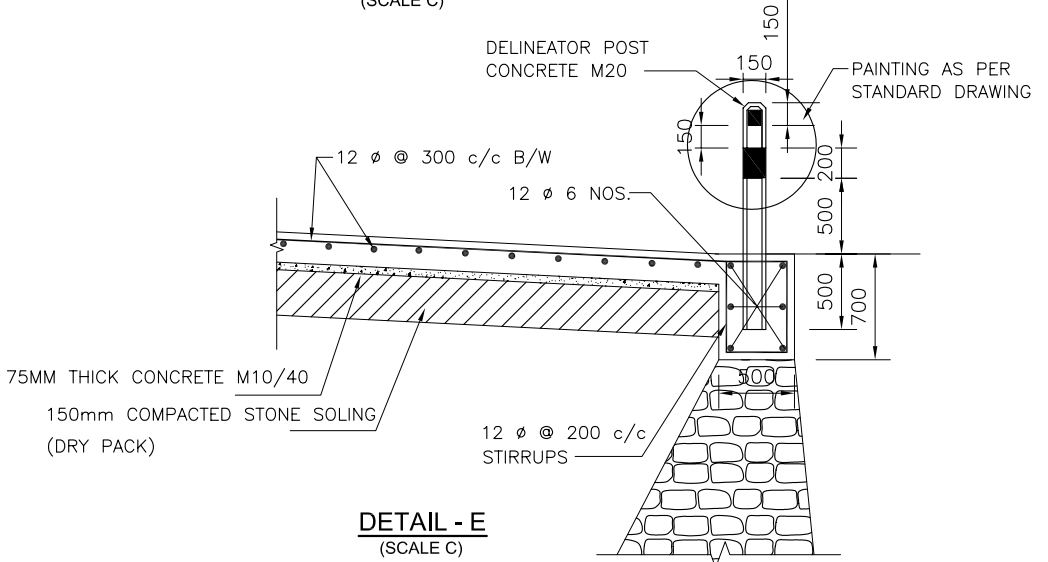
SECTION A-A
(SCALE B)



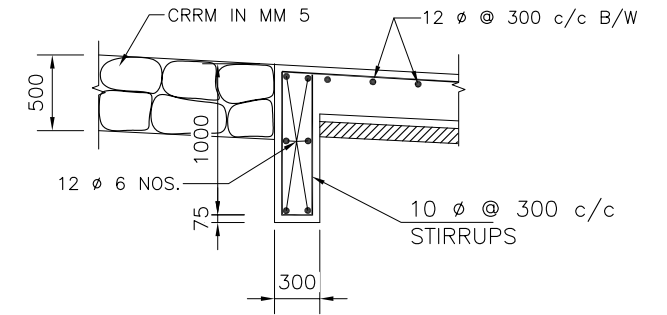
DETAIL - C
(SCALE C)



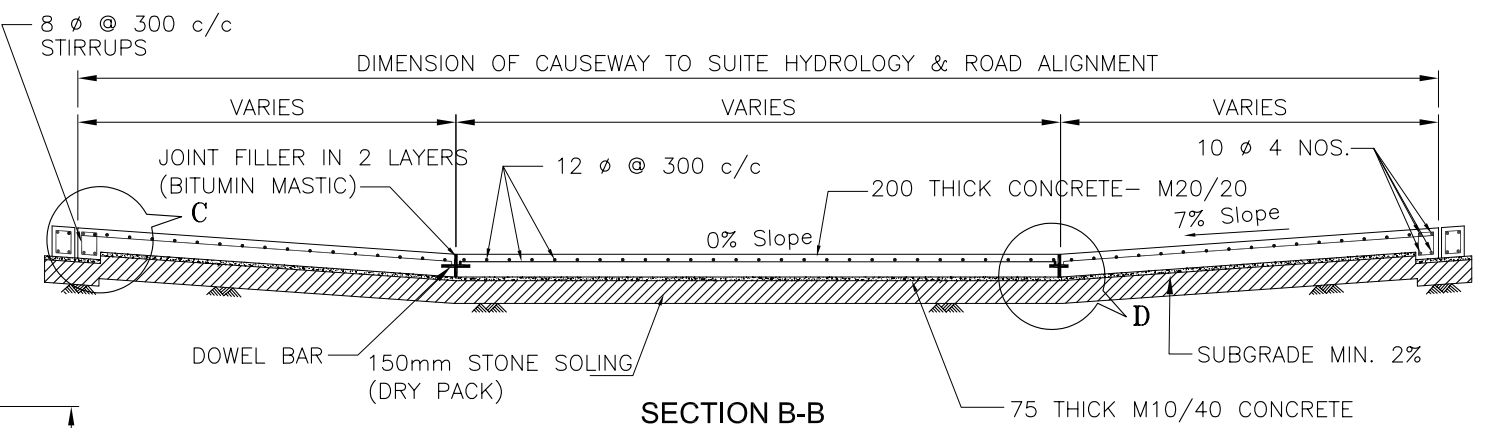
DETAIL - D
(SCALE C)



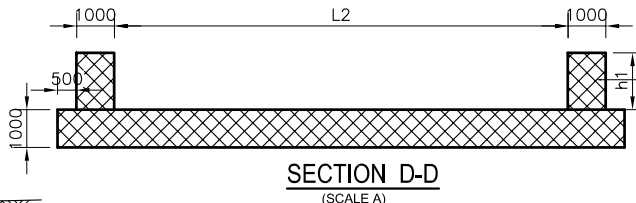
DETAIL - E
(SCALE C)



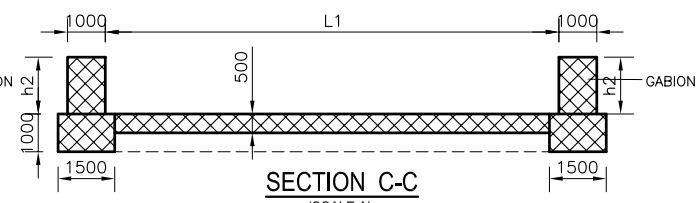
DETAIL - F
(SCALE C)



SECTION B-B
(SCALE B)



SECTION D-D
(SCALE A)



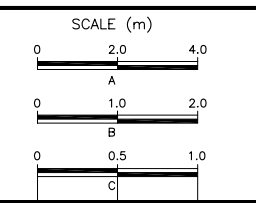
SECTION C-C
(SCALE A)

- NOTES:**
1. CONCRETE MIX USED IS M20/20
 2. GABION LENGTH L1/L2 AND HEIGHT h1,h2 AND h3 VARIES
 3. APRON A3 VARIES
 4. GUIDE WALL A1/A2 VARIES
 5. CHECKDAM WILL BE PROVIDED AT UP-STREAM, WHERE REQUIRED AS PER SITE SPECIFIC DESIGN..
 6. ALL DIMENSIONS SHALL BE IN MILIMETER UNLESS OTHERWISE STATED.

7. THE SLAB THICKNESS OF THE CAUSEWAY SHALL BE CHECKED AND MODIFIED TO THE 'TRL' ROAD NOTE 29 FOR INDIVIDUAL ROAD.
8. FOR HIGHER GRADE MORE THAN 7%, SITE SPECIFIC CAUSEWAY IS TO BE PROPOSED BASED ON DISCHARGE CAPACITY.
9. CONCRETE SLAB THICKNESS IN GENERAL IS 200 MM. FOR SPECIFIC DESIGN ROAD NOTE 29 IS TO BE REFERRED TO DETERMINE THE SLAB THICKNESS BASED ON THE CUMULATIVE NUMBER OF STANDARD AXLES.

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
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CONSULTANTS:
M/s MMM Group Ltd.
in JV with
SAI Consulting Engineers (P) Ltd.
in association with
ITECO Nepal and TMS Nepal

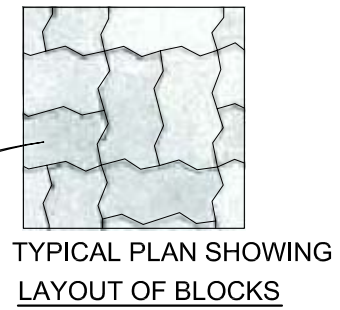
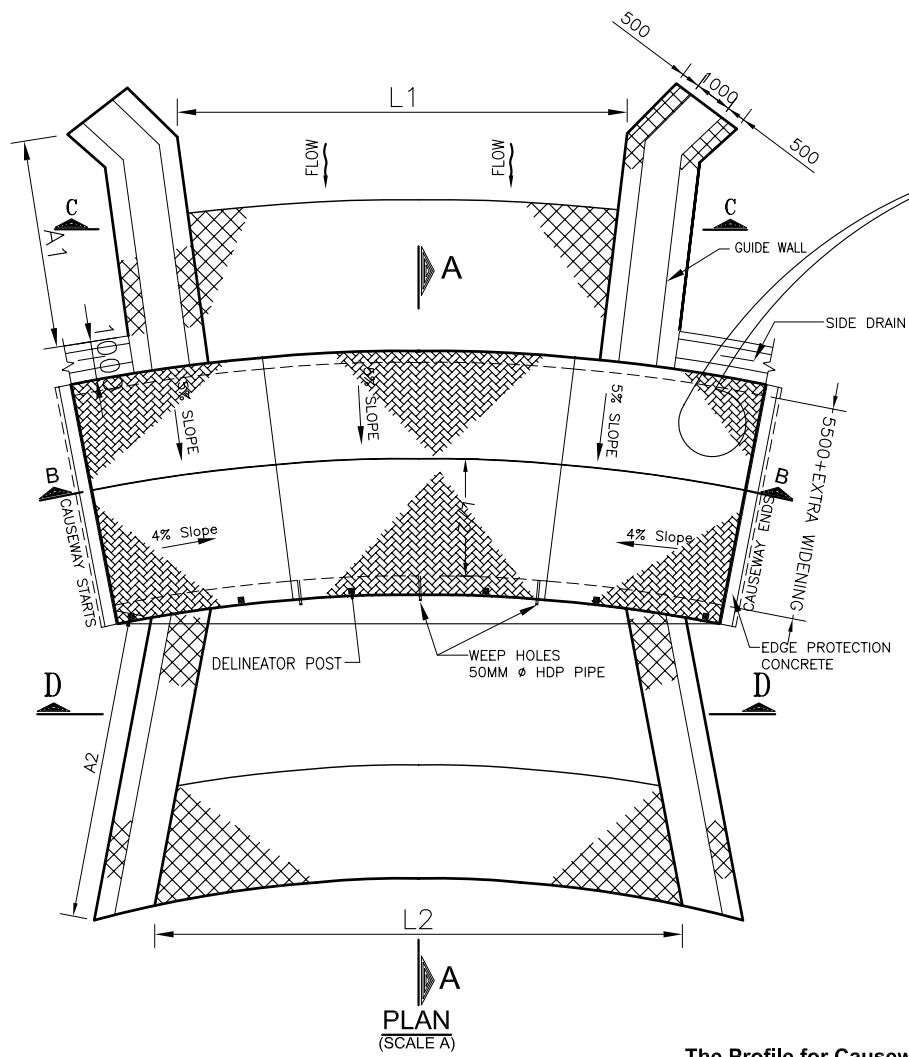


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APPROVED BY:

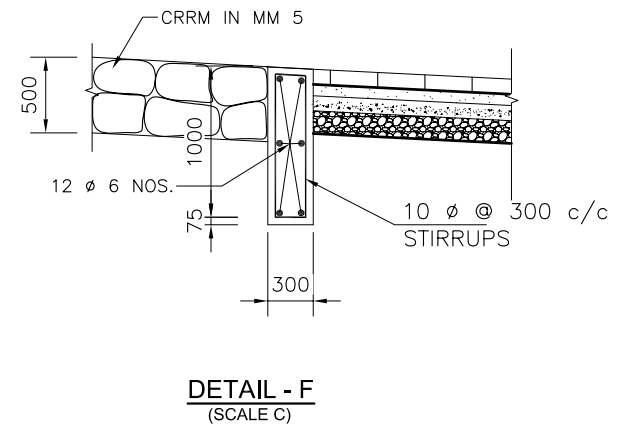
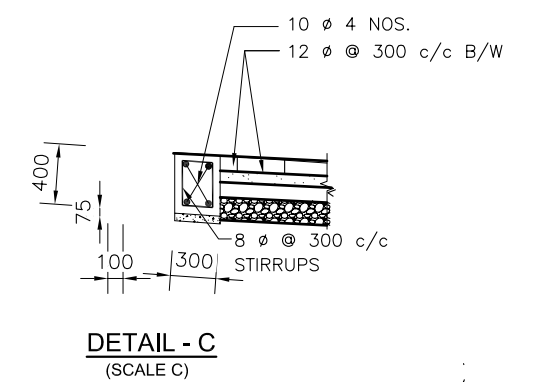
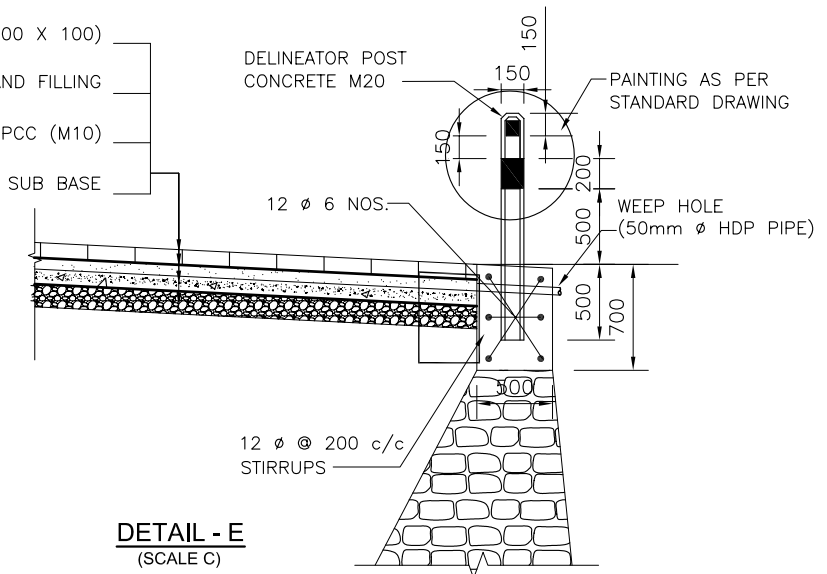
STANDARD DRAWINGS OF
CAUSE WAY

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

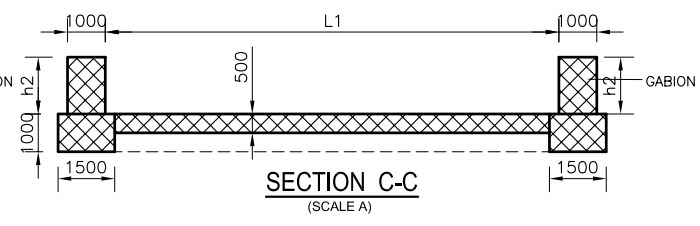
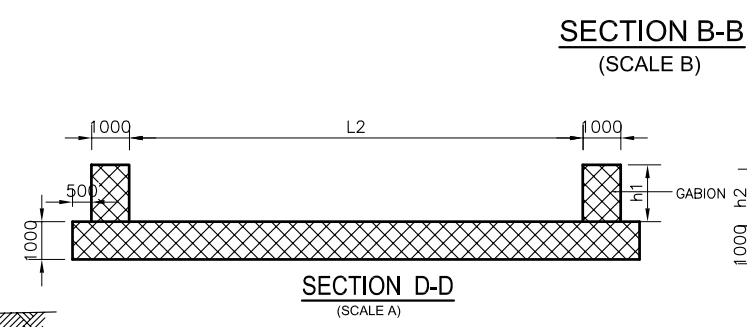
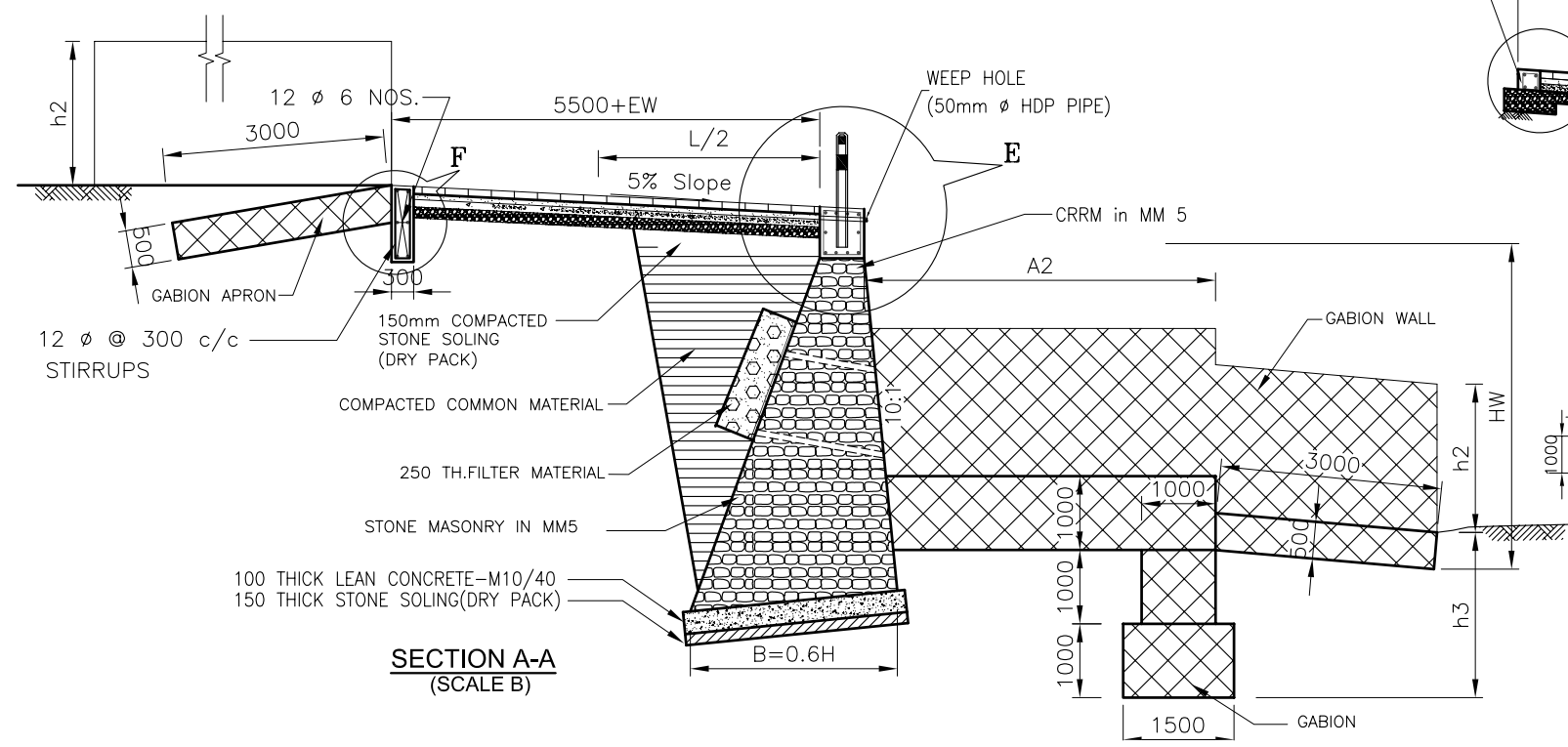
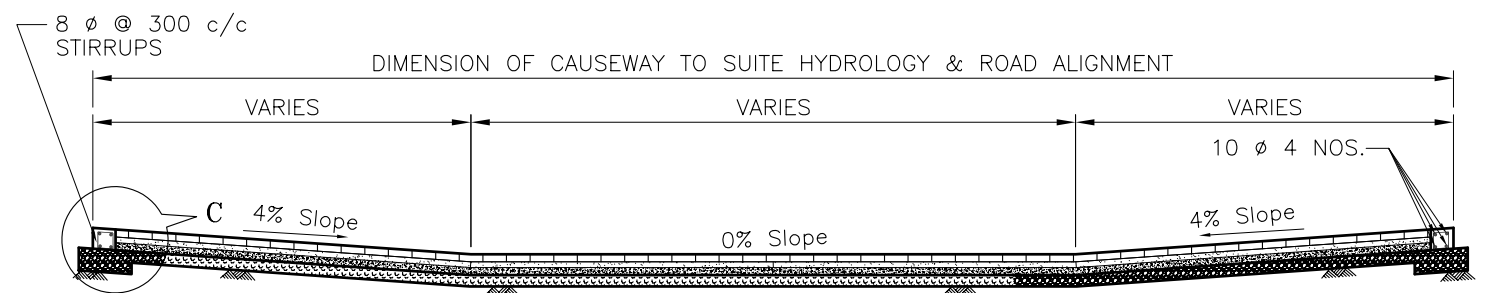
DATE:
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DWG. NO.:
RSDPAF-TYP
SHEET NO.:
18/26



- PAVER BLOCK (150 X 300 X 100)
- 20-40 mm THICK SAND FILLING
- 100mm THICK PCC (M10)
- 200mm THICK GRANULAR SUB BASE



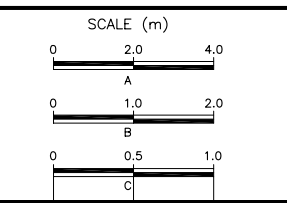
The Profile for Causeway may have to be redesigned as instructed by the engineer to meet the actual site conditions .



- NOTES:
1. CONCRETE MIX USED IS M20/20
 2. GABION LENGTH L1/L2 AND HEIGHT h1,h2 AND h3 VARIES
 3. APRON A3 VARIES
 4. GUIDE WALL A1/A2 VARIES
 5. CHECKDAM WILL BE PROVIDED AT UP-STREAM, WHERE REQUIRED AS PER SITE SPECIFIC DESIGN..
 6. ALL DIMENSIONS SHALL BE IN MILLIMETER UNLESS OTHERWISE STATED.
 7. CAUSEWAY SHALL BE ADJUSTED AS PER SITE CONDITIONS AS PER THE ENGINEER'S INSTRUCTIONS .

GOVERNMENT OF NEPAL (GoN)
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 DEPARTMENT OF ROADS
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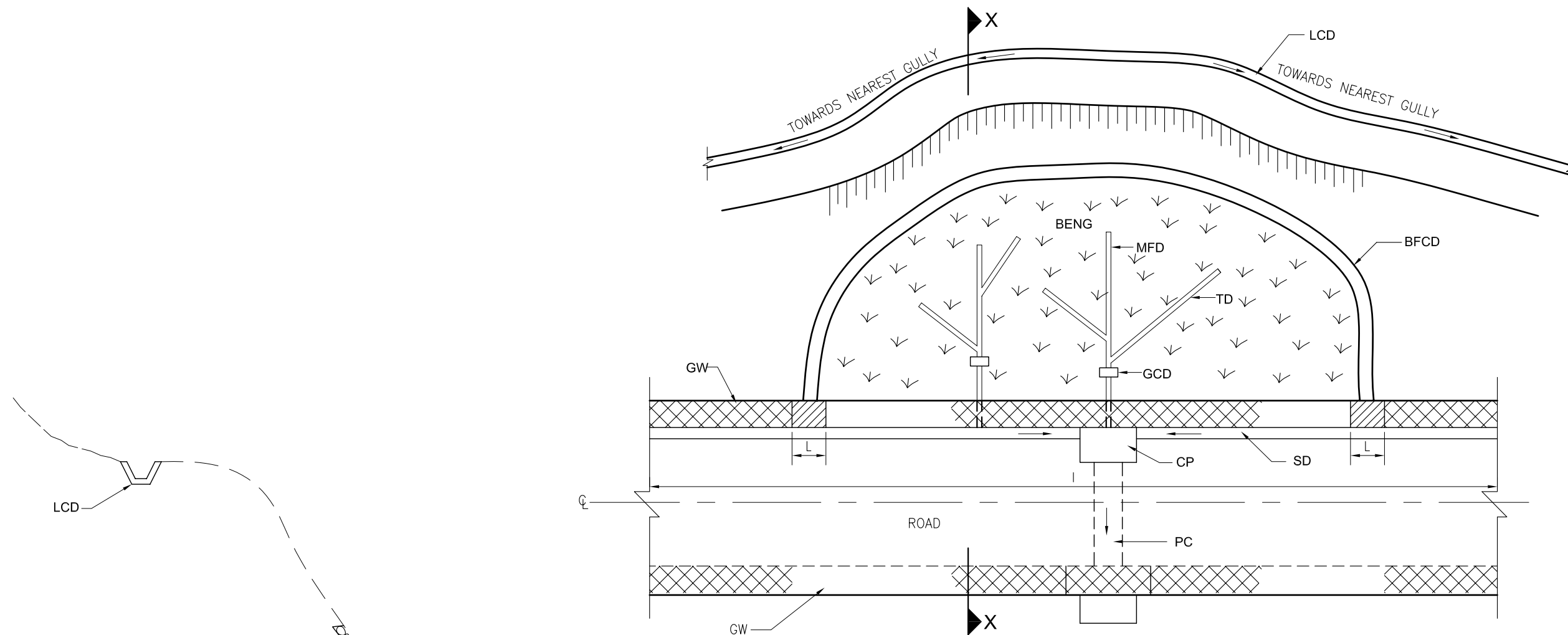


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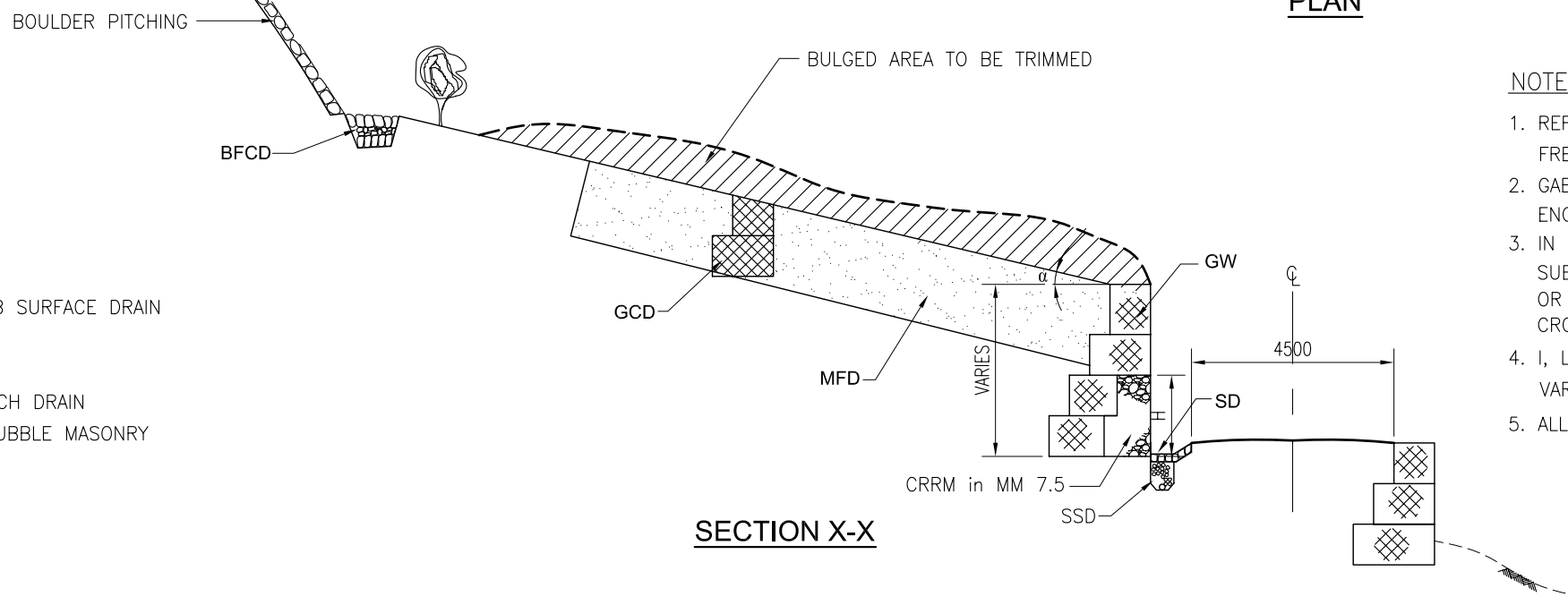
STANDARD DRAWINGS OF
 CAUSE WAY (INTERLOCKING TILES)

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

DATE:
FEB '2011
 DWG. NO.:
RSDPAF/TYP
 SHEET NO.:
18 A /26



PLAN



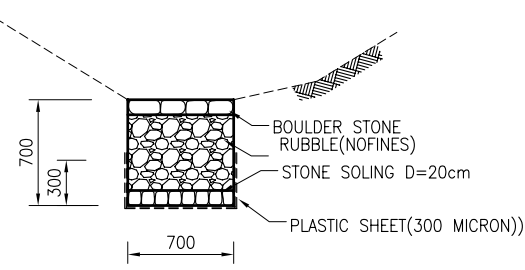
SECTION X-X

- BENG — BIO ENGINEERING
- CP — CATCH PIT
- PC — PIPE CULVERT
- MFD — MAIN FRENCH DRAIN
- TD — TRIBUTARY DRAIN
- GW — GABION WALL
- GCD — GABION CHECK DAM
- SD — SIDE DRAIN WITH SUB SURFACE DRAIN
- SSD — SUB SURFACE DRAIN
- LCD — LINED CATCH DRAIN
- BFCDB — BOULDER FILLED CATCH DRAIN
- CRRM — COURSED RANDOM RUBBLE MASONRY
- α — 30° TO 35°

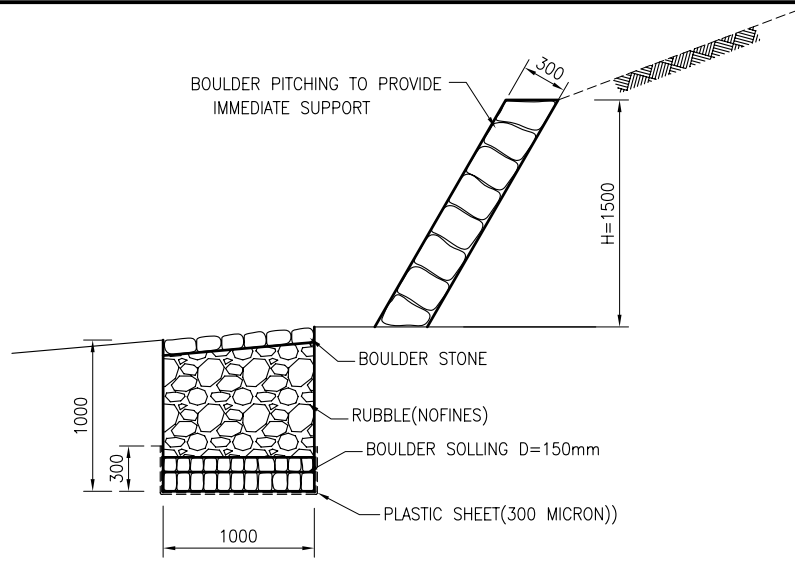
NOTES:

1. REFER TO STANDARD DRAWING RCSP FOR FRENCH DRAIN DETAILS.
2. GABION CHECK DAM IF REQUIRED SHALL BE PROVIDED AS PER ENGINEER'S DIRECTION.
3. IN CASE CROSS DRAINAGE CAN NOT BE PROVIDED, PROVIDE SUB-SURFACE DRAINAGE ACROSS THE ROAD @ EVERY 10 m C/C, OR EXTEND SUB-SOIL DRAINAGE BELOW GL TO THE NEAREST CROSS DRAINAGE.
4. I, L AND H OF CRRM WALL PROVIDED IN THE OUTLET OF SUB SURFACE DRAIN VARIES AS PER SITE CONDITION (L=2 TO 3 m).
5. ALL THE DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE MENTIONED.

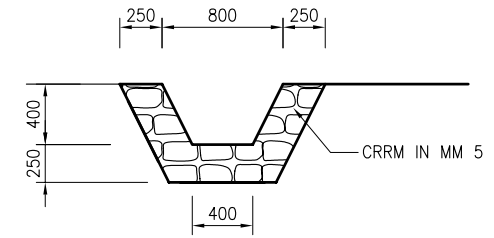
GOVERNMENT OF NEPAL (GoN) MINISTRY OF PHYSICAL PLANNING AND WORKS DEPARTMENT OF ROADS ROAD SECTOR DEVELOPMENT PROJECT IDA Grant No. H629 - NP IDA Credit No. 4832 - NP	CONSULTANTS: M/s MMM Group Ltd. <i>in JV with</i> SAI Consulting Engineers (P) Ltd. <i>in association with</i> ITECO Nepal and TMS Nepal	SCALE (m) NTS	DESIGNED BY: CHECKED BY: APPROVED BY:	STANDARD DRAWINGS OF LANDSLIDE STABILIZATION	ROAD SECTOR DEVELOPMENT PROJECT (RSDP)	DATE: FEB '2011 DWG. NO.: RSDPAF-TYP SHEET NO.: 19/26
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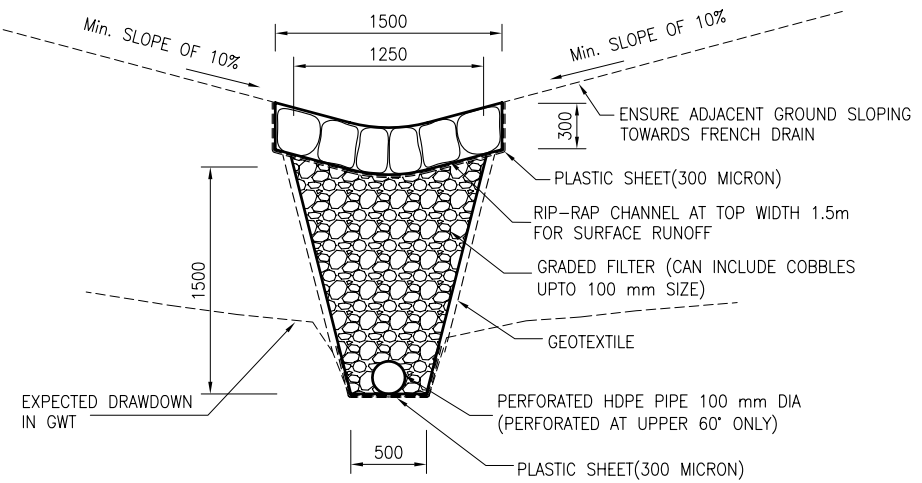
FRENCH DRAIN IN SLOPE



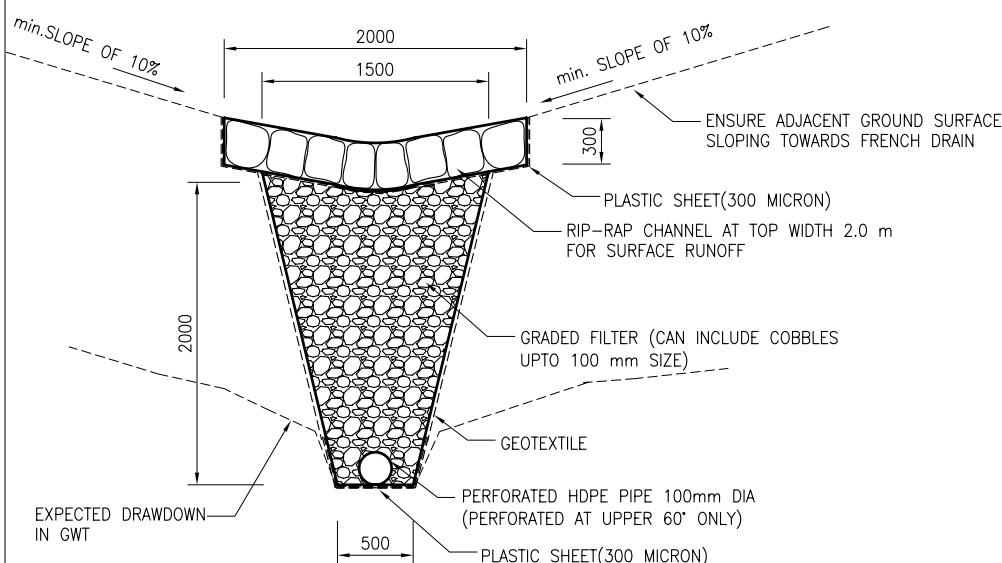
BOULDER FILLED CATCH DRAIN



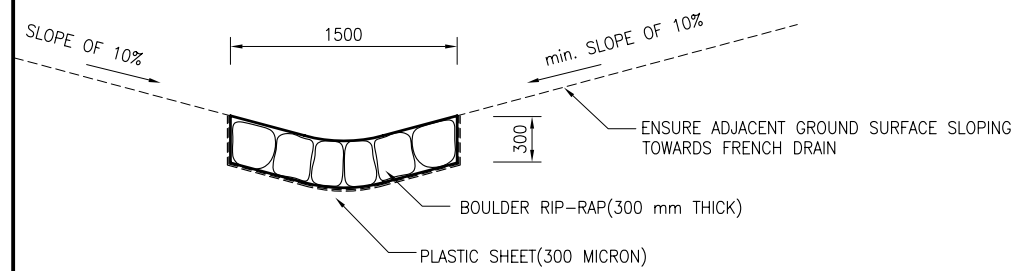
LINED CATCH DRAIN



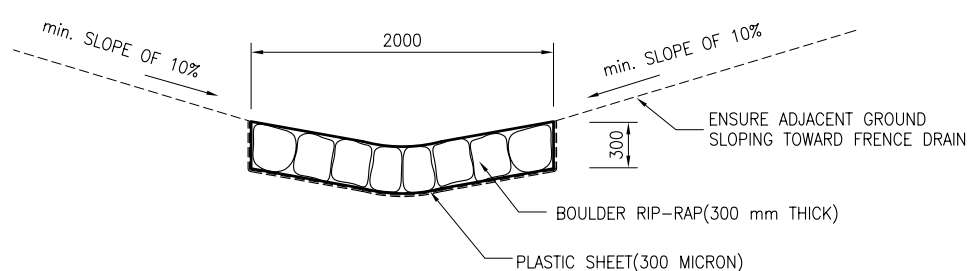
TRIBUTARY FRENCH DRAIN



MAIN FRENCH DRAIN



RIP-RAP CHANNEL WIDTH 1.5m

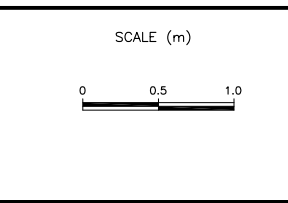


RIP-RAP CHANNEL WIDTH 2.0m

NOTE :
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE MENTIONED.

GOVERNMENT OF NEPAL (GoN)
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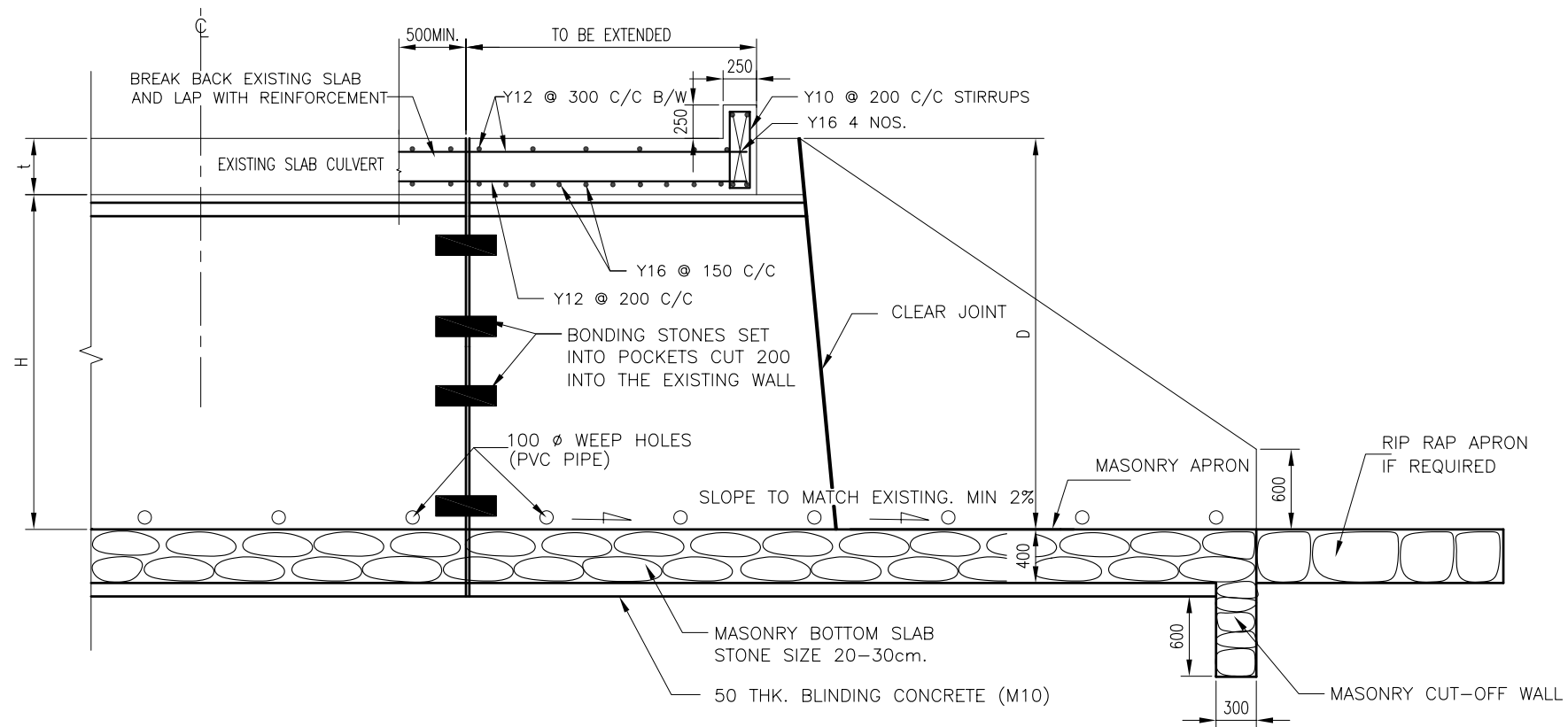


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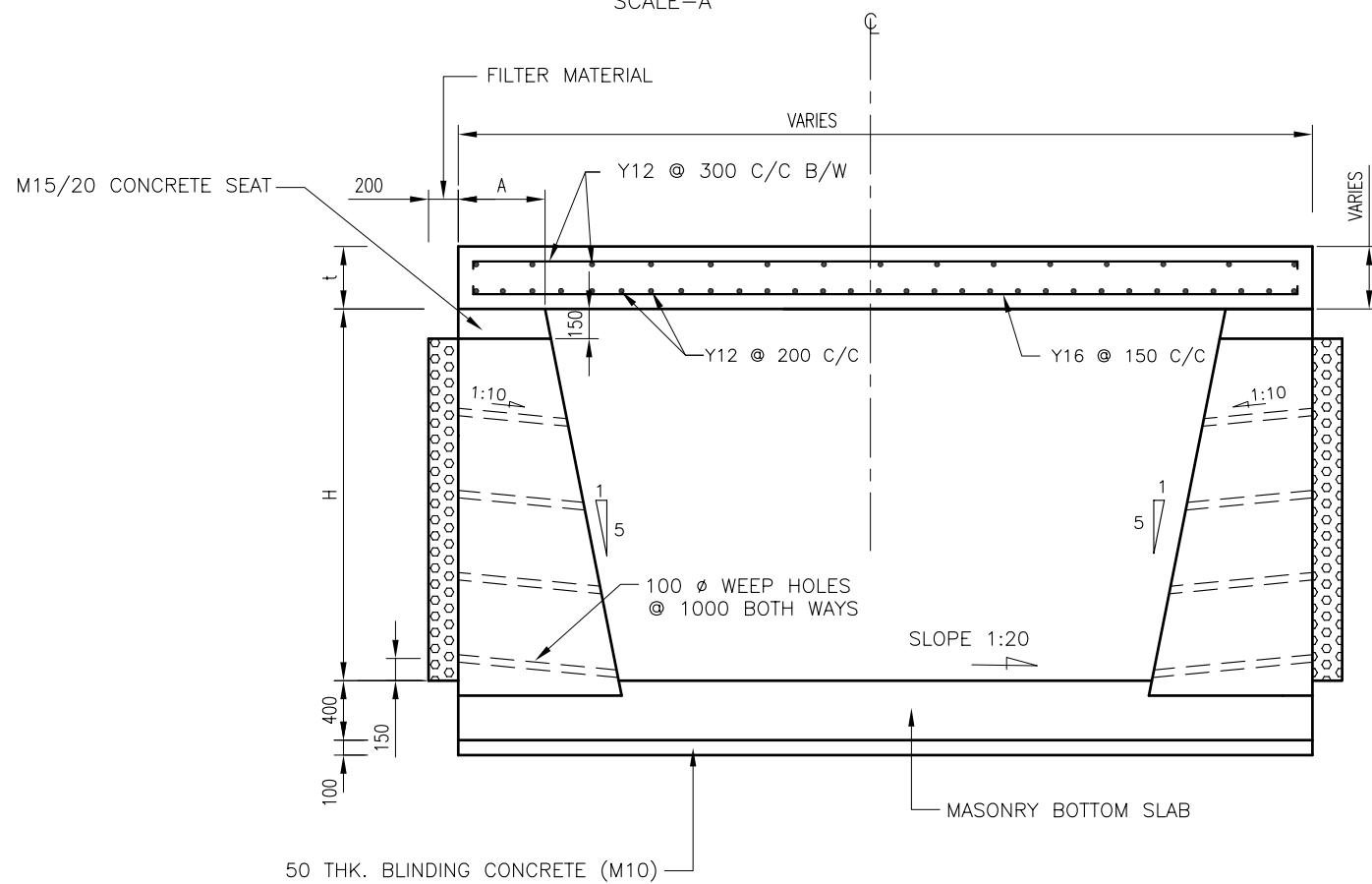
STANDARD DRAWINGS OF
CATCH DRAIN AND
RIP RAP CHANNELS

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

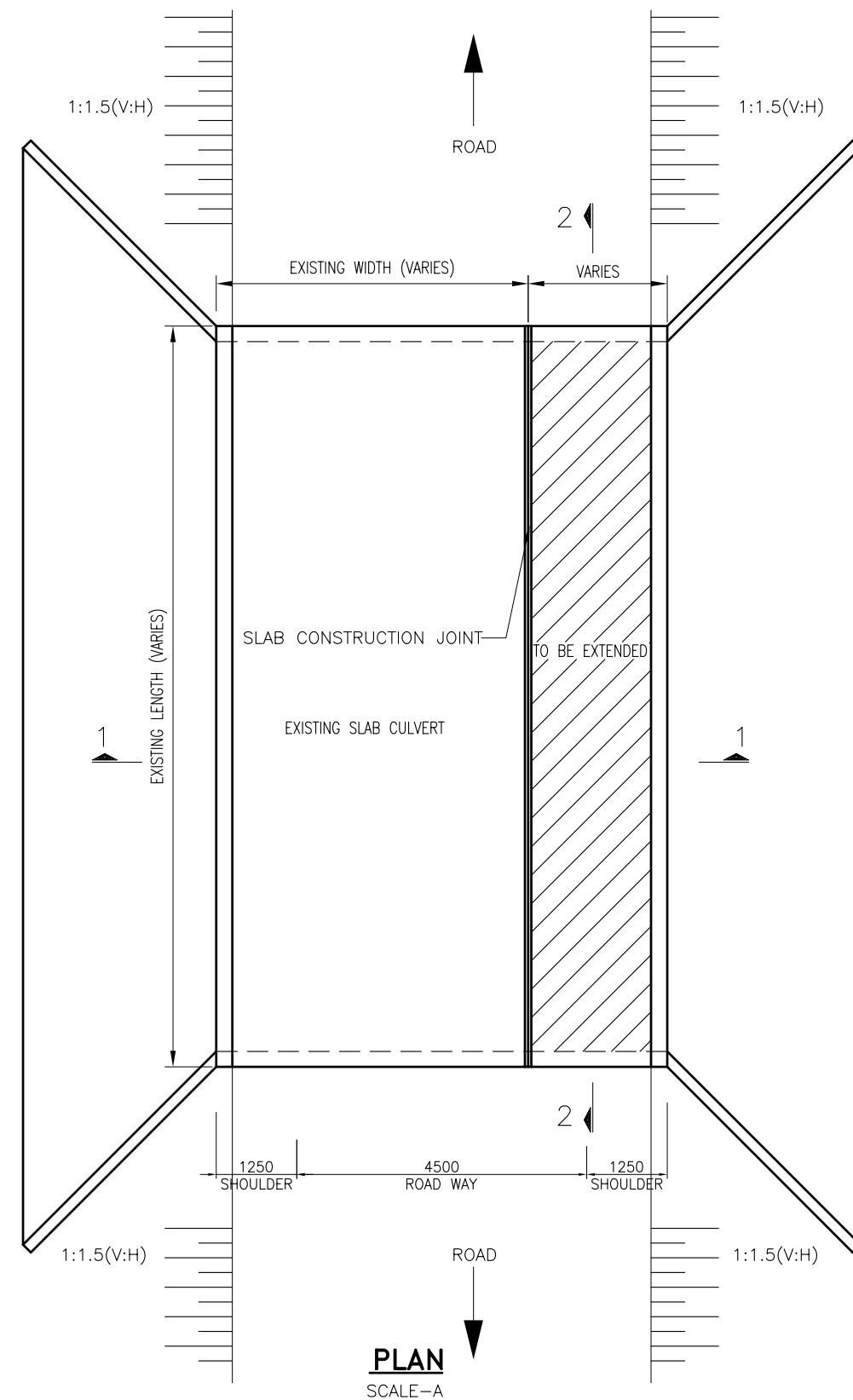
DATE: **FEB '2011**
DWG. NO.: **RSDPAF-TYP**
SHEET NO.: **20/26**



SECTION 1-1
SCALE-A



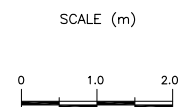
SECTION 2-2
SCALE-A



PLAN
SCALE-A

GOVERNMENT OF NEPAL (GoN)
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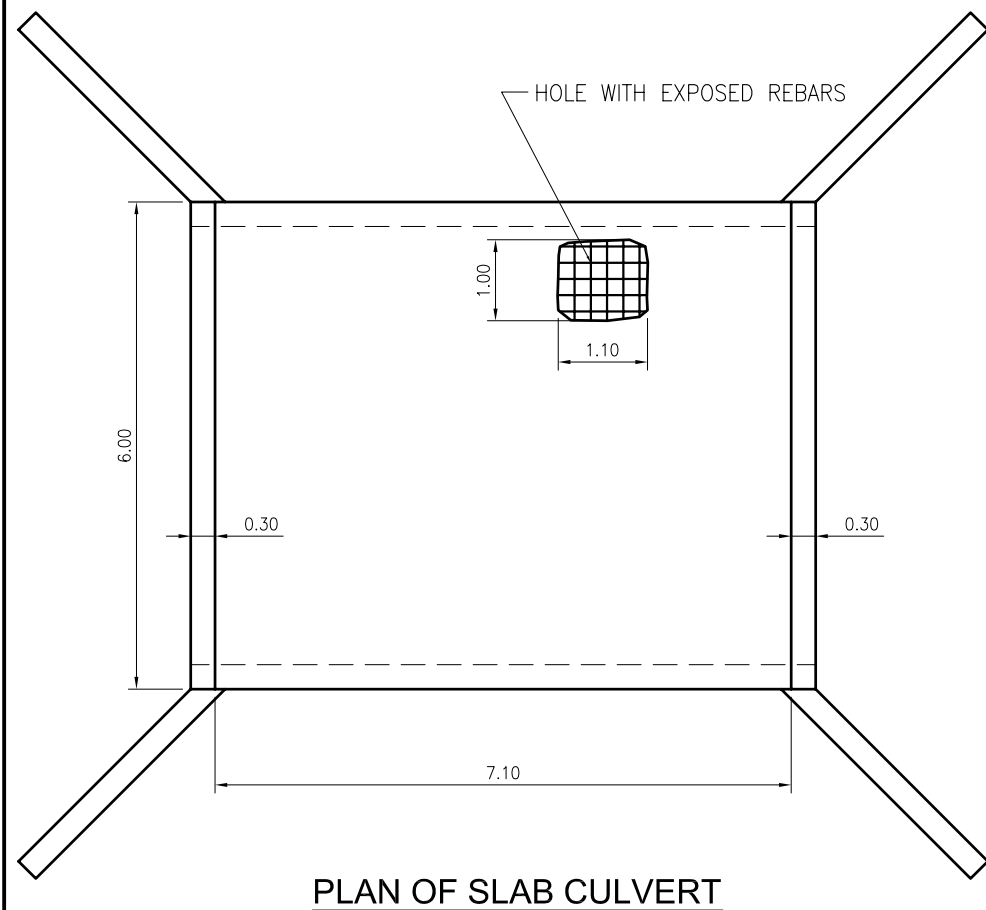


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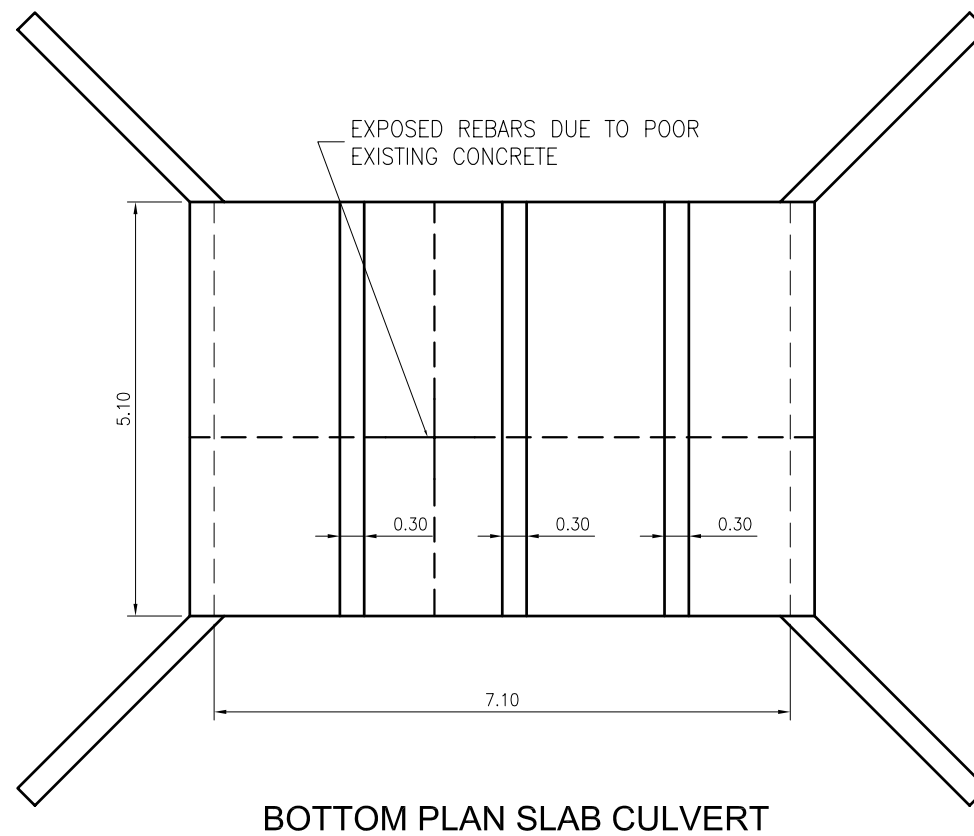
TYPICAL DRAWING OF
EXTENSION OF OLD STRUCTURE

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

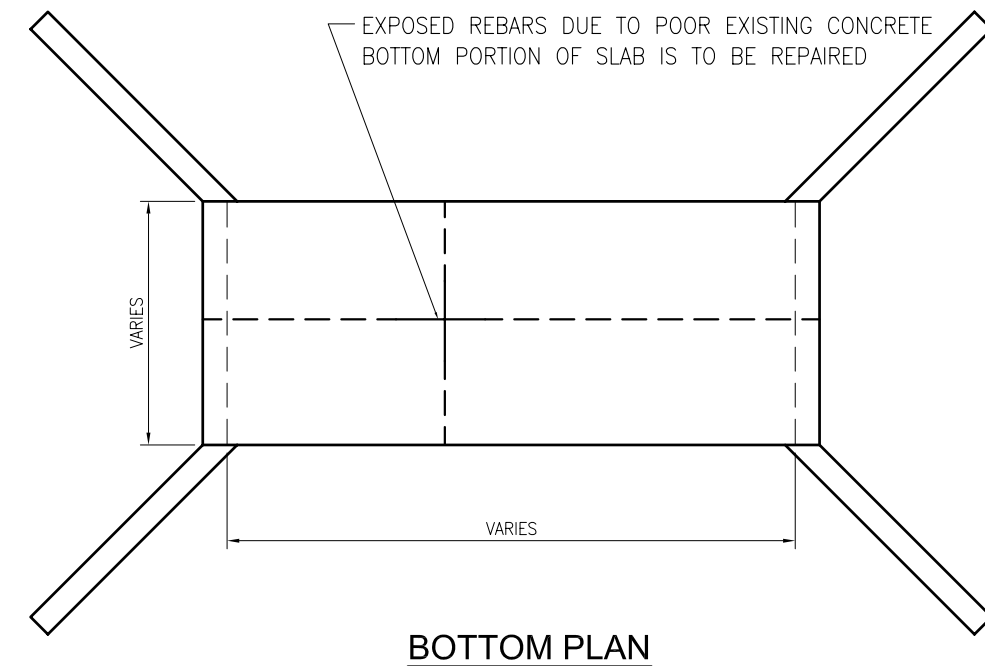
DATE:
FEB '2011
DWG. NO.:
RSDPAF-TYP
SHEET NO.:
21/26



PLAN OF SLAB CULVERT



BOTTOM PLAN SLAB CULVERT



BOTTOM PLAN

CONCRETE REPAIR TO BE CARRIED OUT BY:

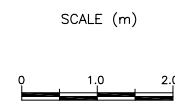
- i) REMOVE ALL LOOSE MATERIALS AND DIRT FROM SURFACE OF EXISTING CONCRETE AND REBAR.
- ii) THOROUGHLY WET THE SURFACE OF EXISTING CONCRETE AND REPAIR USING M30/20 CONCRETE.
- iii) NEW CONCRETE TO BE PLACED AND CURED IN ACCORDANCE WITH SECTION 2000 OF TECHNICAL SPECIFICATION.

NOTES :

1. REMOVE HOLLOW CONCRETE COVER AROUND THE DAMAGED AREA AND REBARS TO OBTAIN A CLEAR SPACE OF 1.5*BAR DIAMETER
2. CLEAN THE SURFACE i.e., DIRT, LOOSE DEBRIS, LAITANCE, GREASE/OIL etc.
3. REMOVE THE EXISTING RUST AND RUST FLAKES FROM THE EXPOSED REBARS USING WIRE BRUSH, EMERY PAPERS, MECHANICAL WIRE BRUSH AND GRIT BLASTING etc.
4. APPLY RUSTICIDE TO REMOVE THE RUST
5. AFTER 24 HOURS, CLEAN THE REBARS WITH JET OF WATER
6. APPLY POLYALK FIXOPRIME OR EQUIVALENT TO PROTECT REBARS FROM FURTHER CORROSION
7. AFTER APPLYING CORROSION INHIBITOR POLYALK FIXOPRIME, OR EQUIVALENT ALLOW 24 HOURS FOR AIR CURE
8. APPLY A BOND COAT OF POLYALK EP: OR EQUIVALENT
9. LAY MORTAR MIXED WITH POLYALK EP LATEX OR EQUIVALENT ON THE SPALLED CONCRETE COVER UNTILL THE ORIGINAL LEVEL OF COVER IS ATTAINED

GOVERNMENT OF NEPAL (GoN)
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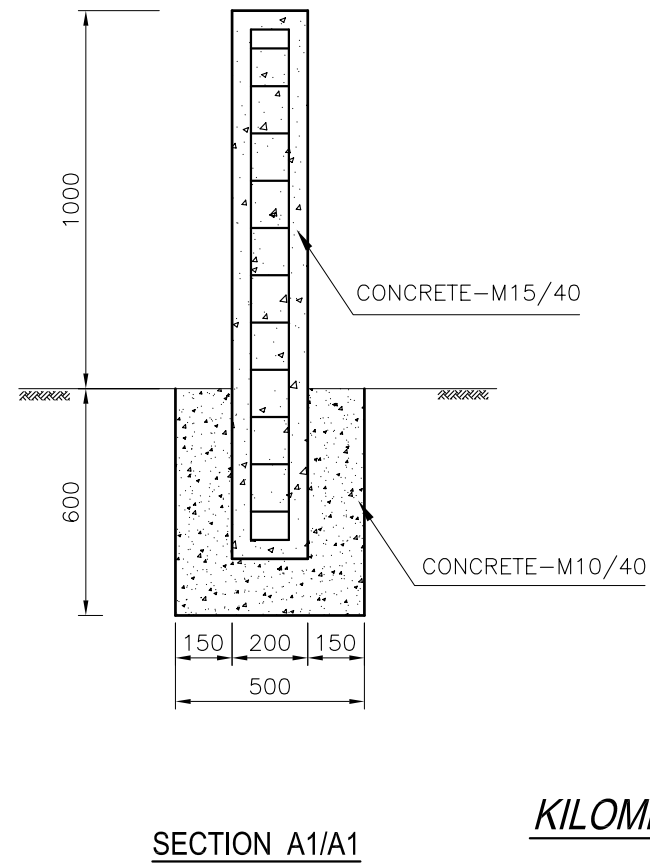
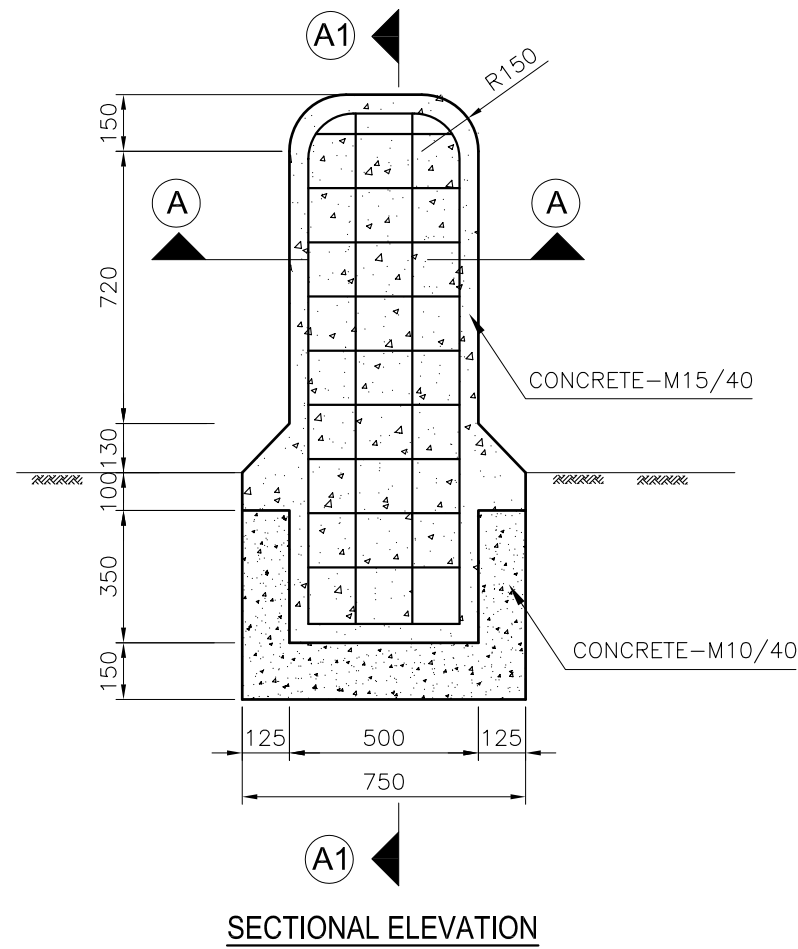
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 APPROVED BY:

STANDARD DRAWING OF
 REHABILITATION OF STRUCTURE

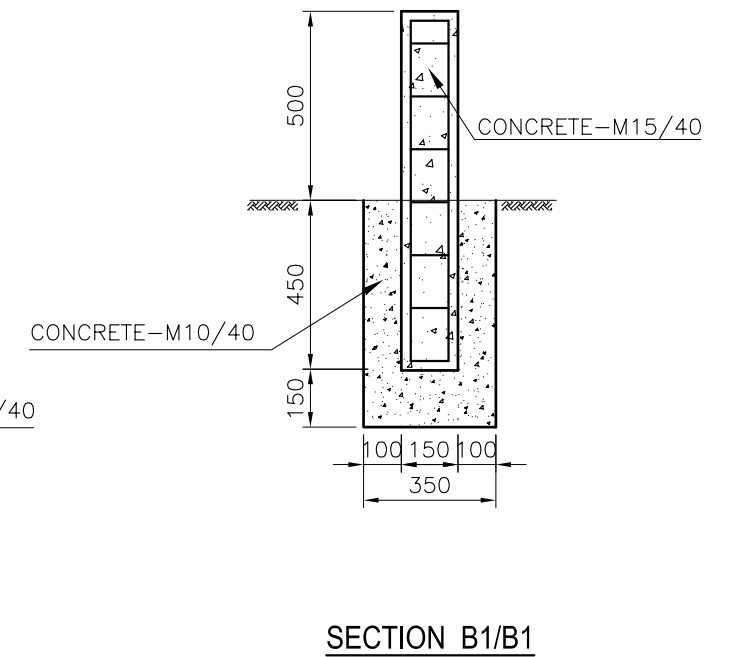
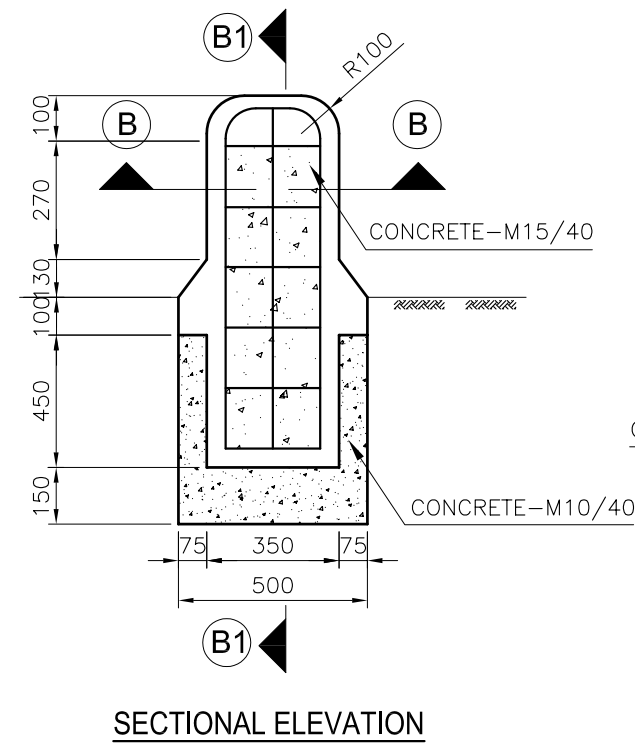
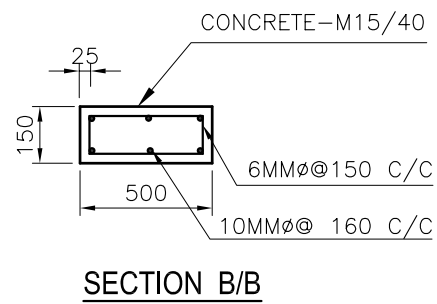
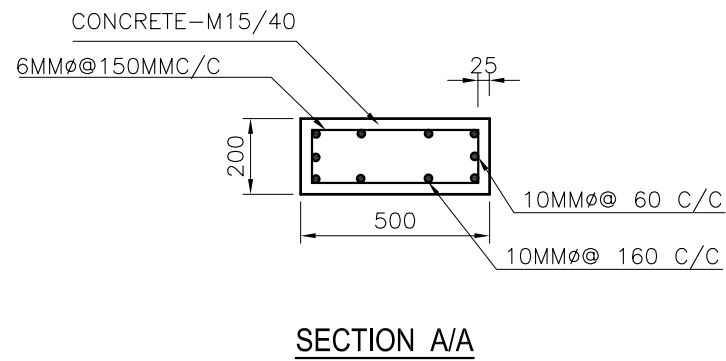
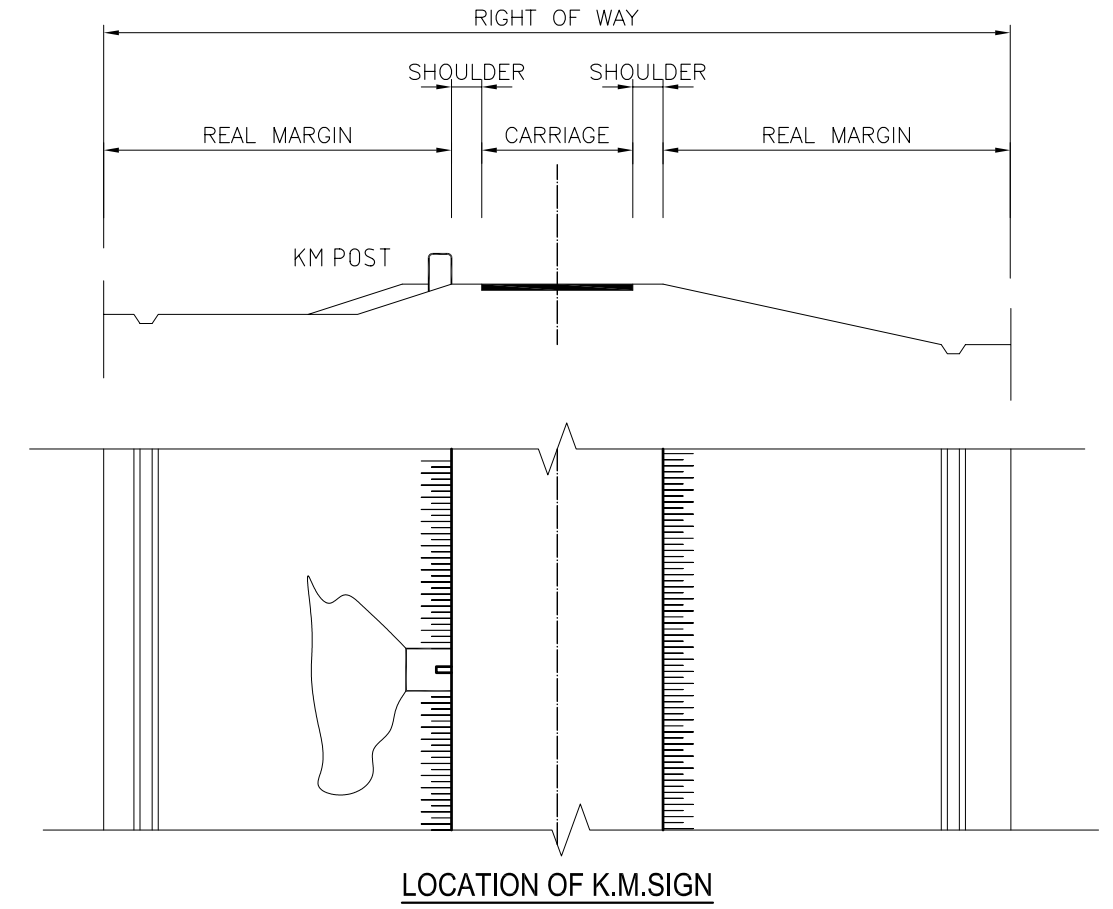
ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

DATE: FEB '2011
 DWG. NO.: RSDPAF-TYP
 SHEET NO.: 22/26

5TH. KILOMETRE STONE



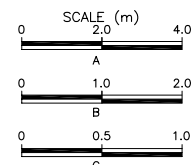
KILOMETRE STONE



- NOTE #:
1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE STATED.
 2. ANY DESCRIPANCY, DOR STANDARD DRAWING SHALL BE FOLLOWED.

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
DEPARTMENT OF ROADS
ROAD SECTOR DEVELOPMENT PROJECT
IDA Grant No. H629 - NP
IDA Credit No. 4832 - NP

CONSULTANTS:
M/s MMM Group Ltd.
in JV with
SAI Consulting Engineers (P) Ltd.
in association with
ITECO Nepal and TMS Nepal



DESIGNED BY:
CHECKED BY:
APPROVED BY:

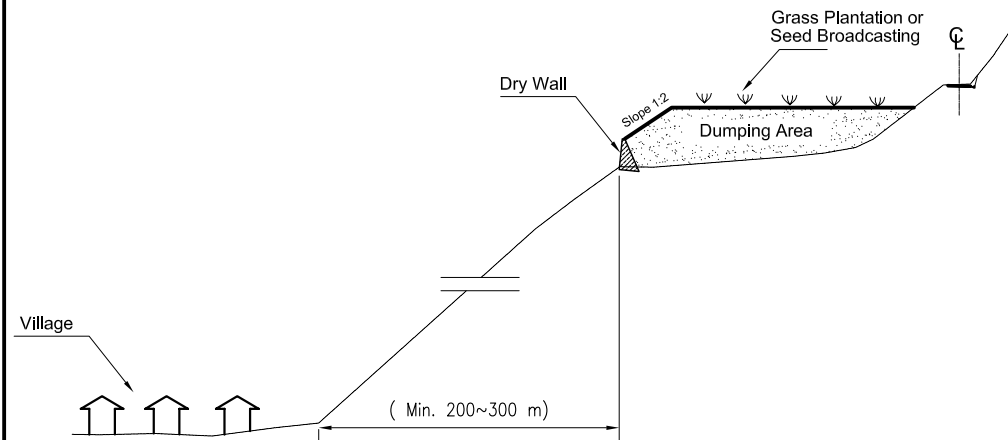
STANDARD DRAWINGS OF
KILOMETER POST

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

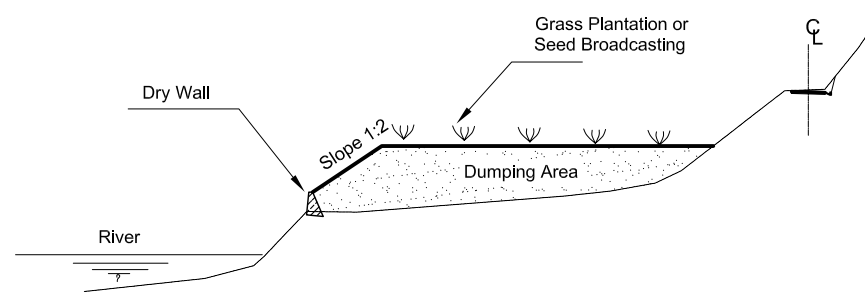
DATE:
FEB '2011
DWG. NO.:
RSDPAF-TYP
SHEET NO.:
23/26

NOTE:

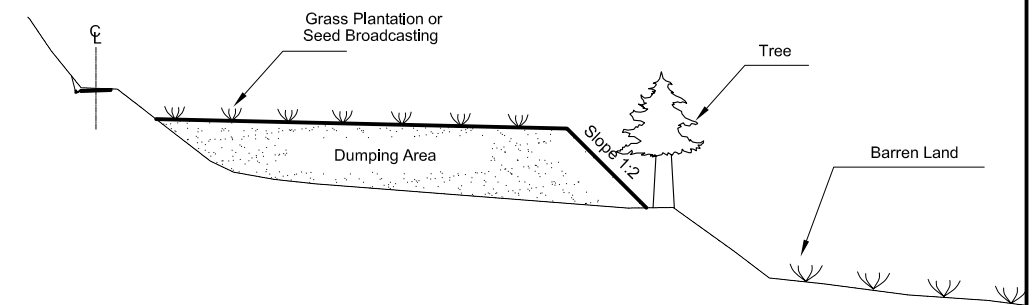
All the tipping site shall be managed as per the 'Guide to Road Slope and Protection Works'.



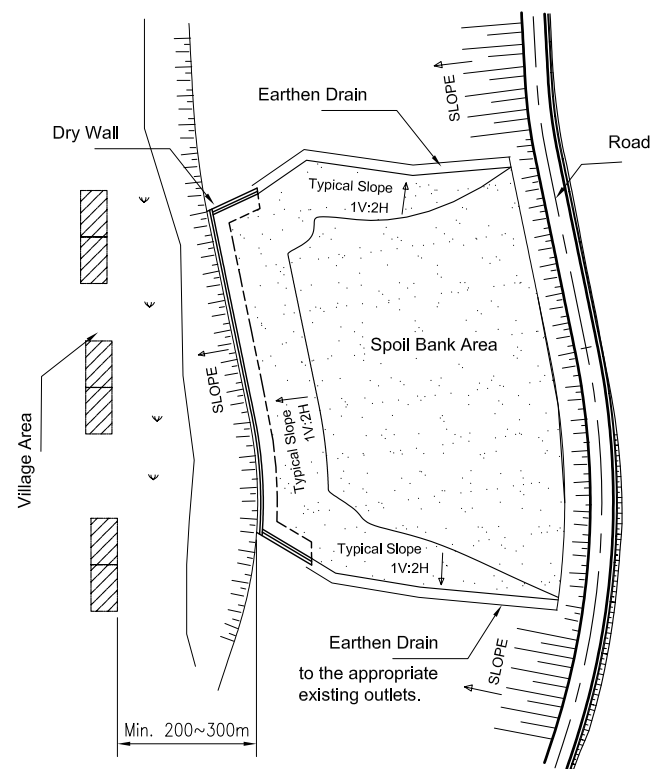
Cross Section of Type -I



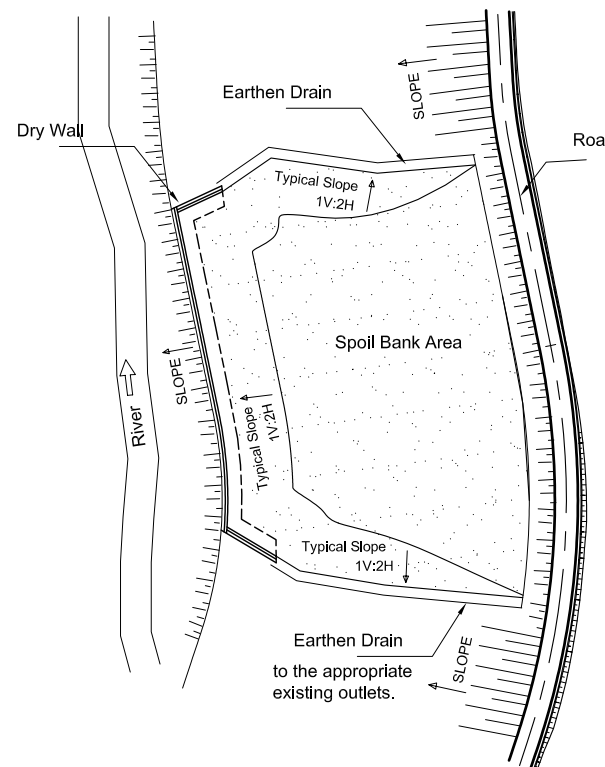
Cross Section of Type -II



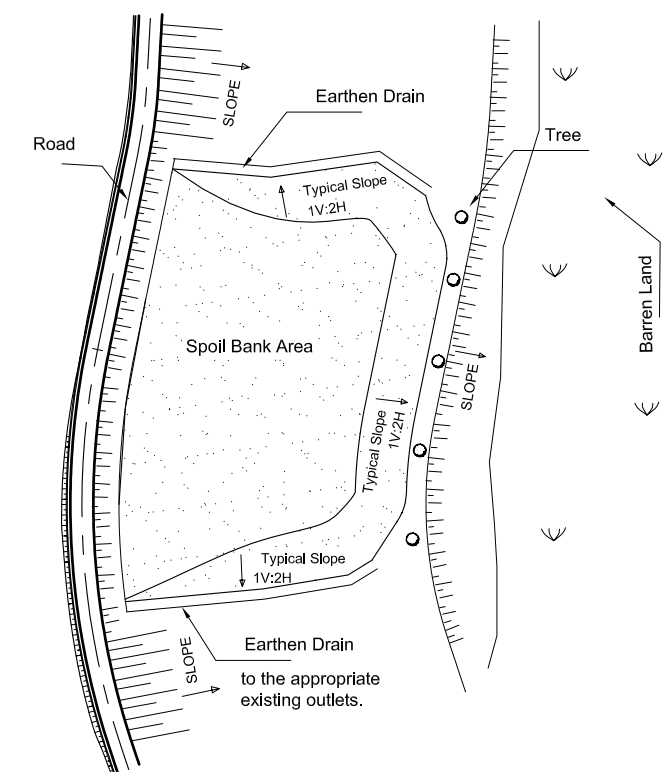
Cross Section of Type -III



Plan of Type -I

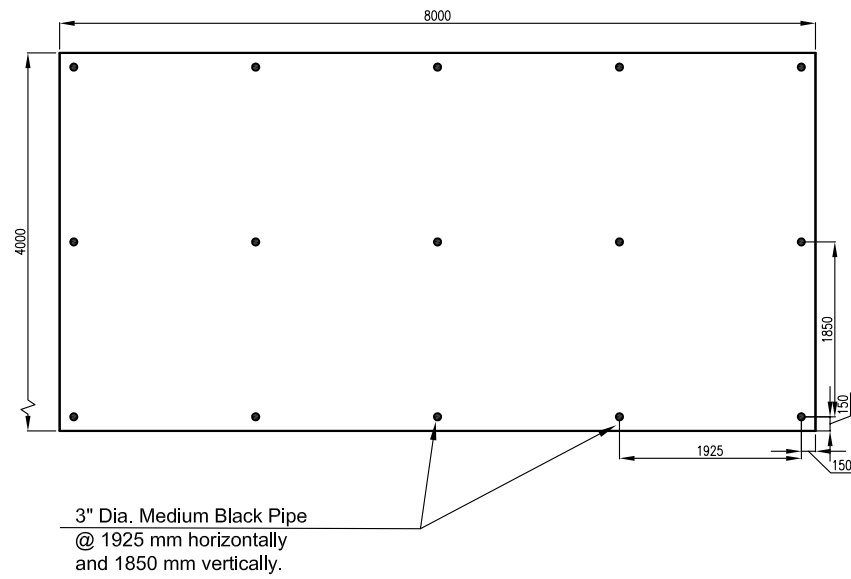


Plan of Type -II

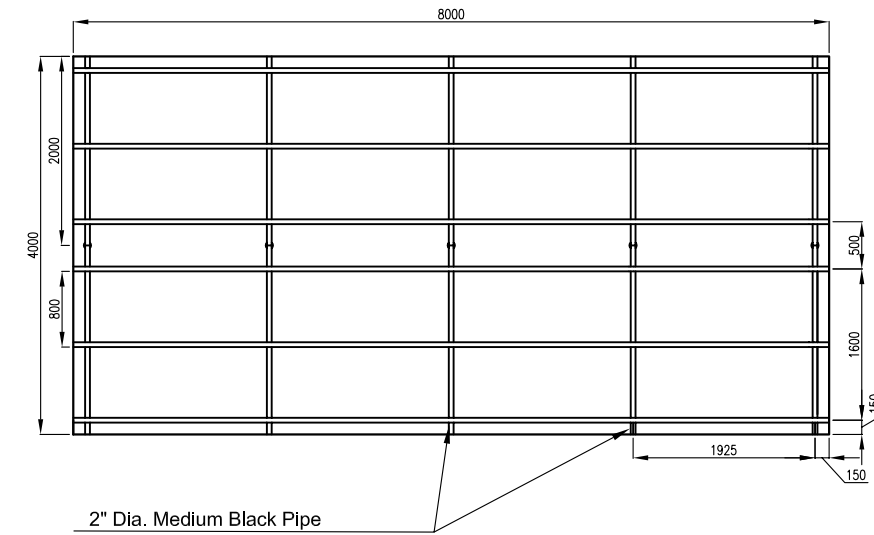


Plan of Type -III

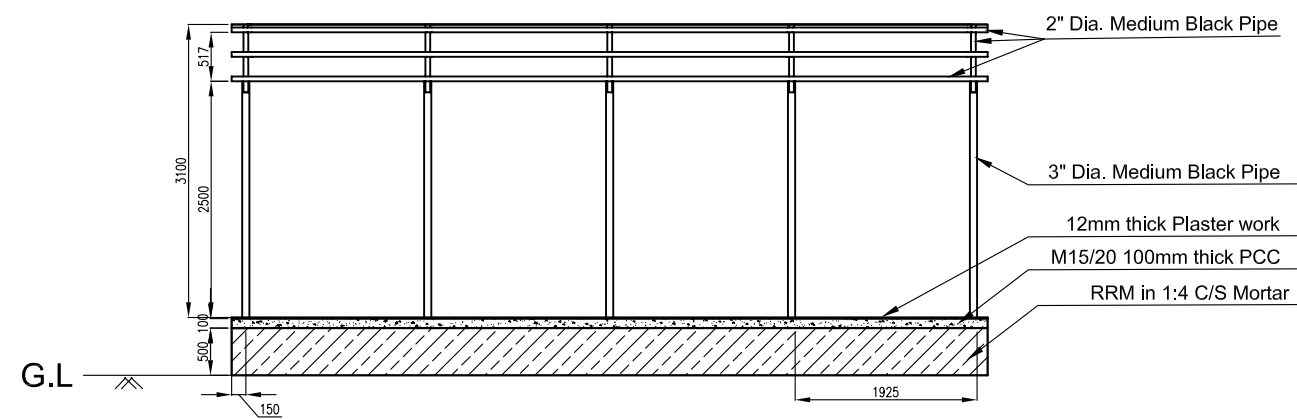
GOVERNMENT OF NEPAL (GoN) MINISTRY OF PHYSICAL PLANNING AND WORKS DEPARTMENT OF ROADS ROAD SECTOR DEVELOPMENT PROJECT IDA Grant No. H629 - NP IDA Credit No. 4832 - NP	CONSULTANTS : M/s MMM Group Ltd. <i>in JV with</i> SAI Consulting Engineers (P) Ltd. <i>in association with</i> ITECO Nepal and TMS Nepal	SCALE (m) NTS	DESIGNED BY:	STANDARD DRAWINGS FOR PROTECTION OF DUMPING SITE	ROAD SECTOR DEVELOPMENT PROJECT (RSDP)	DATE: FEB '2011
			CHECKED BY:			DWG. NO.: RSDPAF-TYP
			APPROVED BY:			SHEET NO.: 24/26



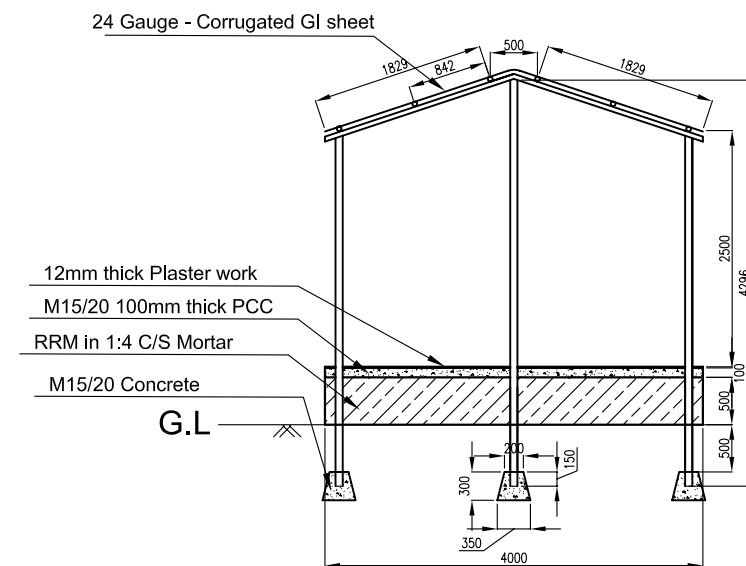
Floor Plan



Roof Plan



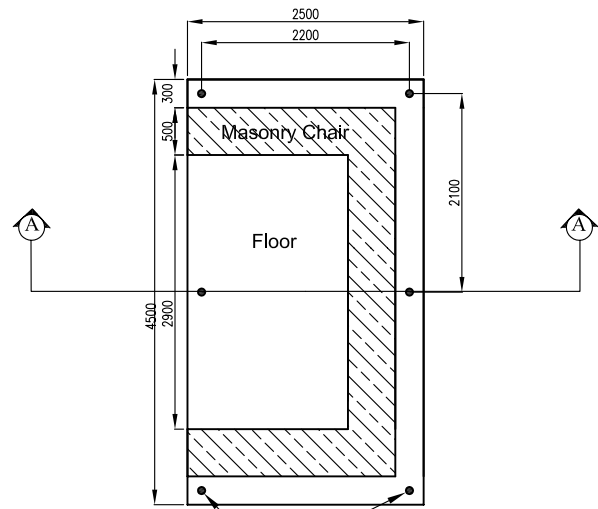
Front Section; Elevation



Sectional Elevation

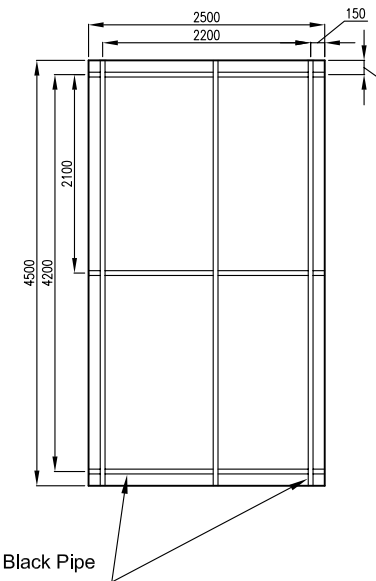
Note: All dimensions are in mm

GOVERNMENT OF NEPAL (GoN) MINISTRY OF PHYSICAL PLANNING AND WORKS DEPARTMENT OF ROADS ROAD SECTOR DEVELOPMENT PROJECT IDA Grant No. H629 - NP IDA Credit No. 4832 - NP	CONSULTANTS : M/s MMM Group Ltd. <i>in JV with</i> SAI Consulting Engineers (P) Ltd. <i>in association with</i> ITECO Nepal and TMS Nepal	SCALE (m) NTS	DESIGNED BY:		STANDARD DRAWINGS OF Market Shed	ROAD SECTOR DEVELOPMENT PROJECT (RSDP)	DATE: <i>FEB '2011</i>	
			CHECKED BY:				DWG. NO.:	<i>RSDPAF-TYP</i>
			APPROVED BY:				SHEET NO.:	<i>25/26</i>



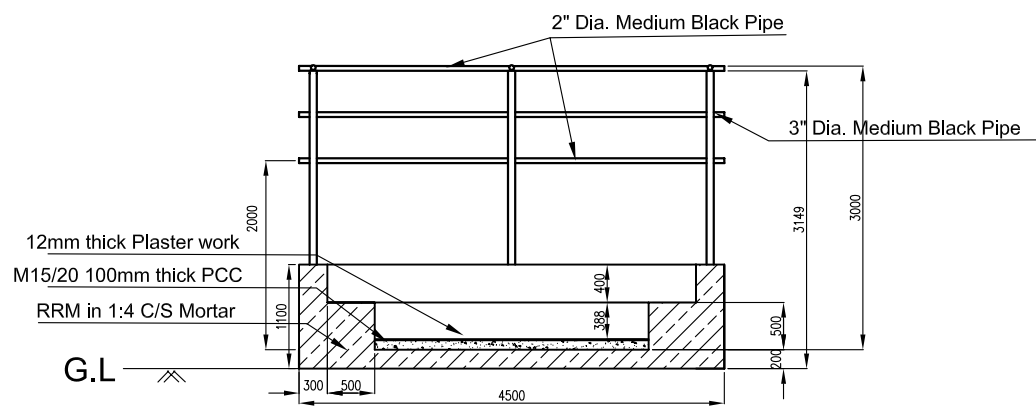
3" Dia. Medium Black Pipe
@ 2200 mm horizontally
and 2100 mm vertically.

Floor Plan

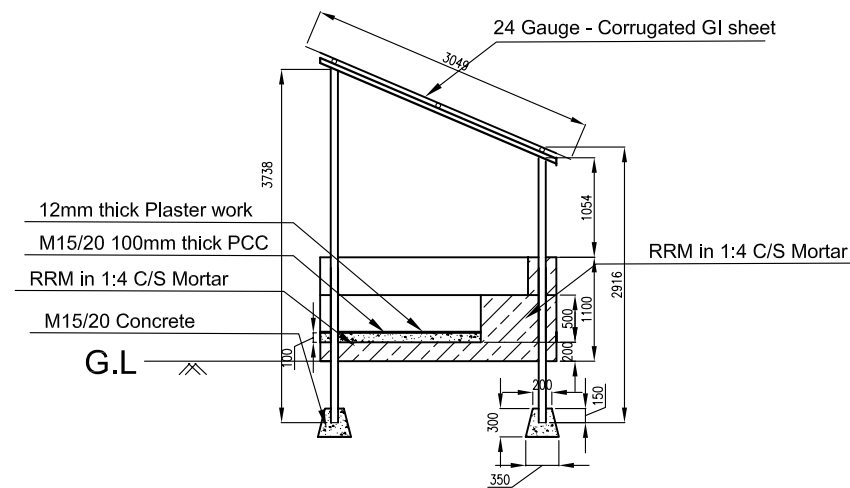


2" Dia. Medium Black Pipe

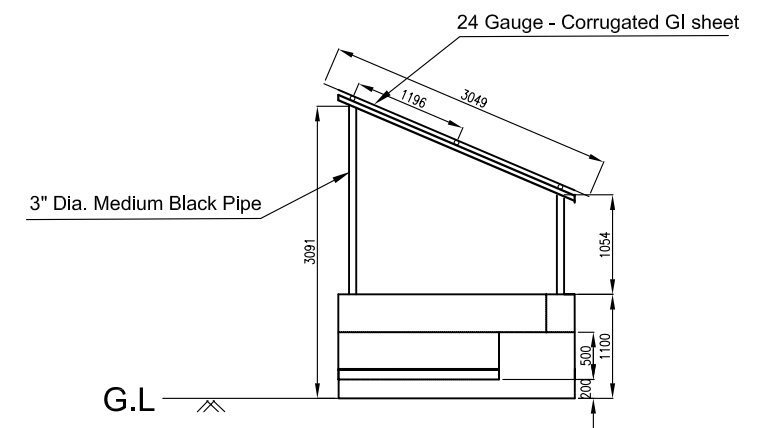
Roof Plan



Front Sectional Elevation



Section A-A'



Side Elevation

GOVERNMENT OF NEPAL (GoN)
MINISTRY OF PHYSICAL PLANNING AND WORKS
DEPARTMENT OF ROADS
ROAD SECTOR DEVELOPMENT PROJECT
IDA Grant No. H629 - NP
IDA Credit No. 4832 - NP

CONSULTANTS :

M/s MMM Group Ltd.
in JV with
SAI Consulting Engineers (P) Ltd.
in association with
ITECO Nepal and TMS Nepal

SCALE (m)
NTS

DESIGNED BY:
CHECKED BY:
APPROVED BY:

STANDARD DRAWINGS OF
Passengers' Shed

Note: All dimensions are in mm

ROAD SECTOR DEVELOPMENT PROJECT (RSDP)

DATE:
FEB '2011

DWG. NO.:
RSDPAF-TYP

SHEET NO.:
26/26